

FINAL REPORT

2018 Milne Inlet Marine Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program

Mary River Project

Submitted to:

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EXECUTIVE SUMMARY

In 2018, Baffinland undertook a fourth consecutive year of environmental effects monitoring (EEM) at Milne Port as part of the Marine Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) monitoring program for the Mary River Project. The MEEMP was developed in 2015 following completion of marine baseline studies in Milne Port during 2013 and 2014. Study components for the 2018 MEEMP included marine water and sediment quality, marine epifauna¹, benthic infauna², marine vegetation (i.e., macroflora), and fish and fish habitat. The MEEMP sampling design is based on the Metal Mining Technical Guidance for Environmental Effects Monitoring (EEM) (Environment Canada 2012) and includes statistical approaches to detecting potential project-induced impacts on the marine environment. In general, the MEEMP study design and data collection methodology followed the same approach utilized in 2017 to provide technical continuity and repeatability of the program and to allow for inter-annual comparisons of the multi-year dataset. Several program modifications were introduced in 2018 in consultation with the MEWG. This included 1) the addition of benthic infauna to the distance-gradient EEM design (replacing epifauna and macroflora), 2) the addition of underwater video surveys at permanently installed belt transect plots (1 x 5 m) for monitoring epifauna and macroflora using a Before/After-Control/Impact design, 3) a reduction in sampling intensity for hydrocarbons in sediment, 4) the addition of two new sediment sampling stations to account for a proposed second ore dock as part of the Phase 2 Proposal, 5) the addition of a new indicator species (Hiatella arctica) for fish body condition and tissue analysis, and 6) extending the duration of the fish monitoring program to occur over a longer extent of the open-water shipping season than in the previous years of monitoring.

The AIS monitoring program was also developed in 2015 as part of the MEEMP to enhance baseline data and provide early warning of potential AIS introductions in Milne Port. Monitoring parameters for the AIS monitoring program targeted lower trophic levels, including zooplankton, benthic and encrusting epifauna, benthic infauna, macroflora and fish. Sampling methodology for the AIS monitoring program generally followed the approach of previous years (2014-2017) with some minor modifications in 2018, including increased sampling effort at Ragged Island and monitoring of ship hulls at Milne Port for biofouling and transport of non-native species.

As part of the MEEMP, vertical water quality profiling was conducted at 19 sampling stations in Milne Inlet to collect surface-to-bottom measurements of conductivity, temperature, depth, dissolved oxygen, pH, turbidity and chlorophyll a. Discrete water quality samples were collected at four sampling stations near the effluent discharge point in Milne Port (distributed in a radial design) to monitor for potential changes in water quality due to site drainage and operational discharges (including iron ore stockpile run-off). Sediment samples were collected along four transects (West, East, Coastal and North) surveyed in previous years (2014-2017) as part of a radial gradient design that allowed for monitoring effects as a function of distance from the ore dock point source, in consideration of potential contaminant issues (e.g., ore dust, hydrocarbon deposition) and/or physical impacts (sediment re-suspension and transportation) in the marine environment. Fish sampling was conducted throughout the Milne Port area using gill net, Fukui trap, angling and beach seine sampling methods. Collected fish were identified to species and measured for length/weight before being released. Incidental fish mortalities were retained for age, sex, stomach content, and metals in tissue (body burden) analyses.

AlS monitoring at Milne Port including vertical and horizontal oblique zooplankton tows, benthic infaunal sampling, and underwater video surveys for epifauna and macroflora. Settlement baskets deployed in 2016 and 2017 were recovered from the West and East sides of the ore dock for analysis of encrusting epifauna. Sampling for benthic

² Infauna – organisms living in the substrate of the seafloor (e.g. polychaete worms, clams).



¹ Epifauna – organisms living on the seafloor (e.g. sea stars, crab).

infauna and zooplankton was also conducted at Ragged Island (same locations as 2017) to screen for the presence of AIS near existing anchorage sites. Ship hull monitoring was conducted for the first time in 2018 by means of ship hull video surveys of three ore carriers berthed alongside the ore dock.

Physical properties of the water column during summer were shown to be influenced by freshwater input, particularly at the head of Milne inlet. Strong vertical stratification was persistent throughout the entire inlet; however, a horizontal gradient in salinity and temperature was also observed in the upper water column extending from the head to the mouth of Milne Inlet. Surface water was shown to increase in temperature and decrease in salinity in a southward gradient, indicating stronger freshwater runoff influence at the head of the inlet at Milne Port. Below the pycnocline, water was uniformly cold and saline throughout the inlet. Below 15 to 25 m depth, temperature was less than 0°C and salinity was above 30 PSU, comparable to open ocean conditions, at both the head and mouth of the inlet. Chlorophyll *a* and dissolved oxygen concentrations were low, suggesting low phytoplankton production during the time of the surveys. Water in Milne Inlet was clear with turbidity consistently below 0.1 NTU throughout most of the water column and higher turbidity (0.5 to 8 NTU) at the surface, which was most likely associated with surface runoff from land.

All water quality parameters measured in 2018 were within ranges typical of background conditions previously observed or below the analytical detection limits used in previous monitoring years (2014-2017). All water quality parameters analyzed in 2018 (nitrates, arsenic, cadmium, chromium, mercury, silver and naphthalene) were below applicable CCME WQG³. PAHs were below detection limits in all samples collected between 2015-2018. Fecal coliform bacteria levels measured in 2018 were also below detection limits.

Sediment samples were analyzed for particle size composition, organic content, metals and hydrocarbons. Particle size composition was generally consistent with results from previous years (2014 through 2017). Metal concentrations were generally correlated with sediment physical composition. In general, metal concentrations, when detected, were higher in areas with a higher proportion of fines. Arsenic concentrations exceeded CCME and BC Interim Sediment Quality Guidelines (ISQGs; 7.24 mg/kg) at three stations but did not exceed the CCME Probable Effect Level (PEL). Arsenic concentrations also exceeded the T₂₀⁴ benchmark (7.4 mg/kg; Buchman 2008) at two stations and exceeded Effects Range-Low (ERL) of 8.2 mg/kg (Buchman 2008) at one station. Exceedances of CCME ISQG for arsenic were also reported in previous years (2014 through 2017). Nickel concentrations in 2018 exceeded the T₂₀ benchmark (15 mg/kg) at five stations. Nickel concentrations also exceeded NOAA Threshold Effect Level (TEL) of 15.9 mg/kg at two stations. No CCME sediment quality guidelines exist for nickel; however, nickel concentrations in 2018 were below BC Working ISQG (30 mg/kg) and PEL (50 mg/kg). Observed exceedances for arsenic and nickel are not considered to be Project-related, as neither chemical element is associated with ore processing at Mary River (Baffinland 2012) and both were recorded in similar high concentrations during baseline surveys (SEM 2015). Also, exceedances for nickel were only observed at certain far-field stations located over two kilometers from the ore dock. It is presumed that elevated arsenic and nickel concentrations in these areas are likely naturally occurring.

Volatile organic compounds, extractable petroleum hydrocarbons, and PAHs were, with few exceptions, below detection limits. PAHs were detected at three stations and concentrations of volatile organic compound dichloromethane were detected at three stations. Concentrations of PAHs acenaphthylene and dibenz(a,h)anthracene in one of the stations of the North transect slightly exceeded CCME and BC ISQGs. No other organic compound exceeded sediment quality guidelines and benchmarks during the 2018 sediment program.

⁴ Chemical concentrations corresponding to 20% probability of observing toxicity



³ Canadian Council of Ministers of the Environment (CCME) – Canadian Water Quality Guidelines {WQG} for The Protection of Aquatic Life (CCME 2002)

Fines content remained stable between the five years of sampling on the West and East transects. On the Coastal Transect, there was an estimated increase in percent fines at the 1,000-m and 1,500-m distances between 2014 and 2016, although the 2018 estimates showed no change from 2014 indicating no consistent trend between years. On the North Transect, a significant increase in percent fines was estimated at transect origin between 2014 and 2015, followed by a small decline in 2016 and no further changes throughout 2017-2018. Overall, there were no significant changes in percent fines between 2014 and 2018 on any of the four transects.

Iron concentrations showed interannual changes at some locations on the West and East transects during the five study years, while no significant changes in iron concentrations were observed on the Coastal or North Transects. Between 2014 and 2018, significant increases in iron concentrations, based on observed fines content, were observed at 500 m and 1,500 m from the ore dock on the West Transect and at 500 m and 1,000 m on the East Transect. When iron concentrations were corrected to minimum or maximum transect-specific fines content, significant increases between 2014 and 2018 were estimated only at 50 and 1,000 m from the ore dock on the East Transect (no corrected estimates were done for 0 m). Although not significant, gradual annual increases were estimated at 500 m and 1,000 m on the West Transect between 2015 and 2018, at 50 m and 500 m on the East Transect between 2016 and 2018, and at 1,000 m on the East Transect between 2016 and 2018. No significant changes in the same direction were observed in two consecutive years over the 2014-2018 period.

A revised approach for monitoring marine benthic communities in Milne Port was introduced in 2018 using permanent belt transect plots in a control and reference area, and infaunal sampling stations along four transects as part of the distance-gradient design (in concert with sediment sampling). Data collected in 2018 will be compared to 2019 monitoring results when available. In general, benthic community composition appeared to be consistent with that observed during the 2014 to 2015 surveys. For epibenthos, both total abundance and taxonomic richness were lower in the belt transect plots than recorded on previous (2014-21017) transect surveys. This was expected given the smaller area sampled using the belt transect plots. For infauna, mean density, taxa richness and species diversity values in 2018 were mostly within ranges observed in the 2017 AIS benthic infaunal samples (Golder 2018), with the exception of several samples on the West and North Transects which demonstrated lower values. As in previous years, polychaetes were the most abundant taxa at all stations sampled in 2018, followed by crustaceans and bivalves.

Tissue samples from opportunistically collected clams, *Hiatella arctica*, were analyzed to determine body burden of metals as a supplement to fish tissue analysis. Concentrations of most metals in *H. arctica* tissues were higher compared to levels in Arctic char tissue sample, aside from mercury which was lower in *H. arctica*. Mercury concentrations in all *H. arctica* tissue samples were below the Health Canada guideline for human consumption.

Fishing effort in 2018 yielded greater sampling sizes than in previous years both in terms of total catch (403 fish) and gill net catch per unit of effort (CPUE; mean 3.38 and standard deviation (SD) 3.35 fish/h). Relative taxonomic composition of fish in the Milne Port area did not change considerably from previous studies with catches being dominated by three species; Arctic char, fourhorn sculpin and shorthorn sculpin (comprising 98% of the total catch). Other recorded fish species included Arctic sculpin, Arctic cod and northern sandlance.

As in previous years, gill net sampling proved to be the most effective fish collection method, yielding 93% of the total catch. Gill nets in 2018 also yielded highest total catch and CPUE in comparison to previous years. Beach seine was the most efficient method of sampling in terms of the CPUE when recalculated to number of fish caught per hour (mean 20 and SD 23.6 fish/h). However, beach seining was limited to certain nearshore areas and could only be deployed for short durations (several minutes). Fukui traps were less effective and less efficient in 2018 than in previous years, yielding both the lowest total catch and lowest CPUE recorded since 2013.



A total of 26 incidental Arctic char mortalities were retained for sex, age, stomach content and body burden analysis (14 females and 12 males - ranging from 5 to 17 years in age). Female Arctic char were on average slightly older than males (average age of 11 years vs. 10 years) and larger than males (average length 410 mm vs. 397 mm; average weight 901 g vs. 705 g). However, male Arctic char has a greater maximum length (514 mm vs. 508 mm) and maximum weight (1480 g vs.1470 g) than females. No relationship between body length and age in the analyzed incidental Arctic char mortalities was observed, indicating body size is not a good predictor for Arctic char age in the Milne Port area.

Concentrations of metals in Arctic char tissue analyzed for body burden in 2018 were consistent with those reported in previous years (2010-2017). No samples exceeded the Health Canada guideline (0.5 mg/kg) for mercury in fish tissue for human consumption. No significant differences in the length-to-weight relationships were observed between 2017 and 2018 for the three most dominant species (Arctic char, fourhorn sculpin and shorthorn sculpin) despite much smaller sampling sizes in 2017.

Three zooplankton, 46 benthic infauna and one fish taxa were identified during the 2018 AIS monitoring program that were not encountered during previous years. None of the newly detected species were identified in the invasive species databases. An analysis of the available literature and species databases indicated that all of the newly identified taxa had known ranges that include Arctic waters or had unknown northern limits, with ranges reaching into the north Atlantic and Norwegian Sea. These taxa presumably could have ranges that extend to Arctic waters

One of the 46 new benthic infaunal species identified in 2018 was a sabellid worm found in the deep-water sediment samples collected at Milne Port. This was initially identified by the taxonomic laboratory as *Pseudofabricia sp.* Currently, the only species described for this genus is *P. aberrans*, which is considered endemic to the Mediterranean Sea (Giangrande and Cantone 1990; Cepeda and Lattig 2016; WoRMS 2019). *P. aberrans* is not listed in the global invasive species database (Molnar et al. 2008), or as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014). Samples were sent for independent verification by the University of Laval's Benthic Ecology Laboratory, which concluded that the species may have been *Manayunkia aesturiana*. This species has a documented range in the North Atlantic (including Arctic waters) and specimens have been collected near Baffin Island (Goldsmit 2016).

In 2017 AIS surveys, the cryptogenic amphipod *Monocorophium insidosium* was identified in samples from Milne Port (Golder 2018). The invasive status of this amphipod could not be determined due to uncertainties surrounding its native range, which may include the northwest Atlantic (Fofonoff et al. 2019). Individuals of this genus were identified in 2018 surveys and were not identifiable to species level but were consistent with 2017 *M. insidosium* specimens (Macdonald 2019, pers. comm.). An independent verification of taxonomic identification of the species conducted by Philippe Archambault's Benthic Ecology Lab at Université Laval indicated that the *M. insidosium* identified in 2017 and 2018 may have been *Crassicorophium bonelli*, which has been identified from eastern North America and the northeastern Atlantic Ocean (GBIF 2018; ETI Bioinformatics 2019 Sirenko et al. 2019).

Hull surveys of the three ore carriers at Milne Port in 2018 indicated that the surveyed hulls were mostly free of biofouling. Exceptions included small areas on the stern of two of the carriers (the Arkadia and the Golden Saguenay) where some degree of colonization by aquatic organisms was observed. On the Arkadia, colonizing organisms belonged to an undetermined species of barnacle. Biofouling taxa on the Golden Saguenay could not be positively identified on the captured video footage, and no physical samples could be collected due to where the fouling was located.



Overall indicator thresholds established for the Marine Environment in the Final Environmental Impact Statement (FEIS) and FEIS Addendum (Baffinland 2012; 2013) were only exceeded in 2018 for the following sediment quality components:

- Slight exceedance of CCME guidelines for PAH (acenaphthylene and dibenz(a,h)anthracene) in one sample on the North Transect.
- Iron concentrations in sediment showed significant increases at 50 and 1,000 m from the ore dock along the East Transect in comparison to the baseline year of 2014.

These observed changes remained within the geographic boundaries predicted in the assessment (Baffinland 2012; 2013).



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ANNEXE L

Physical Oceanography Report



ACRONYMS AND ABBREVIATIONS

Acronym or Abbreviation	Definition	
°C	Degree Celsius	
μm	Micrometre	
AIS	Aquatic Invasive Species	
ALS	ALS Environmental	
ANOVA	Analysis of Variance	
ANCOVA	Analysis of Covariance	
Baffinland	Baffinland Iron Mines Corporation	
BACI	Before/After Control/Impact	
Biologica	Biologica Environmental Services	
CCME	Canadian Council of Ministers of Environment	
cm	Centimetres	
CPUE	Catch Per Unit Effort	
CTD	Conductivity, Temperature, Depth	
DFO	Fisheries and Oceans Canada	
DL	Detection Limit	
DO	Dissolved oxygen	
DQO	Data Quality Objectives	
EEM	Environmental Effects Monitoring	
EPH	Extractable Petroleum Hydrocarbons	
ERL	Effects Range Low	
ERP	Early Revenue Phase	
FEIS	Final Environmental Impact Statement	
g	Grams	
GPS	Global Positioning System	
HDPE	High Density Polyethylene	
HSD	Honest Significant Difference	
Indet.	Indeterminate	
ISQG	Interim Sediment Quality Guideline	
LSA	Local Study Area	
Maxxam	Maxxam Analytics	
MEEMP	Marine Ecological Effects Monitoring Program	
MEWG	Marine Environmental Working Group	
m	Metre(s)	
m2	Square Metres	
m/s	Metre per Second	



Acronym or Abbreviation	Definition		
MDL	Method Detection Limit		
mg/kg	Milligrams per Kilogram		
mg/L	Milligrams per Litre		
mg	Milligram		
mm	Millimetre		
Mtpa	Million Tonnes per Annum		
NTU	Nephelometric Turbidity Unit		
NIRB	Nunavut Impact Review Board		
No.	Number		
PAH	Polycyclic Aromatic Hydrocarbons		
PC	Project Certificate		
PCA	Principal Component Analysis		
PEL	Probable Effect Level		
PSU	Practical Salinity Unit		
QA/QC	Quality Assurance/Quality Control		
RM Repeated Measures			
ROV	Remotely Operated Vehicle		
RPD	Relative Percent Differences		
SD	Standard Deviation		
SEM	Sikumiut Environmental Management Ltd.		
sp.	Species		
sp. nr.	Species Near to		
SWI	Standard Working Instructions		
TEL	Threshold Effect Level		
The Project	Mary River Project		
TIC	Total Inorganic Carbon		
TOC	Total Organic Carbon		
TSS	Total Suspended Solids		
UTM	Universal Transverse Mercator		
VOC	Volatile Organic Compounds		
WQG	Water Quality Guidelines		
wwt	Wet Weight		



1.0 INTRODUCTION

This report presents the results for the MEEMP and AIS monitoring programs conducted in Milne Inlet during the 2018 open-water season. Baffinland Iron Mines Corporation (Baffinland) completed the fourth consecutive year of environmental effects monitoring (EEM) at Milne Port as part of the 2018 Marine Ecological Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) monitoring program for the Mary River Project. Both programs were originally developed in 2015 following completion of marine baseline studies in Milne Port during 2013 and 2014. The MEEMP and AIS monitoring programs are intended to provide a primary means to identify and quantify project-related change in the marine environment. Where such change occurs, the programs' assist in identifying appropriate modifications to, or mitigation of, project operational activities to avoid and/or minimize adverse effects on the marine environment. Results from the MEEMP and AIS monitoring programs also provide information to the Nunavut Impact Review Board (NIRB) to support its yearly review of the Mary River Project.

1.1 Background

The Mary River Project (hereafter, "the Project") is an operating iron ore mine located in the Qikiqtaaluk Region of North Baffin Island, Nunavut (Figure 1-1). Baffinland is the owner and operator of the Project. The operating Mine Site is connected to a port at Milne Inlet (Milne Port) via the 100-km long Milne Inlet Tote Road. Undeveloped components of the Project include a South Railway connecting the Mine Station to a future port at Steensby Inlet (Steensby Port).

Project Certificate No. 005, amended by the Nunavut Impact Review Board (NIRB) on 27 May 2014, authorizes Baffinland to mine up to 22.2 million tonnes per annum (Mtpa) of iron ore from Deposit No. 1. Of this 22.2 Mtpa, the Company is currently authorized to transport 18 Mtpa of ore by rail to Steensby Port for year-round shipping through the Southern Shipping Route (via Foxe Basin and Hudson Strait), and 4.2 Mtpa of ore by truck to Milne Port for open water shipping through the Northern Shipping Route using chartered ore carrier vessels. A Production Increase to ship 6.0 Mtpa from Milne Port was approved for 2018 and 2019. Shipping of ore from Milne Inlet during the ERP began in 2015 and is expected to continue for the life of the Project (20+ years). During the first year of ERP Operations in 2015, Baffinland shipped approximately 900,000 tonnes via 13 ore carrier voyages. The amount of ore shipped during the 2018 open-water season has since increased to approximately 5.1 million tonnes via 71 return ore carrier voyages.

As a part of regulatory commitments, Baffinland has developed and implemented a multi-parameter EEM program for the marine environment, collectively referred to as the MEEMP. The MEEMP was designed to evaluate potential Project-related effects on the marine environment as predicted in the Final Environmental Impact Statement (FEIS; Baffinland 2013) and FEIS Addendum (Baffinland 2013). Potential effects on the marine environment may include:

- Changes in water and sediment quality (e.g., ore dust, hydrocarbon leaks, wastewater, and site runoff)
- Changes in marine habitat and biota from contaminant sources (e.g., ore dust, hydrocarbon leaks, wastewater, and site runoff)
- Physical perturbations caused by shipping (sediment re-suspension and transportation)

The Valued Ecosystem Components (VECs) on which effects were assessed in the FEIS and monitored during the MEEMP studies were Marine Water and Sediment Quality, Marine Fish Habitat and Arctic Char Health. The assessment predicted that Project activities may result in localized changes above threshold values (Level-II-



magnitude) for Water and Sediment Quality and Arctic Char Health VECs, confined within the LSA. It was predicted that changes would not exceed thresholds (Level-I-magnitude) for the Marine Fish Habitat VEC. All predicted residual environmental effects were rated as "Not Significant" since they were confined to the LSA (Baffinland 2012 and 2013).

Criteria used to determine effect magnitude thresholds for the Water and Sediment Quality VECs were CCME Guidelines for the Protection of Aquatic Life (Table 1-1) or baseline concentrations if they exceeded guidelines. CCME guidelines for water quality were also used to determine effect magnitude thresholds for the Arctic Char Health VEC (Table 1-2). Thresholds for effect magnitude on the Fish Habitat VEC were established as a reduction in productive capacity measured as a proportion of lost or altered habitat to the total area of the LSA (Table 1-3) (Baffinland 2012 and 2013). For certain parameters where no guidelines or quality criteria exist (e.g., sediment percent fines, sediment iron concentrations and benthic community abundance) the MEEMP uses a significance criterion of two standard deviations of the baseline year as a threshold (Baffinland 2016).

Table 1-1: Criteria for Determination of the Magnitude of Effect on Water and Sediment Quality (Baffinland 2012)

Level	Descriptor	Criteria
Not Assessed (Level 0)	Negligible	Water/sediment quality change not expected to be detectable
Level I	Low	Water/sediment quality change may be detectable but would remain within CCME guidelines
Level II	Moderate	Water/sediment quality change within an order of magnitude of the CCME guidelines
Level III	High	Water/sediment quality change greater than an order of magnitude above the CCME guidelines

Table 1-2: Criteria for Determination of the Magnitude of Effect on Arctic Char Health (from Baffinland 2012)

Level	Descriptor	Criteria	
Not Assessed (Level 0) Negligible		Water quality change within CCME guidelines	
Level I	Low	Water quality change is from 1 to 10 times the CCME guidelines	
Level II	Moderate	Water quality change is from 10 to 100 times the CCME guidelines	
Level III	High	Water quality change is more than 100 times the CCME guidelines	

Table 1-3: Criteria for Determination of the Magnitude of Effect on Marine Fish Habitat (from Baffinland 2012)

Level Descrip		Criteria	
Not Assessed (Level 0) Negligible		Less than 1 % reduction in productive capacity	
Level I Low		Between 1% and 10 % reduction in productive capacity	
Level II	Moderate	Between 10% and 20 % reduction in productive capacity	
Level III	High	More than 20 % reduction in productive capacity	



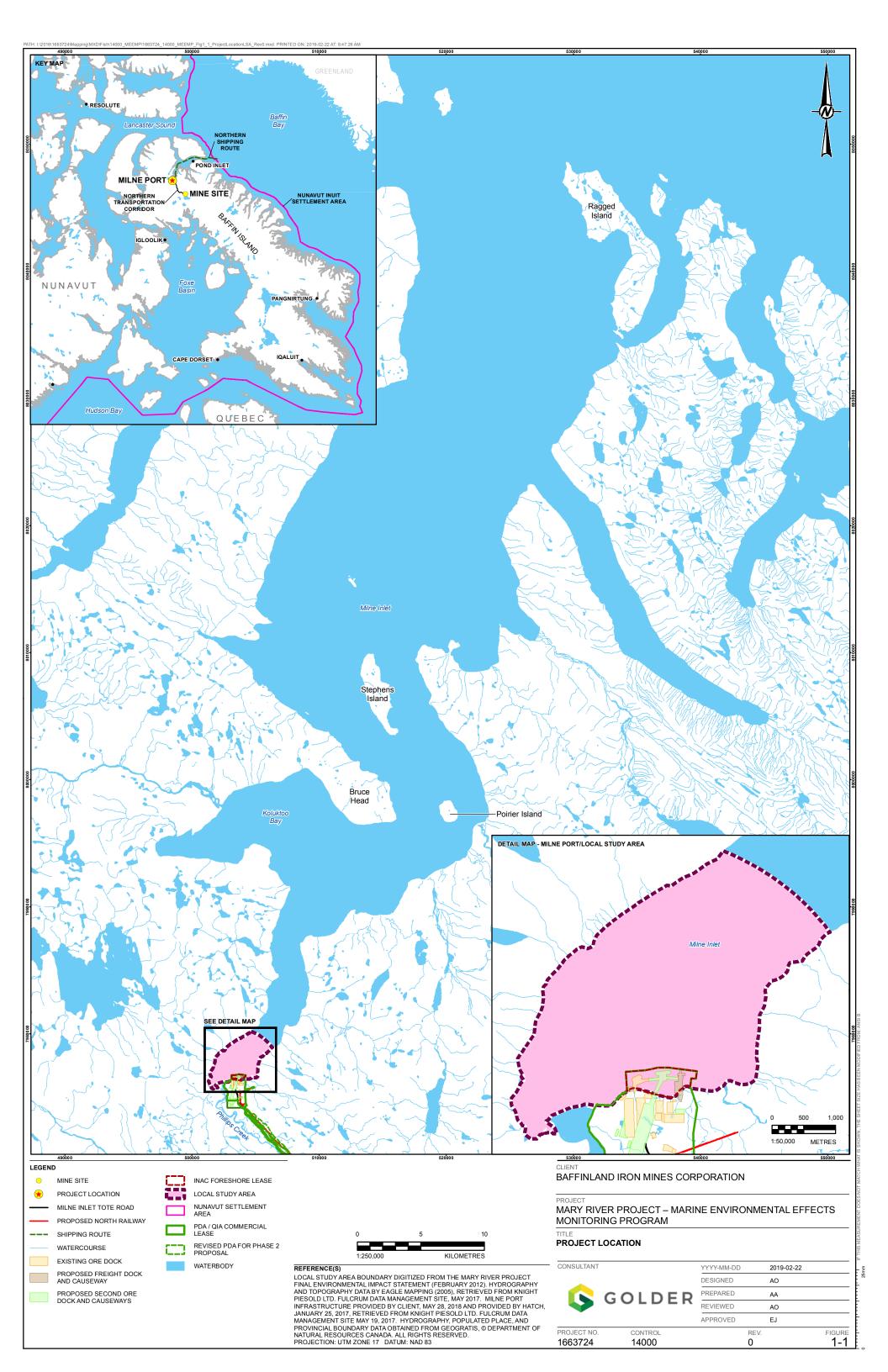
The MEEMP includes monitoring of marine water and sediment quality, marine invertebrates, marine vegetation, and fish and fish habitat. The MEEMP sampling design is based on the Metal Mining Environmental Effects Monitoring (EEM) guidelines (Environment Canada 2012) and includes statistical approaches for detecting potential Project-induced impacts on the marine environment.

Aquatic Invasive Species (AIS) monitoring is an integral component of the MEEMP. It is designed to address the potential risks of invasive species introductions to the marine environment from ship ballast water and hull biofouling in accordance with existing Terms and Conditions of the Project Certificate (as applicable). The AIS monitoring program is based on a Before/After experimental design that focuses on areas with the highest likelihood of marine invasion. The AIS Monitoring Program is conducted at a surveillance level where detection of a single invasive species is the threshold for triggering of adaptive management measures (e.g., ballast water treatment) and/or potential corrective actions (e.g., measures to eradicate the AIS), if deemed feasible. The AIS monitoring program consists of data collected across multiple trophic levels (marine vegetation, zooplankton, benthic invertebrates and fish) to establish a comprehensive inventory of existing marine biota in the Project area that is intended to serve as a point of reference for any new species identified over time, and to evaluate potential changes in community structure that may be linked to AIS introductions. Marine organisms identified during baseline studies in 2008, 2010 and 2013 also contributed to the AIS inventory. AIS monitoring is recommended to be conducted annually until results of ballast water sampling are deemed satisfactory to recommend reducing the frequency of monitoring in the receiving environment.

Sikumiut Environmental Management Ltd. (SEM) was originally retained by Baffinland to design and implement the MEEMP. The MEEMP program was first implemented in 2014. Monitoring efforts in 2014 focused primarily on further characterization of baseline conditions in Milne Port. Environmental effects monitoring was completed by SEM in 2015 and 2016. Golder completed environmental effects monitoring in 2017 and 2018, which included modifications to 2014-2016 MEEMP and AIS sampling design to better address the objectives of the programs.

This report presents the results of the MEEMP and AIS monitoring programs conducted at Milne Port and in Milne Inlet during the 2018 open-water season. The physical oceanography component of the program is presented in a separate report, included as ANNEXE L.





1.2 Objectives

In accordance with existing Terms and Conditions of Project Certificate (PC) #005, Baffinland is responsible for the establishment and implementation of the MEEMP, which comprises EEM studies that are conducted over a defined time period with the following objectives:

- Assess the accuracy of effects predictions in the FEIS (Baffinland 2012) and Addendum 1 (Baffinland 2013).
- Assess the effectiveness of Project mitigation measures.
- Verify compliance of the Project with regulatory requirements, Project permits, standards and policies.
- Identify unforeseen adverse effects and provide early warnings of undesirable changes in the environment.
- Improve understanding of local environmental processes and potential Project-related cause-and-effect relationships.
- Provide feedback to the applicable regulators (e.g. NIRB) and advisory bodies (e.g. Marine Environmental Working Group or MEWG) with respect to:
 - Potential adjustments to existing monitoring protocols or monitoring framework to allow for the most scientifically defensible synthesis, analysis and interpretation of data.
 - Project management decisions requiring modification of operational practices where and when necessary.

The MEEMP was developed in consideration of the anticipated and potential Project-related impacts to the marine environment as identified in the 2012 FEIS and 2014 ERP Addendum, as well as monitoring requirements outlined in the following PC Terms and Conditions:

- Condition No. 76 'The Proponent shall develop a comprehensive Environmental Effects Monitoring Program to address concerns and identify potential impacts of the Project on the marine environment.'
- Condition No. 83 (a) 'To identify potential for and conduct monitoring to identify effects of sediment redistribution associated with construction and operation of the Milne Port.'
- Condition No. 84 'The Proponent shall update its sediment redistribution modeling once ship design has been completed and sampling should be undertaken to validate the model and to inform sampling sites and the monitoring plan.'
- Condition No. 85 'The Proponent shall develop a monitoring plan to verify its impact predictions associated with sediment redistribution resulting from propeller wash in shallow water locations along the shipping route. If monitoring detects negative impacts from sediment redistribution, additional mitigation measures will need to be developed and implemented.'
- Condition No. 87 'The Proponent shall develop a detailed monitoring program at a number of sites over the long term to evaluate changes to marine habitat and organisms and to monitor for non-native introductions resulting from Project-related shipping. This program needs to be able to detect changes that may have biological consequences and should be initiated several years prior to any ballast water discharge into Steensby Inlet and Milne Inlet to collect sufficient baseline data and should continue over the life of the Project.'



Condition No. 89 – 'The Proponent shall develop and implement an effective ballast water management program that may include the treatment and monitoring of ballast water discharges in a manner consistent with applicable regulations and/or exceed those regulations if they are determined to be ineffective for providing the desired and predicted results. The ballast water management program shall include, without limitation, a provision that requires ship owners to test their ballast water to confirm that it meets the salinity requirements of the applicable regulations prior to discharge at the Milne Port, and a requirement noting that the Proponent, in choosing shipping contractors will, whenever feasible, give preference to contractors that use ballast water treatment in addition to ballast water exchange.'

- Condition No. 91 'The Proponent shall develop a detailed monitoring plan for Steensby Inlet and Milne Inlet for fouling that complies with all applicable regulatory requirements and guidelines as issued by Transport Canada, and includes sampling areas on ships where antifouling treatment is not applied such as the areas where non-native species are most likely to occur.'
- Condition No. 99 (a) 'Establish shipping season, inter-annual baseline in Steensby Inlet and Milne Inlet that enables effective monitoring of physical and chemical effects of ballast water releases, sewage outfall, and bottom scour by ship props, particularly downslope and downstream from the docks. This shall include the selection and identification of physical, chemical, and biological community/indicator components. The biological indicators shall include both pelagic and benthic species but with emphasis on relatively sedentary benthic species (e.g., sculpins).'
- Condition No. 99 (b) (ii) 'The collection of additional baseline data in Milne Inlet on narwhal, bowhead and anadromous Arctic char abundance, distribution ecology and habitat use.'
- Condition No. 113 'The Proponent shall conduct monitoring of marine fish and fish habitat, which includes but is not limited to, monitoring for Arctic char stock size and health condition in Steensby Inlet and Milne Inlet, as recommended by the Marine Environment Working Group.'
- Condition No. 114 'In the event of the development of a commercial fishery in the Steensby Inlet area or Milne Inlet-Eclipse Sound areas, the Proponent, in conjunction with the Marine Environment Working Group, shall update its monitoring program for marine fish and fish habitat to ensure that the ability to identify Arctic char stock(s) potentially affected by Project activities and monitor for changes in stock size and structure of affected stocks and fish health (condition, taste) is maintained to address any additional monitoring issues identified by the MEWG relating to the commercial fishery.'
- Condition No. 115 'The Proponent is encouraged to continue to explore off-setting options in both the freshwater and marine environment to offset the serious harm to fish which will result from the construction and infrastructure associated with the Project.'
- Condition No. 126 'The Proponent shall design monitoring programs to ensure that local users of the marine area in communities along the shipping route have opportunity to be engaged throughout the life of the Project in assisting with monitoring and evaluating potential project-induced impacts and changes in marine mammal distributions.'



1.3 Study Area

The 2018 MEEMP and AIS field surveys were conducted primarily within the Local Study Area (LSA) for the Marine Environment as defined ¹⁰ in the FEIS and Addendum 1 (Baffinland 2012; 2013). The LSA includes all of Milne Port (Assomption Harbour) and extends north up to 4 km from the existing terminal (spanning the full width of Milne Inlet at the northern boundary) (Figure 1-1). The southeast boundary of the LSA ends at the confluence of Milne Inlet with Phillips Creek.

In 2018, following feedback provided from MEWG members and the community during the 2016 community workshops, additional AIS and physical oceanographic monitoring was conducted at Ragged Island north of the LSA boundary. This represented the second consecutive year of sampling at Ragged Island which aimed at detecting potential Project effects from ore carriers when anchored in this area.

¹⁰ The LSA includes all marine waters where there exists a reasonable potential for direct measurable effects from Project activities on the marine environment.



2.0 STUDY DESIGN

2.1 MEEMP

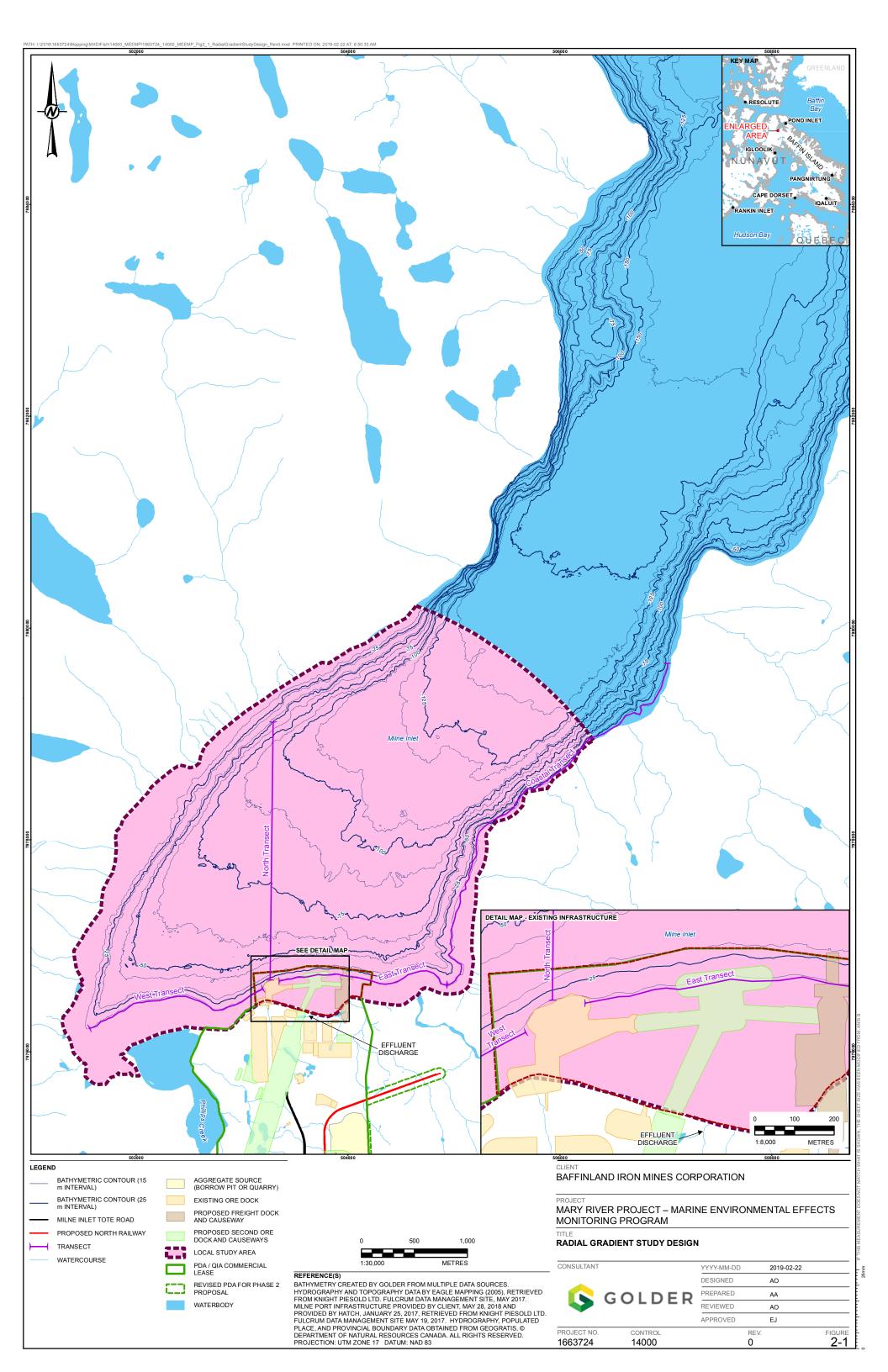
The MEEMP was designed to evaluate potential Project-related impacts on the marine environment as predicted in the FEIS and FEIS Addendum (Baffinland 2013). The original sampling design for the MEEMP (Baffinland 2016; SEM 2015) was based on a radial gradient transect design extending out from the ore dock (Figure 2-1). The ore dock represents the potential point source for contaminants (e.g., ore dust, hydrocarbon deposition) and physical perturbations (e.g., sediment re-suspension and transportation). The radial pattern is designed to detect potential Project-related effects based on a gradient of key components with numerical indicators (e.g., metal concentrations in sediment and abundance of benthic biota) with increasing distance from the point source.

The initial MEEMP design (excluding AIS monitoring) included the following study components:

- Marine water quality
- Marine sediment quality
- Benthic epifauna and epiflora
- Fish

Water quality was added to the MEEMP in 2015 to monitor for potential changes in water quality associated with site drainage and treated effluent discharges to the marine environment (including iron ore stockpile run-off). Four water quality stations were established near the site discharge point for compliance monitoring; one station next to the site discharge point, and three stations located slightly offshore in a radial pattern.





The EEM sampling design for sediment quality, benthic epifauna and epiflora was based on a radial gradient transect design extending out from the ore dock. A series of sampling stations were arranged at increasing distances from the point source along each of four transects. Three transects (East, West and Coastal) were arranged along the 15 metre (m) depth contour to minimize the confounding influence of depth on sediment and associated biota. The 15 m depth contour was considered to be unaffected by winter ice scour and was previously associated with relatively higher species counts and increased species diversity for both marine flora and fauna (SEM 2015; Baffinland 2016). The East and West Transects extended approximately 1,700 m and 1,800 m to the east and the west of the ore dock respectively. The Coastal Transect started at the eastern terminus of the East Transect and extended north along the 15 m depth contour for approximately 4,250 m. The fourth transect (North Transect) extended directly offshore of the existing ore dock out to a distance of 2,000 m, corresponding with a water depth of approximately 100 m. This transect included both a distance and depth gradient for consideration in the EEM analysis.

The statistical design was based on repeated measures (RM) distance regression analysis with each station re-sampled annually. The RM distance regression analysis is an alternative to the Before/After Control/Impact (BACI) analysis of variance (ANOVA) design and has higher sensitivity to change and is more robust than simple comparison of parameters between control and impact locations (Environment Canada 2012). From the point source, stations have been established along the distance gradient, which allows for physical, chemical and biological changes to be assessed spatially (SEM 2015; Baffinland 2016). This design was also used to identify negative environmental effects for further mitigation and/or alterations to Project activities. Analysis of covariance (ANCOVA) is applied to baseline and annual monitoring data to compare gradients in the regression line to determine if monitoring results are significantly different from baseline conditions.

2.1.1 Modifications to the MEEMP

The 2018 MEEMP study design considered the following:

- MEEMP 2014 to 2017 results
- Regulatory feedback on the 2017 MEEMP report and the MEEMP program to-date
- EEM guidance from Environment and Climate Change Canada (Environment Canada 2010; 2012)
- Future sampling requirements for the Phase 2 Proposal involving the installation of a second ore dock and an increase in port operations and shipping activities

To meet the objectives of the MEEMP, data collected for specific study components (endpoints) are assessed to determine if statistically significant changes have occurred in the receiving environment (based on predetermined effect indicators and measurement endpoints). Statistical confidence depends on many factors, including:

- Appropriate selection of indicators and endpoints that provide robust signals of changes in the environment
- Appropriate data collection methods for high resolution of measurement endpoints
- A study design that allows for meaningful statistical analysis and accuracy in detecting potential effects



Environment and Climate Change Canada (Environment Canada 2010; 2012) recommends using the following environmental components as effect indicators for EEM programs:

- Water quality
- Sediment quality
- Fish population
- Fish tissue
- Benthic invertebrate communities (infauna¹¹)

The 2014 to 2017 MEEMP study design included the above components, except for infauna. Changes to the benthic community were instead evaluated using epifauna ¹² and epiflora ¹³ as effect indicators using towed underwater video transect surveys. The use of epifauna and epiflora as effect indicators deviated from the standard EEM methodology (Environment Canada 2010; 2012) and presented a number of disadvantages, including 1) high temporal and spatial variability due to the transient nature of most epifaunal species, 2) typical low resolution of video survey data compared to laboratory analysis for species identification, enumeration and substrate classification, and 3) difficulty in distinguishing between live epiflora (e.g. kelp) and dead vegetation debris using video survey methods, which can result in inaccurate data reporting.

Fish studies consisted of population weight-to-length relationships and fish tissue analysis (body burden) collected from accidental mortalities. Prior to 2018, fish tissue sampling was limited to incidental Arctic char mortalities, which fluctuated from year to year and did not always yield enough samples for a meaningful statistical analysis. Sculpin, a resident species (unlike migratory Arctic char), were identified as a target species for body burden analysis during the early stages of the MEEMP. Sculpin tag-recapture studies were conducted between 2014 and 2016 to assess population size. Low catch rates and limited recaptures suggested that their population size in the LSA was too low to support lethal fish collection for subsequent tissue analysis.

In 2017, fish sampling was limited to a two-week period in August, which may not have been representative of the entire open-water shipping season (late July to mid-October).

To address the above issues, the following changes to the MEEMP study design occurred in 2018:

- Benthic infaunal sampling was added as a new study component to the MEEMP program so that infauna could be used as an effects indicator for the EEM program. Infaunal samples were collected along three transects (East, West and Coastal) consistent with the program's radial gradient transect design and in concert with sediment sampling.
- Underwater towed video surveys for benthic epifauna and epiflora were no longer conducted along the full transect lengths. Instead, belt transects (1 m x 5 m plots) were permanently installed on the seabed to serve as sample plots for monitoring of potential Project effects on epifauna and epiflora. Monitoring was conducted using a remotely operated vehicle (ROV) underwater video system. The study design follows a before/after, control/impact (BACI) study approach with five belt plots installed in each of the exposure and reference areas. Taxonomic data is also used to inform the AIS program.

¹³ marine vegetation attached to the substrate (e.g. kelp)



¹¹ benthic invertebrates living within the substrate

¹² benthic invertebrates living on the substrate

The number of sediment samples analyzed for hydrocarbon concentrations was reduced from three samples to one sample at each station, as hydrocarbon concentrations have been below detection limits (DL) in all samples to date.

- Two new sediment sampling stations were added along the East Transect to account for anticipated construction associated with the proposed Phase 2 ore dock and freight dock. Sampling at both old and new stations will continue in 2019 for comparative purposes.
- A local shellfish species *Hiatella arctica* was added as an additional effects indicator for the fish sampling program. *H. arctica* are a resident species in the Project area, easily identifiable and measurable in the field, and are fairly abundant in the study area (Golder 2018). The species was added to the program as an alternate species in case finfish species (Arctic char or sculpins) are sampled in insufficient numbers to support statistical power requirements. Measurement endpoints included body weight to length ratio and tissue (body burden) analysis. No additional licensing or permit was required for shellfish sample collection.
- Fish sampling was conducted throughout the duration of the MEEMP program (over four weeks, from the end of July to the end of August) for better representation of the shipping season.

Other components of the 2018 MEEMP program remained unchanged from previous years (2014-2017).

2.2 AIS Monitoring

The AIS monitoring program was designed to detect for the potential introduction of non-native species from ballast water discharges and/or hull biofouling. AIS monitoring did not follow a radial gradient design but was based on a Before/After experimental design that focused on areas with the highest likelihood of species invasion (based on ship anchorage and berthing locations and results of ballast water dispersion modelling). Monitoring for AIS was conducted at the surveillance level with detection of a single invasive species established as the threshold for triggering of adaptive management measures and/or potential corrective actions, if deemed feasible. The AIS monitoring program consists of data collected across multiple trophic levels (marine vegetation, zooplankton, benthic invertebrates and fish) to establish a comprehensive inventory of existing marine biota in the Project area that is intended to serve as a point of reference for any new species identified over time, and to evaluate potential changes in community structure that may be linked to AIS introductions. Marine organisms identified during baseline studies in 2008, 2010 and 2013 also contributed to the AIS inventory.

Since ballast water releases occur in Milne Port, AIS sampling conducted to date has largely focused in southern Milne Inlet. Baseline AIS surveys were conducted in 2014 to enhance marine flora and fauna inventories collected during baseline sampling in 2008 and 2013. AIS monitoring undertaken in 2015 and 2016 focused on identification of organisms not previously detected during the baseline program (as primary indicators of invasion). Equivalent AIS monitoring was conducted in Milne Port area during 2017, although the program was expanded to include AIS sampling at Ragged Island in response to public concern over ships potentially discharging ballast water while occupying anchorage sites in this area.



2.2.1 Modifications to the AIS program

In accordance with monitoring requirements outlined in PC Condition No. 91., ROV-based underwater video surveys were conducted of several ore carrier ship hulls in 2018 to assess for potential biofouling and transport of non-native species by Project vessels originating from outside Canadian waters.

Several of the benthic infaunal sampling stations (15-25 m strata) that were part of the 2014-2017 AIS monitoring program were relocated in 2018 to new locations along the three MEEMP transects (Figure 3-2). The benthic infauna samples collected along the North, West and East transects were used as an effects indicator for the EEM program as well as monitoring for the AIS program.

2.3 Physical Oceanography

In 2018, Baffinland Iron Mines Corporation (Baffinland) undertook physical oceanographic monitoring at three sites in Milne Inlet, two at Milne Port and one at Bruce Head. The physical oceanographic monitoring program is intended to address select Terms and Conditions of Project Certificate (PC) No. 005 and to support the 2018 MEEMP and AIS monitoring programs, the 2018 Bruce Head Monitoring Program, the 2018 Narwhal Tagging Program, and validation of ballast water dispersion modelling undertaken in support of the Project. Detailed sampling methodology and results of the Physical Oceanography Program are presented separately in ANNEXE L.



3.0 MATERIALS AND METHODS

The 2018 MEEMP and AIS field monitoring programs were conducted over a five week period (26 July to 28 August) by a five-person field team composed of Golder biologists, local Inuit field technicians, and a local Inuit vessel operator from Pond Inlet, NU. Sampling was conducted from a 28-foot aluminum vessel and an 11-foot zodiac tender vessel based at the Milne Port facility.

3.1 MEEMP

3.1.1 Water Quality

3.1.1.1 Vertical Physical Profiles

Water column profiling was conducted at a total of 17 stations in Milne Inlet including one station near Ragged Island using a SeaBird SBE-19plus Conductivity, Temperature, Depth (CTD) profiler with integrated external sensors (Wetlab ECO-FI chlorophyll *a* fluorometer, SeaBird SBE- 43 Dissolved Oxygen sensor, and SeaBird SBE-10 pH sensor) (

Figure 3-1). The probe was deployed once per station to collect surface-to-bottom measurements of conductivity, temperature, depth, dissolved oxygen, pH, turbidity and chlorophyll a. Sampling was conducted between 7 and 9 August (Table 3-1). Water column profiling near Ragged Island (CTD-R1) was conducted near the existing ship anchorage locations.

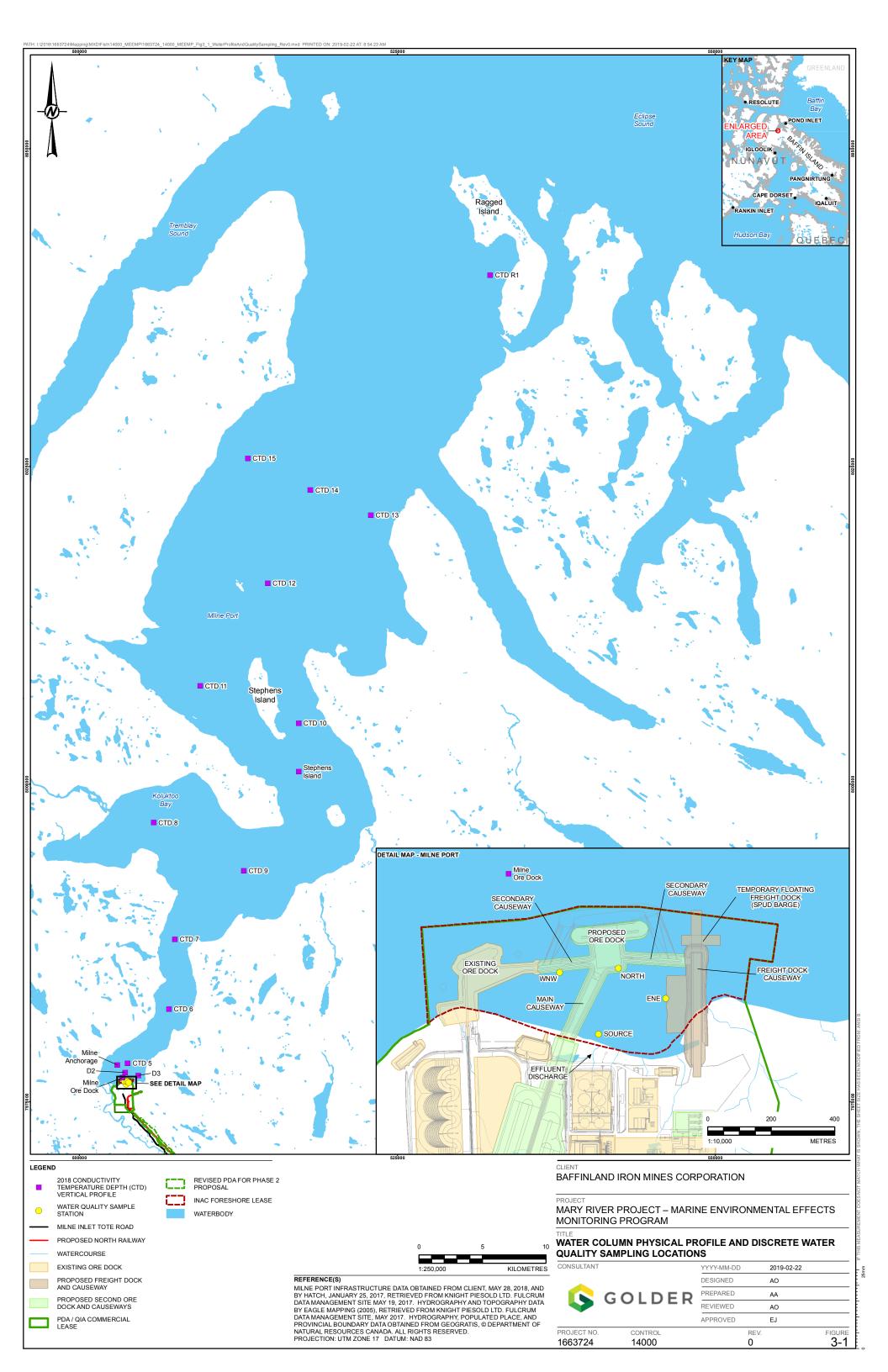
Vertical depth profiles were used to:

- Characterize water column conditions in Milne Inlet, including identification of potential salinity anomalies.
- Evaluate the physiochemical properties of the marine environment important for biological productivity.
- Determine the depth of the pycnocline (density-based stratification in the water column due to gradient in temperature and/or salinity).
- Characterize water column conditions at existing vessel anchorage sites near Ragged Island.

Table 3-1: Water Column Physical Profile Locations

Station	UTM Zone	Easting (m)	Northing (m)	Date
Milne Anchorage	17W	502982	7977892	9 August
Milne Ore Dock	17W	503379	7976909	9 August
Stephens Island	17W	517231	8000982	7 August
D2	17W	503579	7977309	9 August
D3	17W	504620	7977079	9 August
CTD 5	17W	503784	7978046	9 August
CTD 6	17W	507040	7982289	7 August
CTD 7	17W	507505	7987797	7 August
CTD 8	17W	505830	7996957	7 August
CTD 9	17W	512922	7993184	7 August
CTD 10	17W	517229	8004793	7 August
CTD 11	17W	509487	8007716	7 August
CTD 12	17W	514799	8015793	7 August
CTD 13	17W	522910	8021152	7 August
CTD 14	17W	518155	8023129	7 August
CTD 15	17W	513240	8025627	7 August
CTD R1	17W	532297	8040038	8 August





3.1.1.2 Discrete Water Quality Sampling

Discrete water quality samples were collected during five weekly sampling events in August to monitor for potential changes in water quality associated with site drainage and treated effluent discharges to the marine environment. Water quality samples were collected at four sampling stations that were previously monitored from 2015-2017 (SEM 2016a; SEM 2017a; Golder 2018): one located at the marine discharge point for treated effluent and site discharge (i.e., Source); and three stations located 250 m offshore of the discharge point in a semi-radial pattern (Figure 3-1; Table 3-2). The treated effluent and site drainage discharge system consists of an upland pipe that terminates in a collection ditch on the upper foreshore. The ditch runs downslope to a marine discharge point located on the beach east of the existing Ore Dock. During sampling, discharge water was observed flowing from the pipe into the collection ditch where it permeated into the ground before reaching the shoreline (water did not directly flow into ocean during the sampling events).

Table 3-2: Marine Water Quality Sampling Locations

Station Name	UTM Zone	Easting (m)	Northing (m)
ENE	17W	503874	7976517
North	17W	503725	7976612
WNW	17W	503540	7976599
Source	17W	503662	7976403

Water sampling was conducted from the field vessel using a 5.0 L Niskin sampler bottle. Samples were collected from approximately 0.5 to 1 m below the surface due to the relatively shallow depth and lack of stratification at the sampling locations. Samples were kept refrigerated in the field until they were shipped (within 48 h from sampling time) to ALS Environmental (ALS), an accredited analytical laboratory. Laboratory analyses of water samples were conducted by ALS and included general chemistry, nutrients, major ions, metals, coliforms, and hydrocarbons. Laboratory analytical results are presented in ANNEXE B-1.

Water quality results were screened against the Canadian Council of Ministers of the Environment (CCME) guidelines for the protection of aquatic life for marine environments (CCME 2014). Mean, minimum and maximum concentrations were calculated for each sampling location over the five sampling events. For statistical calculations, values equal to half of Detection Limit (DL) were used for concentrations below DL.

3.1.2 Sediment Quality

Sediment quality samples were collected along four transects extending out from the ore dock (Figure 3-2). Three transects (East, West and Coastal) were arranged along the 15 metre (m) depth contour. The East and West Transects extended approximately 1,700 m and 1,800 m to the east and the west of the ore dock, respectively. The Coastal Transect started at the eastern terminus of the East Transect and extended north along the 15 m depth contour for approximately 4,250 m. The fourth transect (North Transect) extended directly offshore of the existing ore dock out to 2,000 m, corresponding with a water depth of approximately 100 m.

In addition to the 19 long-term sampling stations established in 2014 and surveyed annually, the 2018 program included two additional stations (B-2 and B-5) along the East transect. These two stations were added in anticipation of future sampling requirements for a second proposed ore dock (east of the existing ore dock). Stations coordinates are shown in Table 3-3.



Table 3-3: Sediment Sampling Locations

Station	UTM Coordina	ites (Zone 17W)	Approximate	Depth (m)
	Easting	Northing	Distance along Transect (m)	
SW-1	503147	7976571	0	18
SW-2	502961	7976466	200	16
SW-3	502721	7976423	500	18
SW-4	502264	7976525	1,000	15
SW-5	501678	7976303	1,500	15
SE-1	503433	7976699	0	17
SE-2	503646	7976741	300	16
SE-3	503911	7976728	500	15
BE-2	504149	7976704	700	15
SE-4	504399	7976653	1,000	15
SE-5*/SC-1	504912	7976638	1,500/0	18
SC-2	504987	7976945	300	15
SC-3	505053	7977456	850	15
BE-5	505066	7977632	1,000	15
SC-4	505505	7978260	2,000	15
SC-5	506964	7979517	4,000	16
SN-1	503303	7976751	0	37
SN-2	503271	7976947	200	57
SN-3	503271	7977197	500	67
SN-4	503271	7977697	1,000	80
SN-5	503271	7978697	2,000	100

Note: *SE-5 is the same as SC-1.

Sediment samples were collected using a Petite Ponar grab sampler with an area of 0.0225 m². Three sediment samples were collected from each station and each sample consisted of one or two grabs depending on grab penetration. Each grab sample was examined for acceptability based on the following criteria:

- sediment did not contain large foreign objects
- grab showed adequate penetration depth and sediment volume greater than 25% full
- grab was not overfilled (i.e., sediments did not touch the top of the grab)
- grab was not leaking (i.e., overlying water was present)
- sample was not disturbed or winnowed (i.e., sediment surface was relatively flat)



Upon acceptance, two terra core samples were taken from the undisturbed sediments and placed into prelabeled methanol preserved vials to test for volatile organic compounds (VOCs). The remaining top 5 cm of sediment was removed from the centre of the grab (i.e., sediment from the side and bottom of the grab was not collected) using a clean stainless steel spoon and transferred to a clean stainless steel bowl. Sediment samples from single or composite grabs were homogenized until the colour and texture were consistent throughout the sample. Aliquots of the sample of the homogenized sediments were transferred to clean, labelled glass jars. Sediment samples were stored on ice packs in a cooler prior to shipment to the analytical laboratory.

Additional information, including the number of unsuccessful grabs, sediment appearance and odour (if any), presence of debris in sample, presence of live organisms in sample, and deviations from the planned sampling program, were recorded on field data sheets. The date, time, transect name, station number, and global positioning system (GPS) coordinates of each sample were recorded. All sampling gear was rinsed and scrubbed with brushes with a biodegradable laboratory-grade detergent between sampling collections. Samples were stored in coolers in the field and in refrigeration until sent to ALS (within 48 h from sampling time) for the following analyses:

- moisture and pH
- particle size composition
- extractable metals
- total organic carbon (TOC) and inorganic carbon (TIC)
- hydrocarbons (extractable petroleum hydrocarbons [EPHs], volatile organic compounds [VOCs] and polycyclic aromatic hydrocarbons [PAHs]). Hydrocarbon analysis were conducted on one sample from each station only

Analytical results were compiled, and basic statistical calculations, e.g., mean and standard deviation (SD), were performed for each station. Concentrations of metals and hydrocarbons were compared to CCME Interim Sediment Quality Guidelines (ISQGs) and Probable Effect Level (PELs) for the protection of aquatic life in the marine environment (CCME 2014). In addition, metals and hydrocarbons were compared to British Columbia Approved (BC MECCS 2018) and Working Quality Guidelines (BC MOE 2017), and National Oceanic and Atmospheric Administration sediment benchmarks (Buchman 2008) following a feedback received from MEWG. Half of the DL values were used for variables with concentrations below analytical DL for statistical calculations and graphs.

Principal Component Analysis (PCA) was conducted on sediment physical and chemical variables of samples. PCA is an ordination technique that examines ecological distances (differences or similarities) between samples and allows plotting of high dimensional data in two or three-dimensional graphs with the distances between the samples in the graphs representing the ecological distances. For the analysis, concentrations below the laboratory detection limits were converted into half-detects; all concentrations were transformed into their square roots. Variables for which all concentrations were below detection limits (e.g., hydrocarbons, volatile organic compounds) were excluded from the PCA.

Fines content was analyzed using ANCOVA, where the model included main effects of distance from transect origin, year (as a categorical variable), transect, and all possible interactions between the three variables. Data transformations were not needed to meet assumptions. The data assigned to the first station along the Coastal Transect were not included, since they were represented in the last station of the East Transect. Therefore, inferences at transect origin were not made for the Coastal Transect. The effect of distance was modeled as a second-degree orthogonal polynomial to account for the non-linearity in percent fines relative to distance from transect origin. Model residuals were examined to identify departures from ANCOVA assumptions – normality,



homoscedasticity, and linearity in predictors. No outliers were identified in the analysis, therefore all data were used in the model. Following ANCOVA, multiple comparisons were performed at the following covariate values: distances of 0 m (except for the Coastal Transect), 500 m, 1,000 m, and 1,500 m for all transects, in addition to 4,000 m for the Coastal Transect. The model results were compared between years within each distance / transect combination. Tukey's honest significant difference (HSD) procedure was used to correct for family-wise error rate.

The analysis of iron concentrations in sediments was performed in a similar way to the analysis of fines content. However, the model also included a main effect of percent fines and distance. Fines, and iron concentrations were transformed using natural log. Four outlier values were removed during the analysis based on examination of residuals – two values from the Coastal Transect in 2014 (at 4,082 m), one value from the Coastal Transect in 2017 (at 1,820 m), and one value from the West Transect in 2018 (at 90 m). All outliers were shown on the plots depicting raw values and model predictions. Two sets of multiple comparisons were performed – 1) multiple comparisons at observed fines content at each transect / distance / year combination, and 2) multiple comparisons at minimum and maximum values of fines content at each transect across years and distances. The first set of comparisons assesses difference between years based on the observed iron and fines values, whereas the second set of comparisons provides information on changes in iron content when corrected for fines content. In the calculation of multiple comparisons based on observed fines content (i.e., first set of comparisons), all estimates were adjusted to mean natural log-transformed fines for each transect / distance combination. For the second set of comparisons, all estimates were adjusted to the minimum (or maximum) natural log-transformed fines content value for each transect across all years and distances. The analysis of both fines and iron concentration were performed in the statistical package R v.3.5.1 (R 2018).

3.1.3 Substrate, Macroflora, and Benthic Epifauna

Epibenthic studies within the 2018 program consisted of underwater video monitoring of benthic epifauna and macroflora communities within permanent belt transects installed on the sea floor. Nine belt transects (1 m x 5 m rectangular plots with clearly demarcated boundaries to allow for study repeatability and count accuracy) were permanently installed on the sea floor, five in the Project exposure area and four in a reference area (Table 3-4; Figure 3-2). Each belt transect was made of two 1-m-long, 5-cm-diameter aluminum pipes filled with concrete connected by two 5-m-long steel chains attached to the both ends of the pipes. The chains were marked at 1-m intervals to allow for accurate area measurements and species scaling. The belt transects were deployed from the field vessel in water depths of approximately 10 to 20 m. An underwater video camera mounted on an ROV was used to verify that the belt transects were positioned properly.

Substrate, benthic macrofloral and epifaunal communities were surveyed within each belt transect using the underwater video system consisting of two standard resolution video cameras (NTSC standard definition with 3x optical zoom) mounted on a lightweight Seamor Chinook 300F industrial-grade inspection ROV equipped with spotlights, integrated pressure/depth sensor, magnetic compass, and scaling lasers (spaced at 15 cm) that allowed for accurate scaling of seabed features and biota. The video camera on the ROV was connected via umbilical to a video monitor set-up on the deck of the 28 ft aluminum field vessel, where video data was recorded on an external hard drive. The ROV was operated by a trained, subcontracted ROV technician (Andy Clark - Ocean Dynamics Inc.) using manual and automatic thruster, tilt, pitch and heading controls built into a top-side deck-mounted control box.

Underwater video was post-processed by a qualified marine biologist. The recorded underwater video footage was analyzed frame by frame to record percent (%) cover of substrate type and benthic macroflora, according to the classification system outlined in the 2017 MEEMP report. The analysis included taxonomic identification of benthic epifauna down to the lowest practical taxonomic level and their abundance (counts and % cover).



Table 3-4: Belt transect locations

Area	Station	UTM Coordinates (1	17W)	Average Depth	
		Easting (m)	Northing (m)	(m)	
Milne Port	TP-1	502828	7976382	9.8	
	TP-2	503039	7976480	9.8	
	TP-3	504208	7976659	12.4	
	TP-4	504363	7976611	12	
	TP-5	504802	7976731	12.1	
Reference Area	TP-6	506562	7979114	10	
	TP-7	506774	7979170	10.9	
	TP-8	506957	7979457	11	
	TP-9	506997	7979599	10.9	
	TP-10	506584	7979115	8	

3.1.4 Benthic Infauna

Benthic infauna samples were collected from 15 stations arranged along three transects (East, West and North) extending out from the ore dock along the 15-metre depth (Table 3-5; Figure 3-2). The West Transects extended approximately 1,500 m to the west of the western edge of the existing ore dock, while the East transect extended to the same distance to the east from the eastern extremity of the proposed future ore dock. The North Transect extended directly offshore of the existing ore dock out to 2,000 m, corresponding with a water depth of approximately 100 m. Sediment quality samples were also collected from the stations where benthic infauna samples were collected (Section 3.1.2).

Table 3-5: Benthic Infauna Sampling Station Locations.

Station	UTM Coordinates (Z	one 17 W)	Approximate	Approximate	
	Easting	Northing	Distance along Transect (m)	depth (m)	
BW-1	503147	7976571	0	15	
BW-2	502961	7976466	200	15	
BW-3	502721	7976423	500	15	
BW-4	502264	7976525	1,000	15	
BW-5	501678	7976303	1,500	15	
BE-1	503911	7976728	0	15	
BE-2	504149	7976704	200	15	
BE-3	504399	7976653	500	15	
BE-4	504912	7976638	1,000	15	
BE-5	505066	7977632	2,000	15	
SN-1	503303	7976751	0	40	
SN-2	503271	7976947	200	60	
SN-3	503271	7977197	500	70	
SN-4	503271	7977697	1,000	80	
SN-5	503271	7978697	2,000	100	



Benthic infaunal samples were collected in triplicate from each station using a Petite Ponar grab sampler with an area of 0.0225 m², each replicate consisting of three to six grab samples, depending on grab penetration. Each benthic sample was examined for acceptability, based on the following criteria:

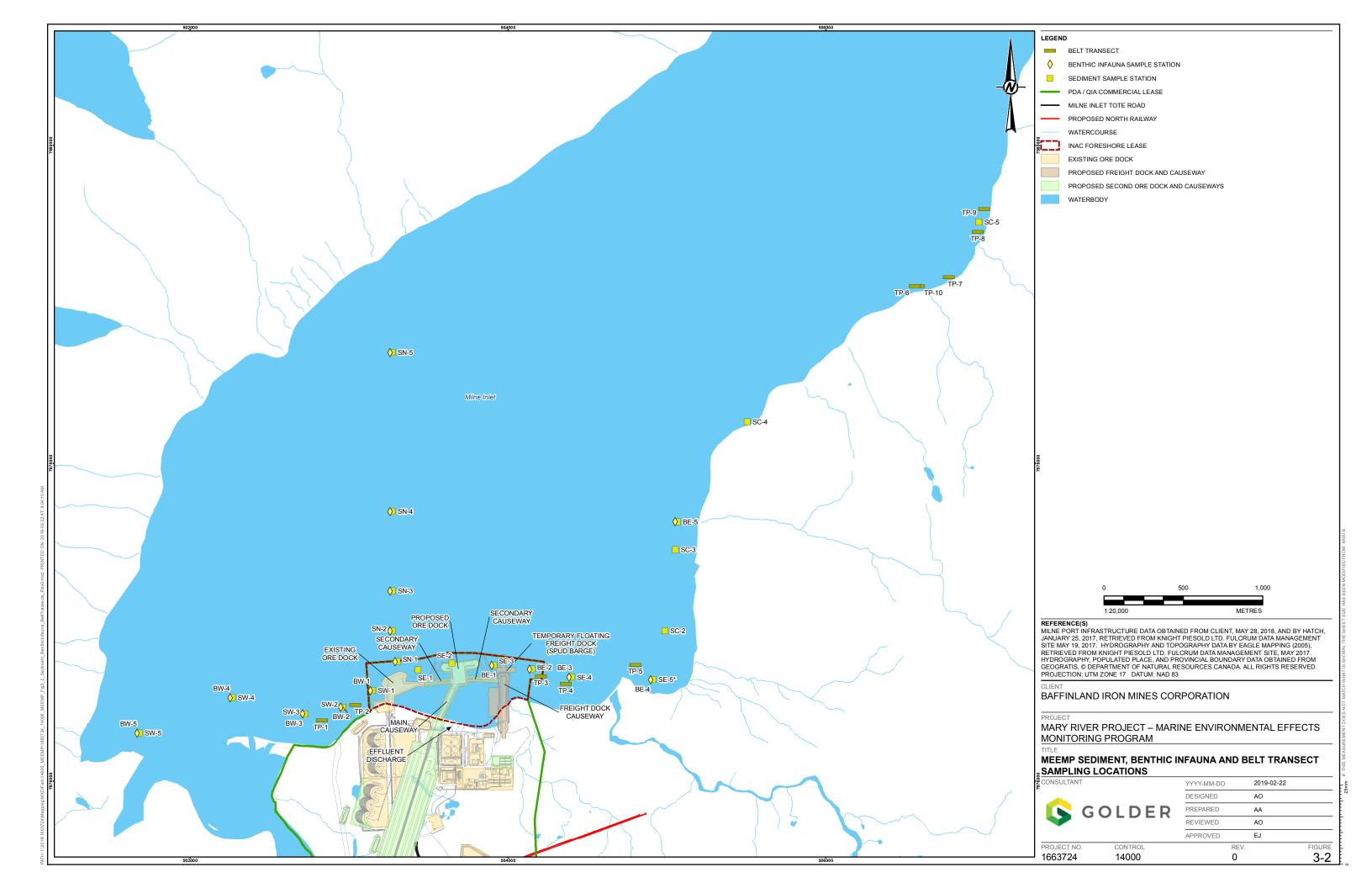
- sediment did not contain large foreign objects;
- grab showed adequate penetration depth and sufficient sediment volume (at least 25% to 60-70% full);
- grab was not overfilled (i.e., sediments did not touch the top of the grab);
- grab was not leaking (i.e., overlying water was present); and
- sample was not disturbed or winnowed (i.e., sediment surface was relatively flat).

Upon acceptance, contents of the grab sampler were transferred to an aluminum sieving table. The contents were gently rinsed through a 0.5 mm mesh sieve with filtered seawater and preserved in a 10% buffered formalin solution in pre-labeled 1 L wide-mouth high density polyethylene (HDPE) sample jars. Larger organisms were removed during the rinsing process using forceps and preserved in separate jars to avoid crushing by hard substrate material. The containers were then sealed and inverted several times to promote homogenization with the formalin. Containers were labeled internally (water-resistant labels) and externally. Field observations (e.g., sediment characteristics) were recorded on field data sheets. Samples were sent to Biologica Environmental Services (Biologica) for analysis of taxonomic composition (identified to the lowest practical taxonomic levels) and abundance. A high level of analytical precision was achieved in 2018 consistent with the level of 2017 studies. Taxonomic and abundance data were used to estimate community indices including density (org/m²), biomass, relative abundance and relative biomass of main taxa, diversity and richness.

Shellfish species *H. arctica* was used to conduct fish condition (energy storage) monitoring as an alternative to fish conditions monitoring (Section 3.1.5.3). Data for shellfish conditions was collected from the same stations as sediment and benthic invertebrate samples. The first five to ten shellfish specimens were collected from sediment or benthic invertebrate sample grabs and measured for length and weight to the nearest millimeter and 0.001 g respectively. Processed shellfish were released back to the water, if collected from a sediment sample, or returned to the sample jar, if taken from a benthic invertebrate sample or used for tissue analysis. The recorded data was used to determine body-length-to-body-weight relationships.

H. arctica tissue samples were collected at each benthic invertebrate sampling station. For shellfish tissue, samples were collected in Ziplock bags, frozen and shipped to the ALS analytical laboratory for analysis of metal concentrations, including mercury.





3.1.5 Fish

3.1.5.1 Permitting

The following scientific data collection permits were obtained prior to the start of the 2018 fish sampling program:

- Fisheries and Oceans Canada (DFO) Licence to Fish for Scientific Purposes Permit #: S-18/19-1028-NU
- DFO Animal Use Protocol Permit # FWI-ACC-2018-42

Copies of the permits are provided in ANNEXE G-1.

3.1.5.2 Fish Collection

Fish sampling was conducted in the Milne Port area from 29 July to 27 August using both active (gill netting, angling, beach seine) and passive (Fukui traps) capture methods (Figure 3-3). Fish sampling locations and methods were consistent with those in previous years. The effort was spread over four weeks to capture as much of the open-water season conditions as possible.

Angling (jigging and trolling) was conducted over a total of six days between 10 and 27 August to characterize bottom and demersal fish in the LSA (Table 3-6). The duration of sampling was activity-dependent; with a single trolling event occurring for 60 minutes, and jigging occurring between 20 and 85 minutes (n=12). Sampling start and end positions were recorded using a Garmin GPS and logged in a field notebook. Jigging occurred from a stationary position with one or two rods and lines deployed from the vessel. Baited hooks or spoon lures (flashers) were allowed to hit the bottom, then flicked upward to attract bottom fish. Trolling occurred along a predetermined depth contour where lines with flashers were cast over the side of the vessel and spooled in towards the vessel at a known depth to attract pelagic fish.

Table 3-6: Summary of 2018 Fish Sampling - Angling (Jigging and Trolling)

Fishing Type	Station Name	Date	Duration	Zone	GPS Coordinat	es
			(hour:min)		Easting	Northing
Trolling	AN01	10-Aug-18	1:00	17W	504981	7977364
Jigging	AN02	20-Aug-18	1:00	17W	503086	7976509
Jigging	AN03	21-Aug-18	1:00	17W	503092	7976482
Jigging	AN04	21-Aug-18	0:22	17W	503216	7976593
Jigging	AN05	21-Aug-18	0:30	17W	505077	7976783
Jigging	AN06	25-Aug-18	0:45	17W	503087	7976465
Jigging	AN07	26-Aug-18	0:30	17W	502813	7976414
Jigging	AN08	26-Aug-18	1:00	17W	502715	7976475
Jigging	AN09	26-Aug-18	0:20	17W	503131	7976542
Jigging	AN10	27-Aug-18	1:25	17W	504837	7976645
Jigging	AN11	27-Aug-18	0:30	17W	504569	7976670
Jigging	AN12	27-Aug-18	0:40	17W	504132	7976566
Jigging	AN13	27-Aug-18	0:45	17W	503485	7976601



Standardized monofilament gill nets were used to sample shallow (i.e., up to 15 m deep) subtidal areas for characterization of pelagic fish communities present in the Milne Port area. A total of 24 gill net sets occurred from 29 July to 26 August (Table 3-7). Each gill net consisted of six panels with each panel measuring 15.2 m in length and 2.4 m in width, with mesh sizes of each panel consisting of 2.5 cm, 3.8 cm, 5.1 cm, 6.4 cm, 7.6 cm and 10.2 cm. The gill nets were deployed in a shore-perpendicular orientation (smallest mesh size closest to shore) and suspended just below the water surface and were checked every two hours for fish presence over the duration of deployment. Sampling locations were recorded using a Garmin GPS and logged in a field notebook. Total soak durations ranged from 1 hour and 55 minutes to 7 hours and 45 minutes with an average soak duration of 4 hours and 20 minutes. An exception was gill net set GN08, which was left deployed for 25 hours and 40 minutes due to strong winds that prevented timely checking and retrieval of the net. The total duration of the gill net effort was 151 hours and 45 minutes.

Table 3-7: Summary of 2018 Fish Sampling - Gill Net

Station	Date	Total	Number of	Zone	GPS Coor	dinates		
		Duration (h:min)	Checks ¹		Start		End	
		(11.11111)			Easting	Northing	Easting	Northing
GN01	29-Jul-18	2:00	0	17W	503051	7976447	503073	7976529
GN02	30-Jul-18	3:55	1	17W	502953	7976414	502892	7976468
GN03	30-Jul-18	4:00	1	17W	502168	7976460	502168	7976552
GN04	30-Jul-18	1:55	0	17W	504828	7976690	504790	7976627
GN05	30-Jul-18	2:00	0	17W	505038	7976635	504995	7976703
GN06	30-Jul-18	2:00	1	17W	504453	7976582	504491	7976501
GN07	2-Aug-18	7:40	0	17W	504378	7976527	504428	7976583
GN08	2-Aug-18	25:40	0	17W	505046	7976907	505128	7976935
GN09	4-Aug-18	7:20	3	17W	502704	7976276	502741	7976350
GN10	4-Aug-18	5:10	2	17W	505179	7977477	505098	7977480
GN11	4-Aug-18	5:25	2	17W	505145	7977216	505060	7977230
GN12	9-Aug-18	7:20	3	17W	502510	7976273	502567	7976333
GN13	9-Aug-18	7:45	3	17W	502772	7976280	502798	7976363
GN14	12-Aug-18	7:25	3	17W	504468	7976514	504423	7976589
GN15	12-Aug-18	4:10	2	17W	504602	7976590	504569	7976662
GN16	12-Aug-18	3:00	1	17W	504294	7976477	504280	7976557
GN17	12-Aug-18	2:00	1	17W	503415	7976531	503487	7976507
GN18	20-Aug-18	2:00	0	17W	503115	7976431	503044	7976484
GN19	20-Aug-18	2:05	0	17W	502643	7976231	502665	7976320
GN20	21-Aug-18	3:45	1	17W	502177	7976192	502237	7976235
GN21	25-Aug-18	4:00	1	17W	505172	7976856	505091	7976804
GN22	25-Aug-18	4:00	1	17W	504968	7976573	505004	7976661
GN23	26-Aug-18	5:40	2	17W	502974	7976375	502924	7976442
GN24	26-Aug-18	5:50	2	17W	502623	7976287	502663	7976388

Notes: 1 Number of checks represents the number of times the field team checked the net and sampled fish with the net remaining in the same location



Fukui traps were used to sample demersal fish in the Milne Port area from 10 to 27 August 2018 (Table 3-8). Sampling was conducted with sets consisting of five traps connected with a line, each trap measuring 61 cm x 46 cm x 20 cm, with 1.25 cm stretch mesh and equipped with a bait container. Traps were baited with Arctic char and deployed for several days at each station. Traps were periodically checked (normally every day) and, upon retrieved, bait containers were refilled if necessary, prior to redeployment. There were 11 Fukui trap stations in total. Fishing locations were recorded using a Garmin GPS and logged in a field notebook.

Table 3-8: Summary of 2018 Fish Sampling - Fukui Traps

Station	Date		Duration	Zone	GPS Coordi	nates
	Set	Pull	(h:min)		Easting	Northing
FT01	10-Aug-18	17-Aug-18	166:55	17W	502579	7976727
FT02	10-Aug-18	17-Aug-18	173:20	17W	502836	7976443
FT03	10-Aug-18	17-Aug-18	172:40	17W	503023	7976492
FT04	10-Aug-18	17-Aug-18	166:15	17W	502848	7976462
FT05	17-Aug-18	25-Aug-18	191:30	17W	503529	7976632
FT06	17-Aug-18	25-Aug-18	190:45	17W	504234	7976593
FT07	17-Aug-18	21-Aug-18	92:30	17W	503014	7976494
FT08	17-Aug-18	21-Aug-18	92:20	17W	503127	7976472
FT09	21-Aug-18	27-Aug-18	140:44	17W	502990	7976408
FT10	21-Aug-18	27-Aug-18	140:50	17W	502919	7976408
FT11	25-Aug-18	27-Aug-18	48:15	17W	502499	7976284

Seine nets were used to sample fish in near shore habitat in Milne Port on 21 and 26 August in six sampling events (Table 3-9). Sampling was conducted using a 1.5 m by 10 m seine net. Sampling effort took an average of 5 minutes to sample total areas ranging from 200 m² to 750 m² at a mean depth of 1 m. Sampling locations were recorded using a Garmin GPS and logged in a field notebook.

Table 3-9: Summary of 2018 Fish Sampling - Seine Net

Station	Date	Total	Area	Zone	GPS Coordinates					
		Duration	Sampled		Start		End			
		(h:min)	(m²)		Easting	Northing	Easting	Northing		
SN01	21-Aug-18	0:10	200	17W	503064	7976442	503084	7976448		
SN02	21-Aug-18	0:05	600	17W	503016	7976412	502983	7976365		
SN03	21-Aug-18	0:05	750	17W	503016	7976412	502928	7976321		
SN04	26-Aug-18	0:05	400	17W	503508	7976424	503545	7976420		
SN05	26-Aug-18	0:05	420	17W	504271	7976475	504314	7976466		
SN06	26-Aug-18	0:05	500	17W	502444	7976268	502494	7976266		



The shellfish species *Hiatella arctica* (wrinkled rock-borer clam) was collected from benthic invertebrate samples (see Section 3.1.4) as an additional effects indicator for the fish sampling program in case insufficient numbers of finfish species (e.g. Arctic char or sculpins) were sampled to support statistical power requirements. Up to 10 specimens of *H. arctica* from each benthic invertebrate station were measured for body weight to length ratio. Samples from each benthic infauna station, where available, were frozen and sent to ALS analytical laboratory for metals in tissue (body burden) analysis.

3.1.5.3 Fish Processing

All fish collected were transferred to aerated buckets with seawater prior to processing. Representative photographs were taken for each species and life stage at each station. Fish were identified to species, measured for length and weight and returned to aerated buckets to allow for recovery prior to release to the approximate area of capture.

Incidental fish mortalities were retained for aging, stomach content and body burden analysis. Whole fish were kept frozen until they were packaged and shipped in a cooler to Biologica Environmental Services (Biologica) in Victoria, British Columbia for laboratory assessments described in more detail in ANNEXE G-6.

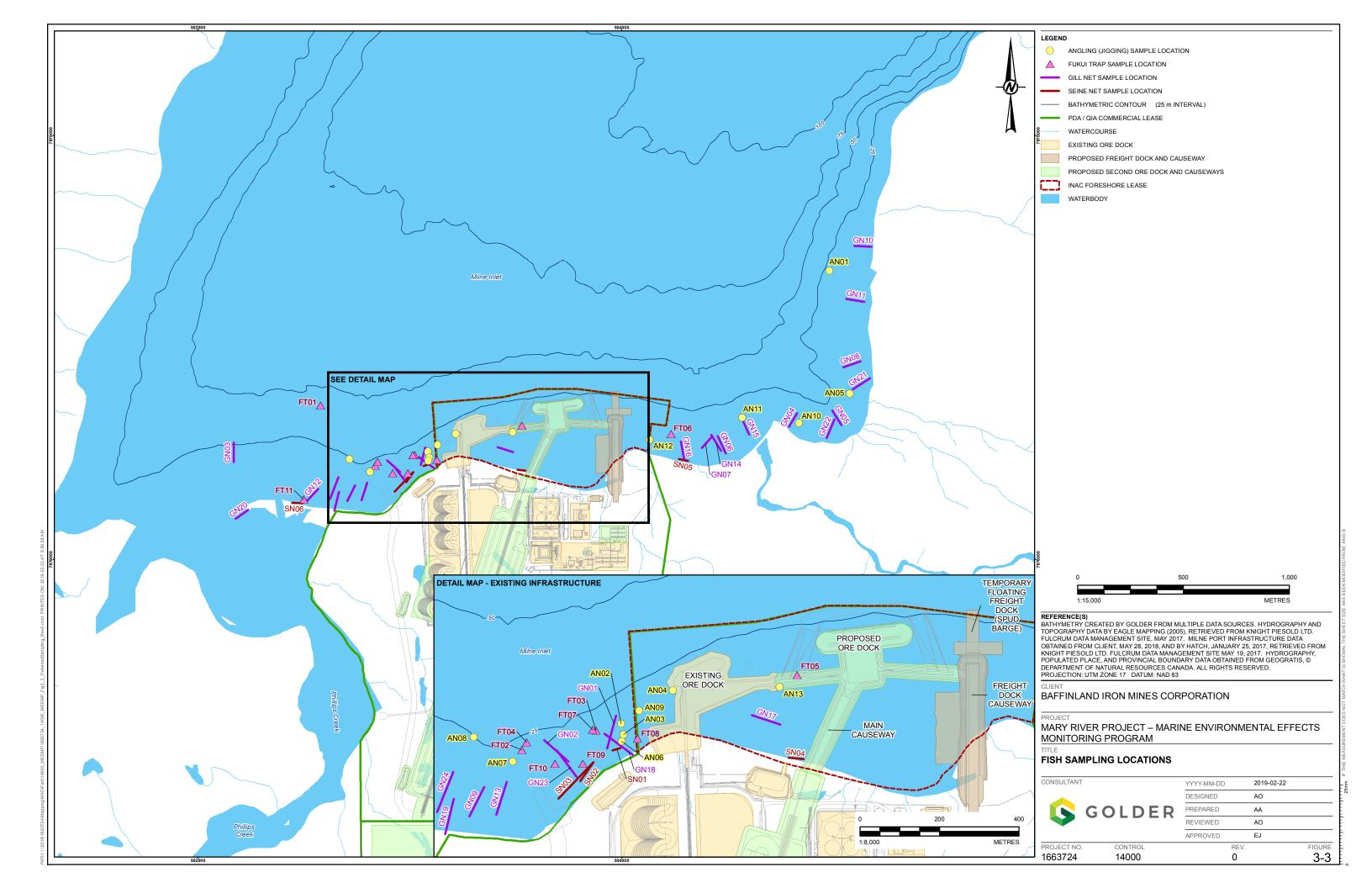
A stomach assessment was conducted prior to dissection, including measurements of percent fullness and percent digestion. The stomach was separated from the intestines anterior of the pyloric caecae and discarded. A longitudinal incision was made with a scalpel, avoiding damage to the contents, to reveal the food bolus. At this time, stomach fullness was estimated by considering two factors: the degree of distention of the stomach, and the weight of the bolus relative to the size of the fish. The bolus was dissected, working anterior-posterior, and its identifiable components weighed to the nearest 0.0001g. Prey items were identified to the lowest practicable taxonomic level (species when possible). Digested and unidentifiable material were categorized (e.g., unidentified parts, digested tissue, non-food, etc.). Each identifiable unit (taxon or category) was placed in small drops of water on a petri dish to prevent desiccation during the identification process. All prey categories (taxa and unidentifiable categories) were blotted and weighed to the nearest 0.01 mg of wet weight (wwt).

Whole fish were examined for lesions or tumors. The internal organs and head were removed prior to tissue collection to prevent contamination of the tissue, should an organ be punctured during tissue removal. The tissue was removed from the dorsal musculature with a knife, rinsed and wrapped in new food-grade aluminum foil and placed in clean labeled bags. Samples were kept frozen in a cooler with ice packs until delivery to Maxxam Analytics (Maxxam) in Victoria, BC for analysis. Maxxam analyzed the wet weight tissue samples for metal concentrations by atomic spectroscopy. The certificate of analysis and chain of custody between Biologica and Maxxam are provided in ANNEXE G-5.

For fish aging, the sagittal otoliths were removed from each fish head, cleaned and placed in labelled vials. Whole otoliths were placed in a glass petri dish with distilled water and examined over a black background using a dissecting scope (10-40x magnification). Incomplete or weak bands were considered malformed or damaged and were not processed.

Summary statistics and regressions for each species were calculated using Microsoft Excel. Relative abundance, length frequency distributions, age-length relationship, length-weight relationships, and major taxa abundances in stomach contents were plotted using SigmaPlot version 14.0. SYSTAT version 13 was used to compare the relationship interaction between sample years by multiplicative ANCOVA. When a significant interaction was determined between years (p < 0.050) the multiplicative ANCOVA was simplified to an additive ANCOVA, following the EEM guidance (Section 8.3.3.2.5, Environment Canada 2012).





3.2 AIS

Zooplankton, benthic infauna and encrusting epifauna samples were sent to Biologica for taxonomic identification and enumeration. Specimens were identified to the lowest possible taxonomic level. The list of identified taxa was compared to the taxa inventory from previous survey years and any taxa that had not been identified during previous AIS and MEEMP surveys in Milne Inlet were assessed further to determine if their known distributions and ranges included north Atlantic, Arctic and/or Canadian Arctic waters. These taxa were also compared against a global invasive species database (Molnar et al. 2008), as well as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014).

Species were not always identified to the species level due to a variety of limitations. Species descriptions are often based on adult samples, and immature specimens may lack the features present in the adult that are required for specific identification (Steinerstauch 2019, pers. comm.). Fragmented samples, or samples damaged during collection, may also be missing identifying features that would be used to determine species. Incomplete species records and descriptions also lead to limitations in specific identification (Steinerstauch 2019, pers. comm.).

3.2.1 Zooplankton

Zooplankton samples were collected at Milne Port and at Ragged Island using a combination of vertical and horizontal oblique tows (Table 3-10; Figure 3-6). Vertical hauls were conducted at seven sampling stations in the Milne Port area, including one sample collected alongside an ore carrier (Arkadia) during ballast water discharge, and four stations at Ragged Island. Vertical hauls were conducted by lowering a 0.3 m diameter plankton net (63 µm mesh size) to 1 to 3 m above the bottom and then raising the net by hand to the surface at a rate of approximately 1 m/s (visually estimated). Three replicate hauls were conducted at each station and combined into a single composite sample following methodology from previous years (SEM 2017a; Golder 2018).

Horizontal oblique tows were conducted along six transects in Milne Port consistent with the studies conducted in 2017. Horizontal oblique tows were conducted by towing a 0.5 m diameter net (50 m mesh size) at a speed of approximately 8-10 km/h for a period of at least ten minutes per tow. Tows were conducted near the surface in a sinusoidal fashion by means of regular transitions in tow speed (1-minute towing, 1-minute idling), which allowed the weighted net to periodically sink and rise during active sampling. This helped to avoid sampling only in the upper few metres of the water column. The sinusoidal oblique tow approach was used to help catch a more representative sample of zooplankton in the water column and to catch faster moving larvae (e.g., fish larvae, larger crustaceans). Tows were collected as a single composite sample for each transect.

All zooplankton samples were preserved in 5% formalin and submitted to Biologica for taxonomic identification and enumeration. A list of zooplankton species collected in 2018 was compared to the species inventory from previous years. Taxa that had not been identified previously in Milne Inlet were further investigated to determine if they were invasive. In addition, taxa were compared against a global invasive species database (Molnar et al. 2008), as well as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014).



Table 3-10: Zooplankton sampling locations

Station	UTM Zone	Start Coordina	ites (17 W)	End Coordinate	es (17 W)
		Easting (m)	Northing (m)	Easting (m)	Northing (m)
Horizontal tows					
ZH-1	17W	502484	7976593	502278	7977327
ZH-2	17W	502888	7976532	502527	7977169
ZH-3	17W	502999	7976642	502425	7977013
ZH-4	17W	503604	7976846	502995	7977281
ZH-5	17W	504360	7978026	502767	7977657
ZH-6	17W	502247	7976849	503673	7977153
Vertical tows					
ZV-1	17W	502768	7976524	n/a	n/a
ZV-2	17W	502866	7976548	n/a	n/a
ZV-3	17W	503028	7976580	n/a	n/a
ZV-4	17W	503570	7976801	n/a	n/a
ZV-5	17W	503793	7976782	n/a	n/a
ZV-6	17W	502576	7976603	n/a	n/a
NBWD Arkadia	17W	503192	7976607	n/a	n/a
BR1	17X	533494	8043032	n/a	n/a
BR2	17X	533668	8042953	n/a	n/a
BR3	17X	532428	8042298	n/a	n/a
BR4	17X	532336	8042130	n/a	n/a

3.2.2 Benthic Infauna

In addition to samples collected as a part of the MEEMP (Section 3.1.4), benthic infaunal samples for the AIS program were collected from eight stations at Milne Port and two stations at Ragged Island split between two depth strata: 3-15 m and 25-35 m (Table 3-11; Figure 3-6). Three samples were collected at each station with the exception of Ragged Island, where a single sample was collected from each of the two stations. Samples were collected using a Petite Ponar grab sampler following the same procedures as described in Section 4.1.4.

Collected samples were analyzed for taxonomic composition (identified to the lowest practical taxonomic levels) and abundance by Biologica together with benthic infauna samples collected for the MEEMP (Section 3.1.4). The benthic infauna species list developed during previous studies was updated and examined for presence of new species identified in 2018. Taxa that had not been previously identified in Milne Inlet were further investigated to determine if they were invasive. In addition, taxa were compared against a global invasive species database (Molnar et al. 2008), as well as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014). Any taxa identified as potentially non-indigenous were sent to Phillipe Archambault's Benthic Ecology Lab for independent verification.

A taxa accumulation curve (Figure 4-32) was calculated for samples collected in Milne Inlet and Ragged Island to compare sampling effort with previous AIS monitoring surveys and to provide an estimate of the effort required



to fully characterize the benthic infauna community. The non-parametric species estimator Chao 2 was calculated for 2018 following the methods used in SEM 2017a (Table 4-21). During taxonomic identification, some specimens were not identifiable, but were identified to the lowest possible taxonomic level (e.g. *Macoma sp.*). These specimens may have represented a species that had already been identified (e.g. *Macoma balthica*). In the accumulation curve and Chao 2 analyses, it was assumed that all taxonomic designations were representative of unique taxa and were included in the analysis, which may have resulted in an over-estimate of the expected number of taxa within an infinite number of samples.

Table 3-11: AIS benthic infauna sampling locations

Area	Station ID	ETM Zone	Easting (m)	Northing (m)	Depth range (m)
Milne Port	BM-1	17W	502746	7976358	3-15
	BM-3	17W	502759	7976475	25-35
	BM-4	17W	502913	7976421	3-15
	BM-6	17W	502878	7976514	25-35
	BM-7	17W	503064	7976495	3-15
	BM-9	17W	503030	7976576	25-35
	BM-10	17W	503565	7976688	3-15
	BM-12	17W	503565	7976778	25-35
Ragged Island	BR-1	17X	533494	8043032	3-13
	BR-4	17X	532336	8042130	15-25

3.2.3 Macroflora and Benthic Epifauna

Macroflora and benthic epifauna data were collected using underwater video surveys conducted along the length of each of the four previously established AIS transects (Figure 3-6) using the ROV. The collected underwater video footage was examined to identify macrofloral and epifaunal species to the lowest practical taxonomic level. Data recorded included presence only, rather than enumeration, since relative abundance of species was not of interest for the AIS monitoring program (ANNEXE J).

3.2.4 Fish and Mobile Epifauna

Taxonomic data on fish and mobile epifauna collected as part of the MEEMP and AIS during fish sampling and underwater video surveys (Section 3.1.5) were used to update the AIS fish and mobile epifauna database.

3.2.5 Encrusting Epifauna

During the 2018 field season, Golder recovered three settlement baskets that had been originally deployed by SEM in 2016 from the west side of the ore dock, adjacent to the caisson (Figure 3-6). The baskets were initially deployed by SEM in August 2016 and recovered by Golder in September 2017, at which point it was determined an insufficient amount of colonization had occurred on the rocks to allow for sample collection and analysis. A total of five settlement plates were attached to the line to provide additional surface area for colonization and the baskets were redeployed. The baskets and plates were recovered on 13 August 2018 for sample collection after a total deployment period of approximately 24 months.



Golder also recovered three settlement baskets that were deployed in September 2017 on the east side of the ore dock adjacent to the caisson (Figure 3-6). The rocks in the baskets on the east side of the ore dock exhibited a lower amount of colonization than those from the baskets on the west side, likely due to a shorter deployment time. However, colonization was deemed sufficient to allow for sample collection and analysis. The baskets and plates were recovered on 13 August 2018 for sample collection after a total deployment period of 11 months.

The amount of epifaunal colonization on rocks and plates in both locations was relatively low (Figure 3-4). After observation of the rocks and plates and consultation with the taxonomic laboratory, it was deemed that submission of whole rocks and plates rather than scraped epifaunal samples would result in the highest quality samples for taxonomic analysis (Figure 3-5). As a result, whole rocks and plates were collected and preserved in 10% formalin to preserve sample integrity. A single composite sample from each location was collected and sent to Biologica for enumeration and identification to the lowest practical taxonomic level (ANNEXE K). In each location, settlement baskets and settlement plates were redeployed after sample collection for recovery in 2019.

Table 3-12: Settlement Basket Recovery Locations

Location	Sample Name	UTM Coordinate	es (Zone 17W)	Deployment Period
		Easting	Northing	
East Side of Ore Dock	SBEO-1	503229	7976590	24 months
West Side of Ore Dock	SBWO-1	503346	7976648	12 months



Figure 3-4: Settlement Baskets Recovered from East Side of Ore Dock

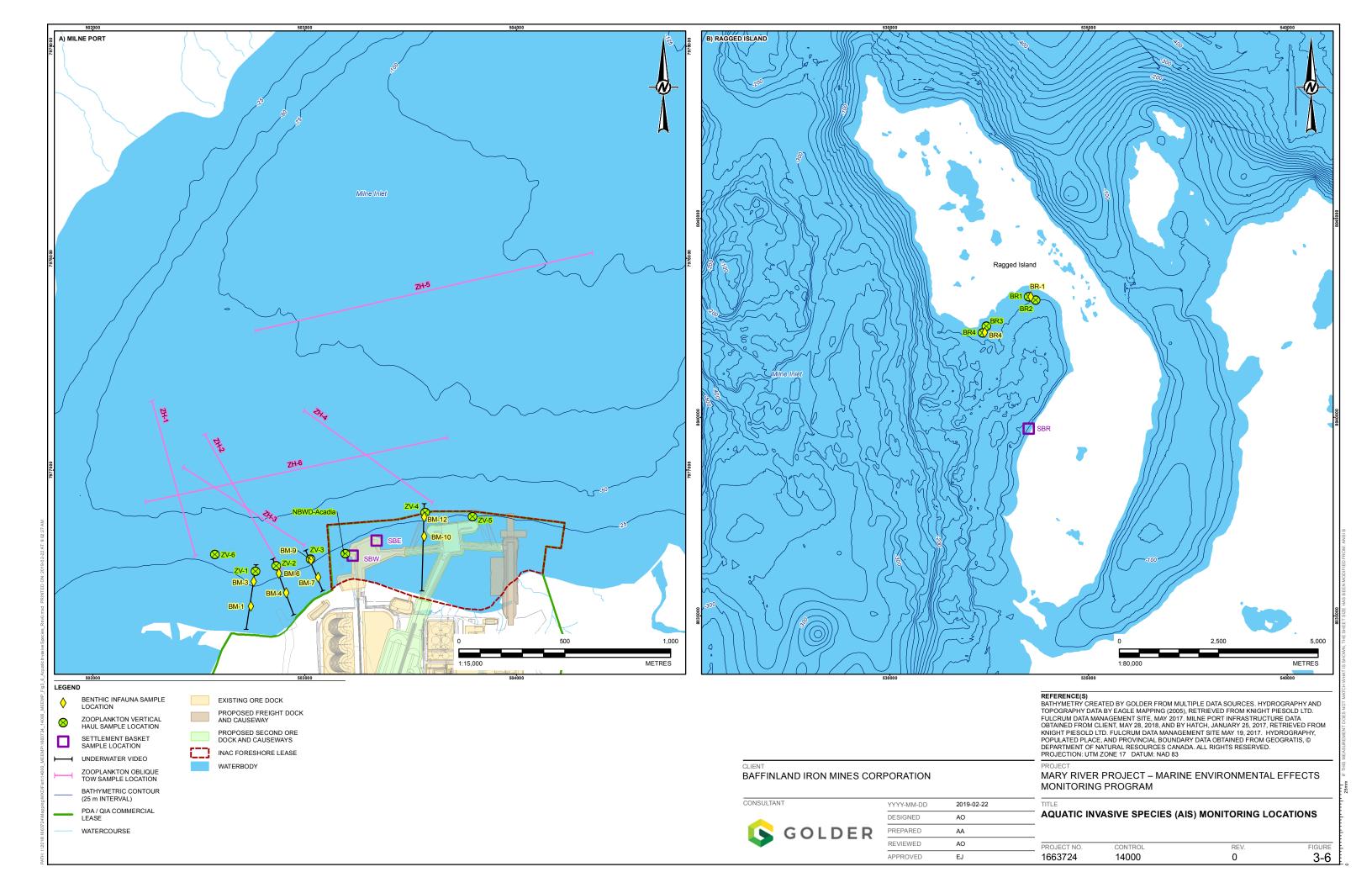




Figure 3-5: Rock Collected from Settlement Basket from West Side of Ore Dock

3.2.6 Ship Hull Monitoring

To address PC Condition No. 91, ship hull biofouling monitoring was included in the AIS program for the first time in 2018. Previous attempts to address the requirements of PC Condition No. 91 are detailed in past MEEMP reports (Golder 2018. The program consisted of conducting underwater video surveys of the hulls of three ore carriers berthed at the ore dock using an ROV-based underwater video system. Surveys were conducted along a series of horizontal transects along the hulls of the ore carriers, interspaced to cover a representative range of depths of the submerged hulls. Much of the effort was focused on areas of the hull where biofouling was most likely to occur (e.g., chain lockers, bulbous bow and stem, sea-chain grating, stern tube, rope guard, propeller nose cone and blades, rudder side, bottom, leading and trailing edges). The collected video recordings were later examined by qualified biologists to identify potential biofouling species to the lowest practical taxonomic level.



3.3 Quality Management

The overall goal of the program was to collect quality data, which was achieved through consistent application of quality assurance/quality control (QA/QC) measures including diligent and thorough data collection, regular communication amongst data recorders, and attention to detail during data entry.

Field staff were trained to be proficient in standardized sampling procedures, data recording using standardized forms, and equipment operations applicable to the monitoring program. All field work was completed according to specified instructions and established technical procedures for standard sample collection, preservation, handling, storage, and shipping protocols. Preliminary interpretation of the records and data QA/QC was carried out in the field to ensure the data collected met client specifications for quality and documentation of liability controls. At the end of the field survey, data were entered and organized in a database for subsequent analysis and interpretation. Field data recorded in notebooks was transferred to an electronic database.

A thorough QA/QC check of the data during the data analysis stage was conducted. The QA/QC measures in place included a multi-tiered technical review team that reviewed all data for consistency of methods and results and independently tested random data samples for quality.

General QA/QC tasks completed during the survey include, but not limited to, the following:

- Preparing geo-referenced field maps for use during the surveys to accurately document the location of any observations.
- Preparing Project-specific data collection forms to ensure a comprehensive and accurate field data collection process.
- Collecting geo-referenced coordinates in the field for comparison with field maps to confirm the location of documented observations.
- Maintaining adequate photo documentation to illustrate the various features and species observed during field surveys, and to be kept for subsequent review and reporting.
- Collating and reviewing field data collected among observers to ensure consistent methods and calibrate observer estimates (e.g., estimation of substrate and vegetation cover in quadrat sampling).
- Reviewing all data and reports for accuracy (e.g., species identification) and consistency (e.g., measurement units).
- Allowing regular communications between the Project Manager and field staff.
- Quality Control (duplicate) samples were collected in the field.
- Accredited laboratories were selected for sample analysis. Performance quality of selected laboratories were verified through Golder's internal vendor approval and assessment procedures.
- Field data sheets were reviewed by the field supervisor at the end of each day for completeness and accuracy.
- Chain-of-custody documentation were used to track sample shipments to the individual subcontractor laboratories.
- Samples were packaged and shipped to the laboratory in accordance with required holding times and storage conditions.
- Laboratory QA/QC included verification of recommended sample holding times and the analysis of laboratory control samples, laboratory duplicates, and spiked samples to assess precision and accuracy of analytical methods. Laboratory QA/QC reports were reviewed upon receipt to confirm that the laboratory data quality objectives (DQOs) had been met and that the appropriate QA/QC information had been reported.



3.3.1 **MEEMP**

3.3.1.1 Water Quality

3.3.1.1.1 Vertical Physical Profiles

Maintenance and calibration of the SBE-19plus CTD profiler and associated sensors are performed annually by the manufacturer (completed immediately prior to the 2018 sampling program). No field quality checks of any of the parameters were required beyond the deployment acceptability check and range checks. Dissolved oxygen (DO), pH, pressure offset, and transmissivity performance were carefully monitored and calibrated prior to and immediately following the 2018 MEEMP program.

Immediately following data collection, all data were checked for erroneous values, and to be certain that all data and configuration files were present and properly named. This check was verified and documented by two field personnel. All data were reviewed graphically for outliers as well as trends, and to confirm that all sensors were functioning properly during the deployment. All profile data, datasheets and field notes were saved to a laptop computer and backed up on an external hard drive.

3.3.1.1.2 Discrete Water Quality Sampling

Quality assurance/quality control measures were implemented to minimize possible contamination of the collected water samples. Industry standard sampling protocols were followed including collection, handling and shipping procedures. Samples were collected in laboratory-sterilized water bottles including collection and analysis of duplicate samples, travel blanks, and field blanks. For field blanks, sample containers were filled with de-ionized water in the laboratory and then processed in the field in the same manner as the collected samples (i.e., uncapped, treated with preservative, re-capped). Field blanks were analyzed to identify potential sources of contamination during field sampling. For travel blanks, sample containers were filled with de-ionized water in the laboratory and then remained sealed in the field, allowing for an assessment of contamination during transport and storage periods.

Duplicate water samples were randomly taken at 10% of the stations during each field trip. For each pair of QA/QC field duplicate water samples, the relative percent differences (RPD) were calculated, using the following formula:

$$RPD = \left(\frac{sample - duplicate}{(sample + duplicate)/2}\right) \times 100$$

The RPD between the duplicates is a measure of the variability inherent in field sampling (e.g. environmental heterogeneity, sampler handling leading to contamination). CCME (2016) and BC MOE (2013) suggests that any field duplicates with RPD values exceeding 20% should be noted and the data interpreted accordingly. Values less than five times the method detection limit (MDL) were not included in the RPD calculations because analytical variability near the MDL is higher and does not provide a good measure of variability associated with the collection of field samples. RPD is more sensitive to variation as values approach the analytical detection limit.



3.3.1.2 Sediment Quality

To confirm sample integrity, the following QA/QC measures were undertaken:

- Samples were collected and processed by qualified experienced personnel.
- Samples were collected in such a way that no foreign material was introduced to the sample.
- Sample handling or contact with contaminated materials/surfaces was minimized.
- Samples were placed in appropriate clean containers in such a way that no material of interest was lost due to adsorption, degradation, or volatilization.
- Sufficient sediment volumes were collected so that required detection limits could be met and quality control samples analyzed.
- Equipment including the grab sampler, stainless steel bowls and spoons were washed with laboratory-grade biodegradable detergent between each station to prevent cross-contamination. Equipment was rinsed between grab samples.
- Field duplicates were sampled from six randomly-selected replicate samples (approximately 10% of total number of stations). Field duplicates were blind sample (identified as Duplicate A to F) collected from the same discrete homogenized grab sample (a split sample) as the "original" sample. To assess variability between field duplicates, the RPD was calculated as follows:

$$RPD = \left(\frac{sample - duplicate}{(sample + duplicate)/2}\right) \times 100$$

In accordance with the BC Field Sampling Manual (BC MOE 2013) and CCME (2016), an RPD value of >50% was used to identify differences between original and duplicate samples. Values less than five times the MDL were not included in the RPD calculations because analytical variability near the MDL is higher and does not provide a good measure of variability associated with the collection of field samples.

- Field data sheets were reviewed by the field supervisor at the end of each day for completeness and accuracy.
- Chain-of-custody documentation were used to track sample shipments to the individual subcontractor laboratories.
- Samples were packaged and shipped to the laboratory in accordance with holding times and storage conditions in an effort for analysis targets to be met.
- Laboratory QA/QC for sediment samples included recommended sample holding times and the analysis of laboratory control samples, method blanks, laboratory duplicates, and spiked samples to assess precision and accuracy of analytical methods. Laboratory QA/QC reports were reviewed upon receipt to confirm that the laboratory data quality objectives (DQOs) had been met and that the appropriate QA/QC information had been reported.

3.3.1.3 Substrate, Macroflora and Epifauna

Underwater video was viewed in real-time to ensure appropriate depth and visual representation of the sea bottom features. Video footage from each survey was post-processed by a marine biologist with local Arctic experience. Epibenthic organisms were identified to the lowest practical taxonomic level using a variety of species identification keys and databases. A subset of images used to identify organisms was checked by a second observer to confirm species identifications.



3.3.1.4 Benthic Infauna

Field QA/QC procedures are discussed in Section 3.1.4. Biologica laboratory QA/QC measures included an assessment of sorting recovery, identification error, and precision/accuracy of sub-sampling. The taxonomic laboratory identified organisms to the lowest practical taxonomic level. Laboratory procedures included sample sorting measures, spot-checks, preliminary counting of major groups, and collaborative identification to accurately identify species to their lowest taxonomic level. Results of QA/QC measures implemented by the taxonomic laboratory are reported in ANNEXE E-2.

Benthic data were checked and no obvious signs of error in sample analysis were found. Incidental organisms, such as meiofauna, including copepod and nematode species, were removed from benthic analysis because these species often fall through the 500 µm mesh sieve used to separate benthic infauna from sediments in the field. Numbers of these species collected within samples would not be representative of the true population numbers at each station and would otherwise bias station comparisons of total abundance, relative abundance, and species diversity.

Biologica developed a subsampling strategy that maximized the detection of large and rare individuals while also enumerating smaller organisms. Large organisms (>1 cm) were first sorted, enumerated, and removed from the whole sample. The remaining debris was then spread evenly on a Caton grid and subsampled via sequential quadrat sorting. The subsample was sorted until a minimum of 400 organisms were counted.

3.3.1.5 Fish

The following QA/QC measures were implemented by field staff during the fish sampling activities.

- Specific Working Instructions (SWIs) were reviewed and followed by all field members.
- Prior to fishing activities, all field members were briefed on sampling protocol/methods and made aware of their role in data collection. Each activity was performed at each station/location in the same manner to maintain consistency throughout the field program.
- Data were collected in Project-specific notebooks and were reviewed by the team lead at the end of each day to ensure quality and completeness. The notebook pages were scanned and saved on an external hard drive at the field office as a backup.
- Fish identification was recorded to species. Any identification that was questionable in the field was verified using fish field guides. One fish was also sent to a laboratory for fish identification.
- Field instruments such as weigh scales were appropriately cleaned and calibrated prior to use.
- All data recorded in field notebooks were entered into Microsoft Excel and verified accurate and complete by a second team member. These documents were saved to the desktop then saved to an external hard drive as a backup.
- All samples were kept on ice, in a fridge or freezer, where appropriate, and labeled (station, date, time, samplers, and contents). All samples were shipped appropriately wrapped and kept on ice in coolers with appropriate documentation for receivers and sent with chain of custody forms.



3.3.2 AIS

3.3.2.1 Zooplankton

Zooplankton collection was standardized to minimize the introduction of sampling error during sample collection. Nets were rinsed using the same rinsing techniques and samples were subject to the same preservation methods to ensure consistency. Zooplankton analysis was conducted by Biologica Environmental Services Ltd., which identified organisms down to the lowest practical taxonomic level. Results of QA/QC measures implemented by the taxonomic laboratory are reported in ANNEXE H-3.

Data were checked thoroughly, and no errors or omissions were found. Species distributions within each collected sample are believed to be representative of the zooplankton community at each sampling location.

3.3.2.2 Benthic Infauna

The same field and laboratory QA/QC procedures were used during collection and analysis of benthic invertebrate communities for AIS Program as those used for the MEEMP. These methods are discussed in sections 3.1.4, 3.2.2, and 3.3.1.4.

3.3.2.3 Macroflora and Benthic Epifauna

The same QA/QC measures described in Section 3.3.1.3 were used during underwater video surveys along the AIS transects. Epibenthic organisms were identified to the lowest practical taxonomic level using a variety of species identification books; a subset of images used to identify organisms was checked by a second observer to confirm species identifications.

3.3.2.4 Fish and Mobile Epifauna

QA/QC measures for fish and mobile epifauna data collection are described in Section 3.3.1.5.

3.3.2.5 Encrusting Epifauna

Field procedures for the encrusting epifauna sample collection are discussed in Section 3.2.5. Laboratory QA/QC measures are described in Section 3.3.1.4.

3.3.2.6 Ship Hull Monitoring

Video documented during the ship hull monitoring surveys was viewed in real-time to verify that all representative areas of the ship were surveyed and ensure appropriate visual representation of the recorded locations. Field notes were taken during the survey. Video footage from each survey was post-processed by a qualified marine biologist with local Arctic experience. Biofouling or encrusting organisms were identified to the lowest practical taxonomic level where possible using a variety of species identification keys and databases. A subset of images was checked by a second qualified observer to confirm quality of observations.



4.0 RESULTS

4.1 MEEMP

4.1.1 Water Quality

4.1.1.1 Vertical Physical Profiles

Oceanographic conditions in Milne Inlet are known to be primarily tidal driven. The water column structure, however, is also influenced by freshwater input, winds, atmospheric conditions and heat fluxes. Most of the variability occurring in the water column is shown to occur in the upper surface water layers.

Vertical depth profiles in Milne Inlet showed a strong vertical gradient in the physical properties of the water column (Figure 4-1). Surface water in Milne Inlet was colder at the north near the mouth and warmer near the head, at Milne Port, ranging in temperature from 2.1°C (Ragged Island) to 7.0°C (Milne Anchorage). Water temperature decreased with depth reaching 0°C at depths between 12 m and 25 m and reaching the average minimum temperature of -1.3°C at the average depth of 62 m. Surface salinity was lowest at the head of the inlet (Milne Port area) where it ranged between 3 practical salinity units (PSU; Ore Dock) and 9 PSU (D3 Mooring Location). Surface salinity was higher further north, increasing in general towards the mouth of the inlet, and ranged between 14.1 PSU (CTD-8) and 19.1 PSU (CTD-15 and Ragged Island). Salinity increased with depth with the halocline (steeply rising salinity layer) occurring at an approximate depth ranging from 8 to 14 m. Below the halocline, salinity was above 30 PSU at all locations and reached a maximum of 33.6 PSU below 200 m depth. Salinity increased and temperature decreased with depth resulting in a vertical density gradient with relatively "lighter" warmer and less saline water floating on top of heavier colder and more saline water. The pycnocline (steeply increasing density layer) was approximately 9 m to 13 m deep (Figure 4-2).

Dissolved oxygen (DO) concentrations at the surface (up to 1 m depth) in Milne Inlet ranged from 7.1 mg/L to 8.8 mg/L corresponding to saturation ranging from 62% to 76% (Figure 4-3). Maximum oxygen concentrations in Milne Inlet occurred at depths between approximately 19 and 30 m or at the depths below the pycnocline and ranged between 10.1 mg/L and 11.2 mg/L corresponding to 85% and 94% saturation, respectively. Below the pycnocline, dissolved oxygen decreased with depth reaching an average minimum of 6.9 mg/L, or 59% saturation, below 200 m.

Water in Milne Inlet was clear throughout the water column with slightly higher turbidity at the surface (between 0 and 4 m); surface turbidity values ranged between 0.5 nephelometric turbidity units (NTU) and 8 NTU (Figure 4-4). Turbidity was higher at the surface at station CTD-10 reaching a maximum of 8.3 NTU. Turbidity below the surface decreased with depth and was steadily low below the pycnocline with most readings of less than 0.1 NTU. Turbidity increased slightly near the bottom, most likely due to the proximity of seabed sediment.

Chlorophyll *a* concentrations were relatively low throughout Milne Inlet, generally less than 0.4 µg/L in the upper 15 m of the water column and nearly 0 µg/L at depths below 15 m (Figure 4-4). These chlorophyll *a* concentrations correspond to an oligotrophic marine environment (Vollenweider 1998).



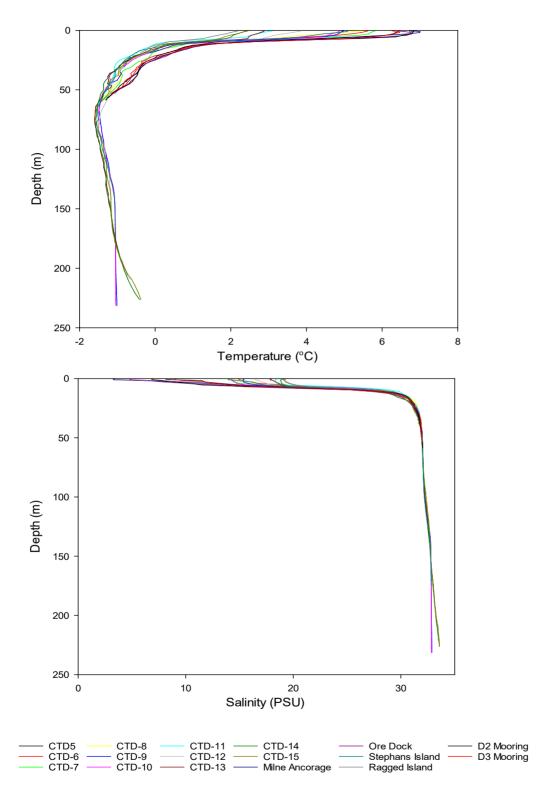


Figure 4-1: Water Temperature and Salinity in Milne Inlet, August 2018

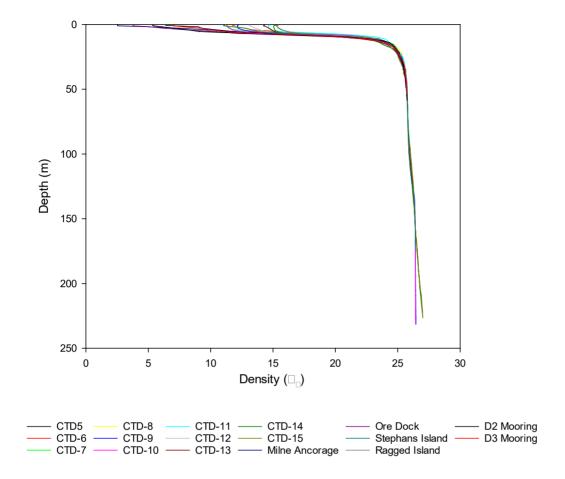


Figure 4-2: Water Density (σ_T) in Milne Inlet, August 2018

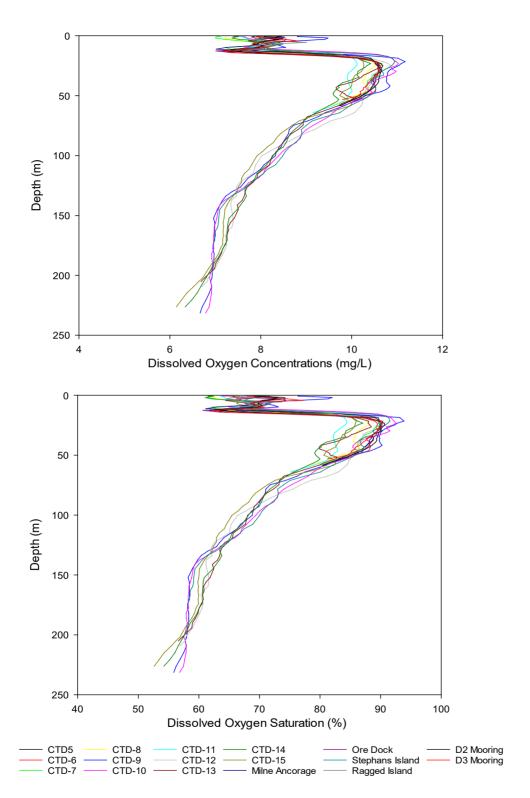


Figure 4-3: Dissolved Oxygen Concentrations and Percent Saturation in Milne Inlet, August 2018

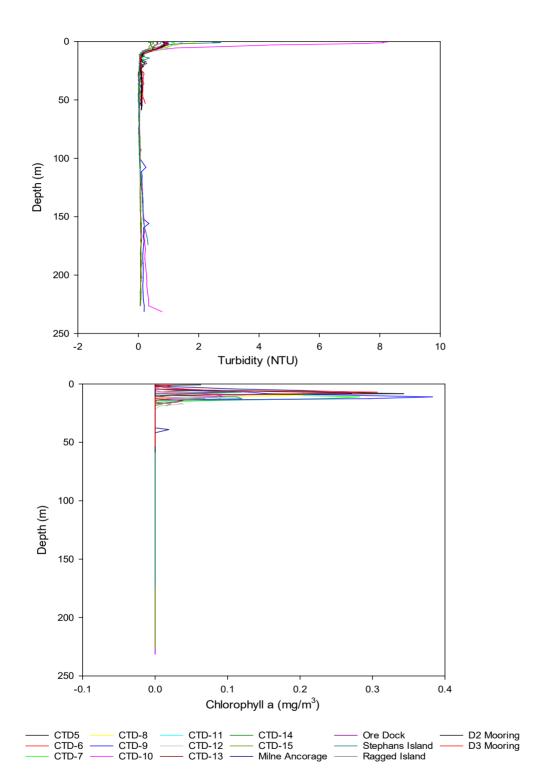


Figure 4-4: Turbidity and Chlorophyll a Concentrations in Milne Inlet, August 2018

4.1.1.2 Discrete Water Quality Samples

Water quality laboratory results are presented in Appendix B. Summary statistics for the 2018 water quality program are presented in Table 4-1 and a comparison to previous survey years is provided in Table 4-2.

Salinity concentrations ranged from 5.4 PSU to 19.3 PSU for all samples collected in 2018, which is reflective of a brackish environment. Mean salinity concentrations at each sampling location ranged from 8 PSU to 10.7 PSU. Salinity concentrations for all samples were higher during the 28 August sampling event.

Concentrations of pH ranged from 7.9 to 8.1 for all samples collected in 2018 (Table 4-1), which are within the CCME water quality guidelines (WQG; 7.0 – 8.7). pH values reported in 2015 (7.5 to 7.9; SEM 2016a), in 2016 (7.7 to 7.9; SEM 2017a) and in 2017 (7.0 to 8.0; Golder 2018) were also within the CCME WQG (Table 4-2).

Total suspended solids (TSS) ranged from below the detection limit of 2 mg/L in 18 out of total 22 samples to 4.3 mg/L in a sample collected from Source on 1 August. Turbidity levels ranged from 0.2 NTU in sample from ENE on 28 August from to 2.5 NTU from Source on 1 August. Both TSS and turbidity levels observed in 2018 were within the CCME WQG (Table 4-1) and ranges observed during previous studies (Table 4-2; SEM 2016a; SEM 2017a; Golder 2018). The highest TSS (25.5 mg/L) and turbidity (9.60 NTU) for the MEEMP surveys were observed during a storm event on 10 September in 2017 (Golder 2018).

As in 2017, nitrate concentrations in all samples collected in 2018 were <0.5 mg/L, which is below the short term (1500 mg/L) and long term (200 mg/L) CCME WQG (Table 4-1 and Table 4-2). Nitrate concentrations reported in 2015 and 2016 were also below CCME WQG. In 2016, nitrate concentrations ranged from 0.05 mg/L to 0.58 mg/L (SEM 2017a). In 2015, nitrate concentrations ranged from 0.03 mg/L to 0.16 mg/L (SEM 2016a).

Fecal coliform bacteria were below the detection limit (DL) of 1 CFU/100 mL in all samples (Table 4-1) although some samples exceeded the recommended holding time for the parameter upon receipt by the laboratory due to transportation delays. Fecal coliform levels ranged between 1 CFU/100 mL and 2 CFU/100 mL in 2017 (Table 4-2; Golder 2018) and were not tested for in 2015 or 2016 (SEM 2016a; SEM 2017a).

As in 2017, total arsenic, cadmium, chromium, mercury, and silver concentrations were below detection limits and below CCME WQG in all samples collected in 2018 (Table 4-1 and Table 4-2). In 2016, concentrations for the same suite of metals were below CCME WQG (SEM 2017a). In 2015, metal concentrations for total arsenic, cadmium, chromium, and silver were below CCME WQG (Table 4-2); but total mercury levels exceeded the CCME WQG (0.000016 mg/L) for all samples collected on 30 August 2015 (with concentrations ranging from 0.000023 mg/L to 0.000025 mg/L). Mercury was below detection limits and below CCME WQG during all other sampling events in 2015 (SEM 2016a).

Total aluminum and iron concentrations in samples collected in 2018 ranged from 0.008 mg/L to 0.048 mg/L and from <0.01 mg/L to 0.093 mg/L, respectively (Table 4-1). There are no CCME WQGs for aluminum and iron. Aluminum concentrations observed in 2018 were within previously collected ranges (Table 4-2). The detection limits for iron during MEEMP studies in 2015-2016 (0.5 mg/L) and during the baseline studies in 2010 (from 0.3 to 0.6 mg/L) were considerably higher than detection limits (0.01 mg/L) and observed iron concentrations in 2017 and 2018; therefore no comparison of iron data collected in 2017 and 2018 could be made to previous studies. The highest levels of aluminum (0.14 mg/L) and iron (0.29 mg/L) were observed during the September storm event of 2017 discussed above.

PAHs were below the detection limits for all samples during all sampling events in 2018, 2017, 2016 and 2015 (SEM 2016a; SEM 2017a; Golder 2018). Naphthalene was also below the CCME WQG for all samples in 2017 and 2018 (Table 4-1 and Table 4-2). Naphthalene was not tested for in 2016 and 2015.

No calculated RPDs between duplicate samples exceeded 20%, except for sulfur (ANNEXE B). The RPD for total sulfur between WNW collected on 14 August and its blind duplicate was 20.3%; and the RPD for dissolved sulfur between WNW collected on 1 August and its blind duplicate was 101%. Therefore, the quality of laboratory analysis is considered acceptable with the exception of sulfur.



Table 4-1: Water Quality Summary Statistics for Each Sampling Location over Five Sampling Events in 2018.

Parameter	CCME Marine WQG for Protection of Aquatic Life		Source			WNW			North			ENE		
	Short Term	Long Term	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Physical			•	•				•						
рН		7.0-8.7	8.0	7.9	8.1	8.0	7.9	8.1	8.0	7.9	8.1	8.0	7.9	8.1
Salinity (PSU)			9.3	5.4	18.5	7.9	5.6	15.6	9.46	5.6	14.4	9.7	5.4	14.4
TSS (mg/L)	<25 mg/L above background	< 5 mg/L above background	<2	<2	4.3	<2	<2	2.2	<2	<2	<2	<2	<2.0	3.1
Turbidity (NTU)	<8 NTU above background	<2 NTU above background	0.99	0.24	2.52	0.70	0.21	1.02	0.50	0.23	0.71	0.76	0.23	1.91
Nutrients (mg/L)			-		1				-	•				
Nitrate (as N)	1500	200	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bacteria (CFU/100 mL)														
Fecal Coliform			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Metals (mg/L)							_	_			_	_	_	
Aluminum			0.02252	0.0094	0.0478	0.015528571	0.0095	0.0207	0.0135	0.0091	0.0169	0.01938	0.0091	0.0378
Arsenic		0.0125	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium		0.00012	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Chromium		0.0015 (Cr(VI))	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Iron		-	0.033	<0.01	0.093	0.022	0.011	0.029	0.015	<0.01	0.023	0.027	<0.01	0.071
Mercury		0.000016	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Silver	0.0075	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
PAHs (mg/L)					_									_
Naphthalene		0.0014	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005



Table 4-2: Water Quality Summary Statistics for 2015, 2016, 2017 and 2018 at all Sampling Locations.

Parameter	CCME Marine WQG for Protect	2015			2016			2017			2018			
	Short Term	Long Term	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Physical										•				
Salinity (ppt)	-	-	-	-	-	-	-	-	13.9	4.1	24.4	8.8	5.4	19.3
рН	-	7.0-8.7	7.83	7.52	7.91	7.85	7.67	7.94	7.77	7.01	8	8.0	7.9	8.1
TSS (mg/L)	<25 mg/L above background	< 5 mg/L above background	1.2	0.5	2.2	1.61	1	3	4.2	<2	<u>25.5</u>	1.4	1.0	4.3
Turbidity (NTU)	<8 NTU above background	<2 NTU above background	0.23	0.05	0.92	0.43	0.1	0.99	1.06	0.27	9.6	0.73	0.19	2.52
Nutrients (mg/L)			-	I	l		I			L				
Nitrate	1500	200	0.04	0.03	0.16	0.16	0.05	0.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bacteria (CFU/10	0mL)											•	•	
F. Coliform	-	-	-	-	-	-	-	-	1.25	1	2	<1	<1	<1
Total Metals (mg/	L)			•										
Aluminum	-	-	-	<0.05	0.05	0.016	0.009	0.025	0.025	0.008	0.142	0.018	0.008	0.048
Arsenic	-	0.0125	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	-	0.00012	<0.00001	<0.00001	<0.00001	0.000016	0.000013	0.000018	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Chromium	-	0.0015 (Cr(VI))	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005	<0.0005	<0.0005	<0.00005	<0.00005	<0.00005
Iron	-	=	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.036	0.01	0.286	0.024	<0.01	0.093
Mercury	-	0.000016	0.00001	0.00001	0.00003	<0.000013	<0.000013	<0.000013	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Silver	0.0075	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00010	<0.0001	<0.0001	<0.0001
PAHs (mg/L)														
Naphthalene	-	0.0014	-	-	-	-	-	-	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005



4.1.2 Sediment Quality

Analysis of the physical and chemical composition of sediments were conducted on samples collected from a total of 21 stations along four transects. Results of the analyses are presented in ANNEXE C. Concentrations of chemical constituents were compared to existing environmental guidelines including CCME Interim Sediment Quality Guideline (ISQGs) and Probable Effect Levels (PELs) for the protection of aquatic life in the marine environment (CCME 2014), British Columbia Approved (BC MECCS 2018) and Working Quality Guidelines (BC MOE 2017), and National Oceanic and Atmospheric Administration sediment benchmarks (Buchman 2008; ANNEXE C-2). Concentrations of some variables fell below analytical detection limits. Half of the detection limit values were used for non-detected concentrations in the graphs and for statistical calculations. Principal component analysis (PCA), a multivariate statistical test, was used to help data interpretation. The test was conducted using SYSTAT 13 program.

PCA showed four components with eigenvalues >1 that accounted for 91% of the total variance. The first two components explained the highest percentage of the variance in the original data (84%), with PC1 and PC2 accounting for 77% and 6% of the variance respectively. The other two principal components accounted for the remaining 8% of the explained variance and will not be discussed further. Details of the PCA, including the eigenvalues, factor loading matrix, factor scores, and correlation matrix, are presented in ANNEXE C-3.

PC1 positively correlated strongly with fine fractions of sediments (silt and clay), and concentrations of metals (loading coefficient ≥0.9) and, with lesser extent, total organic carbon (loading coefficient =0.77). PC1 strongly negatively correlated with sand (loading coefficient =-0.92), and pH (loading coefficient =-0.63). PC2 positively correlated with concentrations of sulfur, selenium, molybdenum, and antimony (loading coefficient ≥0.35), and negatively correlated with calcium, magnesium, arsenic, manganese, phosphorus and TOC (loading coefficient ≤0.33).

PC1 and PC2 were plotted to identify where samples lie in two-dimensional ordinal space, therefore, allowing for further interpretation of the data (Figure 4-5). The right half in the figure represents high silt and clay content and high concentrations of metals and lower pH; the left half of the figure represents higher sand and gravel content, higher pH and lower concentrations of metals. The upper half of the figure represents higher concentrations of sulfur, molybdenum, selenium, and antimony; the lower half of the figure represents higher calcium, magnesium, arsenic, phosphorus, manganese and TOC concentrations. Most of the samples are clumped in the right side of the graph near the centre. Samples from the Coastal Transect (SC) were located in upper-right part of the graph, with higher content of fines and metals. Sample SW-1-2 and samples from station SE-1 located in the upper-left part of the graph with lowest concentrations of fines and most metals with few exceptions. Samples SW-3 and SW-4 were in the lower-central part of the graph with relatively moderate concentrations of most metals, except arsenic, calcium, magnesium and manganese.

As in previous years, sediment physical composition in samples collected in 2018 varied among stations and transects (Figure 4-6; top). Sediment in the West and East Transects predominantly consisted of gravel and sand, particularly at stations near the ore dock, while the Coastal and North Transects had higher proportions of finer classes (silt and clay). In the North Transect, differences in particle size composition seemed to be related to depth, with higher proportion of fines (silt and clay) found in deeper areas. Sediment physical composition distribution among transects in 2018 was consistent with that recorded during 2014-2017 sampling (Figure 4-6).

Concentrations of metals, in general, correlated with sediment physical composition. Some metals were found in low levels: concentrations of bismuth, silver, tin and tungsten were below their detection limits (0.2, 0.1, 2, and 0.5 mg/kg respectively) in all samples; and antimony and selenium were detected in less than 50% of the samples. Where detected, metal concentrations were, in general, higher in areas with higher proportion of fines.



Metals, in general, tend to accumulate to a greater degree in finer sediments due to a combination of physical (e.g. surface area) and chemical (e.g. geochemical substrate) factors (Jones and Bowser 1978; Horowitz 1991).

For instance, highest concentrations of aluminum were detected in samples from the Coastal and North Transects where a higher proportion of fines was found (Figure 4-7; top). Similar trends are seen for iron concentrations, except that high iron concentrations were also observed at stations SW-2, SW-3 and SW-4 from the West Transect; contents of fines at these stations were higher than at neighbouring stations but lower that at the most stations in Coastal and Northern transects (Figure 4-7; bottom). The lowest concentrations of aluminum (898 mg/kg) and iron (2,230 mg/kg) as well as other metals were found in sample SW-1-2, where the lowest proportion of fines (2%) was found. Sediment metal distribution among transects in 2018, in general, was consistent with that found in 2014 to 2017 (Figure 4-8).

Arsenic concentrations in 2018 exceeded the CCME and BC ISQG (7.24 mg/kg) in five samples collected at three stations (Figure 4-9; top): SW-3 (two samples), SN-3 (one sample) and SN-4 (two samples). Arsenic concentrations in four of these samples (excluding the SN-3 sample) also exceeded the T₂₀¹⁴ benchmark (7.4 mg/kg; Buchman 2008) and two of these samples, both collected from SW-3, exceeded Effects Range-Low (ERL) of 8.2 mg/kg (Buchman 2008). The highest arsenic concentration (10.6 mg/kg) was found at SW-3-1. High arsenic concentrations are not associated with ore from the Mary River Project (Baffinland 2012) and may be naturally occurring in these sediments. Similar arsenic exceedances were observed during previous sampling efforts (2014-2017) (SEM 2015; 2016; 2017; Golder 2018). In general, arsenic concentrations in 2018 were similar to those reported in previous surveys (Figure 4-9; bottom). Arsenic concentrations recorded in 2018 did not exceed the CCME Probable Effect Level (PEL) of 41.6 mg/kg or other benchmarks they were screened against.

Nickel concentrations in 2018 exceeded the T₂₀ benchmark (15 mg/kg) in all samples from stations SC-3, SC-4 and SC-5, and in one sample from each BE-5 and SN-5 (Figure 4-10; top). Nickel concentrations also exceeded NOAA Threshold Effect Level (TEL) of 15.9 mg/kg in all four samples from SC-3 and three of four samples from SC-4. The highest nickel concentration of 17.2 mg/kg was observed in sample SC-4-1. The lowest nickel concentration of 1.9 mg/kg was found in sample SW-1-2. No CCME sediment quality guidelines exist for nickel, however, nickel concentrations in sediments observed in 2018 were below BC Working ISQG (30 mg/kg) and PEL (50 mg/kg). Higher nickel concentrations in sediment are not likely associated with the Mary River Project since they were also found at stations located farther away from the Milne Port. Higher nickel concentrations are most likely associated with high content of fines and are naturally occurring. In general, nickel concentrations in 2018 were similar to those reported in previous surveys (Figure 4-10; bottom).

No other metals exceeded sediment quality guidelines and benchmarks during the 2018 sediment program.

Volatile organic compounds, extractable petroleum hydrocarbons, and PAHs were, with few exceptions, below detection limits (ANNEXE C-1 and C-2). Most detected PAHs (acenaphthylene, benz(a)anthracene, benzo(a)pyrene, benzo(b&j)fluoranthene, benzo(b+j+k)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-c,d)pyrene) were found in sample SN-3-1. Sample SE-2-1 also had detected concentrations of benzo(g,h,i)perylene (0.011 mg/kg) and indeno(1,2,3-c,d)pyrene (0.1 mg/kg). Benzo(g,h,i)perylene was also detected in SE-5-1 (0.011 mg/kg). Concentrations of volatile organic compound dichloromethane above the detection limit of 0.3 mg/kg were found in samples BE-2-1 (0.35 mg/kg), BE-5-1 (0.46 mg/kg), and SC-5-1 (0.66 mg/kg).

¹⁴ Chemical concentrations corresponding to 20% probability of observing toxicity



Concentrations of acenaphthylene (0.006 mg/kg) and dibenz(a,h)anthracene (0.0069 mg/kg) PAHs in SN-3-1 exceeded CCME and BC ISQGs of 0.00587 and 0.00622 mg/kg respectively. No other organic compound exceeded sediment quality guidelines and benchmarks during the 2018 sediment program.

No calculated RPDs between duplicate samples exceeded 50% (ANNEXE C). Therefore, the quality of laboratory analysis is considered acceptable.

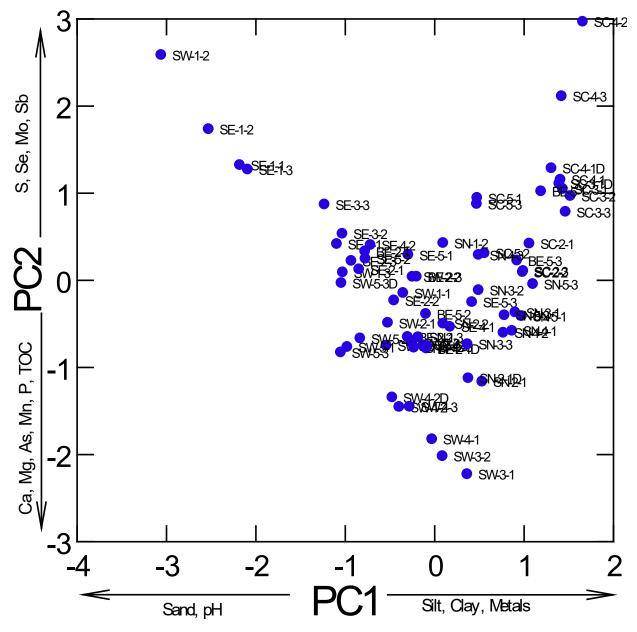
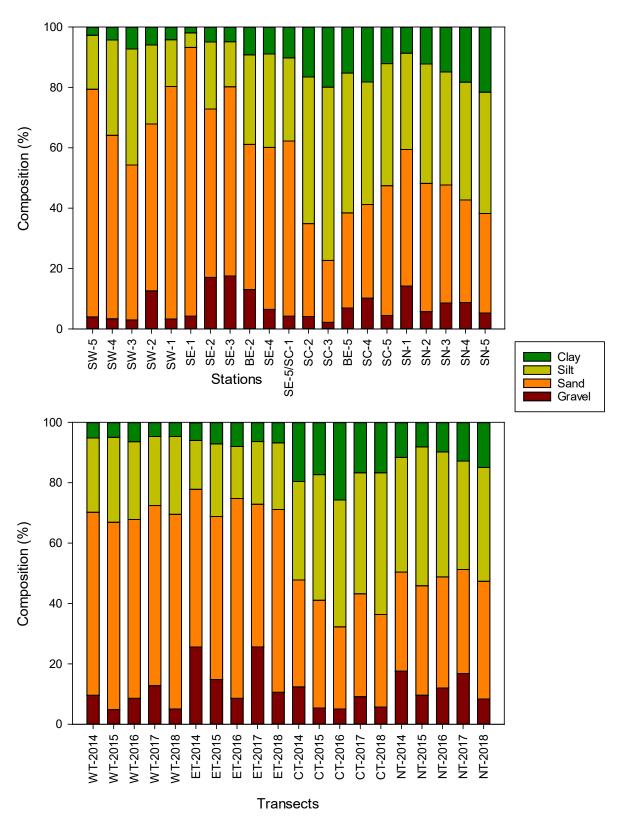
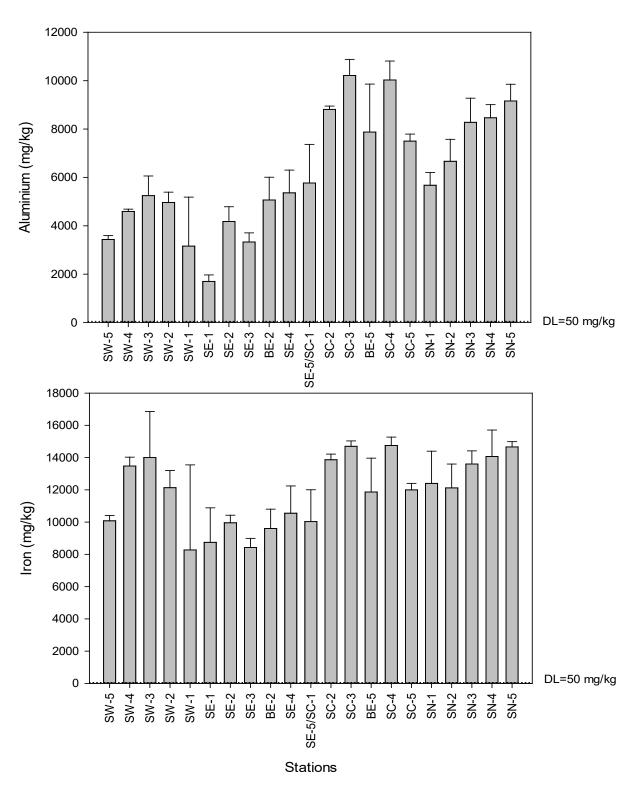


Figure 4-5: Principal Component Analysis (PCA) of Sediment Samples, 2018



Notes: WT - West Transect; ET - East Transect; CT - Coastal Transect; NT - North Transect

Figure 4-6: Mean Sediment Particle Size Composition among Stations in 2018 (top) and among Transects and Years (2014 to 2018; bottom).

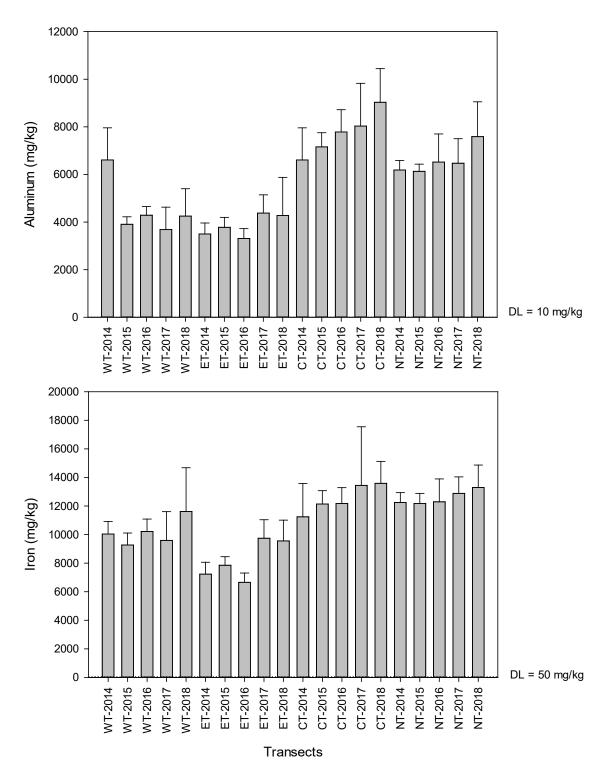


Notes: DL - detection limit

Error bars represent standard deviation

Figure 4-7: Mean Iron and Aluminum Concentrations in Sediments by Station, 2018

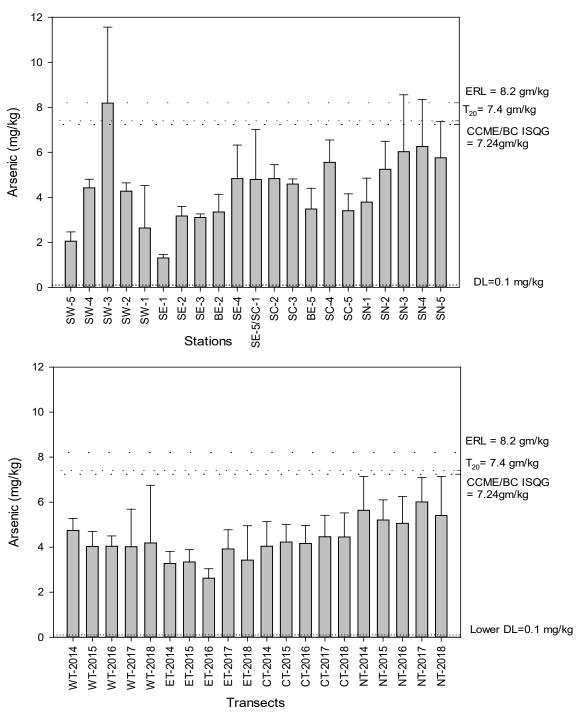




Notes: WT - West Transect; ET - East Transect; CT - Coastal Transect; NT - North Transect DL - detection limit Error bars represent standard deviation

Figure 4-8: Mean Aluminum and Iron Concentrations in Sediments by Transect, 2014 to 2018





Notes: WT - West Transect; ET - East Transect; CT - Coastal Transect; NT - North Transect

DL - detection limit

Error bars represent standard deviation

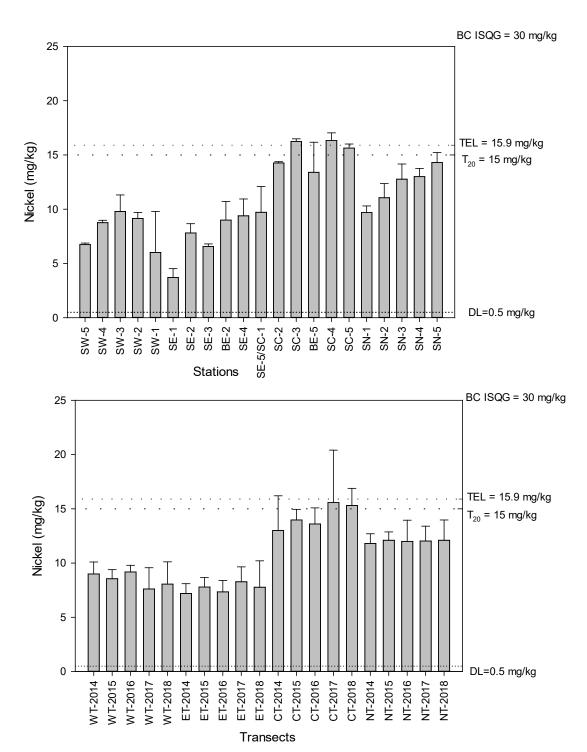
ISQG - Interim Sediment Quality Guidelines

ERL - Effect Range-Low

T₂₀ - 20% probability of observing toxicity

Figure 4-9: Mean Arsenic Concentrations in Sediments by Station in 2018 (top) and by Transect in 2014 to 2018 (bottom)





Notes: WT - West Transect; ET - East Transect; CT - Coastal Transect; NT - North Transect

DL - detection limit

Error bars represent standard deviation ISQG - Interim Sediment Quality Guidelines

Threshold Effects Level

T₂₀ - 20% probability of observing toxicity

Figure 4-10: Mean Nickel Concentrations in Sediments by Station in 2018 (top) and by Transect in 2014 to 2018 (bottom)



4.1.2.1 EEM - Content of Fines

The percentage of fines in sediment samples was analyzed using a single ANCOVA model, with main effects of distance from transect origin, year (as a categorical variable), and transect, and all possible interactions. The effect of distance was modeled as a second-degree polynomial to account for the non-linearity in percent fines relative to distance from transect origin. The model explained 82% of the data variability, and the three-way interaction was statistically significant, indicating differences in the relationship between fines and distance under different years and transects (Table 4-3). The relationships between fines and distance were overall similar across years within each transect, with the exceptions of 2016 in the West and Coastal transects, and 2015 and 2017 in the East Transect (Figure 4-11).

Increases in fines over time would be interpreted as a Project-related effect. The analysis showed high in-station variability between samples, particularly in 2016 and 2017. At the West Transect, fines were generally low at the dock and >1,000 m from the dock, and generally peaked at 600 m to 900 m from the dock (Figure 4-11). Fines content at 0 m decreased significantly between 2016 and 2017/2018, whereas fines content at 500 m, 1,000 m, and 1,500 m distances from the dock did not change significantly between years (Table 4-4). However, note that the 2017 SW-1 station was removed from the test, and the 2017 estimate used for multiple comparisons is an extrapolation of the existing data.

On the East Transect, fines generally increased with distance from the dock in all five sampling years, with small interannual differences in the relationship (Figure 4-11). Estimates of fines at 0 m distance from the dock were similar in 2014, 2016, and 2018, and significantly lower than mean values in 2015 and 2017 (Table 4-4). Overall, while interannual variability was significant, no consistent interannual trend was detected at the East Transect origin. At the remaining examined distances, fines content did not vary significantly between years.

On the Coastal Transect, fines content generally decreased with distance, particularly between 1,000 and 2,000 m from the transect origin (Figure 4-11). Significant increases in percent fines were estimated at 1,000 m and 1,500 m from the transect origin between 2014 and 2016 (Table 4-4; note that there was a high between-sample variability for these stations in 2016; Figure 4-11). However, estimated means throughout 2015-2018 were not significantly different, indicating the lack of a consistent trend between years. Note that multiple comparisons at transect origin were not calculated for the Coastal Transect, since transect origin data are the same as the most distant station in the East Transect.

On the North Transect, all four years had a similar pattern of increase in fines with distance from the transect origin up to approximately 1,000 m, followed by a slight decrease in fines (Figure 4-11). A significant increase in percent fines was estimated at transect origin between 2014 and 2015, followed by a small decline in 2016 and no further changes throughout 2017-2018 (Table 4-4).



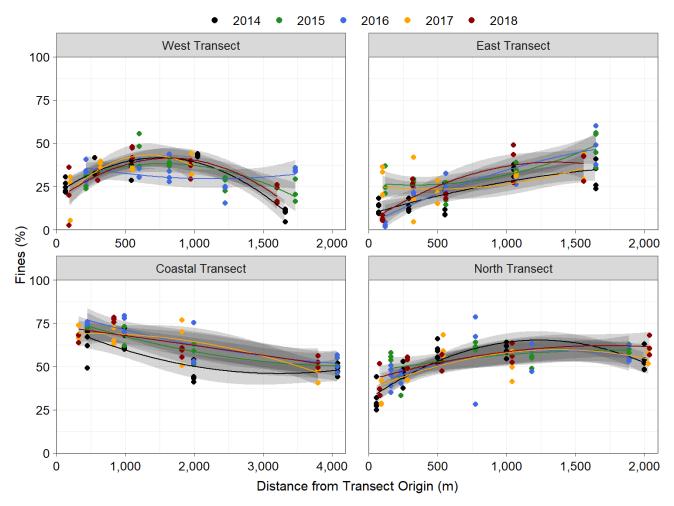


Figure 4-11: Observed (Points) and Estimated (Lines) Percent Fines in Sediment Relative to Sampling Distance along Transects, 2014 to 2018. Grey Ribbons are 95% Confidence Intervals.

Table 4-3: ANOVA Summary of Percent Fines in Sediments by Year and Transect

Adj. R²	Parameter	Df	F value	P value
0.824	Distance from transect origin	2	72.64	<0.001
	Year	4	4.49	0.002
	Transect	3	386.31	<0.001
	Distance × Year	8	0.98	0.451
	Distance × Transect	6	35.2	<0.001
	Year × Transect	12	1.16	0.315
	Distance × Year × Transect	24	2.96	<0.001

Notes: Adj. R²= Adjusted R squared value; Df= degrees of freedom. Distance was modeled as a second-degree orthogonal polynomial.



Table 4-4: Multiple Comparisons of Percent Fines between Years, within Distance/Transect Combinations

Transect and Distance from		S	ampling Year		
Origin (m)	2014	2015	2016	2017	2018
West Transect	•				
0	ab	ab	<u>b</u>	<u>a</u>	а
500	а	а	а	а	а
1,000	а	а	а	а	а
1,500	а	а	а	а	а
East Transect					
0	а	<u>b</u>	<u>a</u>	<u>b</u>	<u>a</u>
500	а	а	а	а	а
1,000	а	а	а	а	а
1,500	а	а	а	а	а
Coastal Transect					
500	а	а	а	а	а
1,000	а	ab	b	ab	ab
1,500	а	ab	b	b	ab
4,000	а	а	а	а	а
North Transect					
0	а	b	ab	ab	ab
500	а	а	а	а	а
1,000	а	а	а	а	а
1,500	а	а	а	а	а

Notes: Years that do not share letters (within every distance in each transect) are significantly different from each other. Increasing letters represent an increase in values: "a" is the lowest estimated fines value, "b" representing is the second lowest, and so on. Grey shading depicts significant, increasing trends between consecutive years, and underlined letters represent significant, decreasing trends between consecutive years.

4.1.2.2 EEM - Iron Concentrations

The content of iron in sediment samples was analyzed using a single ANCOVA model, with main effects of distance from transect origin, year (as a categorical variable), transect, and all possible interactions between the three variables, in addition to a main effect of percent fines, to account for the strong relationship between these two variables (Figure 4-12). Iron content, distance from transect origin, and percent fines were natural-log transformed to make the relationships linear. Since non-linearity still remained in the relationship between natural-log transformed iron content and natural-log transformed distance, the effect of distance was modeled as a second-degree polynomial. The model explained 90% of the data variability, and the three-way interaction was statistically significant (*P*<0.001), indicating differences in the relationship between iron and distance under different years and transects (Table 4-5). Log-transformed percent fines was a statistically significant explanatory variable of iron content (*P*<0.001).



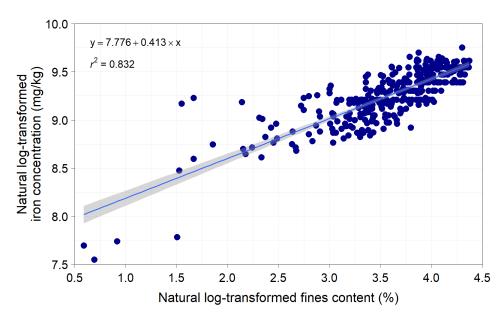


Figure 4-12: Relationship between Iron Concentration and Fines Content in Sediment, 2014-2018. Grey Ribbon is 95% Confidence Interval.

Increases in iron content over time would be interpreted as a Project-related effect. On the West Transect, observed iron concentrations were generally low or intermediate at the dock and at stations farther than 1,000 m from the dock, with a peak in concentrations at 250-1,000 m from the dock (Figure 4-13). Significant increases in iron concentrations were estimated at 500 m and 1,000 m from the dock between 2015 and 2017/2018, as well as at 1,500 m between 2016 and 2018 (Table 4-6). However, note that a decrease in iron concentrations was estimated at 1,000 m between 2014 and 2015. Overall, increases in iron content in sediment on the West Transect was observed at 500 m and 1,500 m during sampling undertaken between 2014 and 2018. Changes were also observed on the East Transect between 2014 and 2018, with significant increases in iron concentrations (at observed fines content values) at 500 m and 1,000 m from the dock, but not at 0 m or 1,500 m from the dock (Table 4-6, Figure 4-13). No interannual changes in iron concentrations (at observed fines content values) were observed on the Coastal Transect at either of the four tested distances from transect origin. On the North Transect, no increases in iron content (at observed fines content values) were estimated between 2014 and 2018 at any of the four examined distances (Table 4-6).

Table 4-5: ANOVA Summary of Iron Content in Sediments by Year and Transect

Adj. R²	Parameter	Df	F value	P value
0.895	Distance from transect origin	2	4.01	0.019
	Year	4	55.55	<0.001
	Transect	3	54.91	<0.001
	Distance × Year	8	8.58	<0.001
	Distance × Transect	6	10.93	<0.001
	Year × Transect	12	7.66	<0.001
	Distance × Year × Transect	24	3.50	<0.001
	Fines	1	153.43	<0.001

Notes: Adj. R^2 = Adjusted R squared value; Df= degrees of freedom. Distance was modeled as a second-degree orthogonal polynomial; distance, fines, and iron content were natural log-transformed prior to analysis.



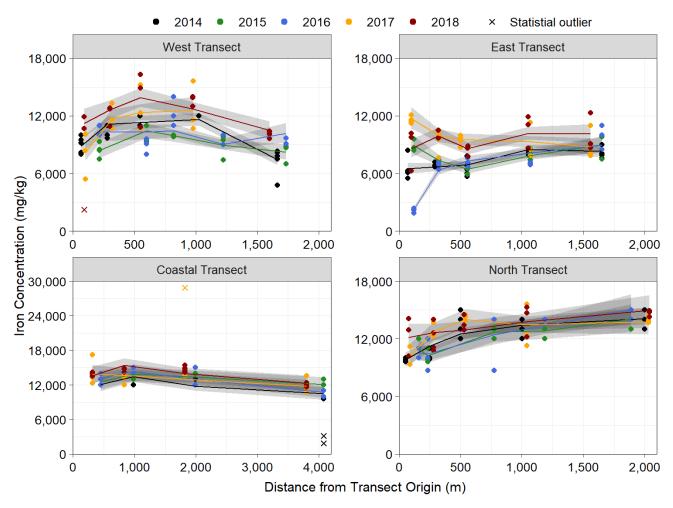


Figure 4-13: Observed (Points) and Estimated (Lines) Iron Content in Sediment Relative to Sampling Distance along Transects, 2014-2018. Grey Ribbons are 95% Confidence Intervals.

Table 4-6: Multiple Comparisons of Iron Content between Years, within Distance/Transect Combinations (at Observed Fines for each Transect / Distance / Year)

Transect and Distance from	Sampling Year						
Origin (m)	2014	2015	2016	2017	2018		
West Transect							
0	а	а	а	а	а		
500	а	а	а	ab	b		
1,000	<u>b</u>	<u>a</u>	а	b	b		
1,500	а	а	b		b		
East Transect							
0	b	<u>b</u>	<u>a</u>	b	b		
500	а	а	а	b	b		
1,000	ab	а	ab	bc	С		
1,500	а	а	а	а	а		

Transect and Distance from Origin (m)		S	ampling Year		
Origin (iii)	2014	2015	2016	2017	2018
Coastal Transect	•				
500	а	а	а	а	а
1,000	а	а	а	а	а
2,000	а	а	а	а	а
4,000	а	а	а	а	а
North Transect					
0	а	а	а	а	а
500	ab	а	а	b	ab
1,000	а	а	а	а	а
2,000	а	а	а	а	а

Notes: Years that do not share letters (within every distance in each transect) are significantly different from each other. Increasing letters represent an increase in values: "a" is the lowest estimated fines value, "b" representing is the second lowest, and so on. Grey shading depicts significant, increasing trends between consecutive years, and underlined letters represent significant, decreasing trends between consecutive years. Multiple comparisons were performed on iron concentrations adjusted to mean log-transformed percent fines within each transect.

The content of fines differed between stations and years, as detailed in Section 4.1.2.1. Therefore, the multiple comparisons detailed above do not represent actual changes in iron concentrations when compared at the same value of fines content. To provide this assessment, multiple comparisons of the iron ANCOVA model were performed at the minimum and maximum values of fines contents, specific to each of the four transects. Due to the high uncertainty of model predictions at transect origin, these multiple comparisons began at 50 m from the transect origin, instead of at the transect origin (i.e., 0 m). At both maximum and minimum transect-specific values of fines content, there were no significant increases in iron content estimated between 2014 and 2018 at either of the examined distances at the West Transect (Table 4-7, Figure 4-14). When 2018 was compared to 2015, significant increases in iron content were estimated at 500 m, 1,000 m, and 1,500 m from the transect origin at the West Transect. At the East Transect, significant increases in iron content between 2014 and 2018 were recorded at 50 m and 1,000 m from the ore dock at both minimum and maximum transect-specific fines content values (Table 4-7). When compared to 2015 values, significant changes were also estimated at 500 m and 1,000 m from the ore dock. No significant changes between years were estimated at either the Coastal or the North transects at any of the examined distances (Table 4-7, Figure 4-14). Overall, significant increases in iron concentrations (when corrected for fines content) between 2014 and 2018 were estimated at the East Transect at 50 and 1,000 m. Interannually, changes in iron at these transects fluctuated showing both increases and decreases, and no consistent trend has been detected (Table 4-7).



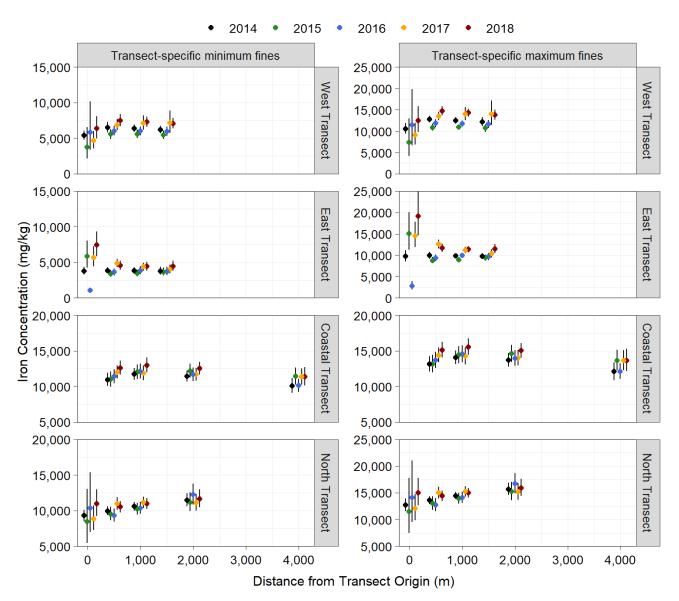


Figure 4-14: Estimated Iron Content in Sediment Relative to Sampling Distance along Transects at Minimum and Maximum Transect-Specific Fines Content, 2014 to 2018. Grey Ribbons are 95% Confidence Intervals.

Table 4-7: Multiple Comparisons of Iron Content between Years, within Distance/Transect Combinations, Adjusted for Content of Fines Covariate (at Minimum and Maximum Transect-Specific Fines Content)

Transect and		Minimum F	ines Con	tent			Maximu	m Fines	Content	
Distance from Origin		Sampli	ng Year			Sampling Year				
(m)	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
West Transect										
50	а	а	а	а	а	а	а	а	а	а
500	abc	а	ab	bc	С	abc	а	ab	bc	С
1,000	abc	а	ab	bc	С	abc	а	ab	bc	С
1,500	ab	а	ab		b	ab	а	ab		b
East Transect										
50	b	bc	а	bc	С	b	bc	а	bc	С
500	ab	а	а	С	bc	ab	а	а	С	bc
1,000	ab	а	abc	bc	С	ab	а	abc	bc	С
1,500	а	а	а	а	а	а	а	а	а	а
Coastal Transe	ect									
500	а	а	а	а	а	а	а	а	а	а
1,000	а	а	а	а	а	а	а	а	а	а
2,000	а	а	а	а	а	а	а	а	а	а
4,000	а	а	а	а	а	а	а	а	а	а
North Transect	t									
50	а	а	а	а	а	а	а	а	а	а
500	а	а	а	а	а	а	а	а	а	а
1,000	а	а	а	а	а	а	а	а	а	а
2,000	а	а	а	а	а	а	а	а	а	а

Notes: Years that do not share letters (within every distance in each transect) are significantly different from each other. Increasing letters represent an increase in values: "a" is the lowest estimated fines value, "b" representing is the second lowest, and so on. Grey shading depicts significant, increasing trends between consecutive years, and underlined letters represent significant, decreasing trends between consecutive years. Multiple comparisons were performed on iron concentrations adjusted to mean log-transformed percent fines within each transect.

4.1.3 Substrate, Macroflora, and Benthic Epifauna

The MEEMP epibenthic study program was modified in 2018 to include underwater video monitoring of benthic epifauna and macroflora communities within nine 1 m x 5 m permanent belt transects installed on the sea floor; five in the Milne Port area and four in the Reference Area. Data on macrofloral and epifaunal taxonomic composition and abundance collected from the belt transects will be used to monitor for potential project-related effects on epibenthic biological communities during future studies. Detailed information on video observation of each belt transect is presented in ANNEXE D and summarized below. One of the belt transects, TP-6, was not fully spread during installation, which substantially reduced its area; therefore, TP-6 was deemed failed and was not included in the analysis.



Observed substrate in the belt transects consisted predominantly of fines and covered from 84% (TP-10) to 100% (TP-1) of the total transect area. The other observed substrate types were shell debris (from <1% to 15%), mixed cobble (trace amounts to 5%) and mixed boulders, which were observed only in TP-9 (5%) (ANNEXE D).

Taxonomic resolution of macroflora and benthic epifauna was relatively coarse for stations in Milne Port area in 2018 due to technical limitations of the ROV video resolution. Relative abundance of macroflora was largely dominated by unidentified algae (Figure 4-15) and taxonomic resolution of identifiable taxa was limited to phylum of algae, except for brown bladed kelp (*Laminaria* sp.) and encrusting coralline algae (Family Corallinophycidae). Station TP2 was equally dominated by *Laminaria* sp. and green algae (Chlorophyceae). Red algae (Rhodophyceae) was most dominant at TP-3, TP-4, and TP-7, while encrusting coralline algae (another Rhodophyceae) was present in TP-7, TP-8, and TP-9 where no other red algae was observed. Brown algae (Phaeophyceae) were present at TP-7 and TP-8 and Laminaria sp. (another Phaeophyceae) was also observed at TP-7.

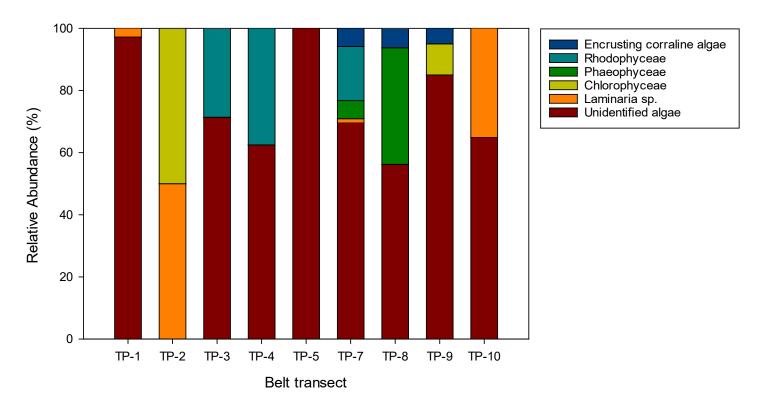


Figure 4-15: Relative abundance (%) of Macroflora observed in belt transects, 2018

Total abundance (count/station) of epifauna are presented in Figure 4-16 (top). Abundance was highest at TP-4 (180 organisms), then TP-7 (129 organisms), TP-1 (118 organisms), and TP-8 (110 organisms). Lowest abundance was found at TP-9 (7 organisms) and TP-10 (1 organism).

Clams dominated the relative abundance at all stations except TP-9 or TP-10, where they were not present (Figure 4-16 (bottom)). Brittle stars (Ophiuridae) largely dominated at TP-9 and TP-10 and were present to a much lesser extent at most of the other stations, but were not present in TP-2 and TP-7. Station TP-10 only had 1 brittle star (ANNEXE D).



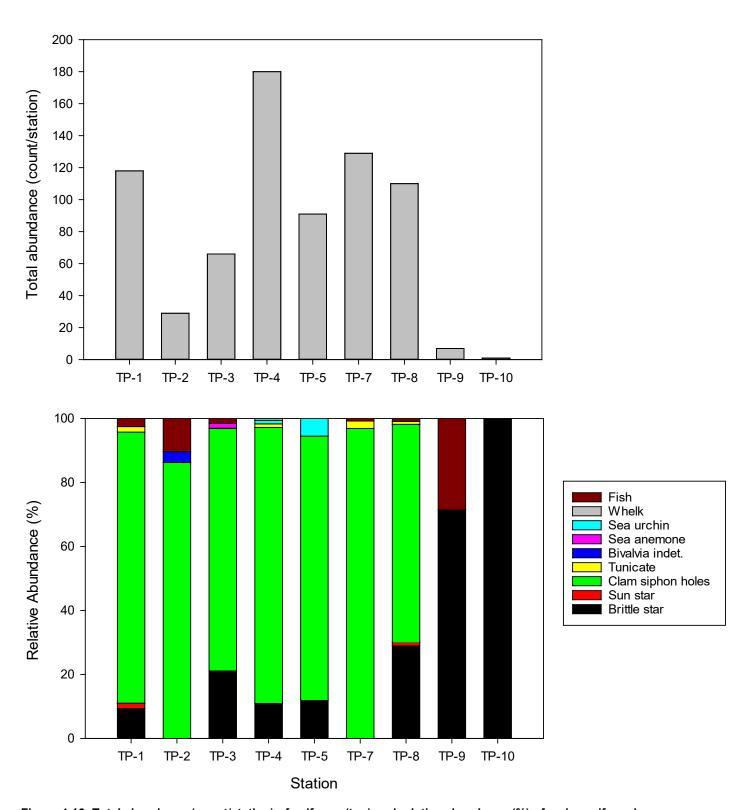


Figure 4-16: Total abundance (count/station) of epifauna (top) and relative abundance (%) of major epifaunal taxonomic groups (bottom) in belt transects, 2018

4.1.4 Benthic Infauna

4.1.4.1 Community Studies

Benthic invertebrate samples were collected from 15 stations arranged along three transects (East, West and North) that extended out from the ore dock at a depth of 15-metre. Benthic invertebrate community studies are a part of the environmental effects monitoring (EEM) studies and community metrics summarized below will be used to assess potential effects from the Project operations during future studies.

Results of benthic infauna taxonomic analysis are presented in ANNEXE E. A total of 39,708 organisms were counted in EEM samples from the Milne Port area in 2018.

Three incidental taxa were removed from this analysis. The incidental taxa, representing two dipteran (*Orthocladiinae* indet. and *Chironomidae* indet.) and one coleopteran (*Curculionidae* indet.) species, are occasionally found in brackish water conditions, but were assumed to be incidental due to the depths at which the samples were collected. Average densities at the sample stations ranged from approximately 3,800 organism/m² to nearly 24,000 organism/m² (Figure 4-17). Densities of benthic infauna were generally higher in the eastern and western transects, compared to the northern transect. Taxa richness (Figure 4-18) was relatively high at most sampled stations ranging from 29 to 59 taxa, similar to benthic infauna richness calculated for stations sampled during the AIS surveys in 2017 (Golder 2018). Shannon-Weiner Diversity (Figure 4-19) was similar to diversity values for AIS stations in 2017 (Golder 2018). Shannon-Weiner Diversity was generally lower at MEEMP program benthic stations compared to reported values from Davis Strait and Ungava Bay (Stewart et al. 1985). However, diversity was within the range, and higher, than values reported from Frobisher Bay and other areas within the Canadian Arctic (Cusson et al. 2007).

Polychaetes were the most abundant major taxa at all stations sampled in the 2018 MEEMP program (Figure 4-20), followed by crustaceans and bivalves. The relative abundance of the major taxa groups is similar to stations sampled during the 2017 AIS program, and baseline studies in 2010 and 2013 (SEM 2015, Golder 2018).

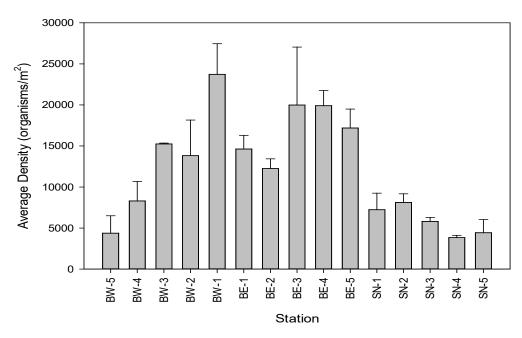


Figure 4-17: Benthic Infauna Taxa Density for Sampling Stations in the Milne Port Area, 2018. Error bars are standard deviation.



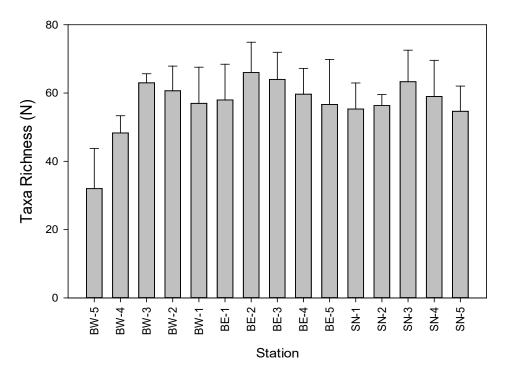


Figure 4-18: Benthic Infauna Taxa Richness for Each Sampling Station in the Milne Port Area, 2018. Error bars are standard deviation

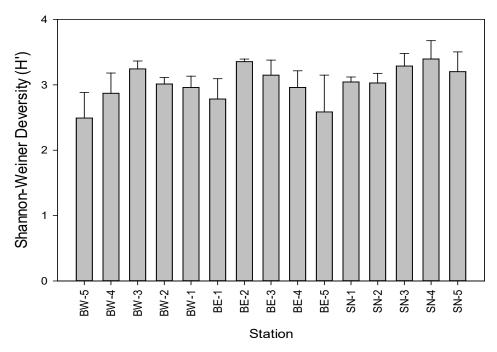


Figure 4-19: Benthic Infauna Diversity (H') in the Milne Port Area, 2018. Error bars are standard deviation

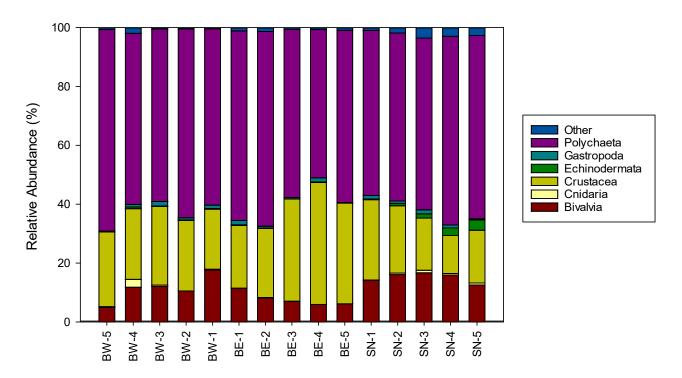


Figure 4-20: Relative Abundance of Major Benthic Infauna Groups in the Milne Port Area, 2018

4.1.4.2 Tissue Analysis

Tissue samples from *Hiatella arctica* were analyzed for body burden (metals) as an additional effects indicator for the fish sampling program. *H. arctica* was sampled opportunistically from sediment chemistry stations, benthic infauna stations, and AIS benthic infauna stations and combined into shellfish tissue stations that were spatially distributed and analyzed as shown in Table 4-8. Table 4-9 summarizes the range of metal tissue data measured in Milne Port Area. All samples collected were above detection limits and majority of metals were higher in *H. arctica* compared to Arctic char, except for mercury which was slightly lower in shellfish (Table 4-16). No samples in 2018 exceeded the Health Canada guideline (0.5 mg/kg) for mercury in shellfish tissue for human consumption. Detailed results of metal analysis for shellfish samples collected at each station from the Milne Port area in 2018 are in ANNEXE F. Clam body weight to length ratio measurements are presented in ANNEXE F.

Table 4-8: Stations sampled for shellfish tissue metals in Milne Port Area, 2018

Type of Sampling Station	Station	Shellfish Tissue Station
Sediment Chemistry, AIS Benthic Infauna	SW-1, BM-7, BM-9	BW-1
Sediment Chemistry, AIS Benthic Infauna	SW-2, BM-4, BM-6	BW-2
Sediment Chemistry, AIS Benthic Infauna	SW-3, BM-1, BM-3	BW-3
Sediment Chemistry	SW2-SW5	BW2-BW5
Sediment Chemistry	SE-1	SE-1
Sediment Chemistry, AIS Benthic Infauna	SE-2, BM-10, BM-12	SE-2
Benthic Infauna	BE-1	BE-1
Benthic Infauna	BE-2	BE-2
Benthic Infauna	BE-3	BE-3
Benthic Infauna	BE-4	BE-4
Benthic Infauna, Sediment Chemistry	BE-5, SC3-SC5	BE-5
Sediment Chemistry	SN-1	SN-1
Sediment Chemistry	SN-3	SN-3

Table 4-9: Summary of Detected Metal Concentrations (mg/kg wwt) in *H. arctica* shellfish Tissue Samples in the Milne Port Area, 2018

Metals	Health Canada Guideline	Mean	SD	
Arsenic	-	2.44	0.68	
Cadmium	-	0.68	0.47	
Chromium	-	1.53	0.55	
Copper	-	2.11	0.40	
Iron	-	1329.83	511.54	
Mercury	0.50	0.03	0.01	
Zinc	-	11.26	1.83	

Mean concentrations of metals in *H. arctica* are presented in Figure 4-21 to Figure 4-24. Highest arsenic and iron were found in shellfish samples from stations BW-3 and SN-1; arsenic at these stations was 4.12 and 3.73 mg/kg respectively and iron was 2,300 and 2,100 mg/kg respectively. Cadmium was low (< 0.827 mg/kg wwt) in most shellfish sampling stations, except for station SE-1 closer to the ore dock (2.49 mg/kg wwt) and a composite sample of stations BW2-BW5 (1.79 mg/kg wwt). Shellfish from station SN-1 also contained higher copper (3.29 mg/kg wwt) compared to other stations (< 2.61 mg/kg wwt). Mercury was low in shellfish tissue from all stations (<0.04 mg/kg wwt) except for station SE-2 (n=3) which contained one tissue sample measuring (0.0697 mg/kg wwt), and BE-2 (n=2) which included one tissue sample containing 0.0692 mg/kg wwt mercury. Chromium and zinc in shellfish tissue varied at all stations sampled.

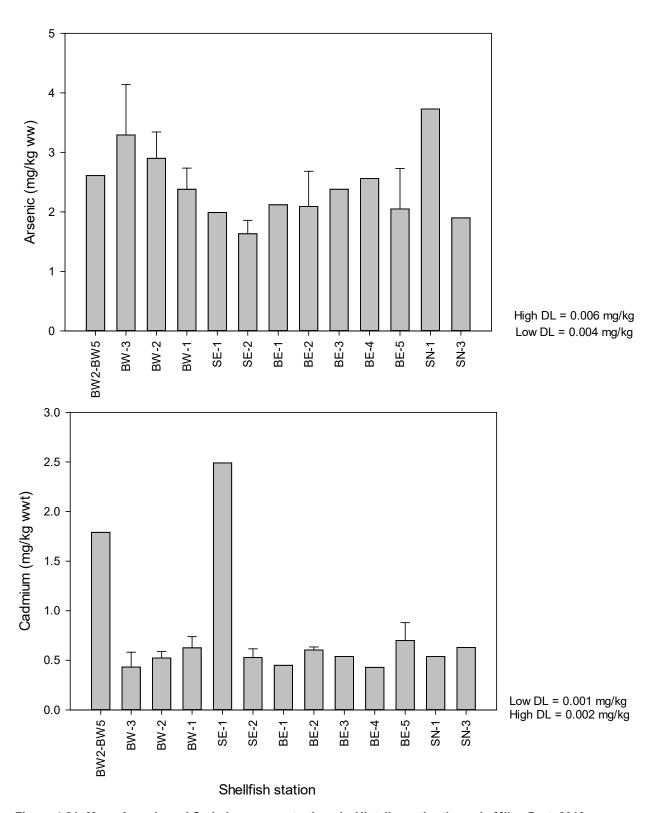


Figure 4-21: Mean Arsenic and Cadmium concentrations in *Hiatella arctica* tissue in Milne Port, 2018.

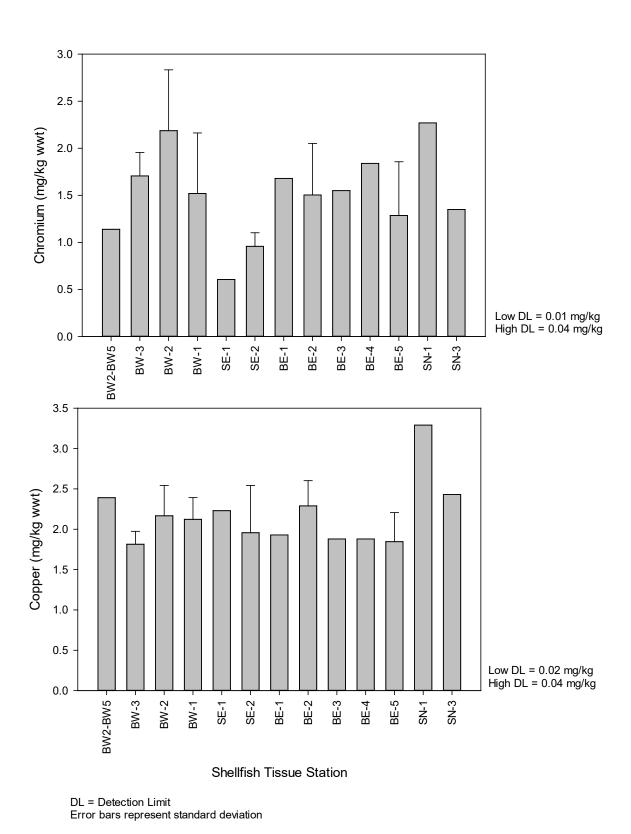


Figure 4-22: Mean Chromium and Copper concentrations in *Hiatella arctica* tissue in Milne Port, 2018.

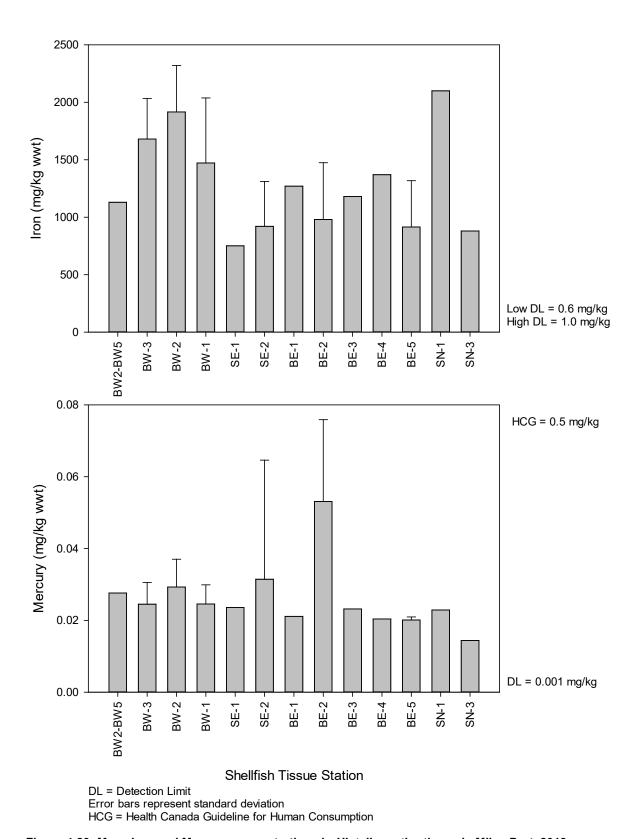


Figure 4-23: Mean Iron and Mercury concentrations in *Hiatella arctica* tissue in Milne Port, 2018.



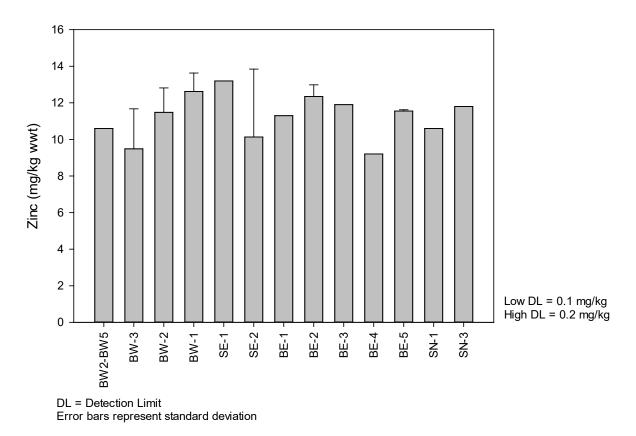


Figure 4-24: Mean Zinc concentration in Hiatella arctica tissue in Milne Port, 2018.

4.1.5 Fish Surveys 4.1.5.1 Catch Data

For the 2018 fish survey, overall effort for the four fishing methods was 1,712 hours and 31 minutes (Table 4-10 and Table 4-11). Angling effort, which included both trolling and jigging, ranged from 20 minutes to 1 hour and 25 minutes, with a mean of 45 minutes over 13 stations (Table 4-10). A total of 13 fish, representing three species were caught in angling surveys (Table 4-11). Shorthorn sculpin (*Myoxocephalus scorpius*) was the most abundant species caught during angling, followed by fourhorn sculpin (*M. quadricornis*) and Arctic sculpin (*M. scorpioides*). These three species were the same species caught in 2017 angling surveys and in previous monitoring surveys in the Milne Port area (SEM 2016a; SEM 2017a; Golder 2018). Mean relative abundance, as indicated by catch per unit effort (CPUE), was highest for shorthorn sculpin, the most abundant catch in angling surveys, with 0.69 fish/h (SD of 1.25 fish/h), followed by fourhorn sculpin with 0.54 fish/h (SD of 1.14 fish/h; Table 4-11).

Fukui traps were deployed at 11 stations with each deployment consisting of 5 traps per set, except for FT11, where 3 traps were set. Trap effort was calculated from the amount of time the traps were left to soak at each station. Effort ranged from 48 hours and 15 minutes to 191 hours and 30 minutes, with an average of 143 hours and 16 minutes (Table 4-10). A total of 4 fish were caught in Fukui trap surveys. As in the 2017 surveys (Golder 2018), fourhorn sculpin and sandlance (*Ammodytes spp.*) were caught during the Fukui trap survey. Additionally, a single Arctic sculpin was captured. This species was not captured in the 2017 Fukui trap surveys (Golder 2018).



Due to the high fishing effort and low catch, relative abundance in 2018, indicated by CPUE, was low for all species (Table 4-11) and was lower than in previous years. The highest mean CPUE was for fourhorn sculpin, with 0.0015 fish/h (SD of 0.0035 fish/h).

Gill net effort was calculated as the soak time at each of the 24 stations. At most stations, the gill nets were checked 1 to 3 times during the set time, and the fish capture results pooled for the station. Effort at each station ranged from 1 hour and 55 minutes to 7 hours and 45 minutes with an average soak duration of 4 hours and 20 minutes (Table 4-10). An exception was gill net set GN08, which was left deployed for 25 hours and 40 minutes due to strong winds that prevented retrieval of the net. The total duration of the gill net effort was 151 hours and 45 minutes. As in 2017 (Golder 2018), Arctic sculpin, Arctic char (*Salvelinus alpinus*), fourhorn sculpin, and shorthorn sculpin were captured in gill net surveys. Additionally, an Arctic cod (*Arctogadus glacialis*) and an unidentified sculpin were captured. Arctic cod has not been caught in previous gill net surveys in the Milne Port area (SEM 2016a; SEM 2017a; Golder 2018). Arctic char were the most abundant fish species caught in gill net surveys (n = 169), this species was not captured by any other survey method. Fourhorn sculpin was the next most abundant species caught in gillnet surveys (n = 137), followed by shorthorn sculpin (n = 67). The highest mean CPUE was for Arctic char with 1.57 fish/h (SD of 2.19 fish/h; Table 4-11).

Effort for seine net sampling was calculated from the time elapsed to drag the sample areas that ranged from 200 m^2 to 750 m^2 . A total of ten fish were captured in seine net efforts: shorthorn sculpin, fourhorn sculpin, an unknown sculpin species, and an unidentified fish, tentatively identified as a cod. Shorthorn sculpin were the most abundant (n = 4), followed by fourhorn sculpin (n = 3). The highest mean CPUE was for shorthorn sculpin at 8 fish/h (SD of 9.80 fish/h), followed by fourhorn sculpin at 6 fish/h (SD of 10.04 fish/h).

Table 4-10: Summary Statistics of Fishing Efforts by Fishing Method, 2018

Method	Number of	Effort Statistic (hour:minutes)						
	Stations	Min	Max	Mean	SD	Total		
Angling	13	0:20	1:25	0:45	0:19	9:47		
Fukui traps	11	48:15	191:30	143:16	46:31	1,576:04		
Gill net ^a	24	1:55	7:45	4:21	2:05	151:45		
Seine net	6	0:05	0:10	0:05	0:02	0:35		
Total effort (hour:minutes)						1,712:31		

^a Gill net effort GN08 was deployed for an extended period of time due to weather conditions and was excluded from calculation of mean deployment time



Table 4-11: Summary Statistics of Fishing Efforts, by Fishing Method and Fish Species

	N (Fish Counts)			CPUE	
Species	Range	Mean ± SD	Total	Range (fish/h)	Mean ± SD (fish/h)
Angling					
Arctic sculpin	0 - 1	0.08 ± 0.28	1	0 - 2.00	0.15 ± 0.55
Fourhorn sculpin	0 - 2	0.38 ± 0.65	5	0 - 4.00	0.54 ± 1.14
Shorthorn sculpin	0 - 4	0.54 ± 1.13	7	0 - 4.00	0.69 ± 1.25
All species	0 - 4	1.00 ± 1.29	13	0 - 6.00	1.39 ± 1.85
Fukui traps ¹					
Arctic sculpin	0 - 1	0.09 ± 0.30	1	0 - 0.005	0.0004 ± 0.0016
Fourhorn sculpin	0 - 1	0.18 ± 0.40	2	0 - 0.011	0.0015 ± 0.0035
Northern sandlance	0 - 1	0.09 ± 0.30	1	0 - 0.07	0.0006 ± 0.0021
All species	0 - 2	0.36 ± 0.67	4	0 - 0.011	0.0026 ± 0.0045
Gill net					
Arctic sculpin	0 - 1	0.04 ± 0.20	1	0 - 0.04	<0.01 ± 0.01
Arctic char	0 - 23	7.04 ± 7.44	169	0 - 10.43	1.57 ± 2.19
Fourhorn sculpin	0 - 37	5.71 ± 8.26	137	0 - 9.00	1.27 ± 2.09
Shorthorn sculpin	0 - 16	2.79 ± 3.72	67	0 - 3.00	0.53 ± 0.73
Arctic cod	0 - 1	0.04 ± 0.20	1	0 - 0.19	0.01 ± 0.04
Unknown sculpin	0 - 1	0.04 ± 0.20	1	0 - 0.04	<0.00 ± 0.01
All species	0 - 48	15.67 ± 13.37	376	0 - 14.09	3.38 ± 3.35
Seine net					
Fourhorn sculpin	0 - 2	0.5 ± 0.84	3	0 - 24.00	6.00 ± 10.04
Shorthorn sculpin	0 - 2	0.67 ± 0.82	4	0 - 24.00	8.00 ± 9.80
Unknown species	0 - 1	0.17 ± 0.41	1	0 - 12.00	2.00 ± 4.90
Unknown sculpin	0 - 2	0.33 ± 0.82	2	0 - 24.00	4.00 ± 9.80
All species	0 - 5	1.67 ± 1.97	10	0 - 60.00	20.00 ± 23.60

¹ Fukui traps: at each station, five traps were deployed except for FT11 where 3 traps were deployed.

Six Arctic fish species, in addition to one unidentified species and three unidentified sculpin, were captured during fish surveys in 2018. Arctic char, fourhorn sculpin and shorthorn sculpin were the most abundant fish species caught, comprising almost 98% of the total catch (Figure 4-25). Arctic char were the most abundant fish species captured, with a relative abundance of 42% of the total catch, followed by fourhorn sculpin (36% of catch) and shorthorn sculpin (19% of catch). Arctic sculpin, Arctic cod, and northern sandlance made up the remainder of identified species with relative abundances of 0.7%, 0.25%, and 0.25%, respectively. Gill netting was the most efficient capture method for fish, accounting for 93% of the total catch, including 100% of the total catch of Arctic char.



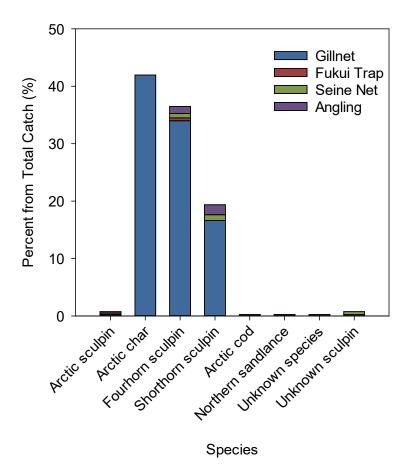


Figure 4-25: Relative Abundance of Fish Species by Capture Method in Milne Port Area, 2018

Total fish catch in 2018 was significantly greater compared to previous years (Table 4-12), with 403 fish captured, more than double the previous highest total captured in 2016 (197 fish). Throughout the 2010-2018 surveys, thirteen different fish species were identified. Arctic cod was collected for the first time in the Milne Port area in 2018, however, it had been previously observed in large schools in the Milne Port area (SEM 2017b) and in Arctic char stomach contents in 2016 (SEM 2017a).

Arctic char was the most frequently-captured fish in 2018 surveys, similar to 2015 and 2016, where Arctic char comprised 60% and 80% of the total catch, respectively (SEM 2016a; SEM 2017a). As in previous survey years, sculpin species were the most frequently-caught fish aside from Arctic char. Relative abundance among the sculpin species varied between survey years, however, shorthorn sculpin and fourhorn sculpin consistently were the two most abundant sculpin species.

Table 4-12: Total Fish Catch per Year in the Milne Port Area 2010 to 2018

Common Name	Taxonomic ID	2010	2013	2014	2015	2016	2017	2018
Arctic char	Salvelinus alpinus	11	6	3	67	157	23	169
Arctic sculpin	Myoxocephalus scorpioides	0	0	4	1	0	9	3
Shorthorn sculpin	Myoxocephalus scorpius	50	4	9	8	18	45	78
Fourhorn sculpin	Myoxocephalus quadricornis	7	3	39	13	18	40	147
Arctic staghorn sculpin	Gymnocanthus tricuspis	3	0	0	2	0	0	0
Longhorn sculpin	Myoxocephalus octodecemspinosus	0	2	4	2	2	0	0
Arctic hookear sculpin	Artediellus atlanticus	0	0	5	1	0	0	0
Unidentified sculpin	Cottidae	0	0	0	12	0	0	3
Greenland cod	Gadus ogac	4	0	1	0	0	0	0
Common lumpfish	Cyclopterus lumpus	0	0	1	0	0	0	0
Fishdoctor	Gymnelis viridis	0	1	0	3	0	0	0
Fourline snakeblenny	Eumesogrammus praecisus	0	0	1	2	2	0	0
Sandlance	Ammodytes spp.	0	0	0	0	0	1	1
Arctic cod	Arctogadus glacialis	0	0	0	0	0	0	1
Unidentified species	-	0	0	0	0	0	0	1
Total		75	16	67	111	197	118	403

4.1.5.2 Fish Length and Weight

Summary statistics for fish lengths and weights were calculated for each fish species caught at Milne Port (Table 4-13). Weights of approximately 5% (20 out of 403) of captured fish were not recorded due to equipment malfunction. Arctic char lengths ranged between 162 mm and 776 mm (mean length of 439 mm, SD of 122 mm). Arctic char weights ranged from 41 g to 5,000 g, with a mean weight of 1,125 g and SD of 942 g.

Mean lengths of the three identified sculpin species ranged from 191 mm (Arctic sculpin) to 221 mm (shorthorn sculpin). Mean weights of identified sculpin species ranged from 122 g (fourhorn sculpin) to 348 g (Arctic sculpin). Of the sculpin species identified, Arctic sculpin had the smallest mean length and, conversely, the highest mean weight across the three sculpin species. However, only three individual Arctic sculpins were identified, limiting the comparability to the other sculpin species.

In addition to Arctic char and the three identified sculpin species, a single Arctic cod with a length of 282 mm and a weight of 210 g and a single northern sandlance with a length of 158 mm and an unknown weight were captured. Three sculpin specimens were not identified to species. These fish ranged in length between 34 mm and 240 mm; only one fish was weighed.



Table 4-13: Length and Weight Statistics for Fish Species Captured in Milne Port Area, 2018

Species	N Fish	Variable	Statistic			
			Min	Max	Mean	SD
Arctic sculpin	3	Length (mm)	70	400	191	182
Arctic char	169		162	776	439	122
Fourhorn sculpin	147		60	312	220	47
Shorthorn sculpin	78		52	392	221	72
Arctic cod	1		282	282	282	-
Northern sandlance	1		158	158	158	-
Unknown sculpin	3		34	240	104	118
Arctic sculpin	2	Weight (g)	16	680	348	470
Arctic char	156		41	5,000	1,125	942
Fourhorn sculpin	146		2	350	122	72
Shorthorn sculpin	77		2	825	178	168
Arctic cod	1		180	180	180	-
Northern sandlance	0		-	-	-	-
Unknown sculpin	1		210	210	210	-

The length frequency distribution of Arctic char collected in 2018 (Figure 4-26) did not exhibit the strong bimodality reported for Arctic char collected in 2017 (Golder 2018). Fourhorn sculpin and Shorthorn sculpin were the only other fish species with sufficient sample sizes for an informative length frequency distribution (Figure 4-26). Fourhorn sculpin has a narrow unimodal distribution of lengths, with a peak at 220-280 mm. On the other hand, shorthorn sculpin had a wider distribution of length frequencies, with a wide peak between 260 mm and 230 mm, and a spike in counts at 80 mm and 180 mm.

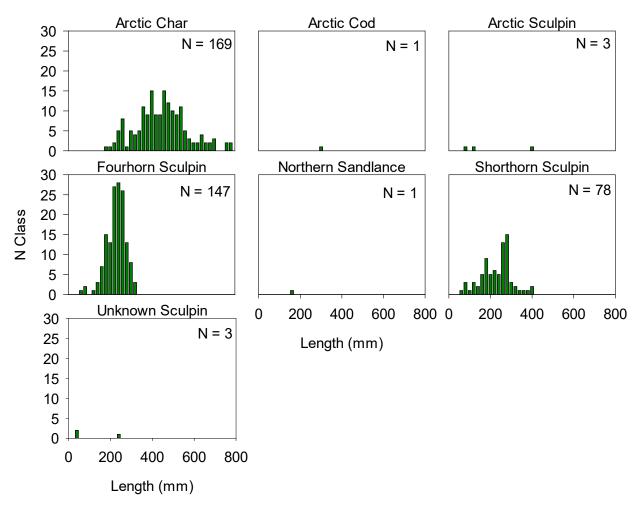


Figure 4-26: Length Frequency Distributions of Fish Species Captured in the Milne Port Area in 2018

Length-weight regression was performed on all species with three or more weight and length data points (i.e., Arctic char, fourhorn sculpin, and shorthorn sculpin). The 2017 regression curves were superimposed on the plots of 2018 data, to visualize changes in length-weight relationships between the two years (Figure 4-27). The regression for Arctic char had a high R^2 value, indicating a good fit for the Arctic char data. The 2017 and 2018 regressions were similar, despite a much smaller sample size in 2017 (N = 23) relative to 2018 (N = 156). For Arctic char, the length-weight relationship was not significantly different between 2017 and 2018 (p-value of the ANCOVA interaction = 0.959, year effect = 0.816).

The sample size for fourhorn sculpin was significantly larger in 2018 compared to 2017 (N = 146 and 28, respectively). The 2017 regression predicted larger weights at lengths of 250 mm or higher compared to 2018. However, the 2017 relationship had a lower R^2 (0.658), and was affected by a single individual with a high body weight relative to length. The length-weight relationship interaction between 2017 and 2018 was significant (p = 0.043). However, when the multiplicative ANCOVA was simplified to an additive ANCOVA, following the EEM guidance (Section 8.3.3.2.5, Environment Canada 2012), no significant differences were found between 2017 and 2018 (p = 0.168).

The length-weight regressions for shorthorn sculpin differed between 2017 and 2018. Fish of lengths up to approximately 300 mm were estimated to be heavier in 2017 when compared to 2018. On the other hand, fish that were 300 mm or longer were estimated to have higher weights in 2018 than in 2017. However, the 2017 sample size was much smaller compared to 2018 (N = 20 and N = 77, respectively), with only two fish smaller than 200 mm in length. In addition, no shorthorn sculpin >350 mm in length were collected in 2017, whereas three were recorded in 2018. Therefore, it is likely that the visual differences in the length-weight regressions between 2017 and 2018 were due to sampling limitations. The length-weight relationship was not significantly different between 2017 and 2018 (p-value of the ANCOVA interaction = 0.476, year effect = 0.289).

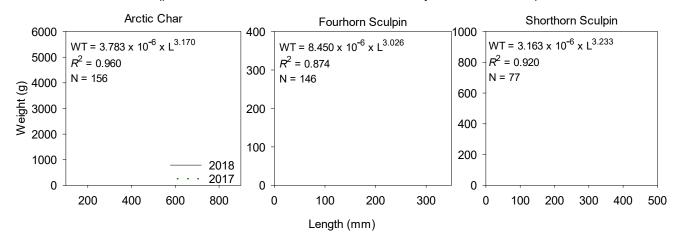


Figure 4-27: Weight-Length Plots and Regressions for Fish Species Captured in Milne Port Area in 2018 with regression line from 2017 catch (green hatched line)

Estimated ages of 26 Arctic char incidental mortalities were determined in lab and compared to the body length of each fish in order to determine the relationship between size and age in Arctic char at Milne Port. No relationship between fish body length and age was found for Arctic char incidental mortalities ($R^2 = 0.032$, Figure 4-28), indicating body size is not a good predictor for Arctic char age in the Milne Port area.

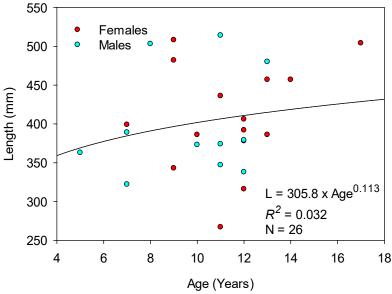


Figure 4-28: Age-Length Relationship of Arctic Char Incidental Mortalities from the Milne Port Area, 2018



4.1.5.3 Sex, Age and Stomach Content

Twenty-six incidental mortalities of Arctic char were retained for aging, body burden analysis, and stomach content analysis. Mortalities were composed of fish damaged during gill net retrievals at stations GN03, GN07, GN08, and GN12. The ages of incidental mortalities ranged from 5 to 17 years, with a mean of 11 years (SD of 2.59 years; Table 4-15). Mean fish ages were slightly higher in females than in males (11 years and 10 years, respectively). Females were also slightly longer and heavier on average (means of 410 mm and 901 g) compared to male Arctic char (means of 397 mm and 705 g). Detailed results of analysis of Arctic char incidental mortalities in 2018 are in ANNEXE G-5.

Table 4-14: Summary of Arctic Char Incidental Mortality Characteristics

	N	Min	Max	Mean	SD		
Age							
All	26	5	17	11	2.59		
Female	14	7	17	11	2.53		
Male	12	5	13	10	2.54		
Length	Length						
All	26	267	514	404	66.83		
Female	14	267	508	410	70.22		
Male	12	322	514	397	64.97		
Weight	Weight						
All	26	110	1480	810	416.21		
Female	14	170	1470	901	393.63		
Male	12	110	1480	705	433.68		

In the analysis of stomach contents of incidental mortalities, approximately 30% of the total stomach contents, by weight, was indeterminate or unidentifiable material (Figure 4-29). Amphipod tissue and individuals were the most abundant of the identifiable stomach content, at 29% of the total weight and an abundance of 813 individuals. The order Mysida (Arthropoda) was the most abundant group, with 1,052 individuals counted; however, mysids represented only 9% of the total stomach content weight. The second most abundant group was the order Calanoida (Arthropoda), with 936 individuals (6% of the total stomach content weight). Other crustacean tissue that could not be identified comprised approximately 25% of the total weight. Since no intact individuals were found, general crustacean abundance was not determined.

A total of 7 individuals and tissue from the arthropod orders Decapoda, Diptera, and Isopoda were identified, but they comprised less than 0.2% of the total weight of stomach contents and were excluded from Figure 4-29. Overall, arthropods, mostly crustaceans, made up over 98% of the identifiable tissue in Arctic char stomachs, with the remaining identifiable tissue being composed of fish. Only three fish (Chordata, Vertebrata) were found in Arctic char stomach contents, yet they accounted for 1.4% of the total stomach content weight.



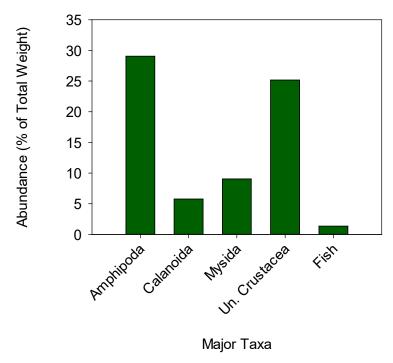


Figure 4-29: Abundance of Major Taxa in the Stomach Contents of Arctic Char Incidental Mortalities, 2018. Un. Crustacea = unidentified crustaceans.

Only one incidental mortality of Arctic char was collected from gillnets at station GN03. This individual had a half-full stomach with the dominant identifiable taxa being indeterminate species of Calanoida (Arthropoda; Table 4-15). Arctic char stomachs from station GN07 ranged from 25% to 75% full, with dominant identifiable taxa of Mysida (Arthropoda), followed by the orders Crustacea and Calanoida. Incidental mortalities from GN08 had stomachs that ranged from empty to 75% full. The dominant taxon in these fish was Crustacea (Arthropoda). Amphipoda (Arthropoda) was the most dominant taxon in all incidental mortalities from GN12. The stomachs of these fish ranged from 75% to 100% full. Amphipoda was the third most abundant taxon in fish stomachs (813 individuals) across all sample locations. Of these 813 individuals, 776 amphipods were found in GN12 fish stomachs. Amphipoda also represented the greatest proportion (29%) of identifiable tissue in stomachs across all sample locations (Figure 4-29). Amphipods from GN12 alone represented 28% of the total identifiable tissue across all stations in the stomachs of Arctic char incidental mortalities.

Table 4-15: Summary of Arctic Char Incidental Mortality Stomach Characteristics, 2018

Fish ID	Date Sampled	Stomach Weight (g)	Stomach Fullness (%)	Material Digested (%)	Dominant Taxa ^a in Stomach (by Weight)
GN3-1	30-Jul-18	13.1	50	75	Arthropoda (Indeterminate Calanoida)
GN7-1	02-Aug-18	9.6	75	75	Arthropoda (Mysida <i>Mysis sp.</i>)
GN7-2	02-Aug-18	14.4	50	75	Arthropoda (Indeterminate Mysida)
GN7-3	02-Aug-18	5.5	25	75	Arthropoda (Indeterminate Mysida)
GN7-4	02-Aug-18	26.0	50	75	Arthropoda (Indeterminate Crustacea)
GN7-5	02-Aug-18	15.8	50	75	Arthropoda (Indeterminate Mysida)
GN7-6	02-Aug-18	4.7	75	75	Chordata (Indeterminate Pisces)
GN7-7	02-Aug-18	9.9	25	50	Arthropoda (Indeterminate Calanoida)
GN7-8	02-Aug-18	37.5	50	75	Arthropoda (Calanoida spp.)
GN7-9	02-Aug-18	10.0	50	75	Arthropoda (Indeterminate Crustacea)
GN7-10	02-Aug-18	26.2	50	50	Arthropoda (Mysida spp.)
GN8-1	03-Aug-18	9.5	10	100	Unidentifiable tissue
GN8-2	03-Aug-18	22.3	25	100	Arthropoda (Indeterminate Calanoida)
GN8-3	03-Aug-18	22.8	25	75	Arthropoda (Indeterminate Mysida)
GN8-4	03-Aug-18	25.7	50	75	Arthropoda (Calanoida spp.)
GN8-5	03-Aug-18	16.9	50	75	Arthropoda (Calanoida spp.)
GN8-6	03-Aug-18	13.2	0	100	Empty stomach
GN8-7	03-Aug-18	19.6	50	75	Arthropoda (Indeterminate Crustacea)
GN8-8	03-Aug-18	12.8	50	75	Arthropoda (Indeterminate Crustacea)
GN8-9	03-Aug-18	8.6	75	100	Arthropoda (Indeterminate Crustacea)
GN8-10	03-Aug-18	24.8	50	75	Arthropoda (Indeterminate Crustacea)
GN8-11	03-Aug-18	12.2	50	50	Arthropoda (Indeterminate Crustacea)
GN8-12	03-Aug-18	10.9	75	75	Arthropoda (Indeterminate Crustacea)
GN12-1	09-Aug-18	18.0	100	75	Arthropoda (Amphipoda <i>Themisto sp.</i>)
GN12-2	09-Aug-18	25.3	100	75	Arthropoda (Amphipoda spp.)
GN12-3	09-Aug-18	31.4	75	75	Arthropoda (Amphipoda spp.)

an Identified to the lowest possible taxon

4.1.5.4 Tissue Analysis

Tissue samples from the incidental Arctic char mortalities were analyzed to compare body burden of metals pre(2010 and 2013) and during Project operation (2015 to present). Annual means and standard deviations of
arsenic, cadmium, chromium, copper, iron, mercury, and zinc concentrations were calculated for 2010-2018
samples (Table 4-16). Other metals were analyzed in fish tissue but were consistently below detection limits in
previous years. In 2017 and 2018, calcium, cobalt, magnesium, manganese, nickel, phosphorus, potassium,
sodium, strontium, thallium, and tin were also above detection limits. However, in 2017 only 2 Arctic char
mortalities were analyzed for metals, which limited comparison of mean concentrations for these metals between



the two years. Fish sampling was performed in 2014, but no tissue was collected for metals analysis, since there were no incidental mortalities.

Of the metals that exceeded detection limits in 2018 surveys, guidelines exist only for mercury. No samples in 2018, or previous years, exceeded the Health Canada guideline (0.5 mg/kg) for mercury in fish tissue for human consumption. Concentrations of metals in Arctic char tissue between sample years were generally consistent from 2010 to 2017. Detailed results of metal analysis for each Arctic char incidental mortality from the Milne Port area in 2018 are in ANNEXE G-5.

Table 4-16: Summary of Detected Metal Concentrations (mg/kg) in Arctic Char Incidental Mortality Tissue Samples in the Milne Port Area (2010 to 2018)

Metals	Health	2010 (n=11)		2013 (n=6) 2015 (n=5)		2016 (n=13)		2017 (n=2)		2018 (n=26)			
	Canada Guidelines	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Arsenic	-	0.82	0.17	0.61	0.12	1.38	0.91	0.97	0.21	0.81	0.40	0.51	0.24
Cadmium	-	0.01	<0.01	<0.05	<0.01	<0.05	<0.01	<0.05	<0.01	0.01	<0.01	0.01	0.01
Chromium	-	0.59	0.90	<0.5	<0.01	<0.5	<0.01	<0.5	<0.01	<0.01	<0.01	0.02	0.01
Copper	-	0.85	0.27	1.06	0.26	0.55	0.20	1.63	1.18	0.56	0.12	0.48	0.13
Iron	-	9.90	5.03	<15	<0.01	<15	<0.01	8.38	3.19	6.00	0.14	4.20	1.07
Mercury	0.50	0.05	0.03	0.03	0.01	0.04	0.01	0.04	0.02	0.06	0.04	0.04	0.02
Zinc	-	6.20	0.80	9.20	1.96	6.92	1.71	7.18	1.27	5.84	0.54	5.45	1.40

Notes: No tissue samples were collected in 2014 since incidental fish mortalities did not occur during the surveys

4.2 AIS

4.2.1 Zooplankton

Taxonomic data of zooplankton collected from seven stations in Milne Port and four stations at Ragged Island are presented in ANNEXE H. Zooplankton taxa presence/absence in 2018 is presented along with presence/absence in 2014, 2015, 2016 and 2017 in Table 4-17. A list of newly observed taxa in Milne Port, defined as taxa identified during the 2018 survey but not during previous monitoring surveys in 2014 to 2017, is provided in Table 4-18 along with a brief description of the known geographic distribution of each taxon.

Of the 44 zooplankton taxa identified in samples collected during the 2018 AIS monitoring survey identified, three taxa were not observed during previous AIS monitoring or baseline surveys (Table 4-17).

Table 4-17: Zooplankton Taxa Presence and Absence in Milne Inlet during AIS Monitoring (2014-2018)

Taxa	2014	2015	2016	2017	2018
Acarti hudsonica			х		
Acartia longiremis	х	х	х	х	
Aeginopsis laurentii**				х	х
Aglantha digitale	х			х	х
Ammodytes sp.				х	х
Anthomedusae indet.		х			
Pholis fasciata				х	



Taxa	2014	2015	2016	2017	2018
Balanomorpha indet.**				х	
Beroe gracilis		х			
Beroe cucumis			х		
Bivalvia indet.	х	х	х	х	х
Bosmina longicornis		х	х		
Bosminidae indet.	х			х	
Bryozoa indet. **					х
Calanoida indet.	х	х	х	х	х
Calanus finmarchicus	х	х	х	х	х
Calanus glacialis	х	х	х	х	х
Calanus hyperboreus	х	х	х	х	х
Catablema vesicarium**				х	х
Centropages sp.		х			х
Chydorus sphaericus			х		
Clione limacina	х			х	х
Clytemnestra sp.	х		х	х	
Cnidaria indet.			х	х	х
Corycaeus sp.		х			
Cottidae indet.				х	
Ctenocalanus vanus				х	х
Daphnia sp.		х			
Echinoidea indet.	х	х	х	х	х
Erythrops sp.					х
Eukrohnia hamata	х				
Euphysa sp.		х			x
Eurytemora herdmani		х			
Euterpina acutifrons		х	x	х	
<i>Fritillaria</i> sp.		х	x		x
Gadidae indet.				х	x
Gymnosomata	x				
Hydracarina sp.		Х			
Hyperia medusarum				х	
Hyperoche medusarum				х	
Isopoda indet.**				х	x
Limacina helicina		х		х	x
Lucicutia sp	x		х		
Lysianassoidea indet.					x



Таха	2014	2015	2016	2017	2018
Metridia sp.		х		х	х
Microcalanus sp.				х	Х
Microsetella norvegica	х	х	х	х	Х
Mysis litoralis				х	
Nemertea indet.				х	
Oikopleura sp.		х		х	Х
Oithona atlantica	х	х	х	х	Х
Oithona similis	х	х	х	х	Х
Oncaea minuta	х	х			
Oncaeidae indet.	х	х	х	х	
Parasagitta elegans	х			х	Х
Polychaeta indet.	х	х	х	х	Х
Pseudocalanus sp.	х	х	х	х	Х
Rathkea sp.**				х	
Sabellariidae indet.				х	
Sabinea septemcarinata**				х	Х
Sagittidae indet.	х	х	х		
Sapphirina opalina		х			
Sapphirina sp.			х	х	
Scolecithricella sp.				х	Х
Synchaeta sp.			х	х	
Themisto abyssorum**				х	
Themisto libellula				х	х
Themisto sp.	х			х	х
Triconia borealis			х	х	

Notes: taxa identified to the lowest practical taxonomic level; presence/absence for previous years taken from SEM 2015, 2016, 2017a, Golder 2018. **=taxa not identified in 2014, 2015, and 2016 but identified during baseline studies in 2008 or 2010 (Baffinland 2012; SEM 2017a); indet.= indeterminate (taxa could not be identified beyond the taxonomic level listed); sp.=species. High taxonomic levels presented only for taxa not previously identified to a lower taxonomic level (e.g. Crustacea indet. omitted due to large numbers of crustacean taxa identified to species level, Cottidae indet. presented due to lack of sculpins identified to species level).

Zooplankton samples in 2018 contained only three taxa, which were not previously identified during previous AIS monitoring or baseline studies (Table 4-18). None of the new taxa were identified to species level, one was identified to genus level and the remaining two taxa represented the first recorded occurrence of a family or larger taxonomic level. New taxa identified in the samples included a genus of mysid shrimp (*Erythrops* sp.), amphipods of the superfamily Lysianassoidea, and unidentified bryozoans.

Each newly observed taxa was cross-checked against a global database of marine invasive species and none of the taxa were identified as a globally-recognized invasive species (Molnar et al. 2008) or an invasive species in Canada according to the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014). In addition to these databases, each new taxon was researched

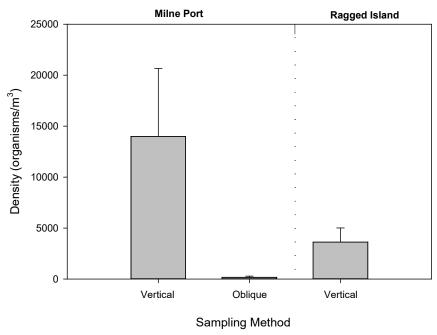


independently in the literature for their known habitats and distributions for signs of taxa that may be considered non-native to the Arctic region. None of the newly observed zooplankton taxa in 2018 could be identified as non-native to the Arctic, despite not being previously identified in Milne Port (Table 4-18). None of the newly observed taxa could be identified to species level. Each taxon identified to genus level or higher contained at least one species with a known occurrence in the Arctic or a taxon with a global distribution (Lysianassoidea).

Table 4-18: Newly Observed Zooplankton Taxa Identified in Milne Port in 2018

Taxa	Common Name	Description
Erythrops sp.	Mysid shrimp	Genus of mysid shrimp, known occurrences of some species in the Arctic Ocean including <i>Erythrops abyssorum</i> and <i>Erythrops erythrophthalma</i> (Muller 1993; Tattersall and Tattersall 1951).
Bryozoa indet.	Unidentified bryozoan	Bryozoans are a phylum with representative taxa found worldwide, adult bryozoans have been observed on the armour stone around the ore dock.
Lysianassoidea indet.	Unidentified amphipod	A superfamily of amphipods; contains taxa with a global distribution.

A total of 745,124 organisms were estimated from samples collected at Milne Port and Ragged Island in 2018. Adjusted for the total volume of water sampled during each vertical haul and oblique tow, the mean density of organisms for each area and sampling method was 14,007 ± 6,650 organisms/m³ in vertical hauls at Milne Port, 178 ± 114 organisms/m³ in oblique tows at Milne Port, and 3,625 ± 1,391 organisms/m³ in vertical hauls at Ragged Island (Figure 4-30). Higher zooplankton density in vertical hauls compared to the oblique tows was consistent with previous sampling years and likely a result of differences in the depth strata targeted by each sampling method. In general, zooplankton density in 2018 was slightly higher than in previous AIS monitoring years while taxa richness and overall community composition was similar.



Notes: Error bars represent one standard deviation

Figure 4-30: Mean Density of Zooplankton Collected in Oblique Tows and Vertical Hauls, Milne Inlet, 2018

¹⁵ Calculated as the average density per sampling method ± one standard deviation of the mean



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A taxa accumulation curve was calculated for samples collected in 2018 to compare sampling effort with previous AIS monitoring surveys in Milne Port and to provide an estimate of the effort required to fully characterize the zooplankton community (Figure 4-31). The taxa accumulation curve for the 2018 AIS sampling effort reached an asymptote at approximately fourteen samples, after which no new taxa were identified in any additional samples up to a total of seventeen. The taxa accumulation curve for the 2018 AIS sampling effort is very similar to that observed for the 2017 AIS sampling effort (Golder 2018) suggesting that the sampling effort in 2018 captured a proportion of the overall zooplankton community that was sufficient to describe the general zooplankton community structure.

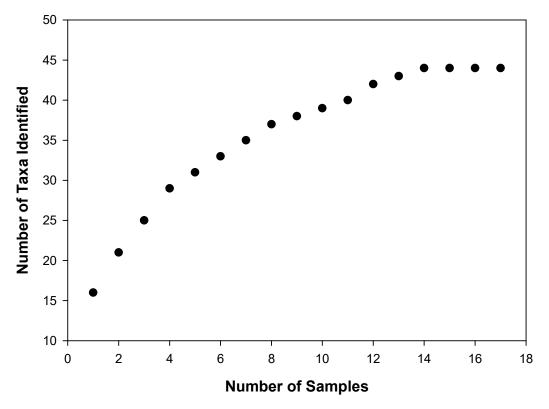


Figure 4-31: Taxa Accumulation Curve for Zooplankton, Milne Inlet, 2018

The non-parametric species estimator Chao 2¹⁶ was calculated for 2018 following the methods used in SEM 2017a and Golder 2018. For samples collected in 2018, the Chao 2 calculation provided an estimate of 52.3 taxa observed, which exceeded the actual observed number of taxa (44) by 19% (Table 4-19). The discrepancy between the observed and expected number of zooplankton taxa was larger than in 2017, but similar to the discrepancy observed during previous AIS monitoring years. The relatively low discrepancy between the observed and expected number of taxa suggests that the zooplankton sampling effort in 2018 was sufficient to characterize the overall zooplankton community.

¹⁶ Chao 2 calculation: S₁=S_{obs}+(Q₁²/2Q₂)



Table 4-19: Chao 2 Species Estimates for Zooplankton Samples Collected in Milne Inlet (2014-2018)

Year	Sobs	Q ₁	Q ₂	S ₁	% S ₁ exceeds S _{obs}
2014	34	7	6	38.1	12
2015	40	10	6	48.3	21
2016	37	8	5	43.4	17
2017	44	8	9	47.6	8
2018	44	10	6	52.3	19

Notes: Values for 2014 through 2017 taken from SEM 2017a and Golder 2018. S_{obs}= # of taxa observed; Q₁= # of species occurring in only one sample; Q₂= # of species occurring in two samples; S₁= # of taxa expected to be observed based on Chao 2 estimate

4.2.2 Benthic Infauna

Benthic invertebrate samples were collected from the eight stations in Milne Port and two stations at Ragged Island (Table 3-5) that were sampled in 2017 as a part of the long term AIS program and 15 stations sampled as a part of the MEEMP for the first time in 2018. Invertebrates in benthic samples were identified to the lowest possible taxonomic level (ANNEXE E) and the presence/absence of each taxa compared to taxonomic data from 2010, 2013, 2015, 2016 and 2017 (ANNEXE I). The taxa list was also updated to include any new accepted species names for any previously identified species.

A total of 62,803 organisms were counted in 2018 surveys in Milne Inlet and at Ragged Island. These were identified to represent 349 different taxa of benthic infauna, including 46 unique taxa that were not identified in previous surveys of Milne Port and Ragged Island (Table 4-20). Of the newly identified taxa, 42 were found only in the Milne Port area, two only at Ragged Island, and two newly observed taxa were found at both Milne Port and Ragged Island. Approximately 39% of the new taxa were identified to the species level, 52% were only able to be identified to the genus level. The remaining 9% of the new taxa represented the first recorded instances of a family or larger taxonomic level at Milne Port and Ragged Island.

Table 4-20: Newly Observed Benthic Invertebrate Infauna Taxa Identified at Milne Port and Ragged Island in 2018

Phylum	Class/Order	Family	Таха	
Annelida	Polychaeta	Cirratulidae	Kirkegaardia sp.	
Annelida	Polychaeta	Echiuridae	Parougia caeca	
Annelida	Polychaeta	Fabriciidae	Manayunkia aesturiana**	
Annelida	Polychaeta	Hesionidae	Gyptis sp.*	
Annelida	Polychaeta	Hesionidae	Microphthalmus sp.	
Annelida	Polychaeta	Lumbrineridae	Scoletoma sp.	
Annelida	Polychaeta	Maldanidae	Nicomache sp.	
Annelida	Polychaeta	Maldanidae	Praxillella gracilis	
Annelida	Polychaeta	Maldanidae	Rhodine gracilior**	
Annelida	Polychaeta	Nephtyidae	Aglaophamus sp.	
Annelida	Polychaeta	Nephtyidae	Nephtys bucera	
Annelida	Polychaeta	Opheliidae	Ophelina cylindricaudata	
Annelida	Polychaeta	Phyllodocidae	Eulalia sp.	
Annelida	Polychaeta	Polynoidae	Bylgides sp.	



Phylum	Class/Order	Family	Taxa	
Annelida	Polychaeta	Polynoidae	Melaenis loveni	
Annelida	Polychaeta	Protodrilidae	Protodrilus sp.	
Annelida	Polychaeta	Sabellidae	Bispira sp.	
Annelida	Polychaeta	Spionidae	Dipolydora concharum	
Annelida	Polychaeta	Spionidae	Dipolydora socialis	
Annelida	Polychaeta	Spionidae	Laonice cirrata	
Annelida	Polychaeta	Spionidae	Scolelepis sp.	
Annelida	Polychaeta	Syllidae	Eusyllis sp.	
Annelida	Polychaeta	Syllidae	Pionosyllis sp.	
Annelida	Polychaeta	Syllidae	Syllides longocirratus	
Annelida	Polychaeta	Terebellidae	Amaeana sp.	
Annelida	Polychaeta	Terebellidae	Proclea graffii	
Arthropoda	Amphipoda	Amphilochidae	Amphilochus sp.	
Arthropoda	Amphipoda	Munnopsidae	Eurycope sp.	
Arthropoda	Amphipoda	Oedicerotidae	Aceroides sp.	
Arthropoda	Amphipoda	Oedicerotidae	Arrhis sp.*	
Arthropoda	Amphipoda	Uristidae	Onisimus brevicaudatus	
Arthropoda	Coleoptera	Curculionidae	Curculionidae indet.	
Bryozoa	Cheilostomatida	Calloporidae	Calloporidae indet.	
Bryozoa	Cheilostomatida	Candidae	Scrupocellaria sp.	
Bryozoa	Cheilostomatida	Myriaporidae	Leieschara sp.	
Bryozoa	Ctenostomatida	Alcyonidiidae	Alcyonidium sp.	
Bryozoa	Ctenostomatida	Triticellidae	Triticella sp.	
Chordata	Ascidiacea		Aplousobranchia indet.	
Echinodermata	Ophiuroidea	Ophiuridae	Ophiocten affinis	
Mollusca	Bivalvia	Arcidae	Bathyarca glacialis	
Mollusca	Bivalvia	Yoldiidae	Yoldiella frigida	
Mollusca	Bivalvia	Yoldiidae	Yoldiella intermedia	
Mollusca	Gastropoda	Buccinidae	Buccinum hydrophanum	
Mollusca	Gastropoda	Columbellidae	Columbellidae indet.	
Nemertea	Palaeonemertea	Carinomidae	Carinoma sp.	
Nemertea	Palaeonemertea	Tubulanidae	Tubulanus sp.	

Notes: taxa identified to the lowest practical taxonomic level; presence/absence for previous years taken from SEM 2017. * = taxa identified only at Ragged Island; ** = independent verification indicates possible alternative identification for a specimen; indet.= indeterminate (taxa could not be identified beyond the taxonomic level listed); sp. = species. High taxonomic levels presented only for taxa not previously identified to a lower taxonomic level.



Each newly observed taxa was cross-referenced against a global database of marine invasive species (Molnar et al. 2008), as well as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014). Each new taxa was also independently researched in the existing literature for known habitats and distribution, to determine the potential for considering the taxa invasive or non-native to the Arctic region (EOL 2019, Fofonoff et al. 2019, NCCOS 2019, Palomares and Pauly 2018, Read and Fauchald 2019, Sirenko et al. 2019, Vieira et al. 2014, WoRMS 2019).

Most of the newly observed taxa in Milne Port and at Ragged Island in 2018 were known in Arctic habitats. A few taxa had unknown northern limits but included ranges as far north as the Gulf of St. Lawrence, Newfoundland, southern Greenland, and the Norwegian Sea, including Iceland and Norway. A more detailed description of status of the newly identified species and their known ranges is provided in Appendix I-2.

One of the 46 new benthic infaunal species identified in 2018 was a sabellid worm found in the deep-water sediment samples collected at Milne Port. This was initially identified by the taxonomic laboratory as *Pseudofabricia sp.* Currently, the only species described for this genus is *P. aberrans*, which is considered endemic to the Mediterranean Sea (Giangrande and Cantone 1990; Cepeda and Lattig 2016; WoRMS 2019). *P. aberrans* is not listed in the global invasive species database (Molnar et al. 2008), or as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014). Samples were sent for independent verification by the University of Laval's Benthic Ecology Laboratory, which concluded that the species may have been *Manayunkia aesturiana*. This species has a documented range in the North Atlantic (including Arctic waters) and specimens have been collected near Baffin Island (Goldsmit 2016).

One of the 46 new benthic infaunal species identified in 2018, a sabellid worm collected in deep-water samples at Milne Port, was tentatively identified as *Pseudofabricia* sp. nr. *aberrans*. Previously, *P. aberrans* had only been collected from the Mediterranean Sea and this species is presumed to be endemic to that region (Giangrande and Cantone 1990; Cepeda and Lattig 2016; WoRMS 2019). *P. aberrans* is not listed in the global invasive species database (Molnar et al. 2008), or as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014). Specimens of the genus *Pseudofabricia*, not identified to the species level, have been identified in the Black Sea and along the United Kingdom coast (WoRMS 2019). A limited description exists for *P. aberrans* and polychaete surveys in the Canadian Arctic are not exhaustive, and it is possible these specimens are a cryptic species related to *P. aberrans*, or that the range on record is incomplete. The samples were sent for independent verification by the University of Laval's Benthic Ecology Laboratory, which concluded that the species could be *Manayunkia aesturiana* which has a documented range in the North Atlantic (including Arctic waters) with specimens previously collected near Baffin Island (Goldsmit 2016).

In 2018, an estimated 40 *M. aesturiana* specimens¹⁷ were found in eight replicate samples from stations SN-2, SN-3 and SN-4, all of which were surveyed for the first time in 2018.

A maldanid polychaete identified to the genus *Rhodine* was found in one benthic infaunal sample from Milne Port in 2018. Initial identification suggested the specimens may have been *R. loveni*, an Arctic species that had previously been observed in Milne Port in 2017 surveys (WoRMS 2019). Independent verification of the taxonomic identifications indicate that an alternative identification for the *R. loveni* specimen may have been *R. gracillor*, which also has an Arctic distribution including Baffin Island, although it has not been previously identified at Milne Port (WoRMS 2019).

¹⁷ Thirty-one adult and four intermediate individuals were counted in whole and 3/4th, 2/3rd, and 5/6th subsamples and extrapolated to an estimate of 40 across all replicates.



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A taxa accumulation curve (Figure 4-32) was calculated for samples collected in Milne Inlet and Ragged Island to compare sampling effort with previous AIS monitoring surveys and to provide an estimate of the effort required to fully characterize the benthic infauna community. Three incidental taxa were removed from this analysis. The incidental taxa, representing two dipteran and one coleopteran species are occasionally found in brackish water conditions, but were assumed to be incidental due to the depths at which the samples were collected. The taxa accumulation curve for the 2018 AIS sampling effort reached an asymptote at 58 samples, after which no new taxa were identified in any additional samples, up to a total of 71 samples. AIS sampling in 2018 was sufficient to fully characterize the benthic infauna community. The asymptote was reached at 351 taxa for 2018, which is higher than the previous sampling years (approximately 234 taxa in 2017, 210 taxa in 2016, 170 taxa in 2015, 180 taxa in 2013, SEM 2017a, Golder 2018). The increased number of taxa in 2017 was attributed to greater detection probability of small and rare taxa due to the sorting methods applied at Biologica (Golder 2018). These sorting methods likely contributed as well to the increase in number of new taxa observed in 2018.

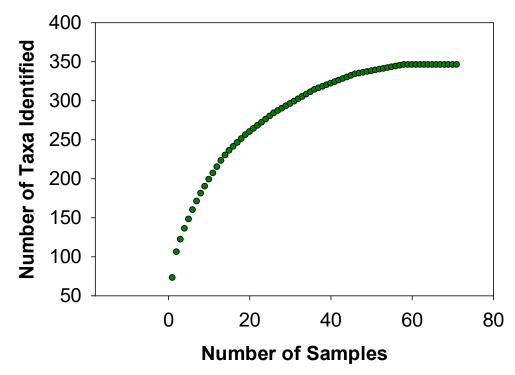


Figure 4-32: Taxa Accumulation Curve for Benthic Infauna Collected at Milne Inlet and Ragged Island, 2018

The non-parametric species estimator Chao 2 was calculated for 2018 following the methods used in SEM 2017a (Table 4-21). Three incidental taxa were removed from this analysis. The incidental taxa, representing two dipteran and one coleopteran species are occasionally found in brackish water conditions, but were assumed to be incidental due to the depths at which the samples were collected. For samples collected in 2018, the Chao 2 calculation provided an estimate of 439.7 taxa expected, which exceeded the observed number of taxa (346) by 27%. The discrepancy between the observed and the expected number of benthic infauna taxa in 2018 is within the range determined in previous AIS monitoring years.

Table 4-21: Chao 2 Species Estimates for Benthic Infauna Samples Collected in Milne Inlet (2013, 2015 to 2018)

Year	Sobs	Q ₁	Q ₂	S ₂	% S ₂ exceeds S _{obs}
2013	188	70	27	278.7	48
2015	181	56	25	246.3	36
2016	218	59	38	263.8	21
2017	235	92	47	324.0	38
2018	346	81	35	439.7	27

Notes: Values for 2013, 2015 to 2017 are taken from Golder 2018. S_{obs} = # of taxa observed; Q_1 = # of taxa occurring in only one sample; Q_2 = # of taxa occurring in two samples; S_2 = # of taxa expected to be observed based on Chao 2 estimates

4.2.3 Macroflora and Benthic Epifauna

A total of six distinct macroflora taxa were observed during AIS underwater video surveys in Milne Port in 2018 (ANNEXE J). One of the six observed taxa had not been previously recorded during AIS surveys along the established transects in 2014 through 2017. The new taxa were identified as encrusting coralline algae (Family Corallinophycidae) and was observed in areas with coarse substrate consisting of cobbles and boulders. Encrusting coralline algae, however, was observed in underwater video footage along one of the MEEMP transects, the East Transect, in 2017 (Golder 2018).

The twenty-five distinct epifauna taxa recorded from AIS underwater video surveys and Fukui trap samples in Milne Port in 2018 included epifauna, fish and plankton (ANNEXE J). Three of the twenty-five taxa had not been previously recorded during AIS underwater video surveys in 2014 through 2017. The three new taxa in 2018 included an ice-cream coneworm of the family Pectinariidae, a ribbon worm (Nemertea indet.) and a prickleback fish of the family Stichaeidae. Nemertean and Pectinariidae worms have been identified in collected benthic infauna samples in previous years (ANNEXE E). The prickleback fish is further discussed in Section 4.2.4.

4.2.4 Fish and Mobile Epifauna

Fish and mobile epifauna taxa observed during the 2018 studies are listed in ANNEXE J. One fish species, Arctic cod, was caught in gill nets for the first time in 2018 (Section 4.1.5.1); and a fish of family Pricklebacks (Stichaeidae) was observed for the first time in the video footage from two of the AIS transects. Arctic cod, however, was previously observed in the Milne Port area during underwater video surveys of the Fish Offset Habitat assessment in 2016 (SEM 2017b), therefore was not considered a new species in Milne Inlet. Known range of pricklebacks includes North Atlantic regions and a few species of the family were recorded in the Arctic (Nelson 1994 referenced in Fishbase; Lamb and Edgell 2010), therefore the observed fish is most likely native to the region having previously escaped fishing gear and video observations due its body size and form (small and elongated), and demersal solitary behaviour.



4.2.5 Encrusting Epifauna

A total of 1,733 encrusting epifauna from eight distinct taxa were identified from samples collected from settlement baskets and settlement plates recovered from the Milne Ore Dock in 2018 (Table 4-22; ANNEXE K). The majority of encrusting epifauna collected were unidentified barnacles of the suborder Balanomorpha, which included a total of 1,674 juveniles. The next most abundant taxon was juvenile wrinkled rock-borer (*Hiatella arctica*) of which a total of 29 juveniles were observed. Wrinkled rock-borer was a commonly observed bivalve species during subtidal video transects conducted as part of the MEEMP program in previous monitoring years. Other epifauna identified included adults from four colonial bryozoan species (*Alcyonidium gelatinosum, Alcyonidium disciforme, Disporella hispida, Infundibulipora prolifera*), two juvenile clams (*Mya* sp.), and two polychaetes (*Circeis* sp.).

Each epifauna taxa identified to species was cross-checked against a global database of marine invasive species and none of the taxa were identified as a globally-recognized invasive species (Molnar et al. 2008) or an invasive species in Canada according to the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada By Ballast Water (Casas-Monroy et al. 2014).

Table 4-22: Epifauna Taxa Identified From Settlement Baskets and Plates in Milne Port, 2018

Taxa	Total Abundance			Description		
A I J		J				
Alcyonidium gelatinosum	1	_	_	Colonial bryozoan species; known to be distributed within the North Atlantic and Arctic (WoRMS 2018)		
Alcyonidium disciforme	1	_	_	Colonial bryozoan species; known to be distributed throughout the Southern Atlantic, Northern Atlantic and Arctic (Bock and Gordon 2013)		
Balanomorpha	_	_	1,674	Unidentified barnacle; global distribution		
Disporella sp.	16	_	_	Bryozoan with global distribution; known to be distributed within the Arctic, including Baffin Island (WoRMS 2018).		
Disporella hispida	7	_	_	Colonial, suspension-feeding bryozoan; known distribution ranges from Northeast Atlantic and Mediterranean up to Svalbard in the Arctic		
Hiatella arctica	_	_	29	Common name: wrinkled rock-borer; species of saltwater clam native to the Arctic; adult specimens observed in Milne Port during previous MEEMP surveys (Golder 2017)		
Infundibulipora prolifera	1	_	_	Colonial bryozoan species; known to be distributed within the Arctic (Bock and Gordon 2013)		
Mya sp.	_	_	2	Genus of saltwater clams; wide geographic distribution including the Arctic and Atlantic		
Circeis sp.	1	1	_	Polychaete worm known to be distributed within the Arctic, including Baffin Island (WoRMS 2018).		

A= adult; I= intermediate (has adult features but not of typical reproductive size); J= juvenile



4.2.6 Ship Hull Monitoring

A total of 32 ROV transects were conducted alongside three ore carriers docked in Milne Port between 3 to 5 August 2018. A total of 302 minutes of video footage was collected of the ship hulls, which was analyzed to assess the presence or absence of aquatic invasive species. Surveys of the Arkadia and Golden Ice ore carriers consisted of transects along each of the four corners of the ship hull (i.e. starboard stern, starboard bow, port bow, port stern). No signs of biofouling were identified from video collected along any of the transects of the Golden Ice ore carrier in 2018. However, transects conducted along the Arkadia and Golden Saguenay detected a small amount of potential biofouling at the stern of the ship near the propeller on both ore carriers. The biofouling observed at the stern of the Arkadia was identified as encrusted barnacles (Balanomorpha indet.) (Figure 4-33). The observed growth on the stern area of the Golden Saguenay carrier could not be positively identified. The biofouling was observed at approximately 8.6 and 7.3 m depth respectively, which was too deep for sample collection using the planned hull scraping methods.

Due to the limits of identification using solely the video footage, with no sample collection possible given the location and depth of the observed biofouling, identification to species or genus level was not possible. Future ship hull monitoring surveys should aim to collect video footage using high definition cameras which were not available for the 2018 AIS survey due to technical constraints of the ROV available for the program.



Figure 4-33: Arkadia ship hull with encrusting barnacles from ROV footage.

Table 4-23: Ship hull biofouling monitoring effort in 2018

Date	Carrier	Location of Survey	Number of Transects	Transect Depths (m)	Survey effort (mm:ss)	Evidence of Biofouling	
3 August	Arkadia	Starboard stern	3	1, 3, 5	27:25	No signs of biofouling	
2018		Starboard bow	3	1, 4, 7	26:51		
		Port bow	4	1, 3, 7, 10	54:51		
		Port stern	4	1, 3, 6, 9	44:31		
		Stern and propeller	1	8	10:02	Barnacles observed near propeller	
4 August Golden Ice 2018	Golden Ice	Starboard stern	3	2, 5, 9	27:27	No signs of biofouling	
		Port stern	3	1, 4, 8	27:21		
		Port bow	4	2, 4, 7	36:31		
		Starboard bow	2	2, 5	12:18		
5 August	Golden	Starboard stern	3	1, 4, 7	24:36	Unidentified potential	
2018 S	Saguenay	Port stern [†]	2	2, 5	11:20	growth near propeller	

[†]Monitoring effort of the Golden Saguenay hull was reduced due to inclement weather (i.e., high wind and waves).

5.0 DISCUSSION

5.1 MEEMP

5.1.1 Water Quality

Vertical physical profiles of the water column (Sections 3.1.1.1 and 4.1.1.1) showed that physical properties of the water column in Milne Inlet in summer were influenced by freshwater input, particularly at the head of the inlet. Strong vertical stratification was persistent throughout the entire inlet, however, a horizontal gradient in salinity and temperature was also observed in the upper water column extending from the head to the mouth of Milne Inlet. Surface water was shown to increase in temperature and decrease in salinity in a southward gradient, indicating stronger freshwater runoff influence at the head of the inlet at Milne Port. Below the pycnocline, water was uniformly cold and saline throughout the inlet. Below 15 to 25 m depth, temperature was less than 0°C and salinity was above 30 PSU, comparable to open ocean conditions, at both the head and mouth of the inlet.

Both low chlorophyll *a* and dissolved oxygen concentrations suggest low phytoplankton production during the time of the surveys. Low primary production (as indicated by chlorophyll *a*) in Milne Inlet was reported during the baseline studies in 2010 (Baffinland 2012). Water in Milne Inlet was clear with turbidity consistently below 0.1 NTU throughout most of the water column and higher turbidity (0.5 to 8 NTU) at the surface, which was most likely associated with surface runoff from land.

Collection of discrete water samples was added to the MEEMP in 2015 to monitor for potential effects on water quality from the Milne Port site drainage. Since 2015, samples have been collected near the site drainage discharge location and at three other nearby locations over five separate sampling events, mostly in August. Due to the shallow water depths at the sampling locations, only water samples near the surface were collected. All water quality parameters measured in 2018 were within ranges typical of background conditions previously observed or below the detection limits of previous studies. All analyzed water quality constituents, including nitrates, arsenic, cadmium, chromium, mercury, silver and naphthalene in 2018 were below CCME WQG. PAHs were below the detection limit for all samples during all sampling events in 2018, 2017, 2016, and 2015. Naphthalene was not tested for in 2016 and 2015.

Fecal coliform bacteria measurements were added to the testing during one sampling event in 2018. Fecal coliform bacteria levels measured during the 2018 surveys were below the detection limit. There are no CCME WQG for fecal coliform in marine environments.

5.1.2 Sediment Quality

Percent fines and iron concentrations in sediments were used as indicators for potential Project-related environmental effects. In general, fines content and iron concentrations showed high in-station, between-station and between-transect variability.

Fines content remained stable between the five years of sampling on the West and East transects. On the Coastal Transect, there was an estimated increase in percent fines at the 1,000-m and 1,500-m distances between 2014 and 2016, although the 2018 estimates showed no change from 2014 indicating no consistent trend between years. On the North Transect, a significant increase in percent fines was estimated at transect origin between 2014 and 2015, followed by a small decline in 2016 and no further changes throughout 2017-2018. Overall, there were no significant changes in percent fines between 2014 and 2018 on any of the four transects.



Iron concentrations showed interannual changes at some locations on the West and East transects during the five study years, while no significant changes in iron concentrations were observed on the Coastal or North transects. Between 2014 and 2018, significant increases in iron concentrations, based on observed fines content, were observed at 500 m and 1,500 m from the ore dock on the West Transect and at 500 m and 1,000 m on the East Transect. When iron concentrations were corrected to minimum or maximum transect-specific fines content, significant increases between the baseline (2014) and 2018 were estimated only at 50 and 1,000 m from the ore dock on the East Transect (no corrected estimates were done for 0 m). Gradual annual increases were also estimated at 500 m and 1000 m along the West Transect, and at 500 m along the East Transect between 2015 and 2018, but these changes didn't result in significant increases from the baseline year of 2014. No significant changes in the same direction were observed in two consecutive years over the 2014-2018 study period.

Observed exceedances of sediment quality thresholds for arsenic and nickel in sediments (CCME and BC SQGs and NOAA benchmarks) are not considered to be Project-related. Arsenic and nickel are not associated with ore processing at Mary River (Baffinland 2012) and were recorded in similar high concentrations during baseline surveys (SEM 2015). Also, exceedances for nickel were observed only at stations of the North and Coastal transects located more than 2,000 m from the ore dock. Therefore, high concentrations of arsenic and nickel are likely naturally occurring in these areas.

Volatile organic compounds, extractable petroleum hydrocarbons, and PAHs were, with few exceptions, below detection limits. PAHs were detected in samples SN-3-1, SE-2-1, and SE-5-1. Concentrations of volatile organic compound dichloromethane were detected in samples BE-2-1, BE-5-1, and SC-5-1.

Concentrations of PAHs acenaphthylene (0.006 mg/kg) and dibenz(a,h)anthracene (0.0069 mg/kg) in SN-3-1 exceeded CCME and BC ISQGs of 0.00587 and 0.00622 mg/kg by 2 and 11% respectively. No other organic compound exceeded sediment quality guidelines and benchmarks during the 2018 sediment program.

It is recommended that the sediment sampling program conducted annually since 2014 continue in 2019 to further evaluate changes in sediment chemistry and composition. If the future studies show that changes persist and form a consistent pattern, an investigation will be conducted whether these changes are caused by Project-related effects or natural variability of the marine environment as recommended by Environment Canada (2012).

5.1.3 Epibenthic Communities

Underwater video surveys using belt transects were used for monitoring effects on epibenthic communities (macroflora and epifauna) for the first time in 2018. The observed substrates and biological communities, in general, were consistent with those observed previously during the four MEEMP underwater transect surveys. The total abundance and taxonomic richness in belt transects was lower than in the previously surveyed transects, which was expected given the considerably smaller study areas. However, it is anticipated that surveying within permanently established belt transects within clearly demarcated boundaries will provide better repeatability and count accuracy. Consecutive surveys conducted annually will allow for monitoring of potential changes in epibenthic communities related to Project activities.



5.1.4 Benthic Infauna

Benthic infauna sampling was used to monitor for potential Project-related effects within the MEEMP for the first time in 2018. The collected data will be used to assess potential effects from the Project operations during future studies. Benthic infauna sampling sites in 2018 were sampled in the general area of 2017 AIS program benthic infauna sample sites at Milne Port (Golder 2018). Mean densities in MEEMP samples from 2018 were largely within the range of densities from 2017, although some 2018 samples from the western and northern transect were lower. Taxa richness and diversity were more variable in 2017 samples. However, taxa richness and diversity values in all 2018 samples were within the 2017 range (Golder 2018). In 2017 AIS and 2018 MEEMP samples, polychaetes were the most abundant taxa at all sample sites, followed by crustaceans and bivalves. Similar relative abundances were also noted in baseline studies from 2010 and 2013 (SEM 2015, Golder 2018).

Tissue samples from opportunistically collected clams, *Hiatella arctica*, were analyzed to determine body burden of metals as a supplement to fish tissue analysis. Concentrations of most metals in *H. arctica* tissues were higher compared to levels in Arctic char tissue sample, aside from mercury which was lower in *H. arctica*. Health Canada has no guidance for metals in shellfish tissue aside from mercury (0.5 mg/kg). All *H. arctica* tissue samples were below guidance thresholds. Concentrations of metals varied between sampling stations. However, due to the opportunistic sampling, replication was low (N = 1 at seven of thirteen stations) and a comparison of body burden of metals in *H. arctica* between stations could not be made.

5.1.5 Fish

Fishing effort in 2018 yielded considerably greater sampling size compared to previous years' studies both in terms of the total catch and CPUE. This may have occurred due to a longer sampling duration; fish sampling in 2018 was conducted over a broader sampling period (five weeks) than in the previous year encompassing most of the productive period from the end of July to the end of August.

Relative taxonomic composition of fish in the Milne Port area did not change considerably from previous studies. Catches were dominated by three species; Arctic char, fourhorn sculpin and shorthorn sculpin that comprised 98% of the total catch. Three other identified species (Arctic sculpin, Arctic cod and northern sandlance), unidentified sculpins and one unidentified fish caught in fishing gear in 2018 constituted only a small proportion of the total catch.

As in previous years, gill nets proved to be the most effective method of fish sampling, yielding 376 fish (93%) out of the total catch of 403. Gill nets in 2018 also yielded highest total catch and CPUE in comparison to previous years. Beach seine was the most efficient method of sampling in terms of the CPUE when recalculated to a number of fish caught per hour (mean 20 and SD 23.6 fish/h). However, due to limitations of the method, beach seining can be used only in very limited nearshore areas to sample small and juvenile fish, and can only be deployed for short exposure durations (minutes), thus yielding considerably lower catches than gill nets. Fukui traps were less effective and less efficient in 2018 than during previous studies yielding both the lowest total catch and lowest CPUE since the start of fish surveys in 2013.

Length-to-weight relationships were compared between 2017 and 2018 for the three most abundant fish species, Arctic char, fourhorn sculpin and shorthorn sculpin. No significant differences in the length-to-weight relationships were found between 2017 and 2018 for all three species, despite much smaller sampling sizes in 2017.

Of the 26 incidental Arctic char mortalities retained for sex, age, stomach content and body burden analysis, 14 were female and 12 were male. Analyzed fish ranged in age from 5 to 17 years. Female Arctic char were



slightly older than males (average age of 11 years vs. 10 years, respectively), and, on average, longer (average length 410 mm vs. 397 mm, respectively) and heavier (average weight 901 g vs. 705 g, respectively), although male Arctic char showed slightly greater maximum length (514 mm vs. 508 mm in females) and weight (1480 g vs.1470 g in females). No relationship between fish body length and age was found for Arctic char incidental mortalities, indicating body size is not a good predictor for Arctic char age in the Milne Port area.

Concentrations of metals in Arctic char tissue analyzed for body burden in 2018 was consistent from those found in 2010 to 2017. No samples in 2018, or previous years, exceeded the Health Canada guideline (0.5 mg/kg) for mercury in fish tissue for human consumption.

5.2 AIS

5.2.1 Zooplankton

A total of three new zooplankton taxa were identified during the 2018 AIS surveys; however, only one taxon could be identified below the family level and no taxa could be identified to species. None of the newly observed zooplankton taxa were identified as invasive to the Arctic region. A literature review of known geographic distributions for each taxa confirmed that each new taxa was either known to occur in the Arctic or identified at a higher taxonomic level (e.g., genus, family, class), which contained species known to occur in the Arctic. Known occurrences of species within each newly observed taxa identified to higher taxonomic level suggest that specimens could also be native to the Arctic.

Taxa collected during the AIS monitoring surveys should continue to be compared to the best available literature (e.g., check for additions to the Canadian and global invasive species databases on an annual basis) to confirm the geographic ranges of known invasive species.

5.2.2 Benthic Infauna

Benthic infauna samples were collected from 10 stations in Milne Inlet and Ragged Island that were sampled previously as a part of the long term AIS program and 15 stations sampled as a part of the MEEMP for the first time in 2018. The samples were identified to the lowest possible taxonomic level. A total of 349 different benthic invertebrate taxa were identified, which included 46 taxa that were not identified in previous surveys. An analysis of the available literature and species databases indicated that 45 of the 46 newly identified taxa had known ranges that include Arctic waters or had unknown northern limits with ranges reaching into the north Atlantic and Norwegian Sea. These taxa presumably could have ranges that extend to Arctic waters.

One of the 46 new benthic infaunal species identified in 2018 was a sabellid worm found in the deep-water sediment samples collected at Milne Port. This was initially identified by the taxonomic laboratory as *Pseudofabricia sp.* Currently, the only species described for this genus is *P. aberrans*, which is considered endemic to the Mediterranean Sea (Giangrande and Cantone 1990; Cepeda and Lattig 2016; WoRMS 2019). *P. aberrans* is not listed in the global invasive species database (Molnar et al. 2008), or as a known invasive species list within the National Risk Assessment for Introduction of Aquatic Nonindigenous Species to Canada by Ballast Water (Casas-Monroy et al. 2014). Samples were sent for independent verification by the University of Laval's Benthic Ecology Laboratory, which concluded that the species may have been *Manayunkia aesturiana*. This species has a documented range in the North Atlantic (including Arctic waters) and specimens have been collected near Baffin Island (Goldsmit 2016).



In 2017 AIS surveys, the cryptogenic amphipod *Monocorophium insidosium* was identified in samples collected from Milne Port (Golder 2018). The invasive status of this amphipod could not be determined due to uncertainties surrounding its native range, which may include the northwest Atlantic (Fofonoff et al. 2019). Individuals of this genus were identified in 2018 surveys and were not identifiable to the species level but were consistent with 2017 *M. insidosium* specimens (Macdonald 2019, pers. comm.). Independent verification of the taxonomic identifications indicated that the *M. insidosium* identified in 2017 and 2018 may have been *Crassicorophium bonelli* which has been identified from eastern North America and the northeastern Atlantic Ocean (GBIF 2018; ETI Bioinformatics 2019; Sirenko et al. 2019).

5.2.3 Macroflora and Benthic Epifauna

Underwater video surveys along the length of each of the four previously established AIS transects were analyzed for presence of macroflora and epifauna species. One new macroflora taxa of encrusting coralline algae (Family Corallinophycidae) was identified in the 2018 survey that had not been previously observed along the same transects. However, encrusting coralline algae had been observed previously during the MEEMP underwater surveys in 2017 (Golder 2018) and, therefore, cannot be considered non-native.

Three new epifauna taxa that had not been previously observed during AIS surveys were identified in the 2018 AIS survey. Two of the three taxa, a nemertean and a Pectinariidae polychaete have been identified in previous years benthic infaunal samples. The third taxa observed was a prickleback fish further discussed in Section 4.2.4. None of the newly observed taxa from the 2018 AIS underwater video surveys were identified as potential nonnative or invasive species.

5.2.4 Fish and Mobile Epifauna

Monitoring for potential invasive or non-native fish species was conducted through an extensive program that included use of four types of fishing gear, zooplankton net sampling and underwater video recording. Three fish species (Arctic cod, herring, and prickleback) were observed in 2018 that were not previously recorded in the AIS database (ANNEXE H and ANNEXE J). Arctic cod have previously been observed at Milne Port (SEM 2017b), Atlantic herring have been documented on the north end of Baffin Island, and prickleback species are documented to inhabit the Arctic Ocean (Nelson 1994 referenced in Fishbase; Lamb and Edgell 2010). Therefore, it is unlikely that any fish species caught or observed during the 2018 studies are non-native or invasive.

5.2.5 Encrusting Epifauna

Samples of rocks and settlement plates for encrusting epifauna were analyzed for the first time in 2018 since the deployment of settlement baskets in 2016. Insufficient colonization was the reason encrusting epifauna from settlement baskets was not analyzed in 2017.

A total of eight encrusting epifaunal taxa was identified in the samples. The majority of the colonizing organisms found were in juvenile stages, which made positive identification down to the species level difficult. Juvenile barnacles of unidentified species constituted 97% of the total number of organisms found (1,733 organisms). Other observed epifaunal taxa were wrinkled rock-borer, commonly found in underwater video and infaunal samples, four species of colonial bryozoans, clams (*Mya* sp.), and polychaetes (*Circeis* sp.). None of the identified taxa were found in the marine invasive species databases.



5.2.6 Ship Hull Monitoring

Ship hull monitoring was conducted for the first time in 2018. Underwater video surveys were conducted over the hulls of three ore carriers berthed alongside the ore dock. Most of the ships' surface below the water line was found free of biofouling. Exceptions were small areas at the sterns of two ships, the Arkadia and Golden Saguenay, where some amounts of colonization by aquatic organisms were found. On the Arkadia, this included barnacles (undetermined species). Biofouling taxa on the Golden Saguenay was not positively identified through the video footage due to limited definition of the camera and low lighting, and no physical samples were collected due to the depth and location of the observations (more than 7 m below the sea surface).



6.0 CONCLUSION AND RECOMMENDATIONS

The MEEMP study design was considerably modified in 2018. The main modifications included addition of benthic infauna sampling to monitor for potential effect through distance-gradient design; conducting epibenthic video surveys within permanently established belt transects using before/after, control/impact design instead of radial distance gradient video surveys; and a longer duration of the fish sampling program.

Main conclusions and recommendations based on the results of the 2018 MEEMP studies is as follows:

Water quality:

All water quality samples collected in 2018 were below the applicable water quality guidelines and effect thresholds for all tested parameters. Concentrations of iron and aluminum that do not have established CCME guidelines were above detection limits; however, these parameters were either within range of previously observed background levels or were below the detection limit levels used in the 2010-2016 sampling programs. Temporal and spatial variability were generally low among water samples collected throughout the water quality program. Water sampling should be repeated in 2019 following the same procedures outlined in this report.

Sediment Quality:

- Iron concentrations showed gradual increases at the 50-m station of the East Transect since 2016, and at the 1,000-m station of the same transect since 2015. However, these increases were only significant at the 50-m station between 2016 and 2017 (following a significant decrease observed between 2015 and 2016), and at the 1,000 m-station between 2015 and 2017 (following a decrease observed between 2014 and 2015). No significant increases of iron concentrations when corrected to fines content were detected in the West, North and Coastal transects.
- It is recommended that the sediment sampling program conducted annually since 2014 continue in 2019 to further evaluate changes in sediment chemistry and composition.

Macroflora and Epifauna:

- Previous surveys have reiterated the difficulty in accurately replicating the position of underwater video transects between replicate transects and between subsequent survey years, which made it difficult to interpret inter-annual changes and assess potential linkages to Project activities. Therefore, the surveys conducted within the permanently established belt transects with clearly demarcated boundaries are anticipated to improve repeatability and count accuracy.
- It is recommended to continue epibenthic monitoring within the belt transects using underwater video in 2019.

Benthic Infauna:

With the video survey shortcomings detected in previous years, it was recommended that beginning in 2018, biological sampling focus on benthic infauna rather than epifauna and macroflora. Benthic infaunal sampling was conducted in conjunction with sediment sampling along the radial transects following established methods outlined in Environment Canada's Metal Mining EEM Guidance Document (Environment Canada 2012). Community composition and distribution of benthic infauna will be used as an indicator of potential effects from increased sedimentation or contamination from Project activities, should any be present within sediments in Milne Port. Sampling for benthic infauna



along the radial transects will provide a more reliable dataset using a more repeatable sampling method than underwater video surveys with less variability created by the inherent difficulty in replicating surveys between years.

- Shellfish (*H. arctica*) samples collected from benthic infauna samples and analyzed for weight-length relationship and concentrations of metals in tissue can also be used as an alternative indicator to fish weight-length and body burden studies. However, shellfish sampling can also be considered redundant if fish studies yield sufficient sampling size for the analysis.
- Benthic infauna sampling should be continued in 2019 and further as one of the main indicators of Project-related effect monitoring in the marine environment.
- It should be evaluated whether shellfish sampling for weight and length and body burden should be continued in 2019.

Fish:

- Considerably more fish were collected in 2018 than during previous sampling years. Fishing yield in 2018 was greater than in any previous surveys in terms of both total catch and CPUE. As in previous years, gill netting proved to be the most effective survey method, particularly for adult fish. Fukui traps, on the other hand, yielded the smallest catch for the entire duration of the MEEMP studies. Beach seine proved to be the most efficient method in terms of CPUE when recalculated to the number of fish caught per hour. Beach seining, however, can only be used to target small and juvenile fish in the limited nearshore areas.
- Statistical analysis found no significant changes in fish weight-to-length relationships in the three main species caught, Arctic char, fourhorn sculpin and shorthorn sculpin, between 2017 and 2018, although the sample sizes in 2017 were considerably smaller.
- Arctic char tissue analysis showed concentrations of metals consistent with previous years' surveys.
 No exceedance of Health Canada guideline for mercury in fish tissue was detected.
- In 2019, monitoring should continue to provide general characterization of the fish community (including Arctic char) in the Milne Port area using the same methods as in 2018. Fish community monitoring should include monitoring for the relative abundance and distribution of species, catch per unit of effort, measurements of length/weight distribution of each fish species, and analysis of age distribution, body burden and diet of incidental fish mortalities.

Modifications to AIS Monitoring Program included addition of the ship hull monitoring for potential biofouling and expansion of the benthic infauna program. The key findings and recommendations for the AIS program are as follows:

The AIS benthic infauna sampling program was expanded considerably by adding 15 new benthic stations that expanded the area of study further west, east and north and to greater water depths. As a result, a greater number of benthic infauna taxa was identified than in previous years, including 46 taxa that were detected in the area for the first time since the start of the AIS program. One of the 46 new species was initially identified as *Pseudofabricia* sp. nr. *Aberrans*; a species described as endemic to the Mediterranean Sea but is not listed in the global or national invasive species databases. For confirmation purposes,



samples were sent to the University of Laval's Benthic Ecology Laboratory for independent taxonomic verification. The laboratory confirmed that the specimen could be *Manayunkia aesturiana* which has a documented range in the North Atlantic (including Arctic waters) and has been collected previously near Baffin Island (Goldsmit 2016).

- The underwater video survey of the three ore carriers showed that most of the hulls were free of biofouling with the exception of small areas at the sterns of two of the sampled ships where some amounts of colonization by aquatic organisms were found. Colonization on one of the ships consisted of barnacles (species undetermined). Fouling organisms on the other ship could not be positively identified due to limitations in camera resolution at the low lighting available and the inability to collect physical samples in the area of colonization. It is recommended that future surveys of ship hulls be conducted using a higher definition video camera with enhanced lighting capabilities.
- Based on AIS monitoring conducted to date, no confirmed invasive or non-native zooplankton, benthic epifauna, macroflora or fish taxa have been identified in the RSA.
- Encrusting epifauna samples from settlement baskets were collected for the first time in 2018 since their installation in 2016. No confirmed invasive or non-native taxa have been identified in these samples to date.

Overall indicator thresholds established for the Marine Environment in the Final Environmental Impact Statement (FEIS) and FEIS Addendum (Baffinland 2012; 2013) were only exceeded in 2018 for the following sediment quality components:

- Slight exceedance of CCME guidelines for PAH (acenaphthylene and dibenz(a,h)anthracene) in one sample on the North Transect.
- Iron concentrations in sediment showed significant increases at 50 and 1,000 m from the ore dock along the East Transect in comparison to the baseline year of 2014.

These observed changes remained within the geographic boundaries predicted in the assessment (Baffinland 2012; 2013).



Signature Page

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7.0 REFERENCES

Baffinland (Baffinland Iron Mines Corporation), 2012. Mary River Project. Environmental Impact Statement (EIS). Volume 8: Marine Environment. 318 pp, + appendices.

- Baffinland, 2013. Mary River Project Addendum to the Final Environmental Impact Statement.
- Baffinland. 2016. Marine Environmental Effects Monitoring Plan. 78 pp.
- British Columbia Ministry of Environment & Climate Change Strategy (BC MECCS). 2018. British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife and Agriculture, Summary Report.
- British Columbia Ministry of Environment (BC MOE). 2013. British Columbia Field Sampling Manual.
- BC MOE. 2017. British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife and Agriculture.
- Bewers, J. M., Macaulay, I. D., Sundby, B. 1974. Trace metals in the waters of the Gulf of St. Lawrence. Canadian Journal of Earth Sciences 11:939–950.
- Bewers, J. M., Yeats, P. A. 1978. Trace metals in the waters of a partially mixed estuary. Estuarine and Coastal Marine Science 7:147–162.
- Bock, P. and Gordon, D. 2013. Phylum Bryozoa Ehrenberg, 1831. Zootaxa. 3703. 67-74. 0.11646/zootaxa.3703.1.14.
- Boyle, E., Collier, P., Dengler, A. J., Edmond, J. M., Ng, A. C., Stallard, R. F. 1974. On the chemical mass balance of estuaries. Geochimica et Cosmochimicha Acta 38:1719–1728
- Buchman, M.F., 2008. NOAA Screening Quick Reference Tables, NOAA OR&R Report 08-1, Seattle WA, Office of Response and Restoration Division, National Oceanic and Atmospheric Administration, 4 p.
- Cameron, F.J., Jones, M.V., Edwards, C. 1984. Effects of Salinity on Bacterial Iron Oxidation. Current Microbiology 10: 353-356
- Casas-Monroy O, Linley RD, Adams JK, Chan FT, Drake DAR, Bailey SA. 2014. National risk assessment for introduction of aquatic nonindigenous species to Canada by ballast water. Canadian Science Advisory Secretariat Research Document 2013/128. VI + 73 p.
- CCME (Canadian Council of Ministers of the Environment). 2014. Canadian Environmental Quality Guidelines. [accessed December 2018] https://www.ccme.ca/en/resources/canadian environmental quality guidelines/index.html.
- CCME. 2016. Guidance Manual for Environmental Site Characterization in Support of Environmental and Human Risk Assessment.
- Cepeda, D. and Lattig, P. 2016. A new species of Polycirridae (Annelida: Terebellida) and three new reports for Cantabrian and Mediterranean Seas. Cahiers de Biologie Marine 57(4):371-387
- Cusson, M., Archambault, P., Aitken, A. 2007. Biodiversity of benthic assemblages on the Arctic continental shelf: historical data from Canada. Marine Ecology Progress Series 331:291-304
- Cusson M. 2018. Biodiversity of benthic assemblages on the Arctic continental shelf: historical data from Canada (1955 to 1977). v1.2. Canadian node of the Ocean Biogeographic Information System (OBIS Canada). Published by OBIS [Accessed 22 May 2019] http://ipt.iobis.org/obiscanada/resource?r=cusson_arcticbenthos&v=1.2.



DFO (Fisheries and Oceans Canada). 2016. Central and Arctic Multi-Species Stock Assessment Surveys Version 6
In OBIS Canada Digital Collections. Bedford Institute of Oceanography, Dartmouth, NS, Canada.
Published by OBIS, [Accessed 22 May 2019] Digital http://www.iobis.org/.

- Environment Canada. 2010. Pulp and Paper Environmental Effect Monitoring (EEM) Technical Guidance Document.
- Environment Canada. 2012. Metal Mining Technical Guidance for Environmental Effects Monitoring. EN14-61/2012E-PDF.
- EOL (Encyclopedia of Life). 2019. [Accessed 22 January 2019]. https://eol.org/
- ETI Bioinformatics. 2019. Marine Species Identification Portal. Key of Nature. [Accessed 5 April 2019]. http://species-identification.org/index.php
- Fofonoff, P.W., Ruiz, G.M., Steves, B., Simkanin, C., Carlton, J.T. 2019. National Exotic Marine and Estuarine Species Information System. [accessed 22 January 2019]. http://invasions.si.edu/nemesis/.
- GBIF. 2018. Global Biodiversity Information Facility (GBIF). [Accessed 5 April 2019]. https://www.gbif.org/
- Giangrande, A. and Cantone, G. 1990. Redescription and systematic position of *Pseudofabrica aberrans* Cantone, 1972 (Polychaeta, Sabellidae, Fabriciinae). Italian Journal of Zoology 57(4):361-364
- Golder (Golder Associates Ltd.). 2018. Mary River Project 2017 Marine Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program. Prepared for Baffinland Iron Mines Corporation, Oakville, Ontario. Golder Doc. No. 1663724-048R-Rev1; 9 April 2018. 504 p.
- Goldsmit J. 2016. CAISN: Abundance and Biomass of Benthic Invertebrates Collected in Four Ports of the Canadian Arctic During Summers of 2011 and 2012. Version 2 in OBIS Canada Digital Collections. Bedford Institute of Oceanography, Dartmouth, NS, Canada. Published by OBIS. [Accessed 21 May 2019] http://www.iobis.org/.
- Horowitz, A.J. 1991. A Primer on Sediments-trace Element Chemistry, 2nd Edition. Lewis Publishers, Chelsea, MI.
- Jones, B. and C. Bowser. 1978. The mineralogy and related chemistry of lake sediments, *in* Lerman, A., ed., Lakes: chemistry, geology, physics, New York, Springer-Verlag. p. 179-235
- Lamb, A. and Edgell, P. 1986. Coastal fishes of the Pacific northwest. Madeira Park, BC.
- Macdonald T. 2019. President/CEO, Biologica Environmental Services Ltd. Email to Ospan A, Marine Biologist, Golder Associates Ltd. 23 January 2019.
- Miller, Roberta. 2011. The St. Anne de Bellevue Arctic Biological Station Collection In Museum collection database, Fisheries and Oceans Canada digital collections, Maurice Lamontagne Institute, Quebec
- Molnar JL, Gamboa RL, Revenga C, Spalding MD. 2008. Assessing the global threat of invasive species to marine biodiversity. Frontiers in Ecology and the Environment. [accessed January 2019] http://www.conservationgateway.org/ConservationPractices/Marine/Pages/marineinvasives.aspx
- Müller, H. G. (1993). World catalogue and bibliography of the recent Mysidacea. 238p.



NCCOS (National Centers for Coastal Ocean Science) 2019. NOAA National Benthic Inventory [Accessed 22 January, 2019] https://products.coastalscience.noaa.gov/nbi/

- Nelson, J.S. 1994. Fishes of the world. Third edition. John Wiley & Sons, Inc., New York. 600 p. Referenced in Fishbase: https://www.fishbase.de/summary/FamilySummary.php?ID=393, accessed January 2019.
- OBIS (Ocean Biogeographic Information System). 2016. Global biodiversity indices from the Ocean Biogeographic Information System. Intergovernmental Oceanographic Commission of UNESCO. Available at: http://www.iobis.org
- Palomares MLD, Pauly D [editors] 2018. SeaLifeBase. Version 06/2018. [accessed 22 January 2019]. http://www.sealifebase.org
- R Core Team (R). 2018. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria. URL www.R-project.org
- Read, G. and Fauchald, K. [editors] 2019 World Polychaete Database. [accessed 22 January 2019] http://www.marinespecies.org/polychaeta/index.php
- SEM. 2015. Marine Biological and Environmental Baseline Surveys Milne Inlet 2014. Prepared for Baffinland Iron Mines Corporation, Oakville, Ontario.
- SEM 2017a. 2016 Marine Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species Monitoring Milne Inlet Marine Ecosystem. Prepared for Baffinland Iron Mines Corporation, Oakville, Ontario
- SEM 2017b. 2016 Milne Ore Dock Fish Offset Monitoring. Prepared for Baffinland Iron Mines Corporation, Oakville, Ontario. Sokal RR, Rohlf FJ. 2012. Biometry 4th ed. W.H. Freeman and Co. New York, NY, USA.
- Siferd, Tim. 2010. Central and Arctic multi-species stock assessment surveys. In OBIS Canada Digital Collections. Bedford Institute of Oceanography, Dartmouth, Nova Scotia. OBIS Canada Ver1
- Sirenko, B.I., Clarke. C., Hopcroft, R.R., Huettmann, F., Bluhm, A.B., Gradinger, R. [Editors] 2019. The Arctic Register of Marine Species (ARMS) compiled by the Arctic Ocean Diversity (ArcOD). [accessed 22 January 2019]. http://www.arcodiv.org/
- Steinerstauch S. 2019. Manager, Laboratory Operations, Biologica Environmental Services Ltd. Email to Ospan A, Marine Biologist, Golder Associates Ltd. 17 May 2019.
- Stewart, P.L., Pocklington, P., Cunjak, R.A. 1985. Distribution, Abundance and Diversity of the Canadian Continental Shelf and Slope of Southern Davis Strait and Ungava Bay. Arctic 36(4):281-291
- Tattersall, W.M. and Tattersall, O.S. (1951). The British Mysidacea. Ray Society: London. VIII, 460 pp.
- Vieira, LM, Spencer Jones ME, Winston JE, Migotto AE, Marques AC. 2014. Evidence for polyphyly of the genus Scrupocellaria (Bryozoa:Canidae) based on a phylogenetic analysis of morphological characters. PLoS ONE 9(4):e95296
- Vollenweider, R.A., Giovanardi, F., Montanari, G., Rinaldi, A. 1998. Characterization of the trophic conditions of marine coastal waters with special reference to the NW Adriatic Sea: Proposal for a trophic scale, turbidity and generalized water quality index. Environmetrics 9: 329-357.
- WoRMS (WoRMS Editorial Board). 2019. World Register of Marine Species. [accessed 22 January 2019] http://www.marinespecies.org/index.php



ANNEXE A

Photo Log



Photograph 1: Milne Port ore stockpile, looking southeast.



Photograph 2: Green sea urchins and a feather star collected from one of the Fukui traps on 17 August 2018.



Photograph 3: Sieved benthic sample collected from station BE-3-1 on 17 August 2018.



Photograph 4: Hiatella arctica removed from benthic sample BE-4-3 for tissue analysis on 17 August 2018.



Photograph 5: A whelk snail found in one of the Fukui traps retrieved on 17 August 2018.



Photograph 6: Pandalus sp., a genus of shrimp found in a Fukui trap retrieved on 17 August 2018.



Photograph 7: Golder staff processing a benthic sample collected from station BM-1-13 on 18 August 2018.



Photograph 8: Golder staff deploying Petite Ponar grab sampler for sediment collection on 19 August 2018.



Photograph 9: Milne Port ore dock, photograph taken on 19 August 2018.



Photograph 10: Unidentified larval fish collected from beach seine SN05 on 26 August 2018.



Photograph 11: Arctic cod collected from gill net GN10, panel 4 on 4 August 2018.



Photograph 12: Arctic char collected from gill net GN10, panel 3 on 4 August 2018.



Photograph 13: Fourhorn sculpin collected from gill net GN13, panel 3 on 9 August 2018.



Photograph 14: Shorthorn sculpin collected from gill net GN11, panel 5 on 4 August 2018.



Photograph 15: Field team deploying CTD Seabird at one of the Ragged Island station locations on 8 August 2018.



Photograph 16: Zooplankton sample collection at Ragged Island on 8 August 2018.



Photograph 17: Homogenized sediment sample collected from station SC-2-1 on 11 August 2018.



Photograph 18: Hiatella arctica collected from station SW2 for tissue analysis on 13 August 2018.



Photograph 19: Ophiuridae family of brittlestar collected from benthic station SW1-3 on 13 August 2018.



Photograph 20: Scallops and brittle stars observed from underwater video footage taken along AIS Transect #1 on 6 August 2018.



Photograph 21: Clione limnacina observed from underwater video footage taken along belt transect TP 7 on 6 August 2018.



Photograph 22: Brittle stars and scallop of the genus Pecten sp. from underwater video footage along AIS Transect #4 taken on 4 August 2018.



Photograph 23: Prickleback species of fish observed from underwater video footage taken along AIS Transect #1 on 6 August 2018.

ANNEXE B

Water Quality Analysis Data





GOLDER ASSOCIATES LTD.

ATTN: Arman Ospan

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Date Received: 07-AUG-18

Report Date: 28-AUG-18 14:42 (MT)

Version: FINAL REV. 2

Client Phone: 250-881-7372

Certificate of Analysis

Lab Work Order #: L2142053
Project P.O. #: NOT SUBMITTED
Job Reference: 1663724/14000
C of C Numbers: 17-668075

Legal Site Desc:

Comments: 28-AUG-2018 Salinity, EC and LEPH/HEPH data is included.

Amber Springer, B.Sc Account Manager

ambu Springer

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28-AUG-18 14:42 (MT) Version: FINAL REV. 2

	Sample ID Description Sampled Date Sampled Time Client ID	L2142053-1 Seawater 01-AUG-18 10:30 SOURCE	L2142053-2 Seawater 01-AUG-18 10:20 ENE	L2142053-3 Seawater 01-AUG-18 10:00 WNW	L2142053-4 Seawater 01-AUG-18 10:10 NORTH	L2142053-5 Seawater 01-AUG-18 DUP-A
Grouping	Analyte					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	11300	14200	11400	14500	11500
	Hardness (as CaCO3) (mg/L)	1170	1440	1150	1570	1140
	рН (рН)	8.05	8.02	8.03	8.02	8.03
	Salinity (psu)	6.5	8.3	6.5	8.5	6.6
	Total Suspended Solids (mg/L)	4.3	3.1	<2.0	<2.0	2.2
	Turbidity (NTU)	2.52	1.91	1.02	0.71	0.94
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	94.7	90.1	87.9	90.1	88.0
	Ammonia, Total (as N) (mg/L)	0.0139	<0.0050	<0.0050	<0.0050	<0.0050
	Bromide (Br) (mg/L)	12.6	15.0	12.6	15.8	12.0
	Chloride (CI) (mg/L)	3590	4500	3550	4610	3570
	Fluoride (F) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Nitrate (as N) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Nitrite (as N) (mg/L)	<0.10	<0.10	<0.10	<0.10	0.10
	Total Kjeldahl Nitrogen (mg/L)	0.135	0.095	0.115	0.106	0.113
	Sulfate (SO4) (mg/L)	489	607	483	629	483
Organic / Inorganic Carbon	Total Organic Carbon (mg/L)	1.54	1.24	1.15	1.14	1.23
Total Metals	Aluminum (Al)-Total (mg/L)	0.0478	0.0378	0.0164	0.0149	0.0207
	Antimony (Sb)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Arsenic (As)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Barium (Ba)-Total (mg/L)	0.0052	0.0051	0.0047	0.0055	0.0055
	Beryllium (Be)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Boron (B)-Total (mg/L)	1.03	1.26	0.97	1.32	0.99
	Cadmium (Cd)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Calcium (Ca)-Total (mg/L)	94.9	114	98.1	115	99.5
	Cesium (Cs)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Chromium (Cr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Cobalt (Co)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Copper (Cu)-Total (mg/L)	0.00085	0.00081	0.00079	<0.00050	0.00085
	Gallium (Ga)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Iron (Fe)-Total (mg/L)	0.093	0.071	0.025	0.018	0.026
	Lead (Pb)-Total (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Lithium (Li)-Total (mg/L)	0.038	0.043	0.036	0.051	0.037
	Magnesium (Mg)-Total (mg/L)	228	286	224	283	234
	Manganese (Mn)-Total (mg/L)	0.00256	0.00186	0.00158	0.00090	0.00161
	Mercury (Hg)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL REV. 2

	Sample ID Description Sampled Date Sampled Time Client ID	L2142053-1 Seawater 01-AUG-18 10:30 SOURCE	L2142053-2 Seawater 01-AUG-18 10:20 ENE	L2142053-3 Seawater 01-AUG-18 10:00 WNW	L2142053-4 Seawater 01-AUG-18 10:10 NORTH	L2142053-5 Seawater 01-AUG-18
Grouping	Analyte					
SEAWATER						
Total Metals	Molybdenum (Mo)-Total (mg/L)	0.0024	0.0025	0.0021	0.0029	0.0022
	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Total (mg/L)	67.1	84.9	68.4	85.7	67.1
	Rhenium (Re)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Rubidium (Rb)-Total (mg/L)	0.0218	0.0257	0.0214	0.0302	0.0221
	Selenium (Se)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Silicon (Si)-Total (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Silver (Ag)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Total (mg/L)	1760	2370	1850	2340	1800
	Strontium (Sr)-Total (mg/L)	1.47	1.77	1.50	1.84	1.54
	Sulfur (S)-Total (mg/L)	175	212	172	223	179
	Tellurium (Te)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Thallium (TI)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Thorium (Th)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Tin (Sn)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Tungsten (W)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Uranium (U)-Total (mg/L)	0.00281	0.00152	0.00204	0.00156	0.00196
	Vanadium (V)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Yttrium (Y)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Zinc (Zn)-Total (mg/L)	<0.0030	<0.0030	0.0031	<0.0030	0.0034
	Zirconium (Zr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals	Dissolved Mercury Filtration Location	LAB	LAB	LAB	LAB	LAB
	Dissolved Metals Filtration Location	LAB	LAB	LAB	LAB	LAB
	Aluminum (Al)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Antimony (Sb)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Arsenic (As)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Barium (Ba)-Dissolved (mg/L)	0.0046	0.0053	0.0048	0.0054	0.0050
	Beryllium (Be)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Boron (B)-Dissolved (mg/L)	0.92	1.30	1.03	1.26	0.99
	Cadmium (Cd)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Calcium (Ca)-Dissolved (mg/L)	91.9	112	95.2	108	95.8
	Cesium (Cs)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Chromium (Cr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Cobalt (Co)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2142053-1 Seawater 01-AUG-18 10:30 SOURCE	L2142053-2 Seawater 01-AUG-18 10:20 ENE	L2142053-3 Seawater 01-AUG-18 10:00 WNW	L2142053-4 Seawater 01-AUG-18 10:10 NORTH	L2142053-5 Seawater 01-AUG-18
Grouping	Analyte					
SEAWATER						
Dissolved Metals	Copper (Cu)-Dissolved (mg/L)	0.00069	0.00051	0.00053	<0.00050	0.00096
	Gallium (Ga)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Iron (Fe)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Lead (Pb)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Lithium (Li)-Dissolved (mg/L)	0.034	0.050	0.037	0.047	0.039
	Magnesium (Mg)-Dissolved (mg/L)	228	283	223	316	218
	Manganese (Mn)-Dissolved (mg/L)	0.00087	0.00061	0.00103	0.00063	0.00107
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010	<0.000010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0020	0.0029	0.0022	0.0027	0.0022
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	0.00318	<0.00050
	Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Dissolved (mg/L)	64	82	65	82	67
	Rhenium (Re)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Rubidium (Rb)-Dissolved (mg/L)	0.0195	0.0290	0.0222	0.0273	0.0233
	Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Silicon (Si)-Dissolved (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	1730	2230	1850	2330	1920
	Strontium (Sr)-Dissolved (mg/L)	1.37	1.84	1.47	1.82	1.45
	Sulfur (S)-Dissolved (mg/L)	179	223	174	243	ртс 532
	Tellurium (Te)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Thallium (TI)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Thorium (Th)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Tungsten (W)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Uranium (U)-Dissolved (mg/L)	0.00263	0.00166	0.00212	0.00150	0.00204
	Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Yttrium (Y)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2142053-1 Seawater 01-AUG-18 10:30 SOURCE	L2142053-2 Seawater 01-AUG-18 10:20 ENE	L2142053-3 Seawater 01-AUG-18 10:00 WNW	L2142053-4 Seawater 01-AUG-18 10:10 NORTH	L2142053-5 Seawater 01-AUG-18 DUP-A
Grouping	Analyte					
WATER						
Bacteriological Tests	Coliform Bacteria - Fecal (CFU/100mL)	PEHR <1	PEHR <1	PEHR <1	PEHR <1	<1 PEHR
Hydrocarbons	EPH10-19 (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	EPH19-32 (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	LEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	HEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	Surrogate: 2-Bromobenzotrifluoride (%)	107.3	113.1	102.4	105.6	108.1
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Acenaphthylene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Acridine (mg/L)	<0.000010	<0.000010	<0.000010	<0.00010	<0.000010
	Anthracene (mg/L)	<0.000010	<0.000010	<0.000010	<0.00010	<0.000010
	Benz(a)anthracene (mg/L)	<0.000010	<0.000010	<0.000010	<0.00010	<0.000010
	Benzo(a)pyrene (mg/L)	<0.000050	<0.0000050	<0.0000050	<0.000050	<0.0000050
	Benzo(b&j)fluoranthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Benzo(b+j+k)fluoranthene (mg/L)	<0.000015	<0.000015	<0.000015	<0.00015	<0.000015
	Benzo(g,h,i)perylene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Benzo(k)fluoranthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Chrysene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Dibenz(a,h)anthracene (mg/L)	<0.000050	<0.0000050	<0.0000050	<0.000050	<0.0000050
	Fluoranthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Fluorene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Indeno(1,2,3-c,d)pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	1-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	2-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Naphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Phenanthrene (mg/L)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
	Pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Quinoline (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Surrogate: Acridine d9 (%)	89.0	85.6	90.0	94.2	90.1
	Surrogate: Chrysene d12 (%)	84.3	80.2	78.9	85.0	83.8
	Surrogate: Naphthalene d8 (%)	83.0	85.2	83.9	96.3	91.4
	Surrogate: Phenanthrene d10 (%)	95.9	94.8	94.1	103.9	99.3

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

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QC Samples with Qualifiers & Comments:

QC Type Desc	QC Type Description Parameter		Qualifier	Applies to Sample Number(s)				
Laboratory Control Sample Silicon (Si)-T		Silicon (Si)-Total	MES	L2142053-1, -2, -3, -4, -5				
Qualifiers for	Individual Parameters Li	sted:						
Qualifier	r Description							
DTC	Dissolved concentration	exceeds total. Results were cor	nfirmed by re-analysis	s.				
MES Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Pa Scan (considered acceptable as per OMOE & CCME).								

Test Method References:

PEHR

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TITR-VA	Seawater	Alkalinity Spec by Titration (Seawater)	APHA 2320 Alkalinity

This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

ANIONS-C-BR-IC-VA Seawater Bromide by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.

ANIONS-C-CL-IC-VA Seawater Chloride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-F-IC-VA Seawater Fluoride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-NO2-IC-VA Seawater Nitrite in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrite is detected by UV absorbance.

ANIONS-C-NO3-IC-VA Seawater Nitrate in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrate is detected by UV absorbance.

ANIONS-C-SO4-IC-VA Seawater Sulfate by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

CARBONS-C-TOC-VA Seawater TOC by combustion (seawater) APHA 5310B TOTAL ORGANIC CARBON (TOC)

This analysis is carried out using procedures adapted from APHA Method 5310 "Total Organic Carbon (TOC)".

EC-C-PCT-VA Seawater Conductivity (Automated) (seawater) APHA 2510 Auto. Conduct.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

EPH-ME-FID-VA Water EPH in Water BC Lab Manual

EPH is extracted from water using a hexane micro-extraction technique, with analysis by GC-FID, as per the BC Lab Manual. EPH results include PAHs and are therefore not equivalent to LEPH or HEPH.

FCOLI-MF-ENV-VA Water Fecal coliform by membrane filtration APHA METHOD 9222

This analysis is carried out using procedures adapted from APHA Method 9222 "Membrane Filter Technique for Members of the Coliform Group". Coliform bacteria is enumerated by culturing and colony counting. A known sample volume is filtered through a 0.45 micron membrane filter. The test involves an initial 24 hour incubation of the filter with the appropriate growth medium, positive results require further testing (up to an additional 48 hours) to confirm and quantify the total coliform. This method is used for non-turbid water with a low background bacteria level.

HARDNESS-CALC-VA Seawater Hardness APHA 2340B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-DIS-C-CVAFS-VA Seawater Diss. Mercury in Seawater by CVAFS PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by filtration (EPA Method 3005A) and involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

PUGET SOUND PROTOCOLS, EPA 245.7

HG-TOT-C-CVAFS-VA Seawater Total Mercury in Seawater by CVAFS

Reference Information

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This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

LEPH/HEPH-CALC-VA

Water

LEPHs and HEPHs

BC MOE LEPH/HEPH

LEPHw and HEPHw are measures of Light and Heavy Extractable Petroleum Hydrocarbons in water. Results are calculated by subtraction of applicable PAH concentrations from EPH10-19 and EPH19-32, as per the BC Lab Manual LEPH/HEPH calculation procedure. LEPHw = EPH10-19 minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene.

HEPH = EPH19-32 minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

MET-D-L-HRMS-VA

Seawater

Diss. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve laboratory sample filtration based on APHA Method 3030B.

MET-T-L-HRMS-VA

Seawater

Tot. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve preliminary sample treatment by acid digestion based on APHA Method 3030E.

NH3-F-VA

Seawater

Ammonia in Seawater by Fluorescence

J. ENVIRON. MONIT., 2005, 7, 37-42, RSC

This analysis is carried out, on sulfuric acid preserved samples, using procedures modified from J. Environ. Monit., 2005, 7, 37 - 42, The Royal Society of Chemistry, "Flow-injection analysis with fluorescence detection for the determination of trace levels of ammonium in seawater", Roslyn J. Waston et al.

PAH-ME-MS-VA

Water

PAHs in Water

EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PH-C-PCT-VA

Seawater pH by Meter (Automated) (seawater)

APHA 4500-H pH Value

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

It is recommended that this analysis be conducted in the field.

SALINITY-CALC-VA

Seawater

Salinity by conductivity meter

APHA 2520B

Salinity is determined by the APHA 2520B Electrical Conductivity Method. Salinity is a unitless parameter that is roughly equivalent to grams per Litre. ALS applies the unit of psu (practical salinity unit) to indicate that salinity values are derived from the Practical Salinity Scale.

TKN-C-F-VA

Seawate

TKN in Seawater by Fluorescence

APHA 4500-NORG D

This analysis is carried out using procedures adapted from APHA Method 4500-Norg D. "Block Digestion and Flow Injection Analysis". Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection.

TSS-C-VA

Seawater

Total Suspended Solids by Gravimetric

APHA 2540 D

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) is determined by filtering a sample through a glass fibre filter. TSS is determined by drying the filter at 104 degrees celsius.

TURBIDITY-C-VA

Seawater

Turbidity by Meter in Seawater

APHA 2130 Turbidity

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code

Laboratory Location

VA AI

ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

17-668075

Reference Information

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GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

mg/kg - milligrams per kilogram based on dry weight of sample.

mg/kg wwt - milligrams per kilogram based on wet weight of sample.

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L2142053 Report Date: 28-AUG-18 Page 1 of 15

Client: GOLDER ASSOCIATES LTD.

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Contact: Arman Ospan

Test N	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EPH-ME-FID-VA	Water							
Batch R4161202								
WG2842904-2 LCS EPH10-19			95.4		%		70-130	07-AUG-18
EPH19-32			90.0		%		70-130	07-AUG-18
WG2843178-2 LCS EPH10-19			84.6		%		70-130	08-AUG-18
EPH19-32			87.6		%		70-130	08-AUG-18
WG2842904-1 MB EPH10-19			<0.25		mg/L		0.25	08-AUG-18
EPH19-32			<0.25		mg/L		0.25	08-AUG-18
Surrogate: 2-Bromobenzot	trifluoride		97.0		%		60-140	08-AUG-18
WG2843178-1 MB EPH10-19			<0.25		mg/L		0.25	08-AUG-18
EPH19-32			<0.25		mg/L		0.25	08-AUG-18
Surrogate: 2-Bromobenzot	trifluoride		93.6		g/_ %		60-140	08-AUG-18
-	Water		00.0		,0		00-140	00-400-10
WG2843119-2 MB Coliform Bacteria - Fecal			<1		CFU/100mL		1	07-AUG-18
PAH-ME-MS-VA	Water							
Batch R4181364								
WG2859555-2 LCS Acenaphthene			95.0		%		60-130	27-AUG-18
Acenaphthylene			99.2		%		60-130	27-AUG-18
Acridine			99.8		%		60-130	27-AUG-18
Anthracene			96.5		%		60-130	27-AUG-18
Benz(a)anthracene			112.5		%		60-130	27-AUG-18
Benzo(a)pyrene			101.1		%		60-130	27-AUG-18
Benzo(b&j)fluoranthene			95.5		%		60-130	27-AUG-18
Benzo(g,h,i)perylene			105.7		%		60-130	27-AUG-18
Benzo(k)fluoranthene			88.2		%		60-130	27-AUG-18
Chrysene			100.2		%		60-130	27-AUG-18
Dibenz(a,h)anthracene			102.7		%		60-130	27-AUG-18
Diberiz(a,ri)aritiriacerie								
Fluoranthene			103.0		%		60-130	27-AUG-18
, , ,			103.0 98.5		%		60-130 60-130	27-AUG-18 27-AUG-18



Workorder: L2142053 Report Date: 28-AUG-18

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「est I	Matrix Reference	Result Qualifier	Units	RPD	Limit	Analyzed
PAH-ME-MS-VA	Water					
Batch R4181364						
WG2859555-2 LCS		04.0	0/			
1-Methylnaphthalene		94.0	%		60-130	27-AUG-18
2-Methylnaphthalene		92.8	%		60-130	27-AUG-18
Naphthalene		93.0	%		50-130	27-AUG-18
Phenanthrene		103.3	%		60-130	27-AUG-18
Pyrene		105.1	%		60-130	27-AUG-18
Quinoline		70.9	%		60-130	27-AUG-18
WG2859555-1 MB Acenaphthene		<0.000010	mg/L		0.00001	27-AUG-18
Acenaphthylene		<0.000010	mg/L		0.00001	27-AUG-18
Acridine		<0.00010	mg/L		0.00001	27-AUG-18
Anthracene		<0.00010	mg/L		0.00001	27-AUG-18
Benz(a)anthracene		<0.000010	mg/L		0.00001	27-AUG-18
Benzo(a)pyrene		<0.000050	mg/L		0.000005	27-AUG-18
Benzo(b&j)fluoranthene		<0.000010	mg/L		0.00001	27-AUG-18
Benzo(g,h,i)perylene		<0.000010	mg/L		0.00001	27-AUG-18
Benzo(k)fluoranthene		<0.000010	mg/L		0.00001	27-AUG-18
Chrysene		<0.000010	mg/L		0.00001	27-AUG-18
Dibenz(a,h)anthracene		<0.0000050	mg/L		0.000005	27-AUG-18
Fluoranthene		<0.000010	mg/L		0.00001	27-AUG-18
Fluorene		<0.000010	mg/L		0.00001	27-AUG-18
Indeno(1,2,3-c,d)pyrene		<0.000010	mg/L		0.00001	27-AUG-18
1-Methylnaphthalene		<0.000050	mg/L		0.00005	27-AUG-18
2-Methylnaphthalene		<0.000050	mg/L		0.00005	27-AUG-18
Naphthalene		<0.000050	mg/L		0.00005	27-AUG-18
Phenanthrene		<0.000020	mg/L		0.00002	27-AUG-18
Pyrene		<0.000010	mg/L		0.00001	27-AUG-18
Quinoline		<0.000050	mg/L		0.00005	27-AUG-18
Surrogate: Acridine d9		91.7	%		60-130	27-AUG-18
Surrogate: Chrysene d12		95.8	%		60-130	27-AUG-18
Surrogate: Naphthalene da	3	92.9	%		50-130	27-AUG-18
Surrogate: Phenanthrene	d10	99.1	%		60-130	27-AUG-18

ALK-TITR-VA Seawater



Workorder: L2142053 Report Date: 28-AUG-18 Page 3 of 15

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ALK-TITR-VA	Seawater							
Batch R4 WG2842980-3 Alkalinity, Total	161800 CRM (as CaCO3)	VA-ALK-TITR	R-CONTROL 106.7		%		85-115	08-AUG-18
WG2842980-5 Alkalinity, Total	DUP (as CaCO3)	L2142053-1 94.7	93.9		mg/L	0.8	20	08-AUG-18
WG2842980-1 Alkalinity, Total	MB (as CaCO3)		<1.0		mg/L		1	08-AUG-18
ANIONS-C-BR-IC-\	/A Seawater							
Batch R4	164917							
WG2842959-3 Bromide (Br)	DUP	L2142053-1 12.6	11.7		mg/L	7.6	20	07-AUG-18
WG2842959-2 Bromide (Br)	LCS		99.0		%		85-115	07-AUG-18
WG2842959-1 Bromide (Br)	MB		<5.0		mg/L		5	07-AUG-18
ANIONS-C-CL-IC-V	/A Seawater							
Batch R4 WG2842959-3	164917 DUP	L2142053-1						
Chloride (CI)		3590	3500		mg/L	2.6	20	07-AUG-18
WG2842959-2 Chloride (CI)	LCS		101.2		%		90-110	07-AUG-18
WG2842959-1 Chloride (CI)	MB		<50		mg/L		50	07-AUG-18
ANIONS-C-F-IC-VA	Seawater							
Batch R4	164917							
WG2842959-3 Fluoride (F)	DUP	L2142053-1 <1.0	<1.0	RPD-NA	mg/L	N/A	20	07-AUG-18
WG2842959-2 Fluoride (F)	LCS		99.98		%		90-110	07-AUG-18
WG2842959-1 Fluoride (F)	МВ		<1.0		mg/L		1	07-AUG-18
ANIONS-C-NO2-IC	-VA Seawater							
Batch R4	164917							
WG2842959-3 Nitrite (as N)	DUP	L2142053-1 <0.10	<0.10	RPD-NA	mg/L	N/A	20	07-AUG-18
WG2842959-2 Nitrite (as N)	LCS		100.7		%		90-110	07-AUG-18
WG2842959-1	MB							



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Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ANIONS-C-NO2-IC Batch R4 WG2842959-1 Nitrite (as N)	-VA 1164917 MB	Seawater		<0.10		mg/L		0.1	07-AUG-18
ANIONS-C-NO3-IC	-VA	Seawater							
Batch R4 WG2842959-3 Nitrate (as N)	164917 DUP		L2142053-1 <0.50	<0.50	RPD-NA	mg/L	N/A	20	07-AUG-18
WG2842959-2 Nitrate (as N)	LCS			101.0		%		90-110	07-AUG-18
WG2842959-1 Nitrate (as N)	MB			<0.50		mg/L		0.5	07-AUG-18
ANIONS-C-SO4-IC	-VA	Seawater							
Batch R4 WG2842959-3 Sulfate (SO4)	1164917 DUP		L2142053-1 489	471		mg/L	3.7	20	07-AUG-18
WG2842959-2 Sulfate (SO4)	LCS			102.3		%		90-110	07-AUG-18
WG2842959-1 Sulfate (SO4)	MB			<30		mg/L		30	07-AUG-18
CARBONS-C-TOC	-VA	Seawater							
Batch R4 WG2843183-4 Total Organic C				99.1		%		80-120	08-AUG-18
WG2843183-8 Total Organic C				95.9		%		80-120	08-AUG-18
WG2843183-3 Total Organic C				<0.50		mg/L		0.5	08-AUG-18
WG2843183-7 Total Organic C				<0.50		mg/L		0.5	08-AUG-18
HG-DIS-C-CVAFS-	VA	Seawater							
Batch R4 WG2843414-3 Mercury (Hg)-D			L2142053-2 <0.000010	<0.00001	0 RPD-NA	mg/L	N/A	20	08-AUG-18
WG2843414-2 Mercury (Hg)-D	LCS			99.4		%		80-120	08-AUG-18
WG2843414-1 Mercury (Hg)-D			LF	<0.000010	0	mg/L		0.00001	08-AUG-18
WG2843414-4	MS		L2142053-1						



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70-130 20 80-120 0.00001 70-130	08-AUG-18 08-AUG-18 08-AUG-18 08-AUG-18
20 80-120 0.00001	08-AUG-18 08-AUG-18 08-AUG-18
80-120 0.00001	08-AUG-18 08-AUG-18
80-120 0.00001	08-AUG-18 08-AUG-18
0.00001	08-AUG-18
70-130	08-AUG-18
20	00 ALIC 10
20	09-AUG-18 09-AUG-18
20	09-AUG-18
20	09-AUG-18
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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R4163572								
WG2843170-3 DUP		L2142053-2						
Nickel (Ni)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	09-AUG-18
Phosphorus (P)-Dissolve		<0.050	<0.050	RPD-NA	mg/L	N/A	20	09-AUG-18
Potassium (K)-Dissolved		82	81		mg/L	0.8	20	09-AUG-18
Rhenium (Re)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	09-AUG-18
Rubidium (Rb)-Dissolved		0.0290	0.0275		mg/L	5.3	20	09-AUG-18
Selenium (Se)-Dissolved	d	<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	09-AUG-18
Silicon (Si)-Dissolved		<1.0	<1.0	RPD-NA	mg/L	N/A	20	09-AUG-18
Silver (Ag)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	09-AUG-18
Sodium (Na)-Dissolved		2230	2250		mg/L	1.1	20	09-AUG-18
Strontium (Sr)-Dissolved	l	1.84	1.83		mg/L	0.5	20	09-AUG-18
Sulfur (S)-Dissolved		223	229		mg/L	3.0	20	09-AUG-18
Tellurium (Te)-Dissolved	1	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	09-AUG-18
Thallium (TI)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	09-AUG-18
Thorium (Th)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	09-AUG-18
Tin (Sn)-Dissolved		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	09-AUG-18
Titanium (Ti)-Dissolved		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	09-AUG-18
Tungsten (W)-Dissolved		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	09-AUG-18
Uranium (U)-Dissolved		0.00166	0.00161		mg/L	3.1	20	09-AUG-18
Vanadium (V)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	09-AUG-18
Yttrium (Y)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	09-AUG-18
Zinc (Zn)-Dissolved		<0.0030	<0.0030	RPD-NA	mg/L	N/A	20	09-AUG-18
Zirconium (Zr)-Dissolved	d	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	09-AUG-18
WG2843170-2 LCS					0.4			
Aluminum (Al)-Dissolved			99.8		%		80-120	09-AUG-18
Antimony (Sb)-Dissolved	1		104.2		%		80-120	09-AUG-18
Arsenic (As)-Dissolved			88.9		%		80-120	09-AUG-18
Barium (Ba)-Dissolved			94.4		%		80-120	09-AUG-18
Beryllium (Be)-Dissolved			95.8		%		80-120	09-AUG-18
Bismuth (Bi)-Dissolved			102.4		%		80-120	09-AUG-18
Boron (B)-Dissolved			104.4		%		80-120	09-AUG-18
Cadmium (Cd)-Dissolve	d		101.0		%		80-120	09-AUG-18
Calcium (Ca)-Dissolved			101.6		%		80-120	09-AUG-18
Cesium (Cs)-Dissolved			88.8		%		80-120	09-AUG-18
Chromium (Cr)-Dissolve	d		96.0		%		80-120	09-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R416357	2							
WG2843170-2 LCS			07.0		0/			
Cobalt (Co)-Dissolved			97.6		%		80-120	09-AUG-18
Copper (Cu)-Dissolved			89.6		%		80-120	09-AUG-18
Gallium (Ga)-Dissolve	a		99.6		%		80-120	09-AUG-18
Iron (Fe)-Dissolved			96.9		%		80-120	09-AUG-18
Lead (Pb)-Dissolved			106.1		%		80-120	09-AUG-18
Lithium (Li)-Dissolved			96.1		%		80-120	09-AUG-18
Magnesium (Mg)-Diss			93.5		%		80-120	09-AUG-18
Manganese (Mn)-Diss			97.2		%		80-120	09-AUG-18
Molybdenum (Mo)-Dis	solved		94.6		%		80-120	09-AUG-18
Nickel (Ni)-Dissolved			94.8		%		80-120	09-AUG-18
Phosphorus (P)-Disso	lved		90.4		%		80-120	09-AUG-18
Potassium (K)-Dissolv			89.9		%		80-120	09-AUG-18
Rhenium (Re)-Dissolv			95.2		%		80-120	09-AUG-18
Rubidium (Rb)-Dissolv	ved		93.5		%		80-120	09-AUG-18
Selenium (Se)-Dissolv	ved .		101.7		%		80-120	09-AUG-18
Silicon (Si)-Dissolved			104.1		%		80-120	09-AUG-18
Silver (Ag)-Dissolved			97.6		%		80-120	09-AUG-18
Sodium (Na)-Dissolve	d		98.8		%		80-120	09-AUG-18
Strontium (Sr)-Dissolv	red		91.2		%		80-120	09-AUG-18
Sulfur (S)-Dissolved			96.4		%		80-120	09-AUG-18
Tellurium (Te)-Dissolv	red		103.0		%		80-120	09-AUG-18
Thallium (TI)-Dissolve	d		98.5		%		80-120	09-AUG-18
Thorium (Th)-Dissolve	ed		104.0		%		80-120	09-AUG-18
Tin (Sn)-Dissolved			93.0		%		80-120	09-AUG-18
Titanium (Ti)-Dissolve	d		94.0		%		80-120	09-AUG-18
Tungsten (W)-Dissolv	ed		91.8		%		80-120	09-AUG-18
Uranium (U)-Dissolved	d		100.6		%		80-120	09-AUG-18
Vanadium (V)-Dissolv	ed		97.0		%		80-120	09-AUG-18
Yttrium (Y)-Dissolved			99.0		%		80-120	09-AUG-18
Zinc (Zn)-Dissolved			91.8		%		80-120	09-AUG-18
Zirconium (Zr)-Dissolv	/ed		87.9		%		80-120	09-AUG-18
WG2843170-1 MB		LF						
Aluminum (AI)-Dissolv	red		<0.0050		mg/L		0.005	09-AUG-18
Antimony (Sb)-Dissolv	/ed		<0.00050		mg/L		0.0005	09-AUG-18



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA Seawater							
Batch R4163572							
WG2843170-1 MB	LF						
Arsenic (As)-Dissolved		<0.0020		mg/L		0.002	09-AUG-18
Barium (Ba)-Dissolved		<0.0010		mg/L		0.001	09-AUG-18
Beryllium (Be)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Bismuth (Bi)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Boron (B)-Dissolved		<0.10		mg/L		0.1	09-AUG-18
Cadmium (Cd)-Dissolved		<0.000050		mg/L		0.00005	09-AUG-18
Calcium (Ca)-Dissolved		<1.0		mg/L		1	09-AUG-18
Cesium (Cs)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Chromium (Cr)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Cobalt (Co)-Dissolved		<0.000050		mg/L		0.00005	09-AUG-18
Copper (Cu)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Gallium (Ga)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Iron (Fe)-Dissolved		<0.010		mg/L		0.01	09-AUG-18
Lead (Pb)-Dissolved		<0.00030		mg/L		0.0003	09-AUG-18
Lithium (Li)-Dissolved		<0.020		mg/L		0.02	09-AUG-18
Magnesium (Mg)-Dissolved		<1.0		mg/L		1	09-AUG-18
Manganese (Mn)-Dissolved		<0.00020		mg/L		0.0002	09-AUG-18
Molybdenum (Mo)-Dissolved		<0.0020		mg/L		0.002	09-AUG-18
Nickel (Ni)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Phosphorus (P)-Dissolved		<0.050		mg/L		0.05	09-AUG-18
Potassium (K)-Dissolved		<1.0		mg/L		1	09-AUG-18
Rhenium (Re)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Rubidium (Rb)-Dissolved		<0.0050		mg/L		0.005	09-AUG-18
Selenium (Se)-Dissolved		<0.0020		mg/L		0.002	09-AUG-18
Silicon (Si)-Dissolved		<1.0		mg/L		1	09-AUG-18
Silver (Ag)-Dissolved		<0.00010		mg/L		0.0001	09-AUG-18
Sodium (Na)-Dissolved		<1.0		mg/L		1	09-AUG-18
Strontium (Sr)-Dissolved		<0.010		mg/L		0.01	09-AUG-18
Sulfur (S)-Dissolved		<5.0		mg/L		5	09-AUG-18
Tellurium (Te)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Thallium (TI)-Dissolved		<0.000050		mg/L		0.00005	09-AUG-18
Thorium (Th)-Dissolved		<0.00050		mg/L		0.0005	09-AUG-18
Tin (Sn)-Dissolved		<0.0010		mg/L		0.001	09-AUG-18
Titanium (Ti)-Dissolved		<0.0050		mg/L		0.005	09-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R4163572	2							
WG2843170-1 MB Tungsten (W)-Dissolve	nd.	LF	<0.0010		ma/l		0.004	00 1110 10
• , ,			<0.0010	n	mg/L		0.001	09-AUG-18
Uranium (U)-Dissolved Vanadium (V)-Dissolve			<0.00050		mg/L mg/L		0.00005	09-AUG-18
Yttrium (Y)-Dissolved	eu .		<0.00050		_		0.0005	09-AUG-18
• •			<0.0030		mg/L		0.0005	09-AUG-18
Zinc (Zn)-Dissolved	ad		<0.0050		mg/L		0.003	09-AUG-18
Zirconium (Zr)-Dissolve	eu		<0.00050		mg/L		0.0005	09-AUG-18
MET-T-L-HRMS-VA	Seawater							
Batch R4163572	2							
WG2843349-2 LCS Aluminum (AI)-Total			107.0		%		80-120	09-AUG-18
Antimony (Sb)-Total			102.3		%		80-120	09-AUG-18
Arsenic (As)-Total			98.7		%		80-120	09-AUG-18
Barium (Ba)-Total			96.8		%		80-120	09-AUG-18
Beryllium (Be)-Total			97.0		%		80-120	09-AUG-18
Bismuth (Bi)-Total			103.8		%		80-120	09-AUG-18
Boron (B)-Total			101.6		%		80-120	09-AUG-18
Cadmium (Cd)-Total			99.8		%		80-120	09-AUG-18
Calcium (Ca)-Total			99.98		%		80-120	09-AUG-18
Cesium (Cs)-Total			90.6		%		80-120	09-AUG-18
Chromium (Cr)-Total			97.2		%		80-120	09-AUG-18
Cobalt (Co)-Total			105.6		%		80-120	09-AUG-18
Copper (Cu)-Total			100.0		%		80-120	09-AUG-18
Gallium (Ga)-Total			102.4		%		80-120	09-AUG-18
Iron (Fe)-Total			108.2		%		80-120	09-AUG-18
Lead (Pb)-Total			111.3		%		80-120	09-AUG-18
Lithium (Li)-Total			95.7		%		80-120	09-AUG-18
Magnesium (Mg)-Total			95.4		%		80-120	09-AUG-18
Manganese (Mn)-Total			106.0		%		80-120	09-AUG-18
Molybdenum (Mo)-Tota	al		90.3		%		80-120	09-AUG-18
Nickel (Ni)-Total			103.0		%		80-120	09-AUG-18
Phosphorus (P)-Total			97.0		%		80-120	09-AUG-18
Potassium (K)-Total			94.0		%		80-120	09-AUG-18
Rhenium (Re)-Total			99.6		%		80-120	09-AUG-18
Rubidium (Rb)-Total			90.4		%		80-120	09-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4163572								
WG2843349-2 LCS			404.0		0/			
Selenium (Se)-Total			101.2	МЕО	%		80-120	09-AUG-18
Silicon (Si)-Total			120.9	MES	%		80-120	09-AUG-18
Silver (Ag)-Total			93.9		%		80-120	09-AUG-18
Sodium (Na)-Total			103.6		%		80-120	09-AUG-18
Strontium (Sr)-Total			92.8		%		80-120	09-AUG-18
Sulfur (S)-Total			106.6		%		70-130	09-AUG-18
Tellurium (Te)-Total			102.0		%		80-120	09-AUG-18
Thallium (Tl)-Total			101.9		%		80-120	09-AUG-18
Thorium (Th)-Total			107.0		%		80-120	09-AUG-18
Tin (Sn)-Total			100.6		%		80-120	09-AUG-18
Titanium (Ti)-Total			104.0		%		80-120	09-AUG-18
Tungsten (W)-Total			97.1		%		80-120	09-AUG-18
Uranium (U)-Total			102.2		%		80-120	09-AUG-18
Vanadium (V)-Total			105.2		%		80-120	09-AUG-18
Yttrium (Y)-Total			98.0		%		80-120	09-AUG-18
Zinc (Zn)-Total			95.6		%		80-120	09-AUG-18
Zirconium (Zr)-Total			90.7		%		80-120	09-AUG-18
WG2843349-1 MB								
Aluminum (Al)-Total			< 0.0050		mg/L		0.005	09-AUG-18
Antimony (Sb)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Arsenic (As)-Total			< 0.0020		mg/L		0.002	09-AUG-18
Barium (Ba)-Total			<0.0010		mg/L		0.001	09-AUG-18
Beryllium (Be)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Bismuth (Bi)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Boron (B)-Total			<0.10		mg/L		0.1	09-AUG-18
Cadmium (Cd)-Total			<0.000050)	mg/L		0.00005	09-AUG-18
Calcium (Ca)-Total			<1.0		mg/L		1	09-AUG-18
Cesium (Cs)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Chromium (Cr)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Cobalt (Co)-Total			<0.000050)	mg/L		0.00005	09-AUG-18
Copper (Cu)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Gallium (Ga)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Iron (Fe)-Total			<0.010		mg/L		0.0003	09-AUG-18
Lead (Pb)-Total			<0.00030		mg/L		0.0003	09-AUG-18 09-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4163572 WG2843349-1 MB								
Lithium (Li)-Total			<0.020		mg/L		0.02	09-AUG-18
Magnesium (Mg)-Total			<1.0		mg/L		1	09-AUG-18
Manganese (Mn)-Total			<0.00020		mg/L		0.0002	09-AUG-18
Molybdenum (Mo)-Total			<0.0020		mg/L		0.002	09-AUG-18
Nickel (Ni)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Phosphorus (P)-Total			<0.050		mg/L		0.05	09-AUG-18
Potassium (K)-Total			<1.0		mg/L		1	09-AUG-18
Rhenium (Re)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Rubidium (Rb)-Total			<0.0050		mg/L		0.005	09-AUG-18
Selenium (Se)-Total			<0.0020		mg/L		0.002	09-AUG-18
Silicon (Si)-Total			<1.0		mg/L		1	09-AUG-18
Silver (Ag)-Total			<0.00010		mg/L		0.0001	09-AUG-18
Sodium (Na)-Total			<1.0		mg/L		1	09-AUG-18
Strontium (Sr)-Total			<0.010		mg/L		0.01	09-AUG-18
Sulfur (S)-Total			<5.0		mg/L		5	09-AUG-18
Tellurium (Te)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Thallium (TI)-Total			<0.000050)	mg/L		0.00005	09-AUG-18
Thorium (Th)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Tin (Sn)-Total			<0.0010		mg/L		0.001	09-AUG-18
Titanium (Ti)-Total			<0.0050		mg/L		0.005	09-AUG-18
Tungsten (W)-Total			<0.0010		mg/L		0.001	09-AUG-18
Uranium (U)-Total			<0.000050)	mg/L		0.00005	09-AUG-18
Vanadium (V)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Yttrium (Y)-Total			<0.00050		mg/L		0.0005	09-AUG-18
Zinc (Zn)-Total			<0.0030		mg/L		0.003	09-AUG-18
Zirconium (Zr)-Total			<0.00050		mg/L		0.0005	09-AUG-18
NH3-F-VA	Seawater							
Batch R4161073								
WG2843113-3 DUP Ammonia, Total (as N)		L2142053-1 0.0139	0.0134		mg/L	3.8	20	08-AUG-18
WG2843113-2 LCS Ammonia, Total (as N)			101.9		%		85-115	08-AUG-18
WG2843113-1 MB Ammonia, Total (as N)			<0.0050		mg/L		0.005	08-AUG-18
WG2843113-4 MS		L2142053-1						



Workorder: L2142053 Report Date: 28-AUG-18 Page 12 of 15

					·			
Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NH3-F-VA Batch R4161073 WG2843113-4 MS Ammonia, Total (as N)	Seawater	L2142053-1	94.3		%		75-125	08-AUG-18
PH-C-PCT-VA	Seawater							
Batch R4161800 WG2842980-2 CRM pH		VA-PH7-BUF	7.01		рН		6.9-7.1	08-AUG-18
WG2842980-5 DUP pH		L2142053-1 8.05	8.09	J	рН	0.04	0.3	08-AUG-18
TKN-C-F-VA	Seawater							
Batch R4161498 WG2843154-3 DUP Total Kjeldahl Nitrogen		L2142053-2 0.095	0.100		mg/L	4.4	20	08-AUG-18
WG2843154-2 LCS Total Kjeldahl Nitrogen			100.6		%		75-125	08-AUG-18
WG2843154-1 MB Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	08-AUG-18
WG2843154-4 MS Total Kjeldahl Nitrogen		L2142053-3	101.0		%		70-130	08-AUG-18
TSS-C-VA	Seawater							
Batch R4160707 WG2842958-2 LCS Total Suspended Solids			89.3		%		85-115	07-AUG-18
WG2842958-1 MB Total Suspended Solids			<2.0		mg/L		2	07-AUG-18
TURBIDITY-C-VA	Seawater							
Batch R4160462								
WG2843045-2 CRM Turbidity		VA-FORM-40	99.0		%		85-115	07-AUG-18
WG2843045-1 MB Turbidity			<0.10		NTU		0.1	07-AUG-18

Workorder: L2142053 Report Date: 28-AUG-18 Page 13 of 15

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Workorder: L2142053 Report Date: 28-AUG-18 Page 14 of 15

Hold Time Exceedances:

	Sample						
ALS Product Description	ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Turbidity by Meter in Seawa	ter						
	1	01-AUG-18 10:30	07-AUG-18 16:28	3	6	days	EHTR
	2	01-AUG-18 10:20	07-AUG-18 16:28	3	6	days	EHTR
	3	01-AUG-18 10:00	07-AUG-18 16:28	3	6	days	EHTR
	4	01-AUG-18 10:10	07-AUG-18 16:28	3	6	days	EHTR
	5	01-AUG-18	07-AUG-18 16:28	3	6	days	EHTR
pH by Meter (Automated) (s	eawater)						
	1	01-AUG-18 10:30	08-AUG-18 09:41	0.25	167	hours	EHTR-FM
	2	01-AUG-18 10:20	08-AUG-18 09:41	0.25	167	hours	EHTR-FN
	3	01-AUG-18 10:00	08-AUG-18 09:41	0.25	168	hours	EHTR-FM
	4	01-AUG-18 10:10	08-AUG-18 09:41	0.25	168	hours	EHTR-FM
	5	01-AUG-18	08-AUG-18 09:41	0.25	166	hours	EHTR-FN
Anions and Nutrients							
Nitrate in Seawater by IC							
	1	01-AUG-18 10:30	07-AUG-18 10:07	3	6	days	EHTR
	2	01-AUG-18 10:20	07-AUG-18 10:07	3	6	days	EHTR
	3	01-AUG-18 10:00	07-AUG-18 10:07	3	6	days	EHTR
	4	01-AUG-18 10:10	07-AUG-18 10:07	3	6	days	EHTR
	5	01-AUG-18	07-AUG-18 10:07	3	6	days	EHTR
Nitrite in Seawater by IC							
•	1	01-AUG-18 10:30	07-AUG-18 10:07	3	6	days	EHTR
	2	01-AUG-18 10:20	07-AUG-18 10:07	3	6	days	EHTR
	3	01-AUG-18 10:00	07-AUG-18 10:07	3	6	days	EHTR
	4	01-AUG-18 10:10	07-AUG-18 10:07	3	6	days	EHTR
	5	01-AUG-18	07-AUG-18 10:07	3	6	days	EHTR
Bacteriological Tests						•	
Fecal coliform by membrane	e filtration						
•	1	01-AUG-18 10:30	07-AUG-18 14:30	30	148	hours	EHTR
	2	01-AUG-18 10:20	07-AUG-18 14:30	30	148	hours	EHTR
	3	01-AUG-18 10:00	07-AUG-18 14:30	30	149	hours	EHTR
	4	01-AUG-18 10:10	07-AUG-18 14:30	30	148	hours	EHTR
	5	01-AUG-18	07-AUG-18 14:30	30	146	hours	EHTR
Polycyclic Aromatic Hydroca	rbons						
PAHs in Water							
	1	01-AUG-18 10:30	24-AUG-18 16:00	14	23	days	EHT
	2	01-AUG-18 10:20	24-AUG-18 16:00	14	23	days	EHT
	3	01-AUG-18 10:00	24-AUG-18 16:00	14	23	days	EHT
	4	01-AUG-18 10:10	24-AUG-18 16:00	14	23	days	EHT
	5	01-AUG-18	24-AUG-18 16:00	14	23	days	EHT

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Notes*:

Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes. Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2142053 were received on 07-AUG-18 10:10.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

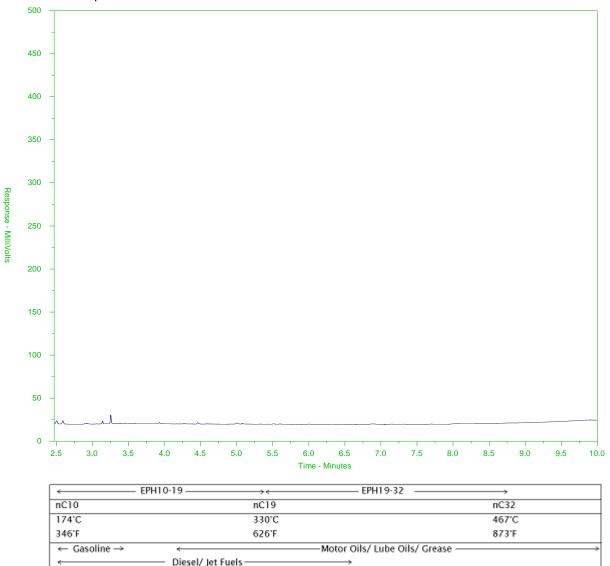
Workorder: L2142053 Report Date: 28-AUG-18 Page 15 of 15

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



ALS Sample ID: L2142053-1 Client Sample ID: SOURCE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

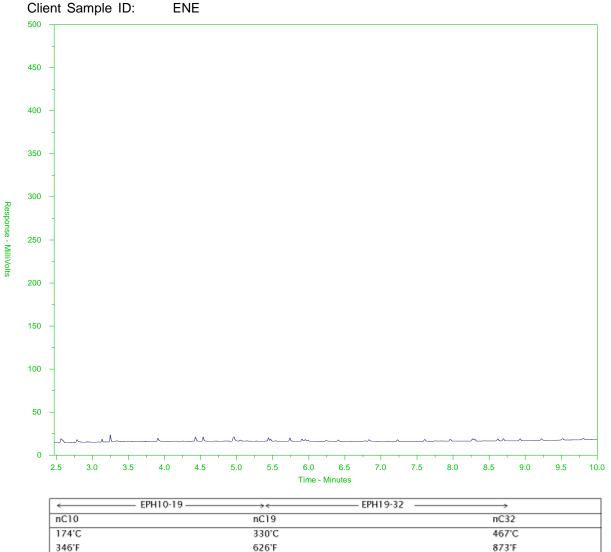
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2142053-2



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

Diesel/ Jet Fuels

Motor Oils/ Lube Oils/ Grease

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

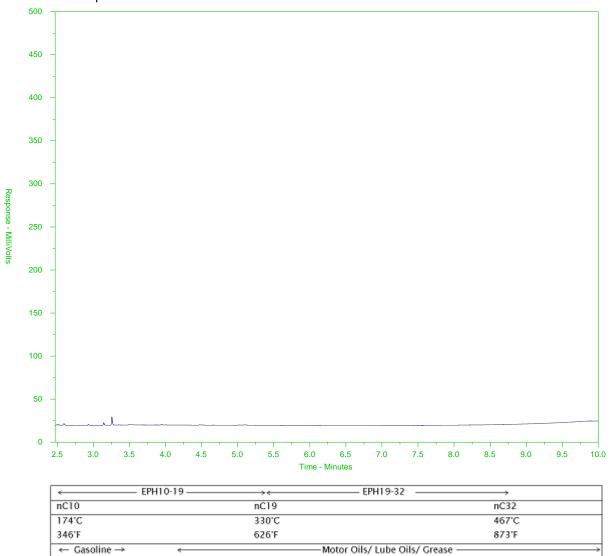
A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

Note: This chromatogram was produced using GC conditions that are specific to the ALS Canada EPH method. Refer to the ALS Canada EPH Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.

← Gasoline →



ALS Sample ID: L2142053-3 Client Sample ID: WNW



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

Diesel/ Jet Fuels

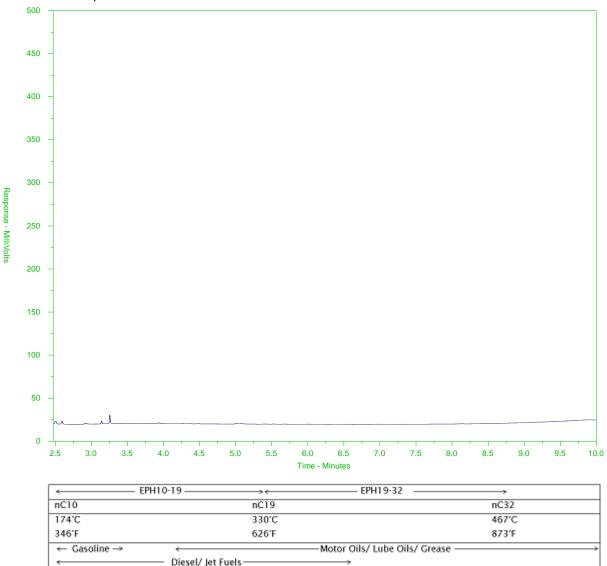
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2142053-4 Client Sample ID: NORTH



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

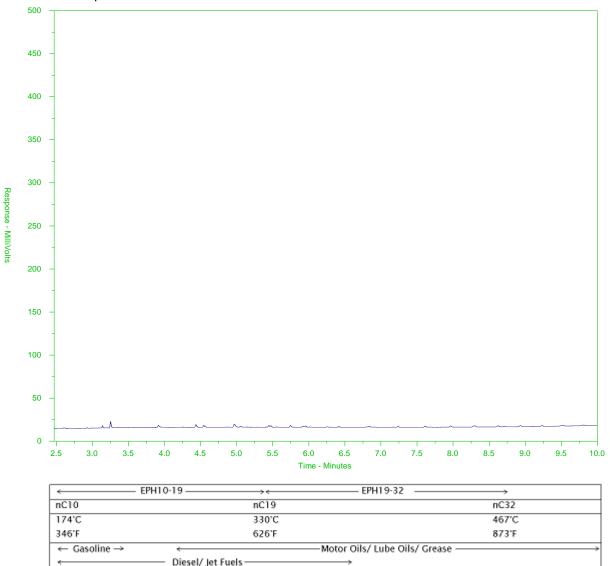
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2142053-5 Client Sample ID: DUP-A



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

ALS

Chain of Custody (COC) / Analytical Request Form

oc Number: 17 - 668075

L2142053-COFC

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Chain of Custody (COC) / Analytical Request Form

L2142053-COFC

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	\$ NO	mption/use? * Samples on ice, Keep and * **Dissolution metals and Dissolution mercury unfiltered and unpresented **		Cooling Initiated																
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Failure to complete an porticits of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user accounts

1. If any water samples are taken from a Regulated Drinking Water (DW). System, please submit using an Authorized DW COC form.



GOLDER ASSOCIATES LTD.

ATTN: John Sherrin

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Date Received: 10-AUG-18

Report Date: 27-AUG-18 13:08 (MT)

Version: FINAL REV. 2

Client Phone: 250-881-7372

Certificate of Analysis

Lab Work Order #: L2144572
Project P.O. #: NOT SUBMITTED
Job Reference: 1663724/14000/3

C of C Numbers: Legal Site Desc:

Comments: 27-AUG-2018 Salinity data is included.

Amber Springer, B.Sc Account Manager

ambu Springer

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700 ALS CANADA LTD Part of the ALS Group An ALS Limited Company



L2144572 CONTD.... PAGE 2 of 8

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Version: FINAL REV. 2

	Sample ID Description Sampled Date Sampled Time Client ID	L2144572-1 SEAWATER 07-AUG-18 17:30 SOURCE	L2144572-2 SEAWATER 07-AUG-18 17:20 WNW	L2144572-3 SEAWATER 07-AUG-18 17:00 NORTH	L2144572-4 SEAWATER 07-AUG-18 17:10 ENE	
Grouping	Analyte					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	12100	13500	14900	17000	
	Hardness (as CaCO3) (mg/L)	1300	1390	1550	1780	
	pH (pH)	8.09	8.08	8.07	8.07	
	Salinity (psu)	6.9	7.7	8.7	9.9	
	Total Suspended Solids (mg/L)	<2.0	<2.0	<2.0	<2.0	
	Turbidity (NTU)	0.55	0.58	0.49	0.60	
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	80.5	80.7	80.4	83.2	
	Ammonia, Total (as N) (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Bromide (Br) (mg/L)	13.4	15.0	17.3	20.2	
	Chloride (CI) (mg/L)	3850	4360	4940	5800	
	Fluoride (F) (mg/L)	<1.0	<1.0	<1.0	<1.0	
	Nitrate (as N) (mg/L)	<0.50	<0.50	<0.50	<0.50	
	Nitrite (as N) (mg/L)	<0.10	<0.10	<0.10	<0.10	
	Total Kjeldahl Nitrogen (mg/L)	0.081	0.090	0.091	0.090	
	Sulfate (SO4) (mg/L)	497	553	655	765	
Organic / Inorganic Carbon	Total Organic Carbon (mg/L)	1.33	1.77	1.22	1.20	
Total Metals	Aluminum (Al)-Total (mg/L)	0.0155	0.0165	0.0142	0.0209	
	Antimony (Sb)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Arsenic (As)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Barium (Ba)-Total (mg/L)	0.0058	0.0060	0.0056	0.0064	
	Beryllium (Be)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Boron (B)-Total (mg/L)	0.94	1.10	1.21	1.40	
	Cadmium (Cd)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Calcium (Ca)-Total (mg/L)	95.6	105	118	135	
	Cesium (Cs)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Chromium (Cr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Cobalt (Co)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Copper (Cu)-Total (mg/L)	<0.00050	<0.00050	<0.00050	0.00088	
	Gallium (Ga)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Iron (Fe)-Total (mg/L)	0.017	0.019	0.014	0.026	
	Lead (Pb)-Total (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Lithium (Li)-Total (mg/L)	0.045	0.035	0.042	0.048	
	Magnesium (Mg)-Total (mg/L)	251	275	301	362	
	Manganese (Mn)-Total (mg/L)	0.00102	0.00115	0.00106	0.00157	
	Mercury (Hg)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

L2144572 CONTD....

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Version: FINAL REV. 2

	Sample ID Description Sampled Date Sampled Time Client ID	L2144572-1 SEAWATER 07-AUG-18 17:30 SOURCE	L2144572-2 SEAWATER 07-AUG-18 17:20 WNW	L2144572-3 SEAWATER 07-AUG-18 17:00 NORTH	L2144572-4 SEAWATER 07-AUG-18 17:10 ENE	
Grouping	Analyte					
SEAWATER						
Total Metals	Molybdenum (Mo)-Total (mg/L)	0.0022	0.0026	0.0027	0.0031	
	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Potassium (K)-Total (mg/L)	71.2	77.3	94.4	107	
	Rhenium (Re)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Rubidium (Rb)-Total (mg/L)	0.0233	0.0268	0.0285	0.0327	
	Selenium (Se)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Silicon (Si)-Total (mg/L)	1.0	<1.0	<1.0	<1.0	
	Silver (Ag)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Total (mg/L)	1950	2100	2440	2760	
	Strontium (Sr)-Total (mg/L)	1.50	1.57	1.73	1.99	
	Sulfur (S)-Total (mg/L)	190	211	234	279	
	Tellurium (Te)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Thallium (TI)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Thorium (Th)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Tin (Sn)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Titanium (Ti)-Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Tungsten (W)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Uranium (U)-Total (mg/L)	0.00125	0.00127	0.00132	0.00187	
	Vanadium (V)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Yttrium (Y)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Zinc (Zn)-Total (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	
	Zirconium (Zr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Dissolved Metals	Dissolved Mercury Filtration Location	LAB	LAB	LAB	LAB	
	Dissolved Metals Filtration Location	LAB	LAB	LAB	LAB	
	Aluminum (Al)-Dissolved (mg/L)	0.0072	0.0071	0.0068	0.0059	
	Antimony (Sb)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Arsenic (As)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Barium (Ba)-Dissolved (mg/L)	0.0055	0.0054	0.0056	0.0057	
	Beryllium (Be)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Boron (B)-Dissolved (mg/L)	0.96	1.08	1.21	1.40	
	Cadmium (Cd)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.00050	
	Calcium (Ca)-Dissolved (mg/L)	100	105	114	132	
	Cesium (Cs)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Chromium (Cr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Cobalt (Co)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2144572-1 SEAWATER 07-AUG-18 17:30 SOURCE	L2144572-2 SEAWATER 07-AUG-18 17:20 WNW	L2144572-3 SEAWATER 07-AUG-18 17:00 NORTH	L2144572-4 SEAWATER 07-AUG-18 17:10 ENE	
Grouping	Analyte					
SEAWATER						
Dissolved Metals	Copper (Cu)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Gallium (Ga)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Iron (Fe)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
	Lead (Pb)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Lithium (Li)-Dissolved (mg/L)	0.047	0.037	0.039	0.049	
	Magnesium (Mg)-Dissolved (mg/L)	254	273	307	352	
	Manganese (Mn)-Dissolved (mg/L)	0.00076	0.00088	0.00084	0.00097	
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Molybdenum (Mo)-Dissolved (mg/L)	0.0022	0.0025	0.0027	0.0032	
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Potassium (K)-Dissolved (mg/L)	75	82	99	107	
	Rhenium (Re)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Rubidium (Rb)-Dissolved (mg/L)	0.0234	0.0261	0.0277	0.0327	
	Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Silicon (Si)-Dissolved (mg/L)	<1.0	<1.0	<1.0	<1.0	
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Dissolved (mg/L)	2060	2200	2410	2770	
	Strontium (Sr)-Dissolved (mg/L)	1.48	1.56	1.77	1.99	
	Sulfur (S)-Dissolved (mg/L)	188	208	235	272	
	Tellurium (Te)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Thallium (TI)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Thorium (Th)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Titanium (Ti)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Tungsten (W)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Uranium (U)-Dissolved (mg/L)	0.00127	0.00126	0.00131	0.00185	
	Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Yttrium (Y)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

L2144572 CONTD....

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ALS ENVIRONMENTAL ANALYTICAL REPORT

L2144572-1 L2144572-2 L2144572-3 L2144572-4 Sample ID **SEAWATER SEAWATER** Description **SEAWATER** SEAWATER 07-AUG-18 07-AUG-18 07-AUG-18 Sampled Date 07-AUG-18 17:30 17:20 17:00 17:10 Sampled Time SOURCE WNW NORTH ENE Client ID Grouping Analyte **WATER** Coliform Bacteria - Fecal (CFU/100mL) **Bacteriological** <1 <1 <1 <1 **Tests** EPH10-19 (mg/L) **Hydrocarbons** < 0.25 <0.25 < 0.25 < 0.25 EPH19-32 (mg/L) < 0.25 <0.25 < 0.25 < 0.25 LEPH (mg/L) < 0.25 <0.25 < 0.25 < 0.25 HEPH (mg/L) < 0.25 < 0.25 < 0.25 < 0.25 Surrogate: 2-Bromobenzotrifluoride (%) 109.0 117.5 104.8 118.3 Polycyclic Acenaphthene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 **Aromatic Hydrocarbons** Acenaphthylene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Acridine (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Anthracene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Benz(a)anthracene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Benzo(a)pyrene (mg/L) < 0.0000050 < 0.0000050 < 0.0000050 < 0.0000050 Benzo(b&j)fluoranthene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Benzo(b+j+k)fluoranthene (mg/L) < 0.000015 < 0.000015 < 0.000015 < 0.000015 Benzo(g,h,i)perylene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Benzo(k)fluoranthene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Chrysene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Dibenz(a,h)anthracene (mg/L) < 0.0000050 < 0.0000050 < 0.0000050 < 0.0000050 Fluoranthene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Fluorene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 Indeno(1,2,3-c,d)pyrene (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 1-Methylnaphthalene (mg/L) < 0.000050 < 0.000050 < 0.000050 < 0.000050 2-Methylnaphthalene (mg/L) < 0.000050 < 0.000050 < 0.000050 < 0.000050 Naphthalene (mg/L) < 0.000050 < 0.000050 < 0.000050 < 0.000050 Phenanthrene (mg/L) < 0.000020 < 0.000020 < 0.000020 < 0.000020 Pyrene (mg/L) < 0.000010 < 0.000010 <0.000010 < 0.000010 Quinoline (mg/L) < 0.000050 < 0.000050 < 0.000050 < 0.000050 Surrogate: Acridine d9 (%) 104.2 108.8 112.0 113.3 Surrogate: Chrysene d12 (%) 97.0 105.6 97.4 90.8 Surrogate: Naphthalene d8 (%) 115.2 117.5 115.0 116.7 Surrogate: Phenanthrene d10 (%) 121.3 125.4 124.2 122.8

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Reference Information Version: FINAL REV. 2

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)	
Laboratory Control Sample	Silicon (Si)-Dissolved	MES	L2144572-1, -2, -3, -4	
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L2144572-1, -2, -3, -4	
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2144572-1, -2, -3, -4	
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L2144572-1, -2, -3, -4	
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L2144572-1, -2, -3, -4	
Matrix Spike	Calcium (Ca)-Total	MS-B	L2144572-1, -2, -3, -4	
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2144572-1, -2, -3, -4	
Matrix Spike	Sodium (Na)-Total	MS-B	L2144572-1, -2, -3, -4	
Matrix Spike	Strontium (Sr)-Total	MS-B	L2144572-1, -2, -3, -4	

Qualifiers for Individual Parameters Listed:

Qualifier	Description
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TITR-VA	Seawater	Alkalinity Spec by Titration (Seawater)	APHA 2320 Alkalinity

This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

Seawater Bromide by IC (seawater)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-CL-IC-VA Seawater Chloride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

Fluoride by IC (seawater) EPA 300.1 (mod) ANIONS-C-F-IC-VA

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-NO2-IC-VA Seawater Nitrite in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrite is detected by UV absorbance.

ANIONS-C-NO3-IC-VA Nitrate in Seawater by IC EPA 300.1 (mod) Seawater

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrate is detected by UV absorbance.

ANIONS-C-SO4-IC-VA Sulfate by IC (seawater) EPA 300.1 (mod) Seawater

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

CARBONS-C-TOC-VA TOC by combustion (seawater) APHA 5310B TOTAL ORGANIC CARBON (TOC) Seawater

This analysis is carried out using procedures adapted from APHA Method 5310 "Total Organic Carbon (TOC)".

EC-C-PCT-VA Seawater Conductivity (Automated) (seawater) APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

EC-SCREEN-VA Conductivity Screen (Internal Use Only) **APHA 2510** Qualitative analysis of conductivity where required during preparation of other tests - e.g. TDS, metals, etc.

EPH-ME-FID-VA Water EPH in Water BC Lab Manual

EPH is extracted from water using a hexane micro-extraction technique, with analysis by GC-FID, as per the BC Lab Manual. EPH results include PAHs and are therefore not equivalent to LEPH or HEPH.

FCOLI-MF-ENV-VA Water Fecal coliform by membrane filtration APHA METHOD 9222

This analysis is carried out using procedures adapted from APHA Method 9222 "Membrane Filter Technique for Members of the Coliform Group". Coliform bacteria is enumerated by culturing and colony counting. A known sample volume is filtered through a 0.45 micron membrane filter. The test involves an initial 24 hour incubation of the filter with the appropriate growth medium, positive results require further testing (up to an additional 48 hours) to confirm and quantify the total coliform. This method is used for non-turbid water with a low background bacteria level.

Reference Information

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HARDNESS-CALC-VA Seawater Hardness **APHA 2340B**

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-DIS-C-CVAFS-VA

Seawater Diss. Mercury in Seawater by CVAFS

PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by filtration (EPA Method 3005A) and involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

HG-TOT-C-CVAFS-VA

Seawater

Total Mercury in Seawater by CVAFS

PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

LEPH/HEPH-CALC-VA

Water

LEPHs and HEPHs

BC MOE LEPH/HEPH

LEPHw and HEPHw are measures of Light and Heavy Extractable Petroleum Hydrocarbons in water. Results are calculated by subtraction of applicable PAH concentrations from EPH10-19 and EPH19-32, as per the BC Lab Manual LEPH/HEPH calculation procedure. LEPHw = EPH10-19 minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene.

HEPH = EPH19-32 minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

MET-D-L-HRMS-VA

Seawater Diss. Metals in Seawater by HR-ICPMS EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve laboratory sample filtration based on APHA Method 3030B.

Seawater

Tot. Metals in Seawater by HR-ICPMS

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve preliminary sample treatment by acid digestion based on APHA Method 3030E.

NH3-F-VA

Seawater

Ammonia in Seawater by Fluorescence

J. ENVIRON, MONIT., 2005, 7, 37-42, RSC

This analysis is carried out, on sulfuric acid preserved samples, using procedures modified from J. Environ. Monit., 2005, 7, 37 - 42, The Royal Society of Chemistry, "Flow-injection analysis with fluorescence detection for the determination of trace levels of ammonium in seawater", Roslvn J. Waston et

PAH-ME-MS-VA

Water

PAHs in Water

EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PH-C-PCT-VA

Seawater

pH by Meter (Automated) (seawater)

APHA 4500-H pH Value

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

It is recommended that this analysis be conducted in the field.

SALINITY-CALC-VA

Seawater

Salinity by conductivity meter

APHA 2520B

Salinity is determined by the APHA 2520B Electrical Conductivity Method. Salinity is a unitless parameter that is roughly equivalent to grams per Litre. ALS applies the unit of psu (practical salinity unit) to indicate that salinity values are derived from the Practical Salinity Scale.

TKN-C-F-VA

TKN in Seawater by Fluorescence

This analysis is carried out using procedures adapted from APHA Method 4500-Norg D. "Block Digestion and Flow Injection Analysis". Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection.

TSS-C-VA

Seawater

Total Suspended Solids by Gravimetric

APHA 2540 D

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) is determined by filtering a sample through a glass fibre filter. TSS is determined by drying the filter at 104 degrees celsius.

Turbidity by Meter in Seawater

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code

Laboratory Location

VA ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

Reference Information

L2144572 CONTD....

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27-AUG-18 13:08 (MT)

Version: FINAL REV. 2

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

mg/kg - milligrams per kilogram based on dry weight of sample.

mg/kg wwt - milligrams per kilogram based on wet weight of sample.

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L2144572 Report Date: 27-AUG-18 Page 1 of 16

Client: GOLDER ASSOCIATES LTD.

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Contact: John Sherrin

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EPH-ME-FID-VA	Water							
Batch R4172647								
WG2848690-2 LCS EPH10-19			102.0		%		70-130	15-AUG-18
EPH19-32			104.7		%		70-130	15-AUG-18
WG2848690-1 MB EPH10-19			<0.25		mg/L		0.25	15-AUG-18
EPH19-32			<0.25		mg/L		0.25	15-AUG-18
Surrogate: 2-Bromobenz	zotrifluoride		121.5		g, <u>_</u> %		60-140	15-AUG-18
-					,,		00 140	13 700 10
FCOLI-MF-ENV-VA	Water							
Batch R4165848 WG2846577-1 MB								
Coliform Bacteria - Feca	ıl		<1		CFU/100mL		1	10-AUG-18
PAH-ME-MS-VA	Water							
Batch R4170010								
WG2848690-2 LCS								
Acenaphthene			90.9		%		60-130	17-AUG-18
Acenaphthylene			92.4		%		60-130	17-AUG-18
Acridine			93.4		%		60-130	17-AUG-18
Anthracene			92.5		%		60-130	17-AUG-18
Benz(a)anthracene			98.4		%		60-130	17-AUG-18
Benzo(a)pyrene			88.5		%		60-130	17-AUG-18
Benzo(b&j)fluoranthene			79.3		%		60-130	17-AUG-18
Benzo(g,h,i)perylene			95.3		%		60-130	17-AUG-18
Benzo(k)fluoranthene			88.3		%		60-130	17-AUG-18
Chrysene			97.5		%		60-130	17-AUG-18
Dibenz(a,h)anthracene			94.5		%		60-130	17-AUG-18
Fluoranthene			95.4		%		60-130	17-AUG-18
Fluorene			92.2		%		60-130	17-AUG-18
Indeno(1,2,3-c,d)pyrene			95.2		%		60-130	17-AUG-18
1-Methylnaphthalene			82.5		%		60-130	17-AUG-18
2-Methylnaphthalene			86.8		%		60-130	17-AUG-18
Naphthalene			87.8		%		50-130	17-AUG-18
Phenanthrene			96.6		%		60-130	17-AUG-18
Pyrene			95.8		%		60-130	17-AUG-18
Quinoline			64.4		%		60-130	17-AUG-18



Workorder: L2144572 Report Date: 27-AUG-18 Page 2 of 16

est Mati	rix Reference	Result Quali	fier Units	RPD	Limit	Analyzed
PAH-ME-MS-VA Wat	er					
Batch R4170010						
WG2848690-1 MB		0.000040			0.00004	.=
Acenaphthene		<0.000010	mg/L		0.00001	17-AUG-18
Acenaphthylene		<0.000010	mg/L		0.00001	17-AUG-18
Acridine		<0.000010	mg/L		0.00001	17-AUG-18
Anthracene		<0.000010	mg/L		0.00001	17-AUG-18
Benz(a)anthracene		<0.000010	mg/L		0.00001	17-AUG-18
Benzo(a)pyrene		<0.000050	mg/L		0.000005	17-AUG-18
Benzo(b&j)fluoranthene		<0.000010	mg/L		0.00001	17-AUG-18
Benzo(g,h,i)perylene		<0.000010	mg/L		0.00001	17-AUG-18
Benzo(k)fluoranthene		<0.000010	mg/L		0.00001	17-AUG-18
Chrysene		<0.000010	mg/L		0.00001	17-AUG-18
Dibenz(a,h)anthracene		<0.0000050	mg/L		0.000005	17-AUG-18
Fluoranthene		<0.000010	mg/L		0.00001	17-AUG-18
Fluorene		<0.000010	mg/L		0.00001	17-AUG-18
Indeno(1,2,3-c,d)pyrene		<0.000010	mg/L		0.00001	17-AUG-18
1-Methylnaphthalene		<0.000050	mg/L		0.00005	17-AUG-18
2-Methylnaphthalene		<0.000050	mg/L		0.00005	17-AUG-18
Naphthalene		<0.000050	mg/L		0.00005	17-AUG-18
Phenanthrene		<0.000020	mg/L		0.00002	17-AUG-18
Pyrene		<0.000010	mg/L		0.00001	17-AUG-18
Quinoline		<0.000050	mg/L		0.00005	17-AUG-18
Surrogate: Acridine d9		120.7	%		60-130	17-AUG-18
Surrogate: Chrysene d12		122.1	%		60-130	17-AUG-18
Surrogate: Naphthalene d8		121.7	%		50-130	17-AUG-18
Surrogate: Phenanthrene d10		126.4	%		60-130	17-AUG-18
ALK-TITR-VA Sea	water					
Batch R4165554						
WG2846491-3 CRM Alkalinity, Total (as CaCO3)	VA-ALK-TITF	103.1	%		85-115	11-AUG-18
WG2846491-5 DUP Alkalinity, Total (as CaCO3)	L2144572-1 80.5	79.8	mg/L	0.9	20	11-AUG-18
WG2846491-1 MB Alkalinity, Total (as CaCO3)		<1.0	mg/L		1	11-AUG-18
ANIONS-C-BR-IC-VA Sea	water					



Workorder: L2144572 Report Date: 27-AUG-18 Page 3 of 16

Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ANIONS-C-BR-I	IC-VA	Seawater							
Batch WG2846432-	R4164847 -3 DUP		1 04 4 4 5 7 0 4						
Bromide (Br			L2144572-1 13.4	13.4		mg/L	0.1	20	10-AUG-18
WG2846432- Bromide (Br				94.6		%		85-115	10-AUG-18
WG2846432- Bromide (Br				<5.0		mg/L		5	10-AUG-18
ANIONS-C-CL-I	C-VA	Seawater							
Batch	R4164847								
WG2846432- Chloride (Cl)			L2144572-1 3850	3810		mg/L	1.0	20	10-AUG-18
WG2846432- Chloride (Cl)				96.9		%		90-110	10-AUG-18
WG2846432- Chloride (Cl)				<50		mg/L		50	10-AUG-18
ANIONS-C-F-IC	-VA	Seawater							
Batch	R4164847								
WG2846432 - Fluoride (F)	-3 DUP		L2144572-1 <1.0	<1.0	RPD-NA	mg/L	N/A	20	10-AUG-18
WG2846432 - Fluoride (F)	-2 LCS			97.7		%		90-110	10-AUG-18
WG2846432 - Fluoride (F)	-1 MB			<1.0		mg/L		1	10-AUG-18
ANIONS-C-NO2	P-IC-VA	Seawater							
Batch	R4164847								
WG2846432- Nitrite (as N)			L2144572-1 <0.10	<0.10	RPD-NA	mg/L	N/A	20	10-AUG-18
WG2846432- Nitrite (as N)				99.4		%		90-110	10-AUG-18
WG2846432- Nitrite (as N)				<0.10		mg/L		0.1	10-AUG-18
ANIONS-C-NO3	-IC-VA	Seawater							
Batch	R4164847								
WG2846432 - Nitrate (as N			L2144572-1 <0.50	<0.50	RPD-NA	mg/L	N/A	20	10-AUG-18
WG2846432 - Nitrate (as N				97.4		%		90-110	10-AUG-18
WG2846432-	-1 MB								



Workorder: L2144572

Report Date: 27-AUG-18

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Test	Matrix	Reference	Result Qualifier	Units	RPD	Limit	Analyzed
ANIONS-C-NO3-IC-VA	Seawater						
Batch R4164847 WG2846432-1 MB Nitrate (as N)			<0.50	mg/L		0.5	10-AUG-18
ANIONS-C-SO4-IC-VA	Seawater						
Batch R4164847 WG2846432-3 DUP Sulfate (SO4)		L2144572-1 497	500	mg/L	0.5	20	10-AUG-18
WG2846432-2 LCS Sulfate (SO4)			98.6	%		90-110	10-AUG-18
WG2846432-1 MB Sulfate (SO4)			<30	mg/L		30	10-AUG-18
CARBONS-C-TOC-VA Batch R4165476 WG2846716-4 LCS Total Organic Carbon	Seawater		98.8	%		80-120	10-AUG-18
WG2846716-3 MB Total Organic Carbon			<0.50	mg/L		0.5	10-AUG-18
EC-C-PCT-VA	Seawater						
Batch R4165554 WG2846491-4 CRM Conductivity WG2846491-5 DUP		VA-EC-PCT-C	104.6	% uS/cm	0.7	90-110	11-AUG-18
Conductivity WG2846491-1 MB Conductivity		12100	12000	uS/cm	0.7	10 2	11-AUG-18 11-AUG-18
HG-DIS-C-CVAFS-VA Batch R4164308	Seawater					-	117.66 16
WG2846698-2 LCS Mercury (Hg)-Dissolved			95.5	%		80-120	11-AUG-18
WG2846698-1 MB Mercury (Hg)-Dissolved		LF	<0.000010	mg/L		0.00001	11-AUG-18
WG2846698-4 MS Mercury (Hg)-Dissolved		L2144572-4	93.6	%		70-130	11-AUG-18
HG-TOT-C-CVAFS-VA	Seawater						



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-TOT-C-CVAFS-VA Seawate	er						
Batch R4164308							
WG2846706-2 LCS Mercury (Hg)-Total		97.9		%		00.400	44 4110 40
		97.9		70		80-120	11-AUG-18
WG2846706-1 MB Mercury (Hg)-Total		<0.000010		mg/L		0.00001	11-AUG-18
MET-D-L-HRMS-VA Seawate	er			-			
Batch R4175659							
WG2847227-3 DUP Antimony (Sb)-Dissolved	L2144572-2 <0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
Arsenic (As)-Dissolved	<0.0020	<0.00030	RPD-NA	mg/L	N/A N/A	20	
Barium (Ba)-Dissolved	0.0054	0.0054	RPD-NA	mg/L	0.2	20	16-AUG-18
Beryllium (Be)-Dissolved	<0.0050	<0.0054	DDD MA				16-AUG-18
Bismuth (Bi)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
Boron (B)-Dissolved	1.08	1.11	RPD-NA	mg/L	N/A	20	16-AUG-18
Calcium (Ca)-Dissolved	1.05	105		mg/L mg/L	2.5	20	16-AUG-18
Cesium (Cs)-Dissolved	<0.00050	<0.00050	DDD MA	•	0.1	20	16-AUG-18
Chromium (Cr)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
Cobalt (Co)-Dissolved	<0.00050	<0.00050	RPD-NA RPD-NA	mg/L	N/A	20	16-AUG-18
Copper (Cu)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L mg/L	N/A	20	16-AUG-18
Gallium (Ga)-Dissolved	<0.00050	<0.00050		mg/L	N/A	20	16-AUG-18
Iron (Fe)-Dissolved	<0.010	<0.00030	RPD-NA	•	N/A	20	16-AUG-18
Lead (Pb)-Dissolved	<0.0030	<0.00030	RPD-NA	mg/L mg/L	N/A	20	16-AUG-18
Magnesium (Mg)-Dissolved	273	273	RPD-NA	mg/L	N/A	20	16-AUG-18
Manganese (Mn)-Dissolved	0.00088	0.00072		mg/L	0.1	20	16-AUG-18
Molybdenum (Mo)-Dissolved	0.0025	0.00072		mg/L	20	20	16-AUG-18
Nickel (Ni)-Dissolved	<0.0025	<0.0025	RPD-NA	mg/L	0.4	20	16-AUG-18
Phosphorus (P)-Dissolved	<0.050	<0.050	RPD-NA	mg/L	N/A N/A	20 20	16-AUG-18
Potassium (K)-Dissolved	82	76	RPD-NA	mg/L	7.1	20	16-AUG-18 16-AUG-18
Rhenium (Re)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	
Rubidium (Rb)-Dissolved	0.0261	0.0260	KFD-NA	mg/L	0.4	20	16-AUG-18 16-AUG-18
Selenium (Se)-Dissolved	<0.0020	<0.0020	RPD-NA	mg/L	N/A		
Silicon (Si)-Dissolved	<1.0	<1.0	RPD-NA	mg/L	N/A N/A	20	16-AUG-18 16-AUG-18
Silver (Ag)-Dissolved	<0.00010	<0.00010	RPD-NA	mg/L	N/A N/A	20	16-AUG-18 16-AUG-18
Sodium (Na)-Dissolved	2200	2140	KPD-NA	mg/L		20	
Strontium (Sr)-Dissolved	1.56	1.53		mg/L	2.7	20	16-AUG-18
Sulfur (S)-Dissolved	208	208		mg/L	2.3 0.2	20 20	16-AUG-18 16-AUG-18



Workorder: L2144572 Report Date: 27-AUG-18 Page 6 of 16

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R4175659								
WG2847227-3 DUP		L2144572-2						
Tellurium (Te)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
Thallium (TI)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	16-AUG-18
Thorium (Th)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
Tin (Sn)-Dissolved		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	16-AUG-18
Titanium (Ti)-Dissolved		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	16-AUG-18
Tungsten (W)-Dissolved		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	16-AUG-18
Uranium (U)-Dissolved		0.00126	0.00138		mg/L	9.1	20	16-AUG-18
Vanadium (V)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
Yttrium (Y)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
Zinc (Zn)-Dissolved		<0.0030	<0.0030	RPD-NA	mg/L	N/A	20	16-AUG-18
Zirconium (Zr)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	16-AUG-18
WG2847227-2 LCS Aluminum (Al)-Dissolved			103.0		%		80-120	16-AUG-18
Antimony (Sb)-Dissolved			101.9		%		80-120	16-AUG-18
Arsenic (As)-Dissolved			101.0		%		80-120	16-AUG-18
Barium (Ba)-Dissolved			96.8		%		80-120	16-AUG-18
Beryllium (Be)-Dissolved			94.3		%		80-120	16-AUG-18
Bismuth (Bi)-Dissolved			100.0		%		80-120	16-AUG-18
Boron (B)-Dissolved			100.4		%		80-120	16-AUG-18
Cadmium (Cd)-Dissolved			99.5		%		80-120	16-AUG-18
Calcium (Ca)-Dissolved			100.7		%		80-120	16-AUG-18
Cesium (Cs)-Dissolved			90.4		%		80-120	16-AUG-18
Chromium (Cr)-Dissolved			98.0		%		80-120	16-AUG-18
Cobalt (Co)-Dissolved			101.6		%		80-120	16-AUG-18
Copper (Cu)-Dissolved			106.0		%		80-120	16-AUG-18
Gallium (Ga)-Dissolved			105.6		%		80-120	16-AUG-18
Iron (Fe)-Dissolved			107.9		%		80-120	16-AUG-18
Lead (Pb)-Dissolved			102.8		%		80-120	16-AUG-18
Lithium (Li)-Dissolved			110.4		%		80-120	16-AUG-18
Magnesium (Mg)-Dissolve	ed		100.9		%		80-120	16-AUG-18
Manganese (Mn)-Dissolve			102.0		%		80-120	16-AUG-18
Molybdenum (Mo)-Dissolv			93.6		%		80-120	16-AUG-18
Nickel (Ni)-Dissolved			103.2		%		80-120	16-AUG-18
Phosphorus (P)-Dissolved	4		98.6		%		80-120	16-AUG-18



Workorder: L2144572 Report Date: 27-AUG-18 Page 7 of 16

MET-D-L-HRMS-VA Seawater Batch R4175659 WG2847227-2 LCS					
WG2847227-2 LCS					
Potassium (K)-Dissolved	103.5		%	80-120	16-AUG-18
Rhenium (Re)-Dissolved	96.3		%	80-120	16-AUG-18
Rubidium (Rb)-Dissolved	102.0		%	80-120	16-AUG-18
Selenium (Se)-Dissolved	97.0		%	80-120	16-AUG-18
Silicon (Si)-Dissolved	120.5	MES	%	80-120	16-AUG-18
Silver (Ag)-Dissolved	95.9		%	80-120	16-AUG-18
Sodium (Na)-Dissolved	100.8		%	80-120	16-AUG-18
Strontium (Sr)-Dissolved	87.6		%	80-120	16-AUG-18
Sulfur (S)-Dissolved	111.1		%	80-120	16-AUG-18
Tellurium (Te)-Dissolved	102.0		%	80-120	16-AUG-18
Thallium (TI)-Dissolved	94.7		%	80-120	16-AUG-18
Thorium (Th)-Dissolved	100.0		%	80-120	16-AUG-18
Tin (Sn)-Dissolved	96.4		%	80-120	16-AUG-18
Titanium (Ti)-Dissolved	107.6		%	80-120	16-AUG-18
Tungsten (W)-Dissolved	91.2		%	80-120	16-AUG-18
Uranium (U)-Dissolved	96.2		%	80-120	16-AUG-18
Vanadium (V)-Dissolved	103.4		%	80-120	16-AUG-18
Yttrium (Y)-Dissolved	100.0		%	80-120	16-AUG-18
Zinc (Zn)-Dissolved	101.6		%	80-120	16-AUG-18
Zirconium (Zr)-Dissolved	91.2		%	80-120	16-AUG-18
WG2847227-1 MB LF					
Antimony (Sb)-Dissolved	<0.00050		mg/L	0.0005	16-AUG-18
Arsenic (As)-Dissolved	<0.0020		mg/L	0.002	16-AUG-18
Barium (Ba)-Dissolved	<0.0010		mg/L	0.001	16-AUG-18
Beryllium (Be)-Dissolved	<0.00050		mg/L	0.0005	16-AUG-18
Bismuth (Bi)-Dissolved	<0.00050		mg/L	0.0005	16-AUG-18
Boron (B)-Dissolved	<0.10		mg/L	0.1	16-AUG-18
Cadmium (Cd)-Dissolved	<0.000050)	mg/L	0.00005	16-AUG-18
Calcium (Ca)-Dissolved	<1.0		mg/L	1	16-AUG-18
Cesium (Cs)-Dissolved	<0.00050		mg/L	0.0005	16-AUG-18
Chromium (Cr)-Dissolved	<0.00050		mg/L	0.0005	16-AUG-18
Cobalt (Co)-Dissolved	<0.000050)	mg/L	0.00005	16-AUG-18
Copper (Cu)-Dissolved	<0.00050		mg/L	0.0005	16-AUG-18
Gallium (Ga)-Dissolved	<0.00050		mg/L	0.0005	16-AUG-18



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Satch R417559 WG28472274 MB LF	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
WG2847227-1 MB	MET-D-L-HRMS-VA	Seawater							
Iron (Fe)-Dissolved	Batch R41756	59							
Lead (Pb)-Dissolved			LF			,			
Lithium (Li)-Dissolved	` ,					•			
Magnesium (Mg)-Dissolved <1.0	, ,								
Manganese (Mn)-Dissolved <0.00020						•			
Molybdenum (Mo)-Dissolved <0.0020 mg/L 0.002 16-AUG-18 Nickel (Ni)-Dissolved <0.00050						•			
Nickel (Ni)-Dissolved	• ,					•		0.0002	
Phosphorus (P)-Dissolved						•		0.002	16-AUG-18
Potassium (K)-Dissolved	, ,					mg/L		0.0005	16-AUG-18
Rhenium (Re)-Dissolved <0.00050	Phosphorus (P)-Diss	olved		<0.050		mg/L		0.05	16-AUG-18
Rubidium (Rb)-Dissolved									



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA Seawater							
Batch R4175659							
WG2847227-4 MS	L2144572-1	00.0		0/			
Boron (B)-Dissolved		93.2		%		70-130	16-AUG-18
Cadmium (Cd)-Dissolved		90.2	NO 5	%		70-130	16-AUG-18
Calcium (Ca)-Dissolved		N/A	MS-B	%		-	16-AUG-18
Cesium (Cs)-Dissolved		94.5		%		70-130	16-AUG-18
Chromium (Cr)-Dissolved		90.2		%		70-130	16-AUG-18
Cobalt (Co)-Dissolved		94.8		%		70-130	16-AUG-18
Copper (Cu)-Dissolved		88.9		%		70-130	16-AUG-18
Gallium (Ga)-Dissolved		90.8		%		70-130	16-AUG-18
Iron (Fe)-Dissolved		90.3		%		70-130	16-AUG-18
Lead (Pb)-Dissolved		91.8		%		70-130	16-AUG-18
Lithium (Li)-Dissolved		100.4		%		70-130	16-AUG-18
Magnesium (Mg)-Dissolved		N/A	MS-B	%		-	16-AUG-18
Manganese (Mn)-Dissolved		94.2		%		70-130	16-AUG-18
Molybdenum (Mo)-Dissolved		105.0		%		70-130	16-AUG-18
Nickel (Ni)-Dissolved		92.4		%		70-130	16-AUG-18
Phosphorus (P)-Dissolved		93.3		%		70-130	16-AUG-18
Potassium (K)-Dissolved		80.8		%		70-130	16-AUG-18
Rhenium (Re)-Dissolved		100.0		%		70-130	16-AUG-18
Rubidium (Rb)-Dissolved		107.6		%		70-130	16-AUG-18
Selenium (Se)-Dissolved		90.0		%		70-130	16-AUG-18
Silver (Ag)-Dissolved		90.7		%		70-130	16-AUG-18
Sodium (Na)-Dissolved		N/A	MS-B	%		-	16-AUG-18
Strontium (Sr)-Dissolved		N/A	MS-B	%		-	16-AUG-18
Tellurium (Te)-Dissolved		99.97		%		70-130	16-AUG-18
Thallium (TI)-Dissolved		89.2		%		70-130	16-AUG-18
Thorium (Th)-Dissolved		104.2		%		70-130	16-AUG-18
Tin (Sn)-Dissolved		97.0		%		70-130	16-AUG-18
Titanium (Ti)-Dissolved		98.4		%		70-130	16-AUG-18
Tungsten (W)-Dissolved		99.2		%		70-130	16-AUG-18
Uranium (U)-Dissolved		101.7		%		70-130	16-AUG-18
Vanadium (V)-Dissolved		97.0		%		70-130	16-AUG-18
Yttrium (Y)-Dissolved		101.2		%		70-130	16-AUG-18
Zinc (Zn)-Dissolved		89.3		%		70-130	16-AUG-18
Zirconium (Zr)-Dissolved		93.4		%		70-130	16-AUG-18



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est Ma	atrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA Se	eawater							
Batch R4178616								
WG2847227-3 DUP		L2144572-2						
Aluminum (Al)-Dissolved		0.0071	0.0067		mg/L	5.6	20	17-AUG-18
Cadmium (Cd)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	17-AUG-18
Lithium (Li)-Dissolved		0.037	0.035		mg/L	6.4	20	17-AUG-18
WG2847227-1 MB Aluminum (Al)-Dissolved		LF	<0.0050		mg/L		0.005	47 1110 40
Silver (Ag)-Dissolved			<0.00010		mg/L		0.005	17-AUG-18
			<0.00010		mg/L		0.0001	17-AUG-18
	eawater							
Batch R4175659								
WG2846837-2 LCS Aluminum (Al)-Total			99.8		%		80-120	16-AUG-18
Antimony (Sb)-Total			106.7		%		80-120	16-AUG-18
Arsenic (As)-Total			95.6		%		80-120	16-AUG-18
Barium (Ba)-Total			96.4		%		80-120	16-AUG-18
Beryllium (Be)-Total			92.8		%		80-120	16-AUG-18
Bismuth (Bi)-Total			104.5		%		80-120	16-AUG-18
Boron (B)-Total			100.5		%		80-120	16-AUG-18
Cadmium (Cd)-Total			97.0		%		80-120	16-AUG-18
Calcium (Ca)-Total			96.7		%		80-120	16-AUG-18
Cesium (Cs)-Total			91.0		%		80-120	16-AUG-18
Chromium (Cr)-Total			92.4		%		80-120	16-AUG-18
Cobalt (Co)-Total			99.6		%		80-120	16-AUG-18
Copper (Cu)-Total			99.2		%		80-120	16-AUG-18
Gallium (Ga)-Total			102.4		%		80-120	16-AUG-18
Iron (Fe)-Total			101.9		%		80-120	16-AUG-18
Lead (Pb)-Total			108.0		%		80-120	16-AUG-18
Lithium (Li)-Total			107.2		%		80-120	16-AUG-18
Magnesium (Mg)-Total			99.1		%		80-120	16-AUG-18
Manganese (Mn)-Total			102.4		%		80-120	16-AUG-18
Molybdenum (Mo)-Total			93.6		%		80-120	16-AUG-18
Nickel (Ni)-Total			100.4		%		80-120	16-AUG-18
Phosphorus (P)-Total			96.1		%		80-120	16-AUG-18
Potassium (K)-Total			93.9		%		80-120	16-AUG-18
Rhenium (Re)-Total			97.7		%		80-120	16-AUG-18
Rubidium (Rb)-Total			101.0		%		80-120	16-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4175659								
WG2846837-2 LCS Selenium (Se)-Total			04.2		9/		00.400	40 410 40
` ,			94.3		%		80-120	16-AUG-18
Silicon (Si)-Total			118.9		%		80-120	16-AUG-18
Silver (Ag)-Total			94.8		%		80-120	16-AUG-18
Sodium (Na)-Total			95.1		%		80-120	16-AUG-18
Strontium (Sr)-Total			97.6		%		80-120	16-AUG-18
Sulfur (S)-Total			110.8		%		70-130	16-AUG-18
Tellurium (Te)-Total			100.0		%		80-120	16-AUG-18
Thallium (TI)-Total			99.3		%		80-120	16-AUG-18
Thorium (Th)-Total			104.0		%		80-120	16-AUG-18
Tin (Sn)-Total			97.6		%		80-120	16-AUG-18
Titanium (Ti)-Total			103.6		%		80-120	16-AUG-18
Tungsten (W)-Total			94.5		%		80-120	16-AUG-18
Uranium (U)-Total			101.2		%		80-120	16-AUG-18
Vanadium (V)-Total			100.8		%		80-120	16-AUG-18
Yttrium (Y)-Total			100.0		%		80-120	16-AUG-18
Zinc (Zn)-Total			97.2		%		80-120	16-AUG-18
Zirconium (Zr)-Total			90.9		%		80-120	16-AUG-18
WG2846837-1 MB								
Aluminum (Al)-Total			< 0.0050		mg/L		0.005	16-AUG-18
Antimony (Sb)-Total			<0.00050		mg/L		0.0005	16-AUG-18
Arsenic (As)-Total			<0.0020		mg/L		0.002	16-AUG-18
Barium (Ba)-Total			<0.0010		mg/L		0.001	16-AUG-18
Beryllium (Be)-Total			< 0.00050		mg/L		0.0005	16-AUG-18
Bismuth (Bi)-Total			< 0.00050		mg/L		0.0005	16-AUG-18
Boron (B)-Total			<0.10		mg/L		0.1	16-AUG-18
Cadmium (Cd)-Total			<0.000050)	mg/L		0.00005	16-AUG-18
Calcium (Ca)-Total			<1.0		mg/L		1	16-AUG-18
Cesium (Cs)-Total			<0.00050		mg/L		0.0005	16-AUG-18
Chromium (Cr)-Total			<0.00050		mg/L		0.0005	16-AUG-18
Cobalt (Co)-Total			<0.000050)	mg/L		0.00005	16-AUG-18
Copper (Cu)-Total			<0.00050		mg/L		0.0005	16-AUG-18
Gallium (Ga)-Total			<0.00050		mg/L		0.0005	16-AUG-18
Iron (Fe)-Total			<0.010		mg/L		0.01	16-AUG-18
Lead (Pb)-Total			<0.00030		mg/L		0.0003	16-AUG-18
(2/					<i>3-</i> –		2.2000	107.00 10



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MET-T-L-HRMS-VA Sea Batch R4175659 WG2846837-1 MB Lithium (Li)-Total	awater				
WG2846837-1 MB					
Lithium (Li)-i otai		0.000			
		<0.020	mg/L	0.02	16-AUG-18
Magnesium (Mg)-Total		<1.0	mg/L	1	16-AUG-18
Manganese (Mn)-Total		<0.00020	mg/L	0.0002	16-AUG-18
Molybdenum (Mo)-Total		<0.0020	mg/L	0.002	16-AUG-18
Nickel (Ni)-Total		<0.00050	mg/L	0.0005	16-AUG-18
Phosphorus (P)-Total		<0.050	mg/L	0.05	16-AUG-18
Potassium (K)-Total		<1.0	mg/L	1	16-AUG-18
Rhenium (Re)-Total		<0.00050	mg/L	0.0005	16-AUG-18
Rubidium (Rb)-Total		<0.0050	mg/L	0.005	16-AUG-18
Selenium (Se)-Total		<0.0020	mg/L	0.002	16-AUG-18
Silicon (Si)-Total		<1.0	mg/L	1	16-AUG-18
Silver (Ag)-Total		<0.00010	mg/L	0.0001	16-AUG-18
Sodium (Na)-Total		<1.0	mg/L	1	16-AUG-18
Strontium (Sr)-Total		<0.010	mg/L	0.01	16-AUG-18
Sulfur (S)-Total		<5.0	mg/L	5	16-AUG-18
Tellurium (Te)-Total		<0.00050	mg/L	0.0005	16-AUG-18
Thallium (TI)-Total		<0.000050	mg/L	0.00005	16-AUG-18
Thorium (Th)-Total		<0.00050	mg/L	0.0005	16-AUG-18
Tin (Sn)-Total		<0.0010	mg/L	0.001	16-AUG-18
Titanium (Ti)-Total		< 0.0050	mg/L	0.005	16-AUG-18
Tungsten (W)-Total		<0.0010	mg/L	0.001	16-AUG-18
Uranium (U)-Total		<0.000050	mg/L	0.00005	16-AUG-18
Vanadium (V)-Total		<0.00050	mg/L	0.0005	16-AUG-18
Yttrium (Y)-Total		<0.00050	mg/L	0.0005	16-AUG-18
Zinc (Zn)-Total		<0.0030	mg/L	0.003	16-AUG-18
Zirconium (Zr)-Total		<0.00050	mg/L	0.0005	16-AUG-18
WG2846837-4 MS	L2144572-3				
Aluminum (Al)-Total		95.8	%	70-130	16-AUG-18
Antimony (Sb)-Total		103.1	%	70-130	16-AUG-18
Arsenic (As)-Total		93.8	%	70-130	16-AUG-18
Barium (Ba)-Total		104.2	%	70-130	16-AUG-18
Beryllium (Be)-Total		99.5	%	70-130	16-AUG-18
Bismuth (Bi)-Total		90.9	%	70-130	16-AUG-18
Boron (B)-Total		94.2	%	70-130	16-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
/IET-T-L-HRMS-VA	Seawater							
Batch R4175659								
WG2846837-4 MS		L2144572-3	00.0		0/			
Cadmium (Cd)-Total			92.0	NO 5	%		70-130	16-AUG-18
Calcium (Ca)-Total			N/A	MS-B	%		=	16-AUG-18
Cesium (Cs)-Total			97.3		%		70-130	16-AUG-18
Chromium (Cr)-Total			90.0		%		70-130	16-AUG-18
Cobalt (Co)-Total			87.0		%		70-130	16-AUG-18
Copper (Cu)-Total			83.7		%		70-130	16-AUG-18
Gallium (Ga)-Total			85.0		%		70-130	16-AUG-18
Iron (Fe)-Total			87.6		%		70-130	16-AUG-18
Lead (Pb)-Total			89.9		%		70-130	16-AUG-18
Lithium (Li)-Total			105.5		%		70-130	16-AUG-18
Magnesium (Mg)-Total			N/A	MS-B	%		=	16-AUG-18
Manganese (Mn)-Total			89.2		%		70-130	16-AUG-18
Molybdenum (Mo)-Total			109.9		%		70-130	16-AUG-18
Nickel (Ni)-Total			85.4		%		70-130	16-AUG-18
Phosphorus (P)-Total			86.5		%		70-130	16-AUG-18
Potassium (K)-Total			75.8		%		70-130	16-AUG-18
Rhenium (Re)-Total			97.2		%		70-130	16-AUG-18
Rubidium (Rb)-Total			109.5		%		70-130	16-AUG-18
Selenium (Se)-Total			86.8		%		70-130	16-AUG-18
Silver (Ag)-Total			91.0		%		70-130	16-AUG-18
Sodium (Na)-Total			N/A	MS-B	%		-	16-AUG-18
Strontium (Sr)-Total			N/A	MS-B	%		-	16-AUG-18
Tellurium (Te)-Total			104.0		%		70-130	16-AUG-18
Thallium (TI)-Total			87.2		%		70-130	16-AUG-18
Thorium (Th)-Total			104.4		%		70-130	16-AUG-18
Tin (Sn)-Total			99.0		%		70-130	16-AUG-18
Titanium (Ti)-Total			93.8		%		70-130	16-AUG-18
Tungsten (W)-Total			98.2		%		70-130	16-AUG-18
Uranium (U)-Total			99.4		%		70-130	16-AUG-18
Vanadium (V)-Total			92.2		%		70-130	16-AUG-18
Yttrium (Y)-Total			103.3		%		70-130	16-AUG-18
Zinc (Zn)-Total			82.1		%		70-130	16-AUG-18
Zirconium (Zr)-Total			97.4		%		70-130	16-AUG-18
IH3-F-VA	Seawater							

NH3-F-VA Seawater



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								.go
Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NH3-F-VA	Seawater							
Batch R4167288 WG2846701-2 LCS Ammonia, Total (as N)			97.4		%		85-115	13-AUG-18
WG2846701-1 MB Ammonia, Total (as N)			<0.0050		mg/L		0.005	13-AUG-18
PH-C-PCT-VA	Seawater							
Batch R4165554 WG2846491-2 CRM pH		VA-PH7-BUF	7.01		рН		6.9-7.1	11-AUG-18
WG2846491-5 DUP pH		L2144572-1 8.09	8.10	J	рН	0.01	0.3	11-AUG-18
TKN-C-F-VA	Seawater							
Batch R4169336 WG2848376-3 DUP Total Kjeldahl Nitrogen		L2144572-1 0.081	0.081		mg/L	0.3	20	14-AUG-18
WG2848376-2 LCS Total Kjeldahl Nitrogen			102.9		%		75-125	14-AUG-18
WG2848376-1 MB Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	14-AUG-18
WG2848376-4 MS Total Kjeldahl Nitrogen		L2144572-2	103.4		%		70-130	14-AUG-18
TSS-C-VA	Seawater							
Batch R4169024 WG2848433-2 LCS Total Suspended Solids			98.1		%		85-115	14-AUG-18
WG2848433-1 MB Total Suspended Solids			<2.0		mg/L		2	14-AUG-18
TURBIDITY-C-VA	Seawater							
Batch R4163250								
WG2846247-2 CRM Turbidity		VA-FORM-40	100.5		%		85-115	10-AUG-18
WG2846247-3 DUP Turbidity		L2144572-1 0.55	0.59		NTU	8.3	15	10-AUG-18
WG2846247-1 MB Turbidity			<0.10		NTU		0.1	10-AUG-18

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

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Hold Time Exceedances:

	Sample						
ALS Product Description	ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
pH by Meter (Automated) (s	eawater)						
	1	07-AUG-18 17:30	11-AUG-18 11:00	0.25	90	hours	EHTR-FM
	2	07-AUG-18 17:20	11-AUG-18 11:00	0.25	90	hours	EHTR-FM
	3	07-AUG-18 17:00	11-AUG-18 11:00	0.25	90	hours	EHTR-FM
	4	07-AUG-18 17:10	11-AUG-18 11:00	0.25	90	hours	EHTR-FM
Bacteriological Tests							
Fecal coliform by membrane	e filtration						
	1	07-AUG-18 17:30	10-AUG-18 15:00	30	70	hours	EHTR
	2	07-AUG-18 17:20	10-AUG-18 15:00	30	70	hours	EHTR
	3	07-AUG-18 17:00	10-AUG-18 15:00	30	70	hours	EHTR
	4	07-AUG-18 17:10	10-AUG-18 15:00	30	70	hours	EHTR

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Notes*:

Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes. Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2144572 were received on 10-AUG-18 09:15.

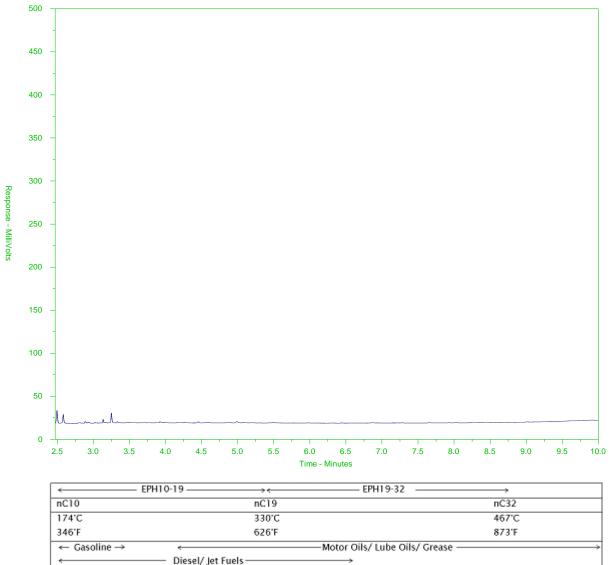
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



ALS Sample ID: L2144572-1 Client Sample ID: SOURCE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

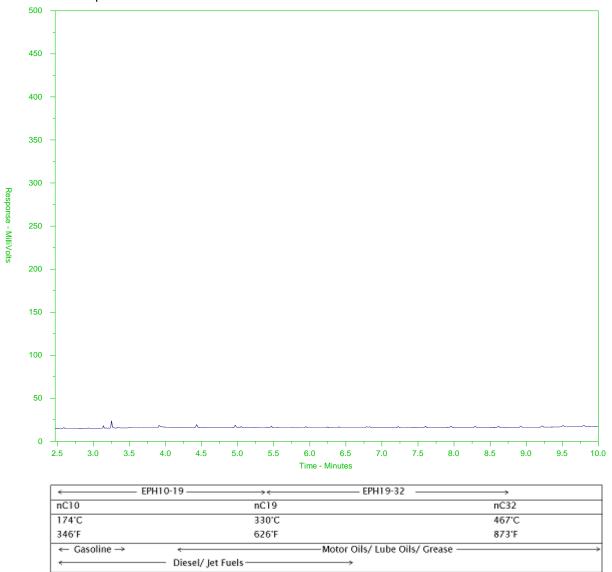
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2144572-2 Client Sample ID: WNW



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

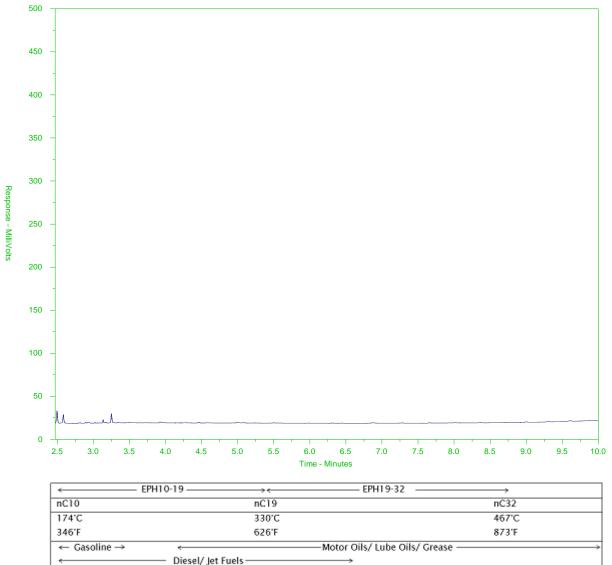
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2144572-3 Client Sample ID: NORTH



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

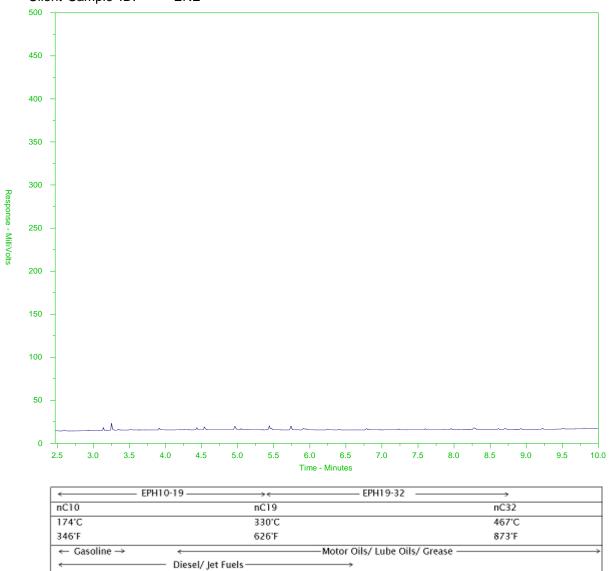
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2144572-4 Client Sample ID: ENE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

ALS Environmental

Chain of Custody (COC) / Analytical Request Form



COC Number: 15 - xxxxxx

1 of

Canada Toll Free: 1 800 668 9878

www.alsglobal.com Contact and company name below will appear on the final report Report Format / Distribution Report To Select Service Level Below - Please confirm all E&P TATs with your AM - surcharges will apply Company: Golder Associatex I td Select Report Format: IZI PDF ☑ EXCEL ☐ EDD (DIGITAL) Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply John Sherrin / Arman Ospan Quality Control (QC) Report with Report YES No Contact: 4 day [P4] 1 Business day (F1) П 1 (250) 881 7372 Phone: Compare Results to Criteria on Report - provide details below if box checked 3 day (P3) П Same Day, Weekend or ☑ EMAIL Company address below will appear on the final report Select Distribution: □ MAIL П 2 day (P2) Statutory holiday (E01 Street 2nd floor 3795 Carey Rd. Fmail 1 or Fax isherrin@golder.com Date and Time Required for all E&P TATs: dama arresy an nun City/Province: Victoria BC Email 2 aospan@golder.com For tests that can not be performed according to the service level selected, you will be contacted. Postal Code: V8Z 6T8 Email 3 Analysis Request Invoice To Same as Report To ☑ YES □ NO Invoice Distribution Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below Capy of Invoice with Report ☐ YES FINO Select Invoice Distribution: 🗇 FMAIL 🗀 MAIL 🗀 FAX Company: Email 1 or Fax Johnsh A Contact: Email 2 **Number of Containers** Project Information Oil and Gas Required Fields (client use) ALS Account # / Quote #: BR191034 PO# AEE/Cost Center: 1663724/14000/3 Joh #: Major/Minor Code: Routing Code: PO / AFE: Requisitioner: LSD: Location: ALS Lab Work Order # (lab use only) ALS Contact: Sampler: ΗŽ otal Mercury issolved ! General (Conductiv Sample Identification and/or Coordinates ALS Sample # Date Time ò ga Sample Type (lab use only) (This description will appear on the report) (dd-mmm-yy) (hh:mm) 07-AG-K Source Seawater 9 WNW 07-AUG-18 Seawater 9 07-17UG-18 North Seawater 9 ENE Seawater 9 Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below SAMPLE CONDITION AS RECEIVED (lab use only) Drinking Water (DW) Samples¹ (client use) (electronic COC only) SIF Observations Yes Frozen Are samples taken from a Regulated DW System? * Dissolved Metals + Dissolved Mercury are unfiltered + unpreserved ice Packs ☐ YES ☑ NO Cooling Initiated Are samples for human drinking water use? INITIAL COOLER TEMPERATURES °C FINAL COOLER TEMPERATURES °C TYES INO INITIAL SHIPMENT RECEPTION (lab use only) SHIPMENT RELEASE (client use) FINAL SHIPMENT RECEPTION (lab use only) Released by: Received by: Time: Received by: DaAUG 1 0 2018 WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY, By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW). System, please submit using an Authorized DW COC form.



GOLDER ASSOCIATES LTD.

ATTN: John Sherrin

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Date Received: 17-AUG-18

Report Date: 25-AUG-18 10:26 (MT)

Version: FINAL

Client Phone: 250-881-7372

Certificate of Analysis

Lab Work Order #: L2148896
Project P.O. #: NOT SUBMITTED
Job Reference: 1663724/14000/3

C of C Numbers: Legal Site Desc:

Comments: ADDITIONAL 24-AUG-18 13:06

Amber Springer, B.Sc Account Manager

ambu Springer

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ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700 ALS CANADA LTD Part of the ALS Group An ALS Limited Company



L2148896 CONTD.... PAGE 2 of 8

25-AUG-18 10:26 (MT) Version: FINAL

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2148896-1 Seawater 14-AUG-18 SOURCE	L2148896-2 Seawater 14-AUG-18 WNW	L2148896-3 Seawater 14-AUG-18 NORTH	L2148896-4 Seawater 14-AUG-18 ENE	L2148896-5 Seawater 14-AUG-18 DUP-B
Grouping	Analyte					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	9630	10100	9970	9690	10100
	Hardness (as CaCO3) (mg/L)	932	926	928	876	1010
	pH (pH)	8.08	8.07	8.07	8.09	8.07
	Salinity (psu)	5.4	5.6	5.6	5.4	5.7
	Total Suspended Solids (mg/L)	2.2	<2.0	<2.0	<2.0	<2.0
	Turbidity (NTU)	0.88	0.65	0.50	0.66	0.60
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	89.0	84.9	84.7	90.2	85.2
	Ammonia, Total (as N) (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Bromide (Br) (mg/L)	10.4	10.1	10.5	10.4	10.3
	Chloride (CI) (mg/L)	2950	3050	3080	2950	3070
	Fluoride (F) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Nitrate (as N) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Nitrite (as N) (mg/L)	<0.10	<0.10	<0.10	<0.10	<0.10
	Total Kjeldahl Nitrogen (mg/L)	0.129	0.105	0.084	0.105	0.145
	Sulfate (SO4) (mg/L)	396	410	411	398	420
Organic / Inorganic Carbon	Total Organic Carbon (mg/L)	1.45	1.12	1.02	1.35	1.14
Total Metals	Aluminum (Al)-Total (mg/L)	0.0213	0.0129	0.0124	0.0186	0.0143
	Antimony (Sb)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Arsenic (As)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Barium (Ba)-Total (mg/L)	0.0047	0.0046	0.0046	0.0046	0.0048
	Beryllium (Be)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Boron (B)-Total (mg/L)	0.74	0.76	0.74	0.71	0.74
	Cadmium (Cd)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Calcium (Ca)-Total (mg/L)	75.8	86.0	77.6	78.3	82.3
	Cesium (Cs)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Chromium (Cr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Cobalt (Co)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Copper (Cu)-Total (mg/L)	0.00052	<0.00050	0.00053	0.00054	0.00051
	Gallium (Ga)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Iron (Fe)-Total (mg/L)	0.026	0.018	0.017	0.020	0.023
	Lead (Pb)-Total (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Lithium (Li)-Total (mg/L)	0.027	0.030	0.029	0.027	0.029
	Magnesium (Mg)-Total (mg/L)	178	189	185	188	192
	Manganese (Mn)-Total (mg/L)	0.00366	0.00094	0.00079	0.00106	0.00095
	Mercury (Hg)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2148896-1 Seawater 14-AUG-18 SOURCE	L2148896-2 Seawater 14-AUG-18 WNW	L2148896-3 Seawater 14-AUG-18 NORTH	L2148896-4 Seawater 14-AUG-18 ENE	L2148896-5 Seawater 14-AUG-18 DUP-B
Grouping	Analyte					
SEAWATER						
Total Metals	Molybdenum (Mo)-Total (mg/L)	0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Total (mg/L)	48.8	58.0	50.8	53.7	53.3
	Rhenium (Re)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Rubidium (Rb)-Total (mg/L)	0.0173	0.0184	0.0173	0.0171	0.0182
	Selenium (Se)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Silicon (Si)-Total (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Silver (Ag)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Total (mg/L)	1410	1590	1430	1440	1550
	Strontium (Sr)-Total (mg/L)	1.21	1.20	1.19	1.14	1.30
	Sulfur (S)-Total (mg/L)	137	142	140	143	174
	Tellurium (Te)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Thallium (TI)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Thorium (Th)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Tin (Sn)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Tungsten (W)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Uranium (U)-Total (mg/L)	0.00214	0.00124	0.00115	0.00193	0.00130
	Vanadium (V)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Yttrium (Y)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Zinc (Zn)-Total (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
	Zirconium (Zr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals	Dissolved Mercury Filtration Location	LAB	LAB	LAB	LAB	LAB
	Dissolved Metals Filtration Location	LAB	LAB	LAB	LAB	LAB
	Aluminum (Al)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Antimony (Sb)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Arsenic (As)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Barium (Ba)-Dissolved (mg/L)	0.0045	0.0044	0.0047	0.0040	0.0043
	Beryllium (Be)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Boron (B)-Dissolved (mg/L)	0.69	0.76	0.70	0.67	0.71
	Cadmium (Cd)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Calcium (Ca)-Dissolved (mg/L)	77.7	74.6	74.8	77.1	83.5
	Cesium (Cs)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Chromium (Cr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Cobalt (Co)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

L2148896 CONTD....

Version:

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ALS ENVIRONMENTAL ANALYTICAL REPORT

L2148896-1 L2148896-2 L2148896-3 L2148896-4 L2148896-5 Sample ID Description Seawater Seawater Seawater Seawater Seawater 14-AUG-18 Sampled Date 14-AUG-18 14-AUG-18 14-AUG-18 14-AUG-18 Sampled Time SOURCE WNW NORTH ENE DUP-B Client ID Grouping **Analyte SEAWATER Dissolved Metals** Copper (Cu)-Dissolved (mg/L) 0.00051 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Gallium (Ga)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Iron (Fe)-Dissolved (mg/L) < 0.010 < 0.010 < 0.010 < 0.010 <0.010 Lead (Pb)-Dissolved (mg/L) < 0.00030 < 0.00030 < 0.00030 < 0.00030 < 0.00030 Lithium (Li)-Dissolved (mg/L) 0.028 0.027 0.023 0.029 0.028 Magnesium (Mg)-Dissolved (mg/L) 180 180 194 179 166 Manganese (Mn)-Dissolved (mg/L) 0.00287 0.00059 0.00081 0.00054 0.00061 Mercury (Hg)-Dissolved (mg/L) < 0.000010 < 0.000010 < 0.000010 < 0.000010 < 0.000010 Molybdenum (Mo)-Dissolved (mg/L) < 0.0020 < 0.0020 < 0.0020 < 0.0020 < 0.0020 Nickel (Ni)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Phosphorus (P)-Dissolved (mg/L) < 0.050 < 0.050 < 0.050 < 0.050 < 0.050 Potassium (K)-Dissolved (mg/L) 51 52 49 57 Rhenium (Re)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Rubidium (Rb)-Dissolved (mg/L) 0.0172 0.0176 0.0172 0.0161 0.0173 Selenium (Se)-Dissolved (mg/L) < 0.0020 <0.0020 < 0.0020 <0.0020 <0.0020 Silicon (Si)-Dissolved (mg/L) <1.0 <1.0 <1.0 <1.0 <1.0 Silver (Ag)-Dissolved (mg/L) < 0.00010 < 0.00010 < 0.00010 < 0.00010 < 0.00010 Sodium (Na)-Dissolved (mg/L) 1450 1390 1370 1420 1570 Strontium (Sr)-Dissolved (mg/L) 1.21 1.18 1.13 1.09 1.31 Sulfur (S)-Dissolved (mg/L) 137 145 137 134 142 Tellurium (Te)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Thallium (TI)-Dissolved (mg/L) 0.000057 0.000051 0.000051 < 0.000050 < 0.000050 Thorium (Th)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Tin (Sn)-Dissolved (mg/L) < 0.0010 <0.0010 < 0.0010 < 0.0010 < 0.0010 Titanium (Ti)-Dissolved (mg/L) < 0.0050 < 0.0050 < 0.0050 < 0.0050 < 0.0050 Tungsten (W)-Dissolved (mg/L) <0.0010 < 0.0010 < 0.0010 < 0.0010 < 0.0010 Uranium (U)-Dissolved (mg/L) 0.00210 0.00131 0.00122 0.00207 0.00126 Vanadium (V)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Yttrium (Y)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050 Zinc (Zn)-Dissolved (mg/L) < 0.0030 < 0.0030 < 0.0030 < 0.0030 < 0.0030 Zirconium (Zr)-Dissolved (mg/L) < 0.00050 < 0.00050 < 0.00050 < 0.00050 < 0.00050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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25-AUG-18 10:26 (MT) Version: FINAL

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2148896-1 Seawater 14-AUG-18 SOURCE	L2148896-2 Seawater 14-AUG-18 WNW	L2148896-3 Seawater 14-AUG-18 NORTH	L2148896-4 Seawater 14-AUG-18 ENE	L2148896-5 Seawater 14-AUG-18 DUP-B
Grouping	Analyte					
WATER						
Bacteriological Tests	Coliform Bacteria - Fecal (CFU/100mL)	PEHR <1	PEHR <1	PEHR <1	PEHR <1	PEHR <1
Hydrocarbons	EPH10-19 (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	EPH19-32 (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	LEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	HEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	<0.25
	Surrogate: 2-Bromobenzotrifluoride (%)	104.8	118.7	121.7	110.6	119.0
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
-	Acenaphthylene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Acridine (mg/L)	<0.00010	<0.000010	<0.000010	<0.000010	<0.000010
	Anthracene (mg/L)	<0.00010	<0.000010	<0.000010	<0.000010	<0.000010
	Benz(a)anthracene (mg/L)	<0.00010	<0.000010	<0.000010	<0.000010	<0.000010
	Benzo(a)pyrene (mg/L)	<0.000050	<0.0000050	<0.000050	<0.000050	<0.000050
	Benzo(b&j)fluoranthene (mg/L)	<0.00010	<0.000010	<0.000010	<0.000010	<0.000010
	Benzo(b+j+k)fluoranthene (mg/L)	<0.00015	<0.00015	<0.000015	<0.000015	<0.000015
	Benzo(g,h,i)perylene (mg/L)	<0.00010	<0.00010	<0.000010	<0.00010	<0.000010
	Benzo(k)fluoranthene (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010	<0.000010
	Chrysene (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010	<0.000010
	Dibenz(a,h)anthracene (mg/L)	<0.000050	<0.0000050	<0.0000050	<0.000050	<0.000050
	Fluoranthene (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010	<0.000010
	Fluorene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Indeno(1,2,3-c,d)pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	1-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	2-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Naphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Phenanthrene (mg/L)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
	Pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Quinoline (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Surrogate: Acridine d9 (%)	85.5	84.0	85.0	79.8	96.2
	Surrogate: Chrysene d12 (%)	82.0	77.5	75.1	73.9	100.1
	Surrogate: Naphthalene d8 (%)	94.9	92.5	89.8	79.9	108.4
	Surrogate: Phenanthrene d10 (%)	97.2	94.6	92.6	83.5	108.1

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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PAGE 6 of 8 25-AUG-18 10:26 (MT) Version: FINAL

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)	
Matrix Spike	Bromide (Br)	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Chloride (CI)	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Sulfate (SO4)	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Sodium (Na)-Total	MS-B	L2148896-1, -2, -3, -4, -5	
Matrix Spike	Strontium (Sr)-Total	MS-B	L2148896-1, -2, -3, -4, -5	

Qualifiers for Individual Parameters Listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
PEHR	Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.

Test Method References:

ALS Test Code	de Matrix Test Description		Method Reference**
ALK-TITR-VA	Seawater	Alkalinity Spec by Titration (Seawater)	APHA 2320 Alkalinity

This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

ANIONS-C-BR-IC-VA Seawater Bromide by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-CL-IC-VA Seawater Chloride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-F-IC-VA Seawater Fluoride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-NO2-IC-VA Seawater Nitrite in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrite is detected by UV absorbance.

ANIONS-C-NO3-IC-VA Seawater Nitrate in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrate is detected by UV absorbance.

ANIONS-C-SO4-IC-VA Seawater Sulfate by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

CARBONS-C-TOC-VA Seawater TOC by combustion (seawater) APHA 5310B TOTAL ORGANIC CARBON (TOC)

This analysis is carried out using procedures adapted from APHA Method 5310 "Total Organic Carbon (TOC)".

EC-C-PCT-VA Seawater Conductivity (Automated) (seawater) APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

eiectroae.

EC-SCREEN-VASeawater Conductivity Screen (Internal Use Only)
APHA 2510
Qualitative analysis of conductivity where required during preparation of other tests - e.g. TDS, metals, etc.

EPH-ME-FID-VA Water EPH in Water BC Lab Manual

EPH is extracted from water using a hexane micro-extraction technique, with analysis by GC-FID, as per the BC Lab Manual. EPH results include PAHs and are therefore not equivalent to LEPH or HEPH.

FCOLI-MF-ENV-VA Water Fecal coliform by membrane filtration APHA METHOD 9222

This analysis is carried out using procedures adapted from APHA Method 9222 "Membrane Filter Technique for Members of the Coliform Group". Coliform bacteria is enumerated by culturing and colony counting. A known sample volume is filtered through a 0.45 micron membrane filter. The test involves an initial 24 hour incubation of the filter with the appropriate growth medium, positive results require further testing (up to an additional 48 hours) to confirm and quantify the total coliform. This method is used for non-turbid water with a low background bacteria level.

HARDNESS-CALC-VA Seawater Hardness APHA 2340B

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Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-DIS-C-CVAFS-VA

Seawater

Diss. Mercury in Seawater by CVAFS

PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by filtration (EPA Method 3005A) and involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

HG-TOT-C-CVAFS-VA

Seawater

Total Mercury in Seawater by CVAFS

PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

LEPH/HEPH-CALC-VA

Water

LEPHs and HEPHs

BC MOE LEPH/HEPH

LEPHw and HEPHw are measures of Light and Heavy Extractable Petroleum Hydrocarbons in water. Results are calculated by subtraction of applicable PAH concentrations from EPH10-19 and EPH19-32, as per the BC Lab Manual LEPH/HEPH calculation procedure. LEPHw = EPH10-19 minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene.

HEPH = EPH19-32 minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

MET-D-L-HRMS-VA

Seawater

Diss. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve laboratory sample filtration based on APHA Method 3030B.

MET-T-L-HRMS-VA

Seawater

Tot. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve preliminary sample treatment by acid digestion based on APHA Method 3030E.

NH3-F-VA

Seawater Ammonia in Seawater by Fluorescence

J. ENVIRON. MONIT., 2005, 7, 37-42, RSC

This analysis is carried out, on sulfuric acid preserved samples, using procedures modified from J. Environ. Monit., 2005, 7, 37 - 42, The Royal Society of Chemistry, "Flow-injection analysis with fluorescence detection for the determination of trace levels of ammonium in seawater", Roslyn J. Waston et al.

PAH-ME-MS-VA

Water

PAHs in Water

EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

DH_C_DCT_VA

Seawater

pH by Meter (Automated) (seawater)

APHA 4500-H pH Value

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

It is recommended that this analysis be conducted in the field.

SALINITY-CALC-VA

Seawate

Salinity by conductivity meter

APHA 2520B

Salinity is determined by the APHA 2520B Electrical Conductivity Method. Salinity is a unitless parameter that is roughly equivalent to grams per Litre. ALS applies the unit of psu (practical salinity unit) to indicate that salinity values are derived from the Practical Salinity Scale.

TKN-C-F-VA

Seawater

TKN in Seawater by Fluorescence

APHA 4500-NORG D.

This analysis is carried out using procedures adapted from APHA Method 4500-Norg D. "Block Digestion and Flow Injection Analysis". Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection.

TSS-C-VA

VA

Seawater

Total Suspended Solids by Gravimetric

APHA 2540 D

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) is determined by filtering a sample through a glass fibre filter. TSS is determined by drying the filter at 104 degrees celsius.

TURBIDITY-C-VA

Seawater

Turbidity by Meter in Seawater

APHA 2130 Turbidity

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code Laboratory Location

ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

Reference Information

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GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

mg/kg - milligrams per kilogram based on dry weight of sample.

mg/kg wwt - milligrams per kilogram based on wet weight of sample.

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



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Client: GOLDER ASSOCIATES LTD.

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Contact: John Sherrin

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EPH-ME-FID-VA	Water							
Batch R4179544								
WG2856364-2 LCS EPH10-19			99.5		%		70-130	22-AUG-18
EPH19-32			97.4		%		70-130	22-AUG-18
WG2856364-1 MB EPH10-19			<0.25		mg/L		0.25	22-AUG-18
EPH19-32			<0.25		mg/L		0.25	22-AUG-18 22-AUG-18
Surrogate: 2-Bromobena	zotrifluoride		107.4		%		60-140	22-AUG-18
_					,,		00 140	22 700 10
FCOLI-MF-ENV-VA	Water							
Batch R4176419 WG2852252-2 MB								
Coliform Bacteria - Feca	al		<1		CFU/100mL		1	17-AUG-18
PAH-ME-MS-VA	Water							
Batch R4179958								
WG2856364-2 LCS								
Acenaphthene			88.3		%		60-130	23-AUG-18
Acenaphthylene			91.5		%		60-130	23-AUG-18
Acridine			87.8		%		60-130	23-AUG-18
Anthracene			98.7		%		60-130	23-AUG-18
Benz(a)anthracene			95.5		%		60-130	23-AUG-18
Benzo(a)pyrene			94.6		%		60-130	23-AUG-18
Benzo(b&j)fluoranthene			83.8		%		60-130	23-AUG-18
Benzo(g,h,i)perylene			90.4		%		60-130	23-AUG-18
Benzo(k)fluoranthene			88.9		%		60-130	23-AUG-18
Chrysene			97.4		%		60-130	23-AUG-18
Dibenz(a,h)anthracene			96.9		%		60-130	23-AUG-18
Fluoranthene			96.8		%		60-130	23-AUG-18
Fluorene			94.0		%		60-130	23-AUG-18
Indeno(1,2,3-c,d)pyrene			95.8		%		60-130	23-AUG-18
1-Methylnaphthalene			84.6		%		60-130	23-AUG-18
2-Methylnaphthalene			87.2		%		60-130	23-AUG-18
Naphthalene			79.4		%		50-130	23-AUG-18
Phenanthrene			97.8		%		60-130	23-AUG-18
Pyrene			98.0		%		60-130	23-AUG-18
Quinoline			74.2		%		60-130	23-AUG-18
WG2856364-1 MB								



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est M	atrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-ME-MS-VA V	Vater							
Batch R4179958								
WG2856364-1 MB			0.000040	,	/I		0.00004	
Acenaphthene			<0.000010		mg/L		0.00001	23-AUG-18
Acenaphthylene			<0.000010		mg/L		0.00001	23-AUG-18
Acridine			<0.000010		mg/L		0.00001	23-AUG-18
Anthracene			<0.000010		mg/L		0.00001	23-AUG-18
Benz(a)anthracene			<0.000010		mg/L		0.00001	23-AUG-18
Benzo(a)pyrene			<0.000005		mg/L		0.000005	23-AUG-18
Benzo(b&j)fluoranthene			<0.000010		mg/L		0.00001	23-AUG-18
Benzo(g,h,i)perylene			<0.000010		mg/L		0.00001	23-AUG-18
Benzo(k)fluoranthene			<0.000010)	mg/L		0.00001	23-AUG-18
Chrysene			<0.000010)	mg/L		0.00001	23-AUG-18
Dibenz(a,h)anthracene			<0.000005	5C	mg/L		0.000005	23-AUG-18
Fluoranthene			<0.000010)	mg/L		0.00001	23-AUG-18
Fluorene			<0.000010)	mg/L		0.00001	23-AUG-18
Indeno(1,2,3-c,d)pyrene			<0.000010)	mg/L		0.00001	23-AUG-18
1-Methylnaphthalene			<0.000050)	mg/L		0.00005	23-AUG-18
2-Methylnaphthalene			<0.000050)	mg/L		0.00005	23-AUG-18
Naphthalene			<0.000050)	mg/L		0.00005	23-AUG-18
Phenanthrene			<0.000020)	mg/L		0.00002	23-AUG-18
Pyrene			<0.000010)	mg/L		0.00001	23-AUG-18
Quinoline			<0.000050)	mg/L		0.00005	23-AUG-18
Surrogate: Acridine d9			99.2		%		60-130	23-AUG-18
Surrogate: Chrysene d12			107.4		%		60-130	23-AUG-18
Surrogate: Naphthalene d8			99.2		%		50-130	23-AUG-18
Surrogate: Phenanthrene d	10		107.2		%		60-130	23-AUG-18
LK-TITR-VA S	eawater							
Batch R4177250								
WG2853043-3 CRM Alkalinity, Total (as CaCO3))	VA-ALK-TITR	100.7		%		85-115	18-AUG-18
WG2853043-5 DUP Alkalinity, Total (as CaCO3))	L2148896-1 89.0	89.8		mg/L	0.9	20	18-AUG-18
WG2853043-1 MB Alkalinity, Total (as CaCO3)		<1.0		mg/L		1	18-AUG-18
NIONS-C-BR-IC-VA S	eawater							



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								. 25 0 0. 10		
Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	
ANIONS-C-BR-IC-VA	4	Seawater								
	78111 DUP		L2148896-1 10.4	10.0		mg/L	4.2	20	17-AUG-18	
WG2853086-2 Bromide (Br)	LCS			99.4		%		85-115	17-AUG-18	
WG2853086-1 Bromide (Br)	МВ			<5.0		mg/L		5	17-AUG-18	
WG2853086-4 Bromide (Br)	MS		L2148896-2	N/A	MS-B	%		-	17-AUG-18	
ANIONS-C-CL-IC-VA	١	Seawater								
Batch R417	78111									
WG2853086-3 Chloride (CI)	DUP		L2148896-1 2950	2960		mg/L	0.3	20	17-AUG-18	
WG2853086-2 Chloride (CI)	LCS			99.6		%		90-110	17-AUG-18	
WG2853086-1 Chloride (CI)	MB			<50		mg/L		50	17-AUG-18	
WG2853086-4 Chloride (CI)	MS		L2148896-2	N/A	MS-B	%		-	17-AUG-18	
ANIONS-C-F-IC-VA		Seawater								
Batch R417	78111									
WG2853086-3 Fluoride (F)	DUP		L2148896-1 <1.0	<1.0	RPD-NA	mg/L	N/A	20	17-AUG-18	
WG2853086-2 Fluoride (F)	LCS			98.9		%		90-110	17-AUG-18	
WG2853086-1 Fluoride (F)	МВ			<1.0		mg/L		1	17-AUG-18	
ANIONS-C-NO2-IC-V	/A	Seawater								
Batch R417	78111									
WG2853086-3 Nitrite (as N)	DUP		L2148896-1 <0.10	<0.10	RPD-NA	mg/L	N/A	20	17-AUG-18	
WG2853086-2 Nitrite (as N)	LCS			99.3		%		90-110	17-AUG-18	
WG2853086-1 Nitrite (as N)	МВ			<0.10		mg/L		0.1	17-AUG-18	
ANIONS-C-NO3-IC-V	/A	Seawater								



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ANIONS-C-NO3-IC-VA	Seawater							
Batch R4178111 WG2853086-3 DUP Nitrate (as N)		L2148896-1 <0.50	<0.50	RPD-NA	mg/L	N/A	20	17-AUG-18
WG2853086-2 LCS Nitrate (as N)			101.5		%		90-110	17-AUG-18
WG2853086-1 MB Nitrate (as N)			<0.50		mg/L		0.5	17-AUG-18
ANIONS-C-SO4-IC-VA	Seawater							
Batch R4178111								
WG2853086-3 DUP Sulfate (SO4)		L2148896-1 396	407		mg/L	2.8	20	17-AUG-18
WG2853086-2 LCS Sulfate (SO4)			100.6		%		90-110	17-AUG-18
WG2853086-1 MB Sulfate (SO4)			<30		mg/L		30	17-AUG-18
WG2853086-4 MS Sulfate (SO4)		L2148896-2	N/A	MS-B	%		-	17-AUG-18
CARBONS-C-TOC-VA	Seawater							
Batch R4176319 WG2853296-1 DUP Total Organic Carbon		L2148896-2 1.12	1.12		mg/L	0.1	20	17-AUG-18
WG2853296-4 LCS Total Organic Carbon			97.9		%		80-120	17-AUG-18
WG2853296-3 MB Total Organic Carbon			<0.50		mg/L		0.5	17-AUG-18
WG2853296-2 MS Total Organic Carbon		L2148896-3	104.7		%		70-130	17-AUG-18
EC-C-PCT-VA	Seawater							
Batch R4177250								
WG2853043-4 CRM Conductivity		VA-EC-PCT-C	ONTROL 99.4		%		90-110	18-AUG-18
WG2853043-5 DUP Conductivity		L2148896-1 9630	9580		uS/cm	0.5	10	18-AUG-18
WG2853043-1 MB Conductivity			<2.0		uS/cm		2	18-AUG-18
HG-DIS-C-CVAFS-VA	Seawater							



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-DIS-C-CVAFS-VA	Seawater							
Batch R4175860 WG2853304-3 DUP Mercury (Hg)-Dissolved		L2148896-2 <0.000010	<0.000010	RPD-NA	mg/L	N/A	20	18-AUG-18
WG2853275-2 LCS Mercury (Hg)-Dissolved			99.95		%		80-120	18-AUG-18
WG2853304-2 LCS Mercury (Hg)-Dissolved			99.96		%		80-120	18-AUG-18
WG2853275-1 MB Mercury (Hg)-Dissolved		LF	<0.000010		mg/L		0.00001	18-AUG-18
WG2853304-1 MB Mercury (Hg)-Dissolved		LF	<0.000010		mg/L		0.00001	18-AUG-18
HG-TOT-C-CVAFS-VA	Seawater							
Batch R4175860 WG2853299-2 LCS Mercury (Hg)-Total			99.96		%		80-120	18-AUG-18
WG2853299-1 MB Mercury (Hg)-Total			<0.000010		mg/L		0.00001	18-AUG-18
MET-D-L-HRMS-VA	Seawater							
Batch R4179695 WG2853500-3 DUP		L2148896-3						
Antimony (Sb)-Dissolved	t	< 0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Arsenic (As)-Dissolved		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	21-AUG-18
Barium (Ba)-Dissolved		0.0047	0.0043		mg/L	8.2	20	21-AUG-18
Beryllium (Be)-Dissolved	d	< 0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Bismuth (Bi)-Dissolved		< 0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Boron (B)-Dissolved		0.70	0.70		mg/L	0.1	20	21-AUG-18
Cadmium (Cd)-Dissolve	d	<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	21-AUG-18
Calcium (Ca)-Dissolved		74.8	77.2		mg/L	3.3	20	21-AUG-18
Cesium (Cs)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Chromium (Cr)-Dissolve	ed	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Cobalt (Co)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	21-AUG-18
Copper (Cu)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Gallium (Ga)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Iron (Fe)-Dissolved		<0.010	<0.010	RPD-NA	mg/L	N/A	20	21-AUG-18
Lead (Pb)-Dissolved		<0.00030	<0.00030	RPD-NA	mg/L	N/A	20	21-AUG-18
Lithium (Li)-Dissolved		0.027	0.027		mg/L	3.4	20	21-AUG-18
Magnesium (Mg)-Dissol	wod	180	183		mg/L	1.9	20	21-AUG-18



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA Seawa	iter						
Batch R4179695							
WG2853500-3 DUP	L2148896-3						
Manganese (Mn)-Dissolved	0.00081	0.00064	J	mg/L	0.00016	0.0004	21-AUG-18
Molybdenum (Mo)-Dissolved	<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	21-AUG-18
Nickel (Ni)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Phosphorus (P)-Dissolved	<0.050	<0.050	RPD-NA	mg/L	N/A	20	21-AUG-18
Potassium (K)-Dissolved	49	52		mg/L	5.1	20	21-AUG-18
Rhenium (Re)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Rubidium (Rb)-Dissolved	0.0172	0.0165		mg/L	4.2	20	21-AUG-18
Selenium (Se)-Dissolved	<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	21-AUG-18
Silicon (Si)-Dissolved	<1.0	<1.0	RPD-NA	mg/L	N/A	20	21-AUG-18
Silver (Ag)-Dissolved	<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	21-AUG-18
Sodium (Na)-Dissolved	1370	1470		mg/L	7.2	20	21-AUG-18
Strontium (Sr)-Dissolved	1.13	1.19		mg/L	5.2	20	21-AUG-18
Sulfur (S)-Dissolved	137	137		mg/L	0.6	20	21-AUG-18
Tellurium (Te)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Thallium (TI)-Dissolved	0.000051	<0.000050	RPD-NA	mg/L	N/A	20	21-AUG-18
Thorium (Th)-Dissolved	< 0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Tin (Sn)-Dissolved	<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	21-AUG-18
Titanium (Ti)-Dissolved	<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	21-AUG-18
Tungsten (W)-Dissolved	<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	21-AUG-18
Uranium (U)-Dissolved	0.00122	0.00112		mg/L	8.5	20	21-AUG-18
Vanadium (V)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Yttrium (Y)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Zirconium (Zr)-Dissolved	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
WG2853500-2 LCS							
Aluminum (Al)-Dissolved		90.0		%		80-120	21-AUG-18
Antimony (Sb)-Dissolved		97.6		%		80-120	21-AUG-18
Arsenic (As)-Dissolved		92.5		%		80-120	21-AUG-18
Barium (Ba)-Dissolved		93.2		%		80-120	21-AUG-18
Beryllium (Be)-Dissolved		90.2		%		80-120	21-AUG-18
Bismuth (Bi)-Dissolved		96.1		%		80-120	21-AUG-18
Boron (B)-Dissolved		94.1		%		80-120	21-AUG-18
Cadmium (Cd)-Dissolved		93.4		%		80-120	21-AUG-18
Calcium (Ca)-Dissolved		101.1		%		80-120	21-AUG-18
Cesium (Cs)-Dissolved		87.0		%		80-120	21-AUG-18



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est Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
IET-D-L-HRMS-VA Seawa	ater						
Batch R4179695							
WG2853500-2 LCS							
Chromium (Cr)-Dissolved		95.6		%		80-120	21-AUG-18
Cobalt (Co)-Dissolved		97.2		%		80-120	21-AUG-18
Copper (Cu)-Dissolved		94.4		%		80-120	21-AUG-18
Gallium (Ga)-Dissolved		94.0		%		80-120	21-AUG-18
Iron (Fe)-Dissolved		94.2		%		80-120	21-AUG-18
Lead (Pb)-Dissolved		101.0		%		80-120	21-AUG-18
Lithium (Li)-Dissolved		87.7		%		80-120	21-AUG-18
Magnesium (Mg)-Dissolved		90.5		%		80-120	21-AUG-18
Manganese (Mn)-Dissolved		93.6		%		80-120	21-AUG-18
Molybdenum (Mo)-Dissolved		87.6		%		80-120	21-AUG-18
Nickel (Ni)-Dissolved		90.6		%		80-120	21-AUG-18
Phosphorus (P)-Dissolved		90.8		%		80-120	21-AUG-18
Potassium (K)-Dissolved		92.0		%		80-120	21-AUG-18
Rhenium (Re)-Dissolved		93.6		%		80-120	21-AUG-18
Rubidium (Rb)-Dissolved		94.6		%		80-120	21-AUG-18
Selenium (Se)-Dissolved		96.6		%		80-120	21-AUG-18
Silicon (Si)-Dissolved		98.0		%		80-120	21-AUG-18
Silver (Ag)-Dissolved		85.8		%		80-120	21-AUG-18
Sodium (Na)-Dissolved		104.4		%		80-120	21-AUG-18
Strontium (Sr)-Dissolved		94.4		%		80-120	21-AUG-18
Sulfur (S)-Dissolved		98.2		%		80-120	21-AUG-18
Tellurium (Te)-Dissolved		95.8		%		80-120	21-AUG-18
Thallium (TI)-Dissolved		95.5		%		80-120	21-AUG-18
Thorium (Th)-Dissolved		104.0		%		80-120	21-AUG-18
Tin (Sn)-Dissolved		95.4		%		80-120	21-AUG-18
Titanium (Ti)-Dissolved		91.6		%		80-120	21-AUG-18
Tungsten (W)-Dissolved		90.6		%		80-120	21-AUG-18
Uranium (U)-Dissolved		96.8		%		80-120	21-AUG-18
Vanadium (V)-Dissolved		95.8		%		80-120	21-AUG-18
Yttrium (Y)-Dissolved		91.0		%		80-120	21-AUG-18
Zinc (Zn)-Dissolved		95.4		%		80-120	21-AUG-18
Zirconium (Zr)-Dissolved		91.3		%		80-120	21-AUG-18
WG2853500-1 MB	LF						
Aluminum (Al)-Dissolved		< 0.0050		mg/L		0.005	21-AUG-18



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MET-D-L-HRMS-VA Seawater				RPD	Limit	Analyzed
Batch R4179695						
WG2853500-1 MB	LF		_			
Antimony (Sb)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Arsenic (As)-Dissolved		<0.0020	mg/L		0.002	21-AUG-18
Barium (Ba)-Dissolved		<0.0010	mg/L		0.001	21-AUG-18
Beryllium (Be)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Bismuth (Bi)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Boron (B)-Dissolved		<0.10	mg/L		0.1	21-AUG-18
Cadmium (Cd)-Dissolved		<0.000050	mg/L		0.00005	21-AUG-18
Cesium (Cs)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Chromium (Cr)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Cobalt (Co)-Dissolved		<0.000050	mg/L		0.00005	21-AUG-18
Copper (Cu)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Gallium (Ga)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Iron (Fe)-Dissolved		<0.010	mg/L		0.01	21-AUG-18
Lead (Pb)-Dissolved		<0.00030	mg/L		0.0003	21-AUG-18
Lithium (Li)-Dissolved		<0.020	mg/L		0.02	21-AUG-18
Magnesium (Mg)-Dissolved		<1.0	mg/L		1	21-AUG-18
Manganese (Mn)-Dissolved		<0.00020	mg/L		0.0002	21-AUG-18
Molybdenum (Mo)-Dissolved		<0.0020	mg/L		0.002	21-AUG-18
Nickel (Ni)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Phosphorus (P)-Dissolved		<0.050	mg/L		0.05	21-AUG-18
Rhenium (Re)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Rubidium (Rb)-Dissolved		<0.0050	mg/L		0.005	21-AUG-18
Selenium (Se)-Dissolved		<0.0020	mg/L		0.002	21-AUG-18
Silicon (Si)-Dissolved		<1.0	mg/L		1	21-AUG-18
Silver (Ag)-Dissolved		<0.00010	mg/L		0.0001	21-AUG-18
Strontium (Sr)-Dissolved		<0.010	mg/L		0.01	21-AUG-18
Sulfur (S)-Dissolved		<5.0	mg/L		5	21-AUG-18
Tellurium (Te)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Thorium (Th)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18
Tin (Sn)-Dissolved		<0.0010	mg/L		0.001	21-AUG-18
Titanium (Ti)-Dissolved		<0.0050	mg/L		0.005	21-AUG-18
Tungsten (W)-Dissolved		<0.0010	mg/L		0.001	21-AUG-18
Uranium (U)-Dissolved		<0.000050	mg/L		0.00005	21-AUG-18
Vanadium (V)-Dissolved		<0.00050	mg/L		0.0005	21-AUG-18



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA Seawater							
Batch R4179695							
WG2853500-1 MB	LF			,,			
Yttrium (Y)-Dissolved		<0.00050		mg/L		0.0005	21-AUG-18
Zinc (Zn)-Dissolved		<0.0030		mg/L		0.003	21-AUG-18
Zirconium (Zr)-Dissolved		<0.00050		mg/L		0.0005	21-AUG-18
WG2853500-4 MS Aluminum (Al)-Dissolved	L2148896-1	92.9		%		70-130	24 ALIC 49
Antimony (Sb)-Dissolved		100.7		%		70-130 70-130	21-AUG-18 21-AUG-18
Arsenic (As)-Dissolved		92.8		%		70-130	21-AUG-18 21-AUG-18
Barium (Ba)-Dissolved		93.2		%		70-130 70-130	21-AUG-18 21-AUG-18
Beryllium (Be)-Dissolved		95.6		%		70-130 70-130	21-AUG-18 21-AUG-18
Bismuth (Bi)-Dissolved		84.8		%		70-130	21-AUG-18 21-AUG-18
Boron (B)-Dissolved		99.5		%		70-130 70-130	21-AUG-18 21-AUG-18
Cadmium (Cd)-Dissolved		90.2		%		70-130	21-AUG-18 21-AUG-18
Calcium (Ca)-Dissolved		98.3		%		70-130	21-AUG-18 21-AUG-18
Cesium (Cs)-Dissolved		93.5		%		70-130	21-AUG-18 21-AUG-18
Chromium (Cr)-Dissolved		90.0		%		70-130	21-AUG-18 21-AUG-18
Cobalt (Co)-Dissolved		91.8		%		70-130	21-AUG-18
Copper (Cu)-Dissolved		85.0		%		70-130	21-AUG-18 21-AUG-18
Gallium (Ga)-Dissolved		90.8		%		70-130	21-AUG-18
Iron (Fe)-Dissolved		85.9		%		70-130	21-AUG-18
Lead (Pb)-Dissolved		85.2		%		70-130	21-AUG-18
Lithium (Li)-Dissolved		96.1		%		70-130	21-AUG-18
Magnesium (Mg)-Dissolved		N/A	MS-B	%		-	21-AUG-18
Manganese (Mn)-Dissolved		90.1		%		70-130	21-AUG-18
Molybdenum (Mo)-Dissolved		97.4		%		70-130	21-AUG-18
Nickel (Ni)-Dissolved		85.9		%		70-130	21-AUG-18
Phosphorus (P)-Dissolved		92.5		%		70-130	21-AUG-18
Potassium (K)-Dissolved		85.9		%		70-130	21-AUG-18
Rhenium (Re)-Dissolved		92.6		%		70-130	21-AUG-18
Rubidium (Rb)-Dissolved		101.8		%		70-130	21-AUG-18
Selenium (Se)-Dissolved		97.4		%		70-130	21-AUG-18
Silver (Ag)-Dissolved		86.8		%		70-130	21-AUG-18
Sodium (Na)-Dissolved		N/A	MS-B	%		-	21-AUG-18
Strontium (Sr)-Dissolved		N/A	MS-B	%		-	21-AUG-18
Tellurium (Te)-Dissolved		97.6	=	%		70-130	21-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R417	79695							
	MS	L2148896-1						
Thallium (TI)-Diss			85.7		%		70-130	21-AUG-18
Thorium (Th)-Diss			100.4		%		70-130	21-AUG-18
Tin (Sn)-Dissolve			94.0		%		70-130	21-AUG-18
Titanium (Ti)-Diss	solved		96.0		%		70-130	21-AUG-18
Tungsten (W)-Dis			93.8		%		70-130	21-AUG-18
Uranium (U)-Diss	olved		96.0		%		70-130	21-AUG-18
Vanadium (V)-Dis	ssolved		94.4		%		70-130	21-AUG-18
Yttrium (Y)-Dissol	lved		96.5		%		70-130	21-AUG-18
Zinc (Zn)-Dissolve	ed		86.0		%		70-130	21-AUG-18
Zirconium (Zr)-Dis	ssolved		97.8		%		70-130	21-AUG-18
Batch R418	81660							
	DUP	L2148896-3			_			
Aluminum (Al)-Dis		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	22-AUG-18
Zinc (Zn)-Dissolve	ed	<0.0030	<0.0030	RPD-NA	mg/L	N/A	20	22-AUG-18
WG2853500-1 Calcium (Ca)-Diss	MB solved	LF	<1.0		ma/l		4	00 4110 40
					mg/L		1	22-AUG-18
Potassium (K)-Dis			<1.0		mg/L		1	22-AUG-18
Sodium (Na)-Diss			<1.0		mg/L		1	22-AUG-18
Thallium (TI)-Diss	solved		<0.000050		mg/L		0.00005	22-AUG-18
MET-T-L-HRMS-VA	Seawater							
	79695							
WG2854102-3 Aluminum (Al)-To	DUP otal	L2148896-2 0.0129	0.0150		mg/L	15	20	21-AUG-18
Antimony (Sb)-To		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Arsenic (As)-Tota		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	21-AUG-18
Barium (Ba)-Tota		0.0046	0.0047	11. 2 10.1	mg/L	2.4	20	21-AUG-18
Beryllium (Be)-To		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Bismuth (Bi)-Tota		< 0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Boron (B)-Total	•	0.76	0.70	111 2 1471	mg/L	7.8	20	21-AUG-18
Cadmium (Cd)-To	otal	<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	21-AUG-18
Calcium (Ca)-Tota		86.0	81.4	III D-IIA	mg/L	5.4	20	21-AUG-18 21-AUG-18
Cesium (Cs)-Tota		<0.00050	<0.00050	RPD-NA	mg/L	5.4 N/A	20	21-AUG-18 21-AUG-18
Chromium (Cr)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A N/A	20	
Cobalt (Co)-Total		<0.00050	<0.00050					21-AUG-18
				=	mg/L	N/A	20	21-AUG-18
Copper (Cu)-Tota	li .	<0.00050	0.00065	RPD-NA	mg/L	N/A	20	21-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4179695								
WG2854102-3 DUP		L2148896-2						
Gallium (Ga)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Iron (Fe)-Total		0.018	0.018		mg/L	3.3	20	21-AUG-18
Lead (Pb)-Total		<0.00030	<0.00030	RPD-NA	mg/L	N/A	20	21-AUG-18
Lithium (Li)-Total		0.030	0.029		mg/L	3.8	20	21-AUG-18
Magnesium (Mg)-Total		189	208		mg/L	9.6	20	21-AUG-18
Manganese (Mn)-Total		0.00094	0.00103		mg/L	9.2	20	21-AUG-18
Molybdenum (Mo)-Total		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	21-AUG-18
Nickel (Ni)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Phosphorus (P)-Total		<0.050	<0.050	RPD-NA	mg/L	N/A	20	21-AUG-18
Potassium (K)-Total		58.0	54.1		mg/L	6.9	20	21-AUG-18
Rhenium (Re)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Rubidium (Rb)-Total		0.0184	0.0173		mg/L	6.2	20	21-AUG-18
Selenium (Se)-Total		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	21-AUG-18
Silicon (Si)-Total		<1.0	<1.0	RPD-NA	mg/L	N/A	25	21-AUG-18
Silver (Ag)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	21-AUG-18
Sodium (Na)-Total		1590	1530		mg/L	3.3	20	21-AUG-18
Strontium (Sr)-Total		1.20	1.20		mg/L	0.2	20	21-AUG-18
Sulfur (S)-Total		142	159		mg/L	11	25	21-AUG-18
Tellurium (Te)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Thallium (TI)-Total		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	21-AUG-18
Thorium (Th)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Tin (Sn)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	21-AUG-18
Titanium (Ti)-Total		<0.0050	< 0.0050	RPD-NA	mg/L	N/A	20	21-AUG-18
Tungsten (W)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	21-AUG-18
Uranium (U)-Total		0.00124	0.00128		mg/L	3.2	20	21-AUG-18
Vanadium (V)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Yttrium (Y)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
Zinc (Zn)-Total		<0.0030	<0.0030	RPD-NA	mg/L	N/A	20	21-AUG-18
Zirconium (Zr)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	21-AUG-18
WG2854102-2 LCS Aluminum (Al)-Total			93.3		%		80-120	21-AUG-18
Antimony (Sb)-Total			99.6		%		80-120	21-AUG-18
Arsenic (As)-Total			99.2		%		80-120	21-AUG-18
Barium (Ba)-Total			94.8		%		80-120	21-AUG-18
(-,							00 120	



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4179695								
WG2854102-2 LCS Beryllium (Be)-Total			00.5		0/			
, ,			88.5 98.2		%		80-120	21-AUG-18
Bismuth (Bi)-Total Boron (B)-Total			96.2		%		80-120	21-AUG-18
							80-120	21-AUG-18
Cadmium (Cd)-Total			91.7		%		80-120	21-AUG-18
Calcium (Ca)-Total			97.8		%		80-120	21-AUG-18
Cesium (Cs)-Total			89.2		%		80-120	21-AUG-18
Chromium (Cr)-Total			95.2		%		80-120	21-AUG-18
Cobalt (Co)-Total			94.0		%		80-120	21-AUG-18
Copper (Cu)-Total			94.4		%		80-120	21-AUG-18
Gallium (Ga)-Total			99.2		%		80-120	21-AUG-18
Iron (Fe)-Total			102.1		%		80-120	21-AUG-18
Lead (Pb)-Total			105.2		%		80-120	21-AUG-18
Lithium (Li)-Total			89.8		%		80-120	21-AUG-18
Magnesium (Mg)-Total			100.9		%		80-120	21-AUG-18
Manganese (Mn)-Total			100.0		%		80-120	21-AUG-18
Molybdenum (Mo)-Total			88.0		%		80-120	21-AUG-18
Nickel (Ni)-Total			96.6		%		80-120	21-AUG-18
Phosphorus (P)-Total			96.4		%		80-120	21-AUG-18
Potassium (K)-Total			91.0		%		80-120	21-AUG-18
Rhenium (Re)-Total			95.9		%		80-120	21-AUG-18
Rubidium (Rb)-Total			93.1		%		80-120	21-AUG-18
Selenium (Se)-Total			95.1		%		80-120	21-AUG-18
Silicon (Si)-Total			106.1		%		80-120	21-AUG-18
Silver (Ag)-Total			89.2		%		80-120	21-AUG-18
Sodium (Na)-Total			97.6		%		80-120	21-AUG-18
Strontium (Sr)-Total			90.0		%		80-120	21-AUG-18
Sulfur (S)-Total			106.1		%		70-130	21-AUG-18
Tellurium (Te)-Total			93.7		%		80-120	21-AUG-18
Thallium (TI)-Total			98.7		%		80-120	21-AUG-18
Thorium (Th)-Total			105.0		%		80-120	21-AUG-18
Tin (Sn)-Total			92.6		%		80-120	21-AUG-18
Titanium (Ti)-Total			100.8		%		80-120	21-AUG-18
Tungsten (W)-Total			95.1		%		80-120	21-AUG-18
Uranium (U)-Total			97.8		%		80-120	21-AUG-18
` '			-					2.7.00 10



Workorder: L2148896 Report Date: 25-AUG-18 Page 13 of 18

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4179695								
WG2854102-2 LCS			100.4		%		00.400	04 4110 40
Vanadium (V)-Total			89.1		%		80-120	21-AUG-18
Yttrium (Y)-Total			95.4		%		80-120	21-AUG-18
Zinc (Zn)-Total Zirconium (Zr)-Total					%		80-120	21-AUG-18
,			87.0		%		80-120	21-AUG-18
WG2854102-1 MB Aluminum (Al)-Total			<0.0050		mg/L		0.005	21-AUG-18
Antimony (Sb)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Arsenic (As)-Total			<0.0020		mg/L		0.002	21-AUG-18
Barium (Ba)-Total			<0.0010		mg/L		0.001	21-AUG-18
Beryllium (Be)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Bismuth (Bi)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Boron (B)-Total			<0.10		mg/L		0.1	21-AUG-18
Cadmium (Cd)-Total			<0.000050)	mg/L		0.00005	21-AUG-18
Calcium (Ca)-Total			<1.0		mg/L		1	21-AUG-18
Cesium (Cs)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Chromium (Cr)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Cobalt (Co)-Total			<0.000050	1	mg/L		0.00005	21-AUG-18
Copper (Cu)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Gallium (Ga)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Iron (Fe)-Total			<0.010		mg/L		0.01	21-AUG-18
Lead (Pb)-Total			<0.00030		mg/L		0.0003	21-AUG-18
Lithium (Li)-Total			<0.020		mg/L		0.02	21-AUG-18
Magnesium (Mg)-Total			<1.0		mg/L		1	21-AUG-18
Manganese (Mn)-Total			<0.00020		mg/L		0.0002	21-AUG-18
Molybdenum (Mo)-Total			<0.0020		mg/L		0.002	21-AUG-18
Nickel (Ni)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Phosphorus (P)-Total			< 0.050		mg/L		0.05	21-AUG-18
Potassium (K)-Total			<1.0		mg/L		1	21-AUG-18
Rhenium (Re)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Rubidium (Rb)-Total			<0.0050		mg/L		0.005	21-AUG-18
Selenium (Se)-Total			<0.0020		mg/L		0.002	21-AUG-18
Silicon (Si)-Total			<1.0		mg/L		1	21-AUG-18
Silver (Ag)-Total			<0.00010		mg/L		0.0001	21-AUG-18
Sodium (Na)-Total			<1.0		mg/L		1	21-AUG-18



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METT-L-HRMS-VA Seawater Batch R417895 MC285402-1 MB Sirontium (Sr)-Total <0.010 mg/L 0.01 21-AUG-18 Solfur (S)-Total <0.0005 21-AUG-18 <0.00050 mg/L 0.0005 21-AUG-18 Tellurium (Te)-Total <0.00050 mg/L 0.0005 21-AUG-18 <0.00050 mg/L 0.0005 21-AUG-18 <0.00050 mg/L 0.00050 21-AUG-18 <0.00050 mg/L 0.0005 21-AUG-18 <0.00050 mg/L 0.00050 21-AUG-18 <0.00050 mg/L 0.00050 21-AUG-18 <0.00050 mg/L 0.00050 21-AUG-18 <0.00050 mg/L 0.00050 21-AUG-18 <0.00050 21-AUG-18 <0.000	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
No. No.	MET-T-L-HRMS-VA	Seawater							
Strontum (Sr)-Total <.0.010	Batch R4179695								
Sulfur (S)-Total				0.040		/I		0.04	
Tellurium (Te)-Total						•			
Thallium (TI)-Total <0.000050									
Thorium (Th)-Total					2	-			
Tin (Sn)-Total	` '				J	•			
Titanium (Ti)-Total <0.0050	` '					•			
Tungsten (W)-Total <0.0010						•			
Uranium (U)-Total <0.000050									
Vanadium (V)-Total <0.00050					_	•			
Yttrium (Y)-Total <0.00050 mg/L 0.0005 21-AL/G-18 Zinc (Zn)-Total <0.0030	, ,				0				
Zinc (Zn)-Total <0.0030 mg/L 0.003 21-AUG-18 Zirconium (Zr)-Total <0.00050 mg/L 0.0005 21-AUG-18 WG2854102-4 MS L2148896-1 89.8 % 70-130 21-AUG-18 Aluminum (Al)-Total 89.8 % 70-130 21-AUG-18 Antimony (Sb)-Total 97.7 % 70-130 21-AUG-18 Arsenic (As)-Total 91.3 % 70-130 21-AUG-18 Barjum (Ba)-Total 95.7 % 70-130 21-AUG-18 Beryllium (Be)-Total 94.6 % 70-130 21-AUG-18 Bismuth (Bi)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 90.5 % 70-130 21-AUG-18 Cadium (Cd)-Total 90.5 % 70-130 21-AUG-18 Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Copper (Cu)-Total 86.4 % <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>21-AUG-18</td>						-			21-AUG-18
Zirconium (Zr)-Total						•		0.0005	
WG2854102-4 MS L2148896-1 Aluminum (Al)-Total 89.8 % 70-130 21-AUG-18 Antimony (Sb)-Total 97.7 % 70-130 21-AUG-18 Arsenic (As)-Total 91.3 % 70-130 21-AUG-18 Barium (Ba)-Total 95.7 % 70-130 21-AUG-18 Beryllium (Be)-Total 94.6 % 70-130 21-AUG-18 Bismuth (Bi)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total <td></td> <td></td> <td></td> <td><0.0030</td> <td></td> <td>•</td> <td></td> <td>0.003</td> <td>21-AUG-18</td>				<0.0030		•		0.003	21-AUG-18
Aluminum (Al)-Total 89.8 % 70-130 21-AUG-18 Antimony (Sb)-Total 97.7 % 70-130 21-AUG-18 Arsenic (As)-Total 91.3 % 70-130 21-AUG-18 Barium (Ba)-Total 95.7 % 70-130 21-AUG-18 Beryllium (Be)-Total 94.6 % 70-130 21-AUG-18 Bismuth (Bj)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (CS)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-1	Zirconium (Zr)-Total			<0.00050		mg/L		0.0005	21-AUG-18
Antimony (Sb)-Total 97.7 % 70-130 21-AUG-18 Arsenic (As)-Total 91.3 % 70-130 21-AUG-18 Barium (Ba)-Total 95.7 % 70-130 21-AUG-18 Beryllium (Be)-Total 94.6 % 70-130 21-AUG-18 Bismuth (Bi)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Casium (Cs)-Total 99.6 % 70-130 21-AUG-18 Chromium (Cr)-Total 99.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % 70-130 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18			L2148896-1	90.9		0/		70.400	24 ALIC 40
Arsenic (As)-Total 91.3 % 70-130 21-AUG-18 Barium (Ba)-Total 95.7 % 70-130 21-AUG-18 Beryllium (Be)-Total 94.6 % 70-130 21-AUG-18 Bismuth (Bi)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cs)-Total 99.6 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Chobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total 88.6 % 70-130 21-AUG-18 Magnesium (Mg)-Total 88.6 % 70-130 21-AUG-18 Magnesium (Mg)-Total 88.6 % 70-130 21-AUG-18									
Barium (Ba)-Total 95.7 % 70-130 21-AUG-18 Beryllium (Be)-Total 94.6 % 70-130 21-AUG-18 Bismuth (Bi)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cy)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % 70-130				-					
Beryllium (Be)-Total 94.6 % 70-130 21-AUG-18 Bismuth (Bi)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % 70-130 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130									
Bismuth (Bi)-Total 89.9 % 70-130 21-AUG-18 Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % 70-130 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	` '								
Boron (B)-Total 101.6 % 70-130 21-AUG-18 Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % 70-130 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	, ,								
Cadmium (Cd)-Total 90.5 % 70-130 21-AUG-18 Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % 70-130 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	` ,								
Calcium (Ca)-Total 99.6 % 70-130 21-AUG-18 Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	,								
Cesium (Cs)-Total 97.9 % 70-130 21-AUG-18 Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18									
Chromium (Cr)-Total 90.4 % 70-130 21-AUG-18 Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	, ,								
Cobalt (Co)-Total 86.4 % 70-130 21-AUG-18 Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18									
Copper (Cu)-Total 83.4 % 70-130 21-AUG-18 Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18									
Gallium (Ga)-Total 87.4 % 70-130 21-AUG-18 Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18								70-130	21-AUG-18
Iron (Fe)-Total 87.4 % 70-130 21-AUG-18 Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	,								
Lead (Pb)-Total 91.8 % 70-130 21-AUG-18 Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18								70-130	21-AUG-18
Lithium (Li)-Total 98.5 % 70-130 21-AUG-18 Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18								70-130	21-AUG-18
Magnesium (Mg)-Total N/A MS-B % - 21-AUG-18 Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	,							70-130	
Manganese (Mn)-Total 88.6 % 70-130 21-AUG-18	Lithium (Li)-Total			98.5		%		70-130	21-AUG-18
	Magnesium (Mg)-Total			N/A	MS-E	3 %		-	21-AUG-18
Molybdenum (Mo)-Total 105.4 % 70-130 21-AUG-18	Manganese (Mn)-Total			88.6		%		70-130	21-AUG-18
7.00	Molybdenum (Mo)-Total			105.4		%		70-130	21-AUG-18



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lest lest	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4179695								
WG2854102-4 MS		L2148896-1	0.4.0		0.4			
Nickel (Ni)-Total			84.9		%		70-130	21-AUG-18
Phosphorus (P)-Total			88.9		%		70-130	21-AUG-18
Potassium (K)-Total			84.8		%		70-130	21-AUG-18
Rhenium (Re)-Total			101.4		%		70-130	21-AUG-18
Rubidium (Rb)-Total			103.7		%		70-130	21-AUG-18
Selenium (Se)-Total			93.4		%		70-130	21-AUG-18
Silver (Ag)-Total			88.2		%		70-130	21-AUG-18
Sodium (Na)-Total			N/A	MS-B	%		-	21-AUG-18
Strontium (Sr)-Total			N/A	MS-B	%		-	21-AUG-18
Tellurium (Te)-Total			98.3		%		70-130	21-AUG-18
Thallium (TI)-Total			91.9		%		70-130	21-AUG-18
Thorium (Th)-Total			105.2		%		70-130	21-AUG-18
Tin (Sn)-Total			93.5		%		70-130	21-AUG-18
Titanium (Ti)-Total			90.5		%		70-130	21-AUG-18
Tungsten (W)-Total			102.0		%		70-130	21-AUG-18
Uranium (U)-Total			101.8		%		70-130	21-AUG-18
Vanadium (V)-Total			91.0		%		70-130	21-AUG-18
Yttrium (Y)-Total			97.5		%		70-130	21-AUG-18
Zinc (Zn)-Total			84.9		%		70-130	21-AUG-18
Zirconium (Zr)-Total			97.8		%		70-130	21-AUG-18
NH3-F-VA	Seawater							
Batch R4176871								
WG2853509-3 DUP		L2148896-1						
Ammonia, Total (as N)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	20-AUG-18
WG2853509-2 LCS Ammonia, Total (as N)			96.7		%		85-115	20-AUG-18
WG2853509-6 LCS Ammonia, Total (as N)			92.7		%		85-115	20-AUG-18
WG2853509-1 MB Ammonia, Total (as N)			<0.0050		mg/L		0.005	20-AUG-18
WG2853509-5 MB Ammonia, Total (as N)			<0.0050		mg/L		0.005	20-AUG-18
WG2853509-4 MS Ammonia, Total (as N)		L2148896-1	95.8		%		75-125	20-AUG-18
PH-C-PCT-VA	Seawater							



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PH-C-PCT-VA	Seawater							
Batch R4177250								
WG2853043-2 CRM pH		VA-PH7-BUF	7.01		рН		6.9-7.1	18-AUG-18
•			7.01		рп		6.9-7.1	18-AUG-18
WG2853043-5 DUP pH		L2148896-1 8.08	8.08	J	рН	0.00	0.3	18-AUG-18
TKN-C-F-VA	Seawater							
Batch R4178851								
WG2854704-3 DUP		L2148896-1						
Total Kjeldahl Nitrogen		0.129	0.135		mg/L	4.0	20	21-AUG-18
WG2854704-2 LCS Total Kjeldahl Nitrogen			106.6		%		75-125	21-AUG-18
WG2854704-1 MB Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	21-AUG-18
WG2854704-4 MS Total Kjeldahl Nitrogen		L2148896-2	111.8		%		70-130	21-AUG-18
Batch R4180759								
WG2855926-2 LCS Total Kjeldahl Nitrogen			102.2		%		75-125	22-AUG-18
WG2855926-1 MB Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	22-AUG-18
TSS-C-VA	Seawater				•			
Batch R4179085								
WG2854839-2 LCS								
Total Suspended Solids			89.3		%		85-115	20-AUG-18
WG2854839-1 MB								
Total Suspended Solids			<2.0		mg/L		2	20-AUG-18
TURBIDITY-C-VA	Seawater							
Batch R4175815								
WG2853256-2 CRM Turbidity		VA-FORM-40	100.5		%		85-115	18-AUG-18
WG2853256-1 MB Turbidity			<0.10		NTU		0.1	18-AUG-18

Workorder: L2148896 Report Date: 25-AUG-18 Page 17 of 18

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Workorder: L2148896 Report Date: 25-AUG-18 Page 18 of 18

Hold Time Exceedances:

	Sample						
ALS Product Description	ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Turbidity by Meter in Seaw	ater						
	1	14-AUG-18	18-AUG-18 01:00	3	4	days	EHTL
	2	14-AUG-18	18-AUG-18 01:00	3	4	days	EHTL
	3	14-AUG-18	18-AUG-18 01:00	3	4	days	EHTL
	4	14-AUG-18	18-AUG-18 01:00	3	4	days	EHTL
	5	14-AUG-18	18-AUG-18 01:00	3	4	days	EHTL
pH by Meter (Automated) (seawater)						
	1	14-AUG-18	18-AUG-18 09:06	0.25	93	hours	EHTR-FM
	2	14-AUG-18	18-AUG-18 09:06	0.25	93	hours	EHTR-FM
	3	14-AUG-18	18-AUG-18 09:06	0.25	93	hours	EHTR-FM
	4	14-AUG-18	18-AUG-18 09:06	0.25	93	hours	EHTR-FM
	5	14-AUG-18	18-AUG-18 09:06	0.25	93	hours	EHTR-FM
Bacteriological Tests							
Fecal coliform by membrar	ne filtration						
	1	14-AUG-18	17-AUG-18 12:35	30	72	hours	EHTR
	2	14-AUG-18	17-AUG-18 12:35	30	72	hours	EHTR
	3	14-AUG-18	17-AUG-18 12:35	30	72	hours	EHTR
	4	14-AUG-18	17-AUG-18 12:35	30	72	hours	EHTR
	5	14-AUG-18	17-AUG-18 12:35	30	72	hours	EHTR

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Notes*:

Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes. Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2148896 were received on 17-AUG-18 09:45.

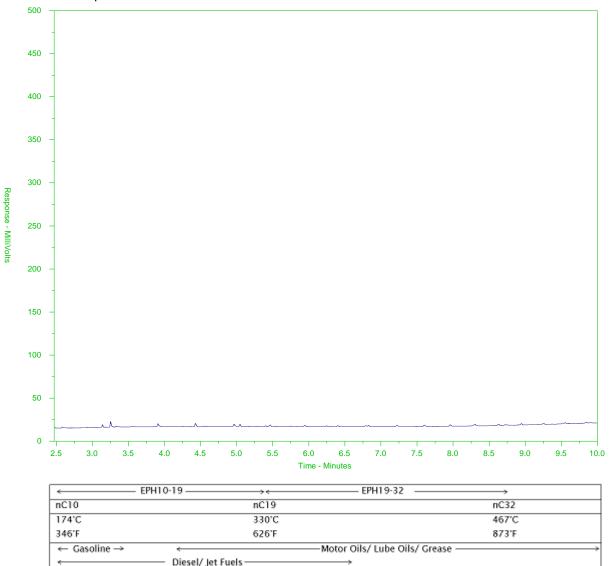
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



ALS Sample ID: L2148896-1 Client Sample ID: SOURCE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

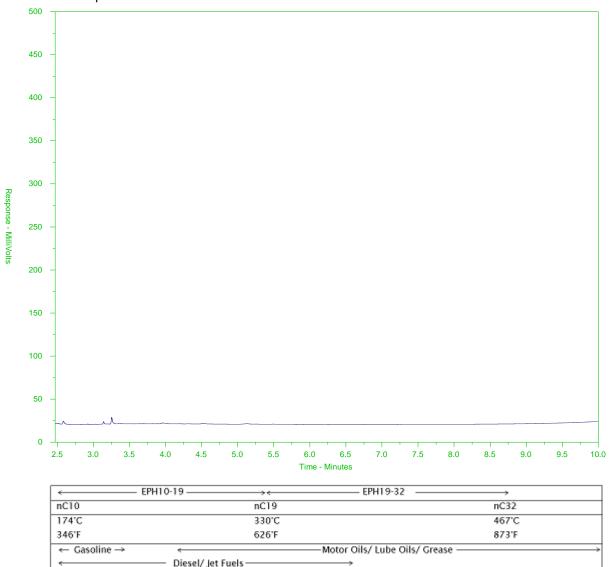
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148896-2 Client Sample ID: WNW



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

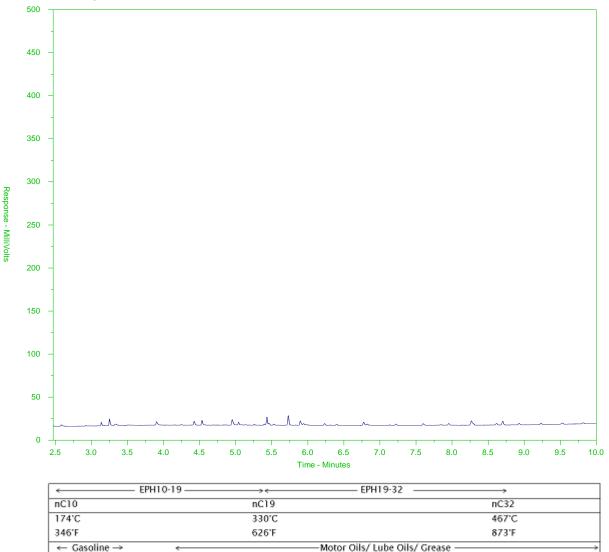
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148896-3 Client Sample ID: NORTH



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

Diesel/ Jet Fuels

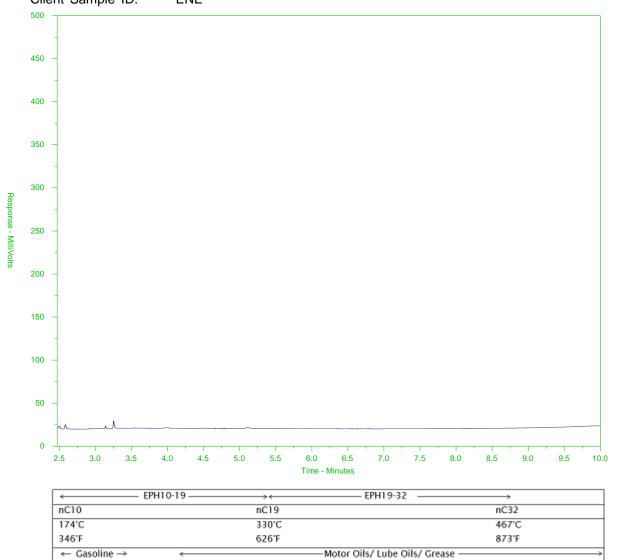
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148896-4 Client Sample ID: ENE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

Diesel/ Jet Fuels

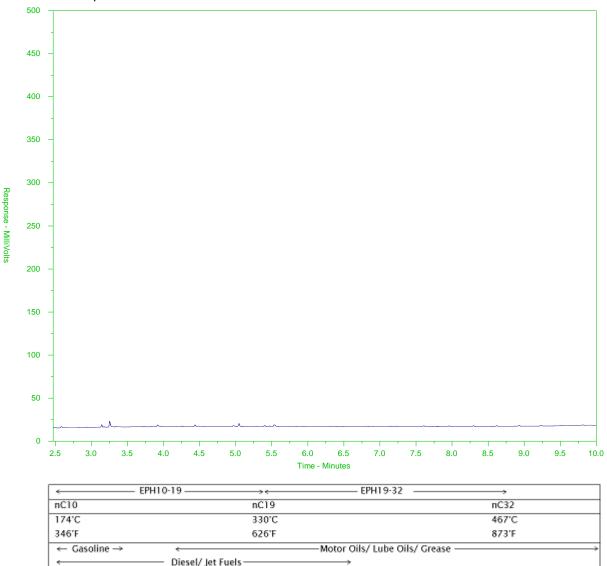
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148896-5 Client Sample ID: DUP-B



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



COC Number: 15 - xxxxxx

Canada Toll Free: 1 800 668 9878

	www.alsglobal.com																	
Report To	Contact and company name below will appear on the final report		Report Format	/ Distribution		Select Service	e Level B	elow - Pl	ease con	firm all E	&P TAT	s with y	our AM	- surcha	rges will	apply		
Company:	Golder Associatex Ltd.	Select Report F	ormat: 🖸 PDF 🕻	EXCEL DED	D (DIGITAL)		Re	gular	[R] [☑ Stand	ard TA	T if rec	eived b	y 3 pm	- busine	ss days -	- no surcha	arges apply
Contact:	John Sherrin / Arman Ospan	Quality Control	(QC) Report with R	eport 🛛 YES	□ NO	Y lays)	4	day [F	·4]			Շ	1	Busin	ness da	ıy [E1]		
Phone:	1 (250) 881 7372	Compare Result	s to Criteria on Report -	provide details belo	w if box checked	PRIORITY Isiness Day:	3	day [F	'3]			MERGENCY	5	Same !	Day, W	/eeken	ıd or	
	Company address below will appear on the final report	Select Distribut	ion: 🖸 EMAIL	MAIL	AX	PR (Busin	2	day [F	2]			EME			tory ho			
Street:	2nd floor 3795 Carey Rd.	Email 1 or Fax	jsherrin@golder.co	om		D	ate and	Time Re	equired	for all E	&P TA	Ts:		$\overline{}$				
City/Province:	Victoria BC	Email 2	aospan@golder.co	om		For tests that	can not b	e perfor	med acco	ording to	the serv	rice leve	l select	ed, you	will be cc	ntacted.		
Postal Code:	V8Z 6T8	Email 3					Analysis Request											
Invoice To	Same as Report To ☑ YES ☐ NO		Invoice Dis	tribution			Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below											
	Copy of Invoice with Report ☐ YES ☑ NO	Select Invoice D	Distribution: 🛛 EMA	IL MAIL [FAX		Р		Р		Р	Р	Р					1
Company:		Email 1 or Fax			· · · · · · · · · · · · · · · · · · ·									\neg			\top	1 '
Contact:		Email 2	mail 2				ł							ı I				φ
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ALS Lab Wor	rk Order # (lab use only)	ALS Contact: Sampler:			General (pH, All	Ammonia,	Dissolved Metals	Total Metals	Dissolved Mercury	Total Mercury	Hydrocarbons (I	Coliforms					ž	
ALS Sample #	Sample Identification and/or Coordinates		Date	Time	T	eral		olve	ž	olve	ğ	Loca	al C	.		- [
(lab use only)	(This description will appear on the report)		(dd-mmm-yy)	(hh:mm)	Sample Type	Sen	TOC,	Diss	Tota	SsiC	Fota	1yd	Fecal					
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	ENE		14-AUG-18		Seawater	X	X	X	X	X	$\frac{\checkmark}{}$	×	$\hat{\mathbf{x}}$	\dashv	+	-	+-	9
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	SHIPMENT RELEASE (client use)		INITIAL SHIPME		N (lab use only)					_	AL SI	ПРМ					se only)	
Released by:	Date: 14-Aug-18 IS:00	Received by:		Date:		Time:		Recei	ved by	4.	1	(Date	AUG	172	018	945A

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.



GOLDER ASSOCIATES LTD.

ATTN: John Sherrin / Arman Ospan 3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Date Received: 24-AUG-18

Report Date: 31-AUG-18 15:10 (MT)

Version: FINAL

Client Phone: 250-881-7372

Certificate of Analysis

Lab Work Order #: L2152840
Project P.O. #: NOT SUBMITTED
Job Reference: 1663724/14000/3

C of C Numbers: Legal Site Desc:

ambu Springer

Amber Springer, B.Sc Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700 ALS CANADA LTD Part of the ALS Group An ALS Limited Company



L2152840 CONTD.... PAGE 2 of 8

Version: FINAL

31-AUG-18 15:10 (MT)

	Sample ID Description Sampled Date Sampled Time Client ID	L2152840-1 SEAWATER 21-AUG-18 08:50 SOURCE	L2152840-2 SEAWATER 21-AUG-18 09:00 WNW	L2152840-3 SEAWATER 21-AUG-18 09:05 NORTH	L2152840-4 SEAWATER 21-AUG-18 09:10 ENE	
Grouping	Analyte					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	9460	12800	17000	9770	
	Hardness (as CaCO3) (mg/L)	1020	1340	1610	1070	
	pH (pH)	8.06	8.06	8.03	8.08	
	Total Suspended Solids (mg/L)	<2.0	<2.0	<2.0	<2.0	
	Turbidity (NTU)	0.74	0.91	0.57	0.46	
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	98.9	99.3	96.5	97.2	
	Ammonia, Total (as N) (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Bromide (Br) (mg/L)	10.2	15.1	19.8	11.1	
	Chloride (CI) (mg/L)	2980	4240	5550	3190	
	Fluoride (F) (mg/L)	<1.0	<1.0	<1.0	<1.0	
	Nitrate (as N) (mg/L)	<0.50	<0.50	<0.50	<0.50	
	Nitrite (as N) (mg/L)	<0.10	<0.10	<0.10	<0.10	
	Total Kjeldahl Nitrogen (mg/L)	0.125	0.121	0.103	0.099	
	Sulfate (SO4) (mg/L)	403	582	766	433	
Organic /	Total Organic Carbon (mg/L)	1.56	1.48	1.18	1.50	
Inorganic Carbon Total Metals	Aluminum (AI)-Total (mg/L)	0.0186	0.0184	0.0400	0.0444	
	Antimony (Sb)-Total (mg/L)	<0.0050	<0.0050	0.0169 <0.00050	0.0114 <0.00050	
	Arsenic (As)-Total (mg/L)					
	Barium (Ba)-Total (mg/L)	<0.0020 0.0053	<0.0020	<0.0020	<0.0020	
	Beryllium (Be)-Total (mg/L)		0.0058	0.0061	0.0059	
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Boron (B)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Cadmium (Cd)-Total (mg/L)	0.72	0.98	0.98	0.79	
	Calcium (Ca)-Total (mg/L)	<0.000050		<0.000050	<0.000050	
	Cesium (Cs)-Total (mg/L)	84.3	103	99.3	87.0	
	Chromium (Cr)-Total (mg/L)	<0.00050 <0.00050	<0.00050	<0.00050	<0.00050	
	Cobalt (Co)-Total (mg/L)		<0.00050	<0.00050	<0.00050	
	Copper (Cu)-Total (mg/L)	<0.00050 <0.00050	<0.000050 0.00085	<0.00050 <0.00050	<0.000050 <0.00050	
	Gallium (Ga)-Total (mg/L)					
	Iron (Fe)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Lead (Pb)-Total (mg/L)	0.022	0.029	0.023	0.011	
	Lithium (Li)-Total (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Magnesium (Mg)-Total (mg/L)	0.031	0.041	0.042	0.034	
	Manganese (Mn)-Total (mg/L)	201	267	267	206	
	Mercury (Hg)-Total (mg/L)	0.00111	0.00125	0.00118	0.00089	
	Molybdenum (Mo)-Total (mg/L)	<0.000010 <0.0020	<0.000010	<0.000010 0.0026	<0.000010 0.0022	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

L2152840 CONTD.... PAGE 3 of 8

31-AUG-18 15:10 (MT) Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2152840-1 SEAWATER 21-AUG-18 08:50 SOURCE	L2152840-2 SEAWATER 21-AUG-18 09:00 WNW	L2152840-3 SEAWATER 21-AUG-18 09:05 NORTH	L2152840-4 SEAWATER 21-AUG-18 09:10 ENE	
Grouping	Analyte					
SEAWATER						
Total Metals	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Potassium (K)-Total (mg/L)	59.6	79.0	76.4	62.6	
	Rhenium (Re)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Rubidium (Rb)-Total (mg/L)	0.0203	0.0270	0.0267	0.0222	
	Selenium (Se)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Silicon (Si)-Total (mg/L)	<1.0	<1.0	<1.0	<1.0	
	Silver (Ag)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Total (mg/L)	1580	2110	2030	1650	
	Strontium (Sr)-Total (mg/L)	1.27	1.67	1.59	1.26	
	Sulfur (S)-Total (mg/L)	141	191	187	142	
	Tellurium (Te)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Thallium (TI)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Thorium (Th)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Tin (Sn)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Titanium (Ti)-Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Tungsten (W)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Uranium (U)-Total (mg/L)	0.00187	0.00224	0.00200	0.00188	
	Vanadium (V)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Yttrium (Y)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Zinc (Zn)-Total (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	
	Zirconium (Zr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Dissolved Metals	Dissolved Mercury Filtration Location	LAB	LAB	LAB	LAB	
	Dissolved Metals Filtration Location	LAB	LAB	LAB	LAB	
	Aluminum (Al)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	0.0079	
	Antimony (Sb)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Arsenic (As)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Barium (Ba)-Dissolved (mg/L)	0.0054	0.0061	0.0059	0.0054	
	Beryllium (Be)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Boron (B)-Dissolved (mg/L)	0.73	1.00	1.17	0.78	
	Cadmium (Cd)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Calcium (Ca)-Dissolved (mg/L)	84.8	107	124	88.3	
	Cesium (Cs)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Chromium (Cr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Cobalt (Co)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Copper (Cu)-Dissolved (mg/L)	<0.00050	0.00064	<0.00050	<0.00050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

L2152840 CONTD.... PAGE 4 of 8

31-AUG-18 15:10 (MT)

Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2152840-1 SEAWATER 21-AUG-18 08:50 SOURCE	L2152840-2 SEAWATER 21-AUG-18 09:00 WNW	L2152840-3 SEAWATER 21-AUG-18 09:05 NORTH	L2152840-4 SEAWATER 21-AUG-18 09:10 ENE
Grouping	Analyte				
SEAWATER					
Dissolved Metals	Gallium (Ga)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Iron (Fe)-Dissolved (mg/L)	<0.010	<0.010	<0.010	0.013
	Lead (Pb)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030
	Lithium (Li)-Dissolved (mg/L)	0.033	0.043	0.050	0.033
	Magnesium (Mg)-Dissolved (mg/L)	197	260	316	206
	Manganese (Mn)-Dissolved (mg/L)	0.00059	0.00062	0.00067	0.00109
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010
	Molybdenum (Mo)-Dissolved (mg/L)	<0.0020	0.0028	0.0031	0.0021
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Dissolved (mg/L)	60	79	97	63
	Rhenium (Re)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Rubidium (Rb)-Dissolved (mg/L)	0.0213	0.0271	0.0316	0.0211
	Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020
	Silicon (Si)-Dissolved (mg/L)	<1.0	<1.0	<1.0	<1.0
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	1580	2100	2610	1640
	Strontium (Sr)-Dissolved (mg/L)	1.21	1.66	1.82	1.23
	Sulfur (S)-Dissolved (mg/L)	141	185	231	147
	Tellurium (Te)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Thallium (TI)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050
	Thorium (Th)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050
	Tungsten (W)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010
	Uranium (U)-Dissolved (mg/L)	0.00188	0.00226	0.00203	0.00192
	Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Yttrium (Y)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2152840-1 SEAWATER 21-AUG-18 08:50 SOURCE	L2152840-2 SEAWATER 21-AUG-18 09:00 WNW	L2152840-3 SEAWATER 21-AUG-18 09:05 NORTH	L2152840-4 SEAWATER 21-AUG-18 09:10 ENE	
Grouping	Analyte					
WATER						
Bacteriological Tests	Coliform Bacteria - Fecal (CFU/100mL)	<1	<1	<1	<1	
Hydrocarbons	EPH10-19 (mg/L)	<0.25	<0.25	<0.25	<0.25	
	EPH19-32 (mg/L)	<0.25	<0.25	<0.25	<0.25	
	LEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	
	HEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	
	Surrogate: 2-Bromobenzotrifluoride (%)	98.2	103.9	92.4	95.8	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
•	Acenaphthylene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Acridine (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Anthracene (mg/L)	<0.000010	<0.000010	<0.000010	<0.00010	
	Benz(a)anthracene (mg/L)	<0.00010	<0.000010	<0.000010	<0.00010	
	Benzo(a)pyrene (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.000050	
	Benzo(b&j)fluoranthene (mg/L)	<0.00010	<0.00010	<0.000010	<0.000010	
	Benzo(b+j+k)fluoranthene (mg/L)	<0.00015	<0.00015	<0.000015	<0.000015	
	Benzo(g,h,i)perylene (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010	
	Benzo(k)fluoranthene (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010	
	Chrysene (mg/L)	<0.000010	<0.00010	<0.000010	<0.000010	
	Dibenz(a,h)anthracene (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.000050	
	Fluoranthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Fluorene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Indeno(1,2,3-c,d)pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	1-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	2-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Naphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Phenanthrene (mg/L)	<0.000020	<0.000020	<0.000020	<0.000020	
	Pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Quinoline (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Surrogate: Acridine d9 (%)	74.8	73.8	70.0	75.3	
	Surrogate: Chrysene d12 (%)	67.5	78.4	75.4	68.7	
	Surrogate: Naphthalene d8 (%)	89.2	96.0	92.3	94.4	
	Surrogate: Phenanthrene d10 (%)	94.3	98.9	95.1	95.4	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)	
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Calcium (Ca)-Total	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Potassium (K)-Total	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Rubidium (Rb)-Total	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Sodium (Na)-Total	MS-B	L2152840-1, -2, -3, -4	
Matrix Spike	Strontium (Sr)-Total	MS-B	L2152840-1, -2, -3, -4	

Qualifiers for Individual Parameters Listed:

Qualifier Description

MS-B Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TITR-VA	Seawater	Alkalinity Spec by Titration (Seawater)	APHA 2320 Alkalinity

This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

ANIONS-C-BR-IC-VA Seawater Bromide by IC (seawater) EPA 300.1 (mod

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-CL-IC-VA Seawater Chloride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-F-IC-VA Seawater Fluoride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-NO2-IC-VA Seawater Nitrite in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrite is detected by UV absorbance.

ANIONS-C-NO3-IC-VA Seawater Nitrate in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrate is detected by UV absorbance.

ANIONS-C-SO4-IC-VA Seawater Sulfate by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

CARBONS-C-TOC-VA Seawater TOC by combustion (seawater) APHA 5310B TOTAL ORGANIC CARBON (TOC)

This analysis is carried out using procedures adapted from APHA Method 5310 "Total Organic Carbon (TOC)".

EC-C-PCT-VA Seawater Conductivity (Automated) (seawater) APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

EPH-ME-FID-VA Water EPH in Water BC Lab Manual

EPH is extracted from water using a hexane micro-extraction technique, with analysis by GC-FID, as per the BC Lab Manual. EPH results include PAHs and are therefore not equivalent to LEPH or HEPH.

FCOLI-MF-ENV-VA Water Fecal coliform by membrane filtration APHA METHOD 9222

This analysis is carried out using procedures adapted from APHA Method 9222 "Membrane Filter Technique for Members of the Coliform Group". Coliform bacteria is enumerated by culturing and colony counting. A known sample volume is filtered through a 0.45 micron membrane filter. The test involves an initial 24 hour incubation of the filter with the appropriate growth medium, positive results require further testing (up to an additional 48 hours) to confirm and quantify the total coliform. This method is used for non-turbid water with a low background bacteria level.

HARDNESS-CALC-VA Seawater Hardness APHA 2340B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-DIS-C-CVAFS-VA Seawater Diss. Mercury in Seawater by CVAFS PUGET SOUND PROTOCOLS, EPA 245.7

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This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by filtration (EPA Method 3005A) and involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

HG-TOT-C-CVAFS-VA

Seawater

Total Mercury in Seawater by CVAFS

PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

LEPH/HEPH-CALC-VA

Water

LEPHs and HEPHs

BC MOE LEPH/HEPH

LEPHw and HEPHw are measures of Light and Heavy Extractable Petroleum Hydrocarbons in water. Results are calculated by subtraction of applicable PAH concentrations from EPH10-19 and EPH19-32, as per the BC Lab Manual LEPH/HEPH calculation procedure. LEPHw = EPH10-19 minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene.

HEPH = EPH19-32 minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

MET-D-L-HRMS-VA

Seawater

Diss. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve laboratory sample filtration based on APHA Method 3030B.

MET-T-L-HRMS-VA

Seawater

Tot. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve preliminary sample treatment by acid digestion based on APHA Method 3030E.

NH3-F-VA

Seawater

Ammonia in Seawater by Fluorescence

J. ENVIRON. MONIT., 2005, 7, 37-42, RSC

This analysis is carried out, on sulfuric acid preserved samples, using procedures modified from J. Environ. Monit., 2005, 7, 37 - 42, The Royal Society of Chemistry, "Flow-injection analysis with fluorescence detection for the determination of trace levels of ammonium in seawater", Roslyn J. Waston et al.

PAH-ME-MS-VA

Water

PAHs in Water

EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

PH-C-PCT-VA

Seawater

pH by Meter (Automated) (seawater)

APHA 4500-H pH Value

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

It is recommended that this analysis be conducted in the field.

TKN-C-F-VA

Seawater

TKN in Seawater by Fluorescence

APHA 4500-NORG D.

This analysis is carried out using procedures adapted from APHA Method 4500-Norg D. "Block Digestion and Flow Injection Analysis". Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection.

TSS-C-VA

Seawate

Total Suspended Solids by Gravimetric

APHA 2540 D

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) is determined by filtering a sample through a glass fibre filter. TSS is determined by drying the filter at 104 degrees celsius.

TURBIDITY-C-VA

Seawater

Turbidity by Meter in Seawater

APHA 2130 Turbidity

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code

Laboratory Location

VA

ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

Reference Information

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GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

mg/kg - milligrams per kilogram based on dry weight of sample.

mg/kg wwt - milligrams per kilogram based on wet weight of sample.

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L2152840 Report Date: 31-AUG-18 Page 1 of 15

Client: GOLDER ASSOCIATES LTD.

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Contact: John Sherrin / Arman Ospan

Гest	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EPH-ME-FID-VA	Water							
Batch R4191713								
WG2862959-2 LCS EPH10-19			113.7		%		70-130	30-AUG-18
EPH19-32			111.7		%		70-130	30-AUG-18
WG2862959-1 MB EPH10-19			<0.25		mg/L		0.05	00 4110 40
EPH19-32			<0.25		mg/L		0.25	30-AUG-18
Surrogate: 2-Bromobenz	zotrifluoride		90.4		%		0.25 60-140	30-AUG-18 30-AUG-18
-			30.4		70		60-140	30-AUG-16
FCOLI-MF-ENV-VA	Water							
Batch R4185736								
WG2858735-2 MB Coliform Bacteria - Feca	ıl		<1		CFU/100mL		1	24-AUG-18
20	•				0. 0, room_		•	2470010
PAH-ME-MS-VA	Water							
Batch R4193448								
WG2862959-2 LCS								
Acenaphthene			70.4		%		60-130	31-AUG-18
Acenaphthylene			74.5		%		60-130	31-AUG-18
Acridine			63.5		%		60-130	31-AUG-18
Anthracene			81.0		%		60-130	31-AUG-18
Benz(a)anthracene			80.6		%		60-130	31-AUG-18
Benzo(a)pyrene			77.1		%		60-130	31-AUG-18
Benzo(b&j)fluoranthene			72.3		%		60-130	31-AUG-18
Benzo(g,h,i)perylene			80.1		%		60-130	31-AUG-18
Benzo(k)fluoranthene			82.2		%		60-130	31-AUG-18
Chrysene			84.5		%		60-130	31-AUG-18
Dibenz(a,h)anthracene			86.1		%		60-130	31-AUG-18
Fluoranthene			83.3		%		60-130	31-AUG-18
Fluorene			77.4		%		60-130	31-AUG-18
Indeno(1,2,3-c,d)pyrene			82.7		%		60-130	31-AUG-18
1-Methylnaphthalene			64.5		%		60-130	31-AUG-18
2-Methylnaphthalene			60.1		%		60-130	31-AUG-18
Naphthalene			63.4		%		50-130	31-AUG-18
Phenanthrene			82.2		%		60-130	31-AUG-18
Pyrene			82.9		%		60-130	31-AUG-18
Quinoline			80.6		%		60-130	31-AUG-18



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Test Mat	rix Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-ME-MS-VA Wat	ter						
Batch R4193448							
WG2862959-1 MB							
Acenaphthene		<0.000010		mg/L		0.00001	31-AUG-18
Acenaphthylene		<0.000010		mg/L		0.00001	31-AUG-18
Acridine		<0.000010		mg/L		0.00001	31-AUG-18
Anthracene		<0.000010		mg/L		0.00001	31-AUG-18
Benz(a)anthracene		<0.000010		mg/L		0.00001	31-AUG-18
Benzo(a)pyrene		<0.000005	iC	mg/L		0.000005	31-AUG-18
Benzo(b&j)fluoranthene		<0.000010	1	mg/L		0.00001	31-AUG-18
Benzo(g,h,i)perylene		<0.000010	1	mg/L		0.00001	31-AUG-18
Benzo(k)fluoranthene		<0.000010)	mg/L		0.00001	31-AUG-18
Chrysene		<0.000010)	mg/L		0.00001	31-AUG-18
Dibenz(a,h)anthracene		<0.000005	C	mg/L		0.000005	31-AUG-18
Fluoranthene		<0.000010)	mg/L		0.00001	31-AUG-18
Fluorene		<0.000010)	mg/L		0.00001	31-AUG-18
Indeno(1,2,3-c,d)pyrene		<0.000010)	mg/L		0.00001	31-AUG-18
1-Methylnaphthalene		<0.000050)	mg/L		0.00005	31-AUG-18
2-Methylnaphthalene		<0.000050)	mg/L		0.00005	31-AUG-18
Naphthalene		<0.000050)	mg/L		0.00005	31-AUG-18
Phenanthrene		<0.000020)	mg/L		0.00002	31-AUG-18
Pyrene		<0.000010)	mg/L		0.00001	31-AUG-18
Quinoline		<0.000050)	mg/L		0.00005	31-AUG-18
Surrogate: Acridine d9		79.8		%		60-130	31-AUG-18
Surrogate: Chrysene d12		100.7		%		60-130	31-AUG-18
Surrogate: Naphthalene d8		93.1		%		50-130	31-AUG-18
Surrogate: Phenanthrene d10		98.0		%		60-130	31-AUG-18
ALK-TITR-VA Sea	ıwater						
Batch R4194452							
WG2861704-3 CRM	VA-ALK-TITI	R-CONTROL					
Alkalinity, Total (as CaCO3)		100.2		%		85-115	30-AUG-18
WG2861704-1 MB Alkalinity, Total (as CaCO3)		<1.0		mg/L		1	30-AUG-18
ANIONS-C-BR-IC-VA Sea	water						
Batch R4194598							
WG2861700-2 LCS Bromide (Br)		104.0		%		85-115	29-AUG-18
WG2861700-1 MB							



Workorder: L2152840

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ANIONS-C-BR-IC-VA Batch R4194598 WG2861700-1 MB Bromide (Br)	Seawater		<5.0		mg/L		5	29-AUG-18
ANIONS-C-CL-IC-VA	Seawater							
Batch R4194598 WG2861700-2 LCS Chloride (CI)			100.4		%		90-110	29-AUG-18
WG2861700-1 MB Chloride (CI)			<50		mg/L		50	29-AUG-18
ANIONS-C-F-IC-VA	Seawater							
Batch R4194598 WG2861700-2 LCS								
Fluoride (F) WG2861700-1 MB			99.8		%		90-110	29-AUG-18
Fluoride (F)			<1.0		mg/L		1	29-AUG-18
ANIONS-C-NO2-IC-VA	Seawater							
Batch R4194598 WG2861700-2 LCS Nitrite (as N)			100.7		%		90-110	29-AUG-18
WG2861700-1 MB Nitrite (as N)			<0.10		mg/L		0.1	29-AUG-18
ANIONS-C-NO3-IC-VA	Seawater							
Batch R4194598 WG2861700-2 LCS Nitrate (as N)			100.6		%		90-110	29-AUG-18
WG2861700-1 MB Nitrate (as N)			<0.50		mg/L		0.5	29-AUG-18
ANIONS-C-SO4-IC-VA	Seawater							
Batch R4194598 WG2861700-2 LCS Sulfate (SO4)			100.7		%		90-110	29-AUG-18
WG2861700-1 MB Sulfate (SO4)			<30		mg/L		30	29-AUG-18
CARBONS-C-TOC-VA	Seawater							



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CARBONS-C-TOC-VA	Seawater							
Batch R4188929								
WG2861170-1 DUP Total Organic Carbon		L2152840-4 1.50	1.51		mg/L	0.7	20	27-AUG-18
WG2861170-4 LCS Total Organic Carbon			97.4		%		80-120	27-AUG-18
WG2861170-3 MB Total Organic Carbon			<0.50		mg/L		0.5	27-AUG-18
EC-C-PCT-VA	Seawater							
Batch R4194452								
WG2861704-4 CRM		VA-EC-PCT-C	CONTROL					
Conductivity			99.0		%		90-110	30-AUG-18
WG2861704-1 MB Conductivity			<2.0		uS/cm		2	30-AUG-18
HG-DIS-C-CVAFS-VA	Seawater							
Batch R4182927								
WG2859683-2 LCS Mercury (Hg)-Dissolved			97.1		%		80-120	25-AUG-18
WG2859683-1 MB		LF						
Mercury (Hg)-Dissolved			<0.000010		mg/L		0.00001	25-AUG-18
WG2859683-4 MS Mercury (Hg)-Dissolved		L2152840-2	96.4		%		70-130	25-AUG-18
HG-TOT-C-CVAFS-VA	Seawater							
Batch R4184632								
WG2860762-2 LCS Mercury (Hg)-Total			101.0		%		80-120	27-AUG-18
WG2860762-1 MB Mercury (Hg)-Total			<0.000010	1	mg/L		0.00001	27-AUG-18
MET-D-L-HRMS-VA	Seawater							
Batch R4191429								
WG2859780-2 LCS								
Aluminum (Al)-Dissolved	t		93.3		%		80-120	29-AUG-18
Antimony (Sb)-Dissolved	k		96.5		%		80-120	29-AUG-18
Arsenic (As)-Dissolved			97.7		%		80-120	29-AUG-18
Barium (Ba)-Dissolved			99.2		%		80-120	29-AUG-18
Beryllium (Be)-Dissolved	i		95.8		%		80-120	29-AUG-18
Bismuth (Bi)-Dissolved			100.9		%		80-120	29-AUG-18
Boron (B)-Dissolved			113.4		%		80-120	29-AUG-18
Cadmium (Cd)-Dissolve			101.0		%		80-120	29-AUG-18



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA Seawate	r						
Batch R4191429							
WG2859780-2 LCS		00.4		0/			
Calcium (Ca) Dissolved		88.4 100.2		%		80-120	29-AUG-18
Cesium (Cs)-Dissolved				%		80-120	29-AUG-18
Chromium (Cr)-Dissolved		95.2		%		80-120	29-AUG-18
Cobalt (Co)-Dissolved		93.6		%		80-120	29-AUG-18
Copper (Cu)-Dissolved		93.6		%		80-120	29-AUG-18
Gallium (Ga)-Dissolved		96.4		%		80-120	29-AUG-18
Iron (Fe)-Dissolved		96.4		%		80-120	29-AUG-18
Lead (Pb)-Dissolved		106.6		%		80-120	29-AUG-18
Lithium (Li)-Dissolved		97.6		%		80-120	29-AUG-18
Magnesium (Mg)-Dissolved		100.5		%		80-120	29-AUG-18
Manganese (Mn)-Dissolved		100.8		%		80-120	29-AUG-18
Molybdenum (Mo)-Dissolved		100.4		%		80-120	29-AUG-18
Nickel (Ni)-Dissolved		91.2		%		80-120	29-AUG-18
Phosphorus (P)-Dissolved		98.9		%		80-120	29-AUG-18
Potassium (K)-Dissolved		103.7		%		80-120	29-AUG-18
Rhenium (Re)-Dissolved		102.0		%		80-120	29-AUG-18
Rubidium (Rb)-Dissolved		102.0		%		80-120	29-AUG-18
Selenium (Se)-Dissolved		94.0		%		80-120	29-AUG-18
Silicon (Si)-Dissolved		112.7		%		80-120	29-AUG-18
Silver (Ag)-Dissolved		95.9		%		80-120	29-AUG-18
Sodium (Na)-Dissolved		115.4		%		80-120	29-AUG-18
Strontium (Sr)-Dissolved		93.6		%		80-120	29-AUG-18
Sulfur (S)-Dissolved		97.4		%		80-120	29-AUG-18
Tellurium (Te)-Dissolved		103.0		%		80-120	29-AUG-18
Thallium (TI)-Dissolved		95.5		%		80-120	29-AUG-18
Thorium (Th)-Dissolved		97.7		%		80-120	29-AUG-18
Tin (Sn)-Dissolved		102.8		%		80-120	29-AUG-18
Titanium (Ti)-Dissolved		92.8		%		80-120	29-AUG-18
Tungsten (W)-Dissolved		98.2		%		80-120	29-AUG-18
Uranium (U)-Dissolved		104.0		%		80-120	29-AUG-18
Vanadium (V)-Dissolved		96.6		%		80-120	29-AUG-18
Yttrium (Y)-Dissolved		97.1		%		80-120	29-AUG-18
Zinc (Zn)-Dissolved		91.8		%		80-120	29-AUG-18
Zirconium (Zr)-Dissolved		95.0		%		80-120	29-AUG-18



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Batch R4191429 WO2359759-1 MB	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
WG2859780-1 MB	MET-D-L-HRMS-VA	Seawater							
Aluminum (A)-Dissolved	Batch R419142	29							
Antimony (Sb)-Dissolved			LF			_			
Arsenic (As)-Dissolved						-			
Barium (Ba)-Dissolved									
Beryllium (Be)-Dissolved						-			
Bismuth (Bi)-Dissolved	` ,					-		0.001	29-AUG-18
Boron (B)-Dissolved	Beryllium (Be)-Dissolv	ved		<0.00050		mg/L		0.0005	29-AUG-18
Cadmium (Cd)-Dissolved <0.000050	` '	ed		<0.00050		mg/L		0.0005	29-AUG-18
Calcium (Ca)-Dissolved <1.0	Boron (B)-Dissolved			<0.10		mg/L		0.1	29-AUG-18
Cesium (Cs)-Dissolved <0.00050 mg/L 0.0005 29-AUG-18 Chromium (Cr)-Dissolved <0.00050	Cadmium (Cd)-Dissol	lved		<0.000050)	mg/L		0.00005	29-AUG-18
Chromium (Cr)-Dissolved <0.00050 mg/L 0.0005 29-AUG-18 Cobalt (Co)-Dissolved <0.00050	Calcium (Ca)-Dissolve	ed		<1.0		mg/L		1	29-AUG-18
Cobalt (Co)-Dissolved <0.000050	Cesium (Cs)-Dissolve	ed		<0.00050		mg/L		0.0005	29-AUG-18
Copper (Cu)-Dissolved <0.00050	Chromium (Cr)-Disso	lved		<0.00050		mg/L		0.0005	29-AUG-18
Gallium (Ga)-Dissolved <0.00050	Cobalt (Co)-Dissolved	t		<0.000050)	mg/L		0.00005	29-AUG-18
Iron (Fe)-Dissolved	Copper (Cu)-Dissolve	ed		<0.00050		mg/L		0.0005	29-AUG-18
Lead (Pb)-Dissolved <0.00030	Gallium (Ga)-Dissolve	ed		<0.00050		mg/L		0.0005	29-AUG-18
Lithium (Li)-Dissolved <0.020	Iron (Fe)-Dissolved			<0.010		mg/L		0.01	29-AUG-18
Magnesium (Mg)-Dissolved <1.0	Lead (Pb)-Dissolved			<0.00030		mg/L		0.0003	29-AUG-18
Manganese (Mn)-Dissolved <0.00020 mg/L 0.0002 29-AUG-18 Molybdenum (Mo)-Dissolved <0.0020	Lithium (Li)-Dissolved	I		<0.020		mg/L		0.02	29-AUG-18
Molybdenum (Mo)-Dissolved <0.0020	Magnesium (Mg)-Diss	solved		<1.0		mg/L		1	29-AUG-18
Nickel (Ni)-Dissolved <0.00050 mg/L 0.0005 29-AUG-18 Phosphorus (P)-Dissolved <0.050	Manganese (Mn)-Diss	solved		<0.00020		mg/L		0.0002	29-AUG-18
Phosphorus (P)-Dissolved <0.050	Molybdenum (Mo)-Dis	ssolved		<0.0020		mg/L		0.002	29-AUG-18
Potassium (K)-Dissolved <1.0	Nickel (Ni)-Dissolved			<0.00050		mg/L		0.0005	29-AUG-18
Rhenium (Re)-Dissolved <0.00050	Phosphorus (P)-Disso	olved		< 0.050		mg/L		0.05	29-AUG-18
Rubidium (Rb)-Dissolved <0.0050	Potassium (K)-Dissolv	ved		<1.0		mg/L		1	29-AUG-18
Selenium (Se)-Dissolved <0.0020	Rhenium (Re)-Dissolv	ved		<0.00050		mg/L		0.0005	29-AUG-18
Silicon (Si)-Dissolved <1.0	Rubidium (Rb)-Dissol	ved		< 0.0050		mg/L		0.005	29-AUG-18
Silver (Ag)-Dissolved <0.00010	Selenium (Se)-Dissol	ved		<0.0020		mg/L		0.002	29-AUG-18
Sodium (Na)-Dissolved <1.0	Silicon (Si)-Dissolved			<1.0		mg/L		1	29-AUG-18
Strontium (Sr)-Dissolved <0.010 mg/L 0.01 29-AUG-18 Sulfur (S)-Dissolved <5.0	Silver (Ag)-Dissolved			<0.00010		mg/L		0.0001	29-AUG-18
Strontium (Sr)-Dissolved <0.010	Sodium (Na)-Dissolve	ed		<1.0		mg/L		1	29-AUG-18
Sulfur (S)-Dissolved <5.0	Strontium (Sr)-Dissolv	ved		<0.010		mg/L		0.01	
Tellurium (Te)-Dissolved <0.00050 mg/L 0.0005 29-AUG-18 Thallium (Tl)-Dissolved <0.000050	Sulfur (S)-Dissolved			<5.0					
Thallium (TI)-Dissolved <0.000050 mg/L 0.00005 29-AUG-18	Tellurium (Te)-Dissolv	ved		<0.00050		mg/L			
	Thallium (TI)-Dissolve	ed		<0.000050)	mg/L			
	Thorium (Th)-Dissolve	ed		<0.00050		mg/L		0.0005	29-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R4191429								
WG2859780-1 MB		LF						
Tin (Sn)-Dissolved			<0.0010		mg/L		0.001	29-AUG-18
Titanium (Ti)-Dissolved			<0.0050		mg/L		0.005	29-AUG-18
Tungsten (W)-Dissolved			<0.0010		mg/L		0.001	29-AUG-18
Uranium (U)-Dissolved			<0.000050		mg/L		0.00005	29-AUG-18
Vanadium (V)-Dissolved			<0.00050		mg/L		0.0005	29-AUG-18
Yttrium (Y)-Dissolved			<0.00050		mg/L		0.0005	29-AUG-18
Zinc (Zn)-Dissolved			<0.0030		mg/L		0.003	29-AUG-18
Zirconium (Zr)-Dissolved	t		<0.00050		mg/L		0.0005	29-AUG-18
Batch R4193248								
WG2859780-3 DUP		L2152840-2	0.0000		4			
Aluminum (Al)-Dissolved		<0.0050	0.0090	RPD-NA	mg/L	N/A	20	29-AUG-18
Antimony (Sb)-Dissolved	d	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18
Arsenic (As)-Dissolved		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	29-AUG-18
Barium (Ba)-Dissolved		0.0061	0.0062		mg/L	0.8	20	29-AUG-18
Beryllium (Be)-Dissolved	i	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18
Bismuth (Bi)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18
Boron (B)-Dissolved		1.00	1.01		mg/L	0.9	20	29-AUG-18
Cadmium (Cd)-Dissolve	d	<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	29-AUG-18
Calcium (Ca)-Dissolved		107	108		mg/L	1.4	20	29-AUG-18
Cesium (Cs)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18
Chromium (Cr)-Dissolve	d	<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18
Cobalt (Co)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	29-AUG-18
Copper (Cu)-Dissolved		0.00064	0.00074		mg/L	15	20	29-AUG-18
Gallium (Ga)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18
Iron (Fe)-Dissolved		<0.010	<0.010	RPD-NA	mg/L	N/A	20	29-AUG-18
Lead (Pb)-Dissolved		<0.00030	<0.00030	RPD-NA	mg/L	N/A	20	29-AUG-18
Lithium (Li)-Dissolved		0.043	0.043		mg/L	0.5	20	29-AUG-18
Magnesium (Mg)-Dissol	ved	260	267		mg/L	2.7	20	29-AUG-18
Manganese (Mn)-Dissol	ved	0.00062	0.00075		mg/L	19	20	29-AUG-18
Molybdenum (Mo)-Disso	olved	0.0028	0.0027		mg/L	4.8	20	29-AUG-18
Nickel (Ni)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18
Phosphorus (P)-Dissolve	ed	<0.050	< 0.050	RPD-NA	mg/L	N/A	20	29-AUG-18
Potassium (K)-Dissolved	d	79	80		mg/L	1.2	20	29-AUG-18
Rhenium (Re)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-AUG-18



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MET-D-L-HRMS-VA Seawater Batch R4193248 WG2859780-3 DUP L2152840-2 Rubidium (Rb)-Dissolved 0.0271 0.0275 mg/L Selenium (Se)-Dissolved <0.0020 <0.0020 RPD-NA mg/L Silicon (Si)-Dissolved <1.0 <1.0 RPD-NA mg/L Silver (Ag)-Dissolved <0.00010 <0.00010 RPD-NA mg/L Sodium (Na)-Dissolved 2100 2170 mg/L mg/L Strontium (Sr)-Dissolved 1.66 1.60 mg/L mg/L Sulfur (S)-Dissolved 185 193 mg/L mg/L Tellurium (Te)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Thallium (Tl)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Tin (Sn)-Dissolved <0.0010 <0.0010 RPD-NA mg/L Titanium (Ti)-Dissolved <0.0050 <0.0050 RPD-NA mg/L Tungsten (W)-Dissolved <0.0010 <0.0010 RPD-NA mg/L			
WG2859780-3 DUP L2152840-2 Rubidium (Rb)-Dissolved 0.0271 0.0275 mg/L Selenium (Se)-Dissolved <0.0020 <0.0020 RPD-NA mg/L Silicon (Si)-Dissolved <1.0 <1.0 RPD-NA mg/L Silver (Ag)-Dissolved <0.00010 <0.00010 RPD-NA mg/L Sodium (Na)-Dissolved 2100 2170 mg/L Strontium (Sr)-Dissolved 1.66 1.60 mg/L Sulfur (S)-Dissolved 185 193 mg/L Tellurium (Te)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Thallium (Tl)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Tin (Sn)-Dissolved <0.0010 <0.0010 RPD-NA mg/L Titanium (Ti)-Dissolved <0.0050 <0.0050 RPD-NA mg/L Tungsten (W)-Dissolved <0.0010 <0.0010 RPD-NA mg/L Vanadium (V)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Vttrium (Y)-Dissolved			
Rubidium (Rb)-Dissolved 0.0271 0.0275 mg/L Selenium (Se)-Dissolved <0.0020 <0.0020 RPD-NA mg/L Silicon (Si)-Dissolved <1.0 <1.0 RPD-NA mg/L Silver (Ag)-Dissolved <0.00010 <0.00010 RPD-NA mg/L Sodium (Na)-Dissolved 2100 2170 mg/L Strontium (Sr)-Dissolved 1.66 1.60 mg/L Sulfur (S)-Dissolved 185 193 mg/L Tellurium (Te)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Thallium (Ti)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Thorium (Th)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Titanium (Ti)-Dissolved <0.0050 <0.0050 RPD-NA mg/L Tungsten (W)-Dissolved <0.0010 <0.0010 RPD-NA mg/L Vanadium (V)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Vttrium (Y)-Dissolved <0.00050 <0.00050 RPD-NA mg/			
Selenium (Se)-Dissolved <0.0020			
Silicon (Si)-Dissolved <1.0	1.5	20	29-AUG-18
Silver (Ag)-Dissolved <0.00010 <0.00010 RPD-NA mg/L Sodium (Na)-Dissolved 2100 2170 mg/L Strontium (Sr)-Dissolved 1.66 1.60 mg/L Sulfur (S)-Dissolved 185 193 mg/L Tellurium (Te)-Dissolved <0.00050	N/A	20	29-AUG-18
Sodium (Na)-Dissolved 2100 2170 mg/L Strontium (Sr)-Dissolved 1.66 1.60 mg/L Sulfur (S)-Dissolved 185 193 mg/L Tellurium (Te)-Dissolved <0.00050	N/A	20	29-AUG-18
Strontium (Sr)-Dissolved 1.66 1.60 mg/L Sulfur (S)-Dissolved 185 193 mg/L Tellurium (Te)-Dissolved <0.00050	N/A	20	29-AUG-18
Sulfur (S)-Dissolved 185 193 mg/L Tellurium (Te)-Dissolved <0.00050	3.4	20	29-AUG-18
Tellurium (Te)-Dissolved <0.00050	3.4	20	29-AUG-18
Thallium (TI)-Dissolved <0.000050	3.9	20	29-AUG-18
Thorium (Th)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Tin (Sn)-Dissolved <0.0010	N/A	20	29-AUG-18
Tin (Sn)-Dissolved <0.0010 <0.0010 RPD-NA mg/L Titanium (Ti)-Dissolved <0.0050	N/A	20	29-AUG-18
Titanium (Ti)-Dissolved <0.0050 <0.0050 RPD-NA mg/L Tungsten (W)-Dissolved <0.0010	N/A	20	29-AUG-18
Tungsten (W)-Dissolved <0.0010 <0.0010 RPD-NA mg/L Uranium (U)-Dissolved 0.00226 0.00238 mg/L Vanadium (V)-Dissolved <0.00050	N/A	20	29-AUG-18
Uranium (U)-Dissolved 0.00226 0.00238 mg/L Vanadium (V)-Dissolved <0.00050	N/A	20	29-AUG-18
Vanadium (V)-Dissolved <0.00050 <0.00050 RPD-NA mg/L Yttrium (Y)-Dissolved <0.00050	N/A	20	29-AUG-18
Yttrium (Y)-Dissolved <0.00050 <0.00050 RPD-NA mg/L	5.2	20	29-AUG-18
, , , , , , , , , , , , , , , , , , ,	N/A	20	29-AUG-18
Zinc (Zn)-Dissolved <0.0030 0.0050 RPD-NA mg/L	N/A	20	29-AUG-18
	N/A	20	29-AUG-18
Zirconium (Zr)-Dissolved <0.00050 <0.00050 RPD-NA mg/L	N/A	20	29-AUG-18
WG2859780-4 MS L2152840-1 Aluminum (Al)-Dissolved 102.4 %		70-130	29-AUG-18
Antimony (Sb)-Dissolved 104.1 %		70-130	29-AUG-18
Arsenic (As)-Dissolved 94.8 %		70-130	29-AUG-18
Barium (Ba)-Dissolved 99.8 %		70-130	29-AUG-18
Beryllium (Be)-Dissolved 98.0 %		70-130	29-AUG-18
Bismuth (Bi)-Dissolved 95.1 %		70-130	29-AUG-18
Boron (B)-Dissolved 98.7 %		70-130	29-AUG-18
Cadmium (Cd)-Dissolved 95.2 %		70-130	29-AUG-18
Calcium (Ca)-Dissolved 100.6 %		70-130	29-AUG-18
Cesium (Cs)-Dissolved 101.5 %		70-130	29-AUG-18
Chromium (Cr)-Dissolved 96.8 %		70-130	29-AUG-18
Cobalt (Co)-Dissolved 98.8 %		70-130	29-AUG-18
Copper (Cu)-Dissolved 97.3 %		70-130	29-AUG-18
Gallium (Ga)-Dissolved 99.6 %		70-130	29-AUG-18
Iron (Fe)-Dissolved 99.6 %		70-130	29-AUG-18



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA Seawater							
Batch R4193248							
WG2859780-4 MS	L2152840-1	07.4		%		70.400	00 4110 40
Lead (Pb)-Dissolved		97.4				70-130	29-AUG-18
Lithium (Li)-Dissolved		105.8	MC D	%		70-130	29-AUG-18
Magnesium (Mg)-Dissolved		N/A	MS-B	%		-	29-AUG-18
Manganese (Mn)-Dissolved		103.4		%		70-130	29-AUG-18
Molybdenum (Mo)-Dissolved		104.4		%		70-130	29-AUG-18
Nickel (Ni)-Dissolved		96.9		%		70-130	29-AUG-18
Phosphorus (P)-Dissolved		101.6		%		70-130	29-AUG-18
Potassium (K)-Dissolved		94.5		%		70-130	29-AUG-18
Rhenium (Re)-Dissolved		94.0		%		70-130	29-AUG-18
Rubidium (Rb)-Dissolved		102.7		%		70-130	29-AUG-18
Selenium (Se)-Dissolved		98.4		%		70-130	29-AUG-18
Silver (Ag)-Dissolved		91.8		%		70-130	29-AUG-18
Sodium (Na)-Dissolved		N/A	MS-B	%		-	29-AUG-18
Strontium (Sr)-Dissolved		N/A	MS-B	%		-	29-AUG-18
Tellurium (Te)-Dissolved		102.0		%		70-130	29-AUG-18
Thallium (TI)-Dissolved		92.9		%		70-130	29-AUG-18
Thorium (Th)-Dissolved		101.4		%		70-130	29-AUG-18
Tin (Sn)-Dissolved		103.5		%		70-130	29-AUG-18
Titanium (Ti)-Dissolved		102.4		%		70-130	29-AUG-18
Tungsten (W)-Dissolved		96.0		%		70-130	29-AUG-18
Uranium (U)-Dissolved		99.6		%		70-130	29-AUG-18
Vanadium (V)-Dissolved		102.7		%		70-130	29-AUG-18
Yttrium (Y)-Dissolved		103.0		%		70-130	29-AUG-18
Zinc (Zn)-Dissolved		96.9		%		70-130	29-AUG-18
Zirconium (Zr)-Dissolved		105.0		%		70-130	29-AUG-18
MET-T-L-HRMS-VA Seawater							
Batch R4191429							
WG2860197-2 LCS		04.4		0/			
Aluminum (Al)-Total		91.1		%		80-120	29-AUG-18
Antimony (Sb)-Total		93.8		%		80-120	29-AUG-18
Arsenic (As)-Total		95.9		%		80-120	29-AUG-18
Barium (Ba)-Total		95.6		%		80-120	29-AUG-18
Beryllium (Be)-Total		94.2		%		80-120	29-AUG-18
Bismuth (Bi)-Total		95.5		%		80-120	29-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4191429								
WG2860197-2 LCS Boron (B)-Total			106.5		%		80-120	20 ALIC 18
Cadmium (Cd)-Total			95.5		%		80-120	29-AUG-18 29-AUG-18
Calcium (Ca)-Total			90.3		%		80-120	
Cesium (Cs)-Total			95.8		%		80-120	29-AUG-18 29-AUG-18
Chromium (Cr)-Total			90.4		%		80-120	29-AUG-18 29-AUG-18
Cobalt (Co)-Total			92.0		%		80-120	29-AUG-18
Copper (Cu)-Total			90.4		%		80-120	
Gallium (Ga)-Total			94.0		%			29-AUG-18
Iron (Fe)-Total			94.7		%		80-120	29-AUG-18
Lead (Pb)-Total			100.8		%		80-120 80-120	29-AUG-18
Lithium (Li)-Total			93.2		%			29-AUG-18 29-AUG-18
Magnesium (Mg)-Total			96.0		%		80-120 80-120	
Manganese (Mn)-Total			98.0		%			29-AUG-18
Molybdenum (Mo)-Total			95.2		%		80-120	29-AUG-18
Nickel (Ni)-Total			95.2		%		80-120	29-AUG-18
Phosphorus (P)-Total			97.8		%		80-120	29-AUG-18
Potassium (K)-Total			101.2		%		80-120	29-AUG-18
Rhenium (Re)-Total			98.8		%		80-120	29-AUG-18
Rubidium (Rb)-Total			100.0		%		80-120	29-AUG-18
Selenium (Se)-Total			93.6		%		80-120	29-AUG-18
Silicon (Si)-Total			110.1		%		80-120	29-AUG-18
			91.1		%		80-120	29-AUG-18
Silver (Ag)-Total			118.6		%		80-120	29-AUG-18
Sodium (Na)-Total					%		80-120	29-AUG-18
Strontium (Sr)-Total Sulfur (S)-Total			95.2 96.9				80-120	29-AUG-18
` ,			99.0		%		70-130	29-AUG-18
Tellurium (Te)-Total					%		80-120	29-AUG-18
Thallium (Tl)-Total			91.9		%		80-120	29-AUG-18
Thorium (Th)-Total			95.9		%		80-120	29-AUG-18
Tin (Sn)-Total			95.4		%		80-120	29-AUG-18
Titanium (Ti)-Total			93.6		%		80-120	29-AUG-18
Tungsten (W)-Total			94.4		%		80-120	29-AUG-18
Uranium (U)-Total			103.2		%		80-120	29-AUG-18
Vanadium (V)-Total			95.4		%		80-120	29-AUG-18
Yttrium (Y)-Total			97.4		%		80-120	29-AUG-18



Workorder: L2152840 Report Date: 31-AUG-18

Page 11 of 15

MET-T-L-HRMS-VA Seawater Batch R4191429 WG2860197-2 LCS Zinc (Zn)-Total 92.2 % 80-120 Zirconium (Zr)-Total 94.5 % 80-120 WG2860197-1 MB MB	29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18
WG2860197-2 LCS Zinc (Zn)-Total 92.2 % 80-120 Zirconium (Zr)-Total 94.5 % 80-120 WG2860197-1 MB	29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18
Zinc (Zn)-Total 92.2 % 80-120 Zirconium (Zr)-Total 94.5 % 80-120 WG2860197-1 MB	29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18
Zirconium (Zr)-Total 94.5 % 80-120 WG2860197-1 MB	29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18
WG2860197-1 MB	29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18
	29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18
Aluminum (Al)-Total <0.0050 mg/L 0.005	29-AUG-18 29-AUG-18 29-AUG-18 29-AUG-18
Antimony (Sb)-Total <0.00050 mg/L 0.0005	29-AUG-18 29-AUG-18 29-AUG-18
Arsenic (As)-Total <0.0020 mg/L 0.002	29-AUG-18
Barium (Ba)-Total <0.0010 mg/L 0.001	29-AUG-18
Beryllium (Be)-Total <0.00050 mg/L 0.0005	
Bismuth (Bi)-Total <0.00050 mg/L 0.0005	29-AUG-18
Boron (B)-Total <0.10 mg/L 0.1	29-AUG-18
Cadmium (Cd)-Total <0.000050 mg/L 0.00009	5 29-AUG-18
Calcium (Ca)-Total <1.0 mg/L 1	29-AUG-18
Cesium (Cs)-Total <0.00050 mg/L 0.0005	29-AUG-18
Chromium (Cr)-Total <0.00050 mg/L 0.0005	29-AUG-18
Cobalt (Co)-Total <0.000050 mg/L 0.00005	5 29-AUG-18
Copper (Cu)-Total <0.00050 mg/L 0.0005	29-AUG-18
Gallium (Ga)-Total <0.00050 mg/L 0.0005	29-AUG-18
Iron (Fe)-Total <0.010 mg/L 0.01	29-AUG-18
Lead (Pb)-Total <0.00030 mg/L 0.0003	29-AUG-18
Lithium (Li)-Total <0.020 mg/L 0.02	29-AUG-18
Magnesium (Mg)-Total <1.0 mg/L 1	29-AUG-18
Manganese (Mn)-Total <0.00020 mg/L 0.0002	29-AUG-18
Molybdenum (Mo)-Total <0.0020 mg/L 0.002	29-AUG-18
Nickel (Ni)-Total <0.00050 mg/L 0.0005	29-AUG-18
Phosphorus (P)-Total <0.050 mg/L 0.05	29-AUG-18
Potassium (K)-Total <1.0 mg/L 1	29-AUG-18
Rhenium (Re)-Total <0.00050 mg/L 0.0005	29-AUG-18
Rubidium (Rb)-Total <0.0050 mg/L 0.005	29-AUG-18
Selenium (Se)-Total <0.0020 mg/L 0.002	29-AUG-18
Silicon (Si)-Total <1.0 mg/L 1	29-AUG-18
Silver (Ag)-Total <0.00010 mg/L 0.0001	29-AUG-18
Sodium (Na)-Total <1.0 mg/L 1	29-AUG-18
Strontium (Sr)-Total <0.010 mg/L 0.01	29-AUG-18
Sulfur (S)-Total <5.0 mg/L 5	29-AUG-18



Workorder: L2152840 Report Date: 31-AUG-18

Page 12 of 15

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4191429								
WG2860197-1 MB Tellurium (Te)-Total			<0.00050		mg/L		0.0005	29-AUG-18
Thallium (TI)-Total			<0.000050		mg/L		0.00005	29-AUG-18
Thorium (Th)-Total			<0.00050		mg/L		0.0005	29-AUG-18
Tin (Sn)-Total			<0.0010		mg/L		0.001	29-AUG-18
Titanium (Ti)-Total			<0.0050		mg/L		0.005	29-AUG-18
Tungsten (W)-Total			<0.0010		mg/L		0.001	29-AUG-18
Uranium (U)-Total			<0.000050		mg/L		0.00005	29-AUG-18
Vanadium (V)-Total			<0.00050		mg/L		0.0005	29-AUG-18
Yttrium (Y)-Total			<0.00050		mg/L		0.0005	29-AUG-18
Zinc (Zn)-Total			<0.0030		mg/L		0.003	29-AUG-18
Zirconium (Zr)-Total			<0.00050		mg/L		0.0005	29-AUG-18
NH3-F-VA	Seawater							
Batch R4185730 WG2860249-3 DUP		L2152840-1						
Ammonia, Total (as N)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	27-AUG-18
WG2860249-2 LCS Ammonia, Total (as N)			94.1		%		85-115	27-AUG-18
WG2860249-1 MB Ammonia, Total (as N)			<0.0050		mg/L		0.005	27-AUG-18
WG2860249-4 MS Ammonia, Total (as N)		L2152840-1	99.2		%		75-125	27-AUG-18
PH-C-PCT-VA	Seawater							
Batch R4194452								
WG2861704-2 CRM pH		VA-PH7-BUF	6.99		рН		6.9-7.1	30-AUG-18
TKN-C-F-VA	Seawater							
Batch R4190133								
WG2861293-3 DUP Total Kjeldahl Nitrogen		L2152840-3 0.103	0.105		mg/L	1.9	20	28-AUG-18
WG2861293-2 LCS Total Kjeldahl Nitrogen			105.0		%		75-125	28-AUG-18
WG2861293-1 MB Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	28-AUG-18
WG2861293-4 MS Total Kjeldahl Nitrogen		L2152840-4	102.7		%		70-130	28-AUG-18



Workorder: L2152840

Report Date: 31-AUG-18

Page 13 of 15

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TSS-C-VA	Seawater							
Batch R4184493 WG2859792-2 LCS Total Suspended Solids			96.4		%		85-115	25-AUG-18
WG2859792-4 LCS Total Suspended Solids	3		91.3		%		85-115	25-AUG-18
WG2859792-1 MB Total Suspended Solids	S		<2.0		mg/L		2	25-AUG-18
WG2859792-3 MB Total Suspended Solids	3		<2.0		mg/L		2	25-AUG-18
TURBIDITY-C-VA	Seawater							
Batch R4183426 WG2860163-2 CRM Turbidity		VA-FORM-40	101.0		%		85-115	26-AUG-18
WG2860163-3 DUP Turbidity		L2152840-1 0.74	0.69		NTU	7.0	15	26-AUG-18
WG2860163-1 MB Turbidity			<0.10		NTU		0.1	26-AUG-18

Workorder: L2152840 Report Date: 31-AUG-18 Page 14 of 15

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Workorder: L2152840 Report Date: 31-AUG-18 Page 15 of 15

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests		, <u>, , , , , , , , , , , , , , , , , , </u>					
Turbidity by Meter in Seawa	ıtar						
Turblaity by Weter in Seawa	1	21-AUG-18 08:50	26-AUG-18 13:38	3	5	days	EHTR
	2	21-AUG-18 09:00	26-AUG-18 13:38	3	5	days	EHTR
	3	21-AUG-18 09:05	26-AUG-18 13:38	3	5	days	EHTR
	4	21-AUG-18 09:10	26-AUG-18 13:38	3	5	days	EHTR
pH by Meter (Automated) (s	seawater)						
p byetc. (r tateatca) (c	1	21-AUG-18 08:50	30-AUG-18 11:33	0.25	219	hours	EHTR-FM
	2	21-AUG-18 09:00	30-AUG-18 11:33	0.25	219	hours	EHTR-FN
	3	21-AUG-18 09:05	30-AUG-18 11:33	0.25	218	hours	EHTR-FN
	4	21-AUG-18 09:10	30-AUG-18 11:33	0.25	218	hours	EHTR-FN
Anions and Nutrients							
Nitrate in Seawater by IC							
	1	21-AUG-18 08:50	29-AUG-18 06:23	3	8	days	EHTR
	2	21-AUG-18 09:00	29-AUG-18 06:23	3	8	days	EHTR
	3	21-AUG-18 09:05	29-AUG-18 06:23	3	8	days	EHTR
	4	21-AUG-18 09:10	29-AUG-18 06:23	3	8	days	EHTR
Nitrite in Seawater by IC							
	1	21-AUG-18 08:50	29-AUG-18 06:23	3	8	days	EHTR
	2	21-AUG-18 09:00	29-AUG-18 06:23	3	8	days	EHTR
	3	21-AUG-18 09:05	29-AUG-18 06:23	3	8	days	EHTR
	4	21-AUG-18 09:10	29-AUG-18 06:23	3	8	days	EHTR
Bacteriological Tests							
Fecal coliform by membrane	e filtration						
	1	21-AUG-18 08:50	24-AUG-18 12:00	30	75	hours	EHTR
	2	21-AUG-18 09:00	24-AUG-18 12:00	30	75	hours	EHTR
	3	21-AUG-18 09:05	24-AUG-18 12:00	30	75	hours	EHTR
	4	21-AUG-18 09:10	24-AUG-18 12:00	30	75	hours	EHTR
Legend & Qualifier Definition	· ·						

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Notes*:

Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes. Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2152840 were received on 24-AUG-18 09:30.

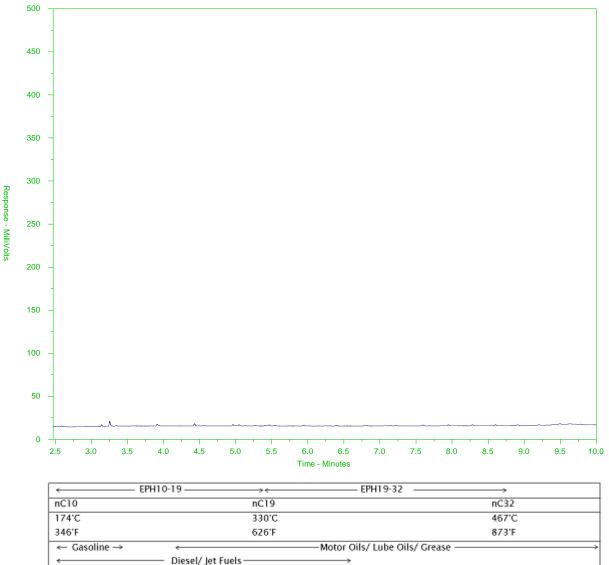
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



ALS Sample ID: L2152840-1 Client Sample ID: SOURCE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

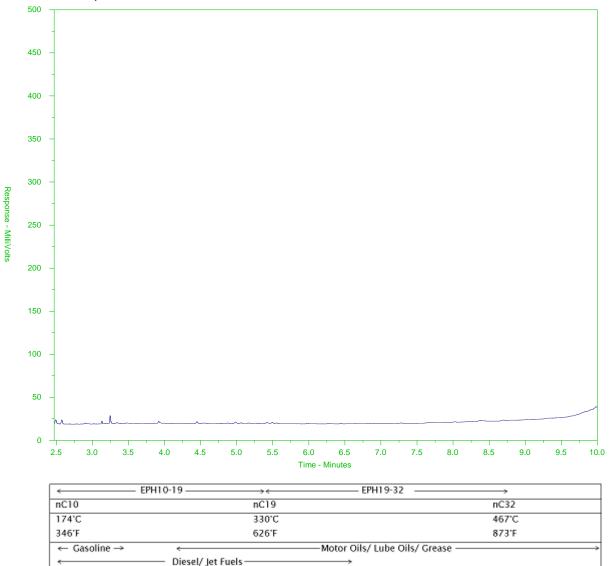
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2152840-2 Client Sample ID: WNW



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

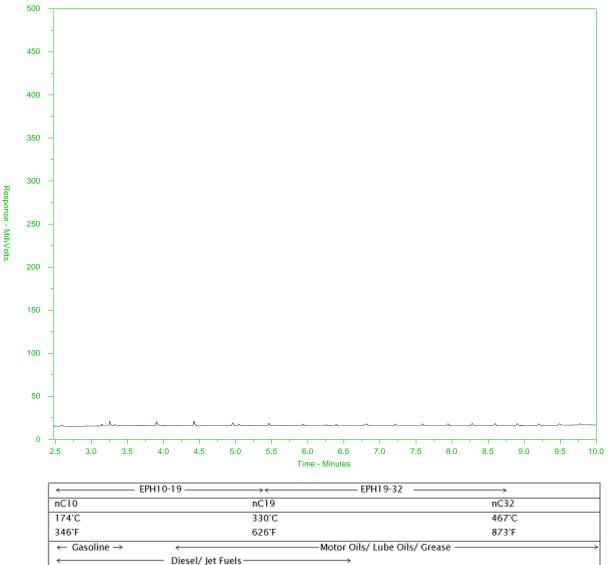
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2152840-3 Client Sample ID: NORTH



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

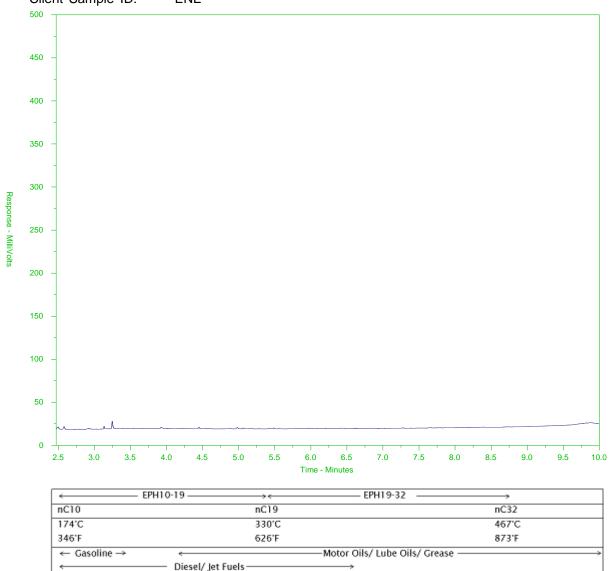
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2152840-4 Client Sample ID: ENE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

ALS Environmental

Chain of Custody (COC) / Analytical Request Form

L2152840-COFC

COC Number: 15 - xxxxxx

ge 1 of-

Canada Toll Free: 1 800 668 9878

	www.aisglobal.com				<u> </u>	***************************************														
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GOLDER ASSOCIATES LTD.

ATTN: John Sherrin

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Date Received: 31-AUG-18

Report Date: 10-SEP-18 15:55 (MT)

Version: FINAL

Client Phone: 250-881-7372

Certificate of Analysis

Lab Work Order #: L2156759
Project P.O. #: NOT SUBMITTED
Job Reference: 1663724/14000/3

C of C Numbers: Legal Site Desc:

ambu Springer

Amber Springer, B.Sc Account Manager

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ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700 ALS CANADA LTD Part of the ALS Group An ALS Limited Company



L2156759 CONTD.... PAGE 2 of 8

10-SEP-18 15:55 (MT) Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2156759-1 Seawater 28-AUG-18 07:55 SOURCE	L2156759-2 Seawater 28-AUG-18 08:15 WNW	L2156759-3 Seawater 28-AUG-18 07:45 NORTH	L2156759-4 Seawater 28-AUG-18 08:05 ENE	
Grouping	Analyte					
SEAWATER						
Physical Tests	Conductivity (uS/cm)	29800	25500	23700	31100	
	Hardness (as CaCO3) (mg/L)	3440	2630	2420	3260	
	pH (pH)	7.91	7.94	7.93	7.93	
	Salinity (psu)	18.5	15.6	14.4	19.3	
	Total Suspended Solids (mg/L)	<2.0	<2.0	<2.0	<2.0	
	Turbidity (NTU)	0.24	0.21	0.23	0.19	
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	90.1	92.1	93.5	91.0	
	Ammonia, Total (as N) (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Bromide (Br) (mg/L)	33.5	27.9	25.3	40.2	
	Chloride (CI) (mg/L)	9550	7910	7180	11300	
	Fluoride (F) (mg/L)	<1.0	<1.0	<1.0	<1.0	
	Nitrate (as N) (mg/L)	<0.50	<0.50	<0.50	<0.50	
	Nitrite (as N) (mg/L)	<0.10	<0.10	<0.10	<0.10	
	Total Kjeldahl Nitrogen (mg/L)	0.064	0.069	0.079	0.060	
	Sulfate (SO4) (mg/L)	1330	1100	987	1570	
Organic / Inorganic Carbon	Total Organic Carbon (mg/L)	0.92	0.96	0.99	0.88	
Total Metals	Aluminum (Al)-Total (mg/L)	0.0094	0.0095	0.0091	0.0082	
	Antimony (Sb)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Arsenic (As)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Barium (Ba)-Total (mg/L)	0.0080	0.0070	0.0071	0.0077	
	Beryllium (Be)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Boron (B)-Total (mg/L)	2.61	2.25	2.16	2.74	
	Cadmium (Cd)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Calcium (Ca)-Total (mg/L)	229	198	180	241	
	Cesium (Cs)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Chromium (Cr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Cobalt (Co)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Copper (Cu)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Gallium (Ga)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Iron (Fe)-Total (mg/L)	<0.010	0.011	<0.010	<0.010	
	Lead (Pb)-Total (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Lithium (Li)-Total (mg/L)	0.101	0.085	0.081	0.105	
	Magnesium (Mg)-Total (mg/L)	674	561	494	692	
	Manganese (Mn)-Total (mg/L)	0.00116	0.00100	0.00094	0.00103	
	Mercury (Hg)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2156759-1 Seawater 28-AUG-18 07:55 SOURCE	L2156759-2 Seawater 28-AUG-18 08:15 WNW	L2156759-3 Seawater 28-AUG-18 07:45 NORTH	L2156759-4 Seawater 28-AUG-18 08:05 ENE	
Grouping	Analyte					
SEAWATER						
Total Metals	Molybdenum (Mo)-Total (mg/L)	0.0063	0.0053	0.0050	0.0065	
	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Potassium (K)-Total (mg/L)	200	172	154	213	
	Rhenium (Re)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Rubidium (Rb)-Total (mg/L)	0.0663	0.0553	0.0518	0.0682	
	Selenium (Se)-Total (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Silicon (Si)-Total (mg/L)	<1.0	<1.0	<1.0	<1.0	
	Silver (Ag)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Total (mg/L)	5390	4440	4030	5570	
	Strontium (Sr)-Total (mg/L)	3.98	3.44	2.91	4.17	
	Sulfur (S)-Total (mg/L)	514	421	370	536	
	Tellurium (Te)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Thallium (TI)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Thorium (Th)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Tin (Sn)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Titanium (Ti)-Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Tungsten (W)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Uranium (U)-Total (mg/L)	0.00223	0.00215	0.00191	0.00216	
	Vanadium (V)-Total (mg/L)	0.00069	0.00067	0.00053	0.00070	
	Yttrium (Y)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Zinc (Zn)-Total (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	
	Zirconium (Zr)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Dissolved Metals	Dissolved Mercury Filtration Location	LAB	LAB	LAB	LAB	
	Dissolved Metals Filtration Location	LAB	LAB	LAB	LAB	
	Aluminum (Al)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Antimony (Sb)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Arsenic (As)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Barium (Ba)-Dissolved (mg/L)	0.0077	0.0070	0.0068	0.0084	
	Beryllium (Be)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Boron (B)-Dissolved (mg/L)	2.61	2.22	2.09	2.89	
	Cadmium (Cd)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Calcium (Ca)-Dissolved (mg/L)	232	196	184	241	
	Cesium (Cs)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Chromium (Cr)-Dissolved (mg/L)	<0.00050	<0.00050	0.00063	<0.00050	
	Cobalt (Co)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2156759-1 Seawater 28-AUG-18 07:55 SOURCE	L2156759-2 Seawater 28-AUG-18 08:15 WNW	L2156759-3 Seawater 28-AUG-18 07:45 NORTH	L2156759-4 Seawater 28-AUG-18 08:05 ENE	
Grouping	Analyte					
SEAWATER						
Dissolved Metals	Copper (Cu)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Gallium (Ga)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Iron (Fe)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
	Lead (Pb)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Lithium (Li)-Dissolved (mg/L)	0.100	0.084	0.079	0.108	
	Magnesium (Mg)-Dissolved (mg/L)	695	520	475	646	
	Manganese (Mn)-Dissolved (mg/L)	0.00089	0.00076	0.00081	0.00078	
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Molybdenum (Mo)-Dissolved (mg/L)	0.0063	0.0053	0.0049	0.0069	
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Potassium (K)-Dissolved (mg/L)	203	169	157	215	
	Rhenium (Re)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Rubidium (Rb)-Dissolved (mg/L)	0.0641	0.0542	0.0513	0.0703	
	Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Silicon (Si)-Dissolved (mg/L)	<1.0	<1.0	<1.0	<1.0	
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Dissolved (mg/L)	5380	4400	4110	5510	
	Strontium (Sr)-Dissolved (mg/L)	3.96	3.09	2.82	3.91	
	Sulfur (S)-Dissolved (mg/L)	523	394	357	492	
	Tellurium (Te)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Thallium (TI)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Thorium (Th)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Titanium (Ti)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Tungsten (W)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Uranium (U)-Dissolved (mg/L)	0.00214	0.00214	0.00191	0.00215	
	Vanadium (V)-Dissolved (mg/L)	0.00068	0.00058	<0.00050	0.00070	
	Yttrium (Y)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2156759-1 Seawater 28-AUG-18 07:55 SOURCE	L2156759-2 Seawater 28-AUG-18 08:15 WNW	L2156759-3 Seawater 28-AUG-18 07:45 NORTH	L2156759-4 Seawater 28-AUG-18 08:05 ENE	
Grouping	Analyte					
WATER						
Bacteriological Tests	Coliform Bacteria - Fecal (CFU/100mL)	PEHR <1	PEHR <1	PEHR <1	PEHR <1	
Hydrocarbons	EPH10-19 (mg/L)	<0.25	<0.25	<0.25	<0.25	
	EPH19-32 (mg/L)	<0.25	<0.25	<0.25	<0.25	
	LEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	
	HEPH (mg/L)	<0.25	<0.25	<0.25	<0.25	
	Surrogate: 2-Bromobenzotrifluoride (%)	102.0	98.5	97.9	102.2	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Acenaphthylene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Acridine (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Anthracene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Benz(a)anthracene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Benzo(a)pyrene (mg/L)	<0.000050	<0.0000050	<0.0000050	<0.000050	
	Benzo(b&j)fluoranthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Benzo(b+j+k)fluoranthene (mg/L)	<0.000015	<0.000015	<0.000015	<0.000015	
	Benzo(g,h,i)perylene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Benzo(k)fluoranthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Chrysene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Dibenz(a,h)anthracene (mg/L)	<0.000050	<0.0000050	<0.0000050	<0.000050	
	Fluoranthene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Fluorene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Indeno(1,2,3-c,d)pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	1-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	2-Methylnaphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Naphthalene (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Phenanthrene (mg/L)	<0.000020	<0.000020	<0.000020	<0.000020	
	Pyrene (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Quinoline (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	
	Surrogate: Acridine d9 (%)	86.3	82.0	66.7	86.2	
	Surrogate: Chrysene d12 (%)	83.9	95.1	70.4	85.9	
	Surrogate: Naphthalene d8 (%)	84.0	85.8	76.8	85.5	
	Surrogate: Phenanthrene d10 (%)	95.0	99.1	89.5	103.2	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)	
Matrix Spike	Bromide (Br)	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Chloride (CI)	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Sulfate (SO4)	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Calcium (Ca)-Total	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Magnesium (Mg)-Total	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Potassium (K)-Total	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Rubidium (Rb)-Total	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Sodium (Na)-Total	MS-B	L2156759-1, -2, -3, -4	
Matrix Spike	Strontium (Sr)-Total	MS-B	L2156759-1, -2, -3, -4	

Qualifiers for Individual Parameters Listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
PEHR	Parameter Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TITR-VA	Seawater	Alkalinity Spec by Titration (Seawater)	APHA 2320 Alkalinity

This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

ANIONS-C-BR-IC-VA Bromide by IC (seawater) Seawater FPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-CL-IC-VA Seawater Chloride by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

Fluoride by IC (seawater) EPA 300.1 (mod) Seawater

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

ANIONS-C-NO2-IC-VA Seawater Nitrite in Seawater by IC EPA 300.1 (mod)

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrite is detected by UV absorbance.

ANIONS-C-NO3-IC-VA Nitrate in Seawater by IC EPA 300.1 (mod) Seawater

This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrate is detected by UV absorbance.

ANIONS-C-SO4-IC-VA Seawater Sulfate by IC (seawater) EPA 300.1 (mod)

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

APHA 5310B TOTAL ORGANIC CARBON (TOC) **CARBONS-C-TOC-VA** Seawater TOC by combustion (seawater)

This analysis is carried out using procedures adapted from APHA Method 5310 "Total Organic Carbon (TOC)".

EC-C-PCT-VA Seawater Conductivity (Automated) (seawater) APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

EC-SCREEN-VA Seawater Conductivity Screen (Internal Use Only) Qualitative analysis of conductivity where required during preparation of other tests - e.g. TDS, metals, etc.

EPH-ME-FID-VA Water EPH in Water BC Lab Manual

EPH is extracted from water using a hexane micro-extraction technique, with analysis by GC-FID, as per the BC Lab Manual. EPH results include PAHs and are therefore not equivalent to LEPH or HEPH.

FCOLI-MF-ENV-VA Fecal coliform by membrane filtration **APHA METHOD 9222**

This analysis is carried out using procedures adapted from APHA Method 9222 "Membrane Filter Technique for Members of the Coliform Group". Coliform bacteria is enumerated by culturing and colony counting. A known sample volume is filtered through a 0.45 micron membrane filter. The test involves an initial 24 hour incubation of the filter with the appropriate growth medium, positive results require further testing (up to an additional 48 hours) to confirm and quantify the total coliform. This method is used for non-turbid water with a low background bacteria level.

APHA 2340B HARDNESS-CALC-VA Seawater Hardness

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Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-DIS-C-CVAFS-VA

Seawater

Diss. Mercury in Seawater by CVAFS

PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedures may involve preliminary sample treatment by filtration (EPA Method 3005A) and involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

HG-TOT-C-CVAFS-VA

Seawater

Total Mercury in Seawater by CVAFS

PUGET SOUND PROTOCOLS, EPA 245.7

This analysis is carried out using procedures adapted from "Recommended Guidelines for Measuring Metals in Puget Sound Marine Water, Sediment, and Tissue Samples" prepared for the United States Environmental Protection Agency and the Puget Sound Water Quality Authority, 1995. The procedure involves a cold-oxidation of the acidified seawater sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).

LEPH/HEPH-CALC-VA

Water

LEPHs and HEPHs

BC MOE LEPH/HEPH

LEPHw and HEPHw are measures of Light and Heavy Extractable Petroleum Hydrocarbons in water. Results are calculated by subtraction of applicable PAH concentrations from EPH10-19 and EPH19-32, as per the BC Lab Manual LEPH/HEPH calculation procedure. LEPHw = EPH10-19 minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene.

HEPH = EPH19-32 minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

MET-D-L-HRMS-VA

Seawater

Diss. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve laboratory sample filtration based on APHA Method 3030B.

MET-T-L-HRMS-VA

Seawater

Tot. Metals in Seawater by HR-ICPMS

EPA 200.8

Trace metals in seawater are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) based on US EPA Method 200.8, (Revision 5.5). The procedures may involve preliminary sample treatment by acid digestion based on APHA Method 3030E.

NH3-F-VA

Seawater Ammonia in Seawater by Fluorescence

J. ENVIRON. MONIT., 2005, 7, 37-42, RSC

This analysis is carried out, on sulfuric acid preserved samples, using procedures modified from J. Environ. Monit., 2005, 7, 37 - 42, The Royal Society of Chemistry, "Flow-injection analysis with fluorescence detection for the determination of trace levels of ammonium in seawater", Roslyn J. Waston et al.

PAH-ME-MS-VA

Water

PAHs in Water

EPA 3511/8270D (mod)

PAHs are extracted from water using a hexane micro-extraction technique, with analysis by GC/MS. Because the two isomers cannot be readily separated chromatographically, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

DH_C_DCT_VA

Seawater

pH by Meter (Automated) (seawater)

APHA 4500-H pH Value

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

It is recommended that this analysis be conducted in the field.

SALINITY-CALC-VA

Seawate

Salinity by conductivity meter

APHA 2520B

Salinity is determined by the APHA 2520B Electrical Conductivity Method. Salinity is a unitless parameter that is roughly equivalent to grams per Litre. ALS applies the unit of psu (practical salinity unit) to indicate that salinity values are derived from the Practical Salinity Scale.

TKN_C_E_V

Seawater

TKN in Seawater by Fluorescence

APHA 4500-NORG D.

This analysis is carried out using procedures adapted from APHA Method 4500-Norg D. "Block Digestion and Flow Injection Analysis". Total Kjeldahl Nitrogen is determined using block digestion followed by Flow-injection analysis with fluorescence detection.

TSS-C-VA

VA

Seawate

Total Suspended Solids by Gravimetric

APHA 2540 D

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids (TSS) is determined by filtering a sample through a glass fibre filter. TSS is determined by drying the filter at 104 degrees celsius.

TURBIDITY-C-VA

Seawater

Turbidity by Meter in Seawater

APHA 2130 Turbidity

This analysis is carried out using procedures adapted from APHA Method 2130 "Turbidity". Turbidity is determined by the nephelometric method.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code Laboratory Location

ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

Reference Information

L2156759 CONTD....

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10-SEP-18 15:55 (MT)

Version: FINAL

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

mg/kg - milligrams per kilogram based on dry weight of sample.

mg/kg wwt - milligrams per kilogram based on wet weight of sample.

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L2156759 Report Date: 10-SEP-18 Page 1 of 13

Client: GOLDER ASSOCIATES LTD.

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Contact: John Sherrin

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EPH-ME-FID-VA	Water							
Batch R4203184								
WG2868820-2 LCS EPH10-19			99.9		%		70-130	06-SEP-18
EPH19-32			104.6		%		70-130	06-SEP-18
WG2868820-1 MB EPH10-19			<0.25		mg/L		0.25	06-SEP-18
EPH19-32			<0.25		mg/L		0.25	06-SEP-18
Surrogate: 2-Bromoben	zotrifluoride		90.7		g, <u></u> %		60-140	06-SEP-18
-			00		,,		00 140	00 GET -10
FCOLI-MF-ENV-VA	Water							
Batch R4201415 WG2865116-2 MB								
Coliform Bacteria - Fec	al		<1		CFU/100mL		1	31-AUG-18
PAH-ME-MS-VA	Water							
Batch R4203945								
WG2868820-2 LCS								
Acenaphthene			84.9		%		60-130	10-SEP-18
Acenaphthylene			85.8		%		60-130	10-SEP-18
Acridine			90.2		%		60-130	10-SEP-18
Anthracene			92.8		%		60-130	10-SEP-18
Benz(a)anthracene			74.8		%		60-130	10-SEP-18
Benzo(a)pyrene			81.0		%		60-130	10-SEP-18
Benzo(b&j)fluoranthene)		74.9		%		60-130	10-SEP-18
Benzo(g,h,i)perylene			95.6		%		60-130	10-SEP-18
Benzo(k)fluoranthene			85.4		%		60-130	10-SEP-18
Chrysene			78.7		%		60-130	10-SEP-18
Dibenz(a,h)anthracene			89.9		%		60-130	10-SEP-18
Fluoranthene			88.2		%		60-130	10-SEP-18
Fluorene			87.6		%		60-130	10-SEP-18
Indeno(1,2,3-c,d)pyrene	9		86.1		%		60-130	10-SEP-18
1-Methylnaphthalene			71.7		%		60-130	10-SEP-18
2-Methylnaphthalene			71.3		%		60-130	10-SEP-18
Naphthalene			71.5		%		50-130	10-SEP-18
Phenanthrene			95.3		%		60-130	10-SEP-18
Pyrene			87.0		%		60-130	10-SEP-18
Quinoline			87.6		%		60-130	10-SEP-18
WG2868820-1 MB								



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-ME-MS-VA	Water							
Batch R42039	45							
WG2868820-1 MB			0.000044					
Acenaphthene			<0.000010		mg/L		0.00001	10-SEP-18
Acenaphthylene			<0.000010		mg/L		0.00001	10-SEP-18
Acridine			<0.000010		mg/L		0.00001	10-SEP-18
Anthracene			<0.000010		mg/L		0.00001	10-SEP-18
Benz(a)anthracene			<0.000010		mg/L		0.00001	10-SEP-18
Benzo(a)pyrene			<0.00000	5C	mg/L		0.000005	10-SEP-18
Benzo(b&j)fluoranthe	ene		<0.000010)	mg/L		0.00001	10-SEP-18
Benzo(g,h,i)perylene			<0.000010)	mg/L		0.00001	10-SEP-18
Benzo(k)fluoranthene	e		<0.000010)	mg/L		0.00001	10-SEP-18
Chrysene			<0.000010)	mg/L		0.00001	10-SEP-18
Dibenz(a,h)anthracer	ne		<0.00000	5C	mg/L		0.000005	10-SEP-18
Fluoranthene			<0.000010)	mg/L		0.00001	10-SEP-18
Fluorene			<0.00001)	mg/L		0.00001	10-SEP-18
Indeno(1,2,3-c,d)pyre	ene		<0.00001)	mg/L		0.00001	10-SEP-18
1-Methylnaphthalene			<0.00005)	mg/L		0.00005	10-SEP-18
2-Methylnaphthalene			<0.00005)	mg/L		0.00005	10-SEP-18
Naphthalene			< 0.000050)	mg/L		0.00005	10-SEP-18
Phenanthrene			< 0.000020)	mg/L		0.00002	10-SEP-18
Pyrene			<0.000010)	mg/L		0.00001	10-SEP-18
Quinoline			<0.00005)	mg/L		0.00005	10-SEP-18
Surrogate: Acridine d	19		83.5		%		60-130	10-SEP-18
Surrogate: Chrysene	d12		73.7		%		60-130	10-SEP-18
Surrogate: Naphthale	ene d8		78.8		%		50-130	10-SEP-18
Surrogate: Phenanth	rene d10		88.1		%		60-130	10-SEP-18
ALK-TITR-VA	Seawater							
Batch R42055	92							
WG2871096-5 DUI		L2156759-2						
Alkalinity, Total (as C	aCO3)	92.1	91.6		mg/L	0.5	20	07-SEP-18
WG2871096-1 MB Alkalinity, Total (as C			<1.0		mg/L		1	07-SEP-18
ANIONS-C-BR-IC-VA	Seawater							
Batch R42058	72							
WG2869978-6 LCS Bromide (Br)	5		103.8		%		85-115	07-SEP-18
WG2869978-5 MB								



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Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ANIONS-C-BR-IC-\	/A	Seawater							
Batch R4 WG2869978-5 Bromide (Br)	205872 MB			<5.0		mg/L		5	07-SEP-18
WG2869978-8 Bromide (Br)	MS		L2156759-2	N/A	MS-B	%		-	07-SEP-18
ANIONS-C-CL-IC-V	/A	Seawater							
Batch R4 WG2869978-6 Chloride (Cl)	205872 LCS			99.9		%		90-110	07-SEP-18
WG2869978-5 Chloride (CI)	MB			<50		mg/L		50	07-SEP-18
WG2869978-8 Chloride (CI)	MS		L2156759-2	N/A	MS-B	%		-	07-SEP-18
ANIONS-C-F-IC-VA	١	Seawater							
Batch R4	205872								
WG2869978-6 Fluoride (F)	LCS			100.9		%		90-110	07-SEP-18
WG2869978-5 Fluoride (F)	MB			<1.0		mg/L		1	07-SEP-18
ANIONS-C-NO2-IC	-VA	Seawater							
Batch R4	205872								
WG2869978-6 Nitrite (as N)	LCS			100.2		%		90-110	07-SEP-18
WG2869978-5 Nitrite (as N)	MB			<0.10		mg/L		0.1	07-SEP-18
ANIONS-C-NO3-IC	-VA	Seawater							
Batch R4	205872								
WG2869978-6 Nitrate (as N)	LCS			100.6		%		90-110	07-SEP-18
WG2869978-5 Nitrate (as N)	MB			<0.50		mg/L		0.5	07-SEP-18
ANIONS-C-SO4-IC	-VA	Seawater							
Batch R4	205872								
WG2869978-6 Sulfate (SO4)	LCS			100.9		%		90-110	07-SEP-18
WG2869978-5 Sulfate (SO4)	MB			<30		mg/L		30	07-SEP-18
WG2869978-8	MS		L2156759-2						



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	
ANIONS-C-SO4-IC-VA Batch R4205872 WG2869978-8 MS Sulfate (SO4)	Seawater	L2156759-2	N/A	MS-B	%		-	07-SEP-18	
CARBONS-C-TOC-VA Batch R4203048	Seawater								
WG2867907-1 DUP Total Organic Carbon		L2156759-1 0.92	0.96		mg/L	5.0	20	03-SEP-18	
WG2867907-4 LCS Total Organic Carbon			107.5		%		80-120	03-SEP-18	
WG2867907-3 MB Total Organic Carbon			<0.50		mg/L		0.5	03-SEP-18	
WG2867907-2 MS Total Organic Carbon		L2156759-2	103.3		%		70-130	03-SEP-18	
EC-C-PCT-VA	Seawater								
Batch R4205592									
WG2871096-4 CRM Conductivity		VA-EC-PCT-C	101.4		%		90-110	07-SEP-18	
WG2871096-5 DUP Conductivity		L2156759-2 25500	25700		uS/cm	0.8	10	07-SEP-18	
WG2871096-1 MB Conductivity			<2.0		uS/cm		2	07-SEP-18	
HG-DIS-C-CVAFS-VA	Seawater								
Batch R4196203									
WG2865969-2 LCS			00.4		0/				
Mercury (Hg)-Dissolved			99.4		%		80-120	01-SEP-18	
WG2865969-1 MB Mercury (Hg)-Dissolved		LF	<0.000010)	mg/L		0.00001	01-SEP-18	
WG2865969-4 MS Mercury (Hg)-Dissolved		L2156759-4	102.2		%		70-130	01-SEP-18	
HG-TOT-C-CVAFS-VA	Seawater								
Batch R4203031									
WG2868487-2 LCS Mercury (Hg)-Total			101.0		%		80-120	05-SEP-18	
WG2868487-1 MB Mercury (Hg)-Total			<0.000010)	mg/L		0.00001	05-SEP-18	
WG2868487-10 MS Mercury (Hg)-Total		L2156759-3	102.2		%		70-130	05-SEP-18	
	Seawater								



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R4204348								
WG2866192-2 LCS								
Aluminum (Al)-Dissolved			97.2		%		80-120	06-SEP-18
Antimony (Sb)-Dissolved	d		88.5		%		80-120	06-SEP-18
Arsenic (As)-Dissolved			97.4		%		80-120	06-SEP-18
Barium (Ba)-Dissolved			89.1		%		80-120	06-SEP-18
Beryllium (Be)-Dissolved	d		88.6		%		80-120	06-SEP-18
Bismuth (Bi)-Dissolved			88.3		%		80-120	06-SEP-18
Boron (B)-Dissolved			92.6		%		80-120	06-SEP-18
Cadmium (Cd)-Dissolve	d		90.4		%		80-120	06-SEP-18
Calcium (Ca)-Dissolved			87.6		%		80-120	06-SEP-18
Cesium (Cs)-Dissolved			90.5		%		80-120	06-SEP-18
Chromium (Cr)-Dissolve	ed		92.4		%		80-120	06-SEP-18
Cobalt (Co)-Dissolved			96.8		%		80-120	06-SEP-18
Copper (Cu)-Dissolved			94.4		%		80-120	06-SEP-18
Gallium (Ga)-Dissolved			95.2		%		80-120	06-SEP-18
Iron (Fe)-Dissolved			97.1		%		80-120	06-SEP-18
Lead (Pb)-Dissolved			97.6		%		80-120	06-SEP-18
Lithium (Li)-Dissolved			88.3		%		80-120	06-SEP-18
Magnesium (Mg)-Dissol	ved		89.0		%		80-120	06-SEP-18
Manganese (Mn)-Dissol	ved		102.0		%		80-120	06-SEP-18
Molybdenum (Mo)-Disso	olved		90.6		%		80-120	06-SEP-18
Nickel (Ni)-Dissolved			95.6		%		80-120	06-SEP-18
Phosphorus (P)-Dissolve	ed		99.6		%		80-120	06-SEP-18
Potassium (K)-Dissolved	d		101.2		%		80-120	06-SEP-18
Rhenium (Re)-Dissolved	d		95.6		%		80-120	06-SEP-18
Rubidium (Rb)-Dissolve	d		89.1		%		80-120	06-SEP-18
Selenium (Se)-Dissolved			93.5		%		80-120	06-SEP-18
Silicon (Si)-Dissolved			102.6		%		80-120	06-SEP-18
Silver (Ag)-Dissolved			83.5		%		80-120	06-SEP-18
Sodium (Na)-Dissolved			103.0		%		80-120	06-SEP-18
Strontium (Sr)-Dissolved	d		95.6		%		80-120	06-SEP-18
Sulfur (S)-Dissolved			98.9		%		80-120	06-SEP-18
Tellurium (Te)-Dissolved	t		94.0		%		80-120	06-SEP-18
Thallium (TI)-Dissolved			83.5		%		80-120	06-SEP-18
Thorium (Th)-Dissolved			90.0		%		80-120	06-SEP-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R4204348								
WG2866192-2 LCS								
Tin (Sn)-Dissolved			98.8		%		80-120	06-SEP-18
Titanium (Ti)-Dissolved			101.6		%		80-120	06-SEP-18
Tungsten (W)-Dissolved	d		98.2		%		80-120	06-SEP-18
Uranium (U)-Dissolved			99.2		%		80-120	06-SEP-18
Vanadium (V)-Dissolved	d		98.2		%		80-120	06-SEP-18
Yttrium (Y)-Dissolved			92.2		%		80-120	06-SEP-18
Zinc (Zn)-Dissolved			90.2		%		80-120	06-SEP-18
Zirconium (Zr)-Dissolve	d		94.8		%		80-120	06-SEP-18
WG2866192-1 MB Antimony (Sb)-Dissolve	d	LF	<0.00050		ma/l		0.0005	00 055 40
	u				mg/L		0.0005	06-SEP-18
Arsenic (As)-Dissolved			<0.0020		mg/L		0.002	06-SEP-18
Barium (Ba)-Dissolved	لم		<0.0010		mg/L		0.001	06-SEP-18
Beryllium (Be)-Dissolve	u		<0.00050		mg/L		0.0005	06-SEP-18
Bismuth (Bi)-Dissolved			<0.00050		mg/L		0.0005	06-SEP-18
Boron (B)-Dissolved	•		<0.10		mg/L		0.1	06-SEP-18
Calcium (Ca)-Dissolved			<1.0		mg/L		1	06-SEP-18
Cesium (Cs)-Dissolved			<0.00050		mg/L		0.0005	06-SEP-18
Chromium (Cr)-Dissolve			<0.00050		mg/L		0.0005	06-SEP-18
Gallium (Ga)-Dissolved			<0.00050		mg/L		0.0005	06-SEP-18
Lead (Pb)-Dissolved			<0.00030		mg/L		0.0003	06-SEP-18
Lithium (Li)-Dissolved			<0.020		mg/L		0.02	06-SEP-18
Magnesium (Mg)-Disso			<1.0		mg/L		1	06-SEP-18
Molybdenum (Mo)-Disse	olved		<0.0020		mg/L		0.002	06-SEP-18
Nickel (Ni)-Dissolved			<0.00050		mg/L		0.0005	06-SEP-18
Phosphorus (P)-Dissolv			<0.050		mg/L		0.05	06-SEP-18
Potassium (K)-Dissolve			<1.0		mg/L		1	06-SEP-18
Rhenium (Re)-Dissolve	d		<0.00050		mg/L		0.0005	06-SEP-18
Rubidium (Rb)-Dissolve			<0.0050		mg/L		0.005	06-SEP-18
Selenium (Se)-Dissolve	d		<0.0020		mg/L		0.002	06-SEP-18
Silicon (Si)-Dissolved			<1.0		mg/L		1	06-SEP-18
Silver (Ag)-Dissolved			<0.00010		mg/L		0.0001	06-SEP-18
Sodium (Na)-Dissolved			<1.0		mg/L		1	06-SEP-18
Strontium (Sr)-Dissolve	d		<0.010		mg/L		0.01	06-SEP-18
Sulfur (S)-Dissolved			<5.0		mg/L		5	06-SEP-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-HRMS-VA	Seawater							
Batch R420434	18							
WG2866192-1 MB		LF						
Tellurium (Te)-Dissolv			<0.00050		mg/L		0.0005	06-SEP-18
Thallium (TI)-Dissolve			<0.000050)	mg/L		0.00005	06-SEP-18
Thorium (Th)-Dissolve	ed		<0.00050		mg/L		0.0005	06-SEP-18
Tin (Sn)-Dissolved			<0.0010		mg/L		0.001	06-SEP-18
Titanium (Ti)-Dissolve			<0.0050		mg/L		0.005	06-SEP-18
Tungsten (W)-Dissolv			<0.0010		mg/L		0.001	06-SEP-18
Uranium (U)-Dissolve	d		<0.000050)	mg/L		0.00005	06-SEP-18
Vanadium (V)-Dissolv	ved .		<0.00050		mg/L		0.0005	06-SEP-18
Yttrium (Y)-Dissolved			<0.00050		mg/L		0.0005	06-SEP-18
Zirconium (Zr)-Dissolv	ved		<0.00050		mg/L		0.0005	06-SEP-18
Batch R420519	91							
WG2866192-1 MB		LF						
Aluminum (Al)-Dissolv			<0.0050		mg/L		0.005	06-SEP-18
Cadmium (Cd)-Dissol			<0.000050		mg/L		0.00005	06-SEP-18
Cobalt (Co)-Dissolved			<0.000050)	mg/L		0.00005	06-SEP-18
Copper (Cu)-Dissolve	d		<0.00050		mg/L		0.0005	06-SEP-18
Iron (Fe)-Dissolved			<0.010		mg/L		0.01	06-SEP-18
Manganese (Mn)-Diss	solved		<0.00020		mg/L		0.0002	06-SEP-18
Zinc (Zn)-Dissolved			< 0.0030		mg/L		0.003	06-SEP-18
MET-T-L-HRMS-VA	Seawater							
Batch R420434	18							
WG2865917-2 LCS	;		00.0		0/			
Aluminum (Al)-Total			96.6		%		80-120	06-SEP-18
Antimony (Sb)-Total			95.0		%		80-120	06-SEP-18
Arsenic (As)-Total			94.4		%		80-120	06-SEP-18
Barium (Ba)-Total			97.0		%		80-120	06-SEP-18
Beryllium (Be)-Total			96.2		%		80-120	06-SEP-18
Bismuth (Bi)-Total			87.0		%		80-120	06-SEP-18
Boron (B)-Total			93.6		%		80-120	06-SEP-18
Cadmium (Cd)-Total			96.5		%		80-120	06-SEP-18
Calcium (Ca)-Total			91.2		%		80-120	06-SEP-18
Cesium (Cs)-Total			97.2		%		80-120	06-SEP-18
Chromium (Cr)-Total			92.8		%		80-120	06-SEP-18
Cobalt (Co)-Total			94.4		%		80-120	06-SEP-18



Workorder: L2156759 Report Date: 10-SEP-18 Page 8 of 13

est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ET-T-L-HRMS-VA	Seawater							
Batch R4204348								
WG2865917-2 LCS Copper (Cu)-Total			90.8		%		80-120	06-SEP-18
Gallium (Ga)-Total			95.6		%		80-120	06-SEP-18
Iron (Fe)-Total			96.4		%		80-120	06-SEP-18
Lead (Pb)-Total			98.6		%		80-120	06-SEP-18
Lithium (Li)-Total			98.2		%		80-120	06-SEP-18
Magnesium (Mg)-Total			90.2		%		80-120	06-SEP-18
Manganese (Mn)-Total			100.8		%		80-120	06-SEP-18
Molybdenum (Mo)-Total			94.8		%		80-120	06-SEP-18
Nickel (Ni)-Total			94.2		%		80-120	06-SEP-18
Phosphorus (P)-Total			96.1		%		80-120	06-SEP-18
Potassium (K)-Total			99.7		%		80-120	06-SEP-18
Rhenium (Re)-Total			95.7		%		80-120	06-SEP-18
Rubidium (Rb)-Total			94.8		%		80-120	06-SEP-18
Selenium (Se)-Total			90.5		%		80-120	06-SEP-18
Silicon (Si)-Total			96.3		%		80-120	06-SEP-18
Silver (Ag)-Total			94.9		%		80-120	06-SEP-18
Sodium (Na)-Total			100.4		%		80-120	06-SEP-18
Strontium (Sr)-Total			90.0		%		80-120	06-SEP-18
Sulfur (S)-Total			94.9		%		70-130	06-SEP-18
Tellurium (Te)-Total			97.5		%		80-120	06-SEP-18
Thallium (TI)-Total			87.2		%		80-120	06-SEP-18
Thorium (Th)-Total			92.2		%		80-120	06-SEP-18
Tin (Sn)-Total			97.6		%		80-120	06-SEP-18
Titanium (Ti)-Total			96.4		%		80-120	06-SEP-18
Tungsten (W)-Total			90.9		%		80-120	06-SEP-18
Uranium (U)-Total			99.0		%		80-120	06-SEP-18
Vanadium (V)-Total			99.0		%		80-120	06-SEP-18
Yttrium (Y)-Total			93.4		%		80-120	06-SEP-18
Zinc (Zn)-Total			89.6		%		80-120	06-SEP-18
Zirconium (Zr)-Total			99.0		%		80-120	06-SEP-18
WG2865917-1 MB			-0.0050		ma/l		0.005	00.077.17
Aluminum (Al)-Total			<0.0050		mg/L		0.005	06-SEP-18
Antimony (Sb)-Total Arsenic (As)-Total			<0.00050 <0.0020		mg/L		0.0005	06-SEP-18



Workorder: L2156759 Report Date: 10-SEP-18 Page 9 of 13

MET-T-L-HRMS-VA Seawater	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MO2865917-1 MB Barium (Ba)-Total	MET-T-L-HRMS-VA	Seawater							
Beryllium (Be)-Total									
Bismuth (Bi)-Total	Barium (Ba)-Total			<0.0010		mg/L		0.001	06-SEP-18
Boron (B)-Total	Beryllium (Be)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Cadmium (Cd)-Total <0.000050	Bismuth (Bi)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Calcium (Ca)-Total <1.0	Boron (B)-Total			<0.10		mg/L		0.1	06-SEP-18
Cesium (Cs)-Total <0.00050	Cadmium (Cd)-Total			<0.000050)	mg/L		0.00005	06-SEP-18
Chromium (Cr)-Total <0.00050	Calcium (Ca)-Total			<1.0		mg/L		1	06-SEP-18
Cobalt (Co)-Total <0.000050	Cesium (Cs)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Copper (Cu)-Total <0.00050 mg/L 0.0005 06-SEP-18 Gallium (Ga)-Total <0.00050	Chromium (Cr)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Gallium (Ga)-Total <0.00050 mg/L 0.0005 66-SEP-18 Iron (Fe)-Total <0.010	Cobalt (Co)-Total			<0.000050)	mg/L		0.00005	06-SEP-18
Iron (Fe)-Total	Copper (Cu)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Lead (Pb)-Total <0.00030	Gallium (Ga)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Lithium (Li)-Total <0.020	Iron (Fe)-Total			<0.010		mg/L		0.01	06-SEP-18
Magnesium (Mg)-Total <1.0	Lead (Pb)-Total			<0.00030		mg/L		0.0003	06-SEP-18
Manganese (Mn)-Total <0.00020	Lithium (Li)-Total			<0.020		mg/L		0.02	06-SEP-18
Molybdenum (Mo)-Total <0.0020 mg/L 0.002 06-SEP-18 Nickel (Ni)-Total <0.00050	Magnesium (Mg)-Total			<1.0		mg/L		1	06-SEP-18
Nickel (Ni)-Total <0.00050 mg/L 0.0005 06-SEP-18 Phosphorus (P)-Total <0.050	Manganese (Mn)-Total			<0.00020		mg/L		0.0002	06-SEP-18
Phosphorus (P)-Total <0.050 mg/L 0.05 06-SEP-18 Potassium (K)-Total <1.0	Molybdenum (Mo)-Total			<0.0020		mg/L		0.002	06-SEP-18
Potassium (K)-Total <1.0	Nickel (Ni)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Rhenium (Re)-Total <0.00050	Phosphorus (P)-Total			< 0.050		mg/L		0.05	06-SEP-18
Rubidium (Rb)-Total <0.0050	Potassium (K)-Total			<1.0		mg/L		1	06-SEP-18
Selenium (Se)-Total <0.0020	Rhenium (Re)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Silicon (Si)-Total <1.0	Rubidium (Rb)-Total			< 0.0050		mg/L		0.005	06-SEP-18
Silver (Ag)-Total <0.00010	Selenium (Se)-Total			<0.0020		mg/L		0.002	06-SEP-18
Sodium (Na)-Total <1.0	Silicon (Si)-Total			<1.0		mg/L		1	06-SEP-18
Strontium (Sr)-Total <0.010	Silver (Ag)-Total			<0.00010		mg/L		0.0001	06-SEP-18
Sulfur (S)-Total <5.0	Sodium (Na)-Total			<1.0		mg/L		1	06-SEP-18
Tellurium (Te)-Total <0.00050	Strontium (Sr)-Total			<0.010		mg/L		0.01	06-SEP-18
Thallium (TI)-Total <0.000050	Sulfur (S)-Total			<5.0		mg/L		5	06-SEP-18
Thorium (Th)-Total <0.00050 mg/L 0.0005 06-SEP-18 Tin (Sn)-Total <0.0010	Tellurium (Te)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Thorium (Th)-Total <0.00050	Thallium (TI)-Total			<0.000050)	mg/L		0.00005	06-SEP-18
Tin (Sn)-Total <0.0010	Thorium (Th)-Total			<0.00050		mg/L		0.0005	
	Tin (Sn)-Total			<0.0010		mg/L		0.001	
Tungsten (W)-Total <0.0010 mg/L 0.001 06-SEP-18	Titanium (Ti)-Total			<0.0050		mg/L		0.005	06-SEP-18
	Tungsten (W)-Total			<0.0010		mg/L		0.001	



Workorder: L2156759 Report Date: 10-SEP-18 Page 10 of 13

est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-HRMS-VA	Seawater							
Batch R4204348 WG2865917-1 MB								
Uranium (U)-Total			<0.000050		mg/L		0.00005	06-SEP-18
Vanadium (V)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Yttrium (Y)-Total			<0.00050		mg/L		0.0005	06-SEP-18
Zinc (Zn)-Total			< 0.0030		mg/L		0.003	06-SEP-18
Zirconium (Zr)-Total			<0.00050		mg/L		0.0005	06-SEP-18
IH3-F-VA	Seawater							
Batch R4196326 WG2865925-3 DUP		L2156759-4	0.0050					
Ammonia, Total (as N) WG2865925-2 LCS Ammonia, Total (as N)		<0.0050	<0.0050 94.2	RPD-NA	mg/L %	N/A	20 85-115	02-SEP-18 02-SEP-18
WG2865925-1 MB Ammonia, Total (as N)			<0.0050		mg/L		0.005	02-SEP-18
WG2865925-4 MS Ammonia, Total (as N)		L2156759-4	90.3		%		75-125	02-SEP-18
PH-C-PCT-VA	Seawater							
Batch R4205592 WG2871096-2 CRM		VA-PH7-BUF	6.99		aU.		0.0.7.4	07 OFD 40
рН WG2871096-5 DUP рН		L2156759-2 7.94	7.93	J	pH pH	0.01	6.9-7.1 0.3	07-SEP-18 07-SEP-18
KN-C-F-VA	Seawater							
Batch R4203481 WG2868638-2 LCS								
Total Kjeldahl Nitrogen			100.4		%		75-125	06-SEP-18
WG2868638-1 MB Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	06-SEP-18
SS-C-VA	Seawater							
Batch R4201908 WG2866832-2 LCS Total Suspended Solids			97.3		%		85-115	04 SED 40
WG2866832-1 MB Total Suspended Solids			<2.0		mg/L		2	04-SEP-18 04-SEP-18
•					-			



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Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TURBIDITY-C-VA		Seawater							
Batch R4 WG2866252-2 Turbidity	196200 CRM		VA-FORM-40	101.3		%		85-115	01-SEP-18
WG2866252-3 Turbidity	DUP		L2156759-1 0.24	0.24		NTU	0.8	15	01-SEP-18
WG2866252-1 Turbidity	MB			<0.10		NTU		0.1	01-SEP-18

Workorder: L2156759 Report Date: 10-SEP-18 Page 12 of 13

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	l Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	1 Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCS	D Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Workorder: L2156759 Report Date: 10-SEP-18 Page 13 of 13

Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests		J 3					
-							
Turbidity by Meter in Seawa							
	1	28-AUG-18 07:55	01-SEP-18 12:00	3	4	days	EHTR
	2	28-AUG-18 08:15	01-SEP-18 12:00	3	4	days	EHTR
	3	28-AUG-18 07:45	01-SEP-18 12:00	3	4	days	EHTR
	4	28-AUG-18 08:05	01-SEP-18 12:00	3	4	days	EHTR
pH by Meter (Automated) (s	seawater)						
	1	28-AUG-18 07:55	07-SEP-18 12:39	0.25	245	hours	EHTR-FM
	2	28-AUG-18 08:15	07-SEP-18 12:39	0.25	244	hours	EHTR-FM
	3	28-AUG-18 07:45	07-SEP-18 12:39	0.25	245	hours	EHTR-FM
	4	28-AUG-18 08:05	07-SEP-18 12:39	0.25	245	hours	EHTR-FM
Anions and Nutrients							
Nitrate in Seawater by IC							
	1	28-AUG-18 07:55	07-SEP-18 13:12	3	10	days	EHTR
	2	28-AUG-18 08:15	07-SEP-18 13:12	3	10	days	EHTR
	2 3	28-AUG-18 07:45	07-SEP-18 13:12	3	10	days	EHTR
	4	28-AUG-18 08:05	07-SEP-18 13:12	3	10	days	EHTR
Nitrite in Seawater by IC							
	1	28-AUG-18 07:55	07-SEP-18 13:12	3	10	days	EHTR
	2	28-AUG-18 08:15	07-SEP-18 13:12	3	10	days	EHTR
	3	28-AUG-18 07:45	07-SEP-18 13:12	3	10	days	EHTR
	4	28-AUG-18 08:05	07-SEP-18 13:12	3	10	days	EHTR
Bacteriological Tests							
Fecal coliform by membran	e filtration						
	1	28-AUG-18 07:55	31-AUG-18 14:00	30	78	hours	EHTR
	2	28-AUG-18 08:15	31-AUG-18 14:00	30	78	hours	EHTR
	3	28-AUG-18 07:45	31-AUG-18 14:00	30	78	hours	EHTR
	4	28-AUG-18 08:05	31-AUG-18 14:00	30	78	hours	EHTR
Lagand & Qualifiar Definition							

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Notes*:

Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes. Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L2156759 were received on 31-AUG-18 09:30.

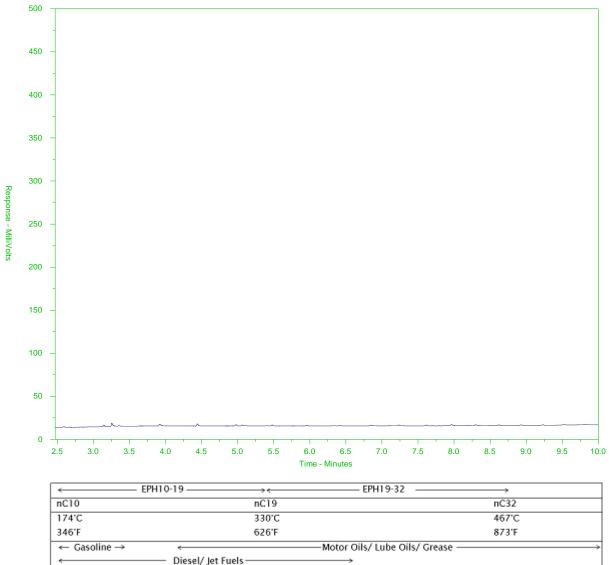
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



ALS Sample ID: L2156759-1 Client Sample ID: SOURCE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

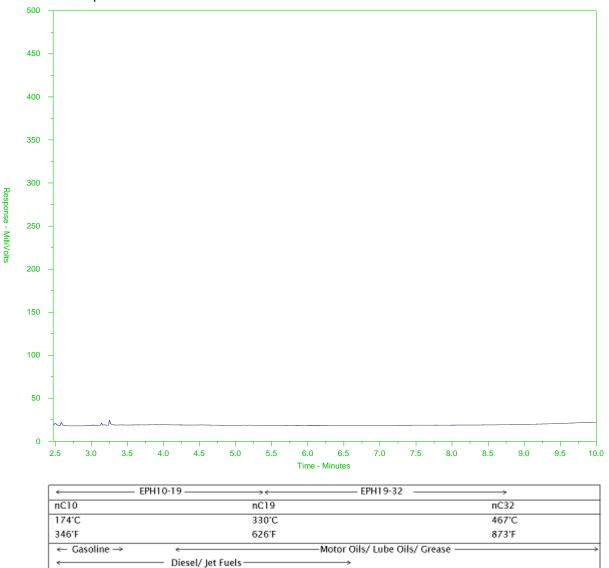
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2156759-2 Client Sample ID: WNW



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

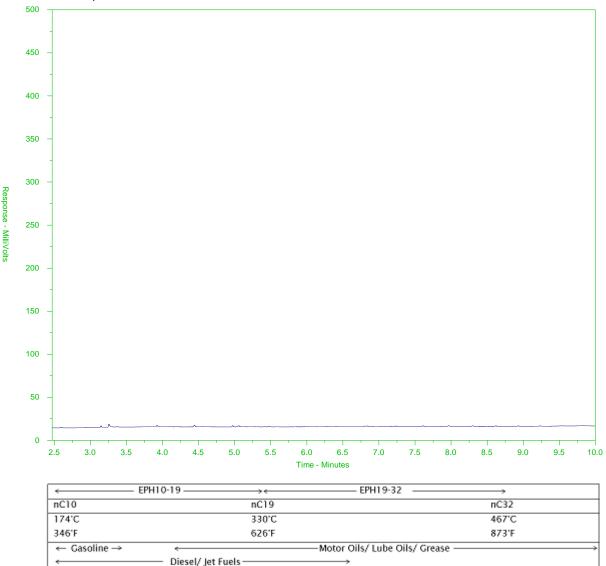
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2156759-3 Client Sample ID: NORTH



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

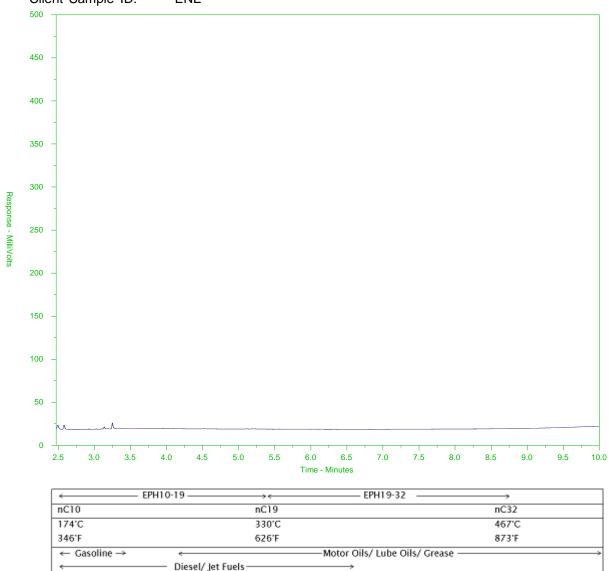
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2156759-4 Client Sample ID: ENE



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

ALS

Chain of Custody (COC) / Analytical Request Form



L2156759-COFC

COC Number: 15 - XXXXXX

1 of

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Canada Toll Free: 1 800 668 9878

	www.alsglobal.com				<u> </u>							- /							
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ANNEXE B-2 WATER QUALITY SCREENING TABLE

Client Sample ID					SOURCE	WNW	DUP-A (WNW)		NORTH	ENE		SOURCE	WNW	NORTH	ENE		SOURCE	WNW	DUP-B (WNW)		NORTH	ENE		SOURCE	WNW	NORTH	ENE		SOURCE	WNW	NORTH	ENE
Date Sampled		CCME Marine WQC		Lowest	1-Aug-2018	1-Aug-2018	(******)	Relative Percent	1-Aug-2018	1-Aug-2018	Lowest	7-Aug-2018	7-Aug-2018	7-Aug-2018	7-Aug-2018	Lowest	14-Aug-2018	14-Aug-2018	14-Aug-2018	Relative Percent	14-Aug-2018	14-Aug-2018	Lowest	21-Aug-2018	21-Aug-2018	21-Aug-2018	21-Aug-2018	Lowest	28-Aug-2018	28-Aug-2018	28-Aug-2018	28-Aug-2018
Time Sampled	Units	Aquati	ic Life	Detection Limit	10:30	10:00	0:00	Difference	10:10	10:20	Detection Limit	17:30	17:20	17:00	17:10	Detection Limit	0:00	0:00	0:00	Difference	0:00	0:00	Detection Limit	8:50	9:00	9:05	9:10	Detection Limit	7:55	8:15	7:45	8:05
ALS Sample ID				Link	L2142053-1		L2142053-5	(RDP)		L2142053-2	Liiiik	L2144572-1	L2144572-2	L2144572-3	L2144572-4	2		L2148896-2	L2148896-5	(RDP)	L2148896-3	L2148896-4	Link		L2152840-2	L2152840-3	L2152840-4	Liiii	L2156759-1	L2156759-2		L2156759-4
Parameter Physical Parameters		Short Term	Long Term		Seawater	Seawater	Seawater		Seawater	Seawater		Seawater	Seawater	Seawater	Seawater		Seawater	Seawater	Seawater		Seawater	Seawater		Seawater	Seawater	Seawater	Seawater		Seawater	Seawater	Seawater	Seawater
Salinity (calculated by Golder)	psu			_	6.5	6.5	6.6	1.5%	8.5	8.3	_	6.9	7.7	8.7	9.9		5.4	5.6	5.7	1.8%	5.6	5.4		5.4	7.4	10.1	5.6	_	18.5	15.6	14.4	19.3
Conductivity	uS/cm			2.0	11300	11400	11500	0.9%	14200	18300	2.0	12100	13500	14900	17000	2.0	9630	10100	10100	0.0%	9970	9690	2.0	9460	12800	17000	9770	2.0	29800	25500	23700	31100
Hardness (as CaCO3)	mg/L			4.3	1170	1150	1140	0.9%	1440	1920	4.3	1300	1390	1550	1780	4.3	932	926	1010	8.7%	928	876	4.3	1020	1340	1610	1070	4.3	3440	2630	2420	3260
рН	pН		7.0-8.7	0.10	8.05	8.03	8.03	0.0%	8.02	7.12	0.10	8.09	8.08	8.07	8.07	0.10	8.08	8.07	8.07	0.0%	8.07	8.09	0.10	8.06	8.06	8.03	8.08	0.10	7.91	7.94	7.93	7.93
Total Suspended Solids	mg/L	< 25 mg/L above background	< 5mg/L above background	-	4.30	<2.0	2.20	NA	<2.0	3.10		<2.0	<2.0	<2.0	<2.0	-	2.20	<2.0	<2.0	NA	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0
Turbidity	NTU	<8 NTU above background	<2 NTU above background	0.10	<u>2.52</u>	1.02	0.94	8.2%	0.71	1.91	0.10	0.55	0.58	0.49	0.60	0.10	0.88	0.65	0.60	8.0%	0.50	0.66	0.10	0.74	0.91	0.57	0.46	0.10	0.24	0.21	0.23	0.19
Anions and Nutrients																																
Alkalinity, Total (as CaCO3) Ammonia, Total (as N)	mg/L mg/L			1.0 0.0050	94.7 0.0139	87.9 <0.0050	88.0 <0.0050	0.1% NA	90.1 <0.0050	90.1 <0.0050	1.0 0.0050	80.5 <0.0050	80.7 <0.0050	80.4 <0.0050	83.2 <0.0050	1.0 0.0050	89.0 <0.0050	84.9 <0.0050	85.2 <0.0050	0.4% NA	84.7 <0.0050	90.2 <0.0050	1.0 0.0050	98.9	99.3 <0.0050	96.5 <0.0050	97.2 <0.0050	1.0 0.0050	90 <0.0050	92 <0.0050	93.5 <0.0050	91.0 <0.0050
Bromide (Br)	mg/L			-	12.60	12.60	12.00	4.9%	15.80	15.00	0.0030	13.4	15.0	17.3	20.2	0.0030	10.4	10.1	10.3	2.0%	10.5	10.4	0.0030	10.2	15.1	19.8	11.1	0.0030	33.5	27.9	25.3	40.2
Chloride (CI)	mg/L			-	3590.00	3550.00	3570.00	0.6%	4610.00	4500.00	-	3850	4360	4940	5800	-	2950	3050	3070	0.7%	3080	2950	-	2980	4240	5550	3190	-	9550	7910	7180	11300
Fluoride (F)	mg/L			-	<1.0	<1.0	<1.0	NA	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	NA	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0
Nitrate (as N)	mg/L	1500	200	-	<0.50	<0.50	<0.50	NA	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	NA	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50
Nitrite (as N)	mg/L			-	<0.10	<0.10	0.10	NA	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	NA	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10
Total Kjeldahl Nitrogen	mg/L			0.050	0.135	0.115	0.113	NA	0.106	0.095	0.050	0.081	0.090	0.091	0.090	0.050	0.129	0.105	0.145	NA	0.084	0.105	0.050	0.125	0.121	0.103	0.099	0.050	0.064	0.069	0.079	0.060
Sulfate (SO4) Organic / Inorganic Carbon	mg/L			-	489.00	483.00	483.00	0.0%	629.00	607.00		497	553	655	765	-	396	410	420	2.4%	411	398		403	582	766	433	-	1330	1100	987	1570
Total Organic Carbon	mg/L			0.50	1.5	1.2	1.2	NA	1.1	1.24	0.50	1.33	1.77	1.22	1.20	0.50	1.45	1.12	1.14	NA	1.02	1.35	0.50	1.6	1.5	1.18	1.5	0.50	0.92	0.96	0.99	0.9
Bacteriological Tests	mg/L			0.00	1.0		1.2	INA			0.00	1.00		1.22	1.20	0.00	1.10	2		14/3	1.02	1.00	0.00	1.0	1.0	1.10	1.0	0.00	0.02	0.00		
Coliform Bacteria - Fecal	CFU/100mL			-	<1	<1	<1	NA	<1	<1	-	<1	<1	<1	<1		<1	<1	<1	NA	<1	<1	-	<1	<1	<1	<1		<1	<1	<1	<1
Total Metals																																
Aluminum (AI)-Total	mg/L			0.0050	0.0478	0.0164	0.0207	NA	0.0149	0.0378	0.0050	0.0155	0.0165	0.0142	0.0209	0.0050	0.0213	0.0129	0.0143	NA	0.0124	0.0186	0.0050	0.0186	0.0184	0.0169	0.0114	0.0050	0.009	0.0095	0.0091	0.0082
Antimony (Sb)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic (As)-Total	mg/L		0.0125	0.0020	<0.0020	<0.0020	<0.0020	NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Barium (Ba)-Total	mg/L			0.0010 0.00050	0.0052 <0.00050	0.0047 <0.00050	0.0055 <0.00050	15.7%	0.0055 <0.00050	0.0051 <0.00050	0.0010 0.00050	0.0058 <0.00050	0.0060 <0.00050	0.0056 <0.00050	0.0064 <0.00050	0.0010	0.0047 <0.00050	0.0046 <0.00050	0.0048 <0.00050	NA NA	0.0046	0.0046 <0.00050	0.0010 0.00050	0.0053 <0.00050	0.0058 <0.00050	0.0061 <0.00050	0.0059 <0.00050	0.0010 0.00050	0.0080 <0.00050	0.0070	0.0071	0.0077 <0.00050
Beryllium (Be)-Total Bismuth (Bi)-Total	mg/L mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA NA	<0.00050 <0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050 <0.00050	<0.00050 <0.00050	<0.00050
Boron (B)-Total	mg/L			0.10	1.03	0.97	0.99	2.0%	1.32	1.26	0.10	0.94	1.10	1.21	1.40	0.10	0.74	0.76	0.74	2.7%	0.74	0.71	0.10	0.72	0.98	0.98	0.79	0.10	2.61	2.25	2.16	2.74
Cadmium (Cd)-Total	mg/L		0.00012	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L			0.50	95	98	100	1.4%	115	114	0.50	95.6	105.0	118.0	135	0.50	76	86	82	4.4%	78	78	0.50	84	103	99	87	0.50	229	198	180	241
Cesium (Cs)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		0.0015 (Cr(VI))	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.000050
Cobalt (Co)-Total	mg/L			0.000050 0.00050	<0.000050 0.00085	<0.000050 0.00079	<0.000050 0.00085	NA NA	<0.00050 <0.00050	<0.000050 0.00081	0.000050	<0.00050 <0.00050	<0.00050 <0.00050	<0.00050 <0.00050	<0.000050 0.00088	0.000050	<0.000050 0.00052	<0.00050 <0.00050	<0.000050 0.00051	NA NA	<0.000050 0.00053	<0.000050 0.00054	0.000050	<0.00050 <0.00050	<0.000050 0.00085	<0.00050 <0.00050	<0.00050 <0.00050	0.000050	<0.00050 <0.00050	<0.00050 <0.00050	<0.00050 <0.00050	<0.000050 <0.00050
Copper (Cu)-Total Gallium (Ga)-Total	mg/L mg/L			0.00050	<0.00050	<0.00079	<0.00050	NA NA	<0.00050	<0.00051	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Iron (Fe)-Total	mg/L			0.010	0.093	0.025	0.026	NA	0.018	0.071	0.010	0.017	0.019	0.014	0.026	0.010	0.026	0.018	0.023	NA.	0.017	0.02	0.010	0.022	0.029	0.023	0.011	0.010	<0.010	0.011	<0.010	<0.010
Lead (Pb)-Total	mg/L			0.00030	<0.00030	<0.00030	<0.00030	NA	<0.00030	<0.00030	0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	<0.00030	<0.00030	<0.00030	NA	<0.00030	<0.00030	0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Lithium (Li)-Total	mg/L			0.020	0.038	0.036	0.037	NA	0.051	0.043	0.020	0.045	0.035	0.042	0.048	0.020	0.027	0.030	0.029	NA	0.029	0.027	0.020	0.031	0.041	0.042	0.034	0.020	0.101	0.085	0.081	0.105
Magnesium (Mg)-Total	mg/L			1.0	228	224	234	4.4%	283	286	1.0	251	275	301	362	1.0	178	189	192	1.6%	185	188	1.0	201	267	267	206	1.0	674	561	494	692
Manganese (Mn)-Total	mg/L			0.00020	0.00256	0.00158	0.00161	1.9%	0.00090	0.00186	0.00020	0.00102	0.00115	0.00106	0.00157	0.00020	0.00366	0.00094	0.00095	NA	0.00079	0.00106	0.00020	0.00111	0.00125	0.00118	0.00089	0.00020	0.00116	0.00100	0.00094	0.00103
Mercury (Hg)-Total	mg/L		0.000016	0.000010	<0.000010	<0.000010	<0.000010	NA NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Total Nickel (Ni)-Total	mg/L mg/L			0.0020 0.00050	0.0024 <0.00050	0.0021 <0.00050	0.0022 <0.00050	NA NA	0.0029 <0.00050	0.0025 <0.00050	0.0020 0.00050	0.0022 <0.00050	0.0026 <0.00050	0.0027 <0.00050	0.0031 <0.00050	0.0020	0.0020 <0.00050	<0.0020 <0.00050	<0.0020 <0.00050	NA NA	<0.0020 <0.00050	<0.0020 <0.00050	0.0020	<0.0020 <0.00050	0.0027 <0.00050	0.0026 <0.00050	0.0022 <0.00050	0.0020	0.0063 <0.00050	0.0053 <0.00050	0.0050 <0.00050	0.0065 <0.00050
Phosphorus (P)-Total	mg/L			1.0	<0.050	<0.050	<0.050	NA	<0.050	<0.050	1.0	<0.050	<0.050	<0.050	<0.050	1.0	<0.050	<0.050	<0.050	NA.	<0.050	<0.050	1.0	<0.050	<0.050	<0.050	<0.050	1.0	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Total	mg/L			20	67	68	67	NA	86	85	20	71	77	94	107	20	49	58	53	NA	51	54	20	59.6	79.0	76.4	62.6	20	200	172	154	213
Rhenium (Re)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Rubidium (Rb)-Total	mg/L			0.0050	0.0218	0.0214	0.0221	NA	0.0302	0.0257	0.0050	0.0233	0.0268	0.0285	0.0327	0.0050	0.0173	0.0184	0.0182	NA	0.0173	0.0171	0.0050	0.0203	0.0270	0.0267	0.0222	0.0050	0.066	0.055	0.0518	0.068
Selenium (Se)-Total	mg/L			0.0020	<0.0020	<0.0020	<0.0020	NA NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	NA NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silicon (Si)-Total Silver (Ag)-Total	mg/L mg/L	0.0075		0.50 0.00010	<1.0 <0.00010	<1.0 <0.00010	<1.0 <0.00010	NA NA	<1.0 <0.00010	<1.0 <0.00010	0.50 0.00010	1 <0.00010	<1.0 <0.00010	<1.0 <0.00010	<1.0 <0.00010	0.50 0.00010	<1.0 <0.00010	<1.0 <0.00010	<1.0 <0.00010	NA NA	<1.0 <0.00010	<1.0 <0.00010	0.50 0.00010	<1.0 <0.00010	<1.0 <0.00010	<1.0 <0.00010	<1.0 <0.00010	0.50 0.00010	<1.0 <0.00010	<1.0 <0.00010	<1.0 <0.00010	<1.0 <0.00010
Sodium (Na)-Total	mg/L	0.0073		20	1760	1850	1800	2.7%	2340	2370	20	1950	2100	2440	2760	20	1410	1590	1550	2.5%	1430	1440	20	1580	2110	2030	1650	20	5390	4440	4030	5570
Strontium (Sr)-Total	mg/L			0.050	1.47	1.50	1.54	2.6%	1.84	1.77	0.050	1.50	1.570	1.73	1.99	0.050	1.21	1.20	1.30	8.0%	1.19	1.14	0.050	1.27	1.67	1.59	1.26	0.050	3.98	3.44	2.91	4.17
Sulfur (S)-Total	mg/L			5.0	175.00	172.00	179.00	4.0%	223.00	212.00	5.0	190.00	211.000	234.00	279.00	5.0	137	142	174	20.3%	140	143	5.0	141	191	187	142	5.0	514	421	370	536
Tellurium (Te)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Thallium (TI)-Total	mg/L			0.000050	<0.000050	<0.000050		NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Thorium (Th)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Tin (Sn)-Total Titanium (Ti)-Total	mg/L			0.0010 0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050	NA NA	<0.0010 <0.0050	<0.0010 <0.0050	0.0010 0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050	0.0010 0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050	NA NA	<0.0010 <0.0050	<0.0010 <0.0050	0.0010 0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050	0.0010 0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050	<0.0010 <0.0050
Tungsten (W)-Total	mg/L mg/L			0.0050	<0.0050	<0.0050	<0.0050	NA NA	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	NA NA	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium (U)-Total	mg/L			0.000050	0.00281	0.00204	0.00196	4.0%	0.00156	0.00152	0.000050	0.00125	0.001270	0.00132	0.00187	0.000050	0.00214	0.00124	0.00130	4.7%	0.00115	0.00193	0.000050	0.00187	0.00224	0.00200	0.00188	0.000050	0.00223	0.00215	0.00191	0.00216
Vanadium (V)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	0.00069	0.00067	0.00053	0.00070
Yttrium (Y)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L			0.0030	<0.0030	0.0031	0.0034	NA	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	NA	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Zirconium (Zr)-Total	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050

ANNEXE B-2 WATER QUALITY SCREENING TABLE

Client Sample ID					SOURCE	WNW	DUP-A (WNW)		NORTH	ENE		SOURCE	WNW	NORTH	ENE		SOURCE	WNW	DUP-B (WNW)		NORTH	ENE		SOURCE	WNW	NORTH	ENE		SOURCE	WNW	NORTH	ENE
Date Sampled		CCME Marine WQG	for Protection of	Lowest	1-Aug-2018	1-Aug-2018	1-Aug-2018	Relative	1-Aug-2018	1-Aug-2018	Lowest	7-Aug-2018	7-Aug-2018	7-Aug-2018	7-Aug-2018	Lowest	14-Aug-2018	14-Aug-2018	. ,	Relative	14-Aug-2018	14-Aug-2018	Lowest	21-Aug-2018	21-Aug-2018	21-Aug-2018	21-Aug-2018	Lowest	28-Aug-2018	28-Aug-2018	28-Aug-2018	28-Aug-2018
Time Sampled	Units	Aquatio		Detection	10:30	10:00	0:00	Percent Difference	10:10	10:20	Detection	17:30	17:20	17:00	17:10	Detection	0:00	0:00	0:00	Percent Difference	0:00	0:00	Detection	8:50	9:00	9:05	9:10	Detection	7:55	8:15	7:45	8:05
ALS Sample ID				Limit	L2142053-1	L2142053-3	L2142053-5	(RDP)	L2142053-4	L2142053-2	Limit	L2144572-1	L2144572-2	L2144572-3	L2144572-4	Limit	L2148896-1	L2148896-2	L2148896-5	(RDP)	L2148896-3	L2148896-4	Limit	L2152840-1	L2152840-2	L2152840-3	L2152840-4	Limit	L2156759-1	L2156759-2	L2156759-3	L2156759-4
Parameter		Short Term	Long Term		Seawater	Seawater	Seawater		Seawater	Seawater		Seawater	Seawater	Seawater	Seawater		Seawater	Seawater	Seawater		Seawater	Seawater		Seawater	Seawater	Seawater	Seawater		Seawater	Seawater	Seawater	Seawater
Dissolved Metals			-						_																							
Dissolved Mercury Filtration Location	-			-	LAB	LAB	LAB	NA	LAB	LAB		LAB	LAB	LAB	LAB	-	LAB	LAB	LAB		LAB	LAB		LAB	LAB	LAB	LAB	-	LAB	LAB	LAB	LAB
Dissolved Metals Filtration Location	-			-	LAB	LAB	LAB	NA	LAB	LAB	-	LAB	LAB	LAB	LAB	-	LAB	LAB	LAB		LAB	LAB		LAB	LAB	LAB	LAB		LAB	LAB	LAB	LAB
Aluminum (AI)-Dissolved	mg/L			0.0050	<0.0050	<0.0050	<0.0050	NA	<0.0050	<0.0050	0.0050	0.0072	0.0071	0.0068	0.0059	0.0050	<0.0050	<0.0050	<0.0050	NA	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	0.0079	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Sb)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	< 0.00050	NA	<0.00050	< 0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	< 0.00050
Arsenic (As)-Dissolved	mg/L			0.0020	<0.0020	<0.0020	<0.0020	NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Barium (Ba)-Dissolved	mg/L			0.0010	0.0046	0.0048	0.0050	NA	0.0054	0.0053	0.0010	0.0055	0.0054	0.0056	0.0057	0.0010	0.0045	0.0044	0.0043	NA	0.0047	0.0040	0.0010	0.0054	0.0061	0.0059	0.0054	0.0010	0.0077	0.0070	0.0068	0.0084
Beryllium (Be)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth (Bi)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L			0.10	0.92	1.03	0.99	4.0%	1.26	1.30	0.10	0.96	1.08	1.21	1.40	0.10	0.69	0.76	0.71	6.8%	0.70	0.67	0.10	0.73	1.00	1.17	0.78	0.10	2.61	2.22	2.09	2.89
Cadmium (Cd)-Dissolved	mg/L			0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L			0.50	91.9	95	96	0.6%	108	112	0.50	100.0	105.0	114.0	132	0.50	78	75	84	11.3%	75	77	0.50	85	107.0	124	88	0.50	232	196	184	241
Cesium (Cs)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	0.00063	<0.00050
Cobalt (Co)-Dissolved	mg/L			0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Copper (Cu)-Dissolved	mg/L			0.00050	0.00069	0.00053	0.00096	NA	<0.00050	0.00051	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	0.00051	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	0.00064	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Gallium (Ga)-Dissolved	mg/L			0.00050	<0.00050	<0.00050 <0.010	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Iron (Fe)-Dissolved Lead (Pb)-Dissolved	mg/L			0.010 0.00030	<0.010 <0.00030	<0.00030	<0.010 <0.00030	NA	<0.010 <0.00030	<0.010 <0.00030	0.010 0.00030	<0.010 <0.00030	<0.010 <0.00030	<0.010 <0.00030	<0.010 <0.00030	0.010	<0.010 <0.00030	<0.010 <0.00030	<0.010 <0.00030	NA 	<0.010 <0.00030	<0.010 <0.00030	0.010 0.00030	<0.010 <0.00030	<0.010 <0.00030	<0.010 <0.00030	0.013 <0.00030	0.010	<0.010 <0.00030	<0.010 <0.00030	<0.010 <0.00030	<0.010 <0.00030
Lithium (Li)-Dissolved	mg/L			0.00030	0.034	0.00030	0.00030	NA NA	0.00030	0.050	0.00030	0.00030	0.00030	0.039	0.00030	0.00030	0.00030	0.029	0.028	NA NA	0.00030	0.003	0.00030	0.00030	0.00030	0.050	0.033	0.00030	0.100	0.00030	0.00030	0.108
Magnesium (Mg)-Dissolved	mg/L mg/L			1.0	228	223	218	2.3%	316	283	1.0	254	273	307	352	1.0	179	180	194	7.5%	180	166	1.0	197	260	316	206	1.0	695	520	475	646
Manganese (Mn)-Dissolved	mg/L			0.00020	0.00087	0.00103	0.00107	3.8%	0.00063	0.00061	0.00020	0.00076	0.00088	0.00084	0.00097	0.00020	0.00287	0.00059	0.00061	7.5% NA	0.00081	0.00054	0.00020	0.00059	0.00062	0.00067	0.00109	0.00020	0.00089	0.00076	0.00081	0.00078
Mercury (Hg)-Dissolved	mg/L			0.000010	<0.000010	<0.000010	<0.00010	NA	<0.000010	<0.00001	0.000010	<0.00010	<0.000010	<0.000010	<0.00001	0.000010	<0.000010	<0.000010	<0.000010	NA.	<0.00001	<0.00001	0.00020	<0.000010	<0.000010	<0.00001	<0.000010	0.00010	<0.000010	<0.00010	<0.000010	<0.00010
Molybdenum (Mo)-Dissolved	mg/L			0.0020	0.0020	0.0022	0.0022	NA	0.0027	0.0029	0.0020	0.0022	0.0025	0.0027	0.0032	0.0020	<0.0020	<0.0020	<0.0020	NA	<0.0020	<0.0020	0.0020	<0.0020	0.0028	0.0031	0.0021	0.0020	0.0063	0.0053	0.0049	0.0069
Nickel (Ni)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	0.00318	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Phosphorus (P)-Dissolved	mg/L			1.0	<0.050	<0.050	<0.050	NA	<0.050	<0.050	1.0	<0.050	<0.050	< 0.050	< 0.050	1.0	<0.050	<0.050	< 0.050	NA	<0.050	<0.050	1.0	<0.050	<0.050	<0.050	<0.050	1.0	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Dissolved	mg/L			20	64	65	67	NA	82	82	20	75	82	99	107	20	51	52	57	NA	49	49	20	60.0	79.0	97.0	63.0	20	203	169	157	215
Rhenium (Re)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Rubidium (Rb)-Dissolved	mg/L			0.0050	0.0195	0.0222	0.0233	NA	0.0273	0.0290	0.0050	0.0234	0.0261	0.0277	0.0327	0.0050	0.0172	0.0176	0.0173	NA	0.0172	0.0161	0.0050	0.0213	0.0271	0.0316	0.0211	0.0050	0.0641	0.0542	0.0513	0.070
Selenium (Se)-Dissolved	mg/L			0.0020	<0.0020	<0.0020	<0.0020	NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	NA	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silicon (Si)-Dissolved	mg/L			0.50	<1.0	<1.0	<1.0	NA	<1.0	<1.0	0.50	<1.0	<1.0	<1.0	<1.0	0.50	<1.0	<1.0	<1.0	NA	<1.0	<1.0	0.50	<1.0	<1.0	<1.0	<1.0	0.50	<1.0	<1.0	<1.0	<1.0
Silver (Ag)-Dissolved	mg/L			0.00010	<0.00010	<0.00010	<0.00010	NA	<0.00010	<0.00010	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	<0.00010	<0.00010	<0.00010	NA	<0.00010	<0.00010	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Dissolved	mg/L			20	1730	1850	1920	3.7%	2330	2230	20	2060	2200	2410	2770	20	1450	1390	1570	12.2%	1370	1420	20	1580	2100	2610	1640	20	5380	4400	4110	5510
Strontium (Sr)-Dissolved	mg/L			0.050	1.37	1.47	1.45	1.4%	1.82	1.84	0.050	1.48	1.560	1.77	1.99	0.050	1.21	1.18	1.31	10.4%	1.13	1.09	0.050	1.21	1.66	1.82	1.23	0.050	3.96	3.09	2.82	3.91
Sulfur (S)-Dissolved	mg/L			-	179	174	532	101.4%	243	223		188	208	235	272	-	137	145	142	2.1%	137	134		141	185	231	147	-	523	394	357	492
Tellurium (Te)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Thallium (TI)-Dissolved	mg/L			0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	0.000057	0.000051	<0.000050	NA	0.000051	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Thorium (Th)-Dissolved Tin (Sn)-Dissolved	mg/L			0.00050 0.0010	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010	NA NA	<0.00050 <0.0010	<0.00050 <0.0010	0.00050 0.0010	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010	0.00050	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010	NA NA	<0.00050 <0.0010	<0.00050 <0.0010	0.00050	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010	0.00050	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010	<0.00050 <0.0010
Titanium (Ti)-Dissolved	mg/L mg/L			0.0010	<0.0010	<0.0010	<0.0010	NA NA	<0.0010	<0.0010	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	<0.0010	<0.0010	<0.0010	NA NA	<0.0010	<0.0010	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tungsten (W)-Dissolved	mg/L mg/L			0.0050	<0.0050	<0.0050	<0.0050	NA NA	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	NΑ	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Uranium (U)-Dissolved	mg/L			0.000050	0.00263	0.00212	0.00204	3.8%	0.0010	0.0016	0.0000	0.0010	0.0010	0.0010	0.0010	0.0000	0.0010	0.0010	0.0010	NA 3.9%	0.0010	0.00207	0.0000	0.0010	0.00226	0.00203	0.0010	0.0000	0.0010	0.00214	0.0010	0.00215
Vanadium (V)-Dissolved	mg/L			0.00050	<0.00203	<0.00212	<0.00204	3.6% NA	<0.00150	<0.00050	0.00050	<0.00127	<0.001200	<0.00151	<0.00165	0.00050	<0.00210	<0.00151	<0.00120	NA	<0.00122	<0.00207	0.00050	<0.00166	<0.00220	<0.00203	<0.00192	0.00050	0.00214	0.00214	<0.00151	0.00213
Yttrium (Y)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA.	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00070
Zinc (Zn)-Dissolved	mg/L			0.0030	<0.0030	<0.0030	<0.0030	NA.	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	NA	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Zirconium (Zr)-Dissolved	mg/L			0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	NA	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Hydrocarbons																																
EPH10-19	mg/L			0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25
EPH19-32	mg/L			0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25
LEPH	mg/L			0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25
HEPH	mg/L			0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	NA	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25	0.050	<0.25	<0.25	<0.25	<0.25
2-Bromobenzotrifluoride	%			-	107.3	102.4	108.1	5.4%	105.6	113.1	-	109	117.5	104.8	118.3	-	104.8	118.7	119	0.3%	121.7	110.6	-	98.2	103.9	92.4	95.8	-	102	98.5	97.9	102.2

ANNEXE B-2 WATER QUALITY SCREENING TABLE

		T					DUD A												DUD D													
Client Sample ID					SOURCE	WNW	DUP-A (WNW)		NORTH	ENE		SOURCE	WNW	NORTH	ENE		SOURCE	WNW	DUP-B (WNW)		NORTH	ENE		SOURCE	WNW	NORTH	ENE		SOURCE	WNW	NORTH	ENE
Date Sampled		CCME Marine WQG		Lowest	1-Aug-2018	1-Aug-2018	1-Aug-2018	Relative Percent	1-Aug-2018	1-Aug-2018	Lowest	7-Aug-2018	7-Aug-2018	7-Aug-2018	7-Aug-2018	Lowest	14-Aug-2018	14-Aug-2018	14-Aug-2018	Relative Percent	14-Aug-2018	14-Aug-2018	Lowest	21-Aug-2018	21-Aug-2018	21-Aug-2018	21-Aug-2018	Lowest	28-Aug-2018	28-Aug-2018	28-Aug-2018	28-Aug-2018
Time Sampled	Units	Aquatic	Life	Detection	10:30	10:00	0:00	Difference	10:10	10:20	Detection	17:30	17:20	17:00	17:10	Detection	0:00	0:00	0:00	Difference	0:00	0:00	Detection	8:50	9:00	9:05	9:10	Detection	7:55	8:15	7:45	8:05
ALS Sample ID				Limit	L2142053-1	L2142053-3	L2142053-5	(RDP)	L2142053-4	L2142053-2	Limit	L2144572-1	L2144572-2	L2144572-3	L2144572-4	Limit	L2148896-1	L2148896-2	L2148896-5	(RDP)	L2148896-3	L2148896-4	Limit	L2152840-1	L2152840-2	L2152840-3	L2152840-4	Limit	L2156759-1	L2156759-2	L2156759-3	L2156759-4
Parameter		Short Term	Long Term		Seawater	Seawater	Seawater		Seawater	Seawater		Seawater	Seawater	Seawater	Seawater		Seawater	Seawater	Seawater		Seawater	Seawater		Seawater	Seawater	Seawater	Seawater		Seawater	Seawater	Seawater	Seawater
Polycyclic Aromatic Hydrocarbons																															*	
Acenaphthene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acenaphthylene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L			0.0000050	<0.0000050	<0.000050	<0.0000050	NA	<0.000050	<0.0000050	0.0000050	<0.0000050	<0.000050	<0.0000050	<0.0000050	0.0000050	<0.0000050	<0.0000050	<0.000050	NA	<0.0000050	<0.0000050	0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Benzo(b&j)fluoranthene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(b+j+k)fluoranthene	mg/L			0.000015	<0.000015	<0.000015	<0.000015	NA	<0.000015	<0.000015	0.000015	<0.000015	<0.000015	<0.000015	<0.000015	0.000015	<0.000015	<0.000015	<0.000015	NA	<0.000015	<0.000015	0.000015	<0.000015	<0.000015	<0.000015	<0.000015	0.000015	<0.000015	<0.000015	<0.000015	<0.000015
Benzo(g,h,i)perylene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(k)fluoranthene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Chrysene	mg/L			0.0000100	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010
Dibenz(a,h)anthracene	mg/L			0.0000050	<0.0000050	<0.000050	<0.0000050	NA	<0.0000050	<0.0000050	0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.000050	0.0000050	<0.0000050	<0.000050	<0.0000050	NA	<0.0000050	<0.0000050	0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Fluoranthene	mg/L			0.0000100	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L			0.0000100	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010	0.0000100	<0.000010	<0.000010	<0.000010	<0.000010
Indeno(1,2,3-c,d)pyrene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-Methylnaphthalene	mg/L			0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
2-Methylnaphthalene	mg/L			0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Naphthalene	mg/L		0.0014	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L			0.000020	<0.000020	<0.000020	<0.000020	NA	<0.000020	<0.000020	0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000020	<0.000020	<0.000020	<0.000020	NA	<0.000020	<0.000020	0.000020	<0.000020	<0.000020	<0.000020	<0.000020	0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L			0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	NA	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L			0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	NA	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Acridine d9	%				89	90	90.1		94.2	85.6		104.2	108.8	112	113.3		85.5	84	96.2		85	79.8		74.8	73.8	70	75.3		86.3	82	66.7	86.2
Chrysene d12	%				84.3	78.9	83.8		85	80.2		97	105.6	97.4	90.8		82	77.5	100.1		75.1	73.9		67.5	78.4	75.4	68.7		83.9	95.1	70.4	85.9
Naphthalene d8	%				83	83.9	91.4		96.3	85.2		115.2	117.5	115	116.7		94.9	92.5	108.4		89.8	79.9		89.2	96	92.3	94.4		84	85.8	76.8	85.5
Phenanthrene d10	%	ĺ			95.9	94.1	99.3		103.9	94.8		121.3	125.4	124.2	122.8		97.2	94.6	108.1		92.6	83.5		94.3	98.9	95.1	95.4		95	99.1	89.5	103.2

3/3

RDP > 20%

Values Values Greater than short term CCME marine WQG for protection of aquatic life guideline Greater than long term CCME marine WQG for protection of aquatic life guideline Values

CFU/ 100ml = colony forming units per 100 millilitre, mg/L = milligrams per litre; NA = not applicable; NTU = nephlometric turbidity units; pH = scale of acidity, psu = practical salinity unit, μS/cm = microSiemens per centimetre, % = pecentage.

31 May 2019 1663724-092-R-Rev1-14000

ANNEXE C

Sediment Quality Analysis Data



GOLDER ASSOCIATES LTD.

ATTN: John Sherrin / Arman Ospan 3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Date Received: 17-AUG-18

Report Date: 28-AUG-18 16:13 (MT)

Version: FINAL

Client Phone: 250-881-7372

Certificate of Analysis

Lab Work Order #: L2148903
Project P.O. #: NOT SUBMITTED
Job Reference: 1663724/14000/3

C of C Numbers: Legal Site Desc:

ambu Springer

Amber Springer, B.Sc Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700 ALS CANADA LTD Part of the ALS Group An ALS Limited Company



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28-AUG-18 16:13 (MT) Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-1 Sediment 11-AUG-18 13:35 SW-1-1	L2148903-2 Sediment 11-AUG-18 13:40 SW-1-2	L2148903-3 Sediment 11-AUG-18 13:45 SW-1-3	L2148903-4 Sediment 11-AUG-18 12:55 SW-2-1	L2148903-5 Sediment 11-AUG-18 13:00 SW-2-2
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	22.2			23.1	
	pH (1:2 soil:water) (pH)	8.20	8.41	8.30	8.21	8.22
Particle Size	% Gravel (>2mm) (%)	3.0	1.9	5.0	8.7	16.5
	% Sand (2.0mm - 0.063mm) (%)	60.8	95.4	74.9	62.6	49.9
	% Silt (0.063mm - 4um) (%)	28.6	2.0	15.8	23.4	26.8
	% Clay (<4um) (%)	7.6	<1.0	4.3	5.3	6.7
	Texture	Sandy loam	Sand	Loamy sand	Sandy Ioam	Sandy loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.13	0.608	0.934	1.14	1.31
	Total Organic Carbon (%)	2.18	0.44	1.56	2.07	2.54
Metals	Aluminum (Al) (mg/kg)	4810	898	3770	4480	5110
	Antimony (Sb) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Arsenic (As) (mg/kg)	3.93	0.47	3.51	4.54	3.85
	Barium (Ba) (mg/kg)	15.6	2.38	11.8	15.0	16.4
	Beryllium (Be) (mg/kg)	0.30	<0.10	0.24	0.28	0.29
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	32.7	7.4	23.9	30.2	34.5
	Cadmium (Cd) (mg/kg)	0.048	<0.020	0.022	0.034	0.084
	Calcium (Ca) (mg/kg)	63800	16800	45600	60500	70400
	Chromium (Cr) (mg/kg)	17.8	3.57	12.5	16.2	17.1
	Cobalt (Co) (mg/kg)	2.92	0.58	2.32	2.83	2.92
	Copper (Cu) (mg/kg)	5.63	0.96	4.25	4.71	5.60
	Iron (Fe) (mg/kg)	11900	2230	10700	12700	10900
	Lead (Pb) (mg/kg)	4.31	0.93	3.37	3.78	4.42
	Lithium (Li) (mg/kg)	22.5	4.4	16.5	20.7	22.1
	Magnesium (Mg) (mg/kg)	34700	9730	23100	30900	32900
	Manganese (Mn) (mg/kg)	113	24.2	100	118	117
	Mercury (Hg) (mg/kg)	0.0090	<0.0050	0.0061	0.0070	0.0097
	Molybdenum (Mo) (mg/kg)	0.37	0.12	0.30	0.38	0.33
	Nickel (Ni) (mg/kg)	9.31	1.90	6.85	8.54	9.29
	Phosphorus (P) (mg/kg)	394	109	361	402	463
	Potassium (K) (mg/kg)	2210	410	1660	2170	2320
	Selenium (Se) (mg/kg)	0.21	<0.20	<0.20	<0.20	0.22
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	4070	854	2700	3380	4410
	Strontium (Sr) (mg/kg)	41.8	9.54	29.9	45.6	76.9
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-6 Sediment 11-AUG-18 13:05 SW-2-3	L2148903-7 Sediment 11-AUG-18 12:35 SW-3-1	L2148903-8 Sediment 11-AUG-18 12:40 SW-3-2	L2148903-9 Sediment 11-AUG-18 12:45 SW-3-3	L2148903-10 Sediment 11-AUG-18 11:40 SW-4-1
Grouping	Analyte	-				
SOIL						
Physical Tests	Moisture (%)		26.9			21.4
	pH (1:2 soil:water) (pH)	8.22	7.99	8.08	8.25	8.12
Particle Size	% Gravel (>2mm) (%)	12.7	5.0	1.3	2.7	4.4
	% Sand (2.0mm - 0.063mm) (%)	53.3	46.9	51.4	55.6	55.7
	% Silt (0.063mm - 4um) (%)	28.3	40.5	39.9	35.0	35.3
	% Clay (<4um) (%)	5.6	7.6	7.4	6.7	4.5
	Texture	Sandy loam				
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.35	1.25	1.19	1.14	0.983
	Total Organic Carbon (%)	2.72	3.24	3.09	2.95	3.38
Metals	Aluminum (Al) (mg/kg)	5300	5840	5580	4320	4600
	Antimony (Sb) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Arsenic (As) (mg/kg)	4.43	10.6	9.63	4.33	4.39
	Barium (Ba) (mg/kg)	18.0	20.2	18.7	14.7	14.9
	Beryllium (Be) (mg/kg)	0.32	0.37	0.34	0.27	0.40
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	35.0	44.5	38.6	29.8	41.6
	Cadmium (Cd) (mg/kg)	0.041	0.029	0.029	0.056	<0.020
	Calcium (Ca) (mg/kg)	66900	88500	75200	69700	110000
	Chromium (Cr) (mg/kg)	17.7	21.7	19.2	15.5	17.6
	Cobalt (Co) (mg/kg)	3.10	3.63	3.47	2.59	3.08
	Copper (Cu) (mg/kg)	5.76	7.22	6.35	4.97	6.10
	Iron (Fe) (mg/kg)	12800	16300	14900	10800	13900
	Lead (Pb) (mg/kg)	4.49	4.86	4.54	3.75	5.20
	Lithium (Li) (mg/kg)	23.6	29.0	25.6	20.2	33.0
	Magnesium (Mg) (mg/kg)	33800	48500	39900	32700	46300
	Manganese (Mn) (mg/kg)	125	158	148	110	149
	Mercury (Hg) (mg/kg)	0.0094	0.0085	0.0090	0.0071	0.0071
	Molybdenum (Mo) (mg/kg)	0.39	0.54	0.35	0.28	0.68
	Nickel (Ni) (mg/kg)	9.62	11.0	10.3	8.08	9.06
	Phosphorus (P) (mg/kg)	506	1020	1040	494	668
	Potassium (K) (mg/kg)	2320	2770	2430	1930	2080
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	2850	5560	4420	2720	3520
	Strontium (Sr) (mg/kg)	46.8	66.1	57.7	47.6	65.4
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-11 Sediment 11-AUG-18 11:45 SW-4-2	L2148903-12 Sediment 11-AUG-18 11:50 SW-4-3	L2148903-13 Sediment 11-AUG-18 10:30 SW-5-1	L2148903-14 Sediment 11-AUG-18 10:35 SW-5-2	L2148903-15 Sediment 11-AUG-18 10:40 SW-5-3
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)			20.9		
	pH (1:2 soil:water) (pH)	8.23	8.06	8.46	8.34	8.52
Particle Size	% Gravel (>2mm) (%)	2.5	3.3	2.3	4.8	7.3
	% Sand (2.0mm - 0.063mm) (%)	60.3	59.7	73.3	69.2	76.3
	% Silt (0.063mm - 4um) (%)	33.2	32.3	21.1	22.9	14.3
	% Clay (<4um) (%)	4.1	4.8	3.3	3.1	2.1
	Texture	Sandy loam	Sandy loam	Loamy sand	Loamy sand	Loamy sand
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.12	1.08	1.17	1.17	1.03
	Total Organic Carbon (%)	3.10	3.32	2.95	2.93	2.17
Metals	Aluminum (Al) (mg/kg)	4500	4560	3290	3640	3480
	Antimony (Sb) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Arsenic (As) (mg/kg)	4.37	4.93	1.78	1.97	2.66
	Barium (Ba) (mg/kg)	15.7	15.2	10.9	11.1	10.1
	Beryllium (Be) (mg/kg)	0.28	0.28	0.22	0.22	0.21
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	30.8	31.4	24.1	25.4	24.6
	Cadmium (Cd) (mg/kg)	<0.020	0.026	<0.020	0.021	<0.020
	Calcium (Ca) (mg/kg)	75000	74700	73200	71800	69100
	Chromium (Cr) (mg/kg)	16.9	16.4	12.7	12.9	13.1
	Cobalt (Co) (mg/kg)	2.97	3.13	2.53	2.52	2.41
	Copper (Cu) (mg/kg)	5.77	6.47	4.31	4.46	5.18
	Iron (Fe) (mg/kg)	13000	14000	9620	10100	10400
	Lead (Pb) (mg/kg)	3.77	3.70	2.77	2.89	2.71
	Lithium (Li) (mg/kg)	23.3	23.4	20.1	20.9	20.2
	Magnesium (Mg) (mg/kg)	39700	40300	37400	36500	35000
	Manganese (Mn) (mg/kg)	136	156	127	129	116
	Mercury (Hg) (mg/kg)	0.0084	0.0070	0.0050	0.0061	<0.0050
	Molybdenum (Mo) (mg/kg)	0.30	0.39	0.32	0.38	0.27
	Nickel (Ni) (mg/kg)	8.79	8.64	6.67	6.91	6.80
	Phosphorus (P) (mg/kg)	640	720	310	349	374
	Potassium (K) (mg/kg)	2020	2080	1570	1650	1610
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	4050	4820	2830	2480	2840
	Strontium (Sr) (mg/kg)	44.2	46.9	38.9	37.6	36.1
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-16 Sediment 11-AUG-18 14:10 SE-1-1	L2148903-17 Sediment 11-AUG-18 14:15 SE-1-2	L2148903-18 Sediment 11-AUG-18 14:20 SE-1-3	L2148903-19 Sediment 11-AUG-18 14:45 SE-2-1	L2148903-20 Sediment 11-AUG-18 14:50 SE-2-2
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	18.0			23.3	
-	pH (1:2 soil:water) (pH)	8.54	8.57	8.43	8.29	8.33
Particle Size	% Gravel (>2mm) (%)	2.4	6.3	4.0	17.5	10.2
	% Sand (2.0mm - 0.063mm) (%)	89.2	87.3	90.6	57.0	60.4
	% Silt (0.063mm - 4um) (%)	6.3	4.6	3.6	20.0	23.4
	% Clay (<4um) (%)	2.2	1.8	1.7	5.6	6.0
	Texture	Sand	Sand	Sand	Sandy loam	Sandy loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	0.693	0.738	0.525	1.37	1.62
3	Total Organic Carbon (%)	0.80	0.41	0.78	1.90	2.43
Metals	Aluminum (Al) (mg/kg)	1660	1460	1990	3780	4880
	Antimony (Sb) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Arsenic (As) (mg/kg)	1.28	1.18	1.47	3.65	2.88
	Barium (Ba) (mg/kg)	5.37	4.23	5.76	11.7	14.0
	Beryllium (Be) (mg/kg)	0.13	<0.10	0.12	0.26	0.30
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	11.4	9.7	13.3	26.3	35.0
	Cadmium (Cd) (mg/kg)	<0.020	<0.020	<0.020	0.027	0.035
	Calcium (Ca) (mg/kg)	25300	20800	28400	57200	63600
	Chromium (Cr) (mg/kg)	6.33	5.27	7.34	12.7	16.3
	Cobalt (Co) (mg/kg)	1.29	1.01	1.47	2.36	2.72
	Copper (Cu) (mg/kg)	3.06	2.46	2.71	4.82	5.55
	Iron (Fe) (mg/kg)	9750	6290	10200	9710	10500
	Lead (Pb) (mg/kg)	1.63	1.31	1.78	3.81	4.39
	Lithium (Li) (mg/kg)	7.9	6.5	8.5	19.1	21.4
	Magnesium (Mg) (mg/kg)	13200	11400	13200	29300	35300
	Manganese (Mn) (mg/kg)	63.9	46.9	67.4	98.1	112
	Mercury (Hg) (mg/kg)	<0.0050	<0.0050	<0.0050	0.0079	0.0081
	Molybdenum (Mo) (mg/kg)	0.26	0.17	0.29	0.30	0.31
	Nickel (Ni) (mg/kg)	3.53	3.00	4.60	7.44	8.79
	Phosphorus (P) (mg/kg)	175	197	197	337	363
	Potassium (K) (mg/kg)	730	640	880	1700	2220
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	1900	1320	2700	3840	4990
	Strontium (Sr) (mg/kg)	16.0	13.1	19.9	37.7	43.4
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-21 Sediment 11-AUG-18 14:55 SE-2-3	L2148903-22 Sediment 11-AUG-18 15:20 SE-3-1	L2148903-23 Sediment 11-AUG-18 15:25 SE-3-2	L2148903-24 Sediment 11-AUG-18 15:30 SE-3-3	L2148903-25 Sediment 11-AUG-18 16:00 SE-4-1
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)		21.5			27.9
	pH (1:2 soil:water) (pH)	8.39	8.30	8.34	8.26	8.20
Particle Size	% Gravel (>2mm) (%)	23.6	6.8	21.7	24.2	3.7
	% Sand (2.0mm - 0.063mm) (%)	49.8	72.2	60.2	55.6	47.3
	% Silt (0.063mm - 4um) (%)	23.3	15.6	14.0	15.2	38.2
	% Clay (<4um) (%)	3.3	5.3	4.1	5.0	10.8
	Texture	Sandy loam	Loamy sand	Loamy sand	Sandy loam / Loamy sand	Loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.32	1.14	1.85	1.17	1.45
	Total Organic Carbon (%)	1.24	1.68	1.91	1.56	2.53
Metals	Aluminum (Al) (mg/kg)	3870	3660	3410	2920	6290
	Antimony (Sb) (mg/kg)	<0.10	<0.10	<0.10	<0.10	0.12
	Arsenic (As) (mg/kg)	2.99	3.27	3.10	2.95	5.15
	Barium (Ba) (mg/kg)	12.6	10.6	10.7	10.7	16.5
	Beryllium (Be) (mg/kg)	0.24	0.24	0.24	0.21	0.41
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	27.4	25.0	24.4	21.6	42.1
	Cadmium (Cd) (mg/kg)	0.026	0.025	0.023	0.031	0.045
	Calcium (Ca) (mg/kg)	52400	46400	44200	41300	72100
	Chromium (Cr) (mg/kg)	13.1	12.0	12.6	10.6	20.5
	Cobalt (Co) (mg/kg)	2.23	2.11	2.17	1.91	3.36
	Copper (Cu) (mg/kg)	4.45	3.95	4.06	3.68	7.19
	Iron (Fe) (mg/kg)	9660	8620	8870	7790	11900
	Lead (Pb) (mg/kg)	3.46	3.59	3.34	3.20	6.36
	Lithium (Li) (mg/kg)	17.3	16.9	15.3	13.9	28.5
	Magnesium (Mg) (mg/kg)	28000	24900	23300	22400	39600
	Manganese (Mn) (mg/kg)	93.3	83.5	85.7	79.8	126
	Mercury (Hg) (mg/kg)	0.0071	0.0073	0.0068	0.0076	0.0118
	Molybdenum (Mo) (mg/kg)	0.29	0.27	0.33	0.28	0.42
	Nickel (Ni) (mg/kg)	7.23	6.54	6.81	6.33	10.9
	Phosphorus (P) (mg/kg)	330	303	349	323	554
	Potassium (K) (mg/kg)	1600	1620	1410	1230	2740
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	2430	3230	3490	3430	5070
	Strontium (Sr) (mg/kg)	40.0	31.9	32.7	34.2	56.2
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-26 Sediment 11-AUG-18 16:05 SE-4-2	L2148903-27 Sediment 11-AUG-18 16:10 SE-4-3	L2148903-28 Sediment 11-AUG-18 16:25 SE-5-1	L2148903-29 Sediment 11-AUG-18 16:30 SE-5-2	L2148903-30 Sediment 11-AUG-18 16:35 SE-5-3
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)			24.4		
	pH (1:2 soil:water) (pH)	8.25	8.15	8.30	8.23	8.24
Particle Size	% Gravel (>2mm) (%)	10.2	5.6	2.6	4.1	6.0
	% Sand (2.0mm - 0.063mm) (%)	62.6	51.1	55.0	67.8	51.2
	% Silt (0.063mm - 4um) (%)	21.2	33.4	31.5	20.5	30.7
	% Clay (<4um) (%)	6.0	10.0	11.0	7.6	12.1
	Texture	Sandy loam				
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.35	1.35	1.33	1.12	1.51
	Total Organic Carbon (%)	1.45	2.46	1.82	1.46	1.89
Metals	Aluminum (Al) (mg/kg)	4410	5390	5610	4260	7440
	Antimony (Sb) (mg/kg)	<0.10	<0.10	0.10	<0.10	0.12
	Arsenic (As) (mg/kg)	3.21	6.14	2.34	5.33	6.70
	Barium (Ba) (mg/kg)	12.3	15.1	12.7	13.5	18.3
	Beryllium (Be) (mg/kg)	0.28	0.35	0.36	0.27	0.51
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	29.6	39.1	36.4	31.2	54.1
	Cadmium (Cd) (mg/kg)	0.067	0.029	0.057	0.032	0.046
	Calcium (Ca) (mg/kg)	52500	66300	58700	41900	65300
	Chromium (Cr) (mg/kg)	14.5	17.4	18.1	13.5	22.4
	Cobalt (Co) (mg/kg)	2.42	2.97	2.98	2.37	3.73
	Copper (Cu) (mg/kg)	4.84	6.14	6.07	4.51	7.56
	Iron (Fe) (mg/kg)	8650	11100	9110	8690	12300
	Lead (Pb) (mg/kg)	4.44	5.13	5.50	4.07	8.85
	Lithium (Li) (mg/kg)	19.2	23.6	25.0	18.7	35.2
	Magnesium (Mg) (mg/kg)	27500	33600	32900	22300	33900
	Manganese (Mn) (mg/kg)	94.8	120	107	90.2	144
	Mercury (Hg) (mg/kg)	0.0093	0.0109	0.0079	0.0077	0.0128
	Molybdenum (Mo) (mg/kg)	0.26	0.32	0.36	0.27	0.44
	Nickel (Ni) (mg/kg)	7.81	9.48	9.50	7.46	12.2
	Phosphorus (P) (mg/kg)	397	582	352	444	546
	Potassium (K) (mg/kg)	1720	2270	2390	1860	3060
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	0.21
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	3510	4600	4150	4400	5000
	Strontium (Sr) (mg/kg)	53.9	84.9	37.6	50.1	52.5
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-31 Sediment 11-AUG-18 17:00 SC-2-1	L2148903-32 Sediment 11-AUG-18 17:05 SC-2-2	L2148903-33 Sediment 11-AUG-18 17:10 SC-2-3	L2148903-34 Sediment 12-AUG-18 12:15 SC-3-1	L2148903-35 Sediment 12-AUG-18 12:20 SC-3-2
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	37.7			46.8	
	pH (1:2 soil:water) (pH)	8.13	8.17	8.20	7.98	7.95
Particle Size	% Gravel (>2mm) (%)	1.5	4.9	6.0	3.9	2.7
	% Sand (2.0mm - 0.063mm) (%)	30.4	31.4	30.5	18.8	18.9
	% Silt (0.063mm - 4um) (%)	50.5	47.2	48.0	56.3	59.3
	% Clay (<4um) (%)	17.6	16.6	15.6	21.0	19.1
	Texture	Silt loam	Silt loam	Silt loam	Silt loam	Silt Ioam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.70	1.85	1.85	1.95	1.87
	Total Organic Carbon (%)	3.12	3.06	3.01	3.5	3.6
Metals	Aluminum (Al) (mg/kg)	8920	8860	8660	9250	10400
	Antimony (Sb) (mg/kg)	0.18	0.16	0.17	0.22	0.22
	Arsenic (As) (mg/kg)	4.31	4.67	5.52	4.89	4.57
	Barium (Ba) (mg/kg)	22.6	22.6	22.9	24.4	26.2
	Beryllium (Be) (mg/kg)	0.55	0.57	0.55	0.61	0.61
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	59.7	59.1	59.6	64.7	69.6
	Cadmium (Cd) (mg/kg)	0.066	0.066	0.068	0.094	0.098
	Calcium (Ca) (mg/kg)	86300	85700	85800	87900	80700
	Chromium (Cr) (mg/kg)	26.2	26.8	26.4	29.6	30.5
	Cobalt (Co) (mg/kg)	4.18	4.12	4.13	4.47	4.69
	Copper (Cu) (mg/kg)	9.20	8.81	8.79	10.4	10.2
	Iron (Fe) (mg/kg)	13500	13900	14200	14900	14900
	Lead (Pb) (mg/kg)	8.40	8.36	8.74	9.52	9.78
	Lithium (Li) (mg/kg)	39.7	39.7	39.9	44.1	43.4
	Magnesium (Mg) (mg/kg)	51200	50500	48700	52900	50300
	Manganese (Mn) (mg/kg)	151	153	151	156	164
	Mercury (Hg) (mg/kg)	0.0155	0.0150	0.0158	0.0182	0.0205
	Molybdenum (Mo) (mg/kg)	0.75	0.58	0.56	1.01	0.97
	Nickel (Ni) (mg/kg)	14.4	14.2	14.2	16.0	16.5
	Phosphorus (P) (mg/kg)	553	612	621	609	647
	Potassium (K) (mg/kg)	3860	3810	3740	4030	4370
	Selenium (Se) (mg/kg)	0.35	0.35	0.30	0.45	0.41
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	7470	7080	6000	10300	9260
	Strontium (Sr) (mg/kg)	70.5	60.8	64.9	67.9	57.7
	Sulfur (S) (mg/kg)	1200	1000	1300	1500	1600

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-36 Sediment 12-AUG-18 12:25 SC-3-3	L2148903-37 Sediment 12-AUG-18 12:45 SC-4-1	L2148903-38 Sediment 12-AUG-18 12:50 SC-4-2	L2148903-39 Sediment 12-AUG-18 12:55 SC-4-3	L2148903-40 Sediment 12-AUG-18 13:30 SC-5-1
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)				56.4	36.0
	pH (1:2 soil:water) (pH)	8.07	8.14	7.99	8.09	8.18
Particle Size	% Gravel (>2mm) (%)	1.7	7.0	13.0	9.7	3.4
	% Sand (2.0mm - 0.063mm) (%)	22.8	32.3	27.4	30.6	44.3
	% Silt (0.063mm - 4um) (%)	56.7	40.5	41.0	43.3	39.4
	% Clay (<4um) (%)	18.8	20.1	18.5	16.4	13.0
	Texture	Silt loam	Loam	Silt loam	Silt loam	Loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.82	1.99	1.93	2.00	1.39
	Total Organic Carbon (%)	3.5	2.78	3.2	3.3	2.18
Metals	Aluminum (Al) (mg/kg)	10800	10600	9460	9260	7170
	Antimony (Sb) (mg/kg)	0.22	0.17	0.17	0.15	0.13
	Arsenic (As) (mg/kg)	4.33	4.96	6.41	6.39	3.12
	Barium (Ba) (mg/kg)	28.7	34.9	29.5	31.4	20.3
	Beryllium (Be) (mg/kg)	0.59	0.62	0.56	0.51	0.46
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	68.6	63.5	65.6	59.3	42.2
	Cadmium (Cd) (mg/kg)	0.106	0.104	0.223	0.128	0.083
	Calcium (Ca) (mg/kg)	83000	80500	74300	86500	57600
	Chromium (Cr) (mg/kg)	30.8	31.1	28.9	28.3	24.6
	Cobalt (Co) (mg/kg)	4.67	5.07	4.85	4.56	3.87
	Copper (Cu) (mg/kg)	10.3	10.6	10.8	10.4	7.72
	Iron (Fe) (mg/kg)	14800	15400	14900	14200	12400
	Lead (Pb) (mg/kg)	9.62	9.29	8.80	8.53	7.07
	Lithium (Li) (mg/kg)	43.2	41.5	38.5	36.1	28.5
	Magnesium (Mg) (mg/kg)	51000	39100	34700	33300	30900
	Manganese (Mn) (mg/kg)	166	160	151	139	129
	Mercury (Hg) (mg/kg)	0.0201	0.0227	0.0267	0.0247	0.0168
	Molybdenum (Mo) (mg/kg)	1.14	0.83	1.90	1.08	0.63
	Nickel (Ni) (mg/kg)	16.4	17.2	16.1	15.5	15.2
	Phosphorus (P) (mg/kg)	608	525	747	601	517
	Potassium (K) (mg/kg)	4440	4330	4220	3970	2740
	Selenium (Se) (mg/kg)	0.42	0.46	0.67	0.63	0.35
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	7200	8560	13800	11700	5900
	Strontium (Sr) (mg/kg)	55.8	74.0	133	170	74.7
	Sulfur (S) (mg/kg)	1200	1400	3200	2500	<1000

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-41 Sediment 12-AUG-18 13:35 SC-5-2	L2148903-42 Sediment 12-AUG-18 13:40 SC-5-3	L2148903-43 Sediment 12-AUG-18 15:35 BE-2-1	L2148903-44 Sediment 12-AUG-18 15:40 BE-2-2	L2148903-45 Sediment 12-AUG-18 15:45 BE-2-3
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)			22.4		
	pH (1:2 soil:water) (pH)	8.16	8.16	8.35	8.42	8.18
Particle Size	% Gravel (>2mm) (%)	2.3	7.7	5.5	6.5	37.2
	% Sand (2.0mm - 0.063mm) (%)	41.6	43.1	43.2	69.7	34.0
	% Silt (0.063mm - 4um) (%)	43.5	38.4	39.4	18.4	22.0
	% Clay (<4um) (%)	12.6	10.9	11.9	5.5	6.8
	Texture	Loam	Loam / Sandy loam	Loam	Loamy sand	Sandy loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.30	1.52	1.62	1.16	1.65
	Total Organic Carbon (%)	5.58	2.23	2.77	1.50	2.46
Metals	Aluminum (Al) (mg/kg)	7730	7600	3900	5360	4880
	Antimony (Sb) (mg/kg)	0.13	0.12	<0.10	<0.10	<0.10
	Arsenic (As) (mg/kg)	4.26	2.84	2.84	3.26	4.49
	Barium (Ba) (mg/kg)	18.5	18.9	12.1	15.9	14.7
	Beryllium (Be) (mg/kg)	0.45	0.47	0.24	0.37	0.32
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	46.7	44.4	27.5	38.1	35.0
	Cadmium (Cd) (mg/kg)	0.062	0.066	0.035	0.034	0.073
	Calcium (Ca) (mg/kg)	49400	58600	52600	79900	66300
	Chromium (Cr) (mg/kg)	25.5	25.7	12.1	18.9	16.5
	Cobalt (Co) (mg/kg)	3.82	3.93	2.08	3.27	2.86
	Copper (Cu) (mg/kg)	7.72	7.62	4.15	6.91	6.70
	Iron (Fe) (mg/kg)	12000	11600	7840	10500	10100
	Lead (Pb) (mg/kg)	6.61	6.75	3.87	5.50	5.01
	Lithium (Li) (mg/kg)	28.3	30.4	17.3	28.8	24.1
	Magnesium (Mg) (mg/kg)	31500	34300	26100	43300	35000
	Manganese (Mn) (mg/kg)	126	127	87.7	130	124
	Mercury (Hg) (mg/kg)	0.0156	0.0156	0.0083	0.0085	0.0118
	Molybdenum (Mo) (mg/kg)	0.67	0.72	0.31	0.34	0.30
	Nickel (Ni) (mg/kg)	15.8	15.9	6.54	10.4	9.14
	Phosphorus (P) (mg/kg)	637	513	353	378	507
	Potassium (K) (mg/kg)	2890	2850	1680	2310	2020
	Selenium (Se) (mg/kg)	0.34	0.34	<0.20	<0.20	0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	6230	6320	3460	3590	4040
	Strontium (Sr) (mg/kg)	57.2	55.2	53.6	46.5	65.6
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-46 Sediment 12-AUG-18 16:00 BE-5-1	L2148903-47 Sediment 12-AUG-18 16:05 BE-5-2	L2148903-48 Sediment 12-AUG-18 16:10 BE-5-3	L2148903-49 Sediment 12-AUG-18 14:05 SN-1-1	L2148903-50 Sediment 12-AUG-18 14:10 SN-1-2
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	41.7			26.7	
	pH (1:2 soil:water) (pH)	8.13	8.24	8.13	8.33	8.40
Particle Size	% Gravel (>2mm) (%)	5.9	8.0	7.0	7.8	7.0
	% Sand (2.0mm - 0.063mm) (%)	23.7	39.1	31.7	55.3	41.4
	% Silt (0.063mm - 4um) (%)	51.4	41.3	46.2	29.7	39.8
	% Clay (<4um) (%)	19.1	11.6	15.1	7.2	11.8
	Texture	Silt loam	Loam	Silt loam	Sandy loam	Loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.88	1.55	1.67	1.38	1.63
	Total Organic Carbon (%)	3.2	2.78	3.24	2.10	3.04
Metals	Aluminum (Al) (mg/kg)	9200	5590	8830	5330	6280
	Antimony (Sb) (mg/kg)	0.18	<0.10	0.15	<0.10	0.10
	Arsenic (As) (mg/kg)	4.14	2.43	3.88	4.84	2.71
	Barium (Ba) (mg/kg)	29.9	15.4	24.3	15.6	15.4
	Beryllium (Be) (mg/kg)	0.55	0.40	0.54	0.33	0.36
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	58.8	39.5	58.7	35.9	41.3
	Cadmium (Cd) (mg/kg)	0.092	0.054	0.082	0.042	0.084
	Calcium (Ca) (mg/kg)	79000	71800	76900	67700	78800
	Chromium (Cr) (mg/kg)	27.8	18.3	26.0	17.5	19.3
	Cobalt (Co) (mg/kg)	4.34	3.02	4.14	3.10	3.27
	Copper (Cu) (mg/kg)	10.1	6.24	9.18	6.37	6.77
	Iron (Fe) (mg/kg)	13500	9500	12600	14100	10200
	Lead (Pb) (mg/kg)	9.01	5.61	8.16	4.72	5.65
	Lithium (Li) (mg/kg)	38.7	26.7	37.6	23.4	26.2
	Magnesium (Mg) (mg/kg)	44400	40700	43500	36400	39500
	Manganese (Mn) (mg/kg)	154	125	147	142	116
	Mercury (Hg) (mg/kg)	0.0206	0.0110	0.0166	0.0110	0.0110
	Molybdenum (Mo) (mg/kg)	0.76	0.31	0.64	0.39	0.57
	Nickel (Ni) (mg/kg)	15.2	10.2	14.8	9.37	10.4
	Phosphorus (P) (mg/kg)	547	415	568	445	331
	Potassium (K) (mg/kg)	3700	2290	3630	2290	2520
	Selenium (Se) (mg/kg)	0.40	<0.20	0.37	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	7700	3660	6060	3670	4470
	Strontium (Sr) (mg/kg)	65.7	46.6	67.9	43.3	50.3
	Sulfur (S) (mg/kg)	1400	<1000	<1000	<1000	1200

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-51 Sediment 12-AUG-18 14:15 SN-1-3	L2148903-52 Sediment 12-AUG-18 14:25 SN-2-1	L2148903-53 Sediment 12-AUG-18 14:30 SN-2-2	L2148903-54 Sediment 12-AUG-18 14:35 SN-2-3	L2148903-55 Sediment 13-AUG-18 11:00 SN-3-1
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)		26.1			29.1
	pH (1:2 soil:water) (pH)	8.39	8.29	8.35	8.37	8.27
Particle Size	% Gravel (>2mm) (%)	27.8	4.4	7.8	5.9	13.7
	% Sand (2.0mm - 0.063mm) (%)	39.0	41.7	43.4	45.1	29.5
	% Silt (0.063mm - 4um) (%)	26.3	40.7	36.6	37.2	40.0
	% Clay (<4um) (%)	6.9	13.2	12.2	11.8	16.9
	Texture	Sandy loam	Loam	Loam	Loam	Silt loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.50	1.63	1.69	1.63	1.94
	Total Organic Carbon (%)	2.63	2.66	2.73	2.83	3.1
Metals	Aluminum (Al) (mg/kg)	5420	7720	6210	5670	9160
	Antimony (Sb) (mg/kg)	<0.10	0.12	0.11	<0.10	0.15
	Arsenic (As) (mg/kg)	3.81	6.60	4.32	4.07	4.77
	Barium (Ba) (mg/kg)	15.0	20.5	17.7	15.2	23.0
	Beryllium (Be) (mg/kg)	0.35	0.45	0.38	0.36	0.51
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	39.1	50.8	43.0	40.1	54.7
	Cadmium (Cd) (mg/kg)	0.046	0.067	0.068	0.047	0.118
	Calcium (Ca) (mg/kg)	73500	87200	81600	77500	96000
	Chromium (Cr) (mg/kg)	17.5	22.9	19.0	17.5	25.7
	Cobalt (Co) (mg/kg)	3.01	4.02	3.37	3.25	4.49
	Copper (Cu) (mg/kg)	7.14	8.52	7.29	6.84	10.3
	Iron (Fe) (mg/kg)	12900	14000	11100	10800	14500
	Lead (Pb) (mg/kg)	4.97	6.63	5.94	5.63	7.67
	Lithium (Li) (mg/kg)	25.1	33.5	28.7	26.7	37.9
	Magnesium (Mg) (mg/kg)	37700	46100	39500	38800	44600
	Manganese (Mn) (mg/kg)	134	170	132	130	160
	Mercury (Hg) (mg/kg)	0.0101	0.0146	0.0115	0.0112	0.0159
	Molybdenum (Mo) (mg/kg)	0.34	0.37	0.32	0.30	0.41
	Nickel (Ni) (mg/kg)	9.30	12.4	10.3	9.65	14.2
	Phosphorus (P) (mg/kg)	390	524	389	408	444
	Potassium (K) (mg/kg)	2260	3220	2500	2370	3700
	Selenium (Se) (mg/kg)	<0.20	<0.20	<0.20	<0.20	0.22
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	3440	4420	4100	3460	5060
	Strontium (Sr) (mg/kg)	46.5	55.4	53.1	49.5	63.6
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-56 Sediment 13-AUG-18 11:05 SN-3-2	L2148903-57 Sediment 13-AUG-18 11:10 SN-3-3	L2148903-58 Sediment 13-AUG-18 11:45 SN-4-1	L2148903-59 Sediment 13-AUG-18 11:50 SN-4-2	L2148903-60 Sediment 13-AUG-18 11:55 SN-4-3
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)			29.1		
	pH (1:2 soil:water) (pH)	8.37	8.26	8.30	8.37	8.38
Particle Size	% Gravel (>2mm) (%)	5.5	6.6	17.0	4.5	4.8
	% Sand (2.0mm - 0.063mm) (%)	47.0	40.8	30.7	32.0	39.3
	% Silt (0.063mm - 4um) (%)	33.8	38.6	35.5	44.0	37.5
	% Clay (<4um) (%)	13.6	14.0	16.8	19.5	18.3
	Texture	Loam	Loam	Loam	Silt loam / Loam	Loam
Organic / Inorganic Carbon	Inorganic Carbon (%)	1.63	1.81	1.96	2.01	1.97
	Total Organic Carbon (%)	2.27	2.74	2.77	2.94	2.56
Metals	Aluminum (Al) (mg/kg)	8480	7190	8860	8690	7850
	Antimony (Sb) (mg/kg)	0.14	0.11	0.17	0.15	0.15
	Arsenic (As) (mg/kg)	4.38	8.94	7.66	7.26	3.87
	Barium (Ba) (mg/kg)	18.8	17.0	23.5	21.1	18.3
	Beryllium (Be) (mg/kg)	0.47	0.41	0.50	0.46	0.43
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	51.8	46.9	57.3	53.3	49.9
	Cadmium (Cd) (mg/kg)	0.097	0.047	0.080	0.092	0.120
	Calcium (Ca) (mg/kg)	80300	74400	84400	82500	78700
	Chromium (Cr) (mg/kg)	23.3	20.3	24.7	22.9	21.6
	Cobalt (Co) (mg/kg)	3.74	3.48	4.40	3.97	3.61
	Copper (Cu) (mg/kg)	9.17	7.89	9.82	9.43	9.09
	Iron (Fe) (mg/kg)	12900	13400	15300	14700	12200
	Lead (Pb) (mg/kg)	6.94	6.25	7.85	7.46	6.88
	Lithium (Li) (mg/kg)	35.8	30.7	37.2	36.6	33.9
	Magnesium (Mg) (mg/kg)	41100	38300	42400	40200	38100
	Manganese (Mn) (mg/kg)	138	146	169	174	131
	Mercury (Hg) (mg/kg)	0.0161	0.0152	0.0178	0.0165	0.0153
	Molybdenum (Mo) (mg/kg)	0.35	0.33	0.40	0.37	0.39
	Nickel (Ni) (mg/kg)	12.7	11.4	13.8	12.9	12.3
	Phosphorus (P) (mg/kg)	404	530	560	532	361
	Potassium (K) (mg/kg)	3450	3050	3610	3640	3270
	Selenium (Se) (mg/kg)	0.21	0.22	0.24	0.26	0.21
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	4690	4760	4750	4570	4740
	Strontium (Sr) (mg/kg)	55.5	56.8	59.0	62.0	57.8
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-61 Sediment 13-AUG-18 12:30 SN-5-1	L2148903-62 Sediment 13-AUG-18 12:35 SN-5-2	L2148903-63 Sediment 13-AUG-18 12:40 SN-5-3	L2148903-64 Sediment 13-AUG-18 DUP-A	L2148903-65 Sediment 13-AUG-18 DUP-B
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	30.4				
	pH (1:2 soil:water) (pH)	8.30	8.32	8.35	8.27	8.28
Particle Size	% Gravel (>2mm) (%)	7.1	2.8	6.0	1.7	3.3
	% Sand (2.0mm - 0.063mm) (%)	32.3	40.7	25.9	82.7	67.4
	% Silt (0.063mm - 4um) (%)	39.4	35.8	45.3	13.3	25.5
	% Clay (<4um) (%)	21.1	20.8	22.8	2.3	3.8
	Texture	Loam	Loam	Silt loam	Sand	Loamy sand
Organic / Inorganic Carbon	Inorganic Carbon (%)	2.27	2.06	2.17	1.20	1.10
	Total Organic Carbon (%)	2.9	2.81	3.1	2.07	2.61
Metals	Aluminum (Al) (mg/kg)	8770	8760	9960	3320	4720
	Antimony (Sb) (mg/kg)	0.17	0.14	0.17	<0.10	<0.10
	Arsenic (As) (mg/kg)	6.68	6.69	3.90	1.80	4.01
	Barium (Ba) (mg/kg)	25.4	21.3	24.3	8.73	12.9
	Beryllium (Be) (mg/kg)	0.51	0.47	0.56	0.22	0.27
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	<0.20
	Boron (B) (mg/kg)	55.4	55.2	62.4	25.6	31.6
	Cadmium (Cd) (mg/kg)	0.114	0.129	0.123	0.021	<0.020
	Calcium (Ca) (mg/kg)	93300	90100	89800	59800	74600
	Chromium (Cr) (mg/kg)	24.9	23.7	26.7	11.7	16.6
	Cobalt (Co) (mg/kg)	4.62	4.10	4.44	2.29	2.73
	Copper (Cu) (mg/kg)	10.3	9.79	11.3	4.77	6.05
	Iron (Fe) (mg/kg)	14900	14300	14800	10200	13000
	Lead (Pb) (mg/kg)	8.06	7.43	8.56	2.82	3.61
	Lithium (Li) (mg/kg)	37.6	35.5	42.8	18.1	22.6
	Magnesium (Mg) (mg/kg)	42800	40500	43500	28200	41100
	Manganese (Mn) (mg/kg)	174	175	163	117	140
	Mercury (Hg) (mg/kg)	0.0178	0.0179	0.0199	0.0067	0.0082
	Molybdenum (Mo) (mg/kg)	0.40	0.41	0.39	0.35	0.33
	Nickel (Ni) (mg/kg)	14.1	13.5	15.3	6.58	8.56
	Phosphorus (P) (mg/kg)	482	454	399	287	530
	Potassium (K) (mg/kg)	3650	3590	4110	1650	2150
	Selenium (Se) (mg/kg)	0.24	0.22	0.27	<0.20	<0.20
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	<0.10
	Sodium (Na) (mg/kg)	5440	5190	5630	3230	3650
	Strontium (Sr) (mg/kg)	75.8	67.1	67.2	37.8	48.8
	Sulfur (S) (mg/kg)	<1000	<1000	<1000	<1000	<1000

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-66 Sediment 13-AUG-18 DUP-C	L2148903-67 Sediment 13-AUG-18 DUP-D	L2148903-68 Sediment 13-AUG-18 DUP-E	L2148903-69 Sediment 13-AUG-18 DUP-F	
Grouping	Analyte					
SOIL	•					
Physical Tests	Moisture (%)					
-	pH (1:2 soil:water) (pH)	8.08	8.21	8.36	8.44	
Particle Size	% Gravel (>2mm) (%)	<1.0	11.2	4.9	3.2	
	% Sand (2.0mm - 0.063mm) (%)	21.6	33.6	39.8	45.3	
	% Silt (0.063mm - 4um) (%)	57.2	37.7	43.6	38.9	
	% Clay (<4um) (%)	20.8	17.6	11.7	12.6	
	Texture	Silt loam	Loam	Loam	Loam	
Organic /	Inorganic Carbon (%)	2.02	2.12	1.84	1.77	
Inorganic Carbon	T. 10 10 10 10 10					
	Total Organic Carbon (%)	3.7	2.9	3.90	3.65	
Metals	Aluminum (Al) (mg/kg)	10400	10800	7070	6140	
	Antimony (Sb) (mg/kg)	0.21	0.15	0.12	<0.10	
	Arsenic (As) (mg/kg)	4.57	4.47	6.00	2.81	
	Barium (Ba) (mg/kg)	22.4	31.4	17.2	14.7	
	Beryllium (Be) (mg/kg)	0.54	0.54	0.39	0.35	
	Bismuth (Bi) (mg/kg)	<0.20	<0.20	<0.20	<0.20	
	Boron (B) (mg/kg)	61.5	56.4	41.6	36.2	
	Cadmium (Cd) (mg/kg)	0.090	0.098	0.066	0.039	
	Calcium (Ca) (mg/kg)	74000	79100	81200	76300	
	Chromium (Cr) (mg/kg)	29.5	29.7	21.3	18.5	
	Cobalt (Co) (mg/kg)	4.55	5.10	3.87	3.18	
	Copper (Cu) (mg/kg)	10.3	10.4	8.14	6.71	
	Iron (Fe) (mg/kg)	14200	14500	12600	9980	
	Lead (Pb) (mg/kg)	9.47	9.43	6.23	5.62	
	Lithium (Li) (mg/kg)	39.5	38.5	29.1	25.8	
	Magnesium (Mg) (mg/kg)	49700	40200	44200	41900	
	Manganese (Mn) (mg/kg)	164	152	168	122	
	Mercury (Hg) (mg/kg)	0.0206	0.0227	0.0156	0.0105	
	Molybdenum (Mo) (mg/kg)	1.05	0.76	0.34	0.28	
	Nickel (Ni) (mg/kg)	16.1	16.5	11.9	9.90	
	Phosphorus (P) (mg/kg)	577	530	481	371	
	Potassium (K) (mg/kg)	4230	4110	2770	2570	
	Selenium (Se) (mg/kg)	0.43	0.53	<0.20	<0.20	
	Silver (Ag) (mg/kg)	<0.10	<0.10	<0.10	<0.10	
	Sodium (Na) (mg/kg)	8330	8690	3890	3090	
	Strontium (Sr) (mg/kg)	57.1	77.3	59.2	55.2	
	Sulfur (S) (mg/kg)	1700	1500	<1000	<1000	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-1 Sediment 11-AUG-18 13:35 SW-1-1	L2148903-2 Sediment 11-AUG-18 13:40 SW-1-2	L2148903-3 Sediment 11-AUG-18 13:45 SW-1-3	L2148903-4 Sediment 11-AUG-18 12:55 SW-2-1	L2148903-5 Sediment 11-AUG-18 13:00 SW-2-2
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.096	<0.050	0.076	0.093	0.094
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	256	55.4	209	288	256
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.687	0.162	0.620	0.617	0.694
	Vanadium (V) (mg/kg)	19.3	3.44	14.2	17.1	19.3
	Zinc (Zn) (mg/kg)	14.3	2.8	12.1	13.5	14.3
	Zirconium (Zr) (mg/kg)	4.9	1.0	3.6	4.4	4.1
Volatile Organic Compounds	VOC Sample Container	Field MeOH			Field MeOH	
	Benzene (mg/kg)	<0.0050			<0.0050	
	Bromodichloromethane (mg/kg)	<0.050			<0.050	
	Bromoform (mg/kg)	<0.050			<0.050	
	Carbon Tetrachloride (mg/kg)	<0.050			<0.050	
	Chlorobenzene (mg/kg)	<0.050			<0.050	
	Dibromochloromethane (mg/kg)	<0.050			<0.050	
	Chloroethane (mg/kg)	<0.10			<0.10	
	Chloroform (mg/kg)	<0.10			<0.10	
	Chloromethane (mg/kg)	<0.10			<0.10	
	1,2-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,3-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,4-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,1-Dichloroethane (mg/kg)	<0.050			<0.050	
	1,2-Dichloroethane (mg/kg)	<0.050			<0.050	
	1,1-Dichloroethylene (mg/kg)	<0.050			<0.070	
	cis-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	trans-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	Dichloromethane (mg/kg)	<0.30			<0.30	
	1,2-Dichloropropane (mg/kg)	<0.050			<0.050	
	cis-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	trans-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	1,3-Dichloropropene (cis & trans) (mg/kg)	<0.10			<0.10	
	Ethylbenzene (mg/kg)	<0.015			<0.015	
	Methyl t-butyl ether (MTBE) (mg/kg)	<0.20			<0.20	
	Styrene (mg/kg)	<0.050			<0.050	
	1,1,1,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	1,1,2,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	Tetrachloroethylene (mg/kg)	<0.050			<0.050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-6 Sediment 11-AUG-18 13:05 SW-2-3	L2148903-7 Sediment 11-AUG-18 12:35 SW-3-1	L2148903-8 Sediment 11-AUG-18 12:40 SW-3-2	L2148903-9 Sediment 11-AUG-18 12:45 SW-3-3	L2148903-10 Sediment 11-AUG-18 11:40 SW-4-1
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.102	0.110	0.099	0.075	0.119
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	278	321	276	228	261
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.746	0.774	0.753	0.662	0.907
	Vanadium (V) (mg/kg)	19.6	23.2	21.0	16.5	16.4
	Zinc (Zn) (mg/kg)	15.6	15.6	15.3	11.7	12.5
	Zirconium (Zr) (mg/kg)	4.4	5.9	5.2	4.3	6.7
Volatile Organic Compounds	VOC Sample Container		Field MeOH			Field MeOH
	Benzene (mg/kg)		<0.0050			<0.0050
	Bromodichloromethane (mg/kg)		<0.050			<0.050
	Bromoform (mg/kg)		<0.050			<0.050
	Carbon Tetrachloride (mg/kg)		<0.050			<0.050
	Chlorobenzene (mg/kg)		<0.050			<0.050
	Dibromochloromethane (mg/kg)		<0.050			<0.050
	Chloroethane (mg/kg)		<0.10			<0.10
	Chloroform (mg/kg)		<0.10			<0.10
	Chloromethane (mg/kg)		<0.10			<0.10
	1,2-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,3-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,4-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,1-Dichloroethane (mg/kg)		<0.050			<0.050
	1,2-Dichloroethane (mg/kg)		<0.050			<0.050
	1,1-Dichloroethylene (mg/kg)		<0.20			<0.050
	cis-1,2-Dichloroethylene (mg/kg)		<0.050			<0.050
	trans-1,2-Dichloroethylene (mg/kg)		<0.050			<0.050
	Dichloromethane (mg/kg)		<0.30			<0.30
	1,2-Dichloropropane (mg/kg)		<0.050			<0.050
	cis-1,3-Dichloropropylene (mg/kg)		<0.050			<0.050
	trans-1,3-Dichloropropylene (mg/kg)		<0.050			<0.050
	1,3-Dichloropropene (cis & trans) (mg/kg)		<0.10			<0.10
	Ethylbenzene (mg/kg)		<0.015			<0.015
	Methyl t-butyl ether (MTBE) (mg/kg)		<0.20			<0.20
	Styrene (mg/kg)		<0.050			<0.050
	1,1,1,2-Tetrachloroethane (mg/kg)		<0.050			<0.050
	1,1,2,2-Tetrachloroethane (mg/kg)		<0.050			<0.050
	Tetrachloroethylene (mg/kg)		<0.050			<0.050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-11 Sediment 11-AUG-18 11:45 SW-4-2	L2148903-12 Sediment 11-AUG-18 11:50 SW-4-3	L2148903-13 Sediment 11-AUG-18 10:30 SW-5-1	L2148903-14 Sediment 11-AUG-18 10:35 SW-5-2	L2148903-15 Sediment 11-AUG-18 10:40 SW-5-3
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.081	0.085	0.066	0.067	0.066
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	253	250	216	216	219
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.742	0.713	0.521	0.824	0.582
	Vanadium (V) (mg/kg)	15.9	15.8	11.7	12.3	12.0
	Zinc (Zn) (mg/kg)	11.8	12.7	9.5	9.5	9.1
	Zirconium (Zr) (mg/kg)	4.4	3.5	4.1	5.4	4.8
Volatile Organic Compounds	VOC Sample Container			Field MeOH		
	Benzene (mg/kg)			<0.0050		
	Bromodichloromethane (mg/kg)			<0.050		
	Bromoform (mg/kg)			<0.050		
	Carbon Tetrachloride (mg/kg)			<0.050		
	Chlorobenzene (mg/kg)			<0.050		
	Dibromochloromethane (mg/kg)			<0.050		
	Chloroethane (mg/kg)			<0.10		
	Chloroform (mg/kg)			<0.10		
	Chloromethane (mg/kg)			<0.10		
	1,2-Dichlorobenzene (mg/kg)			<0.050		
	1,3-Dichlorobenzene (mg/kg)			<0.050		
	1,4-Dichlorobenzene (mg/kg)			<0.050		
	1,1-Dichloroethane (mg/kg)			<0.050		
	1,2-Dichloroethane (mg/kg)			<0.050		
	1,1-Dichloroethylene (mg/kg)			<0.050		
	cis-1,2-Dichloroethylene (mg/kg)			<0.050		
	trans-1,2-Dichloroethylene (mg/kg)			<0.050		
	Dichloromethane (mg/kg)			<0.30		
	1,2-Dichloropropane (mg/kg)			<0.050		
	cis-1,3-Dichloropropylene (mg/kg)			<0.050		
	trans-1,3-Dichloropropylene (mg/kg)			<0.050		
	1,3-Dichloropropene (cis & trans) (mg/kg)			<0.10		
	Ethylbenzene (mg/kg)			<0.015		
	Methyl t-butyl ether (MTBE) (mg/kg)			<0.20		
	Styrene (mg/kg)			<0.050		
	1,1,1,2-Tetrachloroethane (mg/kg)			<0.050		
	1,1,2,2-Tetrachloroethane (mg/kg)			<0.050		
	Tetrachloroethylene (mg/kg)			<0.050		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	11-AUG-18 14:10	L2148903-17 Sediment 11-AUG-18 14:15 SE-1-2	L2148903-18 Sediment 11-AUG-18 14:20 SE-1-3	L2148903-19 Sediment 11-AUG-18 14:45 SE-2-1	L2148903-20 Sediment 11-AUG-18 14:50 SE-2-2
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	<0.050	<0.050	<0.050	0.071	0.086
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	96.2	83.0	111	180	238
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.506	0.252	0.376	0.546	0.703
	Vanadium (V) (mg/kg)	6.62	5.34	7.16	15.3	18.8
	Zinc (Zn) (mg/kg)	5.6	4.6	6.3	11.5	12.7
	Zirconium (Zr) (mg/kg)	2.1	1.9	2.2	3.4	6.2
Volatile Organic Compounds	VOC Sample Container	Field MeOH			Field MeOH	
	Benzene (mg/kg)	<0.0050			<0.0050	
	Bromodichloromethane (mg/kg)	<0.050			<0.050	
	Bromoform (mg/kg)	<0.050			<0.050	
	Carbon Tetrachloride (mg/kg)	<0.050			<0.050	
	Chlorobenzene (mg/kg)	<0.050			<0.050	
	Dibromochloromethane (mg/kg)	<0.050			<0.050	
	Chloroethane (mg/kg)	<0.10			<0.10	
	Chloroform (mg/kg)	<0.10			<0.10	
	Chloromethane (mg/kg)	<0.10			<0.10	
	1,2-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,3-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,4-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,1-Dichloroethane (mg/kg)	<0.050			<0.050	
	1,2-Dichloroethane (mg/kg)	<0.050			<0.050	
	1,1-Dichloroethylene (mg/kg)	<0.20			OLQ <0.15	
	cis-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	trans-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	Dichloromethane (mg/kg)	<0.30			<0.30	
	1,2-Dichloropropane (mg/kg)	<0.050			<0.050	
	cis-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	trans-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	1,3-Dichloropropene (cis & trans) (mg/kg)	<0.10			<0.10	
	Ethylbenzene (mg/kg)	<0.015			<0.015	
	Methyl t-butyl ether (MTBE) (mg/kg)	<0.20			<0.20	
	Styrene (mg/kg)	<0.050			<0.050	
	1,1,1,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	1,1,2,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	Tetrachloroethylene (mg/kg)	<0.050			<0.050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-21 Sediment 11-AUG-18 14:55 SE-2-3	L2148903-22 Sediment 11-AUG-18 15:20 SE-3-1	L2148903-23 Sediment 11-AUG-18 15:25 SE-3-2	L2148903-24 Sediment 11-AUG-18 15:30 SE-3-3	L2148903-25 Sediment 11-AUG-18 16:00 SE-4-1
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.071	0.069	0.062	0.059	0.115
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	205	179	190	152	281
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.601	0.493	0.563	0.479	0.861
	Vanadium (V) (mg/kg)	15.6	14.6	14.4	12.5	25.3
	Zinc (Zn) (mg/kg)	10.8	10.6	10.6	9.6	16.8
	Zirconium (Zr) (mg/kg)	4.5	3.3	3.8	2.7	5.9
Volatile Organic Compounds	VOC Sample Container		Field MeOH			Field MeOH
	Benzene (mg/kg)		<0.0050			<0.0050
	Bromodichloromethane (mg/kg)		<0.050			<0.050
	Bromoform (mg/kg)		<0.050			<0.050
	Carbon Tetrachloride (mg/kg)		<0.050			<0.050
	Chlorobenzene (mg/kg)		<0.050			<0.050
	Dibromochloromethane (mg/kg)		<0.050			<0.050
	Chloroethane (mg/kg)		<0.10			<0.10
	Chloroform (mg/kg)		<0.10			<0.10
	Chloromethane (mg/kg)		<0.10			<0.10
	1,2-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,3-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,4-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,1-Dichloroethane (mg/kg)		<0.050			<0.050
	1,2-Dichloroethane (mg/kg)		<0.050			<0.050
	1,1-Dichloroethylene (mg/kg)		<0.20			<0.15
	cis-1,2-Dichloroethylene (mg/kg)		<0.050			<0.050
	trans-1,2-Dichloroethylene (mg/kg)		<0.050			<0.050
	Dichloromethane (mg/kg)		<0.30			<0.30
	1,2-Dichloropropane (mg/kg)		<0.050			<0.050
	cis-1,3-Dichloropropylene (mg/kg)		<0.050			<0.050
	trans-1,3-Dichloropropylene (mg/kg)		<0.050			<0.050
	1,3-Dichloropropene (cis & trans) (mg/kg)		<0.10			<0.10
	Ethylbenzene (mg/kg)		<0.015			<0.015
	Methyl t-butyl ether (MTBE) (mg/kg)		<0.20			<0.20
	Styrene (mg/kg)		<0.050			<0.050
	1,1,1,2-Tetrachloroethane (mg/kg)		<0.050			<0.050
	1,1,2,2-Tetrachloroethane (mg/kg)		<0.050			<0.050
	Tetrachloroethylene (mg/kg)		<0.050			<0.050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-26 Sediment 11-AUG-18 16:05 SE-4-2	L2148903-27 Sediment 11-AUG-18 16:10 SE-4-3	L2148903-28 Sediment 11-AUG-18 16:25 SE-5-1	L2148903-29 Sediment 11-AUG-18 16:30 SE-5-2	L2148903-30 Sediment 11-AUG-18 16:35 SE-5-3
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.073	0.092	0.106	0.077	0.139
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	204	265	252	212	308
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.625	0.748	0.785	0.554	1.02
	Vanadium (V) (mg/kg)	17.7	20.2	22.1	17.3	26.5
	Zinc (Zn) (mg/kg)	12.1	15.0	14.5	11.6	18.0
	Zirconium (Zr) (mg/kg)	4.5	5.4	6.8	4.9	8.6
Volatile Organic Compounds	VOC Sample Container			Field MeOH		
	Benzene (mg/kg)			<0.0050		
	Bromodichloromethane (mg/kg)			<0.050		
	Bromoform (mg/kg)			<0.050		
	Carbon Tetrachloride (mg/kg)			<0.050		
	Chlorobenzene (mg/kg)			<0.050		
	Dibromochloromethane (mg/kg)			<0.050		
	Chloroethane (mg/kg)			<0.10		
	Chloroform (mg/kg)			<0.10		
	Chloromethane (mg/kg)			<0.10		
	1,2-Dichlorobenzene (mg/kg)			<0.050		
	1,3-Dichlorobenzene (mg/kg)			<0.050		
	1,4-Dichlorobenzene (mg/kg)			<0.050		
	1,1-Dichloroethane (mg/kg)			<0.050		
	1,2-Dichloroethane (mg/kg)			<0.050		
	1,1-Dichloroethylene (mg/kg)			<0.15		
	cis-1,2-Dichloroethylene (mg/kg)			<0.050		
	trans-1,2-Dichloroethylene (mg/kg)			<0.050		
	Dichloromethane (mg/kg)			<0.30		
	1,2-Dichloropropane (mg/kg)			<0.050		
	cis-1,3-Dichloropropylene (mg/kg)			<0.050		
	trans-1,3-Dichloropropylene (mg/kg)			<0.050		
	1,3-Dichloropropene (cis & trans) (mg/kg)			<0.10		
	Ethylbenzene (mg/kg)			<0.015		
	Methyl t-butyl ether (MTBE) (mg/kg)			<0.20		
	Styrene (mg/kg)			<0.050		
	1,1,1,2-Tetrachloroethane (mg/kg)			<0.050		
	1,1,2,2-Tetrachloroethane (mg/kg)			<0.050		
	Tetrachloroethylene (mg/kg)			<0.050		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	11-AUG-18 17:00	L2148903-32 Sediment 11-AUG-18 17:05 SC-2-2	L2148903-33 Sediment 11-AUG-18 17:10 SC-2-3	L2148903-34 Sediment 12-AUG-18 12:15 SC-3-1	L2148903-35 Sediment 12-AUG-18 12:20 SC-3-2
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.152	0.145	0.146	0.170	0.173
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	351	339	352	314	375
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	1.23	1.13	1.20	1.37	1.49
	Vanadium (V) (mg/kg)	30.9	30.6	30.9	35.8	36.9
	Zinc (Zn) (mg/kg)	23.0	22.0	21.9	25.1	26.0
	Zirconium (Zr) (mg/kg)	7.8	7.8	7.3	6.7	8.4
Volatile Organic Compounds	VOC Sample Container	Field MeOH			Field MeOH	
	Benzene (mg/kg)	<0.0050			<0.0050	
	Bromodichloromethane (mg/kg)	<0.050			<0.050	
	Bromoform (mg/kg)	<0.050			<0.050	
	Carbon Tetrachloride (mg/kg)	<0.050			<0.050	
	Chlorobenzene (mg/kg)	<0.050			<0.050	
	Dibromochloromethane (mg/kg)	<0.050			<0.050	
	Chloroethane (mg/kg)	<0.10			<0.10	
	Chloroform (mg/kg)	<0.10			<0.10	
	Chloromethane (mg/kg)	<0.10			<0.10	
	1,2-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,3-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,4-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,1-Dichloroethane (mg/kg)	<0.050			<0.050	
	1,2-Dichloroethane (mg/kg)	<0.050			<0.050	
	1,1-Dichloroethylene (mg/kg)	<0.20			<0.35	
	cis-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	trans-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	Dichloromethane (mg/kg)	<0.30			<0.30	
	1,2-Dichloropropane (mg/kg)	<0.050			<0.050	
	cis-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	trans-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	1,3-Dichloropropene (cis & trans) (mg/kg)	<0.10			<0.10	
	Ethylbenzene (mg/kg)	<0.015			<0.015	
	Methyl t-butyl ether (MTBE) (mg/kg)	<0.20			<0.20	
	Styrene (mg/kg)	<0.050			<0.050	
	1,1,1,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	1,1,2,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	Tetrachloroethylene (mg/kg)	<0.050			<0.050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-36 Sediment 12-AUG-18 12:25 SC-3-3	L2148903-37 Sediment 12-AUG-18 12:45 SC-4-1	L2148903-38 Sediment 12-AUG-18 12:50 SC-4-2	L2148903-39 Sediment 12-AUG-18 12:55 SC-4-3	L2148903-40 Sediment 12-AUG-18 13:30 SC-5-1
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.167	0.169	0.164	0.158	0.126
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	379	388	341	336	323
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	1.55	1.47	1.52	1.33	1.29
	Vanadium (V) (mg/kg)	35.8	33.7	33.1	32.5	26.1
	Zinc (Zn) (mg/kg)	26.0	27.7	26.4	26.2	22.1
	Zirconium (Zr) (mg/kg)	8.7	8.9	7.1	6.7	5.3
Volatile Organic Compounds	VOC Sample Container	-			Field MeOH	Field MeOH
	Benzene (mg/kg)				<0.012	<0.0050
	Bromodichloromethane (mg/kg)				<0.050	<0.050
	Bromoform (mg/kg)				<0.050	<0.050
	Carbon Tetrachloride (mg/kg)				<0.050	<0.050
	Chlorobenzene (mg/kg)				<0.050	<0.050
	Dibromochloromethane (mg/kg)				<0.050	<0.050
	Chloroethane (mg/kg)				<0.10	<0.10
	Chloroform (mg/kg)				<0.10	<0.10
	Chloromethane (mg/kg)				<0.10	<0.10
	1,2-Dichlorobenzene (mg/kg)				<0.050	<0.050
	1,3-Dichlorobenzene (mg/kg)				<0.050	<0.050
	1,4-Dichlorobenzene (mg/kg)				<0.050	<0.050
	1,1-Dichloroethane (mg/kg)				<0.050	<0.050
	1,2-Dichloroethane (mg/kg)				<0.090	<0.050
	1,1-Dichloroethylene (mg/kg)				<0.30	<0.050
	cis-1,2-Dichloroethylene (mg/kg)				<0.050	<0.050
	trans-1,2-Dichloroethylene (mg/kg)				<0.050	<0.050
	Dichloromethane (mg/kg)				<0.30	0.66
	1,2-Dichloropropane (mg/kg)				<0.050	<0.050
	cis-1,3-Dichloropropylene (mg/kg)				<0.050	<0.050
	trans-1,3-Dichloropropylene (mg/kg)				<0.050	<0.050
	1,3-Dichloropropene (cis & trans) (mg/kg)				<0.10	<0.10
	Ethylbenzene (mg/kg)				<0.015	<0.015
	Methyl t-butyl ether (MTBE) (mg/kg)				<0.20	<0.20
	Styrene (mg/kg)				<0.050	<0.050
	1,1,1,2-Tetrachloroethane (mg/kg)				<0.050	<0.050
	1,1,2,2-Tetrachloroethane (mg/kg)				<0.050	<0.050
	Tetrachloroethylene (mg/kg)				<0.050	<0.050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-41 Sediment 12-AUG-18 13:35 SC-5-2	L2148903-42 Sediment 12-AUG-18 13:40 SC-5-3	L2148903-43 Sediment 12-AUG-18 15:35 BE-2-1	L2148903-44 Sediment 12-AUG-18 15:40 BE-2-2	L2148903-45 Sediment 12-AUG-18 15:45 BE-2-3
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.122	0.123	0.070	0.093	0.088
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	349	345	176	244	223
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	1.29	1.28	0.588	0.813	0.773
	Vanadium (V) (mg/kg)	25.9	23.7	15.3	21.0	20.3
	Zinc (Zn) (mg/kg)	21.0	21.6	10.9	15.4	14.4
	Zirconium (Zr) (mg/kg)	5.6	6.3	3.5	7.0	4.8
Volatile Organic Compounds	VOC Sample Container			Field MeOH		
	Benzene (mg/kg)			<0.0050		
	Bromodichloromethane (mg/kg)			<0.050		
	Bromoform (mg/kg)			<0.050		
	Carbon Tetrachloride (mg/kg)			<0.050		
	Chlorobenzene (mg/kg)			<0.050		
	Dibromochloromethane (mg/kg)			<0.050		
	Chloroethane (mg/kg)			<0.10		
	Chloroform (mg/kg)			<0.10		
	Chloromethane (mg/kg)			<0.10		
	1,2-Dichlorobenzene (mg/kg)			<0.050		
	1,3-Dichlorobenzene (mg/kg)			<0.050		
	1,4-Dichlorobenzene (mg/kg)			<0.050		
	1,1-Dichloroethane (mg/kg)			<0.050		
	1,2-Dichloroethane (mg/kg)			<0.050		
	1,1-Dichloroethylene (mg/kg)			<0.050		
	cis-1,2-Dichloroethylene (mg/kg)			<0.050		
	trans-1,2-Dichloroethylene (mg/kg)			<0.050		
	Dichloromethane (mg/kg)			0.35		
	1,2-Dichloropropane (mg/kg)			<0.050		
	cis-1,3-Dichloropropylene (mg/kg)			<0.050		
	trans-1,3-Dichloropropylene (mg/kg)			<0.050		
	1,3-Dichloropropene (cis & trans) (mg/kg)			<0.10		
	Ethylbenzene (mg/kg)			<0.015		
	Methyl t-butyl ether (MTBE) (mg/kg)			<0.20		
	Styrene (mg/kg)			<0.050		
	1,1,1,2-Tetrachloroethane (mg/kg)			<0.050		
	1,1,2,2-Tetrachloroethane (mg/kg)			<0.050		
	Tetrachloroethylene (mg/kg)			<0.050		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	12-AUG-18 16:00	L2148903-47 Sediment 12-AUG-18 16:05 BE-5-2	L2148903-48 Sediment 12-AUG-18 16:10 BE-5-3	L2148903-49 Sediment 12-AUG-18 14:05 SN-1-1	L2148903-50 Sediment 12-AUG-18 14:10 SN-1-2
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.157	0.095	0.142	0.090	0.112
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	340	260	346	252	262
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	1.39	0.877	1.36	0.757	0.977
	Vanadium (V) (mg/kg)	31.8	20.2	29.4	19.8	21.9
	Zinc (Zn) (mg/kg)	23.9	15.7	22.3	14.8	15.5
	Zirconium (Zr) (mg/kg)	7.5	6.1	8.0	5.6	8.1
Volatile Organic Compounds	VOC Sample Container	Field MeOH			Field MeOH	
	Benzene (mg/kg)	<0.011			<0.0050	
	Bromodichloromethane (mg/kg)	<0.050			<0.050	
	Bromoform (mg/kg)	<0.050			<0.050	
	Carbon Tetrachloride (mg/kg)	<0.050			<0.050	
	Chlorobenzene (mg/kg)	<0.050			<0.050	
	Dibromochloromethane (mg/kg)	<0.050			<0.050	
	Chloroethane (mg/kg)	<0.10			<0.10	
	Chloroform (mg/kg)	<0.10			<0.10	
	Chloromethane (mg/kg)	<0.10			<0.10	
	1,2-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,3-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,4-Dichlorobenzene (mg/kg)	<0.050			<0.050	
	1,1-Dichloroethane (mg/kg)	<0.050			<0.050	
	1,2-Dichloroethane (mg/kg)	OLHM <0.085			<0.050	
	1,1-Dichloroethylene (mg/kg)	<0.50			<0.10	
	cis-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	trans-1,2-Dichloroethylene (mg/kg)	<0.050			<0.050	
	Dichloromethane (mg/kg)	0.46			<0.30	
	1,2-Dichloropropane (mg/kg)	<0.050			<0.050	
	cis-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	trans-1,3-Dichloropropylene (mg/kg)	<0.050			<0.050	
	1,3-Dichloropropene (cis & trans) (mg/kg)	<0.10			<0.10	
	Ethylbenzene (mg/kg)	<0.015			<0.015	
	Methyl t-butyl ether (MTBE) (mg/kg)	<0.20			<0.20	
	Styrene (mg/kg)	<0.050			<0.050	
	1,1,1,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	1,1,2,2-Tetrachloroethane (mg/kg)	<0.050			<0.050	
	Tetrachloroethylene (mg/kg)	<0.050			<0.050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-51 Sediment 12-AUG-18 14:15 SN-1-3	L2148903-52 Sediment 12-AUG-18 14:25 SN-2-1	L2148903-53 Sediment 12-AUG-18 14:30 SN-2-2	L2148903-54 Sediment 12-AUG-18 14:35 SN-2-3	L2148903-55 Sediment 13-AUG-18 11:00 SN-3-1
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.096	0.123	0.106	0.104	0.136
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	253	305	249	232	328
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.816	0.971	0.876	0.878	1.18
	Vanadium (V) (mg/kg)	19.6	27.9	22.3	21.6	34.2
	Zinc (Zn) (mg/kg)	14.6	18.7	15.5	14.9	22.1
	Zirconium (Zr) (mg/kg)	7.0	7.5	7.6	7.1	8.7
Volatile Organic Compounds	VOC Sample Container		Field MeOH			Field MeOH
	Benzene (mg/kg)		<0.0050			<0.0050
	Bromodichloromethane (mg/kg)		<0.050			<0.050
	Bromoform (mg/kg)		<0.050			<0.050
	Carbon Tetrachloride (mg/kg)		<0.050			<0.050
	Chlorobenzene (mg/kg)		<0.050			<0.050
	Dibromochloromethane (mg/kg)		<0.050			<0.050
	Chloroethane (mg/kg)		<0.10			<0.10
	Chloroform (mg/kg)		<0.10			<0.10
	Chloromethane (mg/kg)		<0.10			<0.10
	1,2-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,3-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,4-Dichlorobenzene (mg/kg)		<0.050			<0.050
	1,1-Dichloroethane (mg/kg)		<0.050			<0.050
	1,2-Dichloroethane (mg/kg)		<0.050			<0.050
	1,1-Dichloroethylene (mg/kg)		<0.050			<0.050
	cis-1,2-Dichloroethylene (mg/kg)		<0.050			<0.050
	trans-1,2-Dichloroethylene (mg/kg)		<0.050			<0.050
	Dichloromethane (mg/kg)		<0.30			<0.30
	1,2-Dichloropropane (mg/kg)		<0.050			<0.050
	cis-1,3-Dichloropropylene (mg/kg)		<0.050			<0.050
	trans-1,3-Dichloropropylene (mg/kg)		<0.050			<0.050
	1,3-Dichloropropene (cis & trans) (mg/kg)		<0.10			<0.10
	Ethylbenzene (mg/kg)		<0.015			<0.015
	Methyl t-butyl ether (MTBE) (mg/kg)		<0.20			<0.20
	Styrene (mg/kg)		<0.050			<0.050
	1,1,1,2-Tetrachloroethane (mg/kg)		<0.050			<0.050
	1,1,2,2-Tetrachloroethane (mg/kg)		<0.050			<0.050
	Tetrachloroethylene (mg/kg)		<0.050			<0.050

 $^{^{\}star}$ Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-56 Sediment 13-AUG-18 11:05 SN-3-2	L2148903-57 Sediment 13-AUG-18 11:10 SN-3-3	L2148903-58 Sediment 13-AUG-18 11:45 SN-4-1	L2148903-59 Sediment 13-AUG-18 11:50 SN-4-2	L2148903-60 Sediment 13-AUG-18 11:55 SN-4-3
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.121	0.110	0.138	0.130	0.123
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	281	257	309	282	247
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	0.973	0.858	0.999	0.946	1.14
	Vanadium (V) (mg/kg)	29.7	26.5	34.4	32.7	29.2
	Zinc (Zn) (mg/kg)	19.8	17.4	22.7	21.2	20.1
	Zirconium (Zr) (mg/kg)	8.8	6.9	8.2	8.0	8.1
Volatile Organic Compounds	VOC Sample Container			Field MeOH		-
	Benzene (mg/kg)			<0.0050		
	Bromodichloromethane (mg/kg)			<0.050		
	Bromoform (mg/kg)			<0.050		
	Carbon Tetrachloride (mg/kg)			<0.050		
	Chlorobenzene (mg/kg)			<0.050		
	Dibromochloromethane (mg/kg)			<0.050		
	Chloroethane (mg/kg)			<0.10		
	Chloroform (mg/kg)			<0.10		
	Chloromethane (mg/kg)			<0.10		
	1,2-Dichlorobenzene (mg/kg)			<0.050		
	1,3-Dichlorobenzene (mg/kg)			<0.050		
	1,4-Dichlorobenzene (mg/kg)			<0.050		
	1,1-Dichloroethane (mg/kg)			<0.050		
	1,2-Dichloroethane (mg/kg)			<0.050		
	1,1-Dichloroethylene (mg/kg)			<0.050		
	cis-1,2-Dichloroethylene (mg/kg)			<0.050		
	trans-1,2-Dichloroethylene (mg/kg)			<0.050		
	Dichloromethane (mg/kg)			<0.30		
	1,2-Dichloropropane (mg/kg)			<0.050		
	cis-1,3-Dichloropropylene (mg/kg)			<0.050		
	trans-1,3-Dichloropropylene (mg/kg)			<0.050		
	1,3-Dichloropropene (cis & trans) (mg/kg)			<0.10		
	Ethylbenzene (mg/kg)			<0.015		
	Methyl t-butyl ether (MTBE) (mg/kg)			<0.20		
	Styrene (mg/kg)			<0.050		
	1,1,1,2-Tetrachloroethane (mg/kg)			<0.050		
	1,1,2,2-Tetrachloroethane (mg/kg)			<0.050		
	Tetrachloroethylene (mg/kg)			<0.050		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	13-AUG-18 12:30	L2148903-62 Sediment 13-AUG-18 12:35 SN-5-2	L2148903-63 Sediment 13-AUG-18 12:40 SN-5-3	L2148903-64 Sediment 13-AUG-18 DUP-A	L2148903-65 Sediment 13-AUG-18 DUP-B
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.136	0.124	0.151	0.068	0.076
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	<2.0
	Titanium (Ti) (mg/kg)	300	275	316	215	253
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	<0.50
	Uranium (U) (mg/kg)	1.06	0.965	1.16	0.655	0.683
	Vanadium (V) (mg/kg)	33.8	32.1	35.7	10.9	15.5
	Zinc (Zn) (mg/kg)	23.9	22.1	25.7	9.4	11.3
	Zirconium (Zr) (mg/kg)	7.9	7.5	10.3	3.6	5.9
Volatile Organic Compounds	VOC Sample Container	Field MeOH				
	Benzene (mg/kg)	<0.0050				
	Bromodichloromethane (mg/kg)	<0.050				
	Bromoform (mg/kg)	<0.050				
	Carbon Tetrachloride (mg/kg)	<0.050				
	Chlorobenzene (mg/kg)	<0.050				
	Dibromochloromethane (mg/kg)	<0.050				
	Chloroethane (mg/kg)	<0.10				
	Chloroform (mg/kg)	<0.10				
	Chloromethane (mg/kg)	<0.10				
	1,2-Dichlorobenzene (mg/kg)	<0.050				
	1,3-Dichlorobenzene (mg/kg)	<0.050				
	1,4-Dichlorobenzene (mg/kg)	<0.050				
	1,1-Dichloroethane (mg/kg)	<0.050				
	1,2-Dichloroethane (mg/kg)	<0.050				
	1,1-Dichloroethylene (mg/kg)	<0.050				
	cis-1,2-Dichloroethylene (mg/kg)	<0.050				
	trans-1,2-Dichloroethylene (mg/kg)	<0.050				
	Dichloromethane (mg/kg)	<0.30				
	1,2-Dichloropropane (mg/kg)	<0.050				
	cis-1,3-Dichloropropylene (mg/kg)	<0.050				
	trans-1,3-Dichloropropylene (mg/kg)	<0.050				
	1,3-Dichloropropene (cis & trans) (mg/kg)	<0.10				
	Ethylbenzene (mg/kg)	<0.015				
	Methyl t-butyl ether (MTBE) (mg/kg)	<0.20				
	Styrene (mg/kg)	<0.050				
	1,1,1,2-Tetrachloroethane (mg/kg)	<0.050				
	1,1,2,2-Tetrachloroethane (mg/kg)	<0.050				
	Tetrachloroethylene (mg/kg)	<0.050				

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-66 Sediment 13-AUG-18 DUP-C	L2148903-67 Sediment 13-AUG-18	L2148903-68 Sediment 13-AUG-18 DUP-E	L2148903-69 Sediment 13-AUG-18 DUP-F	
Grouping	Analyte					
SOIL						
Metals	Thallium (TI) (mg/kg)	0.173	0.176	0.116	0.099	
	Tin (Sn) (mg/kg)	<2.0	<2.0	<2.0	<2.0	
	Titanium (Ti) (mg/kg)	358	381	276	251	
	Tungsten (W) (mg/kg)	<0.50	<0.50	<0.50	<0.50	
	Uranium (U) (mg/kg)	1.47	1.43	0.892	0.900	
	Vanadium (V) (mg/kg)	35.7	31.9	25.4	20.6	
	Zinc (Zn) (mg/kg)	25.3	26.9	17.8	15.0	
	Zirconium (Zr) (mg/kg)	8.4	9.3	7.0	7.4	
Volatile Organic Compounds	VOC Sample Container					
	Benzene (mg/kg)					
	Bromodichloromethane (mg/kg)					
	Bromoform (mg/kg)					
	Carbon Tetrachloride (mg/kg)					
	Chlorobenzene (mg/kg)					
	Dibromochloromethane (mg/kg)					
	Chloroethane (mg/kg)					
	Chloroform (mg/kg)					
	Chloromethane (mg/kg)					
	1,2-Dichlorobenzene (mg/kg)					
	1,3-Dichlorobenzene (mg/kg)					
	1,4-Dichlorobenzene (mg/kg)					
	1,1-Dichloroethane (mg/kg)					
	1,2-Dichloroethane (mg/kg)					
	1,1-Dichloroethylene (mg/kg)					
	cis-1,2-Dichloroethylene (mg/kg)					
	trans-1,2-Dichloroethylene (mg/kg)					
	Dichloromethane (mg/kg)					
	1,2-Dichloropropane (mg/kg)					
	cis-1,3-Dichloropropylene (mg/kg)					
	trans-1,3-Dichloropropylene (mg/kg)					
	1,3-Dichloropropene (cis & trans) (mg/kg)					
	Ethylbenzene (mg/kg)					
	Methyl t-butyl ether (MTBE) (mg/kg)					
	Styrene (mg/kg)					
	1,1,1,2-Tetrachloroethane (mg/kg)					
	1,1,2,2-Tetrachloroethane (mg/kg)					
	Tetrachloroethylene (mg/kg)					

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-1 Sediment 11-AUG-18 13:35 SW-1-1	L2148903-2 Sediment 11-AUG-18 13:40 SW-1-2	L2148903-3 Sediment 11-AUG-18 13:45 SW-1-3	L2148903-4 Sediment 11-AUG-18 12:55 SW-2-1	L2148903-5 Sediment 11-AUG-18 13:00 SW-2-2
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)	<0.050			<0.050	
	1,1,1-Trichloroethane (mg/kg)	<0.050			<0.050	
	1,1,2-Trichloroethane (mg/kg)	<0.050			<0.050	
	Trichloroethylene (mg/kg)	<0.010			<0.010	
	Trichlorofluoromethane (mg/kg)	<0.10			<0.10	
	Vinyl Chloride (mg/kg)	<0.10			<0.10	
	ortho-Xylene (mg/kg)	<0.050			<0.050	
	meta- & para-Xylene (mg/kg)	<0.050			<0.050	
	Xylenes (mg/kg)	<0.075			<0.075	
	Surrogate: 4-Bromofluorobenzene (SS) (%)	89.8			74.1	
	Surrogate: 1,4-Difluorobenzene (SS) (%)	83.2			74.8	
Hydrocarbons	EPH10-19 (mg/kg)	<200			<200	
	EPH19-32 (mg/kg)	<200			<200	
	LEPH (mg/kg)	<200			<200	
	HEPH (mg/kg)	<200			<200	
	Surrogate: 2-Bromobenzotrifluoride (%)	94.4			95.0	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050			<0.0050	
	Acenaphthylene (mg/kg)	<0.0050			<0.0050	
	Anthracene (mg/kg)	<0.0040			<0.0040	
	Benz(a)anthracene (mg/kg)	<0.010			<0.010	
	Benzo(a)pyrene (mg/kg)	<0.010			<0.010	
	Benzo(b&j)fluoranthene (mg/kg)	<0.010			<0.010	
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015			<0.015	
	Benzo(g,h,i)perylene (mg/kg)	<0.010			<0.010	
	Benzo(k)fluoranthene (mg/kg)	<0.010			<0.010	
	Chrysene (mg/kg)	<0.010			<0.010	
	Dibenz(a,h)anthracene (mg/kg)	<0.0050			<0.0050	
	Fluoranthene (mg/kg)	<0.010			<0.010	
	Fluorene (mg/kg)	<0.010			<0.010	
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010			<0.010	
	1-Methylnaphthalene (mg/kg)	<0.050			<0.050	
	2-Methylnaphthalene (mg/kg)	<0.010			<0.010	
	Naphthalene (mg/kg)	<0.010			<0.010	
	Phenanthrene (mg/kg)	<0.010			<0.010	
	Pyrene (mg/kg)	<0.010			<0.010	
	Quinoline (mg/kg)	<0.050			<0.050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-6 Sediment 11-AUG-18 13:05 SW-2-3	L2148903-7 Sediment 11-AUG-18 12:35 SW-3-1	L2148903-8 Sediment 11-AUG-18 12:40 SW-3-2	L2148903-9 Sediment 11-AUG-18 12:45 SW-3-3	L2148903-10 Sediment 11-AUG-18 11:40 SW-4-1
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)		<0.050			<0.050
	1,1,1-Trichloroethane (mg/kg)		<0.050			<0.050
	1,1,2-Trichloroethane (mg/kg)		<0.050			<0.050
	Trichloroethylene (mg/kg)		<0.010			<0.010
	Trichlorofluoromethane (mg/kg)		<0.10			<0.10
	Vinyl Chloride (mg/kg)		<0.10			<0.10
	ortho-Xylene (mg/kg)		<0.050			<0.050
	meta- & para-Xylene (mg/kg)		<0.050			<0.050
	Xylenes (mg/kg)		<0.075			<0.075
	Surrogate: 4-Bromofluorobenzene (SS) (%)		93.6			91.3
	Surrogate: 1,4-Difluorobenzene (SS) (%)		99.9			91.8
Hydrocarbons	EPH10-19 (mg/kg)		<200			<200
	EPH19-32 (mg/kg)		<200			<200
	LEPH (mg/kg)		<200			<200
	HEPH (mg/kg)		<200			<200
	Surrogate: 2-Bromobenzotrifluoride (%)		96.8			96.2
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)		<0.0050			<0.0050
	Acenaphthylene (mg/kg)		<0.0050			<0.0050
	Anthracene (mg/kg)		<0.0040			<0.0040
	Benz(a)anthracene (mg/kg)		<0.010			<0.010
	Benzo(a)pyrene (mg/kg)		<0.010			<0.010
	Benzo(b&j)fluoranthene (mg/kg)		<0.010			<0.010
	Benzo(b+j+k)fluoranthene (mg/kg)		<0.015			<0.015
	Benzo(g,h,i)perylene (mg/kg)		<0.010			<0.010
	Benzo(k)fluoranthene (mg/kg)		<0.010			<0.010
	Chrysene (mg/kg)		<0.010			<0.010
	Dibenz(a,h)anthracene (mg/kg)		<0.0050			<0.0050
	Fluoranthene (mg/kg)		<0.010			<0.010
	Fluorene (mg/kg)		<0.010			<0.010
	Indeno(1,2,3-c,d)pyrene (mg/kg)		<0.010			<0.010
	1-Methylnaphthalene (mg/kg)		<0.050			<0.050
	2-Methylnaphthalene (mg/kg)		<0.010			<0.010
	Naphthalene (mg/kg)		<0.010			<0.010
	Phenanthrene (mg/kg)		<0.010			<0.010
	Pyrene (mg/kg)		<0.010			<0.010
	Quinoline (mg/kg)		<0.050			<0.050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-11 Sediment 11-AUG-18 11:45 SW-4-2	L2148903-12 Sediment 11-AUG-18 11:50 SW-4-3	L2148903-13 Sediment 11-AUG-18 10:30 SW-5-1	L2148903-14 Sediment 11-AUG-18 10:35 SW-5-2	L2148903-15 Sediment 11-AUG-18 10:40 SW-5-3
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)			<0.050		
	1,1,1-Trichloroethane (mg/kg)			<0.050		
	1,1,2-Trichloroethane (mg/kg)			<0.050		
	Trichloroethylene (mg/kg)			<0.010		
	Trichlorofluoromethane (mg/kg)			<0.10		
	Vinyl Chloride (mg/kg)			<0.10		
	ortho-Xylene (mg/kg)			<0.050		
	meta- & para-Xylene (mg/kg)			<0.050		
	Xylenes (mg/kg)			<0.075		
	Surrogate: 4-Bromofluorobenzene (SS) (%)			90.7		
	Surrogate: 1,4-Difluorobenzene (SS) (%)			98.3		
Hydrocarbons	EPH10-19 (mg/kg)			<200		
	EPH19-32 (mg/kg)			<200		
	LEPH (mg/kg)			<200		
	HEPH (mg/kg)			<200		
	Surrogate: 2-Bromobenzotrifluoride (%)			91.9		
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)			<0.0050		
•	Acenaphthylene (mg/kg)			<0.0050		
	Anthracene (mg/kg)			<0.0040		
	Benz(a)anthracene (mg/kg)			<0.010		
	Benzo(a)pyrene (mg/kg)			<0.010		
	Benzo(b&j)fluoranthene (mg/kg)			<0.010		
	Benzo(b+j+k)fluoranthene (mg/kg)			<0.015		
	Benzo(g,h,i)perylene (mg/kg)			<0.010		
	Benzo(k)fluoranthene (mg/kg)			<0.010		
	Chrysene (mg/kg)			<0.010		
	Dibenz(a,h)anthracene (mg/kg)			<0.0050		
	Fluoranthene (mg/kg)			<0.010		
	Fluorene (mg/kg)			<0.010		
	Indeno(1,2,3-c,d)pyrene (mg/kg)			<0.010		
	1-Methylnaphthalene (mg/kg)			<0.050		
	2-Methylnaphthalene (mg/kg)			<0.010		
	Naphthalene (mg/kg)			<0.010		
	Phenanthrene (mg/kg)			<0.010		
	Pyrene (mg/kg)			<0.010		
	Quinoline (mg/kg)			<0.050		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-16 Sediment 11-AUG-18 14:10 SE-1-1	L2148903-17 Sediment 11-AUG-18 14:15 SE-1-2	L2148903-18 Sediment 11-AUG-18 14:20 SE-1-3	L2148903-19 Sediment 11-AUG-18 14:45 SE-2-1	L2148903-20 Sediment 11-AUG-18 14:50 SE-2-2
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)	<0.050			<0.050	
	1,1,1-Trichloroethane (mg/kg)	<0.050			<0.050	
	1,1,2-Trichloroethane (mg/kg)	<0.050			<0.050	
	Trichloroethylene (mg/kg)	<0.010			<0.010	
	Trichlorofluoromethane (mg/kg)	<0.10			<0.10	
	Vinyl Chloride (mg/kg)	<0.10			<0.10	
	ortho-Xylene (mg/kg)	<0.050			<0.050	
	meta- & para-Xylene (mg/kg)	<0.050			<0.050	
	Xylenes (mg/kg)	<0.075			<0.075	
	Surrogate: 4-Bromofluorobenzene (SS) (%)	88.1			89.5	
	Surrogate: 1,4-Difluorobenzene (SS) (%)	87.8			82.8	
Hydrocarbons	EPH10-19 (mg/kg)	<200			<200	
	EPH19-32 (mg/kg)	<200			<200	
	LEPH (mg/kg)	<200			<200	
	HEPH (mg/kg)	<200			<200	
	Surrogate: 2-Bromobenzotrifluoride (%)	91.2			93.9	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050			<0.0050	
	Acenaphthylene (mg/kg)	<0.0050			<0.0050	
	Anthracene (mg/kg)	<0.0040			<0.0040	
	Benz(a)anthracene (mg/kg)	<0.010			<0.010	
	Benzo(a)pyrene (mg/kg)	<0.010			<0.010	
	Benzo(b&j)fluoranthene (mg/kg)	<0.010			<0.020	
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015			<0.022	
	Benzo(g,h,i)perylene (mg/kg)	<0.010			0.011	
	Benzo(k)fluoranthene (mg/kg)	<0.010			<0.010	
	Chrysene (mg/kg)	<0.010			<0.010	
	Dibenz(a,h)anthracene (mg/kg)	<0.0050			<0.0050	
	Fluoranthene (mg/kg)	<0.010			<0.010	
	Fluorene (mg/kg)	<0.010			<0.010	
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010			0.010	
	1-Methylnaphthalene (mg/kg)	<0.050			<0.050	
	2-Methylnaphthalene (mg/kg)	<0.010			<0.010	
	Naphthalene (mg/kg)	<0.010			<0.010	
	Phenanthrene (mg/kg)	<0.010			<0.010	
	Pyrene (mg/kg)	<0.010			<0.010	
	Quinoline (mg/kg)	<0.050			<0.050	

 $^{^{\}star}$ Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-21 Sediment 11-AUG-18 14:55 SE-2-3	L2148903-22 Sediment 11-AUG-18 15:20 SE-3-1	L2148903-23 Sediment 11-AUG-18 15:25 SE-3-2	L2148903-24 Sediment 11-AUG-18 15:30 SE-3-3	L2148903-25 Sediment 11-AUG-18 16:00 SE-4-1
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)		<0.050			<0.050
	1,1,1-Trichloroethane (mg/kg)		<0.050			<0.050
	1,1,2-Trichloroethane (mg/kg)		<0.050			<0.050
	Trichloroethylene (mg/kg)		<0.010			<0.010
	Trichlorofluoromethane (mg/kg)		<0.10			<0.10
	Vinyl Chloride (mg/kg)		<0.10			<0.10
	ortho-Xylene (mg/kg)		<0.050			<0.050
	meta- & para-Xylene (mg/kg)		<0.050			<0.050
	Xylenes (mg/kg)		<0.075			<0.075
	Surrogate: 4-Bromofluorobenzene (SS) (%)		91.6			97.2
	Surrogate: 1,4-Difluorobenzene (SS) (%)		80.6			86.2
Hydrocarbons	EPH10-19 (mg/kg)		<200			<200
	EPH19-32 (mg/kg)		<200			<200
	LEPH (mg/kg)		<200			<200
	HEPH (mg/kg)		<200			<200
	Surrogate: 2-Bromobenzotrifluoride (%)		92.3			94.6
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)		<0.0050			<0.0050
	Acenaphthylene (mg/kg)		<0.0050			<0.0050
	Anthracene (mg/kg)		<0.0040			<0.0040
	Benz(a)anthracene (mg/kg)		<0.010			<0.010
	Benzo(a)pyrene (mg/kg)		<0.010			<0.010
	Benzo(b&j)fluoranthene (mg/kg)		<0.010			<0.010
	Benzo(b+j+k)fluoranthene (mg/kg)		<0.015			<0.015
	Benzo(g,h,i)perylene (mg/kg)		<0.010			<0.010
	Benzo(k)fluoranthene (mg/kg)		<0.010			<0.010
	Chrysene (mg/kg)		<0.010			<0.010
	Dibenz(a,h)anthracene (mg/kg)		<0.0050			<0.0050
	Fluoranthene (mg/kg)		<0.010			<0.010
	Fluorene (mg/kg)		<0.010			<0.010
	Indeno(1,2,3-c,d)pyrene (mg/kg)		<0.010			<0.010
	1-Methylnaphthalene (mg/kg)		<0.050			<0.050
	2-Methylnaphthalene (mg/kg)		<0.010			<0.010
	Naphthalene (mg/kg)		<0.010			<0.010
	Phenanthrene (mg/kg)		<0.010			<0.010
	Pyrene (mg/kg)		<0.010			<0.010
	Quinoline (mg/kg)		<0.050			<0.050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-26 Sediment 11-AUG-18 16:05 SE-4-2	L2148903-27 Sediment 11-AUG-18 16:10 SE-4-3	L2148903-28 Sediment 11-AUG-18 16:25 SE-5-1	L2148903-29 Sediment 11-AUG-18 16:30 SE-5-2	L2148903-30 Sediment 11-AUG-18 16:35 SE-5-3
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)			<0.050		
	1,1,1-Trichloroethane (mg/kg)			<0.050		
	1,1,2-Trichloroethane (mg/kg)			<0.050		
	Trichloroethylene (mg/kg)			<0.010		
	Trichlorofluoromethane (mg/kg)			<0.10		
	Vinyl Chloride (mg/kg)			<0.10		
	ortho-Xylene (mg/kg)			<0.050		
	meta- & para-Xylene (mg/kg)			<0.050		
	Xylenes (mg/kg)			<0.075		
	Surrogate: 4-Bromofluorobenzene (SS) (%)			90.8		
	Surrogate: 1,4-Difluorobenzene (SS) (%)			84.6		
Hydrocarbons	EPH10-19 (mg/kg)			<200		
	EPH19-32 (mg/kg)			<200		
	LEPH (mg/kg)			<200		
	HEPH (mg/kg)			<200		
	Surrogate: 2-Bromobenzotrifluoride (%)			97.2		
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)			<0.0050		
	Acenaphthylene (mg/kg)			<0.0050		
	Anthracene (mg/kg)			<0.0040		
	Benz(a)anthracene (mg/kg)			<0.010		
	Benzo(a)pyrene (mg/kg)			<0.010		
	Benzo(b&j)fluoranthene (mg/kg)			<0.010		
	Benzo(b+j+k)fluoranthene (mg/kg)			<0.015		
	Benzo(g,h,i)perylene (mg/kg)			0.011		
	Benzo(k)fluoranthene (mg/kg)			<0.010		
	Chrysene (mg/kg)			<0.010		
	Dibenz(a,h)anthracene (mg/kg)			<0.0050		
	Fluoranthene (mg/kg)			<0.010		
	Fluorene (mg/kg)			<0.010		
	Indeno(1,2,3-c,d)pyrene (mg/kg)			<0.010		
	1-Methylnaphthalene (mg/kg)			<0.050		
	2-Methylnaphthalene (mg/kg)			<0.010		
	Naphthalene (mg/kg)			<0.010		
	Phenanthrene (mg/kg)			<0.010		
	Pyrene (mg/kg)			<0.010		
	Quinoline (mg/kg)			<0.050		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-31 Sediment 11-AUG-18 17:00 SC-2-1	L2148903-32 Sediment 11-AUG-18 17:05 SC-2-2	L2148903-33 Sediment 11-AUG-18 17:10 SC-2-3	L2148903-34 Sediment 12-AUG-18 12:15 SC-3-1	L2148903-35 Sediment 12-AUG-18 12:20 SC-3-2
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)	<0.050			<0.050	
	1,1,1-Trichloroethane (mg/kg)	<0.050			<0.050	
	1,1,2-Trichloroethane (mg/kg)	<0.050			<0.050	
	Trichloroethylene (mg/kg)	<0.010			<0.010	
	Trichlorofluoromethane (mg/kg)	<0.10			<0.10	
	Vinyl Chloride (mg/kg)	<0.10			<0.10	
	ortho-Xylene (mg/kg)	<0.050			<0.050	
	meta- & para-Xylene (mg/kg)	<0.050			<0.050	
	Xylenes (mg/kg)	<0.075			<0.075	
	Surrogate: 4-Bromofluorobenzene (SS) (%)	82.4			83.5	
	Surrogate: 1,4-Difluorobenzene (SS) (%)	72.3			83.9	
Hydrocarbons	EPH10-19 (mg/kg)	<200			<200	
	EPH19-32 (mg/kg)	<200			<200	
	LEPH (mg/kg)	<200			<200	
	HEPH (mg/kg)	<200			<200	
	Surrogate: 2-Bromobenzotrifluoride (%)	95.1			101.7	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050			<0.0050	
	Acenaphthylene (mg/kg)	<0.0050			<0.0050	
	Anthracene (mg/kg)	<0.0040			<0.0040	
	Benz(a)anthracene (mg/kg)	<0.010			<0.010	
	Benzo(a)pyrene (mg/kg)	<0.010			<0.010	
	Benzo(b&j)fluoranthene (mg/kg)	<0.010			<0.010	
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015			<0.015	
	Benzo(g,h,i)perylene (mg/kg)	<0.010			<0.010	
	Benzo(k)fluoranthene (mg/kg)	<0.010			<0.010	
	Chrysene (mg/kg)	<0.010			<0.010	
	Dibenz(a,h)anthracene (mg/kg)	<0.0050			<0.0050	
	Fluoranthene (mg/kg)	<0.010			<0.010	
	Fluorene (mg/kg)	<0.010			<0.010	
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010			<0.010	
	1-Methylnaphthalene (mg/kg)	<0.050			<0.050	
	2-Methylnaphthalene (mg/kg)	<0.010			<0.010	
	Naphthalene (mg/kg)	<0.010			<0.010	
	Phenanthrene (mg/kg)	<0.010			<0.010	
	Pyrene (mg/kg)	<0.010			<0.010	
	Quinoline (mg/kg)	<0.050			<0.050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-36 Sediment 12-AUG-18 12:25 SC-3-3	L2148903-37 Sediment 12-AUG-18 12:45 SC-4-1	L2148903-38 Sediment 12-AUG-18 12:50 SC-4-2	L2148903-39 Sediment 12-AUG-18 12:55 SC-4-3	L2148903-40 Sediment 12-AUG-18 13:30 SC-5-1
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)				<0.075	<0.050
	1,1,1-Trichloroethane (mg/kg)				<0.050	<0.050
	1,1,2-Trichloroethane (mg/kg)				<0.050	<0.050
	Trichloroethylene (mg/kg)				<0.010	<0.010
	Trichlorofluoromethane (mg/kg)				<0.10	<0.10
	Vinyl Chloride (mg/kg)				<0.10	<0.10
	ortho-Xylene (mg/kg)				<0.050	<0.050
	meta- & para-Xylene (mg/kg)				<0.050	<0.050
	Xylenes (mg/kg)				<0.075	<0.075
	Surrogate: 4-Bromofluorobenzene (SS) (%)				90.5	91.0
	Surrogate: 1,4-Difluorobenzene (SS) (%)				90.7	86.6
Hydrocarbons	EPH10-19 (mg/kg)				<200	<200
	EPH19-32 (mg/kg)				<200	<200
	LEPH (mg/kg)				<200	<200
	HEPH (mg/kg)				<200	<200
	Surrogate: 2-Bromobenzotrifluoride (%)				97.2	93.7
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)				<0.0050	<0.0050
•	Acenaphthylene (mg/kg)				<0.0050	<0.0050
	Anthracene (mg/kg)				<0.0040	<0.0040
	Benz(a)anthracene (mg/kg)				<0.010	<0.010
	Benzo(a)pyrene (mg/kg)				<0.010	<0.010
	Benzo(b&j)fluoranthene (mg/kg)				<0.010	<0.010
	Benzo(b+j+k)fluoranthene (mg/kg)				<0.015	<0.015
	Benzo(g,h,i)perylene (mg/kg)				<0.010	<0.010
	Benzo(k)fluoranthene (mg/kg)				<0.010	<0.010
	Chrysene (mg/kg)				<0.010	<0.010
	Dibenz(a,h)anthracene (mg/kg)				<0.0050	<0.0050
	Fluoranthene (mg/kg)				<0.010	<0.010
	Fluorene (mg/kg)				<0.010	<0.010
	Indeno(1,2,3-c,d)pyrene (mg/kg)				<0.010	<0.010
	1-Methylnaphthalene (mg/kg)				<0.050	<0.050
	2-Methylnaphthalene (mg/kg)				<0.010	<0.010
	Naphthalene (mg/kg)				<0.010	<0.010
	Phenanthrene (mg/kg)				<0.010	<0.010
	Pyrene (mg/kg)				<0.010	<0.010
	Quinoline (mg/kg)				<0.050	<0.050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-41 Sediment 12-AUG-18 13:35 SC-5-2	L2148903-42 Sediment 12-AUG-18 13:40 SC-5-3	L2148903-43 Sediment 12-AUG-18 15:35 BE-2-1	L2148903-44 Sediment 12-AUG-18 15:40 BE-2-2	L2148903-45 Sediment 12-AUG-18 15:45 BE-2-3
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)			<0.050		
	1,1,1-Trichloroethane (mg/kg)			<0.050		
	1,1,2-Trichloroethane (mg/kg)			<0.050		
	Trichloroethylene (mg/kg)			<0.010		
	Trichlorofluoromethane (mg/kg)			<0.10		
	Vinyl Chloride (mg/kg)			<0.10		
	ortho-Xylene (mg/kg)			<0.050		
	meta- & para-Xylene (mg/kg)			<0.050		
	Xylenes (mg/kg)			<0.075		
	Surrogate: 4-Bromofluorobenzene (SS) (%)			98.7		
	Surrogate: 1,4-Difluorobenzene (SS) (%)			98.7		
Hydrocarbons	EPH10-19 (mg/kg)			<200		
	EPH19-32 (mg/kg)			<200		
	LEPH (mg/kg)			<200		
	HEPH (mg/kg)			<200		
	Surrogate: 2-Bromobenzotrifluoride (%)			95.1		
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)			<0.0050		
	Acenaphthylene (mg/kg)			<0.0050		
	Anthracene (mg/kg)			<0.0040		
	Benz(a)anthracene (mg/kg)			<0.010		
	Benzo(a)pyrene (mg/kg)			<0.010		
	Benzo(b&j)fluoranthene (mg/kg)			<0.010		
	Benzo(b+j+k)fluoranthene (mg/kg)			<0.015		
	Benzo(g,h,i)perylene (mg/kg)			<0.010		
	Benzo(k)fluoranthene (mg/kg)			<0.010		
	Chrysene (mg/kg)			<0.010		
	Dibenz(a,h)anthracene (mg/kg)			<0.0050		
	Fluoranthene (mg/kg)			<0.010		
	Fluorene (mg/kg)			<0.010		
	Indeno(1,2,3-c,d)pyrene (mg/kg)			<0.010		
	1-Methylnaphthalene (mg/kg)			<0.050		
	2-Methylnaphthalene (mg/kg)			<0.010		
	Naphthalene (mg/kg)			<0.010		
	Phenanthrene (mg/kg)			<0.010		
	Pyrene (mg/kg)			<0.010		
	Quinoline (mg/kg)			<0.010		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-46 Sediment 12-AUG-18 16:00 BE-5-1	L2148903-47 Sediment 12-AUG-18 16:05 BE-5-2	L2148903-48 Sediment 12-AUG-18 16:10 BE-5-3	L2148903-49 Sediment 12-AUG-18 14:05 SN-1-1	L2148903-50 Sediment 12-AUG-18 14:10 SN-1-2
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)	0.106			<0.050	
	1,1,1-Trichloroethane (mg/kg)	<0.050			<0.050	
	1,1,2-Trichloroethane (mg/kg)	<0.050			<0.050	
	Trichloroethylene (mg/kg)	<0.010			<0.010	
	Trichlorofluoromethane (mg/kg)	<0.10			<0.10	
	Vinyl Chloride (mg/kg)	<0.10			<0.10	
	ortho-Xylene (mg/kg)	<0.050			<0.050	
	meta- & para-Xylene (mg/kg)	<0.050			<0.050	
	Xylenes (mg/kg)	<0.075			<0.075	
	Surrogate: 4-Bromofluorobenzene (SS) (%)	115.8			79.3	
	Surrogate: 1,4-Difluorobenzene (SS) (%)	125.6			72.9	
Hydrocarbons	EPH10-19 (mg/kg)	<200			<200	
	EPH19-32 (mg/kg)	<200			<200	
	LEPH (mg/kg)	<200			<200	
	HEPH (mg/kg)	<200			<200	
	Surrogate: 2-Bromobenzotrifluoride (%)	97.1			93.0	
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050			<0.0050	
-	Acenaphthylene (mg/kg)	<0.0050			<0.0050	
	Anthracene (mg/kg)	<0.0040			<0.0040	
	Benz(a)anthracene (mg/kg)	<0.010			<0.010	
	Benzo(a)pyrene (mg/kg)	<0.010			<0.010	
	Benzo(b&j)fluoranthene (mg/kg)	<0.010			<0.010	
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015			<0.015	
	Benzo(g,h,i)perylene (mg/kg)	<0.010			<0.010	
	Benzo(k)fluoranthene (mg/kg)	<0.010			<0.010	
	Chrysene (mg/kg)	<0.010			<0.010	
	Dibenz(a,h)anthracene (mg/kg)	<0.0050			<0.0050	
	Fluoranthene (mg/kg)	<0.010			<0.010	
	Fluorene (mg/kg)	<0.010			<0.010	
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010			<0.010	
	1-Methylnaphthalene (mg/kg)	<0.050			<0.050	
	2-Methylnaphthalene (mg/kg)	<0.010			<0.010	
	Naphthalene (mg/kg)	<0.010			<0.010	
	Phenanthrene (mg/kg)	<0.010			<0.010	
	Pyrene (mg/kg)	<0.010			<0.010	
	Quinoline (mg/kg)	<0.050			<0.050	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-51 Sediment 12-AUG-18 14:15 SN-1-3	L2148903-52 Sediment 12-AUG-18 14:25 SN-2-1	L2148903-53 Sediment 12-AUG-18 14:30 SN-2-2	L2148903-54 Sediment 12-AUG-18 14:35 SN-2-3	L2148903-55 Sediment 13-AUG-18 11:00 SN-3-1
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)		<0.050			<0.050
	1,1,1-Trichloroethane (mg/kg)		<0.050			<0.050
	1,1,2-Trichloroethane (mg/kg)		<0.050			<0.050
	Trichloroethylene (mg/kg)		<0.010			<0.010
	Trichlorofluoromethane (mg/kg)		<0.10			<0.10
	Vinyl Chloride (mg/kg)		<0.10			<0.10
	ortho-Xylene (mg/kg)		<0.050			<0.050
	meta- & para-Xylene (mg/kg)		<0.050			<0.050
	Xylenes (mg/kg)		<0.075			<0.075
	Surrogate: 4-Bromofluorobenzene (SS) (%)		86.5			73.9
	Surrogate: 1,4-Difluorobenzene (SS) (%)		86.5			83.8
Hydrocarbons	EPH10-19 (mg/kg)		<200			<200
	EPH19-32 (mg/kg)		<200			<200
	LEPH (mg/kg)		<200			<200
	HEPH (mg/kg)		<200			<200
	Surrogate: 2-Bromobenzotrifluoride (%)		92.5			91.7
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)		<0.0050			<0.0050
•	Acenaphthylene (mg/kg)		<0.0050			0.0060
	Anthracene (mg/kg)		<0.0040			<0.0040
	Benz(a)anthracene (mg/kg)		<0.010			0.011
	Benzo(a)pyrene (mg/kg)		<0.010			0.037
	Benzo(b&j)fluoranthene (mg/kg)		<0.010			0.035
	Benzo(b+j+k)fluoranthene (mg/kg)		<0.015			0.050
	Benzo(g,h,i)perylene (mg/kg)		<0.010			0.053
	Benzo(k)fluoranthene (mg/kg)		<0.010			0.015
	Chrysene (mg/kg)		<0.010			0.013
	Dibenz(a,h)anthracene (mg/kg)		<0.0050			0.0069
	Fluoranthene (mg/kg)		<0.010			<0.010
	Fluorene (mg/kg)		<0.010			<0.010
	Indeno(1,2,3-c,d)pyrene (mg/kg)		<0.010			0.049
	1-Methylnaphthalene (mg/kg)		<0.050			<0.050
	2-Methylnaphthalene (mg/kg)		<0.010			<0.010
	Naphthalene (mg/kg)		<0.010			<0.010
	Phenanthrene (mg/kg)		<0.010			<0.010
	Pyrene (mg/kg)		<0.010			<0.010
	Quinoline (mg/kg)		<0.050			<0.050

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-56 Sediment 13-AUG-18 11:05 SN-3-2	L2148903-57 Sediment 13-AUG-18 11:10 SN-3-3	L2148903-58 Sediment 13-AUG-18 11:45 SN-4-1	L2148903-59 Sediment 13-AUG-18 11:50 SN-4-2	L2148903-60 Sediment 13-AUG-18 11:55 SN-4-3
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)			<0.050		
	1,1,1-Trichloroethane (mg/kg)			<0.050		
	1,1,2-Trichloroethane (mg/kg)			<0.050		
	Trichloroethylene (mg/kg)			<0.010		
	Trichlorofluoromethane (mg/kg)			<0.10		
	Vinyl Chloride (mg/kg)			<0.10		
	ortho-Xylene (mg/kg)			<0.050		
	meta- & para-Xylene (mg/kg)			<0.050		
	Xylenes (mg/kg)			<0.075		
	Surrogate: 4-Bromofluorobenzene (SS) (%)			82.0		
	Surrogate: 1,4-Difluorobenzene (SS) (%)			94.1		
Hydrocarbons	EPH10-19 (mg/kg)			<200		
	EPH19-32 (mg/kg)			<200		
	LEPH (mg/kg)			<200		
	HEPH (mg/kg)			<200		
	Surrogate: 2-Bromobenzotrifluoride (%)			88.9		
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)			<0.0050		
-	Acenaphthylene (mg/kg)			<0.0050		
	Anthracene (mg/kg)			<0.0040		
	Benz(a)anthracene (mg/kg)			<0.010		
	Benzo(a)pyrene (mg/kg)			<0.010		
	Benzo(b&j)fluoranthene (mg/kg)			<0.010		
	Benzo(b+j+k)fluoranthene (mg/kg)			<0.015		
	Benzo(g,h,i)perylene (mg/kg)			<0.010		
	Benzo(k)fluoranthene (mg/kg)			<0.010		
	Chrysene (mg/kg)			<0.010		
	Dibenz(a,h)anthracene (mg/kg)			<0.0050		
	Fluoranthene (mg/kg)			<0.010		
	Fluorene (mg/kg)			<0.010		
	Indeno(1,2,3-c,d)pyrene (mg/kg)			<0.010		
	1-Methylnaphthalene (mg/kg)			<0.050		
	2-Methylnaphthalene (mg/kg)			<0.010		
	Naphthalene (mg/kg)			<0.010		
	Phenanthrene (mg/kg)			<0.010		
	Pyrene (mg/kg)			<0.010		
	Quinoline (mg/kg)			<0.050		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-61 Sediment 13-AUG-18 12:30 SN-5-1	L2148903-62 Sediment 13-AUG-18 12:35 SN-5-2	L2148903-63 Sediment 13-AUG-18 12:40 SN-5-3	L2148903-64 Sediment 13-AUG-18 DUP-A	L2148903-65 Sediment 13-AUG-18 DUP-B
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)	<0.050				
	1,1,1-Trichloroethane (mg/kg)	<0.050				
	1,1,2-Trichloroethane (mg/kg)	<0.050				
	Trichloroethylene (mg/kg)	<0.010				
	Trichlorofluoromethane (mg/kg)	<0.10				
	Vinyl Chloride (mg/kg)	<0.10				
	ortho-Xylene (mg/kg)	<0.050				
	meta- & para-Xylene (mg/kg)	<0.050				
	Xylenes (mg/kg)	<0.075				
	Surrogate: 4-Bromofluorobenzene (SS) (%)	71.2				
	Surrogate: 1,4-Difluorobenzene (SS) (%)	72.0				
Hydrocarbons	EPH10-19 (mg/kg)	<200				
	EPH19-32 (mg/kg)	<200				
	LEPH (mg/kg)	<200				
	HEPH (mg/kg)	<200				
	Surrogate: 2-Bromobenzotrifluoride (%)	90.2				
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)	<0.0050				
	Acenaphthylene (mg/kg)	<0.0050				
	Anthracene (mg/kg)	<0.0040				
	Benz(a)anthracene (mg/kg)	<0.010				
	Benzo(a)pyrene (mg/kg)	<0.010				
	Benzo(b&j)fluoranthene (mg/kg)	<0.010				
	Benzo(b+j+k)fluoranthene (mg/kg)	<0.015				
	Benzo(g,h,i)perylene (mg/kg)	<0.010				
	Benzo(k)fluoranthene (mg/kg)	<0.010				
	Chrysene (mg/kg)	<0.010				
	Dibenz(a,h)anthracene (mg/kg)	<0.0050				
	Fluoranthene (mg/kg)	<0.010				
	Fluorene (mg/kg)	<0.010				
	Indeno(1,2,3-c,d)pyrene (mg/kg)	<0.010				
	1-Methylnaphthalene (mg/kg)	<0.050				
	2-Methylnaphthalene (mg/kg)	<0.010				
	Naphthalene (mg/kg)	<0.010				
	Phenanthrene (mg/kg)	<0.010				
	Pyrene (mg/kg)	<0.010				
	Quinoline (mg/kg)	<0.050				

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-66 Sediment 13-AUG-18 DUP-C	L2148903-67 Sediment 13-AUG-18 DUP-D	L2148903-68 Sediment 13-AUG-18 DUP-E	L2148903-69 Sediment 13-AUG-18 DUP-F	
Grouping	Analyte					
SOIL						
Volatile Organic Compounds	Toluene (mg/kg)					
	1,1,1-Trichloroethane (mg/kg)					
	1,1,2-Trichloroethane (mg/kg)					
	Trichloroethylene (mg/kg)					
	Trichlorofluoromethane (mg/kg)					
	Vinyl Chloride (mg/kg)					
	ortho-Xylene (mg/kg)					
	meta- & para-Xylene (mg/kg)					
	Xylenes (mg/kg)					
	Surrogate: 4-Bromofluorobenzene (SS) (%)					
	Surrogate: 1,4-Difluorobenzene (SS) (%)					
Hydrocarbons	EPH10-19 (mg/kg)					
	EPH19-32 (mg/kg)					
	LEPH (mg/kg)					
	HEPH (mg/kg)					
	Surrogate: 2-Bromobenzotrifluoride (%)					
Polycyclic Aromatic Hydrocarbons	Acenaphthene (mg/kg)					
nyurocarbons	Acenaphthylene (mg/kg)					
	Anthracene (mg/kg)					
	Benz(a)anthracene (mg/kg)					
	Benzo(a)pyrene (mg/kg)					
	Benzo(b&j)fluoranthene (mg/kg)					
	Benzo(b+j+k)fluoranthene (mg/kg)					
	Benzo(g,h,i)perylene (mg/kg)					
	Benzo(k)fluoranthene (mg/kg)					
	Chrysene (mg/kg)					
	Dibenz(a,h)anthracene (mg/kg)					
	Fluoranthene (mg/kg)					
	Fluorene (mg/kg)					
	Indeno(1,2,3-c,d)pyrene (mg/kg)					
	1-Methylnaphthalene (mg/kg)					
	2-Methylnaphthalene (mg/kg)					
	Naphthalene (mg/kg)					
	Phenanthrene (mg/kg)					
	Pyrene (mg/kg)					
	Quinoline (mg/kg)					

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-1 Sediment 11-AUG-18 13:35 SW-1-1	L2148903-2 Sediment 11-AUG-18 13:40 SW-1-2	L2148903-3 Sediment 11-AUG-18 13:45 SW-1-3	L2148903-4 Sediment 11-AUG-18 12:55 SW-2-1	L2148903-5 Sediment 11-AUG-18 13:00 SW-2-2
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)	91.1			88.0	
	Surrogate: Chrysene d12 (%)	106.1			99.2	
	Surrogate: Naphthalene d8 (%)	90.4			85.7	
	Surrogate: Phenanthrene d10 (%)	103.8			94.1	
	B(a)P Total Potency Equivalent (mg/kg)	<0.020			<0.020	
	IACR (CCME) (mg/kg)	<0.15			<0.15	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-6 Sediment 11-AUG-18 13:05 SW-2-3	L2148903-7 Sediment 11-AUG-18 12:35 SW-3-1	L2148903-8 Sediment 11-AUG-18 12:40 SW-3-2	L2148903-9 Sediment 11-AUG-18 12:45 SW-3-3	L2148903-10 Sediment 11-AUG-18 11:40 SW-4-1
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)		92.5			87.5
	Surrogate: Chrysene d12 (%)		104.8			99.1
	Surrogate: Naphthalene d8 (%)		90.7			85.6
	Surrogate: Phenanthrene d10 (%)		98.9			93.5
	B(a)P Total Potency Equivalent (mg/kg)		<0.020			<0.020
	IACR (CCME) (mg/kg)		<0.15			<0.15

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-11 Sediment 11-AUG-18 11:45 SW-4-2	L2148903-12 Sediment 11-AUG-18 11:50 SW-4-3	L2148903-13 Sediment 11-AUG-18 10:30 SW-5-1	L2148903-14 Sediment 11-AUG-18 10:35 SW-5-2	L2148903-15 Sediment 11-AUG-18 10:40 SW-5-3
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)			91.0		
-	Surrogate: Chrysene d12 (%)			102.4		
	Surrogate: Naphthalene d8 (%)			88.6		
	Surrogate: Phenanthrene d10 (%)			96.4		
	B(a)P Total Potency Equivalent (mg/kg)			<0.020		
	IACR (CCME) (mg/kg)			<0.15		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-16 Sediment 11-AUG-18 14:10 SE-1-1	L2148903-17 Sediment 11-AUG-18 14:15 SE-1-2	L2148903-18 Sediment 11-AUG-18 14:20 SE-1-3	L2148903-19 Sediment 11-AUG-18 14:45 SE-2-1	L2148903-20 Sediment 11-AUG-18 14:50 SE-2-2
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)	86.9			90.3	
•	Surrogate: Chrysene d12 (%)	98.3			101.7	
	Surrogate: Naphthalene d8 (%)	84.8			87.2	
	Surrogate: Phenanthrene d10 (%)	92.8			97.1	
	B(a)P Total Potency Equivalent (mg/kg)	<0.020			<0.020	
	IACR (CCME) (mg/kg)	<0.15			<0.15	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-21 Sediment 11-AUG-18 14:55 SE-2-3	L2148903-22 Sediment 11-AUG-18 15:20 SE-3-1	L2148903-23 Sediment 11-AUG-18 15:25 SE-3-2	L2148903-24 Sediment 11-AUG-18 15:30 SE-3-3	L2148903-25 Sediment 11-AUG-18 16:00 SE-4-1
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)		88.0			89.6
	Surrogate: Chrysene d12 (%)		92.3			100.3
	Surrogate: Naphthalene d8 (%)		85.9			87.6
	Surrogate: Phenanthrene d10 (%)		91.9			94.1
	B(a)P Total Potency Equivalent (mg/kg)		<0.020			<0.020
	IACR (CCME) (mg/kg)		<0.15			<0.15

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-26 Sediment 11-AUG-18 16:05 SE-4-2	L2148903-27 Sediment 11-AUG-18 16:10 SE-4-3	L2148903-28 Sediment 11-AUG-18 16:25 SE-5-1	L2148903-29 Sediment 11-AUG-18 16:30 SE-5-2	L2148903-30 Sediment 11-AUG-18 16:35 SE-5-3
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)			91.7		
	Surrogate: Chrysene d12 (%)			103.4		
	Surrogate: Naphthalene d8 (%)			86.6		
	Surrogate: Phenanthrene d10 (%)			105.2		
	B(a)P Total Potency Equivalent (mg/kg)			<0.020		
	IACR (CCME) (mg/kg)			<0.15		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-31 Sediment 11-AUG-18 17:00 SC-2-1	L2148903-32 Sediment 11-AUG-18 17:05 SC-2-2	L2148903-33 Sediment 11-AUG-18 17:10 SC-2-3	L2148903-34 Sediment 12-AUG-18 12:15 SC-3-1	L2148903-35 Sediment 12-AUG-18 12:20 SC-3-2
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)	92.0			98.3	
	Surrogate: Chrysene d12 (%)	103.3			111.9	
	Surrogate: Naphthalene d8 (%)	88.1			95.0	
	Surrogate: Phenanthrene d10 (%)	105.4			114.4	
	B(a)P Total Potency Equivalent (mg/kg)	<0.020			<0.020	
	IACR (CCME) (mg/kg)	<0.15			<0.15	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-36 Sediment 12-AUG-18 12:25 SC-3-3	L2148903-37 Sediment 12-AUG-18 12:45 SC-4-1	L2148903-38 Sediment 12-AUG-18 12:50 SC-4-2	L2148903-39 Sediment 12-AUG-18 12:55 SC-4-3	L2148903-40 Sediment 12-AUG-18 13:30 SC-5-1
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)				91.4	88.9
	Surrogate: Chrysene d12 (%)				100.1	99.1
	Surrogate: Naphthalene d8 (%)				86.6	85.0
	Surrogate: Phenanthrene d10 (%)				106.7	103.4
	B(a)P Total Potency Equivalent (mg/kg)				<0.020	<0.020
	IACR (CCME) (mg/kg)				<0.15	<0.15

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-41 Sediment 12-AUG-18 13:35 SC-5-2	L2148903-42 Sediment 12-AUG-18 13:40 SC-5-3	L2148903-43 Sediment 12-AUG-18 15:35 BE-2-1	L2148903-44 Sediment 12-AUG-18 15:40 BE-2-2	L2148903-45 Sediment 12-AUG-18 15:45 BE-2-3
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)			96.0		
	Surrogate: Chrysene d12 (%)			114.3		
	Surrogate: Naphthalene d8 (%)			92.4		
	Surrogate: Phenanthrene d10 (%)			110.4		
	B(a)P Total Potency Equivalent (mg/kg)			<0.020		
	IACR (CCME) (mg/kg)			<0.15		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-46 Sediment 12-AUG-18 16:00 BE-5-1	L2148903-47 Sediment 12-AUG-18 16:05 BE-5-2	L2148903-48 Sediment 12-AUG-18 16:10 BE-5-3	L2148903-49 Sediment 12-AUG-18 14:05 SN-1-1	L2148903-50 Sediment 12-AUG-18 14:10 SN-1-2
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)	96.0			92.0	
-	Surrogate: Chrysene d12 (%)	110.9			122.2	
	Surrogate: Naphthalene d8 (%)	91.0			88.1	
	Surrogate: Phenanthrene d10 (%)	113.0			104.6	
	B(a)P Total Potency Equivalent (mg/kg)	<0.020			<0.020	
	IACR (CCME) (mg/kg)	<0.15			<0.15	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-51 Sediment 12-AUG-18 14:15 SN-1-3	L2148903-52 Sediment 12-AUG-18 14:25 SN-2-1	L2148903-53 Sediment 12-AUG-18 14:30 SN-2-2	L2148903-54 Sediment 12-AUG-18 14:35 SN-2-3	L2148903-55 Sediment 13-AUG-18 11:00 SN-3-1
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)		92.5			88.6
	Surrogate: Chrysene d12 (%)		105.8			112.0
	Surrogate: Naphthalene d8 (%)		88.9			85.7
	Surrogate: Phenanthrene d10 (%)		106.3			103.8
	B(a)P Total Potency Equivalent (mg/kg)		<0.020			0.056
	IACR (CCME) (mg/kg)		<0.15			0.51

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-56 Sediment 13-AUG-18 11:05 SN-3-2	L2148903-57 Sediment 13-AUG-18 11:10 SN-3-3	L2148903-58 Sediment 13-AUG-18 11:45 SN-4-1	L2148903-59 Sediment 13-AUG-18 11:50 SN-4-2	L2148903-60 Sediment 13-AUG-18 11:55 SN-4-3
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)			89.5		
	Surrogate: Chrysene d12 (%)			109.4		
	Surrogate: Naphthalene d8 (%)			85.6		
	Surrogate: Phenanthrene d10 (%)			102.7		
	B(a)P Total Potency Equivalent (mg/kg)			<0.020		
	IACR (CCME) (mg/kg)			<0.15		

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Version: FINAL

	Sample ID Description Sampled Date Sampled Time Client ID	L2148903-61 Sediment 13-AUG-18 12:30 SN-5-1	L2148903-62 Sediment 13-AUG-18 12:35 SN-5-2	L2148903-63 Sediment 13-AUG-18 12:40 SN-5-3	L2148903-64 Sediment 13-AUG-18 DUP-A	L2148903-65 Sediment 13-AUG-18 DUP-B
Grouping	Analyte					
SOIL						
Polycyclic Aromatic Hydrocarbons	Surrogate: Acenaphthene d10 (%)	89.1				
	Surrogate: Chrysene d12 (%)	104.3				
	Surrogate: Naphthalene d8 (%)	85.1				
	Surrogate: Phenanthrene d10 (%)	105.1				
	B(a)P Total Potency Equivalent (mg/kg)	<0.020				
	IACR (CCME) (mg/kg)	<0.15				

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

Version:

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FINAL

ALS ENVIRONMENTAL ANALYTICAL REPORT

L2148903-66 L2148903-67 L2148903-68 L2148903-69 Sample ID Sediment Sediment Sediment Description Sediment 13-AUG-18 13-AUG-18 13-AUG-18 13-AUG-18 Sampled Date Sampled Time DUP-C DUP-D DUP-E DUP-F Client ID Grouping Analyte SOIL Polycyclic Surrogate: Acenaphthene d10 (%) Aromatic Hydrocarbons Surrogate: Chrysene d12 (%) Surrogate: Naphthalene d8 (%) Surrogate: Phenanthrene d10 (%) B(a)P Total Potency Equivalent (mg/kg) IACR (CCME) (mg/kg)

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

L2148903 CONTD....

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Version: FINAL

Qualifiers for Individual Samples Listed:

Sample Number	Client Sample ID	Qualifier	Description
L2148903-12	SW-4-3	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-13	SW-5-1	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-14	SW-5-2	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-15	SW-5-3	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-17	SE-1-2	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-19	SE-2-1	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-34	SC-3-1	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-35	SC-3-2	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-38	SC-4-2	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.
L2148903-39	SC-4-3	PSAL	Limited sample was available for PSA (100g minimum is standard). Measurement Uncertainty for PSA results may be higher than usual.

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Laboratory Control Sample	1,1-Dichloroethylene	LCS-ND	L2148903-1
Laboratory Control Sample	1,3-Dichlorobenzene	LCS-ND	L2148903-1
Laboratory Control Sample	1,4-Dichlorobenzene	LCS-ND	L2148903-1
Laboratory Control Sample	Carbon Tetrachloride	LCS-ND	L2148903-1
Laboratory Control Sample	Chloroform	LCS-ND	L2148903-13, -16, -19, -22, -25, -28, -31, -34, -40, -43, -46, -49, -52, -55, -58, -61, -7
Laboratory Control Sample	Trichloroethylene	LCS-ND	L2148903-1
Laboratory Control Sample	cis-1,2-Dichloroethylene	LCS-ND	L2148903-1
Laboratory Control Sample	trans-1,2-Dichloroethylene	LCS-ND	L2148903-1
Laboratory Control Sample	Benzene	LCS-ND	L2148903-1
Laboratory Control Sample	Methyl t-butyl ether (MTBE)	LCS-ND	L2148903-1
Method Blank	Benz(a)anthracene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Benzo(a)pyrene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Benzo(b&j)fluoranthene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Benzo(g,h,i)perylene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Benzo(k)fluoranthene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Chrysene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Dibenz(a,h)anthracene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Fluoranthene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Indeno(1,2,3-c,d)pyrene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Method Blank	Pyrene	MB-LOR	L2148903-1, -10, -13, -16, -25, -4, -7
Certified Reference Material	Titanium (Ti)	MES	L2148903-50, -51, -53, -54

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DLHM	Detection Limit Adjusted: Sample has High Moisture Content
DLQ	Detection Limit raised due to co-eluting interference. GCMS qualifier ion ratio did not meet acceptance criteria.
LCS-ND	Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
C-TIC-PCT-SK	Soil	Total Inorganic Carbon in Soil	CSSS (2008) P216-217

Reference Information

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A known quantity of acetic acid is consumed by reaction with carbonates in the soil. The pH of the resulting solution is measured and compared against a standard curve relating pH to weight of carbonate.

C-TOC-CALC-SK

Soil

Total Organic Carbon Calculation

CSSS (2008) 21.2

Total Organic Carbon (TOC) is calculated by the difference between total carbon (TC) and total inorganic carbon. (TIC)

C-TOT-LECO-SK

Soil

Total Carbon by combustion method

CSSS (2008) 21.2

The sample is ignited in a combustion analyzer where carbon in the reduced CO2 gas is determined using a thermal conductivity detector.

EPH-TUMB-FID-VA

Soil

EPH in Solids by Tumbler and GCFID

BC MOE EPH GCFID

Analysis is in accordance with BC MOE Lab Manual method "Extractable Petroleum Hydrocarbons in Solids by GC/FID", v2.1, July 1999. Soil samples are extracted with a 1:1 mixture of hexane and acetone using a rotary extraction technique modified from EPA 3570 prior to gas chromatography with flame ionization detection (GC-FID). EPH results include Polycyclic Aromatic Hydrocarbons (PAH) and are therefore not equivalent to Light and Heavy Extractable Petroleum Hydrocarbons (LEPH/HEPH).

HG-200.2-CVAF-VA

Soil

Mercury in Soil by CVAAS

EPA 200.2/1631E (mod)

Soil samples are digested with hot nitric and hydrochloric acids, followed by CVAAS analysis. This method is fully compliant with the BC SALM strong acid leachable metals digestion method.

IC-CACO3-CALC-SK

Soil

Inorganic Carbon as CaCO3 Equivalent

Calculation

LEPH/HEPH-CALC-VA

Soil

LEPHs and HEPHs

BC MOE LEPH/HEPH

LEPHs and HEPHs are measures of Light and Heavy Extractable Petroleum Hydrocarbons in soil. Results are calculated by subtraction of applicable PAH concentrations from EPH10-19 and EPH19-32, as per the BC Lab Manual LEPH/HEPH calculation procedure. LEPHs = EPH10-19 minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene.

HEPHs = EPH19-32 minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.

MET-200.2-CCMS-VA

Soil

Metals in Soil by CRC ICPMS

EPA 200.2/6020A (mod)

This method uses a heated strong acid digestion with HNO3 and HCl and is intended to liberate metals that may be environmentally available. Silicate minerals are not solubilized. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. Analysis is by Collision/Reaction Cell ICPMS.

MOISTURE-VA

Soil

Moisture content

CWS for PHC in Soil - Tier 1

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

PAH-TMB-H/A-MS-VA

Soil

PAH - Rotary Extraction (Hexane/Acetone)

EPA 3570/8270

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Methods 3570 & 8270, published by the United States Environmental Protection Agency (EPA). The procedure uses a mechanical shaking technique to extract a subsample of the sediment/soil with a 1:1 mixture of hexane and acetone. The extract is then solvent exchanged to toluene. The final extract is analysed by capillary column gas chromatography with mass spectrometric detection (GC/MS). Surrogate recoveries may not be reported in cases where interferences from the sample matrix prevent accurate quantitation. Because the two isomers cannot be readily chromatographically separated, benzo(j)fluoranthene is reported as part of the benzo(b)fluoranthene parameter.

Benzo(a)pyrene Total Potency Equivalents [B(a)P TPE] represents the sum of estimated cancer potency relative to B(a)P for all potentially carcinogenic unsubstituted PAHs, and is calculated as per the CCME PAH Soil Quality Guidelines reference document (2010).

PH-1:2-VA

Soil

pH in Soil (1:2 Soil:Water Extraction)

BC WLAP METHOD: PH, ELECTROMETRIC, SOIL

This analysis is carried out in accordance with procedures described in the pH, Electrometric in Soil and Sediment method - Section B Physical/Inorganic and Misc. Constituents, BC Environmental Laboratory Manual 2007. The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water. The pH of the solution is then measured using a standard pH probe.

PSA-PIPET+GRAVEL-SK

Soil

Particle size - Sieve and Pipette

SSIR-51 METHOD 3.2.1

Particle size distribution is determined by a combination of techniques. Dry sieving is performed for coarse particles, wet sieving for sand particles and the pipette sedimentation method for clay particles.

Reference:

Burt, R. (2009). Soil Survey Field and Laboratory Methods Manual. Soil Survey Investigations Report No. 5. Method 3.2.1.2.2. United States Department of Agriculture Natural Resources Conservation Service.

VOC-HSMS-VA

Soi

VOCs in soil by Headspace GCMS

EPA 5035A/5021A/8260C

The soil methanol extract is added to water and reagents, then heated in a sealed vial to equilibrium. The headspace from the vial is transferred into a gas chromatograph. Target compound concentrations are measured using mass spectrometry detection.

VOC7-L-HSMS-VA

Soi

VOCs in soil by Headspace GCMS

EPA 5035A/5021A/8260C

Reference Information

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The soil methanol extract is added to water and reagents, then heated in a sealed vial to equilibrium. The headspace from the vial is transferred into a gas chromatograph. Target compound concentrations are measured using mass spectrometry detection.

VOC7/VOC-SURR-MS-VASoilVOC7 and/or VOC Surrogates for SoilsEPA 5035A/5021A/8260CXYLENES-CALC-VASoilSum of Xylene Isomer ConcentrationsEPA 8260B & 524.2

Calculation of Total Xylenes

Total Xylenes is the sum of the concentrations of the ortho, meta, and para Xylene isomers. Results below detection limit (DL) are treated as zero. The DL for Total Xylenes is set to a value no less than the square root of the sum of the squares of the DLs of the individual Xylenes.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SK	ALS ENVIRONMENTAL - SASKATOON, SASKATCHEWAN, CANADA
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

mg/kg - milligrams per kilogram based on dry weight of sample.

mg/kg wwt - milligrams per kilogram based on wet weight of sample.

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L2148903 Report Date: 28-AUG-18 Page 1 of 42

Client: GOLDER ASSOCIATES LTD.

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Contact: John Sherrin / Arman Ospan

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
C-TIC-PCT-SK	Soil							
Batch R4181245								
WG2855903-1 DUP Inorganic Carbon		L2148903-10 0.983	0.975		%	0.8	20	23-AUG-18
WG2855903-2 LCS Inorganic Carbon			101.3		%		80-120	23-AUG-18
WG2855903-3 MB Inorganic Carbon			<0.050		%		0.05	23-AUG-18
Batch R4182435								
WG2855906-1 DUP Inorganic Carbon		L2148903-30 1.51	1.47		%	2.8	20	24-AUG-18
WG2855906-2 LCS Inorganic Carbon			97.2		%		80-120	24-AUG-18
WG2855906-3 MB Inorganic Carbon			<0.050		%		0.05	24-AUG-18
Batch R4182437								
WG2855909-1 DUP Inorganic Carbon		L2148903-50 1.63	1.62		%	0.8	20	24-AUG-18
WG2855909-2 LCS Inorganic Carbon			97.3		%		80-120	24-AUG-18
WG2855909-3 MB Inorganic Carbon			<0.050		%		0.05	24-AUG-18
Batch R4182440								
WG2855910-1 DUP Inorganic Carbon		L2148903-65 1.10	1.06		%	3.6	20	24-AUG-18
WG2855910-2 LCS Inorganic Carbon			100.4		%		80-120	24-AUG-18
WG2855910-3 MB Inorganic Carbon			<0.050		%		0.05	24-AUG-18
C-TOT-LECO-SK	Soil							
Batch R4181607								
WG2855650-1 DUP Total Carbon by Combu	stion	L2148903-10 4.36	4.61		%	5.7	20	22-AUG-18
WG2855650-2 IRM Total Carbon by Combu	stion	08-109_SOIL	92.9		%		80-120	22-AUG-18
WG2855650-4 LCS Total Carbon by Combu	stion	SULFADIAZIN	E 99.4		%		90-110	22-AUG-18
WG2855650-3 MB Total Carbon by Combu	stion		<0.05		%		0.05	22-AUG-18



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
C-TOT-LECO-SK Soil							
Batch R4181609							
WG2855656-1 DUP Total Carbon by Combustion	L2148903-30 3.40	3.49		%	2.5	20	22-AUG-18
WG2855656-2 IRM Total Carbon by Combustion	08-109_SOIL	97.0		%		80-120	22-AUG-18
WG2855656-4 LCS Total Carbon by Combustion	SULFADIAZIN	IE 98.3		%		90-110	22-AUG-18
WG2855656-3 MB Total Carbon by Combustion		<0.05		%		0.05	22-AUG-18
Batch R4181619							
WG2855659-1 DUP Total Carbon by Combustion	L2148903-50 4.67	4.70		%	0.6	20	22-AUG-18
WG2855659-2 IRM Total Carbon by Combustion	08-109_SOIL	97.0		%		80-120	22-AUG-18
WG2855659-4 LCS Total Carbon by Combustion	SULFADIAZIN	IE 101.3		%		90-110	22-AUG-18
WG2855659-3 MB Total Carbon by Combustion		<0.05		%		0.05	22-AUG-18
Batch R4182173							
WG2855665-1 DUP Total Carbon by Combustion	L2148903-69 5.42	5.34		%	1.5	20	23-AUG-18
WG2855665-2 IRM Total Carbon by Combustion	08-109_SOIL	108.0		%		80-120	23-AUG-18
WG2855665-4 LCS	SULFADIAZIN	IE					
Total Carbon by Combustion		99.2		%		90-110	23-AUG-18
WG2855665-3 MB Total Carbon by Combustion		<0.05		%		0.05	23-AUG-18
EPH-TUMB-FID-VA Soil							
Batch R4179592							
WG2854799-3 DUP EPH10-19	L2148903-31 <200	<200	RPD-NA	mg/kg	N/A	40	22-AUG-18
EPH19-32	<200	<200	RPD-NA	mg/kg	N/A	40	22-AUG-18
WG2854799-2 LCS		404.0					
EPH10-19		101.6		%		70-130	22-AUG-18
EPH19-32		100.7		%		70-130	22-AUG-18
WG2854799-1 MB EPH10-19		<200		mg/kg		200	22-AUG-18
EPH19-32		<200		mg/kg		200	22-AUG-18
Surrogate: 2-Bromobenzotrifluoride		95.2		%		60-140	22-AUG-18



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Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
EPH-TUMB-FID-V	'A	Soil							
Batch R	4179592								
WG2854799-5 EPH10-19	MS		L2148903-34	98.5		%		60-140	22-AUG-18
EPH19-32				103.1		%		60-140	22-AUG-18
Batch R	4180642								
WG2854662-2	LCS								
EPH10-19				106.2		%		70-130	23-AUG-18
EPH19-32	мъ			110.4		%		70-130	23-AUG-18
WG2854662-1 EPH10-19	MB			<200		mg/kg		200	23-AUG-18
EPH19-32				<200		mg/kg		200	23-AUG-18
Surrogate: 2-B	Bromobenz	zotrifluoride		110.0		%		60-140	23-AUG-18
HG-200.2-CVAF-V	/A	Soil							
Batch R	4178862								
WG2854861-4 Mercury (Hg)	CRM		VA-CANMET-	TILL1 102.8		%		70-130	21-AUG-18
WG2854861-3 Mercury (Hg)	LCS			102.4		%		80-120	24 ALIC 49
WG2854861-1	МВ			102.4		70		80-120	21-AUG-18
Mercury (Hg)				<0.0050		mg/kg		0.005	21-AUG-18
	4180900								
WG2854756-4 Mercury (Hg)	CRM		VA-CANMET-	TILL1 97.9		%		70-130	23-AUG-18
WG2855306-4	CRM		VA-CANMET-	TILL1					
Mercury (Hg)				96.8		%		70-130	23-AUG-18
WG2855862-4 Mercury (Hg)	CRM		VA-CANMET-	TILL1 98.2		%		70-130	23-AUG-18
WG2855862-2	DUP		L2148903-24						
Mercury (Hg)			0.0076	0.0070		mg/kg	7.5	40	23-AUG-18
WG2854756-3 Mercury (Hg)	LCS			96.3		%		80-120	23-AUG-18
WG2855306-3 Mercury (Hg)	LCS			97.5		%		80-120	23-AUG-18
WG2855862-3 Mercury (Hg)	LCS			99.6		%		80-120	23-AUG-18
WG2854756-1 Mercury (Hg)	MB			<0.0050		mg/kg		0.005	23-AUG-18
WG2855306-1 Mercury (Hg)	МВ			<0.0050		mg/kg		0.005	23-AUG-18
wordary (rig)				10.0000		1119/119		0.003	23-AUG-10



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Test		Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-200.2-CVAF-VA		Soil		_					
Batch R4 WG2855862-1 Mercury (Hg)	180900 MB			<0.0050		mg/kg		0.005	23-AUG-18
Batch R4: WG2856011-4 Mercury (Hg)	181963 CRM		VA-CANMET-	Π LL1 101.0		%		70-130	24-AUG-18
WG2856011-3 Mercury (Hg)	LCS			95.8		%		80-120	24-AUG-18
WG2856011-1 Mercury (Hg)	МВ			<0.0050		mg/kg		0.005	24-AUG-18
Batch R4	182661								
WG2856086-4 Mercury (Hg)	CRM		VA-CANMET-	Π LL1 106.8		%		70-130	24-AUG-18
WG2856086-2 Mercury (Hg)	DUP		L2148903-63 0.0199	0.0200		mg/kg	0.1	40	24-AUG-18
WG2856086-3 Mercury (Hg)	LCS			108.8		%		80-120	24-AUG-18
WG2856086-1 Mercury (Hg)	MB			<0.0050		mg/kg		0.005	24-AUG-18
MET-200.2-CCMS-\	/A	Soil							
Batch R4 WG2854861-4 Aluminum (Al)	179719 CRM		VA-CANMET-	Γ ΙLL1 107.4		%		70-130	21-AUG-18
Antimony (Sb)				105.3		%		70-130	21-AUG-18
Arsenic (As)				108.0		%		70-130	21-AUG-18
Barium (Ba)				103.9		%		70-130	21-AUG-18
Beryllium (Be)				0.54		mg/kg		0.34-0.74	21-AUG-18
Bismuth (Bi)				102.2		%		70-130	21-AUG-18
Boron (B)				3.1		mg/kg		0-8.2	21-AUG-18
Cadmium (Cd)				106.1		%		70-130	21-AUG-18
Calcium (Ca)				100.1		%		70-130	21-AUG-18
Chromium (Cr)				107.0		%		70-130	21-AUG-18
Cobalt (Co)				105.8		%		70-130	21-AUG-18
()				106.5		%		70-130	21-AUG-18
Copper (Cu)				100.5					
				107.6		%		70-130	21-AUG-18
Copper (Cu)						% %		70-130 70-130	21-AUG-18 21-AUG-18



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MET-200_2-CCMS-VA Soil	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
WG2854861-4 CRM VA-CANMET-TILL1 Magnesium (Mg) 105.6 % 70-130 21-AUG-18 Manganese (Mn) 105.6 % 70-130 21-AUG-18 Molybdenum (Mo) 103.0 % 70-130 21-AUG-18 Nickel (Ni) 106.2 % 70-130 21-AUG-18 Potassium (K) 111.3 mg/kg 0.11-0.51 21-AUG-18 Selenium (Se) 0.24 mg/kg 0.13-0.33 21-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 21-AUG-18 Sclodium (Na) 108.8 % 70-130 21-AUG-18 Strontium (Sr) 102.2 mg/kg 0.077-0.18 21-AUG-18 Tronglium (Ti) 0.129 mg/kg 0.077-0.18 21-AUG-18 Tronglium (Ti) 10.0 mg/kg 0.0 21-AUG-18 Tungsten (W) 0.18 mg/kg 0.0 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Value (Er) <td< th=""><th>MET-200.2-CCMS-VA</th><th>Soil</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	MET-200.2-CCMS-VA	Soil							
Magnesium (Mg) 106.0 % 70-130 21-AUG-18 Manganese (Mn) 105.6 % 70-130 21-AUG-18 Molybdonum (Mo) 103.0 % 70-130 21-AUG-18 Nickel (Ni) 106.2 % 70-130 21-AUG-18 Potassium (K) 111.3 % 70-130 21-AUG-18 Selenium (Se) 0.31 mg/kg 0.13-0.33 21-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 21-AUG-18 Scodium (Na) 108.8 % 70-130 21-AUG-18 Strontium (Sr) 102.2 % 70-130 21-AUG-18 Thallium (Ti) 0.129 mg/kg 0.3 21-AUG-18 Tiranium (Ti) 110.3 % 70-130 21-AUG-18 Tiranium (Ti) 110.3 % 70-130 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Vanadium (V	Batch R4179719								
Manganese (Min) 105.6 % 70-130 21-AUG-18 Molybdenum (Mo) 103.0 % 70-130 21-AUG-18 Nickel (Ni) 106.2 % 70-130 21-AUG-18 Potassium (K) 1111.3 % 70-130 21-AUG-18 Selenium (Se) 0.31 mg/kg 0.11-0.51 21-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 21-AUG-18 Sodium (Na) 108.8 % 70-130 21-AUG-18 Silver (Ag) 0.22 % 70-130 21-AUG-18 Thallium (Ti) 0.129 mg/kg 0.077-0.18 21-AUG-18 Thallium (Ti) 1.0 mg/kg 0.3 21-AUG-18 Tin (Sn) 1.0 mg/kg 0.3 21-AUG-18 Tin (Sn) 1.0 mg/kg 0.66 21-AUG-18 Tungsten (W) 0.18 mg/kg 0.06 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Valocita (Zn)			VA-CANMET						
Molybdenum (Mo) 103.0 % 70-130 21-AUG-18 Nickel (Ni) 106.2 % 70-130 21-AUG-18 Potassium (K) 111.3 % 70-130 21-AUG-18 Selenium (Se) 0.31 mg/kg 0.11-0.51 21-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 21-AUG-18 Sodium (Na) 108.8 % 70-130 21-AUG-18 Strontium (Sr) 102.2 % 70-130 21-AUG-18 Thallium (Ti) 0.129 mg/kg 0.3 21-AUG-18 Tin (Sn) 1.0 mg/kg 0.3 21-AUG-18 Titanium (Ti) 110.3 % 70-130 21-AUG-18 Tungsten (W) 0.18 mg/kg 0.0.6 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zinc (Zn) 106.4 % 70-130 21-AUG-18 Zinc (Zn) <td< td=""><td>, ,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	, ,								
Nickel (Ni) 106.2 % 70-130 21-AlG-18 Potassium (K) 111.3 % 70-130 21-AlG-18 Selenium (Se) 0.31 mg/kg 0.11-0.51 21-AlG-18 Selenium (Se) 0.31 mg/kg 0.11-0.51 21-AlG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 21-AlG-18 Sodium (Na) 108.8 % 70-130 21-AlG-18 Strontium (Sr) 102.2 % 70-130 21-AlG-18 Strontium (Sr) 102.2 mg/kg 0.077-0.18 21-AlG-18 Transium (Ti) 0.129 mg/kg 0.77-0.18 21-AlG-18 Tin (Sh) 1.0 mg/kg 0.3 21-AlG-18 Titanium (Ti) 110.3 % 70-130 21-AlG-18 Titanium (U) 105.9 % 70-130 21-AlG-18 Uranium (U) 105.9 % 70-130 21-AlG-18 Zinc (Zh) 103.3 % 70-130 21-AlG-18 Zinc (Zh) 103.3 % 70-130 21-AlG-18 Zirconium (Zr) 1.0 mg/kg 0.1.8 21-AlG-18 Antimony (Sb) 102.0 mg/kg 0.1.8 21-AlG-18 Antimony (Sb) 102.0 % 80-120 21-AlG-18 Barium (Ba) 102.4 % 80-120 21-AlG-18 Barium (Ba) 102.4 % 80-120 21-AlG-18 Beryllium (Be) 100.4 % 80-120 21-AlG-18 Bismuth (Bi) 97.7 % 80-120 21-AlG-18 Boron (B) 97.0 % 80-120 21-AlG-18 Calcium (Ca) 98.6 % 80-120 21-AlG-18 Cobalt (Co) 100.3 % 80-120 21-AlG-18 Libium (Li) 97.9 % 80-120 21-AlG-18 Libium (Li) 97.9 % 80-120 21-AlG-18								70-130	21-AUG-18
Potassium (K)								70-130	21-AUG-18
Selenium (Se) 0.31 mg/kg 0.11-0.51 21-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 21-AUG-18 Sodium (Na) 108.8 % 70-130 21-AUG-18 Strontium (Sr) 102.2 % 70-130 21-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 21-AUG-18 Tin (Sn) 1.0 mg/kg 0-3 21-AUG-18 Titanium (Ti) 110.3 % 70-130 21-AUG-18 Titanium (U) 0.18 mg/kg 0-0.66 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zirconium (Zr) 10.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS Aluminum (Al) 104.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120								70-130	21-AUG-18
Silver (Ag) 0.24 mg/kg 0.13-0.33 21-AUG-18 Sodium (Na) 108.8 % 70-130 21-AUG-18 Strontium (Sr) 102.2 % 70-130 21-AUG-18 Translium (Ti) 0.129 mg/kg 0.077-0.18 21-AUG-18 Tin (Sn) 1.0 mg/kg 0.3 21-AUG-18 Titanium (Ti) 110.3 % 70-130 21-AUG-18 Tungsten (W) 0.18 mg/kg 0-66 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 1.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS LCS Aluminum (Al) 104.0 % 80-120 21-AUG-18 Artsenic (As) 102.0 % 80-120 21-AUG-18 Artsenic (As) 103.5 %								70-130	21-AUG-18
Sodium (Na) 108.8 % 70-130 21-AUG-18 Strontium (Sr) 102.2 % 70-130 21-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 21-AUG-18 Tin (Sn) 1.0 mg/kg 0-3 21-AUG-18 Titanium (TI) 110.3 % 70-130 21-AUG-18 Tungsten (W) 0.18 mg/kg 0-6.6 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 We2854861-3 LCS Inc Mg/kg 0-1.8 21-AUG-18 Autrinium (Al) 104.0 % 80-120 21-AUG-18 Arsenic (As) 102.0 % 80-120 21-AUG-18 Arsenic (As) 102.4 % 80-120 21-AUG-18 Beryllium (Selenium (Se)			0.31		mg/kg		0.11-0.51	21-AUG-18
Strontium (Sr) 102.2 % 70-130 21-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 21-AUG-18 Tin (Sn) 1.0 mg/kg 0-3 21-AUG-18 Titanium (TI) 110.3 % 70-130 21-AUG-18 Tungsten (W) 0.18 mg/kg 0-0.66 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zirc (Zn) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 10.0 mg/kg 0-1.8 21-AUG-18 Arsenci (As)	Silver (Ag)			0.24		mg/kg		0.13-0.33	21-AUG-18
Thallium (TI) 0.129 mg/kg 0.077-0.18 21-AUG-18 Tin (Sn) 1.0 mg/kg 0-3 21-AUG-18 Titanium (Ti) 110.3 % 70-130 21-AUG-18 Tungsten (W) 0.18 mg/kg 0-0.66 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zirconium (Zr) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 10.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS 21-AUG-18 21-AUG-18 Aluminum (Al) 104.0 % 80-120 21-AUG-18 Arisenic (As) 102.0 % 80-120 21-AUG-18 Arisenic (As) 103.5 % 80-120 21-AUG-18 Beryllium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Boron (B) 97.0 <td>Sodium (Na)</td> <td></td> <td></td> <td>108.8</td> <td></td> <td>%</td> <td></td> <td>70-130</td> <td>21-AUG-18</td>	Sodium (Na)			108.8		%		70-130	21-AUG-18
Tin (Sn) 1.0 mg/kg 0.3 21-AUG-18 Titanium (Ti) 110.3 % 70-130 21-AUG-18 Tungsten (W) 0.18 mg/kg 0-0.66 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zirocorium (Zr) 103.3 % 70-130 21-AUG-18 Zirocorium (Zr) 1.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS ICS 21-AUG-18 Aluminum (Al) 104.0 % 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 100.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Cadmium (Cd) 100.9	Strontium (Sr)			102.2		%		70-130	21-AUG-18
Titanium (Ti) 110.3 % 70-130 21-AUG-18 Tungsten (W) 0.18 mg/kg 0-0.66 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 10.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS N 80-120 21-AUG-18 Aluminum (Al) 104.0 % 80-120 21-AUG-18 Arsenic (As) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Cadium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6	Thallium (TI)			0.129		mg/kg		0.077-0.18	21-AUG-18
Tungsten (W) 0.18 mg/kg 0-0.66 21-AUG-18 Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 1.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS Tunium (Al) 104.0 % 80-120 21-AUG-18 Aluminum (Al) 104.0 % 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Assenium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18	Tin (Sn)			1.0		mg/kg		0-3	21-AUG-18
Uranium (U) 105.9 % 70-130 21-AUG-18 Vanadium (V) 106.4 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 1.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS TO-130 21-AUG-18 Aluminum (Al) 104.0 % 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 %	Titanium (Ti)			110.3		%		70-130	21-AUG-18
Vanadium (V) 106.4 % 70-130 21-AUG-18 Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 1.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 LCS LCS USA 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 </td <td>Tungsten (W)</td> <td></td> <td></td> <td>0.18</td> <td></td> <td>mg/kg</td> <td></td> <td>0-0.66</td> <td>21-AUG-18</td>	Tungsten (W)			0.18		mg/kg		0-0.66	21-AUG-18
Zinc (Zn) 103.3 % 70-130 21-AUG-18 Zirconium (Zr) 1.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 Aluminum (Al) LCS Section (As) 104.0 % 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 <	Uranium (U)			105.9		%		70-130	21-AUG-18
Zirconium (Zr) 1.0 mg/kg 0-1.8 21-AUG-18 WG2854861-3 Aluminum (Al) LCS Antimony (Sb) 104.0 % 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-1	Vanadium (V)			106.4		%		70-130	21-AUG-18
WG2854861-3 LCS Aluminum (Al) 104.0 % 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Zinc (Zn)			103.3		%		70-130	21-AUG-18
Aluminum (Al) 104.0 % 80-120 21-AUG-18 Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Zirconium (Zr)			1.0		mg/kg		0-1.8	21-AUG-18
Antimony (Sb) 102.0 % 80-120 21-AUG-18 Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	WG2854861-3 LCS								
Arsenic (As) 103.5 % 80-120 21-AUG-18 Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Aluminum (Al)			104.0		%		80-120	21-AUG-18
Barium (Ba) 102.4 % 80-120 21-AUG-18 Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Antimony (Sb)			102.0		%		80-120	21-AUG-18
Beryllium (Be) 100.4 % 80-120 21-AUG-18 Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18				103.5		%		80-120	21-AUG-18
Bismuth (Bi) 97.7 % 80-120 21-AUG-18 Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Barium (Ba)			102.4		%		80-120	21-AUG-18
Boron (B) 97.0 % 80-120 21-AUG-18 Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Beryllium (Be)			100.4		%		80-120	21-AUG-18
Cadmium (Cd) 100.9 % 80-120 21-AUG-18 Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Bismuth (Bi)			97.7		%		80-120	21-AUG-18
Calcium (Ca) 96.6 % 80-120 21-AUG-18 Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Boron (B)			97.0		%		80-120	21-AUG-18
Chromium (Cr) 102.3 % 80-120 21-AUG-18 Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Cadmium (Cd)			100.9		%		80-120	21-AUG-18
Cobalt (Co) 100.3 % 80-120 21-AUG-18 Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Calcium (Ca)			96.6		%		80-120	21-AUG-18
Copper (Cu) 101.2 % 80-120 21-AUG-18 Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Chromium (Cr)			102.3		%		80-120	21-AUG-18
Iron (Fe) 103.3 % 80-120 21-AUG-18 Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Cobalt (Co)			100.3		%		80-120	21-AUG-18
Lead (Pb) 99.2 % 80-120 21-AUG-18 Lithium (Li) 97.9 % 80-120 21-AUG-18	Copper (Cu)			101.2		%		80-120	21-AUG-18
Lithium (Li) 97.9 % 80-120 21-AUG-18	Iron (Fe)			103.3		%		80-120	21-AUG-18
	Lead (Pb)			99.2		%		80-120	21-AUG-18
Magnesium (Mg) 101.6 % 80-120 21-AUG-18	Lithium (Li)			97.9		%		80-120	21-AUG-18
	Magnesium (Mg)			101.6		%			



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MET-200.2-CCMS-VA	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
WC2854881-3 LCS Manganese (Mn) 102.4 % 80-120 21-AUG-18 Molybdenum (Mol) 102.1 % 80-120 21-AUG-18 Nickel (Ni) 101.3 % 80-120 21-AUG-18 Phosphorus (P) 106.8 % 80-120 21-AUG-18 Potassium (K) 102.5 % 80-120 21-AUG-18 Selenium (Se) 96.9 % 80-120 21-AUG-18 Silver (Ag) 99.2 % 80-120 21-AUG-18 Soldrum (Na) 102.0 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Stuffur (S) 107.7 % 80-120 21-AUG-18 Thallium (TI) 96.8 % 80-120 21-AUG-18 Thallium (Ti) 99.6 % 80-120 21-AUG-18 Ticanium (U) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18	MET-200.2-CCMS-VA	Soil							
Morybdenum (Mo) 102.4 % 80-120 21-AUG-18 Molybdenum (Mo) 102.1 % 80-120 21-AUG-18 Nickel (N) 101.3 % 80-120 21-AUG-18 Phosphorus (P) 106.8 % 80-120 21-AUG-18 Potassium (K) 102.5 % 80-120 21-AUG-18 Selenium (Se) 96.9 % 80-120 21-AUG-18 Silver (Ag) 99.2 % 80-120 21-AUG-18 Sodium (Na) 102.0 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Transitum (TI) 96.8 % 80-120 21-AUG-18 Tiros (Sr) 99.2 % 80-120 21-AUG-18 Tiros (TI) 96.8 % 80-120 21-AUG-18 Tiros (TI) 99.6 % 80-120 21-AUG-18 Uranium (U) 99.9 <td>Batch R4179719</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Batch R4179719								
Molybdenum (Mo) 102.1 % 80.120 21-AUG-18 Nickel (Ni) 101.3 % 80.120 21-AUG-18 Phosphorus (P) 106.8 % 80.120 21-AUG-18 Potassium (K) 102.5 % 80.120 21-AUG-18 Selenium (Se) 96.9 % 80.120 21-AUG-18 Silver (Ag) 99.2 % 80.120 21-AUG-18 Sodium (Na) 102.0 % 80.120 21-AUG-18 Sitrontium (Sr) 99.2 % 80.120 21-AUG-18 Sulfur (S) 107.7 % 80.120 21-AUG-18 Sulfur (S) 107.7 % 80.120 21-AUG-18 Tin (Sn) 98.9 % 80.120 21-AUG-18 Tin (Sn) 98.9 % 80.120 21-AUG-18 Tin (Sn) 99.6 % 80.120 21-AUG-18 Tin (amillum (Ti) 99.6 % 80.120 21-AUG-18 Tin (amillum (Ti) 99.6				102.4		0/.		00.400	04 AUO 40
Nickel (Ni) 101.3 % 80.120 21.AUG-18 Phosphorus (P) 106.8 % 80.120 21.AUG-18 Phosphorus (P) 106.8 % 80.120 21.AUG-18 Potassium (K) 102.5 % 80.120 21.AUG-18 Selenium (Se) 96.9 % 80.120 21.AUG-18 Silver (Ag) 99.2 % 80.120 21.AUG-18 Sodium (Na) 102.0 % 80.120 21.AUG-18 Strontium (Sr) 99.2 % 80.120 21.AUG-18 Strontium (Sr) 99.2 % 80.120 21.AUG-18 Strontium (Sr) 99.2 % 80.120 21.AUG-18 Strontium (Ti) 96.8 % 80.120 21.AUG-18 Thallium (Ti) 96.8 % 80.120 21.AUG-18 Tin (Sn) 98.9 % 80.120 21.AUG-18 Tin (Sn) 98.9 % 80.120 21.AUG-18 Tin (Sn) 99.9 % 80.120 21.AUG-18 Tin (U) 99.4 % 80.120 21.AUG-18 Tin (U) 103.7 % 80.120 21.AUG-18 Tin (Tin (Ti) 96.5 % 80.120 21.AUG-18 Tin (Tin (Ti) 96.5 % 80.120 21.AUG-18 Tin (Tin (U) 99.4 % 80.120 21.AUG-18 Tin (Tin (U) 99.4 % 80.120 21.AUG-18 Tin (Tin (U) 99.4 % 80.120 21.AUG-18 Tin (U) 103.7 % 80.120 21.AUG-18 Tin (Tin (Ti) 96.5 % 96.5	• , ,								
Phosphorus (P) 106.8 % 80-120 21-AUG-18 Potassium (K) 102.5 % 80-120 21-AUG-18 Selenium (Se) 96.9 % 80-120 21-AUG-18 Selenium (Se) 96.9 % 80-120 21-AUG-18 Silver (Ag) 99.2 % 80-120 21-AUG-18 Sodium (Na) 102.0 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Suffur (S) 107.7 % 80-120 21-AUG-18 Tillium (TI) 96.8 % 80-120 21-AUG-18 Tillium (TI) 96.8 % 80-120 21-AUG-18 Titanium (TI) 99.6 % 80-120 21-AUG-18 Titanium (TI) 99.6 % 80-120 21-AUG-18 Titanium (TI) 99.6 % 80-120 21-AUG-18 Titanium (U) 99.4 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Aluminum (A) 450 mg/kg 0.1 21-AUG-18 Antimony (Sb) 40.10 mg/kg 0.1 21-AUG-18 Barium (Ba) 40.50 mg/kg 0.1 21-AUG-18 Beryllium (Be) 40.10 mg/kg 0.1 21-AUG-18 Beryllium (Be) 40.10 mg/kg 0.1 21-AUG-18 Bismuth (Bi) 40.20 mg/kg 0.2 21-AUG-18 Bismuth (Bi) 40.20 mg/kg 0.2 21-AUG-18 Bismuth (Ci) 40.020 mg/kg 0.2 21-AUG-18 Bismuth (Ci) 40.020 mg/kg 0.2 21-AUG-18 Cadnium (Cd) 40.020 mg/kg 0.5 21-AUG-18 Cadnium (Cd) 40.020 mg/kg 0.5 21-AUG-18 Chromium (Cr) 40.50 mg/kg 0.5 21-AUG-18									
Potassium (K) 102.5 % 80-120 21-AUG-18 Selenium (Se) 96.9 % 80-120 21-AUG-18 Silver (Ag) 99.2 % 80-120 21-AUG-18 Silver (Ag) 99.2 % 80-120 21-AUG-18 Sodium (Na) 102.0 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Sulfur (S) 107.7 % 80-120 21-AUG-18 Thallium (TI) 96.8 % 80-120 21-AUG-18 Tin (Sr) 98.9 % 80-120 21-AUG-18 Tin (Sr) 99.9 % 80-120 21-AUG-18 Tinanium (TI) 99.6 % 80-120 21-AUG-18 Tinanium (TI) 99.6 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Zinco (Zn) 97.5 % 80-120 21-AUG-18 Zinco (Ium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB Aluminum (Al) <50 mg/kg 0.1 21-AUG-18 Antimony (Sb) <0.10 mg/kg 0.1 21-AUG-18 Barium (Ba) <0.50 mg/kg 0.1 21-AUG-18 Barium (Ba) <0.50 mg/kg 0.1 21-AUG-18 Bismuth (Bi) <0.20 mg/kg 0.1 21-AUG-18 Bismuth (Bi) <0.20 mg/kg 0.2 21-AUG-18 Cadmium (Cd) <0.020 mg/kg 0.2 21-AUG-18 Cadmium (Cd) <0.020 mg/kg 0.2 21-AUG-18 Cadmium (Cd) <0.020 mg/kg 0.5 21-AUG-18 Cadmium (Cd) <0.050 mg/kg 0.5 21-AUG-18									
Selenium (Se) 96.9 % 80-120 21-AUG-18 Silver (Ag) 99.2 % 80-120 21-AUG-18 Sodium (Na) 102.0 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Sulfur (S) 107.7 % 80-120 21-AUG-18 Thallium (TI) 96.8 % 80-120 21-AUG-18 Tin (Sn) 98.9 % 80-120 21-AUG-18 Titanium (Ti) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 80-120 21-AUG-18 WC2284861-1 MB 70-130 21-AUG-18 Aluminum (Al) <50									
Silver (Ag) 99.2 % 80-120 21-AUG-18 Sodium (Na) 102.0 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Surfur (S) 107.7 % 80-120 21-AUG-18 Thallium (TI) 96.8 % 80-120 21-AUG-18 Tin (Sn) 98.9 % 80-120 21-AUG-18 Titanium (TI) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WC2254861-1 MB Aluminum (Al) <50 mg/kg 50 21-AUG-18 Arsenic (As) <0.10 mg/kg 0.1 21-AUG-18 <t< td=""><td>` ,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	` ,								
Sodium (Na) 102.0 % 80-120 21-AUG-18 Strontium (Sr) 99.2 % 80-120 21-AUG-18 Sulfur (S) 107.7 % 80-120 21-AUG-18 Thallium (TI) 96.8 % 80-120 21-AUG-18 Tin (Sn) 98.9 % 80-120 21-AUG-18 Titanium (TI) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zirconium (Zr) 97.5 % 80-120 21-AUG-18 Wca284861-1 MB Auminum (Al) <50									
Strontium (Sr) 99.2 % 80-120 21-AUG-18 Sulfur (S) 107.7 % 80-120 21-AUG-18 Thallium (TI) 96.8 % 80-120 21-AUG-18 Tin (Sn) 98.9 % 80-120 21-AUG-18 Titanium (TI) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zirc (Zn) 97.5 % 80-120 21-AUG-18 Zirc (Zn) 97.5 % 80-120 21-AUG-18 WG2854861-1 MB MB 4 70-130 21-AUG-18 Aluminum (Al) <50									
Sulfur (S) 107.7 % 80-120 21-AUG-18 Thallium (TI) 96.8 % 80-120 21-AUG-18 Tin (Sn) 98.9 % 80-120 21-AUG-18 Titanium (TI) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB 4 50 mg/kg 50 21-AUG-18 Airminum (Al) <50									
Thallium (TI) 96.8 % 80-120 21-AUG-18 Tin (Sn) 98.9 % 80-120 21-AUG-18 Titanium (Ti) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Ziroconium (Zr) 98.0 % 70-130 21-AUG-18 Ziroconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB 4 50 70-130 21-AUG-18 Aluminum (Al) <50									
Tin (Sn) 98.9 % 80-120 21-AUG-18 Titanium (Ti) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB S 70-130 21-AUG-18 Aluminum (A) 450 mg/kg 0.1 21-AUG-18 Antimony (Sb) <0.10									
Titanium (Ti) 99.6 % 80-120 21-AUG-18 Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB *** 70-130 21-AUG-18 Aluminum (Al) <50									
Tungsten (W) 99.9 % 80-120 21-AUG-18 Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB Aluminum (Al) <50 mg/kg 50 21-AUG-18 Arsenic (As) <0.10 mg/kg 0.1 21-AUG-18 Barium (Ba) <0.50 mg/kg 0.5 21-AUG-18 Beryllium (Be) <0.10 mg/kg 0.1 21-AUG-18 Bismuth (Bi) <0.20 mg/kg 0.1 21-AUG-18 Boron (B) <50 mg/kg 50 21-AUG-18 Cadmium (Cd) <0.020 mg/kg 50 21-AUG-18 Calcium (Ca) <50 mg/kg 50 21-AUG-18 Calcium (Ca) <50 mg/kg 50 21-AUG-18 Chromium (Cr) <0.50 mg/kg 0.5 21-AUG-18 Cobalt (Co) <0.10 mg/kg 0.5 21-AUG-18 Copper (Cu) <0.50 mg/kg 0.5 21-AUG-18								80-120	21-AUG-18
Uranium (U) 99.4 % 80-120 21-AUG-18 Vanadium (V) 103.7 % 80-120 21-AUG-18 Zirc (Zn) 97.5 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB Aluminum (Al) <50								80-120	21-AUG-18
Vanadium (V) 103.7 % 80-120 21-AUG-18 Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 MB Aluminum (Al) <50	Tungsten (W)			99.9		%		80-120	21-AUG-18
Zinc (Zn) 97.5 % 80-120 21-AUG-18 Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 Aluminum (Al) MB Aluminum (Al) <50 mg/kg 50 21-AUG-18 Antimony (Sb) <0.10 mg/kg 0.1 21-AUG-18 Arsenic (As) <0.10 mg/kg 0.1 21-AUG-18 Barium (Ba) <0.50 mg/kg 0.5 21-AUG-18 Beryllium (Be) <0.10 mg/kg 0.1 21-AUG-18 Bismuth (Bi) <0.20 mg/kg 0.2 21-AUG-18 Boron (B) <5.0 mg/kg 0.2 21-AUG-18 Cadmium (Cd) <0.020 mg/kg 0.02 21-AUG-18 Calcium (Ca) <50 mg/kg 0.5 21-AUG-18 Chromium (Cr) <0.50 mg/kg 0.5 21-AUG-18 Cobalt (Co) <0.10 mg/kg 0.5 21-AUG-18 Copper (Cu) <0.50 mg/kg 0.5 21-AUG-18 Iron (Fe) <50 mg/kg 0.5	Uranium (U)			99.4		%		80-120	21-AUG-18
Zirconium (Zr) 98.0 % 70-130 21-AUG-18 WG2854861-1 Aluminum (Al) MB 50 mg/kg 50 21-AUG-18 Antimony (Sb) <0.10 mg/kg 0.1 21-AUG-18 Arsenic (As) <0.10 mg/kg 0.1 21-AUG-18 Barium (Ba) <0.50 mg/kg 0.5 21-AUG-18 Beryllium (Be) <0.10 mg/kg 0.1 21-AUG-18 Bismuth (Bi) <0.20 mg/kg 0.2 21-AUG-18 Boron (B) <5.0 mg/kg 0.02 21-AUG-18 Cadmium (Cd) <0.020 mg/kg 0.02 21-AUG-18 Calcium (Ca) <50 mg/kg 0.5 21-AUG-18 Chromium (Cr) <0.50 mg/kg 0.5 21-AUG-18 Copper (Cu) <0.50 mg/kg 0.5 21-AUG-18 Iron (Fe) <50 mg/kg 0.5 21-AUG-18 Lead (Pb) <0.50 mg/kg 0.5 21-AUG-18	Vanadium (V)			103.7		%		80-120	21-AUG-18
WG2854861-1 Aluminum (Al) MB Aluminum (Al) <50	Zinc (Zn)			97.5		%		80-120	21-AUG-18
Aluminum (Al) <50	Zirconium (Zr)			98.0		%		70-130	21-AUG-18
Antimony (Sb) <0.10									
Arsenic (As)	` '					mg/kg		50	21-AUG-18
Barium (Ba) <0.50	Antimony (Sb)			<0.10		mg/kg		0.1	21-AUG-18
Beryllium (Be) <0.10	Arsenic (As)			<0.10		mg/kg		0.1	21-AUG-18
Bismuth (Bi) <0.20	Barium (Ba)			<0.50		mg/kg		0.5	21-AUG-18
Boron (B) <5.0	Beryllium (Be)			<0.10		mg/kg		0.1	21-AUG-18
Cadmium (Cd) <0.020	Bismuth (Bi)			<0.20		mg/kg		0.2	21-AUG-18
Calcium (Ca) <50	Boron (B)			<5.0		mg/kg		5	21-AUG-18
Chromium (Cr) <0.50	Cadmium (Cd)			<0.020		mg/kg		0.02	21-AUG-18
Cobalt (Co) <0.10	Calcium (Ca)			<50		mg/kg		50	21-AUG-18
Copper (Cu) <0.50	Chromium (Cr)			<0.50		mg/kg		0.5	21-AUG-18
Iron (Fe) <50	Cobalt (Co)			<0.10		mg/kg		0.1	21-AUG-18
Lead (Pb) <0.50 mg/kg 0.5 21-AUG-18	Copper (Cu)			<0.50		mg/kg		0.5	21-AUG-18
Lead (Pb) <0.50 mg/kg 0.5 21-AUG-18	Iron (Fe)			<50		mg/kg		50	21-AUG-18
	Lead (Pb)			<0.50		mg/kg		0.5	
	Lithium (Li)			<2.0				2	21-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4179719								
WG2854861-1 MB								
Magnesium (Mg)			<20		mg/kg		20	21-AUG-18
Manganese (Mn)			<1.0		mg/kg		1	21-AUG-18
Molybdenum (Mo)			<0.10		mg/kg		0.1	21-AUG-18
Nickel (Ni)			<0.50		mg/kg		0.5	21-AUG-18
Phosphorus (P)			<50		mg/kg		50	21-AUG-18
Potassium (K)			<100		mg/kg		100	21-AUG-18
Selenium (Se)			<0.20		mg/kg		0.2	21-AUG-18
Silver (Ag)			<0.10		mg/kg		0.1	21-AUG-18
Sodium (Na)			<50		mg/kg		50	21-AUG-18
Strontium (Sr)			<0.50		mg/kg		0.5	21-AUG-18
Sulfur (S)			<1000		mg/kg		1000	21-AUG-18
Thallium (TI)			< 0.050		mg/kg		0.05	21-AUG-18
Tin (Sn)			<2.0		mg/kg		2	21-AUG-18
Titanium (Ti)			<1.0		mg/kg		1	21-AUG-18
Tungsten (W)			<0.50		mg/kg		0.5	21-AUG-18
Uranium (U)			< 0.050		mg/kg		0.05	21-AUG-18
Vanadium (V)			<0.20		mg/kg		0.2	21-AUG-18
Zinc (Zn)			<2.0		mg/kg		2	21-AUG-18
Zirconium (Zr)			<1.0		mg/kg		1	21-AUG-18
Batch R4181435								
WG2854756-4 CRM		VA-CANMET						
Aluminum (Al)			105.7		%		70-130	22-AUG-18
Antimony (Sb)			107.7		%		70-130	22-AUG-18
Arsenic (As)			102.5		%		70-130	22-AUG-18
Barium (Ba)			97.8		%		70-130	22-AUG-18
Beryllium (Be)			0.54		mg/kg		0.34-0.74	22-AUG-18
Bismuth (Bi)			99.7		%		70-130	22-AUG-18
Boron (B)			3.6		mg/kg		0-8.2	22-AUG-18
Cadmium (Cd)			102.9		%		70-130	22-AUG-18
Calcium (Ca)			108.1		%		70-130	22-AUG-18
Chromium (Cr)			107.6		%		70-130	22-AUG-18
Cobalt (Co)			102.2		%		70-130	22-AUG-18
Copper (Cu)			103.4		%		70-130	22-AUG-18
Iron (Fe)			105.5		%		70-130	22-AUG-18



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MET-200.2-CCMS-VA Soil	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
No.	MET-200.2-CCMS-VA	Soil							
Lead (Pb)	Batch R4181435								
Lithium (Li) 108.8 % 70.130 22-AUG-18 Magnesium (Mg) 109.6 % 70.130 22-AUG-18 Manganese (Mn) 104.5 % 70.130 22-AUG-18 Molybdenum (Mo) 104.6 % 70.130 22-AUG-18 Nickel (Ni) 102.7 % 70.130 22-AUG-18 Potassium (K) 116.7 % 70.130 22-AUG-18 Selenium (Se) 0.33 mg/kg 0.11-0.51 22-AUG-18 Selenium (Se) 0.33 mg/kg 0.13-0.33 22-AUG-18 Strontium (Sn) 110.8 % 70.130 22-AUG-18 Strontium (Sr) 106.0 % 70.130 22-AUG-18 Tin (Sn) 1.1 mg/kg 0.7-0.13 22-AUG-18 Tin (Sn) 1.1 mg/kg 0.7-0.13 22-AUG-18 Tin (sn) 1.2 % 70.130 22-AUG-18 Tin (sn) 1.1 mg/kg 0-0.66 22-AUG-18 Tin (sn)			VA-CANMET						
Magnesium (Mg) 109.6 % 70-130 22-AUG-18 Manganese (Mn) 104.5 % 70-130 22-AUG-18 Molybdenum (Mo) 104.6 % 70-130 22-AUG-18 Molybdenum (Mo) 102.7 % 70-130 22-AUG-18 Potassium (K) 116.7 % 70-130 22-AUG-18 Selenium (Se) 0.33 mg/kg 0.11-0.51 22-AUG-18 Silver (Ag) 0.25 mg/kg 0.13-0.33 22-AUG-18 Sodium (Na) 110.8 % 70-130 22-AUG-18 Strontium (Sr) 100.0 % 70-130 22-AUG-18 Thallium (TI) 0.133 mg/kg 0.077-0.18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0.3 22-AUG-18 Tinalium (TI) 122.1 % 70-130 22-AUG-18 Tinalium (W) 96.5 % 70-130 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Valor-1a<									
Manganese (Mr) 104.5 % 70-130 22-AUG-18 Molybdenum (Mo) 104.6 % 70-130 22-AUG-18 Nickel (Ni) 102.7 % 70-130 22-AUG-18 Potassium (K) 116.7 % 70-130 22-AUG-18 Selenium (Se) 0.33 mg/kg 0.11-0.51 22-AUG-18 Silver (Ag) 0.25 mg/kg 0.13-0.33 22-AUG-18 Sodium (Na) 110.8 % 70-130 22-AUG-18 Strontium (Sr) 108.0 % 70-130 22-AUG-18 Thallium (TI) 0.133 mg/kg 0.077-0.18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-0.66 22-AUG-18 Uranium (TI) 122.1 % 70-130 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V)	, ,								
Molybdenum (Mo) 104.6 % 70-130 22-AUG-18 Nickel (Ni) 102.7 % 70-130 22-AUG-18 Potassium (K) 116.7 % 70-130 22-AUG-18 Selenium (Se) 0.33 mg/kg 0.11-0.51 22-AUG-18 Silver (Ag) 0.25 mg/kg 0.13-0.33 22-AUG-18 Sodium (Na) 110.8 % 70-130 22-AUG-18 Strontium (Sr) 108.0 % 70-130 22-AUG-18 Strontium (Sr) 108.0 % 70-130 22-AUG-18 Tin (Sn) 1.1 mg/kg 0.70-18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Vanadium (V) <								70-130	22-AUG-18
Nickel (Ni) Potassium (K) Pota									
Potassium (K)								70-130	22-AUG-18
Selenium (Se) 0.33 mg/kg 0.11-0.51 22-AUG-18 Silver (Ag) 0.25 mg/kg 0.13-0.33 22-AUG-18 Sodium (Na) 110.8 % 70-130 22-AUG-18 Strontium (Sr) 108.0 % 70-130 22-AUG-18 Thallium (TI) 0.133 mg/kg 0.077-0.18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0.3 22-AUG-18 Titanium (Ti) 122.1 % 70-130 22-AUG-18 Tungsten (W) 0.20 mg/kg 0.066 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zirco (Zn) 104.1 % 70-130 22-AUG-18 Zirco (Zn) 104.1 % 70-130 22-AUG-18 WG2854756-3 LCS Incs 80-120 22-AUG-18 Ariminum (Al) 99.2 % 80-120 22-AUG-18 Ariminum (Sb)	, ,							70-130	22-AUG-18
Silver (Ag) 0.25 mg/kg 0.13-0.33 22-AUG-18 Sodium (Na) 110.8 % 70-130 22-AUG-18 Strontium (Sr) 108.0 % 70-130 22-AUG-18 Thallium (TI) 0.133 mg/kg 0.077-0.18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Titanium (Ti) 122.1 % 70-130 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zirco (Zn) 104.1 % 70-130 22-AUG-18 Zirco (Zn) 104.1 % 70-130 22-AUG-18 WG2854756-3 LCS LCS AUminum (Al) 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 <	Potassium (K)					%		70-130	22-AUG-18
Sodium (Na) 110.8 % 70-130 22-AUG-18 Strontium (Sr) 108.0 % 70-130 22-AUG-18 Thallium (TI) 0.133 mg/kg 0.077-0.18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Titanium (TI) 122.1 % 70-130 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zirc (Zn) 104.1 % 70-130 22-AUG-18 Zirc (Zn) 104.1 % 70-130 22-AUG-18 Zirc onium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS 80-120 22-AUG-18 Aluminum (Al) 99.2 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2	Selenium (Se)					mg/kg		0.11-0.51	22-AUG-18
Strontium (Sr) 108.0 % 70-130 22-AUG-18 Thallium (TI) 0.133 mg/kg 0.077-0.18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Titanium (TI) 122.1 % 70-130 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zinc (Zn) 104.1 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS LCS Aluminum (A) 99.2 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Beryllium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-1				0.25				0.13-0.33	22-AUG-18
Thallium (TI) 0.133 mg/kg 0.077-0.18 22-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Titanium (TI) 122.1 % 70-130 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS T 22-AUG-18 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Born (B) 100.4 % 80-120 22-AUG-18 Cadium (Cd) <td< td=""><td>Sodium (Na)</td><td></td><td></td><td>110.8</td><td></td><td>%</td><td></td><td>70-130</td><td>22-AUG-18</td></td<>	Sodium (Na)			110.8		%		70-130	22-AUG-18
Tin (Sn) 1.1 mg/kg 0-3 22-AUG-18 Titanium (Ti) 122.1 % 70-130 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zinc (Zn) 104.1 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS Aluminum (Al) 99.2 % 80-120 22-AUG-18 Arsenic (As) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18	Strontium (Sr)			108.0		%		70-130	22-AUG-18
Titanium (TI) 122.1 % 70-130 22-AUG-18 Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zinc (Zn) 104.1 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS S0-120 22-AUG-18 Aluminum (Al) 99.2 % 80-120 22-AUG-18 Arsenic (As) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Beryllium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 %	Thallium (TI)			0.133		mg/kg		0.077-0.18	22-AUG-18
Tungsten (W) 0.20 mg/kg 0-0.66 22-AUG-18 Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zinc (Zn) 104.1 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS Aluminum (Al) 99.2 % 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Tin (Sn)			1.1		mg/kg		0-3	22-AUG-18
Uranium (U) 96.5 % 70-130 22-AUG-18 Vanadium (V) 107.0 % 70-130 22-AUG-18 Zinc (Zn) 104.1 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS LCS 80-120 22-AUG-18 Aluminum (Al) 99.2 % 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 %	Titanium (Ti)			122.1		%		70-130	22-AUG-18
Vanadium (V) 107.0 % 70-130 22-AUG-18 Zinc (Zn) 104.1 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS Aluminum (Al) 99.2 % 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 </td <td>Tungsten (W)</td> <td></td> <td></td> <td>0.20</td> <td></td> <td>mg/kg</td> <td></td> <td>0-0.66</td> <td>22-AUG-18</td>	Tungsten (W)			0.20		mg/kg		0-0.66	22-AUG-18
Zinc (Zn) 104.1 % 70-130 22-AUG-18 Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 LCS Aluminum (Al) 99.2 % 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Uranium (U)			96.5		%		70-130	22-AUG-18
Zirconium (Zr) 0.9 mg/kg 0-1.8 22-AUG-18 WG2854756-3 Aluminum (Al) LCS Aluminum (Al) 99.2 % 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Vanadium (V)			107.0		%		70-130	22-AUG-18
WG2854756-3 Aluminum (Al) LCS Aluminum (Al) 99.2 % 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Zinc (Zn)			104.1		%		70-130	22-AUG-18
Aluminum (Al) 99.2 % 80-120 22-AUG-18 Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Zirconium (Zr)			0.9		mg/kg		0-1.8	22-AUG-18
Antimony (Sb) 115.0 % 80-120 22-AUG-18 Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	WG2854756-3 LCS								
Arsenic (As) 103.0 % 80-120 22-AUG-18 Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Aluminum (Al)			99.2		%		80-120	22-AUG-18
Barium (Ba) 101.2 % 80-120 22-AUG-18 Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Antimony (Sb)			115.0		%		80-120	22-AUG-18
Beryllium (Be) 103.6 % 80-120 22-AUG-18 Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Arsenic (As)			103.0		%		80-120	22-AUG-18
Bismuth (Bi) 109.7 % 80-120 22-AUG-18 Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Barium (Ba)			101.2		%		80-120	22-AUG-18
Boron (B) 100.4 % 80-120 22-AUG-18 Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Beryllium (Be)			103.6		%		80-120	22-AUG-18
Cadmium (Cd) 102.8 % 80-120 22-AUG-18 Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Bismuth (Bi)			109.7		%		80-120	22-AUG-18
Calcium (Ca) 97.6 % 80-120 22-AUG-18 Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Boron (B)			100.4		%		80-120	22-AUG-18
Chromium (Cr) 100.6 % 80-120 22-AUG-18 Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Cadmium (Cd)			102.8		%		80-120	22-AUG-18
Cobalt (Co) 99.8 % 80-120 22-AUG-18 Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Calcium (Ca)			97.6		%		80-120	22-AUG-18
Copper (Cu) 100.0 % 80-120 22-AUG-18 Iron (Fe) 97.5 % 80-120 22-AUG-18	Chromium (Cr)			100.6		%		80-120	22-AUG-18
Iron (Fe) 97.5 % 80-120 22-AUG-18	Cobalt (Co)			99.8		%		80-120	22-AUG-18
	Copper (Cu)			100.0		%		80-120	22-AUG-18
Lead (Pb) 107.2 % 80-120 22-AUG-18	Iron (Fe)			97.5		%		80-120	22-AUG-18
	Lead (Pb)			107.2		%		80-120	22-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4181435								
WG2854756-3 LCS			100.4		0/		00.155	00 4110 15
Lithium (Li)			102.1		%		80-120	22-AUG-18
Magnesium (Mg)			106.3		%		80-120	22-AUG-18
Manganese (Mn)			98.7		%		80-120	22-AUG-18
Molybdenum (Mo)			101.8		%		80-120	22-AUG-18
Nickel (Ni)			98.9		%		80-120	22-AUG-18
Phosphorus (P)			98.0		%		80-120	22-AUG-18
Potassium (K)			107.3		%		80-120	22-AUG-18
Selenium (Se)			101.4		%		80-120	22-AUG-18
Silver (Ag)			99.4		%		80-120	22-AUG-18
Sodium (Na)			105.7		%		80-120	22-AUG-18
Strontium (Sr)			105.5		%		80-120	22-AUG-18
Sulfur (S)			102.3		%		80-120	22-AUG-18
Thallium (TI)			109.1		%		80-120	22-AUG-18
Tin (Sn)			101.7		%		80-120	22-AUG-18
Titanium (Ti)			99.8		%		80-120	22-AUG-18
Tungsten (W)			101.5		%		80-120	22-AUG-18
Uranium (U)			95.7		%		80-120	22-AUG-18
Vanadium (V)			103.6		%		80-120	22-AUG-18
Zinc (Zn)			94.4		%		80-120	22-AUG-18
Zirconium (Zr)			98.7		%		70-130	22-AUG-18
WG2854756-1 MB								
Aluminum (Al)			<50		mg/kg		50	22-AUG-18
Antimony (Sb)			<0.10		mg/kg		0.1	22-AUG-18
Arsenic (As)			<0.10		mg/kg		0.1	22-AUG-18
Barium (Ba)			<0.50		mg/kg		0.5	22-AUG-18
Beryllium (Be)			<0.10		mg/kg		0.1	22-AUG-18
Bismuth (Bi)			<0.20		mg/kg		0.2	22-AUG-18
Boron (B)			<5.0		mg/kg		5	22-AUG-18
Cadmium (Cd)			<0.020		mg/kg		0.02	22-AUG-18
Calcium (Ca)			<50		mg/kg		50	22-AUG-18
Chromium (Cr)			< 0.50		mg/kg		0.5	22-AUG-18
Cobalt (Co)			<0.10		mg/kg		0.1	22-AUG-18
Copper (Cu)			<0.50		mg/kg		0.5	22-AUG-18
Iron (Fe)			<50		mg/kg		50	22-AUG-18
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MET-200_2-CCMS-VA Soil	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
No	MET-200.2-CCMS-VA	Soil							
Lead (Pb)	Batch R418143	35							
Lithium (Li) <2.0 mg/kg 2 22-AUG-18 Magnesium (Mg) <20				0.50				0.5	
Magnesium (Mg) <20 mg/kg 20 22-AUG-18 Manganese (Mn) <1.0									
Manganese (Mn) <1.0 mg/kg 1 22-AUG-18 Molybdenum (Mo) <0.10									
Molybdenum (Mo) <0.10 mg/kg 0.1 22-AUG-18 Nickel (Ni) <0.50									
Nickel (Ni)									
Phosphorus (P) <50 mg/kg 50 22-AUG-18 Potassium (K) <100									
Potassium (K)									
Selenium (Se) <0.20 mg/kg 0.2 22.AUG-18 Silver (Ag) <0.10									22-AUG-18
Silver (Ag) <0.110 mg/kg 0.1 22-AUG-18 Sodium (Na) <50	` ,								22-AUG-18
Sodium (Na) <50 mg/kg 50 22-AUG-18 Strontium (Sr) <0.50	Selenium (Se)			<0.20		mg/kg		0.2	22-AUG-18
Strontium (Sr) <0.50 mg/kg 0.5 22-AUG-18 Sulfur (S) <1000	Silver (Ag)			<0.10		mg/kg		0.1	22-AUG-18
Sulfur (S) <1000 mg/kg 1000 22-AUG-18 Thallium (TI) <0.050				<50		mg/kg		50	22-AUG-18
Thallium (TI) <0.050	Strontium (Sr)			<0.50		mg/kg		0.5	22-AUG-18
Tin (Sn)	Sulfur (S)			<1000		mg/kg		1000	22-AUG-18
Titanium (Ti) <1.0 mg/kg 1 22-AUG-18 Tungsten (W) <0.50	Thallium (TI)			< 0.050		mg/kg		0.05	22-AUG-18
Tungsten (W) <0.50 mg/kg 0.5 22-AUG-18 Uranium (U) <0.050	Tin (Sn)			<2.0		mg/kg		2	22-AUG-18
Uranium (U) <0.050 mg/kg 0.05 22-AUG-18 Vanadium (V) <0.20	Titanium (Ti)			<1.0		mg/kg		1	22-AUG-18
Vanadium (V) <0.20 mg/kg 0.2 22-AUG-18 Zinc (Zn) <2.0	Tungsten (W)			<0.50		mg/kg		0.5	22-AUG-18
Zinc (Zn) <2.0 mg/kg 2 22-AUG-18 Zirconium (Zr) <1.0 mg/kg 1 22-AUG-18 Batch R4181620 WG2855306-4 CRM VA-CANMET-TILL1 Aluminum (Al) 107.0 % 70-130 23-AUG-18 Antimony (Sb) 104.4 % 70-130 23-AUG-18 Arsenic (As) 106.0 % 70-130 23-AUG-18 Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18	Uranium (U)			< 0.050		mg/kg		0.05	22-AUG-18
Batch R4181620 WG2855306-4 CRM VA-CANMET-TILL1 Aluminum (Al) 107.0 % 70-130 23-AUG-18 Antimony (Sb) 104.4 % 70-130 23-AUG-18 Arsenic (As) 106.0 % 70-130 23-AUG-18 Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18	Vanadium (V)			<0.20		mg/kg		0.2	22-AUG-18
Batch R4181620 WG2855306-4 CRM VA-CANMET-TILL1 Aluminum (Al) 107.0 % 70-130 23-AUG-18 Antimony (Sb) 104.4 % 70-130 23-AUG-18 Arsenic (As) 106.0 % 70-130 23-AUG-18 Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18	Zinc (Zn)			<2.0		mg/kg		2	22-AUG-18
WG2855306-4 Aluminum (Al) CRM VA-CANMET-TILL1 Aluminum (Al) 107.0 % 70-130 23-AUG-18 Antimony (Sb) 104.4 % 70-130 23-AUG-18 Arsenic (As) 106.0 % 70-130 23-AUG-18 Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18	Zirconium (Zr)			<1.0		mg/kg		1	22-AUG-18
Aluminum (Al) 107.0 % 70-130 23-AUG-18 Antimony (Sb) 104.4 % 70-130 23-AUG-18 Arsenic (As) 106.0 % 70-130 23-AUG-18 Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18	Batch R418162	20							
Antimony (Sb) 104.4 % 70-130 23-AUG-18 Arsenic (As) 106.0 % 70-130 23-AUG-18 Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18		M	VA-CANMET						
Arsenic (As) 106.0 % 70-130 23-AUG-18 Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18									
Barium (Ba) 103.4 % 70-130 23-AUG-18 Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18									23-AUG-18
Beryllium (Be) 0.53 mg/kg 0.34-0.74 23-AUG-18 Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18								70-130	23-AUG-18
Bismuth (Bi) 99.1 % 70-130 23-AUG-18 Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18								70-130	23-AUG-18
Boron (B) 3.3 mg/kg 0-8.2 23-AUG-18 Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18								0.34-0.74	
Cadmium (Cd) 103.8 % 70-130 23-AUG-18 Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18								70-130	23-AUG-18
Calcium (Ca) 107.6 % 70-130 23-AUG-18 Chromium (Cr) 108.2 % 70-130 23-AUG-18								0-8.2	23-AUG-18
Chromium (Cr) 108.2 % 70-130 23-AUG-18	Cadmium (Cd)			103.8		%		70-130	23-AUG-18
	Calcium (Ca)			107.6		%		70-130	23-AUG-18
Cobalt (Co) 104.4 % 70-130 23-AUG-18	Chromium (Cr)			108.2		%		70-130	23-AUG-18
	Cobalt (Co)			104.4		%		70-130	23-AUG-18



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Iron (Fe) 106.6 % 70-130 23-AUG-18 Lead (Pb) 99.5 % 70-130 23-AUG-18 Lithium (Li) 104.9 % 70-130 23-AUG-18 Magnesium (Mg) 107.2 % 70-130 23-AUG-18 Manganese (Mn) 100.7 % 70-130 23-AUG-18 Molybdenum (Mo) 101.6 % 70-130 23-AUG-18 Nickel (Ni) 104.0 % 70-130 23-AUG-18 Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Scdium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tiranjum (Ti) 118.2 % 70-130 23-AUG-18 Tiranjum (Ti) 118.2 % 70-130 23-AUG-18 Uranium (U)	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
WG2855306-4 CRM	MET-200.2-CCMS-VA	Soil							
Copper (Cu) 106.1 % 70-130 23-AUG-18 Iron (Fe) 106.6 % 70-130 23-AUG-18 Lead (Pb) 99.5 % 70-130 23-AUG-18 Lithium (Li) 104.9 % 70-130 23-AUG-18 Magnesium (Mg) 107.2 % 70-130 23-AUG-18 Manganese (Mn) 100.7 % 70-130 23-AUG-18 Molybdenum (Mo) 101.6 % 70-130 23-AUG-18 Nickel (Ni) 104.0 % 70-130 23-AUG-18 Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.17-0.18 23-AUG-18 Sitronium (Sr) 105.4 % 70-130 23-AUG-18 Stronium (Sr) 105.4 % 70-130 23-AUG-18 Tin (Sn)	Batch R418162	0							
Iron (Fe) 106.6 % 70-130 23-AUG-16 Lead (Pb) 99.5 % 70-130 23-AUG-18 Lithium (Li) 104.9 % 70-130 23-AUG-18 Magnesium (Mg) 107.2 % 70-130 23-AUG-18 Manganese (Mn) 100.7 % 70-130 23-AUG-18 Molybdenum (Mo) 101.6 % 70-130 23-AUG-18 Nickel (Ni) 104.0 % 70-130 23-AUG-18 Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Tin (Sn) 1.1 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0.06 23-AUG-18 Uranium (Ti)		!	VA-CANMET						
Lead (Pb) 99.5 % 70.130 23.AUG-16 Lithium (Li) 104.9 % 70-130 23.AUG-16 Magnesium (Mg) 107.2 % 70-130 23.AUG-18 Manganese (Mn) 100.7 % 70-130 23.AUG-18 Molybdenum (Mo) 101.6 % 70-130 23.AUG-18 Nickel (Ni) 104.0 % 70-130 23.AUG-18 Nickel (Ni) 106.6 % 70-130 23.AUG-18 Potassium (K) 116.6 % 70-130 23.AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23.AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23.AUG-18 Stontium (Se) 105.4 % 70-130 23.AUG-18 Strontium (Sr) 105.4 % 70-130 23.AUG-18 Thallium (TI) 0.129 mg/kg 0.37-0.18 23.AUG-18 Tin (Sh) 1.1 mg/kg 0.3 23.AUG-18 Tinalium (Ti) 118.2 % 70-130 23.AUG-18 Vanadium (V) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>23-AUG-18</td>									23-AUG-18
Lithium (Li) 104.9 % 70-130 23-AUG-16 Magnesium (Mg) 107.2 % 70-130 23-AUG-16 Manganese (Mn) 100.7 % 70-130 23-AUG-16 Molybdenum (Mo) 101.6 % 70-130 23-AUG-16 Nickel (Ni) 104.0 % 70-130 23-AUG-16 Potassium (K) 116.6 % 70-130 23-AUG-16 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-16 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-16 Strontium (Sr) 105.4 % 70-130 23-AUG-16 Strontium (Sr) 105.4 % 70-130 23-AUG-16 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-16 Tin (Sn) 1.1 mg/kg 0.3 23-AUG-16 Titanium (TI) 118.2 % 70-130 23-AUG-16 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-16 Uranium (U) 107.5 % 70-130 23-AUG-16 Vanadium (V) 107.4 % 70-130 23-AUG-16 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-16 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-16 Autminum (Al) 107.3 % 80-120 23-AUG-16 Autminum (Al) 107.3 % 80-120 23-AUG-16 Autminum (Ba) 102.6 % 80-120 23-AUG-16 Beryllium (Be) 96.6 % 80-120 23-AUG-16 Bismuth (Bi) 96.0 % 80-120 23-AUG-16								70-130	23-AUG-18
Magnesium (Mg) 107.2 % 70-130 23-AUG-18 Manganese (Mn) 100.7 % 70-130 23-AUG-18 Molybdenum (Mo) 101.6 % 70-130 23-AUG-18 Nickel (Ni) 104.0 % 70-130 23-AUG-18 Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0.3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Urandium (U) 107.5 % 70-130 23-AUG-18 Vanadium (Y) 107.4 % 70-130 23-AUG-18 Zirconi								70-130	23-AUG-18
Manganese (Mn) 100.7 % 70-130 23-AUG-18 Molybdenum (Mo) 101.6 % 70-130 23-AUG-18 Nickel (Ni) 104.0 % 70-130 23-AUG-18 Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zirc (Zn) 106.5 % 70-130 23-AUG-18 WG285306-3 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>70-130</td> <td>23-AUG-18</td>								70-130	23-AUG-18
Molybdenum (Mo) 101.6 % 70-130 23-AUG-18 Nickel (Ni) 104.0 % 70-130 23-AUG-18 Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Trallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tiralium (Ti) 1.1 mg/kg 0.3 23-AUG-18 Tiralium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG28								70-130	23-AUG-18
Nickel (Ni) 104.0 % 70-130 23-AUG-18 Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (Tl) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zirc (Zn) 106.5 % 70-130 23-AUG-18 Zirc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Manganese (Mn)			100.7				70-130	23-AUG-18
Potassium (K) 116.6 % 70-130 23-AUG-18 Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Mg/kg 0-1.8 23-AUG-18 Aluminum (A) 10.3 % 80-120 23-AUG-18 Arsenic (As)	Molybdenum (Mo)			101.6		%		70-130	23-AUG-18
Selenium (Se) 0.34 mg/kg 0.11-0.51 23-AUG-18 Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 WG2855306-3 LCS mg/kg 0-1.8 23-AUG-18 Aluminum (Al) 101.3 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) <td>Nickel (Ni)</td> <td></td> <td></td> <td>104.0</td> <td></td> <td>%</td> <td></td> <td>70-130</td> <td>23-AUG-18</td>	Nickel (Ni)			104.0		%		70-130	23-AUG-18
Silver (Ag) 0.24 mg/kg 0.13-0.33 23-AUG-18 Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 WG285306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antenory (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-	Potassium (K)			116.6		%		70-130	23-AUG-18
Sodium (Na) 117.3 % 70-130 23-AUG-18 Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-1	Selenium (Se)			0.34		mg/kg		0.11-0.51	23-AUG-18
Strontium (Sr) 105.4 % 70-130 23-AUG-18 Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Berjllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Silver (Ag)			0.24		mg/kg		0.13-0.33	23-AUG-18
Thallium (TI) 0.129 mg/kg 0.077-0.18 23-AUG-18 Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Tungsten (W) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 2inc (Zn) 2irconium (Zr) 0.8 mg/kg 0-0.66 23-AUG-18 70-130 23-AUG-18 70-130 23-AUG-18 70-130 23-AUG-18 70-130 23-AUG-18 MG2855306-3 Aluminum (Al) 101.3 % 80-120 23-AUG-18 Arsenic (As) Barium (Ba) 102.6 % 80-120 23-AUG-18 80-120 80-120 23-AUG-18 80-120 23-AUG-18	Sodium (Na)			117.3		%		70-130	23-AUG-18
Tin (Sn) 1.1 mg/kg 0-3 23-AUG-18 Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Strontium (Sr)			105.4		%		70-130	23-AUG-18
Titanium (Ti) 118.2 % 70-130 23-AUG-18 Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Thallium (TI)			0.129		mg/kg		0.077-0.18	23-AUG-18
Tungsten (W) 0.17 mg/kg 0-0.66 23-AUG-18 Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Tin (Sn)			1.1		mg/kg		0-3	23-AUG-18
Uranium (U) 107.5 % 70-130 23-AUG-18 Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Titanium (Ti)			118.2		%		70-130	23-AUG-18
Vanadium (V) 107.4 % 70-130 23-AUG-18 Zinc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Tungsten (W)			0.17		mg/kg		0-0.66	23-AUG-18
Zinc (Zn) 106.5 % 70-130 23-AUG-18 Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Uranium (U)			107.5		%		70-130	23-AUG-18
Zirconium (Zr) 0.8 mg/kg 0-1.8 23-AUG-18 WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Vanadium (V)			107.4		%		70-130	23-AUG-18
WG2855306-3 LCS Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Zinc (Zn)			106.5		%		70-130	23-AUG-18
Aluminum (Al) 101.3 % 80-120 23-AUG-18 Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Zirconium (Zr)			0.8		mg/kg		0-1.8	23-AUG-18
Antimony (Sb) 101.2 % 80-120 23-AUG-18 Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	WG2855306-3 LCS								
Arsenic (As) 100.3 % 80-120 23-AUG-18 Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Aluminum (Al)			101.3		%		80-120	23-AUG-18
Barium (Ba) 102.6 % 80-120 23-AUG-18 Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Antimony (Sb)			101.2		%		80-120	23-AUG-18
Beryllium (Be) 96.6 % 80-120 23-AUG-18 Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Arsenic (As)			100.3		%		80-120	23-AUG-18
Bismuth (Bi) 96.0 % 80-120 23-AUG-18	Barium (Ba)			102.6		%		80-120	23-AUG-18
	Beryllium (Be)			96.6		%		80-120	23-AUG-18
	Bismuth (Bi)			96.0		%		80-120	23-AUG-18
Boron (B) 92.5 % 80-120 23-AUG-18	Boron (B)			92.5		%		80-120	23-AUG-18
Cadmium (Cd) 101.5 % 80-120 23-AUG-18	Cadmium (Cd)			101.5		%		80-120	23-AUG-18
Calcium (Ca) 95.6 % 80-120 23-AUG-18	Calcium (Ca)			95.6		%		80-120	23-AUG-18
Chromium (Cr) 99.6 % 80-120 23-AUG-18	Chromium (Cr)			99.6		%		80-120	23-AUG-18
Cobalt (Co) 98.4 % 80-120 23-AUG-18	Cobalt (Co)			98.4		%		80-120	23-AUG-18
Copper (Cu) 99.4 % 80-120 23-AUG-18	Copper (Cu)			99.4		%		80-120	23-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4181620)							
WG2855306-3 LCS								
Iron (Fe)			101.4		%		80-120	23-AUG-18
Lead (Pb)			96.6		%		80-120	23-AUG-18
Lithium (Li)			96.0		%		80-120	23-AUG-18
Magnesium (Mg)			99.7		%		80-120	23-AUG-18
Manganese (Mn)			98.2		%		80-120	23-AUG-18
Molybdenum (Mo)			99.0		%		80-120	23-AUG-18
Nickel (Ni)			98.1		%		80-120	23-AUG-18
Phosphorus (P)			106.6		%		80-120	23-AUG-18
Potassium (K)			100.8		%		80-120	23-AUG-18
Selenium (Se)			99.9		%		80-120	23-AUG-18
Silver (Ag)			95.4		%		80-120	23-AUG-18
Sodium (Na)			99.5		%		80-120	23-AUG-18
Strontium (Sr)			96.5		%		80-120	23-AUG-18
Sulfur (S)			98.9		%		80-120	23-AUG-18
Thallium (TI)			96.5		%		80-120	23-AUG-18
Tin (Sn)			96.0		%		80-120	23-AUG-18
Titanium (Ti)			96.1		%		80-120	23-AUG-18
Tungsten (W)			100.7		%		80-120	23-AUG-18
Uranium (U)			99.2		%		80-120	23-AUG-18
Vanadium (V)			100.5		%		80-120	23-AUG-18
Zinc (Zn)			95.1		%		80-120	23-AUG-18
Zirconium (Zr)			92.1		%		70-130	23-AUG-18
WG2855306-1 MB								
Aluminum (Al)			<50		mg/kg		50	23-AUG-18
Antimony (Sb)			<0.10		mg/kg		0.1	23-AUG-18
Arsenic (As)			<0.10		mg/kg		0.1	23-AUG-18
Barium (Ba)			<0.50		mg/kg		0.5	23-AUG-18
Beryllium (Be)			<0.10		mg/kg		0.1	23-AUG-18
Bismuth (Bi)			<0.20		mg/kg		0.2	23-AUG-18
Boron (B)			<5.0		mg/kg		5	23-AUG-18
Cadmium (Cd)			<0.020		mg/kg		0.02	23-AUG-18
Calcium (Ca)			<50		mg/kg		50	23-AUG-18
Chromium (Cr)			< 0.50		mg/kg		0.5	23-AUG-18
Cobalt (Co)			<0.10		mg/kg		0.1	23-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4181620								
WG2855306-1 MB			0.50					
Copper (Cu)			<0.50		mg/kg		0.5	23-AUG-18
Iron (Fe)			<50		mg/kg		50	23-AUG-18
Lead (Pb)			<0.50		mg/kg		0.5	23-AUG-18
Lithium (Li)			<2.0		mg/kg		2	23-AUG-18
Magnesium (Mg)			<20		mg/kg		20	23-AUG-18
Manganese (Mn)			<1.0		mg/kg		1	23-AUG-18
Molybdenum (Mo)			<0.10		mg/kg		0.1	23-AUG-18
Nickel (Ni)			<0.50		mg/kg		0.5	23-AUG-18
Phosphorus (P)			<50		mg/kg		50	23-AUG-18
Potassium (K)			<100		mg/kg		100	23-AUG-18
Selenium (Se)			<0.20		mg/kg		0.2	23-AUG-18
Silver (Ag)			<0.10		mg/kg		0.1	23-AUG-18
Sodium (Na)			<50		mg/kg		50	23-AUG-18
Strontium (Sr)			<0.50		mg/kg		0.5	23-AUG-18
Sulfur (S)			<1000		mg/kg		1000	23-AUG-18
Thallium (TI)			< 0.050		mg/kg		0.05	23-AUG-18
Tin (Sn)			<2.0		mg/kg		2	23-AUG-18
Titanium (Ti)			<1.0		mg/kg		1	23-AUG-18
Tungsten (W)			<0.50		mg/kg		0.5	23-AUG-18
Uranium (U)			< 0.050		mg/kg		0.05	23-AUG-18
Vanadium (V)			<0.20		mg/kg		0.2	23-AUG-18
Zinc (Zn)			<2.0		mg/kg		2	23-AUG-18
Zirconium (Zr)			<1.0		mg/kg		1	23-AUG-18
Batch R4182088								
WG2856011-4 CRM		VA-CANMET-			%		70.400	
Aluminum (Al)			116.1				70-130	23-AUG-18
Antimony (Sb)			110.3		%		70-130	23-AUG-18
Arsenic (As)			105.8		%		70-130	23-AUG-18
Barium (Ba)			106.1		%		70-130	23-AUG-18
Beryllium (Be)			0.57		mg/kg		0.34-0.74	23-AUG-18
Bismuth (Bi)			105.2		%		70-130	23-AUG-18
Boron (B)			3.8		mg/kg		0-8.2	23-AUG-18
Cadmium (Cd)			108.6		%		70-130	23-AUG-18
Calcium (Ca)			118.0		%		70-130	23-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182088								
WG2856011-4 CRM		VA-CANMET						
Chromium (Cr)			111.5		%		70-130	23-AUG-18
Cobalt (Co)			109.9		%		70-130	23-AUG-18
Copper (Cu)			109.8		%		70-130	23-AUG-18
Iron (Fe)			109.8		%		70-130	23-AUG-18
Lead (Pb)			107.2		%		70-130	23-AUG-18
Lithium (Li)			113.8		%		70-130	23-AUG-18
Magnesium (Mg)			113.9		%		70-130	23-AUG-18
Manganese (Mn)			108.5		%		70-130	23-AUG-18
Molybdenum (Mo)			113.0		%		70-130	23-AUG-18
Nickel (Ni)			110.9		%		70-130	23-AUG-18
Potassium (K)			113.1		%		70-130	23-AUG-18
Selenium (Se)			0.33		mg/kg		0.11-0.51	23-AUG-18
Silver (Ag)			0.25		mg/kg		0.13-0.33	23-AUG-18
Sodium (Na)			123.9		%		70-130	23-AUG-18
Strontium (Sr)			126.5		%		70-130	23-AUG-18
Thallium (TI)			0.142		mg/kg		0.077-0.18	23-AUG-18
Tin (Sn)			1.2		mg/kg		0-3	23-AUG-18
Titanium (Ti)			131.2	MES	%		70-130	23-AUG-18
Tungsten (W)			0.17		mg/kg		0-0.66	23-AUG-18
Uranium (U)			115.6		%		70-130	23-AUG-18
Vanadium (V)			110.1		%		70-130	23-AUG-18
Zinc (Zn)			108.7		%		70-130	23-AUG-18
Zirconium (Zr)			1.1		mg/kg		0-1.8	23-AUG-18
WG2856011-3 LCS								
Aluminum (Al)			101.4		%		80-120	23-AUG-18
Antimony (Sb)			104.3		%		80-120	23-AUG-18
Arsenic (As)			100.6		%		80-120	23-AUG-18
Barium (Ba)			99.0		%		80-120	23-AUG-18
Beryllium (Be)			98.8		%		80-120	23-AUG-18
Bismuth (Bi)			99.8		%		80-120	23-AUG-18
Boron (B)			97.7		%		80-120	23-AUG-18
Cadmium (Cd)			100.5		%		80-120	23-AUG-18
Calcium (Ca)			100.5		%		80-120	23-AUG-18
Chromium (Cr)			99.6		%		80-120	23-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182088								
WG2856011-3 LCS								
Cobalt (Co)			100.4		%		80-120	23-AUG-18
Copper (Cu)			100.0		%		80-120	23-AUG-18
Iron (Fe)			97.9		%		80-120	23-AUG-18
Lead (Pb)			103.9		%		80-120	23-AUG-18
Lithium (Li)			97.8		%		80-120	23-AUG-18
Magnesium (Mg)			104.6		%		80-120	23-AUG-18
Manganese (Mn)			97.5		%		80-120	23-AUG-18
Molybdenum (Mo)			104.5		%		80-120	23-AUG-18
Nickel (Ni)			101.9		%		80-120	23-AUG-18
Phosphorus (P)			102.1		%		80-120	23-AUG-18
Potassium (K)			97.1		%		80-120	23-AUG-18
Selenium (Se)			106.5		%		80-120	23-AUG-18
Silver (Ag)			101.0		%		80-120	23-AUG-18
Sodium (Na)			97.8		%		80-120	23-AUG-18
Strontium (Sr)			108.3		%		80-120	23-AUG-18
Sulfur (S)			106.5		%		80-120	23-AUG-18
Thallium (TI)			101.2		%		80-120	23-AUG-18
Tin (Sn)			100.0		%		80-120	23-AUG-18
Titanium (Ti)			96.7		%		80-120	23-AUG-18
Tungsten (W)			98.9		%		80-120	23-AUG-18
Uranium (U)			104.8		%		80-120	23-AUG-18
Vanadium (V)			100.5		%		80-120	23-AUG-18
Zinc (Zn)			97.2		%		80-120	23-AUG-18
Zirconium (Zr)			103.9		%		70-130	23-AUG-18
WG2856011-1 MB								
Aluminum (AI)			<50		mg/kg		50	23-AUG-18
Antimony (Sb)			<0.10		mg/kg		0.1	23-AUG-18
Arsenic (As)			<0.10		mg/kg		0.1	23-AUG-18
Barium (Ba)			< 0.50		mg/kg		0.5	23-AUG-18
Beryllium (Be)			<0.10		mg/kg		0.1	23-AUG-18
Bismuth (Bi)			<0.20		mg/kg		0.2	23-AUG-18
Boron (B)			<5.0		mg/kg		5	23-AUG-18
Cadmium (Cd)			<0.020		mg/kg		0.02	23-AUG-18
Calcium (Ca)			<50		mg/kg		50	23-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182088								
WG2856011-1 MB								
Chromium (Cr)			<0.50		mg/kg		0.5	23-AUG-18
Cobalt (Co)			<0.10		mg/kg		0.1	23-AUG-18
Copper (Cu)			<0.50		mg/kg		0.5	23-AUG-18
Iron (Fe)			<50		mg/kg		50	23-AUG-18
Lead (Pb)			<0.50		mg/kg		0.5	23-AUG-18
Lithium (Li)			<2.0		mg/kg		2	23-AUG-18
Magnesium (Mg)			<20		mg/kg		20	23-AUG-18
Manganese (Mn)			<1.0		mg/kg		1	23-AUG-18
Molybdenum (Mo)			<0.10		mg/kg		0.1	23-AUG-18
Nickel (Ni)			< 0.50		mg/kg		0.5	23-AUG-18
Phosphorus (P)			<50		mg/kg		50	23-AUG-18
Potassium (K)			<100		mg/kg		100	23-AUG-18
Selenium (Se)			<0.20		mg/kg		0.2	23-AUG-18
Silver (Ag)			<0.10		mg/kg		0.1	23-AUG-18
Sodium (Na)			<50		mg/kg		50	23-AUG-18
Strontium (Sr)			<0.50		mg/kg		0.5	23-AUG-18
Sulfur (S)			<1000		mg/kg		1000	23-AUG-18
Thallium (TI)			< 0.050		mg/kg		0.05	23-AUG-18
Tin (Sn)			<2.0		mg/kg		2	23-AUG-18
Titanium (Ti)			<1.0		mg/kg		1	23-AUG-18
Tungsten (W)			< 0.50		mg/kg		0.5	23-AUG-18
Uranium (U)			< 0.050		mg/kg		0.05	23-AUG-18
Vanadium (V)			<0.20		mg/kg		0.2	23-AUG-18
Zinc (Zn)			<2.0		mg/kg		2	23-AUG-18
Zirconium (Zr)			<1.0		mg/kg		1	23-AUG-18
Batch R4182167								
WG2855862-4 CRM		VA-CANMET	-TILL1					
Aluminum (AI)			110.8		%		70-130	22-AUG-18
Antimony (Sb)			100.2		%		70-130	22-AUG-18
Arsenic (As)			105.3		%		70-130	22-AUG-18
Barium (Ba)			106.7		%		70-130	22-AUG-18
Beryllium (Be)			0.58		mg/kg		0.34-0.74	22-AUG-18
Bismuth (Bi)			97.4		%		70-130	22-AUG-18
Boron (B)			3.7		mg/kg		0-8.2	22-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182167								
WG2855862-4 CRM		VA-CANMET						
Cadmium (Cd)			98.1		%		70-130	22-AUG-18
Calcium (Ca)			115.4		%		70-130	22-AUG-18
Chromium (Cr)			110.3		%		70-130	22-AUG-18
Cobalt (Co)			106.0		%		70-130	22-AUG-18
Copper (Cu)			107.2		%		70-130	22-AUG-18
Iron (Fe)			106.2		%		70-130	22-AUG-18
Lead (Pb)			97.1		%		70-130	22-AUG-18
Lithium (Li)			114.3		%		70-130	22-AUG-18
Magnesium (Mg)			113.8		%		70-130	22-AUG-18
Manganese (Mn)			110.1		%		70-130	22-AUG-18
Molybdenum (Mo)			101.0		%		70-130	22-AUG-18
Nickel (Ni)			109.2		%		70-130	22-AUG-18
Potassium (K)			110.1		%		70-130	22-AUG-18
Selenium (Se)			0.35		mg/kg		0.11-0.51	22-AUG-18
Silver (Ag)			0.24		mg/kg		0.13-0.33	22-AUG-18
Sodium (Na)			114.4		%		70-130	22-AUG-18
Strontium (Sr)			114.3		%		70-130	22-AUG-18
Thallium (TI)			0.130		mg/kg		0.077-0.18	22-AUG-18
Tin (Sn)			1.1		mg/kg		0-3	22-AUG-18
Titanium (Ti)			128.4		%		70-130	22-AUG-18
Tungsten (W)			0.17		mg/kg		0-0.66	22-AUG-18
Uranium (U)			105.6		%		70-130	22-AUG-18
Vanadium (V)			109.1		%		70-130	22-AUG-18
Zinc (Zn)			105.9		%		70-130	22-AUG-18
Zirconium (Zr)			0.7		mg/kg		0-1.8	22-AUG-18
WG2855862-2 DUP		L2148903-24	ļ					
Aluminum (Al)		2920	3360		mg/kg	14	40	22-AUG-18
Antimony (Sb)		<0.10	<0.10	RPD-NA	mg/kg	N/A	30	22-AUG-18
Arsenic (As)		2.95	3.28		mg/kg	10	30	22-AUG-18
Barium (Ba)		10.7	10.9		mg/kg	2.0	40	22-AUG-18
Beryllium (Be)		0.21	0.21		mg/kg	1.7	30	22-AUG-18
Bismuth (Bi)		<0.20	<0.20	RPD-NA	mg/kg	N/A	30	22-AUG-18
Boron (B)		21.6	23.8		mg/kg	9.3	30	22-AUG-18
Cadmium (Cd)		0.031	0.022	J	mg/kg	0.009	0.04	22-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182167								
WG2855862-2 DUP		L2148903-24	40000					
Calcium (Ca)		41300	46000		mg/kg	11	30	22-AUG-18
Chromium (Cr)		10.6	11.6		mg/kg	9.1	30	22-AUG-18
Cobalt (Co)		1.91	2.02		mg/kg	5.6	30	22-AUG-18
Copper (Cu)		3.68	3.93		mg/kg	6.5	30	22-AUG-18
Iron (Fe)		7790	8430		mg/kg	8.0	30	22-AUG-18
Lead (Pb)		3.20	3.44		mg/kg	7.4	40	22-AUG-18
Lithium (Li)		13.9	14.8		mg/kg	6.4	30	22-AUG-18
Magnesium (Mg)		22400	23700		mg/kg	5.9	30	22-AUG-18
Manganese (Mn)		79.8	83.8		mg/kg	4.9	30	22-AUG-18
Molybdenum (Mo)		0.28	0.26		mg/kg	6.3	40	22-AUG-18
Nickel (Ni)		6.33	6.55		mg/kg	3.3	30	22-AUG-18
Phosphorus (P)		323	370		mg/kg	14	30	22-AUG-18
Potassium (K)		1230	1370		mg/kg	10	40	22-AUG-18
Selenium (Se)		<0.20	<0.20	RPD-NA	mg/kg	N/A	30	22-AUG-18
Silver (Ag)		<0.10	<0.10	RPD-NA	mg/kg	N/A	40	22-AUG-18
Sodium (Na)		3430	2930		mg/kg	16	40	22-AUG-18
Strontium (Sr)		34.2	43.8		mg/kg	25	40	22-AUG-18
Sulfur (S)		<1000	<1000	RPD-NA	mg/kg	N/A	30	22-AUG-18
Thallium (TI)		0.059	0.061		mg/kg	3.8	30	22-AUG-18
Tin (Sn)		<2.0	<2.0	RPD-NA	mg/kg	N/A	40	22-AUG-18
Titanium (Ti)		152	171		mg/kg	12	40	22-AUG-18
Tungsten (W)		<0.50	<0.50	RPD-NA	mg/kg	N/A	30	22-AUG-18
Uranium (U)		0.479	0.532		mg/kg	11	30	22-AUG-18
Vanadium (V)		12.5	13.8		mg/kg	9.3	30	22-AUG-18
Zinc (Zn)		9.6	10.2		mg/kg	5.7	30	22-AUG-18
Zirconium (Zr)		2.7	3.3		mg/kg	20	30	22-AUG-18
WG2855862-3 LCS								
Aluminum (AI)			101.8		%		80-120	22-AUG-18
Antimony (Sb)			98.5		%		80-120	22-AUG-18
Arsenic (As)			106.0		%		80-120	22-AUG-18
Barium (Ba)			103.8		%		80-120	22-AUG-18
Beryllium (Be)			101.5		%		80-120	22-AUG-18
Bismuth (Bi)			98.1		%		80-120	22-AUG-18
Boron (B)			97.0		%		80-120	22-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182167	•							
WG2855862-3 LCS			100.1		0/			
Cadmium (Cd)			100.4		%		80-120	22-AUG-18
Calcium (Ca)			102.8		%		80-120	22-AUG-18
Chromium (Cr)			105.2		%		80-120	22-AUG-18
Cobalt (Co)			102.2		%		80-120	22-AUG-18
Copper (Cu)			103.7		%		80-120	22-AUG-18
Iron (Fe)			105.9		%		80-120	22-AUG-18
Lead (Pb)			101.4		%		80-120	22-AUG-18
Lithium (Li)			103.7		%		80-120	22-AUG-18
Magnesium (Mg)			110.5		%		80-120	22-AUG-18
Manganese (Mn)			104.4		%		80-120	22-AUG-18
Molybdenum (Mo)			98.2		%		80-120	22-AUG-18
Nickel (Ni)			105.2		%		80-120	22-AUG-18
Phosphorus (P)			106.2		%		80-120	22-AUG-18
Potassium (K)			103.8		%		80-120	22-AUG-18
Selenium (Se)			102.9		%		80-120	22-AUG-18
Silver (Ag)			93.9		%		80-120	22-AUG-18
Sodium (Na)			105.5		%		80-120	22-AUG-18
Strontium (Sr)			103.7		%		80-120	22-AUG-18
Sulfur (S)			96.7		%		80-120	22-AUG-18
Thallium (TI)			98.5		%		80-120	22-AUG-18
Tin (Sn)			99.6		%		80-120	22-AUG-18
Titanium (Ti)			104.1		%		80-120	22-AUG-18
Tungsten (W)			102.9		%		80-120	22-AUG-18
Uranium (U)			104.0		%		80-120	22-AUG-18
Vanadium (V)			107.9		%		80-120	22-AUG-18
Zinc (Zn)			103.1		%		80-120	22-AUG-18
Zirconium (Zr)			99.0		%		70-130	22-AUG-18
WG2855862-1 MB			00.0				70 100	22 700-10
Aluminum (Al)			<50		mg/kg		50	22-AUG-18
Antimony (Sb)			<0.10		mg/kg		0.1	22-AUG-18
Arsenic (As)			<0.10		mg/kg		0.1	22-AUG-18
Barium (Ba)			<0.50		mg/kg		0.5	22-AUG-18
Beryllium (Be)			<0.10		mg/kg		0.1	22-AUG-18
Bismuth (Bi)			<0.20		mg/kg		0.2	22-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182167								
WG2855862-1 MB			5.0				_	
Boron (B)			<5.0		mg/kg		5	22-AUG-18
Cadmium (Cd)			<0.020		mg/kg		0.02	22-AUG-18
Calcium (Ca)			<50		mg/kg		50	22-AUG-18
Chromium (Cr)			<0.50		mg/kg		0.5	22-AUG-18
Cobalt (Co)			<0.10		mg/kg		0.1	22-AUG-18
Copper (Cu)			<0.50		mg/kg		0.5	22-AUG-18
Iron (Fe)			<50		mg/kg		50	22-AUG-18
Lead (Pb)			<0.50		mg/kg		0.5	22-AUG-18
Lithium (Li)			<2.0		mg/kg		2	22-AUG-18
Magnesium (Mg)			<20		mg/kg		20	22-AUG-18
Manganese (Mn)			<1.0		mg/kg		1	22-AUG-18
Molybdenum (Mo)			<0.10		mg/kg		0.1	22-AUG-18
Nickel (Ni)			<0.50		mg/kg		0.5	22-AUG-18
Phosphorus (P)			<50		mg/kg		50	22-AUG-18
Potassium (K)			<100		mg/kg		100	22-AUG-18
Selenium (Se)			<0.20		mg/kg		0.2	22-AUG-18
Silver (Ag)			<0.10		mg/kg		0.1	22-AUG-18
Sodium (Na)			<50		mg/kg		50	22-AUG-18
Strontium (Sr)			< 0.50		mg/kg		0.5	22-AUG-18
Sulfur (S)			<1000		mg/kg		1000	22-AUG-18
Thallium (TI)			< 0.050		mg/kg		0.05	22-AUG-18
Tin (Sn)			<2.0		mg/kg		2	22-AUG-18
Titanium (Ti)			<1.0		mg/kg		1	22-AUG-18
Tungsten (W)			<0.50		mg/kg		0.5	22-AUG-18
Uranium (U)			< 0.050		mg/kg		0.05	22-AUG-18
Vanadium (V)			<0.20		mg/kg		0.2	22-AUG-18
Zinc (Zn)			<2.0		mg/kg		2	22-AUG-18
Zirconium (Zr)			<1.0		mg/kg		1	22-AUG-18
Batch R4182265								
WG2856086-1 MB								
Aluminum (Al)			<50		mg/kg		50	24-AUG-18
Antimony (Sb)			<0.10		mg/kg		0.1	24-AUG-18
Arsenic (As)			<0.10		mg/kg		0.1	24-AUG-18
Barium (Ba)			<0.50		mg/kg		0.5	24-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4182265								
WG2856086-1 MB			0.40				0.4	
Beryllium (Be)			<0.10		mg/kg		0.1	24-AUG-18
Bismuth (Bi)			<0.20		mg/kg		0.2	24-AUG-18
Boron (B)			<5.0		mg/kg		5	24-AUG-18
Cadmium (Cd)			<0.020		mg/kg		0.02	24-AUG-18
Calcium (Ca)			<50		mg/kg		50	24-AUG-18
Chromium (Cr)			<0.50		mg/kg		0.5	24-AUG-18
Cobalt (Co)			<0.10		mg/kg		0.1	24-AUG-18
Copper (Cu)			<0.50		mg/kg		0.5	24-AUG-18
Iron (Fe)			<50		mg/kg		50	24-AUG-18
Lead (Pb)			<0.50		mg/kg		0.5	24-AUG-18
Lithium (Li)			<2.0		mg/kg		2	24-AUG-18
Magnesium (Mg)			<20		mg/kg		20	24-AUG-18
Manganese (Mn)			<1.0		mg/kg		1	24-AUG-18
Molybdenum (Mo)			<0.10		mg/kg		0.1	24-AUG-18
Nickel (Ni)			< 0.50		mg/kg		0.5	24-AUG-18
Phosphorus (P)			<50		mg/kg		50	24-AUG-18
Potassium (K)			<100		mg/kg		100	24-AUG-18
Selenium (Se)			<0.20		mg/kg		0.2	24-AUG-18
Silver (Ag)			<0.10		mg/kg		0.1	24-AUG-18
Sodium (Na)			<50		mg/kg		50	24-AUG-18
Strontium (Sr)			<0.50		mg/kg		0.5	24-AUG-18
Sulfur (S)			<1000		mg/kg		1000	24-AUG-18
Thallium (TI)			< 0.050		mg/kg		0.05	24-AUG-18
Tin (Sn)			<2.0		mg/kg		2	24-AUG-18
Titanium (Ti)			<1.0		mg/kg		1	24-AUG-18
Tungsten (W)			< 0.50		mg/kg		0.5	24-AUG-18
Uranium (U)			< 0.050		mg/kg		0.05	24-AUG-18
Vanadium (V)			<0.20		mg/kg		0.2	24-AUG-18
Zinc (Zn)			<2.0		mg/kg		2	24-AUG-18
Zirconium (Zr)			<1.0		mg/kg		1	24-AUG-18
Batch R4183367								
WG2856086-4 CRM		VA-CANMET						
Aluminum (Al)			97.4		%		70-130	25-AUG-18
Antimony (Sb)			92.7		%		70-130	25-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-VA	Soil							
Batch R4183367	7							
WG2856086-4 CRM		VA-CANMET						
Arsenic (As)			92.4		%		70-130	25-AUG-18
Barium (Ba)			91.0		%		70-130	25-AUG-18
Beryllium (Be)			0.47		mg/kg		0.34-0.74	25-AUG-18
Bismuth (Bi)			93.4		%		70-130	25-AUG-18
Boron (B)			2.9		mg/kg		0-8.2	25-AUG-18
Cadmium (Cd)			98.0		%		70-130	25-AUG-18
Calcium (Ca)			97.5		%		70-130	25-AUG-18
Chromium (Cr)			98.0		%		70-130	25-AUG-18
Cobalt (Co)			88.1		%		70-130	25-AUG-18
Copper (Cu)			95.7		%		70-130	25-AUG-18
Iron (Fe)			95.4		%		70-130	25-AUG-18
Lead (Pb)			91.4		%		70-130	25-AUG-18
Lithium (Li)			93.4		%		70-130	25-AUG-18
Magnesium (Mg)			96.7		%		70-130	25-AUG-18
Manganese (Mn)			96.8		%		70-130	25-AUG-18
Molybdenum (Mo)			93.3		%		70-130	25-AUG-18
Nickel (Ni)			95.2		%		70-130	25-AUG-18
Potassium (K)			101.9		%		70-130	25-AUG-18
Selenium (Se)			0.25		mg/kg		0.11-0.51	25-AUG-18
Silver (Ag)			0.21		mg/kg		0.13-0.33	25-AUG-18
Sodium (Na)			96.6		%		70-130	25-AUG-18
Strontium (Sr)			101.1		%		70-130	25-AUG-18
Thallium (TI)			0.119		mg/kg		0.077-0.18	25-AUG-18
Tin (Sn)			1.0		mg/kg		0-3	25-AUG-18
Titanium (Ti)			109.0		%		70-130	25-AUG-18
Tungsten (W)			0.15		mg/kg		0-0.66	25-AUG-18
Uranium (U)			99.3		%		70-130	25-AUG-18
Vanadium (V)			97.3		%		70-130	25-AUG-18
Zinc (Zn)			95.5		%		70-130	25-AUG-18
Zirconium (Zr)			0.7		mg/kg		0-1.8	25-AUG-18
WG2856086-2 DUP		L2148903-63	3					
Aluminum (Al)		9960	10500		mg/kg	5.1	40	25-AUG-18
Antimony (Sb)		0.17	0.17		mg/kg	1.1	30	25-AUG-18
Arsenic (As)		3.90	4.03		mg/kg	3.3	30	25-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
//ET-200.2-CCMS-VA	Soil							
Batch R4183367								
WG2856086-2 DUP		L2148903-63						
Barium (Ba)		24.3	24.1		mg/kg	1.0	40	25-AUG-18
Beryllium (Be)		0.56	0.56		mg/kg	0.3	30	25-AUG-18
Bismuth (Bi)		<0.20	<0.20	RPD-NA	mg/kg	N/A	30	25-AUG-18
Boron (B)		62.4	63.9		mg/kg	2.4	30	25-AUG-18
Cadmium (Cd)		0.123	0.124		mg/kg	0.9	30	25-AUG-18
Calcium (Ca)		89800	92100		mg/kg	2.5	30	25-AUG-18
Chromium (Cr)		26.7	27.4		mg/kg	2.7	30	25-AUG-18
Cobalt (Co)		4.44	4.46		mg/kg	0.4	30	25-AUG-18
Copper (Cu)		11.3	11.3		mg/kg	0.3	30	25-AUG-18
Iron (Fe)		14800	15000		mg/kg	1.0	30	25-AUG-18
Lead (Pb)		8.56	8.63		mg/kg	0.8	40	25-AUG-18
Lithium (Li)		42.8	42.7		mg/kg	0.4	30	25-AUG-18
Magnesium (Mg)		43500	44000		mg/kg	1.1	30	25-AUG-18
Manganese (Mn)		163	167		mg/kg	2.6	30	25-AUG-18
Molybdenum (Mo)		0.39	0.39		mg/kg	0.5	40	25-AUG-18
Nickel (Ni)		15.3	15.4		mg/kg	0.6	30	25-AUG-18
Phosphorus (P)		399	416		mg/kg	4.4	30	25-AUG-18
Potassium (K)		4110	4350		mg/kg	5.7	40	25-AUG-18
Selenium (Se)		0.27	0.23		mg/kg	17	30	25-AUG-18
Silver (Ag)		<0.10	<0.10	RPD-NA	mg/kg	N/A	40	25-AUG-18
Sodium (Na)		5630	5470		mg/kg	2.9	40	25-AUG-18
Strontium (Sr)		67.2	69.6		mg/kg	3.5	40	25-AUG-18
Sulfur (S)		<1000	<1000	RPD-NA	mg/kg	N/A	30	25-AUG-18
Thallium (TI)		0.151	0.155		mg/kg	3.0	30	25-AUG-18
Tin (Sn)		<2.0	<2.0	RPD-NA	mg/kg	N/A	40	25-AUG-18
Titanium (Ti)		316	324		mg/kg	2.5	40	25-AUG-18
Tungsten (W)		<0.50	< 0.50	RPD-NA	mg/kg	N/A	30	25-AUG-18
Uranium (U)		1.16	1.21		mg/kg	4.5	30	25-AUG-18
Vanadium (V)		35.7	36.8		mg/kg	3.0	30	25-AUG-18
Zinc (Zn)		25.7	25.6		mg/kg	0.4	30	25-AUG-18
Zirconium (Zr)		10.3	10.7		mg/kg	3.6	30	25-AUG-18
WG2856086-3 LCS					-			
Aluminum (Al)			95.4		%		80-120	25-AUG-18
Antimony (Sb)			97.9		%		80-120	25-AUG-18



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Barlum (Ba) 92.3 % 80-120 25-AUC Beryllium (Be) 90.9 % 80-120 25-AUC Bismuth (Bi) 89.4 % 80-120 25-AUC Boron (B) 89.3 % 80-120 25-AUC Cadmium (Cd) 96.1 % 80-120 25-AUC Calcium (Ca) 94.1 % 80-120 25-AUC Chromium (Cr) 95.4 % 80-120 25-AUC Choalt (Co) 87.4 % 80-120 25-AUC Cropper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 <t< th=""><th>Test</th><th>Matrix</th><th>Reference</th><th>Result</th><th>Qualifier</th><th>Units</th><th>RPD</th><th>Limit</th><th>Analyzed</th></t<>	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
WG2856086-3 LCS Arsenic (As) 96.8 % 80-120 25-AUC Berlillim (Ba) 92.3 % 80-120 25-AUC Beryllium (Ba) 90.9 % 80-120 25-AUC Bismuth (Bi) 89.4 % 80-120 25-AUC Borno (B) 89.3 % 80-120 25-AUC Cadmium (Cd) 96.1 % 80-120 25-AUC Calcium (Ca) 94.1 % 80-120 25-AUC Chromium (Cr) 95.4 % 80-120 25-AUC Cobalt (Ca) 87.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Itadi (Ph) 94.6 % 80-120 25-AUC Magnesium (Mq) 96.9 % 80-120 25-AUC Molydenum (Mo) 97.3 % 80-120 25-AUC Molydenum (Mo)	MET-200.2-CCMS-VA	Soil							
Arsenic (As) 96.8 % 80-120 25-AUC Barium (Ba) 92.3 % 80-120 25-AUC Beryllium (Be) 90.9 % 80-120 25-AUC Bismuth (B) 89.4 % 80-120 25-AUC Bismuth (B) 89.3 % 80-120 25-AUC Cadmium (Cd) 96.1 % 80-120 25-AUC Calcium (Ca) 94.1 % 80-120 25-AUC Chromium (Cr) 95.4 % 80-120 25-AUC Cobalt (Co) 87.4 % 80-120 25-AUC Coper (Cu) 93.4 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Solum (Na) 93.6 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Solum (Na) 93.6 % 80-120 25-AUC Solum (Vi) 94.3 % 80-120 25-AUC Titanium (Ti) 90.1 % 80-120	Batch R4183367								
Barium (Ba) 92.3 % 80-120 25-AUC Beryllium (Be) 90.9 % 80-120 25-AUC Bismuth (Bi) 89.4 % 80-120 25-AUC Bismuth (Bi) 89.4 % 80-120 25-AUC Boron (B) 89.3 % 80-120 25-AUC Cadmium (Cd) 96.1 % 80-120 25-AUC Calcium (Ca) 94.1 % 80-120 25-AUC Cromium (Cr) 95.4 % 80-120 25-AUC Croper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lithium (Li) 94.6 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Silver (Ag) 93.8									
Beryllium (Be) 90.9 % 80-120 25-AUC Bismuth (Bi) 89.4 % 80-120 25-AUC Bismuth (Bi) 89.4 % 80-120 25-AUC Boron (B) 89.3 % 80-120 25-AUC Cadmium (Cd) 96.1 % 80-120 25-AUC Calcilium (Ca) 94.1 % 80-120 25-AUC Calcilium (Cr) 95.4 % 80-120 25-AUC Chromium (Cr) 95.4 % 80-120 25-AUC Cobalt (Co) 87.4 % 80-120 25-AUC Copper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Lithium (Li) 90.8 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Silver (Na) 93.6 % 80-120 25-AUC Silver (Na) 94.4 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Tin (Sn) 94.6 % 80-120 25-AUC Tin (Sn) 95.8 % 80-120 25-AUC Tin (Sn) 94.6 % 80-120 25-AUC Tin (Sn) 94.6 % 80-120 25-AUC Tin (Sn) 94.6 % 80-120 25-AUC Tin (Sn) 95.8 % 80-120 25-AUC Tin (Sn) 94.6 % 80-120 25-AUC Tin (Sn) 95.8 % 80-120 25-AUC Tin (Sn) 95.8 % 80-120 25-AUC Tin (Sn) 95.8 % 80-120 25-AUC Tin (Sn) 94.6 % 80-120 25-AUC Tin (Sn) 95.8 % 80-120 25-AUC Tin (Sn) 94.6 % 80-1									25-AUG-18
Bismuth (Bi) Boron (B) Boron (B) Boron (B) Boron (B) Boron (B) Boron (B) Boron (Cd) Boro									25-AUG-18
Boron (B) 89.3 % 80-120 25-AUC Cadmium (Cd) 96.1 % 80-120 25-AUC Calcium (Ca) 94.1 % 80-120 25-AUC Calcium (Cr) 95.4 % 80-120 25-AUC Chromium (Cr) 95.4 % 80-120 25-AUC Cobalt (Co) 87.4 % 80-120 25-AUC Copper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Soldium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Tinalium (Ti) 90.1 % 80-120 25-AUC Tinalium (Ti) 91.7 % 80-120 25-AUC Tinalium (Ti) 91.7 % 80-120 25-AUC Tinalium (U) 94.4 % 80-120 25-AUC Tinalium (U) 94.3 % 80-120 25-AUC Tinalium (U) 95.8 % 80-120 25-AUC Tinalium (U) 95.8 % 80-120 25-AUC Tinalium (U) 94.3 % 80-120 25-AUC Tinalium (U) 95.8 % 80-120 25-AUC Tinalium (Ti) 95.8 % 80-120 25-AUC Tinalium (U) 95.8 % 80-1								80-120	25-AUG-18
Cadmium (Cd) 96.1 % 80-120 25-AUC Calcium (Ca) 94.1 % 80-120 25-AUC Chromium (Cr) 95.4 % 80-120 25-AUC Cobalt (Co) 87.4 % 80-120 25-AUC Copper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Lithium (Li) 90.8 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 95.1 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120	, ,							80-120	25-AUG-18
Calcium (Ca) 94.1 % 80-120 25-AUC Chromium (Cr) 95.4 % 80-120 25-AUC Cobalt (Co) 87.4 % 80-120 25-AUC Copper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Sulfur (S) 95.6 % 80-120 25-AUC Thallium (Ti) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Vanadium (V) 94.6 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Vanadium (V) 94.6 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Vanadium (V) 94.6 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Vanadium (V) 94.6 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Vanadium (V) 94.6 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Vanadium (V) 94.6 %	Boron (B)							80-120	25-AUG-18
Chromium (Cr) 95.4 % 80.120 25.AUC Cobalt (Co) 87.4 % 80.120 25.AUC Copper (Cu) 93.4 % 80.120 25.AUC Iron (Fe) 91.8 % 80.120 25.AUC Lead (Pb) 94.6 % 80.120 25.AUC Lithium (Li) 90.8 % 80.120 25.AUC Magnesium (Mg) 96.9 % 80.120 25.AUC Molybdenum (Mo) 97.3 % 80.120 25.AUC Nickel (Ni) 94.6 % 80.120 25.AUC Phosphorus (P) 93.8 % 80.120 25.AUC Selenium (Se) 95.2 % 80.120 25.AUC Sodium (Na) 93.6 % 80.120 25.AUC Sodium (Na) 95.6 % 80.120 25.AUC Sodium (Na) 95.6 % 80.120 25.AUC Tin (Sn) 95.6 % 80.120 25.AUC Tin (Sn) 95.6 % 80.120 25.AUC Uranium (U) 94.3 % 80.120 25.AUC Uranium (U) 94.3 % 80.120 25.AUC Vanadium (V) 95.8 % 80.120 25.AUC Zinc (Zn) 91.8 % 80.120 25.AUC Zinc (Zn) 91.8 % 80.120 25.AUC Zinc (Zn) 91.8 % 80.120 25.AUC Zinconium (Zr) 94.6 % 80.120 25.AUC Zinconium (Zr) 94.6 % 80.120 25.AUC Zinconium (Zr) 94.6 % 70.130 25.AUC				96.1		%		80-120	25-AUG-18
Cobalt (Co) 87.4 % 80-120 25-AUC Copper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Lithium (Li) 90.8 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120	Calcium (Ca)			94.1		%		80-120	25-AUG-18
Copper (Cu) 93.4 % 80-120 25-AUC Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Lithium (Li) 90.8 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 95.1 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120	Chromium (Cr)			95.4		%		80-120	25-AUG-18
Iron (Fe) 91.8 % 80-120 25-AUC Lead (Pb) 94.6 % 80-120 25-AUC Lithium (Li) 90.8 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Suffur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-	Cobalt (Co)			87.4		%		80-120	25-AUG-18
Lead (Pb) 94.6 % 80-120 25-AUC Lithium (Li) 90.8 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Manganese (Mn) 95.1 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Suffur (S) 95.4 % 80-120 25-AUC Suffur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-A	Copper (Cu)			93.4		%		80-120	25-AUG-18
Lithium (Li) 90.8 % 80-120 25-AUC Magnesium (Mg) 96.9 % 80-120 25-AUC Manganese (Mn) 95.1 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120	Iron (Fe)			91.8		%		80-120	25-AUG-18
Magnesium (Mg) 96.9 % 80-120 25-AUC Manganese (Mn) 95.1 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 80-120	Lead (Pb)			94.6		%		80-120	25-AUG-18
Manganese (Mn) 95.1 % 80-120 25-AUC Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 <td< td=""><td>Lithium (Li)</td><td></td><td></td><td>90.8</td><td></td><td>%</td><td></td><td>80-120</td><td>25-AUG-18</td></td<>	Lithium (Li)			90.8		%		80-120	25-AUG-18
Molybdenum (Mo) 97.3 % 80-120 25-AUC Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Magnesium (Mg)			96.9		%		80-120	25-AUG-18
Nickel (Ni) 94.6 % 80-120 25-AUC Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Uranium (U) 94.4 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Manganese (Mn)			95.1		%		80-120	25-AUG-18
Phosphorus (P) 93.8 % 80-120 25-AUC Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Uranjum (W) 94.4 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Molybdenum (Mo)			97.3		%		80-120	25-AUG-18
Potassium (K) 101.4 % 80-120 25-AUC Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Nickel (Ni)			94.6		%		80-120	25-AUG-18
Selenium (Se) 95.2 % 80-120 25-AUC Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Phosphorus (P)			93.8		%		80-120	25-AUG-18
Silver (Ag) 92.4 % 80-120 25-AUC Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Potassium (K)			101.4		%		80-120	25-AUG-18
Sodium (Na) 93.6 % 80-120 25-AUC Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Selenium (Se)			95.2		%		80-120	25-AUG-18
Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Silver (Ag)			92.4		%		80-120	25-AUG-18
Strontium (Sr) 102.5 % 80-120 25-AUC Sulfur (S) 95.4 % 80-120 25-AUC Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Sodium (Na)			93.6		%		80-120	25-AUG-18
Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Strontium (Sr)			102.5		%		80-120	25-AUG-18
Thallium (TI) 90.1 % 80-120 25-AUC Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Sulfur (S)			95.4		%		80-120	25-AUG-18
Tin (Sn) 95.6 % 80-120 25-AUC Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Thallium (TI)			90.1		%		80-120	25-AUG-18
Titanium (Ti) 91.7 % 80-120 25-AUC Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Tin (Sn)			95.6		%			25-AUG-18
Tungsten (W) 94.4 % 80-120 25-AUC Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC									25-AUG-18
Uranium (U) 94.3 % 80-120 25-AUC Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC	Tungsten (W)								25-AUG-18
Vanadium (V) 95.8 % 80-120 25-AUC Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC									25-AUG-18
Zinc (Zn) 91.8 % 80-120 25-AUC Zirconium (Zr) 94.6 % 70-130 25-AUC									25-AUG-18
Zirconium (Zr) 94.6 % 70-130 25-AUC									25-AUG-18
									25-AUG-18
ADICTUDE VA. CAIL	MOISTURE-VA	Soil						70-100	20 7.00-10



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		- 101011		-				.go 20 01 12
Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-VA	Soil							
Batch R4179036								
WG2854836-2 LCS Moisture			99.5		%		90-110	20-AUG-18
WG2854836-6 LCS Moisture			99.6		%		90-110	20-AUG-18
WG2854836-1 MB Moisture			<0.25		%		0.25	20-AUG-18
WG2854836-5 MB Moisture			<0.25		%		0.25	20-AUG-18
Batch R4179040								
WG2854255-4 DUP Moisture		L2148903-4 23.1	24.1		%	4.5	20	20-AUG-18
WG2854255-2 LCS Moisture			99.9		%		90-110	20-AUG-18
WG2854255-6 LCS Moisture			100.1		%		90-110	20-AUG-18
WG2854255-1 MB Moisture			<0.25		%		0.25	20-AUG-18
WG2854255-5 MB Moisture			<0.25		%		0.25	20-AUG-18
PAH-TMB-H/A-MS-VA	Soil							
Batch R4179582								
WG2854799-3 DUP Acenaphthene		L2148903-31 < 0.0050	<0.0050	RPD-NA	mg/kg	N/A	50	23-AUG-18
Acenaphthylene		<0.0050	< 0.0050	RPD-NA	mg/kg	N/A	50	23-AUG-18
Anthracene		<0.0040	<0.0040	RPD-NA	mg/kg	N/A	50	23-AUG-18
Benz(a)anthracene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Benzo(a)pyrene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Benzo(b&j)fluoranthene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Benzo(g,h,i)perylene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Benzo(k)fluoranthene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Chrysene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Dibenz(a,h)anthracene		<0.0050	<0.0050	RPD-NA	mg/kg	N/A	50	23-AUG-18
		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Fluoranthene								
Fluoranthene Fluorene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
	ı	<0.010 <0.010	<0.010 <0.010	RPD-NA RPD-NA	mg/kg mg/kg	N/A N/A	50 50	23-AUG-18 23-AUG-18
Fluorene	,	<0.010 <0.010 <0.050		RPD-NA RPD-NA RPD-NA	mg/kg mg/kg mg/kg	N/A N/A N/A	50 50 50	23-AUG-18 23-AUG-18 23-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	Soil							
Batch R4179582								
WG2854799-3 DUP		L2148903-31 < 0.010	-0.040		ma/k=	A1/A	50	00 41/0 40
Naphthalene Phenanthrene			<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
Pyrene Quinoline		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	23-AUG-18
		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	23-AUG-18
WG2854799-2 LCS Acenaphthene			85.4		%		60-130	22-AUG-18
Acenaphthylene			87.5		%		60-130	22-AUG-18
Anthracene			96.8		%		60-130	22-AUG-18
Benz(a)anthracene			82.5		%		60-130	22-AUG-18
Benzo(a)pyrene			83.1		%		60-130	22-AUG-18
Benzo(b&j)fluoranthene			91.0		%		60-130	22-AUG-18
Benzo(g,h,i)perylene			90.4		%		60-130	22-AUG-18
Benzo(k)fluoranthene			90.1		%		60-130	22-AUG-18
Chrysene			93.0		%		60-130	22-AUG-18
Dibenz(a,h)anthracene			84.8		%		60-130	22-AUG-18
Fluoranthene			91.5		%		60-130	22-AUG-18
Fluorene			83.9		%		60-130	22-AUG-18
Indeno(1,2,3-c,d)pyrene			85.1		%		60-130	22-AUG-18
1-Methylnaphthalene			85.1		%		60-130	22-AUG-18
2-Methylnaphthalene			91.6		%		60-130	22-AUG-18
Naphthalene			90.7		%		50-130	22-AUG-18
Phenanthrene			100.4		%		60-130	22-AUG-18
Pyrene			91.5		%		60-130	22-AUG-18
Quinoline			81.3		%		60-130	22-AUG-18
WG2854799-1 MB					_			
Acenaphthene			<0.0050		mg/kg		0.005	22-AUG-18
Acenaphthylene			<0.0050		mg/kg		0.005	22-AUG-18
Anthracene			<0.0040		mg/kg		0.004	22-AUG-18
Benz(a)anthracene			<0.010		mg/kg		0.01	22-AUG-18
Benzo(a)pyrene			<0.010		mg/kg		0.01	22-AUG-18
Benzo(b&j)fluoranthene			<0.010		mg/kg		0.01	22-AUG-18
Benzo(g,h,i)perylene			<0.010		mg/kg		0.01	22-AUG-18
Benzo(k)fluoranthene			<0.010		mg/kg		0.01	22-AUG-18
Chrysene			<0.010		mg/kg		0.01	22-AUG-18
Dibenz(a,h)anthracene			<0.0050		mg/kg		0.005	22-AUG-18



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Test Matrix	Reference Re	sult Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA Soil						
Batch R4179582						
WG2854799-1 MB						
Fluoranthene		0.010	mg/kg		0.01	22-AUG-18
Fluorene		0.010	mg/kg		0.01	22-AUG-18
Indeno(1,2,3-c,d)pyrene		0.010	mg/kg		0.01	22-AUG-18
1-Methylnaphthalene		0.050	mg/kg		0.05	22-AUG-18
2-Methylnaphthalene		0.010	mg/kg		0.01	22-AUG-18
Naphthalene	<(0.010	mg/kg		0.01	22-AUG-18
Phenanthrene	<(0.010	mg/kg		0.01	22-AUG-18
Pyrene	<(0.010	mg/kg		0.01	22-AUG-18
Quinoline	<(0.050	mg/kg		0.05	22-AUG-18
Surrogate: Naphthalene d8	89	0.7	%		50-130	22-AUG-18
Surrogate: Acenaphthene d10	91	.8	%		60-130	22-AUG-18
Surrogate: Phenanthrene d10	93	3.4	%		60-130	22-AUG-18
Surrogate: Chrysene d12	85	5.0	%		60-130	22-AUG-18
Batch R4180648						
WG2854662-2 LCS						
Acenaphthene		0.8	%		60-130	25-AUG-18
Acenaphthylene		2.3	%		60-130	25-AUG-18
Anthracene		l.5	%		60-130	25-AUG-18
Benz(a)anthracene		0.8	%		60-130	25-AUG-18
Benzo(a)pyrene).7	%		60-130	25-AUG-18
Benzo(b&j)fluoranthene		3.8	%		60-130	25-AUG-18
Benzo(g,h,i)perylene).3	%		60-130	25-AUG-18
Benzo(k)fluoranthene	83	3.9	%		60-130	25-AUG-18
Chrysene	83	3.4	%		60-130	25-AUG-18
Dibenz(a,h)anthracene	77	7.3	%		60-130	25-AUG-18
Fluoranthene	83	3.7	%		60-130	25-AUG-18
Fluorene	79	0.6	%		60-130	25-AUG-18
Indeno(1,2,3-c,d)pyrene	73	3.5	%		60-130	25-AUG-18
1-Methylnaphthalene	8′	.0	%		60-130	25-AUG-18
2-Methylnaphthalene	86	3.3	%		60-130	25-AUG-18
Naphthalene	83	3.2	%		50-130	25-AUG-18
Phenanthrene	82	2.9	%		60-130	25-AUG-18
Pyrene	84	1.2	%		60-130	25-AUG-18
Quinoline	84	1.3	%		60-130	25-AUG-18
WG2854662-1						



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	Soil							
Batch R4180648								
WG2854662-1 MB			0.0050		//		0.005	
Acenaphthene			<0.0050		mg/kg		0.005	25-AUG-18
Acenaphthylene Anthracene			<0.0050		mg/kg		0.005	25-AUG-18
			<0.0040	MDIOD	mg/kg		0.004	25-AUG-18
Benz(a)anthracene			0.018	MB-LOR	mg/kg		0.01	25-AUG-18
Benzo(a)pyrene			0.026	MB-LOR	mg/kg		0.01	25-AUG-18
Benzo(b&j)fluoranthene			0.044	MB-LOR	mg/kg		0.01	25-AUG-18
Benzo(g,h,i)perylene			0.037	MB-LOR	mg/kg		0.01	25-AUG-18
Benzo(k)fluoranthene			0.016	MB-LOR	mg/kg		0.01	25-AUG-18
Chrysene			0.023	MB-LOR	mg/kg		0.01	25-AUG-18
Dibenz(a,h)anthracene			0.0051	MB-LOR	mg/kg		0.005	25-AUG-18
Fluoranthene			0.017	MB-LOR	mg/kg		0.01	25-AUG-18
Fluorene			<0.010		mg/kg		0.01	25-AUG-18
Indeno(1,2,3-c,d)pyrene			0.032	MB-LOR	mg/kg		0.01	25-AUG-18
1-Methylnaphthalene			< 0.050		mg/kg		0.05	25-AUG-18
2-Methylnaphthalene			<0.010		mg/kg		0.01	25-AUG-18
Naphthalene			<0.010		mg/kg		0.01	25-AUG-18
Phenanthrene			<0.010		mg/kg		0.01	25-AUG-18
Pyrene			0.017	MB-LOR	mg/kg		0.01	25-AUG-18
Quinoline			<0.050		mg/kg		0.05	25-AUG-18
Surrogate: Naphthalene da	8		113.0		%		50-130	25-AUG-18
Surrogate: Acenaphthene	d10		112.8		%		60-130	25-AUG-18
Surrogate: Phenanthrene	d10		118.0		%		60-130	25-AUG-18
Surrogate: Chrysene d12			113.6		%		60-130	25-AUG-18
Batch R4183870								
WG2859920-2 LCS								
Acenaphthene			97.9		%		60-130	26-AUG-18
Acenaphthylene			97.7		%		60-130	26-AUG-18
Anthracene			98.1		%		60-130	26-AUG-18
Benz(a)anthracene			93.1		%		60-130	26-AUG-18
Benzo(a)pyrene			90.5		%		60-130	26-AUG-18
Benzo(b&j)fluoranthene			108.3		%		60-130	26-AUG-18
Benzo(g,h,i)perylene			60.1		%		60-130	26-AUG-18
Benzo(k)fluoranthene			94.1		%		60-130	26-AUG-18
Chrysene			86.4		%		60-130	26-AUG-18



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Test N	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TMB-H/A-MS-VA	Soil							
Batch R4183870								
WG2859920-2 LCS			75.4		0/			
Dibenz(a,h)anthracene			75.1		%		60-130	26-AUG-18
Fluoranthene			98.3		%		60-130	26-AUG-18
Fluorene			94.5		%		60-130	26-AUG-18
Indeno(1,2,3-c,d)pyrene			74.1		%		60-130	26-AUG-18
1-Methylnaphthalene			98.4		%		60-130	26-AUG-18
2-Methylnaphthalene			104.5		%		60-130	26-AUG-18
Naphthalene			100.3		%		50-130	26-AUG-18
Phenanthrene			98.9		%		60-130	26-AUG-18
Pyrene			95.9		%		60-130	26-AUG-18
Quinoline			96.8		%		60-130	26-AUG-18
WG2859920-1 MB			0.050					
Acenaphthene			<0.050		mg/kg		0.05	26-AUG-18
Acenaphthylene			<0.050		mg/kg		0.05	26-AUG-18
Anthracene			<0.040		mg/kg		0.04	26-AUG-18
Benz(a)anthracene			<0.10		mg/kg		0.1	26-AUG-18
Benzo(a)pyrene			<0.10		mg/kg		0.1	26-AUG-18
Benzo(b&j)fluoranthene			<0.10		mg/kg		0.1	26-AUG-18
Benzo(g,h,i)perylene			<0.10		mg/kg		0.1	26-AUG-18
Benzo(k)fluoranthene			<0.10		mg/kg		0.1	26-AUG-18
Chrysene			<0.10		mg/kg		0.1	26-AUG-18
Dibenz(a,h)anthracene			< 0.050		mg/kg		0.05	26-AUG-18
Fluoranthene			<0.10		mg/kg		0.1	26-AUG-18
Fluorene			<0.10		mg/kg		0.1	26-AUG-18
Indeno(1,2,3-c,d)pyrene			<0.10		mg/kg		0.1	26-AUG-18
1-Methylnaphthalene			<0.50		mg/kg		0.5	26-AUG-18
2-Methylnaphthalene			<0.10		mg/kg		0.1	26-AUG-18
Naphthalene			<0.10		mg/kg		0.1	26-AUG-18
Phenanthrene			<0.10		mg/kg		0.1	26-AUG-18
Pyrene			<0.10		mg/kg		0.1	26-AUG-18
Quinoline			<0.50		mg/kg		0.5	26-AUG-18
Surrogate: Naphthalene d8	3		95.0		%		50-130	26-AUG-18
Surrogate: Acenaphthene	d10		97.7		%		60-130	26-AUG-18
Surrogate: Phenanthrene of	d10		93.5		%		60-130	26-AUG-18
Surrogate: Chrysene d12			89.1		%		60-130	26-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PH-1:2-VA	Soil							
Batch R4180592								
WG2854861-5 IRM		VA-ALP-SRS						
pH (1:2 soil:water)			6.38		рН		6-6.6	22-AUG-18
Batch R4180620								
WG2854756-5 IRM		VA-ALP-SRS						
pH (1:2 soil:water)			6.40		рН		6-6.6	22-AUG-18
Batch R4180752								
WG2855862-2 DUP		L2148903-24						
pH (1:2 soil:water)		8.26	8.25	J	рН	0.01	0.2	22-AUG-18
WG2855862-5 IRM pH (1:2 soil:water)		VA-ALP-SRS	1507 6.47		nU		0.00	00 4110 40
			0.47		рН		6-6.6	22-AUG-18
Batch R4181694			.=					
WG2855306-5 IRM pH (1:2 soil:water)		VA-ALP-SRS	1 507 6.50		рН		6-6.6	23-AUG-18
F (<u> </u>					F		0 0.0	207.00 10
Batch R4181842								
WG2856086-2 DUP		L2148903-63						
pH (1:2 soil:water)		8.35	8.42	J	рН	0.07	0.2	23-AUG-18
WG2856086-5 IRM		VA-ALP-SRS						
pH (1:2 soil:water)			6.37		рН		6-6.6	23-AUG-18
Batch R4183079								
WG2856011-5 IRM pH (1:2 soil:water)		VA-ALP-SRS	1507 6.38		рН		0.00	05 ALIO 40
pri (1.2 soll.water)			0.30		рп		6-6.6	25-AUG-18
PSA-PIPET+GRAVEL-SK	Soil							
Batch R4182109								
WG2855866-1 DUP		L2148903-8	4.0		0/		0.5	
% Gravel (>2mm)	· · · · · ·	1.3	1.3		%	0.0	25	23-AUG-18
% Sand (2.0mm - 0.063m % Silt (0.063mm - 4um)	1111)	51.4	52.4	J	%	0.9	5	23-AUG-18
% Siit (0.063iiiii - 4uiii) % Clay (<4um)		39.9 7.4	39.0 7.3	J	%	0.9	5	23-AUG-18
• • •			1.3	J	70	0.1	5	23-AUG-18
WG2855866-2 IRM % Sand (2.0mm - 0.063m	nm)	2017-PSA	44.2		%		39.1-49.1	23-AUG-18
% Silt (0.063mm - 4um)	,		37.1		%		32.5-42.5	23-AUG-18
% Clay (<4um)			18.7		%		13.4-23.4	23-AUG-18



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Test Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PSA-PIPET+GRAVEL-SK Soil							
Batch R4182174							
WG2855874-1 DUP	L2148903-48						
% Gravel (>2mm)	7.0	7.0		%	0.0	25	23-AUG-18
% Sand (2.0mm - 0.063mm)	31.7	30.6	J	%	1.2	5	23-AUG-18
% Silt (0.063mm - 4um)	46.2	46.9	J	%	0.7	5	23-AUG-18
% Clay (<4um)	15.1	15.5	J	%	0.5	5	23-AUG-18
WG2855874-2 IRM % Sand (2.0mm - 0.063mm)	2017-PSA	46.6		%		39.1-49.1	23-AUG-18
% Silt (0.063mm - 4um)		34.1		%		32.5-42.5	23-AUG-18
% Clay (<4um)		19.4		%		13.4-23.4	23-AUG-18
Batch R4182537							
WG2855869-1 DUP	L2148903-27						
% Gravel (>2mm)	5.6	5.6		%	0.0	25	23-AUG-18
% Sand (2.0mm - 0.063mm)	51.1	50.6	J	%	0.5	5	23-AUG-18
% Silt (0.063mm - 4um)	33.4	33.6	J	%	0.3	5	23-AUG-18
% Clay (<4um)	10.0	10.2	J	%	0.2	5	23-AUG-18
WG2855869-2 IRM % Sand (2.0mm - 0.063mm)	2017-PSA	43.8		%		39.1-49.1	23-AUG-18
% Silt (0.063mm - 4um)		37.2		%		32.5-42.5	23-AUG-18
% Clay (<4um)		18.9		%		13.4-23.4	23-AUG-18
Batch R4182997							
WG2855878-2 IRM	2017-PSA						
% Sand (2.0mm - 0.063mm)		44.1		%		39.1-49.1	24-AUG-18
% Silt (0.063mm - 4um)		37.0		%		32.5-42.5	24-AUG-18
% Clay (<4um)		18.9		%		13.4-23.4	24-AUG-18
VOC-HSMS-VA Soil							
Batch R4172291							
WG2858608-3 DUP	L2148903-4						
Bromodichloromethane	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Bromoform	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Carbon Tetrachloride	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Chlorobenzene	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Dibromochloromethane	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Chloroethane	<0.10	<0.10	RPD-NA	mg/kg	N/A	50	02-AUG-18
Chloroform	<0.10	<0.10	RPD-NA	mg/kg	N/A	50	02-AUG-18
Chloromethane	<0.10	<0.10	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,2-Dichlorobenzene	<0.050	< 0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-HSMS-VA	Soil							
Batch R4172	291							
	UP	L2148903-4						
1,3-Dichlorobenzer		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,4-Dichlorobenzer	e	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,1-Dichloroethane		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,2-Dichloroethane		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,1-Dichloroethylen		<0.070	<0.070	RPD-NA	mg/kg	N/A	50	02-AUG-18
cis-1,2-Dichloroethy	/lene	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
trans-1,2-Dichloroe	thylene	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Dichloromethane		<0.30	<0.30	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,2-Dichloropropan	е	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
cis-1,3-Dichloropro	pylene	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
trans-1,3-Dichlorop		<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,1,1,2-Tetrachloro	ethane	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,1,2,2-Tetrachloro	ethane	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Tetrachloroethylene	9	< 0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,1,1-Trichloroetha	ne	<0.050	<0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
1,1,2-Trichloroetha	ne	< 0.050	< 0.050	RPD-NA	mg/kg	N/A	50	02-AUG-18
Trichloroethylene		<0.010	<0.010	RPD-NA	mg/kg	N/A	50	02-AUG-18
Trichlorofluorometh	ane	<0.10	<0.10	RPD-NA	mg/kg	N/A	50	02-AUG-18
Vinyl Chloride		<0.10	<0.10	RPD-NA	mg/kg	N/A	50	02-AUG-18
WG2855489-2 LG Bromodichlorometh	CS nane		78.0		%		70-130	22-AUG-18
Bromoform			79.3		%		70-130	22-AUG-18
Carbon Tetrachlorio	de		65.6	LCS-ND	%		70-130	22-AUG-18
Chlorobenzene			89.4		%		70-130	22-AUG-18
Dibromochlorometh	nane		108.8		%		70-130	22-AUG-18
Chloroethane			75.1		%		60-140	22-AUG-18
Chloroform			99.9		%		70-130	22-AUG-18
Chloromethane			84.6		%		60-140	22-AUG-18
1,2-Dichlorobenzer	e		72.5		%		70-130	22-AUG-18
1,3-Dichlorobenzer	e		62.9	LCS-ND	%		70-130	22-AUG-18
1,4-Dichlorobenzer			66.0	LCS-ND	%		70-140	22-AUG-18
1,1-Dichloroethane			82.3		%		70-130	22-AUG-18
1,2-Dichloroethane			76.0		%		70-130	22-AUG-18
1,1-Dichloroethylen	Δ.		66.0	LCS-ND	%		70-130	22-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-HSMS-VA	Soil							
Batch R4172291								
WG2855489-2 LCS								
cis-1,2-Dichloroethylene			66.5	LCS-ND	%		70-130	22-AUG-18
trans-1,2-Dichloroethylene)		64.6	LCS-ND	%		70-130	22-AUG-18
Dichloromethane			71.3		%		60-140	22-AUG-18
1,2-Dichloropropane			78.1		%		70-130	22-AUG-18
cis-1,3-Dichloropropylene			84.7		%		70-130	22-AUG-18
trans-1,3-Dichloropropylen	ne		77.5		%		70-130	22-AUG-18
1,1,1,2-Tetrachloroethane			83.9		%		70-130	22-AUG-18
1,1,2,2-Tetrachloroethane			81.9		%		70-130	22-AUG-18
Tetrachloroethylene			78.8		%		70-130	22-AUG-18
1,1,1-Trichloroethane			86.2		%		70-130	22-AUG-18
1,1,2-Trichloroethane			91.4		%		70-130	22-AUG-18
Trichloroethylene			67.7	LCS-ND	%		70-130	22-AUG-18
Trichlorofluoromethane			69.8		%		60-140	22-AUG-18
Vinyl Chloride			71.3		%		60-140	22-AUG-18
WG2858602-2 LCS								
Bromodichloromethane			105.5		%		70-130	27-AUG-18
Bromoform			112.9		%		70-130	27-AUG-18
Carbon Tetrachloride			87.2		%		70-130	27-AUG-18
Chlorobenzene			123.8		%		70-130	27-AUG-18
Dibromochloromethane			107.4		%		70-130	27-AUG-18
Chloroethane			100.1		%		60-140	27-AUG-18
Chloroform			131.0	LCS-ND	%		70-130	27-AUG-18
Chloromethane			110.8		%		60-140	27-AUG-18
1,2-Dichlorobenzene			99.1		%		70-130	27-AUG-18
1,3-Dichlorobenzene			85.1		%		70-130	27-AUG-18
1,4-Dichlorobenzene			88.7		%		70-140	27-AUG-18
1,1-Dichloroethane			109.1		%		70-130	27-AUG-18
1,2-Dichloroethane			101.3		%		70-130	27-AUG-18
1,1-Dichloroethylene			87.1		%		70-130	27-AUG-18
cis-1,2-Dichloroethylene			92.5		%		70-130	27-AUG-18
trans-1,2-Dichloroethylene)		84.7		%		70-130	27-AUG-18
Dichloromethane			96.2		%		60-140	27-AUG-18
1,2-Dichloropropane			104.5		%		70-130	27-AUG-18
cis-1,3-Dichloropropylene			111.8		%		70-130	27-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-HSMS-VA	Soil							
Batch R4172291								
WG2858602-2 LCS			407.7		0/			
trans-1,3-Dichloropropyle			107.7		%		70-130	27-AUG-18
1,1,1,2-Tetrachloroethan			115.4		%		70-130	27-AUG-18
1,1,2,2-Tetrachloroethan	е		115.5		%		70-130	27-AUG-18
Tetrachloroethylene			108.4		%		70-130	27-AUG-18
1,1,1-Trichloroethane			114.8		%		70-130	27-AUG-18
1,1,2-Trichloroethane			127.6		%		70-130	27-AUG-18
Trichloroethylene			90.1		%		70-130	27-AUG-18
Trichlorofluoromethane			77.8		%		60-140	27-AUG-18
Vinyl Chloride			93.4		%		60-140	27-AUG-18
WG2860196-2 LCS Bromodichloromethane			104.7		%		70-130	26-AUG-18
Bromoform			107.9		%		70-130	26-AUG-18
Carbon Tetrachloride			86.3		%		70-130	26-AUG-18
Chlorobenzene			129.1		%		70-130	26-AUG-18
Dibromochloromethane			110.4		%		70-130	26-AUG-18
Chloroethane			106.5		%		60-140	26-AUG-18
Chloroform			92.0		%		70-130	26-AUG-18
Chloromethane			124.3		%		60-140	26-AUG-18
1,2-Dichlorobenzene			102.5		%		70-130	26-AUG-18
1,3-Dichlorobenzene			92.3		%		70-130	26-AUG-18
1,4-Dichlorobenzene			96.8		%		70-140	26-AUG-18
1,1-Dichloroethane			108.3		%		70-130	26-AUG-18
1,2-Dichloroethane			98.5		%		70-130	26-AUG-18
1,1-Dichloroethylene			89.7		%		70-130	26-AUG-18
cis-1,2-Dichloroethylene			92.2		%		70-130	26-AUG-18
trans-1,2-Dichloroethylen	ne		89.1		%		70-130	26-AUG-18
Dichloromethane			96.1		%		60-140	26-AUG-18
1,2-Dichloropropane			104.9		%		70-130	26-AUG-18
cis-1,3-Dichloropropylene	Э		101.3		%		70-130	26-AUG-18
trans-1,3-Dichloropropyle	ene		106.5		%		70-130	26-AUG-18
1,1,1,2-Tetrachloroethan	е		119.8		%		70-130	26-AUG-18
1,1,2,2-Tetrachloroethan	е		110.8		%		70-130	26-AUG-18
Tetrachloroethylene			116.5		%		70-130	26-AUG-18
1,1,1-Trichloroethane			113.7		%		70-130	26-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
OC-HSMS-VA	Soil							
Batch R417229	1							
WG2860196-2 LCS			20.0		0.4			
1,1,2-Trichloroethane			83.8		%		70-130	26-AUG-18
Trichloroethylene			93.8		%		70-130	26-AUG-18
Trichlorofluoromethan	е		88.0		%		60-140	26-AUG-18
Vinyl Chloride			104.5		%		60-140	26-AUG-18
WG2861388-2 LCS Bromodichloromethan	e		99.3		%		70-130	28-AUG-18
Bromoform			108.5		%		70-130	28-AUG-18
Carbon Tetrachloride			82.2		%		70-130	28-AUG-18
Chlorobenzene			100.9		%		70-130	28-AUG-18
Dibromochloromethan	e		90.8		%		70-130	28-AUG-18
Chloroethane			94.9		%		60-140	28-AUG-18
Chloroform			87.8		%		70-130	28-AUG-18
Chloromethane			102.7		%		60-140	28-AUG-18
1,2-Dichlorobenzene			103.1		%		70-130	28-AUG-18
1,3-Dichlorobenzene			91.7		%		70-130	28-AUG-18
1,4-Dichlorobenzene			95.3		%		70-140	28-AUG-18
1,1-Dichloroethane			104.5		%		70-130	28-AUG-18
1,2-Dichloroethane			93.6		%		70-130	28-AUG-18
1,1-Dichloroethylene			82.7		%		70-130	28-AUG-18
cis-1,2-Dichloroethyler	ne		87.8		%		70-130	28-AUG-18
trans-1,2-Dichloroethy			84.7		%		70-130	28-AUG-18
Dichloromethane			90.6		%		60-140	28-AUG-18
1,2-Dichloropropane			101.3		%		70-130	28-AUG-18
cis-1,3-Dichloropropyle	ene		92.1		%		70-130	28-AUG-18
trans-1,3-Dichloroprop	ylene		99.6		%		70-130	28-AUG-18
1,1,1,2-Tetrachloroeth			92.2		%		70-130	28-AUG-18
1,1,2,2-Tetrachloroeth	ane		113.0		%		70-130	28-AUG-18
Tetrachloroethylene			90.5		%		70-130	28-AUG-18
1,1,1-Trichloroethane			109.3		%		70-130	28-AUG-18
1,1,2-Trichloroethane			95.7		%		70-130	28-AUG-18
Trichloroethylene			89.4		%		70-130	28-AUG-18
Trichlorofluoromethan	е		76.9		%		60-140	28-AUG-18
Vinyl Chloride			88.7		%		60-140	28-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-HSMS-VA	Soil							
Batch R41722	91							
WG2855489-1 MB								
Bromoform			<0.050		mg/kg		0.05	22-AUG-18
Carbon Tetrachloride	•		<0.050		mg/kg		0.05	22-AUG-18
Chlorobenzene			<0.050		mg/kg		0.05	22-AUG-18
Dibromochlorometha	ne		<0.050		mg/kg		0.05	22-AUG-18
Chloroethane			<0.10		mg/kg		0.1	22-AUG-18
Chloroform			<0.10		mg/kg		0.1	22-AUG-18
Chloromethane			<0.10		mg/kg		0.1	22-AUG-18
1,2-Dichlorobenzene			< 0.050		mg/kg		0.05	22-AUG-18
1,3-Dichlorobenzene			< 0.050		mg/kg		0.05	22-AUG-18
1,4-Dichlorobenzene			< 0.050		mg/kg		0.05	22-AUG-18
1,1-Dichloroethane			< 0.050		mg/kg		0.05	22-AUG-18
1,2-Dichloroethane			< 0.050		mg/kg		0.05	22-AUG-18
1,1-Dichloroethylene			< 0.050		mg/kg		0.05	22-AUG-18
cis-1,2-Dichloroethyle	ene		< 0.050		mg/kg		0.05	22-AUG-18
trans-1,2-Dichloroeth	ylene		< 0.050		mg/kg		0.05	22-AUG-18
Dichloromethane			< 0.30		mg/kg		0.3	22-AUG-18
1,2-Dichloropropane			< 0.050		mg/kg		0.05	22-AUG-18
cis-1,3-Dichloropropy	rlene		< 0.050		mg/kg		0.05	22-AUG-18
trans-1,3-Dichloropro	pylene		<0.050		mg/kg		0.05	22-AUG-18
1,1,1,2-Tetrachloroet	hane		< 0.050		mg/kg		0.05	22-AUG-18
1,1,2,2-Tetrachloroet	hane		< 0.050		mg/kg		0.05	22-AUG-18
Tetrachloroethylene			< 0.050		mg/kg		0.05	22-AUG-18
1,1,1-Trichloroethane	e		< 0.050		mg/kg		0.05	22-AUG-18
1,1,2-Trichloroethane)		< 0.050		mg/kg		0.05	22-AUG-18
Trichloroethylene			<0.010		mg/kg		0.01	22-AUG-18
Trichlorofluorometha	ne		<0.10		mg/kg		0.1	22-AUG-18
Vinyl Chloride			<0.10		mg/kg		0.1	22-AUG-18
WG2858602-1 MB								
Bromodichlorometha	ne		< 0.050		mg/kg		0.05	27-AUG-18
Bromoform			< 0.050		mg/kg		0.05	27-AUG-18
Carbon Tetrachloride	•		< 0.050		mg/kg		0.05	27-AUG-18
Chlorobenzene			< 0.050		mg/kg		0.05	27-AUG-18
Dibromochlorometha	ne		< 0.050		mg/kg		0.05	27-AUG-18
Chloroethane			<0.10		mg/kg		0.1	27-AUG-18



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est	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
/OC-HSMS-VA	Soil							
Batch R4172291								
WG2858602-1 MB			0.40					
Chloroform			<0.10		mg/kg		0.1	27-AUG-18
Chloromethane			<0.10		mg/kg		0.1	27-AUG-18
1,2-Dichlorobenzene			<0.050		mg/kg		0.05	27-AUG-18
1,3-Dichlorobenzene			<0.050		mg/kg		0.05	27-AUG-18
1,4-Dichlorobenzene			<0.050		mg/kg		0.05	27-AUG-18
1,1-Dichloroethane			<0.050		mg/kg		0.05	27-AUG-18
1,2-Dichloroethane			< 0.050		mg/kg		0.05	27-AUG-18
1,1-Dichloroethylene			< 0.050		mg/kg		0.05	27-AUG-18
cis-1,2-Dichloroethylene			<0.050		mg/kg		0.05	27-AUG-18
trans-1,2-Dichloroethyle	ne		< 0.050		mg/kg		0.05	27-AUG-18
Dichloromethane			< 0.30		mg/kg		0.3	27-AUG-18
1,2-Dichloropropane			< 0.050		mg/kg		0.05	27-AUG-18
cis-1,3-Dichloropropyler	ie		< 0.050		mg/kg		0.05	27-AUG-18
trans-1,3-Dichloropropyl	ene		< 0.050		mg/kg		0.05	27-AUG-18
1,1,1,2-Tetrachloroetha	ne		< 0.050		mg/kg		0.05	27-AUG-18
1,1,2,2-Tetrachloroethau	ne		< 0.050		mg/kg		0.05	27-AUG-18
Tetrachloroethylene			< 0.050		mg/kg		0.05	27-AUG-18
1,1,1-Trichloroethane			< 0.050		mg/kg		0.05	27-AUG-18
1,1,2-Trichloroethane			< 0.050		mg/kg		0.05	27-AUG-18
Trichloroethylene			<0.010		mg/kg		0.01	27-AUG-18
Trichlorofluoromethane			<0.10		mg/kg		0.1	27-AUG-18
Vinyl Chloride			<0.10		mg/kg		0.1	27-AUG-18
WG2860196-1 MB								
Bromodichloromethane			< 0.050		mg/kg		0.05	26-AUG-18
Bromoform			< 0.050		mg/kg		0.05	26-AUG-18
Carbon Tetrachloride			< 0.050		mg/kg		0.05	26-AUG-18
Chlorobenzene			< 0.050		mg/kg		0.05	26-AUG-18
Dibromochloromethane			< 0.050		mg/kg		0.05	26-AUG-18
Chloroethane			<0.10		mg/kg		0.1	26-AUG-18
Chloroform			<0.10		mg/kg		0.1	26-AUG-18
Chloromethane			<0.10		mg/kg		0.1	26-AUG-18
1,2-Dichlorobenzene			< 0.050		mg/kg		0.05	26-AUG-18
1,3-Dichlorobenzene			<0.050		mg/kg		0.05	26-AUG-18
1,4-Dichlorobenzene			<0.050		mg/kg		0.05	26-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-HSMS-VA	Soil							
Batch R41722	291							
WG2860196-1 ME	3							
1,1-Dichloroethane			<0.050		mg/kg		0.05	26-AUG-18
1,2-Dichloroethane			<0.050		mg/kg		0.05	26-AUG-18
1,1-Dichloroethylene			<0.050		mg/kg		0.05	26-AUG-18
cis-1,2-Dichloroethyl			<0.050		mg/kg		0.05	26-AUG-18
trans-1,2-Dichloroetl	hylene		< 0.050		mg/kg		0.05	26-AUG-18
Dichloromethane			<0.30		mg/kg		0.3	26-AUG-18
1,2-Dichloropropane	•		< 0.050		mg/kg		0.05	26-AUG-18
cis-1,3-Dichloroprop	ylene		<0.050		mg/kg		0.05	26-AUG-18
trans-1,3-Dichloropro	opylene		<0.050		mg/kg		0.05	26-AUG-18
1,1,1,2-Tetrachloroe	thane		< 0.050		mg/kg		0.05	26-AUG-18
1,1,2,2-Tetrachloroe	thane		< 0.050		mg/kg		0.05	26-AUG-18
Tetrachloroethylene			< 0.050		mg/kg		0.05	26-AUG-18
1,1,1-Trichloroethan	е		< 0.050		mg/kg		0.05	26-AUG-18
1,1,2-Trichloroethan	е		< 0.050		mg/kg		0.05	26-AUG-18
Trichloroethylene			<0.010		mg/kg		0.01	26-AUG-18
Trichlorofluorometha	ane		<0.10		mg/kg		0.1	26-AUG-18
Vinyl Chloride			<0.10		mg/kg		0.1	26-AUG-18
WG2861388-1 ME	3							
Bromodichlorometha	ane		<0.050		mg/kg		0.05	28-AUG-18
Bromoform			< 0.050		mg/kg		0.05	28-AUG-18
Carbon Tetrachloride	e		< 0.050		mg/kg		0.05	28-AUG-18
Chlorobenzene			< 0.050		mg/kg		0.05	28-AUG-18
Dibromochlorometha	ane		< 0.050		mg/kg		0.05	28-AUG-18
Chloroethane			<0.10		mg/kg		0.1	28-AUG-18
Chloroform			<0.10		mg/kg		0.1	28-AUG-18
Chloromethane			<0.10		mg/kg		0.1	28-AUG-18
1,2-Dichlorobenzene	e		< 0.050		mg/kg		0.05	28-AUG-18
1,3-Dichlorobenzene	e		< 0.050		mg/kg		0.05	28-AUG-18
1,4-Dichlorobenzene)		<0.050		mg/kg		0.05	28-AUG-18
1,1-Dichloroethane			<0.050		mg/kg		0.05	28-AUG-18
1,2-Dichloroethane			<0.050		mg/kg		0.05	28-AUG-18
1,1-Dichloroethylene)		< 0.050		mg/kg		0.05	28-AUG-18
cis-1,2-Dichloroethyl	lene		< 0.050		mg/kg		0.05	28-AUG-18
trans-1,2-Dichloroetl	hylene		< 0.050		mg/kg		0.05	28-AUG-18



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VOC-HSMS-VA So Batch R4172291							Analyzed
Batch R4172291	·==						
WG2861388-1 MB							
Dichloromethane		<0.30		mg/kg		0.3	28-AUG-18
1,2-Dichloropropane		<0.050		mg/kg		0.05	28-AUG-18
cis-1,3-Dichloropropylene		<0.050		mg/kg		0.05	28-AUG-18
trans-1,3-Dichloropropylene		<0.050		mg/kg		0.05	28-AUG-18
1,1,1,2-Tetrachloroethane		<0.050		mg/kg		0.05	28-AUG-18
1,1,2,2-Tetrachloroethane		<0.050		mg/kg		0.05	28-AUG-18
Tetrachloroethylene		<0.050		mg/kg		0.05	28-AUG-18
1,1,1-Trichloroethane		<0.050		mg/kg		0.05	28-AUG-18
1,1,2-Trichloroethane		<0.050		mg/kg		0.05	28-AUG-18
Trichloroethylene		<0.010		mg/kg		0.01	28-AUG-18
Trichlorofluoromethane		<0.10		mg/kg		0.1	28-AUG-18
Vinyl Chloride		<0.10		mg/kg		0.1	28-AUG-18
VOC7-L-HSMS-VA So	il						
Batch R4172291							
WG2858608-3 DUP Benzene	L2148903-4 <0.0050	<0.0050	RPD-NA	mg/kg	N/A	40	02-AUG-18
Ethylbenzene	<0.015	<0.015	RPD-NA	mg/kg	N/A	40	02-AUG-18
Methyl t-butyl ether (MTBE)	<0.20	<0.20	RPD-NA	mg/kg	N/A	40	02-AUG-18
Styrene	<0.050	<0.050	RPD-NA	mg/kg	N/A	40	02-AUG-18
Toluene	<0.050	<0.050	RPD-NA	mg/kg	N/A	40	02-AUG-18
meta- & para-Xylene	<0.050	<0.050	RPD-NA	mg/kg	N/A	40	02-AUG-18
ortho-Xylene	<0.050	<0.050	RPD-NA	mg/kg	N/A	40	02-AUG-18
WG2855489-2 LCS		69.6	LCS-ND	%		70.400	00 1110 10
Benzene			LC2-ND			70-130	22-AUG-18
Ethylbenzene		103.3	1.00 ND	%		70-130	22-AUG-18
Methyl t-butyl ether (MTBE)		69.4	LCS-ND	%		70-130	22-AUG-18
Styrene		75.9		%		70-130	22-AUG-18
Toluene		81.8		%		70-130	22-AUG-18
meta- & para-Xylene		78.0		%		70-130	22-AUG-18
ortho-Xylene		72.6		%		70-130	22-AUG-18
WG2858602-2 LCS Benzene		92.5		%		70-130	27-AUG-18
Ethylbenzene		98.0		%		70-130	27-AUG-18
Methyl t-butyl ether (MTBE)		94.5		%		70-130	27-AUG-18
Styrene		105.2		%		70-130	27-AUG-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC7-L-HSMS-VA	Soil							
Batch R41722	91							
WG2858602-2 LC	S							
Toluene			115.0		%		70-130	27-AUG-18
meta- & para-Xylene			107.6		%		70-130	27-AUG-18
ortho-Xylene	_		100.4		%		70-130	27-AUG-18
WG2860196-2 LC Benzene	S		93.5		%		70-130	26-AUG-18
Ethylbenzene			107.6		%		70-130	26-AUG-18
Methyl t-butyl ether (MTBE)		98.7		%		70-130	26-AUG-18
Styrene	···· – –,		114.4		%		70-130	26-AUG-18
Toluene			118.0		%		70-130	26-AUG-18
meta- & para-Xylene	!		115.6		%		70-130	26-AUG-18
ortho-Xylene			106.9		%		70-130	26-AUG-18
WG2861388-2 LC	s							207.00
Benzene			89.2		%		70-130	28-AUG-18
Ethylbenzene			86.0		%		70-130	28-AUG-18
Methyl t-butyl ether (MTBE)		97.1		%		70-130	28-AUG-18
Styrene			87.6		%		70-130	28-AUG-18
Toluene			86.6		%		70-130	28-AUG-18
meta- & para-Xylene	•		89.5		%		70-130	28-AUG-18
ortho-Xylene			82.7		%		70-130	28-AUG-18
WG2855489-1 ME	3							
Benzene			<0.0050		mg/kg		0.005	22-AUG-18
Ethylbenzene			<0.015		mg/kg		0.015	22-AUG-18
Methyl t-butyl ether (MTBE)		<0.20		mg/kg		0.2	22-AUG-18
Styrene			< 0.050		mg/kg		0.05	22-AUG-18
Toluene			< 0.050		mg/kg		0.05	22-AUG-18
meta- & para-Xylene			< 0.050		mg/kg		0.05	22-AUG-18
ortho-Xylene			<0.050		mg/kg		0.05	22-AUG-18
WG2858602-1 MB	1		0.0050					
Benzene			<0.0050		mg/kg		0.005	27-AUG-18
Ethylbenzene	MTDE)		<0.015		mg/kg		0.015	27-AUG-18
Methyl t-butyl ether (MIBE)		<0.20		mg/kg		0.2	27-AUG-18
Styrene			<0.050		mg/kg		0.05	27-AUG-18
Toluene			<0.050		mg/kg		0.05	27-AUG-18
meta- & para-Xylene			<0.050		mg/kg		0.05	27-AUG-18
ortho-Xylene			<0.050		mg/kg		0.05	27-AUG-18



Page 41 of 42

Workorder: L2148903 Report Date: 28-AUG-18

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC7-L-HSMS-VA	Soil							_
Batch R41722 WG2860196-1 ME	_							
Benzene			< 0.0050		mg/kg		0.005	26-AUG-18
Ethylbenzene			< 0.015		mg/kg		0.015	26-AUG-18
Methyl t-butyl ether	(MTBE)		<0.20		mg/kg		0.2	26-AUG-18
Styrene			< 0.050		mg/kg		0.05	26-AUG-18
Toluene			< 0.050		mg/kg		0.05	26-AUG-18
meta- & para-Xylene	e		< 0.050		mg/kg		0.05	26-AUG-18
ortho-Xylene			< 0.050		mg/kg		0.05	26-AUG-18
WG2861388-1 ME	3							
Benzene			<0.0050		mg/kg		0.005	28-AUG-18
Ethylbenzene			<0.015		mg/kg		0.015	28-AUG-18
Methyl t-butyl ether	(MTBE)		<0.20		mg/kg		0.2	28-AUG-18
Styrene			< 0.050		mg/kg		0.05	28-AUG-18
Toluene			< 0.050		mg/kg		0.05	28-AUG-18
meta- & para-Xylene	e		< 0.050		mg/kg		0.05	28-AUG-18
ortho-Xylene			< 0.050		mg/kg		0.05	28-AUG-18

Workorder: L2148903 Report Date: 28-AUG-18 Page 42 of 42

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
LCS-ND	Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

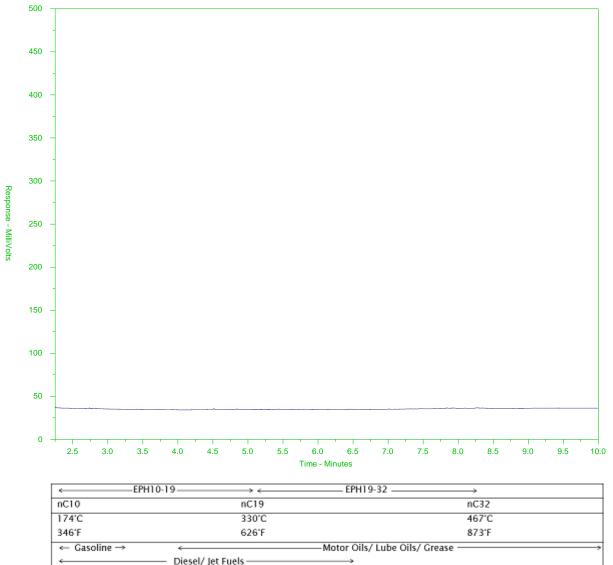
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

BC EPH HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2148903-1 Client Sample ID: SW-1-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

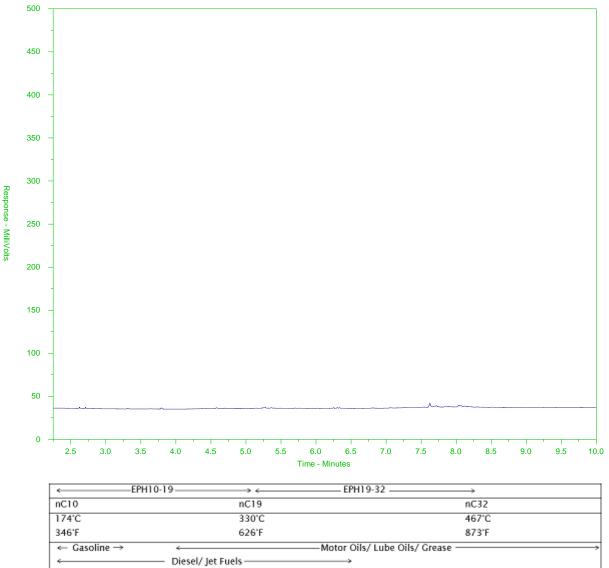
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

Note: This chromatogram was produced using GC conditions that are specific to the ALS Canada EPH method. Refer to the ALS Canada EPH Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR library can be found at www.alsglobal.com.



ALS Sample ID: L2148903-4 Client Sample ID: SW-2-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

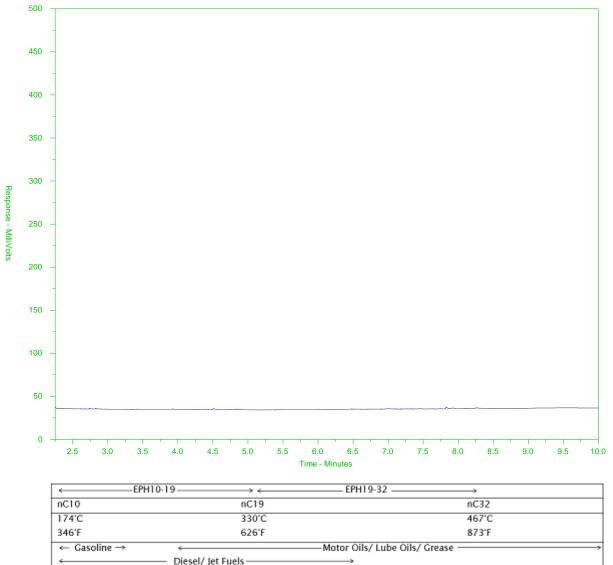
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-7 Client Sample ID: SW-3-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

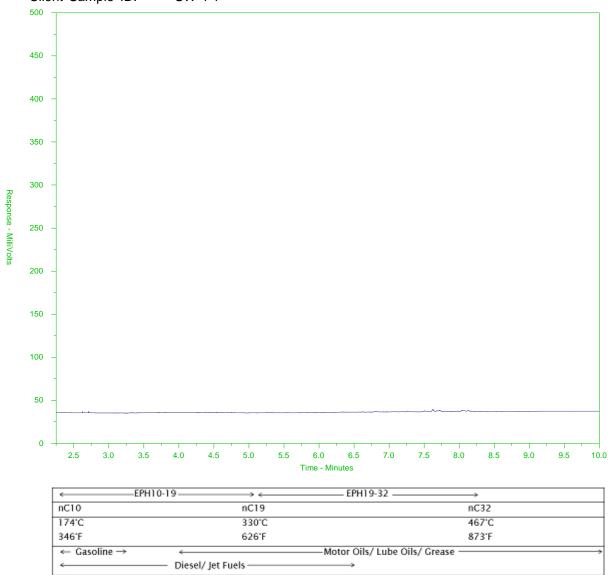
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-10 Client Sample ID: SW-4-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

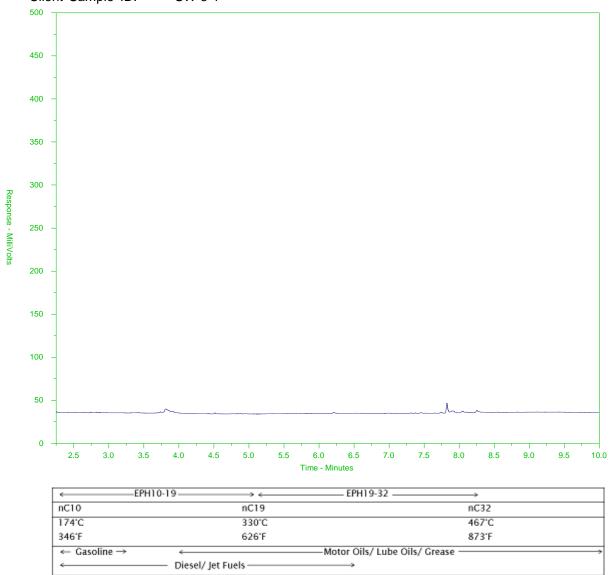
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-13 Client Sample ID: SW-5-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

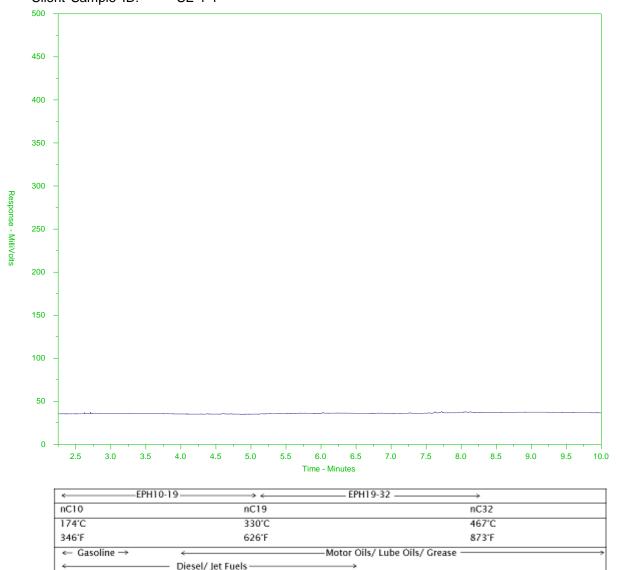
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-16 Client Sample ID: SE-1-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

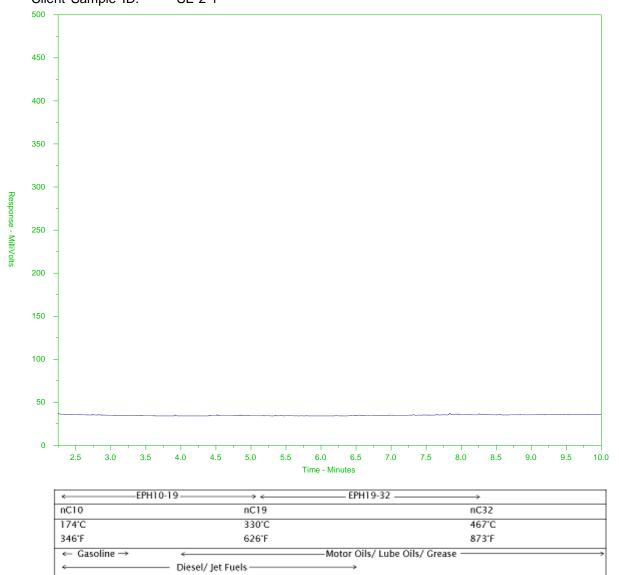
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-19
Client Sample ID: SE-2-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

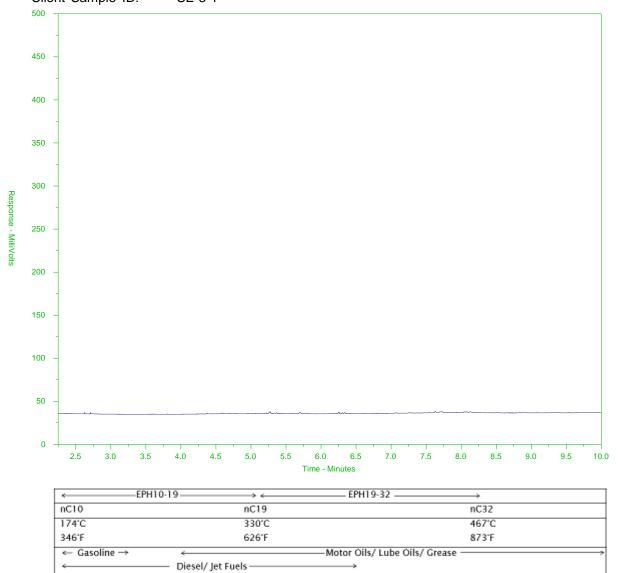
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-22 Client Sample ID: SE-3-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

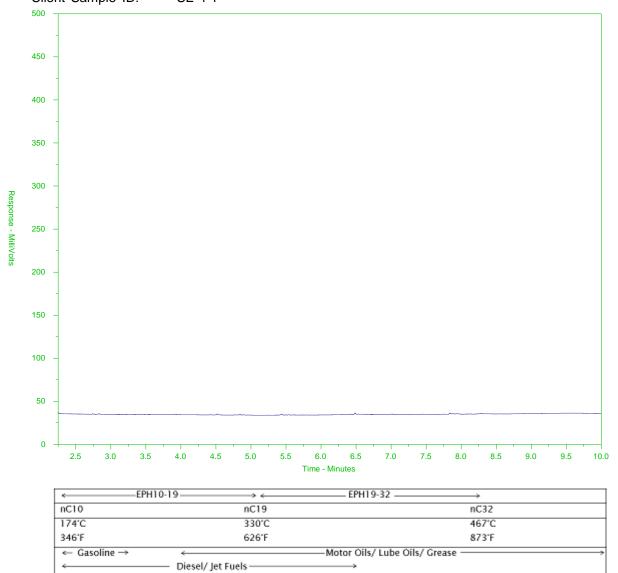
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-25 Client Sample ID: SE-4-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

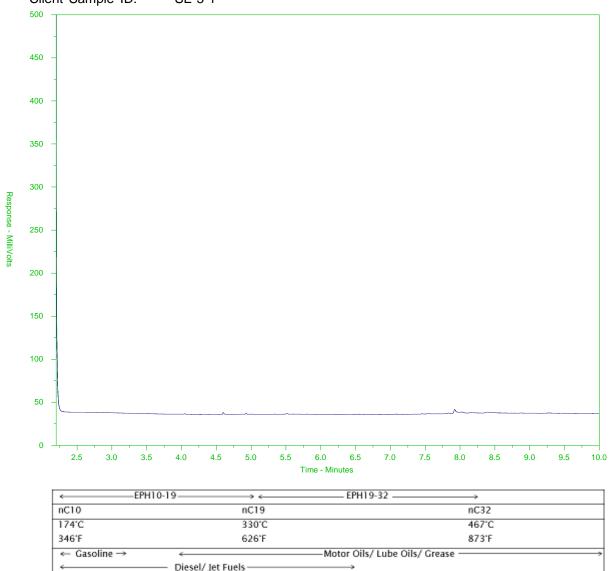
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-28 Client Sample ID: SE-5-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

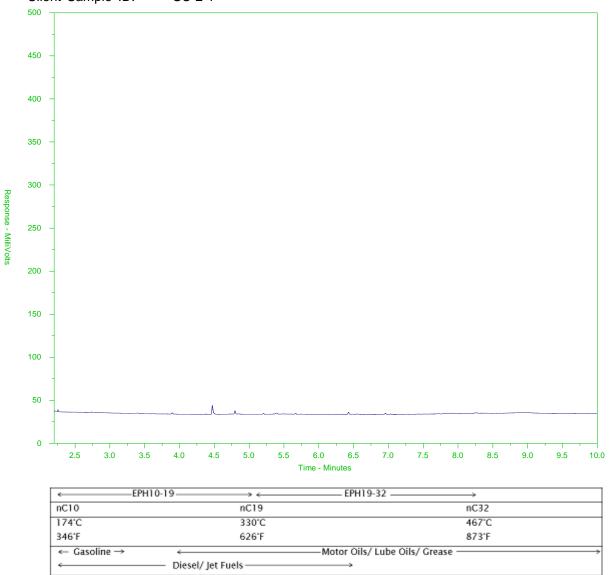
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-31 Client Sample ID: SC-2-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

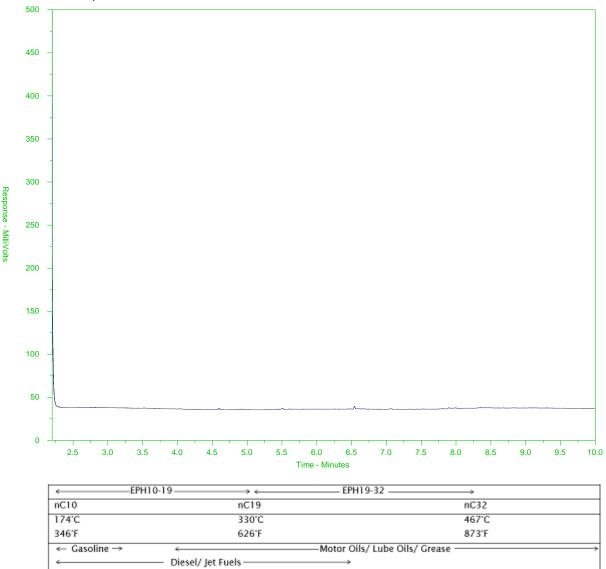
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: WG2854799-3#L2148903-31

Client Sample ID: SC-2-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

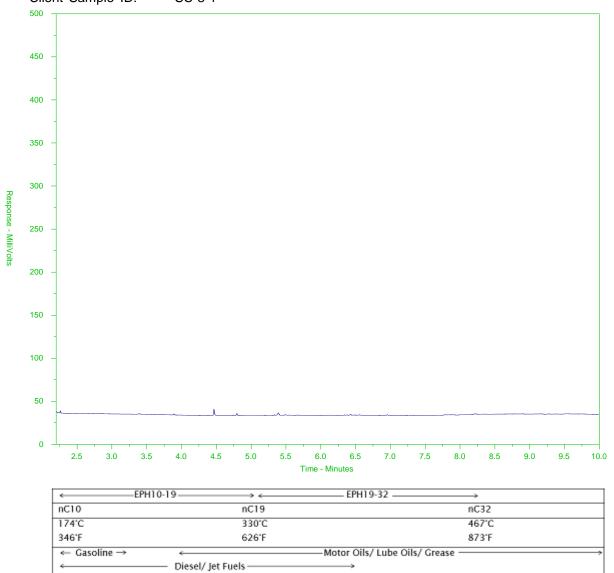
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-34 Client Sample ID: SC-3-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

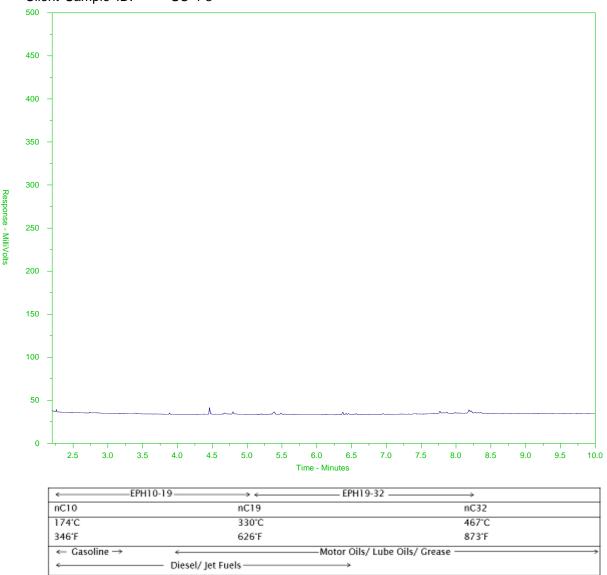
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-39 Client Sample ID: SC-4-3



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

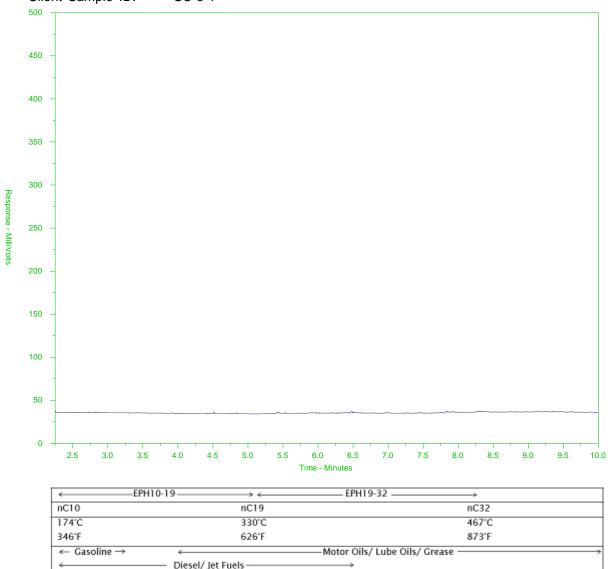
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-40
Client Sample ID: SC-5-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

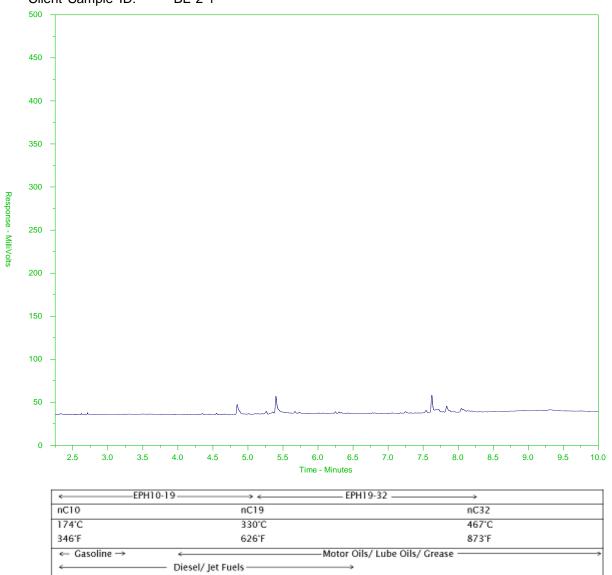
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-43 Client Sample ID: BE-2-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

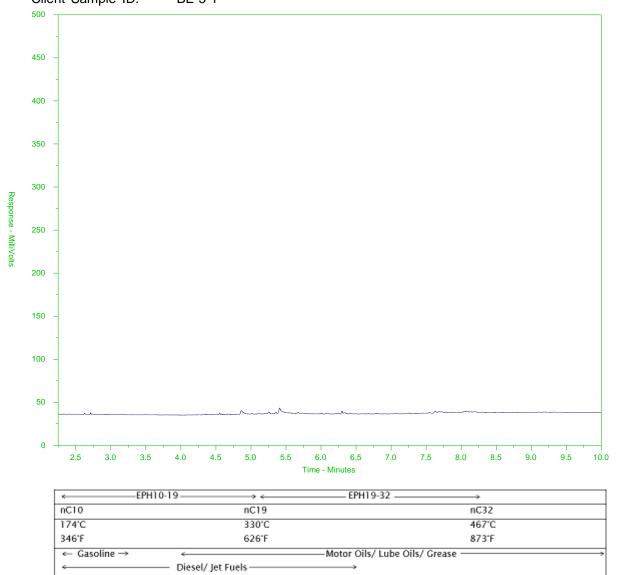
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-46 Client Sample ID: BE-5-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

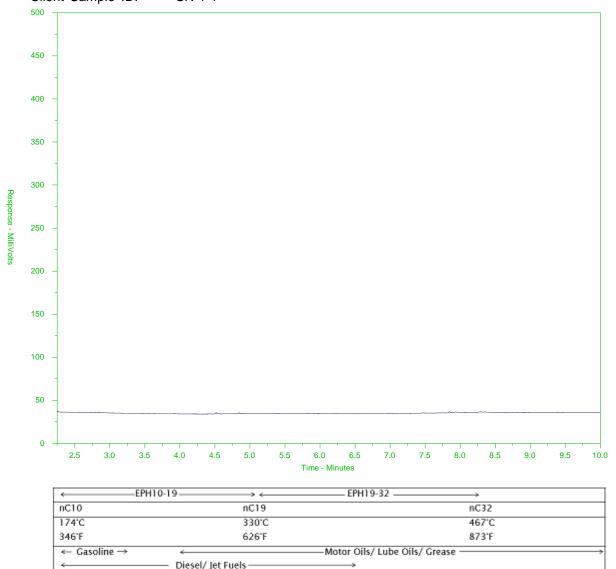
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-49
Client Sample ID: SN-1-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

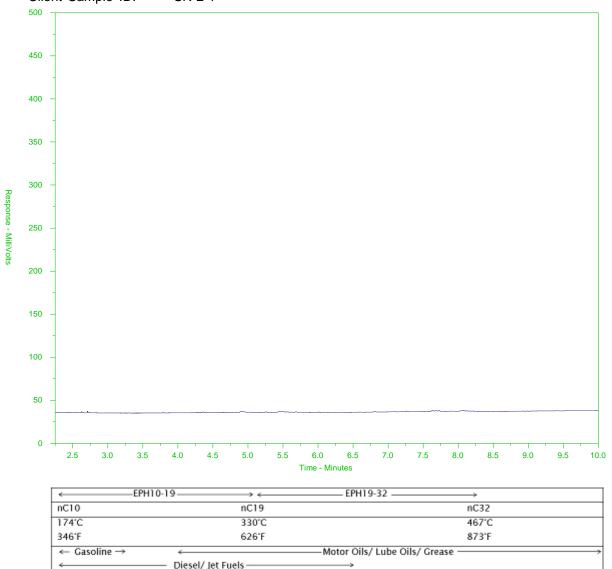
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-52 Client Sample ID: SN-2-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

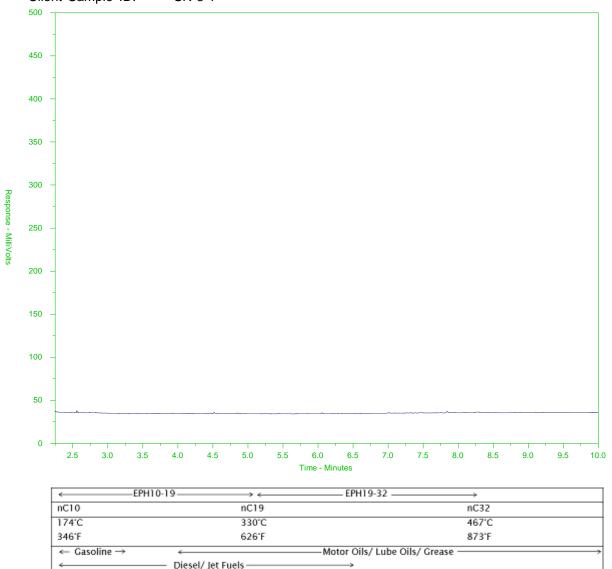
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-55 Client Sample ID: SN-3-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

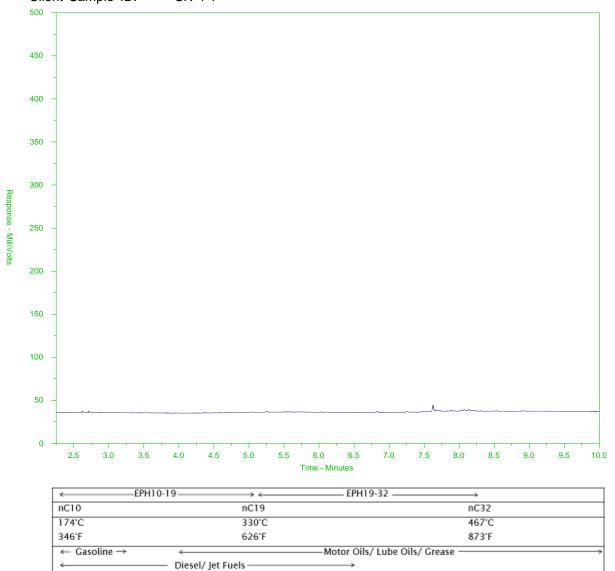
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-58 Client Sample ID: SN-4-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

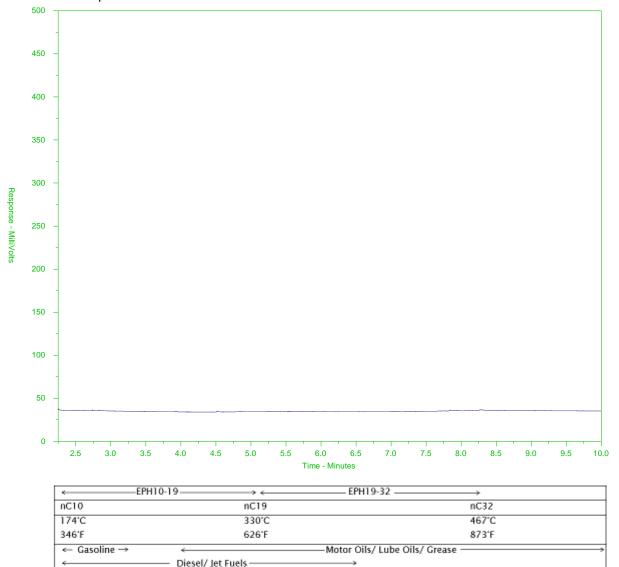
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.



ALS Sample ID: L2148903-61 Client Sample ID: SN-5-1



The BC EPH Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and three n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

A "-L-" in the sample ID denotes a low level sample. A "-S-" denotes a silica gel cleaned sample.

ALS Environmental

1. If any water sample's are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2148903-COFC

COC Number: 15 - XXXXXX

Page 1 of **6**

Report To	Contact and company na	ıme below will app	pear on the final report		Report Format	/Distribution :						ŢĒ.	&P TAT	s with ye	our AM:	- surchar	ges will a	pply		
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Contact:	John Sherrin / Arman Ospa	ın		Quality Control	(QC) Report with R	leport ☑ YES	□ NO	× 6	4	day [F	24]			ئ ئ	1	Busin	ess da	y [E1]		
Phone:	1 (250) 881 7372			☐ Compare Results	to Criteria on Report -	provide details belov	wif box checked	PRIORITY Isiness Day	3	day [F	23]			ZGEN	s	Same E	Dav. W	ekend	or	_
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Street:	2nd floor 3795 Carey Rd.		•	Email 1 or Fax	jsherrin@golder.co	om		(Date and	Time Re	equired	for all E	&P TA	Ts:			t)	-70116-7116	yv erta	iffi
City/Province:	Victoria BC			Email 2	aospan@golder.co	om		For tests tha	at can not	be perfon	med acc	ording to	the serv	vice leve	l select	ed, you w	rill be con	tacted.		
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1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

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L2148903-COFC

COC Number: 15 - xxxxxx

ige **5**of**6**

Environmental Canada Toll Free: 1 800 668 9878

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Report To	Contact and company name below will appear on the final repo	ort	Report Format	/ Distribution				•		P TAT	s with your	AM - surc	harges will ap	ply	
Company:	Golder Associatex Ltd.	Select Report 8	ormat: 🗹 PDF	EXCEL DEDI	(DIGITAL)		- Reg	Juiari		ard TA	T if receiv	ed by 3 p	n - business	days - no surch	arges apply
Contact:	John Sherrin / Arman Ospan	Quality Control	(QC) Report with R	leport 🗹 YES	□ NO	Y ays)		lay [P4]			Շ	1 Bus	iness day	[E1]	
Phone:	1 (250) 881 7372	☐ Compare Resul	ts to Criteria on Report -	provide details below	if box checked	PRIORIT SÍNESS D	3 0	iay [P3]			SMERGENCY	Same	Dav. We	ekend or	
	Company address below will appear on the final report	Select Distribut	tion: 🖸 EMAIL	☐ MAIL ☐ F.	AX	(Busing P	2 0	lay (P2)			S S		utory holi		
Street:	2nd floor 3795 Carey Rd.	Email 1 or Fax	jsherrin@golder.c	om		Da	ate and T	ime Requi	red for all	E&P TA	Ts:		(51)-	ar nab-yy ar	11451
City/Province:	Victoria BC	Email 2	aospan@golder.c	om		For tests that	can not be	performed	according to	o the serv	ice level s	elected, yo	u will be cont	acted,	
Postal Code:	V8Z 6T8	Email 3								An	alysis R	lequest			
Invoice To	Same as Report To ☑ YES ☐ NO		Invoice Di	stribution			Indicate	Filtered (F	, Preserve	d (P) or	Filtered ar	nd Preser	ved (F/P) be	low	
	Copy of Invoice with Report ☐ YES ☑ NO	Select Invoice	Distribution: 🛭 EMA	IL MAIL	FAX				P						
Company:		Email 1 or Fax													
Contact:		Email 2		•				$\overline{}$							Б
	Project Information	Oi	l and Gas Require	d Fields (client (use)] "		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5						of Containers
ALS Account #		AFE/Cost Center:		PO#		, ž		F 5	اک						on the
Job #:	1663724/14000/3	Major/Minor Code:		Routing Code:			191	ءِ ار	되						၂ ဥ
PO / AFE:		Requisitioner:				Particle size	$ \vdash $	7:17	┥.	l :					
LSD:		Location:		_		الآر ا		\$ 6	510						Number
ALS Lab Wor	rk Order # (lab use only)	ALS Contact:		Sampler:		1 7			Ó Lì						z
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ALS Sample #	Sample Identification and/or Coordi		Date	Time	Sample Type	_	`		1						1
(lab use only)	(This description will appear on the re	port)	(dd-mmm-yy)	(hh:mm)	, ,,			_					<u> </u>		1
	SN-1-1		12-Aug-18	14:05	Sediment	×	$\mathbf{\Sigma}$	<u> </u>	- X						4
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Drinking		ions / Specify Criteria to			down list below			SAME	LE CON	DITIO	N AS R	ECEIVE	D (lab us	e only)	<u> </u>
		(elec	tronic COC only)			Frozen					SIF Obs	servatio	ns Yes	☐ No	
•	en from a Regulated DW System?					ice Packs		lce	Cubes		Custody	y seal in	tact Yes	₃ □ No	
	☑ NO					Cooling Ini			4						
	numan drinking water use?						NIITIAL C	OOLER TO	MPERAT	URES °C	;	- /T		DLER TEMPER	ATURES °C
☐ YES	☑ NO			·	·					L		<u> </u>		1376	16,6
Poloscod by	SHIPMENT RELEASE (client use)	Danish and b	INITIAL SHIPME		V (lab use only)	1=			FI	VAL SI	IIPMEN	IT RECI	PTION (I	ab use only)	·
Released by:	July 14- Aug-181	Same Received by:		Date:		Time:		Received	LU	14		Date	alm	h Solp	Sold An
REFER TO BACK	PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION	·	WHI	I TE - LABORATOR	Y COPY YEL	L LOW - CLIEN	VŤ COP	, 	J.W.	7		<u> </u>	"/' /-	770	OCTOBER 2016 FRONT
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Failure to complete all portions of the form may delay analysis. Please fill in this form LEGIBLY, By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW). System, please submit using an Authorized DW COC form.

Environmental

Chain of Custody (COC) / Analytical Request Form

L2148903-COFC

COC Number: 15 - XXXXXX

Canada Toll Free: 1 800 668 9878 www.alsglobal.com Contact and company name below will appear on the final report Report To Report Format / Distribution Select Service Level Below - Please continues the TATs with your AM - surcharges will apply Company: Golder Associatex Ltd. Select Report Format: PDF 🖸 EXCEL 🔲 EDD (DIGITAL) Regular [R] Standard TAT if received by 3 pm - business days - no surcharges apply John Sherrin / Arman Ospan Contact: 4 day [P4] 1 Business day [E1] Phone: 1 (250) 881 7372 Compare Results to Criteria on Report - provide details below if box checked 3 day [P3] Same Day, Weekend or Company address below will appear on the final report Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX 2 day [P2] Statutory holiday [E0] 2nd floor 3795 Carey Rd. Street: Email 1 or Fax jsherrin@golder.com Date and Time Required for all E&P TATs: reformers, etcolor Victoria BC City/Province: aospan@golder.com Email 2 or tests that can not be performed according to the service level selected, you will be contacted. V8Z 6T8 Postal Code: Email 3 **Analysis Request** Invoice To Same as Report To ☑ YES □ NO Invoice Distribution Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below Copy of Invoice with Report ☐ YES ☑ NO Select Invoice Distribution: 🖸 EMAIL 🔲 MAIL 🔲 FAX Company: Email 1 or Fax Contact: Email 2 Number of Containers **Project Information** Oil and Gas Required Fields (client use) HGE 5,38 ALS Account # / Quote #: BR191034 AFE/Cost Center: PO# Job #: 1663724/14000/3 Major/Minor Code: Routing Code: PO / AFE: Requisitioner: SD: Location: S ALS Lab Work Order # (lab use only) ALS Contact: Sampler: Sample Identification and/or Coordinates ALS Sample # Date Time Sample Type (lab use only) (This description will appear on the report) (dd-mmm-yy) (hh:mm) 13-Aug-18 12:30 Sediment 12:40 2 SAMPLE CONDITION AS RECEIVED (lab use only) Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below Drinking Water (DW) Samples¹ (client use) (electronic COC only) SIF Observations Frozen Are samples taken from a Regulated DW System? П ice Packs ☐ YES ☑ NO Cooling Initiated Are samples for human drinking water use? INSTIAL COOLER TEMPERATURES °C TYES INO HIPMENT RELEASE (client use) INITIAL SHIPMENT RECEPTION (lab use only) FINAL SHIPMENT RECEPTION Released by: Received by:

WHITE - LABORATORY COPY

YELLOW - CLIENT COPY

ON ALS LOCATIONS AND SAMPLING INFORMATION Failure to complete all phritions of this form may delay analysis. Please fill in this form LEGIBLY, By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy 1. If any water sample are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW CDC form.

Samuel a ID	I				I			ı								SW-1-1	SW-1-2	SW-1-3	SW-2-1	SW-2-2	SW-2-3	SW-3-1	CW 2.2	CW 2.2	SW-4-1	SW-4-2	DUP B (SW-		SW-4-3	SW-5-1	CW F 2	SW-5-3
Sample ID Date Sampled			CC	CME		BC MOE	1		Ī	NOAA Sec	diment Bench	hmarks	ī	Ī					3vv-2-1 3 11-Aug-2018				SW-3-2 11-Aug-2018	SW-3-3 11-Aug-2018			4-2) 8 13-Aug-2018			11-Aug-2018	SW-5-2 11-Aug-2018	
Laboratory Sample ID																	L2148903-2				L2148903-6				L2148903-10			Relative Percent		L2148903-13		
Barranta	Lowes	st													Eco Tox													Difference				
Parameter	Detection n Limit		ISOG	PEL	Working ISQG	Working PE	Approved	т	TEI	EDI	т	PEL	ERM	AET	EqP (@ 1%TOC)	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment	Sediment	Sediment
Physical Properties			ISQG	PEL	ISQG	Working PE	L Approved	120	IEL	ERL	50	PEL	ERIVI	AET	1%10C)	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Jediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment	Sediment	Sediment
Moisture pH (1:2 soil:water)	0.25		-	-	-	-	-	-	-	-	-	-	-	-	-	22.2 8.20	8.41	8.30	23.1 8.21	8.22	8.22	26.9 7.99	8.08	8.25	21.4 8.12	8.23	8.28	NA 0.6%	8.06	20.9 8.46	8.34	8.52
% Gravel (>2mm)	1.0		-	-	-	-	-	-	-	-	-	-	-	-	-	3.0	1.9	5.0	8.7	16.5	12.7	5.0	1.3	2.7	4.4	2.5	3.3	NA	3.3	2.3	4.8	7.3
% Sand (2.0mm - 0.063mm) % Silt (0.063mm - 4um)	1.0		-	-	-	-	-	-	-	-	-	-	-	-	-	60.8 28.6	95.4 2.0	74.9 15.8	62.6 23.4	49.9 26.8	53.3 28.3	46.9 40.5	51.4 39.9	55.6 35.0	55.7 35.3	60.3 33.2	67.4 25.5	11.1% 26.2%	59.7 32.3	73.3 21.1	69.2 22.9	76.3 14.3
% Clay (<4um)	1.0	%	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	<1.0	4.3	5.3	6.7	5.6	7.6	7.4	6.7	4.5	4.1	3.8	NA	4.8	3.3	3.1	2.1
Texture			_	_			_	_	-	_	_	_	_	_		Sandy loam	Sand	I namy sand	Sandy Ioam	Sandy Ioam	Sandy loam	Sandy loam	Sandy Ioam	Sandy loam	Sandy Ioam	Sandy loam	Loamy sand		Sandy Joam	Loamy sand	l namy sand	Loamy sand
																Garlay loan	Cana	Loamy Sand	Canay Ioani	Ganay IGain	Candy ICan	Carray Ioann	oundy loans	oundy louin	Odridy Iodini	oundy loan	Loanly Sand	NA	Garlay Ioani	Loanly Sand	Loamy Sand	Louiny Sund
Organic / Inorganic Carbon (Soil) Inorganic Carbon	0.050	%	-	l -	1 -		1 -	T -			Ι.	Τ -	l -	I -	-	1.13	0.608	0.934	1.14	1.31	1.35	1.25	1.19	1.14	0.983	1.12	1.10	1.8%	1.08	1.17	1.17	1.03
Total Organic Carbon	0.050		-	-	-	-	-	-	-	-	-	-	-	-	-	2.18	0.44	1.56	2.07	2.54	2.72	3.24	3.09	2.95	3.38	3.1	2.61	17.2%	3.32	2.95	2.93	2.17
Metals Aluminum (Al)	50	mg/kg	-	-	-	-	1 -	<u> </u>	-	-	-	<u> </u>	-	18000.00	-	4810	898	3770	4480	5110	5300	5840	5580	4320	4600	4500	4720	4.8%	4560	3290	3640	3480
Antimony (Sb) Arsenic (As)	0.10	mg/kg mg/kg	7.24	41.6	7.24	- 42	-	0.63 7.40	7.24	8.20	2.40 20.00	- 41.60	70.00	9.30 35.00		<0.10 3.93	<0.10 0.47	<0.10 3.51	<0.10 4.54	<0.10 3.85	<0.10 4.43	<0.10 10.60	<0.10 9.63	<0.10 4.33	<0.10 4.39	<0.10 4.37	<0.10 4.01	NA 8.6%	<0.10 4.93	<0.10 1.78	<0.10 1.97	<0.10 2.66
Barium (Ba)	0.50	mg/kg	-	-	-	-	-	-	130.10	-	20.00	41.00	70.00	48.00	-	15.6	2.38	11.8	15.0	16.4	18.0	20.2	18.7	14.7	14.9	15.7	12.9	19.6%	15.2	10.9	11.1	10.1
Beryllium (Be) Bismuth (Bi)	0.10	mg/kg mg/kg	-	-	-	-	+ -	-	-	-	-	-	-	-	-	0.30 <0.20	<0.10 <0.20	0.24 <0.20	0.28 <0.20	0.29 <0.20	0.32 <0.20	0.37 <0.20	0.34 <0.20	0.27 <0.20	0.40 <0.20	0.28 <0.20	0.27 <0.20	NA NA	0.28 <0.20	0.22 <0.20	0.22 <0.20	0.21 <0.20
Boron (B)	5.0	mg/kg	-	-	- 0.7	-	-	-	-	-	- 4.40	-	-	-	-	32.7	7.4	23.9	30.2	34.5	35.0	44.5	38.6	29.8	41.6	30.8	31.6	2.6%	31.4	24.1	25.4	24.6
Cadmium (Cd) Calcium (Ca)	50	mg/kg mg/kg	0.7	4.2	0.7	4.2	-	0.38	0.68	1.20	1.40	4.21	9.60	3.00		0.048 63800	<0.020 16800	0.022 45600	0.034 60500	0.084 70400	0.041 66900	0.029 88500	0.029 75200	0.056 69700	<0.020 110000	<0.020 75000	<0.020 74600	NA 0.5%	0.026 74700	<0.020 73200	0.021 71800	<0.020 69100
Chromium (Cr) Cobalt (Co)	0.50	mg/kg mg/kg	52.3	160	52.3	160	-	49.00	52.30	81.00	141.00	160.00	370.00	62.00 10.00	-	17.8 2.92	3.57 0.58	12.5 2.32	16.2 2.83	17.1 2.92	17.7 3.10	21.7 3.63	19.2 3.47	15.5 2.59	17.6 3.08	16.9 2.97	16.6 2.73	1.8% 8.4%	16.4 3.13	12.7 2.53	12.9 2.52	13.1 2.41
Copper (Cu)	0.50	ma/ka	18.7	108	18.7	108		32.00	18.70	34.00	94.00	108.00	270.00	390.00	-	5.63	0.96	4.25	4.71	5.60	5.76	7.22	6.35	4.97	6.10	5.77	6.05	4.7%	6.47	4.31	4.46	5.18
Iron (Fe) Lead (Pb)	50 0.50	mg/kg mg/kg	30.2	- 112	30.2	- 112	+ -	30.00	30.24	46.70	94.00	112,00	218.00	220000.00 400.00	-	11900 4.31	2230 0.93	10700 3.37	12700 3.78	10900 4.42	12800 4.49	16300 4.86	14900 4.54	10800 3.75	13900 5.20	13000 3.77	13000 3.61	0.0% 4.3%	14000 3.70	9620 2.77	10100 2.89	10400 2.71
Lithium (Li)	2.0	mg/kg	-	<u> </u>	-	-	-	-	-	-	-	-	-	-	-	22.5	4.4	16.5	20.7	22.1	23.6	29.0	25.6	20.2	33.0	23.3	22.6	3.1%	23.4	20.1	20.9	20.2
Magnesium (Mg) Manganese (Mn)	20 1.0	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	260.00	-	34700 113	9730 24.2	23100 100	30900 118	32900 117	33800 125	48500 158	39900 148	32700 110	46300 149	39700 136	41100 140	3.5% 2.9%	40300 156	37400 127	36500 129	35000 116
Mercury (Hg) Molybdenum (Mo)	0.0050	mg/kg mg/kg	0.13	0.7	0.13	0.7	-	0.14	0.13	0.15	0.48	0.70	0.71	0.41		0.0090 0.37	<0.0050 0.12	0.0061	0.0070 0.38	0.0097 0.33	0.0094 0.39	0.0085 0.54	0.0090	0.0071 0.28	0.0071 0.68	0.0084	0.0082	NA NA	0.0070	0.0050 0.32	0.0061 0.38	<0.0050 0.27
Nickel (Ni)	0.50	mg/kg	-	-	30	50		15.00	15.90	20.90	47.00			110.00	-	9.31	1.90	6.85	8.54	9.29	9.62	11.0	10.3	8.08	9.06	8.79	8.56	2.7%	8.64	6.67	6.91	6.80
Phosphorus (P) Potassium (K)		mg/kg mg/kg	-	-	-	-	-	-		-	-	-	-	-	-	394 2210	109 410	361 1660	402 2170	463 2320	506 2320	1020 2770	1040 2430	494 1930	668 2080	640 2020	530 2150	18.8% 6.2%	720 2080	310 1570	349 1650	374 1610
Selenium (Se)	0.20	mg/kg	-	-	-	-	2ª	-	-	-	-	-	-	1.00	-	0.21	<0.20	<0.20	<0.20	0.22	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	NA	<0.20	<0.20	<0.20	<0.20
Silver (Ag) Sodium (Na)	0.10 50	mg/kg mg/kg	-	-	- 1	2.2	-	0.23	0.73	1.00	1.10	1.77	3.70	3.10	-	<0.10 4070	<0.10 854	<0.10 2700	<0.10 3380	<0.10 4410	<0.10 2850	<0.10 5560	<0.10 4420	<0.10 2720	<0.10 3520	<0.10 4050	<0.10 3650	NA 10.4%	<0.10 4820	<0.10 2830	<0.10 2480	<0.10 2840
Strontium (Sr) Sulfur (S)	0.50	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	41.8 <1000	9.54 <1000	29.9 <1000	45.6 <1000	76.9 <1000	46.8 <1000	66.1 <1000	57.7	47.6 <1000	65.4 <1000	44.2 <1000	48.8 <1000	9.9% NA	46.9 <1000	38.9 <1000	37.6 <1000	36.1 <1000
Thallium (TI)	0.050	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	-		0.096	<0.050	0.076	0.093	0.094	0.102	0.110	<1000 0.099	0.075	0.119	0.081	0.076	NA	0.085	0.066	0.067	0.066
Tin (Sn) Titanium (Ti)		mg/kg mg/kg	-	-	-	-	-	-	0.05	-	-	-	-	3.40	-	<2.0 256	<2.0 55.4	<2.0 209	<2.0 288	<2.0 256	<2.0 278	<2.0 321	<2.0 276	<2.0 228	<2.0 261	<2.0 253	<2.0 253	NA 0.0%	<2.0 250	<2.0 216	<2.0 216	<2.0 219
Tungsten (W)	0.50	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.50	<0.50	< 0.50	NA	< 0.50	< 0.50	<0.50	<0.50
Uranium (U) Vanadium (V)	0.050	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	57.00	-	0.687 19.3	0.162 3.44	0.620 14.2	0.617 17.1	0.694 19.3	0.746 19.6	0.774 23.2	0.753 21.0	0.662 16.5	0.907 16.4	0.742 15.9	0.683 15.5	8.3% 2.5%	0.713 15.8	0.521 11.7	0.824 12.3	0.582 12.0
Zinc (Zn) Zirconium (Zr)	2.0	mg/kg mg/kg	124	271	124	271	-	94.00	124.00	150.00	245.00	271.00	410.00	410.00	-	14.3 4.9	2.8 1.0	12.1 3.6	13.5 4.4	14.3 4.1	15.6 4.4	15.6 5.9	15.3 5.2	11.7 4.3	12.5 6.7	11.8 4.4	11.3 5.9	4.3% 29.1%	12.7 3.5	9.5 4.1	9.5 5.4	9.1 4.8
Volatile Organic Compounds (Soil)	1.0	Hig/kg	-	1					_	_					-	4.9	1.0	3.0	4.4	4.1	4.4	5.9	5.2	4.3	0.7	4.4	5.9	29.170	3.3	4.1	5.4	4.0
VOC Sample Container Benzene	0.0050	mg/kg	-	-	-	-	+ -	-	-	-	-	-	-	-	0.06	Field MeOH <0.0050			Field MeOH <0.0050			Field MeOH <0.0050			Field MeOH <0.0050		-	NA NA		Field MeOH <0.0050		—
Bromodichloromethane	0.050	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-		<0.050			< 0.050			<0.050			<0.050			NA		<0.050		
Bromoform Carbon Tetrachloride	0.050	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	0.65 1.20	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			NA NA		<0.050 <0.050		
Chlorobenzene Dibromochloromethane		mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			NA NA		<0.050 <0.050		
Chloroethane	0.10	mg/kg	-				<u> </u>	-	-	-	-	<u> </u>	-	-	-	<0.10			<0.10			<0.10			<0.10			NA		<0.10		
Chloroform Chloromethane	0.10	mg/kg mg/kg	-	-	-	-	+ :	-	-	-	-	-	-	-	-	<0.10 <0.10			<0.10 <0.10			<0.10 <0.10			<0.10 <0.10		+	NA NA		<0.10 <0.10		
1,2-Dichlorobenzene	0.050	mg/kg	-	-	0.023	-	-	-	-	-	-	-	-	0.01	0.34 1.70	<0.050			< 0.050			<0.050			< 0.050		1	NA NA		<0.050		
1,3-Dichlorobenzene 1,4-Dichlorobenzene	0.050	mg/kg mg/kg	-	-	0.031	0.0	9 -	-						0.11	0.35	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			NA		<0.050 <0.050		
1,1-Dichloroethane 1,2-Dichloroethane	0.050	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		<u> </u>	NA NA		<0.050 <0.050		
1,1-Dichloroethylene	0.050	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.050			<0.070			<0.20			< 0.050		1	NA		<0.050		
cis-1,2-Dichloroethylene trans-1,2-Dichloroethylene		mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		†	NA NA		<0.050 <0.050		$\overline{}$
Dichloromethane	0.30	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.30			< 0.30			< 0.30			<0.30 <0.050			NA NA		<0.30 <0.050		
1,2-Dichloropropane cis-1,3-Dichloropropylene	0.050	mg/kg mg/kg	-	-	-	-		-	-	-	-	-	-	-	-	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			< 0.050		<u> </u>	NA		<0.050		
trans-1,3-Dichloropropylene 1,3-Dichloropropene (cis & trans)	0.050	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.050 <0.10			<0.050 <0.10			<0.050 <0.10			<0.050 <0.10	_	+	NA NA		<0.050 <0.10		-
Ethylbenzene	0.015	mg/kg	-					-	-	-			-	0.00	3.60	<0.015			< 0.015			<0.015			<0.015		1	NA		<0.015		
Methyl t-butyl ether (MTBE) Styrene		mg/kg mg/kg	-	1 -	-	-	-	-	-	-	-	-	-	-	-	<0.20 <0.050			<0.20 <0.050			<0.20 <0.050			<0.20 <0.050		+	NA NA	1	<0.20 <0.050		$\overline{}$
1,1,1,2-Tetrachloroethane	0.050	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.050			< 0.050			<0.050			< 0.050			NA NA		<0.050		
1,1,2,2-Tetrachloroethane Tetrachloroethylene	0.050	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.06	0.53	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		<u> </u>	NA		<0.050 <0.050		
Toluene 1,1,1-Trichloroethane	0.050	mg/kg mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	0.67 0.17	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050	-		NA NA		<0.050 <0.050		\Box
1,1,2-Trichloroethane	0.050	mg/kg	-					-	-	-		<u> </u>			-	< 0.050			< 0.050			<0.050			< 0.050			NA		<0.050		
Trichloroethylene Trichlorofluoromethane	0.010	mg/kg mg/kg	-	-	-	-	+ -	-	-	-	-	-	-	-	-	<0.010 <0.10			<0.010 <0.10			<0.010 <0.10			<0.010 <0.10		+	NA NA	<u> </u>	<0.010 <0.10		
Vinyl Chloride	0.10	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10			<0.10			<0.10			<0.10		1	NA		<0.10		
ortho-Xylene meta- & para-Xylene		mg/kg mg/kg	-	_ -	-	-	-	-	-	-	L -	<u> </u>	L -	-	0.03	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		<u>t </u>	NA NA		<0.050 <0.050		
Xylenes 4-Bromofluorobenzene (SS)	0.075	mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.00	-	<0.075 89.8			<0.075 74.1			<0.075 93.6			<0.075 91.3			NA NA		<0.075 90.7		
1,4-Difluorobenzene (SS)		%	-	-	-	-	-	-	-	-	-	-	-	-	-	83.2			74.1			99.9			91.8			NA NA		98.3		
	_								_		_	_	_		_	_		_					_			_		_			_	

Sample ID	DUP A (S	SW-5	SE-1-2 SE-1-3 SE-2-1 SE-2-2	SE-2-3 SE-3-1 SE-3-2 SE-3-3	BE-2-1 DUP F(BE-2	BE-2-2 BE	-2-3 SE-4-1 SE-4-2 SE	4-3 SE-5-1 SE-5-2	SE-5-3 SC-2-1 SC-2-2	SC-2-3 SC-3-1 DUP C (SC	SC-3-2 SC-3-3
·	3)				1)					3-1)	
Date Sampled Laboratory Sample ID	13-Aug-2 L214890	2 C4 Relative		18 11-Aug-2018 11-Aug-2018 11-Aug-2018 11-Aug-20 20 L2148903-21 L2148903-22 L2148903-23 L2148903		Relative LOTADOOD 441 0440		g-2018 11-Aug-2018 11-Aug-2018	8 11-Aug-2018 11-Aug-2018 11-Aug-2018 9 L2148903-30 L2148903-31 L2148903-32		18 Relative 12-Aug-2018 12-Aug
Laboratory Sample ID		Percent Difference	22 140903-17 22 140903-10 22 140903-19 22 140903	2012 140903-2112 140903-2212 140903-2312 140903	3-24 LZ 140303-43 LZ 140303-03	Percent L2146903-44 L2146 Difference	903-43 L2 140903-23 L2 140903-20 L2 140	903-27 L2 140903-20 L2 140903-2	9 L2 140903-30 L2 140903-31 L2 140903-32	ELZ 140903-33 LZ 140903-34 LZ 140903-0	Difference
Parameter	Lowest Detectio Units	Difference				Difference					Difference
r arameter	n Limit Sedime	nnt .	Sediment Sediment Sediment Sedimer	Sediment Sediment Sediment Sediment	nt Sediment Sediment	Sediment Sedi	ment Sediment Sediment Sedi	ment Sediment Sediment	Sediment Sediment Sediment	Sediment Sediment Sediment	Sediment Sediment
Physical Properties	Sedime	ant I	Sediment Sediment Sediment Sedimen	Sediffierit Sediffierit Sediffierit Sediffieri	nt Sediment Sediment	Sediment Sedi	Herit Sediffierit Sediffierit Sedi	nent Sediment Sediment	Sediment Sediment Sediment	Sediment Sediment Sediment	Sediment Sediment
Moisture	0.25 %	NA	23.3	21.5	22.4	NA	27.9	24.4	37.7	46.8	NA NA
pH (1:2 soil:water)	0.10 pH 8.27		8.57 8.43 8.29 8.33	8.39 8.30 8.34 8.26				15 8.30 8.23	8.24 8.13 8.17	8.20 7.98 8.08	1.2% 7.95 8.07
% Gravel (>2mm)	1.0 % 1.7		6.3 4.0 17.5 10.2	23.6 6.8 21.7 24.2				.6 2.6 4.1	6.0 1.5 4.9	6.0 3.9 <1.0	NA 2.7 1.7
% Sand (2.0mm - 0.063mm) % Silt (0.063mm - 4um)	1.0 % 82.7 1.0 % 13.3		87.3 90.6 57.0 60.4 4.6 3.6 20.0 23.4	49.8 72.2 60.2 55.6 23.3 15.6 14.0 15.2				1.1 55.0 67.8 3.4 31.5 20.5	51.2 30.4 31.4 30.7 50.5 47.2	30.5 18.8 21.6 48.0 56.3 57.2	13.9% 18.9 22.8 1.6% 59.3 56.7
% Clay (<4um)	1.0 % 2.3		1.8 1.7 5.6 6.0	3.3 5.3 4.1 5.0	11.9 12.6			0.0 11.0 7.6	12.1 17.6 16.6	15.6 21.0 20.8	1.0% 19.1 18.8
,				Sandy loa	am						
Texture	- Sand	NA NA	Sand Sand Sandy loam Sandy loa	m Sandy loam Loamy sand Loamy sand / Loamy sand	y Loam Loam	Loamy sand Sand	loam Loam Sandy loam Sand	loam Sandy loam Sandy loam	Sandy loam Silt loam Silt loam	Silt loam Silt loam Silt loam	Silt Ioam Silt Ioam
Organic / Inorganic Carbon (Soil)		INA		Saliu		NA.				<u> </u>	INA
Inorganic Carbon	0.050 % 1.20		0.738 0.525 1.37 1.62	1.32 1.14 1.85 1.17				35 1.33 1.12	1.51 1.70 1.85	1.85 1.95 2.02	3.5% 1.87 1.82
Total Organic Carbon	0.050 % 2.07	4.7%	0.41 0.78 1.9 2.43	1.24 1.68 1.91 1.56	2.77 3.65	27.4% 1.5 2.	46 2.53 1.45 2.	46 1.82 1.46	1.89 3.12 3.06	3.01 3.5 3.7	5.6% 3.6 3.5
Metals Aluminum (Al)	50 mg/kg 3320) 4.7%	1460 1990 3780 4880	3870 3660 3410 2920	3900 6140	44.6% 5360 48	80 6290 4410 53	90 5610 4260	7440 8920 8860	8660 9250 10400	11.7% 10400 10800
Antimony (Sb)	0.10 mg/kg <0.10		<0.10 <0.10 <0.10 <0.10	<0.10 <0.10 <0.10 <0.10				.10 0.10 <0.10	0.12 0.18 0.16	0.17 0.22 0.21	NA 0.22 0.22
Arsenic (As)	0.10 mg/kg 1.80		1.18 1.47 3.65 2.88	2.99 3.27 3.10 2.95				14 2.34 5.33	6.70 4.31 4.67	5.52 4.89 4.57	
Barium (Ba) Beryllium (Be)	0.50 mg/kg 8.73 0.10 mg/kg 0.22		4.23 5.76 11.7 14.0 <0.10 0.12 0.26 0.30	12.6 10.6 10.7 10.7 0.24 0.24 0.24 0.21				5.1 12.7 13.5 35 0.36 0.27	18.3 22.6 22.6 0.51 0.55 0.57	22.9 24.4 22.4 0.55 0.61 0.54	8.5% 26.2 28.7 12.2% 0.61 0.59
Bismuth (Bi)	0.20 mg/kg <0.20		<0.10 <0.12 <0.20 <0.20 <0.20 <0.20	<0.24				.20 <0.20 <0.20	<0.20 <0.20 <0.20	<0.20 <0.20 <0.20	NA <0.20 <0.20
Boron (B)	5.0 mg/kg 25.6	4.0%	9.7 13.3 26.3 35.0	27.4 25.0 24.4 21.6	27.5 36.2	27.3% 38.1 38	5.0 42.1 29.6 39	9.1 36.4 31.2	54.1 59.7 59.1	59.6 64.7 61.5	5.1% 69.6 68.6
Calcium (Cd)	0.020 mg/kg 0.021 50 mg/kg 59800		<0.020 <0.020 0.027 0.035 20800 28400 57200 63600	0.026 0.025 0.023 0.031 52400 46400 44200 41300				0.057 0.032	0.046 0.066 0.066 65300 86300 85700	0.068 0.094 0.090 85800 87000 74000	NA 0.098 0.106
Calcium (Ca) Chromium (Cr)	50 mg/kg 59800 0.50 mg/kg 11.7		20800 28400 57200 63600 5.27 7.34 12.7 16.3	52400 46400 44200 41300 13.1 12.0 12.6 10.6				300 58700 41900 7.4 18.1 13.5	65300 86300 85700 22.4 26.2 26.8	85800 87900 74000 26.4 29.6 29.5	17.2% 80700 83000 0.3% 30.5 30.8
Cobalt (Co)	0.10 mg/kg 2.29	5.1%	1.01 1.47 2.36 2.72	2.23 2.11 2.17 1.91	2.08 3.18	41.8% 3.27 2.	86 3.36 2.42 2.	97 2.98 2.37	3.73 4.18 4.12	4.13 4.47 4.55	1.8% 4.69 4.67
Copper (Cu)	0.50 mg/kg 4.77		2.46 2.71 4.82 5.55	4.45 3.95 4.06 3.68				14 6.07 4.51	7.56 9.20 8.81	8.79 10.4 10.3	1.0% 10.2 10.3
Iron (Fe) Lead (Pb)	50 mg/kg 10200 0.50 mg/kg 2.82		6290 10200 9710 10500 1.31 1.78 3.81 4.39	9660 8620 8870 7790 3.46 3.59 3.34 3.20				100 9110 8690 13 5.50 4.07	12300 13500 13900 8.85 8.40 8.36	14200 14900 14200 8.74 9.52 9.47	4.8% 14900 14800 0.5% 9.78 9.62
Lithium (Li)	2.0 mg/kg 2.62		6.5 8.5 19.1 21.4	17.3 16.9 15.3 13.9				3.6 25.0 18.7	35.2 39.7 39.7	39.9 44.1 39.5	11.0% 43.4 43.2
Magnesium (Mg)	20 mg/kg 28200	0 21.5%	11400 13200 29300 35300	28000 24900 23300 22400	26100 41900	46.5% 43300 35	000 39600 27500 33	32900 22300	33900 51200 50500	48700 52900 49700	6.2% 50300 51000
Manganese (Mn)	1.0 mg/kg 117		46.9 67.4 98.1 112	93.3 83.5 85.7 79.8				20 107 90.2	144 151 153	151 156 164	
Mercury (Hg) Molybdenum (Mo)	0.0050 mg/kg 0.006 0.10 mg/kg 0.35		<0.0050 <0.0050 0.0079 0.0081 0.17 0.29 0.30 0.31	0.0071 0.0073 0.0068 0.0076 0.29 0.27 0.33 0.28				109 0.0079 0.0077 32 0.36 0.27	0.0128 0.0155 0.0150 0.44 0.75 0.58	0.0158 0.0182 0.0206 0.56 1.01 1.05	NA 0.0205 0.0201 3.9% 0.97 1.14
Nickel (Ni)	0.50 mg/kg 6.58		3.00 4.60 7.44 8.79	7.23 6.54 6.81 6.33				48 9.50 7.46	12.2 14.4 14.2	14.2 16.0 16.1	0.6% 16.5 16.4
Phosphorus (P)	50 mg/kg 287		197 197 337 363	330 303 349 323				352 444	546 553 612	621 609 577	5.4% 647 608
Potassium (K)	100 mg/kg 1650		640 880 1700 2220	1600 1620 1410 1230				70 2390 1860	3060 3860 3810	3740 4030 4230	4.8% 4370 4440
Selenium (Se) Silver (Ag)	0.20 mg/kg <0.20 0.10 mg/kg <0.10		<0.20 <0.20 <0.20 <0.20 <0.10	<0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.				.20 <0.20 <0.20 .10 <0.10 <0.10	0.21 0.35 0.35 <0.10 <0.10 <0.10	0.30 0.45 0.43 <0.10 <0.10 <0.10	NA 0.41 0.42 NA <0.10 <0.10
Sodium (Na)	0.10 mg/kg <0.10 50 mg/kg 3230		1320 2700 3840 4990	2430 3230 3490 3430				00 4150 4400	5000 7470 7080	6000 10300 8330	
Strontium (Sr)	0.50 mg/kg 37.8	4.6%	13.1 19.9 37.7 43.4	40.0 31.9 32.7 34.2	53.6 55.2	2.9% 46.5 65	5.6 56.2 53.9 8	1.9 37.6 50.1	52.5 70.5 60.8	64.9 67.9 57.1	17.3% 57.7 55.8
Sulfur (S)	1000 mg/kg <1000		<1000 <1000 <1000 <1000	<1000 <1000 <1000 <1000				000 <1000 <1000	<1000 1200 1000	1300 1500 1700	NA 1600 1200
Thallium (TI) Tin (Sn)	0.050 mg/kg 0.068 2.0 mg/kg <2.0		<pre><0.050</pre>	0.071 0.069 0.062 0.059 <2.0 <2.0 <2.0 <2.0 <2.0			088 0.115 0.073 0.0 2.0 <2.0 <2.0 <	092 0.106 0.077 2.0 <2.0 <2.0	0.139 0.152 0.145 <2.0 <2.0 <2.0	0.146 0.170 0.173 <2.0 <2.0 <2.0	NA 0.173 0.167 NA <2.0 <2.0
Titanium (Ti)	1.0 mg/kg 215		83.0 111 180 238	205 179 190 152				55 252 212	308 351 339	352 314 358	13.1% 375 379
Tungsten (W)	0.50 mg/kg <0.50		<0.50 <0.50 <0.50 <0.50	<0.50 <0.50 <0.50 <0.50				.50 <0.50 <0.50	<0.50 <0.50 <0.50	<0.50 <0.50 <0.50	NA <0.50 <0.50
Uranium (U) Vanadium (V)	0.050 mg/kg 0.655 0.20 mg/kg 10.9		0.252 0.376 0.546 0.703 5.34 7.16 15.3 18.8	0.601 0.493 0.563 0.479 15.6 14.6 14.4 12.5				748 0.785 0.554 0.2 22.1 17.3	1.02 1.23 1.13 26.5 30.9 30.6	1.20 1.37 1.47 30.9 35.8 35.7	7.0% 1.49 1.55 0.3% 36.9 35.8
Zinc (Zn)	0.20 mg/kg 10.9 2.0 mg/kg 9.4		4.6 6.3 11.5 12.7	10.8 10.6 10.6 9.6				0.2 22.1 17.3 5.0 14.5 11.6	18.0 23.0 22.0	21.9 25.1 25.3	0.8% 26.0 26.0
Zirconium (Zr)	1.0 mg/kg 3.6		1.9 2.2 3.4 6.2	4.5 3.3 3.8 2.7				.4 6.8 4.9	8.6 7.8 7.8		
Volatile Organic Compounds (Soil)		T NA	[5] H.M.OH	I I I I I I I I I I I I I I I I I I I	I F I M. OUT		I STATE OF THE STA	IF:	I FORM OUT	I FOLIA OUT	T NA T
VOC Sample Container Benzene	0.0050 mg/kg	NA NA	Field MeOH <0.0050	Field MeOH <0.0050	Field MeOH <0.0050	NA NA	Field MeOH <0.0050	Field MeOH <0.0050	Field MeOH <0.0050	Field MeOH <0.0050	NA NA
Bromodichloromethane	0.050 mg/kg	NA NA	<0.050	<0.050	<0.050	NA NA	<0.050	<0.050	<0.050	<0.050	NA NA
Bromoform	0.050 mg/kg	NA	<0.050	<0.050	<0.050	NA	<0.050	<0.050	<0.050	<0.050	NA NA
Carbon Tetrachloride Chlorobenzene	0.050 mg/kg 0.050 mg/ka	NA NA	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	NA NA	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	NA NA
Dibromochloromethane	0.050 mg/kg 0.050 mg/kg	NA NA	<0.050	<0.050	<0.050	NA NA	<0.050	<0.050	<0.050	<0.050	NA NA
Chloroethane	0.10 mg/kg	NA	<0.10	<0.10	<0.10	NA	<0.10	<0.10	<0.10	<0.10	NA
Chloromethane	0.10 mg/kg 0.10 mg/ka	NA NA	<0.10 <0.10	<0.10 <0.10	<0.10 <0.10	NA NA	<0.10	<0.10 <0.10	<0.10 <0.10	<0.10 <0.10	NA NA
Chloromethane 1.2-Dichlorobenzene	0.10 mg/kg 0.050 mg/kg	NA NA	<0.10 <0.050	<0.10	<0.10	NA NA	<0.10 <0.050	<0.10	<0.10	<0.10	NA NA
1,3-Dichlorobenzene	0.050 mg/kg	NA	<0.050	<0.050	<0.050	NA	<0.050	<0.050	<0.050	<0.050	NA
1,4-Dichlorobenzene	0.050 mg/kg	NA NA	<0.050	<0.050	<0.050	NA NA	<0.050	<0.050	<0.050	<0.050	NA NA
1,1-Dichloroethane 1,2-Dichloroethane	0.050 mg/kg 0.050 mg/kg	NA NA	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	NA NA	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	NA NA
1,1-Dichloroethylene	0.050 mg/kg	NA	<0.15	<0.20	<0.050	NA	<0.15	<0.15	<0.20	<0.35	NA
cis-1,2-Dichloroethylene	0.050 mg/kg	NA	<0.050	<0.050	<0.050	NA	<0.050	<0.050	<0.050	<0.050	NA
trans-1,2-Dichloroethylene Dichloromethane	0.050 mg/kg 0.30 mg/kg	NA NA	<0.050 <0.30	<0.050 <0.30	<0.050 0.35	NA NA	<0.050 <0.30	<0.050 <0.30	<0.050 <0.30	<0.050 <0.30	NA NA
1,2-Dichloropropane	0.30 mg/kg 0.050 mg/kg	NA NA	<0.30 <0.050	<0.30 <0.050	<0.050	NA NA	<0.30 <0.050	<0.30 <0.050	<0.30 <0.050	<0.30 <0.050	NA NA
cis-1,3-Dichloropropylene	0.050 mg/kg	NA	<0.050	<0.050	<0.050	NA	<0.050	<0.050	<0.050	<0.050	NA
trans-1,3-Dichloropropylene	0.050 mg/kg	NA NA	<0.050	<0.050	<0.050	NA NA	<0.050	<0.050	<0.050	<0.050	NA NA
1,3-Dichloropropene (cis & trans) Ethylbenzene	0.10 mg/kg 0.015 mg/kg	NA NA	<0.10 <0.015	<0.10 <0.015	<0.10 <0.015	NA NA	<0.10 <0.015	<0.10 <0.015	<0.10 <0.015	<0.10 <0.015	NA NA
Methyl t-butyl ether (MTBE)	0.20 mg/kg	NA	<0.00	<0.20	<0.013	NA NA	<0.20	<0.20	<0.20	<0.00	NA NA
Styrene	0.050 mg/kg	NA	<0.050	<0.050	<0.050	NA	<0.050	<0.050	<0.050	<0.050	NA NA
1,1,1,2-Tetrachloroethane	0.050 mg/kg	NA NA	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	NA NA	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	NA NA
1,1,2,2-Tetrachloroethane Tetrachloroethylene	0.050 mg/kg 0.050 mg/kg	NA NA	<0.050 <0.050	<0.050 <0.050	<0.050	NA NA	<0.050 <0.050	<0.050	<0.050 <0.050	<0.050 <0.050	NA NA
Toluene	0.050 mg/kg	NA	<0.050	<0.050	<0.050	NA	<0.050	<0.050	<0.050	<0.050	NA
1,1,1-Trichloroethane	0.050 mg/kg	NA	<0.050	<0.050	<0.050	NA	<0.050	<0.050	<0.050	<0.050	NA
1,1,2-Trichloroethane	0.050 mg/kg	NA NA	<0.050	<0.050	<0.050	NA NA	<0.050	<0.050	<0.050 <0.010	<0.050	NA NA
Trichloroethylene Trichlorofluoromethane	0.010 mg/kg 0.10 mg/kg	NA NA	<0.010 <0.10	<0.010 <0.10	<0.010 <0.10	NA NA	<0.010 <0.10	<0.010 <0.10	<0.010 <0.10	<0.010 <0.10	NA NA
Vinyl Chloride	0.10 mg/kg	NA	<0.10	<0.10	<0.10	NA	<0.10	<0.10	<0.10	<0.10	NA
ortho-Xylene	0.050 mg/kg	NA NA	<0.050	<0.050	<0.050	NA NA	<0.050	<0.050	<0.050	<0.050	NA NA
meta- & para-Xylene Xylenes	0.050 mg/kg 0.075 mg/kg	NA NA	<0.050 <0.075	<0.050 <0.075	<0.050 <0.075	NA NA	<0.050 <0.075	<0.050 <0.075	<0.050 <0.075	<0.050 <0.075	NA NA
4-Bromofluorobenzene (SS)	0.075 mg/kg %	NA NA	<0.075 89.5	91.6	98.7	NA NA	97.2	90.8	<0.075 82.4	<0.075 83.5	NA NA
1,4-Difluorobenzene (SS)	%	NA	82.8	80.6	98.7	NA NA	86.2	84.6	72.3	83.9	NA NA

Sample ID			BE-5-1	BE-5-2	BE-5-3	SC-4-1	DUP-D (SC-		SC-4-2	SC-4-3	SC-5-1	SC-5-2	SC-5-3	SN-1-1	SN-1-2	SN-1-3	SN-2-1	DUP-E (SN-		SN-2-2	SN-2-3	SN-3-1	SN-3-2	SN-3-3	SN-4-1	SN-4-2	SN-4-3	SN-5-1	SN-5-2	SN-5-3
· ·				3 12-Aug-201			4-1)											2-1)												
Date Sampled Laboratory Sample ID							8 13-Aug-2018 7 L2148903-67	Relative Percent	12-Aug-2018 L2148903-38			12-Aug-2018 L2148903-41				8 12-Aug-2018 0 L2148903-51	L2148903-52 L	13-Aug-2018 L2148903-68	Relative Percent		12-Aug-2018 L2148903-54					13-Aug-2018 L2148903-59		13-Aug-2018 1 L2148903-61 L		
	Lowest							Difference											Difference											
Parameter	Detectio	Units																												
Physical Proportion	n Limit		Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Physical Properties Moisture	0.25	%	41.7	l	1			NA		56.4	36.0	l	l	26.7	I	Ī	26.1	Ī	NA	l I	1	29.1			29.1			30.4	I	
pH (1:2 soil:water)	0.10	pН	8.13	8.24	8.13	8.14	8.21	0.9%	7.99	8.09	8.18	8.16	8.16	8.33	8.40	8.39	8.29	8.36	0.8%	8.35	8.37	8.27	8.37	8.26	8.30	8.37	8.38	8.30	8.32	8.35
% Gravel (>2mm) % Sand (2.0mm - 0.063mm)	1.0	%	5.9 23.7	8.0 39.1	7.0 31.7	7.0 32.3	11.2 33.6	46.2% 3.9%	13.0 27.4	9.7 30.6	3.4 44.3	2.3 41.6	7.7 43.1	7.8 55.3	7.0 41.4	27.8 39.0	4.4 41.7	4.9 39.8	NA 4.7%	7.8 43.4	5.9 45.1	13.7 29.5	5.5 47.0	6.6 40.8	17.0 30.7	4.5 32.0	4.8 39.3	7.1 32.3	2.8 40.7	6.0 25.9
% Silt (0.063mm - 4um)	1.0	%	51.4	41.3	46.2	40.5	37.7	7.2%	41.0	43.3	39.4	43.5	38.4	29.7	39.8	26.3	40.7	43.6	6.9%	36.6	37.2	40.0	33.8	38.6	35.5	44.0	37.5	39.4	35.8	45.3
% Clay (<4um)	1.0	%	19.1	11.6	15.1	20.1	17.6	13.3%	18.5	16.4	13.0	12.6	10.9	7.2	11.8	6.9	13.2	11.7	12.0%	12.2	11.8	16.9	13.6	14.0	16.8	19.5	18.3	21.1	20.8	22.8
Texture		-	Silt loam	Loam	Silt loam	Loam	Loam		Silt loam	Silt loam	Loam	Loam	Loam / Sandy loam	Sandy loam	Loam	Sandy Ioam	Loam	Loam		Loam	Loam	Silt loam	Loam	Loam	Loam	Silt loam / Loam	Loam	Loam	Loam	Silt loam
Organic / Inorganic Carbon (Soil)								NA							L	L	<u> </u>		NA										<u> </u>	
Inorganic Carbon	0.050	%	1.88	1.55	1.67	1.99	2.12	6.3%	1.93	2.00	1.39	1.30	1.52	1.38	1.63	1.50	1.63	1.84	12.1%	1.69	1.63	1.94	1.63	1.81	1.96	2.01	1.97	2.27	2.06	2.17
Total Organic Carbon Metals	0.050	%	3.2	2.78	3.24	2.78	2.9	4.2%	3.2	3.3	2.18	5.58	2.23	2.1	3.04	2.63	2.66	3.9	37.8%	2.73	2.83	3.1	2.27	2.74	2.77	2.94	2.56	2.9	2.81	3.1
Aluminum (Al)	50	mg/kg	9200	5590	8830	10600	10800	1.9%	9460	9260	7170	7730	7600	5330	6280	5420	7720	7070	8.8%	6210	5670	9160	8480	7190	8860	8690	7850	8770	8760	9960
Antimony (Sb) Arsenic (As)	0.10 0.10	mg/kg mg/kg	0.18 4.14	<0.10 2.43	0.15 3.88	0.17 4.96	0.15 4.47	NA 10.4%	0.17 6.41	0.15 6.39	0.13 3.12	0.13 4.26	0.12 2.84	<0.10 4.84	0.10 2.71	<0.10 3.81	0.12 6.60	0.12 6.00	NA 9.5%	0.11 4.32	<0.10 4.07	0.15 4.77	0.14 4.38	0.11 8.94	0.17 7.66	0.15 7.26	0.15 3.87	0.17 6.68	0.14 6.69	0.17 3.90
Barium (Ba)	0.50	mg/kg	29.9	15.4	24.3	34.9	31.4	10.6%	29.5	31.4	20.3	18.5	18.9	15.6	15.4	15.0	20.5	17.2	17.5%	17.7	15.2	23.0	18.8	17.0	23.5	21.1	18.3	25.4	21.3	24.3
Beryllium (Be) Bismuth (Bi)	0.10 0.20	mg/kg mg/kg	0.55 <0.20	0.40 <0.20	0.54 <0.20	0.62 <0.20	0.54 <0.20	13.8% NA	0.56 <0.20	0.51 <0.20	0.46 <0.20	0.45 <0.20	0.47 <0.20	0.33 <0.20	0.36 <0.20	0.35 <0.20	0.45 <0.20	0.39 <0.20	NA NA	0.38 <0.20	0.36 <0.20	0.51 <0.20	0.47 <0.20	0.41 <0.20	0.50 <0.20	0.46 <0.20	0.43 <0.20	0.51 <0.20	0.47 <0.20	0.56 <0.20
Boron (B)	5.0	mg/kg	58.8	39.5	58.7	63.5	56.4	11.8%	65.6	59.3	42.2	46.7	44.4	35.9	41.3	39.1	50.8	41.6	19.9%	43.0	40.1	54.7	51.8	46.9	57.3	53.3	49.9	55.4	55.2	62.4
Cadmium (Cd) Calcium (Ca)		mg/kg mg/kg	0.092 79000	0.054 71800	0.082 76900	0.104 80500	0.098 79100	5.9% 1.8%	0.223 74300	0.128 86500	0.083 57600	0.062 49400	0.066 58600	0.042 67700	0.084 78800	0.046 73500	0.067 87200	0.066 81200	7.1%	0.068 81600	0.047 77500	0.118 96000	0.097 80300	0.047 74400	0.080 84400	0.092 82500	0.120 78700	0.114 93300	0.129 90100	0.123 89800
Chromium (Cr)	0.50	mg/kg	27.8	18.3	26.0	31.1	29.7	4.6%	28.9	28.3	24.6	25.5	25.7	17.5	19.3	17.5	22.9	21.3	7.2%	19.0	17.5	25.7	23.3	20.3	24.7	22.9	21.6	24.9	23.7	26.7
Cobalt (Co) Copper (Cu)	0.10 0.50	mg/kg mg/kg	4.34 10.1	3.02 6.24	4.14 9.18	5.07 10.6	5.10 10.4	0.6% 1.9%	4.85 10.8	4.56 10.4	3.87 7.72	3.82 7.72	3.93 7.62	3.10 6.37	3.27 6.77	3.01 7.14	4.02 8.52	3.87 8.14	3.8% 4.6%	3.37 7.29	3.25 6.84	4.49 10.3	3.74 9.17	3.48 7.89	4.40 9.82	3.97 9.43	3.61 9.09	4.62 10.3	4.10 9.79	4.44 11.3
Iron (Fe)	50	mg/kg	13500	9500	12600	15400	14500	6.0%	14900	14200	12400	12000	11600	14100	10200	12900	14000	12600	10.5%	11100	10800	14500	12900	13400	15300	14700	12200	14900	14300	14800
Lead (Pb) Lithium (Li)	0.50 2.0	mg/kg mg/kg	9.01 38.7	5.61 26.7	8.16 37.6	9.29 41.5	9.43 38.5	1.5% 7.5%	8.80 38.5	8.53 36.1	7.07 28.5	6.61 28.3	6.75 30.4	4.72 23.4	5.65 26.2	4.97 25.1	6.63 33.5	6.23 29.1	6.2% 14.1%	5.94 28.7	5.63 26.7	7.67 37.9	6.94 35.8	6.25 30.7	7.85 37.2	7.46 36.6	6.88 33.9	8.06 37.6	7.43 35.5	8.56 42.8
Magnesium (Mg)	20	mg/kg	44400	40700	43500	39100	40200	2.8%	34700	33300	30900	31500	34300	36400	39500	37700	46100	44200	4.2%	39500	38800	44600	41100	38300	42400	40200	38100	42800	40500	43500
Manganese (Mn) Mercury (Hg)	1.0 0.0050	mg/kg mg/kg	154 0.0206	125 0.0110	147 0.0166	160 0.0227	152 0.0227	5.1% NA	151 0.0267	139 0.0247	129 0.0168	126 0.0156	127 0.0156	142 0.0110	116 0.0110	134 0.0101	170 0.0146	168 0.0156	1.2% NA	132 0.0115	130 0.0112	160 0.0159	138 0.0161	146 0.0152	169 0.0178	174 0.0165	131 0.0153	174 0.0178	175 0.0179	163 0.0199
Molybdenum (Mo)	0.10	mg/kg	0.76	0.31	0.64	0.83	0.76	8.8%	1.90	1.08	0.63	0.67	0.72	0.39	0.57	0.34	0.37	0.34	NA	0.32	0.30	0.41	0.35	0.33	0.40	0.37	0.39	0.40	0.41	0.39
Nickel (Ni) Phosphorus (P)	0.50 50	mg/kg mg/kg	15.2 547	10.2 415	14.8 568	17.2 525	16.5 530	4.2% 0.9%	16.1 747	15.5 601	15.2 517	15.8 637	15.9 513	9.37 445	10.4 331	9.30 390	12.4 524	11.9 481	4.1% 8.6%	10.3 389	9.65 408	14.2 444	12.7 404	11.4 530	13.8 560	12.9 532	12.3 361	14.1 482	13.5 454	15.3 399
Potassium (K)	100	mg/kg	3700	2290	3630	4330	4110	5.2%	4220	3970	2740	2890	2850	2290	2520	2260	3220	2770	15.0%	2500	2370	3700	3450	3050	3610	3640	3270	3650	3590	4110
Selenium (Se) Silver (Ag)	0.20 0.10	mg/kg mg/kg	0.40 <0.10	<0.20 <0.10	0.37 <0.10	0.46 <0.10	0.53 <0.10	NA NA	0.67 <0.10	0.63 <0.10	0.35 <0.10	0.34 <0.10	0.34 <0.10	<0.20 <0.10	<0.20 <0.10	<0.20 <0.10	<0.20 <0.10	<0.20 <0.10	NA NA	<0.20 <0.10	<0.20 <0.10	0.22 <0.10	0.21 <0.10	0.22 <0.10	0.24 <0.10	0.26 <0.10	0.21 <0.10	0.24 <0.10	0.22 <0.10	0.27 <0.10
Sodium (Na)	50	mg/kg	7700	3660	6060	8560	8690	1.5%	13800	11700	5900	6230	6320	3670	4470	3440	4420	3890	12.8%	4100	3460	5060	4690	4760	4750	4570	4740	5440	5190	5630
Strontium (Sr) Sulfur (S)	0.50 1000	mg/kg mg/kg	65.7 1400	46.6 <1000	67.9 <1000	74.0 1400	77.3 1500	4.4% NA	133 3200	170 2500	74.7 <1000	57.2 <1000	55.2 <1000	43.3 <1000	50.3 1200	46.5 <1000	55.4 <1000	59.2 <1000	6.6% NA	53.1 <1000	49.5 <1000	63.6 <1000	55.5 <1000	56.8 <1000	59.0 <1000	62.0 <1000	57.8 <1000	75.8 <1000	67.1 <1000	67.2 <1000
Thallium (TI)	0.050	mg/kg	0.157	0.095	0.142	0.169	0.176	NA	0.164	0.158	0.126	0.122	0.123	0.090	0.112	0.096	0.123	0.116	NA	0.106	0.104	0.136	0.121	0.110	0.138	0.130	0.123	0.136	0.124	0.151
Tin (Sn) Titanium (Ti)		mg/kg mg/kg	<2.0 340	<2.0 260	<2.0 346	<2.0 388	<2.0 381	NA 1.8%	<2.0 341	<2.0 336	<2.0 323	<2.0 349	<2.0 345	<2.0 252	<2.0 262	<2.0 253	<2.0 305	<2.0 276	NA 10.0%	<2.0 249	<2.0 232	<2.0 328	<2.0 281	<2.0 257	<2.0 309	<2.0 282	<2.0 247	<2.0 300	<2.0 275	<2.0 316
Tungsten (W)	0.50	mg/kg	< 0.50	<0.50	< 0.50	<0.50	<0.50	NA	<0.50	<0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	NA	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Uranium (U) Vanadium (V)	0.050	mg/kg mg/kg	1.39 31.8	0.877 20.2	1.36 29.4	1.47 33.7	1.43 31.9	2.8% 5.5%	1.52 33.1	1.33 32.5	1.29 26.1	1.29 25.9	1.28 23.7	0.757 19.8	0.977 21.9	0.816 19.6	0.971 27.9	0.892 25.4	8.5% 9.4%	0.876 22.3	0.878 21.6	1.18 34.2	0.973 29.7	0.858 26.5	0.999 34.4	0.946 32.7	1.14 29.2	1.06 33.8	0.965 32.1	1.16 35.7
Zinc (Zn)	2.0	mg/kg	23.9	15.7	22.3	27.7	26.9	2.9%	26.4	26.2	22.1	21.0	21.6	14.8	15.5	14.6	18.7	17.8	4.9%	15.5	14.9	22.1	19.8	17.4	22.7	21.2	20.1	23.9	22.1	25.7
Zirconium (Zr) Volatile Organic Compounds (Soil)	1.0	mg/kg	7.5	6.1	8.0	8.9	9.3	4.4%	7.1	6.7	5.3	5.6	6.3	5.6	8.1	7.0	7.5	7.0	6.9%	7.6	7.1	8.7	8.8	6.9	8.2	8.0	8.1	7.9	7.5	10.3
VOC Sample Container		-	Field MeOH					NA		Field MeOH				Field MeOH			Field MeOH		NA			Field MeOH			Field MeOH			Field MeOH		
Benzene Bromodichloromethane	0.0050 0.050	mg/kg mg/kg	<0.011 <0.050					NA NA		<0.012 <0.050	<0.0050 <0.050			<0.0050 <0.050			<0.0050 <0.050		NA NA			<0.0050 <0.050			<0.0050 <0.050			<0.0050 <0.050		
Bromoform	0.050	mg/kg	<0.050					NA		<0.050	<0.050			<0.050			<0.050		NA			<0.050			<0.050			<0.050		
Carbon Tetrachloride	0.050 0.050	mg/kg	<0.050 <0.050					NA NA		<0.050 <0.050	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		NA NA			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		
Chlorobenzene Dibromochloromethane	0.050	mg/kg mg/kg	<0.050					NA		<0.050	<0.050			< 0.050			<0.050		NA			<0.050			<0.050			< 0.050		
Chloroethane Chloroform	0.10	mg/kg mg/kg	<0.10 <0.10	<u> </u>			1	NA NA		<0.10 <0.10	<0.10 <0.10			<0.10 <0.10	ļ <u> </u>	1	<0.10 <0.10		NA NA			<0.10 <0.10			<0.10 <0.10			<0.10		
Chloromethane	0.10	mg/kg	<0.10					NA		<0.10	<0.10			<0.10			<0.10		NA NA			<0.10			<0.10			<0.10		
1,2-Dichlorobenzene 1,3-Dichlorobenzene	0.050 0.050	mg/kg mg/kg	<0.050 <0.050		<u> </u>	+ -	+	NA NA	<u> </u>	<0.050 <0.050	<0.050 <0.050			<0.050 <0.050		+ -	<0.050 <0.050		NA NA	\vdash		<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		
1,4-Dichlorobenzene	0.050	mg/kg	<0.050					NA		<0.050	< 0.050			< 0.050			<0.050		NA			< 0.050			<0.050			< 0.050		
1,1-Dichloroethane 1,2-Dichloroethane	0.050 0.050	mg/kg	<0.050 <0.085					NA NA		<0.050 <0.090	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		NA NA			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		
1,1-Dichloroethylene	0.050	mg/kg	<0.50					NA		<0.30	<0.050			<0.10			<0.050		NA			<0.050			<0.050			<0.050		
cis-1,2-Dichloroethylene trans-1,2-Dichloroethylene	0.050 0.050		<0.050 <0.050					NA NA		<0.050 <0.050	<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		NA NA			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		
Dichloromethane	0.30	mg/kg	0.46					NA		< 0.30	0.66			< 0.30			<0.30		NA			< 0.30			< 0.30			<0.30		
1,2-Dichloropropane cis-1,3-Dichloropropylene	0.050 0.050	mg/kg	<0.050 <0.050				1	NA NA		<0.050 <0.050	<0.050 <0.050			<0.050 <0.050	ļ <u> </u>	1	<0.050 <0.050		NA NA			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		
trans-1,3-Dichloropropylene	0.050	mg/kg	< 0.050					NA		< 0.050	< 0.050			< 0.050			< 0.050		NA			< 0.050			< 0.050			< 0.050		
1,3-Dichloropropene (cis & trans) Ethylbenzene	0.10 0.015	mg/kg	<0.10 <0.015	ļ		1	1	NA NA		<0.10 <0.015	<0.10 <0.015			<0.10 <0.015	ļ	1	<0.10 <0.015		NA NA			<0.10 <0.015			<0.10 <0.015			<0.10 <0.015	1	
Methyl t-butyl ether (MTBE)	0.20	mg/kg	<0.20					NA		<0.20	<0.20			<0.20			<0.20		NA			<0.20			<0.20			<0.20		
Styrene 1.1.1.2-Tetrachloroethane		mg/kg mg/kg	<0.050 <0.050	ļ		-	1	NA NA		<0.050 <0.050	<0.050 <0.050			<0.050 <0.050	ļ	1	<0.050 <0.050		NA NA			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050	1	
1,1,2,2-Tetrachloroethane	0.050	mg/kg	<0.050					NA		< 0.050	<0.050			< 0.050			< 0.050		NA			< 0.050			< 0.050			< 0.050		
Tetrachloroethylene Toluene		mg/kg mg/kg	<0.050 0.106	ļ <u> </u>	1	<u> </u>	 	NA NA		<0.050 <0.075	<0.050 <0.050			<0.050 <0.050	ļ	+ -	<0.050 <0.050		NA NA			<0.050 <0.050			<0.050 <0.050			<0.050 <0.050		
1,1,1-Trichloroethane	0.050	mg/kg	<0.050					NA		< 0.050	<0.050			< 0.050			<0.050		NA			< 0.050			<0.050			< 0.050		
1,1,2-Trichloroethane Trichloroethylene	0.050 0.010	mg/kg mg/kg	<0.050 <0.010	ļ <u> </u>	1	<u> </u>	 	NA NA		<0.050 <0.010	<0.050 <0.010			<0.050 <0.010	ļ	+ -	<0.050 <0.010		NA NA			<0.050 <0.010			<0.050 <0.010			<0.050 <0.010		
Trichlorofluoromethane	0.10	mg/kg	<0.10					NA		<0.10	<0.10			<0.10			<0.10		NA			<0.10			<0.10			<0.10		
Vinyl Chloride ortho-Xylene		mg/kg mg/kg	<0.10 <0.050	ļ		-	1	NA NA		<0.10 <0.050	<0.10 <0.050			<0.10 <0.050	ļ	1	<0.10 <0.050		NA NA			<0.10 <0.050			<0.10 <0.050			<0.10 <0.050	1	
meta- & para-Xylene	0.050	mg/kg	<0.050					NA		< 0.050	<0.050			< 0.050			<0.050		NA			< 0.050			<0.050			< 0.050		
Xylenes 4-Bromofluorohenzene (SS)	0.075	mg/kg %	<0.075 115.8				4 T	NA NA		<0.075 90.5	<0.075 91			<0.075 79.3	<u> </u>		<0.075 86.5		NA NA			<0.075 73.9			<0.075 82			<0.075 71.2		
4-Bromofluorobenzene (SS) 1,4-Difluorobenzene (SS)		%	115.8					NA NA		90.5 90.7	86.6			79.3 72.9			86.5 86.5		NA NA			83.8			94.1			71.2		

	т т	1																1	1								DUD B (SW		1	$\overline{}$		$\overline{}$
Sample ID			CCN	ME		BC MOF				NOAA Sec	liment Bench	marks				SW-1-1	SW-1-2	SW-1-3	SW-2-1	SW-2-2	SW-2-3	SW-3-1	SW-3-2	SW-3-3	SW-4-1	SW-4-2	4-2)		SW-4-3	SW-5-1	SW-5-2	SW-5-3
Date Sampled		ľ	I				I									11-Aug-2018	11-Aug-2018	3 11-Aug-2018	11-Aug-2018	11-Aug-2018	11-Aug-2018	11-Aug-2018	11-Aug-2018	11-Aug-2018	11-Aug-2018	11-Aug-2018	13-Aug-2018	Datation	11-Aug-2018	11-Aug-2018 1	11-Aug-2018	11-Aug-2018
Laboratory Sample ID																L2148903-1					L2148903-6							Relative Percent		L2148903-13 L2		
																												Difference				
	Lowest														Eco Tox													Difference		1 1		. '
Parameter	Detectio	Units			Working										EqP (@															1 1		,
	n Limit		ISQG	PEL	ISQG	Working PEL	Approved	T ₂₀	TEL	ERL	T ₅₀	PEL	ERM	AET	1%TOC)	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment	Sediment	Sediment
Hydrocarbons (Soil)				-																												
EPH10-19	200	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<200			<200			<200			<200			NA		<200		
EPH19-32	200	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<200			<200			<200			<200			NA		<200		
LEPH	200	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<200			<200			<200			<200			NA		<200		
HEPH	200	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	<200			<200			<200			<200			NA		<200		
2-Bromobenzotrifluoride		%	-	-	-	-	-	-	-	-	-	-	-		-	94.4			95			96.8			96.2			NA		91.9		
Polycyclic Aromatic Hydrocarbons (Soil)																																
Acenaphthene	0.0050	mg/kg	0.00671	0.0889	0.00671	0.0889	0.15 ^b	0.019	0.007	0.016	0.116	0.089	0.500	0.130	-	< 0.0050			< 0.0050			<0.0050			<0.0050			NA		<0.0050		
Acenaphthylene	0.0050	mg/kg	0.00587	0.128	0.00587	0.128	-	0.014	0.006	0.044	0.140	0.128	0.640	0.071	-	< 0.0050			< 0.0050			<0.0050			< 0.0050			NA		< 0.0050		
Anthracene		mg/kg	0.0469	0.245	0.0469	0.245	-	0.034	0.047	0.085	0.290	0.245	1.100	0.280	-	< 0.0040			< 0.0040			<0.0040			<0.0040			NA		< 0.0040		
Benz(a)anthracene	0.010	mg/kg	0.0748	0.693	0.0748	0.693	-	0.061	0.075	0.261	0.466	0.693	1.600	0.960	-	<0.010			<0.010			<0.010			<0.010			NA		<0.010		
Benzo(a)pyrene	0.010	mg/kg	0.0888	0.763	0.0888	0.763	0.06 ^b	0.069	0.089	0.430	0.520	0.763	1.600	1.100	-	< 0.010			< 0.010			< 0.010			<0.010			NA		<0.010		
Benzo(b&j)fluoranthene	0.010	mg/kg	-	-	-	-	-	0.130	-	-	1.107	-	-	1.800	-	< 0.010			< 0.010			<0.010			<0.010			NA		<0.010		
Benzo(b+j+k)fluoranthene	0.015	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.015			< 0.015			< 0.015			<0.015			NA		<0.015		
Benzo(g,h,i)perylene	0.010	mg/kg	-	-	0.31	0.78	-	-	-	-	-	-	-	-	-	< 0.010			< 0.010			< 0.010			<0.010			NA		<0.010		
Benzo(k)fluoranthene	0.010	mg/kg	-	-	2.3	4.5	-	0.070	-	-	0.537			1.800	-	< 0.010			<0.010			<0.010			<0.010			NA		<0.010		
Chrysene	0.010	mg/kg	0.108	0.846	0.108	0.846	0.2 ^b	0.082	0.108	0.384	0.650	0.846	2.800	0.950	-	< 0.010			< 0.010			< 0.010			<0.010			NA		<0.010		
Dibenz(a,h)anthracene	0.0050	mg/kg	0.00622	0.135	0.00622	0.135	-	0.019	0.006	0.063	0.113	0.135	0.260	0.230	-	< 0.0050			< 0.0050			<0.0050			< 0.0050			NA		< 0.0050		
Fluoranthene	0.010	mg/kg	0.113	1.494	0.113	1.494	-	0.119	0.113	0.600	1.034	1.494	5.100	1.300	-	< 0.010			< 0.010			<0.010			<0.010			NA		<0.010		
Fluorene	0.010	mg/kg	0.0212	0.144	0.0212	0.144	0.2 ^b	0.019	0.021	0.019	0.114	0.144	0.540	0.120	0.540	< 0.010			< 0.010			< 0.010			<0.010			NA		< 0.010		
Indeno(1,2,3-c,d)pyrene	0.010	mg/kg			0.34	0.88	-	0.068	-	-	0.488			0.600	-	< 0.010			< 0.010			< 0.010			<0.010			NA	1	< 0.010		
1-Methylnaphthalene	0.050	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.050			< 0.050			< 0.050			< 0.050			NA		< 0.050		
2-Methylnaphthalene	0.010	mg/kg	0.0202	0.201	0.02	0.202	-	0.021	0.020	0.070	0.128	0.201	0.670	0.064	-	< 0.010			< 0.010			< 0.010			<0.010			NA		<0.010		
Naphthalene	0.010	mg/kg	0.0346	0.391	0.0346	0.391	0.01 ^b	0.030	0.035	0.160	0.217	0.391	2.100	0.230	0.480	< 0.010			< 0.010			<0.010			<0.010			NA		<0.010		
Phenanthrene	0.010	mg/kg	0.0867	0.544	0.0867	0.544	-	0.068	0.087	0.240	0.455	0.544	1.500	0.660	-	< 0.010			< 0.010			< 0.010			<0.010			NA	1	< 0.010		
Pyrene	0.010	mg/kg	0.153	1.398	0.153	1.398	-	0.125	0.153	0.665	0.932	1.398	2.600	2.400	-	< 0.010			< 0.010			<0.010			<0.010			NA		<0.010		
Quinoline	0.050	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.050			< 0.050			< 0.050			< 0.050			NA		< 0.050		
Acenaphthene d10		%	-	-	-	-	-	-	-	-	-	-	-	-	-	91.1			88			92.5			87.5			NA	1	91		
Chrysene d12		%	-	-	_	-	-	-	-	-	-	-	-	-	-	106.1			99.2			104.8			99.1			NA		102.4		
Naphthalene d8		%	-	-	_	-	-	-	-	-			-	-	-	90.4			85.7			90.7			85.6			NA		88.6		
Phenanthrene d10		%	-	-	_	-	-	-	-	-	-	-	-	-	-	103.8			94.1			98.9			93.5			NA		96.4		
B(a)P Total Potency Equivalent	0.020	mg/kg	-	-	_	-	-	-	-	-	-	-	-	-	-	<0.020			< 0.020			<0.020			<0.020			NA		<0.020		
IACR (CCME)	0.15	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	=	<0.15			<0.15			<0.15			<0.15			NA		<0.15		

Notes:

^a Selenium - BC Alert concentration

^b PAHs - BC concentrations at 1% TOC

- BC concentrations at 1% TOC

Greater then CCME ISQG guideline
Greater then CCME PEL guideline
Greater then BC MOE working ISQG guideline
Greater then NOAA Sediment Benchmarks working T20 guideline
Greater then NOAA Sediment Benchmarks working T2L guideline
RDP is greater then S0%
Greater then CCME and BC MOE ISQG guideline
miligram per kilogram, NA - not available, pH - scale of acidity, % - percentage, * - - no value

	T		DUD A (OM E		_	Т		1	· ·					DUD E/DE O						т т		ī		1	I	1 1		DUD 0 (00	1		
Sample ID			DUP A (SW-5		SE-1-2	SE-1-3	SE-2-1	SE-2-2	SE-2-3	SE-3-1	SE-3-2	SE-3-3	BE-2-1	DUP F(BE-2-		BE-2-2	BE-2-3	SE-4-1	SE-4-2	SE-4-3	SE-5-1	SE-5-2	SE-5-3	SC-2-1	SC-2-2	SC-2-3	SC-3-1	DUP C (SC-		SC-3-2	SC-3-3
Date Sampled			13-Aug-2018		11 Aug 2019	11 Aug 2019	11 Aug 201	8 11-Aug-2018	11 Aug 2019	11 Aug 2019	11 Aug 2010	11 Aug 2010	12 Aug 2016	12 Aug 2010		12 Aug 2010	12 Aug 2010	11 Aug 2019	11 Aug 2019	11 Aug 2019	11 Aug 2010	11 Aug 2010	11 Aug 2010	11 Aug 2010	11 Aug 2010	11 Aug 2019	12 Aug 2010	12 Aug 2019		12 Aug 2019	12 Aug 2010
Laboratory Sample ID			L2148903-64	Relative				9 L2148903-20							Relative											11-Aug-2018 L2148903-33			Relative	12-Aug-2016	8 12-Aug-2018 5 L2148903-36
Laboratory Sample ID			LZ 140903-04	Percent	L2 140903-17	L2 140903-10	L2 140903-1	9 LZ 140903-20	LZ 140903-Z I I	LZ 140903-ZZ	LZ 140903-Z3	L2 140903-24	L2 140903-43		Percent	LZ 1409U3-44	LZ 140903-45	LZ 140903-23	LZ 140903-20	LZ 140903-27	LZ 140903-20	LZ 140903-Z9	L2 140903-30	L2 140903-3 I	LZ 140903-32	LZ 140903-33	LZ 140903-34		Percent	LZ 140903-33	ALZ 140903-30
	Lowe	st		Difference											Difference														Difference	('	
Parameter	Detecti	Units																												('	
	n Limi		Sediment		Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment								
Hydrocarbons (Soil)							•																								
EPH10-19	200	ma/ka		NA			<200	1		<200			<200	1	NA			<200			<200			<200			<200		NA	í	1
EPH19-32	200	mg/kg		NA			<200			<200			<200		NA			<200			<200			<200			<200		NA	i '	1
LEPH	200	mg/kg		NA			<200			<200			<200		NA			<200			<200			<200			<200		NA	i '	1
HEPH	200	mg/kg		NA			<200			<200			<200		NA			<200			<200			<200			<200		NA	(
2-Bromobenzotrifluoride		%		NA			93.9			92.3			95.1		NA			94.6			97.2			95.1			101.7		NA	(
Polycyclic Aromatic Hydrocarbons (Soil)																															
Acenaphthene	0.0050	mg/kg		NA			< 0.0050			< 0.0050			< 0.0050		NA			< 0.0050			< 0.0050			< 0.0050			< 0.0050		NA	(1
Acenaphthylene	0.0050	ma/ka		NA			< 0.0050			< 0.0050			< 0.0050		NA			< 0.0050			< 0.0050			< 0.0050			< 0.0050		NA		1
Anthracene	0.0040			NA			< 0.0040			< 0.0040			< 0.0040		NA			< 0.0040			< 0.0040			< 0.0040			< 0.0040		NA	i '	1
Benz(a)anthracene	0.010	mg/kg		NA			< 0.010			<0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010			< 0.010		NA	i '	1
Benzo(a)pyrene	0.010			NA			< 0.010			<0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010			<0.010		NA	· ·	
Benzo(b&j)fluoranthene	0.010	mg/kg		NA			< 0.020			<0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010			< 0.010		NA	i '	1
Benzo(b+j+k)fluoranthene	0.015	mg/kg		NA			< 0.022			< 0.015			< 0.015		NA			< 0.015			< 0.015			< 0.015			< 0.015		NA	i '	1
Benzo(g,h,i)perylene	0.010	mg/kg		NA			0.011			<0.010			<0.010		NA			<0.010			0.011			< 0.010			<0.010		NA	(
Benzo(k)fluoranthene	0.010	mg/kg		NA			<0.010			<0.010			<0.010		NA			<0.010			<0.010			<0.010			<0.010		NA	, ,	
Chrysene	0.010	mg/kg		NA			< 0.010			<0.010			< 0.010		NA			< 0.010			<0.010			< 0.010			<0.010		NA	, ,	
Dibenz(a,h)anthracene	0.0050	mg/kg		NA			< 0.0050			< 0.0050			< 0.0050		NA			< 0.0050			< 0.0050			< 0.0050			<0.0050		NA	· ·	
Fluoranthene	0.010	mg/kg		NA			< 0.010			<0.010			< 0.010		NA			< 0.010			<0.010			<0.010			<0.010		NA	· ·	
Fluorene	0.010	mg/kg		NA			< 0.010			<0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010			< 0.010		NA	· ·	
Indeno(1,2,3-c,d)pyrene	0.010	mg/kg		NA			0.010			<0.010			< 0.010		NA			< 0.010			<0.010			< 0.010			<0.010		NA	(
1-Methylnaphthalene	0.050	mg/kg		NA			< 0.050			< 0.050			< 0.050		NA			< 0.050			< 0.050			< 0.050			< 0.050		NA	· ·	
2-Methylnaphthalene	0.010	mg/kg		NA			< 0.010			<0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010			< 0.010		NA	· ·	
Naphthalene	0.010	mg/kg		NA			< 0.010			<0.010			<0.010		NA			<0.010			<0.010			< 0.010			<0.010		NA	,	
Phenanthrene	0.010	mg/kg		NA			< 0.010			<0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010			<0.010		NA		
Pyrene	0.010			NA			< 0.010	1		< 0.010			< 0.010		NA			< 0.010			<0.010			< 0.010			<0.010		NA		1
Quinoline	0.050	mg/kg		NA			< 0.050	1		< 0.050			< 0.050	1	NA			< 0.050		1	< 0.050			< 0.050			< 0.050		NA	(1
Acenaphthene d10		%		NA			90.3			88			96		NA			89.6			91.7			92			98.3		NA		
Chrysene d12		%		NA			101.7			92.3			114.3		NA			100.3			103.4			103.3			111.9		NA	,	
Naphthalene d8		%		NA			87.2			85.9			92.4		NA			87.6			86.6			88.1			95		NA	'	
Phenanthrene d10		%	•	NA			97.1			91.9			110.4		NA	•		94.1			105.2			105.4			114.4		NA	·	
B(a)P Total Potency Equivalent	0.020			NA			<0.020			<0.020			<0.020		NA	•		<0.020			<0.020			<0.020			<0.020		NA	·	
IACR (CCME)	0.15	ma/ka		NA			< 0.15			<0.15			< 0.15		NA			< 0.15			< 0.15			< 0.15			< 0.15		NA		

Notes:

* Selenium - BC Alert concentration

* PAHs - BC concentrations at 1% TOC

Greater then CCME ISQG Greater then CCME PEL g Greater then BC MOE wor Greater then BC MOE wor Greater then NOAA Sedim Greater then NOAA Sedim RDP is greater then 50% Greater then CCME and B

percentage, "-" - no value

			T	T	I		DUP-D (SC-											DUP-E (SN-												T
Sample ID			BE-5-1	BE-5-2	BE-5-3	SC-4-1	4-1)		SC-4-2	SC-4-3	SC-5-1	SC-5-2	SC-5-3	SN-1-1	SN-1-2	SN-1-3	SN-2-1	2-1)		SN-2-2	SN-2-3	SN-3-1	SN-3-2	SN-3-3	SN-4-1	SN-4-2	SN-4-3	SN-5-1	SN-5-2	SN-5-3
Date Sampled			12-Aug-201	8 12-Aug-2018	12-Aug-2018	12-Aug-2018	13-Aug-2018	Relative	12-Aug-2018	12-Aug-2018	12-Aug-2018	3 12-Aug-2018	12-Aug-2018	12-Aug-2018	12-Aug-2018	12-Aug-2018	12-Aug-201	8 13-Aug-2018	Relative	12-Aug-2018	12-Aug-2018	13-Aug-2018	პ 13-Aug-2018							
Laboratory Sample ID			L2148903-4	6 L2148903-47	L2148903-48	L2148903-37	L2148903-67	Percent	L2148903-38	L2148903-39	L2148903-40	L2148903-41	L2148903-42	L2148903-49	L2148903-50	L2148903-51	L2148903-5	2 L2148903-68	Percent	L2148903-53	L2148903-54	L2148903-55	L2148903-56	L2148903-57	L2148903-58	L2148903-59	L2148903-60	L2148903-61	L2148903-62	2 L2148903-6?
	Louis	ot						Difference											Difference										i '	
Parameter	Lowe							Billorolloo											Billoronoo										1 '	
Farameter	n Limi																												i '	
	11 211111		Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment									
Hydrocarbons (Soil)																														
EPH10-19	200							NA		<200	<200			<200			<200		NA			<200			<200			<200	·	
EPH19-32	200							NA		<200	<200			<200			<200		NA			<200			<200			<200	<u> </u>	
LEPH	200							NA		<200	<200			<200			<200		NA			<200			<200			<200		
HEPH	200	mg/kg						NA		<200	<200			<200			<200		NA			<200			<200			<200		
2-Bromobenzotrifluoride		%	97.1					NA		97.2	93.7			93			92.5		NA			91.7			88.9			90.2	1	
Polycyclic Aromatic Hydrocarbons (Soil)																														
Acenaphthene	0.005	0 mg/kg	< 0.0050					NA		< 0.0050	< 0.0050			< 0.0050			<0.0050		NA			<0.0050			< 0.0050			< 0.0050	1	
Acenaphthylene	0.005	0 mg/kg	< 0.0050					NA		< 0.0050	< 0.0050			< 0.0050			< 0.0050		NA			0.0060			< 0.0050			< 0.0050		1
Anthracene	0.004	0 mg/kg	< 0.0040					NA		< 0.0040	< 0.0040			< 0.0040			< 0.0040		NA			< 0.0040			< 0.0040			< 0.0040		
Benz(a)anthracene	0.010	mg/kg	<0.010					NA		< 0.010	< 0.010			< 0.010			< 0.010		NA			0.011			< 0.010			< 0.010		
Benzo(a)pyrene	0.010	mg/kg	< 0.010					NA		< 0.010	< 0.010			< 0.010			< 0.010		NA			0.037			< 0.010			< 0.010		
Benzo(b&j)fluoranthene	0.010) mg/kg	< 0.010		1			NA		< 0.010	< 0.010	1		< 0.010			< 0.010		NA			0.035			< 0.010			< 0.010		1
Benzo(b+j+k)fluoranthene	0.015				1			NA		< 0.015	< 0.015	1		< 0.015			< 0.015		NA			0.05			< 0.015			< 0.015		1
Benzo(g,h,i)perylene	0.010) mg/kg	< 0.010					NA		< 0.010	< 0.010			< 0.010			< 0.010		NA			0.053			< 0.010			< 0.010		
Benzo(k)fluoranthene	0.010	mg/kg	<0.010					NA		< 0.010	< 0.010			< 0.010			< 0.010		NA			0.015			<0.010			< 0.010		
Chrysene	0.010	mg/kg	< 0.010					NA		< 0.010	< 0.010			< 0.010			< 0.010		NA			0.013			< 0.010			< 0.010		
Dibenz(a,h)anthracene	0.005	0 mg/kg	< 0.0050		1			NA		< 0.0050	< 0.0050	1		< 0.0050			< 0.0050		NA			0.0069			< 0.0050			< 0.0050		1
Fluoranthene	0.010				1			NA		< 0.010	< 0.010	1		< 0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010		1
Fluorene	0.010) mg/kg	< 0.010		1			NA		< 0.010	< 0.010	1		< 0.010			< 0.010		NA			< 0.010			< 0.010			< 0.010		1
Indeno(1,2,3-c,d)pyrene	0.010) mg/kg						NA		< 0.010	< 0.010			< 0.010			< 0.010		NA			0.049			< 0.010			< 0.010		
1-Methylnaphthalene	0.050							NA		< 0.050	< 0.050			< 0.050			< 0.050		NA			< 0.050			< 0.050			< 0.050		
2-Methylnaphthalene	0.010				ĺ	1	Ì	NA		<0.010	<0.010	1		<0.010	1		<0.010	1	NA	1	İ	<0.010		İ	<0.010			<0.010	$\overline{}$	
Naphthalene	0.010					Ì	Ì	NA		<0.010	<0.010			<0.010	1		<0.010	1	NA	1		<0.010			<0.010			<0.010		
Phenanthrene	0.010			1	1	1	1	NA.	1	< 0.010	<0.010	1		<0.010	1	1	< 0.010	1	NA.	1		< 0.010	1		<0.010			<0.010	$\overline{}$	
Pyrene		mg/kg		1	İ	i e	İ	NA		<0.010	< 0.010	İ		<0.010	i e		<0.010	1 1	NA	i e		<0.010			<0.010			<0.010		+
Quinoline	0.050			1	İ	i e	İ	NA		<0.050	<0.050	İ		<0.050	i e		<0.050	1 1	NA	i e		<0.050			<0.050			<0.050		+
Acenaphthene d10		%	96	1	İ	i e	İ	NA		91.4	88.9	İ		92	i e		92.5	1 1	NA	i e		88.6			89.5			89.1		+
Chrysene d12		%	110.9			Ì	İ	NA		100.1	99.1			122.2	İ		105.8	1 1	NA	İ	ì	112			109.4			104.3		1
Naphthalene d8		%	91	1	İ	İ	İ	NA		86.6	85	İ		88.1	İ	İ	88.9	1 1	NA	İ		85.7	İ		85.6	İ		85.1		1
Phenanthrene d10		%	113			Ì	Ì	NA		106.7	103.4			104.6	1		106.3	1	NA	1		103.8			102.7			105.1		1
B(a)P Total Potency Equivalent	0.020) mg/kg	<0.020			Ì	İ	NA		<0.020	<0.020			<0.020	İ		<0.020	1 1	NA	İ	ì	0.056			<0.020			<0.020		1
IACR (CCME)		ma/ka				i e	i e	NA		< 0.15	< 0.15			< 0.15			< 0.15		NA			0.51			< 0.15			<0.15		1

Notes:

* Selenium - BC Alert concentration

* PAHs - BC concentrations at 1% TOC

Greater then CCME ISQG
Greater then CCME ISQG
Greater then CCME PEL g
Greater then BC MOE wor
Greater then NOAA Sedim
Greater then NOAA Sedim
RDP is greater then 50%
Greater then CCME and B
am per kilogram, NA - not available, pH - scale of acidity, % - percentage, ** - no value

ANNEXE C-3 SYSTAT PCA

SYSTAT Report on Principal Component Analysis

▼File: Untitled2.syz

IMPORT successfully completed. Processed 39 variables and 69 cases.

▼ Factor Analysis

Matrix to be Factored																
	PH	GRAVEL	SAND	SILT	CLAY	INORG_	CARBON	тос	ALUMINUM_	_AL_	ANTIMONY_	_SB_	ARSENIC_	_AS_	BARIUM_	_BA_
PH	1.000															
GRAVEL	0.112	1.000														
SAND	0.568	-0.096	1.000													
SILT	-0.617	-0.184	-0.889	1.000												
CLAY	-0.445	-0.100	-0.914	0.860	1.000											
INORG_CARBON	-0.324	0.174	-0.878	0.778	0.888	1.000										
TOC	-0.539	-0.155	-0.709	0.856	0.636	0.640		1.000								
ALUMINUMAL_	-0.543	-0.075	-0.908	0.890	0.941	0.866		0.718	1.000							
ANTIMONYSB_	-0.428	-0.195	-0.819	0.699	0.868	0.735		0.484	0.865		1.000					
ARSENICAS_	-0.540	0.033	-0.551	0.630	0.564	0.529		0.553	0.623		0.381		1.000			
BARIUMBA_	-0.636	0.010	-0.877	0.867	0.872	0.815		0.718	0.954		0.774		0.673		1.000	
BERYLLIUMBE_	-0.599	-0.052	-0.895	0.901	0.910	0.835		0.729	0.976		0.818		0.628		0.945	
BORONB_	-0.598	-0.060	-0.911	0.905	0.920	0.851		0.736	0.983		0.834		0.663		0.950	
CADMIUMCD_	-0.415	0.112	-0.827	0.687	0.876	0.818		0.495	0.845		0.793		0.443		0.808	
CALCIUMCA_	-0.412	-0.040	-0.685	0.806	0.652	0.692		0.791	0.762		0.491		0.639		0.772	
CHROMIUMCR_	-0.626	-0.081	-0.889	0.909	0.892	0.818		0.762	0.983		0.818		0.637		0.965	
COBALTCO_	-0.582	-0.059	-0.865	0.893	0.880	0.827		0.776	0.975		0.786		0.677		0.967	
COPPERCU_	-0.506	-0.039	-0.890	0.868	0.911	0.857		0.730	0.977		0.830		0.647		0.941	
IRONFE_	-0.542	-0.084	-0.668	0.741	0.655	0.589		0.693	0.790		0.582		0.755		0.825	
LEADPB_	-0.564	-0.045	-0.916	0.881	0.943	0.861		0.674	0.982		0.865		0.598		0.935	
LITHIUMLI_	-0.561	-0.088	-0.880	0.902	0.888	0.830		0.758	0.969		0.808		0.642		0.935	
MAGNESIUMMG_	-0.494	-0.127	-0.741	0.868	0.677	0.688		0.819	0.797		0.555		0.598		0.772	
MANGANESEMN_	-0.495	-0.098	-0.737	0.839	0.727	0.721		0.810	0.851		0.609		0.728		0.845	

ANNEXE C-3 SYSTAT PCA

Matrix to be Factored											
	PH	GRAVEL	SAND	SILT	CLAY	INORG_CARBO	NTOC	ALUMINUMAL_	ANTIMONY_SB_	ARSENICAS_	BARIUM_BA_
MERCURYHG_	-0.562	0.022	-0.906	0.831	0.927	0.877	0.653	0.954	0.849	0.584	0.928
MOLYBDENUMMO_	-0.720	-0.123	-0.692	0.645	0.625	0.515	0.551	0.712	0.713	0.341	0.750
NICKELNI_	-0.607	-0.066	-0.885	0.889	0.899	0.816	0.741	0.981	0.832	0.611	0.954
PHOSPHORUSP_	-0.797	-0.116	-0.589	0.740	0.500	0.422	0.715	0.635	0.386	0.822	0.716
POTASSIUMK_	-0.575	-0.096	-0.897	0.895	0.925	0.854	0.733	0.993	0.848	0.651	0.958
SELENIUMSE_	-0.576	-0.047	-0.736	0.581	0.727	0.614	0.435	0.767	0.827	0.307	0.772
SODIUMNA_	-0.742	-0.053	-0.797	0.743	0.784	0.696	0.612	0.842	0.776	0.528	0.872
STRONTIUMSR_	-0.604	0.107	-0.719	0.732	0.708	0.695	0.663	0.764	0.543	0.653	0.833
SULFURS_	-0.535	-0.055	-0.570	0.441	0.503	0.447	0.333	0.538	0.607	0.195	0.593
THALLIUMTL_	-0.632	-0.068	-0.896	0.906	0.897	0.831	0.745	0.974	0.820	0.628	0.954
TITANIUMTI_	-0.656	-0.083	-0.800	0.888	0.782	0.731	0.794	0.922	0.694	0.640	0.930
URANIUMU_	-0.595	-0.108	-0.871	0.867	0.864	0.777	0.733	0.945	0.836	0.479	0.918
VANADIUMV_	-0.543	-0.025	-0.918	0.889	0.949	0.882	0.697	0.987	0.847	0.673	0.942
ZINCZN_	-0.587	-0.030	-0.907	0.875	0.932	0.854	0.701	0.988	0.850	0.619	0.966
ZIRCONIUMZR_	-0.315	-0.051	-0.789	0.817	0.842	0.819	0.667	0.912	0.720	0.553	0.834

Matrix to be Factored (Contd.)											
	BERYLLIUM_B	BORON_B	CADMIUM_CD	CALCIUMCA	CHROMIUM_C	COBALT_C	O COPPER_CL	IRONFE	LEAD_PB		
	E_	L			R_				_		
PH											
GRAVEL											
SAND											
SILT											
CLAY											
INORG_CARBON											
TOC											
ALUMINUMAL_											
ANTIMONYSB_											
ARSENICAS_											
BARIUMBA_											
BERYLLIUMBE_	1.000										
BORON_B_	0.986	1.000									
CADMIUMCD_	0.794	0.816	1.000								

ANNEXE C-3 SYSTAT PCA

Matrix to be Factored (Contd.)											
	BERYLLÍUM_B E_	BORON_B	CADMIUM_CD	CALCIUM_CA	CHROMIUMC R_	COBALT_CO	COPPER_CU	IRONFE	LEAD_PB		
CALCIUMCA_	0.792	0.809	0.534	1.000	_						
CHROMIUMCR_	0.981	0.979	0.799	0.789	1.000						
COBALTCO_	0.970	0.970	0.789	0.835	0.987	1.000					
COPPERCU_	0.959	0.971	0.827	0.818	0.967	0.976	1.000				
IRONFE_	0.795	0.803	0.541	0.794	0.822	0.863	0.843	1.000			
LEADPB_	0.984	0.981	0.835	0.732	0.968	0.951	0.954	0.737	1.000		
LITHIUMLI_	0.980	0.986	0.764	0.867	0.972	0.973	0.971	0.823	0.962		
MAGNESIUMMG_	0.828	0.837	0.505	0.944	0.833	0.849	0.825	0.775	0.773		
MANGANESEMN_	0.860	0.870	0.594	0.920	0.873	0.920	0.897	0.913	0.807		
MERCURYHG_	0.923	0.932	0.896	0.652	0.930	0.916	0.928	0.692	0.949		
MOLYBDENUMM O_	0.720	0.728	0.646	0.455	0.755	0.718	0.690	0.603	0.724		
NICKELNI_	0.976	0.967	0.816	0.746	0.993	0.979	0.962	0.801	0.967		
PHOSPHORUSP_	0.673	0.687	0.376	0.663	0.715	0.718	0.649	0.768	0.615		
POTASSIUMK_	0.974	0.988	0.828	0.796	0.983	0.977	0.977	0.820	0.972		
SELENIUMSE_	0.726	0.736	0.759	0.357	0.761	0.713	0.729	0.524	0.770		
SODIUMNA_	0.842	0.849	0.761	0.559	0.868	0.840	0.827	0.687	0.849		
STRONTIUMSR_	0.770	0.787	0.732	0.701	0.790	0.800	0.781	0.663	0.760		
SULFURS_	0.510	0.542	0.569	0.276	0.547	0.510	0.511	0.370	0.557		
THALLIUMTL_	0.977	0.980	0.799	0.793	0.981	0.969	0.949	0.777	0.975		
TITANIUMTI_	0.936	0.926	0.679	0.801	0.965	0.959	0.901	0.836	0.896		
URANIUMU_	0.947	0.935	0.792	0.707	0.958	0.939	0.931	0.758	0.942		
VANADIUMV_	0.972	0.981	0.857	0.766	0.969	0.962	0.970	0.784	0.978		
ZINCZN_	0.974	0.972	0.860	0.731	0.983	0.974	0.968	0.792	0.977		
ZIRCONIUMZR_	0.904	0.915	0.713	0.828	0.888	0.900	0.913	0.727	0.897		

Matrix to be Factored (Contd.)											
	LITHIUML	.I_ <mark>MAGN</mark>	ESIUMMG_	MANGANESE_MN_	MERCURYHG_	MOLYBDENUMMO_	NICKELNI_	PHOSPHORUSP_			
PH											
GRAVEL											
SAND											
SILT											

Matrix to be Factored		I MACNESIUM I	AC MANCANESE	MN MEDCLIDY	HC MOLVEDENIIM	MO NICKEI	NI_PHOSPHORUSP
CLAY	LITHIUMLI	I_WAGNESIUWII	WG_WANGANESE_	WIN_WERCURY_	_HG_MOLTBDENUM_	_WO_NICKEL	NI_PHOSPHORUSP
INORG_CARBON							
TOC							
ALUMINUMAL_							
ANTIMONY_SB_							
ARSENIC_AS_							
BARIUM_BA_							
BERYLLIUMBE_							
BORONB_							
CADMIUMCD_							
CALCIUMCA_							
CHROMIUMCR_							
COBALTCO_							
COPPERCU_							
IRONFE_							
LEADPB_							
LITHIUMLI_	1.000						
MAGNESIUMMG_	0.889	1.000					
MANGANESEMN_	0.910	0.916	1.000				
MERCURYHG_	0.894	0.667	0.752	1.000			
MOLYBDENUMMO_	0.692	0.503	0.547	0.738	1.000		
NICKEL_NI_	0.956	0.789	0.848	0.942	0.753	1.000	
PHOSPHORUSP_	0.685	0.702	0.747	0.572	0.574	0.684	1.000
POTASSIUMK_	0.978	0.825	0.873	0.938	0.726	0.972	0.666
SELENIUMSE_	0.694	0.394	0.480	0.823	0.845	0.782	0.429
SODIUMNA_	0.806	0.597	0.658	0.865	0.897	0.867	0.657
STRONTIUMSR_	0.760	0.607	0.696	0.807	0.680	0.783	0.686
SULFURS_	0.490	0.303	0.307	0.609	0.855	0.529	0.346
	0.973	0.826	0.850	0.927	0.756	0.968	0.687
	0.930	0.848	0.886	0.841	0.716	0.950	0.765
URANIUMU_	0.927	0.755	0.801	0.912	0.825	0.963	0.622
	0.962	0.795	0.844	0.944	0.669	0.965	0.640
	0.953	0.759	0.830	0.963	0.746	0.988	0.644
	0.927	0.835	0.843	0.813	0.536	0.871	0.519

Matrix to be Factored	(Contd.)									
	POTASŚIUMI	K SELENIUM	SE SODIUM_	_NA	STRONTIUM_S	SR	SULFUR_S	THALLIUMTL	TITANIUMT	I URANIUMU
PH	_	-						_	<u> </u>	_
GRAVEL										
SAND										
SILT										
CLAY										
INORG_CARBON										
TOC										
ALUMINUMAL_										
ANTIMONYSB_										
ARSENIC_AS_										
BARIUM_BA_										
BERYLLIUMBE_										
BORONB_										
CADMIUMCD_										
CALCIUMCA_										
CHROMIUMCR_										
COBALTCO_										
COPPERCU_										
IRONFE_										
LEADPB_										
LITHIUMLI_										
MAGNESIUMMG_										
MANGANESEMN_										
MERCURY_HG_										
MOLYBDENUMMO										
NICKELNI_										
PHOSPHORUSP_										
POTASSIUMK_	1.000									
SELENIUM_SE_	0.759	1.000								
SODIUMNA_	0.855	0.872	1.000							

Matrix to be Factored	(Contd.)							
	POTASSIUM_K	SELENIUM_SE	SODIUM_NA	STRONTIUM_SR	SULFUR_S	THALLIUMTL	TITANIUMTI	URANIUMU
	_	_		_	_	_	_	_
STRONTIUMSR_	0.780	0.670	0.814	1.000				
SULFURS_	0.557	0.774	0.796	0.578	1.000			
THALLIUMTL_	0.977	0.752	0.855	0.786	0.570	1.000		
TITANIUMTI_	0.932	0.665	0.807	0.767	0.473	0.945	1.000	
URANIUMU_	0.934	0.810	0.866	0.749	0.612	0.941	0.912	1.000
VANADIUMV_	0.983	0.725	0.825	0.767	0.497	0.963	0.899	0.910
ZINCZN_	0.981	0.799	0.871	0.795	0.561	0.971	0.924	0.949
ZIRCONIUMZR_	0.905	0.540	0.656	0.651	0.366	0.890	0.847	0.851

Matrix to be Factored					
	VANADIUM_V	_ZINC_	_ZN_	ZIRCONIUM_	_ZR_
PH					
GRAVEL					
SAND					
SILT					
CLAY					
INORG_CARBON					
TOC					
ALUMINUMAL_					
ANTIMONYSB_					
ARSENIC_AS_					
BARIUMBA_					
BERYLLIUMBE_					
BORON_B_					
CADMIUMCD_					
CALCIUMCA_					
CHROMIUMCR_					
COBALTCO_					
COPPERCU_					
IRONFE_					
LEADPB_					
LITHIUMLI_					

Matrix to be Factored	(Contd.)					
		V	ZINC_	_ZN_	ZIRCONIUM_	_ZR_
MAGNESIUMMG_						
MANGANESEMN_						
MERCURY_HG_						
MOLYBDENUMMO_						
NICKELNI_						
PHOSPHORUSP_						
POTASSIUMK_						
SELENIUMSE_						
SODIUMNA_						
STRONTIUMSR_						
SULFURS_						
THALLIUMTL_						
TITANIUMTI_						
URANIUMU_						
VANADIUMV_	1.000					
ZINCZN_	0.980		1.000			
ZIRCONIUMZR_	0.899		0.866		1.000	

L	Latent Roots (Eigenvalues)																						
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2	9.333	2.407	1.753	1.239	0.663	0.522	0.430	0.314	0.266	0.171	0.137	0.117	0.098	0.092	0.066	0.062	0.057	0.046	0.038	0.037	0.027	0.022	0.019

Late	Latent Roots (Eigenvalues) (Contd.)													
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
0.01	70.016	0.011	0.008	0.007	0.005	0.005	0.004	0.003	0.002	0.002	0.002	0.001	0.001	0.001

Empirical Upper Bound for the First Eigenvalue: 32.434

Chi-Square Test that All Eigenvalues are Equal

N : 69.000 Chi-Square : 6,886.332 df : 703.000

p-Value : 0.000

Chi-Square Test that the Last 34 Eigenvalues are Equal

Chi-Square : 2,613.981 df : 598.717 p-Value : 0.000

Latent Vectors (Eigen		s)		
	1	2	3	4
PH	-0.117	-0.038	0.494	0.119
GRAVEL	-0.011	0.053	0.237	-0.799
SAND	-0.169	-0.075	-0.093	0.083
SILT	0.170	-0.113	-0.030	0.098
CLAY	0.169	0.087	0.181	0.074
INORG_CARBON	0.157	0.035	0.284	-0.131
тос	0.143	-0.214	-0.114	0.064
ALUMINUMAL_	0.182	0.024	0.090	0.050
ANTIMONYSB_	0.153	0.226	0.111	0.223
ARSENICAS_	0.123	-0.265	-0.138	-0.280
BARIUM_BA_	0.179	0.015	-0.024	-0.084
BERYLLIUMBE_	0.181	-0.013	0.050	0.027
BORON_B_	0.183	-0.011	0.046	0.019
CADMIUMCD_	0.152	0.212	0.186	-0.116
CALCIUMCA_	0.149	-0.298	0.046	-0.008
CHROMIUMCR_	0.183	-0.008	-0.001	0.034
COBALTCO_	0.182	-0.056	0.020	0.006
COPPERCU_	0.180	-0.022	0.095	0.013
IRONFE_	0.153	-0.197	-0.120	-0.030
LEADPB_	0.180	0.055	0.090	0.031
LITHIUMLI_	0.181	-0.067	0.057	0.063
MAGNESIUMMG_	0.154	-0.276	0.007	0.104
MANGANESEMN_	0.163	-0.256	0.000	0.025
MERCURYHG_	0.175	0.130	0.080	-0.064
MOLYBDENUMMO_	0.142	0.258	-0.297	0.039
NICKEL_NI_	0.181	0.021	0.019	0.030
PHOSPHORUSP_	0.133	-0.229	-0.388	-0.139
POTASSIUMK_	0.183	0.002	0.050	0.049
SELENIUMSE_	0.142	0.354	-0.099	0.011
SODIUMNA_	0.163	0.200	-0.197	-0.063
STRONTIUMSR_	0.152	0.022	-0.120	-0.281
SULFURS_	0.108	0.378	-0.251	-0.023
THALLIUMTL_	0.182	0.006	0.011	0.027
TITANIUMTI_	0.174	-0.093	-0.077	0.020
URANIUMU_	0.176	0.082	-0.009	0.101
VANADIUMV_	0.180	0.003	0.113	-0.008
ZINCZN_	0.182	0.054	0.056	-0.006
ZIRCONIUM ZR_	0.164	-0.103	0.226	0.098

	Standard Error for Each Eigenvector								
Element	l1	2	3	4					
PH		_	0.063						
GRAVEL				0.103					
SAND				0.066					
SILT			0.068						
CLAY				0.083					
INORG_CARBON				0.110					
тос	0.015	0.067	0.106	0.109					
ALUMINUM AL_				0.036					
ANTIMONY_SB_	0.013	0.065	0.121	0.075					
ARSENIC_AS_				0.127					
BARIUMBA_	0.005	0.026	0.037	0.029					
BERYLLIUMBE_	0.004	0.026	0.023	0.031					
BORON_B_	0.003	0.022	0.017	0.024					
CADMIUMCD_	0.013	0.080	0.098	0.091					
CALCIUMCA_	0.014	0.039	0.122	0.088					
CHROMIUMCR_	0.003	0.015	0.020	0.020					
COBALTCO_	0.004	0.016	0.027	0.025					
COPPERCU_	0.005	0.039	0.022	0.042					
IRONFE_	0.013	0.062	0.092	0.092					
LEADPB_	0.005	0.038	0.031	0.042					
LITHIUMLI_	0.005	0.028	0.037	0.032					
MAGNESIUMMG_	0.013	0.038	0.118	0.080					
MANGANESEMN_	0.011	0.024	0.101	0.060					
MERCURYHG_	0.008	0.038	0.059	0.048					
MOLYBDENUMMO_	0.015	0.116	0.105	0.125					
NICKEL_NI_	0.004	0.020	0.025	0.029					
PHOSPHORUSP_	0.016	0.151	0.104	0.146					
POTASSIUMK_	0.003	0.024	0.022	0.025					
SELENIUMSE_	0.015	0.046	0.137	0.082					
SODIUMNA_	0.011	0.078	0.082	0.082					
STRONTIUM_SR_	0.013	0.079	0.110	0.080					
SULFURS_	0.019	0.104	0.154	0.136					
THALLIUMTL_	0.004	0.018	0.021	0.024					
TITANIUMTI_	0.008	0.039	0.048	0.052					
URANIUMU_	0.007	0.030	0.055	0.042					
VANADIUMV_				0.049					
ZINCZN_				0.032					
ZIRCONIUMZR_	0.011	0.091	0.061	0.091					

Component Loadings										
	1	2	3	4						
PH	-0.632	-0.060	0.654	0.133						
GRAVEL	-0.061	0.082	0.314	-0.889						
SAND	-0.918	-0.117	-0.124	0.092						
SILT	0.919	-0.175	-0.040	0.109						
CLAY	0.915	0.134	0.240	0.083						
INORG_CARBON	0.850	0.055	0.376	-0.146						
TOC	0.774	-0.332	-0.151	0.071						
ALUMINUMAL_	0.985	0.037	0.120	0.056						
ANTIMONYSB_	0.829	0.350	0.147	0.249						
ARSENICAS_	0.667	-0.411	-0.183	-0.311						
BARIUMBA_	0.971	0.023	-0.031	-0.094						
BERYLLIUMBE_	0.981	-0.020	0.066	0.030						
BORONB_	0.989	-0.017	0.061	0.021						
CADMIUMCD_	0.824	0.329	0.247	-0.130						
CALCIUMCA_	0.807	-0.463	0.060	-0.009						
CHROMIUMCR_	0.991	-0.012	-0.001	0.038						
COBALTCO_	0.986	-0.087	0.026	0.007						
COPPERCU_	0.977	-0.035	0.125	0.015						
IRONFE_	0.828	-0.306	-0.159	-0.033						
LEADPB_	0.973	0.086	0.119	0.035						
LITHIUMLI_	0.978	-0.103	0.075	0.070						
MAGNESIUMMG_	0.833	-0.429	0.009	0.115						
MANGANESEMN_	0.882	-0.398	0.000	0.028						
MERCURYHG_	0.946	0.201	0.106	-0.071						
MOLYBDENUMMO_	0.767	0.400	-0.393	0.044						
NICKELNI_	0.982	0.033	0.025	0.034						
PHOSPHORUSP_	0.719	-0.356	-0.514	-0.155						
POTASSIUMK_	0.989	0.003	0.067	0.054						
SELENIUMSE_	0.768	0.549	-0.131	0.012						
SODIUMNA_	0.882	0.311	-0.260	-0.071						
STRONTIUMSR_	0.822	0.034	-0.159	-0.313						
SULFURS_	0.583	0.587	-0.332	-0.026						
THALLIUMTL_	0.983	0.010	0.014	0.030						
TITANIUMTI_	0.944	-0.144	-0.102	0.022						
URANIUMU_	0.953	0.127	-0.012	0.113						
VANADIUMV_	0.977	0.004	0.149	-0.009						
ZINCZN_	0.983	0.084	0.074	-0.006						
ZIRCONIUMZR_	0.887	-0.160	0.300	0.109						

Variance Explained by Components										
1	2	3	4							
29.333	29.333 2.407 1.753 1.239									

	Percent of Total Variance Explained									
1	1 2 3 4									
77.191	6.336	4.613	3.260							

Differences: Original I	Minus	Fitted Co	rrelatio	ons or	Covar	iances										
	PH	GRAVEL	SAND	SILT	CLAY	INORG	CARBON	ТОС	ALUMINUM_	_AL_	ANTIMONY_	_SB_	ARSENIC_	_AS_	BARIUM_	_BA_
PH	0.151															
GRAVEL	-0.009	0.100														
SAND	0.049	-0.021	0.121													
SILT	-0.035	-0.004	-0.081	0.112												
CLAY	-0.026	-0.057	-0.037	0.043	0.080											
INORG_CARBON	-0.009	-0.026	-0.031	0.037	0.025	0.111										
TOC	0.021	0.030	-0.063	0.073	0.003	0.067		0.262								
ALUMINUMAL_	-0.003	-0.006	0.010	-0.010	0.001	-0.010		-0.019	0.011							
ANTIMONYSB_	-0.012	0.001	-0.023	-0.022	0.006	-0.008		-0.037	0.004		0.107					
ARSENIC_AS_	0.018	-0.112	0.019	-0.027	0.079	0.007		-0.105	0.021		0.076		0.256			
BARIUM_BA_	0.013	-0.006	0.022	-0.012	-0.004	-0.014		-0.024	0.006		-0.011		0.000		0.047	
BERYLLIUMBE_	-0.028	0.016	0.008	-0.004	-0.003	-0.018		-0.029	0.001		-0.005		-0.012		-0.002	
BORONB_	-0.016	0.001	0.000	-0.007	0.001	-0.009		-0.028	0.002		0.007		0.014		-0.006	
CADMIUMCD_	-0.018	-0.057	0.011	0.011	0.029	-0.013		0.012	-0.001		-0.010		0.033		-0.004	
CALCIUMCA_	0.032	0.021	0.010	-0.013	-0.039	0.006	(0.022	-0.023		-0.022		-0.082		0.000	
CHROMIUMCR_	-0.004	0.014	0.015	-0.008	-0.016	-0.018		-0.013	0.006		-0.008		-0.017		0.007	
COBALTCO_	0.019	0.006	0.032	-0.027	-0.017	-0.015		-0.013	0.003		-0.006		-0.009		0.013	
COPPERCU_	0.026	-0.003	0.016	-0.032	-0.009	-0.016		-0.020	0.001		0.011		0.009		-0.001	
IRONFE_	0.071	0.011	0.040	-0.076	-0.021	-0.044		-0.072	0.006		0.035		0.037		0.020	
LEADPB_	-0.026	0.001	-0.001	0.002	0.010	-0.011		-0.035	0.004		0.002		0.017		-0.004	
LITHIUMLI_	-0.007	0.019	0.008	-0.019	-0.017	-0.014		-0.027	-0.004		0.006		-0.017		-0.003	
MAGNESIUMMG_	-0.014	0.058	-0.036	0.015	-0.039	0.017		0.024	-0.016		-0.015		-0.096		-0.015	
MANGANESEMN_	0.035	0.013	0.023	-0.044	-0.029	-0.003		-0.007	-0.005		0.010		-0.015		0.001	
MERCURY_HG_	-0.012	-0.033	0.005	0.009	0.015	0.011		0.009	0.006		-0.004		0.034		0.002	
MOLYBDENUMMO_	0.040	0.053	0.006	-0.011	-0.041	-0.006	ĺ	0.027	-0.014		-0.016		-0.065		-0.013	
NICKELNI_	-0.005	0.013	0.019	-0.010	-0.012	-0.025		-0.007	0.008		-0.005		-0.015		0.005	
PHOSPHORUSP_	-0.007	-0.020	-0.020	0.014	0.026	0.000		-0.027	0.010		0.029		0.054		-0.004	
POTASSIUMK_	0.000	-0.008	0.014	-0.017	-0.001	-0.005		-0.025	0.007		0.004		0.022		0.005	
SELENIUMSE_	0.027	0.007	0.015	-0.035	-0.019	-0.019	(0.001	0.005		0.015		0.000		0.011	

Differences: Original I	Differences: Original Minus Fitted Correlations or Covariances											
	PH	GRAVEL	SAND	SILT	CLAY	INORG_	CARBON	ТОС	ALUMINUMAL	_ANTIMONYSB_	ARSENICAS_	BARIUM_BA_
SODIUMNA_	0.014	-0.005	0.023	-0.015	0.003	0.016	-	-0.003	-0.003	-0.008	-0.003	-0.006
STRONTIUMSR_	0.063	-0.074	0.048	0.011	0.014	0.007	(0.036	-0.011	-0.050	-0.008	-0.001
SULFURS_	0.088	0.014	-0.006	-0.002	-0.028	0.040	(0.029	-0.016	-0.026	-0.021	0.001
THALLIUMTL_	-0.023	0.013	0.006	0.002	-0.010	-0.007	-	-0.013	0.001	-0.008	-0.012	0.002
TITANIUMTI_	-0.004	0.038	0.034	-0.010	-0.040	-0.022	-	-0.001	0.009	-0.028	-0.060	0.016
URANIUMU_	0.008	0.043	0.007	0.000	-0.032	-0.020	(0.027	-0.004	-0.025	-0.072	-0.001
VANADIUMV_	-0.022	-0.020	-0.002	0.000	0.020	-0.006	-	-0.034	0.007	0.017	0.049	-0.002
ZINCZN_	-0.007	-0.006	0.015	-0.010	0.004	-0.016	-	-0.021	0.008	-0.004	0.009	0.011
ZIRCONIUMZR_	0.026	0.019	0.033	-0.025	-0.029	-0.023	-	-0.035	0.002	-0.029	-0.015	-0.003

Differences: Original Minus Fitted Correlations or Covariances (Contd.)									
	BERYLLIUMB E_	BORON_B	CADMIUMCD	CALCIUMC	CHROMIUM_C R_	COBALTCO	COPPERCU	IRONFE	LEADPB
PH									
GRAVEL									
SAND									
SILT									
CLAY									
INORG_CARBON									
TOC									
ALUMINUMAL_									
ANTIMONYSB_	İ								
ARSENICAS_									
BARIUMBA_									
BERYLLIUMBE_	0.032								
BORON_B_	0.012	0.018							
CADMIUMCD_	-0.021	-0.006	0.134						
CALCIUMCA_	-0.012	-0.001	0.005	0.130					
CHROMIUMCR_	0.008	-0.002	-0.008	-0.016	0.017				
COBALTCO_	0.000	-0.008	-0.001	-0.002	0.009	0.020			
COPPERCU_	-0.008	-0.003	0.004	0.006	-0.002	0.007	0.029		
IRONFE_	-0.012	-0.011	-0.007	-0.007	-0.001	0.025	0.044	0.194	
LEADPB_	0.022	0.012	-0.021	-0.021	0.004	-0.004	-0.009	-0.023	0.030

Differences: Original Minus Fitted Correlations or Covariances (Contd.)									
	BERYLLIUMB	BORON_B	CADMIUM_CD	CALCIUM_CA	CHROMIUM_C	COBALTCO	COPPER_CU	IRONFE	LEAD_PB
	E_	_			R_	_			_
LITHIUMLI_	0.012	0.011	-0.017	0.026	-0.001	-0.002	0.002	-0.004	0.008
MAGNESIUMMG_	-0.001	0.003	-0.028	0.073	-0.001	-0.010	-0.006	-0.041	-0.006
MANGANESEMN_	-0.013	-0.009	0.001	0.024	-0.007	0.016	0.022	0.062	-0.018
MERCURY_HG_	-0.005	-0.005	0.014	-0.026	-0.002	-0.001	-0.001	-0.015	0.001
MOLYBDENUMM O_	0.000	-0.001	-0.016	0.044	-0.002	0.006	0.003	0.029	-0.012
NICKELNI_	0.011	-0.005	-0.006	-0.033	0.020	0.013	0.001	0.004	0.005
PHOSPHORUSP_	0.000	0.005	0.007	-0.052	0.003	-0.007	0.001	-0.023	0.013
POTASSIUMK_	-0.002	0.005	0.002	-0.004	0.001	0.001	0.002	0.014	-0.001
SELENIUMSE_	-0.009	-0.007	-0.021	-0.001	0.006	0.007	0.013	0.035	-0.010
SODIUMNA_	0.002	0.000	-0.014	0.006	0.000	0.005	0.010	0.008	-0.002
STRONTIUMSR_	-0.016	-0.009	0.041	0.059	-0.013	-0.002	0.004	-0.044	-0.014
SULFURS_	-0.027	-0.003	-0.026	0.098	-0.023	-0.004	0.005	0.013	-0.020
THALLIUMTL_	0.011	0.006	-0.015	0.003	0.006	0.000	-0.013	-0.031	0.014
TITANIUMTI_	0.014	-0.003	-0.023	-0.021	0.027	0.019	-0.013	-0.005	0.002
URANIUMU_	0.012	-0.007	-0.018	-0.002	0.011	0.010	0.004	0.009	0.000
VANADIUMV_	0.005	0.006	0.013	-0.030	0.002	-0.004	-0.002	0.000	0.010
ZINCZN_	0.007	-0.004	0.002	-0.028	0.010	0.010	0.001	0.015	0.004
ZIRCONIUMZR_	0.008	0.015	-0.025	0.020	0.004	0.003	0.002	-0.005	0.008

Differences: Original	Minus Fitted C	orrelations or (Covari	iances (Contd.)							
	LITHIUMLI_	MAGNESIUM_	_MG_	MANGANESE_	_MN_	MERCURY_	_HG_	MOLYBDENUM_M	O_NICKELNI	PHOSPHORUS_	_P_
PH											
GRAVEL											\Box
SAND											\neg
SILT	1										\neg
CLAY	1										\neg
INORG_CARBON											
TOC	1										\neg
ALUMINUMAL_	1										\neg
ANTIMONYSB_											
ARSENICAS_											\neg

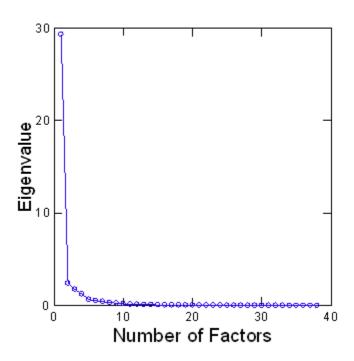
Differences: Original Minus Fitted Correlations or Covariances (Contd.) LITHIUM LI MAGNESIUM MG MANGANESE MN MERCURY HG MOLYBDENUM MO NICKEL NI PHOSPHORUS P								
	LITHIUM	LI_MAGNESIUM_	_MG_ <mark>MANGANESE</mark> _	_MN_MERCURY_	_HG_MOLYBDENUN	/IMO_NICKELI	NI_ <mark>PHOSPHORUSP</mark>	
BARIUMBA_								
BERYLLIUMBE_								
BORON_B_								
CADMIUMCD_								
CALCIUMCA_								
CHROMIUMCR_								
COBALTCO_								
COPPERCU_								
IRONFE_								
LEADPB_								
LITHIUMLI_	0.023							
MAGNESIUMMG_	0.021	0.109						
MANGANESEMN_	0.004	0.007	0.063					
MERCURYHG_	-0.013	-0.028	0.000	0.048				
MOLYBDENUMMO_	0.010	0.034	0.028	-0.024	0.094			
NICKELNI_	-0.005	-0.018	-0.005	0.006	-0.005	0.034		
PHOSPHORUSP_	-0.005	-0.026	-0.024	0.007	-0.031	0.008	0.068	
POTASSIUMK_	0.002	-0.004	0.000	-0.002	-0.010	-0.003	-0.002	
SELENIUMSE_	0.008	-0.010	0.020	0.000	-0.017	0.013	0.007	
SODIUMNA_	0.001	0.006	0.005	-0.009	-0.004	0.000	-0.012	
STRONTIUMSR_	-0.007	-0.026	-0.007	0.017	-0.014	-0.011	-0.023	
SULFURS_	0.008	0.076	0.027	-0.027	0.043	-0.053	-0.039	
THALLIUMTL_	0.010	0.008	-0.014	-0.004	0.002	0.001	-0.005	
TITANIUMTI_	-0.002	-0.001	-0.004	-0.011	0.008	0.030	-0.013	
URANIUMU_	0.001	0.003	0.007	-0.006	0.033	0.019	-0.007	
VANADIUMV_	-0.003	-0.017	-0.015	0.003	-0.023	0.003	0.015	
ZINCZN_	-0.005	-0.024	-0.003	0.007	-0.013	0.018	0.004	
ZIRCONIUMZR_	0.013	0.012	-0.006	-0.018	0.033	-0.006	-0.004	

Differences: Original Minus Fitted Correlations or Covariances (Contd.)								
	POTASSIUMK	SELENIUM_SE	SODIUM_NA	STRONTIUM_SR	SULFUR_S	THALLIUMTL	TITANIUMTI	URANIUM_U
PH	_	_				_	_	_
GRAVEL								
SAND								
SILT								
CLAY								
INORG_CARBON								
TOC								
ALUMINUMAL_								
ANTIMONYSB_								
ARSENIC_AS_	ĺ							
BARIUMBA_								
BERYLLIUMBE_								
BORON_B_								
CADMIUMCD_								
CALCIUMCA_								
CHROMIUMCR_								
COBALTCO_								
COPPERCU_								
IRONFE_								
LEADPB_								
LITHIUMLI_								
MAGNESIUMMG_								
MANGANESEMN_								
MERCURY_HG_								
MOLYBDENUMMO								
NICKELNI_								
PHOSPHORUSP_	İ							
POTASSIUMK_	0.014							
SELENIUM_SE_	0.006	0.091						
SODIUMNA_	0.003	-0.009	0.053					
STRONTIUMSR_	-0.006	0.002	0.014	0.199				
SULFURS_	0.003	-0.039	0.011	0.019	0.205			

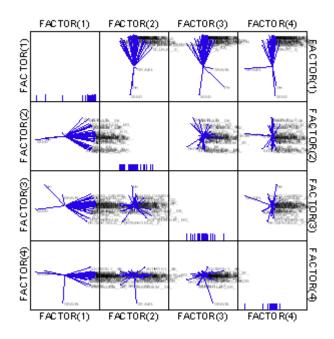
Differences: Original	Differences: Original Minus Fitted Correlations or Covariances (Contd.)									
	POTASSIUMK	SELENIUM_SE	SODIUM_NA	STRONTIUM_SR	SULFUR_S	THALLIUMTL	TITANIUMTI	URANIUMU		
	_	_	_	_	_	<u></u>	_	_		
THALLIUMTL_	0.002	-0.008	-0.010	-0.012	-0.003	0.032				
TITANIUMTI_	0.005	0.006	-0.005	-0.013	-0.025	0.020	0.078			
URANIUMU_	-0.015	0.005	-0.010	-0.006	-0.019	-0.001	0.027	0.062		
VANADIUMV_	0.007	-0.008	0.000	-0.015	-0.025	0.001	-0.007	-0.019		
ZINC_ZN_	0.003	0.006	-0.003	-0.007	-0.037	0.003	0.016	0.003		
ZIRCONIUMZR_	0.003	-0.015	0.009	0.009	0.046	0.012	0.015	0.017		

Differences: Original Minus Fitted Correlations or Covariances									
(Contd.)	VANADIUM	v	ZINC	7N	ZIRCONIUM_	7R			
PH	TANGA DIGIN_	_'_							
GRAVEL									
SAND									
SILT									
CLAY									
INORG CARBON									
TOC									
ALUMINUMAL_									
ANTIMONY_SB_									
ARSENIC_AS_									
BARIUM_BA_									
BERYLLIUM_BE_			-						
BORON_B_			-						
CADMIUMCD_									
CALCIUMCA_									
CHROMIUMCR_									
COBALTCO_									
COPPERCU_									
IRONFE_									
LEADPB_									
LITHIUMLI_									
MAGNESIUMMG_									
MANGANESEMN_									
MERCURYHG_									
MOLYBDENUMMO_									
NICKELNI_									
PHOSPHORUSP_									
POTASSIUMK_									
SELENIUM_SE_									
SODIUMNA_									
STRONTIUM_SR_									
SULFURS_									
THALLIUMTL_									
TITANIUMTI_									
URANIUMU_									
VANADIUM_V_	0.024								
ZINC_ZN_	0.009		0.020						
ZIRCONIUMZR_	-0.010		-0.014		0.086				

Scree Plot



Factor Loadings Plot



Factor Coefficients				
				4
PH		-0.025		
GRAVEL	-0.002	0.034	0.179	-0.718
SAND	-0.031	-0.048	-0.070	0.075
SILT	0.031	-0.073	-0.023	0.088
CLAY	0.031	0.056	0.137	0.067
INORG_CARBON	0.029	0.023	0.214	-0.118
TOC	0.026	-0.138	-0.086	0.057
ALUMINUMAL_	0.034	0.015	0.068	0.045
ANTIMONY_SB_	0.028	0.146	0.084	0.201
ARSENIC_AS_	0.023	-0.171	-0.104	-0.251
BARIUM_BA_	0.033	0.010	-0.018	-0.076
BERYLLIUMBE_	0.033	-0.008	0.038	0.025
BORONB_	0.034	-0.007	0.035	0.017
CADMIUMCD_	0.028	0.137	0.141	-0.105
CALCIUMCA_	0.028	-0.192	0.034	-0.007
CHROMIUMCR_	0.034	-0.005	-0.001	0.031
COBALTCO_	0.034	-0.036	0.015	0.005
COPPERCU_	0.033	-0.014	0.071	0.012
IRONFE_	0.028	-0.127	-0.091	-0.027
LEADPB_	0.033	0.036	0.068	0.028
LITHIUMLI_	0.033	-0.043	0.043	0.056
MAGNESIUMMG_	0.028	-0.178	0.005	0.093
MANGANESEMN_	0.030	-0.165	0.000	0.022
MERCURYHG_	0.032	0.084	0.060	-0.057
MOLYBDENUMMO_	0.026	0.166	-0.224	0.035
NICKEL_NI_	0.033	0.014	0.014	0.027
PHOSPHORUSP_	0.025	-0.148	-0.293	-0.125
POTASSIUMK_	0.034	0.001	0.038	0.044
SELENIUM_SE_	0.026	0.228	-0.075	0.010
SODIUMNA_	0.030	0.129	-0.148	-0.057
STRONTIUM_SR_	0.028	0.014	-0.091	-0.253
SULFUR_S_	0.020	0.244	-0.189	-0.021
THALLIUMTL_	0.034	0.004	0.008	0.024
TITANIUMTI_	0.032	-0.060	-0.058	0.018
URANIUMU_	0.033	0.053	-0.007	0.091
VANADIUMV_	0.033	0.002	0.085	-0.007
ZINCZN_	0.034	0.035	0.042	-0.005
ZIRCONIUMZR_	0.030	-0.067	0.171	0.088

Coefficients for Standardized Factor Scores								
	1	2	3	4				
PH	-0.022	-0.025	0.373	0.107				
GRAVEL	-0.002	0.034	0.179	-0.718				
SAND	-0.031	-0.048	-0.070	0.075				
SILT	0.031	-0.073	-0.023	0.088				
CLAY	0.031	0.056	0.137	0.067				
INORG_CARBON	0.029	0.023	0.214	-0.118				

Coefficients for Standardized Factor Scores									
	1	2	3	4					
TOC	0.026	-0.138	-0.086	0.057					
ALUMINUMAL_	0.034	0.015	0.068	0.045					
ANTIMONY_SB_	0.028	0.146	0.084	0.201					
ARSENICAS_	0.023	-0.171	-0.104	-0.251					
BARIUMBA_	0.033	0.010	-0.018	-0.076					
BERYLLIUMBE_	0.033	-0.008	0.038	0.025					
BORON_B_	0.034	-0.007	0.035	0.017					
CADMIUMCD_	0.028	0.137	0.141	-0.105					
CALCIUMCA_	0.028	-0.192	0.034	-0.007					
CHROMIUMCR_	0.034	-0.005	-0.001	0.031					
COBALTCO_	0.034	-0.036	0.015	0.005					
COPPERCU_	0.033	-0.014	0.071	0.012					
IRONFE_	0.028	-0.127	-0.091	-0.027					
LEADPB_	0.033	0.036	0.068	0.028					
LITHIUMLI_	0.033	-0.043	0.043	0.056					
MAGNESIUMMG_	0.028	-0.178	0.005	0.093					
MANGANESEMN_	0.030	-0.165	0.000	0.022					
MERCURYHG_	0.032	0.084	0.060	-0.057					
MOLYBDENUMMO_	0.026	0.166	-0.224	0.035					
NICKEL_NI_	0.033	0.014	0.014	0.027					
PHOSPHORUSP_	0.025	-0.148	-0.293	-0.125					
POTASSIUMK_	0.034	0.001	0.038	0.044					
SELENIUMSE_	0.026	0.228	-0.075	0.010					
SODIUMNA_	0.030	0.129	-0.148	-0.057					
STRONTIUMSR_	0.028	0.014	-0.091	-0.253					
SULFURS_	0.020	0.244	-0.189	-0.021					
THALLIUMTL_	0.034	0.004	0.008	0.024					
TITANIUMTI_	0.032	-0.060	-0.058	0.018					
URANIUMU_	0.033	0.053	-0.007	0.091					
VANADIUMV_	0.033	0.002	0.085	-0.007					
ZINCZN_	0.034	0.035	0.042	-0.005					
ZIRCONIUMZR_	0.030	-0.067	0.171	0.088					

Standardized Scores have been saved.

▼ File: C:\Users\aospan\Desktop\2018_BIM_Stat\Sedim_PCA_Factor_Scores.syz

Number of Variables : 44 Number of Cases : 69

SYSTAT Rectangular file C:\Users\aospan\Desktop\2018_BIM_Stat\Sedim_PCA_Factor_Scores.syz, Created data file Fri Jan 11 13:52:28 2019 containing variables:

PH	GRAVEL	SAND	SILT	CLAY	INORG_CARBO N
тос	ALUMINUMAL	ANTIMONYSB_	ARSENICAS_	BARIUM_BA_	BERYLLIUMB E_
BORON_B_	CADMIUMCD_	CALCIUMCA_	CHROMIUMCR	COBALTCO_	COPPERCU_
IRONFE_	LEADPB_	LITHIUMLI_	MAGNESIUMM G_	MANGANESEM N_	MERCURY_HG
MOLYBDENUMM O_	NICKELNI_	PHOSPHORUS P_	POTASSIUMK_	SELENIUMSE_	SODIUMNA_
STRONTIUMSR_	SULFUR_S_	THALLIUMTL_	TITANIUMTI_	URANIUMU_	VANADIUMV_
ZINCZN_	ZIRCONIUMZ R_	FACTOR(1)	FACTOR(2)	FACTOR(3)	FACTOR(4)
TSQUARE	PROB				

▼File: C:\Users\aospan\Desktop\2018_BIM_Stat\Sediment_input.syz

Number of Variables : 39 Number of Cases : 69

SYSTAT Rectangular file C:\Users\aospan\Desktop\2018_BIM_Stat\Sediment_input.syz, Created data file Fri Jan 11 14:01:52 2019 containing variables:

SAMPLE\$	PH	GRAVEL	SAND	SILT	CLAY
INORG_CARBO N	тос	ALUMINUMAL	ANTIMONYSB_	ARSENICAS_	BARIUM_BA_
BERYLLIUMB E_	BORON_B_	CADMIUMCD_	CALCIUMCA_	CHROMIUMCR	COBALTCO_
COPPERCU_	IRONFE_	LEADPB_	LITHIUMLI_	MAGNESIUMM G_	MANGANESEM N_
MERCURYHG	MOLYBDENUMM O_	NICKELNI_	PHOSPHORUS P_	POTASSIUMK_	SELENIUMSE_
SODIUMNA_	STRONTIUMSR_	SULFUR_S_	THALLIUMTL_	TITANIUMTI_	URANIUMU_
VANADIUMV_	ZINCZN_	ZIRCONIUMZ R_			

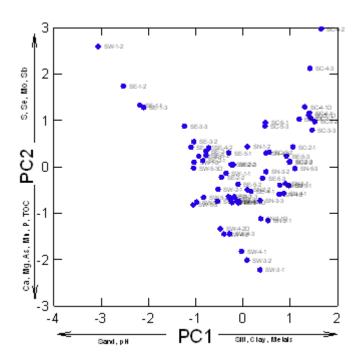
▼File: C:\Users\aospan\Desktop\2018_BIM_Stat\Sedim_PCA_Factor_Scores.syz

Number of Variables: 44 Number of Cases: 69

SYSTAT Rectangular file C:\Users\aospan\Desktop\2018_BIM_Stat\Sedim_PCA_Factor_Scores.syz, Created data file Fri Jan 11 13:52:28 2019 containing variables:

PH	GRAVEL	SAND	SILT	CLAY	INORG_CARBO N
тос	ALUMINUMAL	ANTIMONYSB_	ARSENICAS_	BARIUM_BA_	BERYLLIUMB E_
BORONB_	CADMIUMCD_	CALCIUMCA_	CHROMIUMCR	COBALTCO_	COPPERCU_
IRONFE_	LEADPB_		MAGNESIUMM G_	MANGANESEM N_	MERCURYHG
MOLYBDENUMM O_	NICKELNI_	PHOSPHORUS P_	POTASSIUMK_	SELENIUMSE_	SODIUMNA_
STRONTIUM_SR_	SULFURS_	THALLIUMTL_	TITANIUMTI_	URANIUMU_	VANADIUMV_
	ZIRCONIUMZ R_	FACTOR(1)	FACTOR(2)	FACTOR(3)	FACTOR(4)
TSQUARE	PROB				

▼Scatter Plot



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ANNEXE D

Belt Transect Underwater Video Data



ANNEXE D-1 BELT TRANSECT UNDERWATER VIDEO DATA

		ct Location							
	UTM Cod Easting	rdinates	Video File	Video Analysis		Depth	Substrate (Percent	Macroflora (Percent	
TP 1	502828	7976382	Name	Start 12:41:30	12:48:09	9.1 - 10.6	Cover) Fine (100%) Shell debris (<1%)	Cover) Not classifiable (35%) Laminaria sp. (1%)	Epifauna (Count) brittle star-Ophiuridae indet. (11) sun star (2) sea butterfly (1) clam siphon holes (~100) tunicate (2) sand lance (1) sculpin (2)
TP 2			TP-2.AVI	10:16:43	10:28:12	9.23-10.3	Fine (90%) Mixed cobble (5%) Shell debris (5%)	<i>Laminaria</i> sp. (1%) Green algae (1%)	Mysida (750) sea butterfly (1) sculpin (2) bivalve sp. (1) fish doctor (1) jellyfish (5) clam siphon holes (3)
TP 3			TP-3.AVI	12:21:48	12:28:39	12.2-12.5	Fine (95%) Shell debris (5%)	red algae (20%) Not classifiable (50%)	Ophiuroidae (14) fish doctor (1) sea anemone indet. (1) clam siphon holes (~50)
TP 4			TP-4.AVI	12:57:00	13:02:26	11.9-12.1	Fine (85%) Shell debris (10%) Mixed cobble (5%)	Not classifiable (50%) red algae (30%)	Ophiuroidae (20) clam siphon holes (~50) tunicate (2) sea urchin (2) Buccinidae (1)

ANNEXE D-1 BELT TRANSECT UNDERWATER VIDEO DATA

		ect Location ordinates	Video File	Video Analysis	Video	Depth	Substrate (Percent	Macroflora (Percent	
Transect	Easting	Northing	Name	Video Analysis Start	Video Analysis End	Range (m)	Cover)	Macroflora (Percent Cover)	Epifauna (Count)
TP 5			TP-5.AVI	13:21:25	13:25:45	11.76-12.39	Fine (95%) Shell debris (10%) Mixed cobble (trace amounts)	Not classifiable (80%)	Ophiuroidae (2) clam siphon holes sea urchin (5)
TP 7			TP-7.AVI	14:24:17	14:30:48	10.4-11.36	Fine (90%) Shell debris (10%) Mixed cobble (trace amounts)	green algae (5%) red algae (15%) Laminaria sp. (1%) Not classifiable (60%) encrusting corraline algae (5%)	sculpin (1) clione (1) tunicate (3)
TP 8			TP-8.AVI	14:57:37	15:03:30		Fine (85%) Shell debris (10%) Mixed cobble (5%)		sculpin (1) sunstar (1) tunicate (1) Ophiuroidae (32)
TP 9			TP-9.AVI	15:51:08	15:56:27			green algae (10%) detritus/ algal mat (85%) encrusting corraline algae (5%)	sculpin (2) jellyfish (?) Ophiuroidae (32)

ANNEXE D-1 BELT TRANSECT UNDERWATER VIDEO DATA

		ct Location ordinates	Video File	Video Analysis	Video	Depth	Substrate (Percent	Macroflora (Percent	
Transect	Easting	Northing	Name	Start	Analysis End	Range (m)	Cover)	Cover)	Epifauna (Count)
TP 10			TP-10.AVI	16:51:35	16:58:55	7.09-9.25	Shell dehris (15%)	Laminaria sp. (35%) detritus/ algal mat (65%)	Ophiuroidae (1) Mysida (abundant)

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ANNEXE E

Benthic Infauna Data



Abbreviations & Definitions

Worksheets:

1. Abbreviations & Definitions Glossary of terms and outline of report

2. Data - Matrix Abundance data in matrix format, including total taxa count (species richness) per sample, and total abundance, no. composite grabs, and total density.

3. Data - Long Abundance data in long (raw) format.
 4. Quality Control Results of sorting efficiency QA/QC

5. Provisional Taxa Description of unique that are undescribed and assigned internal numbers (e.g., sp. 1, sp.2 etc.)

Life Stages:

A Adult

 J
 Juvenile

 L
 Larvae

 N
 Nymph

 P
 Pupa

 Col
 Colony

 Deut
 Deutonymph

MEMO Incidental taxa/fragments not included in data, or whose abundance is not generally captured accurately by 1.0mm screen.

Number of unique taxa (=species richness), not including higher-order taxa for which there exists a lower-order identification (e.g. not including Lumbrineris sp. if there

Total Number of Taxa exists *Lumbrineris cruzensis* in the data)

Total Number of Organisms Total Abundance, not including incidental taxa

Biologica Coding

Major Taxonomic Groups:		Taxonomic Family Codes:		
Miscellaneous		Group	Family	Family code
BRAC	Brachiopoda	ANHI	Piscicolidae	1138
BRYO	Bryozoa	ANOL	Enchytraeidae	1133
CNAN	Cnidaria Anthozoa	ANOL	Naididae	1134
CNHY	Cnidaria Hydrozoa	ANOL	Tubificidae	1136
CNXX	Cnidaria	BRAC	Frieleiidae	0951
ENTO	Entoprocta	BRAC	Cancellothyrididae	0952
EURA	Echiura	BRAC	Craniidae	0953
HEMI	Hemichordata	BRAC	Laqueidae	0954
KINO	Kinorhyncha	BRAC	Platidiidae	0955
NTEA	Nemertea	BRAC	Lingulidae	0956
PHOR	Phoronida	BRAC	Dallinidae	0957
PIXX	Pisces	BRAC	Terebrataliidae	0958
PLTY	Platyhelminthes	BRYO	Aeteidae	0961
PORI	Porifera	BRYO	Alcyonidiidae	0962
PRIA	Priapulida	BRYO	Annectocymidae	0964
SIPN	Sipuncula	BRYO	Arachnidiidae	0966
TARD	Tardigrada	BRYO	Bugulidae	0968
URAS	Ascidiacea	BRYO	Bitectiporidae	0969
Annelida		BRYO	Calloporidae	0970
ANHI	Annelida Hirudinea	BRYO	Candidae	0972
ANOL	Annelida Oligochaeta	BRYO	Cellariidae	0974
POER	Polychaeta Errantia	BRYO	Celleporidae	0976
POSE	Polychaeta Sedentaria	BRYO	Chapperiidae	0980
POLY	Polychaeta	BRYO	Cheiloporinidae	0981
POXX	Polychaeta indet.	BRYO	Clavoporidae	0982
Arthropoda		BRYO	Cribrilinidae	0983
CHPY	Chelicerata Pycnogonida	BRYO	Crisiidae	0984
CHAC	Chelicerata Arachnida	BRYO	Diastoporidae	0985
CRAM	Crustacea Amphipoda	BRYO	Epistomiidae	0986
CRCI	Crustacea Cirripedia	BRYO	Escharellidae	0987
CRCO	Crustacea Copepoda	BRYO	Entalophoridae	0988
CRCU	Crustacea Cumacea	BRYO	Diaperoeciidae	0989
CRDE	Crustacea Decapoda	BRYO	Electridae	0990
CRIS	Crustacea Isopoda	BRYO	Eucrateidae	0993
CRLE	Crustacea Leptostraca	BRYO	Hincksinidae	0988
CRMY	Crustacea Mysidacea	BRYO	Hippoporinidae	0989
CROS	Crustacea Ostracoda	BRYO	Hippothoidae	0990
CRTA	Crustacea Tanaidacea	BRYO	Lichenoporidae	0991
CRXX	Crustacea	BRYO	Lunulariidae	0992
Echinodermata		BRYO	Membraniporidae	0994
ECAS	Echinodermata Asteroidea	BRYO	Microporellidae	0996
ECCR	Echinodermata Crinoidea	BRYO	Microporidae	0998
ECEC	Echinodermata Echinoidea	BRYO	Mucronellidae	0999
ECHO	Echinodermata Holothuroidea	BRYO	Myriaporidae	1000
ECOP	Echinodermata Ophiuroidea	BRYO	Oncousoeciidae	1001
Mollusca		BRYO	Phylactellidae	1002
MOAP	Mollusca Aplacophora	BRYO	Reteporidae	1001
MOBI	Mollusca Bivalvia	BRYO	Rhamphostomellidae	1004
MOCE	Mollusca Cephalopoda	BRYO	Schizoporellidae	1006
MOGA	Mollusca Gastropoda	BRYO	Smittinidae	1008
МОРО	Mollusca Polyplacophora	BRYO	Stomachetosellidae	1009
MOSC	Mollusca Scaphopoda	BRYO	Thalamoporellidae	1010
		BRYO	Triticellidae	1012
		BRYO	Tubuliporidae	1014
		BRYO	Umbonulidae	1015
		BRYO	Vesiculariidae	1016
		BRYO	Victorellidae	1017
		CHAC	Halacaridae	0673

Taxonomic	Family	Codes:

Taxonomic Family Codes:		
Group	Family	Family code
CHPY CHPY	Ammotheidae Callipallenidae	0662
CHPY	Nymphonidae	0664 0666
CHPY	Phoxichilidiidae	0668
CHPY	Pycnogonidae	0670
CHPY	Tanystylidae	0672
CNAN CNAN	Actiniidae Actinostolidae	0040 0041
CNAN	Anthothelidae	0041
CNAN	Caryophylliidae	0042
CNAN	Cerianthidae	0044
CNAN	Clavulariidae	0046
CNAN	Corallimorphidae	0048
CNAN CNAN	Dendrophylliidae Diadumenidae	0049 0050
CNAN	Edwardsiidae	0052
CNAN	Epizoanthidae	0054
CNAN	Gorgoniidae	0056
CNAN CNAN	Halcampidae Halcampoididae	0058 0060
CNAN	Haloclavidae	0062
CNAN	Hormanthiidae	0064
CNAN	Isanthidae	0066
CNAN	Limnactiniidae	0068
CNAN CNAN	Metridiidae Muriceidae	0070 0072
CNAN	Pennatulidae	0074
CNAN	Plexauridae	0076
CNAN	Protoptilidae	0077
CNAN	Renillidae	0078
CNAN CNAN	Sagartiidae Virgulariidae	0080 0082
CNHY	Aequoreidae	0083
CNHY	Aglaopheniidae	0084
CNHY	Cladonematidae	0085
CNHY CNHY	Alcycellidae Bonneviellidae	0086 0087
CNHY	Bougainvilliidae	0087
CNHY	Calycopsidae	0089
CNHY	Campanulariidae	0090
CNHY	Eirenidae	0091
CNHY CNHY	Campanulinidae Clavidae	0092 0093
CNHY	Corymorphidae	0094
CNHY	Corynidae	0095
CNHY	Eudendriidae	0096
CNHY CNHY	Haleciidae Hebellidae	0097 0098
CNHY	Halimedusidae	0099
CNHY	Hydractiniidae	0100
CNHY	Laodiceidae	
CNHY CNHY	Lafoeidae Lovenellidae	0101 0102
CNHY	Mitrocomidae	0102
CNHY	Olindiasidae	0104
CNHY	Pandeidae	0105
CNHY	Pennariidae	0106
CNHY CNHY	Euphysidae Plumulariidae	0107 0108
CNHY	Proboscidactylidae	0109
CNHY	Protohydridae	
CNHY	Rathkeidae	
CNHY CNHY	Rhodaliidae Rhysiidae	0110 0111
CNHY	Sertulariidae	0112
CNHY	Tiarannidae	0113
CNHY	Trichydridae	
CNHY CNHY	Tubulariidae Velellidae	0114 0115
CNHY	Cordylophoridae	0116
CNHY	Calycellidae	0117
CRAM	Iphimediidae	0760
CRAM	Ampeliscidae	0762
CRAM CRAM	Amphilochidae Ampithoidae	0764 0766
CRAM	Anisogammaridae	0767
CRAM	Anamixidae	0768
CRAM	Aoridae	0770
CRAM CRAM	Argissidae Astyridae	0772 0774
CRAM	Bateidae	0774
CRAM	Beaudettiidae	0778
CRAM	Calliopiidae	0780
CRAM CRAM	Caprellidae Cheluridae	0782 0784
CRAM	Colomastigidae	0786
CRAM	Corophiidae	0788

Taxonomic	Eamily	Codoci
raxonomic	ramııv	coaes:

Taxonomic Family Codes		
Group CRAM	Family Cressidae	Family cod 0790
CRAM	Dexaminidae	0790
CRAM	Dogielinotidae	0794
CRAM	Eophliantidae	0796
CRAM	Eusiridae	0798
CRAM	Gammaridae	0800
CRAM CRAM	Haustoriidae Hyalidae	0802 0804
CRAM	Hyatellidae	0806
CRAM	Hyperiopsidae	0808
CRAM	Isaeidae	0810
CRAM	Ischyroceridae	0812
CRAM CRAM	Kuriidae Lafystiidae	0814 0816
CRAM	Laphystiopsidae	0818
CRAM	Lepechinellidae	0820
CRAM	Leucothoidae	0822
CRAM	Liljeborgiidae	0824
CRAM CRAM	Lysianassidae Megaluropidae	0826 0827
CRAM	Melphidippidae	0827
CRAM	Melitidae	0829
CRAM	Ochlesidae	0830
CRAM	Maeridae	0831
CRAM CRAM	Oedicerotidae Opisidae	0832 0833
CRAM	Pagetinidae	0833
CRAM	Odiidae	0835
CRAM	Parampithoidae	0836
CRAM	Pardaliscidae	0838
CRAM CRAM	Pariambidae Philiantidae	0840 0842
CRAM	Phoxocephalidae	0844
CRAM	Phtiscidae	0846
CRAM	Pleustidae	0848
CRAM	Podoceridae	0850
CRAM CRAM	Pontogeneiidae Prophliantidae	0851 0852
CRAM	Pontoporeiidae	0853
CRAM	Protellidae	0854
CRAM	Sebidae	0856
CRAM	Stegocephalidae	0858
CRAM CRAM	Stenothoidae Stilipedidae	0859 0860
CRAM	Synopiidae	0862
CRAM	Talitridae	0864
CRAM	Thaumatelsonidae	0866
CRAM	Urothoidae	0865
CRAM CRCO	Vitjazianidae Clytemnestridae	0868 1300
CRCO	Harpacticidae	1301
CRCO	Mytilicolidae	1302
CRCO	Chondracanthidae	1303
CRCO CRCO	Caligidae Tisbidae	1304 1305
CRCO	Ectinosomatidae	1306
CRCI	Archaeobalanidae	0688
CRCI	Balanidae	0690
CRCI	Chthamalidae	0691
CRCI CRCI	Pollicipedidae Scalpellidae	0693 0692
CRCU	Bodotriidae	0698
CRCU	Diastylidae	0700
CRCU	Lampropidae	0702
CRCU CRCU	Leuconidae Nannastacidae	0704 0706
CRDE	Albuneidae	0870
CRDE	Alpheidae	0872
CRDE	Aristeidae	0874
CRDE	Atelecyclidae	0875
CRDE CRDE	Axiidae	0876 0878
CRDE	Calappidae Callianassidae	0880
CRDE	Cancridae	0882
CRDE	Crangonidae	0884
CRDE	Cyclodorippidae	0886
CRDE	Diogenidae Dromiidae	0888
CRDE CRDE	Galatheidae	0890 0892
CRDE	Grapsidae	0894
CRDE	Hippidae	0896
CRDE	Hippolytidae	0898
CRDE CRDE	Homolidae Laomediidae	0900 0902
CRDE	Leucosiidae	0902
CRDE	Lithodidae	0906
CRDE	Majidae	0908

Tayonomic	Family	Codec

axonomic Family Codes:		
Group	Family	Family cod
CRDE	Ogyrididae	0910
CRDE	Oplophoridae	0912 0913
CRDE CRDE	Oregoniidae	0913
CRDE	Paguridae Palaemonidae	0914
CRDE	Palicidae	0918
CRDE	Palinuridae	0920
CRDE	Pandalidae	0922
CRDE	Parapaguridae	0924
CRDE	Parthenopidae	0926
CRDE	Pasiphaeidae	0928
CRDE	Penaeidae	0930
CRDE	Pinnotheridae	0932
CRDE	Porcellanidae	0934
CRDE	Portunidae	0936
CRDE	Processidae	0938
CRDE	Sergestidae	0940
CRDE	Sicyoniidae	0942
CRDE	Solenoceridae	0944
CRDE	Upogebiidae	0946
CRDE	Xanthidae	0948
CRIS	Aegidae	0720
CRIS	Ancinidae Anthuridae	0722
CRIS Cris	Arcturidae	0724 0726
CRIS	Bopyridae	0728
CRIS	Cirolanidae	0730
CRIS	Corallanidae	0732
CRIS	Cymothoidae	0734
CRIS	Desmosomatidae	0735
CRIS	Gnathiidae	0736
CRIS	Idoteidae	0738
CRIS	Janiridae	0740
CRIS	Joeropsididae	0742
CRIS	Limnoriidae	0744
CRIS	Munnidae	0746
CRIS	Munnopsidae	0748
CRIS	Paramunnidae	0750
CRIS	Paranthuridae	0752
CRIS	Scyphacidae	0753
CRIS Cris	Serolidae Sphaeromatidae	0754 0756
CRIS	Tridentellidae	0758
CRLE	Nebaliidae	0694
CRMY	Mysidae	0696
CROS	Cylindroleberididae	0674
CROS	Cyprididae	0676
CROS	Cypridinidae	0678
CROS	Cytheridae	0677
CROS	Cytheruridae	0675
CROS	Loxoconchidae	0679
CROS	Macrocyprididae	0680
CROS	Paradoxostomatidae	0681
CROS	Philomedidae	0682
CROS	Pontocyprididae	0683
CROS CROS	Rutidermatidae Sarsiellidae	0684 0686
CROS	Trachyleberididae	0687
CRTA	Anarthruridae	0708
CRTA	Akanthophoreidae	0709
CRTA	Leptocheliidae	0710
CRTA	Leptognathiidae	0711
CRTA	Nototanaidae	0713
CRTA	Paratanaidae	0712
CRTA	Pseudotanaidae	0714
CRTA	Tanaellidae	0715
CRTA	Tanaidae	0716
CRTA	Typhlotanaidae	0718
ECAS	Asteriidae	1020
ECAS	Asterinidae	1022
ECAS	Asteropseidae	1024
ECAS ECAS	Astropectinidae Benthopectinidae	1026 1028
ECAS	Brisingidae	1030
ECAS	Ctenodiscidae	1030
ECAS	Echinasteridae	1034
ECAS	Freyellidae	1036
ECAS	Goniasteridae	1038
ECAS	Korethrasteridae	1040
ECAS	Labidiasteridae	1042
ECAS	Luididae	1044
ECAS	Pedicellasteridae	1046
ECAS	Poraniidae	1048
ECAS	Porcellanasteridae	1050
ECAS	Pterasteridae	1052
ECAS	Solasteridae	1054
ECAS	Zoroasteridae	1056

Tavono	mic	Family	Cadaci

l axonomic Family Codes:		
Group	Family	Family cod
ECCR	Antedonidae	1018
ECEC ECEC	Brissidae Dendrasteridae	1076 1078
ECEC	Loveniidae	1080
ECEC	Schizasteridae	1082
ECEC	Spatangidae	1084
ECEC	Strongylocentrotidae	1086
ECEC	Toxopneustidae	1088
ECHO	Caudinidae	1090
ECHO	Chirodotidae	1092
ECHO ECHO	Cucumariidae Molpadiidae	1094 1096
ECHO	Phyllophoridae	1098
ECHO	Psolidae	1100
ECHO	Sclerodactylidae	1102
ECHO	Stichopodidae	1104
ECHO	Synallactidae	1106
ECHO	Synaptidae	1108
ECOP	Amphiuridae	1058
ECOP ECOP	Gorgonocephalidae Ophiacanthidae	1060
ECOP	Ophiactidae	1062 1064
ECOP	Ophiocomidae	1066
ECOP	Ophiodermatidae	1068
ECOP	Ophionereidae	1070
ECOP	Ophiotricidae	1072
ECOP	Ophiuridae	1074
ENTO	Barentsiidae	0958
ENTO	Pedicellinidae	0959
ENTO EURA	Loxosomatidae	0960 0322
EURA	Bonelliidae Echiuridae	0322
EURA	Thalassematidae	0324
EURA	Urechidae	0326
HEMI	Harrimaniidae	1126
HEMI	Ptychoderidae	1128
HEMI	Spengeliidae	1130
KINO	Campiloderidae	1140
KINO	Cateriidae	1142
KINO KINO	Centroderidae Condyloderidae	1144 1146
KINO	Echinoderidae	1148
KINO	Neocentrophyidae	1150
KINO	Pycnophyidae	1152
KINO	Semnoderidae	1154
MOAP	Chaetodermatidae	0338
MOAP	Limifossoridae	0340
MOBI	Anomiidae	0348
MOBI MOBI	Aricidae Astartidae	0350 0352
MOBI	Cardiidae	0354
MOBI	Carditidae	0356
MOBI	Chamidae	0358
MOBI	Corbiculidae	0360
MOBI	Corbulidae	0362
MOBI	Crassatellidae	0364
MOBI	Cuspidariidae	0366
MOBI MOBI	Dimyidae Donacidae	0368 0370
MOBI	Galeommatidae	0370
MOBI	Gastrochaenidae	0374
MOBI	Glycymerididae	0376
MOBI	Hiatellidae	0378
MOBI	Isognomonidae	0380
MOBI	Kelliellidae	0382
MOBI MOBI	Lasaeidae Laternulidae	0384 0386
MOBI	Limidae	0388
MOBI	Limopsidae	0390
MOBI	Lucinidae	0392
MOBI	Lyonsiidae	0394
MOBI	Mactridae	0396
MOBI	Malletiidae	0398
MOBI	Manzanellidae	0400
MOBI MOBI	Modiolatus Myidae	0401 0402
MOBI	Mytilidae	0402
MOBI	Neilonellidae	0404
MOBI	Neoleptonidae	0408
MOBI	Noetilldae	0410
MOBI	Nuculanidae	0412
MOBI	Nuculidae	0414
MOBI	Ostreidae	0416
MOBI	Pandoridae	0418
MOBI MOBI	Pectinidae Periplomatidae	0420 0422
MOBI	Petricolidae	0422

Tayonomic	Family	Codec

Taxonomic Family Codes:		
Group	Family	Family code
MOBI	Pharidae	0426
MOBI MOBI	Philobryidae Pholadidae	0428 0430
MOBI	Pinnidae	0430
MOBI	Poromyidae	0434
MOBI	Pristiglomidae	0436
MOBI	Propeamussiidae	0438
MOBI	Psammobiidae	0440
MOBI MOBI	Pteriidae	0442
MOBI	Saccella Semelidae	0443 0444
MOBI	Siliculidae	0446
MOBI	Solecurtidae	0448
MOBI	Solemyidae	0450
MOBI	Solenidae	0452
MOBI MOBI	Spheniopsidae Tellinidae	0454 0456
MOBI	Teredinidae	0458
MOBI	Thraciidae	0460
MOBI	Thyasiridae	0462
MOBI	Tindariidae	0464
MOBI	Trapezidae	0466
MOBI MOBI	Turtoniidae Ungulinidae	0468 0470
MOBI	Veneridae	0470
MOBI	Verticordiidae	0474
МОВІ	Vesicomyidae	0476
MOBI	Yoldiidae	0478
MOCE	Histioteuthidae	0652
MOCE	Loliginiidae	0654
MOCE MOCE	Octopodidae Opisthoteuthidae	0656 0658
MOCE	Sepiolidae	0660
MOGA	Acmaeidae	0480
MOGA	Acteonidae	0482
MOGA	Adeorbidae	0484
MOGA MOGA	Aeolidiidae	0486
MOGA	Aglajidae Aplysiidae	0488 0490
MOGA	Archidorididae	0492
MOGA	Arminidae	0494
MOGA	Barleeidae	0496
MOGA	Buccinidae	0498
MOGA MOGA	Bullidae Bursidae	0500 0502
MOGA	Cadlinidae	0502
MOGA	Caecidae	0506
MOGA	Calliostomatidae	0507
MOGA	Calyptraeidae	0508
MOGA	Cancellariidae	0510
MOGA MOGA	Cerithiidae Cerithiopsidae	0512 0514
MOGA	Colloniidae	0514
MOGA	Columbellidae	0516
MOGA	Mangeliidae	0518
MOGA	Conidae	0519
MOGA	Conualeviidae	0520
MOGA MOGA	Coralliophilidae Corambidae	0522 0524
MOGA	Cumanotidae	0524
MOGA	Cylichnidae	0528
MOGA	Cymatiidae	0529
MOGA	Dendrodorididae	0530
MOGA	Dendronotidae Diaphanidae	0532
MOGA MOGA	Dironidae	0534 0536
MOGA	Discodorididae	0538
MOGA	Dorididae	0539
MOGA	Dotoidae	0540
MOGA	Epitoniidae	0542
MOGA MOGA	Eulimidae	0544
MOGA	Facelinidae Fasciolariidae	0546 0548
MOGA	Fissurellidae	0550
MOGA	Flabellinidae	0552
MOGA	Gastropteridae	0554
MOGA	Goniodorididae	0556
MOGA	Haminoeidae	0558
MOGA MOGA	Hermaeidae Hipponicidae	0560 0562
MOGA	Aplustridae	0562
MOGA	Littorinidae	0566
MOGA	Lamellariidae	0568
MOGA	Lepetidae	0570
MOGA	Litiopidae	0572
MOGA MOGA	Lottiidae Cysticidae	0574 0576
TIOUR	Cysticiae	03/0

Tayonomic	Family	Codec

Group	Family	Family cod
MOGA MOGA	Mitridae Muricidae	0578 0580
MOGA	Nassariidae	0582
MOGA	Naticidae	0584
MOGA	Notodorididae	0586
MOGA MOGA	Nucellidae Oleidae	0587 0588
MOGA	Olividae	0590
MOGA	Onchidorididae	0592
MOGA	Ovulidae	0594
MOGA	Philinidae	0596
MOGA MOGA	Platydorididae Pleurobranchidae	0598 0600
MOGA	Polyceratidae	0602
MOGA	Potamididae	0603
MOGA	Pseudomelatomidae	0604
MOGA	Pyramidellidae	0606
MOGA	Retusidae	0608
MOGA MOGA	Rissoidae Scaphandridae	0610 0612
MOGA	Sciddurellidae	0614
MOGA	Stiligeridae	0615
MOGA	Terebridae	0616
MOGA MOGA	Tergipedidae	0618 0620
MOGA	Tethyidae Trichotropididae	0620
MOGA	Tritoniidae	0622
MOGA	Triviidae	0624
MOGA	Trochidae	0626
MOGA	Truncatellidae	0628
MOGA MOGA	Turbinidae Turbinellidae	0630 0632
MOGA	Turridae	0634
MOGA	Turritellidae	0636
MOGA	Vanikoridae	0638
MOGA	Velutinidae	0471
MOGA MOGA	Vermetidae Vitrinellidae	0640 0642
MOPO	Callistoplacidae	0341
MOPO	Ischnochitonidae	0342
MOPO	Protochitonidae	0343
MOPO MOPO	Leptochitonidae Tonicellidae	0344 0345
MOPO	Mopaliidae	0345
MOPO	Schizoplacidae	0347
MOPO	Lepidochitonidae	0348
MOSC	Dentaliidae	0644
MOSC MOSC	Gadilidae Pulsellidae	0646 0647
MOSC	Rhabdidae	0648
MOSC	Siphonodentaliidae	0650
NTEA	Amphiporidae	0140
NTEA	Carinomidae	0142
NTEA NTEA	Cephalothricidae Emplectonematidae	0144 0146
NTEA	Lineidae	0148
NTEA	Cratenemertidae	0149
NTEA	Ototyphlonemertidae	0150
NTEA	Prosorhochmidae	0152
NTEA NTEA	Tetrastemmatidae Tubulanidae	0154 0156
NTEA	Valenciniidae	0158
PHOR	Phoronidae	0950
PIXX	Anarhichadidae	1190
PIXX	Ammodytidae	1195
PIXX PIXX	Cryptacanthodidae Stichaeidae	1200 1210
PIXX	Bathylagidae	1220
PIXX	Batrachoididae	1230
PIXX	Gobiidae	1240
PIXX	Liparidae	1250
PIXX PIXX	Agonidae Zoarcidae	1255 1260
PIXX	Scorpaenidae	1270
PIXX	Pholidae	1271
PLTY	Callioplanidae	0116
PLTY	Cryptocelididae	0118
PLTY PLTY	Emprosthopharyngidae Euryleptidae	0120 0122
PLTY	Holoplanidae	0122
PLTY	Latocestidae	0126
PLTY	Leptoplanidae	0128
PLTY	Planoceridae	0130
PLTY PLTY	Pleioplanidae Plehniidae	0131 0132
PLTY	Promesostomidae	0133

Tayonomic	Family	Codec

Taxonomic Family Codes:		
Group	Family	Family code
PLTY	Pseudocerotidae	0136
PLTY	Stylochidae	0138
POER	Aceotidae	0160
POER	Alciopidae	0162
POER	Amphinomidae	0164
POER	Aphroditidae	0166
POER	Chrysopetalidae	0168
POER	Diurodrilidae	0170
POER	Dorvilleidae	0172
POER	Eulepethidae Eunicidae	0174 0176
POER	Euphrosinidae	0178
POER	Glyceridae	0178
POER	Goniadidae	0182
POER	Hartmaniellidae	0184
POER	Hesionidae	0186
POER	Histriobdellidae	0188
POER	Icthyotomidae	0190
POER	Iospilidae	0192
POER	Lacydoniidae	0194
POER	Lopadorhynchidae	0196
POER	Lumbrineridae	0198
POER	Nautiliniellidae	0200
POER	Nephtyidae	0202
POER POER	Nereididae Oenonidae	0204 0206
POER	Onuphidae	0208
POER	Paralacydoniidae	0208
POER	Pholoidae	0210
POER	Phyllodocidae	0214
POER	Pilargidae	0216
POER	Pisionidae	0218
POER	Polynoidae	0220
POER	Pontodoridae	0222
POER	Sigalionidae	0224
POER	Sphaerodoridae	0226
POER	Syllidae	0228
POER	Tomopteridae	0230
POER	Typhloscolecidae	0232
PORI	Amphoriscidae	0002
PORI	Aphrocallistidae	0004
PORI	Aplysillidae Axinellidae	0005 0006
PORI	Coelosphaeridae	0007
PORI	Clathriidae	0007
PORI	Desmacellidae	0009
PORI	Clathrinidae	0010
PORI	"Clionidae"	0011
PORI	Cyamonidae	0012
PORI	Dysideidae	0013
PORI	Grantiidae	0014
PORI	Halichondriidae	0015
PORI	Haliclonidae	0016
PORI	Halisarcidae	0019
PORI	Hymedesmiidae	0021
PORI	Hymeniacidonidae	0017
PORI	Leucosoleniidae	0018
PORI PORI	Microcionidae Mycalidae	0019 0020
PORI	Myxillidae	0020
PORI	Pachastrellidae	0022
PORI	Plakinidae	0023
PORI	Polymastiidae	0025
PORI	Raspailiidae	0026
PORI	Rossellidae	0028
PORI	Spirastrellidae	0030
PORI	Stellettidae	0032
PORI	Suberitidae	0034
PORI	Sycettidae	0035
PORI	Tethyidae	0036
PORI	Tedaniidae	0037
PORI	Tetillidae	0038
POSE	Aberrantidae Acrocirridae	0234 0236
POSE	Aeolosomatidae	0238
POSE	Alvinellidae	0238
POSE	Ampharetidae	0240
POSE	Apistobranchidae	0242
POSE	Arenicolidae	0246
POSE	Capitellidae	0248
POSE	Chaetopteridae	0250
POSE	Cirratulidae	0252
POSE	Cossuridae	0254
POSE	Ctenodrilidae	0256
POSE	Fabriciidae	0257
POSE	Fauveliopsidae	0258
POSE	Flabelligeridae	0260

Tavanamic	Eamily	Codec

Taxonomic Family Codes:		
Group	Family	Family code
POSE	Longosomatidae	0262
POSE	Magelonidae	0264
POSE	Maldanidae	0266
POSE	Nerillidae	0268
POSE	Opheliidae	0270
POSE	Orbiniidae	0272
POSE	Oweniidae	0274
POSE	Paraonidae	0276
POSE	Parergodrilidae	0278
POSE	Pectinariidae	0280
POSE	Poecilochaetidae	0282
POSE	Poeobiidae	0284
POSE	Polygordiidae	0286
POSE	Potamodrilidae	0288
POSE	Protodrilidae	0290
POSE	Protodriloididae	0292
POSE	Psammodrilidae	0294
POSE	Questidae	0296
POSE	Sabellariidae	0298
POSE	Sabellidae	0300
POSE	Saccocirridae	0302
POSE	Scalibregmatidae	0302
POSE	Serpulidae	0304
POSE	Spintheridae	0308
	•	
POSE	Spionidae	0310
POSE	Spirorbidae	0311
POSE	Sternaspidae	0312
POSE	Terebellidae	0314
POSE	Trichobranchidae	0316
POSE	Trochochaetidae	0318
POSE	Uncispionidae	0320
PRIA	Maccabeidae	1156
PRIA	Priapulidae	1158
PRIA	Tubiluchidae	1160
SIPN	Aspidosiphonidae	0328
SIPN	Golfingiidae	0330
SIPN	Phascolionidae	0332
SIPN	Themistidae	0333
SIPN	Phascolosomatidae	0334
SIPN	Sipunculidae	0336
TARD	Echiniscoididae	0661
URAS	Agneziidae	1110
URAS	Cionidae	1112
URAS	Clavelinidae	1113
URAS	Corellidae	1114
URAS	Didemnidae	1115
URAS	Molgulidae	1116
URAS	Polycitoridae	1118
URAS	Polyclinidae	1120
URAS	Pyuridae	1122
URAS	Ritterellidae	1123
URAS	Styelidae	1124
URAS	Ascidiidae	1132
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Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundance per sample for Golder Baffinlands Iron Mine 2018.

c	iologica Sa lient Samp	•					Grand Total	mb18-108-001 BE-1	mb18-108-002 BE-1 2	mb18-108-003 BE-1	mb18-108-004 BE-2	mb18-108-005 BE-2	mb18-108-006 BE-2	mb18-108-007 BE-3	mb18-108-008 BE-3 2	mb18-108-009 BE-3	mb18-108-010 BE-4	mb18-108-011 BE-4 2	mb18-108-012 BE-4	mb18-108-013 BE-5	mb18-108-014 BE-5 2
	eplicate ate Sampl	ed						2018-08-17	2018-08-17	2018-08-17	2018-08-17	2 2018-08-17	2018-08-17	2018-08-17	2018-08-17	3 2018-08-17	2018-08-17	2018-08-17	3 2018-08-17	1 2018-08-17	2 2018-08-17
		grpcode	Order	Family	TaxonName	Unique Taxa	Total Abundance										Total Abundance				
		ANHI	Rhynchobdellida	Piscicolidae	Hirudinea indet.	1	3											_	_		
		ANOL EURA	Enchytraeida Echiuroidea	Enchytraeidae Echiuridae	Enchytraeidae indet. Echiurus echiurus	1 1	95 3	8	3	1	2	2	3	2		14		4	4		
		POER	Eunicida	Dorvilleidae	Dorvilleidae indet.	•	14														
		POER	Eunicida	Dorvilleidae	Parougia caeca	1	35				2	2									
A	NNE	POER	Eunicida	Lumbrineridae	Lumbrineridae indet.		52								4			4			
		POER	Eunicida	Lumbrineridae	Lumbrineris sp.	1	14														
		POER	Eunicida	Lumbrineridae	Scoletoma impations	1 1	554 716	3 8	3 24	3	5 21	5 26	4 21	9	8 28	29	18	0	40	18	5 34
		POER POER	Eunicida Eunicida	Lumbrineridae Lumbrineridae	Scoletoma impatiens Scoletoma sp.	1	716 68	4	24	3	21	20	21		20	29	10	0	40	10	54
		POER	Eunicida	Onuphidae	Nothria conchylega	1	76	·													
A	NNE	POER	Phyllodocida	Glyceridae	Glycera capitata	1	2														
		POER	Phyllodocida	Glyceridae	Glycera sp.		2														
		POER	Phyllodocida	Hesionidae	Microphthalmus sp.	1	1 1														
		POER POER	Phyllodocida Phyllodocida	Hesionidae Hesionidae	Gyptis sp. Nereimyra punctata	1	1,999	104	21	24	56	35	27	21	24	29	18	68	20	3	12
		POER	Phyllodocida	Nephtyidae	Aglaophamus sp.	1	2	104	21	2-7	30	33	2,	21	24	23	10	00	20	3	12
Α	NNE	POER	Phyllodocida	Nephtyidae	Bipalponephtys cornuta	1	1,479	8	13	14	26	22	21	10	24	14	9	4	12	45	24
		POER	Phyllodocida	Nephtyidae	Nephtys bucera	1	1														
		POER	Phyllodocida	Nephtyidae	Nephtys ciliata	1	11														
		POER POER	Phyllodocida Phyllodocida	Nephtyidae Nereididae	Nephtys sp. Nereis zonata	1	3 96	1	1		2	2	1	2		11			2	3	2
		POER	Phyllodocida	Nereididae	Nereididae indet.	1	53	1	1		2	2	3	2	4	11			2	3	2
		POER	Phyllodocida	Pholoidae	Pholoe minuta	1	2,157	26	107	83	24	26	18	48	9	72	18	100	72	6	8
A	NNE	POER	Phyllodocida	Pholoidae	Pholoe sp.		1,133	4		29	18	31	12		8	5		96	24		
		POER	Phyllodocida	Pholoidae	Pholoe tecta	1	8,708	104	238	281	76	91	93	154	164	317	130	316	404	117	130
		POER	Phyllodocida	Phyllodocidae	Eteone barbata	1	6			2		2		2			2				
		POER POER	Phyllodocida Phyllodocida	Phyllodocidae Phyllodocidae	Eteone longa complex Eteone sp.	1	73 115	2			2	2	3	2			3		8	3	2
		POER	Phyllodocida	Phyllodocidae	Eulalia sp.	1	1	-			_		3						· ·	3	-
Α	NNE	POER	Phyllodocida	Phyllodocidae	Phyllodoce groenlandica	1	8														
		POER	Phyllodocida	Phyllodocidae	Phyllodoce sp.		4														
		POER	Phyllodocida	Phyllodocidae	Eteone flava	1	1												1		•
		POER POER	Phyllodocida Phyllodocida	Phyllodocidae Polynoidae	Hypereteone sp. Gattyana cirrhosa	1	2 77	4	1		2	2	5	1	1	2		10			5
		POER	Phyllodocida	Polynoidae	Harmothoe extenuata	1	28	-	-	2	2	2	3	3	6	2	1	10			3
А	NNE	POER	Phyllodocida	Polynoidae	Harmothoe imbricata	1	78							2				4	5		2
A	NNE	POER	Phyllodocida	Polynoidae	Harmothoe sp.		200	2	8	3	4			12			3	24	12	3	
		POER	Phyllodocida	Polynoidae	Melaenis loveni	1	1														
		POER POER	Phyllodocida Phyllodocida	Polynoidae Polynoidae	Bylgides sarsi Bylgides sp.	1	2														
		POER	Phyllodocida	Polynoidae	Hartmania moorei	1	5														
А		POER	Phyllodocida	Polynoidae	Polynoidae indet.		26														
A	NNE	POER	Phyllodocida	Sphaerodoridae	Sphaerodoropsis minuta	1	27														2
		POER	Phyllodocida	Sphaerodoridae	Sphaerodoropsis sp.		1				_										
		POER POER	Phyllodocida Phyllodocida	Syllidae Syllidae	Syllides longocirratus Syllides sp.	1	34				4	2									
			Phyllodocida	Syllidae	Eusyllinae indet.		16					2									
А	NNE	POER	Phyllodocida	Syllidae	Eusyllis sp.	1	4														
		POER	Phyllodocida	Syllidae	Pionosyllis sp.	1	1														
		POER	Phyllodocida	Syllidae	Exogone verugera	1	2		42		1.5	24	24	4.4	40	77	66	22	20	45	4.4
		POER POSE	Phyllodocida Sabellida	Syllidae Fabriciidae	Parexogone hebes Pseudofabricia sp. nr. aberrans	1	386 40	8	13		16	24	21	14	40	77	66	32	20	15	14
		POSE	Sabellida	Oweniidae	Galathowenia oculata	1	289	2					6					4			
			Sabellida	Oweniidae	Myriochele heeri	1	54														
A	NNE	POSE	Sabellida	Oweniidae	Owenia fusiformis	1	336		3				3							15	
			Sabellida	Oweniidae	Oweniidae indet.		8			_				_							
		POSE	Sabellida	Sabellidae	Euchone incolor	1	1,882	24	14	3	28	48	36	5	72	53	30	36	1	49	31
		POSE POSE	Sabellida Sabellida	Sabellidae Sabellidae	Euchone sp. Bispira sp.	1	9 1											1	1		
			Sabellida	Sabellidae	Chone duneri	1	3											-			
		POSE	Sabellida	Sabellidae	Dialychone sp.		37												4		
			Sabellida	Sabellidae	Dialychone sp. 1	1	313	9	8		8	10	15	2	20	5	3	8		3	2
			Sabellida	Sabellidae	Euchone rubrocincta	1	10		3			-	2	•	4.5	-	1				
		POSE POSE	Sabellida Sabellida	Sabellidae Sabellidae	Sabellidae indet. Sabellidae sp. 2	1	129 3	2			4	5	3	2	16 1	5	3	4	4		
			Sabellida	Sabellidae	Sabellidae sp. 3	1	5 59	2					6		1	10					
			Sabellida	Sabellidae	Sabellidae sp. 4	1	2						-	2							
А	NNE	POSE	Sabellida	Serpulidae	Pileolaria sp.	1	1														

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Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundance per sample for Golder Baffinlands Iron Mine 2018.

Cli Re	ent Sam plicate	•					Grand Total	mb18-108-001 BE-1 1	mb18-108-002 BE-1 2	mb18-108-003 BE-1 3	mb18-108-004 BE-2 1	mb18-108-005 BE-2 2	mb18-108-006 BE-2 3	mb18-108-007 BE-3 1	mb18-108-008 BE-3 2	mb18-108-009 BE-3 3	mb18-108-010 BE-4 1	BE-4 2	mb18-108-012 BE-4 3	mb18-108-013 BE-5 1	mb18-108-014 BE-5 2
	te Samp	led grpcode	Ordor	Family	TaxonName	Unique Taya	Total Abundance	2018-08-17 Total Abundance	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17 Total Abundance	2018-08-17	2018-08-17	2018-08-17
	code NE	POSE	Sabellida	Family Serpulidae	Spirorbinae indet.	Onique Taxa	40	Total Abulluance	Total Abundance	Total Abulluance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abulluance	Total Abulluance	Total Abulluance	Total Abundance	Total Abundance	Total Abundance
	NE	POSE	Spionida	Apistobranchidae	Apistobranchus sp.	1	59				2		3		4		3				
A١	NE	POSE	Spionida	Spionidae	Dipolydora caulleryi	1	2	1													
	NE	POSE	Spionida	Spionidae	Dipolydora concharum	1	1										1				
	NE	POSE	Spionida	Spionidae	Dipolydora quadrilobata	1	79	14						2				20			5
	NE NE	POSE POSE	Spionida Spionida	Spionidae Spionidae	Dipolydora socialis	1	7 13						6	2						3	
	NE	POSE	Spionida	Spionidae	Dipolydora sp. Laonice cirrata	1	6						6	2						3	
	NE	POSE	Spionida	Spionidae	Marenzelleria sp.	1	301														
	NE	POSE	Spionida	Spionidae	Polydora sp. complex		8														
A۱	NE	POSE	Spionida	Spionidae	Prionospio (Prionospio) sp.		61		1						4						
	NE	POSE	Spionida	Spionidae	Prionospio (Prionospio) steenstrupi	1	1,650	12	5		4	22	39			10	6	36		129	12
	NE	POSE	Spionida	Spionidae	Prionospio cirrifera	1	1														
	NE NE	POSE POSE	Spionida Spionida	Spionidae Spionidae	Prionospio sp. Pygospio sp.	1	47 361	10					6		4	14	12	8			2
	NE	POSE	Spionida	Spionidae	Scolelepis sp.	1	301	10					U		4	14	12	8			2
	NE	POSE	Spionida	Spionidae	Spio filicornis	1	41				2					5	3				
ΑN	NE	POSE	Spionida	Spionidae	Spio sp.		10														
	NE	POSE	Spionida	Spionidae	Spionidae indet.		1														
	NE	POSE	Terebellida	Ampharetidae	Ampharete sp.	1	253		11	5	2	2	3	3		34	7		4	3	2
	NE NE	POSE POSE	Terebellida Terebellida	Ampharetidae Ampharetidae	Lysippe labiata Melinna elisabethae	1	18 55					2									
	NE	POSE	Terebellida	Ampharetidae	Melinna sp.	1	1														
	NE	POSE	Terebellida	Ampharetidae	Ampharete vega	1	8														
ΑN	NE	POSE	Terebellida	Ampharetidae	Ampharetidae indet.		69				4		3		8	5					
A۱	NE	POSE	Terebellida	Ampharetidae	Amphicteis sundevalli	1	4														
	NE	POSE	Terebellida	Cirratulidae	Aphelochaeta sp.	1	322	2	5	_	14	10	9	12	12	29	21		32	12	7
	NE	POSE POSE	Terebellida	Cirratulidae Cirratulidae	Chaetozone bathyala	1	2,653 64	37	91	5	65	67	114	15	64	19	34	28	8	45	101
	NE NE	POSE	Terebellida Terebellida	Cirratulidae	Chaetozone careyi Chaetozone pigmentata	1	197	2			10	23	6		12		9			6	2
	NE	POSE	Terebellida	Cirratulidae	Chaetozone setosa complex	1	397	2	11		10	2	9	3	12	19	3			18	2
	NE	POSE	Terebellida	Cirratulidae	Chaetozone sp.		1,119	22	16		14	35	45	2	28	19	3	4		21	10
AN	NE	POSE	Terebellida	Cirratulidae	Cirratulidae indet.		588		19	31	2	19	3	23	8	14		8	8	3	7
	NE	POSE	Terebellida	Cirratulidae	Kirkegaardia sp.	1	2														
	NE	POSE	Terebellida	Cirratulidae	Tharyx sp.	1	187							2					4		2
	NE NE	POSE POSE	Terebellida Terebellida	Flabelligeridae Pectinariidae	Diplocirrus hirsutus Cistenides granulata	1	11 677	7	16	19			13	10	3	23	2	17	4 11	5	4
	NE	POSE	Terebellida	Terebellidae	Polycirrus sp. complex	1	64	2	10	13	2		13	2	4	23	-	1,	4	3	7
	NE	POSE	Terebellida	Terebellidae	Lanassa venusta	1	10								1		3				
A۱	NE	POSE	Terebellida	Terebellidae	Laphania boecki	1	58		5	3				7	4			8	5		
	NE	POSE	Terebellida	Terebellidae	Leaena abranchiata	1	4					2									
	NE	POSE	Terebellida	Terebellidae	Pista maculata	1	97 5	4			3	1	1	1	10 4	3	2		3		3
	NE NE	POSE POSE	Terebellida Terebellida	Terebellidae Terebellidae	Proclea graffi Proclea sp.	1	2								4						
	NE	POSE	Terebellida	Terebellidae	Amaeana sp.	1	1														
ΑN	NE	POSE	Terebellida	Terebellidae	Neoamphitrite affinis	1	7														2
	NE	POSE	Terebellida	Terebellidae	Terebellidae indet.		52						3		4	5	6		4		
	NE	POSE	Terebellida	Trichobranchidae	Terebellides sp.	1	449	9	8	3		2	7	3	16	49	17	27	14	13	3
	NE NE	POSE POSE	Terebellida	Trichobranchidae Capitellidae	Trichobranchus glacialis Capitella capitata complex	1 1	2 53						6	2		5		8	4		
	NE	POSE		Capitellidae	Mediomastus sp.	1	1,387	4	80	99	14	17	12		4	62	15		68	9	7
	NE	POSE		Capitellidae	Notomastus latericeus	1	8														
ΑN	NE	POSE		Cossuridae	Cossura sp.	1	1,199	12	3		14	38	6	14	40	19	18	32	20	27	12
	NE	POSE		Maldanidae	Clymenura sp.	1	18														
	NE	POSE		Maldanidae	Euclymene sp.	1	14														
	NE NE	POSE POSE		Maldanidae Maldanidae	Euclymeninae indet. Microclymene sp.	1	78 61				2		3				3	4			2
	NE	POSE		Maldanidae	Praxillella gracilis	1	4						3				Ü				2
	NE	POSE		Maldanidae	Praxillella praetermissa	1	50										3	12			
ΑN	NE	POSE		Maldanidae	Maldane sarsi	1	476	2	11	2	4	14	9	3	20		27		26		19
	NE	POSE		Maldanidae	Nicomache sp.	1	1														
	NE	POSE		Maldanidae	Rhodine loveni	1	3		2				_							3	
	NE NE	POSE POSE		Maldanidae Opheliidae	Maldanidae indet. Ophelina acuminata	1	34 19		3				6				1			3	
	NE	POSE		Opheliidae	Ophelina acuminata Ophelina cylindricaudata	1	18				8						1			3	
	NE	POSE		Opheliidae	Ophelina sp.		9				_										
A۱	NE	POSE		Orbiniidae	Leitoscoloplos sp.	1	2	2													
	NE	POSE		Orbiniidae	Orbiniidae indet.		36									5	9				
A۱	NE	POSE		Orbiniidae	Scoloplos acutus	1	258		5		6	5	9		16		12			12	7

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Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundance per sample for Golder Baffinlands Iron Mine 2018.

	Sample #					Grand Total	mb18-108-001	mb18-108-002	mb18-108-003	mb18-108-004	mb18-108-005	mb18-108-006		mb18-108-008	mb18-108-009	mb18-108-010	mb18-108-011	mb18-108-012	mb18-108-013	mb18-108-014
Client Sa Replicate	•						BE-1 1	BE-1 2	BE-1 3	BE-2 1	BE-2 2	BE-2 3	BE-3 1	BE-3 2	BE-3 3	BE-4 1	BE-4 2	BE-4 3	BE-5 1	BE-5 2
Date San			_				2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17			2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17
taxcode ANNE	grpcode POSE	Order	Family Orbiniidae	TaxonName Scoloplos armiger	Unique Taxa	Total Abundance 29	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ANNE	POSE		Orbiniidae	Scolopios sp.	1	74			2	1	5	1	2				4			
ANNE	POSE		Paraonidae	Aricidea catherinae	1	11					2									
ANNE	POSE		Paraonidae	Aricidea hartmanae	1	127	6			2	5	6								
ANNE	POSE		Paraonidae	Aricidea minuta	1	304	2 10	5	0	12	14	18	2	8	10	1	8	8	2	2 5
ANNE ANNE	POSE POSE		Paraonidae Paraonidae	Aricidea nolani Aricidea sp.	1	224 16	10	3	9				9	4			4	4	3	5
ANNE	POSE		Paraonidae	Paraonidae indet.		26			3											
ANNE	POSE		Sabellidae	Branchiomma sp.	1	1														
ANNE	POSE		Scalibregmatidae	Polyphysia crassa	1	3														
ANNE ANNE	POSE POXX		Scalibregmatidae Protodrilidae	Scalibregma inflatum Protodrilus sp.	1	773 25	2	22	10	26	19	18	5	24	38	12	4	8	18	12
ARTH	CHAR	Acarina	Halacaridae	Halacaridae indet.	1	12									5			4		
ARTH	CHPY	Pantopoda	Nymphonidae	Nymphon sp.	1	5														
ARTH	CRAM	Amphipoda	Phoxocephalidae	Harpinia serrata	1	22														
ARTH	CRAM	Amphipoda	Phoxocephalidae	Harpinia sp.		3														
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Ampeliscidae Ampeliscidae	Ampeliscidae indet. Byblis sp.	1	26 22														
ARTH	CRAM	Amphipoda	Amphilochidae	Amphilochus sp.	1	5						3								
ARTH	CRAM	Amphipoda	Calliopiidae	Calliopiidae indet.	1	7							2							
ARTH	CRAM	Amphipoda	Podoceridae	Dyopedos sp.	1	2														
ARTH	CRAM	Amphipoda	Corophiidae	Corophiidae indet.	4	12	2												2	
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Corophiidae Dexaminidae	Monocorophium sp. Dexaminidae indet.	1	11 2	2												3	
ARTH	CRAM	Amphipoda	Gammaridae	Gammarus sp.	1	20														
ARTH	CRAM	Amphipoda	Opisidae	Opisa sp.	1	4														
ARTH	CRAM	Amphipoda	Tryphosidae	Gronella groenlandica	1	4														
ARTH	CRAM	Amphipoda	Tryphosidae	Hippomedon sp.	1	3 48								36						
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Tryphosidae Tryphosidae	Orchomene sp. Orchomenella minuta	1	48								30						
ARTH	CRAM	Amphipoda	Tryphosidae	Orchomenella pinguis	1	14														
ARTH	CRAM	Amphipoda	Tryphosidae	Tryphosidae indet.		58			3			3	10		10			8		
ARTH	CRAM	Amphipoda	Uristidae	Anonyx sarsi	1	27				_		1	_			3		18	_	
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Uristidae Uristidae	Anonyx sp. Onisimus barentsi group	1	59 17				2		3	2	8				4	3	ว
ARTH	CRAM	Amphipoda	Uristidae	Onisimus barentsi group Onisimus brevicaudatus	1	1														2
ARTH	CRAM	Amphipoda	Uristidae	Onisimus sp.		45		3	3								4	4		
ARTH	CRAM	Amphipoda		Lysianassoidea indet.		37	4	5	3											
ARTH	CRAM	Amphipoda	Oedicerotidae	Arrhis sp.	1	1														
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Oedicerotidae Pontoporeiidae	Monoculopsis sp. Pontoporeia femorata	1	82 338	44	3			5		14	32	16	9	8	61		
ARTH	CRAM	Amphipoda	Ampeliscidae	Ampelisca eschrichtii	1	3		3			3		14	32	10	3	0	01		
ARTH	CRAM	Amphipoda	Ampeliscidae	Haploops tubicola	1	19		1						2		3				
ARTH	CRAM	Amphipoda	Atylidae	Atylus carinatus	1	9	2										2			
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Corophiidae Dexaminidae	Crassicorophium bonellii Guernea nordenskioldi	1	15 1,530	12	45	24	28	41	72	26	64	58	31	52	92		70
ARTH	CRAM	Amphipoda	Eusiridae	Rhachotropis helleri	1	2	12	43	24	28	41	72	20	04	36	31	32	32		70
ARTH	CRAM	Amphipoda	Oedicerotidae	Aceroides sp.	1	12														
ARTH	CRAM	Amphipoda	Oedicerotidae	Monoculodes sp.	1	90			3	4		3	2							
ARTH	CRAM	Amphipoda	Oedicerotidae	Oedicerotidae indet.	4	76 188	2	40	2 10	4	40	3	9	8	5	6	16			10
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Oedicerotidae Oedicerotidae	Paroediceros lynceus Rostroculodes sp.	1	188 87	8	10	10	4	10	3	9	8	5		13		12	10
ARTH	CRAM	Amphipoda	Oedicerotidae	Westwoodilla sp.	1	100		3		2					10	6	24			7
ARTH	CRAM	Amphipoda	Pontoporeiidae	Monoporeia affinis	1	427	6													
ARTH	CRAM	Amphipoda	Stenothoidae	Stenothoidae indet.	1	1	_					_		_						
ARTH ARTH	CRAM CRCI	Amphipoda Sessilia		Amphipoda indet. Balanomorpha indet.	1	39 441	8 222				า	3	1	4						
ARTH	CRCO	Cyclopoida		Cyclopoida indet.	1	1,676	8		9	6	2	21			10	3	16	24	3	19
ARTH	CRCO	Harpacticoida		Harpacticoida indet.	1	304	6		7	2	2	9			10	J	24	12	J	19
ARTH	CRCU	Cumacea	Diastylidae	Brachydiastylis resima	1	2,058		3					26	76	403	275	20	280	351	259
ARTH	CRCU	Cumacea	Diastylidae	Diastylidae indet.		125								40			72	8	_	
ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis bradyi Diastylis goodsiri	1	9 5													9	
ARTH	CRCU	Cumacea	Diastylidae	Diastylis lucifera	1	70								28						
ARTH	CRCU	Cumacea	Diastylidae	Diastylis rathkei	1	163									2	9	108	4		1
ARTH	CRCU	Cumacea	Diastylidae	Diastylis scorpioides	1	268		11		6	19	6	14	1		3				23
ARTH	CRCU	Cumacea	Diastylidae	Diastylis sp.	4	153		3		2						112				
ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis spinulosa Diastyloides biplicatus	1	3 186		11			7	42	21			9				
	220	244004	_ 1001,11000		<u> </u>	200					,	72	21			,				

Biologica Environmental Services Ltd.



Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundance per sample for Golder Baffinlands Iron Mine 2018.

Part		Biologica S						Grand Total	mb18-108-001 BE-1	mb18-108-002 BE-1	mb18-108-003 BE-1	mb18-108-004 BE-2	mb18-108-005 BE-2	mb18-108-006 BE-2		mb18-108-008 BE-3	mb18-108-009 BE-3	mb18-108-010 BE-4	mb18-108-011 BE-4	mb18-108-012 BE-4	mb18-108-013 BE-5	mb18-108-014 BE-5
Part March			ipie #											3				1				
Property Property																						
Mathematical Content							Unique Taxa		Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
Mathematical Control							1			8	10	32		12	24	8	34		12		15	7
Mathematical Content							1		2							4		6				2
Mathematical Control				Cumacea	Leuconidae		1	399		5	2	4				4	10	6	8			10
Fig. Column Col														3								
Mathematical Control of the Contro					Nannastacidae		1	-											0			
Mary Mary					Thoridae		1							1					٥			
All							1	1						-								
Mathematical Control		ARTH	CRDE					1														
Mathematical Control					Crangonidae		1	1						1								
Ministry Ministry					Constitute o		4	2	2	-		2				0						
Min							1		2	5		2				8		ь				
Mathematical Content							1	•								•						
Mine Mine		ARTH	CRMY					33														2
Mary Mary		ARTH	CRMY	Mysida	Mysidae	Mysis sp.	1				5								4			
Ministry Ministry							1		20	53	19	49			24	216	67	72	212	144	150	
Mathematical Members							1				2		2	9				42	8	4		
Mathematical Methods Mathematical Methods							1			3	2	4		3		8	10		·		3	
Mile Mile						·							5		3							
Main		ARTH	CRTA	Tanaidacea		Tanaidacea indet.		161	2			4	2					45	24		3	
Main							1															
Control Cont				•			1				2											
Control				•			1			2			2		2							
Control Cont							-			3			2		2	1						
Control Cont							1															
Column C	1	ECHI	ECHO	Dendrochirotida	Psolidae	Psolus phantapus	1	2														
Control Cont						•	1	•														
Control Cont				•		•	1			2				1		1				2		
Fig. Sept.				•			1			3				1		1				2		
Miles Mile				•			-											3		4		
Mile Mile	1	MISC	BRYO	Cheilostomatida	Candidae	Scrupocellaria sp.	1	1														
MSC MSC						•	1	2														
Mile							1	1														
Mode Mode							1	6	4													
Mile Mile					mac		-	3	•													
Mile Mile	1	MISC	BRYO	Cyclostomatida	Crisiidae	Crisia sp.	1	1														
Mile Mile				Cyclostomatida		•		6								4						
MSC CMP Authorabheetals — Minoatheetals —				0 - 4 b 4 b 4 -	Daniel and Hill dan	•	4			4												
Misconsciplination Miscons					Bougainvillildae		1			1												
MISC CHY Hydroxoa Indet 16 MISC NISC Henricomental mater 1 2 MISC NISC Henricomental mater 1 2 3 2 2 3 4 2 2 MISC NITA Heteromental deteromental mater Uneidade understanted 1 2 3 2 6 4 5 3 4 2 2 MISC NITA Heteromental determinants Uneidade understanted 1 2 2 2 2 3 4 9 2 2 MISC NITA Heteromental determinants Uneidade understanted 1 2 2 2 2 2 3 3 4 9 2 3 3 4 9 2 3 3 4 9 2 4 3 4 9 2 4 3 4 9 2 4 3 4 9 2					Olindiidae		1		2					3	2		1	1				
MSC NFA Additional transfer Cephalothris days 1 97 3 4 2 MSC NFA Hetronemerea Lineidae Cerbarbulus sp. 1 15 9 2 MSC NFA Hetronemerea Lineidae Lineidae (arimas sp. 1 15 9 2 MSC NFA Hetronemerea Lineidae Lineidae (arimas sp. 1 2 9 2 MSC NFA Haleonemerea Lineidae Cariman sp. 1 2 9 2 2 2 2 2 2 3 3 2 3 4 3 9 2 4 3 9 2 4 3 9 4 3 9 4 4 3 9 4 4 3 9 4 4 3 9 4 4 3 9 4 3 9 4 3 9 2 3 4	1	MISC	CNHY			Hydrozoa indet.																
MSC NTA Heteromentence MISC Line/doe Cerebratulys Sp. 145 3 5 9 2 MISC NTA Palasonemetral Line/doe Line/doe Inclineded (Line/doe) 1 2 2 5 2 5 2 8 9 2 8 9 2 9 2 9 2 9 2 9 2 9 2 9 2 8 9 2 9 2 9 2 9 2 9 2 9 2 1 4 3 9 7 9 2 2 2 1 4 3 7 7 2 2 2 1 4 3 7 7 2 2 2 1 4 3 7 2<							1															
MSC NTEAL Heteromented Bundlage Line idiage Line idiage 1 2 2 7 2 2 7 2 2 4 3 7 2 2 3 5 5 21 4 3 7 2 3 5 5 21 4 3 7 2 2 3 5 5 21 4 3 7 2 3 5 5 21 4 3 7 2 3 5 5 21 4 3 7 2 3 5 5 21 4 3 7 2 3 5 5 21 4 3 7 2 2 4 3 7 2 2 4 4 3 7 2 2 4 4 3 7 2 2 4 4 3 2 4 4 4 4 4 4					•		_			3	2		2			4	F	3	4		0	2
MISC NTEA Paleanementary Carinomidae						•	1		2		3		7	б		4	5				9	2
MISC NTEA							1		_				,									
MISC NTE			NTEA			Anopla indet.		11			7	2	2									
MISC PIX Sorpaniforms Cottidae (Indet. 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									6		2			3		5	5	21		4	3	7
MISC PIXX Scorpaeniformes Cutidae Cutidae Cutidae indet. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					Tubulanidae	•	1			1			-									
MISC PIXX				Scornagniformes	Cottidae		1	1					/									
MISC PLTY				3corpacimornies	Cottidae		-	4					1									
MISC PRIA Priapulidae Priapulus caudatus 1 16 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3							1	1					_									
MISC PRIA Priapulidae Priapulidae Priapulidae Priapulidae Priapulidae Priapulidae Priapulidae Priapulidae 9 Priapu	- 1	MISC	PORI			Calcarea indet.	1	2														
MISC SIPN Golfingiida Golfingiida Golfingiidae Golfingiidae Golfingiidae Golfingiidae Golfingiidae Golfingiidae Golfingiidae Golfingiidae Golfingiidae Golfingiidae Aplousobranchia Aplousobranchia indet. 1 2 MISC URAS Phlebobranchia Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Molgulidae Molgulidae Molgulidae Molgulidae Pyuridae Boltenia echinata 1 2							1						5								3	
MISC URAS Aplousobranchia Aplousobranchia indet. 1 2 MISC URAS Phlebobranchia Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Ascidiidae Molgulidae Molgulidae Molgulidae Molgulidae Molgulidae Boltenia echinata 1 2 MISC URAS Stolidobranchia Pyuridae Boltenia echinata 1 2				Colfingiida			4								2							
MISC URAS Phlebobranchia Ascidiidae Ascidiid					Johnghude		1															
MISC URAS Stolidobranchia Molgulidae Molgulidae Molgula sp. 1 2 MISC URAS Stolidobranchia Pyuridae Boltenia echinata 1 2					Ascidiidae	•	1	4							2							
							1	2														
MISC URAS Stolidobranchia Styelidae Polycarpa fibrosa 1 1							1	2					1									
	I	MISC	URAS	Stolidobranchia	Styelidae	Polycarpa fibrosa	1	1											1			



Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundance per sample for Golder Baffinlands Iron Mine 2018.

Clie	logica Sar nt Sampl licate						Grand Total	mb18-108-001 BE-1	mb18-108-002 BE-1 2	mb18-108-003 BE-1 3	mb18-108-004 BE-2 1	mb18-108-005 BE-2	mb18-108-006 BE-2 3	mb18-108-007 BE-3 1	mb18-108-008 BE-3	mb18-108-009 BE-3	mb18-108-010 BE-4	mb18-108-011 BE-4 2	mb18-108-012 BE-4 3	mb18-108-013 BE-5 1	mb18-108-014 BE-5 2
•	e Sample	I						2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17
		pcode C	Order	Family	TaxonName	Unique Taxa	Total Abundance											Total Abundance			
MIS		RAS S	Stolidobranchia	Styelidae	Styelidae indet.		4														2
МО	LL N	OAP C	Chaetodermatida	Chaetodermatidae	Chaetoderma sp.	1	33						3								
MO	LL N	OAP			Aplacophora indet.		9														
MO			Adapedonta	Hiatellidae	Hiatella arctica	1	417	1	10	23	8	4	2	7	3	9	6	36	21	6	2
MO			Anomalodesmata	Cuspidariidae	Cuspidaria sp.	1	5														
MO			Anomalodesmata	Lyonsiidae	Lyonsia arenosa	1	12						•								
MO			Anomalodesmata	Thraciidae	Thracia myopsis	1	5 7						3								
MO			Anomalodesmata	Thraciidae	Thracia sp.	1	8														
MO MO			Arcida Carditoida	Arcidae Astartidae	Bathyarca glacialis Astarte borealis	1	8 609	2	11	11	6		4	9	24	4	12	7	19	8	12
MO			Carditoida	Astartidae	Astarte boreans Astarte montagui	1	1,117	7	27	28	5	13	7	13	11	18	2	20	15	0	5
МО			Carditoida	Astartidae	Astarte sp.	-	507	2	24	21	8	13	12	2	8	10	6	16	12	3	5
МО			ucinida	Thyasiridae	Axinopsida sp.	1	111														
МО			ucinida	Thyasiridae	Thyasira sp.	1	372		3	3	14	7	9	7	4	5			8	3	
МО	LL N	OBI L	ucinida	Thyasiridae	Thyasiridae indet.		424				14	10	3	2	4		3	8		15	2
MO	LL N	OBI N	Myida	Myidae	Mya sp.		92	2		5		5				10					
MO	LL N	OBI N	Иyida	Myidae	Mya truncata	1	183	1	6	5	1	3		3		1	5	1	8	7	2
MO			Mytilida	Mytilidae	Dacrydium vitreum	1	3														
MO			Mytilida	Mytilidae	Crenella faba	1	27							2				4			
MO			Mytiloida	Mytilidae	Musculus discors	1	83	2	1	4				7				18	5		
MO			Mytiloida	Mytilidae	Mytilidae indet.	á	11			-			4	5	10	-				7	2
MO MO			Nuculanida Nuculanida	Nuculanidae Nuculanidae	Nuculana minuta Nuculana pernula	1	296 33		4	5			1	,	19	/		4	8	,	1
MO			Nuculanida	Nuculanidae	Nuculana sp.	1	147		5		2	7	1			5	3			9	1
MO			Nuculanida	recalamac	Nuculanoidea indet.		60		5		-	5	3			J	3			3	
МО			Nuculanoida	Yoldiidae	Portlandia intermedia	1	1		J			3	J								
МО			Nuculanoida	Yoldiidae	Yoldiella frigida	1	5														
МО	LL N	OBI N	Nuculanoida	Yoldiidae	Yoldiella lenticula	1	1														
МО	LL N	OBI N	Nuculanoida	Yoldiidae	Yoldiidae indet.		110			3		5	3								
MO	LL N	OBI N	Nuculida	Nuculidae	Ennucula tenuis	1	681	2			8	5	14		8		3	4		32	5
MO	LL N	OBI P	Pectinida	Pectinidae	Chlamys islandica	1	2														
MO			Pectinida	Propeamussiidae	Similipecten greenlandicus	1	87						4							1	1
MO			Pectinoida	Pectinidae	Pectinidae indet.	1	2														
MO			Pectinoida	Propeamussiidae	Propeamussiidae indet.	4	17		4			2	4	ā	4						
MO			/eneroida /eneroida	Cardiidae	Ciliatocardium ciliatum	1	50 135		1	2		2	1	4	1	-				4	
MO MO			/eneroida /eneroida	Cardiidae Tellinidae	Serripes groenlandicus Macoma balthica	1	135 28	2		3				2	2	5					
MO			/eneroida	Tellinidae	Macoma calcarea	1	267	4	2				6	1	3		3	1		4	7
МО			/eneroida	Tellinidae	Macoma moesta	1	56		_				1	1	8	1	1	_			•
МО			/eneroida	Tellinidae	Macoma sp.		664	2	3	2		12		3	28		3	8		15	12
MO	LL N	ОВІ		Periplomatidae	Periploma aleuticum	1	13														
MO	LL N	OBI			Bivalvia indet.		311	80	5	10					8	5	9	12	4		5
MO			Cephalaspidea	Cylichnidae	Cylichna alba	1	7														
MO			Cephalaspidea	Cylichnidae	Cylichna sp.		14					2									
MO			Cephalaspidea	Cylichnidae	Cylichnidae indet.		14														
MO MO			Cephalaspidea Cephalaspidea	Cylichnidae	Cylichnoides occultus Cephalaspidea indet.	1	7 250		27	3		2		5		5		24	20	3	2
MO			ittorinimorpha	Capulidae	Ariadnaria borealis	1	22		21	3		2		2		5		24	20	3	1
MO			ittorinimorpha	Naticidae	Cryptonatica affinis	1	10							-							-
MO			ittorinimorpha	Naticidae	Euspira pallida	1	27				2	2						4			
МО			.ittorinimorpha	Naticidae	Naticidae indet.		5														
МО	LL N	OGA L	ittorinimorpha	Rissoidae	Boreocingula castanea	1	32														
MO	LL N	OGA L	ittorinimorpha	Velutinidae	Velutinidae indet.	1	2							2							
MO			ittorinimorpha	Rissoidae	Rissoidae indet.	1	83		3				3								
MO			Neogastropoda	Buccinidae	Buccinidae indet.		5														
MO			Neogastropoda	Buccinidae	Buccinum hydrophanum	1	1														
MO			Neogastropoda	Buccinidae	Columba III da a in dat	1	1							2							
MO			Neogastropoda	Columbellidae	Columbellidae indet.	1	2							2							
MO MO			Neogastropoda Neogastropoda	Cancellariidae Mangeliidae	Admete viridula Mangeliidae indet.	1	7														
MO			Neogastropoda	Mangeliidae	Oenopota sp.	1	3														
MO			rochida	Colloniidae	Moelleria costulata	1	1														
MO			rochida	Margaritidae	Margarites groenlandicus	1	2	2													
МО			Trochida	Margaritidae	Margarites helicinus	1	33	2													
MO	LL N	OGA T	Trochida	Margaritidae	Margarites olivaceus	1	1														
MO			Trochida	Margaritidae	Margarites sp.		11											4			
MO		OGA		Buccinidae	Volutopsius norwegicus	1	1														
MO		OGA		Lepetidae	Lepeta caeca	1	46		1				1							1	
MO	LL N	OGA		Lottiidae	Lottiidae indet.	1	5	2													



Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundance per sample for Golder Baffinlands Iron Mine 2018.

Biologica Sample #		Grand Total	mb18-108-001	mb18-108-002	mb18-108-003	mb18-108-004	mb18-108-005	mb18-108-006	mb18-108-007	mb18-108-008	mb18-108-009	mb18-108-010	mb18-108-011	mb18-108-012	mb18-108-013	mb18-108-014
Client Sample #			BE-1	BE-1	BE-1	BE-2	BE-2	BE-2	BE-3	BE-3	BE-3	BE-4	BE-4	BE-4	BE-5	BE-5
Replicate			1	2	3	1	2	3	1	2	3	1	2	3	1	2
Date Sampled			2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17
taxcode grpcode Order Family Tax	xonName Unique Ta	xa Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
MOLL MOGA Lottiidae Tes	studinalia testudinalis 1	3														
MOLL MOGA Trochidae Tro	ochidae indet. 1	12					2									
MOLL MOGA Gas	stropoda indet.	45			3	2			3			3	16			
MOLL MOPO Chitonida Tonicellidae Tor	nicella marmorea 1	3														1
MOLL MOSC Gadilida Gadilidae Gad	dilidae indet. 1	1														
	tal Abundance	62,803	962	1,111	890	742	902	1,113	830	1,448	1,768	1,287	1,982	1,677	1,324	1,143
	tal Unique Taxa (Species Richness) 259		65	63	46	59	63	76	70	67	55	63	65	51	54	71
No	o. composite grabs	227	3	3	3	3	3	4	3	3	3	3	4	4	3	3
Tot	tal Density (Organisms/m²)	843,267	14252	16454	13185	10993	13369	12367	12298	21452	26199	19067	22022	18633	19615	16936
Incidental Organisms:																
MEMO MEMO Cal	lanoida indet. (planktonic)	21								16		3				
MEMO MEMO Cha	atognatha indet. (planktonic)	2														
MEMO MEMO Cop	pepoda indet. (parasitic)	36				1					5					2
MEMO MEMO Des	smosoma sp. (planktonic)	24													3	
MEMO MEMO Egg	g/egg mass	890		32	21	28	19	6	14	4		6		8	36	
MEMO MEMO Hyp	periidae indet. (planktonic)	13						1								
MEMO MEMO Insc	secta indet. (terrestrial)	2														
MEMO MEMO Nei	matoda indet.	7,971	222	144	166	50	137	120	110	300	365	165	116	428	156	98
MEMO MEMO Hys	periidae indet. (planktonic)	1														



ANNE POSE Sabellida

Serpulidae

Pileolaria sp.

Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundar

С	iologica Samplo lient Sample #	:#			mb18-108-015 BE-5 3	mb18-108-016 BM-1 1	mb18-108-017 BM-1 2	mb18-108-018 BM-1 3	mb18-108-019 BM-3 1	mb18-108-020 BM-3 2	mb18-108-021 BM-3 3	mb18-108-022 BM-4 1	mb18-108-023 BM-4 2	mb18-108-024 BM-4 3	mb18-108-025 BM-6 1	mb18-108-026 BM-6 2	mb18-108-027 BM-6 3	mb18-108-028 BM-7 1	mb18-108-029 BM-7 2	mb18-108-030 BM-7 3	
	ate Sampled				2018-08-17	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	
		de Order	Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	
	NNE ANHI	•	Piscicolidae Enchytraeidae	Hirudinea indet. Enchytraeidae indet.				6	3												
	NNE EURA	•	Echiuridae	Echiurus echiurus		3		Ü													
Α	NNE POER		Dorvilleidae	Dorvilleidae indet.																	
	NNE POER		Dorvilleidae	Parougia caeca			2							4		6					
	INNE POER		Lumbrineridae Lumbrineridae	Lumbrineridae indet. Lumbrineris sp.																1	
	NNE POER		Lumbrineridae	Scoletoma fragilis	2	3	2	2	1		2	2	3		7		3	1		-	
А	NNE POER	Eunicida	Lumbrineridae	Scoletoma impatiens		39	4		12	8	14	22	12	20	6	18	15	2		8	
	NNE POER		Lumbrineridae	Scoletoma sp.																	
	INNE POER		Onuphidae Glyceridae	Nothria conchylega Glycera capitata																	
	NNE POER	•	Glyceridae	Glycera sp.																	
Α	NNE POER	Phyllodocida	Hesionidae	Microphthalmus sp.														1			
	NNE POER		Hesionidae	Gyptis sp.		_					_							_			
	INNE POER	•	Hesionidae Nephtyidae	Nereimyra punctata Aglaophamus sp.	151	6	8	18	78	20	7	17	12	20		6	19	3		15	
	NNE POER	•	Nephtyidae	Bipalponephtys cornuta		36	6	2	30	14		14	36	28	14	30	36	6		12	
	NNE POER	•	Nephtyidae	Nephtys bucera																	
	NNE POER	•	Nephtyidae	Nephtys ciliata																	
	NNE POER		Nephtyidae	Nephtys sp.	2	2				2							6	4			
	INNE POER	•	Nereididae Nereididae	Nereis zonata Nereididae indet.	2	3	2	2	6	2			3	4			6	1			
	NNE POER	•	Pholoidae	Pholoe minuta	68	39	88	85	39	60	60	47	33	92	2	6	33	9	16	32	
	NNE POER	•	Pholoidae	Pholoe sp.		3	2	2	3					40							
	NNE POER	•	Pholoidae	Pholoe tecta	442	177	280	196	205	279	118	276	201	276	30	66	117	14	4	36	
	NNE POER		Phyllodocidae	Eteone barbata	2				3		2			4		9					
	INNE POER		Phyllodocidae Phyllodocidae	Eteone longa complex Eteone sp.	2			4	3		2			4		9	3			1	
	NNE POER	•	Phyllodocidae	Eulalia sp.				·	3								J			-	
Α	NNE POER	Phyllodocida	Phyllodocidae	Phyllodoce groenlandica													3				
	NNE POER	•	Phyllodocidae	Phyllodoce sp.																	
	INNE POER		Phyllodocidae Phyllodocidae	Eteone flava Hypereteone sp.																	
	NNE POER		Polynoidae	Gattyana cirrhosa		1	4		1	2	1			1			6				
	NNE POER	•	Polynoidae	Harmothoe extenuata	2				7			5									
	NNE POER		Polynoidae	Harmothoe imbricata	1		2	2	30					4			3				
	NNE POER	•	Polynoidae	Harmothoe sp.	7	12	2		18	20		2				3				1	
	INNE POER		Polynoidae Polynoidae	Melaenis loveni Bylgides sarsi							2					1					
	NNE POER		Polynoidae	Bylgides sp.							_										
Α	NNE POER	Phyllodocida	Polynoidae	Hartmania moorei																	
	NNE POER		Polynoidae	Polynoidae indet.										4	2	3					
	INNE POER	Phyllodocida Phyllodocida	Sphaerodoridae Sphaerodoridae	Sphaerodoropsis minuta Sphaerodoropsis sp.												6					
	NNE POER		Syllidae	Syllides longocirratus																	
Α	NNE POER	Phyllodocida	Syllidae	Syllides sp.																	
	NNE POER	•	Syllidae	Eusyllinae indet.																	
	INNE POER	•	Syllidae Syllidae	Eusyllis sp. Pionosyllis sp.																	
	NNE POER		Syllidae	Exogone verugera																	
	NNE POER		Syllidae	Parexogone hebes																	
	NNE POSE		Fabriciidae	Pseudofabricia sp. nr. aberrans																	
	NNE POSE		Oweniidae	Galathowenia oculata					9		2	2			14	21				2	
	INNE POSE INNE POSE		Oweniidae Oweniidae	Myriochele heeri Owenia fusiformis							2 2	2		12	4 44	33	1 10				
	NNE POSE		Oweniidae	Oweniidae indet.							2	2		12	4	55	10				
Α	NNE POSE	Sabellida	Sabellidae	Euchone incolor		48	32	4	79	22	106	72	81	114	30	156	120	23	1	15	
	NNE POSE		Sabellidae	Euchone sp.			6														
	INNE POSE		Sabellidae Sabellidae	Bispira sp. Chone duneri									3								
	INNE POSE		Sabellidae	Dialychone sp.	2					2			3	4			6				
	NNE POSE		Sabellidae	Dialychone sp. 1	_	12			33		7		12		8	9	· ·	2			
	NNE POSE		Sabellidae	Euchone rubrocincta																	
	NNE POSE		Sabellidae	Sabellidae indet.		3			9		10									1	
	INNE POSE INNE POSE		Sabellidae Sabellidae	Sabellidae sp. 2 Sabellidae sp. 3										1							
	NNE POSE		Sabellidae	Sabellidae sp. 4										-							

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CI	ologica S ient Sam	ample # ple #				mb18-108-015 BE-5	mb18-108-016 BM-1	mb18-108-017 BM-1 2	mb18-108-018 BM-1 3	mb18-108-019 BM-3 1	mb18-108-020 BM-3 2	mb18-108-021 BM-3	mb18-108-022 BM-4 1	mb18-108-023 BM-4 2	mb18-108-024 BM-4	mb18-108-025 BM-6	mb18-108-026 BM-6 2	mb18-108-027 BM-6	mb18-108-028 BM-7	mb18-108-029 BM-7 2	mb18-108-030 BM-7 3
	ete Samp	led				2018-08-17	2018-08-18	2018-08-18	2018-08-18	2018-08-18		2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18
		grpcode	Order	Family	TaxonName							Total Abundance									
	NNE	POSE	Sabellida	Serpulidae	Spirorbinae indet.																
	NNE	POSE	Spionida	Apistobranchidae	Apistobranchus sp.		3					2					3	3			2
	NNE NNE	POSE POSE	Spionida Spionida	Spionidae Spionidae	Dipolydora caulleryi Dipolydora concharum																
	NNE	POSE	Spionida	Spionidae	Dipolydora quadrilobata	10		2	2		4										
	NNE	POSE	Spionida	Spionidae	Dipolydora socialis			2						3							
ΙA	NNE	POSE	Spionida	Spionidae	Dipolydora sp.																
ΙA	NNE	POSE	Spionida	Spionidae	Laonice cirrata													1			
	NNE	POSE	Spionida	Spionidae	Marenzelleria sp.				20										10	1	
	NNE	POSE	Spionida	Spionidae	Polydora sp. complex																
	NNE NNE	POSE	Spionida Spionida	Spionidae	Prionospio (Prionospio) sp.		15	4		42	4	26	F	21	8	88	75	21	4		4
	NNE	POSE POSE	Spionida	Spionidae Spionidae	Prionospio (Prionospio) steenstrupi Prionospio cirrifera		13	4		42	4	20	3	21	8	86	75	21	4		*
	NNE	POSE	Spionida	Spionidae	Prionospio sp.						2						3				
	NNE	POSE	Spionida	Spionidae	Pygospio sp.	2	18	8		6		31	2	12	8	4	9	3	2		6
ΙA	NNE	POSE	Spionida	Spionidae	Scolelepis sp.																
ΙA	NNE	POSE	Spionida	Spionidae	Spio filicornis	2		4	4												1
	NNE	POSE	Spionida	Spionidae	Spio sp.														1		
	NNE	POSE	Spionida	Spionidae	Spionidae indet.	7	0		2	45		42	-	1	12				2		4
	NNE NNE	POSE POSE	Terebellida Terebellida	Ampharetidae Ampharetidae	Ampharete sp. Lysippe labiata	/	9	4	2	15		12	/	12 3	12 4	4	1	6	2		1
	NNE	POSE	Terebellida	Ampharetidae	Melinna elisabethae									3	4	2	1				
	NNE	POSE	Terebellida	Ampharetidae	Melinna sp.											-					
	NNE	POSE	Terebellida	Ampharetidae	Ampharete vega																
ΙA	NNE	POSE	Terebellida	Ampharetidae	Ampharetidae indet.		6					5			8		6				
ΙA	NNE	POSE	Terebellida	Ampharetidae	Amphicteis sundevalli							1									
	NNE	POSE	Terebellida	Cirratulidae	Aphelochaeta sp.	2	9	2			8	7	7	3		4	12	24			
	NNE	POSE	Terebellida	Cirratulidae	Chaetozone bathyala	7	75	30	2	60	12	55	53	60	64	38	84	33	18	4.4	21
	NNE NNE	POSE POSE	Terebellida Terebellida	Cirratulidae Cirratulidae	Chaetozone careyi Chaetozone pigmentata		3		2		6				4	2		2	17	11	
	NNE	POSE	Terebellida	Cirratulidae	Chaetozone setosa complex	2	3	10		6	2	12	10	3	4	30	18	15	3		7
	NNE	POSE	Terebellida	Cirratulidae	Chaetozone sp.	-	15	4	4	12	6	12	17	21	17	22	9	33	20	4	25
	NNE	POSE	Terebellida	Cirratulidae	Cirratulidae indet.	2	9	2	2	12			14	36	24				3		
ΙA	NNE	POSE	Terebellida	Cirratulidae	Kirkegaardia sp.																
ΙA	NNE	POSE	Terebellida	Cirratulidae	Tharyx sp.			2		54			10						1		
	NNE	POSE	Terebellida	Flabelligeridae	Diplocirrus hirsutus																
	NNE	POSE	Terebellida	Pectinariidae	Cistenides granulata	5	8	19	25	2	18	8	19	12	22	1	7	11	8		12
	NNE NNE	POSE POSE	Terebellida Terebellida	Terebellidae Terebellidae	Polycirrus sp. complex Lanassa venusta venusta	9	3														
	NNE	POSE	Terebellida	Terebellidae	Laphania boecki	1				3				3	4			6			
	NNE	POSE	Terebellida	Terebellidae	Leaena abranchiata										2						
ΙA	NNE	POSE	Terebellida	Terebellidae	Pista maculata		2			3	3	2	3		6			4			
ΙA	NNE	POSE	Terebellida	Terebellidae	Proclea graffi																
	NNE	POSE	Terebellida	Terebellidae	Proclea sp.																
	NNE	POSE	Terebellida	Terebellidae	Amaeana sp.		4			2	4										
	NNE NNE	POSE POSE	Terebellida Terebellida	Terebellidae Terebellidae	Neoamphitrite affinis Terebellidae indet.		1			3	1	5			1						
	NNE	POSE	Terebellida	Trichobranchidae	Terebellides sp.	24	7	9	5	3	10	13	3	31	4	4	12	7			7
	NNE	POSE	Terebellida	Trichobranchidae	Trichobranchus glacialis	2															
	NNE	POSE		Capitellidae	Capitella capitata complex	2		2			2	2							1		
ΙA	NNE	POSE		Capitellidae	Mediomastus sp.	110	15	16	72	99	30	12	31	6	16	2	12	6	15	11	3
	NNE	POSE		Capitellidae	Notomastus latericeus					3											
	NNE	POSE		Cossuridae	Cossura sp.	14	57	8	6	12	6	7	34	12	16	22	36	33	6		4
	NNE NNE	POSE POSE		Maldanidae Maldanidae	Clymenura sp. Euclymene sp.						2										
	NNE	POSE		Maldanidae	Euclymeniae indet.			2			2					4	18	9		1	
	NNE	POSE		Maldanidae	Microclymene sp.			-						9		4	18	,		-	
	NNE	POSE		Maldanidae	Praxillella gracilis																
ΙA	NNE	POSE		Maldanidae	Praxillella praetermissa		3					2									
	NNE	POSE		Maldanidae	Maldane sarsi						6	7	7		16		9	6	3		4
	NNE	POSE		Maldanidae	Nicomache sp.																
	NNE	POSE		Maldanidae	Rhodine loveni								•	-							
	NNE NNE	POSE POSE		Maldanidae Opheliidae	Maldanidae indet. Ophelina acuminata		1						2	6	4			2			1
	NNE	POSE		Opheliidae	Ophelina cylindricaudata		1								+			3			1
	NNE	POSE		Opheliidae	Ophelina sp.													3			
	NNE	POSE		Orbiniidae	Leitoscoloplos sp.																
	NNE	POSE		Orbiniidae	Orbiniidae indet.			2					2			6			1		1
ΙA	NNE	POSE		Orbiniidae	Scoloplos acutus								10	3	12		15				4



	gica Sample : Sample #	#			mb18-108-015 BE-5	mb18-108-016 BM-1	mb18-108-017 BM-1	mb18-108-018 BM-1	mb18-108-019 BM-3	mb18-108-020 BM-3	mb18-108-021 BM-3	mb18-108-022 BM-4	mb18-108-023 BM-4	mb18-108-024 BM-4	mb18-108-025 BM-6	mb18-108-026 BM-6	mb18-108-027 BM-6	mb18-108-028 BM-7	mb18-108-029 BM-7	mb18-108-030 BM-7
Repli	•				3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	Sampled	de Order	Family	TaxonName	2018-08-17	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18		2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18 Total Abundance	2018-08-18
taxco ANNE		ue Order	Family Orbiniidae	Scoloplos armiger	Total Abulluance	Total Abulluance	Total Abundance	4	Total Abundance	Total Abulluance	Total Abundance 5	Total Abundance	3	Total Abulluance	Total Abundance	Total Abundance	2	Total Abulluance	Total Abulluance	Total Abundance
ANNE			Orbiniidae	Scoloplos sp.				2									9			
ANNE ANNE			Paraonidae Paraonidae	Aricidea catherinae Aricidea hartmanae	5									4	4					
ANNE			Paraonidae	Aricidea minuta	5	12	2		6	2		2	12	12	4	12	9	1		1
ANNE			Paraonidae	Aricidea nolani	6	3	4	4			2	7	6	12	2	6	3	2		
ANNE			Paraonidae	Aricidea sp.								2			6		3			
ANNE ANNE			Paraonidae Sabellidae	Paraonidae indet. Branchiomma sp.																
ANNE			Scalibregmatidae	Polyphysia crassa																
ANNE			Scalibregmatidae	Scalibregma inflatum	13	24	20		9	6	35	22	24	40	6	36	30	1	4	6
ANNE ARTH		Acarina	Protodrilidae Halacaridae	Protodrilus sp. Halacaridae indet.					3											
ARTH		Pantopoda	Nymphonidae	Nymphon sp.					3						2					
ARTH	CRAM		Phoxocephalidae	Harpinia serrata	2						2									
ARTH			Phoxocephalidae	Harpinia sp.																
ARTH ARTH			Ampeliscidae Ampeliscidae	Ampeliscidae indet. Byblis sp.												3	6			
ARTH			Amphilochidae	Amphilochus sp.												_				
ARTH			Calliopiidae	Calliopiidae indet.																
ARTH ARTH			Podoceridae Corophiidae	Dyopedos sp. Corophiidae indet.	2															
ARTH			Corophiidae	Monocorophium sp.													3			
ARTH	CRAM		Dexaminidae	Dexaminidae indet.								2								
ARTH			Gammaridae	Gammarus sp.				16		2										
ARTH ARTH			Opisidae Tryphosidae	Opisa sp. Gronella groenlandica						2										
ARTH			Tryphosidae	Hippomedon sp.																
ARTH			Tryphosidae	Orchomene sp.										4		3				
ARTH ARTH			Tryphosidae Tryphosidae	Orchomenella minuta Orchomenella pinguis	2					2										
ARTH			Tryphosidae	Tryphosidae indet.	2		2			2	2					3				
ARTH	CRAM		Uristidae	Anonyx sarsi																
ARTH			Uristidae	Anonyx sp.	17		2		6			-	2							
ARTH ARTH			Uristidae Uristidae	Onisimus barentsi group Onisimus brevicaudatus								/	3							
ARTH			Uristidae	Onisimus sp.			2				2	1		4	2					
ARTH				Lysianassoidea indet.	5			4				2	3							
ARTH ARTH			Oedicerotidae Oedicerotidae	Arrhis sp. Monoculopsis sp.				8	6			2						1		
ARTH			Pontoporeiidae	Pontoporeia femorata	13			32	45	2	1	_	12	8		6	3	-		
ARTH			Ampeliscidae	Ampelisca eschrichtii																
ARTH ARTH	CRAM CRAM		Ampeliscidae	Haploops tubicola Atylus carinatus									3				1			
ARTH	CRAM	Amphipoda Amphipoda	Atylidae Corophiidae	Crassicorophium bonellii									3							2
ARTH	CRAM		Dexaminidae	Guernea nordenskioldi		75	58	2	39	48	70	29	51	60		15	39	2		7
ARTH			Eusiridae	Rhachotropis helleri																
ARTH ARTH			Oedicerotidae Oedicerotidae	Aceroides sp. Monoculodes sp.	2				9			2	6	4			9	1		
ARTH			Oedicerotidae	Oedicerotidae indet.	2				3			2	6	4			J	-		
ARTH			Oedicerotidae	Paroediceros lynceus		6	6	4		7	5	_		8	_		1			
ARTH ARTH			Oedicerotidae Oedicerotidae	Rostroculodes sp. Westwoodilla sp.		6	4	2	6		2	2			2	6				
ARTH			Pontoporeiidae	Monoporeia affinis		· ·	•	165	Ü							3		1	18	5
ARTH			Stenothoidae	Stenothoidae indet.																
ARTH ARTH		Amphipoda Sessilia		Amphipoda indet. Balanomorpha indet.			1		3 19		2		3	4			3	3	1	
ARTH				Cyclopoida indet.	7	45	42	6	12		12	31	24	12		105	24	10	52	413
ARTH	CRCO			Harpacticoida indet.	2	12	12	8	9		22		21	20			27			
ARTH			Diastylidae	Brachydiastylis resima	5					2	22	17	36	80		48	30			
ARTH ARTH			Diastylidae Diastylidae	Diastylidae indet. Diastylis bradyi						2										
ARTH			Diastylidae	Diastylis goodsiri																
ARTH			Diastylidae	Diastylis lucifera			2			2		7	6	4	2					1
ARTH ARTH			Diastylidae Diastylidae	Diastylis rathkei Diastylis scorpioides		А	6	2	15		4	17	3		4	9				
ARTH			Diastylidae	Diastylis sp.		4	Ü		13	4	4	17		16	4			1		
ARTH		Cumacea	Diastylidae	Diastylis spinulosa																
ARTH	CRCU	Cumacea	Diastylidae	Diastyloides biplicatus						6			9		2		3			



MISC URAS Stolidobranchia Styelidae

Polycarpa fibrosa

Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundar

	ca Sample # sample #				mb18-108-015 BE-5 3	mb18-108-016 BM-1	mb18-108-017 BM-1 2	mb18-108-018 BM-1	mb18-108-019 BM-3	mb18-108-020 BM-3 2	mb18-108-021 BM-3	mb18-108-022 BM-4	mb18-108-023 BM-4 2	mb18-108-024 BM-4	mb18-108-025 BM-6	mb18-108-026 BM-6 2	mb18-108-027 BM-6	mb18-108-028 BM-7	mb18-108-029 BM-7 2	mb18-108-030 BM-7 3
Date Sa					2018-08-17	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18
taxcod		e Order	Family	TaxonName	Total Abundance			Total Abundance						Total Abundance			Total Abundance		Total Abundance	
ARTH	CRCU	Cumacea	Lampropidae	Lampropidae indet.			25							20		40				
ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Lampropidae Leuconidae	Lamprops fuscatus Eudorella truncatula		21	26	16	3	12	50	10	9	20 4	۰	12 39	3		1	1
ARTH	CRCU	Cumacea	Leuconidae	Leucon sp.		18	22		18	18	17	17	12	· ·	2	21	12	1		
ARTH	CRCU	Cumacea	Leuconidae	Leuconidae indet.																
ARTH	CRCU	Cumacea	Nannastacidae	Campylaspis rubicunda												3				
ARTH	CRCU	Cumacea		Cumacea indet.					3			2								
ARTH	CRDE	Decapoda	Thoridae	Lebbeus polaris											1					
ARTH ARTH	CRDE CRDE	Decapoda Decapoda	Crangonidae Crangonidae	Sabinea septemcarinata Sabinea sp.											1					
ARTH	CRDE	Decapoda	Crangonidae	Sclerocrangon boreas																
ARTH	CRDE	Decapoda	ū	Caridea indet.						2										
ARTH	CRIS	Isopoda	Gnathiidae	Gnathiidae indet.																
ARTH	CRIS	Isopoda	Munnopsidae	Eurycope sp.																
ARTH ARTH	CRIS CRMY	Isopoda Mysida	Paramunnidae	Pleurogonium spinosissimum Mysidacea indet.								7								
ARTH	CRMY	Mysida	Mysidae	Mysis sp.		3				4	5	,	3			3		1	5	4
ARTH	CROS	Myodocopida	Philomedidae	Philomedes sp.	2	111	8	18	60	62	79	74	72	221	118	78	114	6	2	35
ARTH	CRTA	Tanaidacea	Sphyrapodidae	Pseudosphyrapus anomalus									9		6	15	3			
ARTH	CRTA	Tanaidacea	Akanthophoreidae	Akanthophoreus sp.		6					2	7	30			27	24			
ARTH	CRTA	Tanaidacea	Pseudotanaidae	Pseudotanais sp.		3				•		2		4			6			
ARTH ARTH	CRTA CRTA	Tanaidacea Tanaidacea	Typhlotanaidae	Typhlotanais sp. Tanaidacea indet.			4			2		12	24		2	6				1
ARTH	INCO	Coleoptera	Curculionidae	Curculionidae indet.			4			2			24			Ü				1
ARTH	INDI	Diptera	Chironomidae	Orthocladiinae indet.								2								
ARTH	INDI	Diptera	Chironomidae	Chironomidae indet.					3											
ECHI	ECEC	Camarodonta	Strongylocentrotidae	Strongylocentrotus droebachiensis			6					1								
ECHI	ECEC	Camarodonta	Strongylocentrotidae	Strongylocentrotus sp.																
ECHI ECHI	ECHO ECHO	Apodida Dendrochirotida	Myriotrochidae Psolidae	Myriotrochus rinkii Psolus phantapus																
ECHI	ECHO	Molpadida	Toolidae	Molpadida indet.																
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiocten affinis																
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura sarsii					1	1		3	6				5			
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura robusta						•										
ECHI MISC	ECOP BRYO	Ophiurida Cheilostomatida	Ophiuridae Candidae	Ophiuridae indet. Scrupocellaria sp.						2										
MISC	BRYO	Cheilostomatida	Calloporidae	Calloporidae indet.																
MISC	BRYO	Cheilostomatida	Myriaporidae	Leieschara sp.																
MISC	BRYO	Ctenostomatida	Alcyonidiidae	Alcyonidium sp.																
MISC	BRYO	Ctenostomatida	Triticellidae	Triticella sp.			2								_		_			
MISC MISC	BRYO BRYO	Ctenostomatida Cyclostomatida	Crisiidae	Ctenostomata indet. Crisia sp.											2		1			
MISC	BRYO	Cyclostomatida	Cristidae	Cyclostomatida indet.																
MISC	BRYO	,		Bryozoa indet.													9			
MISC	CNHY	Anthoathecata	Bougainvilliidae	Bougainvilliidae indet.		1														
MISC	CNHY	Anthoathecata		Anthoathecata indet.																
MISC MISC	CNHY CNHY	Limnomedusae	Olindiidae	Monobrachium parasitum Hydrozoa indet.		3	3		3	4	5	1	6		7	2	6	1		
MISC	HEMI			Hemichordata indet.																
MISC	NTEA	Archinemertea	Cephalothricidae	Cephalothrix sp.			2		6				6	4						
MISC	NTEA	Heteronemertea	Lineidae	Cerebratulus sp.		3					7					6		2		1
MISC	NTEA	Heteronemertea	Lineidae	Lineidae indet.		3														
MISC	NTEA	Palaeonemertea	Carinomidae	Carinoma sp.																
MISC MISC	NTEA NTEA			Anopla indet. Enopla indet.	1	3	4		21	2	11	3	3	8	1	3	6	1		3
MISC	NTEA		Tubulanidae	Tubulanus sp.	1	3	7		21	2	11	3	3	Ö	•	3	Ü	-		3
MISC	NTEA			Nemertea indet.																
MISC	PIXX	Scorpaeniformes	Cottidae	Cottidae indet.																
MISC	PIXX			Pisces indet.					3											
MISC	PLTY			Platyhelminthes indet.																
MISC MISC	PORI PRIA		Priapulidae	Calcarea indet. Priapulus caudatus	1												3			
MISC	PRIA		Priapulidae	Priapulus sp.	1	3											3			
MISC	SIPN	Golfingiida	Golfingiidae	Golfingia sp.																
MISC	URAS	Aplousobranchia		Aplousobranchia indet.																
MISC	URAS	Phlebobranchia	Ascidiidae	Ascidia sp.			2													
MISC MISC	URAS URAS	Stolidobranchia Stolidobranchia	Molgulidae Pyuridae	Molgula sp. Boltenia echinata										1						
IVIISC	UKAS	Stolidobranchia	Pyuridae	Dollar Chinata										1						



Biologica Client Sa Replicate					mb18-108-015 BE-5 3	mb18-108-016 BM-1	mb18-108-017 BM-1 2	mb18-108-018 BM-1 3	mb18-108-019 BM-3	mb18-108-020 BM-3 2	mb18-108-021 BM-3 3	mb18-108-022 BM-4 1	mb18-108-023 BM-4	mb18-108-024 BM-4 3	mb18-108-025 BM-6 1	mb18-108-026 BM-6 2	mb18-108-027 BM-6 3	mb18-108-028 BM-7	mb18-108-029 BM-7 2	mb18-108-030 BM-7 3
Date Sar	npled	Out.	Family.	Towns	2018-08-17	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18
taxcode MISC	grpcode URAS	Stolidobranchia	Family Styelidae	TaxonName Styelidae indet.	Total Abundance	Total Abundance	1otal Abundance	Total Abundance	Total Abundance	Total Abundance	lotal Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
MOLL	MOAP	Chaetodermatida	Chaetodermatidae	Chaetoderma sp.											2					
MOLL MOLL	MOAP MOBI	Adapedonta	Hiatellidae	Aplacophora indet. Hiatella arctica	9	10	7	9	20	27	4	12	4	10	2	4	16	5	3	4
MOLL	MOBI	Anomalodesmata		Cuspidaria sp.																
MOLL	MOBI	Anomalodesmata	•	Lyonsia arenosa									3	1						
MOLL MOLL	MOBI MOBI	Anomalodesmata Anomalodesmata	Thraciidae Thraciidae	Thracia myopsis Thracia sp.																
MOLL	MOBI	Arcida	Arcidae	Bathyarca glacialis																
MOLL	MOBI	Carditoida	Astartidae	Astarte borealis	3	12	20	5	3	9	17	6	24		14	11	6	7		15
MOLL	MOBI	Carditoida	Astartidae	Astarte montagui		22	36 22		25 12	24 4	23 7	17 2	46		34 18	27	23	1	1 1	13 4
MOLL MOLL	MOBI MOBI	Carditoida Lucinida	Astartidae Thyasiridae	Astarte sp. Axinopsida sp.			22		12	4	,	10	15 27		16		3	1	1	4
MOLL	MOBI	Lucinida	Thyasiridae	Thyasira sp.		6	2		6	4	7	14	3		6	12	15	3	2	3
MOLL	MOBI	Lucinida	Thyasiridae	Thyasiridae indet.		3	2		6	6	2	12	6	4	8	12	12			7
MOLL MOLL	MOBI MOBI	Myida Myida	Myidae Myidae	Mya sp. Mya truncata	7	3	10	1		2	10	8	3	8	4	3	3 1	1	1	1
MOLL	MOBI	Mytilida	Mytilidae	Dacrydium vitreum	•	_		-			10	2	J	-	•	J	-	-	-	-
MOLL	MOBI	Mytilida	Mytilidae	Crenella faba	2	3			9	4		2								
MOLL MOLL	MOBI MOBI	Mytiloida Mytiloida	Mytilidae Mytilidae	Musculus discors Mytilidae indet.	8		4	3	13	3			3					1		
MOLL	MOBI	Nuculanida	Nuculanidae	Nuculana minuta		3	5	2	4	2	4	2		13		1				5
MOLL	MOBI	Nuculanida	Nuculanidae	Nuculana pernula					1	2	2	2	1	6	1	1				
MOLL	MOBI	Nuculanida	Nuculanidae	Nuculana sp.		9	6				2					6				
MOLL MOLL	MOBI MOBI	Nuculanida Nuculanoida	Yoldiidae	Nuculanoidea indet. Portlandia intermedia			2													
MOLL	МОВІ	Nuculanoida	Yoldiidae	Yoldiella frigida																
MOLL	MOBI	Nuculanoida	Yoldiidae	Yoldiella lenticula																
MOLL MOLL	MOBI MOBI	Nuculanoida Nuculida	Yoldiidae Nuculidae	Yoldiidae indet. Ennucula tenuis		5	1		6	4	12	2 5	3 6	21	4 22	18	3	1		1
MOLL	MOBI	Pectinida	Pectinidae	Chlamys islandica		3	1		Ü	7	12	3	Ü	21	22	10	,	1		3
MOLL	MOBI	Pectinida	Propeamussiidae	Similipecten greenlandicus			1		1				5		16	2				
MOLL	MOBI	Pectinoida	Pectinidae	Pectinidae indet.																
MOLL MOLL	MOBI MOBI	Pectinoida Veneroida	Propeamussiidae Cardiidae	Propeamussiidae indet. Ciliatocardium ciliatum			1		1	1	2		1			2	3			
MOLL	МОВІ	Veneroida	Cardiidae	Serripes groenlandicus					3	2	2	1	4	5		1		2		1
MOLL	MOBI	Veneroida	Tellinidae	Macoma balthica	2	_		9	-	_				40				_		
MOLL MOLL	MOBI MOBI	Veneroida Veneroida	Tellinidae Tellinidae	Macoma calcarea Macoma moesta		4	2 2		5	1	8	2	4	13	9	4 2	6 5	5		
MOLL	MOBI	Veneroida	Tellinidae	Macoma sp.		27	10	2	24	2	22	17	15	4	4	21	15	4		20
MOLL	MOBI		Periplomatidae	Periploma aleuticum	_	_			_	_			_	4			_			
MOLL MOLL	MOBI MOGA	Cephalaspidea	Cylichnidae	Bivalvia indet. Cylichna alba	5	6	4		3	2	2		6		2	6	6	1		
MOLL	MOGA	Cephalaspidea	Cylichnidae	Cylichna sp.												1				
MOLL	MOGA	Cephalaspidea	Cylichnidae	Cylichnidae indet.							2									
MOLL MOLL	MOGA MOGA	Cephalaspidea Cephalaspidea	Cylichnidae	Cylichnoides occultus Cephalaspidea indet.		3	4	8	6		5	14	3	24		3	9	3		4
MOLL	MOGA	Littorinimorpha	Capulidae	Ariadnaria borealis		3	-	Ü	Ü		3	1-7	3	24		6	3	3		7
MOLL	MOGA		Naticidae	Cryptonatica affinis																
MOLL MOLL	MOGA MOGA		Naticidae Naticidae	Euspira pallida Naticidae indet.		3			3				4			3				
MOLL	MOGA	Littorinimorpha	Rissoidae	Boreocingula castanea										8			3			
MOLL	MOGA	Littorinimorpha	Velutinidae	Velutinidae indet.																
MOLL	MOGA		Rissoidae Buccinidae	Rissoidae indet. Buccinidae indet.							2	2		4		9	3			
MOLL MOLL	MOGA MOGA		Buccinidae	Buccinum hydrophanum																
MOLL	MOGA	Neogastropoda	Buccinidae	Colus sp.													1			
MOLL	MOGA	Neogastropoda	Columbellidae	Columbellidae indet.																
MOLL MOLL	MOGA MOGA	Neogastropoda Neogastropoda	Cancellariidae Mangeliidae	Admete viridula Mangeliidae indet.		3														
MOLL	MOGA		Mangeliidae	Oenopota sp.																
MOLL	MOGA		Colloniidae	Moelleria costulata																
MOLL MOLL	MOGA MOGA	Trochida Trochida	Margaritidae Margaritidae	Margarites groenlandicus Margarites helicinus					18	8										
MOLL	MOGA	Trochida	Margaritidae	Margarites olivaceus					16	8										
MOLL	MOGA	Trochida	Margaritidae	Margarites sp.																
MOLL MOLL	MOGA MOGA		Buccinidae Lepetidae	Volutopsius norwegicus Lepeta caeca											2		3			
MOLL	MOGA		Lottiidae	Lottiidae indet.											2		3			



Biologica Sample # Client Sample # Replicate Date Sampled taxcode grpcode Or MOLL MOGA MOLL MOGA MOLL MOGA	Lottii	idae Te hidae Tr	a xon Name estudinalia testudinalis rochidae indet. astropoda indet.	mb18-108-015 BE-5 3 2018-08-17 Total Abundance	mb18-108-016 BM-1 1 2018-08-18 Total Abundance	mb18-108-017 BM-1 2 2018-08-18 Total Abundance	mb18-108-018 BM-1 3 2018-08-18 Total Abundance	mb18-108-019 BM-3 1 2018-08-18 Total Abundance	mb18-108-020 BM-3 2 2018-08-18 Total Abundance	mb18-108-021 BM-3 3 2018-08-18 Total Abundance	mb18-108-022 BM-4 1 2018-08-18 Total Abundance	mb18-108-023 BM-4 2 2018-08-18 Total Abundance	mb18-108-024 BM-4 3 2018-08-18 Total Abundance	mb18-108-025 BM-6 1 2018-08-18 Total Abundance	mb18-108-026 BM-6 2 2018-08-18 Total Abundance	mb18-108-027 BM-6 3 2018-08-18 Total Abundance	mb18-108-028 BM-7 1 2018-08-18 Total Abundance	mb18-108-029 BM-7 2 2018-08-18 Total Abundance	mb18-108-030 BM-7 3 2018-08-18 Total Abundance
	Chitonida Tonic Gadilida Gadil		onicella marmorea adilidae indet.																
		To No	otal Abundance otal Unique Taxa (Species Richness) o. composite grabs otal Density (Organisms/m²)	1,013 45 3 15013	1,143 63 3 16933	957 66 3 14178	801 42 4 8900	1,400 68 3 20746	917 61 3 13585	1,098 66 4 12196	1,136 66 3 16824	1,268 70 4 14089	1,782 69 4 19800	737 56 3 10919	1,348 68 3 19970	1,160 75 3 17185	250 52 4 2778	140 18 4 1556	789 48 4 8767
Incidental Organisms: MEMO MEMO MEMO MEMO MEMO MEMO MEMO MEMO MEMO MEMO MEMO MEMO MEMO MEMO		CI Co Do Eg	alanoida indet. (planktonic) hatognatha indet. (planktonic) opepoda indet. (parasitic) esmosoma sp. (planktonic) gg/egg mass yperiidae indet. (planktonic)	2	12		2		10	41	24				9	3			3
MEMO MEMO MEMO MEMO MEMO MEMO		In N	ssecta indet. (terrestrial) ematoda indet. yperiidae indet. (planktonic)	74	192	88	2	102	80	163	154	75	240	34	123	366	36	4	32



ANNE POSE Sabellida

Serpulidae

Pileolaria sp.

Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundar

Biologica Sample # Client Sample # Replicate				mb18-108-031 BM-9	mb18-108-032 BM-9	mb18-108-033 BM-9 3	mb18-108-034 BM-10	mb18-108-035 BM-10	mb18-108-036 BM-10		mb18-108-038 BM-12 2	mb18-108-039 BM-12	mb18-108-040 BR-1	mb18-108-041 BR-4	mb18-108-042 BW-1	mb18-108-043 BW-1 2	mb18-108-044 BW-1 3	mb18-108-045 BW-2 1	mb18-108-046 BW-2 2
Date Sampled				2018-08-19	2018-08-19	2018-08-19	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-08	2018-08-08	2018-08-13	2018-08-13	2018-08-13	2018-08-13	2018-08-13
taxcode grpcode Orde		Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
•	nchobdellida bytraoida	Piscicolidae Enchytragidae	Hirudinea indet.					2											
	hytraeida iuroidea	Enchytraeidae Echiuridae	Enchytraeidae indet. Echiurus echiurus					2											
	nicida	Dorvilleidae	Dorvilleidae indet.	2			6	1		2									
	nicida	Dorvilleidae	Parougia caeca								2	2							
	nicida nicida	Lumbrineridae Lumbrineridae	Lumbrineridae indet. Lumbrineris sp.																
	nicida	Lumbrineridae	Scoletoma fragilis	2	5	6	2			14	12	17			4		5		
	nicida	Lumbrineridae	Scoletoma impatiens	14	26	18				6				1	32	36	28	15	36
	nicida	Lumbrineridae	Scoletoma sp.								6								
	nicida rllodocida	Onuphidae Glyceridae	Nothria conchylega Glycera capitata																
•	llodocida	Glyceridae	Glycera sp.																
	llodocida	Hesionidae	Microphthalmus sp.																
	llodocida	Hesionidae	Gyptis sp.				_		_					1					
	rllodocida rllodocida	Hesionidae Nephtyidae	Nereimyra punctata Aglaophamus sp.	31	52	30	3	12	2	22	10	12	42	2	161	89	64	120	36
•	llodocida	Nephtyidae	Bipalponephtys cornuta	26	26	54				36	28	22	41	12	76	81	64	42	60
ANNE POER Phyll	llodocida	Nephtyidae	Nephtys bucera													1			
	llodocida	Nephtyidae	Nephtys ciliata							1									
	rllodocida rllodocida	Nephtyidae Nereididae	Nephtys sp. Nereis zonata		3	3	1			2					16	4	1	7	1
•	llodocida	Nereididae	Nereididae indet.		6	6	-					5			4	5	4	,	-
•	llodocida	Pholoidae	Pholoe minuta	24	38	27	2	10		4	2	10		1	108	157	92	18	39
	/llodocida	Pholoidae	Pholoe sp.	103	00	0.4	10	2	4	10	14	3	8	2	56	72	52	21	93
	rllodocida rllodocida	Pholoidae Phyllodocidae	Pholoe tecta Eteone barbata	103	98	84	19	2	1	108	102	74	384	43	298 4	407	280	186	177
•	llodocida	Phyllodocidae	Eteone longa complex			3			4				8		4				
	llodocida	Phyllodocidae	Eteone sp.		6						4				4				
•	/llodocida	Phyllodocidae	Eulalia sp.					2	4										
	rllodocida rllodocida	Phyllodocidae Phyllodocidae	Phyllodoce groenlandica Phyllodoce sp.					2	1										
	llodocida	Phyllodocidae	Eteone flava																
	llodocida	Phyllodocidae	Hypereteone sp.																
	/llodocida	Polynoidae	Gattyana cirrhosa	2		9									4	1	5		1
•	rllodocida rllodocida	Polynoidae Polynoidae	Harmothoe extenuata Harmothoe imbricata	2		3		1							9			3	
•	llodocida	Polynoidae	Harmothoe sp.		6	3						3	4	4	4		16	6	7
	llodocida	Polynoidae	Melaenis loveni																
	rllodocida rllodocida	Polynoidae Polynoidae	Bylgides sarsi Bylgides sp.																
•	llodocida	Polynoidae	Hartmania moorei																
ANNE POER Phyll	llodocida	Polynoidae	Polynoidae indet.	2															
•	llodocida	Sphaerodoridae	Sphaerodoropsis minuta										8						
	rllodocida rllodocida	Sphaerodoridae Syllidae	Sphaerodoropsis sp. Syllides longocirratus							10	8	2							
	llodocida	Syllidae	Syllides sp.								· ·	_							
	llodocida	Syllidae	Eusyllinae indet.									2						12	
	rllodocida rllodocida	Syllidae Syllidae	Eusyllis sp. Pionosyllis sp.												4				
	rllodocida	Syllidae	Exogone verugera																
	llodocida	Syllidae	Parexogone hebes							4		2						3	
	ellida	Fabriciidae	Pseudofabricia sp. nr. aberrans																
	ellida ellida	Oweniidae Oweniidae	Galathowenia oculata Myriochele heeri	19	4					4	8	10	8	4				3	
	ellida	Oweniidae	Owenia fusiformis	47	4					2	2	2	48	41					
ANNE POSE Sabe	ellida	Oweniidae	Oweniidae indet.										4						
	ellida	Sabellidae	Euchone incolor	43	30	72	3			30	4	2	4	7	17	12		21	36
	ellida ellida	Sabellidae Sabellidae	Euchone sp. Bispira sp.																
	ellida	Sabellidae	Chone duneri																
	ellida	Sabellidae	Dialychone sp.			9													
	ellida	Sabellidae	Dialychone sp. 1	12		48				8	12							3	6
	ellida ellida	Sabellidae Sabellidae	Euchone rubrocincta Sabellidae indet.		2			1							Ω	16			
	ellida	Sabellidae	Sabellidae sp. 2		2			1							8	10			
ANNE POSE Sabe	ellida	Sabellidae	Sabellidae sp. 3	2		3				2									
ANNE POSE Sabe	ellida	Sabellidae	Sabellidae sp. 4																



_	ica Sample # Sample # ate				mb18-108-031 BM-9 1	mb18-108-032 BM-9 2	mb18-108-033 BM-9 3	mb18-108-034 BM-10	mb18-108-035 BM-10 2	mb18-108-036 BM-10 3	BM-12	mb18-108-038 BM-12 2	mb18-108-039 BM-12 3	mb18-108-040 BR-1 1	mb18-108-041 BR-4 1	mb18-108-042 BW-1 1	mb18-108-043 BW-1 2	mb18-108-044 BW-1 3	mb18-108-045 BW-2 1	mb18-108-046 BW-2 2
•	ampled				2018-08-19	2018-08-19	2018-08-19	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-08	2018-08-08	2018-08-13	2018-08-13	2018-08-13	2018-08-13	2018-08-13
taxco		e Order	Family	TaxonName	Total Abundance		Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance		Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ANNE		Sabellida	Serpulidae	Spirorbinae indet.		22	42							42	18					
ANNE ANNE		Spionida Spionida	Apistobranchidae	Apistobranchus sp.		2	12							12	2					
ANNE		Spionida	Spionidae Spionidae	Dipolydora caulleryi Dipolydora concharum																
ANNE		Spionida	Spionidae	Dipolydora quadrilobata			3		3			2			5					
ANNE		Spionida	Spionidae	Dipolydora socialis	2															
ANNE	POSE	Spionida	Spionidae	Dipolydora sp.							2									
ANNE	POSE	Spionida	Spionidae	Laonice cirrata																
ANNE		Spionida	Spionidae	Marenzelleria sp.		2	3	23	31	21										
ANNE		Spionida	Spionidae	Polydora sp. complex										4		4				
ANNE		Spionida	Spionidae	Prionospio (Prionospio) sp.	440	0	10				00	70	63	25	4	4	8	4	12	6
ANNE ANNE		Spionida Spionida	Spionidae Spionidae	Prionospio (Prionospio) steenstrupi Prionospio cirrifera	110	8	18				80	70	63	25			4		9	ь
ANNE		Spionida	Spionidae	Prionospio sp.																
ANNE		Spionida	Spionidae	Pygospio sp.	2	14	6	1			2	4	5	16		20	44	16	9	6
ANNE		Spionida	Spionidae	Scolelepis sp.				4		1										
ANNE	POSE	Spionida	Spionidae	Spio filicornis						4	ļ						4			
ANNE	POSE	Spionida	Spionidae	Spio sp.				3	4	1										
ANNE		Spionida	Spionidae	Spionidae indet.																
ANNE		Terebellida	Ampharetidae	Ampharete sp.	5	6		1	1		2	4	3		1	12	12		7	
ANNE		Terebellida	Ampharetidae	Lysippe labiata	-						ā	2								3
ANNE ANNE		Terebellida Terebellida	Ampharetidae Ampharetidae	Melinna elisabethae Melinna sp.	5						4	2								
ANNE		Terebellida	Ampharetidae	Ampharete vega																
ANNE		Terebellida	Ampharetidae	Ampharetidae indet.				1					2							
ANNE		Terebellida	Ampharetidae	Amphicteis sundevalli			1													
ANNE	POSE	Terebellida	Cirratulidae	Aphelochaeta sp.				1			10					4				
ANNE	POSE	Terebellida	Cirratulidae	Chaetozone bathyala	41	71	99	2			116	78	31		1	90	124	76	69	84
ANNE		Terebellida	Cirratulidae	Chaetozone careyi	2			1	4											
ANNE		Terebellida	Cirratulidae	Chaetozone pigmentata	2	4					10	8	7						3	6
ANNE		Terebellida	Cirratulidae	Chaetozone setosa complex	14	8	12				8 30	16	22		1		40	4.4		24
ANNE ANNE		Terebellida Terebellida	Cirratulidae Cirratulidae	Chaetozone sp. Cirratulidae indet.	24	36 10	15 15		1		30 Ω	38 14	24 12	24	1	52	48 28	44 12	6 24	24 12
ANNE		Terebellida	Cirratulidae	Kirkegaardia sp.	2	10	13		1		0	2	12	24	4	32	28	12	24	12
ANNE		Terebellida	Cirratulidae	Tharyx sp.			3					_								
ANNE		Terebellida	Flabelligeridae	Diplocirrus hirsutus											1					
ANNE	POSE	Terebellida	Pectinariidae	Cistenides granulata	7	40		6	5		1			25	8	42	83	20	6	2
ANNE		Terebellida	Terebellidae	Polycirrus sp. complex				1												
ANNE		Terebellida	Terebellidae	Lanassa venusta							2						_			
ANNE		Terebellida	Terebellidae	Laphania boecki													4			
ANNE ANNE		Terebellida Terebellida	Terebellidae Terebellidae	Leaena abranchiata Pista maculata	2	10	4						1			3	6	4	3	2
ANNE		Terebellida	Terebellidae	Proclea graffi	-	10	7						-			3	ŭ	7	3	-
ANNE		Terebellida	Terebellidae	Proclea sp.									2							
ANNE	POSE	Terebellida	Terebellidae	Amaeana sp.																
ANNE	POSE	Terebellida	Terebellidae	Neoamphitrite affinis																
ANNE		Terebellida	Terebellidae	Terebellidae indet.							2		3							
ANNE		Terebellida	Trichobranchidae	Terebellides sp.	3	3	6				2		7	3	7	13	28	28	9	2
ANNE ANNE		Terebellida	Trichobranchidae Capitellidae	Trichobranchus glacialis Capitella capitata complex					1		2		2	8						
ANNE			Capitellidae	Mediomastus sp.	10	4	12	2	11	1		6	7		1	12	28	16	6	
ANNE			Capitellidae	Notomastus latericeus				_		_		-	-		_				-	
ANNE			Cossuridae	Cossura sp.	58	16	21				18	26	19			52	49	4	84	30
ANNE	POSE		Maldanidae	Clymenura sp.											11					
ANNE	POSE		Maldanidae	Euclymene sp.							4									
ANNE			Maldanidae	Euclymeninae indet.		4						2						8		
ANNE			Maldanidae	Microclymene sp.		2	9					4	2							
ANNE			Maldanidae	Praxillella gracilis			4.5													
ANNE			Maldanidae Maldanidae	Praxillella praetermissa	7	17	15 18				2				15	n		4	3	18
ANNE ANNE			Maldanidae	Maldane sarsi Nicomache sp.	/	17	18				2				15	8		4	3	18
ANNE			Maldanidae	Rhodine loveni		1														
ANNE			Maldanidae	Maldanidae indet.			3						2				4			
ANNE			Opheliidae	Ophelina acuminata										1			1			
ANNE			Opheliidae	Ophelina cylindricaudata							2				4					
ANNE			Opheliidae	Ophelina sp.											4					
ANNE			Orbiniidae	Leitoscoloplos sp.																
ANNE			Orbiniidae	Orbiniidae indet.	5															
ANNE	POSE		Orbiniidae	Scoloplos acutus	10	12	7				18	14	5			12	12			



(lient Sa					mb18-108-031 BM-9	mb18-108-032 BM-9	mb18-108-033 BM-9	mb18-108-034 BM-10	mb18-108-035 BM-10	mb18-108-036 BM-10	mb18-108-037 BM-12	mb18-108-038 BM-12	mb18-108-039 BM-12	mb18-108-040 BR-1	mb18-108-041 BR-4	mb18-108-042 BW-1	mb18-108-043 BW-1	mb18-108-044 BW-1	mb18-108-045 BW-2	mb18-108-046 BW-2
	Replicate Date San					1 2018-08-19	2 2018-08-19	3 2018-08-19	1 2018-08-17	2 2018-08-17	3 2018-08-17	1 2018-08-17	2 2018-08-17	3 2018-08-17	1 2018-08-08	1 2018-08-08	1 2018-08-13	2 2018-08-13	3 2018-08-13	1 2018-08-13	2 2018-08-13
	axcode	•	Order	Family	TaxonName							Total Abundance					Total Abundance		Total Abundance		Total Abundance
	ANNE	POSE		Orbiniidae	Scoloplos armiger										4			4			
-	ANNE	POSE		Orbiniidae	Scoloplos sp.													4	4	12	3
	ANNE	POSE		Paraonidae	Aricidea catherinae												4				
	ANNE	POSE POSE		Paraonidae	Aricidea hartmanae Aricidea minuta	2 14	2	6 15				10	2	7	24	2	8	4 16		6	9 9
	ANNE	POSE		Paraonidae Paraonidae	Aricidea minuta Aricidea nolani	2	2	9				4	4	5	28	11		16		9	9
	ANNE	POSE		Paraonidae	Aricidea sp.													4			
-	ANNE	POSE		Paraonidae	Paraonidae indet.											4	4				
	ANNE	POSE		Sabellidae	Branchiomma sp.									1							
	NNE	POSE		Scalibregmatidae	Polyphysia crassa	47	10	24					42	10			12	0	4.5	40	22
	ANNE	POSE POXX		Scalibregmatidae Protodrilidae	Scalibregma inflatum Protodrilus sp.	17	18	21			25	4	12	10		4	12	9	16	18	23
	ARTH	CHAR	Acarina	Halacaridae	Halacaridae indet.						23										
	ARTH	CHPY	Pantopoda	Nymphonidae	Nymphon sp.									2							
-	ARTH	CRAM	Amphipoda	Phoxocephalidae	Harpinia serrata	2						4			8	2					
	ARTH	CRAM	Amphipoda	Phoxocephalidae	Harpinia sp.																
	ARTH	CRAM	Amphipoda	Ampeliscidae	Ampeliscidae indet.							2	2		16	4	8				2
	ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Ampeliscidae Amphilochidae	Byblis sp. Amphilochus sp.							2		2		1					3
	ARTH	CRAM	Amphipoda	Calliopiidae	Calliopiidae indet.									2		5					
	ARTH	CRAM	Amphipoda	Podoceridae	Dyopedos sp.																
-	ARTH	CRAM	Amphipoda	Corophiidae	Corophiidae indet.																
	ARTH	CRAM	Amphipoda	Corophiidae	Monocorophium sp.					1											
	ARTH	CRAM	Amphipoda	Dexaminidae	Dexaminidae indet.																
	ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Gammaridae Opisidae	Gammarus sp. Opisa sp.								2								
	ARTH	CRAM	Amphipoda	Tryphosidae	Gronella groenlandica								2								
	ARTH	CRAM	Amphipoda	Tryphosidae	Hippomedon sp.																
A	ARTH	CRAM	Amphipoda	Tryphosidae	Orchomene sp.																
	ARTH	CRAM	Amphipoda	Tryphosidae	Orchomenella minuta																
	ARTH	CRAM	Amphipoda	Tryphosidae	Orchomenella pinguis	12								2				4			
	ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Tryphosidae Uristidae	Tryphosidae indet. Anonyx sarsi		2		1					2				4			
	ARTH	CRAM	Amphipoda	Uristidae	Anonyx sp.	1	_		-									4	4		
-	ARTH	CRAM	Amphipoda	Uristidae	Onisimus barentsi group					1										3	
	ARTH	CRAM	Amphipoda	Uristidae	Onisimus brevicaudatus																
	ARTH	CRAM	Amphipoda	Uristidae	Onisimus sp.	2						2								3	3
	ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Oedicerotidae	Lysianassoidea indet. Arrhis sp.	5						2				1				3	
	ARTH	CRAM	Amphipoda	Oedicerotidae	Monoculopsis sp.				1						4	-				6	
A	ARTH	CRAM	Amphipoda	Pontoporeiidae	Pontoporeia femorata		2								16	6					
	ARTH	CRAM	Amphipoda	Ampeliscidae	Ampelisca eschrichtii		1	1	1												
	ARTH	CRAM	Amphipoda	Ampeliscidae	Haploops tubicola											10					
	ARTH ARTH	CRAM	Amphipoda Amphipoda	Atylidae Corophiidae	Atylus carinatus Crassicorophium bonellii				7								1				
	ARTH	CRAM	Amphipoda	Dexaminidae	Guernea nordenskioldi	17	10	9	2			22	18	5	28	10	32	40	20	24	36
	ARTH	CRAM	Amphipoda	Eusiridae	Rhachotropis helleri																
A	ARTH	CRAM	Amphipoda	Oedicerotidae	Aceroides sp.																
	ARTH	CRAM	Amphipoda	Oedicerotidae	Monoculodes sp.				1			2			16	1	4			3	
	ARTH ARTH	CRAM CRAM	Amphipoda	Oedicerotidae	Oedicerotidae indet. Paroediceros lynceus	2			2		1	4	2		1			4			
	ARTH	CRAM	Amphipoda Amphipoda	Oedicerotidae Oedicerotidae	Rostroculodes sp.				2					3	28			4			6
	ARTH	CRAM	Amphipoda	Oedicerotidae	Westwoodilla sp.								2	3							3
-	ARTH	CRAM	Amphipoda	Pontoporeiidae	Monoporeia affinis		2		3	3	1				4						
	ARTH	CRAM	Amphipoda	Stenothoidae	Stenothoidae indet.																
	ARTH	CRAM	Amphipoda		Amphipoda indet.	47	70		1	2	1		4	4		1		4.4			
	ARTH ARTH	CRCI CRCO	Sessilia Cyclopoida		Balanomorpha indet. Cyclopoida indet.	17 5	78 4	9	1	3	1	20	22	1 10	60	10	60	14 52	40	5	9
	ARTH	CRCO	Harpacticoida		Harpacticoida indet.	3	7	3	-	1	-	10	2	10	00	2	00	32	40	3	3
	ARTH	CRCU	Cumacea	Diastylidae	Brachydiastylis resima	2				_			2		64	32		4	8		3
,	ARTH	CRCU	Cumacea	Diastylidae	Diastylidae indet.															3	
	ARTH	CRCU	Cumacea	Diastylidae	Diastylis bradyi																
	ARTH	CRCU	Cumacea	Diastylidae	Diastylis goodsiri		3							3							•
	ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis lucifera Diastylis rathkei		2	3				6	2	2	2				4		ь
	ARTH	CRCU	Cumacea	Diastylidae	Diastylis ratikei Diastylis scorpioides	5	6	3				2	20	19	4			8	7		6
	ARTH	CRCU	Cumacea	Diastylidae	Diastylis sp.	_	_	_				_		2			1	_			,
	ARTH	CRCU	Cumacea	Diastylidae	Diastylis spinulosa																
,	ARTH	CRCU	Cumacea	Diastylidae	Diastyloides biplicatus			6				6				4	8		4		



Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundar

Biologica Client San Replicate	•				mb18-108-031 BM-9	mb18-108-032 BM-9 2	mb18-108-033 BM-9	mb18-108-034 BM-10 1	mb18-108-035 BM-10 2	mb18-108-036 BM-10 3	mb18-108-037 BM-12	mb18-108-038 BM-12 2	mb18-108-039 BM-12	mb18-108-040 BR-1 1	mb18-108-041 BR-4	mb18-108-042 BW-1	mb18-108-043 BW-1 2	mb18-108-044 BW-1 3	mb18-108-045 BW-2 1	mb18-108-046 BW-2 2
Date Sam	oled				2018-08-19	2018-08-19	2018-08-19	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-08	2018-08-08	2018-08-13	2018-08-13	2018-08-13	2018-08-13	2018-08-13
	grpcode		Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Lampropidae Lampropidae	Lampropidae indet. Lamprops fuscatus			12	3					1			32	36	36	18	36
ARTH	CRCU	Cumacea	Leuconidae	Eudorella truncatula			3	3				4	2	16	5	32	30	30	6	6
ARTH	CRCU	Cumacea	Leuconidae	Leucon sp.		2					4	6	7	4		4	12		18	15
ARTH	CRCU	Cumacea	Leuconidae	Leuconidae indet.																
ARTH	CRCU	Cumacea	Nannastacidae	Campylaspis rubicunda								_								
ARTH ARTH	CRCU	Cumacea	Thoridae	Cumacea indet.								6								
ARTH	CRDE CRDE	Decapoda Decapoda	Thoridae Crangonidae	Lebbeus polaris Sabinea septemcarinata																
ARTH	CRDE	Decapoda	Crangonidae	Sabinea sp.																
ARTH	CRDE	Decapoda	Crangonidae	Sclerocrangon boreas																
ARTH	CRDE	Decapoda		Caridea indet.																
ARTH	CRIS	Isopoda	Gnathiidae	Gnathiidae indet.																
ARTH ARTH	CRIS CRIS	Isopoda Isopoda	Munnopsidae Paramunnidae	Eurycope sp. Pleurogonium spinosissimum																
ARTH	CRMY	Mysida	raiailiuililiuae	Mysidacea indet.														8	12	
ARTH	CRMY	Mysida	Mysidae	Mysis sp.				1	1								20	_		
ARTH	CROS	Myodocopida	Philomedidae	Philomedes sp.	146	90	159	5		1	54	110		188	180	176	302	180	171	138
ARTH	CRTA	Tanaidacea	Sphyrapodidae	Pseudosphyrapus anomalus	19		3				46	56	19			4				3
ARTH	CRTA	Tanaidacea	Akanthophoreidae	Akanthophoreus sp.		2								80	16	_	28		6	6
ARTH ARTH	CRTA CRTA	Tanaidacea Tanaidacea	Pseudotanaidae	Pseudotanais sp. Typhlotanais sp.				2					2	12 40	8	4				3
ARTH	CRTA	Tanaidacea	Typhlotanaidae	Tanaidacea indet.	5			2					2	40		4	1			
ARTH	INCO	Coleoptera	Curculionidae	Curculionidae indet.	-												_			
ARTH	INDI	Diptera	Chironomidae	Orthocladiinae indet.												4				
ARTH	INDI	Diptera	Chironomidae	Chironomidae indet.																
ECHI	ECEC	Camarodonta	Strongylocentrotidae	Strongylocentrotus droebachiensis	1	1									1	4			2	
ECHI ECHI	ECEC ECHO	Camarodonta Apodida	Strongylocentrotidae Myriotrochidae	Strongylocentrotus sp.			9													
ECHI	ECHO	Dendrochirotida	Psolidae	Myriotrochus rinkii Psolus phantapus																
ECHI	ECHO	Molpadida	15011440	Molpadida indet.											1					
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiocten affinis												4		2		
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura sarsii	1									4		4		1		
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura robusta											7					
ECHI MISC	ECOP BRYO	Ophiurida Cheilostomatida	Ophiuridae Candidae	Ophiuridae indet. Scrupocellaria sp.															3	
MISC	BRYO	Cheilostomatida	Calloporidae	Calloporidae indet.																
MISC	BRYO	Cheilostomatida	Myriaporidae	Leieschara sp.																
MISC	BRYO	Ctenostomatida	Alcyonidiidae	Alcyonidium sp.							4			1						
MISC	BRYO	Ctenostomatida	Triticellidae	Triticella sp.																
MISC	BRYO	Ctenostomatida	Cuiniidaa	Ctenostomata indet.																
MISC MISC	BRYO BRYO	Cyclostomatida Cyclostomatida	Crisiidae	Crisia sp. Cyclostomatida indet.											1					
MISC	BRYO	Cyclostomatida		Bryozoa indet.											-					
MISC	CNHY	Anthoathecata	Bougainvilliidae	Bougainvilliidae indet.							2		5							
MISC	CNHY	Anthoathecata		Anthoathecata indet.																
MISC	CNHY	Limnomedusae	Olindiidae	Monobrachium parasitum							2	4	11			4	8	2		1
MISC MISC	CNHY HEMI			Hydrozoa indet. Hemichordata indet.		2		2			2				1					
MISC	NTEA	Archinemertea	Cephalothricidae	Cephalothrix sp.			3	2		1	6		2	20	4					3
MISC	NTEA	Heteronemertea	Lineidae	Cerebratulus sp.		2	12				2	1					4	4		2
MISC	NTEA	Heteronemertea	Lineidae	Lineidae indet.																
MISC	NTEA	Palaeonemertea	Carinomidae	Carinoma sp.																
MISC MISC	NTEA NTEA			Anopla indet. Enopla indet.	10	2	12				4	6	2			4	4	4	2	3
MISC	NTEA		Tubulanidae	Tubulanus sp.	10	2	12				4	9	2			4	4	4	3	3
MISC	NTEA		rabaiamaac	Nemertea indet.																
MISC	PIXX	Scorpaeniformes	Cottidae	Cottidae indet.					1											
MISC	PIXX			Pisces indet.																
MISC	PLTY			Platyhelminthes indet.									_		1					
MISC	PORI PRIA		Prianulidae	Calcarea indet.									1							
MISC MISC	PRIA		Priapulidae Priapulidae	Priapulus caudatus Priapulus sp.			3										4			
MISC	SIPN	Golfingiida	Golfingiidae	Golfingia sp.		2	3										7			
MISC	URAS	Aplousobranchia	-	Aplousobranchia indet.																
MISC	URAS	Phlebobranchia	Ascidiidae	Ascidia sp.																
MISC	URAS	Stolidobranchia	Molgulidae	Molgula sp.																
MISC MISC	URAS URAS	Stolidobranchia Stolidobranchia	Pyuridae Styelidae	Boltenia echinata Polycarpa fibrosa																
IVIIJC	UNAS	JUNIOUS dillid	JLYCHUAC	i viycaipa iivivsa																



Biologica Sample # Client Sample #	mb18-108-031 BM-9	mb18-108-032 BM-9	mb18-108-033 BM-9	mb18-108-034 BM-10	mb18-108-035 BM-10	mb18-108-036 BM-10	mb18-108-037 BM-12	mb18-108-038 BM-12	mb18-108-039 BM-12	mb18-108-040 BR-1	mb18-108-041 BR-4	mb18-108-042 BW-1	mb18-108-043 BW-1 2	mb18-108-044 BW-1	mb18-108-045 BW-2 1	mb18-108-046 BW-2 2
Replicate Date Sampled	2018-08-19	2 2018-08-19	3 2018-08-19	1 2018-08-17	2018-08-17	2018-08-17	2018-08-17	2 2018-08-17	3 2018-08-17	1 2018-08-08	2018-08-08	1 2018-08-13	2018-08-13	2018-08-13	2018-08-13	2018-08-13
taxcode grpcode Order Family TaxonName	Total Abundance						Total Abundance						Total Abundance			
MISC URAS Stolidobranchia Styelidae Styelidae indet.																
MOLL MOAP Chaetodermatida Chaetodermatidae Chaetoderma sp.	2															
MOLL MOAP Aplacophora indet.																
MOLL MOBI Adapedonta Hiatellidae Hiatella arctica	11	21	7	1	2			1	1		1	17	8	21	7	5
MOLL MOBI Anomalodesmata Cuspidariidae Cuspidaria sp.																
MOLL MOBI Anomalodesmata Lyonsiidae Lyonsia arenosa										4						
MOLL MOBI Anomalodesmata Thraciidae Thracia myopsis MOLL MOBI Anomalodesmata Thraciidae Thracia sp.																
MOLL MOBI Arcida Arcidae Bathyarca glacialis																
MOLL MOBI Carditoida Astartidae Astarte borealis	6	5	15	6	2			5	7	42	5	29	41	36	10	5
MOLL MOBI Carditoida Astartidae Astarte montagui	6	23		10			15	18	40	20	7	87	64	68	17	5
MOLL MOBI Carditoida Astartidae Astarte sp.		8					22	6	9	16	1	16	56	32	9	9
MOLL MOBI Lucinida Thyasiridae Axinopsida sp.	2	10					2					1	4		6	
MOLL MOBI Lucinida Thyasiridae Thyasira sp.	_	6	36					12	5	16	4	20	16		3	21
MOLL MOBI Lucinida Thyasiridae Thyasiridae indet.	5 2	4	6	4		1	6		3	40	4	28	24 12	20	9	15 3
MOLL MOBI Myida Myidae Mya sp. MOLL MOBI Myida Myidae Mya truncata	2	3	13	1	2	1	0	4	1	8	16	9	12	21	3	4
MOLL MOBI Mytilida Mytilidae Dacrydium vitreum		J	15		-			7	-	Ü	10	3		21	3	7
MOLL MOBI Mytilida Mytilidae Crenella faba																
MOLL MOBI Mytiloida Mytilidae Musculus discors		2								5	1	1				
MOLL MOBI Mytiloida Mytilidae Mytilidae indet.																
MOLL MOBI Nuculanida Nuculanidae Nuculana minuta	2	9	8	4			1	8	3	5	3	6	22	48	7	10
MOLL MOBI Nuculanida Nuculanidae Nuculana pernula							40				1	4				
MOLL MOBI Nuculanida Nuculanidae Nuculana sp. MOLL MOBI Nuculanida Nuculanidae Nuculanoidea indet.				2			12	2	2		1	12	16 12	12		
MOLL MOBI Nuculanoida Yoldiidae Portlandia intermedia				2				2	2				12	12		
MOLL MOBI Nuculanoida Yoldiidae Yoldiella frigida																
MOLL MOBI Nuculanoida Yoldiidae Yoldiella lenticula																
MOLL MOBI Nuculanoida Yoldiidae Yoldiidae indet.	2	2								4		8				
MOLL MOBI Nuculida Nuculidae Ennucula tenuis	14	3	15				18	22	12	4		20	9		6	7
MOLL MOBI Pectinida Pectinidae Chlamys islandica		2														
MOLL MOBI Pectinida Propeamussiidae Similipecten greenlandicus		2	1				1	7	16			1			1	
MOLL MOBI Pectinoida Pectinidae Pectinidae indet. MOLL MOBI Pectinoida Propeamussiidae Propeamussiidae Propeamussiidae indet.		2											4	4		
MOLL MOBI Veneroida Cardiidae Ciliatocardium ciliatum		1	1	1								2	7	7		1
MOLL MOBI Veneroida Cardiidae Serripes groenlandicus	5	-	1	1						2	1	10	27	12		1
MOLL MOBI Veneroida Tellinidae Macoma balthica			1													
MOLL MOBI Veneroida Tellinidae Macoma calcarea	5	7	1				2		6	2	5	4	4		3	3
MOLL MOBI Veneroida Tellinidae Macoma moesta							1	2			2			2		1
MOLL MOBI Veneroida Tellinidae Macoma sp.	7	21	9				8	2	2	48	5	28	52	20	12	15
MOLL MOBI Periplomatidae Periploma aleuticum MOLL MOBI Bivalvia indet.	1 10	4	1				4	2		0	າ	12	4 16	٥	1	
MOLL MOGA Cephalaspidea Cylichnidae Cylichna alba	10	7	1				7	2		o o	2	12	10	0	1	3
MOLL MOGA Cephalaspidea Cylichnidae Cylichna sp.			3													
MOLL MOGA Cephalaspidea Cylichnidae Cylichnidae indet.													4			
MOLL MOGA Cephalaspidea Cylichnidae Cylichnoides occultus																
MOLL MOGA Cephalaspidea Cephalaspidea indet.		6	3						2		1	12				3
MOLL MOGA Littorinimorpha Capulidae Ariadnaria borealis										5		0	4			
MOLL MOGA Littorinimorpha Naticidae Cryptonatica affinis MOLL MOGA Littorinimorpha Naticidae Euspira pallida		2										8				
MOLL MOGA Littorinimorpha Naticidae Naticidae indet.		2										4				
MOLL MOGA Littorinimorpha Rissoidae Boreocingula castanea		4						2		4		4				
MOLL MOGA Littorinimorpha Velutinidae Velutinidae indet.																
MOLL MOGA Littorinimorpha Rissoidae Rissoidae indet.	10										2	16		4	3	
MOLL MOGA Neogastropoda Buccinidae Buccinidae indet.													4			
MOLL MOGA Neogastropoda Buccinidae Buccinum hydrophanum															1	
MOLL MOGA Neogastropoda Buccinidae Colus sp. MOLL MOGA Neogastropoda Columbellidae Columbellidae indet.																
MOLL MOGA Neogastropoda Columbellidae Columbellidae indet. MOLL MOGA Neogastropoda Cancellariidae Admete viridula																
MOLL MOGA Neogastropoda Mangeliidae Mangeliidae indet.		2														
MOLL MOGA Neogastropoda Mangeliidae Oenopota sp.																
MOLL MOGA Trochida Colloniidae Moelleria costulata											1					
MOLL MOGA Trochida Margaritidae Margarites groenlandicus																
MOLL MOGA Trochida Margaritidae Margarites helicinus													4			1
MOLL MOGA Trochida Margaritidae Margarites olivaceus		-							_							
MOLL MOGA Trochida Margaritidae Margarites sp. MOLL MOGA Buccinidae Volutopsius norwegicus		2							3							
MOLL MOGA Buccinidae Volutopsius norwegicus MOLL MOGA Lepetidae Lepeta caeca	7						3	2	5	1						
MOLL MOGA Lottiidae Lottiidae indet.	,						3	2	2	1	1					



Riologi	ca Sample	e #			mb18-108-031	mb18-108-032	mb18-108-033	mb18-108-034	mb18-108-035	mb18-108-036	mb18-108-037	mb18-108-038	mb18-108-039	mb18-108-040	mb18-108-041	mb18-108-042	mb18-108-043	mb18-108-044	mb18-108-045	mb18-108-046
·	sample#	<i></i>			BM-9		BM-9	BM-10	BM-10	BM-10	BM-12	BM-12	BM-12	BR-1	BR-4	BW-1	BW-1	BW-1	BW-2	BW-2
Replica					1	2 2	3	1	2 2	3	1	2 2	3	1	1	1	22	33	1	2
Date Sa					2018-08-19	2018-08-19	2018-08-19	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-17	2018-08-08	2018-08-08	2018-08-13	2018-08-13	2018-08-13	2018-08-13	2018-08-13
taxcode	•	ode Order	Family	TaxonName	Total Abundance			Total Abundance	Total Abundance					Total Abundance						Total Abundance
MOLL	MOG		Lottiidae	Testudinalia testudinalis											3					
MOLL	MOG		Trochidae	Trochidae indet.																
MOLL	MOG			Gastropoda indet.			3													
MOLL	MOP		Tonicellidae	Tonicella marmorea			-								2					
MOLL	MOS		Gadilidae	Gadilidae indet.											_					
				Total Abundance	1,035	977	1,089	144	111	69	917	892	688	1,641	607	1,890	2,372	1,492	1,149	1,134
				Total Unique Taxa (Species Richness)	63	68	62	41	26	16	66	56	67	60	65	65	61	45	57	56
				No. composite grabs	3	4	4	4	4	2	2	3	2	6	6	3	5	3	5	4
				Total Density (Organisms/m²)	15330	10856	12100	1600	1233	1533	20378	13215	15292	12156	4493	28000	21084	22104	10216	12600
Inciden	ital Organ	nisms:																		
MEMO	MEM	10		Calanoida indet. (planktonic)																
MEMO	MEM	10		Chatognatha indet. (planktonic)																
MEMO	MEM	10		Copepoda indet. (parasitic)										5		16		4		
MEMO	MEM	10		Desmosoma sp. (planktonic)											5					
MEMO	MEM	10		Egg/egg mass		2	9					44	38	64	22	108	92	32	42	
MEMO	MEM	10		Hyperiidae indet. (planktonic)								6								
MEMO	MEM	10		Insecta indet. (terrestrial)									2							
MEMO	MEM	10		Nematoda indet.	36	70	87	5	1	8	44	34	111	156	79	276	372	180	525	291
MEMO	MEM	10		Hyperiidae indet. (planktonic)							1									



ANNE POSE Sabellida

Serpulidae

Pileolaria sp.

Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundar

(iologica lient San teplicate	Sample # ople #				mb18-108-047 BW-2	mb18-108-048 BW-3	mb18-108-049 BW-3	mb18-108-050 BW-3	mb18-108-051 BW-4 1	mb18-108-052 BW-4 2	mb18-108-053 BW-4 3	mb18-108-054 BW-5 1	mb18-108-055 BW-5 2	mb18-108-056 BW-5	mb18-108-057 SN-1 1	mb18-108-058 SN-1 2	mb18-108-059 SN-1	mb18-108-060 SN-2	mb18-108-061 SN-2 2	mb18-108-062 SN-2 3	
	ate Sam	oled				2018-08-13	2018-08-14	2018-08-14	2018-08-14	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	
1	axcode	grpcode	Order	Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	
	NNE	ANHI	Rhynchobdellida	Piscicolidae	Hirudinea indet.										4-							
	NNE NNE	ANOL EURA	Enchytraeida Echiuroidea	Enchytraeidae Echiuridae	Enchytraeidae indet. Echiurus echiurus						3		24	2	15							
	NNE	POER	Eunicida	Dorvilleidae	Dorvilleidae indet.									1				1				
	NNE	POER	Eunicida	Dorvilleidae	Parougia caeca									-		1		1	3	3	4	
,	NNE	POER	Eunicida	Lumbrineridae	Lumbrineridae indet.											4	1				11	
,	NNE	POER	Eunicida	Lumbrineridae	Lumbrineris sp.																5	
	NNE	POER	Eunicida	Lumbrineridae	Scoletoma fragilis		2	5	3							7	4	23	13	18	24	
	NNE	POER	Eunicida	Lumbrineridae	Scoletoma impatiens	22	6	10	8								-			9		
	NNE NNE	POER POER	Eunicida Eunicida	Lumbrineridae Onuphidae	Scoletoma sp. Nothria conchylega												5	1	4	9	6	
	NNE	POER	Phyllodocida	Glyceridae	Glycera capitata													-	•		v	
,	NNE	POER	Phyllodocida	Glyceridae	Glycera sp.																	
,	NNE	POER	Phyllodocida	Hesionidae	Microphthalmus sp.																	
	NNE	POER	Phyllodocida	Hesionidae	Gyptis sp.																	
	NNE	POER	Phyllodocida	Hesionidae	Nereimyra punctata	66	24	14	28	48	9	24	109	136	7			3			1	
	NNE NNE	POER POER	Phyllodocida Phyllodocida	Nephtyidae Nephtyidae	Aglaophamus sp. Bipalponephtys cornuta	38	62	46	54	4	5	24	5			a	Q	13	11	٥	20	
	NNE	POER	Phyllodocida	Nephtyidae	Nephtys bucera	30	02	40	34	7	3	24	3			3	0	13	11	,	20	
	NNE	POER	Phyllodocida	Nephtyidae	Nephtys ciliata	1										1				1		
,	NNE	POER	Phyllodocida	Nephtyidae	Nephtys sp.																	
	NNE	POER	Phyllodocida	Nereididae	Nereis zonata	6	3		2													
	NNE	POER	Phyllodocida	Nereididae	Nereididae indet.			24							_							
	NNE NNE	POER POER	Phyllodocida Phyllodocida	Pholoidae Pholoidae	Pholoe minuta Pholoe sp.	53 154	20 126	31 67	16 66	28	11	64	14 2	4	5			1			2	
	NNE	POER	Phyllodocida	Pholoidae	Pholoe tecta	194	72	96	139	58	38	137	10	5	2	24	8	15	19	15	13	
	NNE	POER	Phyllodocida	Phyllodocidae	Eteone barbata	23.	,-	30	100	50	30	25.		J	_		· ·	13		10	13	
,	NNE	POER	Phyllodocida	Phyllodocidae	Eteone longa complex		2						1	1	4		3		1	2	1	
,	NNE	POER	Phyllodocida	Phyllodocidae	Eteone sp.	4	4	5	2	2		5	3	8	3	1			4	8	5	
	NNE	POER	Phyllodocida	Phyllodocidae	Eulalia sp.											1						
	NNE	POER	Phyllodocida	Phyllodocidae	Phyllodoce groenlandica	2		2						2								
	NNE NNE	POER POER	Phyllodocida Phyllodocida	Phyllodocidae Phyllodocidae	Phyllodoce sp. Eteone flava	2		2														
	NNE	POER	Phyllodocida	Phyllodocidae	Hypereteone sp.																	
,	NNE	POER	Phyllodocida	Polynoidae	Gattyana cirrhosa	3	1			1												
,	NNE	POER	Phyllodocida	Polynoidae	Harmothoe extenuata	2																
	NNE	POER	Phyllodocida	Polynoidae	Harmothoe imbricata								1	3								
	NNE	POER	Phyllodocida	Polynoidae	Harmothoe sp.	2		2				2		2								
	NNE NNE	POER POER	Phyllodocida Phyllodocida	Polynoidae Polynoidae	Melaenis loveni Bylgides sarsi																	
	NNE	POER	Phyllodocida	Polynoidae	Bylgides sp.																	
,	NNE	POER	Phyllodocida	Polynoidae	Hartmania moorei																1	
,	NNE	POER	Phyllodocida	Polynoidae	Polynoidae indet.							2				3		1		5		
	NNE	POER	Phyllodocida	Sphaerodoridae	Sphaerodoropsis minuta			2									1	1	1	2		
	NNE	POER	Phyllodocida	Sphaerodoridae	Sphaerodoropsis sp.													1	2	2	ā	
	NNE NNE	POER POER	Phyllodocida Phyllodocida	Syllidae Syllidae	Syllides longocirratus Syllides sp.													1	3	2	1	
	NNE	POER	Phyllodocida	Syllidae	Eusyllinae indet.				2													
	NNE	POER	Phyllodocida	Syllidae	Eusyllis sp.																	
,	NNE	POER	Phyllodocida	Syllidae	Pionosyllis sp.																	
	NNE	POER	Phyllodocida	Syllidae	Exogone verugera																	
	NNE	POER	Phyllodocida	Syllidae	Parexogone hebes	2													1	6	2	
	NNE NNE	POSE POSE	Sabellida Sabellida	Fabriciidae Oweniidae	Pseudofabricia sp. nr. aberrans Galathowenia oculata	2	2									16	3	9	5 23	9 18	5 12	
	NNE	POSE	Sabellida	Oweniidae	Myriochele heeri	2	2									10	1	4	3	2	1	
	NNE	POSE	Sabellida	Oweniidae	Owenia fusiformis		6	23					1			3	2					
,	NNE	POSE	Sabellida	Oweniidae	Oweniidae indet.																	
	NNE	POSE	Sabellida	Sabellidae	Euchone incolor	44	26	22	15	60	8	79	7				5					
	NNE	POSE	Sabellida	Sabellidae	Euchone sp.																	
	NNE	POSE POSE	Sabellida Sabellida	Sabellidae Sabellidae	Bispira sp.																	
	NNE NNE		Sabellida	Sabellidae	Chone duneri Dialychone sp.															3		
	NNE	POSE	Sabellida	Sabellidae	Dialychone sp. 1	2		12	2			5	1			3	1	1		2		
	NNE	POSE	Sabellida	Sabellidae	Euchone rubrocincta			2					1				1					
,	NNE	POSE	Sabellida	Sabellidae	Sabellidae indet.	4		12		8				2				1			1	
	NNE		Sabellida	Sabellidae	Sabellidae sp. 2	_	_			_		_									_	
	NNE		Sabellida	Sabellidae	Sabellidae sp. 3	2	2			9		2	14					1	1		2	
,	NNE	POSE	Sabellida	Sabellidae	Sabellidae sp. 4																	



_	ica Sample # Sample # ate				mb18-108-047 BW-2 3	mb18-108-048 BW-3 1	mb18-108-049 BW-3 2	mb18-108-050 BW-3 3	mb18-108-051 BW-4 1	mb18-108-052 BW-4 2	mb18-108-053 BW-4 3	mb18-108-054 BW-5 1	mb18-108-055 BW-5 2	mb18-108-056 BW-5 3	mb18-108-057 SN-1 1	mb18-108-058 SN-1 2	mb18-108-059 SN-1 3	mb18-108-060 SN-2 1	mb18-108-061 SN-2 2	mb18-108-062 SN-2 3
Date 9	ampled				2018-08-13	2018-08-14	2018-08-14	2018-08-14	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxco			Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ANNE ANNE		Sabellida Spionida	Serpulidae Apistobranchidae	Spirorbinae indet. Apistobranchus sp.		2		2												
ANNE		Spionida	Spionidae	Dipolydora caulleryi		2		2										1		
ANNE		Spionida	Spionidae	Dipolydora concharum																
ANNE	POSE	Spionida	Spionidae	Dipolydora quadrilobata									8							
ANNE		Spionida	Spionidae	Dipolydora socialis																
ANNE		Spionida	Spionidae	Dipolydora sp.																
ANNE		Spionida Spionida	Spionidae Spionidae	Laonice cirrata Marenzelleria sp.					102	16		11	50	11						
ANNE ANNE		Spionida	Spionidae	Polydora sp. complex					102	10		11	50	11						
ANNE		Spionida	Spionidae	Prionospio (Prionospio) sp.	2					3										6
ANNE	POSE	Spionida	Spionidae	Prionospio (Prionospio) steenstrupi		60	14	12	22	16	104	8			73	34	74	39	62	59
ANNE		Spionida	Spionidae	Prionospio cirrifera									1							
ANNE		Spionida	Spionidae	Prionospio sp.	2	8	7	4	40	2	-		4		7		5		9	
ANNE ANNE		Spionida Spionida	Spionidae Spionidae	Pygospio sp. Scolelepis sp.	3	14	/	4	10 4	2	5	11	1	9						
ANNE		Spionida	Spionidae	Spio filicornis	4			2	4			1	1	,						
ANNE		Spionida	Spionidae	Spio sp.						1										
ANNE	POSE	Spionida	Spionidae	Spionidae indet.																
ANNE		Terebellida	Ampharetidae	Ampharete sp.	2	12	1			2	2	8								
ANNE		Terebellida	Ampharetidae	Lysippe labiata Melinna elisabethae											-		6	7	1	2
ANNE ANNE		Terebellida Terebellida	Ampharetidae Ampharetidae	Melinna sp.											5		6	,	1	2
ANNE		Terebellida	Ampharetidae	Ampharete vega								5		3						
ANNE	POSE	Terebellida	Ampharetidae	Ampharetidae indet.			2	4	6	2	2		1					3		
ANNE		Terebellida	Ampharetidae	Amphicteis sundevalli			1	1												
ANNE		Terebellida	Cirratulidae	Aphelochaeta sp.	8	C.4	427	101	4.4	1	7	2			16		24		42	10
ANNE ANNE		Terebellida Terebellida	Cirratulidae Cirratulidae	Chaetozone bathyala Chaetozone careyi	27	64	127	101	14 12	4	,	2		Q	21	8	21	9	12	10
ANNE		Terebellida	Cirratulidae	Chaetozone pigmentata	6	4			12	-		Ü		Ü		1	7	8	2	1
ANNE		Terebellida	Cirratulidae	Chaetozone setosa complex							2				25	20	46	9	11	10
ANNE		Terebellida	Cirratulidae	Chaetozone sp.	8	18	26	16	16	3	12	8			23	20	24	16	47	20
ANNE		Terebellida	Cirratulidae	Cirratulidae indet.	8		10	10			17					7	1	23	3	13
ANNE ANNE		Terebellida Terebellida	Cirratulidae Cirratulidae	Kirkegaardia sp. Tharyx sp.												0	13	5	23	13
ANNE		Terebellida	Flabelligeridae	Diplocirrus hirsutus												0	15	3	23	1
ANNE		Terebellida	Pectinariidae	Cistenides granulata	11	2	9	1	23	3	10	40	6	16			1			
ANNE		Terebellida	Terebellidae	Polycirrus sp. complex		2											1	1	2	1
ANNE		Terebellida	Terebellidae	Lanassa venusta	_													_		
ANNE ANNE		Terebellida Terebellida	Terebellidae Terebellidae	Laphania boecki Leaena abranchiata	2													1		
ANNE		Terebellida	Terebellidae	Pista maculata	5	1		1												
ANNE		Terebellida	Terebellidae	Proclea graffi	J	-		-												
ANNE	POSE	Terebellida	Terebellidae	Proclea sp.																
ANNE	POSE	Terebellida	Terebellidae	Amaeana sp.																
ANNE		Terebellida	Terebellidae	Neoamphitrite affinis		2				1	2				1			2	2	
ANNE ANNE		Terebellida Terebellida	Terebellidae Trichobranchidae	Terebellidae indet. Terebellides sp.	6	2 5	8			1	2	1			1		1	3	3	2
ANNE		Terebellida	Trichobranchidae	Trichobranchus glacialis	· ·	J	· ·					-					-			-
ANNE	POSE		Capitellidae	Capitella capitata complex				2					2							
ANNE			Capitellidae	Mediomastus sp.	14	6	10	4	66	8	24	44	10	24	3	3	4	13	17	7
ANNE			Capitellidae	Notomastus latericeus	20	6	24	F0	2		29				20	36	9	17	17	10
ANNE ANNE			Cossuridae Maldanidae	Cossura sp. Clymenura sp.	28	0	24	50	2		29				28	30	9	17	17	16
ANNE			Maldanidae	Euclymene sp.							5				3					
ANNE	POSE		Maldanidae	Euclymeninae indet.				2			3				1	1	1	3	5	
ANNE	POSE		Maldanidae	Microclymene sp.															2	
ANNE			Maldanidae	Praxillella gracilis															_	_
ANNE ANNE			Maldanidae Maldanidae	Praxillella praetermissa Maldane sarsi	20			4				1			1			4	5 18	2
ANNE			Maldanidae	Nicomache sp.	20			4							1			4	18	4
ANNE			Maldanidae	Rhodine loveni																
ANNE			Maldanidae	Maldanidae indet.								1						1	2	1
ANNE			Opheliidae	Ophelina acuminata		2	1													
ANNE			Opheliidae	Ophelina cylindricaudata				2												
ANNE ANNE			Opheliidae Orbiniidae	Ophelina sp. Leitoscoloplos sp.				2												
ANNE			Orbiniidae	Orbiniidae indet.												5				
ANNE			Orbiniidae	Scoloplos acutus		6	1								4	_	3	1	6	2



	ica Sample # Sample #				mb18-108-047 BW-2	mb18-108-048 BW-3	mb18-108-049 BW-3 2	mb18-108-050 BW-3	mb18-108-051 BW-4	mb18-108-052 BW-4 2	mb18-108-053 BW-4	mb18-108-054 BW-5		mb18-108-056 BW-5	mb18-108-057 SN-1	mb18-108-058 SN-1 2	mb18-108-059 SN-1	mb18-108-060 SN-2	mb18-108-061 SN-2 2	mb18-108-062 SN-2 3
•	ampled				2018-08-13	2018-08-14	2018-08-14	2018-08-14	2018-08-18	2018-08-18	2018-08-18	2018-08-18	_	2018-08-18	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcod		Order	Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ANNE ANNE	POSE POSE		Orbiniidae Orbiniidae	Scoloplos armiger Scoloplos sp.	2	1		2	2	1	7				3		3		2	2
ANNE	POSE		Paraonidae	Aricidea catherinae	2		2	2	2	1	,				3		3		2	2
ANNE	POSE		Paraonidae	Aricidea hartmanae	4										4	4	5	5	3	
ANNE	POSE		Paraonidae	Aricidea minuta	17	4	5	4 2							-	-		4	-	4
ANNE ANNE	POSE POSE		Paraonidae Paraonidae	Aricidea nolani Aricidea sp.		2	2	2				1			5	5	8	1	5	1
ANNE	POSE		Paraonidae	Paraonidae indet.											3	1		1	3	1
ANNE	POSE		Sabellidae	Branchiomma sp.																
ANNE ANNE	POSE POSE		Scalibregmatidae Scalibregmatidae	Polyphysia crassa Scalibregma inflatum		10	17	20	4	1	7	25			4	2	3	4	6	1
ANNE	POXX		Protodrilidae	Protodrilus sp.		10	17	20	4	1	,	23			4	2	3	4	Ü	1
ARTH	CHAR	Acarina	Halacaridae	Halacaridae indet.																
ARTH	CHPY	Pantopoda	Nymphonidae	Nymphon sp.													1			
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Phoxocephalidae Phoxocephalidae	Harpinia serrata Harpinia sp.																
ARTH	CRAM	Amphipoda	Ampeliscidae	Ampeliscidae indet.																
ARTH	CRAM	Amphipoda	Ampeliscidae	Byblis sp.													1			
ARTH	CRAM	Amphipoda	Amphilochidae	Amphilochus sp.																
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Calliopiidae Podoceridae	Calliopiidae indet. Dyopedos sp.																
ARTH	CRAM	Amphipoda	Corophiidae	Corophiidae indet.					10										2	
ARTH	CRAM	Amphipoda	Corophiidae	Monocorophium sp.							2									
ARTH	CRAM	Amphipoda	Dexaminidae	Dexaminidae indet.						2		4								
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Gammaridae Opisidae	Gammarus sp. Opisa sp.						3		1								
ARTH	CRAM	Amphipoda	Tryphosidae	Gronella groenlandica								4								
ARTH	CRAM	Amphipoda	Tryphosidae	Hippomedon sp.																
ARTH	CRAM	Amphipoda	Tryphosidae	Orchomene sp.								2	1	1				1		
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Tryphosidae Tryphosidae	Orchomenella minuta Orchomenella pinguis																
ARTH	CRAM	Amphipoda	Tryphosidae	Tryphosidae indet.	2		5													1
ARTH	CRAM	Amphipoda	Uristidae	Anonyx sarsi				2												
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Uristidae Uristidae	Anonyx sp. Onisimus barentsi group	2												1			
ARTH	CRAM	Amphipoda	Uristidae	Onisimus brevicaudatus																1
ARTH	CRAM	Amphipoda	Uristidae	Onisimus sp.					2						1				2	2
ARTH	CRAM	Amphipoda	Ondinamakidan	Lysianassoidea indet.																
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Oedicerotidae Oedicerotidae	Arrhis sp. Monoculopsis sp.	6			2	10			5	27	4						
ARTH	CRAM	Amphipoda	Pontoporeiidae	Pontoporeia femorata																
ARTH	CRAM	Amphipoda	Ampeliscidae	Ampelisca eschrichtii																
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Ampeliscidae Atylidae	Haploops tubicola Atylus carinatus													1			
ARTH	CRAM	Amphipoda	Corophiidae	Crassicorophium bonellii					6											
ARTH	CRAM	Amphipoda	Dexaminidae	Guernea nordenskioldi	16	52	22	38							1	1	3	1	2	
ARTH	CRAM	Amphipoda	Eusiridae	Rhachotropis helleri																
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Oedicerotidae Oedicerotidae	Aceroides sp. Monoculodes sp.			2			1	7		2	1						
ARTH	CRAM	Amphipoda	Oedicerotidae	Oedicerotidae indet.	2	4	2	2		1	10		2							
ARTH	CRAM	Amphipoda	Oedicerotidae	Paroediceros lynceus	2	4		6	16	2	3	5	15							
ARTH	CRAM	Amphipoda	Oedicerotidae	Rostroculodes sp.		4	_	4	6							•			_	
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Oedicerotidae Pontoporeiidae	Westwoodilla sp. Monoporeia affinis			5	4	10	123		3	52	31		2	1	1	5	
ARTH	CRAM	Amphipoda	Stenothoidae	Stenothoidae indet.					10	123		3	32	31						
ARTH	CRAM	Amphipoda		Amphipoda indet.							2					1				
ARTH	CRCI	Sessilia		Balanomorpha indet.	2	2		8		24		3		4.0	3 7	•		_		
ARTH ARTH	CRCO CRCO	Cyclopoida Harpacticoida		Cyclopoida indet. Harpacticoida indet.	32 4	10	55 7	32 2	60 24	32	17	39 2		16 1	/	3	11 3	5 1	2	4
ARTH	CRCU	Cumacea	Diastylidae	Brachydiastylis resima	6		2	2	24			2		1			3	1		
ARTH	CRCU	Cumacea	Diastylidae	Diastylidae indet.																
ARTH	CRCU	Cumacea	Diastylidae	Diastylis bradyi													-			
ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis goodsiri Diastylis lucifera		2		2				1					3			
ARTH	CRCU	Cumacea	Diastylidae	Diastylis rathkei	2	2		2			2					2	1			
ARTH	CRCU	Cumacea	Diastylidae	Diastylis scorpioides		40	2	8							3	2	1			
ARTH	CRCU	Cumacea	Diastylidae	Diastylis sp.				8										4	2	
ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis spinulosa Diastyloides biplicatus		18	29								1			1		
			,	,		_3	_3								-					



MISC URAS Stolidobranchia Styelidae

Polycarpa fibrosa

Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundar

	ca Sample # Sample #				mb18-108-047 BW-2	mb18-108-048 BW-3	mb18-108-049 BW-3 2	mb18-108-050 BW-3	mb18-108-051 BW-4	mb18-108-052 BW-4 2	mb18-108-053 BW-4	mb18-108-054 BW-5	mb18-108-055 BW-5	mb18-108-056 BW-5	mb18-108-057 SN-1	mb18-108-058 SN-1 2	mb18-108-059 SN-1	mb18-108-060 SN-2	mb18-108-061 SN-2 2	mb18-108-062 SN-2 3
•	mpled				2018-08-13	2018-08-14	2018-08-14	2018-08-14	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcod		Order	Family	TaxonName		Total Abundance					Total Abundance						Total Abundance			
ARTH	CRCU	Cumacea	Lampropidae	Lampropidae indet.																
ARTH	CRCU	Cumacea	Lampropidae	Lamprops fuscatus	12	42	31	26	44	12	36				_		_			
ARTH ARTH	CRCU CRCU	Cumacea	Leuconidae Leuconidae	Eudorella truncatula	6	6 16	19	2 30							7		5 3	1	2	1 2
ARTH	CRCU	Cumacea Cumacea	Leuconidae	Leucon sp. Leuconidae indet.	0	16	19	30									3		3	2
ARTH	CRCU	Cumacea	Nannastacidae	Campylaspis rubicunda																
ARTH	CRCU	Cumacea		Cumacea indet.		2	2													
ARTH	CRDE	Decapoda	Thoridae	Lebbeus polaris																
ARTH	CRDE	Decapoda	Crangonidae	Sabinea septemcarinata																
ARTH	CRDE	Decapoda	Crangonidae	Sabinea sp.							1									
ARTH	CRDE	Decapoda	Crangonidae	Sclerocrangon boreas																
ARTH ARTH	CRDE CRIS	Decapoda Isopoda	Gnathiidae	Caridea indet. Gnathiidae indet.		2	2								1				5	
ARTH	CRIS	Isopoda	Munnopsidae	Eurycope sp.		2	2								-				3	
ARTH	CRIS	Isopoda	Paramunnidae	Pleurogonium spinosissimum												1				
ARTH	CRMY	Mysida		Mysidacea indet.					2	1										
ARTH	CRMY	Mysida	Mysidae	Mysis sp.			5	2				1	1	7						
ARTH	CROS	Myodocopida	Philomedidae	Philomedes sp.	176	90	43	94	4						88	33	75	95	110	76
ARTH	CRTA	Tanaidacea	Sphyrapodidae	Pseudosphyrapus anomalus	10		-		6						41	28	52	37		4
ARTH ARTH	CRTA CRTA	Tanaidacea Tanaidacea	Akanthophoreidae Pseudotanaidae	Akanthophoreus sp. Pseudotanais sp.	10 4		5 2	6 4	б						1	1	1 1			1 1
ARTH	CRTA	Tanaidacea	Typhlotanaidae	Typhlotanais sp.	7	4	2	7							3	1	1			-
ARTH	CRTA	Tanaidacea	,,,	Tanaidacea indet.												3		7	6	
ARTH	INCO	Coleoptera	Curculionidae	Curculionidae indet.																
ARTH	INDI	Diptera	Chironomidae	Orthocladiinae indet.					2											
ARTH	INDI	Diptera	Chironomidae	Chironomidae indet.									1							
ECHI	ECEC	Camarodonta	Strongylocentrotidae	Strongylocentrotus droebachiensis																
ECHI ECHI	ECEC ECHO	Camarodonta Apodida	Strongylocentrotidae Myriotrochidae	Strongylocentrotus sp. Myriotrochus rinkii			2		2		۰	3								
ECHI	ECHO	Dendrochirotida	Psolidae	Psolus phantapus			2		2		0	3								
ECHI	ECHO	Molpadida		Molpadida indet.					_						1					
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiocten affinis	1													4		2
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura sarsii													1			
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura robusta											1					2
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiuridae indet.		2	2											3		2
MISC MISC	BRYO BRYO	Cheilostomatida Cheilostomatida	Candidae Calloporidae	Scrupocellaria sp. Calloporidae indet.																
MISC	BRYO	Cheilostomatida	Myriaporidae	Leieschara sp.																
MISC	BRYO	Ctenostomatida	Alcyonidiidae	Alcyonidium sp.											3		1			
MISC	BRYO	Ctenostomatida	Triticellidae	Triticella sp.																
MISC	BRYO	Ctenostomatida		Ctenostomata indet.																
MISC	BRYO	Cyclostomatida	Crisiidae	Crisia sp.																
MISC MISC	BRYO BRYO	Cyclostomatida		Cyclostomatida indet. Bryozoa indet.																
MISC	CNHY	Anthoathecata	Bougainvilliidae	Bougainvilliidae indet.							2	1		2						
MISC	CNHY	Anthoathecata	8	Anthoathecata indet.					2		_	_		_						
MISC	CNHY	Limnomedusae	Olindiidae	Monobrachium parasitum		9		6	18	4	20					1		5	2	2
MISC	CNHY			Hydrozoa indet.					2	1	7									
MISC	HEMI			Hemichordata indet.	_					_	_					_		_	_	
MISC MISC	NTEA NTEA	Archinemertea Heteronemertea	Cephalothricidae Lineidae	Cephalothrix sp. Cerebratulus sp.	2			2	2	3	5 5				1	3 2		4 11	3 2	1
MISC	NTEA	Heteronemertea	Lineidae	Lineidae indet.	2			2	2	2	5				1	2		11	2	1
MISC	NTEA	Palaeonemertea	Carinomidae	Carinoma sp.								1								
MISC	NTEA			Anopla indet.																
MISC	NTEA			Enopla indet.	1	4	8	1	3	1	5	4	2		3	1		1	2	4
MISC	NTEA		Tubulanidae	Tubulanus sp.																
MISC	NTEA	Caamaanifamaa	Cattidae	Nemertea indet.																
MISC MISC	PIXX PIXX	Scorpaeniformes	Cottidae	Cottidae indet. Pisces indet.																
MISC	PLTY			Platyhelminthes indet.																
MISC	PORI			Calcarea indet.																
MISC	PRIA		Priapulidae	Priapulus caudatus					4											
MISC	PRIA		Priapulidae	Priapulus sp.							7									
MISC	SIPN	Golfingiida	Golfingiidae	Golfingia sp.														1	2	
MISC	URAS	Aplousobranchia	Assidiidas	Aplousobranchia indet.																
MISC MISC	URAS URAS	Phlebobranchia Stolidobranchia	Ascidiidae Molgulidae	Ascidia sp. Molgula sp.					2											
MISC	URAS	Stolidobranchia	Pyuridae	Boltenia echinata					2											
MAICC		6. 1. 1	Charaltelese	Dalaman Characa																



_	ca Sample # Sample #				mb18-108-047 BW-2	mb18-108-048 BW-3	mb18-108-049 BW-3	mb18-108-050 BW-3	mb18-108-051 BW-4	mb18-108-052 BW-4	mb18-108-053 BW-4	mb18-108-054 BW-5	mb18-108-055 BW-5	mb18-108-056 BW-5	mb18-108-057 SN-1	mb18-108-058 SN-1	mb18-108-059 SN-1	mb18-108-060 SN-2	mb18-108-061 SN-2	mb18-108-062 SN-2
Replic Data S					3019.09.13	1	2019 09 14	3019.09.14	2019 09 19	2019 09 19	3019.09.19	2019 09 19	2019 09 19	3019.09.19	2019 09 10	2019 09 10	3018.08.10	2018 08 10	2019 09 10	3019.09.10
taxcoc	ampled e grpcode	e Order	Family	TaxonName	2018-08-13 Total Abundance	2018-08-14 Total Abundance	2018-08-14 Total Abundance	2018-08-14 Total Abundance	2018-08-18 Total Abundance	2018-08-18 Total Abundance	2018-08-18 Total Abundance	2018-08-18 Total Abundance	2018-08-18 Total Abundance		2018-08-19 Total Abundance	2018-08-19 Total Abundance	2018-08-19 Total Abundance	2018-08-19 Total Abundance	2018-08-19 Total Abundance	2018-08-19 Total Abundance
MISC	URAS	Stolidobranchia	Styelidae	Styelidae indet.																
MOLL	MOAP	Chaetodermatida	Chaetodermatidae	Chaetoderma sp.													1	1		
MOLL	MOAP	A demandants	Dr. A. Brah.	Aplacophora indet.	45		4	4		4	-			4	2					
MOLL MOLL	MOBI MOBI	Adapedonta Anomalodesmata	Hiatellidae Cuspidariidae	Hiatella arctica Cuspidaria sp.	15		1	1		1	5			1	2			1		2
MOLL	MOBI	Anomalodesmata	Lyonsiidae	Lyonsia arenosa														4		2
MOLL	MOBI	Anomalodesmata	Thraciidae	, Thracia myopsis														1		
MOLL	MOBI	Anomalodesmata	Thraciidae	Thracia sp.											1	1				
MOLL	MOBI	Arcida	Arcidae	Bathyarca glacialis						_	_					2	_			
MOLL MOLL	MOBI MOBI	Carditoida Carditoida	Astartidae Astartidae	Astarte borealis Astarte montagui	19 20	15 21	22 25	13 36		1	2 17				15	9	1 15	4		1
MOLL	MOBI	Carditoida	Astartidae	Astarte montagui	22	12	10	10		2	5				4	1	1	4		2
MOLL	MOBI	Lucinida	Thyasiridae	Axinopsida sp.					8	3	14	10					3	1		
MOLL	MOBI	Lucinida	Thyasiridae	Thyasira sp.	10	6	2								4	2	3	3	8	5
MOLL	MOBI	Lucinida	Thyasiridae	Thyasiridae indet.	10	6	10	18		3	_	17			4	3	3	1	11	8
MOLL MOLL	MOBI MOBI	Myida Myida	Myidae Myidae	Mya truncata	2	8	4	2	2	1	2				1	1				
MOLL	MOBI	Mytilida	Mytilidae	Mya truncata Dacrydium vitreum			4	3	2	2	1				1					
MOLL	MOBI	Mytilida	Mytilidae	Crenella faba																
MOLL	MOBI	Mytiloida	Mytilidae	Musculus discors	2															
MOLL	MOBI	Mytiloida	Mytilidae	Mytilidae indet.														1		
MOLL	MOBI MOBI	Nuculanida	Nuculanidae	Nuculana minuta	22	2	2	2		2	18					1		1		
MOLL MOLL	MOBI	Nuculanida Nuculanida	Nuculanidae Nuculanidae	Nuculana pernula Nuculana sp.		2					12				7	1	1	5	3	
MOLL	MOBI	Nuculanida	Nacaiamaac	Nuculanoidea indet.		_		2			7				,	2	3	1	J	
MOLL	MOBI	Nuculanoida	Yoldiidae	Portlandia intermedia							1									
MOLL	MOBI	Nuculanoida	Yoldiidae	Yoldiella frigida											1			1		
MOLL	MOBI	Nuculanoida	Yoldiidae	Yoldiella lenticula	_					_					_	_		_	_	
MOLL MOLL	MOBI MOBI	Nuculanoida Nuculida	Yoldiidae Nuculidae	Yoldiidae indet. Ennucula tenuis	2	7	2 12	14	4	1	2	1			/ 27	2 18	20	3 28	3 60	11 27
MOLL	MOBI	Pectinida	Pectinidae	Chlamys islandica	2	,	12	14	4		2	1			21	10	20	20	00	21
MOLL	MOBI	Pectinida	Propeamussiidae	Similipecten greenlandicus		2		2							10	1	7	1	3	
MOLL	MOBI	Pectinoida	Pectinidae	Pectinidae indet.																
MOLL	MOBI	Pectinoida	Propeamussiidae	Propeamussiidae indet.													3	4		
MOLL	MOBI MOBI	Veneroida	Cardiidae	Ciliatocardium ciliatum	2	5	2 5	2	6	1	13	1	1	2						
MOLL MOLL	MOBI	Veneroida Veneroida	Cardiidae Tellinidae	Serripes groenlandicus Macoma balthica	0	2	5	2	14	2	15	3	1	2						
MOLL	MOBI	Veneroida	Tellinidae	Macoma calcarea	4	11	8		13	6	31				4	2	3	7	4	4
MOLL	MOBI	Veneroida	Tellinidae	Macoma moesta	5	1		2										3	3	
MOLL	MOBI	Veneroida	Tellinidae	Macoma sp.	22	18	17	18	12	6	17	10		1		2	1		8	7
MOLL	MOBI		Periplomatidae	Periploma aleuticum		2		-	2	4	-	-				2		0	1	1
MOLL MOLL	MOBI MOGA	Cephalaspidea	Cylichnidae	Bivalvia indet. Cylichna alba	b 2	2		ь	2	1	5	5			8	2		9	3	2
MOLL	MOGA	Cephalaspidea	Cylichnidae	Cylichna sp.	2											1			2	1
MOLL	MOGA		Cylichnidae	Cylichnidae indet.											1			4		
MOLL	MOGA		Cylichnidae	Cylichnoides occultus			2													
MOLL	MOGA			Cephalaspidea indet.	4	6	5	8	_	1	10				1			1		
MOLL MOLL	MOGA MOGA		Capulidae Naticidae	Ariadnaria borealis Cryptonatica affinis				1	4								1			
MOLL	MOGA	•	Naticidae	Euspira pallida	1			1									1			
MOLL	MOGA	•	Naticidae	Naticidae indet.													1			
MOLL	MOGA	•	Rissoidae	Boreocingula castanea		2	5													
MOLL	MOGA	•	Velutinidae	Velutinidae indet.																
MOLL	MOGA MOGA	•	Rissoidae	Rissoidae indet. Buccinidae indet.	4	6	10	2			1									
MOLL MOLL	MOGA		Buccinidae Buccinidae	Buccinum hydrophanum							1									
MOLL	MOGA		Buccinidae	Colus sp.																
MOLL	MOGA		Columbellidae	Columbellidae indet.																
MOLL	MOGA		Cancellariidae	Admete viridula																
MOLL	MOGA		Mangeliidae	Mangeliidae indet.		_			2											
MOLL	MOGA MOGA		Mangeliidae	Oenopota sp.		1			1											
MOLL MOLL	MOGA		Colloniidae Margaritidae	Moelleria costulata Margarites groenlandicus																
MOLL	MOGA		Margaritidae	Margarites helicinus																
MOLL	MOGA		Margaritidae	Margarites olivaceus																
MOLL	MOGA	Trochida	Margaritidae	Margarites sp.																1
MOLL	MOGA		Buccinidae	Volutopsius norwegicus											=		1			-
MOLL MOLL	MOGA MOGA		Lepetidae Lottiidae	Lepeta caeca Lottiidae indet.											3		5			5
IVIULL	NOON		Lottinade	Lottildae maet.																



Biologica Sa	ample #			mb18-108-047	mb18-108-048	mb18-108-049	mb18-108-050	mb18-108-051	mb18-108-052	mb18-108-053	mb18-108-054	mb18-108-055	mb18-108-056	mb18-108-057	mb18-108-058	mb18-108-059	mb18-108-060	mb18-108-061	mb18-108-062
Client Samp	ple#			BW-2	BW-3	BW-3	BW-3	BW-4	BW-4	BW-4	BW-5	BW-5	BW-5	SN-1	SN-1	SN-1	SN-2	SN-2	SN-2
Replicate				3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Date Sampl	led			2018-08-13	2018-08-14	2018-08-14	2018-08-14	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-18	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcode	grpcode Order	Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
MOLL	MOGA	Lottiidae	Testudinalia testudinalis																
MOLL	MOGA	Trochidae	Trochidae indet.	4										1					
MOLL	MOGA		Gastropoda indet.																
MOLL	MOPO Chitonida	Tonicellidae	Tonicella marmorea																
MOLL	MOSC Gadilida	Gadilidae	Gadilidae indet.																
			Total Abundance	1,258	1,037	1,023	1,028	814	382	920	488	390	174	574	332	559	548	620	479
			Total Unique Taxa (Species Richness)	69	62	61	66	53	43	49	45	29	22	57	47	62	60	54	55
			No. composite grabs	3	3	3	3	4	3	4	4	3	4	3	3	3	3	3	3
			Total Density (Organisms/m²)	18637	15363	15159	15230	9044	5659	10220	5422	5778	1933	8509	4919	8286	8119	9178	7090
Incidental C	Organisms:																		
MEMO	MEMO		Calanoida indet. (planktonic)																
MEMO	MEMO		Chatognatha indet. (planktonic)																
MEMO	MEMO		Copepoda indet. (parasitic)																
MEMO	MEMO		Desmosoma sp. (planktonic)														1	2	1
MEMO	MEMO		Egg/egg mass	8	20	2	24		4	17	4	9		13		19	16		11
MEMO	MEMO		Hyperiidae indet. (planktonic)																
MEMO	MEMO		Insecta indet. (terrestrial)																
MEMO	MEMO		Nematoda indet.	54	240	209	296	8	3	12	5	2	2	21	3		49	78	38
MEMO	MEMO		Hyperiidae indet. (planktonic)																



Biologica Client San Replicate	nple#				mb18-108-063 SN-3 1	mb18-108-064 SN-3 2	mb18-108-065 SN-3 3	mb18-108-066 SN-4 1	mb18-108-067 SN-4 2	mb18-108-068 SN-4 3	mb18-108-069 SN-5 1	mb18-108-070 SN-5 2	mb18-108-071 SN-5 3
Date Sam					2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcode	grpcode	Order	Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ANNE	ANHI	Rhynchobdellida	Piscicolidae	Hirudinea indet.									
ANNE	ANOL	Enchytraeida	Enchytraeidae	Enchytraeidae indet.									
ANNE ANNE	EURA POER	Echiuroidea Eunicida	Echiuridae Dorvilleidae	Echiurus echiurus Dorvilleidae indet.									
ANNE	POER	Eunicida	Dorvilleidae	Parougia caeca	1			1		1			
ANNE	POER	Eunicida	Lumbrineridae	Lumbrineridae indet.	9			-		-	6		13
ANNE	POER	Eunicida	Lumbrineridae	Lumbrineris sp.	1		1			2			1
ANNE	POER	Eunicida	Lumbrineridae	Scoletoma fragilis	32	26	31	39	34	18	20	80	35
ANNE	POER	Eunicida	Lumbrineridae	Scoletoma impatiens									
ANNE	POER	Eunicida	Lumbrineridae	Scoletoma sp.			16	12					
ANNE	POER	Eunicida	Onuphidae	Nothria conchylega	8	6	6	11			2	4	5
ANNE ANNE	POER POER	Phyllodocida Phyllodocida	Glyceridae Glyceridae	Glycera capitata Glycera sp.				1	2	1			
ANNE	POER	Phyllodocida	Hesionidae	Microphthalmus sp.				1		1			
ANNE	POER	Phyllodocida	Hesionidae	Gyptis sp.									
ANNE	POER	Phyllodocida	Hesionidae	Nereimyra punctata									
ANNE	POER	Phyllodocida	Nephtyidae	Aglaophamus sp.								1	1
ANNE	POER	Phyllodocida	Nephtyidae	Bipalponephtys cornuta	21	6	6	12	4	17		6	19
ANNE	POER	Phyllodocida	Nephtyidae	Nephtys bucera									
ANNE	POER	Phyllodocida	Nephtyidae	Nephtys ciliata	2	1	1		1				
ANNE	POER	Phyllodocida	Nephtyidae	Nephtys sp.						1			
ANNE	POER POER	Phyllodocida Phyllodocida	Nereididae Nereididae	Nereis zonata Nereididae indet.									
ANNE ANNE	POER	Phyllodocida	Pholoidae	Pholoe minuta			1			1			
ANNE	POER	Phyllodocida	Pholoidae	Pholoe sp.			-	1		2			
ANNE	POER	Phyllodocida	Pholoidae	Pholoe tecta	21	23	18	12			13	24	38
ANNE	POER	Phyllodocida	Phyllodocidae	Eteone barbata									
ANNE	POER	Phyllodocida	Phyllodocidae	Eteone longa complex	1		4	2		1			3
ANNE	POER	Phyllodocida	Phyllodocidae	Eteone sp.	5	3	2	1	2	1		1	1
ANNE	POER	Phyllodocida	Phyllodocidae	Eulalia sp.									
ANNE	POER	Phyllodocida	Phyllodocidae	Phyllodoce groenlandica									
ANNE ANNE	POER POER	Phyllodocida Phyllodocida	Phyllodocidae Phyllodocidae	Phyllodoce sp. Eteone flava									
ANNE	POER	Phyllodocida	Phyllodocidae	Hypereteone sp.									
ANNE	POER	Phyllodocida	Polynoidae	Gattyana cirrhosa									
ANNE	POER	Phyllodocida	Polynoidae	Harmothoe extenuata									
ANNE	POER	Phyllodocida	Polynoidae	Harmothoe imbricata									
ANNE	POER	Phyllodocida	Polynoidae	Harmothoe sp.									1
ANNE	POER	Phyllodocida	Polynoidae	Melaenis loveni									
ANNE	POER	Phyllodocida	Polynoidae	Bylgides sarsi			•	_					
ANNE	POER	Phyllodocida	Polynoidae	Bylgides sp.	2		2	1		2			
ANNE ANNE	POER POER	Phyllodocida Phyllodocida	Polynoidae Polynoidae	Hartmania moorei Polynoidae indet.	2			1	1	2			1
ANNE	POER	Phyllodocida	Sphaerodoridae	Sphaerodoropsis minuta	1	2		1	1	1			1
ANNE	POER	Phyllodocida	Sphaerodoridae	Sphaerodoropsis sp.	-	-							1
ANNE	POER	Phyllodocida	Syllidae	Syllides longocirratus	1		1	1	1				
ANNE	POER	Phyllodocida	Syllidae	Syllides sp.									
ANNE	POER	Phyllodocida	Syllidae	Eusyllinae indet.									
ANNE	POER	Phyllodocida	Syllidae	Eusyllis sp.									
ANNE	POER	Phyllodocida	Syllidae	Pionosyllis sp.			_					1	
ANNE	POER	Phyllodocida Phyllodocida	Syllidae	Exogone verugera			2			2			4
ANNE ANNE	POER POSE	Phyllodocida Sabellida	Syllidae Fabriciidae	Parexogone hebes Pseudofabricia sp. nr. aberrans	4	1	1 10	1	2	2			1
ANNE	POSE	Sabellida	Oweniidae	Galathowenia oculata	9	24	13	4			6	8	6
ANNE	POSE	Sabellida	Oweniidae	Myriochele heeri	2	6	4	4		5		2	3
ANNE	POSE	Sabellida	Oweniidae	Owenia fusiformis	5	10	4	1				1	6
ANNE	POSE	Sabellida	Oweniidae	Oweniidae indet.									
ANNE	POSE	Sabellida	Sabellidae	Euchone incolor				1				1	1
ANNE	POSE	Sabellida	Sabellidae	Euchone sp.			1			1			
ANNE	POSE	Sabellida	Sabellidae	Bispira sp.									
ANNE	POSE	Sabellida	Sabellidae	Chone duneri					<u>.</u>	٠			
ANNE	POSE POSE	Sabellida Sabellida	Sabellidae Sabellidae	Dialychone sp. 1					1	1	1	4	1
ANNE ANNE	POSE	Sabellida	Sabellidae	Dialychone sp. 1 Euchone rubrocincta		1	1						1
ANNE	POSE	Sabellida	Sabellidae	Sabellidae indet.	4	1	1	1					
ANNE	POSE	Sabellida	Sabellidae	Sabellidae sp. 2	-		-	-					
ANNE	POSE	Sabellida	Sabellidae	Sabellidae sp. 3			1						
ANNE	POSE	Sabellida	Sabellidae	Sabellidae sp. 4									
ANNE	POSE	Sabellida	Serpulidae	Pileolaria sp.									



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Date Sam					2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcode	grpcode		Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ANNE	POSE	Sabellida	Serpulidae	Spirorbinae indet.						1			
ANNE ANNE	POSE POSE	Spionida Spionida	Apistobranchidae Spionidae	Apistobranchus sp. Dipolydora caulleryi						1			
ANNE	POSE	Spionida	Spionidae	Dipolydora concharum									
ANNE	POSE	Spionida	Spionidae	Dipolydora quadrilobata									
ANNE	POSE	Spionida	Spionidae	Dipolydora socialis									
ANNE	POSE	Spionida	Spionidae	Dipolydora sp.									
ANNE	POSE	Spionida	Spionidae	Laonice cirrata				2	1			1	1
ANNE	POSE	Spionida	Spionidae	Marenzelleria sp.									
ANNE	POSE	Spionida	Spionidae	Polydora sp. complex	-								
ANNE	POSE POSE	Spionida	Spionidae Spionidae	Prionospio (Prionospio) sp.	5 14	11	24	15	4	8	3	4	13
ANNE ANNE	POSE	Spionida Spionida	Spionidae	Prionospio (Prionospio) steenstrupi Prionospio cirrifera	14	11	24	15		8	3		13
ANNE	POSE	Spionida	Spionidae	Prionospio sp.									
ANNE	POSE	Spionida	Spionidae	Pygospio sp.	1								
ANNE	POSE	Spionida	Spionidae	Scolelepis sp.									
ANNE	POSE	Spionida	Spionidae	Spio filicornis									
ANNE	POSE	Spionida	Spionidae	Spio sp.									
ANNE	POSE	Spionida	Spionidae	Spionidae indet.									
ANNE	POSE	Terebellida	Ampharetidae	Ampharete sp.					_	1			_
ANNE	POSE	Terebellida	Ampharetidae	Lysippe labiata	4	2	2	2	1	2	2	3 1	1 7
ANNE ANNE	POSE POSE	Terebellida Terebellida	Ampharetidae Ampharetidae	Melinna elisabethae Melinna sp.	1	2	3	2		3	2	1	/
ANNE	POSE	Terebellida	Ampharetidae	Ampharete vega		1							
ANNE	POSE	Terebellida	Ampharetidae	Ampharetidae indet.				1					
ANNE	POSE	Terebellida	Ampharetidae	Amphicteis sundevalli									
ANNE	POSE	Terebellida	Cirratulidae	Aphelochaeta sp.					2		2	3	3
ANNE	POSE	Terebellida	Cirratulidae	Chaetozone bathyala	2	1	2	4	2	3	5	12	7
ANNE	POSE	Terebellida	Cirratulidae	Chaetozone careyi									
ANNE	POSE	Terebellida	Cirratulidae	Chaetozone pigmentata	8	7	8	3	5		2	2	4
ANNE	POSE	Terebellida	Cirratulidae	Chaetozone setosa complex	3	2		1	40			1	•
ANNE	POSE	Terebellida	Cirratulidae	Chaetozone sp.	33		18	13 5		8	4	17	9
ANNE ANNE	POSE POSE	Terebellida Terebellida	Cirratulidae Cirratulidae	Cirratulidae indet. Kirkegaardia sp.	3	1	2	5	5				12
ANNE	POSE	Terebellida	Cirratulidae	Tharyx sp.	11	5	5	5	2	9	4	8	2
ANNE	POSE	Terebellida	Flabelligeridae	Diplocirrus hirsutus	1	3	1	J	-	,	•	· ·	-
ANNE	POSE	Terebellida	Pectinariidae	Cistenides granulata	1					1			
ANNE	POSE	Terebellida	Terebellidae	Polycirrus sp. complex	1		4	4		2	7	7	2
ANNE	POSE	Terebellida	Terebellidae	Lanassa venusta venusta						3			1
ANNE	POSE	Terebellida	Terebellidae	Laphania boecki						1			
ANNE	POSE	Terebellida	Terebellidae	Leaena abranchiata									
ANNE	POSE	Terebellida	Terebellidae	Pista maculata			_						
ANNE	POSE POSE	Terebellida	Terebellidae	Proclea graffi			1						
ANNE ANNE	POSE	Terebellida Terebellida	Terebellidae Terebellidae	Proclea sp. Amaeana sp.						1			
ANNE	POSE	Terebellida	Terebellidae	Neoamphitrite affinis						1			
ANNE	POSE	Terebellida	Terebellidae	Terebellidae indet.						1			
ANNE	POSE	Terebellida	Trichobranchidae	Terebellides sp.	1		2	1		_			
ANNE	POSE	Terebellida	Trichobranchidae	Trichobranchus glacialis									
ANNE	POSE		Capitellidae	Capitella capitata complex				1					
ANNE	POSE		Capitellidae	Mediomastus sp.	1		2	2	1	4	4	3	3
ANNE	POSE		Capitellidae	Notomastus latericeus		2					1	1	1
ANNE	POSE		Cossuridae	Cossura sp.	5	2	5	2		1	2	2	14
ANNE	POSE POSE		Maldanidae Maldanidae	Clymenura sp.		1	4 2			1			
ANNE ANNE	POSE		Maldanidae	Euclymene sp. Euclymeninae indet.		1							1
ANNE	POSE		Maldanidae	Microclymene sp.		-	_	-					-
ANNE	POSE		Maldanidae	Praxillella gracilis			2					1	1
ANNE	POSE		Maldanidae	Praxillella praetermissa	2					2			1
ANNE	POSE		Maldanidae	Maldane sarsi	17	13	20	14	7	8	6	11	5
ANNE	POSE		Maldanidae	Nicomache sp.									
ANNE	POSE		Maldanidae	Rhodine loveni									
ANNE	POSE		Maldanidae	Maldanidae indet.	1	1			1				
ANNE	POSE		Opheliidae	Ophelina acuminata			1	a			4		
ANNE ANNE	POSE POSE		Opheliidae Opheliidae	Ophelina cylindricaudata Ophelina sp.			1	1		1	1		
ANNE	POSE		Orbiniidae Orbiniidae	Upneiina sp. Leitoscoloplos sp.									
ANNE	POSE		Orbiniidae	Orbiniidae indet.									
ANNE	POSE		Orbiniidae	Scoloplos acutus	3		1	4	6	4	2	3	6
				•									



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Date Sam					2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcode	grpcode	Order	Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ANNE	POSE		Orbiniidae	Scoloplos armiger									
ANNE ANNE	POSE POSE		Orbiniidae Paraonidae	Scoloplos sp.	1	1							
ANNE	POSE		Paraonidae	Aricidea catherinae Aricidea hartmanae	1	2	4	2	3	2	1	3	1
ANNE	POSE		Paraonidae	Aricidea minuta	1	2	7	2	3	2	•	3	-
ANNE	POSE		Paraonidae	Aricidea nolani	1	1	1	3		3	2		2
ANNE	POSE		Paraonidae	Aricidea sp.									
ANNE	POSE		Paraonidae	Paraonidae indet.			1		2			3	
ANNE	POSE		Sabellidae	Branchiomma sp.									
ANNE	POSE		Scalibregmatidae	Polyphysia crassa	_		_	1		1	1		
ANNE	POSE		Scalibregmatidae	Scalibregma inflatum	3		4			2	1		1
ANNE ARTH	POXX CHAR	Acarina	Protodrilidae Halacaridae	Protodrilus sp. Halacaridae indet.									
ARTH	CHPY	Pantopoda	Nymphonidae	Nymphon sp.									
ARTH	CRAM	Amphipoda	Phoxocephalidae	Harpinia serrata									
ARTH	CRAM	Amphipoda	Phoxocephalidae	Harpinia sp.		2	1						
ARTH	CRAM	Amphipoda	Ampeliscidae	Ampeliscidae indet.									
ARTH	CRAM	Amphipoda	Ampeliscidae	Byblis sp.		1	2			2			
ARTH	CRAM	Amphipoda	Amphilochidae	Amphilochus sp.									
ARTH	CRAM	Amphipoda	Calliopiidae	Calliopiidae indet.									
ARTH	CRAM	Amphipoda	Podoceridae	Dyopedos sp.									
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Corophiidae Corophiidae	Corophiidae indet. Monocorophium sp.									
ARTH	CRAM	Amphipoda	Dexaminidae	Dexaminidae indet.									
ARTH	CRAM	Amphipoda	Gammaridae	Gammarus sp.									
ARTH	CRAM	Amphipoda	Opisidae	Opisa sp.									
ARTH	CRAM	Amphipoda	Tryphosidae	Gronella groenlandica									
ARTH	CRAM	Amphipoda	Tryphosidae	Hippomedon sp.						3			
ARTH	CRAM	Amphipoda	Tryphosidae	Orchomene sp.									
ARTH	CRAM	Amphipoda	Tryphosidae	Orchomenella minuta									
ARTH	CRAM	Amphipoda	Tryphosidae	Orchomenella pinguis									
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Tryphosidae Uristidae	Tryphosidae indet. Anonyx sarsi									
ARTH	CRAM	Amphipoda	Uristidae	Anonyx sp.									
ARTH	CRAM	Amphipoda	Uristidae	Onisimus barentsi group									
ARTH	CRAM	Amphipoda	Uristidae	Onisimus brevicaudatus									
ARTH	CRAM	Amphipoda	Uristidae	Onisimus sp.	1		1	1		1			
ARTH	CRAM	Amphipoda		Lysianassoidea indet.									
ARTH	CRAM	Amphipoda	Oedicerotidae	Arrhis sp.									
ARTH	CRAM	Amphipoda	Oedicerotidae	Monoculopsis sp.									
ARTH	CRAM	Amphipoda	Pontoporeiidae	Pontoporeia femorata									
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Ampeliscidae Ampeliscidae	Ampelisca eschrichtii Haploops tubicola								1	
ARTH	CRAM	Amphipoda	Atylidae	Atylus carinatus						1		•	
ARTH	CRAM	Amphipoda	Corophiidae	Crassicorophium bonellii						1			
ARTH	CRAM	Amphipoda	Dexaminidae	Guernea nordenskioldi					2	1	5	2	4
ARTH	CRAM	Amphipoda	Eusiridae	Rhachotropis helleri									
ARTH	CRAM	Amphipoda	Oedicerotidae	Aceroides sp.	1	1	1		2		1		6
ARTH	CRAM	Amphipoda	Oedicerotidae	Monoculodes sp.					2				
ARTH	CRAM	Amphipoda	Oedicerotidae	Oedicerotidae indet.		1		1		1			
ARTH	CRAM	Amphipoda	Oedicerotidae	Paroediceros lynceus						1			1
ARTH ARTH	CRAM CRAM	Amphipoda Amphipoda	Oedicerotidae Oedicerotidae	Rostroculodes sp. Westwoodilla sp.	1	1	1						
ARTH	CRAM	Amphipoda	Pontoporeiidae	Monoporeia affinis	1	1	1						
ARTH	CRAM	Amphipoda	Stenothoidae	Stenothoidae indet.									
ARTH	CRAM	Amphipoda		Amphipoda indet.				1		1			
ARTH	CRCI	Sessilia		Balanomorpha indet.									
ARTH	CRCO	Cyclopoida		Cyclopoida indet.	2	4	14	4	5	3	9	4	14
ARTH	CRCO	Harpacticoida		Harpacticoida indet.			4						1
ARTH	CRCU	Cumacea	Diastylidae	Brachydiastylis resima									2
ARTH	CRCU	Cumacea	Diastylidae	Diastylidae indet.									
ARTH ARTH	CRCU CRCU	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis bradyi Diastylis goodsiri	1	1							
ARTH	CRCU	Cumacea	Diastylidae	Diastylis goodsiri Diastylis lucifera	1	1							1
ARTH	CRCU	Cumacea	Diastylidae	Diastylis rathkei		1							1
	CRCU	Cumacea	Diastylidae	Diastylis scorpioides		2	1	1					3
ARTH	CNCO		The second secon	•									
	CRCU	Cumacea	Diastylidae	Diastylis sp.	1		1				1		
ARTH		Cumacea Cumacea	Diastylidae Diastylidae	Diastylis sp. Diastylis spinulosa	1		1		1		1 1		



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Date Sam					2018-08-19		2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcode	grpcode	Order	Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
ARTH	CRCU	Cumacea	Lampropidae	Lampropidae indet.									
ARTH	CRCU	Cumacea	Lampropidae	Lamprops fuscatus									
ARTH	CRCU	Cumacea	Leuconidae	Eudorella truncatula	1	1	•		3				5
ARTH ARTH	CRCU CRCU	Cumacea	Leuconidae Leuconidae	Leucon sp. Leuconidae indet.		5	3	2	2			3	3
ARTH	CRCU	Cumacea Cumacea	Nannastacidae	Campylaspis rubicunda									
ARTH	CRCU	Cumacea	Namiastacidae	Cumacea indet.									
ARTH	CRDE	Decapoda	Thoridae	Lebbeus polaris									
ARTH	CRDE	Decapoda	Crangonidae	Sabinea septemcarinata									
ARTH	CRDE	Decapoda	Crangonidae	Sabinea sp.									
ARTH	CRDE	Decapoda	Crangonidae	Sclerocrangon boreas									
ARTH	CRDE	Decapoda		Caridea indet.									
ARTH	CRIS	Isopoda	Gnathiidae	Gnathiidae indet.	1		2		2	2	1		
ARTH	CRIS	Isopoda	Munnopsidae	Eurycope sp.									
ARTH	CRIS	Isopoda	Paramunnidae	Pleurogonium spinosissimum									
ARTH ARTH	CRMY CRMY	Mysida Mysida	Mysidae	Mysidacea indet.									
ARTH	CROS	Myodocopida	Philomedidae	Mysis sp. Philomedes sp.	48	58	39	23	16	7	4	8	58
ARTH	CRTA	Tanaidacea	Sphyrapodidae	Pseudosphyrapus anomalus	40	38	39	23	10	,	4	8	36
ARTH	CRTA	Tanaidacea	Akanthophoreidae	Akanthophoreus sp.				6				2	2
ARTH	CRTA	Tanaidacea	Pseudotanaidae	Pseudotanais sp.			1	· ·	1		1	1	4
ARTH	CRTA	Tanaidacea	Typhlotanaidae	Typhlotanais sp.			-		-		-	-	•
ARTH	CRTA	Tanaidacea	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Tanaidacea indet.	1		2		1		2	3	7
ARTH	INCO	Coleoptera	Curculionidae	Curculionidae indet.									
ARTH	INDI	Diptera	Chironomidae	Orthocladiinae indet.									
ARTH	INDI	Diptera	Chironomidae	Chironomidae indet.									
ECHI	ECEC	Camarodonta	Strongylocentrotidae	Strongylocentrotus droebachiensis									
ECHI	ECEC	Camarodonta	Strongylocentrotidae	Strongylocentrotus sp.									
ECHI	ECHO	Apodida	Myriotrochidae	Myriotrochus rinkii			2		1	8	2		
ECHI	ECHO	Dendrochirotida	Psolidae	Psolus phantapus									
ECHI	ECHO	Molpadida		Molpadida indet.			2						
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiocten affinis	1	4	1	2	2	2	5	11	3
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura sarsii	4	1							
ECHI	ECOP	Ophiurida	Ophiuridae	Ophiura robusta			2		2	2		4	3
ECHI MISC	ECOP BRYO	Ophiurida Cheilostomatida	Ophiuridae Candidae	Ophiuridae indet. Scrupocellaria sp.			2		2	3 1	6	1	3
MISC	BRYO	Cheilostomatida	Calloporidae	Calloporidae indet.			1	1		1			
MISC	BRYO	Cheilostomatida	Myriaporidae	Leieschara sp.			1	1		1			
MISC	BRYO	Ctenostomatida	Alcyonidiidae	Alcyonidium sp.						-			
MISC	BRYO	Ctenostomatida	Triticellidae	Triticella sp.									
MISC	BRYO	Ctenostomatida		Ctenostomata indet.									
MISC	BRYO	Cyclostomatida	Crisiidae	Crisia sp.						1			
MISC	BRYO	Cyclostomatida		Cyclostomatida indet.		1							
MISC	BRYO			Bryozoa indet.			1				1		
MISC	CNHY	Anthoathecata	Bougainvilliidae	Bougainvilliidae indet.									
MISC	CNHY	Anthoathecata		Anthoathecata indet.									
MISC	CNHY	Limnomedusae	Olindiidae	Monobrachium parasitum	3	4	3	3		1	3	1	2
MISC	CNHY			Hydrozoa indet.									
MISC	HEMI			Hemichordata indet.						1			
MISC	NTEA	Archinemertea	Cephalothricidae	Cephalothrix sp.	1							1	
MISC	NTEA	Heteronemertea	Lineidae	Cerebratulus sp.	10	4	5	3	4	4	4		6
MISC	NTEA	Heteronemertea	Lineidae	Lineidae indet.				-					
MISC	NTEA	Palaeonemertea	Carinomidae	Carinoma sp.				1					
MISC	NTEA			Anopla indet. Enopla indet.		1	11		5		4	4	2
MISC MISC	NTEA NTEA		Tubulanidae	Enopia indet. Tubulanus sp.		1	11		5		1	4	3
MISC	NTEA		rupuialliude	Nemertea indet.									
MISC	PIXX	Scorpaeniformes	Cottidae	Cottidae indet.									
MISC	PIXX		,	Pisces indet.									
MISC	PLTY			Platyhelminthes indet.									
MISC	PORI			Calcarea indet.							1		
MISC	PRIA		Priapulidae	Priapulus caudatus							_		
MISC	PRIA		Priapulidae	Priapulus sp.		2							1
MISC	SIPN	Golfingiida	Golfingiidae	Golfingia sp.	3		1	1					
MISC	URAS	Aplousobranchia		Aplousobranchia indet.							2		
MISC	URAS	Phlebobranchia	Ascidiidae	Ascidia sp.									
MISC	URAS	Stolidobranchia	Molgulidae	Molgula sp.									
MISC	URAS	Stolidobranchia	Pyuridae	Boltenia echinata									
MISC	URAS	Stolidobranchia	Styelidae	Polycarpa fibrosa									



Biologica : Client San Replicate	nple#				mb18-108-063 SN-3 1	SN-3	mb18-108-065 SN-3 3	mb18-108-066 SN-4 1	mb18-108-067 SN-4 2	mb18-108-068 SN-4 3	mb18-108-069 SN-5 1	mb18-108-070 SN-5 2	mb18-108-071 SN-5 3
Date Sam	pled				2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19	2018-08-19
taxcode	grpcode		Family	TaxonName	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance
MISC	URAS	Stolidobranchia	Styelidae	Styelidae indet.			_			_		_	
MOLL MOLL	MOAP MOAP	Chaetodermatida	Chaetodermatidae	Chaetoderma sp.		3	1 2	6 1	2	1	4	5 1	1
MOLL	MOBI	Adapedonta	Hiatellidae	Aplacophora indet. Hiatella arctica	1	2	2	1	1	1		1	
MOLL	MOBI	Anomalodesmata	Cuspidariidae	Cuspidaria sp.	-	2	1		•				
MOLL	MOBI	Anomalodesmata	Lyonsiidae	Lyonsia arenosa			-						
MOLL	MOBI	Anomalodesmata	Thraciidae	, Thracia myopsis						1			
MOLL	MOBI	Anomalodesmata	Thraciidae	Thracia sp.			3		1		1		
MOLL	MOBI	Arcida	Arcidae	Bathyarca glacialis			1		1	2	2		
MOLL	MOBI	Carditoida	Astartidae	Astarte borealis									
MOLL	MOBI	Carditoida	Astartidae	Astarte montagui	•	2	5	1	6	1	2		2
MOLL	MOBI	Carditoida	Astartidae	Astarte sp.	2	3	2		4	1			2
MOLL MOLL	MOBI MOBI	Lucinida Lucinida	Thyasiridae Thyasiridae	Axinopsida sp. Thyasira sp.	8	8	1	3	4	4	6	8	3 3
MOLL	MOBI	Lucinida	Thyasiridae	Thyasiridae indet.	9	2	3	2		1	7	1	2
MOLL	MOBI	Myida	Myidae	Mya sp.	,	-	3	-	J	-	ŕ	-	-
MOLL	МОВІ	Myida	Myidae	Mya truncata									
MOLL	MOBI	Mytilida	Mytilidae	Dacrydium vitreum						1			
MOLL	MOBI	Mytilida	Mytilidae	Crenella faba									
MOLL	MOBI	Mytiloida	Mytilidae	Musculus discors									
MOLL	MOBI	Mytiloida	Mytilidae	Mytilidae indet.							1		
MOLL	MOBI	Nuculanida	Nuculanidae	Nuculana minuta						4	4	2	
MOLL MOLL	MOBI MOBI	Nuculanida Nuculanida	Nuculanidae Nuculanidae	Nuculana pernula Nuculana sp.	1	7		1	4	1 2	1	1	4
MOLL	MOBI	Nuculanida	Nucuiailiuae	Nuculanoidea indet.	1	,		1	4	2	1	1	4
MOLL	MOBI	Nuculanoida	Yoldiidae	Portlandia intermedia									
MOLL	MOBI	Nuculanoida	Yoldiidae	Yoldiella frigida	2								
MOLL	MOBI	Nuculanoida	Yoldiidae	Yoldiella lenticula									1
MOLL	MOBI	Nuculanoida	Yoldiidae	Yoldiidae indet.	6	4	5	2	6	3	3	4	5
MOLL	MOBI	Nuculida	Nuculidae	Ennucula tenuis	33	22	26	10	8	8	6	3	21
MOLL	MOBI	Pectinida	Pectinidae	Chlamys islandica									
MOLL	MOBI	Pectinida	Propeamussiidae	Similipecten greenlandicus				1		1	1		
MOLL MOLL	MOBI MOBI	Pectinoida Pectinoida	Pectinidae Propeamussiidae	Pectinidae indet. Propeamussiidae indet.			2						
MOLL	MOBI	Veneroida	Cardiidae	Ciliatocardium ciliatum			2						
MOLL	MOBI	Veneroida	Cardiidae	Serripes groenlandicus									
MOLL	MOBI	Veneroida	Tellinidae	Macoma balthica									
MOLL	MOBI	Veneroida	Tellinidae	Macoma calcarea	2	5	6	5	2	7	2	3	2
MOLL	MOBI	Veneroida	Tellinidae	Macoma moesta		1							1
MOLL	MOBI	Veneroida	Tellinidae	Macoma sp.	5	2	3	2	6	1	2	1	
MOLL	MOBI		Periplomatidae	Periploma aleuticum									
MOLL	MOBI			Bivalvia indet.		5	1						
MOLL	MOGA	Cephalaspidea	Cylichnidae	Cylichna alba	2				4	ā			
MOLL MOLL	MOGA MOGA	Cephalaspidea Cephalaspidea	Cylichnidae Cylichnidae	Cylichna sp. Cylichnidae indet.	2			2	1	1			
MOLL	MOGA	Cephalaspidea	Cylichnidae	Cylichnoides occultus		1	1	2					
MOLL	MOGA	Cephalaspidea	Synchronic	Cephalaspidea indet.	2		1					1	
MOLL	MOGA	Littorinimorpha	Capulidae	Ariadnaria borealis	_							_	
MOLL	MOGA	Littorinimorpha	Naticidae	Cryptonatica affinis									
MOLL	MOGA	Littorinimorpha	Naticidae	Euspira pallida			1				1		
MOLL	MOGA	Littorinimorpha	Naticidae	Naticidae indet.									
MOLL	MOGA	Littorinimorpha	Rissoidae	Boreocingula castanea									
MOLL	MOGA	Littorinimorpha	Velutinidae	Velutinidae indet.									
MOLL	MOGA	Littorinimorpha	Rissoidae	Rissoidae indet									
MOLL	MOGA	Neogastropoda	Buccinidae	Buccinidae indet.									
MOLL MOLL	MOGA MOGA	Neogastropoda Neogastropoda	Buccinidae Buccinidae	Buccinum hydrophanum Colus sp.									
MOLL	MOGA	Neogastropoda	Columbellidae	Columbellidae indet.									
MOLL	MOGA	Neogastropoda	Cancellariidae	Admete viridula			1			1			
MOLL	MOGA	Neogastropoda	Mangeliidae	Mangeliidae indet.			-			-			
MOLL	MOGA	Neogastropoda	Mangeliidae	Oenopota sp.								1	
MOLL	MOGA	Trochida	Colloniidae	Moelleria costulata									
MOLL	MOGA	Trochida	Margaritidae	Margarites groenlandicus									
MOLL	MOGA	Trochida	Margaritidae	Margarites helicinus									
MOLL	MOGA	Trochida	Margaritidae	Margarites olivaceus		1							
MOLL	MOGA	Trochida	Margaritidae	Margarites sp.									
MOLL	MOGA		Buccinidae	Volutopsius norwegicus	_		_						_
MOLL	MOGA		Lepetidae	Lepeta caeca	2	1	2		1	1			1
MOLL	MOGA		Lottiidae	Lottiidae indet.									



Biologica Client San Replicate Date Sam taxcode	nple # pled grpcode (Order	Family	TaxonName	mb18-108-063 SN-3 1 2018-08-19 Total Abundance	mb18-108-064 SN-3 2 2018-08-19 Total Abundance	mb18-108-065 SN-3 3 2018-08-19 Total Abundance	mb18-108-066 SN-4 1 2018-08-19 Total Abundance	mb18-108-067 SN-4 2 2018-08-19 Total Abundance	mb18-108-068 SN-4 3 2018-08-19 Total Abundance	mb18-108-069 SN-5 1 2018-08-19 Total Abundance	mb18-108-070 SN-5 2 2018-08-19 Total Abundance	mb18-108-071 SN-5 3 2018-08-19 Total Abundance
MOLL MOLL	MOGA MOGA		Lottiidae Trochidae	Testudinalia testudinalis Trochidae indet.									
MOLL	MOGA		Trochidae	Gastropoda indet.	1					1			
MOLL		Chitonida	Tonicellidae	Tonicella marmorea									
MOLL	MOSC (Gadilida	Gadilidae	Gadilidae indet.			1						
				Total Abundance	405	356	417	280	253	243	195	293	410
				Total Unique Taxa (Species Richness)	58	58	74	55	51	71	52	49	63
				No. composite grabs	3	3	3	3	3	3	3	3	3
				Total Density (Organisms/m²)	6000	5274	6178	4148	3748	3600	2889	4341	6074
Incidenta	l Organisms:												
MEMO	MEMO			Calanoida indet. (planktonic)									
MEMO	MEMO			Chatognatha indet. (planktonic)				2					
MEMO	MEMO			Copepoda indet. (parasitic)									
MEMO	MEMO			Desmosoma sp. (planktonic)					1			2	
MEMO	MEMO			Egg/egg mass		9			1		1		8
MEMO	MEMO			Hyperiidae indet. (planktonic)		1		3			1		1
MEMO	MEMO			Insecta indet. (terrestrial)									
MEMO	MEMO			Nematoda indet.	54	32	57	50	46	26	7	19	41
MEMO	MEMO			Hyperiidae indet. (planktonic)									



Client	Project	Voor	Type Biologica Sample ID	Culit	Client Semule ID	Site Replicate	Data Samulad	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	۸	Int	
Golder	Baffinlands Iron Mine	Year 2018	Benthic mb18-108-001	Split 1/2	Client Sample ID BE-1-1	BE-1 1	Date Sampled 17-Aug-18	Phylum	Class	Order	Superianniy	railily	Subtaining	MEMO	MEMO	Nematoda indet.	111	IIIC	,
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Bryozoa	Gymnolaemata	Ctenostomatida		Triticellidae		MISC	BRYO	Triticella sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Corophioidea	Corophiidae		ARTH	CRAM	Monocorophium sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Mollusca	Bivalvia	P 1	,			MOLL	MOBI	Bivalvia indet.			40
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole	e BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole	e BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 2	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole	e BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora caulleryi			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole		BE-1 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	13	15	24
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	9	1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole		BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	2		•
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	2.5		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae	Et	ANNE	POER	Pholoe tecta	36	12	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	2	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic mb18-108-001 Benthic mb18-108-001	1/2	BE-1-1	BE-1 1 BE-1 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE ANNE	POER POER	Gattyana cirrhosa	2		1
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic mb18-108-001	1/2 1/2	BE-1-1 BE-1-1	BE-1 1	17-Aug-18	Annelida Annelida	Polychaeta	Phyllodocida Sabellida		Polynoidae Oweniidae	Polynoinae	ANNE	POSE	Harmothoe sp. Galathowenia oculata			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	9	2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellillae	ANNE	POSE	Dialychone sp. 1	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole		BE-1 1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata	-	2	5
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	4	2	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	3	1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	J	-	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	7	11	=
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		1	10
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole	e BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole	e BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	6		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Leitoscoloplos sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	4		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1		_
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.	_		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata		18	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Atylidae		ARTH	CRAM	Atylus carinatus	1	4	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	2		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole		BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	2		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH ARTH	CRAM CRAM	Monoporeia affinis Amphipoda indet.	1		2
Golder	Baffinlands Iron Mine	2018 2018	Benthic mb18-108-001 Benthic mb18-108-001	1/2	BE-1-1 BE-1-1	BE-1 1 BE-1 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRCI	• •	1		3 111
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic mb18-108-001 Benthic mb18-108-001	1/2 1/2	BE-1-1 BE-1-1	BE-1 1 BE-1 1	17-Aug-18 17-Aug-18	Arthropoda Arthropoda	Maxillopoda Maxillopoda	Sessilia Cyclopoida				ARTH	CRCO	Balanomorpha indet. Cyclopoida indet.	4		111
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001 Benthic mb18-108-001	1/2	BE-1-1 BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Isopoda	Cymothooidea	Gnathiidae		ARTH	CRIS	Gnathiidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Arthropoda	Ostracoda	Myodocopida	5,5ti100iuca	Philomedidae		ARTH	CROS	Philomedes sp.	4	1	5
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		5		ARTH	CRTA	Tanaidacea indet.	•	-	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole		BE-1 1	17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Lineidae indet.	=		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Nemertea	Enopla	-				MISC	NTEA	Enopla indet.	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	Whole		BE-1 1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-001	1/2	BE-1-1	BE-1 1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	МОВІ	Astarte borealis			1
							-												



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Δ Ι	Int J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	1/2	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae	Sublummy	MOLL	MOBI	Astarte montagui	2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	, Whole		BE-1	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	3	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	1/2	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	1/2	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	Whole	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	1	L
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	Whole	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors	1 1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	1/2	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	1/2	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma balthica	1	Ĺ
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	Whole		BE-1	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	2 2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	1/2	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001	1/2	BE-1-1	BE-1	1	17-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae		MOLL	MOGA	Margarites groenlandicus	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-001 mb18-108-001	1/2 1/2	BE-1-1	BE-1 BE-1	1	17-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae		MOLL MOLL	MOGA MOGA	Margarites helicinus	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-001 mb18-108-002	Whole	BE-1-1 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Mollusca Cnidaria	Gastropoda Hydrozoa	Anthoathecata	Lottioidea	Lottiidae Bougainvilliidae		MISC	CNHY	Lottiidae indet. Bougainvilliidae indet.	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Ciliuaria	TiyuTOZOa	Antiloathecata		bouganiviinidae		MEMO	MEMO	Egg/egg mass	12	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18							MEMO	MEMO	Nematoda indet.	54	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	•		MOLL	MOBI	Nuculanoidea indet.		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	3 4	4 2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	6 1	1 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	4 1	L
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta		18 3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	54 3	33 2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	1 2	<u> </u>
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	Cahallinaa	ANNE	POSE	Owenia fusiformis	1	1
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-002	3/8 3/8	BE-1-2	BE-1 BE-1	2	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE ANNE	POSE	Euchone incolor	4 1	-
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-002 mb18-108-002	3/8 3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Sabellida Sabellida		Sabellidae Sabellidae		ANNE	POSE POSE	Dialychone sp. 1 Euchone rubrocincta	3 1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1 1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	3 1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	Amphareunae	ANNE	POSE	Aphelochaeta sp.	3 1	. 2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	16 1	10 8
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	3 1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1 1	1 4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	6	5 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	16	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	1 1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	13 1	17
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta			Maldanidae		ANNE	POSE	Maldanidae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic		3/8	BE-1-2	BE-1		17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	1	1 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1	•
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	6	2
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-002 mb18-108-002	Whole 3/8		BE-1 BE-1	2	17-Aug-18	Annelida Arthropoda	Polychaeta Malacostraca	Amphipoda	Lycianaccoidos	Scalibregmatidae		ANNE ARTH	POSE CRAM	Scalibregma inflatum	1	1
Golder						BE-1-2	BE-1		17-Aug-18	•	Malacostraca		Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-002 mb18-108-002	3/8 3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Amphipoda Amphipoda	Lysianassoidea Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Lysianassoidea indet. Pontoporeia femorata		2 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda	7 ontoporciolaca	Ampeliscidae		ARTH	CRAM	Haploops tubicola	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	13 4	4
Golder	Baffinlands Iron Mine	2018	Benthic		3/8	BE-1-2	BE-1		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	-5 4	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	2	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Rostroculodes sp.	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.	_	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1 3	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.	1	L
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus	4	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	3	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	j
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Isopoda	Cymothooidea	Gnathiidae		ARTH	CRIS	Gnathiidae indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	6	8	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	_	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Nemertea	Palaeonemertea			Tubulanidae		MISC	NTEA	Tubulanus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	7		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	,	7	2
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-002 mb18-108-002	3/8 3/8	BE-1-2	BE-1 BE-1	2	17-Aug-18	Mollusca	Bivalvia Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL MOLL	MOBI MOBI	Astarte montagui		/	9
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18	Mollusca Mollusca	Bivalvia	Carditoida Lucinida	Crassatelloidea	Astartidae Thyasiridae		MOLL	MOBI	Astarte sp.		1	9
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Myida	Thyasiroidea Myoidea	Thyasiridae Myidae		MOLL	MOBI	Thyasira sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata Mya truncata		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2 BE-1-2	BE-1	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.	-		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum		1	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Mollusca	Bivalvia	Venerolaa	Temmoraea	Tellinade	Maconinac	MOLL	MOBI	Bivalvia indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	3/8	BE-1-2	BE-1	2	17-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.		4	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002	Whole		BE-1	2	17-Aug-18	Mollusca	Gastropoda		Lottioidea	Lepetidae		MOLL	MOGA	Lepeta caeca	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus		2	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Nemertea	Anopla					MISC	NTEA	Anopla indet.	1		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18							MEMO	MEMO	Egg/egg mass	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18							MEMO	MEMO	Nematoda indet.	97		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole	BE-1-3	BE-1	3	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1	8	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta			9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		14	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae	Eterologi	ANNE	POER	Pholoe tecta	92	44	27
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone barbata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	1	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-003 mb18-108-003	7/12 7/12	BE-1-3 BE-1-3	BE-1 BE-1	3	17-Aug-18	Annelida Annelida	Polychaeta	Phyllodocida Sabellida		Polynoidae Sabellidae	Polynoinae Sabellinae	ANNE ANNE	POER POSE	Harmothoe sp. Euchone incolor	2	2	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12 7/12	BE-1-3 BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12 7/12	BE-1-3 BE-1-3	BE-1	3	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	Amphareunae	ANNE	POSE	Chaetozone bathyala	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12 7/12	BE-1-3 BE-1-3	BE-1		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		10	3
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3			17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	7	10	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole		BE-1	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	7		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	,		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole		BE-1	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	34	21	_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3			17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	1		_
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1		17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos armiger	=	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scolopios sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3			17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3			17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Paraonidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	3		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	, 7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	6	8	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		1	1



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida	,	•	,	ARTH	CRCO	Cyclopoida indet.	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	4	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	2	8	1
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Arthropoda	Insecta	Diptera		Chironomidae	Orthocladiinae	ARTH	INDI	Orthocladiinae indet.			
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole		BE-1	3	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	21	•	
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		2	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-1	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	3	1	2
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	1	13	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	Whole		BE-1	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	1		12
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic		7/12	BE-1-3 BE-1-3	BE-1 BE-1	3	17-Aug-18	Mollusca	Bivalvia Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL MOLL	MOBI MOBI	Astarte sp.		2	12
Golder	Baffinlands Iron Mine	2018	Benthic Benthic		7/12 7/12	BE-1-3	BE-1	3 2	17-Aug-18	Mollusca Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae Myidae		MOLL	MOBI	Thyasira sp.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-1	3	17-Aug-18	Mollusca	Bivalvia	Myida Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		3	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-1	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Mytiloida	Myoidea Mytiloidea	Mytilidae		MOLL	MOBI	Mya truncata Musculus discors	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-1	3	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.	2		2
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			2
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Gastropoda	Cephalaspidea	reimolaea	reminade	Widcommide	MOLL	MOGA	Cephalaspidea indet.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	7/12	BE-1-3	BE-1	3	17-Aug-18	Mollusca	Gastropoda	cepitataspiaea				MOLL	MOGA	Gastropoda indet.		_	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.		1	-
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.		1	6
Golder	Baffinlands Iron Mine	2018	Benthic		, Whole		BE-2	1	17-Aug-18	Annelida	Polychaeta	Eunicida	,	Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	BE-2-1	BE-2	1	17-Aug-18							MEMO	MEMO	Copepoda indet. (parasitic)	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18							MEMO	MEMO	Egg/egg mass	14		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18							MEMO	MEMO	Nematoda indet.	25		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Parougia caeca		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	7		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	17	9	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	13		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	3	7	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		9	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida Phyllodocida		Pholoidae	Et	ANNE	POER	Pholoe tecta	27	11	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	2	2	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/2 1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida Annelida	Polychaeta	Phyllodocida		Syllidae Sabellidae	Anoplosyllinae	ANNE ANNE	POER POSE	Syllides longocirratus	2 10	4	
Golder	Baffinlands Iron Mine					BE-2-1	BE-2		17-Aug-18		Polychaeta	Sabellida			Sabellinae			Euchone incolor	3	4	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	3	1	2
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/2 1/2	BE-2-1 BE-2-1	BE-2 BE-2	1	17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Sabellida Spionida		Sabellidae Apistobranchidae		ANNE ANNE	POSE POSE	Sabellidae indet. Apistobranchus sp.	1		2
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1 BE-2-1	BE-2	1		Annelida	Polychaeta Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1 BE-2-1	BE-2	1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio filicornis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	=	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	/ impriaretinae	ANNE	POSE	Ampharetidae indet.	1		2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	3	2	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	=	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	23		2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata		2	3
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		5	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	=	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		
Golder	Baffinlands Iron Mine	2018		mb18-108-004	1/2	BE-2-1	BE-2		17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	6	1	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymeninae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina cylindricaudata	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole		BE-2	1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos armiger	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	1		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/2 1/2	BE-2-1 BE-2-1	BE-2 BE-2	1	17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta			Paraonidae Scalibregmatidae		ANNE ANNE	POSE POSE	Aricidea minuta	4	2	6
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18 17-Aug-18	Arthropoda	Polychaeta Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Scalibregma inflatum Anonyx sp.	4	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysiailassoidea	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	6	8	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Eusiridae		ARTH	CRAM	Rhachotropis helleri	1	Ü	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides		3	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	4	12	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Isopoda	Cymothooidea	Gnathiidae		ARTH	CRIS	Gnathiidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	2	9	7
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/2 Whole	BE-2-1 BE-2-1	BE-2 BE-2	1	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH ARTH	CROS CROS	Philomedes sp.	8	9	/
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18 17-Aug-18	Arthropoda Arthropoda	Ostracoda Malacostraca	Myodocopida Tanaidacea		Philomedidae Pseudotanaidae		ARTH	CRTA	Philomedes sp. Pseudotanais sp.	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		i seddotariaidae		ARTH	CRTA	Tanaidacea indet.	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Nemertea	Anopla	runaldacca				MISC	NTEA	Anopla indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004	Whole	e BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		6	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2	1	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004 mb18-108-004	1/2	BE-2-1	BE-2	1	17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae	Deliniaines	MOLL	MOBI MOGA	Ennucula tenuis		2	2 1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/2 1/2	BE-2-1 BE-2-1	BE-2 BE-2	1	17-Aug-18 17-Aug-18	Mollusca Mollusca	Gastropoda Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Polinicinae	MOLL MOLL	MOGA	Euspira pallida Gastropoda indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18 17-Aug-18	Nemertea	Anopla					MISC	NTEA	Anopla indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2	2	17-Aug-18	Chordata	Pisces-Actinopterygii					MISC	PIXX	Pisces indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.		2	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Philinoidea	Cylichnidae		MOLL	MOGA	Cylichna sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Gastropoda		Trochoidea	Trochidae		MOLL	MOGA	Trochidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole	e BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole	e BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18							MEMO	MEMO	Egg/egg mass	8		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2		17-Aug-18							MEMO	MEMO	Nematoda indet.	57		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2		2	17-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Parougia caeca Scoletoma fragilis	2		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/12 5/12	BE-2-2 BE-2-2	BE-2 BE-2	2	17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Eunicida Eunicida		Lumbrineridae Lumbrineridae		ANNE ANNE	POER POER	Scoletoma impatiens	11		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	13	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	9	-	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	,	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	5	4	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		9	4
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	16	18	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae	Anoplosyllinae	ANNE	POER	Syllides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	16	4	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	5	3	1



Client	Duningt	Vaan	T	Plate des Canada ID	C I'A	Client Consule ID	6 14 -	Dll	Bata Camadad	Dhadaas	Class	Ouden	C. manfamili.	Famili.	Chfamil	da		TowarNorse		14	
Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-005	Split 5/12	Client Sample ID BE-2-2	Site BE-2	Replicate	Date Sampled 17-Aug-18	Phylum Annelida	Class Polychaeta	Order Terebellida	Superfamily	Family Ampharetidae	Subfamily Ampharetinae	taxcode ANNE	grpcode POSE	TaxonName Ampharete sp.	A I	Int 1	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Lysippe labiata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	, imprior contac	ANNE	POSE	Aphelochaeta sp.		4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	28		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	5 2	2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	2 6	6	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	1 1	1	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Leaena abranchiata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole		BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.			1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE ANNE	POSE	Mediomastus sp.	5 2 13 3	_	
Golder Golder	Baffinlands from Mine	2018	Benthic Benthic	mb18-108-005 mb18-108-005	5/12 5/12	BE-2-2 BE-2-2	BE-2 BE-2	2	17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Cossuridae Maldanidae	Maldaninae	ANNE	POSE POSE	Cossura sp. Maldane sarsi	13 3 5 1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta			Orbiniidae	Waldaliillac	ANNE	POSE	Scoloplos acutus	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos sp.		-	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea catherinae	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	4 1	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	11 6	6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida		Diaghulidae		ARTH	CRCO	Harpacticoida indet.	1	7	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-005 mb18-108-005	5/12 5/12	BE-2-2 BE-2-2	BE-2 BE-2	2	17-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Cumacea Cumacea		Diastylidae Diastylidae		ARTH ARTH	CRCU CRCU	Diastylis scorpioides Diastyloides biplicatus	1 /	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18 17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	6 5	5	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	1	1	,
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea	, ipseddorded	Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		,,,		ARTH	CRTA	Tanaidacea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole	BE-2-2	BE-2	2	17-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Lineidae indet.	2 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Nemertea						MISC	NTEA	Nemertea indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Cephalorhyncha	Priapulida			Priapulidae		MISC	PRIA	Priapulus caudatus	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole		BE-2	2	17-Aug-18	Chordata	Ascidiacea	Stolidobranchia		Pyuridae		MISC	URAS	Boltenia echinata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole		BE-2	2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole		BE-2	2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	3		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-005 mb18-108-005	5/12 Whole	BE-2-2 BE-2-2	BE-2 BE-2	2	17-Aug-18 17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Carditoida Carditoida	Crassatelloidea Crassatelloidea	Astartidae Astartidae		MOLL MOLL	MOBI MOBI	Astarte borealis Astarte borealis	3		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte boreans Astarte montagui			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole		BE-2	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	2 4	4	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	3	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	Whole	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	3	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea			MOLL	MOBI	Nuculanoidea indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2	2	17-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.		_	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2		17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae	ol: I	MOLL	MOBI	Ennucula tenuis	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2	BE-2		17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum			1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-005 mb18-108-005	5/12 5/12	BE-2-2 BE-2-2	BE-2 BE-2	2	17-Aug-18	Mollusca	Bivalvia Gastropoda	Veneroida Cephalaspidea	Tellinoidea	Tellinidae	Macominae	MOLL MOLL	MOBI MOGA	Macoma sp. Cephalaspidea indet.			5 1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	5/12	BE-2-2 BE-2-2	BE-2		17-Aug-18 17-Aug-18	Mollusca Mollusca	Gastropoda Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Polinicinae	MOLL	MOGA	Euspira pallida		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	1/3	BE-2-3	BE-2		17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae	Naticoldea	Olindiidae	1 Ollificiliae	MISC	CNHY	Monobrachium parasitum	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leuconidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Caudofoveata	Chaetodermatida		Chaetodermatidae		MOLL	MOAP	Chaetoderma sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.	_		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2		17-Aug-18							MEMO	MEMO	Egg/egg mass	2		
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-006 mb18-108-006	Whole		BE-2	3	17-Aug-18							MEMO MEMO	MEMO MEMO	Hyperiidae indet. (planktonic)	1 40		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic		1/3 1/3	BE-2-3 BE-2-3	BE-2 BE-2	-	17-Aug-18 17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Nematoda indet. Enchytraeidae indet.	4U 1		
Goldel	Sammanus II On WILLE	2010	Dentille		1,5	DL 2 J	DL-Z	9	1, ,,ug-10	/ unichua	Circinata	Literrytracida		Literry a delude		/ 11414L	, VOL	z.iony traciaac mact.	-		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthio	• .	1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Eunicida	,	Lumbrineridae	,	ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthio	mb18-108-006	Whole	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	3	3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	5	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	7		
Golder	Baffinlands Iron Mine	2018	Benthio	mb18-108-006	Whole	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	3	3	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		4	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	24	7	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthio		Whole		BE-2		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	2		
Golder	Baffinlands Iron Mine	2018 2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE ANNE	POSE POSE	Galathowenia oculata	2		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthio Benthio		1/3 1/3	BE-2-3 BE-2-3	BE-2 BE-2		17-Aug-18	Annelida Annelida	Polychaeta	Sabellida Sabellida		Oweniidae Sabellidae	Sabellinae	ANNE	POSE	Owenia fusiformis	0	2	2
Golder Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta	Sabellida		Sabellidae	Sabellillae	ANNE	POSE	Euchone incolor Dialychone sp. 1	5	2	2
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.	3		1
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 3	2		1
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae		ANNE	POSE	Apistobranchus sp.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	11	2	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthio	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	·	ANNE	POSE	Ampharetidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	31	7	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata			2
Golder	Baffinlands Iron Mine	2018	Benthio	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	2	4	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	1		
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthio		Whole		BE-2		17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	_	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex	1	1	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1	3	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta			Cossuridae	F ali a a a i a a a	ANNE	POSE	Cossura sp.	2		1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthio Benthio		1/3 1/3	BE-2-3 BE-2-3	BE-2 BE-2		17-Aug-18	Annelida	Polychaeta			Maldanidae Maldanidae	Euclymeninae Maldaninae	ANNE ANNE	POSE POSE	Microclymene sp.	2		1
Golder Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Maldanidae	ivialualiillae	ANNE	POSE	Maldane sarsi Maldanidae indet.	3		2
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	1		1
Golder	Baffinlands Iron Mine	2018	Benthio		Whole		BE-2		17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scolopios armiger	1	-	-
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	2		
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	6		
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	1	4
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3	BE-2		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Amphilochoidea	Amphilochidae		ARTH	CRAM	Amphilochus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthio	mb18-108-006	Whole	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sarsi	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	13	11	
Golder	Baffinlands Iron Mine	2018	Benthio	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	7		
Golder	Baffinlands Iron Mine	2018	Benthio	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	3		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3	BE-2		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1		1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3		3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus		14	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	2	2	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3		3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	1		
Golder	Baffinlands Iron Mine	2018	Benthio		Whole		BE-2		17-Aug-18	Arthropoda	Malacostraca	Decapoda	Alpheoidea	Thoridae		ARTH	CRDE	Lebbeus polaris	1		
Golder	Baffinlands Iron Mine	2018	Benthio		Whole			3	17-Aug-18	Arthropoda	Malacostraca	Decapoda	Crangonoidea	Crangonidae		ARTH	CRDE	Sclerocrangon boreas	1	24	12
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3	BE-2		17-Aug-18	Arthropoda	Ostracoda	Myodocopida	Ancoudo:dee	Philomedidae		ARTH	CROS	Philomedes sp.	16	21	12
Golder	Baffinlands Iron Mine	2018	Benthio		1/3	BE-2-3		3	17-Aug-18	Arthropoda Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH ARTH	CRTA CRTA	Pseudosphyrapus anomalus	პ 1	1	
Golder	Baffinlands Iron Mine	2018	Benthio		1/3 1/3	BE-2-3 BE-2-3	BE-2		17-Aug-18	Arthropoda Arthropoda	Malacostraca	Tanaidacea Tanaidacea		Akanthophoreidae			CRTA	Akanthophoreus sp.	1	т	
Golder	Baffinlands Iron Mine	2018 2018	Benthio		1/3 Whole	BE-2-3		3	17-Aug-18	Arthropoda Echinodermata	Malacostraca	Tanaidacea Ophiurida		Pseudotanaidae	Onhiuringo	ARTH ECHI	ECOP	Pseudotanais sp.	1	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthio Benthio		Whole 1/3	BE-2-3 BE-2-3	BE-2	3	17-Aug-18 17-Aug-18	Echinodermata Nemertea	Ophiuroidea Enopla	Ophiurida		Ophiuridae	Ophiurinae	MISC	NTEA	Ophiura sarsii Enopla indet.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthio		Whole		BE-2		17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3		3	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Anomalodesmata	Thracioidea	Thraciidae		MOLL	MOBI	Thracia myopsis	-	1	
Goraci	Sammanas non wine	2010	Demaile		1/3	JL 2 J	JL-2	3	1, 1,00-10	.*10114364	Sivuivia	, anomaloucamata	i i i acioiaca	·······································		IVIOLL	141001	3014 111700313		-	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Δ	Int	
Golder	Baffinlands Iron Mine	2018	Benthic	• .	1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae	Subjumity	MOLL	MOBI	Astarte borealis			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	Whole		BE-2	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	Whole	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		7	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	Whole	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea			MOLL	MOBI	Nuculanoidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-2-3	BE-2	3	17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	1	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2	3	17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	2		
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-006	Whole		BE-2 BE-2	3	17-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae	Clinaaaadiinaa	MOLL MOLL	MOBI MOBI	Similipecten greenlandicus	4	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic		Whole	BE-2-3 BE-2-3	BE-2	3	17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Veneroida	Cardioidea Tellinoidea	Cardiidae Tellinidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum Macoma calcarea		1	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3 Whole		BE-2	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Veneroida Veneroida	Tellinoidea	Tellinidae	Macominae Macominae	MOLL	MOBI	Macoma calcarea	1	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006	Whole		BE-2	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-2	3	17-Aug-18	Mollusca	Gastropoda	Venerolaa	Lottioidea	Lepetidae	Widcommide	MOLL	MOGA	Lepeta caeca	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3	1	17-Aug-18	Arthropoda	Maxillopoda	Sessilia	201101404	Lependae		ARTH	CRCI	Balanomorpha indet.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3	1	17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Chordata	Ascidiacea	Phlebobranchia		Ascidiidae		MISC	URAS	Ascidia sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Gastropoda					MOLL	MOGA	Gastropoda indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Gastropoda	Neogastropoda	Buccinoidea	Columbellidae		MOLL	MOGA	Columbellidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.			6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Capuloidea	Capulidae		MOLL	MOGA	Ariadnaria borealis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18							MEMO	MEMO	Egg/egg mass	8		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18							MEMO	MEMO	Nematoda indet.	64		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	5	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	7	4	1
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae	Nausidinas	ANNE	POER	Bipalponephtys cornuta	4	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-007 mb18-108-007	7/12 7/12	BE-3-1 BE-3-1	BE-3 BE-3	1	17-Aug-18	Annelida Annelida	Polychaeta	Phyllodocida Phyllodocida		Nereididae Pholoidae	Nereidinae	ANNE ANNE	POER POER	Nereis zonata	16	12	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		7/12 7/12	BE-3-1 BE-3-1	BE-3	1	17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta Pholoe sp.		19	0
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	59	30	1
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1 BE-3-1	BE-3	1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1	30	_
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		7	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 4	1		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata		1	
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	1	2	4
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	9		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1		•
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		4	9
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Terebellida Terebellida		Cirratulidae		ANNE ANNE	POSE	Tharyx sp.	1	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		7/12 Whole	BE-3-1 BE-3-1	BE-3 BE-3		17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Terebellida Terebellida		Pectinariidae Pectinariidae		ANNE	POSE POSE	Cistenides granulata Cistenides granulata	Ω		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	4		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	27	14	2
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	8		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	4	1	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Calliopioidea	Calliopiidae		ARTH	CRAM	Calliopiidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	2	1	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	7	7	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1	3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	3	1	11
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	2	3	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus		12	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	10	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	6	5	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Cephalorhyncha	Priapulida			Priapulidae		MISC	PRIA	Priapulus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		3	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Mytilida	Mytiloidea	Mytilidae		MOLL	MOBI	Crenella faba		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3		17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Mytilidae indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole	BE-3-1	BE-3	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	Whole		BE-3	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1		
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007	7/12	BE-3-1	BE-3		17-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic		7/12	BE-3-1	BE-3		17-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Velutinoidea	Velutinidae		MOLL	MOGA	Velutinidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	cimo caramia c	MOLL	MOBI	Serripes groenlandicus	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Mollusca	Bivalvia	Venerolaa	caraioiaca	caranaac		MOLL	MOBI	Bivalvia indet.	-	-	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Orchomene sp.	1		8
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida	275.01105501000	Syllidae		ANNE	POER	Parexogone hebes	8	2	Ü
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	7 HIII C. 1 G G	· Olyonacta	111/110400144		oyaac		MEMO	MEMO	Calanoida indet. (planktonic)	4	-	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18							MEMO	MEMO	Egg/egg mass	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3		17-Aug-18							MEMO	MEMO	Nematoda indet.	75		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Lumbrineridae indet.	, 5		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	2		-
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	7		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	3	1	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	6	-	-
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.	· ·		1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1	1	-
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	-	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	23	18	
	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3			Annelida	•	Phyllodocida			Polynoinae	ANNE	POER		1	10	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2 BE-3-2	BE-3		17-Aug-18	Annelida	Polychaeta Polychaeta	Phyllodocida		Polynoidae Polynoidae	Polynoinae Polynoinae	ANNE	POER	Gattyana cirrhosa Harmothoe extenuata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18 17-Aug-18	Annelida	•	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2	BE-3			Annelida	Polychaeta Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	2 17		1
	Baffinlands Iron Mine	2018	Benthic		1/4	BE-3-2 BE-3-2	BE-3		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Janeminae	ANNE	POSE		5		1
Golder		2018	Benthic		1/4 1/4					Annelida Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	Э		4
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		1/4 Whole	BE-3-2	BE-3 BE-3		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet. Sabellidae sp. 2			4
Golder		2018	Benthic						17-Aug-18		Polychaeta					ANNE	POSE	·		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4 1/4	BE-3-2	BE-3 BE-3		17-Aug-18	Annelida Annelida	Polychaeta	Spionida Spionida		Apistobranchidae Spionidae		ANNE	POSE	Apistobranchus sp.	1	T	
Golder	Baffinlands Iron Mine					BE-3-2			17-Aug-18		Polychaeta	Spionida Spionida		Spionidae Spionidae			POSE	Prionospio (Prionospio) sp.	1		
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/4	BE-3-2 BE-3-2	BE-3 BE-3		17-Aug-18	Annelida Annelida	Polychaeta	Spionida Taraballida		Spionidae Ampharetidae		ANNE ANNE		Pygospio sp. Ampharetidae indet	1		ว
Golder	Baffinlands Iron Mine				1/4	BE-3-2			17-Aug-18	Annelida Annelida	Polychaeta	Terebellida Torobollida		Ampharetidae Cirratulidae			POSE	Ampharetidae indet.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	۷	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.		1	2



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida	,	Cirratulidae	,	ANNE	POSE	Chaetozone bathyala	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			7
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Lanassa venusta venusta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Proclea graffi	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2 BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE ANNE	POSE	Maldane sarsi	3	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-008 mb18-108-008	1/4 1/4	BE-3-2 BE-3-2	BE-3 BE-3	2	17-Aug-18	Annelida Annelida	Polychaeta			Orbiniidae		ANNE	POSE POSE	Scoloplos acutus Aricidea minuta	3 1	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2 BE-3-2	BE-3	2	17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta			Paraonidae Paraonidae		ANNE	POSE	Aricidea minuta Aricidea nolani	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	2	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.	1	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1	1	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	1 ontoporciolaca	Ampeliscidae		ARTH	CRAM	Haploops tubicola	2	-	Ü
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	9	7	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	7	12	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylidae indet.			10
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Isopoda	Cymothooidea	Gnathiidae		ARTH	CRIS	Gnathiidae indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Malacostraca	Isopoda	Janiroidea	Munnopsidae	Eurycopinae	ARTH	CRIS	Eurycope sp.	1		25
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	15	14	25
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-008 mb18-108-008	1/4 1/4	BE-3-2 BE-3-2	BE-3 BE-3	2	17-Aug-18	Arthropoda	Malacostraca Malacostraca	Tanaidacea Tanaidacea		Pseudotanaidae		ARTH ARTH	CRTA CRTA	Pseudotanais sp.	2	4	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole		BE-3	2	17-Aug-18 17-Aug-18	Arthropoda Echinodermata	Echinoidea	Camarodonta	Odontophora	Typhlotanaidae		ECHI	ECEC	Typhlotanais sp. Strongylocentrotus sp.		4	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18 17-Aug-18	Echinodermata	Ophiuroidea	Ophiurida	Odontopnora	Strongylocentrotidae Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Bryozoa	Stenolaemata	Cyclostomatida		Ортипиас	Ортинтас	MISC	BRYO	Cyclostomatida indet.	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Nemertea	Enopla	Tieter orienter teu		Linerade		MISC	NTEA	Enopla indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	1		_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3	2	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole		BE-3	2	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3		17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1/4	BE-3-2	BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			7
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	Whole		BE-3	3	17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae	Condicides	Olindiidae		MISC	CNHY	Monobrachium parasitum	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24 5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda Appolida	Malacostraca	Amphipoda Phyllodosida	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.	4.5	1	2
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-009 mb18-108-009	5/24 5/24	BE-3-3 BE-3-3	BE-3 BE-3	_	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE MEMO	POER MEMO	Parexogone hebes	15 1	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24 5/24	BE-3-3 BE-3-3	BE-3	3	17-Aug-18 17-Aug-18							MEMO	MEMO	Copepoda indet. (parasitic) Nematoda indet.	76		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18 17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	4	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	•	4	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	3		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	Whole	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	10	5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	47	19	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	Whole	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	8	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 3		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3	3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio filicornis		1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	4	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae		ANNE	POSE	Ampharetidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	1	4	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	4		
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		_	4
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	40		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae	Tanaha Wasa	ANNE	POSE	Cistenides granulata	18		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Tuishahuanshinas	ANNE	POSE	Terebellidae indet.	2	1	7
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/24 Whole	BE-3-3	BE-3 BE-3		17-Aug-18	Annelida Annelida	Polychaeta	Terebellida		Trichobranchidae Trichobranchidae	Trichobranchinae	ANNE ANNE	POSE	Terebellides sp.	2	1	/
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3 BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta	Terebellida		Capitellidae	Trichobranchinae	ANNE	POSE POSE	Terebellides sp.	1		
Golder Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex Mediomastus sp.	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/24 5/24	BE-3-3	BE-3		17-Aug-18 17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Orbiniidae indet.	7		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		-
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	1	6
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Arthropoda	Arachnida	Acarina	Halacaroidea	Halacaridae		ARTH	CHAR	Halacaridae indet.	1	-	Ü
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	·	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	6	6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	14	27	43
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	Whole	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3	3	17-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	5	9	
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	5/24	BE-3-3	BE-3		17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole			3	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	3 2	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/24 Whole	BE-3-3		3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI MOBI	Astarte montagui	4	4	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole 5/24	BE-3-3 BE-3-3	BE-3	3	17-Aug-18 17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Carditoida Carditoida	Crassatelloidea Crassatelloidea	Astartidae Astartidae		MOLL MOLL	MOBI	Astarte montagui Astarte sp.	4	4	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3		3	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.		-	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	-
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3		3	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-3		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole			3	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		5/24	BE-3-3	BE-3		17-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	1		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α Ι	Int .	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Euchone rubrocincta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora concharum	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole		BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	1 4	4	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	19	3	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		4/12 4/12	BE-4-1 BE-4-1	BE-4 BE-4	1	17-Aug-18 17-Aug-18							MEMO MEMO	MEMO MEMO	Calanoida indet. (planktonic)	2		
Golder Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1 BE-4-1	BE-4	1	17-Aug-18 17-Aug-18							MEMO	MEMO	Egg/egg mass Nematoda indet.	55		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	4	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2	4	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	3	1 :	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	30	13	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	1		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.			Ĺ
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4 BE-4	1	17-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae		ANNE ANNE	POSE	Apistobranchus sp.	1	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-010 mb18-108-010	4/12 4/12	BE-4-1 BE-4-1	BE-4 BE-4	1	17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Spionida Spionida		Spionidae Spionidae		ANNE	POSE POSE	Prionospio (Prionospio) steenstrupi Pygospio sp.	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio filicornis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	, imprior contac	ANNE	POSE	Aphelochaeta sp.	4	2 :	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	9 :	1 :	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1	1 :	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		:	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	2		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Lanassa venusta venusta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole		BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.	_	. :	1
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3	1 :	Ł
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-010 mb18-108-010	Whole 4/12	BE-4-1 BE-4-1	BE-4 BE-4	1	17-Aug-18	Annelida Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE ANNE	POSE POSE	Terebellides sp. Mediomastus sp.	3 :	2	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1 BE-4-1	BE-4	1	17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta			Capitellidae Cossuridae		ANNE	POSE	Cossura sp.	5 . 6	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymeninae indet.	U		1
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Microclymene sp.	1	1	•
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Praxillella praetermissa		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Orbiniidae indet.		:	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	1 :	2
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sarsi	1		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1	:	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Ampeliscidae		ARTH	CRAM	Haploops tubicola	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae Oodicaratidaa		ARTH ARTH	CRAM CRAM	Guernea nordenskioldi	8 :	2 1 :	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		4/12 4/12	BE-4-1 BE-4-1	BE-4 BE-4	1	17-Aug-18 17-Aug-18	Arthropoda Arthropoda	Malacostraca Maxillopoda	Amphipoda Cyclopoida		Oedicerotidae		ARTH	CRAIN	Westwoodilla sp. Cyclopoida indet.	1	1	-
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1 BE-4-1	BE-4	1	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	33	46	11
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	3		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides		1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.		:	37
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	:	2	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Isopoda	Cymothooidea	Gnathiidae		ARTH	CRIS	Gnathiidae indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	7	4 :	13
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	5 !	9	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	5		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Onbiurida -		ARTH	CRTA	Tanaidacea indet.		14	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		4/12 4/12	BE-4-1 BE-4-1	BE-4 BE-4	1	17-Aug-18 17-Aug-18	Echinodermata Nemertea	Ophiuroidea Anopla	Ophiurida Archinemertea		Ophiuridae Cephalothricidae		ECHI MISC	ECOP NTEA	Ophiuridae indet.	1		٠
Golder Golder	Baffinlands Iron Mine	2018	Benthic		4/12 4/12	BE-4-1 BE-4-1	BE-4 BE-4	1	17-Aug-18 17-Aug-18	Nemertea	Enopla	Archinemertea		серпающиниве		MISC	NTEA	Cephalothrix sp. Enopla indet.	2		5
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	1	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	6	•	
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Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	Whole	BE-4-1	BE-4	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4	1	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	4/12	BE-4-1	BE-4		17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BE-4-1	BE-4		17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		2	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4		17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BE-4-1	BE-4		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			3
Golder	Baffinlands Iron Mine	2018 2018	Benthic		4/12	BE-4-1	BE-4		17-Aug-18	Mollusca	Bivalvia					MOLL	MOBI MOGA	Bivalvia indet.			3 1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic		4/12 1/4	BE-4-1 BE-4-2	BE-4 BE-4		17-Aug-18 17-Aug-18	Mollusca Arthropoda	Gastropoda	Amphinada		Ondicaratidae		MOLL ARTH	CRAM	Gastropoda indet.			4
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2 BE-4-2	BE-4		17-Aug-18 17-Aug-18	Arthropoda	Malacostraca Malacostraca	Amphipoda Cumacea		Oedicerotidae		ARTH	CRCU	Oedicerotidae indet. Cumacea indet.		2	4
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2 BE-4-2	BE-4		17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.		4	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.		-	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Mollusca	Gastropoda	Cephalaspidea	,	,		MOLL	MOGA	Cephalaspidea indet.		3	3
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae		MOLL	MOGA	Margarites sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18							MEMO	MEMO	Nematoda indet.	29		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Lumbrineridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2	6	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta		14	3
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		21	3
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	53	22	4
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	2		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	1	4	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	Caballiana	ANNE	POSE	Galathowenia oculata	•		1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	9		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic		Whole 1/4		BE-4 BE-4		17-Aug-18	Annelida Annelida	Polychaeta	Sabellida Sabellida		Sabellidae		ANNE ANNE	POSE POSE	Bispira sp.	1		
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic		1/4	BE-4-2 BE-4-2	BE-4		17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta	Sabellida		Sabellidae Sabellidae		ANNE	POSE	Dialychone sp. 1 Sabellidae indet.	2		1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2 BE-4-2	BE-4		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata	4		1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	8	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	Ö	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	2	4	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	6	1	_
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	Whole	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	13		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.		4	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	Whole	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	8	6	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymeninae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Praxillella praetermissa		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	9		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos sp.	.=		1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	_	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Atylidae		ARTH	CRAM	Atylus carinatus	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	10	3	-
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1		2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM CRAM	Paroediceros lynceus	1	2	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAIVI	Westwoodilla sp.	1	2	э



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int .	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida	,	•	,	ARTH	CRCO	Cyclopoida indet.	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	3	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylidae indet.	F	3	15
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	14 9	9	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lampropidae indet.	7	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	12 1	17	24
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	13		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	2	17-Aug-18	Chordata	Ascidiacea	Stolidobranchia		Styelidae		MISC	URAS	Polycarpa fibrosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		3	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	16	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1 2	4	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2 BE-4-2	BE-4 BE-4	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	4	4	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole		BE-4 BE-4	2	17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Myida	Myoidea Mytiloidea	Myidae		MOLL MOLL	MOBI MOBI	Mya truncata Crenella faba	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4 1/4	BE-4-2 BE-4-2	BE-4	2	17-Aug-18	Mollusca	Bivalvia	Mytilida	•	Mytilidae		MOLL	MOBI		1	1	2
Golder	Baffinlands Iron Mine	2018			Whole		BE-4	2	17-Aug-18		Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		1	2
Golder	Baffinlands Iron Mine	2018	Benthic Benthic		1/4	BE-4-2 BE-4-2	BE-4	2	17-Aug-18 17-Aug-18	Mollusca Mollusca	Bivalvia	Mytiloida Nuculanida	Mytiloidea Nuculanoidea	Mytilidae Nuculanidae		MOLL	MOBI	Musculus discors Nuculana minuta		1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2 BE-4-2	BE-4	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Nuculida	Nucularioidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1/4	BE-4-2 BE-4-2	BE-4	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.	1		2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2 BE-4-2	BE-4	2	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	veneroida	Tellilloluea	reillilluae	iviacommae	MOLL	MOBI	Bivalvia indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2 BE-4-2	BE-4	2	17-Aug-18 17-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Polinicinae	MOLL	MOGA	Euspira pallida		1	3
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-2	BE-4	2	17-Aug-18	Mollusca	Gastropoda	Littoriiiiiorpiia	Naticolaca	Naticidae	1 Offiticinae	MOLL	MOGA	Gastropoda indet.	-	-	4
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	2	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	1 '	2	7
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea	iviyolaca	Diastylidae		ARTH	CRCU	Diastylidae indet.	2	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae		ECHI	ECOP	Ophiuridae indet.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors	-	-	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.	2	2	-
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida	Lysianassolaca	Syllidae		ANNE	POER	Parexogone hebes	5	-	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	71111111111111	· oryonaeta	. nynodocida		57ac		MEMO	MEMO	Egg/egg mass	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18							MEMO	MEMO	Nematoda indet.	107		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	7 2	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2 2	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	Whole	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	10 8	8	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	•	6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	81 2	20	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	Whole	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae		ANNE	POER	Eteone flava	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	Whole	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	;	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	Whole	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	6 1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	7	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Flabelligeridae		ANNE	POSE	Diplocirrus hirsutus	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	11		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	1	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2		
Golder	Baffinlands Iron Mine	2018	Renthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex	1		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Δ	Int	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta	Oraci	Superiumny	Capitellidae	Subtaining	ANNE	POSE	Mediomastus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	Whole	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	4		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18	Arthropoda	Arachnida	Acarina	Halacaroidea	Halacaridae		ARTH	CHAR	Halacaridae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sarsi	40	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012 mb18-108-012	Whole		BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH ARTH	CRAM CRAM	Anonyx sarsi	10		1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/4 1/4	BE-4-3 BE-4-3	BE-4 BE-4		17-Aug-18 17-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Amphipoda Amphipoda	Lysianassoidea Lysianassoidea	Uristidae Uristidae		ARTH	CRAIN	Anonyx sp. Onisimus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	2	3	10
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1	3	10
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	. ontoporciolaca	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	9	14	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	20	29	21
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	8	14	14
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4	3	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii		2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	20	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-012 mb18-108-012	1/4 Whole	BE-4-3 BE-4-3	BE-4 BE-4		17-Aug-18 17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Carditoida Carditoida	Crassatelloidea Crassatelloidea	Astartidae Astartidae		MOLL MOLL	MOBI MOBI	Astarte borealis	5	3	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis Astarte montagui	-	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-4		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	2	1	-
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	-	•	3
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BE-4-3	BE-4		17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	Whole	BE-4-3	BE-4	3	17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012	1/4	BE-4-3	BE-4	3	17-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.		2	3
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	Whole		BE-5		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	5		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18							MEMO	MEMO	Desmosoma sp. (planktonic)	1		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-013 mb18-108-013	1/3	BE-5-1 BE-5-1	BE-5 BE-5		17-Aug-18							MEMO MEMO	MEMO MEMO	Egg/egg mass Nematoda indet.	12 52		
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3 1/3	BE-5-1 BE-5-1	BE-5		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1 BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	15	•	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	28	11	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	5		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	16		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora sp.		_	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae	Aurahan II	ANNE	POSE	Prionospio (Prionospio) steenstrupi	39	4	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BE-5-1 BE-5-1	BE-5		17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Terebellida Terebellida		Cirratulidae		ANNE ANNE	POSE POSE	Aphelochaeta sp.	1 15	3	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3 1/3	BE-5-1 BE-5-1	BE-5 BE-5		17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Terebellida Terebellida		Cirratulidae Cirratulidae		ANNE	POSE	Chaetozone bathyala Chaetozone pigmentata	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1 BE-5-1	BE-5		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata Chaetozone setosa complex		4	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex Chaetozone sp.		3	4
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5		17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	5		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5		17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.		1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	Whole	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.		3	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Rhodininae	ANNE	POSE	Rhodine loveni	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus		4	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Annelida	Polychaeta			Paraonidae Scalibrogmatidae		ANNE	POSE	Aricidea nolani	1	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-013 mb18-108-013	1/3 1/3	BE-5-1 BE-5-1	BE-5 BE-5	1	17-Aug-18	Annelida	Polychaeta	Amphinada	Caranhiaidaa	Scalibregmatidae		ANNE ARTH	POSE CRAM	Scalibregma inflatum	5	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1 BE-5-1	BE-5	1	17-Aug-18 17-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Amphipoda Amphipoda	Corophioidea Lysianassoidea	Corophiidae Uristidae		ARTH	CRAM	Monocorophium sp. Anonyx sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysiailassoluea	Oedicerotidae		ARTH	CRAM	Rostroculodes sp.	4		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida		Octalecrotique		ARTH	CRCO	Cyclopoida indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	31	53	33
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis bradyi	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	5	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	17	17	16
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Cephalorhyncha	Priapulida			Priapulidae		MISC	PRIA	Priapulus caudatus	1	_	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	_	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	5		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	7	1	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BE-5-1 BE-5-1	BE-5 BE-5	1	17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL MOLL	MOBI MOBI	Astarte sp.		1	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1 BE-5-1	BE-5	1	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Lucinida Myida	Thyasiroidea Myoidea	Thyasiridae Myidae		MOLL	MOBI	Thyasira sp. Mya truncata		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	1	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		4	_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	7	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	4		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis		1	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	Whole	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	Whole	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	1/3	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	Whole	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			5
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BE-5-1	BE-5	1	17-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.	_		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013	Whole		BE-5	1	17-Aug-18	Mollusca	Gastropoda	NA Cale	Lottioidea	Lepetidae		MOLL	MOGA	Lepeta caeca	1	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole 5/12	BE-5-2 BE-5-2	BE-5 BE-5	2	17-Aug-18	Mollusca Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL MOLL	MOBI MOBI	Mya truncata Bivalvia indet.		2	2
Golder Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2 BE-5-2	BE-5	2	17-Aug-18 17-Aug-18	Annelida	Bivalvia Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	6		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole		BE-5	2	17-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Capuloidea	Capulidae		MOLL	MOGA	Ariadnaria borealis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5	2	17-Aug-18	Wiellasca	dustropodu	Littoriminorphia	capaioiaca	capanaac		MEMO	MEMO	Copepoda indet. (parasitic)	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18							MEMO	MEMO	Nematoda indet.	41		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	7	5	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	2		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	44	9	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae		ANNE	POER	Hypereteone sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida Bhyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	ქ 1		
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/12 5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida Annelida	Polychaeta	Phyllodocida Phyllodocida		Polynoidae Sphaorodoridae	Polynoinae	ANNE ANNE	POER POER	Harmothoe imbricata	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2 BE-5-2	BE-5 BE-5		17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Sabellida		Sphaerodoridae Sabellidae	Sabellinae	ANNE	POSE	Sphaerodoropsis minuta Euchone incolor	9	4	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2 BE-5-2	BE-5	2	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Janellilac	ANNE	POSE	Dialychone sp. 1	1	7	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata	1		2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	5		-
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-2	BE-5		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	•	ANNE	POSE	Aphelochaeta sp.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	40	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	А	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida	ouper a,	Cirratulidae	, , , , , , , , , , , , , , , , , , ,	ANNE	POSE	Chaetozone setosa complex	•	1	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Tharyx sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Neoamphitrite affinis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Microclymene sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	8	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-014 mb18-108-014	5/12	BE-5-2 BE-5-2	BE-5 BE-5	2	17-Aug-18	Annelida Annelida	Polychaeta			Paraonidae Scalibrogmatidae		ANNE ANNE	POSE POSE	Aricidea nolani	1	1	3
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-014	5/12 5/12	BE-5-2 BE-5-2	BE-5	2	17-Aug-18 17-Aug-18	Arthropoda	Polychaeta Malacostraca	Amphipoda	Lysianassoidea	Scalibregmatidae Uristidae		ARTH	CRAM	Scalibregma inflatum Onisimus barentsi group	1	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysiaiiassoidea	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	15	14	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	13	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida		Oculterotidae		ARTH	CRCO	Cyclopoida indet.	Ω.	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	27	52	29
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole		BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	1	32	23
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	2	7	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole		BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Mysida				ARTH	CRMY	Mysidacea indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	16	16	7
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus		5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Chordata	Ascidiacea	Stolidobranchia		Styelidae		MISC	URAS	Styelidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole	BE-5-2	BE-5	2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole	BE-5-2	BE-5	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole		BE-5	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5	2	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole		BE-5		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole		BE-5		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	1		4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12 Whole	BE-5-2	BE-5		17-Aug-18	Mollusca	Bivalvia Bivalvia	Nuculida Poetinida	Nuculoidea Postinoidea	Nuculidae		MOLL	MOBI MOBI	Ennucula tenuis	1		1
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-014	Whole		BE-5 BE-5		17-Aug-18	Mollusca	Bivalvia Bivalvia	Pectinida Veneroida	Pectinoidea Tellinoidea	Propeamussiidae Tellinidae	Macominao	MOLL	MOBI	Similipecten greenlandicus	1	1	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-014 mb18-108-014	5/12 Whole	BE-5-2 BE-5-2	BE-5		17-Aug-18 17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Veneroida Veneroida	Tellinoidea	Tellinidae Tellinidae	Macominae Macominae	MOLL MOLL	MOBI	Macoma calcarea Macoma calcarea	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2 BE-5-2	BE-5		17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.	1	1	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	5/12	BE-5-2	BE-5		17-Aug-18 17-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Tellifloldea	Tellillidae	Macominae	MOLL	MOGA	Cephalaspidea indet.		1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014	Whole		BE-5		17-Aug-18 17-Aug-18	Mollusca	Polyplacophora	Chitonida	Mopalioidea	Tonicellidae		MOLL	MOPO	Tonicella marmorea		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3 BE-5-3	BE-5		17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Mopalioraea	Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5		17-Aug-18	Mollusca	Bivalvia	,ppodd		550.55.511446		MOLL	MOBI	Bivalvia indet.		•	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Orchomenella minuta	1		-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5		17-Aug-18				_,	, p		MEMO	MEMO	Calanoida indet. (planktonic)	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5		17-Aug-18							MEMO	MEMO	Nematoda indet.	31		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5		17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	15	19	28
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole		BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole		BE-5		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	16	8	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	A In	nt J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida	,	Pholoidae	,	ANNE	POER	Pholoe tecta		1 11
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata	2 2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio filicornis	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	3	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	4	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole		BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae	Debededese	ANNE	POSE	Cistenides granulata	3	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex	1 1	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-015 mb18-108-015	Whole Whole		BE-5 BE-5	3 2	17-Aug-18	Annelida Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae Terebellinae	ANNE ANNE	POSE POSE	Polycirrus sp. complex	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	Terebellida Terebellida		Terebellidae Trichobranchidae	Trichobranchinae	ANNE	POSE	Laphania boecki Terebellides sp.	1 3	5
Golder Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	2	17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranciinae	ANNE	POSE	Trichobranchus glacialis	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta	rerebellida		Capitellidae		ANNE	POSE	Capitella capitata complex	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	34 12	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	5 1	-
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole		BE-5	3	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1 3	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	3	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	3	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Phoxocephaloidea	Phoxocephalidae		ARTH	CRAM	Harpinia serrata	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Caprelloidea	Podoceridae		ARTH	CRAM	Dyopedos sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.		6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	5/12	BE-5-3	BE-5	3	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole	BE-5-3	BE-5	3	17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole	BE-5-3	BE-5	3	17-Aug-18	Cephalorhyncha	Priapulida			Priapulidae		MISC	PRIA	Priapulus caudatus	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015	Whole	BE-5-3	BE-5	3	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	7	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5		17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	3	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5		17-Aug-18	Mollusca	Bivalvia	Mytilida	Mytiloidea	Mytilidae		MOLL	MOBI	Crenella faba	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5	3	17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors	1 1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BE-5	3	17-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae	Manager	MOLL	MOBI	Musculus discors	1 2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BE-5-3	BE-5		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma balthica	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole		BM-1 BM-1		18-Aug-18	Cnidaria Cnidaria	Hydrozoa	Anthoathecata		Bougainvilliidae		MISC MISC	CNHY CNHY	Bougainvilliidae indet.	1	
Golder	Baffinlands Iron Mine				Whole		BM-1		18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae			NTEA	Monobrachium parasitum	3	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BM-1-1 BM-1-1	BM-1		18-Aug-18 18-Aug-18	Nemertea Mollusca	Anopla Bivalvia	Heteronemertea Mytilida	Mytiloidea	Lineidae Mytilidae		MISC MOLL	MOBI	Lineidae indet. Crenella faba		1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Gastropoda	Neogastropoda	Conoidea	Mangeliidae		MOLL	MOGA	Mangeliidae indet.	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	ivioliusca	Gastropoua	Neogastropoua	continued	iviangemuae		MEMO	MEMO	Egg/egg mass	4	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18							MEMO	MEMO	Nematoda indet.	64	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Echiuroidea		Echiuridae		ANNE	EURA	Echiurus echiurus	0-	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1	_
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	8 4	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata		2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	12	-
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	· -	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	8 5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	1	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	A 1	Int J	j
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	46	13	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	Whole	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	4	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	13	2 1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	6	ANNE	POSE	Sabellidae indet.		_ 1	L
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Annelida	Polychaeta	Sabellida		Serpulidae	Spirorbinae	ANNE	POSE	Pileolaria sp.	1	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BM-1-1 BM-1-1	BM-1 BM-1		18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta	Spionida Spionida		Apistobranchidae Spionidae		ANNE ANNE	POSE POSE	Apistobranchus sp.	4 :	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi Pygospio sp.	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	2 :	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	, imprior contac	ANNE	POSE	Ampharetidae indet.		- 2	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	:	1 2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	15 8	8 2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	:	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	:	1 4	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	1 :	1 1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata		2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex		1	Ĺ
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	Whole		BM-1		18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Totale also assistance	ANNE	POSE	Neoamphitrite affinis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1 :	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole 1/3	BM-1-1 BM-1-1	BM-1 BM-1		18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Terebellida		Capitellidae	Trichobranchinae	ANNE ANNE	POSE POSE	Terebellides sp. Mediomastus sp.	3 :	1 1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.		5 1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Praxillella praetermissa	15	1	•
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	Whole		BM-1		18-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	3 :	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	:	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	2 :	1 5	ĵ.
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	11	14	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Rostroculodes sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.		2	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	15		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	4	_	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides		1	L
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH ARTH	CRCU CRCU	Diastylis scorpioides	1 .	7	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BM-1-1 BM-1-1	BM-1 BM-1	1	18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Cumacea Cumacea		Lampropidae Leuconidae		ARTH	CRCU	Lamprops fuscatus Leucon sp.	1	, 2 3	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1	2 3	,
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	10 :	17 1	10
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	10	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	:	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Cephalorhyncha	Priapulida			Priapulidae		MISC	PRIA	Priapulus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	Ĺ
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	:	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	5		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		. 3	3
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2 :	1	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1 BM-1		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae Astartidae		MOLL	MOBI MOBI	Astarte montagui	4 :	12	-
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL MOLL	MOBI	Astarte montagui	1 1	12	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BM-1-1 BM-1-1	BM-1		18-Aug-18 18-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Lucinida Lucinida	Thyasiroidea Thyasiroidea	Thyasiridae Thyasiridae		MOLL	MOBI	Thyasira sp. Thyasiridae indet.	1 .	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	:	2	•
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.		3	3
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	5		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	2 2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	Whole	BM-1-1	BM-1	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	2 :	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	1/3	BM-1-1	BM-1	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.		9	j
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.		2	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.		1	Ĺ
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-1-1	BM-1		18-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Polinicinae	MOLL	MOGA	Euspira pallida		1	Ĺ
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole	BM-1-2	BM-1	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum	1		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	A Ir	nt J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole	•	BM-1	2	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae	ouper a,	Olindiidae		MISC	CNHY	Monobrachium parasitum	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Bryozoa	Gymnolaemata	Ctenostomatida		Triticellidae		MISC	BRYO	Triticella sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera	1	L
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea			MOLL	MOBI	Nuculanoidea indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18							MEMO	MEMO	Nematoda indet.	44	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Parougia caeca	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	24 1	14 6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae	B. I	ANNE	POER	Pholoe tecta	88 4	47 4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1	_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	12 2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	12 3	. 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone sp.	1 2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata	1	,
Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-017 mb18-108-017	1/2	BM-1-2	BM-1 BM-1	2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE ANNE	POSE	Dipolydora socialis	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-017 mb18-108-017	1/2	BM-1-2 BM-1-2	BM-1	2	18-Aug-18	Annelida Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE POSE	Prionospio (Prionospio) steenstrupi	3 1	I
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2 1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae Spionidae		ANNE	POSE	Pygospio sp. Spio filicornis	3 I	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta	Spionida Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	2)
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	Amphareunae	ANNE	POSE	Aphelochaeta sp.	1	i I
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	10 4	4 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	3 1	1 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1	. 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Tharyx sp.	-	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1 1	i
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole		BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	15	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1 1	1 2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole		BM-1	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	6 2	<u>.</u>
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymeninae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Orbiniidae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1 1	L
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	5	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	21 8	j
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1	. 2
Golder	Baffinlands Iron Mine	2018		mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.	2	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole		BM-1		18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.	1	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	21	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida		Br. A. Ital		ARTH	CRCO	Harpacticoida indet.	6	_
Golder	Baffinlands Iron Mine	2018		mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1	. 2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	12 1	
Golder	Baffinlands Iron Mine	2018		mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	4 5	5 2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	1 3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Odantani:	Chanandar-state		ARTH	CRTA	Tanaidacea indet.	2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis	3 4	
Golder	Baffinlands Iron Mine	2018		mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Nemertea	Enopla	Dhlohoh-a		Assidiidas		MISC	NTEA	Enopla indet.	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-017	1/2	BM-1-2	BM-1 BM-1		18-Aug-18	Chordata	Ascidiacea	Phlebobranchia Stolidobranchia		Ascidiidae Styolidae		MISC MISC	URAS	Ascidia sp.	1	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-017 mb18-108-017	1/2 1/2	BM-1-2 BM-1-2	BM-1		18-Aug-18	Chordata Mollusca	Ascidiacea Bivalvia	Stolidobranchia	Hiatelloidea	Styelidae Hiatellidae		MOLL	URAS MOBI	Styelidae indet. Hiatella arctica		1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017 mb18-108-017	Whole		BM-1		18-Aug-18 18-Aug-18	Mollusca	Bivalvia	Adapedonta Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	5	1
Golder	Baffinlands Iron Mine	2018		mb18-108-017 mb18-108-017	1/2	BIVI-1-2 BM-1-2	BM-1		18-Aug-18 18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	5 6	5 4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		12 5
Golder	Baffinlands Iron Mine	2018		mb18-108-017	1/2	BM-1-2	BM-1		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		12 3
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Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae	,	MOLL	MOBI	Thyasira sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole		BM-1 2	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	Whole	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	2		_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.	_		5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017	1/2	BM-1-2	BM-1 2	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea		6		MOLL	MOGA	Cephalaspidea indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Marenzelleria sp.	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18							MEMO	MEMO	Egg/egg mass	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018 mb18-108-018	1/2	BM-1-3	BM-1 3 BM-1 3	18-Aug-18	Ammalida	Clitallata	Frank, stransisla		Fu ahu dua ai da a		MEMO	MEMO ANOL	Nematoda indet.	1	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-018	1/2 1/2	BM-1-3 BM-1-3	BM-1 3 BM-1 3	18-Aug-18 18-Aug-18	Annelida Annelida	Clitellata Polychaeta	Enchytraeida Eunicida		Enchytraeidae Lumbrineridae		ANNE ANNE	POER	Enchytraeidae indet. Scoletoma fragilis		3	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1	E	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida				ANNE	POER	Bipalponephtys cornuta	1	3	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae Nereididae		ANNE	POER	Nereididae indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	21		10
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1		10
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	74	23	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	1	1	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio filicornis	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	·	ANNE	POSE	Chaetozone bathyala	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone careyi	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	19		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	34	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos armiger	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Gammaroidea	Gammaridae		ARTH	CRAM	Gammarus sp.		8	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae		ARTH	CRAM	Monoculopsis sp.		4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	_		15
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole		BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH ARTH	CRAM CRAM	Rostroculodes sp.	25	1 47	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-018 mb18-108-018	1/2 Whole	BM-1-3 BM-1-3	BM-1 3 BM-1 3	18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Amphipoda Amphipoda		Pontoporeiidae Pontoporeiidae		ARTH	CRAM	Monoporeia affinis Monoporeia affinis	35 1	47	
								-	•				Pontoporendae		ARTH		·	2		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-018 mb18-108-018	1/2 1/2	BM-1-3 BM-1-3	BM-1 3 BM-1 3	18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Maxillopoda Maxillopoda	Cyclopoida Harpacticoida				ARTH	CRCO CRCO	Cyclopoida indet. Harpacticoida indet.	э Л		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	5	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	J	5	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole		BM-1 3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole		BM-1 3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	6	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	ŭ	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole		BM-1 3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole		BM-1 3	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	=	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole		BM-1 3	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma balthica		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018	Whole	BM-1-3	BM-1 3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma balthica	2	1	



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Client	Project	Year	Type Biologica Sample ID	Split	Client Sample ID	Site Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-018	1/2	BM-1-3	BM-1 3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-018 Benthic mb18-108-019	1/2 Whole	BM-1-3 BM-3-1	BM-1 3 BM-3 1	18-Aug-18 18-Aug-18	Mollusca Arthropoda	Gastropoda Maxillopoda	Cephalaspidea Sessilia				MOLL ARTH	MOGA CRCI	Cephalaspidea indet. Balanomorpha indet.		4	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1		-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Omidiade		ARTH	CRCU	Cumacea indet.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Chordata	Pisces-Actinopterygii	camacca				MISC	PIXX	Pisces indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			8
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18							MEMO	MEMO	Nematoda indet.	34		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Clitellata	Rhynchobdellida		Piscicolidae		ANNE	ANHI	Hirudinea indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	16	5	5
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	10		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole		BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	9	4	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	45	23	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole		BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1	_	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole		BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe extenuata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	8	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	_	3	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	Cala allia a	ANNE	POSE	Galathowenia oculata	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	23	3	
Golder	Baffinlands Iron Mine	2018 2018	Benthic mb18-108-019 Benthic mb18-108-019	4/12	BM-3-1 BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE ANNE	POSE	Dialychone sp. 1	9	1	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018		4/12 4/12	BM-3-1	BM-3 1 BM-3 1	18-Aug-18	Annelida Annelida	Polychaeta	Sabellida		Sabellidae Spionidae		ANNE	POSE POSE	Sabellidae indet.	12	2	3
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019 Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Spionida		•		ANNE	POSE	Prionospio (Prionospio) steenstrupi	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta	Spionida Terebellida		Spionidae Ampharetidae	Ampharetinae	ANNE	POSE	Pygospio sp. Ampharete sp.	1	2	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	Amphareunae	ANNE	POSE	Chaetozone bathyala	15	5	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1	3	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	-	3	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		3	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Tharyx sp.	4	12	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole		BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	2		-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	Whole		BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Neoamphitrite affinis	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	18	15	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Notomastus latericeus			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Arachnida	Acarina	Halacaroidea	Halacaridae		ARTH	CHAR	Halacaridae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae		ARTH	CRAM	Monoculopsis sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1		14
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	7	6	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.	2		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			5
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	9		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	7		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides		5	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-019	4/12	BM-3-1	BM-3 1	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	8	9	3



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α Ι	Int .	J
Golder	Baffinlands Iron Mine	2018	Benthic	• .	4/12	BM-3-1	BM-3	1	18-Aug-18	Arthropoda	Insecta	Diptera	,	Chironomidae	,	ARTH	INDI	Chironomidae indet.			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019	Whole	BM-3-1	BM-3	1	18-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019	4/12	BM-3-1	BM-3	1	18-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019	4/12	BM-3-1	BM-3	1	18-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	(6	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019	4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019	Whole	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019	Whole	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	6		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		4	4
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	1		_
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3		18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Mytilida	Mytiloidea	Mytilidae		MOLL	MOBI	Crenella faba	1 .	2	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		1	4
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-019	Whole		BM-3 BM-3		18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		1	
Golder	Baffinlands Iron Mine		Benthic		Whole			1	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole 4/12	BM-3-1 BM-3-1	BM-3 BM-3	1	18-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae Nuculidae		MOLL MOLL	MOBI MOBI	Nuculana pernula	2		
Golder Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea Pectinoidea			MOLL	MOBI	Ennucula tenuis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18 18-Aug-18	Mollusca	Bivalvia	Pectinida Veneroida	Cardioidea	Propeamussiidae Cardiidae	Clinocardiinae	MOLL	MOBI	Similipecten greenlandicus Ciliatocardium ciliatum	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Cililocardilliae	MOLL	MOBI	Serripes groenlandicus		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		1	_
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		2	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea	reiiiioidea	reminate	Macominae	MOLL	MOGA	Cephalaspidea indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Polinicinae	MOLL	MOGA	Euspira pallida		-	1
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BM-3-1	BM-3		18-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae	Tommemae	MOLL	MOGA	Margarites helicinus		5	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019	4/12	BM-3-1	BM-3	1	18-Aug-18	Mollusca	Gastropoda	rrocilida	rrocholaea	Wargarttaac		MOLL	MOGA	Gastropoda indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3	2	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1		-
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.	_	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Arthropoda	Malacostraca	Decapoda				ARTH	CRDE	Caridea indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Orchomenella pinguis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18			P P	,	,,,		MEMO	MEMO	Egg/egg mass	5		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3	2	18-Aug-18							MEMO	MEMO	Nematoda indet.	40		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	1	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	3	3	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	21	7	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	(6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	96	42	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	Whole	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	4	6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1/2	BM-3-2	BM-3	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	9 :	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata			2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	:	3	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	3		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1		2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	2 :	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae	- L W	ANNE	POSE	Cistenides granulata	10		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Totalia kan 100	ANNE	POSE	Neoamphitrite affinis	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	3	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex	7	0	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	7 8	8	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-3-2	BM-3		18-Aug-18	Annelida	Polychaeta			Cossuridae	Euclymaninas	ANNE	POSE	Cossura sp.	3	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/2	BM-3-2	BM-3 BM-3		18-Aug-18	Annelida Annelida	Polychaeta			Maldanidae Maldanidae	Euclymeninae Maldaninae	ANNE ANNE	POSE POSE	Euclymene sp.	2	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		1/2 1/2	BM-3-2 BM-3-2	BM-3		18-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Maldanidae Paraonidae	iviaiudiliiidE	ANNE	POSE	Maldane sarsi Aricidea minuta	3 1		
Golder Golder	Baffinlands Iron Mine	2018		mb18-108-020	1/2	BM-3-2	BM-3		18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta			Paraonidae Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	1	2
Goldel	Darminanus II On Willie	2010	Dentille	111010-100-020	1/2	DIVI-3-2	ב-ועום	4	10-WnR-10	Ailliellud	ruiyciiaeta			Scamplegillatidae		AININE	FUJE	Jeanni Egina ilmatulli		_	_



Client	Drainet	Voor	Tymo Biologica Comula ID	Clia	Client Comple ID	Cita Danlianta	Data Campulad	Dhylum	Class	Order	Cunarfamily	Family	Subfamily	tavanda	arneada	TaxonName	Δ.	Int	
Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Biologica Sample ID Benthic mb18-108-020	Split 1/2	Client Sample ID BM-3-2	Site Replicate BM-3 2	Date Sampled 18-Aug-18	Phylum Arthropoda	Class Malacostraca	Amphipoda	Superfamily Lysianassoidea	Family Opisidae	Subtaining	taxcode ARTH	grpcode CRAM	Opisa sp.	A	Int 1	,
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	19	5	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	2		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	12		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	7		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	4	5	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	9	11	11
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Consultantida		ARTH	CRTA	Tanaidacea indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020 Benthic mb18-108-020	1/2	BM-3-2 BM-3-2	BM-3 2	18-Aug-18	Arthropoda	Insecta	Coleoptera		Curculionidae	Onhiusinaa	ARTH	INCO	Curculionidae indet.	1	1	
Golder	Baffinlands Iron Mine	2018 2018		Whole	BM-3-2	BM-3 2 BM-3 2	18-Aug-18	Echinodermata	Ophiuroidea	Ophiurida Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiuridae indet		1	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic mb18-108-020 Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Echinodermata Chidaria	Ophiuroidea	Ophiurida		Ophiuridae Olindiidae		ECHI MISC	ECOP CNHY	Ophiuridae indet.	1		1
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2 1/2	BM-3-2	BM-3 2	18-Aug-18 18-Aug-18	Cnidaria Nemertea	Hydrozoa Enopla	Limnomedusae		Ollifulluae		MISC	NTEA	Monobrachium parasitum Enopla indet.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	-	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	2
	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18 18-Aug-18	Mollusca		Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI			1	2
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18	Mollusca	Bivalvia Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica Hiatella arctica	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	20	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis Astarte borealis	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	2	6	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	1	5	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	1	,	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		2	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasirdae indet.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Mytilida	Mytiloidea	Mytilidae		MOLL	MOBI	Crenella faba	1	1	-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Mytilidae indet.	-	-	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus		_	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole		BM-3 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	Whole	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-020	1/2	BM-3-2	BM-3 2	18-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae		MOLL	MOGA	Margarites helicinus	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	Whole	BM-3-3	BM-3 3	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	5		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18							MEMO	MEMO	Egg/egg mass	17		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18							MEMO	MEMO	Nematoda indet.	68		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	4	1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	14	9	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	14		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	37	12	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	Whole		BM-3 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae		ANNE	POER	Bylgides sarsi	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Myriochele heeri	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	Whole		BM-3 3	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	37	7	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.		_	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae		ANNE	POSE	Apistobranchus sp.		1	_
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi		2	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-021	5/12	BM-3-3	BM-3 3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	10	3	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida	, , , , , , , , , , , , , , , , , , ,	Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	2	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	•	ANNE	POSE	Ampharetidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae		ANNE	POSE	Amphicteis sundevalli	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	19	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	3 2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	•	1	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole			3	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	•	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.	_	_	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-3-3		3	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1 :	2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole		BM-3	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021 mb18-108-021	5/12 5/12	BM-3-3 BM-3-3	BM-3 BM-3	3	18-Aug-18	Annelida Annelida	Polychaeta			Capitellidae Capitellidae		ANNE ANNE	POSE POSE	Capitella capitata complex Mediomastus sp.		4	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	2	18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	2	4	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Praxillella praetermissa	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-3-3		3	18-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta			Orbiniidae	Waldaliilac	ANNE	POSE	Scoloplos armiger	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	6	7
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole		BM-3	3	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Phoxocephaloidea	Phoxocephalidae		ARTH	CRAM	Harpinia serrata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	12	17	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Rostroculodes sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima		3	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole			3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	2	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	14 (6	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	6 :	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021 mb18-108-021	5/12	BM-3-3	BM-3 BM-3	3	18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH ARTH	CRMY CROS	Mysis sp.	2	12	15
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021	5/12 5/12	BM-3-3 BM-3-3		3	18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Ostracoda Malacostraca	Myodocopida Tanaidacea		Philomedidae Akanthophoreidae		ARTH	CRTA	Philomedes sp. Akanthophoreus sp.	0 .	12	15
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-3-3		3	18-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Nemertea	Enopla	Heteronemertea		Lineidae		MISC	NTEA	Enopla indet.	3	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole		BM-3	3	18-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole			3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	•		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole		BM-3	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	5	7	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		2	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	2 4	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole	BM-3-3	BM-3	3	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole		BM-3	3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole			3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	2		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-3-3		3	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1 :	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole			3	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	5		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-3-3		3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Managein	MOLL	MOBI	Serripes groenlandicus	2	-	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-3	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	3 !	5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole			3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1		0
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021 mb18-108-021	5/12 5/12	BM-3-3 BM-3-3		3	18-Aug-18	Mollusca Mollusca	Bivalvia	Veneroida Cephalaspidea	Tellinoidea Philinoidea	Tellinidae Cylichnidae	Macominae	MOLL MOLL	MOBI MOGA	Macoma sp. Cylichnidae indet.	1		9
Golder Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-3-3		3	18-Aug-18 18-Aug-18	Mollusca	Gastropoda Gastropoda	Cephalaspidea	riiiiiioiued	cynciniude		MOLL	MOGA	Cephalaspidea indet.	1		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5/12	BM-3-3		3	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.		1	_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	Whole		BM-4	1	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Rostroculodes sp.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		,		ARTH	CRCU	Cumacea indet.	•	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	Whole		BM-4	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18							MEMO	MEMO	Egg/egg mass	10		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18							MEMO	MEMO	Nematoda indet.	64		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	7	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	4 2	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	6	_	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	10 8	8	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae	Dalamatana	ANNE	POER	Pholoe tecta	81 3	33	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/12 5/12	BM-4-1 BM-4-1	BM-4 BM-4		18-Aug-18	Annelida	Polychaeta	Phyllodocida Phyllodocida		Polynoidae	Polynoinae	ANNE ANNE	POER POER	Harmothoe extenuata	2	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Sabellida		Polynoidae Oweniidae	Polynoinae	ANNE	POSE	Harmothoe sp. Galathowenia oculata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	25 4	4	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	1 '	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	17	5	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	2 2	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	4 2	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	1 !	5	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Tharyx sp.	2 2	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-4 BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae	Taraballinaa	ANNE	POSE	Cistenides granulata	17		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole Whole		BM-4		18-Aug-18	Annelida Annelida	Polychaeta	Terebellida Terebellida		Terebellidae Trichobranchidae	Terebellinae Trichobranchinae	ANNE ANNE	POSE POSE	Pista maculata Terebellides sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta	rerebellida		Capitellidae	Tricilobraticililae	ANNE	POSE	Mediomastus sp.	12 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	13 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	3	-	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Annelida	Polychaeta			Maldanidae		ANNE	POSE	Maldanidae indet.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Orbiniidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	2 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	2 1	1	6
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Dexaminoidea	Dexaminidae		ARTH	CRAM	Dexaminidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus barentsi group		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	0 - 41 41 - 1		ARTH	CRAM	Lysianassoidea indet.			1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/12	BM-4-1 BM-4-1	BM-4 BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae Dexaminidae		ARTH ARTH	CRAM CRAM	Monoculopsis sp.	9 3	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		5/12 5/12	BM-4-1	BM-4		18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Amphipoda Amphipoda		Oedicerotidae		ARTH	CRAM	Guernea nordenskioldi Monoculodes sp.	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida		Ocalecrotiade		ARTH	CRCO	Cyclopoida indet.	13		-
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima		3	4
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera		2	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1 6	6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	3 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	6 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Arthropoda	Malacostraca	Mysida				ARTH	CRMY	Mysidacea indet.	3		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4	1	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	5 1	15	11
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.		3	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	4 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Arthropoda	Insecta	Diptera	Odenteni	Chironomidae	Orthocladiinae	ARTH	INDI	Orthocladiinae indet.			
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-4		18-Aug-18	Echinodermata	Echinoidea Ophiuroidea	Camarodonta	Odontophora	Strongylocentrotidae	Onhiurings	ECHI	ECEC	Strongylocentrotus droebachiensis	1	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/12 Whole	BM-4-1 BM-4-1	BM-4 BM-4		18-Aug-18	Echinodermata Echinodermata	Ophiuroidea Ophiuroidea	Ophiurida Ophiurida		Ophiuridae Ophiuridae	Ophiurinae Ophiurinae	ECHI ECHI	ECOP ECOP	Ophiura sarsii	1	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		Whole 5/12	BIVI-4-1 BM-4-1	BM-4		18-Aug-18 18-Aug-18	Echinodermata Nemertea	Ophiuroidea Enopla	Ophiurida		Ophiuridae	Ophiurinae	MISC	NTEA	Ophiura sarsii Enopla indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-4		18-Aug-18 18-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet. Enopla indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	-		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-4		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	10		-
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-4		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-4-1	BM-4		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		3	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.	,	4	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	Whole	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	. 1	18-Aug-18	Mollusca	Bivalvia	Mytilida	Mytiloidea	Mytilidae	Dacrydiinae	MOLL	MOBI	Dacrydium vitreum			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	. 1	18-Aug-18	Mollusca	Bivalvia	Mytilida	Mytiloidea	Mytilidae		MOLL	MOBI	Crenella faba		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	. 1	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	. 1	18-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	. 1	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	Whole	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	Whole	BM-4-1	BM-4	. 1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			7
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.		3	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	5/12	BM-4-1	BM-4	1	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	Whole	BM-4-2	BM-4	2	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	Whole	BM-4-2	BM-4	2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spionidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18							MEMO	MEMO	Nematoda indet.	25		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	3		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	5	6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	49	18	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	15	8	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Chone duneri			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1		2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora socialis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	3	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Lysippe labiata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	17	3	
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex			1
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		2	5
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		6	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	2		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	6		
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki		1	
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2	2	6
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Microclymene sp.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BM-4	. 2	18-Aug-18	Annelida	Polychaeta			Maldanidae		ANNE	POSE	Maldanidae indet.		2	
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	_	1	
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos armiger	1		
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	4		
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1	1	_
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	2	1	5
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus barentsi group		1	_
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata			4
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Atylidae		ARTH	CRAM	Atylus carinatus			1
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	11	6	•
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.	4	1	2
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.	1	1	4
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.	•		1
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	8		
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida		Dinetalists -		ARTH	CRCO	Harpacticoida indet.	/	,	_
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	2	4	ь
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera	4	2	
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic		2/6	BM-4-2	BM-4		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus	2	5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023	2/6	BM-4-2	BIVI-4	2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	3		



Client	Project	Year	Type Bi	iologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Δ Ι	Int J
Golder	Baffinlands Iron Mine	2018		1b18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Arthropoda	Malacostraca	Cumacea	Superiumny	Leuconidae	Sublammy	ARTH	CRCU	Eudorella truncatula	1 1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1 3	3
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	6 5	5 13
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	2 1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	8 2	2
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.		8
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii	2	2
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	2	
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-023	Whole		BM-4	2	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	4	
Golder	Baffinlands Iron Mine	2018 2018		nb18-108-023	2/6 2/6	BM-4-2 BM-4-2	BM-4 BM-4	2	18-Aug-18	Mollusca	Bivalvia	Anomalodesmata	Pandoroidea	Lyonsiidae		MOLL MOLL	MOBI MOBI	Lyonsia arenosa	1	4 2
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018		nb18-108-023 nb18-108-023	2/6 Whole		BIVI-4 BM-4	2	18-Aug-18 18-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Carditoida Carditoida	Crassatelloidea Crassatelloidea	Astartidae Astartidae		MOLL	MOBI	Astarte borealis Astarte borealis	4 7	+ 2
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	4 2	g 7
Golder	Baffinlands Iron Mine	2018		nb18-108-023	Whole	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	1	, , 1
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	-	5
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.	g	9
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.		2
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	Whole	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	1	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	Whole	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	2	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-023	Whole	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum	1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus		1
Golder	Baffinlands Iron Mine	2018		nb18-108-023	Whole		BM-4	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus	1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-023	Whole		BM-4	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1 3	3
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1	_
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.		5
Golder	Baffinlands Iron Mine	2018		nb18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Philinoidea	Cylichnidae		MOLL	MOGA	Cylichnoides occultus	1	4 2
Golder	Baffinlands Iron Mine	2018		1b18-108-023	2/6	BM-4-2	BM-4	2	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Nationidae	Natioidaa	Delinisinos	MOLL	MOGA	Cephalaspidea indet.	1	1 2
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018		nb18-108-023 nb18-108-023	2/6 Whole	BM-4-2 BM-4-2	BM-4 BM-4	2	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea Naticoidea	Naticidae Naticidae	Polinicinae Polinicinae	MOLL MOLL	MOGA MOGA	Euspira pallida	1	1
Golder Golder	Baffinlands Iron Mine	2018		nb18-108-023	1/4	BM-4-3	BM-4	2	18-Aug-18 18-Aug-18	Mollusca Arthropoda	Gastropoda Malacostraca	Littorinimorpha Amphipoda	Naticoidea	Naticidae Oedicerotidae	Politicinae	ARTH	CRAM	Euspira pallida Oedicerotidae indet.	1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.	1	1 3
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea		Diastylidae		MOLL	MOGA	Cephalaspidea indet.	1	1 5
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Gastropoda	Серпанаэрнаев	Trochoidea	Trochidae		MOLL	MOGA	Trochidae indet.	-	1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.		1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.		1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	Whole	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Orchomene sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18							MEMO	MEMO	Nematoda indet.	60	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Parougia caeca	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	3	3 2
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1 1	1 3
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	4 3	3
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta		6 7
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		3 7
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	43 2	26
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-024	Whole		BM-4		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1	4
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae		ANNE	POER	Polynoidae indet.	2	1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4		18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	Cahallinas	ANNE	POSE	Owenia fusiformis	ქ ექ -	5 2
Golder	Baffinlands Iron Mine	2018 2018		nb18-108-024 nb18-108-024	1/4 Whole	BM-4-3 BM-4-3	BM-4 BM-4	3	18-Aug-18	Annelida Annelida	Polychaeta	Sabellida Sabellida		Sabellidae Sabellidae	Sabellinae Sabellinae	ANNE ANNE	POSE POSE	Euchone incolor	21 5 1 1	5 2
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018		1018-108-024 1b18-108-024	whole 1/4	BIVI-4-3 BM-4-3	BIVI-4 BM-4	3	18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Sabellida		Sabellidae Sabellidae	Saneilliae	ANNE	POSE	Euchone incolor Dialychone sp.	1 1	L
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4		18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	3 1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	Whole		BM-4		18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	1	-
Golder	Baffinlands Iron Mine	2018		nb18-108-024	Whole		BM-4	3	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 3	1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4	-	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-024	1/4	BM-4-3	BM-4		18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	2	=
Golder	Baffinlands Iron Mine	2018	Benthic m		1/4	BM-4-3	BM-4		18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	3	
									-											



Client	Project	Year	Type Biologi	ica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	А	Int	J
Golder	Baffinlands Iron Mine	2018		•	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida	ouper turning	Ampharetidae	Ampharetinae	ANNE	POSE	Lysippe labiata	•	1	•
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae		ANNE	POSE	Ampharetidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2		1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	14	1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	2		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	Whole	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		4	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	2	1	
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	10		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki		1	
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Leaena abranchiata	1		1
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata		1	
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	2		
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4 BM-4	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Trichohranchinaa	ANNE ANNE	POSE	Terebellidae indet.			1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018			1/4 1/4	BM-4-3 BM-4-3	BM-4	3	18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Terebellida		Trichobranchidae Capitellidae	Trichobranchinae	ANNE	POSE POSE	Terebellides sp. Mediomastus sp.	4		1
Golder Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18 18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	4		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	4		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	-	1	
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta			Orbiniidae	Орпенинае	ANNE	POSE	Scoloplos acutus		1	2
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae		1	-
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-3	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	3	1	6
Golder	Baffinlands Iron Mine	2018	Benthic mb18-3	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-3	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	6	9	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			1
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	3		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	5		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	7	8	5
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera		1	
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	4	1	
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	•	1	
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	3	3	40
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4 BM-4	3	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	13	23	19
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018			Whole	BM-4-3 BM-4-3	BM-4	3	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH ARTH	CROS CRTA	Philomedes sp.	1	1	1
Golder Golder	Baffinlands Iron Mine	2018			1/4 1/4	BM-4-3	BM-4	2	18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Malacostraca Malacostraca	Tanaidacea Tanaidacea		Akanthophoreidae Pseudotanaidae		ARTH	CRTA	Akanthophoreus sp. Pseudotanais sp.	1	2	1
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1		1
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Nemertea	Enopla	Archinemertea		Серпаютителиае		MISC	NTEA	Enopla indet.	1		1
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Chordata	Ascidiacea	Stolidobranchia		Pyuridae		MISC	URAS	Boltenia echinata	-		1
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1	1	-
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	8	=	
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Anomalodesmata	Pandoroidea	Lyonsiidae		MOLL	MOBI	Lyonsia arenosa	1		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	7
Golder	Baffinlands Iron Mine	2018	Benthic mb18-3	108-024	Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2	3	
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		19	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			6
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-2	108-024	Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	1		
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	2		
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	3	1	1
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1		_
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus		1	1
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Managira	MOLL	MOBI	Serripes groenlandicus		1	2
Golder	Baffinlands Iron Mine	2018			1/4	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Veneroida Veneroida	Tellinoidea	Tellinidae Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1		3
Golder	Baffinlands Iron Mine	2018			Whole	BM-4-3	BM-4	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae Pariplamatidae	Macominae	MOLL	MOBI	Macoma calcarea	1	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018			1/4 1/4	BM-4-3 BM-4-3	BM-4 BM-4	ა ვ	18-Aug-18	Mollusca Mollusca	Bivalvia Gastropoda	Littorinimorpha	Thracioidea Rissooidea	Periplomatidae Rissoidae		MOLL MOLL	MOBI MOGA	Periploma aleuticum	า	T	
Golder Golder	Baffinlands Iron Mine	2018			Whole		BM-6	ა 1	18-Aug-18 18-Aug-18	Bryozoa	Gastropoda Gymnolaemata	Littorinimorpha Ctenostomatida	Missoulada	Missolidae		MISC	BRYO	Boreocingula castanea Ctenostomata indet.	2		
Golder	Baffinlands Iron Mine	2018			1/2	BM-6-1	BM-6	1	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-		Whole		BM-6	1	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	3		
_0.00		_0_0					0	_			,							paraorealii	3		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α Ι	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Sabellida	Superiumny	Oweniidae	Subjumity	ANNE	POSE	Oweniidae indet.	1 1	1	•
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Caudofoveata	Chaetodermatida		Chaetodermatidae		MOLL	MOAP	Chaetoderma sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Gastropoda					MOLL	MOGA	Gastropoda indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18							MEMO	MEMO	Nematoda indet.	17		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1 1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	Whole		BM-6	1	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	_ 1	1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	/	4	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-025 mb18-108-025	1/2 1/2	BM-6-1 BM-6-1	BM-6 BM-6	1	18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Pholoidae Pholoidae		ANNE ANNE	POER POER	Pholoe minuta Pholoe tecta	11 3	5 T	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae		ANNE	POER	Polynoidae indet.	11 .	3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	5 2	2	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Myriochele heeri	2	=	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	22		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	2 2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	30 1	10	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Melinninae	ANNE	POSE	Melinna elisabethae	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	10	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-025 mb18-108-025	1/2	BM-6-1 BM-6-1	BM-6 BM-6	1	18-Aug-18	Annelida Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE ANNE	POSE POSE	Chaetozone bathyala Chaetozone pigmentata	19		1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2 1/2	BM-6-1	BM-6	1	18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta	Terebellida Terebellida		Cirratulidae Cirratulidae		ANNE	POSE	Chaetozone pignientata Chaetozone setosa complex	12 2	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		5	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	Whole		BM-6	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		Ü
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	- 1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	9 2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymeninae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Microclymene sp.	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Orbiniidae indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-025 mb18-108-025	1/2	BM-6-1 BM-6-1	BM-6 BM-6	1	18-Aug-18	Annelida Annelida	Polychaeta			Paraonidae Scalibrogmatidae		ANNE ANNE	POSE POSE	Aricidea sp.	2 1	2	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2 1/2	BM-6-1	BM-6	1	18-Aug-18 18-Aug-18	Arthropoda	Polychaeta Pycnogonida	Pantopoda	Nymphonoidea	Scalibregmatidae Nymphonidae		ARTH	CHPY	Scalibregma inflatum Nymphon sp.	1	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	275.01105551000	Oedicerotidae		ARTH	CRAM	Rostroculodes sp.	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	3 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	Whole		BM-6	1	18-Aug-18	Arthropoda	Malacostraca	Decapoda	Crangonoidea	Crangonidae		ARTH	CRDE	Sabinea septemcarinata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Arthropoda	Ostracoda	Myodocopida	Auracidat I	Philomedidae		ARTH	CROS	Philomedes sp.		21	20
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025 mb18-108-025	1/2	BM-6-1 BM-6-1	BM-6	1	18-Aug-18	Arthropoda Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae Typhlotanaidae		ARTH ARTH	CRTA CRTA	Pseudosphyrapus anomalus	3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-025 mb18-108-025	1/2 Whole		BM-6 BM-6	1	18-Aug-18 18-Aug-18	Arthropoda Nemertea	Malacostraca Enopla	Tanaidacea		Typhlotanaidae		MISC	NTEA	Typhlotanais sp. Enopla indet.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	6		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui			6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	3	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6		18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	Whole		BM-6		18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6		18-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis		3	8
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2 Whala	BM-6-1	BM-6	1	18-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	4 3	3	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-025 mb18-108-025	Whole 1/2	BM-6-1 BM-6-1	BM-6 BM-6		18-Aug-18 18-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Pectinida Veneroida	Pectinoidea Tellinoidea	Propeamussiidae Tellinidae	Macominae	MOLL MOLL	MOBI MOBI	Similipecten greenlandicus Macoma calcarea	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	Whole		BM-6		18-Aug-18 18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	2 5	<u>.</u> 5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6		18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	1/2	BM-6-1	BM-6		18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025	Whole		BM-6		18-Aug-18	Mollusca	Gastropoda		Lottioidea	Lepetidae		MOLL	MOGA	Lepeta caeca	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	2		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Orchomene sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Capuloidea	Capulidae		MOLL	MOGA	Ariadnaria borealis			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6		18-Aug-18							MEMO	MEMO	Desmosoma sp. (planktonic)	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18							MEMO	MEMO	Egg/egg mass	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18		5.1.1			B		MEMO	MEMO	Nematoda indet.	41		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Parougia caeca	2		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BM-6-2 BM-6-2	BM-6 BM-6	2	18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta	Eunicida Phyllodocida		Lumbrineridae		ANNE ANNE	POER POER	Scoletoma impatiens	4	1	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta Polychaeta	Phyllodocida		Hesionidae Nephtyidae		ANNE	POER	Nereimyra punctata Bipalponephtys cornuta	10	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	12	8	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	2	1	_
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Melaenis loveni	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae		ANNE	POER	Polynoidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Sphaerodoridae		ANNE	POER	Sphaerodoropsis minuta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	4		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-6	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	21		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	43	5	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae		ANNE	POSE	Apistobranchus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6 BM-6	2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	17	8	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3 1/3	BM-6-2 BM-6-2	BM-6	2	18-Aug-18	Annelida Annelida	Polychaeta	Spionida Spionida		Spionidae Spionidae		ANNE ANNE	POSE POSE	Prionospio sp.	2	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-6		18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Pygospio sp. Lysippe labiata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Amphareunae	ANNE	POSE	Ampharetidae indet.	-		2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	2		2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	25	3	_
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1	2	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymeninae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Microclymene sp.	2	3	3
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3	BM-6-2 BM-6-2	BM-6 BM-6		18-Aug-18	Annelida Annelida	Polychaeta			Maldanidae Orbiniidae	Maldaninae	ANNE ANNE	POSE POSE	Maldane sarsi	3	4	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/3 1/3	BM-6-2	BM-6	2	18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta			Paraonidae		ANNE	POSE	Scoloplos acutus Aricidea minuta	2	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta Aricidea nolani	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	2	1	9
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Ampeliscoidae	Ampeliscidae		ARTH	CRAM	Byblis sp.	_	1	•
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata			2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	•	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Rostroculodes sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	35		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima		6	6
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei		_	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	_	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	5	8	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Nannastacidae		ARTH	CRCU	Campylaspis rubicunda	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1		
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		1/3	BM-6-2 BM-6-2	BM-6 BM-6		18-Aug-18	Arthropoda	Ostracoda Malacostraca	Myodocopida	Apseudoidea	Philomedidae Sphyrapodidae		ARTH ARTH	CROS CRTA	Philomedes sp.	٥	15	3
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		1/3 1/3	BM-6-2	BM-6		18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Malacostraca	Tanaidacea Tanaidacea	Apseudoidea	Sphyrapodidae Akanthophoreidae		ARTH	CRTA	Pseudosphyrapus anomalus Akanthophoreus sp.	1	9	
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18 18-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanalophorelude		ARTH	CRTA	Tanaidacea indet.		,	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6		18-Aug-18	Nemertea	Enopla	etc. oemerted				MISC	NTEA	Enopla indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-6		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-6		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	3		
Golder	Baffinlands Iron Mine	2018	Benthic		1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2	2	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		4	3



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	A I	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae	•	MOLL	МОВІ	Astarte montagui	(6	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	4	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.	-	_	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole		BM-6	2	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		3	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-026 mb18-108-026	Whole Whole		BM-6 BM-6	2	18-Aug-18 18-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Nuculanida Nuculanida	Nuculanoidea Nuculanoidea	Nuculanidae Nuculanidae		MOLL MOLL	MOBI MOBI	Nuculana minuta Nuculana pernula	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	:	1	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	1 :	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum	:	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole		BM-6	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1 3	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	Whole		BM-6	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	2		_
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-026 mb18-108-026	1/3	BM-6-2 BM-6-2	BM-6 BM-6	2	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI MOBI	Macoma sp.			2
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-026	1/3 Whole		BM-6	2	18-Aug-18 18-Aug-18	Mollusca Mollusca	Bivalvia Gastropoda	Cephalaspidea	Philinoidea	Cylichnidae		MOLL MOLL	MOGA	Bivalvia indet. Cylichna sp.	1		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Tillilloidea	Cylicillidae		MOLL	MOGA	Cephalaspidea indet.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Polinicinae	MOLL	MOGA	Euspira pallida			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.	:	1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1/3	BM-6-2	BM-6	2	18-Aug-18	Mollusca	Gastropoda					MOLL	MOGA	Gastropoda indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Bryozoa	Gymnolaemata	Ctenostomatida				MISC	BRYO	Ctenostomata indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Bryozoa						MISC	BRYO	Bryozoa indet.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Latticidas	Lanatidas		ARTH	CRAM	Amphipoda indet.	:	3	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027	Whole Whole		BM-6 BM-6	3	18-Aug-18 18-Aug-18	Mollusca Annelida	Gastropoda Polychaeta	Phyllodocida	Lottioidea	Lepetidae Hesionidae		MOLL ANNE	MOGA POER	Lepeta caeca Nereimyra punctata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole		BM-6	3	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Myriochele heeri		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	7.1111/211/44	i oryanacta	Sasemaa		o Weilindae		MEMO	MEMO	Egg/egg mass	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18							MEMO	MEMO	Nematoda indet.	122		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	:	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	1 2	2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	- '	3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata			2
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027	2/6 2/6	BM-6-3 BM-6-3	BM-6 BM-6	3	18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Pholoidae Pholoidae		ANNE ANNE	POER POER	Pholoe minuta Pholoe tecta	6 2 35 4	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	33 .	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Phyllodocinae	ANNE	POER	Phyllodoce groenlandica	:	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	1 :	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	6.1.111	ANNE	POSE	Owenia fusiformis	4	•	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027	2/6 2/6	BM-6-3 BM-6-3	BM-6 BM-6	3	18-Aug-18	Annelida	Polychaeta	Sabellida Sabellida		Sabellidae Sabellidae	Sabellinae	ANNE ANNE	POSE POSE	Euchone incolor	34	3 1	3
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Spionida		Apistobranchidae		ANNE	POSE	Dialychone sp. Apistobranchus sp.	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole		BM-6	3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Laonice cirrata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	4	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	5	1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	11		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1		2
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027	2/6 2/6	BM-6-3 BM-6-3	BM-6 BM-6		18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Terebellida Terebellida		Cirratulidae Cirratulidae		ANNE ANNE	POSE POSE	Chaetozone setosa complex Chaetozone sp.	3		2 9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1	2	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole		BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki	:	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	:	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole		BM-6		18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta			Cossuridae	Euglymania	ANNE	POSE	Cossura sp.	11	2	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027	2/6 2/6	BM-6-3 BM-6-3	BM-6 BM-6		18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Maldanidae Maldanidae	Euclymeninae Maldaninae	ANNE ANNE	POSE POSE	Euclymeninae indet. Maldane sarsi	2	4	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6		18-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina sp.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	Whole		BM-6	3	18-Aug-18	Annelida	Polychaeta			Orbiniidae	•	ANNE	POSE	Scoloplos armiger	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos sp.	2	2	1



Client	Project	Year	Type Bi	iologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	A I	Int J
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta		,	Paraonidae	•	ANNE	POSE	Aricidea minuta	3	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	1	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1 4	4 5
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Ampeliscoidae	Ampeliscidae		ARTH	CRAM	Byblis sp.	2	2
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Corophioidea	Corophiidae		ARTH	CRAM	Monocorophium sp.	1	L
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata	1	ı
Golder	Baffinlands Iron Mine	2018		nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Ampeliscidae		ARTH	CRAM	Haploops tubicola	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	6 7	1
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.	2	2 1
Golder	Baffinlands Iron Mine	2018		nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1	_
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.	_	1
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	8	
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Maxillopoda	Harpacticoida		Discoulidado		ARTH	CRCO	Harpacticoida indet.	9	
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	1 6	, 3
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus	4	-
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	1	1 2
Golder	Baffinlands Iron Mine	2018		nb18-108-027 nb18-108-027	2/6	BM-6-3 BM-6-3	BM-6 BM-6	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH ARTH	CRCU CROS	Leucon sp.	11 1	1 3 14 13
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018		1018-108-027 1b18-108-027	2/6	BIVI-6-3 BM-6-3	BM-6	3	18-Aug-18	Arthropoda	Ostracoda	Myodocopida Tanaidacea	Ancoudoidos	Philomedidae Sphyrapadidae		ARTH	CRTA	Philomedes sp.	11 1	.4 13
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6 2/6	BM-6-3	BM-6	2	18-Aug-18 18-Aug-18	Arthropoda Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae Akanthophoreidae		ARTH	CRTA	Pseudosphyrapus anomalus	2 /	4 2
Golder Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	2	18-Aug-18	Arthropoda	Malacostraca Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Akanthophoreus sp. Pseudotanais sp.	2 -	, 2
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	2	18-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii	2	1
Golder	Baffinlands Iron Mine	2018		nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii		
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Nemertea	Enopla	Opiniuriua		Opiliuriuae	Opiniumae	MISC	NTEA	Enopla indet.	2	2
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Cephalorhyncha	Priapulida			Priapulidae		MISC	PRIA	Priapulus caudatus	1	2
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	-	3
Golder	Baffinlands Iron Mine	2018		nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	5 2	,
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2	,
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		4 1
Golder	Baffinlands Iron Mine	2018		nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	3 5	5
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.		2
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	4	4 1
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.		4
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	1	1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis		2
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum		1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1	1 1
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	Whole	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	2	
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.		5
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.		2
Golder	Baffinlands Iron Mine	2018	Benthic m	nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.	1	1 2
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Rissooidea	Rissoidae		MOLL	MOGA	Boreocingula castanea	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-027	2/6	BM-6-3	BM-6	3	18-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.		1
Golder	Baffinlands Iron Mine	2018		nb18-108-027	Whole		BM-6	3	18-Aug-18	Mollusca	Gastropoda	Neogastropoda	Buccinoidea	Buccinidae		MOLL	MOGA	Colus sp.	1	Ĺ
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	3 2	1
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	1	
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.	_ 1	
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole			1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	5 3	3 1
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	14	
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole				18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	11 6	
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone careyi	11 4	4 2
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	2 1	
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1 6	6 13
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole				18-Aug-18	Annelida	Polychaeta	Calanda		Cossuridae		ANNE	POSE	Cossura sp.	б	
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Marenzelleria sp.	6 4	i
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole				18-Aug-18	Annol: do	Doluchooto	Eupicida		Lumbria asida -		MEMO	MEMO	Nematoda indet.	36	1
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impations	1 1	1
Golder	Baffinlands Iron Mine	2018		nb18-108-028	Whole		BM-7	1	18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Eunicida Phyllodocida		Lumbrineridae	Microphthalminas	ANNE ANNE	POER POER	Scoletoma impatiens	1 1	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018		nb18-108-028 nb18-108-028	Whole		BM-7 BM-7	1	18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Hesionidae	Microphthalminae	ANNE	POER	Microphthalmus sp.	3	•
Golder Golder	Baffinlands Iron Mine	2018		1b18-108-028 1b18-108-028	Whole Whole		BIVI-7 BM-7		18-Aug-18 18-Aug-18	Annelida	Polychaeta Polychaeta	Phyllodocida		Hesionidae Nephtyidae		ANNE	POER	Nereimyra punctata Bipalponephtys cornuta	5 1	1
Golder	Baffinlands Iron Mine	2018		1b18-108-028 1b18-108-028	Whole		BIVI-7 BM-7		18-Aug-18 18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1	•
Joinel	Sammanas II OH WIII IC	2010	Jennine III	100 020	***1016	2111 / 1	D141-7	-	10 1108-10	, unichad	. Diyenacta	. Hymodocida		. ver clarate	. Ter cramae	/ 11 41 4 L	I OLIV	CIS LOTIGICA	-	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	19	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi		4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Tharyx sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	6	9	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Orbiniidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae		ARTH	CRAM	Monoculopsis sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH	CRAM	Monoporeia affinis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.		2	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		3	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028	Whole	BM-7-1	BM-7	1	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole	BM-7-2	BM-7	2	18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Marenzelleria sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole	BM-7-2	BM-7	2	18-Aug-18							MEMO	MEMO	Nematoda indet.	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole	BM-7-2	BM-7	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	14	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole	BM-7-2	BM-7	2	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole	BM-7-2	BM-7	2	18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BM-7-2	BM-7	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone careyi	5	5	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole	BM-7-2	BM-7	2	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	6	5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymeninae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	3		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH	CRAM	Monoporeia affinis	4	14	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	52		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	5		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029	Whole	BM-7-2	BM-7		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	2		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	4		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Gastropoda					MOLL	MOGA	Gastropoda indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.	_	1	19
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18							MEMO	MEMO	Copepoda indet. (parasitic)	3		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18							MEMO	MEMO	Nematoda indet.	32		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Lumbrineris sp.		1	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α Ι	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	6	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	3	3	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	14	16	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	32	4	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	10	5	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE ANNE	POSE POSE	Sabellidae indet.	2		1
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic		Whole Whole		BM-7		18-Aug-18 18-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Spionida Spionida		Apistobranchidae Spionidae		ANNE	POSE	Apistobranchus sp. Prionospio (Prionospio) steenstrupi	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio filicornis	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	16	3	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	4	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1	5	19
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3	3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	4		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	4		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Orbiniidae indet.		_	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	2 :	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole Whole		BM-7		18-Aug-18	Annelida Arthropoda	Polychaeta Malacostraca	Amphinoda		Scalibregmatidae		ANNE ARTH	POSE CRAM	Scalibregma inflatum	2	ວ າ	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18 18-Aug-18	Arthropoda	Malacostraca	Amphipoda Amphipoda		Corophiidae Dexaminidae		ARTH	CRAM	Crassicorophium bonellii Guernea nordenskioldi	2	<u>د</u> ۸	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH	CRAM	Monoporeia affinis	1	2	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Maxillopoda	Cyclopoida		Tontoporendae		ARTH	CRCO	Cyclopoida indet.	413	-	-
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole		BM-7	3	18-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	13	13	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole	BM-7-3	BM-7	3	18-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	3		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1 4	4	10
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	!	9	4
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			4
Golder	Baffinlands Iron Mine	2018 2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL MOLL	MOBI	Thyasira sp. Thyasiridae indet.	2	5	2
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic		Whole Whole		BM-7		18-Aug-18 18-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Lucinida Myida	Thyasiroidea Myoidea	Thyasiridae Myidae		MOLL	MOBI MOBI	Mya truncata		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	2		1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-7		18-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus	-		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030	Whole		BM-7	3	18-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.	:	3	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Orchomenella pinguis	1 4	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18							MEMO	MEMO	Nematoda indet.	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Dorvilleidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens		2	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata		2	9
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	11		
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	5 4	4	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Phyllodocida Phyllodocida		Pholoidae	Dolunciaco	ANNE	POER	Pholoe tecta	34 !	9	
Golder	Baffinlands Iron Mine	2018 2018	Benthic		5/12 5/12	BM-9-1 BM-9-1	BM-9		19-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Polynoidae Polynoidae	Polynoinae	ANNE	POER POER	Gattyana cirrhosa	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic		5/12 5/12	BM-9-1	BIVI-S		19-Aug-18 19-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Polynoidae Polynoidae	Polynoinae	ANNE ANNE	POER POER	Harmothoe imbricata Polynoidae indet.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-S		19-Aug-18 19-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	6	_	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	11		-
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9		19-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	20		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor		6	2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9		19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	3	2	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora socialis		1	



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	A In	nt J
Golder	Baffinlands Iron Mine	2018	Benthic	• •	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Spionida	,	Spionidae	,	ANNE	POSE	Prionospio (Prionospio) steenstrupi	33 13	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Melinninae	ANNE	POSE	Melinna elisabethae	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	10 4	. 3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone careyi	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	3 1	. 2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	5	5
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	. 1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	Whole		BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	5	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	1	19-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3 1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic		5/12	BM-9-1	BM-9 BM-9	1	19-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE ANNE	POSE	Mediomastus sp.		
Golder	Baffinlands Iron Mine		Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta			Cossuridae	Maldaninaa		POSE	Cossura sp.	21 3	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/12 5/12	BM-9-1 BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta			Maldanidae Orbiniidae	Maldaninae	ANNE ANNE	POSE POSE	Maldane sarsi Orbiniidae indet.	3	2
Golder Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida Annelida	Polychaeta			Orbiniidae		ANNE	POSE		2 2	. 2
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18 19-Aug-18	Annelida	Polychaeta Polychaeta			Paraonidae		ANNE	POSE	Scoloplos acutus Aricidea hartmanae	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	6	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta Aricidea nolani	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1 3	3
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Amphipoda	Phoxocephaloidea	Phoxocephalidae		ARTH	CRAM	Harpinia serrata	1	3
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.	-	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Amphipoda	_,	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	5 2	-
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.		7
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	22 24	4 15
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	6 2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	Whole	BM-9-1	BM-9	1	19-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	Whole	BM-9-1	BM-9	1	19-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.		4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Caudofoveata	Chaetodermatida		Chaetodermatidae		MOLL	MOAP	Chaetoderma sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1	. 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	Whole	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	6	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1	. 1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	Whole	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	2	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	1	19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.	1	
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.	2	=
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	_
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.	1 ^	1
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1 2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1 BM-9-1	BM-9 BM-9	1	19-Aug-18	Mollusca Mollusca	Bivalvia	Veneroida	Cardioidea Tellinoidea	Cardiidae Tellinidae	Macamiras	MOLL MOLL	MOBI MOBI	Serripes groenlandicus	1 4	2
Golder		2018	Benthic		Whole			1	19-Aug-18		Bivalvia	Veneroida			Macominae			Macoma calcarea	1 4	
Golder	Baffinlands Iron Mine	2018 2018	Benthic		5/12 Whala	BM-9-1 BM-9-1	BM-9 BM-9	1	19-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae Porinlomatidae	Macominae	MOLL MOLL	MOBI MOBI	Macoma sp.	1	3
Golder	Baffinlands Iron Mine		Benthic		Whole		BM-9	1	19-Aug-18	Mollusca	Bivalvia		Thracioidea	Periplomatidae			MOBI	Periploma aleuticum	1	4
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		5/12 5/12	BM-9-1 BM-9-1	BM-9	1	19-Aug-18 19-Δυσ-18	Mollusca Mollusca	Bivalvia Gastropoda	Littorinimorpha		Rissoidae		MOLL MOLL	MOGA	Bivalvia indet. Rissoidae indet.		4
Golder	Baffinlands Iron Mine	2018	Benthic		5/12	BM-9-1	BM-9	1	19-Aug-18 19-Aug-18	Mollusca	Gastropoda	ышынынырна	Lottioidea	Lepetidae		MOLL	MOGA	Lepeta caeca	1	. 1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	1	19-Aug-18	Mollusca	Gastropoda		Lottioidea	Lepetidae		MOLL	MOGA	Lepeta caeca	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta	Sabellida	Lottioluca	Serpulidae	Spirorbinae	ANNE	POSE	Spirorbinae indet.	16 6	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	2	19-Aug-18 19-Aug-18	Arthropoda	Maxillopoda	Sessilia		oci panaac	Spriorbillac	ARTH	CRCI	Balanomorpha indet.	10 0	, 70
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9	2	19-Aug-18	Cnidaria	Hydrozoa	Jessina				MISC	CNHY	Hydrozoa indet.	1	,,
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.	-	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	2	19-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Pectinidae		MOLL	MOBI	Chlamys islandica	2	_
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae		MOLL	MOGA	Margarites sp.	-	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Gastropoda	Neogastropoda	Conoidea	Mangeliidae		MOLL	MOGA	Mangeliidae indet.	1	-
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	1	
Golder	Baffinlands Iron Mine	2018		mb18-108-032	Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta			Maldanidae	Nicomachinae	ANNE	POSE	Nicomache sp.	1	
									-											



Client	Project	Year	Type	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Δ	Int	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Spionida	Superiumny	Spionidae	Sublummy	ANNE	POSE	Marenzelleria sp.		1	•
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18		, , , , , , , , , , , , , , , , , , , ,			.,		MEMO	MEMO	Egg/egg mass	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18							MEMO	MEMO	Nematoda indet.	35		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	8	3	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata		11	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	13		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9 BM-9	2	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	9 42	9	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-032 mb18-108-032	1/2 1/2	BM-9-2 BM-9-2	BM-9	2	19-Aug-18	Annelida Annelida	Polychaeta	Phyllodocida		Pholoidae Phyllodosidae	Etooningo	ANNE ANNE	POER POER	Pholoe tecta		2	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18 19-Aug-18	Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Phyllodocidae Polynoidae	Eteoninae Polynoinae	ANNE	POER	Eteone sp. Harmothoe sp.	1	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	FolyHolliae	ANNE	POSE	Galathowenia oculata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	13	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.		_	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae		ANNE	POSE	Apistobranchus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	27	7	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		7	11
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.			5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	34		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-032 mb18-108-032	1/2	BM-9-2 BM-9-2	BM-9 BM-9	2	19-Aug-18	Annelida	Polychaeta			Cossuridae Maldanidae	Euclymoningo	ANNE ANNE	POSE POSE	Cossura sp.	7	1	2
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2 1/2	BM-9-2	BM-9	2	19-Aug-18 19-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Maldanidae	Euclymeninae Euclymeninae	ANNE	POSE	Euclymeninae indet. Microclymene sp.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9	2	19-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta			Orbiniidae	Waldalillac	ANNE	POSE	Scoloplos acutus	-	4	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	1		-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	5	3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9	2	19-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sarsi	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Arthropoda	Malacostraca	Amphipoda		Ampeliscidae		ARTH	CRAM	Ampelisca eschrichtii	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	2	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH	CRAM	Monoporeia affinis			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9		19-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	18	18	9
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9		19-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9		19-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9		19-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Nemertea	Enopla	Colfinalida		Colfine		MISC	NTEA	Enopla indet.			1
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-032 mb18-108-032	1/2 1/2	BM-9-2 BM-9-2	BM-9 BM-9		19-Aug-18	Sipuncula Mollusca	Sipunculidea Biyalyia	Golfingiida	Hiatelloidea	Golfingiidae		MISC MOLL	SIPN MOBI	Golfingia sp. Hiatella arctica		1	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		1/2 Whole		BM-9		19-Aug-18 19-Aug-18	Mollusca	Bivalvia Bivalvia	Adapedonta Adapedonta	Hiatelloidea	Hiatellidae Hiatellidae		MOLL	MOBI	Hiatella arctica Hiatella arctica	12	1	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9		19-Aug-18 19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2	3	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9		19-Aug-18 19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte porealis Astarte montagui		6	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	Whole		BM-9		19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		2	•
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	-	-	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.		5	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-9-2	BM-9		19-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9		19-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	



Client	Project	Year	Type Biolo	ogica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	
Golder	Baffinlands Iron Mine	2018	• •	18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae	Jubianny	MOLL	MOBI	Mya truncata	^	1	•
Golder	Baffinlands Iron Mine	2018		18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		-	1
Golder	Baffinlands Iron Mine	2018		18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2	1	1
Golder	Baffinlands Iron Mine	2018		18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	-	-
Golder	Baffinlands Iron Mine	2018		18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.			1
Golder	Baffinlands Iron Mine	2018		18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis			1
Golder	Baffinlands Iron Mine	2018		18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Pectinoida	Pectinoidea	Pectinidae		MOLL	MOBI	Pectinidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			10
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	Whole	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Polinicinae	MOLL	MOGA	Euspira pallida		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-032	1/2	BM-9-2	BM-9	2	19-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Rissooidea	Rissoidae		MOLL	MOGA	Boreocingula castanea	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Mollusca	Gastropoda					MOLL	MOGA	Gastropoda indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Marenzelleria sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18							MEMO	MEMO	Egg/egg mass	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18							MEMO	MEMO	Nematoda indet.	29		
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	2	2	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	8	1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	17	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	3	2	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	22	6	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	3		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	17	-	3
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp.			3
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	11	5	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 3		1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae		ANNE	POSE	Apistobranchus sp.	3	1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata		1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	6		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1	1	
Golder	Baffinlands Iron Mine	2018		18-108-033	Whole	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae		ANNE	POSE	Amphicteis sundevalli	1	•	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	20	9	4
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chartes and a second complex	1	3	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	2	1	4
Golder	Baffinlands Iron Mine	2018 2018		l8-108-033 l8-108-033	1/3	BM-9-3 BM-9-3	BM-9 BM-9	3	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE ANNE	POSE POSE	Cirratulidae indet.	2	3	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae Terebellidae	Torobollingo	ANNE	POSE	Tharyx sp.	4	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018		18-108-033	Whole 1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Terebellida		Trichobranchidae	Terebellinae Trichobranchinae	ANNE	POSE	Pista maculata	1		
Golder Golder	Baffinlands Iron Mine	2018		18-108-033 18-108-033	Whole	BM-9-3	BM-9	3	19-Aug-18 19-Aug-18	Annelida	Polychaeta	Terebellida Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp. Terebellides sp.	3		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18 19-Aug-18	Annelida	Polychaeta	reresemud		Capitellidae	menobranellilae	ANNE	POSE	Mediomastus sp.	J	4	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	-	19-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	7	•	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18 19-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Microclymene sp.	,	1	2
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Praxillella praetermissa	1		2
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	6	-	-
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta			Maldanidae	maraariinac	ANNE	POSE	Maldanidae indet.	Ü		1
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	1		1
Golder	Baffinlands Iron Mine	2018		18-108-033	Whole	BM-9-3	BM-9		19-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	1		_
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	2		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	5		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	2	1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum		2	5
Golder	Baffinlands Iron Mine	2018		18-108-033	Whole	BM-9-3	BM-9		19-Aug-18	Arthropoda	Malacostraca	Amphipoda		Ampeliscidae		ARTH	CRAM	Ampelisca eschrichtii		1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		2	1
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	3		
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9		19-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei		1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides		1	
Golder	Baffinlands Iron Mine	2018		18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	2	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18	18-108-033	1/3	BM-9-3	BM-9	3	19-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula		1	



Client	Project	Year	Type Biologica Sample ID	Split	Client Sample ID	Site Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	А	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Arthropoda	Ostracoda	Myodocopida	ouper.u,	Philomedidae		ARTH	CROS	Philomedes sp.	19		11
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Nemertea	Anopla	Archinemertea	·	Cephalothricidae		MISC	NTEA	Cephalothrix sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		3	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.		2	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Cephalorhyncha	Priapulida			Priapulidae		MISC	PRIA	Priapulus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole		BM-9 3	19-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	3	3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		11	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole		BM-9 3	19-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole		BM-9 3	19-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2		4
Golder	Baffinlands Iron Mine	2018 2018	Benthic mb18-108-033 Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI MOBI	Ennucula tenuis	1		4
Golder	Baffinlands Iron Mine Baffinlands Iron Mine		Benthic mb18-108-033 Benthic mb18-108-033	Whole		BM-9 3 BM-9 3	19-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae Cardiidae	Clinocardiinae	MOLL MOLL	MOBI	Similipecten greenlandicus	1	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic mb18-108-033	Whole Whole		BM-9 3	19-Aug-18 19-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Veneroida	Cardioidea Cardioidea	Cardiidae	Ciliocardinae	MOLL	MOBI	Ciliatocardium ciliatum		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole		BM-9 3	-	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Serripes groenlandicus Macoma balthica		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole		BM-9 3	19-Aug-18 19-Aug-18	Mollusca	Bivalvia	Veneroida Veneroida	Tellinoidea	Tellinidae		MOLL	MOBI	Macoma calcarea		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18 19-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae Macominae	MOLL	MOBI	Macoma sp.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole		BM-9 3	19-Aug-18 19-Aug-18	Mollusca	Bivalvia	venerolua	Thracioidea	Periplomatidae	Macominae	MOLL	MOBI	Periploma aleuticum		1	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Bivalvia		maciolaca	renpiomatidae		MOLL	MOBI	Bivalvia indet.		-	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	Whole		BM-9 3	19-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Philinoidea	Cylichnidae		MOLL	MOGA	Cylichna alba	1		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Philinoidea	Cylichnidae		MOLL	MOGA	Cylichna sp.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-033	1/3	BM-9-3	BM-9 3	19-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Tillilloldea	Cynciniuae		MOLL	MOGA	Cephalaspidea indet.		1	-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Cnidaria	Hydrozoa	Серпанаэрічен				MISC	CNHY	Hydrozoa indet.	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Ocalecrotiade		ARTH	CRAM	Amphipoda indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	caranaac	cimocarannac	MOLL	MOBI	Nuculanoidea indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Annelida	Polychaeta	Spionida	racaianoiaca	Spionidae		ANNE	POSE	Marenzelleria sp.	23		-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	7	Toryonacta	Spioinaa		Spromade		MEMO	MEMO	Nematoda indet.	5		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Dorvilleidae indet.	3	3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	, ,	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	15	4	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Scolelepis sp.		4	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio sp.		3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae		ANNE	POSE	Ampharetidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone careyi	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Polycirrinae	ANNE	POSE	Polycirrus sp. complex			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sarsi		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae		ARTH	CRAM	Monoculopsis sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Ampeliscidae		ARTH	CRAM	Ampelisca eschrichtii	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Corophiidae		ARTH	CRAM	Crassicorophium bonellii	3	4	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH	CRAM	Monoporeia affinis		2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	1		4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole		BM-10 1	17-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Whole	BM-10-1	BM-10 1	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1		



Client	Project	Year	Type Biologica Sample ID	Split	Client Sample ID	Site Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Who	le BM-10-1	BM-10 1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		3	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Who	le BM-10-1	BM-10 1	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		6	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Who	le BM-10-1	BM-10 1	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Who	le BM-10-1	BM-10 1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-034	Who	le BM-10-1	BM-10 1	17-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who	le BM-10-2	BM-10 2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who	le BM-10-2	BM-10 2	17-Aug-18	Chordata	Pisces-Actinopterygii	Scorpaeniformes		Cottidae		MISC	PIXX	Cottidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Marenzelleria sp.	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18							MEMO	MEMO	Nematoda indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Clitellata	Enchytraeida		Enchytraeidae		ANNE	ANOL	Enchytraeidae indet.		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Dorvilleidae indet.	1	_	_
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	_	7	5
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	5	4	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae	Dhuille de chee	ANNE	POER	Pholoe tecta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Phyllodocinae	ANNE	POER	Phyllodoce groenlandica	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035 Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		4
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-035 Benthic mb18-108-035	Who		BM-10 2 BM-10 2	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE ANNE	POSE POSE	Sabellidae indet.		1	2
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who Who		BM-10 2	17-Aug-18	Annelida Annelida	Polychaeta	Spionida Spionida		Spionidae Spionidae		ANNE	POSE	Dipolydora quadrilobata		1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Spio sp. Ampharete sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	Ampharetinae	ANNE	POSE	Chaetozone careyi	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	4		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	5		-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta	rerebellida		Capitellidae		ANNE	POSE	Capitella capitata complex	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	q	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Corophioidea	Corophiidae		ARTH	CRAM	Monocorophium sp.	,	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus barentsi group		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoraea	Pontoporeiidae		ARTH	CRAM	Monoporeia affinis		3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida		· ontoporendue		ARTH	CRCO	Cyclopoida indet.	3	J	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who		BM-10 2	17-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who	le BM-10-2	BM-10 2	17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who	le BM-10-2	BM-10 2	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-035	Who	le BM-10-2	BM-10 2	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Marenzelleria sp.	20		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18							MEMO	MEMO	Nematoda indet.	8		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Phyllodocinae	ANNE	POER	Phyllodoce groenlandica		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Scolelepis sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who	le BM-10-3	BM-10 3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio filicornis	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Spio sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Annelida	Polychaeta			Protodrilidae		ANNE	POXX	Protodrilus sp.	11	14	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH	CRAM	Monoporeia affinis		1	_
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida		Dhilana a di de-		ARTH	CRCO	Cyclopoida indet.	1		4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-036 Benthic mb18-108-036	Who		BM-10 3	17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae Conhalothricidae		ARTH	CROS NTEA	Philomedes sp.			1
Golder	Baffinlands Iron Mine	2018		Who		BM-10 3	17-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC		Cephalothrix sp.	2		1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-037 Benthic mb18-108-037	1/2 1/2	BM-12-1 BM-12-1	BM-12 1 BM-12 1	17-Aug-18	Bryozoa Cnidaria	Gymnolaemata	Ctenostomatida Anthoathecata		Alcyonidiidae Bougainvilliidae		MISC MISC	BRYO CNHY	Alcyonidium sp. Bougainvilliidae indet.	<u>ا</u> 1		
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	Who		BM-12 1	17-Aug-18 17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1		Cnidaria	Hydrozoa Hydrozoa	Limitomedusae		Ollifulluae		MISC	CNHY	Hydrozoa indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	1		11
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.		2	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Phyllodocida	racalanolaca	Syllidae		ANNE	POER	Parexogone hebes	2	-	7
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	,cau	. 0.,00010	,		5,		MEMO	MEMO	Nematoda indet.	22		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	Who		BM-12 1	17-Aug-18							MEMO	MEMO	Hyperiidae indet. (planktonic)	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Dorvilleidae indet.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	7		-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	-	1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	10		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	17	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	Who		BM-12 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Nephtys ciliata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-037	1/2	BM-12-1	BM-12 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Nephtys sp.	1		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	j
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	34	20	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae	Anoplosyllinae	ANNE	POER	Syllides longocirratus	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Myriochele heeri		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	12	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae sp. 3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	28	10	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Melinninae	ANNE	POSE	Melinna elisabethae		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	Whole	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Melinninae	ANNE	POSE	Melinna elisabethae	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Aphelochaeta sp.	1	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	48	10	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	2	1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	1	1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			15
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	Whole	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Lanassa venusta venusta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Euclymene sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina cylindricaudata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	5	2	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	3	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Phoxocephaloidea	Phoxocephalidae		ARTH	CRAM	Harpinia serrata	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1	.2 1	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Ampeliscoidae	Ampeliscidae		ARTH	CRAM	Byblis sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	4	7	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	10		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	5		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	3		
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1	_	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	1/2	BM-12-1		.2 1	17-Aug-18	Arthropoda	Ostracoda	Myodocopida	Amaguda! d	Philomedidae		ARTH	CROS	Philomedes sp.	8	5	14
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	9	14	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1		.2 1	17-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1	1	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Nemertea	Enopla	Conditional	Consentallation	A should do		MISC	NTEA	Enopla indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		4	3
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		1	
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.	1		3
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		0
Golder	Baffinlands Iron Mine	2018	Benthic		1/2	BM-12-1	BM-1		17-Aug-18	Mollusca	Bivalvia	Nuculida Poctinida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1		9
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		17-Aug-18	Mollusca	Bivalvia	Pectinida Vaparoida	Pectinoidea Tollinoidea	Propeamussiidae Tollinidae	Macominae	MOLL	MOBI	Similipecten greenlandicus	1	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		Whole		BM-1 BM-1		17-Aug-18	Mollusca	Bivalvia	Veneroida Veneroida	Tellinoidea	Tellinidae Tellinidae	Macominae	MOLL MOLL	MOBI MOBI	Macoma calcarea	1	1	
Golder	Baffinlands Iron Mine	2018			Whole				17-Aug-18	Mollusca	Bivalvia	Veneroida Veneroida	Tellinoidea	Tellinidae Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1		4
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic		1/2 1/2	BM-12-1 BM-12-1	BM-1 BM-1		17-Aug-18 17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Veneroida	Tellinoidea	reminde	Macominae	MOLL	MOBI	Macoma sp.			2
Golder Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-1		17-Aug-18 17-Aug-18	Mollusca	Gastropoda		Lottioidea	Lepetidae		MOLL	MOGA	Bivalvia indet. Lepeta caeca	2		_
Golder	Baffinlands Iron Mine	2018	Benthic		Whole			.2 1	17-Aug-18 17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae	LULLIUIUEA	Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2		.2 2	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Ampeliscoidae	Ampeliscidae		ARTH	CRAM	Ampeliscidae indet.	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2		.2 2	17-Aug-18 17-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	9	19	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole			.2 2	17-Aug-18 17-Aug-18	Nemertea	Anopla	Heteronemertea	, ipseudolued	Lineidae		MISC	NTEA	Cerebratulus sp.	,	10	1
GOIGEI	Sammanas II OH WIII C	2010	Dentille	510 100 030	**11016	JITI 12 2	ـ - ۱۷۱۰		71 110P.TO	.vemertea	, mopiu	ricteronemented		Linciauc		141130	IIILA	cc. coracaras sp.			-



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	j
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Oedicerotidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea				ARTH	CRCU	Cumacea indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12	2	17-Aug-18							MEMO	MEMO	Egg/egg mass	22		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12		17-Aug-18							MEMO	MEMO	Hyperiidae indet. (planktonic)	3		
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18							MEMO	MEMO	Nematoda indet.	17		
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Parougia caeca		1	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	3	3	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	4	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		6/12 6/12	BM-12-2 BM-12-2	BM-12 BM-12		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE ANNE	POER POER	Bipalponephtys cornuta	12	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18 17-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Pholoidae Pholoidae		ANNE	POER	Pholoe minuta Pholoe sp.		4	2
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18 17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	34	17	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	34	2	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae	Anoplosyllinae	ANNE	POER	Syllides longocirratus	4	-	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	3	2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	26	8	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Melinninae	ANNE	POSE	Melinna elisabethae		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	24	14	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	2	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	3	5	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1	6	12
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	3	1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Kirkegaardia sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta			Cossuridae	F al	ANNE	POSE	Cossura sp.	12	1	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		6/12 6/12	BM-12-2 BM-12-2	BM-12 BM-12		17-Aug-18	Annelida Annelida	Polychaeta			Maldanidae Maldanidae	Euclymeninae	ANNE ANNE	POSE POSE	Euclymeninae indet.		2	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18 17-Aug-18	Annelida	Polychaeta			Orbiniidae	Euclymeninae	ANNE	POSE	Microclymene sp. Scoloplos acutus	1	Z 5	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12		17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	1	3	_
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	-	2	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	1	4
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Opisidae		ARTH	CRAM	Opisa sp.	1	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	•	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	5	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	11		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides		8	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	20	23	12
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1		2
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-12		17-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		6/12 Whala	BM-12-2	BM-12		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI MOBI	Astarte borealis	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-12		17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae Astartidae		MOLL MOLL	MOBI	Astarte montagui	1	6	3
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic		6/12 6/12	BM-12-2 BM-12-2	BM-12 BM-12		17-Aug-18 17-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Carditoida Carditoida	Crassatelloidea Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui Astarte sp.		U	3
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		6	3
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	1
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18 17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta		3	1
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea			MOLL	MOBI	Nuculanoidea indet.		-	1
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	3	7
Golder	Baffinlands Iron Mine	2018	Benthic		6/12	BM-12-2	BM-12		17-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	МОВІ	Similipecten greenlandicus		3	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-12		17-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BM-12		17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038	6/12	BM-12-2	BM-12	2	17-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Rissooidea	Rissoidae		MOLL	MOGA	Boreocingula castanea	1		



Client	Project	Year	Type Biologica Sample ID	Split	Client Sample ID	Site Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	А	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-038	6/12	BM-12-2	BM-12 2	17-Aug-18	Mollusca	Gastropoda	0.00.	Lottioidea	Lepetidae	oud-unin,	MOLL	MOGA	Lepeta caeca		1	•
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Cnidaria	Hydrozoa	Anthoathecata		Bougainvilliidae		MISC	CNHY	Bougainvilliidae indet.	3	_	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	6		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	Whole	BM-12-3	BM-12 3	17-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	Whole	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	Whole	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae		MOLL	MOGA	Margarites sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.		1	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18							MEMO	MEMO	Egg/egg mass	22		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18							MEMO	MEMO	Insecta indet. (terrestrial)	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18							MEMO	MEMO	Nematoda indet.	65		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Eunicida		Dorvilleidae		ANNE	POER	Parougia caeca	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	8	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	4		3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	8	5	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	3	2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	24	16	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae	Anoplosyllinae	ANNE	POER	Syllides longocirratus	1	_	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae	Eusyllinae	ANNE	POER	Eusyllinae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	Whole		BM-12 3	17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3 BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	Cahalliana	ANNE ANNE	POSE	Owenia fusiformis	1		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-039 Benthic mb18-108-039	7/12 7/12	BM-12-3	BM-12 3 BM-12 3	17-Aug-18	Annelida Annelida	Polychaeta	Sabellida		Sabellidae Spionidae	Sabellinae	ANNE	POSE POSE	Euchone incolor	29	-	2
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12 7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Spionida		•		ANNE	POSE	Prionospio (Prionospio) steenstrupi	29	1	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18 17-Aug-18	Annelida	Polychaeta Polychaeta	Spionida Terebellida		Spionidae Ampharetidae	Ampharetinae	ANNE	POSE	Pygospio sp. Ampharete sp.	2	1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Amphareunae	ANNE	POSE	Ampharetidae indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18 17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	16	2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	3	2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone setosa complex	8	4	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	· ·	-	14
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.			7
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	Whole		BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	1		•
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Proclea sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae		ANNE	POSE	Terebellidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Capitella capitata complex			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.		4	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	11		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Microclymene sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Maldanidae		ANNE	POSE	Maldanidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus		2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	1	2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani		3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	Whole		BM-12 3	17-Aug-18	Annelida	Polychaeta			Sabellidae		ANNE	POSE	Branchiomma sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum		2	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Pycnogonida	Pantopoda	Nymphonoidea	Nymphonidae		ARTH	CHPY	Nymphon sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda	Amphilochoidea	Amphilochidae		ARTH	CRAM	Amphilochus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Rostroculodes sp.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Westwoodilla sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Maxillopoda	Cyclopoida		Dischalle		ARTH	CRCO	Cyclopoida indet.	6		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis lucifera	•	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	3	/	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	0	4 9	12
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12 7/12	BM-12-3 BM-12-3	BM-12 3	17-Aug-18	Arthropoda	Ostracoda	Myodocopida	Anceudoidos	Philomedidae Sphyrapodidae		ARTH ARTH	CROS CRTA	Philomedes sp.	8 4		12 4
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-039 Benthic mb18-108-039	7/12 7/12	BM-12-3	BM-12 3 BM-12 3	17-Aug-18	Arthropoda	Malacostraca Malacostraca	Tanaidacea Tanaidacea	Apseudoidea	Sphyrapodidae Typhlotanaidae		ARTH	CRTA	Pseudosphyrapus anomalus Typhlotanais sp.	4 1	э	4
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12 7/12	BM-12-3	BM-12 3	17-Aug-18 17-Aug-18	Arthropoda Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/12	BM-12-3	BM-12 3	17-Aug-18 17-Aug-18	Nemertea	Enopla	/ wermienter tea		cephalotificidae		MISC	NTEA	Enopla indet.		•	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	Whole		BM-12 3	17-Aug-18 17-Aug-18	Porifera	Calcarea					MISC	PORI	Calcarea indet.	1		•
						9								50			-		



Client	Project	Voor	Tuno Biologica Cample I	ID Co	die Clia	iont Comple ID	Cita Banlicata	Data Samulad	Dhylum	Class	Ordor	Superfamily	Family	Subfamily	taxcodo	arncodo	TaxonName	^	Int	
Golder	Project Baffinlands Iron Mine	Year 2018	Type Biologica Sample I Benthic mb18-108-039			ient Sample ID N-12-3	Site Replicate BM-12 3	Date Sampled 17-Aug-18	Phylum Mollusca	Class Bivalvia	Order Adapedonta	Hiatelloidea	Family Hiatellidae	Subtaining	taxcode MOLL	grpcode MOBI	Hiatella arctica	1	IIIL	,
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			и-12-3 И-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	-	2	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			И-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		13	8
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	W	hole BM	M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/	12 BM	И-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/	12 BM	И-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/	12 BM	M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	W	hole BM	M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/		M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/		И-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea			MOLL	MOBI	Nuculanoidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/		M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	2	_	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus		3	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	7	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			И-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		2	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			M-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			И-12-3	BM-12 3	17-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039	7/		И-12-3	BM-12 3	17-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Latelatala.	Lauratida a		MOLL	MOGA	Cephalaspidea indet.	2		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			И-12-3	BM-12 3	17-Aug-18	Mollusca	Gastropoda		Lottioidea	Lepetidae		MOLL	MOGA	Lepeta caeca	3		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-039			И-12-3	BM-12 3	17-Aug-18	Mollusca	Gastropoda	Chanashamatida	Lottioidea	Lottiidae		MOLL	MOGA	Lottiidae indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1 BR-1 1	8-Aug-18	Bryozoa	Gymnolaemata	Ctenostomatida	Candiaidaa	Alcyonidiidae		MISC	BRYO	Alcyonidium sp.	1	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-040 Benthic mb18-108-040	1/			BR-1 1	8-Aug-18 8-Aug-18	Mollusca Annelida	Bivalvia	Veneroida	Cardioidea	Cardiidae Capitellidae		MOLL ANNE	MOBI POSE	Serripes groenlandicus Capitella capitata complex	2	2	
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Mollusca	Polychaeta Gastropoda	Littorinimorpha	Capuloidea	Capitellidae		MOLL	MOGA	Ariadnaria borealis	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1	8-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Capuloidea	Capulidae		MOLL	MOGA	Ariadnaria borealis		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Wioliusca	Gastropoda	Littoriiiiiorpiia	Capuloluea	Capulluae		MEMO	MEMO	Copepoda indet. (parasitic)	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1	8-Aug-18							MEMO	MEMO	Copepoda indet. (parasitic)	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18							MEMO	MEMO	Egg/egg mass	16		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18							MEMO	MEMO	Nematoda indet.	39		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	4	2	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1	1	-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/		R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	10		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	W	hole BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	4	7	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	W	hole BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	48	48	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Sphaerodoridae		ANNE	POER	Sphaerodoropsis minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Myriochele heeri	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	10	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Oweniidae indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae		ANNE	POSE	Apistobranchus sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Polydora sp. complex		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	4 :	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1	8-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040 Benthic mb18-108-040	1/			BR-1 1 BR-1 1	8-Aug-18	Annelida Annelida	Polychaeta	Spionida Torobollida		Spionidae Cirratulidae		ANNE ANNE	POSE	Pygospio sp.	4	1	_
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-040 Benthic mb18-108-040	1/ 1/			BR-1 1 BR-1 1	8-Aug-18	Annelida Annelida	Polychaeta	Terebellida Terebellida		Cirratulidae Pectinariidae		ANNE	POSE POSE	Cirratulidae indet. Cistenides granulata	1		5 1
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1 BR-1 1	8-Aug-18 8-Aug-18	Annelida	Polychaeta Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata Cistenides granulata	1 17		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1	8-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta	reresentua		Capitellidae	menopranenniae	ANNE	POSE	Mediomastus sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040		hole BR-		BR-1 1	8-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta			Orbiniidae	орпештис	ANNE	POSE	Scoloplos armiger	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	6		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	4	3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Phoxocephaloidea	Phoxocephalidae		ARTH	CRAM	Harpinia serrata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Ampeliscoidae	Ampeliscidae		ARTH	CRAM	Ampeliscidae indet.			4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae		ARTH	CRAM	Monoculopsis sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/			BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata		1	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/		R-1	BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	•	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		6	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	W	hole BR-	R-1	BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Rostroculodes sp.		6	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda		Pontoporeiidae		ARTH	CRAM	Monoporeia affinis			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-040	1/	4 BR-	R-1	BR-1 1	8-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	15		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	А	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea	,	Diastylidae	,	ARTH	CRCU	Brachydiastylis resima		7	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	Whole	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula		3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	12	22	13
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	16	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Typhlotanaidae		ARTH	CRTA	Typhlotanais sp.	6	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Nemertea	Anopla	Archinemertea	B 1 11	Cephalothricidae		MISC	NTEA	Cephalothrix sp.	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Anomalodesmata	Pandoroidea	Lyonsiidae		MOLL	MOBI	Lyonsia arenosa	1		_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1	3	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	Whole		BR-1	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040 mb18-108-040	1/4	BR-1 BR-1	BR-1 BR-1	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI MOBI	Astarte montagui		4	1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-040 mb18-108-040	1/4 1/4	BR-1 BR-1	BR-1	1	8-Aug-18 8-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL MOLL	MOBI	Astarte sp.	1	2	4
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Lucinida Lucinida	Thyasiroidea Thyasiroidea	Thyasiridae Thyasiridae		MOLL	MOBI	Thyasira sp. Thyasiridae indet.	1	ວ າ	0
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	0
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors		-	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	Whole		BR-1	1	8-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	Whole		BR-1	1	8-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.	-		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1		-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	Whole		BR-1	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.	_		12
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	1/4	BR-1	BR-1	1	8-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Rissooidea	Rissoidae		MOLL	MOGA	Boreocingula castanea	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040	Whole	BR-1	BR-1	1	8-Aug-18	Mollusca	Gastropoda	•	Lottioidea	Lepetidae		MOLL	MOGA	Lepeta caeca	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Gastropoda		Lottioidea	Lottiidae		MOLL	MOGA	Testudinalia testudinalis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Calliopioidea	Calliopiidae		ARTH	CRAM	Calliopiidae indet.	1		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda				ARTH	CRAM	Amphipoda indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Bryozoa	Stenolaemata	Cyclostomatida				MISC	BRYO	Cyclostomatida indet.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Hemichordata						MISC	HEMI	Hemichordata indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Gastropoda		Lottioidea	Lottiidae		MOLL	MOGA	Testudinalia testudinalis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18							MEMO	MEMO	Desmosoma sp. (planktonic)	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18							MEMO	MEMO	Egg/egg mass	18		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18							MEMO	MEMO	Nematoda indet.	66		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae	Ophiodrominae	ANNE	POER	Gyptis sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	10	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	26	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6 5/6	BR-4 BR-4	BR-4 BR-4	1	8-Aug-18	Annelida Annelida	Polychaeta	Phyllodocida Phyllodocida		Pholoidae Polypoidae	Polynoinas	ANNE ANNE	POER	Pholoe tecta	26 1	10	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-041 mb18-108-041	5/6 Whole		BR-4	1	8-Aug-18 8-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Phyllodocida		Polynoidae Polynoidae	Polynoinae Polynoinae	ANNE	POER POER	Harmothoe sp. Harmothoe sp.	T		
Golder	Baffinlands Iron Mine	2018	Benthic		5/6	BR-4 BR-4	BR-4	1	8-Aug-18 8-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae	i oiyiioiiiae	ANNE	POSE	Galathowenia oculata	3 1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Owenia fusiformis	34		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	5		1
Golder	Baffinlands Iron Mine	2018	Benthic		5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Sabellida		Serpulidae	Spirorbinae	ANNE	POSE	Spirorbinae indet.		2	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Spionida		Apistobranchidae	opii oi oi iliae	ANNE	POSE	Apistobranchus sp.	2	-	•
Golder	Baffinlands Iron Mine	2018	Benthic		5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Dipolydora quadrilobata	2	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) sp.	2	1	_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Flabelligeridae		ANNE	POSE	Diplocirrus hirsutus	1		
Golder	Baffinlands Iron Mine	2018	Benthic		5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Clymenura sp.	2	4	3



Cliant	Drainet	Voor	Tumo	Dialogico Comunio ID	C!!A	Cliant Canada ID	C:A-	Daulianta	Data Campulad	Dhylum	Class	Order	Cuparfamily	Family	Cubfomily	tavendo	arneede	TaxonName	Α	Int	
Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-041	Split 5/6	Client Sample ID BR-4	Site BR-4	Replicate 1	Date Sampled 8-Aug-18	Phylum Annelida	Class Polychaeta	Order	Superfamily	Family Maldanidae	Subfamily Maldaninae	taxcode ANNE	grpcode POSE	Maldane sarsi	12	IIIC	,
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina cylindricaudata	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Paraonidae	•	ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea nolani	4	5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Paraonidae indet.		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum		1	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Phoxocephaloidea	Phoxocephalidae		ARTH	CRAM	Harpinia serrata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Ampeliscoidae	Ampeliscidae		ARTH	CRAM	Byblis sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae		ARTH	CRAM	Arrhis sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda	Pontoporeioidea	Pontoporeiidae		ARTH	CRAM	Pontoporeia femorata		1	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda		Ampeliscidae		ARTH	CRAM	Haploops tubicola		6	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		3	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Maxillopoda	Harpacticoida				ARTH	CRCO	Harpacticoida indet.	2		_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima	4	16	7
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula	2	2	70
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	24	56	70
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-041 mb18-108-041	5/6 5/6	BR-4 BR-4	BR-4 BR-4	1	8-Aug-18 8-Aug-18	Arthropoda	Malacostraca Malacostraca	Tanaidacea		Akanthophoreidae Pseudotanaidae		ARTH ARTH	CRTA CRTA	Akanthophoreus sp. Pseudotanais sp.	12 7	1	
Golder						BR-4	BR-4	1	-	Arthropoda		Tanaidacea	Odontonhora					·	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-041 mb18-108-041	Whole Whole		BR-4	1	8-Aug-18 8-Aug-18	Echinodermata Echinodermata	Echinoidea Holothuroidea	Camarodonta Molpadida	Odontophora	Strongylocentrotidae		ECHI ECHI	ECEC ECHO	Strongylocentrotus droebachiensis Molpadida indet.	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae		ECHI	ECOP	Ophiura robusta		7	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Nemertea	Anopla	Archinemertea		Cephalothricidae		MISC	NTEA	Cephalothrix sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Platyhelminthes	Апоріа	Archinemerica		Серпаютнения		MISC	PLTY	Platyhelminthes indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		-	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	_	1	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	, Mya truncata		1	9
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	Whole	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Bivalvia	t take at at 1		Piccetiles		MOLL	MOBI	Bivalvia indet.	-		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Tueshaid	Rissoidae		MOLL	MOGA	Rissoidae indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Colloniidae		MOLL	MOGA	Moelleria costulata	1		1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6	BR-4	BR-4	1	8-Aug-18	Mollusca	Gastropoda	Chitanida	Lottioidea	Lottiidae		MOLL	MOGA	Lottiidae indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	5/6 1/4	BR-4 BW-1-1	BR-4	1 1	8-Aug-18	Mollusca	Polyplacophora	Chitonida	Mopalioidea	Tonicellidae		MOLL MISC	MOPO CNHY	Tonicella marmorea	1	1	1
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-042 mb18-108-042	1/4 1/4	BW-1-1 BW-1-1	BW-1 BW-1		13-Aug-18 13-Aug-18	Cnidaria Arthropoda	Hydrozoa Ostracoda	Limnomedusae Myodocopida		Olindiidae Philomedidae		ARTH	CROS	Monobrachium parasitum Philomedes sp.	1 19	12	13
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1 BW-1-1	BW-1		13-Aug-18 13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.	19	7	13
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1		13-Aug-18 13-Aug-18	iviolidaca	Divaivia	Lacillida	myasirolaea	myasinaac		MEMO	MEMO	Copepoda indet. (parasitic)	4	,	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1		13-Aug-18							MEMO	MEMO	Egg/egg mass	27		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1		13-Aug-18							MEMO	MEMO	Nematoda indet.	69		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1		13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1		13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	3	3	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	12		15
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole		BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1	1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	19		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1	1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1	1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1	1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	8	7	11
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1	1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	4		



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida	,	Pholoidae	,	ANNE	POER	Pholoe sp.		10	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	44	27	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone barbata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone longa complex	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Phyllodocidae	Eteoninae	ANNE	POER	Eteone sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae	Eusyllinae	ANNE	POER	Eusyllis sp.		1	_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor		3	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Polydora sp. complex			1
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1 BW-1 1	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE ANNE	POSE	Prionospio (Prionospio) sp.		-	1
Golder	Baffinlands Iron Mine		Benthic	mb18-108-042	1/4	BW-1-1	5 2	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae	A		POSE	Pygospio sp.	2	5	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-042 mb18-108-042	1/4 1/4	BW-1-1 BW-1-1	BW-1 1 BW-1 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE ANNE	POSE POSE	Ampharete sp.	3	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida Annelida	Polychaeta	Terebellida Terebellida		Cirratulidae Cirratulidae		ANNE	POSE	Aphelochaeta sp. Chaetozone bathyala	14		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18 13-Aug-18	Annelida	Polychaeta Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	14	1	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	1	1	13
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	6	1	13
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	14	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole		BW-1 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	J		3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	1		J
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	_	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.		11	2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea catherinae		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Paraonidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1		2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Ampeliscoidae	Ampeliscidae		ARTH	CRAM	Ampeliscidae indet.			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda		Atylidae		ARTH	CRAM	Atylus carinatus	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	6	1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	4	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Tanaidacea	Apseudoidea	Sphyrapodidae		ARTH	CRTA	Pseudosphyrapus anomalus	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Pseudotanaidae		ARTH	CRTA	Pseudotanais sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Arthropoda	Insecta	Diptera		Chironomidae	Orthocladiinae	ARTH	INDI	Orthocladiinae indet.			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis	_	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiocten affinis	1		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-1	BW-1 1	13-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Nemertea	Enopla Bivolvia	Adanodonta	Hiatelloidea	Histollidae		MISC	NTEA	Enopla indet.		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042 mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Adapedonta		Hiatellidae		MOLL	MOBI	Hiatella arctica	10	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BW-1 1	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	10	2	4
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-042 mb18-108-042	1/4 Whole	BW-1-1 BW-1-1	BW-1 1 BW-1 1	13-Aug-18 13-Aug-18	Mollusca	Bivalvia Bivalvia	Carditoida Carditoida	Crassatelloidea Crassatelloidea	Astartidae		MOLL MOLL	MOBI MOBI	Astarte borealis Astarte borealis	2	2	4
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-1	BW-1 1	-	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI		2	3 10	0
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole		BW-1 1	13-Aug-18 13-Aug-18	Mollusca Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae Astartidae		MOLL	MOBI	Astarte montagui Astarte montagui	5	10	U
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	3	10	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole		BW-1 1	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.		1	•
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.	2	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	-	-	2
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BW-1 1	13-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	-
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BW-1 1	13-Aug-18	Mollusca	Bivalvia	Mytiloida	Mytiloidea	Mytilidae		MOLL	MOBI	Musculus discors	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	Whole		BW-1 1	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana pernula	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.		2	1
Golder	Baffinlands Iron Mine	2018		mb18-108-042	1/4	BW-1-1	BW-1 1	13-Aug-18	Mollusca	Bivalvia	Nuculanoida	Nuculanoidea	Yoldiidae		MOLL	MOBI	Yoldiidae indet.			2



Client	Project	Year	Type Biologica Sam	unio ID	Split	Client Sample ID	Site	Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Α	Int	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042	•	1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae	Subianiny	MOLL	MOBI	Ennucula tenuis	1	1	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042		Whole		BW-1	1	13-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	1	-	J
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042		Whole		BW-1		13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042	2	1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042	2	Whole	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042	2	1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042	2	1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			7
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042	2	1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042	2	1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042		1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea	Naticidae	Naticinae	MOLL	MOGA	Cryptonatica affinis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042		1/4	BW-1-1	BW-1	1	13-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Naticoidea	Naticidae		MOLL	MOGA	Naticidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042		1/4	BW-1-1	BW-1		13-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Rissooidea	Rissoidae		MOLL	MOGA	Boreocingula castanea	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-042		1/4	BW-1-1	BW-1		13-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.		1	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		Whole	BW-1-2	BW-1		13-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.	_		2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		Whole		BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	1		
Golder	Baffinlands Iron Mine	2018 2018	Benthic mb18-108-043		Whole		BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE ANNE	POER POER	Bipalponephtys cornuta	1		1
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic mb18-108-043 Benthic mb18-108-043		Whole Whole		BW-1 BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae Pholoidae		ANNE	POER	Nereididae indet.	11		1
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		Whole		BW-1		13-Aug-18 13-Aug-18	Annelida Annelida	Polychaeta Polychaeta	Phyllodocida Terebellida		Cirratulidae		ANNE	POSE	Pholoe tecta Chaetozone bathyala	1	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		Whole		BW-1		13-Aug-18 13-Aug-18	Annelida	Polychaeta	rerebellida		Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	3	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Mollusca	Bivalvia	Pectinoida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Propeamussiidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Tryphosidae		ARTH	CRAM	Tryphosidae indet.		1	-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Mollusca	Gastropoda	Littorinimorpha	Capuloidea	Capulidae		MOLL	MOGA	Ariadnaria borealis		-	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Wienasca	Cust. opcuu	zacco minior priu	capaioiaca	capanaac		MEMO	MEMO	Egg/egg mass	23		-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18							MEMO	MEMO	Nematoda indet.	93		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens		5	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	4	8	10
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	20		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	Whole	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Nephtys bucera	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	7	16	16
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	Whole	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		10	8
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	57	39	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		Whole		BW-1		13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	2		1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Sabellidae indet.			4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-043 Benthic mb18-108-043		1/4 1/4	BW-1-2 BW-1-2	BW-1 BW-1		13-Aug-18 13-Aug-18	Annelida Annelida	Polychaeta	Spionida		Spionidae		ANNE ANNE	POSE POSE	Pygospio sp.	8	3	
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta Polychaeta	Spionida Terebellida		Spionidae Ampharetidae	Ampharetinae	ANNE	POSE	Spio filicornis Ampharete sp.	1	1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18 13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae	Amphareunae	ANNE	POSE	Chaetozone bathyala	11	19	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		13	12
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		2	5
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	17	-	-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		Whole		BW-1		13-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	15		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Laphania boecki			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	Whole	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3	1	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta			Capitellidae		ANNE	POSE	Mediomastus sp.	1	6	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	1	11	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	Whole	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta			Cossuridae		ANNE	POSE	Cossura sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta			Maldanidae		ANNE	POSE	Maldanidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	Whole	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta			Opheliidae	Ophelininae	ANNE	POSE	Ophelina acuminata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	3	1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos acutus	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos armiger	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1	2	13-Aug-18	Annelida	Polychaeta			Orbiniidae		ANNE	POSE	Scoloplos sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi	2	8	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043		1/4	BW-1-2	BW-1		13-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Paroediceros lynceus		1	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-043	•	1/4	BW-1-2	BW-1	Z	13-Aug-18	Arthropoda	Maxillopoda	Sessilia				ARTH	CRCI	Balanomorpha indet.			3



Client	Project	Year	Туре	Biologica Sample ID	Split	Client Sample ID	Site Replicat	e Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	Δ	Int	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Maxillopoda	Cyclopoida	Superiumny	runny	Sublammy	ARTH	CRCO	Cyclopoida indet.	13		•
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis scorpioides	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Malacostraca	Mysida		Mysidae		ARTH	CRMY	Mysis sp.	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	20	31	24
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	2	5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2	BW-1 2	13-Aug-18	Arthropoda	Malacostraca	Tanaidacea				ARTH	CRTA	Tanaidacea indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Nemertea	Anopla 	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		1	_
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Nemertea	Enopla			5		MISC	NTEA	Enopla indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Cephalorhyncha	Priapulida	A demandants	titakallatalaa	Priapulidae		MISC	PRIA	Priapulus sp.		1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-043 mb18-108-043	1/4 Whole	BW-1-2 BW-1-2	BW-1 2 BW-1 2	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea Hiatelloidea	Hiatellidae		MOLL MOLL	MOBI MOBI	Hiatella arctica	2	1	1
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-043	1/4	BW-1-2 BW-1-2	BW-1 2	13-Aug-18 13-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Adapedonta Carditoida	Crassatelloidea	Hiatellidae Astartidae		MOLL	MOBI	Hiatella arctica Astarte borealis	3	2	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2 BW-1-2	BW-1 2 BW-1 2	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	2	3	U
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	2	10	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui	2	6	-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.	2	U	14
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasira sp.		4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	3	2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea			MOLL	MOBI	Nuculanoidea indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis		1	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Clinocardiinae	MOLL	MOBI	Ciliatocardium ciliatum		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus			6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	Whole	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae		MOLL	MOBI	Serripes groenlandicus		3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			13
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia		Thracioidea	Periplomatidae		MOLL	MOBI	Periploma aleuticum			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Bivalvia					MOLL	MOBI	Bivalvia indet.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Philinoidea	Cylichnidae		MOLL	MOGA	Cylichnidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Gastropoda	Neogastropoda	Buccinoidea	Buccinidae		MOLL	MOGA	Buccinidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	1/4	BW-1-2	BW-1 2	13-Aug-18	Mollusca	Gastropoda	Trochida	Trochoidea	Margaritidae		MOLL	MOGA	Margarites helicinus	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3	BW-1 3	13-Aug-18	Cnidaria	Hydrozoa	Limnomedusae	5 " 11	Olindiidae		MISC	CNHY	Monobrachium parasitum	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Pectinoida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Propeamussiidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.	1	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-044 mb18-108-044	1/4 1/4	BW-1-3	BW-1 3	13-Aug-18							MEMO	MEMO MEMO	Copepoda indet. (parasitic)	1		
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3 BW-1-3	BW-1 3 BW-1 3	13-Aug-18 13-Aug-18							MEMO MEMO	MEMO	Egg/egg mass Nematoda indet.	0		
Golder	Baffinlands from Mine	2018	Benthic	mb18-108-044 mb18-108-044	1/4	BW-1-3 BW-1-3	BW-1 3	13-Aug-18 13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	45	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3 BW-1-3	BW-1 3 BW-1 3	13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma fragilis	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	4	2	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2	4	10
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	16		-
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae		ANNE	POER	Nereididae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	10	10	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		7	6
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	53	17	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	1	3	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.		4	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	9	10	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.		7	4
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.		2	1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae		ANNE	POSE	Cistenides granulata	1		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BW-1 3	13-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae	- L W	ANNE	POSE	Cistenides granulata	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole		BW-1 3	13-Aug-18	Annelida	Polychaeta	Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.	3	2	2



Client	Dunings	V	T	Biologica Commission	C I'A	Clicut County ID	City Boultonto	Bata Camadad	Dhadaaa	Class	Onden	Caufausile.	Familia	Cubfamil.	da		TowarMone		l.a.k	
Client	Project Baffinlands Iron Mine	Year 2018	Type	Biologica Sample ID mb18-108-044	Split 1/4	Client Sample ID BW-1-3	Site Replicate BW-1 3	Date Sampled	Phylum Annelida	Class	Order	Superfamily	Family Capitallidae	Subfamily	taxcode ANNE	grpcode POSE	TaxonName Mediomastus sp.	А 1	Int	,
Golder	Baffinlands fron Mine	2018	Benthic Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18 13-Aug-18	Annelida	Polychaeta Polychaeta			Capitellidae Cossuridae		ANNE	POSE		1	3 1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3 BW-1-3	BW-1 3	13-Aug-18 13-Aug-18	Annelida	Polychaeta			Maldanidae	Euclymeninae	ANNE	POSE	Cossura sp. Euclymeninae indet.	1	-	1
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta			Maldanidae	Maldaninae	ANNE	POSE	Maldane sarsi	1		-
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta			Orbiniidae	Maradimiae	ANNE	POSE	Scoloplos sp.	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum		1	3
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Anonyx sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Malacostraca	Amphipoda	,	Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		5	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Brachydiastylis resima			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylis rathkei		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastyloides biplicatus		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	5	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Malacostraca	Mysida				ARTH	CRMY	Mysidacea indet.	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	11	18	16
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3	BW-1 3	13-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiocten affinis	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3	BW-1 3	13-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae	Ophiurinae	ECHI	ECOP	Ophiura sarsii	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Nemertea	Anopla	Heteronemertea		Lineidae		MISC	NTEA	Cerebratulus sp.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Nemertea	Enopla					MISC	NTEA	Enopla indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica			2
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	11	2	
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		3	5
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis	4		
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		12	5
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.			8
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet.			5
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata		1	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044	Whole	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae		MOLL	MOBI	Mya truncata	_	1	_
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	6	4	2
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Canadiiidaa		MOLL	MOBI	Nuculanoidea indet.			3
Golder	Baffinlands Iron Mine	2018	Benthic		1/4	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Veneroida	Cardioidea	Cardiidae	Managelinas	MOLL	MOBI	Serripes groenlandicus	2		3
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma moesta	2		-
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic		1/4	BW-1-3 BW-1-3	BW-1 3	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL MOLL	MOBI MOBI	Macoma sp. Bivalvia indet.			5 2
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic		1/4 4/12	BW-2-1	BW-1 3 BW-2 1	13-Aug-18 13-Aug-18	Mollusca	Bivalvia					MISC	NTEA	Enopla indet.		1	2
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1 BW-2-1	BW-2 1	13-Aug-18 13-Aug-18	Nemertea Annelida	Enopla Polychaeta	Phyllodocida		Syllidae		ANNE	POER	Parexogone hebes		1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1 BW-2-1	BW-2 1	13-Aug-18 13-Aug-18	Allifelida	Folychaeta	Filyllodocida		Syllidae		MEMO	MEMO	Egg/egg mass	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18							MEMO	MEMO	Nematoda indet.	175		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	1/3	3	2
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2	10	28
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	14		20
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta		2	4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.		2	5
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	54	8	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe imbricata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Syllidae	Eusyllinae	ANNE	POER	Eusyllinae indet.			4
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Sabellida		Oweniidae		ANNE	POSE	Galathowenia oculata		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	7		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	1		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) sp.		3	1
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	3		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Pygospio sp.	3		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Ampharete sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala		11	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone sp.	1	1	0
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Cirratulidae indet.	_		ŏ
Golder	Baffinlands Iron Mine	2018	Benthic		Whole	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida		Pectinariidae	Tauahall'	ANNE	POSE	Cistenides granulata	ь		
Golder	Baffinlands Iron Mine	2018	Benthic		Whole		BW-2 1	13-Aug-18	Annelida	Polychaeta	Terebellida Terebellida		Terebellidae	Terebellinae	ANNE	POSE	Pista maculata	3		2
Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida Annelida	Polychaeta	Terebellida		Trichobranchidae	Trichobranchinae	ANNE	POSE	Terebellides sp.		2	3
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic		4/12 4/12	BW-2-1 BW-2-1	BW-2 1	13-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Capitellidae		ANNE ANNE	POSE POSE	Mediomastus sp.	26	2	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic		4/12 4/12	BW-2-1 BW-2-1	BW-2 1 BW-2 1	13-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Cossuridae Maldanidae	Maldaninae	ANNE	POSE	Cossura sp. Maldane sarsi	26 1	2	
Golder Golder	Baffinlands Iron Mine	2018	Benthic		4/12	BW-2-1	BW-2 1	13-Aug-18 13-Aug-18	Annelida Annelida	Polychaeta Polychaeta			Orbiniidae	ivialualiillae	ANNE	POSE	Scoloplos sp.	1		4
Golder	Baffinlands Iron Mine	2018		mb18-108-045	4/12 4/12	BW-2-1	BW-2 1	13-Aug-18 13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea hartmanae		2	7
Golder	Sammanas non wine	2010	Dentine	510 100 043	7,12		200 2 1	10 / Mg-10	/ IIII Ciida	· oryenacia			i di domade		/ 11 41 4 L	1 03L	, and aca maramanac		_	



Client	Project	Year	Type Biologica Sample ID	Split	Client Sample ID	Site Replicate	Date Sampled	Phylum	Class	Order	Superfamily	Family	Subfamily	taxcode	grpcode	TaxonName	۸	Int	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Split 4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta	Order	Superianniy	Paraonidae	Subtaining	ANNE	POSE	Aricidea minuta	1		,
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta			Paraonidae		ANNE	POSE	Aricidea minuta Aricidea nolani	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Annelida	Polychaeta			Scalibregmatidae		ANNE	POSE	Scalibregma inflatum	1	2	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus barentsi group	_	1	-
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea	Uristidae		ARTH	CRAM	Onisimus sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Lysianassoidea			ARTH	CRAM	Lysianassoidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda	Oedicerotoidea	Oedicerotidae		ARTH	CRAM	Monoculopsis sp.			2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda		Dexaminidae		ARTH	CRAM	Guernea nordenskioldi		6	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Amphipoda		Oedicerotidae		ARTH	CRAM	Monoculodes sp.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Maxillopoda	Cyclopoida				ARTH	CRCO	Cyclopoida indet.	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Diastylidae		ARTH	CRCU	Diastylidae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Lampropidae		ARTH	CRCU	Lamprops fuscatus	4	2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Eudorella truncatula		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Cumacea		Leuconidae		ARTH	CRCU	Leucon sp.	1	4	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Mysida				ARTH	CRMY	Mysidacea indet.	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Ostracoda	Myodocopida		Philomedidae		ARTH	CROS	Philomedes sp.	8	34	15
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Arthropoda	Malacostraca	Tanaidacea		Akanthophoreidae		ARTH	CRTA	Akanthophoreus sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18	Echinodermata	Echinoidea	Camarodonta	Odontophora	Strongylocentrotidae		ECHI	ECEC	Strongylocentrotus droebachiensis		1	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Echinodermata	Ophiuroidea	Ophiurida		Ophiuridae		ECHI	ECOP	Ophiuridae indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae		MOLL	MOBI	Hiatella arctica	4		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte borealis		4	_
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		2	2
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte montagui		5	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Carditoida	Crassatelloidea	Astartidae		MOLL	MOBI	Astarte sp.		2	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Axinopsida sp.		2	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Lucinida	Thyasiroidea	Thyasiridae		MOLL	MOBI	Thyasiridae indet		1	2
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-045 Benthic mb18-108-045	4/12 4/12	BW-2-1 BW-2-1	BW-2 1 BW-2 1	13-Aug-18	Mollusca Mollusca	Bivalvia Bivalvia	Lucinida	Thyasiroidea Myoidea	Thyasiridae Myidae		MOLL MOLL	MOBI MOBI	Thyasiridae indet.			3
Golder Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18 13-Aug-18	Mollusca	Bivalvia	Myida Myida	Myoidea	Myidae		MOLL	MOBI	Mya sp. Mya truncata		3	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18 13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18	Mollusca	Bivalvia	Nuculanida	Nuculanoidea	Nuculanidae		MOLL	MOBI	Nuculana minuta	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Nuculida	Nuculoidea	Nuculidae		MOLL	MOBI	Ennucula tenuis	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18	Mollusca	Bivalvia	Pectinida	Pectinoidea	Propeamussiidae		MOLL	MOBI	Similipecten greenlandicus	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma calcarea	-	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Bivalvia	Veneroida	Tellinoidea	Tellinidae	Macominae	MOLL	MOBI	Macoma sp.			4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole		BW-2 1	13-Aug-18	Mollusca	Bivalvia		Thracioidea	Periplomatidae		MOLL	МОВІ	Periploma aleuticum	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Gastropoda	Cephalaspidea	Philinoidea	Cylichnidae		MOLL	MOGA	Cylichna alba	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	4/12	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Gastropoda	Littorinimorpha		Rissoidae		MOLL	MOGA	Rissoidae indet.		1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-045	Whole	BW-2-1	BW-2 1	13-Aug-18	Mollusca	Gastropoda	Neogastropoda	Buccinoidea	Buccinidae		MOLL	MOGA	Buccinum hydrophanum	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	Whole	e BW-2-2	BW-2 2	13-Aug-18	Cnidaria	Hydrozoa	Limnomedusae		Olindiidae		MISC	CNHY	Monobrachium parasitum	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Mollusca	Gastropoda	Cephalaspidea				MOLL	MOGA	Cephalaspidea indet.			1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18							MEMO	MEMO	Nematoda indet.	97		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Eunicida		Lumbrineridae		ANNE	POER	Scoletoma impatiens	7	2	3
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Hesionidae		ANNE	POER	Nereimyra punctata	2	3	7
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nephtyidae		ANNE	POER	Bipalponephtys cornuta	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	Whole	e BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Nereididae	Nereidinae	ANNE	POER	Nereis zonata	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe minuta	4	5	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe sp.	7	23	1
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Pholoidae		ANNE	POER	Pholoe tecta	44	15	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	Whole		BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Gattyana cirrhosa	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	Whole		BW-2 2	13-Aug-18	Annelida	Polychaeta	Phyllodocida		Polynoidae	Polynoinae	ANNE	POER	Harmothoe sp.	1		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae	Sabellinae	ANNE	POSE	Euchone incolor	12		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Sabellida		Sabellidae		ANNE	POSE	Dialychone sp. 1	2	_	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae		ANNE	POSE	Prionospio (Prionospio) steenstrupi	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Spionida		Spionidae	A	ANNE	POSE	Pygospio sp.	2		
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Terebellida		Ampharetidae	Ampharetinae	ANNE	POSE	Lysippe labiata	1	4.4	
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Terebellida		Cirratulidae		ANNE	POSE	Chaetozone bathyala	17	11	4
Golder	Baffinlands Iron Mine	2018	Benthic mb18-108-046	1/3	BW-2-2	BW-2 2	13-Aug-18	Annelida	Polychaeta	Terebellida Terebellida		Cirratulidae		ANNE	POSE	Chaetozone pigmentata	4	1	T
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic mb18-108-046 Benthic mb18-108-046	1/3 1/3	BW-2-2 BW-2-2	BW-2 2 BW-2 2	13-Aug-18	Annelida Annelida	Polychaeta	Terebellida Terebellida		Cirratulidae Cirratulidae		ANNE ANNE	POSE POSE	Chaetozone sp. Cirratulidae indet.	1 1		5
Golder	Darminanus II ON IVIII IE	2010	PETITIIC 111010-1100-040	1/3	DVV-Z-Z	DVV-Z Z	13-Aug-18	Allifellud	Polychaeta	rerendillud		Ciratunude		AININE	FUJE	Cirratulluae Illuet.	1	1	2



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-001	L	Raw Count 111	Split Multiplier 2.00	Total Abundance 222	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	2.00	4	1	Attached to Ostracoda
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		40	2.00	80		Damaged/immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	1.00	1	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	1.00	2	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	1.00	1	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		52	2.00	104	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		12	2.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		52	2.00	104	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		12	2.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		18	2.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		11	2.00	22		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	1.00	3	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001			1.00	3	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-001 mb18-108-001		2 6	2.00 2.00	4	1 1	
Golder Golder		2018 2018	Benthic Benthic	mb18-108-001		1	2.00	12 2	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		22	2.00	44	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	2.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		111	2.00	222	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		10	2.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	

Taxonomic Note

Some species known to be invasive

Species name updated from Exogone hebes



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-001	L	Raw Count 2	Split Multiplier 2.00	Total Abundance 4	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1 4	2.00	2 4	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-001 mb18-108-001		1	1.00 2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-001		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		12	2.67	32		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		54	2.67	144		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		5	2.67	13 3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-002 mb18-108-002		1 1	2.67 2.67	3	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		9	2.67	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		8	2.67	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		5	2.67	13	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		40	2.67	107	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		89	2.67	237	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		3	2.67	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		5	2.67	13	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		3	2.67	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2 4	2.67	5	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-002 mb18-108-002		2	2.67 2.67	11 5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		34	2.67	91	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		4	2.67	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		6	2.67	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		7	2.67	19		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		16	1.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		3	2.67	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		30	2.67	80	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		4	2.67	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002 mb18-108-002		2 2	2.67 2.67	5 5	1 1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		8	2.67	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		17	2.67	45	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		3	2.67	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	1.00	2	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1 4	2.67	3	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-002		1	2.67 2.67	11 3	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-002 mb18-108-002		4	2.67	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		3	2.67	8	1	
						-	-			

Taxonomic Note	

Species name updated from Exogone hebes



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-002	L	Raw Count	Split Multiplier 2.67	Total Abundance 5	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		20	2.67	53	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		10	1.00	10	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-002		1	2.67 1.00	3 8	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-002 mb18-108-002		10	2.67	27	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		9	2.67	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	2.67	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		2	2.67	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		10	2.67	27	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-002		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	4	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		6	1.71	10	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		4 3	1.71 1.71	7 5		Damaged
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-003 mb18-108-003		6	1.71	10		Damaged Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		12	1.71	21		Damageu
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		97	1.71	166		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.00	2		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		14	1.71	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		8	1.71	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		48	1.71	82	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		17	1.71	29		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		163	1.71	279	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-003 mb18-108-003		3	1.71 1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-003		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		18	1.71	31	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		7	1.71	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		7	1.00	7	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		57	1.71	98	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		5	1.71	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		6	1.71	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		14	1.71	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	

Taxonomic Note
Family updated from Lysianassidae to Tryphosidae
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	ent Ider	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-003	L	Raw Count 5	Split Multiplier 1.71	Total Abundance 9	Unique Taxa Count 1	Comments
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		4	1.71	7	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		6	1.71	10	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		3	1.71	5	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		11	1.71	19 2	1 1	
	lder lder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-003 mb18-108-003	1	1 1	1.71 1.71	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003	1	2	1.71	3	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		21	1.00	21		
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		4	1.71	7	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		4	1.00	4		
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		16	1.71	27	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.00	1		
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		12	1.71	21		
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
	lder lder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-003 mb18-108-003		1 3	1.71 1.00	2 3	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		4	1.00	4	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.00	2		
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		1	1.71	2	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-003		2	1.71	3		
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2		Damaged
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		7	2.00	14		Damaged
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1 1	1.00 1.00	1 1		Immature
	lder lder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-004 mb18-108-004		1	1.00	1		Immature Immature
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	1.00	2		Immature
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	1.00	1		Parasitic
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		14	2.00	28		
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		25	2.00	50		
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	1.00	2		Irregularly shaped
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		8	2.00	16	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		10 28	2.00 2.00	20 56	1 1	
	lder lder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-004 mb18-108-004		13	2.00	26	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		12	2.00	24	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		9	2.00	18		
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		38	2.00	76	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		14	2.00	28	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		4 2	2.00	8 4	1	
	lder lder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-004 mb18-108-004		1	2.00 2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4		
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		7	2.00	14	1	
Go	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		32	2.00	64	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		5	2.00	10	1	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		7	2.00	14		
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	4	
	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
	lder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-004		3 7	1.00 2.00	3 14	1 1	
G0	lder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		,	2.00	17	1	

Taxonomic Note

Species name updated from Exogone hebes



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		7	2.00	14	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-004		1 2	2.00 2.00	2 4	1 1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-004 mb18-108-004		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		12	2.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		14	2.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-004		1 3	2.00 2.00	2 6	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-004 mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		16	2.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		24	2.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	1.00	2	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2 2	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-004 mb18-108-004		6	2.00 1.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		4	1.00	4	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		3	2.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-004		1	2.00 2.40	2 2		Damagod
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-005 mb18-108-005		1	1.00	1	1	Damaged Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		4	2.40	10	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		8	2.40	19		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		57	2.40	137		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		10	2.40	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-005 mb18-108-005		1 2	2.40 2.40	2 5	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		11	2.40	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		14	2.40	34	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		9	2.40	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		11	2.40	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		13	2.40	31		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		38	2.40	91	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		20 4	2.40	48 10	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-005 mb18-108-005		4 2	2.40 2.40	10 5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		9	2.40	22	1	
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Taxonomic Note

Species name updated from Exogone hebes



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005	_	1	2.40	2	1	comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		28	2.40	67	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		9	2.40	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder		2018	Benthic	mb18-108-005		14	2.40	34	1	
	Baffinlands Iron Mine					8	2.40	19		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005					1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		7	2.40	17	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		16	2.40	38	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		6	2.40	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		6	2.40	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		8	2.40	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		17	2.40	41	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		8	2.40	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		16	2.40	38	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	2.40	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-005		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	-	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		7	3.00	21	1	
Golder	Baffinlands Iron Mine		Benthic	mb18-108-006		2	3.00	6	<u>.</u>	
		2018				1	1.00	1		Planktonic
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-006 mb18-108-006		40	3.00	120		i idiliktoriic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1	
GOIGEI	Darrinanas MOIT WITHE	2010	Dentille	111010-100-000		-	3.00	5	-	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Species name updated from Exogone hebes



kaw abur	ndance data in long format f	or Golder	Battiniands	iron Mine 2018.							
Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments	Taxonomic Note
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		7	3.00	21	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		9	3.00	27	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		7	3.00	21	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		6	3.00	18	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		4	3.00	12			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		31	3.00	93	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	1.00	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		12	3.00	36	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		5	3.00	15	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		13	3.00	39	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		38	3.00	114	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		15	3.00	45			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		4	3.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		4	3.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		6	3.00	18	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		6	3.00	18	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		24	3.00	72	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		7	3.00	21	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		14	3.00	42	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		4	3.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		49	3.00	147	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1		



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-006	L	Raw Count 1	Split Multiplier 3.00	Total Abundance 3	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		7	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		4	3.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		4	3.00	12	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-006		2 4	1.00 1.00	2 4	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-006 mb18-108-006		1	1.00	1	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		3	1.00	3	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-006		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.00	2	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.71	3		Damaged/immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	Shell eroded
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		6	1.71	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		8	1.71	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		8	1.71	14		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		64 1	1.71 1.71	110 2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-007 mb18-108-007		5	1.71	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		12	1.71	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		6	1.71	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		28	1.71	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		35	1.71	60		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		90	1.71	154	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		7	1.71	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	4	
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-007		1 1	1.71	2	1	
	Baffinlands Iron Mine	2018		mb18-108-007		1	1.71 1.71	2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-007 mb18-108-007		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		7	1.71	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		9	1.71	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		13	1.71	22		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		8	1.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		43	1.71	74	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		8	1.71	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1 1	1.71 1.71	2 2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-007 mb18-108-007		5	1.71	9	1 1	
Goldel	Dallillatius II OII Willie	2018	Benthic	mb18-108-007		,	1./1	<i>3</i>	4	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Species name updated from Exogone hebes Species name updatet from Trichotropis borealis



			_		_					
Client	Project	Year	Type	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-007 mb18-108-007		3 1	1.71 1.71	5 2	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		8	1.71	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		15	1.71	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		5	1.71	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		6	1.71	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		15	1.71	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		8	1.71	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		12	1.71	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		14	1.71	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		14	1.71	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-007 mb18-108-007		1 3	1.71 1.71	2 5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.00	2	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		4	1.00	4	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		5	1.71	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		3	1.71	5	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2 1	1.71	3 1	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-007 mb18-108-007		2	1.00 1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		2	1.71	3	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-007		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	1.00	1	1	Adult mega (15.9 g)
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		2	1.00	2	1	Adult mega (7.8 g)
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		2	4.00	8		Damaged/immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	4.00	4		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		9	4.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		10	4.00	40	1	DI II I
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		4	4.00	16		Planktonic
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-008 mb18-108-008		1 75	4.00 4.00	4 300		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		41	4.00	164	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	4.00	4	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-008 mb18-108-008		2 18	1.00 4.00	2 72	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-008		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		4	4.00	16	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008		3	4.00	12	1	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Species name updated from Exogone hebes



Client	Project	Year	Туре	Biologica Sample ID L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	16	4.00	64	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	7	4.00	28		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	á	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1 10	4.00	4 40	1 1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-008 mb18-108-008	2	4.00 4.00	8	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-008	3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	8	4.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	16	4.00	64	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	19	4.00	76	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	10	4.00	40		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	54	4.00	216	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	1	4.00	4	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-008 mb18-108-008	4 3	4.00 1.00	16 3	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-008	7	4.00	28	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	1	4.80	5	1	Damaged/degraded
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	2	4.80	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	16	4.80	77	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	1	4.80	5		Parasitic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	76	4.80	365		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	3	4.80	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	6	4.80	29	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	6	4.80	29	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-009	3	4.80	14	1	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Species name updated from Exogone hebes



Section Semiphologic common 2011 Centro Centro Cent	Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Section Sect						-				•	Comments
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Solider Baffinlands from Mine 2018 Benthic mbls-108-009 2 4.80 38 1											
Golder Baffinlands iron Mine 2018 Benthic mb18-108-009 1 4.80 5 1											
Golder Baffinlands from Mine 2018 Benthic mbla-108-009 1 4.80 5 1 Golder Baffinlands from Mine 2018 Benthic mbla-108-009 2 1.00 2 Golder Baffinlands from Mine 2018 Benthic mbla-108-009 1 4.80 5 1 Golder Baffinlands from Mine 2018 Benthic mbla-108-009 1 4.80 5 1 Golder Baffinlands from Mine 2018 Benthic mbla-108-009 2 4.80 10 1 Golder Baffinlands from Mine 2018 Benthic mbla-108-009 2 4.80 10 1 Golder Baffinlands from Mine 2018 Benthic mbla-108-009 2 4.80 40 1 Golder Baffinlands from Mine 2018 Benthic mbla-108-009 2 4.80 3 4 1 Golder Baffinlands from Mine 2018 Benthic mbla-1											
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Golder Baffinlands Iron Mine 2018 Benthic mb18-108-009 1 1.00 1 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-009 1 4.80 5 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-009 1 4.80 5 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 1 1.00 1 1 Attached to Mollusca Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 1 1.00 1 1 Damaged Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 2 3.00 6 Damaged / mmature											
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Golder Baffinlands Iron Mine 2018 Benthic mb18-108-009 1 4.80 5 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 1 1.00 1 1 1 Attached to Mollusca Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 1 1.00 1 Damaged Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 2 3.00 6 Damaged/immature											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 1 1.00 1 1 Attached to Mollusca Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 1 1.00 1 Damaged Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 2 3.00 6 Damaged/immature										1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 1 1.00 1 Damaged Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 2 3.00 6 Damaged/immature											Attached to Mollusca
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-010 2 3.00 6 Damaged/immature											
											-

Taxonomic Note



Client	Project	Year	Type	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments	Taxonomic Note
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-010 mb18-108-010		1	1.00 1.00	1	1 1	Immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	1.00	1	1	Immature Immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	1.00	1	1	Immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	1.00	1	-	Immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		5	1.00	5		Immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		22	3.00	66	1		Species name updated from Exogone hebes
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3		Planktonic	,
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		55	3.00	165			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		6	3.00	18	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		6	3.00	18	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		6	3.00	18	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		43	3.00	129	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	1.00	1	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-010 mb18-108-010		1 10	3.00 3.00	30	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		4	3.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		7	3.00	21	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		11	3.00	33	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1 2	3.00 1.00	3 2	1 1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-010 mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		5	3.00	15	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	1.00	2	•		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		5	3.00	15	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		6	3.00	18	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		9	3.00	27	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		3	3.00	9			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		4	3.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		4	3.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1 3	3.00	3 9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00 3.00	3	1 1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-010 mb18-108-010		10	3.00	30	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		90	3.00	270	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		37	3.00	111			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		3	3.00	9	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		2	3.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		24	3.00	72	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		14	3.00	42	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		5	3.00	15	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		15	3.00	45	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010		1	3.00	3	1 1		
Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-010		1 7	3.00 3.00	3 21	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-010 mb18-108-010		6	1.00	6	1		
Joidel	Sammanus mon Willic	2010	Dentille	010 100-010		•	2.00	•	-		

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Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 4 4.00 16 Immatur		Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID L mb18-108-010	Raw Count 4	Split Multiplier 3.00	Total Abundance 12	Unique Taxa Count 1	Comments
Scale Second Se	G	Solder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	2	1.00	2	1	
Colder Suffriends from Mine 2018 Bearts	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-010	2	3.00	6		
Colorder Buffelines for Mine 2018 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description Colorder Buffelines for Mine 2013 Buffelines Description							1			1	
College											
Golder Beffinnack from Mine 2018 Berthis moles 1908-190-10 1 3.00 3 1 Golder Deffinnack from Mine 2018 Berthis moles 1908-100 1 3.00 3 1 Golder Deffinnack from Mine 2018 Berthis moles 1908-100 1 1.00 1 1 Golder Deffinnack from Mine 2018 Deffinition 1 1 1 Golder Deffinnack from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 Golder Deffinition from Mine 2018 Deffinition 1 1 Golder Deffinition from Mine 2018 Definition 1 Golder Deffinition from Mine 2018 Definition 1 1 Golder Deffinition from Mine 2018 Definition 1 1 Golder Deffinition from Mine 2018 Definition 1 1 Golder Deffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine 2018 Definition 1 1 Golder Beffinition from Mine											
Golder Bartfounds from Mine 2018 Barther metal \$1.00 0 0 0 0 0 0 0										1	
Selfer Reffinincis from Name 2018 Sentime real \$1.00 0 1 1 1 1 1 1 1 1											
Solicity Suffrencies from Mine 2018 South Feb. 18 100 1 1 1 1 1 1 1 1											
Golder Beffiniands from Miles 2018 Bestitive Miles 100 3 300 3											
Solider Baffininds from Mine 2018 Besthit Mobile 1006-010 3 3 3 3 3 3 3 3 3										ī	
Solider Seffininds from Mine 2018 Sefficial											
Solicy Beffinings from Nime 2018 Serbit Mil-18 (1989-11) 4 4 4 4 4 4 4 5 5 5										4	
Solice Saffiniands from Nime 2018 Senth 60540 24 1 Camage 1 Cam										1	D
Solider											-
Colder Baffinands from Mine 2018 Berthic bible-108-011 2 4.00 8 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 2 4.00 24 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 4 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 4 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 8 4.00 32 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 8 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 8 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 1 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 1 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 1 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 1 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 1 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 1 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 2 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 2 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 2 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 2 4.00 4 1 Damage Colder Baffinands from Mine 2018 Berthic bible-108-011 2 4.00 4 Damage Dam										1	-
Golder Baffoliands from Mine 2018 Benthic mb18-108-011 6 4.00 24 1 1 2 2 2 2 2 2 2 2											-
Golder Baffoliands from Mine 2018 Benthic bill 318.89.11 4 4.00 4 1 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 1 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 3 5 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 3 5 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 3 5 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 3 6 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Color Baffoliands from Mine 2018 Benthic bill 318.89.11 2 4.00 4 1 Immature Benthic b											-
Golder Baffinlands from Mine 2018 Berthic m038-108-011 1 4.00 4 1 1 mmature Golder Baffinlands from Mine 2018 Berthic m038-108-011 29 4.00 116 mmature Golder Baffinlands from Mine 2018 Berthic m038-108-011 29 4.00 116											-
Colder C										1	Damaged
Golder Baffinands from Mine 2018 Benthic multi-108-011 29 4.00 116											Immature
Golder Solder Raffinands from Mine Solder 2018 Solder Resident Residual Solder 2018 Solder Resident Residual Solder 1 4.00 4 1 Golder Solder Baffinands from Mine Solder 2018 Solder Benthic Miss 108-0011 1 4.00 8 1 Golder Solder Baffinands from Mine Solder 2018 Solder Benthic Miss 108-0011 1 4.00 4 1 Golder Solder Solder Solder Solder Baffinands from Mine Solder 2018 Solder Benthic Miss 108-0011 1 4.00 4 1 Golder S						mb18-108-011					Immature
Golder Saffinands from Mine 2018 Sentic mbs 108-011 1 4.00 4 4 4 6 6 6 6 6 6 6			Baffinlands Iron Mine							1	
Golder Baffinands from Mine 2018 Benthic mbl8-108-011 2 4.00 8 1	G	Golder	Baffinlands Iron Mine		Benthic	mb18-108-011		4.00			
Golder Baffinands from Mine 2018 Benthic 508-140-11 2 4.00 8 1 Golder Baffinands from Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands from Mine 2018 Benthic mb18-108-011 2 4.00 96 Golder Baffinlands from Mine 2018 Benthic mb18-108-011 24 4.00 96 Golder Baffinlands from Mine 2018 Benthic mb18-108-011 79 4.00 316 1 Golder Baffinlands from Mine 2018 Benthic mb18-108-011 2 4.00 36 1 Golder Baffinlands from Mine 2018 Benthic mb18-108-011 2 1.00 2 Golder Baffinlands from Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands from Mine 2018 Benthic mb18-108-011 9 4.00	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4	1	
Golder of Britinands from Mine Colla Britin and Strom Mine Collar Service Solder Selfmands from Mine Colla	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4		
Golder Baffinlands from Mine 2018 Benthic Mail 2018 Mail Mail 2018 Mail	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	2	4.00	8	1	
Golder Baffinands from Mine Collab Baenthic College Baffinands from Mine Collab Baenthic	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	17	4.00	68	1	
Golder Baffinlands from Mine 2018 Benthic mb18-108-011 24 4.00 96	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4	1	
Golder Baffinands from Mine 2018 Benthic mb18-108-011 79 4.00 316 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	25	4.00	100	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	24	4.00	96		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	79	4.00	316	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	2	4.00	8	1	
Golder Bodfinands Iron Mine 2018 Denthic Golder Berthic Mathiands Iron Mine 2018 Denthic Mathiands Iron Mine	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	2	1.00	2		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 36 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1 1 1 1 1 1 1 1 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	6	4.00	24		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 3 1 1 1.00 1 1.00 1.00 1 1.00 1.00 1.00 1.00 1.00 1.00	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	9	4.00	36	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 20 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	1.00	1	1	
Golder Baffinlands Iron Mine 2018 Benthic 2018	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	2	4.00	8	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 7 4.00 28 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	5	4.00	20	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 7 4.00 28 1	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	9	4.00	36	1	
Golder Golder Baffinlands Iron Mine Golder Baffinla	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	2	4.00	8	1	
Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 1 4.00 4 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 2 4.00 8 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 13 1.00 13 Golder Baffinlands Iron Mine Saffinlands Iron Mine 2018 Benthic Mb18-108-011 6 4.00 24 1 Golder Baffinlands Iron Mine Saffinlands I	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	7	4.00	28	1	
Golder Golder Baffinlands Iron Mine 2018 Benthic benth	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	7	4.00	28	1	
Golder Baffinlands Iron Mine 2018 Benthic Mine mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic Mine mb18-108-011 13 1.00 13 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 6 4.00 24 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 3 1.00 3 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic Mb18-108-011 1 4.00 4	e	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 1.00 13	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	2	4.00	8		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 6 4.00 24 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	1	4.00	4	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 6 4.00 24 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18	(Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	13	1.00	13		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 1.00 3 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	2	4.00	8	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 1.00 3 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011	G	Golder	Baffinlands Iron Mine	2018	Benthic		6	4.00	24	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 8 4.00 32 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 9 4.00 36 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 9 4.00 36 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18	G	Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011	3	1.00	3		
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 16 4.00 64 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 8 4.00 32 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 9 4.00 36 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-										1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 8 4.00 32 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 9 4.00 36 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-1	G	Golder	Baffinlands Iron Mine	2018	Benthic		16	4.00	64	1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 9 4.00 36 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-10								4.00		1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 9 4.00 36 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-10								4.00		1	
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 9 4.00 36 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-10											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-1											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1 1											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 4.00 4 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 4.00 8 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 2 1.00 2 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 13 4.00 52 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 3 4.00 12 1 Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1											
Golder Baffinlands Iron Mine 2018 Benthic mb18-108-011 1 1.00 1											
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200 200 000 000 000 000 000 000 000 000										1	

Taxonomic Note

Species name updated from Exogone hebes



Cl' t	Burlant	V	-				0 11: 1:: 1:			
Client	Project	Year	Type	Biologica Sample ID	L	Raw Count 4	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-011 mb18-108-011		6	4.00 4.00	16 24	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		18	4.00	72	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		27	4.00	108	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		53	4.00	212	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		13	4.00	52	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-011 mb18-108-011		2 1	4.00 4.00	8 4	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		16	1.00	16	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1 2	1.00 4.00	1 8	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-011 mb18-108-011		3	4.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-011		4	4.00	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		4	1.00	4		Adult mega (16.1 g)
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		107 1	4.00 4.00	428 4	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-012 mb18-108-012		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		18	4.00	72	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		6	4.00	24		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		101	4.00	404	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	1.00	1 12		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-012 mb18-108-012		3 1	4.00 1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		8	4.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		11	1.00	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1 3	1.00 1.00	1 3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-012 mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Species name updated from Exogone hebes



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-012	L	Raw Count 17	Split Multiplier 4.00	Total Abundance 68	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		10	1.00	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		15	4.00	60	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		23	4.00	92	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		70	4.00	280	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		36	4.00	144	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		20	1.00	20		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		7	1.00	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		3	4.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-012		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		5	3.00	15		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3		Planktonic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		12	3.00	36		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		52	3.00	156		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		15	3.00	45	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		39	3.00	117	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		16	3.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		43	3.00	129	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1 4	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013			3.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		15 2	3.00	45 6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013			3.00	6 18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		6 7	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	21 3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013 mb18-108-013		5	3.00 1.00	5	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic			1	3.00	3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-013 mb18-108-013		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		3	3.00	9	1	
Golder	Sammanas II On Willie	2010	Dentine	510 100 015		J	5.00	<u> </u>	-	

Comments Taxonomic Note Species name updated from Exogone hebes



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-013	L	Raw Count	Split Multiplier 3.00	Total Abundance 27	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		117	3.00	351	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		50	3.00	150	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		5	1.00	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		8	1.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		3	3.00	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		10	3.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		5	3.00	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-013		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	1.00	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	2.40	5		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		6	2.40	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2		Parasitic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		41	2.40	98		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		14	2.40	34	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		10	2.40	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		54	2.40	130	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		13	2.40	31	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		42	2.40	101	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	

Taxonomic Note	

Some species known to be invasive

Species name updated from Exogone hebes Species name updatet from Trichotropis borealis



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		4	2.40	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	2.40	7 2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-014 mb18-108-014		1 4	2.40 1.00	4	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		8	2.40	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		29	2.40	70	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-014 mb18-108-014		4 3	2.40 2.40	10 7	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		8	2.40	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		8	2.40	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		108	2.40	259	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		9	2.40	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		39	2.40	94	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40 2.40	2	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-014 mb18-108-014		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	2.40	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014 mb18-108-014		2	2.40	5 2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-014 mb18-108-014		5	1.00 2.40	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014 mb18-108-014		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-014		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	2.40	5		Damaged/immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2		Planktonic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		31	2.40	74		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		62	2.40	149	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	1.00	2	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		28	2.40	67	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	1.00	1		

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Family updated from Lysianassidae to Tryphosidae



Client	Project	Year	Type	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		184	2.40	442	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	1.00	1	1	
						3		7	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015			2.40			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	_	
Golder		2018	Benthic	mb18-108-015		1	2.40	2	1	
	Baffinlands Iron Mine								1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		9	2.40	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		46	2.40	110	1	
						6	2.40	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015						
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		6	2.40	14		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	2.40	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	1.00	1	1	
						1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015						
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		7	1.00	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-015		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	1.00	3	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	Eroded
Golder						4	3.00	12	-	2.0000
	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		4 64				
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016			3.00	192	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		13	3.00	39	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		13	3.00	39	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3		

Taxonomic Note



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016	_	59	3.00	177	1	comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		16	3.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		25	3.00	75	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		5	3.00	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	3.00	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		19	3.00	57	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		8	3.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		25	3.00	75	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		15	3.00	45	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1 7	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		6	3.00 3.00	21 18	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-016 mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		37	3.00	111	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		5	1.00	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		16	1.00	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	3.00	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		9	3.00	27		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-016		1	3.00	3	1	
	- ***						4.00			

Taxonomic Note

 Golder
 Baffinlands Iron Mine
 2018
 Benthic
 mb18-108-017
 1
 1.00
 1
 1
 Adult mega (6.9 g)



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-017	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	Attached to Ostracoda
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	-	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	1.00	2		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		44	2.00	88		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		44	2.00	88	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		139	2.00	278	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
									1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		16	2.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		3	2.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		15	2.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		5	2.00	10	1	
						2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017						
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		15	1.00	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		8	2.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
						10	2.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017						
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		29	2.00	58	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		21	2.00	42	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		13	2.00	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		11	2.00	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		4	2.00	8	1	
				mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic			3				
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017			2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		5	1.00	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		10	2.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		18	2.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		11	2.00	22		

	Tax	onom	ic I	Not
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Family updated from Lysianassidae to Tryphosidae



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-017	L	Raw Count	Split Multiplier 2.00	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		3	2.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		5	2.00	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-017		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		10	2.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		42	2.00	84	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		98	2.00	196	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		19	1.00	19		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		36	2.00	72	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		8	2.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		15	2.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		82	2.00	164	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1 3	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		4	2.00	6	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	8	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-018		8	2.00 2.00	2 16	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		Benthic Benthic	mb18-108-018		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-018 mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018 mb18-108-018		1	1.00	1	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-018		3	1.00	3		

Taxonomic Note
Some species may be invasive (e.g. Marenzelleria neglecta)



Clier Gold		Year 2018	Type Benthic	Biologica Sample ID mb18-108-018	L	Raw Count	Split Multiplier 2.00	Total Abundance	Unique Taxa Count	Comments
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-018		4	2.00	8	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		4	1.00	4		Attached to Mollusca
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3	1	Attached to Mollusca
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3	1	Damaged
Gold		2018	Benthic	mb18-108-019		1	3.00	3	1	Damaged
Gold		2018	Benthic	mb18-108-019		1	3.00	3	1	Damaged
Gold		2018	Benthic	mb18-108-019		1	3.00	3		Damaged
Gold		2018	Benthic	mb18-108-019		1	1.00	1		Immature
Gold		2018	Benthic	mb18-108-019		1	1.00	1		Immature
Gold		2018	Benthic	mb18-108-019		8	3.00	24		Immature
Gold Gold		2018 2018	Benthic	mb18-108-019 mb18-108-019		34 1	3.00 3.00	102 3	1	
Gold		2018	Benthic Benthic	mb18-108-019		1	1.00	1	1 1	
Gold		2018	Benthic	mb18-108-019		4	3.00	12	1	
Gold		2018	Benthic	mb18-108-019		26	3.00	78	1	
Gold		2018	Benthic	mb18-108-019		10	3.00	30	1	
Gold		2018	Benthic	mb18-108-019		1	3.00	3	1	
Gold		2018	Benthic	mb18-108-019		1	1.00	1		
Gold		2018	Benthic	mb18-108-019		2	3.00	6		
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		13	3.00	39	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3		
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		68	3.00	204	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3		
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	1.00	1	1	
Gold		2018	Benthic	mb18-108-019		2	3.00	6	1	
Gold		2018	Benthic	mb18-108-019		1	1.00	1		
Gold		2018	Benthic	mb18-108-019		10	3.00	30	1	
Gold		2018	Benthic	mb18-108-019		6	3.00	18	1	
Gold		2018	Benthic	mb18-108-019		3 26	3.00	9	1 1	
Gold		2018	Benthic	mb18-108-019		11	3.00 3.00	78 33	1	
Gold Gold		2018 2018	Benthic Benthic	mb18-108-019 mb18-108-019		3	3.00	9	1	
Gold		2018	Benthic	mb18-108-019		14	3.00	42	1	
Gold		2018	Benthic	mb18-108-019		2	3.00	6	1	
Gold		2018	Benthic	mb18-108-019		5	3.00	15	1	
Gold		2018	Benthic	mb18-108-019		20	3.00	60	1	
Gold		2018	Benthic	mb18-108-019		2	3.00	6	1	
Gold		2018	Benthic	mb18-108-019		4	3.00	12		
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		4	3.00	12		
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		18	3.00	54	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	1.00	2	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		3	1.00	3	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3	1	
Gold		2018	Benthic	mb18-108-019		2	3.00	6		
Gold		2018	Benthic	mb18-108-019		1	3.00	3	1	
Gold		2018	Benthic	mb18-108-019		33	3.00	99	1	
Gold		2018	Benthic	mb18-108-019		1	3.00	3	1	
Gold		2018	Benthic	mb18-108-019		4	3.00	12	1	
Gold		2018	Benthic	mb18-108-019		2 3	3.00	6 9	1	
Gold Gold		2018 2018	Benthic Benthic	mb18-108-019 mb18-108-019		1	3.00 3.00	3	1 1	
Gold		2018	Benthic	mb18-108-019		2	3.00	6	1	
Gold		2018	Benthic	mb18-108-019		2	3.00	6	1	
Gold		2018	Benthic	mb18-108-019		15	3.00	45	1	
Gold		2018	Benthic	mb18-108-019		13	3.00	39	1	
Gold		2018	Benthic	mb18-108-019		3	3.00	9	1	
Gold		2018	Benthic	mb18-108-019		1	3.00	3		
Gold		2018	Benthic	mb18-108-019		2	3.00	6	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3		
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		5	3.00	15	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		9	1.33	12	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		7	1.33	9	1	
Gold		2018	Benthic	mb18-108-019		5	3.00	15	1	
Gold		2018	Benthic	mb18-108-019		1	3.00	3	1	
Gold		2018	Benthic	mb18-108-019		6	3.00	18	1	
Gold	ler Baffinlands Iron Mine	2018	Benthic	mb18-108-019		20	3.00	60	1	

Taxonomic Note



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-019	L 1	Raw Count	Split Multiplier 3.00	Total Abundance	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		6	1.00	6	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		3 8	1.00	3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-019 mb18-108-019		1	3.00 1.00	24 1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		4	3.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	1.00	1	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-019		1	1.00 3.00	1	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-019 mb18-108-019		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	1.00	2	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-019		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	1.00	1	á	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-020		5 40	2.00	10 80		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-020 mb18-108-020		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		10	2.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		30	2.00	60	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		6	2.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		139	2.00	278	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-020 mb18-108-020		10 11	2.00 2.00	20 22	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-020		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		3	2.00	6	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-020		4 10	2.00 1.00	8 10	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-020 mb18-108-020		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		15	2.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020		3	2.00	6	1	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae



Client	Project	Year	Туре	Biologica Sample ID L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	24	2.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	12	2.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	2	2.00	4	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-020 mb18-108-020	3 6	2.00 2.00	6 12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	31	2.00	62	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	1.00	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-020 mb18-108-020	20 3	1.00 2.00	20 6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	6	1.00	6	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	3	2.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-020 mb18-108-020	2	1.00 2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-020	4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	5	1.00	5	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic		1	2.40	2		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic		1	2.40	2		Damaged
Golder	Baffinlands Iron Mine	2018		mb18-108-021	1	2.40	2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021	17 68	2.40 2.40	41 163		
Golder	Baffinlands Iron Mine	2018		mb18-108-021 mb18-108-021	1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		6	2.40	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic		25	2.40	60	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	14	2.40	34		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	49	2.40	118	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021	1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		2	1.00	2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic		44 3	2.40 2.40	106 7	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic		4	2.40	10	•	
Golder	Baffinlands Iron Mine	2018	Benthic		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic		11	2.40	26	1	
Golder	Baffinlands Iron Mine	2018		mb18-108-021	13	2.40	31	1	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae



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Client	Project	Year	Type	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count 1	Comments
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021 mb18-108-021		5 2	2.40 2.40	12 5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		23	2.40	55	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		5	2.40	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		8	1.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	2.40	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021 mb18-108-021		5 3	2.40 2.40	12 7	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		14	2.40	34	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		29	2.40	70	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		5 9	2.40 2.40	12 22	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021 mb18-108-021		9	2.40	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		21	2.40	50	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		7	2.40	17	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		33	2.40	79	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		4	2.40	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1 4	1.00	1 4	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-021 mb18-108-021		2	1.00 2.40	5	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		12	1.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		7	2.40	17	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		3	2.40	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		3	2.40	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		5	1.00	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	1.00	2	á	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	1.00	2	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-021 mb18-108-021		3 5	2.40 1.00	7 5	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		8	1.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		9	2.40	22		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		2	2.40	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-021		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2		Damaged
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-022 mb18-108-022		1 10	1.00 2.40	1 24		Immature
Goldel	Darimanus MON MINE	2010	Dentille	111010-100-022		10	2.70			

Taxonomic Note



Kaw ab	undance data in long format	tor Golder	Barriniands	s iron Mine 2018.							
Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments	Taxonomic Note
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		64	2.40	154			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		9	2.40	22	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		6	2.40	14	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		19	2.40	46	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		115	2.40	276	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		29	2.40	70			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		22	2.40	53	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		7	2.40	17			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		6	2.40	14			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		17	1.00	17			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	1.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	1.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		13	2.40	31	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		14	2.40	34	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		9	2.40	22	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		12	2.40	29	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		13	2.40	31	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic			4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		31	2.40	74	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		5	2.40	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022	1	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		10	1.00	10			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		4	2.40	10	1		



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-022	L	Raw Count	Split Multiplier 2.40	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		5	2.40	12	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		2	2.40	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		7	2.40	17	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		6	2.40	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-022		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	Attached to Mollusca
Golder		2018		mb18-108-023		3	1.00	3	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic			2	3.00	6		Damaged/immature
	Baffinlands Iron Mine		Benthic	mb18-108-023						- ·
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		25	3.00	75	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		11	3.00	33	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		67	3.00	201	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		27	3.00	81	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		20	3.00	60	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		7	3.00	21		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		12	3.00	36		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		10	3.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		8	3.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		17	3.00	51	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		8	3.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		3	3.00	9	1	
			,							

Taxonomic Note



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-023	L	Raw Count 2	Split Multiplier 3.00	Total Abundance 6	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		24	3.00	72	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		10	3.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		8	3.00	24	4	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6 6	1 1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-023 mb18-108-023		1	3.00 3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		15	3.00	45	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		5	3.00	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		9	3.00	27	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3 1	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-023 mb18-108-023		1 1	1.00 3.00	3	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		5	3.00	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		3	3.00	9	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-023		1	1.00	1		Damagad
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1 4	4.00 4.00	4 16		Damaged Damaged
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-024 mb18-108-024		6	4.00	24	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	Damaged/immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4		Damaged/immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		60	4.00	240		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		7	4.00	28 4	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-024 mb18-108-024		1 23	4.00 4.00	92	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		69	4.00	276	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		28	4.00	112	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-024		1 2	1.00 4.00	1 8	1 1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-024 mb18-108-024		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
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Taxonomic Note

Family updated from Lysianassidae to Tryphosidae



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-024	L	Raw Count	Split Multiplier 4.00	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		16	4.00	64	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		4	4.00	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		6	4.00	24		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		10	1.00	10	1	
Golder		2018				10	4.00	4	1	
	Baffinlands Iron Mine		Benthic	mb18-108-024		2		2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024			1.00		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		15	4.00	60	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		20	4.00	80	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		55	4.00	220	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		8	1.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		8	4.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		5	1.00	5	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		22	4.00	88	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	1.00	3	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		6	4.00	24		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	4.00	8		
Golder	Baffinlands Iron Mine	2018		mb18-108-024		1	1.00	1	1	
Golder	Baffinlands Iron Mine		Benthic	mb18-108-024		3	4.00	12	1	
		2018	Benthic			1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1		4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	4.00		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024			1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	1.00	1	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-024		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	1.00	2	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		3	1.00	3		Attached to Mollusca

Taxonomic Note



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4		Damaged/immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2		Eroded
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		17	2.00	34		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-025		1 15	2.00 2.00	2 30	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-025 mb18-108-025		15	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		22	2.00	44	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		15	2.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		44	2.00	88	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		19	2.00	38	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		15	2.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		11	2.00	22		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		11	2.00	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		3 3	2.00	6 6	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-025 mb18-108-025		1	2.00 2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		59	2.00	118	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		17	2.00	34	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		9	2.00	18		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		4	2.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		11	2.00	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		7	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		1 1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-025		2	2.00 1.00	2 2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-025		2	1.00	2	1	Attached to Mollusca

Taxonomic Note

Golder Baffinlands Iron Mine 2018 Benthic mb18-108-026 2 1.00 2 1 Attached to Mollusca



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-026	L	Raw Count 1	Split Multiplier 3.00	Total Abundance	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9		Planktonic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		41	3.00	123		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		10 2	3.00	30 6	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-026 mb18-108-026		22	3.00 3.00	66	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		21	1.00	21		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		52	3.00	156	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		25	3.00	75	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2 4	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		28	3.00 3.00	12 84	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-026 mb18-108-026		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		4	1.00	4	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		6	3.00	18		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1 2	3.00	3 6	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-026 mb18-108-026		5	3.00 3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		35	3.00	105	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		16	3.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		13	3.00	39	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		26	3.00	78	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		9	3.00	27	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		1	3.00	3	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-026		1 3	1.00 1.00	1 3	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-026 mb18-108-026		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		8	1.00	8	=	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026		7	3.00	21	1	
		-								

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Family updated from Lysianassidae to Tryphosidae Species name updatet from Trichotropis borealis



Client	Project	Year	Type	Biologica Sample ID L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	6	1.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-026 mb18-108-026	4 3	3.00 1.00	12 3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	2	3.00	6	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	7	3.00	21		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-026	3 1	3.00	9	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-026 mb18-108-027	1	3.00 1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	3	3.00	9	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027 mb18-108-027	2	3.00	6	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	•	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	3	1.00	3	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	1.00	1	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	122	3.00	366		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	11	3.00	33	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	39	3.00	117	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00 3.00	3	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	40	3.00	120	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	8	3.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	11	3.00	33	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	5 11	3.00 3.00	15 33	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	8	1.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027 mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	11	3.00	33	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	3	3.00	9		

Taxonomic Note



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027	-	3	3.00	9	1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		10	3.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		13	3.00	39	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		8	3.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		9	3.00	27	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		10	3.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		4	3.00	12	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-027 mb18-108-027		38 1	3.00 3.00	114 3	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		8	3.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		7	1.00	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		8	1.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		4	3.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1 1	1.00	1 3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-027 mb18-108-027		2	3.00 3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	1.00	2	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		5	3.00	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-027		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		5	1.00	5	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		9	1.00	9	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		14	1.00	14	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		18	1.00	18	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		17	1.00	17	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		3	1.00	3	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		20	1.00	20	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		6	1.00	6	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		10	1.00	10	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-028		36 1	1.00 1.00	36 1	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-028 mb18-108-028		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		6	1.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
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Some species known to be invasive

Some species may be invasive (e.g. Marenzelleria neglecta)



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-028	L	Raw Count 23	Split Multiplier	Total Abundance 23	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		3	1.00	3	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		8	1.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		15	1.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder		2018	Benthic			2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
	Baffinlands Iron Mine			mb18-108-028		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1		1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028			1.00		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		3	1.00	3	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		10	1.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		6	1.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		7	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-028		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		16	1.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		11	1.00	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		11	1.00	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		18	1.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		52	1.00	52	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-029		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		5	1.00	5	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1		Eroded
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		20	1.00	20	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		3	1.00	3		Parasitic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		32	1.00	32		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
		0	2							

Taxonomic Note	
Some species may be invasive (e.g. Marenzelleria r	neglecta)



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		8	1.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		15	1.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		12	1.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		32	1.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		36	1.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		15	1.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		6	1.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		21	1.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		7	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		25	1.00	25		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		12	1.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		7	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		6	1.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		7	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		413	1.00	413	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		35	1.00	35	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		15	1.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		13	1.00	13	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		7	1.00	7		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-030		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		2	2.40	5		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		15	2.40	36	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		6	2.40	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		13	2.40	31	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		11	2.40	26	1	
Golder						10	2.40	24	1	
	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-031		43	2.40	103	1	
Golder		2018	Benthic	mb18-108-031						
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		8	2.40	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		11	2.40	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		21	1.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		18	2.40	43	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		5	2.40	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		1	2.40	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031		1	2.40	2	1	

Taxonomic Note Family updated from Lysianassidae to Tryphosidae



Client	Project	Year	Туре	Biologica Sample ID L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments	Taxonomic Note
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	46	2.40	110	1	Comments	raxonomic rece
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	17	2.40	41	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	6	2.40	14	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	10	2.40	24	-		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5	1.00	5	-		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	24	2.40	58	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	3	2.40	7	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	6	2.40	14	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	7	2.40	17	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	61	2.40	146	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	8	2.40	19	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	6	1.00	6			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	2.40	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	6	2.40	14	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	5	1.00	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	3	2.40	7			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	4	2.40	10			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	4	2.40	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	2.40	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-031	2	1.00	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	22	1.00	22	1	Attached to Mollusca	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	70	1.00	70		Attached to Mollusca	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1	2.00	2	1	Attached to Mollusca	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	2	2.00	4		Damaged	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	2	1.00	2	1	Damaged. Brozoan and polychaete encrusting on shell	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1	2.00	2	1	Damaged/immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1	2.00	2	1	Eroded	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1	1.00	1		Immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	1	1.00	1	1	Immature	



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-032	L	Raw Count	Split Multiplier 2.00	Total Abundance 2	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		35	2.00	70		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	2.00	4	1	
Golder	Baffinlands Iron Mine		Benthic	mb18-108-032		1			1	
		2018		mb18-108-032			1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic			13	2.00	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		26	2.00	52	1	
iolder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		13	2.00	26	1	
older	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		19	2.00	38	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		49	2.00	98	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		15	2.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		35	2.00	70	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	2.00	4	1	
Solder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		4	2.00	8	1	
Solder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		18	2.00	36		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		5	2.00	10		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		34	1.00	34		
iolder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		10	1.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	1.00	1		
older	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	2.00	4	1	
older	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		8	2.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		8	2.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		5	2.00	10	1	
Solder	Baffinlands Iron Mine					1	2.00	2	1	
iolder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-032 mb18-108-032		4	2.00	8	1	
iolder	Baffinlands Iron Mine		Benthic Benthic	mb18-108-032		2	2.00	4	1	
older		2018	Benthic	mb18-108-032		1	2.00	2	1	
	Baffinlands Iron Mine	2018		mb18-108-032		3	2.00	6	1	
iolder	Baffinlands Iron Mine	2018	Benthic			1				
older	Baffinlands Iron Mine	2018	Benthic	mb18-108-032			2.00	2	1	
iolder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		45 1	2.00	90	1	
iolder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	1.00	1	1	
iolder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
iolder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
older	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		13	1.00	13		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		10	2.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		4	2.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	1	
	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	2.00	4		
Golder	barrillarius iron wille					1		2		

Taxonomic Note

Some species may be invasive (e.g. Marenzelleria neglecta)



Raw abu	ndance data in long format	for Golder	Baffinlands	Iron Mine 2018.						
Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032	-	1	1.00	1	Jque .una couilt	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic			4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic			1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		10	2.00	20		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		10	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-032		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	3.00	3	1	Immature
Golder	Baffinlands Iron Mine		Benthic	mb18-108-033		1	3.00	3	1	iiiiiiature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-033		3 29	3.00	9 87		
									1	
Golder	Baffinlands Iron Mine	2018	Benthic			2 6	3.00	6	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033			3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic			10	3.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		18	3.00	54		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-033 mb18-108-033		2 9	3.00 3.00	6 27	1	
		2018				28	3.00		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1		84 3	1	
Golder	Baffinlands Iron Mine	2018	Benthic			3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033			3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1 24	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033			3.00	72	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic			16	3.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic			4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic			6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		33	3.00	99	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		5	3.00	15		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		5	3.00	15	á	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic			4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic			3	1.00	3	_	
Golder	Baffinlands Iron Mine	2018	Benthic			4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic			7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic			3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic			5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic			6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic			5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	

Taxonomic Note
Some species may be invasive (e.g. Marenzelleria neglecta)



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-033	L	Raw Count	Split Multiplier 3.00	Total Abundance 159	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3	1	
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1 4	3.00	3 4	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-033 mb18-108-033		3	1.00 3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		6	1.00	6	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-033 mb18-108-033		1 1	1.00 1.00	1 1	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-033		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2	1.00	2	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	Damaged/immature
Golder Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2 23	1.00 1.00	2 23	1	Immature
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-034 mb18-108-034		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		6	1.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		19	1.00	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		4	1.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		3 1	1.00 1.00	3 1	1 1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-034 mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		6	1.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		7 2	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034			1.00	2	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-034 mb18-108-034		2 3	1.00 1.00	2 3	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		5	1.00	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1	

Taxonomic Note

Some species may be invasive (e.g. Marenzelleria neglecta)



Golder Baffinlands Iron Mine 2018 Benthic mb18-108-037 1

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Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments	Taxonomic Note
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		6	1.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		10	1.00	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		4	1.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-034		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		2	1.00	2		Damaged	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1	Damaged	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		31	1.00	31	1		Some species may be invasive (e.g. Marenzelleria neglecta)
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-035		1 2	1.00	1 2	1		
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-035 mb18-108-035		1	1.00 1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		12	1.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		10	1.00	10	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		3	1.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		4	1.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		4	1.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		5	1.00	5	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		11	1.00	11	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1		Some species known to be invasive
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1 3	1.00 1.00	1 3	1 1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-035 mb18-108-035		3	1.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-035		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1		Damaged	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1	Damaged	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		21	1.00	21	1		Some species may be invasive (e.g. Marenzelleria neglecta)
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		8	1.00	8			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		2	1.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		4	1.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00 1.00	1 4	1		
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-036 mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018		mb18-108-036		25	1.00	25	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-036		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	Attached to Mollusca	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	Attached to Mollusca	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	1.00	2	1	Attached to Mollusca	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2		Attached to Mollusca	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		11	2.00	22		Immature	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		6 2	2.00 2.00	12 4	1	Immature	Species name updated from Exogone hebes
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-037 mb18-108-037		22	2.00	44	1		Species name apaated from Exogonic fieldes
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		7	2.00	14	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		3	2.00	6	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		11	2.00	22	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		18	2.00	36	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	1.00	1	1		
	Defficiencies and	2010		140 400 007		4	2.00	2			

2.00 2



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037	-	2	2.00	4	1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		5	2.00	10	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		54	2.00	108	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		15	2.00	30	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		40	2.00	80	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	1.00	2	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		58	2.00	116	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		15	2.00	30	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		4	2.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	1.00	8	1	
								2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		11	2.00	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		10	2.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		27	2.00	54	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		23	2.00	46	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		4	2.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		2	2.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-037		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	1.00	2		Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		28	2.00	56	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	1.00	1	1	Damaged
Golder	Sammanas Iron Wille	2010	Dentine	510 100-030		-	2.00	-	-	

Taxonomic Note



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-038	L	Raw Count 1	Split Multiplier 2.00	Total Abundance 2	Unique Taxa Count	Comments Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		3	2.00	6		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		22	2.00	44		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		3	2.00	6		Planktonic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		17	2.00	34		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		3	2.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		5	2.00	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		14	2.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-038		7 51	2.00 2.00	14 102	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-038 mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		35	2.00	70	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		39	2.00	78	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		8	2.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		19	2.00	38		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		7	2.00	14		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		13	2.00	26	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		7	2.00	14	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		11	2.00	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		10 2	2.00 2.00	20 4	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-038 mb18-108-038		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-038		55	2.00	110	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		9	2.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		3	2.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		6	2.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	2.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		4	2.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		11	2.00	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		3	2.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-038		1	2.00	2	1	

Taxonomic Note



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-038	L	Raw Count	Split Multiplier 2.00	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		6	1.71	10	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		5	1.71	9	•	Intermediate irregularly shaped
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	intermediate irregularly shaped
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		22	1.71	38	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		65	1.71	111		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		10	1.71	17	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		7	1.71	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		13	1.71	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		6	1.71	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		43	1.71	74	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		5	1.71	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		37	1.71	63	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		18	1.71	31	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		13	1.71	22	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		14	1.71	24		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		7	1.71	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		11	1.71	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4 4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	7 5	1 1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71 1.00	1	1	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-039 mb18-108-039		6	1.71	10	1	
Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		6	1.71	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		11	1.71	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		29	1.71	50	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		11	1.71	19	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1	1	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Species name updated from Exogone hebes



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-039	L	Raw Count	Split Multiplier 1.00	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		21	1.71	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		2	1.71	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		7	1.71	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		4	1.71	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		9	1.00	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		3	1.71	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-039		1	1.71	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	1.00	2	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8	1	One in tube with eggs
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4		Parasitic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1		Parasitic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		16	4.00	64		, arasicio
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		39	4.00	156		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		11	4.00	44	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		96	4.00	384	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		12	4.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018		mb18-108-040		1	4.00	4	1	
			Benthic			3	4.00	12	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		6	4.00	24	1	
Golder		2018	Benthic	mb18-108-040		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		=			1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		4 6	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040			4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2 17	4.00	8 17	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040			1.00		1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		15	4.00	60	1	

Taxonomic Note

Species name updatet from Trichotropis borealis Species name updatet from Trichotropis borealis



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-040	L	Raw Count 16	Split Multiplier 4.00	Total Abundance 64	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		47	4.00	188	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		20	4.00	80	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		4	4.00	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		10	4.00	40		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		12	4.00	48		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-040		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		4	1.20	5	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		4	1.20	5		Planktonic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		18	1.20	22		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		66	1.20	79		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		10	1.20	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		36	1.20	43	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		34	1.20	41	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		6	1.20	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		15	1.20	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		4	1.20	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		4	1.20	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		9	1.20	11	1	

t	Comments	Taxonomic Note
	Damaged Damaged Damaged	Species name update from Tectura testudinalis
	Damaged Damaged Immature Immature	
	Planktonic	Species name update from Tectura testudinalis



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041	_	12	1.20	14	1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		9	1.20	11	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		5	1.20	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		8	1.20	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		8	1.20	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		8	1.20	10	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		27	1.20	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		4	1.20	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		150	1.20	180	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		13	1.20	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		7	1.20	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		7	1.00	7	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		5	1.20	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		10	1.20	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	4	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		3	1.20	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1 4	1.00	1 5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041			1.20			
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20 1.20	2	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-041 mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		1	1.20	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-041		2	1.20	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		44	4.00	176	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		7	4.00	28	•	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		4	4.00	16		Parasitic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		27	4.00	108		i di di di
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		69	4.00	276		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		8	4.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		40	4.00	160	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1	•	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		19	4.00	76	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		26	4.00	104	1	
		_510	20.10110				4.00			

Golder Baffinlands Iron Mine 2018 Benthic mb18-108-042 4 1.00 4

Taxonomic Note



Kaw abur	ndance data in long format	tor Golder	Barriniands	s iron Mine 2018.							
Client	Project	Year	Type	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments	Taxonomic Note
Golder	Baffinlands Iron Mine	2018	Benthic			14	4.00	56			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		74	4.00	296	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	1.00	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		4	4.00	16	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic			5	4.00	20	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine		Benthic	mb18-108-042		22		88	1		
		2018					4.00		1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	1.00	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		13	4.00	52	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		7	4.00	28	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		14	1.00	14	_		
Golder	Baffinlands Iron Mine	2018	Benthic			3	1.00	3	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		13	4.00	52	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		8	4.00	32	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		15	4.00	60	1		
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1	1		
			Benthic			2	4.00	8	1		
Golder	Baffinlands Iron Mine	2018		mb18-108-042		8			1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042			4.00	32			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4			
Golder	Baffinlands Iron Mine	2018	Benthic		1	1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic			1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		13	1.00	13			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		6	4.00	24	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		5	1.00	5			
Golder	Baffinlands Iron Mine	2018	Benthic			18	4.00	72	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		15	1.00	15			
Golder	Baffinlands Iron Mine	2018	Benthic			4	4.00	16			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1	1		
						5		20	1		
Golder	Baffinlands Iron Mine	2018	Benthic				4.00				
Golder	Baffinlands Iron Mine	2018	Benthic			2	4.00	8	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1	4		
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	Benthic			1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	1.00	2			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12			
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8	1		



Client Golder	Project Baffinlands Iron Mine	Year 2018	Type Benthic	Biologica Sample ID mb18-108-042	L	Raw Count 5	Split Multiplier 4.00	Total Abundance 20	Unique Taxa Count 1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		7	4.00	28		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	4.00	8	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-042 mb18-108-042		1 1	4.00 4.00	4	1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-042		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-042		2	1.00	2		Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	4.00	8	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1	-	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		11	1.00	11		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		4	1.00	4		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1		Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	Immature
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		23	4.00	92		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		93	4.00	372		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		9	4.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		22	4.00	88	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		20	4.00	80 1	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic	mb18-108-043 mb18-108-043		1 1	1.00 4.00	4	1 1	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		39	4.00	156	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		18	4.00	72		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		99	4.00	396	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		4	4.00	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		11	4.00	44	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		30	4.00	120	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		12	4.00	48		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018	Benthic Benthic	mb18-108-043		7	4.00	28	1	
	Baffinlands Iron Mine	2018		mb18-108-043		17 15	4.00 1.00	68 15	1	
Golder Golder	Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-043 mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		12	4.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1 3	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		J	4.00	12	1	

Taxonomic Note

Family updated from Lysianassidae to Tryphosidae Species name updatet from Trichotropis borealis



Golder Baffinlands Iron Mine 2018 Benthic mb18-108-044

Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043	-	13	4.00	52	1	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		9	4.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		75	4.00	300	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	1.00	2		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		4	1.00	4	_	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		9	4.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		5	1.00	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		14	4.00	56	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		8	1.00	8		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-043 mb18-108-043		14 1	4.00 4.00	56 4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	1.00	2	-	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		4	4.00	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	4.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		6	4.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		3	1.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		13	4.00	52		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		4	4.00	16		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-043		1	4.00	4	1	Attacked to Mallings
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		2	1.00	2	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1 1	4.00 4.00	4 4	1 1	Immature Immature
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-044 mb18-108-044		1	4.00	4	1	Parasitic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		8	4.00	32		i di diffic
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		45	4.00	180		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		7	4.00	28	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		16	4.00	64	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		16	4.00	64	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		23	4.00	92	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		13	4.00	52		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		70	4.00	280	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		19	4.00	76	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		11	4.00	44		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		3	4.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		16	1.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		4	1.00	4	1	

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4.00

28

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Taxonomic Note



Raw abur	ndance data in long format	for Golder	Battinlands	Iron Mine 2018.						
Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic			2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		4	4.00	16	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic			5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic			10	4.00	40	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		9	4.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		45	4.00	180	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	4.00	4	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		2	4.00	8	1	
Golder	Baffinlands Iron Mine	2018	Benthic			13	1.00	13		
Golder	Baffinlands Iron Mine	2018	Benthic			8	4.00	32	1	
Golder	Baffinlands Iron Mine	2018	Benthic			4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		17	4.00	68	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		8	4.00	32		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		5	4.00	20	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		12	4.00	48	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		3	4.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		3	4.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		5	4.00	20		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-044		2	4.00	8		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		14	3.00	42		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		175	3.00	525		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		5	3.00	15	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		40	3.00	120	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		14	3.00	42	1	
Golder	Baffinlands Iron Mine	2018	Benthic			2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic			6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic			7	3.00	21		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		62	3.00	186	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic			2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic			4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic			7	3.00	21	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018				4	3.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic			3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic			3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic			2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic			23	3.00	69	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018				2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic			8	3.00	24		
Golder	Baffinlands Iron Mine	2018	Benthic			6	1.00	6	1	
Golder	Baffinlands Iron Mine	2018		mb18-108-045		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018		mb18-108-045		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic			2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic			28	3.00	84	1	
		2018	Benthic			1	3.00	3	1	
Golder	Dallillands from white									
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine					4		12	1	
Golder Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	Benthic Benthic	mb18-108-045			3.00 3.00	12 6	1 1	

Taxonomic Note
Species name updated from Exogone hebes



Client	Project	Year	Туре	Biologica Sample ID	L	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		3	3.00	9	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		8	3.00	24	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		4	1.33	5	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		6	3.00	18	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		57	3.00	171	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	1.00	2	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		4	1.00	4		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		4	3.00	12	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		5	1.00	5		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		3	3.00	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		3	3.00	9		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		3	1.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		4	3.00	12		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-045		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		1	1.00	1	1	Attached to Mollusca
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		1	3.00	3		Damaged
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		97	3.00	291		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		20	3.00	60	1	
Golder	Baffinlands Iron Mine	2018	Benthic			1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		13	3.00	39	1	
Golder	Baffinlands Iron Mine	2018	Benthic			31	3.00	93		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		59	3.00	177	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		1	1.00	1	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		2	3.00	6		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		1	1.00	1		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		12	3.00	36	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		1	3.00	3	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		28	3.00	84	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		2	3.00	6	1	
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		8 4	3.00 3.00	24		
Golder	Baffinlands Iron Mine	2018	Benthic	mb18-108-046		→	3.00	12		

Taxonomic Note



Benthic report of quality control and quality assurance for Golder Baffinlands Iron Mine 2018.

Biologica Sample ID	Client Sample ID	Sorting Efficiency QC: Spotcheck	No. QC resorts
mb18-108-001	BE-1-1		
mb18-108-002	BE-1-2		
mb18-108-003	BE-1-3		
mb18-108-004	BE-2-1		
mb18-108-005	BE-2-2		
mb18-108-006	BE-2-3	100.00%	
mb18-108-007	BE-3-1		
mb18-108-008	BE-3-2		
mb18-108-009	BE-3-3	99.00%	
mb18-108-010	BE-4-1		
mb18-108-011	BE-4-2		
mb18-108-012	BE-4-3		
mb18-108-013 mb18-108-014	BE-5-1 BE-5-2		
mb18-108-014	BE-5-2 BE-5-3		
mb18-108-016	BM-1-1		
mb18-108-017	BM-1-2	00.00%	
mb18-108-017	BM-1-3	99.00%	
mb18-108-019	BM-3-1	1	
mb18-108-020	BM-3-2	1	
mb18-108-021	BM-3-3	95.15%	
mb18-108-021	BM-4-1	96.09%	-
mb18-108-023	BM-4-2	30.03/0	
mb18-108-024	BM-4-3	<u> </u>	1
mb18-108-025	BM-6-1		
mb18-108-026	BM-6-2	97.00%	
mb18-108-027	BM-6-3	95.35%	
mb18-108-028	BM-7-1	33.3370	
mb18-108-029	BM-7-2		
mb18-108-030	BM-7-3		
mb18-108-031	BM-9-1		
mb18-108-032	BM-9-2		
mb18-108-033	BM-9-3		
mb18-108-034	BM-10-1	100.00%	
mb18-108-035	BM-10-2		
mb18-108-036	BM-10-3		
mb18-108-037	BM-12-1		
mb18-108-038	BM-12-2		
mb18-108-039	BM-12-3		
mb18-108-040	BR-1-1		
mb18-108-041	BR-4-1		
mb18-108-042	BW-1-1	99.17%	
mb18-108-043	BW-1-2		
mb18-108-044	BW-1-3		
mb18-108-045	BW-2-1		
mb18-108-046	BW-2-2	95.17%	
mb18-108-047	BW-2-3		
mb18-108-048	BW-3-1		
mb18-108-049	BW-3-2		
mb18-108-050	BW-3-3		
mb18-108-051	BW-4-1		
mb18-108-052	BW-4-2		
mb18-108-053	BW-4-3	91.00%	Resorted
mb18-108-054	BW-5-1		
mb18-108-055	BW-5-2		
mb18-108-056	BW-5-3	97.48%	
mb18-108-057	SN-1-1		
mb18-108-058	SN-1-2	97.65%	
mb18-108-059	SN-1-3		
mb18-108-060	SN-2-1		
mb18-108-061	SN-2-2		
mb18-108-062	SN-2-3		
mb18-108-063	SN-3-1		
mb18-108-064	SN-3-2	97.90%	
mb18-108-065	SN-3-3	99.00%	
mb18-108-066	SN-4-1		
mb18-108-067	SN-4-2	1	
	SN-4-3		<u> </u>
mb18-108-068			
mb18-108-069	SN-5-1		
	SN-5-1 SN-5-2 SN-5-3		

Quality Control

Sorting efficiency: [(total count – organisms recovered in spot check and/or re-sort) / total count] x 100% Spot Check: 25% of sample debris resorted for 21% of samples

Spotchecked volume was a minimum of 10% of all sorted debris for the project.



Description of unique that are undescribed and assigned internal numbers (e.g., sp. 1, sp.2 etc.) for Golder Baffinlands Iron Mine 2018.

taxcode	grpcode	TaxonName	Morphological Description
ANNE	POSE	Dialychone sp. 1	Methyl Green staining pattern is similar to Paradialychone harrisae observed in California, but has ventral cleft present on collar which is lacking in California specimens.
ANNE	POSE	Dialychone sp. 2	There is a well-defined circular unstained area in the middle of the ventral collar. There is no ventral cleft present. Likely not described.
ANNE	POSE	Sabellidae sp. 2	Specimens do not have companion chaete. Eyespots present from setiger 4. Collar similar to Parasabella pallida
ANNE	POSE	Sabellidae sp. 3	cf Chone, but has only capillary setae on the thorax. There is a semicircular unstained section on the collar (Methyl Greend). Does not appear to be described in literature.
ANNE	POSE	Sahellidae sn. 4	Specimens with rectangular staining pattern on the ventral collar. Thoray has long handled seate, with no white glandular ring, vertal cleft present, and a lateral and dorsal incision on collar



Marine Benthic Enumeration and Identification Methods Client: Golder

Project: Baffinlands Iron Mine 2018

Sample Inventory

Sample arrival: September 18, 2018

Number of samples: 71 Number of jars: 87 Screen size: 500 µm

Biologica project number: 18-108

The sample inventory was checked and approved with the client. Samples were screened and transferred from formalin into 70% ethanol. These were stained with Rose Bengal to aid in sorting. Each sample was provided a unique identification number and placed in the queue for analysis.

Table 1. Summary of benthic samples processed Baffinlands Iron Mine, 2018.

Client	Replicate	Date	Biologica	Split	Organisms
Sample ID		Sampled	Sample ID		Counted
BE-1	1	17-Aug-18	mb18-108-001	1/2	464
				Whole	34
BE-1	2	17-Aug-18	mb18-108-002	3/8	397
				Whole	52
BE-1	3	17-Aug-18	mb18-108-003	7/12	490
				Whole	50
BE-2	1	17-Aug-18	mb18-108-004	1/2	358
				Whole	26
BE-2	2	17-Aug-18	mb18-108-005	5/12	366
				Whole	24
BE-2	3	17-Aug-18	mb18-108-006	1/3	359
				Whole	36
BE-3	1	17-Aug-18	mb18-108-007	7/12	465
				Whole	33
BE-3	2	17-Aug-18	mb18-108-008	1/4	351
				Whole	44
BE-3	3	17-Aug-18	mb18-108-009	5/24	358
				Whole	50
BE-4	1	17-Aug-18	mb18-108-010	4/12	417
				Whole	36
BE-4	2	17-Aug-18	mb18-108-011	1/4	483
				Whole	50
BE-4	3	17-Aug-18	mb18-108-012	1/4	400
				Whole	77

Client Sample ID	Replicate	Date Sampled	Biologica Sample ID	Split	Organisms Counted
BE-5	1	17-Aug-18	mb18-108-013	1/3	428
				Whole	40
BE-5	2	17-Aug-18	mb18-108-014	5/12	463
				Whole	32
BE-5	3	17-Aug-18	mb18-108-015	5/12	406
		_		Whole	39
BM-1	1	18-Aug-18	mb18-108-016	1/3	362
				Whole	57
BM-1	2	18-Aug-18	mb18-108-017	1/2	460
		,		Whole	37
BM-1	3	18-Aug-18	mb18-108-018	1/2	382
				Whole	37
BM-3	1	18-Aug-18	mb18-108-019	4/12	464
		J		Whole	35
BM-3	2	18-Aug-18	mb18-108-020	1/2	431
	_			Whole	55
BM-3	3	18-Aug-18	mb18-108-021	5/12	429
		20 / 10/6 20		Whole	68
BM-4	1	18-Aug-18	mb18-108-022	5/12	454
5	_	10 / 10 / 10		Whole	46
BM-4	2	18-Aug-18	mb18-108-023	2/6	412
DIVI I	_	10 / (05 10	111010 100 023	Whole	32
BM-4	3	18-Aug-18	mb18-108-024	1/4	433
DIVI 4		10 // (05 10	111010 100 024	Whole	50
BM-6	1	18-Aug-18	mb18-108-025	1/2	358
DIVI 0	-	10 // (05 10	111010 100 025	Whole	21
BM-6	2	18-Aug-18	mb18-108-026	1/3	427
DIVI 0		10 Aug 10	111010 100 020	Whole	67
BM-6	3	18-Aug-18	mb18-108-027	2/6	370
DIVI O	3	10 Aug 10	111010 100 027	Whole	50
BM-7	1	18-Aug-18	mb18-108-028	Whole	254
BM-7	2	18-Aug-18	mb18-108-029	Whole	140
BM-7	3	18-Aug-18	mb18-108-030	Whole	789
BM-9	1	19-Aug-18	mb18-108-031	5/12	412
DIVI-9	1	13-Aug-16	111019-109-031	Whole	412
DN4 O	2	10 Aug 10	mb18-108-032		
BM-9		19-Aug-18	111010-100-032	1/2 Whole	400 177
DN4 O	3	10 Aug 19	mb18-108-033	Whole 1/3	
BM-9	3	19-Aug-18	111010-100-033	·	353
DN4 10	1	17 10 10	mh10 100 034	Whole	30
BM-10	1	17-Aug-18	mb18-108-034	Whole	144
BM-10	2	17-Aug-18	mb18-108-035	Whole	111
BM-10	3	17-Aug-18	mb18-108-036	Whole	69
BM-12	1	17-Aug-18	mb18-108-037	1/2	451
				Whole	15

Client Sample ID	Replicate	Date Sampled	Biologica Sample ID	Split	Organisms Counted
BM-12	2	17-Aug-18	mb18-108-038	6/12	442
				Whole	8
BM-12	3	17-Aug-18	mb18-108-039	7/12	388
				Whole	23
BR-1	1	8-Aug-18	mb18-108-040	1/4	400
				Whole	41
BR-4	1	8-Aug-18	mb18-108-041	5/6	478
				Whole	33
BW-1	1	13-Aug-18	mb18-108-042	1/4	453
				Whole	78
BW-1	2	13-Aug-18	mb18-108-043	1/4	575
				Whole	72
BW-1	3	13-Aug-18	mb18-108-044	1/4	361
				Whole	48
BW-2	1	13-Aug-18	mb18-108-045	4/12	374
				Whole	34
BW-2	2	13-Aug-18	mb18-108-046	1/3	365
				Whole	39
BW-2	3	13-Aug-18	mb18-108-047	1/2	603
				Whole	52
BW-3	1	14-Aug-18	mb18-108-048	1/2	497
		_		Whole	43
BW-3	2	14-Aug-18	mb18-108-049	5/12	408
				Whole	44
BW-3	3	14-Aug-18	mb18-108-050	1/2	500
				Whole	28
BW-4	1	18-Aug-18	mb18-108-051	1/2	386
		_		Whole	42
BW-4	2	18-Aug-18	mb18-108-052	Whole	382
BW-4	3	18-Aug-18	mb18-108-053	5/12	367
				Whole	39
BW-5	1	18-Aug-18	mb18-108-054	Whole	488
BW-5	2	18-Aug-18	mb18-108-055	Whole	390
BW-5	3	18-Aug-18	mb18-108-056	Whole	174
SN-1	1	19-Aug-18	mb18-108-057	3/4	421
		_		Whole	13
SN-1	2	19-Aug-18	mb18-108-058	Whole	332
SN-1	3	19-Aug-18	mb18-108-059	3/4	400
				Whole	26
SN-2	1	19-Aug-18	mb18-108-060	3/4	405
		-		Whole	8
SN-2	2	19-Aug-18	mb18-108-061	2/3	409
		-		Whole	6

Client	Replicate	Date	Biologica	Split	Organisms
Sample ID		Sampled	Sample ID		Counted
SN-2	3	19-Aug-18	mb18-108-062	5/6	378
				Whole	25
SN-3	1	19-Aug-18	mb18-108-063	Whole	405
SN-3	2	19-Aug-18	mb18-108-064	Whole	356
SN-3	3	19-Aug-18	mb18-108-065	Whole	417
SN-4	1	19-Aug-18	mb18-108-066	Whole	280
SN-4	2	19-Aug-18	mb18-108-067	Whole	253
SN-4	3	19-Aug-18	mb18-108-068	Whole	243
SN-5	1	19-Aug-18	mb18-108-069	Whole	195
SN-5	2	19-Aug-18	mb18-108-070	Whole	293
SN-5	3	19-Aug-18	mb18-108-071	Whole	410

Sample Processing

Sorting and Subsampling:

All samples were sorted using dissecting microscopes at 10-40x magnification by trained personnel. Microscopic sorting is the only way to ensure >90% of organisms are removed from the debris, which is required by EEM (Environment Canada; Environmental Effects Monitoring) guidelines for marine benthic analyses. This level of effort appears to be greater than previous studies (SEM Ltd., 2016), and the large observed increase in abundance is expected from 2016 data. The level of sorting effort implemented here represents the same level of effort implemented in 2017 by Biologica.

Due to the large volumes and high abundances in the samples, Biologica personnel developed a subsampling strategy that would maximize the detection of large and rare individuals while accurately enumerated smaller organisms. The samples were first sorted whole, with all large organisms (>1.0 cm) removed from the sample. The abundances of these large organisms should be comparable to historical estimates (SEM Ltd., 2016) as are the organisms visible to the naked eye without a microscope. Biologica subsampled the remaining debris to ensure all smaller individuals were examined and identified. This smaller fraction was subsampled to a minimum count of 400 individuals as the budget allowed. Samples with lower abundances were sorted whole.

Subsampling was done with a Caton tray (Caton, 1991). After the whole sort for large/rare taxa, the remaining sample was spread evenly over a Caton grid, and sequential random quadrats were selected and sorted until the minimum target count of 400 organisms was reached or the sample was sorted in its entirety. Some samples (17 of 71) were not subsampled to a target 400 count due to overall low abundances and high debris volumes.

In addition, all large debris in the sample was checked microscopically, including rocks and other large debris. To minimize potential sorter bias, samples were distributed among technicians such that no person sorted all the replicates of a given sample.

Sorting QA/QC:

To ensure sorting efficiency was >95%, whole and/or partial sub-samples were resorted. Sorting efficiency was calculated using the following equation (where total count = final total number of organisms in sample):

Sorting efficiency =

[total count – (organisms recovered in spot check and/or re-sort)] / total count × 100%

Sorting efficiency QA/QC was performed on 21% of samples. A minimum of 25% of the debris was re-sorted for the selected samples. All samples checked must meet or exceed 95% sorting efficiency. Any samples falling below 95% sorting efficiency were re-sorted in their entirety, and additional checks were undertaken as necessary. Refer to Table 2 for sorting efficiency results.

Client	Biologica	Sorting Efficiency QC
Sample ID	Sample ID	Spotchecks
BE-3-3	mb18-108-009	99.00
BM-1-2	mb18-108-017	99.00
BM-3-3	mb18-108-021	95.15
BM-4-1	mb18-108-022	96.09
BM-6-2	mb18-108-026	97.00
BM-6-3	mb18-108-027	95.35
BM-10-1	mb18-108-034	100.00
BW-1-1	mb18-108-042	99.17
BW-2-2	mb18-108-046	95.17
BW-5-3	mb18-108-056	97.48
SN-1-2	mb18-108-058	97.65
SN-3-2	mb18-108-064	97.90
SN-3-3	mb18-108-065	99.00
	97.71%	

Identification and Invasive species detection:

All organisms were identified using a combination of dissecting (10–40x) and compound microscopes (100–1000x) and standard taxonomic keys (see methodological and taxonomic references) to the lowest practicable level (species whenever possible). All specimens were archived in air-tight glass vials with glycerin and 70% ethanol for long-term storage. Taxonomic data were recorded in Biologica's custom database.

During the identification process, taxonomists recorded if the identified taxa were beyond their recorded range and/or potentially introduced (originating from another location) or invasive (both introduced and appearing to proliferate with possible detrimental effects to the ecosystem and/or industry). Within the constraints of available literature and historical data, no taxa observed were identified as invasive taxa. However, both *Monocorophium* sp. (amphipod) and *Marenzelleria* sp. (polychaete) were observed. Both of these organisms occurred in relatively low densities, and the condition of the specimens and/or degree of maturity limited the ability to identify these organisms to species.

Data Management and Analysis

All data were recorded in Biologica's custom database. Organism densities were calculated by dividing the total organism abundance (extrapolated if the sample was split) using a square area of a Petite Ponar grab (0.0225 m²), multiplied by the number of composite grabs.

Results were provided to the Golder project manager in Excel spreadsheets via email.

Selected Methodological and Taxonomic References

- Arctic Ocean Diversity Website. http://www.arcodiv.org/seabottom/Crustaceans.html. [Accessed: January 2018].
- Barnich, R. 2011. Identification of scale worms in British and Irish waters. NMBAQC 2010 taxonomic workshop, Dove Marine Laboratory. 52pp.
- Bernard, F.R. 1979. Bivalve Molluscs of the Western Beaufort Sea. Contributions in Science. Natural History Museum of Los Angeles County.
- Blake, J.A. 2015. New species of Chaetozone and Tharyx (Polychaeta: Cirratulidae) from the Alaskan and Canadian Arctic and the Northeastern Pacific, including a description of the lectotype of Chaetozone setosa Malmgren from Spitsbergen in the Norwegian Arctic. Zootaxa. 3919(3): 501-552
- Bousfield, E.L. 1973. Shallow-water Gammaridean amphipoda of New England. Comstock Publishing Associates.
- Carlton J.T. 2007. Light's Manual, Intertidal Invertebrates of the Central California Coast, Fourth Edition, Univ. of Calif. Press, Berkley. 964pp.
- Clarke, A.H. 1974. Molluscs from Baffin Bay and the northern North Atlantic Ocean. National Museums of Canada Publications in Biological Oceanography. No. 7.
- Coan, E.V., Scott, P.V., and Bernard, F.R. 2000. Bivalve Seashells of Western North America: Marine Bivalve Molluscs from Arctic Alaska to Baja California. Santa Barbara Museum of Natural History Monographs No. 2. 764pp.
- Dnestrovskaya, N.Yu. and Jirkov, I.A. 2011. Identification key for Nephtyidae (Polychaeta) of the Eastern Atlantic and the North Polar Basin. NMBAQC 2008 taxonomic workshop, Dove Marine Laboratory. 7pp
- Environment Canada. 2012. Metal Mining Environmental Effects Monitoring (EEM) Technical Guidance Document.

- Environment Canada. 2002. Revised Guidance for Sample Sorting and Subsampling Protocols for EEM Benthic Invertebrate Community Surveys. https://www.ec.gc.ca/esee-eem/default.asp?lang=En&n=F919D331-1. [Accessed January 2014].
- Environmental Protection Agency. 1987. Recommended Protocols for Sampling and Analyzing Macroinvertebrate Assemblages in Puget Sound.
 - http://www.psparchives.com/our_work/science/protocols.htm. [Accessed January 2014].
- Garwood, P.R. 2007. Family Maldanidae A guide to species in waters around the British Isles. NMBAQC 2006 taxonomic workshop, Dove Marine Laboratory.
- Giangrande, A., Licciano, M., and Wasson, B. 2015. Guide to identification of Sabellidae and Fabriciidae (Polychaeta) in north east Atlantic and Mediterranean waters. NMBAQC 2014 taxonomic workshop, Dove Marine Laboratory. 91pp.
- Jarvis, S. 2011. Hesionidae (Grube, 1850) A Provisional Guide to the Identification of the British Species. Report to the NMBAQC 2008 taxonomic workshop, Dove Marine Laboratory. MIES Report, 10pp.
- Jirkov, I.A. 2011. Identification keys for Terebellomorpha (Polychaeta) of the Eastern Atlantic and the North Polar Basin. II. Ampharetidae. NMBAQC 2008 taxonomic workshop, Dove Marine Laboratory. 6pp.
- Keast, M.A. and Lawrence, M.J. 1990. A collection of Amphipoda from the southern Beaufort Sea. Fisheries and Oceans, Canada
- Kongsfjorden & Hornsund. European Marine Biodiversity Sites. Marine Biodiversity and Ecosystem Functioning Network of Excellence & Arctic Ocean Diversity. Available from: http://www.iopan.gda.pl/projects/biodaff/. [Accessed: January 2018].
- Kornicker, L.S. 1988. Myodocopid ostracoda of the Beaufort Sea, Arctic Ocean.
- Kozloff, E.N. 1987. Marine Invertebrates of the Pacific Northwest. Univ. of Wash. Press, Seattle. 511pp.
- Macpherson, E. 1971. Marine molluscs of Arctic Canada. National Museums of Canada Publications in Biological Oceanography. No. 3.
- Menzies, R.J. and Mohr, J.L. 1962. Benthic Tanaidacea and Isopoda from the Alaskan Arctic and the polar Basin. Crustaceana, 3(3), 192-202.
- Millar. R.H. 1970. British Ascidians, Tunicata: Ascidiacea, Keys and Notes for the Identification of the species. Academic Press. London and New York
- Oliver, P.G., Holmes, A.M., Killeen, I.J., and Turner, J.A. 2016. Marine Bivalve Shells of the British Isles. Amgueddfa Cymru National Museum Wales. Available from: http://naturalhistory.museumwales.ac.uk/britishbivalves [Accessed: January 2018].

- Oug, E. 2012. Guide to identification of Lumbrineridae (Polychaeta) in North East Atlantic waters. NMBAQC 2010 taxonomic workshop, Dove Marine Laboratory. 31pp.
- Rowe, G.A. 2010. A Provisional Guide to the family Opheliidae (Polychaeta) from the shallow waters of the British Isles. NMBAQC 2008 taxonomic workshop, Dove Marine Laboratory. EMU Report, 12pp.
- Squires, H.J. 1990. Decapod Crustacea of the. Atlantic coast of Canada. Can. Bull. Fish. Aquat. Set. 22
- Vader, W., Johnsen, J.R., and Berge, J. 2005. Studies on the genus Onisimus Boeck, 1871 (Crustacea, Amphipoda, Lysianassoidea, Uristidae) Part I. The brevicaudatus and sextonae species groups. Organisms Diversity & Evolution, 5(2), 161–164.
- Watling, L. 1979. Marine Flora and Fauna of the Northeastern United States, Crustacea: Cumacea. NOAA Technical Report NMFS Circular 423, U.S. Dept. of Commerce National Marine Fisheries Service.
- Worsfold, T.M. 2006. Scalibregmatidae (Polychaeta) from shallow seas around the British Isles. Identification guides for the NMBAQC Scheme: 1. Porcupine Marine Natural History Society Newsletter, 20: 15–18.

31 May 2019 1663724-092-R-Rev1-14000

ANNEXE F

Shellfish Tissue Chemical Analysis and Weight and Length Data





GOLDER ASSOCIATES LTD.

ATTN: John Sherrin

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Date Received: 31-AUG-18

Report Date: 23-OCT-18 13:07 (MT)

Version: FINAL

Client Phone: 250-881-7372

Certificate of Analysis

Lab Work Order #: L2156762

Project P.O. #: NOT SUBMITTED

Job Reference: 1663724/14000/3

C of C Numbers:

15-xxxxxx

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Version:

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ALS ENVIRONMENTAL ANALYTICAL REPORT

L2156762-1 L2156762-2 L2156762-3 L2156762-4 L2156762-5 Sample ID Description Clams Clams Clams Clams Clams 17-AUG-18 17-AUG-18 19-AUG-18 19-AUG-18 11-AUG-18 Sampled Date 13:45 14:56 12:45 12:00 Sampled Time 15:20 BE-4 BE-5 SN-1 SN-3 SE-1 Client ID Grouping **Analyte TISSUE Physical Tests** % Moisture (%) 81.4 81.2 78.0 85.4 84.1 Aluminum (Al)-Total (mg/kg wwt) Metals 647 596 652 454 166 Antimony (Sb)-Total (mg/kg wwt) 0.0073 0.0093 0.0083 0.0059 0.0039 Arsenic (As)-Total (mg/kg wwt) 2.56 2.53 3.73 1.90 1.99 Barium (Ba)-Total (mg/kg wwt) 7.33 20.5 4.54 8.41 14.2 Beryllium (Be)-Total (mg/kg wwt) 0.0379 0.0392 0.0404 0.0234 0.0120 Bismuth (Bi)-Total (mg/kg wwt) 0.0076 0.0092 0.0082 0.0051 0.0035 Boron (B)-Total (mg/kg wwt) 7.17 7.35 7.89 5.99 3.69 Cadmium (Cd)-Total (mg/kg wwt) 0.429 0.571 0.538 0.630 2.49 Calcium (Ca)-Total (mg/kg wwt) 4860 11800 7630 6740 2010 Cesium (Cs)-Total (mg/kg wwt) 0.108 0.118 0.121 0.0721 0.0270 Chromium (Cr)-Total (mg/kg wwt) 2.27 1.84 1.69 1.35 0.606 Cobalt (Co)-Total (mg/kg wwt) 0.796 0.993 0.519 0.281 1.30 Copper (Cu)-Total (mg/kg wwt) 1.88 2.10 3.29 2.43 2.23 Iron (Fe)-Total (mg/kg wwt) 1370 1200 2100 880 752 Lead (Pb)-Total (mg/kg wwt) 0.796 1.84 0.937 0.593 0.251 Lithium (Li)-Total (mg/kg wwt) 2.69 2.56 3.25 2.22 0.71 Magnesium (Mg)-Total (mg/kg wwt) 2560 5500 3690 2250 1260 Manganese (Mn)-Total (mg/kg wwt) 68.5 94.0 175 49.8 18.1 Mercury (Hg)-Total (mg/kg wwt) 0.0204 0.0207 0.0229 0.0144 0.0236 Molybdenum (Mo)-Total (mg/kg wwt) 0.222 0.307 0.441 0.155 0.143 Nickel (Ni)-Total (mg/kg wwt) 1.54 1.61 2.24 1.46 0.957 Phosphorus (P)-Total (mg/kg wwt) 1000 1280 1450 1140 1120 Potassium (K)-Total (mg/kg wwt) 1380 1600 1970 1500 1300 Rubidium (Rb)-Total (mg/kg wwt) 2.32 2.24 2.58 1.61 0.945 Selenium (Se)-Total (mg/kg wwt) 1.23 1.22 1.16 1.11 1.26 Sodium (Na)-Total (mg/kg wwt) 3540 3720 6410 4830 5230 Strontium (Sr)-Total (mg/kg wwt) 46.2 20.9 19.0 35.0 11.9 Tellurium (Te)-Total (mg/kg wwt) 0.0043 0.0043 < 0.0040 < 0.0040 < 0.0040 Thallium (TI)-Total (mg/kg wwt) 0.0148 0.0150 0.0163 0.00864 0.00467 Tin (Sn)-Total (mg/kg wwt) 0.046 0.033 0.037 0.032 < 0.020 Uranium (U)-Total (mg/kg wwt) 0.119 0.142 0.130 0.0875 0.0953 Vanadium (V)-Total (mg/kg wwt) 3.01 3.04 3.48 2.17 0.835 Zinc (Zn)-Total (mg/kg wwt) 9.21 11.5 10.6 11.8 13.2 Zirconium (Zr)-Total (mg/kg wwt) 0.778 0.893 0.222 1.19 1.10

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2156762-6 Clams 13-AUG-18 12:00 SW-1	L2156762-7 Clams 11-AUG-18 12:00 SW-1	L2156762-8 Clams 11-AUG-18 12:00 SW-2-SW5	L2156762-9 Clams 11-AUG-18 12:00 SE2	L2156762-10 Clams 14-AUG-18 12:00 SW3
Grouping	Analyte					
TISSUE						
Physical Tests	% Moisture (%)	78.8	85.9	84.2	80.1	86.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	832	375	368	190	558
	Antimony (Sb)-Total (mg/kg wwt)	0.0077	0.0050	0.0056	0.0040	0.0065
	Arsenic (As)-Total (mg/kg wwt)	2.90	2.17	2.61	1.87	3.33
	Barium (Ba)-Total (mg/kg wwt)	12.1	5.10	12.2	2.12	19.9
	Beryllium (Be)-Total (mg/kg wwt)	0.0531	0.0227	0.0238	0.0209	0.0359
	Bismuth (Bi)-Total (mg/kg wwt)	0.0119	0.0055	0.0052	0.0029	0.0079
	Boron (B)-Total (mg/kg wwt)	7.33	4.61	4.99	3.28	6.36
	Cadmium (Cd)-Total (mg/kg wwt)	0.553	0.777	1.79	0.602	0.269
Ce Ch Co Co Iro Lei Littl Ma Me Mc Nic Ph Po Ru Se So Str	Calcium (Ca)-Total (mg/kg wwt)	9420	3500	4740	3700	6120
	Cesium (Cs)-Total (mg/kg wwt)	0.142	0.0645	0.0672	0.0350	0.105
	Chromium (Cr)-Total (mg/kg wwt)	2.46	1.13	1.14	0.822	1.99
	Cobalt (Co)-Total (mg/kg wwt)	1.10	0.368	0.729	0.221	1.72
	Copper (Cu)-Total (mg/kg wwt)	2.52	1.94	2.39	2.61	1.80
	Iron (Fe)-Total (mg/kg wwt)	2310	1090	1130	511	1550
	Lead (Pb)-Total (mg/kg wwt)	0.996	0.421	0.475	0.203	0.878
	Lithium (Li)-Total (mg/kg wwt)	3.38	1.57	1.71	0.78	2.89
	Magnesium (Mg)-Total (mg/kg wwt)	4150	1760	2250	1350	3210
	Manganese (Mn)-Total (mg/kg wwt)	125	24.8	99.3	4.82	327
	Mercury (Hg)-Total (mg/kg wwt)	0.0295	0.0203	0.0276	0.0697	0.0313
	Molybdenum (Mo)-Total (mg/kg wwt)	0.293	0.160	0.249	0.134	0.433
	Nickel (Ni)-Total (mg/kg wwt)	1.98	1.02	1.49	0.787	2.15
	Phosphorus (P)-Total (mg/kg wwt)	1160	1080	1500	2020	835
	Potassium (K)-Total (mg/kg wwt)	1240	1250	1440	2120	1090
	Rubidium (Rb)-Total (mg/kg wwt)	2.86	1.47	1.59	1.44	2.03
	Selenium (Se)-Total (mg/kg wwt)	1.39	1.28	1.09	1.25	0.954
	Sodium (Na)-Total (mg/kg wwt)	1970	3220	4740	2500	3600
	Strontium (Sr)-Total (mg/kg wwt)	30.5	16.8	19.8	16.2	18.0
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0204	0.00727	0.0139	0.00614	0.0377
	Tin (Sn)-Total (mg/kg wwt)	0.045	0.022	<0.020	<0.020	0.025
	Uranium (U)-Total (mg/kg wwt)	0.185	0.103	0.108	0.175	0.159
	Vanadium (V)-Total (mg/kg wwt)	3.68	1.69	1.84	0.799	3.36
	Zinc (Zn)-Total (mg/kg wwt)	13.9	11.5	10.6	14.4	7.06
	Zirconium (Zr)-Total (mg/kg wwt)	0.897	0.464	0.524	0.319	1.07

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping TISSUE Physical Tests Metals	Analyte % Moisture (%) Aluminum (Al)-Total (mg/kg wwt) Antimony (Sb)-Total (mg/kg wwt) Arsenic (As)-Total (mg/kg wwt) Barium (Ba)-Total (mg/kg wwt) Beryllium (Be)-Total (mg/kg wwt) Bismuth (Bi)-Total (mg/kg wwt) Boron (B)-Total (mg/kg wwt)	79.0 860 0.0086 2.96 11.8	80.0 330 0.0048	83.3 528	81.5	
Physical Tests	Aluminum (Al)-Total (mg/kg wwt) Antimony (Sb)-Total (mg/kg wwt) Arsenic (As)-Total (mg/kg wwt) Barium (Ba)-Total (mg/kg wwt) Beryllium (Be)-Total (mg/kg wwt) Bismuth (Bi)-Total (mg/kg wwt)	860 0.0086 2.96 11.8	330		81.5	
	Aluminum (Al)-Total (mg/kg wwt) Antimony (Sb)-Total (mg/kg wwt) Arsenic (As)-Total (mg/kg wwt) Barium (Ba)-Total (mg/kg wwt) Beryllium (Be)-Total (mg/kg wwt) Bismuth (Bi)-Total (mg/kg wwt)	860 0.0086 2.96 11.8	330		81.5	
Metals	Antimony (Sb)-Total (mg/kg wwt) Arsenic (As)-Total (mg/kg wwt) Barium (Ba)-Total (mg/kg wwt) Beryllium (Be)-Total (mg/kg wwt) Bismuth (Bi)-Total (mg/kg wwt)	860 0.0086 2.96 11.8	330			84.2
	Arsenic (As)-Total (mg/kg wwt) Barium (Ba)-Total (mg/kg wwt) Beryllium (Be)-Total (mg/kg wwt) Bismuth (Bi)-Total (mg/kg wwt)	0.0086 2.96 11.8			513	605
	Barium (Ba)-Total (mg/kg wwt) Beryllium (Be)-Total (mg/kg wwt) Bismuth (Bi)-Total (mg/kg wwt)	2.96 11.8		0.0049	0.0074	0.0061
	Beryllium (Be)-Total (mg/kg wwt) Bismuth (Bi)-Total (mg/kg wwt)	11.8	1.67	2.43	4.12	2.43
	Bismuth (Bi)-Total (mg/kg wwt)		14.9	6.50	5.83	6.62
	() () ()	0.0509	0.0286	0.0327	0.0325	0.0439
	Boron (B)-Total (mg/kg wwt)	0.0100	0.0052	0.0069	0.0071	0.0065
		7.16	4.18	5.91	7.11	6.11
	Cadmium (Cd)-Total (mg/kg wwt)	0.568	0.626	0.460	0.565	0.447
	Calcium (Ca)-Total (mg/kg wwt)	9040	3810	5550	8090	4690
	Cesium (Cs)-Total (mg/kg wwt)	0.161	0.0654	0.0997	0.0911	0.0901
	Chromium (Cr)-Total (mg/kg wwt)	2.58	1.12	1.60	1.53	1.44
	Cobalt (Co)-Total (mg/kg wwt)	1.29	0.442	0.510	1.04	0.801
	Copper (Cu)-Total (mg/kg wwt)	2.32	2.51	1.66	1.98	1.74
	Iron (Fe)-Total (mg/kg wwt)	2060	631	1410	2080	1460
	Lead (Pb)-Total (mg/kg wwt)	1.06	0.353	0.581	0.698	0.625
	Lithium (Li)-Total (mg/kg wwt)	3.58	1.48	2.48	2.26	2.51
	Magnesium (Mg)-Total (mg/kg wwt)	4130	2570	2860	2590	2570
	Manganese (Mn)-Total (mg/kg wwt)	166	7.72	38.6	146	87.4
	Mercury (Hg)-Total (mg/kg wwt)	0.0371	0.0692	0.0197	0.0225	0.0216
	Molybdenum (Mo)-Total (mg/kg wwt)	0.393	0.138	0.266	0.297	0.279
	Nickel (Ni)-Total (mg/kg wwt)	2.12	2.72	1.25	1.50	1.40
	Phosphorus (P)-Total (mg/kg wwt)	1300	1370	1000	1250	1060
	Potassium (K)-Total (mg/kg wwt)	1200	1620	1420	1410	1510
	Rubidium (Rb)-Total (mg/kg wwt)	3.18	1.66	2.04	2.00	2.02
	Selenium (Se)-Total (mg/kg wwt)	1.27	1.11	1.20	1.18	1.16
	Sodium (Na)-Total (mg/kg wwt)	1890	5100	4920	4800	5080
	Strontium (Sr)-Total (mg/kg wwt)	30.6	9.56	19.7	27.7	28.5
	Tellurium (Te)-Total (mg/kg wwt)	0.0050	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (TI)-Total (mg/kg wwt)	0.0249	0.00769	0.0105	0.0150	0.0125
	Tin (Sn)-Total (mg/kg wwt)	0.044	<0.020	0.028	0.031	0.038
	Uranium (U)-Total (mg/kg wwt)	0.178	0.151	0.105	0.120	0.107
	Vanadium (V)-Total (mg/kg wwt)	3.69	1.19	2.40	3.02	2.43
	Zinc (Zn)-Total (mg/kg wwt)	12.3	11.9	10.1	11.3	9.94
			T	1	11.0	9.94

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2156762-16 Clams 18-AUG-18 12:20 BM-6	L2156762-17 Clams 18-AUG-18 13:30 BM-7	L2156762-18 Clams 19-AUG-18 15:40 BM-9	L2156762-19 Clams 17-AUG-18 09:00 BM-10	L2156762-20 Clams 17-AUG-18 09:35 BM-12
Grouping	Analyte					
TISSUE						
Physical Tests	% Moisture (%)	80.4	83.9	81.8	84.5	71.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	920	374	461	334	496
	Antimony (Sb)-Total (mg/kg wwt)	0.0094	0.0066	0.0070	0.0043	0.0047
	Arsenic (As)-Total (mg/kg wwt)	3.31	2.13	2.32	1.61	1.42
	Barium (Ba)-Total (mg/kg wwt)	9.07	3.26	9.74	2.28	17.1
	Beryllium (Be)-Total (mg/kg wwt)	0.0523	0.0233	0.0274	0.0217	0.0443
	Bismuth (Bi)-Total (mg/kg wwt)	0.0110	0.0057	0.0067	0.0049	0.0049
	Boron (B)-Total (mg/kg wwt)	8.95	5.22	5.98	4.98	5.34
	Cadmium (Cd)-Total (mg/kg wwt)	0.555	0.530	0.645	0.551	0.430
	Calcium (Ca)-Total (mg/kg wwt)	8730	3220	5270	2910	2670
	Cesium (Cs)-Total (mg/kg wwt)	0.165	0.0615	0.0843	0.0549	0.0817
	Chromium (Cr)-Total (mg/kg wwt)	2.54	1.08	1.41	1.11	0.943
	Cobalt (Co)-Total (mg/kg wwt)	1.47	0.687	0.673	0.359	0.513
	Copper (Cu)-Total (mg/kg wwt)	2.44	2.05	1.98	1.78	1.48
	Iron (Fe)-Total (mg/kg wwt)	2230	1180	1310	1290	962
	Lead (Pb)-Total (mg/kg wwt)	1.10	0.573	0.586	0.434	0.686
	Lithium (Li)-Total (mg/kg wwt)	3.88	1.59	2.09	1.67	1.94
	Magnesium (Mg)-Total (mg/kg wwt)	4190	1920	2570	1680	1470
	Manganese (Mn)-Total (mg/kg wwt)	213	74.0	67.1	19.3	45.1
	Mercury (Hg)-Total (mg/kg wwt)	0.0291	0.0196	0.0288	0.0110	0.0136
	Molybdenum (Mo)-Total (mg/kg wwt)	0.518	0.225	0.330	0.294	0.151
	Nickel (Ni)-Total (mg/kg wwt)	2.32	1.26	1.39	0.958	1.16
	Phosphorus (P)-Total (mg/kg wwt)	1240	1080	1230	1090	895
	Potassium (K)-Total (mg/kg wwt)	1500	1460	1630	1610	1190
	Rubidium (Rb)-Total (mg/kg wwt)	3.05	1.49	1.97	1.54	1.48
	Selenium (Se)-Total (mg/kg wwt)	1.12	1.22	1.43	1.25	0.859
	Sodium (Na)-Total (mg/kg wwt)	4660	5220	6480	4130	3430
	Strontium (Sr)-Total (mg/kg wwt)	26.5	12.6	27.9	9.23	10.4
	Tellurium (Te)-Total (mg/kg wwt)	0.0052	<0.0040	0.0041	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0251	0.0105	0.0111	0.00664	0.00686
	Tin (Sn)-Total (mg/kg wwt)	0.054	0.027	0.037	0.352	0.027
	Uranium (U)-Total (mg/kg wwt)	0.157	0.101	0.112	0.0843	0.147
	Vanadium (V)-Total (mg/kg wwt)	3.96	2.05	2.20	1.67	1.67
	Zinc (Zn)-Total (mg/kg wwt)	12.2	12.3	12.8	8.36	7.64
	Zirconium (Zr)-Total (mg/kg wwt)	0.977	0.531	0.604	0.676	1.19

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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	Sample ID Description Sampled Date Sampled Time Client ID	L2156762-21 Clams 17-AUG-18 11:00 BE-1	L2156762-22 Clams 17-AUG-18 12:00 BE-2	L2156762-23 Clams 17-AUG-18 12:41 BE-3	L2156762-24 Clams 12-AUG-18 SC3-SC-5	
Grouping	Analyte					
TISSUE						
Physical Tests	% Moisture (%)	81.4	80.3	82.1	80.4	
Metals	Aluminum (Al)-Total (mg/kg wwt)	605	682	552	291	
	Antimony (Sb)-Total (mg/kg wwt)	0.0067	0.0072	0.0068	0.0049	
	Arsenic (As)-Total (mg/kg wwt)	2.12	2.51	2.38	1.57	
	Barium (Ba)-Total (mg/kg wwt)	6.75	10.2	5.05	5.20	
	Beryllium (Be)-Total (mg/kg wwt)	0.0339	0.0392	0.0329	0.0185	
	Bismuth (Bi)-Total (mg/kg wwt)	0.0074	0.0079	0.0078	0.0062	
	Boron (B)-Total (mg/kg wwt)	6.28	6.99	6.54	3.73	
	Cadmium (Cd)-Total (mg/kg wwt)	0.450	0.584	0.539	0.827	
	Calcium (Ca)-Total (mg/kg wwt)	6470	6070	4570	2070	
	Cesium (Cs)-Total (mg/kg wwt)	0.110	0.115	0.0965	0.0597	
	Chromium (Cr)-Total (mg/kg wwt)	1.68	1.89	1.55	0.882	
	Cobalt (Co)-Total (mg/kg wwt)	0.598	1.06	0.790	0.579	
	Copper (Cu)-Total (mg/kg wwt)	1.93	2.07	1.88	1.59	
	Iron (Fe)-Total (mg/kg wwt)	1270	1330	1180	630	
	Lead (Pb)-Total (mg/kg wwt)	0.730	0.932	0.968	1.03	
	Lithium (Li)-Total (mg/kg wwt)	2.55	2.82	2.28	1.15	
	Magnesium (Mg)-Total (mg/kg wwt)	2400	2980	2250	1190	
	Manganese (Mn)-Total (mg/kg wwt)	48.3	119	78.5	54.9	
	Mercury (Hg)-Total (mg/kg wwt)	0.0211	0.0370	0.0232	0.0195	
	Molybdenum (Mo)-Total (mg/kg wwt)	0.216	0.270	0.215	0.186	
	Nickel (Ni)-Total (mg/kg wwt)	1.39	1.78	1.44	0.959	
	Phosphorus (P)-Total (mg/kg wwt)	1230	1410	1220	726	
	Potassium (K)-Total (mg/kg wwt)	1400	1370	1350	799	
	Rubidium (Rb)-Total (mg/kg wwt)	2.20	2.39	2.07	1.19	
	Selenium (Se)-Total (mg/kg wwt)	1.33	1.25	1.16	0.647	
	Sodium (Na)-Total (mg/kg wwt)	3690	3340	3780	2350	
	Strontium (Sr)-Total (mg/kg wwt)	28.6	21.8	19.5	10.0	
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	0.0041	<0.0040	<0.0040	
	Thallium (TI)-Total (mg/kg wwt)	0.0135	0.0158	0.0133	0.00739	
	Tin (Sn)-Total (mg/kg wwt)	0.051	0.056	0.032	0.052	
	Uranium (U)-Total (mg/kg wwt)	0.124	0.131	0.106	0.0818	
	Vanadium (V)-Total (mg/kg wwt)	2.47	2.89	2.69	1.57	
	Zinc (Zn)-Total (mg/kg wwt)	11.3	12.8	11.9	11.6	
	Zirconium (Zr)-Total (mg/kg wwt)	0.657	0.747	0.748	0.286	

^{*} Please refer to the Reference Information section for an explanation of any qualifiers detected.

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Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Magnesium (Mg)-Total	DUP-H	L2156762-1, -11, -12, -13, -14, -15, -16, -17, -18, -2, -21, -22, -23, -24, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier Description

DUP-H Duplicate results outside ALS DQO, due to sample heterogeneity.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**	
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAFS (WET)	EPA 200.3, EPA 245.7	

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

HG-WET-MICR-CVAF-VA Tissue Mercury in Tissue by CVAFS Micro (WET) EPA 200.3, EPA 245.7

This method is adapted from US EPA Method 200.3 "Sample Procedures for Spectrochemical Determination of Total Recoverable Elements in Biological Tissues" (1996). Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with repeated additions of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

MET-WET-CCMS-N-VA Tissue Metals in Tissue by CRC ICPMS (WET) EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-MICR-HRMS-VA Tissue Metals in Tissue by HR-ICPMS Micro (WET) EPA 200.3/200.8

Trace metals in tissue are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) modified from US EPA Method 200.8, (Revision 5.5). The sample preparation procedure is modified from US EPA 200.3. Analytical results are reported on wet weight basis.

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MOISTURE-MICR-VA Tissue Moisture in Tissue Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at <60 deg. C.

MOISTURE-TISS-VA Tissue % Moisture in Tissues Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code Laboratory Location

VA ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

15-xxxxx

Reference Information

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GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

mg/kg - milligrams per kilogram based on dry weight of sample.

mg/kg wwt - milligrams per kilogram based on wet weight of sample.

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Workorder: L2156762 Report Date: 23-OCT-18 Page 1 of 10

Client: GOLDER ASSOCIATES LTD.

3795 Carey Road, Second Floor

Victoria BC V8Z 6T8

Contact: John Sherrin

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-WET-CVAFS-N-VA	Tissue							
Batch R4263252								
WG2894656-3 CRM Mercury (Hg)-Total		VA-NRC-DOR	2 M4 107.4		%		70-130	06-OCT-18
WG2894656-2 DUP Mercury (Hg)-Total		L2156762-1 0.0204	0.0196		mg/kg wwt	3.9	40	06-OCT-18
WG2894656-4 LCS Mercury (Hg)-Total			106.6		%		70-130	06-OCT-18
WG2894656-1 MB Mercury (Hg)-Total			<0.0010		mg/kg wwt		0.001	06-OCT-18
HG-WET-MICR-CVAF-VA	Tissue							
Batch R4283945								
WG2894645-3 CRM		VA-NRC-DOR						
Mercury (Hg)-Total			116.8		%		70-130	18-OCT-18
WG2894645-2 DUP Mercury (Hg)-Total		L2156762-3 0.0229	0.0217		mg/kg wwt	5.5	40	18-OCT-18
WG2894645-4 LCS Mercury (Hg)-Total			101.6		%		70-130	18-OCT-18
WG2894645-1 MB Mercury (Hg)-Total			<0.0010		mg/kg wwt		0.001	18-OCT-18
MET-WET-CCMS-N-VA	Tissue							
Batch R4260211								
WG2894656-3 CRM		VA-NRC-DOR			0/			
Aluminum (Al)-Total			100.9		%		70-130	05-OCT-18
Arsenic (As)-Total			92.9 94.6		%		70-130	05-OCT-18
Barium (Ba)-Total			94.6 0.0152				70-130	05-OCT-18
Beryllium (Be)-Total Bismuth (Bi)-Total			0.0132		mg/kg wwt mg/kg wwt		0.005-0.025	
Boron (B)-Total			92.3		%		0.002-0.022 70-130	05-OCT-18
Cadmium (Cd)-Total			95.5		%		70-130	05-OCT-18
Calcium (Ca)-Total			100.3		%		70-130	05-OCT-18
Cesium (Cs)-Total			94.6		%		70-130	05-OCT-18
Chromium (Cr)-Total			99.2		%		70-130	05-OCT-18
Cobalt (Co)-Total			95.8		%		70-130	05-OCT-18
Copper (Cu)-Total			98.1		%		70-130	05-OCT-18
Iron (Fe)-Total			108.1		%		70-130	05-OCT-18
Lead (Pb)-Total			97.1		%		70-130	05-OCT-18
Lithium (Li)-Total			1.04		mg/kg wwt		0.71-1.71	05-OCT-18



Workorder: L2156762 Report Date: 23-OCT-18 Page 2 of 10

MET-WET-CCMS-N-VA	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
Manganese (Mn)-Total	MET-WET-CCMS-N-VA	Tissue							
Manyanese (Mn)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Nicke (NY)-Total Phosphorus (P)-Total Phosphorus (P)-Total Phosphorus (P)-Total Potassium (K)-Total Rubidium (R)-Total Rubidium (R)-Total Selenium (So)-Total Selenium (So)-Total Selenium (So)-Total Selenium (So)-Total Selenium (So)-Total Selenium (So)-Total Selenium (So)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Selenium (Mo)-Total Selenium (Mo)-Total Selenium (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Mo)-Total Molybdenum (Molybdenum (Molybdenum M	Batch R4260211								
Molybdenum (Mo)-Total 89.9 % 70-130 05-OCT-18 Nickel (Ni)-Total 90.6 % 70-130 05-OCT-18 Phosphorus (P)-Total 95.8 % 70-130 05-OCT-18 Phosphorus (P)-Total 93.2 % 70-130 05-OCT-18 Rubidium (Rb)-Total 94.8 % 70-130 05-OCT-18 Rubidium (Rb)-Total 94.8 % 70-130 05-OCT-18 Selenium (Se)-Total 101.4 % 70-130 05-OCT-18 Selenium (Se)-Total 98.8 % 70-130 05-OCT-18 Sodium (Na)-Total 98.8 % 70-130 05-OCT-18 Strontium (SP)-Total 90.3 % 70-130 05-OCT-18 Strontium (SP)-Total 107.4 % 70-130 05-OCT-18 Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Uranium (U)-Total 93.0 % 70-130 05-OCT-18 Uranium (V)-Total 93.0 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.2 % 70-130 05-OCT-18 Uranium (V)-Total 100.0 70-00-00-00-00-00-00-00-00-00-00-00-00-0			VA-NRC-DO						
Nickel (Ni)-Total 90.6 % 70-130 05-OCT-18 Phosphorus (P)-Total 95.8 % 70-130 05-OCT-18 Phosphorus (P)-Total 95.8 % 70-130 05-OCT-18 Potassium (K)-Total 94.8 % 70-130 05-OCT-18 Rubidium (Rb)-Total 94.8 % 70-130 05-OCT-18 Selenium (Se)-Total 101.4 % 70-130 05-OCT-18 Sodium (Na)-Total 98.8 % 70-130 05-OCT-18 Strontium (Se)-Total 99.3 % 70-130 05-OCT-18 Strontium (Se)-Total 99.3 % 70-130 05-OCT-18 Strontium (Se)-Total 111.6 % 70-130 05-OCT-18 Thallium (T)-Total 111.6 % 70-130 05-OCT-18 Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Vanadium (V)-Total 93.0 % 70-130 05-OCT-18 Zirconium (Z)-Total 93.0 % 70-130 05-OCT-18 Zirconium (Z)-Total 102.2 % 70-130 05-OCT-18 Zirconium (Z)-Total 1030 05-OCT-18 Zirconium (Z)-Total 1030 05-OCT-18 Zirconium (Z)-Total 1030 05-OCT-18 Zirconium (Z)-Total 1030 05-OCT-18 Zirconium (Z)-Total 1030 05-OCT-18 Zirconium (Z)-Total 1030 05-OCT-18 Zirc	-							70-130	
Phosphorus (P)-Total	, ,							70-130	05-OCT-18
Potassium (K)-Total 93.2 % 70-130 05-OCT-18 Rubidium (Rb)-Total 94.8 % 70-130 05-OCT-18 Selenium (Se)-Total 101.4 % 70-130 05-OCT-18 Solenium (Se)-Total 98.8 % 70-130 05-OCT-18 Solenium (Se)-Total 98.8 % 70-130 05-OCT-18 Strontium (Se)-Total 98.8 % 70-130 05-OCT-18 Strontium (Se)-Total 90.3 % 70-130 05-OCT-18 Strontium (Se)-Total 111.6 % 70-130 05-OCT-18 Thallium (Ti)-Total 111.6 % 70-130 05-OCT-18 Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Uranium (V)-Total 93.0 % 70-130 05-OCT-18 Zinc (Zn)-Total 93.0 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.56 mg/kg wwt 0.054-0.454 05-OCT-18 Zinc (Zn)-Total 102.56 mg/kg wwt 10.054-0.454 05-OCT-18 Zinc (Zn)-Total 102.5	Nickel (Ni)-Total			90.6				70-130	05-OCT-18
Rubidium (Rb)-Total Selenium (Se)-Total Selenium (Se)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Se)-Total Sodium (Se)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Sodium (Na)-Total Solium	Phosphorus (P)-Total			95.8		%		70-130	05-OCT-18
Selenium (Se)-Total 101.4 % 70-130 05-OCT-18 Sodium (Na)-Total 98.8 % 70-130 05-OCT-18 Strontium (Sr)-Total 90.3 % 70-130 05-OCT-18 Thallium (TI)-Total 111.6 % 70-130 05-OCT-18 Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Vanadium (V)-Total 93.0 % 70-130 05-OCT-18 Zirconjum (Zr)-Total 102.2 % 70-130 05-OCT-18 Zirconjum (Zr)-Total 0.256 mg/kg wwt 18 40 05-OCT-18 WG2894656-2 DUP Aluminum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Animony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Beryllium (Be)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Bismuth (Bi)-Tot	Potassium (K)-Total			93.2		%		70-130	05-OCT-18
Sodium (Na)-Total 98.8 % 70-130 05-OCT-18 Strontium (Sr)-Total 90.3 % 70-130 05-OCT-18 Thallium (TI)-Total 111.6 % 70-130 05-OCT-18 Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Vanadium (V)-Total 90.3 % 70-130 05-OCT-18 Vanadium (V)-Total 107.4 % 70-130 05-OCT-18 Vanadium (V)-Total 102.2 % 70-130 05-OCT-18 Zirconium (Zr)-Total 0.256 mg/kg wwt 0.054-0.454 05-OCT-18 Zirconium (Zh)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Muminum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Berlum (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Berlum (Ba)-Total 0.076 <	Rubidium (Rb)-Total			94.8		%		70-130	05-OCT-18
Strontium (Sr)-Total 90.3 % 70-130 05-OCT-18 Thallium (TI)-Total 111.6 % 70-130 05-OCT-18 Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Vanadium (V)-Total 93.0 % 70-130 05-OCT-18 Zirconium (Zr)-Total 102.2 % 70-130 05-OCT-18 Zirconium (Zr)-Total 0.256 mg/kg wwt 0.054-0.454 05-OCT-18 WG2894656-2 DUP Aluminum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Animony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Bismuth (Bi)-Total 0.0379 0.0465 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 </td <td>Selenium (Se)-Total</td> <td></td> <td></td> <td>101.4</td> <td></td> <td>%</td> <td></td> <td>70-130</td> <td>05-OCT-18</td>	Selenium (Se)-Total			101.4		%		70-130	05-OCT-18
Thallium (TI)-Total 1111.6 % 70-130 05-OCT-18 Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Vanadium (V)-Total 93.0 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zirconium (Zr)-Total 0.256 mg/kg wwt 0.054-0.454 05-OCT-18 WG2894656-2 DUP L2156762-1 Murinum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Antimony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total	Sodium (Na)-Total			98.8		%		70-130	05-OCT-18
Uranium (U)-Total 107.4 % 70-130 05-OCT-18 Vanadium (V)-Total 93.0 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zirconium (Zr)-Total 0.256 mg/kg wwt 0.054-0.454 05-OCT-18 WG2894656-2 DUP L2156762-1 mg/kg wwt 18 40 05-OCT-18 Antimony (Sb)-Total 647 777 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 9.2 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429	Strontium (Sr)-Total			90.3		%		70-130	05-OCT-18
Vanadium (V)-Total 93.0 % 70-130 05-OCT-18 Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zirconium (Zr)-Total 0.256 mg/kg wwt 0.054-0.454 05-OCT-18 WG2894656-2 DUP L2156762-1 WG2894656-2 DUP L2156762-1 Aluminum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Arsenic (As)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Barium (Ba)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 9.2 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Casium (Ca)-Total	Thallium (TI)-Total			111.6		%		70-130	05-OCT-18
Zinc (Zn)-Total 102.2 % 70-130 05-OCT-18 Zirconium (Zr)-Total 0.256 mg/kg wwt 0.054-0.454 05-OCT-18 WG2894656-2 DUP Aluminum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Antimony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadium (Cd)-Total 0.429 0.418 mg/kg wwt 11 40 05-OCT-18 Cesium (Cs)-Total 0.59 0.418 mg/kg wwt 12 40	Uranium (U)-Total			107.4		%		70-130	05-OCT-18
Zirconium (Zr)-Total 0.256 mg/kg wwt 0.054-0.454 05-OCT-18 WG2894656-2 DUP Aluminum (Al)-Total L2156762-1 647 777 mg/kg wwt 18 40 05-OCT-18 Antimony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Cesium (Cs)-Total 4860 7620 mg/kg wwt 12 40 05-OCT-18 Crobalt (Co)-Total 0.51 0.91 m	Vanadium (V)-Total			93.0		%		70-130	05-OCT-18
WG2894656-2 DUP L2156762-1 Aluminum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Antimony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 12 40 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-T	Zinc (Zn)-Total			102.2		%		70-130	05-OCT-18
Aluminum (Al)-Total 647 777 mg/kg wwt 18 40 05-OCT-18 Antimony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 44 60 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Copper (Cu)-Total	Zirconium (Zr)-Total			0.256		mg/kg wwt		0.054-0.454	05-OCT-18
Antimony (Sb)-Total 0.0073 0.0077 mg/kg wwt 5.5 40 05-OCT-18 Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 12 40 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1.88 2.04 mg/kg wwt 18 40 05-OCT-18 Iron (Fe)-Total 1.870 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 17 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2.560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	WG2894656-2 DUP		L2156762-1						
Arsenic (As)-Total 2.56 2.75 mg/kg wwt 7.2 40 05-OCT-18 Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 12 40 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 16 40 05-OCT-18 Iron (Fe)-Total 1.88 2.04 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 18 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Aluminum (AI)-Total		647	777		mg/kg wwt	18	40	05-OCT-18
Barium (Ba)-Total 4.54 4.98 mg/kg wwt 9.2 40 05-OCT-18 Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 44 60 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Lead (Pb)-Total 1370 1640 mg/	Antimony (Sb)-Total		0.0073	0.0077		mg/kg wwt	5.5	40	05-OCT-18
Beryllium (Be)-Total 0.0379 0.0465 mg/kg wwt 20 40 05-OCT-18 Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 44 60 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/	Arsenic (As)-Total		2.56	2.75		mg/kg wwt	7.2	40	05-OCT-18
Bismuth (Bi)-Total 0.0076 0.0085 mg/kg wwt 11 40 05-OCT-18 Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 44 60 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt<	Barium (Ba)-Total		4.54	4.98		mg/kg wwt	9.2	40	05-OCT-18
Boron (B)-Total 7.17 8.03 mg/kg wwt 11 40 05-OCT-18 Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 44 60 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manglesium (Mg)-Total <td>Beryllium (Be)-Total</td> <td></td> <td>0.0379</td> <td>0.0465</td> <td></td> <td>mg/kg wwt</td> <td>20</td> <td>40</td> <td>05-OCT-18</td>	Beryllium (Be)-Total		0.0379	0.0465		mg/kg wwt	20	40	05-OCT-18
Cadmium (Cd)-Total 0.429 0.418 mg/kg wwt 2.7 40 05-OCT-18 Calcium (Ca)-Total 4860 7620 mg/kg wwt 44 60 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Bismuth (Bi)-Total		0.0076	0.0085		mg/kg wwt	11	40	05-OCT-18
Calcium (Ca)-Total 4860 7620 mg/kg wwt 44 60 05-OCT-18 Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Boron (B)-Total		7.17	8.03		mg/kg wwt	11	40	05-OCT-18
Cesium (Cs)-Total 0.118 0.133 mg/kg wwt 12 40 05-OCT-18 Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Cadmium (Cd)-Total		0.429	0.418		mg/kg wwt	2.7	40	05-OCT-18
Chromium (Cr)-Total 1.84 2.12 mg/kg wwt 14 40 05-OCT-18 Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Calcium (Ca)-Total		4860	7620		mg/kg wwt	44	60	05-OCT-18
Cobalt (Co)-Total 0.796 0.931 mg/kg wwt 16 40 05-OCT-18 Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Cesium (Cs)-Total		0.118	0.133		mg/kg wwt	12	40	05-OCT-18
Copper (Cu)-Total 1.88 2.04 mg/kg wwt 7.7 40 05-OCT-18 Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Chromium (Cr)-Total		1.84	2.12		mg/kg wwt	14	40	05-OCT-18
Iron (Fe)-Total 1370 1640 mg/kg wwt 18 40 05-OCT-18 Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Cobalt (Co)-Total		0.796	0.931		mg/kg wwt	16	40	05-OCT-18
Lead (Pb)-Total 0.796 0.977 mg/kg wwt 20 40 05-OCT-18 Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Copper (Cu)-Total		1.88	2.04		mg/kg wwt	7.7	40	05-OCT-18
Lithium (Li)-Total 2.69 3.17 mg/kg wwt 17 40 05-OCT-18 Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Iron (Fe)-Total		1370	1640		mg/kg wwt	18	40	05-OCT-18
Magnesium (Mg)-Total 2560 3970 DUP-H mg/kg wwt 43 40 05-OCT-18 Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Lead (Pb)-Total		0.796	0.977		mg/kg wwt	20	40	05-OCT-18
Manganese (Mn)-Total 68.5 92.2 mg/kg wwt 29 40 05-OCT-18	Lithium (Li)-Total		2.69	3.17		mg/kg wwt	17	40	05-OCT-18
• • • • • • • • • • • • • • • • • • • •	Magnesium (Mg)-Total		2560	3970	DUP-H	mg/kg wwt	43	40	05-OCT-18
Mahhdaana (Ma) Tatal	Manganese (Mn)-Total		68.5	92.2		mg/kg wwt	29	40	05-OCT-18
иотураепитт (иго)- готат 0.222 0.254 mg/kg wwt 14 40 05-ОСТ-18	Molybdenum (Mo)-Total		0.222	0.254		mg/kg wwt	14	40	05-OCT-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-WET-CCMS-N-VA	Tissue							
Batch R4260211								
WG2894656-2 DUP		L2156762-1	4 75					
Nickel (Ni)-Total		1.54	1.75		mg/kg wwt	13	40	05-OCT-18
Phosphorus (P)-Total		1000	1080		mg/kg wwt	6.8	40	05-OCT-18
Potassium (K)-Total		1380	1430		mg/kg wwt	3.4	40	05-OCT-18
Rubidium (Rb)-Total		2.32	2.61		mg/kg wwt	12	40	05-OCT-18
Selenium (Se)-Total		1.16	1.12		mg/kg wwt	3.0	40	05-OCT-18
Sodium (Na)-Total		3540	3600		mg/kg wwt	1.7	40	05-OCT-18
Strontium (Sr)-Total		20.9	25.6		mg/kg wwt	20	60	05-OCT-18
Tellurium (Te)-Total		0.0043	<0.0040	RPD-NA	mg/kg wwt	N/A	40	05-OCT-18
Thallium (TI)-Total		0.0148	0.0170		mg/kg wwt	14	40	05-OCT-18
Tin (Sn)-Total		0.046	0.050		mg/kg wwt	8.0	40	05-OCT-18
Uranium (U)-Total		0.119	0.128		mg/kg wwt	7.1	40	05-OCT-18
Vanadium (V)-Total		3.01	3.59		mg/kg wwt	18	40	05-OCT-18
Zinc (Zn)-Total		9.21	9.82		mg/kg wwt	6.3	40	05-OCT-18
Zirconium (Zr)-Total		0.778	0.964		mg/kg wwt	21	40	05-OCT-18
WG2894656-4 LCS								
Aluminum (Al)-Total			99.6		%		70-130	05-OCT-18
Antimony (Sb)-Total			99.7		%		70-130	05-OCT-18
Arsenic (As)-Total			99.6		%		70-130	05-OCT-18
Barium (Ba)-Total			95.4		%		70-130	05-OCT-18
Beryllium (Be)-Total			99.9		%		70-130	05-OCT-18
Bismuth (Bi)-Total			97.8		%		70-130	05-OCT-18
Boron (B)-Total			94.9		%		70-130	05-OCT-18
Cadmium (Cd)-Total			97.8		%		70-130	05-OCT-18
Calcium (Ca)-Total			96.2		%		70-130	05-OCT-18
Cesium (Cs)-Total			103.2		%		70-130	05-OCT-18
Chromium (Cr)-Total			97.0		%		70-130	05-OCT-18
Cobalt (Co)-Total			97.6		%		70-130	05-OCT-18
Copper (Cu)-Total			97.2		%		70-130	05-OCT-18
Iron (Fe)-Total			98.0		%		70-130	05-OCT-18
Lead (Pb)-Total			98.0		%		70-130	05-OCT-18
Lithium (Li)-Total			97.9		%		70-130	05-OCT-18
Magnesium (Mg)-Total			96.7		%		70-130	05-OCT-18
Manganese (Mn)-Total			101.4		%		70-130	05-OCT-18
Molybdenum (Mo)-Total			100.0		%		70-130	05-OCT-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-WET-CCMS-N-VA	Tissue							
Batch R4260211								
WG2894656-4 LCS			98.7		0/		70.400	05 OOT 40
Nickel (Ni)-Total Phosphorus (P)-Total			101.1		%		70-130	05-OCT-18
Potassium (K)-Total			99.0		%		70-130	05-OCT-18
Rubidium (Rb)-Total			98.9		%		70-130	05-OCT-18
, ,			99.0				70-130	05-OCT-18
Selenium (Se)-Total					%		70-130	05-OCT-18
Sodium (Na)-Total			102.4				70-130	05-OCT-18
Strontium (Sr)-Total			98.7		%		70-130	05-OCT-18
Tellurium (Te)-Total			100.8		%		70-130	05-OCT-18
Thallium (TI)-Total			97.7		%		70-130	05-OCT-18
Tin (Sn)-Total			97.5		%		70-130	05-OCT-18
Uranium (U)-Total			103.9		%		70-130	05-OCT-18
Vanadium (V)-Total			99.3		%		70-130	05-OCT-18
Zinc (Zn)-Total			96.7		%		70-130	05-OCT-18
Zirconium (Zr)-Total			97.0		%		70-130	05-OCT-18
WG2894656-1 MB Aluminum (Al)-Total			<0.40		mg/kg wwt		0.4	05-OCT-18
Antimony (Sb)-Total			<0.0020		mg/kg wwt		0.002	05-OCT-18
Arsenic (As)-Total			<0.0020		mg/kg wwt		0.002	05-OCT-18
Barium (Ba)-Total			<0.010		mg/kg wwt		0.004	05-OCT-18
Beryllium (Be)-Total			<0.0020		mg/kg wwt		0.002	05-OCT-18
Bismuth (Bi)-Total			<0.0020		mg/kg wwt		0.002	05-OCT-18
Boron (B)-Total			<0.20		mg/kg wwt		0.002	05-OCT-18
Cadmium (Cd)-Total			<0.20		mg/kg wwt		0.2	05-OCT-18
Calcium (Ca)-Total			<4.0		mg/kg wwt		4	
Cesium (Cs)-Total			<0.0010		mg/kg wwt		0.001	05-OCT-18 05-OCT-18
Chromium (Cr)-Total			<0.010		mg/kg wwt		0.001	05-OCT-18
Cobalt (Co)-Total			<0.0040		mg/kg wwt		0.004	
Copper (Cu)-Total			<0.020		mg/kg wwt		0.004	05-OCT-18
Iron (Fe)-Total			<0.60		mg/kg wwt			05-OCT-18
			<0.0040				0.6	05-OCT-18
Lead (Pb)-Total					mg/kg wwt		0.004	05-OCT-18
Lithium (Li)-Total			<0.10		mg/kg wwt		0.1	05-OCT-18
Magnesium (Mg)-Total			<0.40		mg/kg wwt		0.4	05-OCT-18
Manganese (Mn)-Total			<0.010		mg/kg wwt		0.01	05-OCT-18
Molybdenum (Mo)-Tota	li		<0.0040		mg/kg wwt		0.004	05-OCT-18



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Units RPD	Limit Analyzed
mg/kg wwt	0.04 05-OCT-18
mg/kg wwt	0.04 05-OCT-18 2 05-OCT-18
mg/kg wwt	4 05-OCT-18
mg/kg wwt	0.01 05-OCT-18
mg/kg wwt	0.01 05-OCT-18
mg/kg wwt	4 05-OCT-18
mg/kg wwt	0.01 05-OCT-18
mg/kg wwt	0.004 05-OCT-18
mg/kg wwt	0.0004 05-OCT-18
mg/kg wwt	0.0004 05-OCT-18
mg/kg wwt	0.0004 05-OCT-18
mg/kg wwt	0.02 05-OCT-18
mg/kg wwt	0.1 05-OCT-18
mg/kg wwt	0.04 05-OCT-18
0/	T0 400 40 00T 40
%	70-130 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
mg/kg wwt	0.005-0.025 19-OCT-18
mg/kg wwt	0.002-0.022 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
%	70-130 19-OCT-18
	70-130 19-OCT-18
• •	0.71-1.71 19-OCT-18
	70-130 19-OCT-18 70-130 19-OCT-18
	% mg/kg wwt %



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-WET-MICR-HRMS-VA	Tissue							
Batch R4293207								
WG2894645-3 CRM		VA-NRC-DO						
Molybdenum (Mo)-Total			112.1		%		70-130	19-OCT-18
Nickel (Ni)-Total			96.1		%		70-130	19-OCT-18
Phosphorus (P)-Total			87.5		%		70-130	19-OCT-18
Potassium (K)-Total			95.0		%		70-130	19-OCT-18
Rubidium (Rb)-Total			109.8		%		70-130	19-OCT-18
Selenium (Se)-Total			93.3		%		70-130	19-OCT-18
Sodium (Na)-Total			95.9		%		70-130	19-OCT-18
Strontium (Sr)-Total			105.0		%		70-130	19-OCT-18
Thallium (TI)-Total			115.0		%		70-130	19-OCT-18
Tin (Sn)-Total			0.076		mg/kg wwt		0.04-0.161	19-OCT-18
Uranium (U)-Total			112.4		%		70-130	19-OCT-18
Vanadium (V)-Total			100.2		%		70-130	19-OCT-18
Zinc (Zn)-Total			91.7		%		70-130	19-OCT-18
Zirconium (Zr)-Total			0.276		mg/kg wwt		0.054-0.454	19-OCT-18
WG2894645-2 DUP		L2156762-3						
Aluminum (Al)-Total		652	704		mg/kg wwt	7.7	40	19-OCT-18
Antimony (Sb)-Total		0.0083	0.0094		mg/kg wwt	12	40	19-OCT-18
Arsenic (As)-Total		3.73	3.11		mg/kg wwt	18	40	19-OCT-18
Barium (Ba)-Total		20.5	21.7		mg/kg wwt	5.7	40	19-OCT-18
Beryllium (Be)-Total		0.0404	0.0450		mg/kg wwt	11	40	19-OCT-18
Bismuth (Bi)-Total		0.0082	0.0095		mg/kg wwt	15	40	19-OCT-18
Boron (B)-Total		7.89	8.56		mg/kg wwt	8.2	40	19-OCT-18
Cadmium (Cd)-Total		0.538	0.572		mg/kg wwt	6.2	40	19-OCT-18
Calcium (Ca)-Total		7630	7590		mg/kg wwt	0.5	60	19-OCT-18
Cesium (Cs)-Total		0.121	0.137		mg/kg wwt	12	40	19-OCT-18
Chromium (Cr)-Total		2.27	2.82		mg/kg wwt	21	40	19-OCT-18
Cobalt (Co)-Total		1.30	1.31		mg/kg wwt	1.2	40	19-OCT-18
Copper (Cu)-Total		3.29	3.76		mg/kg wwt	13	40	19-OCT-18
Iron (Fe)-Total		2100	1960		mg/kg wwt	6.7	40	19-OCT-18
Lead (Pb)-Total		0.937	1.03		mg/kg wwt	9.7	40	19-OCT-18
Lithium (Li)-Total		3.25	3.65		mg/kg wwt	12	40	19-OCT-18
Magnesium (Mg)-Total		3690	3880		mg/kg wwt	5.0	40	19-OCT-18
Manganese (Mn)-Total		175	174		mg/kg wwt	0.4	40	19-OCT-18
Molybdenum (Mo)-Total		0.441	0.464		mg/kg wwt	5.0	40	19-OCT-18



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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-WET-MICR-HRMS-VA	Tissue							
Batch R4293207								
WG2894645-2 DUP		L2156762-3						
Nickel (Ni)-Total		2.24	2.37		mg/kg wwt	5.7	40	19-OCT-18
Phosphorus (P)-Total		1450	1410		mg/kg wwt	2.4	40	19-OCT-18
Potassium (K)-Total		1970	2020		mg/kg wwt	3.0	40	19-OCT-18
Rubidium (Rb)-Total		2.58	2.69		mg/kg wwt	4.4	40	19-OCT-18
Selenium (Se)-Total		1.22	1.22		mg/kg wwt	0.3	40	19-OCT-18
Sodium (Na)-Total		6410	6710		mg/kg wwt	4.7	40	19-OCT-18
Strontium (Sr)-Total		19.0	18.3		mg/kg wwt	4.0	60	19-OCT-18
Tellurium (Te)-Total		<0.0040	0.0044	RPD-NA	mg/kg wwt	N/A	40	19-OCT-18
Thallium (TI)-Total		0.0163	0.0165		mg/kg wwt	0.7	40	19-OCT-18
Tin (Sn)-Total		0.037	0.040		mg/kg wwt	5.2	40	19-OCT-18
Uranium (U)-Total		0.130	0.155		mg/kg wwt	18	40	19-OCT-18
Vanadium (V)-Total		3.48	3.52		mg/kg wwt	1.2	40	19-OCT-18
Zinc (Zn)-Total		10.6	11.2		mg/kg wwt	6.1	40	19-OCT-18
Zirconium (Zr)-Total		1.19	1.32		mg/kg wwt	10	40	19-OCT-18
WG2894645-4 LCS								
Aluminum (Al)-Total			99.3		%		70-130	19-OCT-18
Antimony (Sb)-Total			98.8		%		70-130	19-OCT-18
Arsenic (As)-Total			107.0		%		70-130	19-OCT-18
Barium (Ba)-Total			119.6		%		70-130	19-OCT-18
Beryllium (Be)-Total			99.4		%		70-130	19-OCT-18
Bismuth (Bi)-Total			100.1		%		70-130	19-OCT-18
Boron (B)-Total			105.6		%		70-130	19-OCT-18
Cadmium (Cd)-Total			95.2		%		70-130	19-OCT-18
Calcium (Ca)-Total			100.0		%		70-130	19-OCT-18
Cesium (Cs)-Total			109.4		%		70-130	19-OCT-18
Chromium (Cr)-Total			106.8		%		70-130	19-OCT-18
Cobalt (Co)-Total			102.4		%		70-130	19-OCT-18
Copper (Cu)-Total			95.6		%		70-130	19-OCT-18
Iron (Fe)-Total			98.5		%		70-130	19-OCT-18
Lead (Pb)-Total			101.4		%		70-130	19-OCT-18
Lithium (Li)-Total			110.6		%		70-130	19-OCT-18
Magnesium (Mg)-Total			101.1		%		70-130	19-OCT-18
Manganese (Mn)-Total			108.8		%		70-130	19-OCT-18
Molybdenum (Mo)-Total			103.2		%		70-130	19-OCT-18



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MET-WET-MICR-HRMS-VA Tissue	Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
WO2894645-4 LCS Nickei (Ni)-Total 101.2 % 70-130 19-OCT-18 Phosphorus (P)-Total 96.0 % 70-130 19-OCT-18 Potassium (K)-Total 107.5 % 70-130 19-OCT-18 Rubidium (Rb)-Total 104.7 % 70-130 19-OCT-18 Selenium (Se)-Total 102.8 % 70-130 19-OCT-18 Stontium (Na)-Total 109.4 % 70-130 19-OCT-18 Strontium (Sr)-Total 111.0 % 70-130 19-OCT-18 Tellurum (Te)-Total 111.0 % 70-130 19-OCT-18 Thallium (Ti)-Total 98.5 % 70-130 19-OCT-18 Uranium (U)-Total 98.8 % 70-130 19-OCT-18 Uranium (V)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 198.3 % 70-130 19-OCT-18 WC2894655-1 MB Aluminum (A)-Total 19.0 19.0 19.0 19.0 19.0 19.0 <	MET-WET-MICR-HRMS-VA	Tissue							
Nickel (Ni)-Total 96.0 % 70-130 19-OCT-18 Phosphorus (P)-Total 96.0 % 70-130 19-OCT-18 Phosphorus (P)-Total 96.0 % 70-130 19-OCT-18 Rubicium (K)-Total 107.5 % 70-130 19-OCT-18 Rubicium (K)-Total 104.7 % 70-130 19-OCT-18 Selenium (Se)-Total 102.6 % 70-130 19-OCT-18 Selenium (Se)-Total 102.8 % 70-130 19-OCT-18 Sodium (Na)-Total 102.8 % 70-130 19-OCT-18 Strontium (Sf)-Total 109.4 % 70-130 19-OCT-18 Tellurium (Sf)-Total 109.4 % 70-130 19-OCT-18 Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Tin (Si)-Total 99.8 % 70-130 19-OCT-18 Tin (Si)-Total 99.8 % 70-130 19-OCT-18 Tin (C)-Total 116.2 % 70-130 19-OCT-18 Tin (C)-Total 116.2 % 70-130 19-OCT-18 Tin (C)-Total 116.2 % 70-130 19-OCT-18 Tin (C)-Total 116.2 % 70-130 19-OCT-18 Tin (C)-Total 116.2 % 70-130 19-OCT-18 Tin (C)-Total 116.2 % 70-130 19-OCT-18 Tin (C)-Total 116.2 % 70-130 19-OCT-18 Tin (C)-Total 116.3 % 70-130 19-OCT-18 Tin (C)-Total 116.3 % 70-130 19-OCT-18 Tin (C)-Total 116.3 % 70-130 19-OCT-18 Tin (S)-Total 116.3 % 70-0000 19-OCT-18 Tin (S)-Total 116.3 % 70-0000 19-OCT-18 Tin (S)-Total 116.3 % 70-0000 19-OCT-18 Tin (S)-Total 116.3 % 70-0000 19-OCT-18 Tin (S)-Total 116.3 % 70-0000 19-OCT-18 Tin (S)-Total 116.3 % 70-0000 19-OCT-18 Tin (S)-Total 116.3 % 70-00000 19-OCT-18 Tin (S)-Total 116.3	Batch R4293207								
Phosphorus (P)-Total 96.0 % 70-130 19-OCT-18 Potassium (K)-Total 107.5 % 70-130 19-OCT-18 Rubidium (Rb)-Total 104.7 % 70-130 19-OCT-18 Rubidium (Rb)-Total 104.7 % 70-130 19-OCT-18 Selenium (Se)-Total 102.6 % 70-130 19-OCT-18 Sodium (Na)-Total 102.8 % 70-130 19-OCT-18 Strontium (Sr)-Total 109.4 % 70-130 19-OCT-18 Strontium (Sr)-Total 109.4 % 70-130 19-OCT-18 Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Tin (Sn)-Total 10,-To				101.0		0.4			
Potassium (K)-Total 107.5 % 70-130 19-OCT-18 Rubidium (Rb)-Total 104.7 % 70-130 19-OCT-18 Selenium (Se)-Total 102.6 % 70-130 19-OCT-18 Selenium (Se)-Total 102.8 % 70-130 19-OCT-18 Sronium (Na)-Total 102.8 % 70-130 19-OCT-18 Stronium (Sf)-Total 109.4 % 70-130 19-OCT-18 Stronium (Sf)-Total 111.0 % 70-130 19-OCT-18 Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Tillurium (Ti)-Total 98.5 % 70-130 19-OCT-18 Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Tin (Sn)-Total 116.2 % 70-130 19-OCT-18 Uranium (U)-Total 116.2 % 70-130 19-OCT-18 Uranium (U)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 70.0020 mg/kg wwt 0.002 19-OCT-18 Zinc (Zn)-Total 70.0020 mg/kg wwt 0.002 19-OCT-18 Zinc (Zn)-Total 70.0020 mg/kg wwt 0.002 19-OCT-18 Zinc (Zn)-Total 70.0020 mg/kg wwt 0.002 19-OCT-18 Zinc (Zn)-Total 70.0020 mg/kg wwt 0.002 19-OCT-18 Zinc (Zn)-Total 70.0020 mg/kg wwt 0.002 19-OCT-18 Zinc (Zn)-Total 70.0020 mg/kg wwt 0.002 19-OCT-18 Zinc (Zn)-Total 70.0040 mg/kg wwt 0.004 19-OCT-18 Zinc (Zn)-Total 70.0040 mg/kg wwt 0.004 19-OCT-18 Zinc (Zn)-Total 70.0040 mg/kg wwt 0.004 19-OCT-18 Zinc (Zn)-Total 70.0040 mg/kg wwt 0.004 19-OCT-18 Zinc (Zn)-Total 70.0040 mg/kg wwt 0.004 19-OCT-18 Zinc (Zn)-Total 70.0040 mg/kg wwt 0.004 19-OCT-18 Zinc Zn)-Zn-Zn-Zn-Zn-Zn-Zn-Zn-Zn-Zn-Zn-Zn-Zn-Zn-									
Rubidium (Rb)-Total 104.7 % 70-130 19-OCT-18 Selenium (Se)-Total 102.6 % 70-130 19-OCT-18 Sodium (Na)-Total 102.8 % 70-130 19-OCT-18 Strontium (Sr)-Total 109.4 % 70-130 19-OCT-18 Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Thallium (Tr)-Total 98.5 % 70-130 19-OCT-18 Tin (Sr)-Total 99.8 % 70-130 19-OCT-18 Vanadium (U)-Total 116.2 % 70-130 19-OCT-18 Vanadium (V)-Total 99.4 % 70-130 19-OCT-18 Ziric (Zn)-Total 79.8 % 70-130 19-OCT-18 Ziric (Zn)-Total 108.3 % 70-130 19-OCT-18 Ziric (Zn)-Total 79.8 % 70-130 19-OCT-18 Ziric (Zn)-Total 70.0 70-130 19-OCT-18 Ziric (Zn)-Total 70.0 70-130 19-OCT-18 Ziri									
Selenium (Se)-Total 102.6 % 70-130 19-OCT-18 Sodium (Na)-Total 102.8 % 70-130 19-OCT-18 Strontium (Se)-Total 109.4 % 70-130 19-OCT-18 Tellurium (Te)-Total 1111.0 % 70-130 19-OCT-18 Thallium (Ti)-Total 98.5 % 70-130 19-OCT-18 Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Uranium (U)-Total 116.2 % 70-130 19-OCT-18 Vanadium (V)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zinc (Zn)-Total 108.3 % 70-130 19-OCT-18 WG2894645-1 MB Aluminum (A)-Total 19-OCT-18 Autimony (Sb)-Total <0.0020									
Sodium (Na)-Total 102.8 % 70-130 19-OCT-18	, ,								
Strontium (Sr)-Total 109.4 % 70-130 19-OCT-18	` ,								
Tellurium (Te)-Total 111.0 % 70-130 19-OCT-18 Thallium (TI)-Total 98.5 % 70-130 19-OCT-18 Thallium (TI)-Total 99.8 % 70-130 19-OCT-18 Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Uranium (U)-Total 116.2 % 70-130 19-OCT-18 Uranium (U)-Total 99.4 % 70-130 19-OCT-18 Vanadium (V)-Total 99.4 % 70-130 19-OCT-18 Zinc (2n)-Total 79.8 % 70-130 19-OCT-18 Zirconium (Zi)-Total 108.3 % 70-130 19-OCT-18 Zirconium (Zi)-Total 108.3 % 70-130 19-OCT-18 Aluminum (Al)-Total 108.3 % 70-130 19-OCT-18 Aluminum (Al)-Total 10.0 mg/kg wwt 1 1 19-OCT-18 Arsenic (As)-Total 10.0 mg/kg wwt 0.002 19-OCT-18 Barium (Ba)-Total 10.0020 mg/kg wwt 0.002 19-OCT-18 Barium (Ba)-Total 10.0020 mg/kg wwt 0.001 19-OCT-18 Beryllium (Be)-Total 10.0020 mg/kg wwt 0.002 19-OCT-18 Bismuth (B)-Total 10.0020 mg/kg wwt 0.002 19-OCT-18 Cadmium (Cd)-Total 10.0020 mg/kg wwt 0.002 19-OCT-18 Cadmium (Ca)-Total 10.0020 mg/kg wwt 0.002 19-OCT-18 Calcium (Ca)-Total 10.0020 mg/kg wwt 0.002 19-OCT-18 Calcium (Ca)-Total 10.0020 mg/kg wwt 0.002 19-OCT-18 Cesium (Cs)-Total 10.0040 mg/kg wwt 0.004 19-OCT-18 Cobait (Co)-Total 10.0040 mg/kg wwt 0.004 19-OCT-18 Coper (Cu)-Total 10.0040 mg/kg wwt 0.004 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.004 19-OCT-18 Lead (Pb)-Total 10.007 mg/kg wwt 0.004 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.004 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.004 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18 Liftium (Li)-Total 10.007 mg/kg wwt 0.001 19-OCT-18									
Thailium (TI)-Total 98.5 % 70-130 19-OCT-18 Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Uranium (U)-Total 116.2 % 70-130 19-OCT-18 Uranium (U)-Total 116.2 % 70-130 19-OCT-18 Vanadium (V)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zirc (Zn)-Total 108.3 % 70-130 19-OCT-18 Zirconium (Zp)-Total 108.3 % 70-130 19-OCT-18 WG2894645-1 MB Aluminum (Al)-Total <1.0 mg/kg wwt 1 1 19-OCT-18 Antimony (Sb)-Total <0.0020 mg/kg wwt 0.002 19-OCT-18 Arsenic (As)-Total <0.0060 mg/kg wwt 0.006 19-OCT-18 Barium (Ba)-Total <0.0010 mg/kg wwt 0.01 19-OCT-18 Beryllium (Be)-Total <0.0020 mg/kg wwt 0.002 19-OCT-18 Bismuth (Bi)-Total <0.0020 mg/kg wwt 0.002 19-OCT-18 Bismuth (Bi)-Total <0.0020 mg/kg wwt 0.002 19-OCT-18 Cadmium (Cd)-Total <0.0020 mg/kg wwt 0.002 19-OCT-18 Cadmium (Cd)-Total <0.0020 mg/kg wwt 0.002 19-OCT-18 Calcium (Ca)-Total <0.0020 mg/kg wwt 0.002 19-OCT-18 Calcium (Ca)-Total <0.0020 mg/kg wwt 0.001 19-OCT-18 Cesium (Cs)-Total <0.0010 mg/kg wwt 0.001 19-OCT-18 Cobalt (Co)-Total <0.0040 mg/kg wwt 0.004 19-OCT-18 Cobalt (Co)-Total <0.0040 mg/kg wwt 0.004 19-OCT-18 Copper (Cu)-Total <0.0040 mg/kg wwt 0.004 19-OCT-18 Lead (Pb)-Total <0.0010 mg/kg wwt 0.04 19-OCT-18 Lithium (Li)-Total <0.010 mg/kg wwt 0.01 19-OCT-18 Lithium (Li)-Total <0.010 mg/kg wwt 0.01 19-OCT-18 Lithium (Li)-Total <0.010 mg/kg wwt 0.01 19-OCT-18 Magnese (Mn)-Total <0.010 mg/kg wwt 0.01 19-OCT-18	, ,							70-130	19-OCT-18
Tin (Sn)-Total 99.8 % 70-130 19-OCT-18 Uranium (U)-Total 116.2 % 70-130 19-OCT-18 Vanadium (V)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zirconium (Zr)-Total 108.3 % 70-130 19-OCT-18 WG2894645-1 MB MImminum (Al)-Total <1.0	Tellurium (Te)-Total			111.0				70-130	19-OCT-18
Uranium (U)-Total 116.2 % 70-130 19-OCT-18 Vanadium (V)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zirconium (Zr)-Total 108.3 % 70-130 19-OCT-18 WG289465-1 MB Aluminum (Al)-Total <1.0	Thallium (TI)-Total			98.5		%		70-130	19-OCT-18
Vanadium (V)-Total 99.4 % 70-130 19-OCT-18 Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zirconium (Zr)-Total 108.3 % 70-130 19-OCT-18 WG2894645-1 MB Aluminum (Al)-Total <1.0				99.8		%		70-130	19-OCT-18
Zinc (Zn)-Total 79.8 % 70-130 19-OCT-18 Zirconium (Zr)-Total 108.3 % 70-130 19-OCT-18 WG2894645-1 MB MB MISSION SIGNATION MISSION SIGNATION MISSION SIGNATION Antimony (Sb)-Total <1.0	Uranium (U)-Total			116.2		%		70-130	19-OCT-18
Zirconium (Zr)-Total 108.3 % 70-130 19-OCT-18 WG2894645-1 MB MB MG2894645-1 MB MG2894645-1 MB Aluminum (Al)-Total <1.0	Vanadium (V)-Total			99.4		%		70-130	19-OCT-18
WG2894645-1 MB MB Aluminum (Al)-Total <1.0	Zinc (Zn)-Total			79.8		%		70-130	19-OCT-18
Aluminum (Al)-Total <1.0	Zirconium (Zr)-Total			108.3		%		70-130	19-OCT-18
Antimony (Sb)-Total									
Arsenic (As)-Total						mg/kg wwt		1	
Barium (Ba)-Total	Antimony (Sb)-Total			<0.0020		mg/kg wwt		0.002	19-OCT-18
Beryllium (Be)-Total <0.0020	Arsenic (As)-Total			<0.0060		mg/kg wwt		0.006	19-OCT-18
Bismuth (Bi)-Total <0.0020	Barium (Ba)-Total			<0.010		mg/kg wwt		0.01	19-OCT-18
Boron (B)-Total <0.20	Beryllium (Be)-Total			<0.0020		mg/kg wwt		0.002	19-OCT-18
Cadmium (Cd)-Total <0.0020	Bismuth (Bi)-Total			<0.0020		mg/kg wwt		0.002	19-OCT-18
Calcium (Ca)-Total <4.0	Boron (B)-Total			<0.20		mg/kg wwt		0.2	19-OCT-18
Cesium (Cs)-Total <0.0010	Cadmium (Cd)-Total			<0.0020		mg/kg wwt		0.002	19-OCT-18
Chromium (Cr)-Total <0.040	Calcium (Ca)-Total			<4.0		mg/kg wwt		4	19-OCT-18
Cobalt (Co)-Total <0.0040	Cesium (Cs)-Total			<0.0010		mg/kg wwt		0.001	19-OCT-18
Copper (Cu)-Total <0.040	Chromium (Cr)-Total			<0.040		mg/kg wwt		0.04	19-OCT-18
Iron (Fe)-Total <1.0	Cobalt (Co)-Total			<0.0040		mg/kg wwt		0.004	19-OCT-18
Lead (Pb)-Total <0.010	Copper (Cu)-Total			< 0.040		mg/kg wwt		0.04	19-OCT-18
Lithium (Li)-Total <0.10	Iron (Fe)-Total			<1.0		mg/kg wwt		1	19-OCT-18
Magnesium (Mg)-Total <0.40 mg/kg wwt 0.4 19-OCT-18 Manganese (Mn)-Total <0.010	Lead (Pb)-Total			<0.010		mg/kg wwt		0.01	19-OCT-18
Magnesium (Mg)-Total <0.40	Lithium (Li)-Total			<0.10		mg/kg wwt		0.1	19-OCT-18
Manganese (Mn)-Total <0.010 mg/kg wwt 0.01 19-OCT-18	Magnesium (Mg)-Total			<0.40		mg/kg wwt		0.4	
	Manganese (Mn)-Total			<0.010		mg/kg wwt		0.01	
	Molybdenum (Mo)-Total			<0.0080		mg/kg wwt			19-OCT-18



Workorder: L2156762

Report Date: 23-OCT-18 Page 9 of 10

Test	Matrix	Reference	Result Qualifier	Units	RPD	Limit	Analyzed
MET-WET-MICR-HRMS-VA	Tissue						
Batch R4293207 WG2894645-1 MB							
Nickel (Ni)-Total			<0.040	mg/kg wwt		0.04	19-OCT-18
Phosphorus (P)-Total			<2.0	mg/kg wwt		2	19-OCT-18
Potassium (K)-Total			<4.0	mg/kg wwt		4	19-OCT-18
Rubidium (Rb)-Total			<0.010	mg/kg wwt		0.01	19-OCT-18
Selenium (Se)-Total			<0.020	mg/kg wwt		0.02	19-OCT-18
Sodium (Na)-Total			<4.0	mg/kg wwt		4	19-OCT-18
Strontium (Sr)-Total			<0.020	mg/kg wwt		0.02	19-OCT-18
Tellurium (Te)-Total			<0.0040	mg/kg wwt		0.004	19-OCT-18
Thallium (TI)-Total			<0.00040	mg/kg wwt		0.0004	19-OCT-18
Tin (Sn)-Total			<0.020	mg/kg wwt		0.02	19-OCT-18
Uranium (U)-Total			<0.00040	mg/kg wwt		0.0004	19-OCT-18
Vanadium (V)-Total			<0.020	mg/kg wwt		0.02	19-OCT-18
Zinc (Zn)-Total			<0.20	mg/kg wwt		0.2	19-OCT-18
Zirconium (Zr)-Total			<0.040	mg/kg wwt		0.04	19-OCT-18
MOISTURE-MICR-VA	Tissue						
Batch R4266268							
WG2891074-3 DUP % Moisture		L2156762-3 78.0	78.8	%	1.0	25	30-SEP-18
WG2891074-2 LCS % Moisture			100.1	%		90-110	30-SEP-18
WG2891074-1 MB % Moisture			<2.0	%		2	30-SEP-18
MOISTURE-TISS-VA	Tissue						
Batch R4253990							
WG2890322-3 DUP % Moisture		L2156762-1 81.4	80.0	%	1.8	20	28-SEP-18
WG2890322-2 LCS % Moisture			100.0	%		90-110	28-SEP-18
WG2890322-1 MB							

Workorder: L2156762 Report Date: 23-OCT-18 Page 10 of 10

Legend:

ALS Control Limit (Data Quality Objectives)
Duplicate
Relative Percent Difference
Not Available
Laboratory Control Sample
Standard Reference Material
Matrix Spike
Matrix Spike Duplicate
Average Desorption Efficiency
Method Blank
Internal Reference Material
Certified Reference Material
Continuing Calibration Verification
Calibration Verification Standard

Sample Parameter Qualifier Definitions:

LCSD Laboratory Control Sample Duplicate

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Environmental

Chain of Custody (COC) / Analytical Request Form

COC Number: 15 - xxxxxx

L2156762-COFC

OCTOBER 20:5 FROM

	www.alsglobal.com																		
Report To	t To Contact and company name below will appear on the final report Report Format / Distribution -			T	Report Format	/ Distribucon-	_		. Louince pervi	cercever er	okow TP1ea	se confirm a	H E&P TÁ	Ts with yo	our AM • su	charges wi	l apply		
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	Company address below will a	ppear on the final	report	Select Distribut	ion: 🛛 EMAIL	□ MAIL □	FAX		He History	2	day [P2] 🗆		E E		tutory h			
Street:	2nd floor 3795 Carey Rd.			Email 1 or Fax	jsherrin@golder.co	om				Date and	Time Req	uired for al	I E&P TA	ATs:			्य अस	F 21 ***1	arte
City/Province:	Victoria BC			Email 2	aospan@golder.co	om			For tests the	st can not b	e perform	d according	to the se	vice lavel	l selected, y	ou will be o	ontacted.		
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WHITE - LABORATORY COPY

YELLOW - CLIENT COPY

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

COC Number: 15 - xxxxxx L2156762-COFC

	www.alsglobai.com											
Report To	Contact and company name below will appear on the final report	Report Forma	t / Distribution	Select Servi	ice Level E	elow - Please i	onfirm all E&P Ta	ATs with yo	ur AM - surc	harges will ap	ply	
Company:	Golder Associatex Ltd.	Select Report Format: 🗵 PDF	EXCEL DEDD (DIGITAL)	Regular [R] [2] Standard TAT if received by 3 pm - business days - no surcharges apply								
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Phone:	1 (250) 881 7372	☐ Compare Results to Criteria on Report - provide details below if box checked			3	day [P3]		EMERGENCY	Sam	e Day, We	ekend or	_
	Company address below will appear on the final report	Select Distribution:			2	day [P2]		S ME		utory holi		
Street:	2nd floor 3795 Carey Rd.	Email 1 or Fax jsherrin@golder.	com	1	Date and	Time Require	ed for all E&P T	ATs:				
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ALS Environmental

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2156762-COFC

COC Number: 15 - xxxxxx

Page 3 of 3

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Report To	Contact and company name belo	ow will appear on the final report		Report Format			Select Service Level Below - Please confirm at E&P TATs with your AM - surcharges will apply										
Company:	Golder Associatex Ltd.			ormat: PDF [Regular [R] Standard TAT if received by 3 pm - business days - no surcharges an					arges apply					
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LSD:			Location:			Analysis	Inchading									Number of Containers	
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Drinking	Water (DW) Samples ¹ (client use	e) Opecial managements / op		ronic COC only)	king on the trop	-down list below	Frozen		- 37	IN LE CO		SIF Obs				No	——————————————————————————————————————
Are samples taken from a Regulated DW System?							Ice Packs			_						=	
Ice Packs Ice Cubes Custody seal intact Yes No																	
Are samples for human drinking water use? INITIAL COOLER TEMPERATURES ℃ FINAL COOLER TEMPERATURES ℂ FINAL COOLER					ATURES °C												
☐ YES ☑ NO													67	5.2	T		
	SHIPMENT RELEASE (die	ent use)		INITIAL SHIPME	NT RECEPTIO	N (lab use only)					INAL SI	IIPMEN	T RECE	FPTION	l (lab i	use only)	i
Released by:			Received by:		Date:	(.a. 550 di sy)	Time:		Recei	red by: BP		.a men	Date	e:		osc omy)	Time:
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ANNEXE F-2 : Shellfish Length & Weight Data

Date	Station	Length (mm)	Weight (g)
		12.5	0.41
		22.0	1.53
		21.3	1.36
		26.7	4.34
		17.0	0.52
		22.0	0.77
10-Aug-19	BW-1	22.0	1.38
10 / lug 10	D** 1		
		23.0	1.64
		14.0	0.47
		13.5	0.41
		20.5	1.27
		19.0	0.99
		10.3	0.25
		25.9	3.65
		32.6	6.77
		25.5	6.95
		27.8	2.83
		32.1	5.07
		32.7	4.35
		28.1	4.78
		26.3	3.85
		29.0	3.91
	BW-1	29.2	4.16
15-Aug-19		28.8	3.93
		25.2	4.55
		26.9	2.98
		27.5	4.62
		25.0	3.12
		24.7	3.47
		24.5	2.82
		27.2	2.82
		21.6	1.65
		-	2.05
		-	1.68
		28.0	4.59
		33.9	6.02
		27.0	3.35
18-Aug-19	BW-1	23.4	2.64
10-Aug-19	DVV-1	25.9	1.86
		18.7	1.70
		19.3	1.20
		20.4	1.07
		27.2	4.40
		32.5	6.99
		28.9	5.29
		27.5	4.86
		26.8	3.03
		25.6	3.60
		29.0	3.92
		24.0	3.84
		22.1	2.12
15-Aug-19	BW-2	-	5.46
13-Aug-18	D 4 4 - Z	-	4.40
		18.4	0.88
		20.2	1.31
		-	0.99
		16.6	0.76
		-	1.34
		17.8	0.80
		13.4	0.30
		-	0.39
		10.4	0.14



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ANNEXE F-2 : Shellfish Length & Weight Data

Date	Station	Length (mm)	Weight (g)
		22.6	1.87
		16.5	0.49
		23.3	3.14
		20.3	1.63
18-Aug-19	BW-2	20.7	1.22
3		27.8	0.72
		-	1.80
		_	1.30
		11.5	0.06
		26.8	2.92
		26.0	4.08
		31.1	7.29
		25.3	3.15
			4.42
		30.5	
		23.6	2.94
		21.4	1.84
		21.0	1.17
		-	2.18
		22.8	1.79
18-Aug-19	BW-2	20.2	1.31
16-Aug-19	DVV-Z	23.5	1.83
		20.0	0.90
		19.2	1.24
		23.5	2.55
		19.0	0.94
		20.5	1.12
		13.6	0.26
		16.9	0.20
		17.0	0.56
		11.9	0.20
		11.2	0.08
		32.1	0.68
		29.8	5.46
		27.6	3.69
		24.0	1.93
		21.7	1.47
		25.0	2.40
		20.4	1.37
		30.5	4.98
		27.9	3.98
		29.0	4.10
		15.5	0.51
		29.5	4.42
		-	2.86
		26.8	2.40
18-Aug-19	BW-3	18.3	0.87
.5 / lag-15	D • • -0	26.1	2.48
		17.0	0.67
		16.1	0.59
		20.5	1.54
		13.4	0.34
		18.6	0.87
		15.8	0.40
		21.5	1.53
		19.5	1.13
		17.9	0.72
		19.9	1.08
		15.0	0.45
		13.3	0.36
		15.8	0.46
		12.9	



ANNEXE F-2 : Shellfish Length & Weight Data

Date	Station	Length (mm)	Weight (g)
		32.6	6.00
		32.3	4.79
		27.2	3.26
		24.1	3.05
		27.5	2.51
		31.6	5.17
		25.3	1.85
18-Aug-19	BW-3	20.3	0.92
10-Aug-13	DVV-3	25.1	2.02
		20.5	1.26
		16.0	0.45
		18.4	0.84
		-	0.30
		15.4	0.47
		12.5	0.20
		10.6	0.09
45 4 40	DW 0	31.3	6.53
15-Aug-19	BW-3	28.7	4.49
		28.0	5.01
		23.0	2.10
		27.5	3.64
		15.7	1.17
10-Aug-19	BW2-BW5		
		29.0	3.85
		21.0	1.45
		25.5	1.86
		18.0	0.62
		31.0	8.64
10-Aug-19	SE-1	26.0	4.32
		25.5	2.42
17-Aug-19		22.1	1.22
	SE-2	24.0	2.15
		24.4	2.18
17-Aug-19	CE 0	27.3	3.96
17-Aug-19	SE-2	26.6	3.23
		29.6	6.72
		26.1	3.49
		21.5	1.41
		-	5.07
		-	0.65
		_	2.84
		25.5	2.81
		28.4	3.16
		22.9	
			1.88
		28.7	1.01
		20.1	1.30
		23.3	1.82
		24.8	2.29
		12.6	0.26
		19.7	0.90
17-Aug-19	BE-1	19.0	0.86
		18.5	0.81
		20.7	1.12
		12.5	0.34
		21.6	1.72
		16.6	0.45
		17.1	0.73
		20.5	1.20
		18.8	0.73
		13.0	0.73
		19.8	0.43
		18.0	0.83
		21.4	0.70
		18.0	0.97
		444	0.04
		14.1 15.2	0.31 0.43



ANNEXE F-2 : Shellfish Length & Weight Data

Date	Station	Length (mm)	Weight (g)
		28.1	3.56
		28.9	4.17
		30.5	5.75
		26.3	3.98
		24.3	3.41
17-Aug-19	BE-2	21.2	1.54
3		27.4	3.68
		31.9	4.17
			3.40
		12.4	0.24
		12.0	0.24
		26.2	2.36
		28.1	3.16
		29.4	3.61
17-Aug-19	BE-3	24.1	2.32
		22.6	1.58
		23.5	1.74
		20.5	1.68
		23.7	2.24
		18.1	1.08
		20.6	1.46
		26.1	2.68
		31.3	3.25
		25.1	1.93
		27.2	2.64
		32.7	4.86
		20.7	0.73
		22.9	1.24
		29.7	3.68
		22.0	1.39
		26.4	2.61
		24.7	2.62
		19.8	1.26
		24.1	2.61
		16.0	0.67
		19.8	1.25
		21.2	1.95
		22.7	2.63
		12.1	0.21
		21.9	
17-Aug-19	BE-4		1.82
		21.0	1.72
		18.0	1.01
		21.0	1.20
		26.3	3.04
		16.4	0.79
		18.1	0.80
		15.9	0.43
		22.4	1.63
		15.9	0.56
		20.5	1.29
		19.0	0.92
		19.9	1.45
		17.1	0.75
		24.8	1.80
		11.2	
			0.19
		17.7	0.73
		14.0	0.36
		12.8	0.30
		1/1/	0.56
		14.4	0.50
		14.4 14.4 10.4	0.36 0.17



ANNEXE F-2 : Shellfish Length & Weight Data

Date	Station	Length (mm)	Weight (g)			
		32.5	3.30			
		27.4	2.66			
		36.1	5.97			
		31.1	5.63			
		29.2	3.70			
		33.1	4.89			
15-Aug-19	BE-5	25.9	3.15			
13-Aug-19	DE-3	27.9	3.46			
		31.9	4.34			
		24.6	2.63			
		20.0	1.96			
		-	1.35			
		22.3	2.50			
		26.0	3.02			
		21.5	1.42			
		25.6	1.86			
		25.7	3.01			
		23.2	1.46			
		28.7	2.65			
		22.1	1.20			
17 Aug 10	BE-5	19.4	0.83			
17-Aug-19	DE-3	26.3	3.44			
		17.3	0.63			
		26.3	4.81			
		20.6	1.11			
		17.7	0.74			
		16.7	0.39			
		14.0	0.29			

Notes:

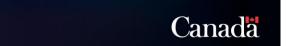
(-) = shell crushed, no length measurement taken



31 May 2019 1663724-092-R-Rev1-14000

ANNEXE G

Fish Catch and Analysis Data



Date: October 4, 2018

To: Mr. Phil Rouget, Golder Associates Ltd.

Subject: Animal Use Protocol - Letter of Approval

Dear Phil,

Your 2018 Animal Use Protocol (AUP), number FWI-ACC-2018-42, entitled "Baffinland 2018 Marine Ecological Effects Monitoring Program and Marine Habitat Offset Monitoring Program" has been reviewed and <u>approved</u> by the Freshwater Institute Animal Care Committee.

Keep this signed letter of approval as well as the signed AUP approval form for your records. Please be advised that should there be a need to revise the protocol you are requested to contact the Freshwater Institute Animal Care Committee and obtain approval prior to proceeding.

The Canadian Council on Animal Care requires Post approval Monitoring of Animal Use Protocols (AUP) and as such the Freshwater Institute Animal Care Committee is going to randomly choose AUP's and ask for photographs or video that shows the handling or interaction with the animals in these AUPs.

In addition, you are required to submit a brief report within 30 days of completion of the project outlining the unexpected changes to the protocol, the number of animals used and any unanticipated results or mortalities. The report form is attached in your approval email.

Feel free to contact me if you have any questions or concerns.

Sincerely, Travis Durhack

Chair Person of FWI-ACC

Junio Turluck

Freshwater Institute Animal Care Committee
Arctic & Aquatic Research
Central & Arctic / Région du Centre et de l'Arctique
Fisheries and Oceans Canada / Pêches et Océans Canada
501 University Crescent
Winnipeg, Manitoba R3T 2N6
Phone:204-983-5072
xca-fwisl-acc@dfo-mpo.gc.ca



APPROVAL BY ANIMAL CARE COMMITTEE MEMBERS

Signatures of ACC Members

Shapelsky	Meandson
Andrew Chapelsky	Marc Brandson
2 Cer Onstr	RAC
Dr. Ericka Anseeuw D.V.M.	Bob Artes
Kerry Wantier	Junio Turbuch
Kerry Wautier	Travis Durhack
Tant Therenge	
Brent Young	
Interim Approval	Final Approval

APPROVAL BY THE FWI ANIMAL CARE COMMITTEE IS FOR THE PERIOD STATED ON YOUR ANIMAL USE PROTOCOL.

Licence #: S-18/19-1028-NU

Philippe Rouget 3795 Carey Road 2nd floor Victoria, BC, CA V8Z 6T8

Dear Philippe Rouget,

Enclosed is your Licence to Fish for Scientific Purposes issued pursuant to Section 52 of the Fishery (General) Regulations.

Failure to comply with any of the conditions specified on the attached licence may result in a contravention of the Fishery (General) Regulations.

Please be advised that this licence only permits those activities stated on your licence. Any other activity may require approval under the Fisheries Act or other legislation. It is the Project Authority's responsibility to obtain any other approvals.

Please ensure that you include the licence number and project title in any future correspondence and that you complete the Summary Harvest Report upon completion of activities under this licence.

Yours truly,

700

July 18, 2018

Date

Jenna Kayakjuak License Delivery Officer Northern Operations Central and Arctic Region Fisheries and Oceans Canada

Enclosure



LICENCE TO FISH FOR SCIENTIFIC PURPOSES

S-18/19-1028-NU

Pursuant to Section 52 of the Fishery (General) Regulations, the Minister of Fisheries and Oceans hereby authorizes the individual(s) listed below to fish for scientific purposes, subject to the conditions specified.

Golder Associates Ltd. Philippe Rouget **Project Authority:**

> 3795 Carey Road 2nd floor Victoria, BC, CA V8Z 6T8

John Sherrin; Daniel Vicente; Andrew Rippington; Arman Ospan; Mitch Firman; Erin Linn; Other Personnel:

> Sarah Proctor; Andy Clark; Patricia Tomliens; Robert Hollingshead; Additional field staff from Pond Inlet (names to be determined). These individuals will be under the supervision of the

above staff.

Baffinland 2018 Marine Ecological Effects Monitoring Program and Marine Habitat Offset Objectives:

Monitoring Program

The Project objectives are to conduct sampling to adhere to the terms and conditions of Baffinland to operate the Mary River Mine and Port Facility in Milne Inlet including:

To assess the effectiveness of fish offsetting measures in relation to the construction of

the Milne ore dock.

To collect marine data for the Marine Ecological Effects Monitoring Program and Marine

Habitat Offset Monitoring Program regulatory requirements.

CONDITIONS

Specified Conditions:

Sampling will be conducted from Milne Inlet (Baffinland's Port Facility) to Ragged Island (Mouth of Tremblay Sound)

Samples may also be captured using Fukui traps. Dead samples will be only taken from incidental mortalities, no fish will be killed for sampling purposes.

Waters:

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Sculpin, Ribbed Gear: 10 MM Mesh Gillnets and Larger

> Fyke Nets Jigging Minnow Trap Seine

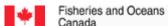
Trolling

Total Weight Weight Number Number Number Number Hours Minutes Weight Live Dead Alive Dead Tows Sets

> 500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Sculpin, Fourhorn Gear: 10 MM Mesh Gillnets and Larger



Species: Gear: Fyke Nets

Jigging Minnow Trap Seine Trolling

Total Weight Weight Number Number Number Hours Minutes

Weight Live Dead Alive Dead Tows Sets

500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Spiny Lumpsucker Gear: 10 MM Mesh Gillnets and Larger

Fyke Nets
Jigging
Minnow Trap
Seine
Trolling

Total Weight Weight Number Number Number Hours Minutes

Weight Live Dead Alive Dead Tows Sets

500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Cod, Greenland Gear: 10 MM Mesh Gillnets and Larger

Fyke Nets
Jigging
Minnow Trap
Seine
Trolling

Total Weight Weight Number Number Number Hours Minutes

Weight Live Dead Alive Dead Tows Sets

500 100

Water Body: Admiralty Inlet Point A: 69° 28' N, 101° 10' W

Species: Sculpin, Fourhorn Gear: 10 MM Mesh Gillnets and Larger

Fyke Nets
Jigging
Minnow Trap
Seine
Trolling

Total Weight Weight Number Number Number Number Hours Minutes

Weight Live Dead Alive Dead Tows Sets

500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Benthos Gear: Ponar dredge



Species: Gear: Van Veen Grab

Total Weight Weight Number Number Number Number Hours Minutes Weight Dead Dead Tows Sets Live Alive

> 3000 400

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Arctic Char (Searun) Gear: 10 MM Mesh Gillnets and Larger

> Fyke Nets Jigging Minnow Trap Seine **Trolling**

Total Weight Weight Number Number Number Number Hours Minutes Dead Alive Dead Tows Sets Weight Live

> 500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Gear: 10 MM Mesh Gillnets and Larger Species: Cod, Arctic

> Fyke Nets **Jigging** Minnow Trap Seine **Trolling**

Total Weight Weight Number Number Number Number Hours Minutes

Weight Live Dead Alive Dead Tows Sets

> 500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Gear: 10 MM Mesh Gillnets and Larger Species: Sculpin, Arctic Staghorn

> Fyke Nets **Jigging** Minnow Trap Seine **Trolling**

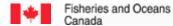
Total Weight Weight Number Number Number Number Hours Minutes Weight Live Dead Alive Dead Tows Sets

500 100

Milne Inlet Water Body: Point A: 72° 20' N, 80° 30' W

Species: Sculpin, Shorthorn Gear: 10 MM Mesh Gillnets and Larger

> Fyke Nets Jigging Minnow Trap Seine



Species: Gear: Trolling

Number Number Number Number Minutes Total Weight Weight Hours Sets Weight Live Dead Alive Dead Tows

500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Sand Lance Gear: 10 MM Mesh Gillnets and Larger

Fyke Nets
Jigging
Minnow Trap
Seine
Trolling

Number Number Total Weight Weight Number Number Hours Minutes Dead Tows Sets Live Dead Alive Weight

500 100

Water Body: Milne Inlet Point A: 72° 20' N, 80° 30' W

Species: Aquatic Invertebrates (various) Gear: Ponar dredge

Van Veen Grab

Total Weight Weight Number Number Number Hours Minutes

Weight Live Dead Alive Dead Tows Sets

200 100

Fishing Period: July 23, 2018 to August 07, 2018

A copy of this licence must be available at the study site and produced at the request of a fishery officer.

Live fish may not be retained unless specified in the conditions of this licence.

The licence holder shall immediately cease fishing when the total fish killed or live sampled reaches any of the maximums set for any of the species listed.

Transportation:

Other approvals/permits may be necessary to collect or transport certain species, such as Marine Mammal Transportation Permits. For marine mammal parts, products and derivatives a Marine Mammal Transportation Licence is required for domestic transport and, for international transport a Canadian CITES Export Permit is also required.

Disposal of Fish Caught:

Fish not required for the purpose of dead sampling and/or retention MUST be returned to the water at the site of capture. Retained fish may be made available to the nearest settlement for domestic consumption or sold commercially within the Territory. Any dead fish for commercial sale beyond the Territory in which it was caught requires authorization under the Fish Inspection Regulations. Disposal of any fish remains must be in accordance with local land use regulations.



Report on Activities:

The Project Authority will submit to the License Delivery Officer, Department of Fisheries and Oceans, within one month of the expiry date, a report stating:

- whether or not the field work was conducted; and if conducted
- ii) waterbody location, fishing coordinates, gear types used at each coordinate, numbers or amount of fish (by species) collected and/or marked and the date or period of collection.

A Summary Harvest Report template is provided by the License Delivery Officer at time of issuance of this licence.

The Project Authority also will provide a copy of any published or public access documents which result from the project . Information supplied will be used for population management purposes by the Department of Fisheries and Oceans and becomes part of the public record.

All documents should be sent to:

Fisheries and Oceans Canada Northern Operations Central and Arctic Region P.O. Box 358 Iqaluit, NU X0A 0H0

Attention: License Delivery Officer

Telephone: (867) 979-8005 Fax: (867) 979-8039

E-mail: XCNA-NT-NUpermit@dfo-mpo.gc.ca

Notification of Commencement:

Prior to the commencement of fishing the Project Authority will contact:

Fisheries and Oceans Canada Northern Operations Central and Arctic Region P.O. Box 358 Igaluit, NU X0A 0H0

Attention: License Delivery Officer

Telephone: (867) 979-8005 Fax: (867) 979-8039

E-mail: XCNA-NT-NUpermit@dfo-mpo.gc.ca



July 18, 2018

Date

Larry Dow Director, Northern Operations

Central and Arctic Region Fisheries and Oceans Canada

For the Minister of Fisheries and Oceans.

Pursuant to Section 52 of the Fishery (General) Regulations.

Fishing Method	Site #	Date 20 Aug 19	Species ¹		Length (mm ⁾²	Sex ²	Life Stage ²
	AN-02 AN-02	20-Aug-18 20-Aug-18	SHSC SHSC	272 244	260 275	-	-
	AN-02	10-Aug-18	-	-	-	-	-
	AN-02	20-Aug-18	SHSC	261	250	_	-
	AN-02	20-Aug-18	SHSC	325	500	-	-
	AN-03	21-Aug-18	SHSC	261	250	-	-
	AN-03	21-Aug-18	FHSC	191	125	-	-
	AN-04	21-Aug-18	-	-	-	-	-
A	AN-05	25-Aug-18	SHSC	388	825	-	A
Angling	AN-06 AN-07	25-Aug-18 26-Aug-18	SHSC	218	- 175	<u>-</u> М	- A
	AN-08	26-Aug-18	-	-	-	-	-
	AN-09	26-Aug-18	_	_	_	_	-
	AN-10	27-Aug-18	FHSC	248	175	-	-
	AN-11	27-Aug-18	FHSC	296	300	-	-
	AN-11	27-Aug-18	FHSC	270	260	-	-
	AN-11	27-Aug-18	ARSC	104	16	-	J
	AN-12	27-Aug-18	-	-	-	-	-
	AN-13	27-Aug-18	FHSC	245	130	-	-
	FT-01	10-Aug-18	Urchin	-	-	-	-
	FT-01	10-Aug-18	Crinnid	-	-	-	-
	FT-01 FT-01	10-Aug-18 10-Aug-18	Urchin Urchin	-	-	-	-
	FT-01	10-Aug-16 10-Aug-18	Urchin	-	-	-	-
	FT-01	10-Aug-18	Urchin	-	-	-	-
	FT-01	10-Aug-18	Scallop	-	-	-	-
	FT-01	10-Aug-18	- '	-	-	-	-
	FT-02	10-Aug-18	Urchin	-	-	-	-
	FT-02	10-Aug-18	Urchin	-	-	-	-
	FT-02	10-Aug-18	Brittle star	-	-	-	-
	FT-02	10-Aug-18	Scallop	-	-	-	-
Fortest Town	FT-02	10-Aug-18	Shrimp	-	-	-	-
Fukui Trap	FT-02	10-Aug-18	Shrimp	-	-	-	-
	FT-02 FT-02	10-Aug-18 10-Aug-18	Shrimp Shrimp	-	-	-	-
	FT-02	10-Aug-18	Snail	-	-	-	-
	FT-03	10-Aug-18	-	_	-	-	_
	FT-04	10-Aug-18	-	-	-	-	-
	FT-05	17-Aug-18	-	-	-	-	-
	FT-06	17-Aug-18	ARSC	70	-	-	-
	FT-06	17-Aug-18	FHSC	312	350	-	-
	FT-07	17-Aug-18	-	-	-	-	-
	FT-08	17-Aug-18	FHSC	163	100	-	-
	FT-09	21-Aug-18	- NDON	-	-	-	-
	FT-10	21-Aug-18	NRSN	158	-	-	-
	FT-11 GN-01	25-Aug-18 29-Jul-18	- ARCH	674	3100	-	-
	GN-01	29-Jul-18	ARCH	630	2800	-	-
	GN-01	29-Jul-18	ARCH	530	1700	-	-
	GN-01	29-Jul-18	FHSC	182	41	-	-
	GN-02	30-Jul-18	FHSC	258	203	-	-
	GN-02	30-Jul-18	SHSC	258	182	-	-
	GN-02	30-Jul-18	FHSC	208	135	-	-
	GN-02	30-Jul-18	ARCH	528	1750	-	-
	GN-02	30-Jul-18	ARCH	584	2130	-	-
	GN-02 GN-02	30-Jul-18 30-Jul-18	ARCH SHSC	633 249	3050 169	-	-
	GN-02 GN-02	30-Jul-18 30-Jul-18	SHSC	249	153	-	-
	GN-02	30-Jul-18	ARCH	322	405	_	-
	GN-03	30-Jul-18	ARCH	296	251	-	-
	GN-03	30-Jul-18	ARCH	406	748	-	-
	GN-03	30-Jul-18	ARCH	644	2900	-	-
	GN-03	30-Jul-18	ARCH	475	1400	-	-
	GN-03	30-Jul-18	ARCH	529	1680	-	-
	GN-03	30-Jul-18	ARCH	466	1200	-	-
	GN-04	30-Jul-18	ARCH	620	2610	-	-
	GN-04	30-Jul-18	ARCH	639	2840	-	-
	GN-04	30-Jul-18	ARCH	240	143	-	-
	GN-04	30-Jul-18	ARCH	239	115	-	-

ishing Method	Site #	Date	Species ¹		Length (mm ⁾²	Sex ²	Life Stage
	GN-04	30-Jul-18	ARCH	238	118	-	-
	GN-04	30-Jul-18	ARCH	308	282	-	-
	GN-04	30-Jul-18	ARCH	254	141	-	-
	GN-04	30-Jul-18	ARCH	220	44	-	-
	GN-04 GN-04	30-Jul-18 30-Jul-18	ARCH ARCH	252 234	148 115	-	-
	GN-04 GN-04	30-Jul-18	ARCH	222	110	-	-
	GN-04	30-Jul-18	ARCH	241	132	_	
	GN-04 GN-04	30-Jul-18	ARCH	298	241	-	-
	GN-04	30-Jul-18	ARCH	242	134		-
	GN-04	30-Jul-18	ARCH	244	142		
	GN-04	30-Jul-18	ARCH	253	190	_	_
	GN-04	30-Jul-18	ARCH	241	141	_	_
	GN-04	30-Jul-18	FHSC	208	98	_	_
	GN-04	30-Jul-18	ARCH	441	920	-	_
	GN-04	30-Jul-18	ARCH	446	1035	-	-
	GN-04	30-Jul-18	ARCH	400	655	-	-
	GN-04	30-Jul-18	SHSC	315	450	-	-
	GN-04	30-Jul-18	SHSC	272	245	-	-
	GN-04	30-Jul-18	SHSC	244	320	-	-
	GN-04	30-Jul-18	SHSC	252	318	-	-
	GN-04	30-Jul-18	FHSC	256	62	-	-
	GN-04	30-Jul-18	FHSC	304	251	-	-
	GN-05	30-Jul-18	-	-	-	-	-
	GN-06	30-Jul-18	ARCH	770	4350	-	-
	GN-06	30-Jul-18	ARCH	420	748	-	-
	GN-06	30-Jul-18	FHSC	181	60	-	-
	GN-06	30-Jul-18	ARCH	162	41	-	-
	GN-06	30-Jul-18	ARCH	619	2610	-	-
	GN-06	30-Jul-18	ARCH	536	1610	-	-
	GN-06	30-Jul-18	ARCH	440	920	-	-
	GN-06	30-Jul-18	ARCH	220	101	-	-
	GN-07	02-Aug-18	ARCH	538	1750	-	-
	GN-07	02-Aug-18	ARCH	510	1510	-	-
	GN-07	02-Aug-18	ARCH	481	1250	-	-
	GN-07	02-Aug-18	FHSC	263	172	-	-
	GN-07	02-Aug-18	FHSC	122	-	-	-
	GN-07	02-Aug-18	ARCH	464	950	-	-
	GN-07	02-Aug-18	ARCH	330	315	-	-
	GN-07	02-Aug-18	ARCH	275	192	-	-
	GN-07	02-Aug-18	FHSC	226	103	-	-
	GN-07	02-Aug-18	FHSC	230	107	-	-
	GN-07	02-Aug-18	FHSC	232	111	-	-
	GN-07	02-Aug-18	FHSC	160	42	-	-
	GN-07	02-Aug-18	ARCH	375	595	-	-
	GN-07	02-Aug-18	ARCH	360	536	-	-
	GN-07	02-Aug-18	ARCH	367	493	-	-
	GN-07	02-Aug-18	ARCH	454	1040	-	-
	GN-07	02-Aug-18	SHSC	246	189	-	-
	GN-07	02-Aug-18	FHSC	244	151	-	-
	GN-07	02-Aug-18	FHSC	212	90	-	-
	GN-07 GN-07	02-Aug-18 02-Aug-18	FHSC FHSC	222 248	113 164	-	-
						-	-
	GN-07 GN-07	02-Aug-18 02-Aug-18	FHSC SHSC	233 201	115 86	-	-
	GN-07 GN-07	02-Aug-16 02-Aug-18	SHSC	186	63		-
	GN-07	02-Aug-18	ARCH	383	622	-	-
	GN-07	02-Aug-18 02-Aug-18	ARCH	743	3890	-	-
	GN-07	02-Aug-18	ARCH	356	1074	_	-
	GN-07	02-Aug-18	ARCH	482	1251	-	-
	GN-07	02-Aug-18	ARCH	503	1293	-	-
	GN-07	02-Aug-10	ARCH	390	635	-	-
	GN-07	02-Aug-10 02-Aug-18	SHSC	291	264	-	-
	GN-07	02-Aug-10 02-Aug-18	SHSC	253	180	-	-
	GN-07	02-Aug-10 02-Aug-18	SHSC	236	158		-
	GN-08	02-Aug-10 02-Aug-18	ARCH	572	2250	-	-
	GN-08	02-Aug-10 02-Aug-18	ARCH	426	751	_	
	3.100						
	GN-08	02-Aug-18	ARCH	470	1120	-	-

ishing Method	Site #	Date	Species ¹		Length (mm ⁾²	Sex ²	Life Stage
	GN-08	02-Aug-18	ARCH	506	1420	-	 -
	GN-08	02-Aug-18	ARCH	466	930	-	-
	GN-08 GN-08	02-Aug-18	FHSC	192	81	-	-
	GN-08	02-Aug-18 02-Aug-18	FHSC FHSC	280 276	242 81	-	-
	GN-08	02-Aug-18	SHSC	220	101	-	
	GN-08	02-Aug-18	FHSC	210	108	_	_
	GN-08	02-Aug-18	FHSC	290	288	-	_
	GN-08	02-Aug-18	FHSC	260	206	-	_
	GN-08	02-Aug-18	SHSC	212	125	-	-
	GN-08	02-Aug-18	ARCH	524	1700	-	-
	GN-08	02-Aug-18	SHSC	222	140	-	-
	GN-08	02-Aug-18	FHSC	290	223	-	-
	GN-08	02-Aug-18	FHSC	286	315	-	-
	GN-08	02-Aug-18	SHSC	266	212	-	-
	GN-08	02-Aug-18	FHSC	266	235	-	-
	GN-08	02-Aug-18	SHSC	266	130	-	-
	GN-08	02-Aug-18	ARSC	400	680	-	-
	GN-08	02-Aug-18	SHSC	342	490	-	-
	GN-08	02-Aug-18	SHSC	280	240	-	-
	GN-08	02-Aug-18	UKSC	240	210	-	-
	GN-08	02-Aug-18	SHSC	304	325	-	-
	GN-08 GN-08	02-Aug-18	SHSC FHSC	246 272	175 190	-	-
	GN-08	02-Aug-18 02-Aug-18	SHSC	262	230	-	-
	GN-08	02-Aug-18	SHSC	266	215	-	-
	GN-08	02-Aug-10 02-Aug-18	ARCH	420	745	-	+ -
	GN-08	02-Aug-18	SHSC	392	760	_	
	GN-08	02-Aug-18	FHSC	290	230	-	-
	GN-08	02-Aug-18	ARCH	480	1220	_	-
	GN-08	02-Aug-18	ARCH	676	3420	-	-
	GN-08	02-Aug-18	ARCH	422	750	-	-
	GN-08	02-Aug-18	ARCH	416	750	-	-
	GN-08	02-Aug-18	SHSC	154	42	-	-
	GN-08	02-Aug-18	ARCH	490	1150	-	-
	GN-08	02-Aug-18	FHSC	282	272	-	-
	GN-08	02-Aug-18	ARCH	520	1480	-	-
	GN-08	02-Aug-18	FHSC	262	180	-	-
	GN-08	02-Aug-18	FHSC	254	190	-	-
	GN-08	02-Aug-18	FHSC	296	260	-	-
	GN-08	02-Aug-18	FHSC	270	180	-	-
	GN-08	02-Aug-18	SHSC	240	170	-	-
	GN-08	02-Aug-18	SHSC	252	180	-	-
	GN-08	02-Aug-18	ARCH	330	160	-	-
	GN-09 GN-09	04-Aug-18 04-Aug-18	ARCH FHSC	626 204	2700 151	-	-
	GN-09	04-Aug-18	ARCH	504	1510	-	-
	GN-09	04-Aug-18	FHSC	254	140	-	-
	GN-09	04-Aug-18	FHSC	262	210	_	-
	GN-09	04-Aug-18	FHSC	240	170	-	_
	GN-09	04-Aug-18	ARCH	522	1340	-	-
	GN-09	04-Aug-18	ARCH	502	1500	-	-
	GN-09	04-Aug-18	ARCH	350	400	-	-
	GN-09	04-Aug-18	ARCH	460	1050	-	-
	GN-09	04-Aug-18	ARCH	442	950	-	-
	GN-09	04-Aug-18	ARCH	450	960	-	-
	GN-09	04-Aug-18	ARCH	446	520	-	-
	GN-09	04-Aug-18	FHSC	190	60	-	-
	GN-09	04-Aug-18	ARCH	420	810	-	-
	GN-09	04-Aug-18	ARCH	444	850	-	-
	GN-09	04-Aug-18	FHSC	230	80	-	-
	GN-09	04-Aug-18	FHSC	162	37	-	-
	GN-09	04-Aug-18	ARCH	510	1600	-	-
	GN-10	04-Aug-18	ARCH	582	2510	-	-
	GN-10	04-Aug-18	ARCH	450	850	-	-
	ON 1.0				210	-	-
	GN-10	04-Aug-18	SHSC	260	210		
	GN-10 GN-10 GN-10	04-Aug-18 04-Aug-18 04-Aug-18	SHSC SHSC SHSC	275 266	270 270 220	-	-

	GN-10	04-Aug-18	ARCO				
				282	180	-	-
	GN-10 GN-10	04-Aug-18 04-Aug-18	FHSC SHSC	302 180	240 70	-	-
	GN-10	04-Aug-18	SHSC	270	240	-	-
	GN-11	04-Aug-18	SHSC	242	190	_	_
	GN-11	04-Aug-18	ARCH	470	1200	-	-
	GN-11	04-Aug-18	ARCH	776	4460	-	_
	GN-11	04-Aug-18	ARCH	690	3350	-	-
	GN-11	04-Aug-18	ARCH	466	890	-	-
	GN-11	04-Aug-18	ARCH	390	600	-	-
	GN-11 GN-11	04-Aug-18 04-Aug-18	ARCH SHSC	450 362	450 730	-	-
	GN-11	04-Aug-18	SHSC	200	90	-	-
	GN-11	04-Aug-18	FHSC	216	100	-	-
	GN-11	04-Aug-18	SHSC	180	50	-	-
	GN-11	04-Aug-18	SHSC	142	31	-	-
	GN-11	04-Aug-18	FHSC	256	210	-	-
	GN-12	09-Aug-18	ARCH	390	700	-	-
	GN-12	09-Aug-18	ARCH	448	1050	-	-
	GN-12 GN-12	09-Aug-18 09-Aug-18	ARCH ARCH	486 300	1390 310	-	-
	GN-12 GN-12	09-Aug-18	ARCH	376	505	-	-
	GN-12	09-Aug-18	FHSC	198	81	_	_
	GN-12	09-Aug-18	ARCH	468	1160	-	-
	GN-12	09-Aug-18	ARCH	560	2390	-	-
	GN-12	09-Aug-18	ARCH	374	560	-	-
	GN-12	09-Aug-18	ARCH	396	700	-	-
Gill Net	GN-12	09-Aug-18	ARCH	396	700	-	-
	GN-12 GN-12	09-Aug-18	ARCH ARCH	312 346	280 370	-	-
	GN-12 GN-12	09-Aug-18 09-Aug-18	ARCH	368	540	-	_
	GN-12	09-Aug-18	ARCH	396	790	_	_
	GN-12	09-Aug-18	ARCH	380	570	-	-
	GN-12	09-Aug-18	ARCH	484	1395	-	-
	GN-12	09-Aug-18	ARCH	340	460	-	-
	GN-12	09-Aug-18	ARCH	370	605	-	-
	GN-12	09-Aug-18	ARCH	342	450	-	-
	GN-12	09-Aug-18	ARCH ARCH	394	540	-	-
	GN-12 GN-12	09-Aug-18 09-Aug-18	ARCH	458 342	1050 450	-	-
	GN-12	09-Aug-18	FHSC	220	120	-	-
	GN-12	09-Aug-18	SHSC	108	70	-	_
	GN-12	09-Aug-18	ARCH	400	720	-	-
	GN-13	09-Aug-18	ARCH	580	2350	-	-
	GN-13	09-Aug-18	ARCH	390	660	-	-
	GN-13	09-Aug-18	ARCH	370	530	-	-
	GN-13	09-Aug-18	ARCH	308	260	-	-
	GN-13 GN-13	09-Aug-18 09-Aug-18	ARCH ARCH	434 306	980 550	-	-
	GN-13	09-Aug-18	ARCH	460	1160	-	-
	GN-13	09-Aug-18	FHSC	186	70	-	_
	GN-13	09-Aug-18	FHSC	162	41	-	-
	GN-13	09-Aug-18	SHSC	168	35	-	-
	GN-13	09-Aug-18	FHSC	250	130	-	-
	GN-13	09-Aug-18	FHSC	252	140	-	-
	GN-13	09-Aug-18	SHSC	128	8	-	-
	GN-13 GN-13	09-Aug-18 09-Aug-18	SHSC ARCH	114 530	5 1790	-	-
	GN-13 GN-13	09-Aug-18 09-Aug-18	SHSC	260	210	-	-
	GN-13	09-Aug-18	SHSC	282	351	-	-
	GN-13	09-Aug-18	ARCH	560	1830	-	-
	GN-13	09-Aug-18	FHSC	162	41	-	-
	GN-13	09-Aug-18	FHSC	250	170	-	-
	GN-13	09-Aug-18	FHSC	230	105	-	-
	GN-13	09-Aug-18	SHSC	220	85	-	-
	GN-13	09-Aug-18	ARCH	486	1390	-	-
	GN-13	09-Aug-18	FHSC	242 340	91 440	-	-
	GN-13	09-Aug-18	ARCH				

Fishing Method	Site #	Date	Species ¹		Length (mm)2	Sex ²	Life Stage
	GN-13	09-Aug-18	ARCH	350	440	-	-
	GN-13	09-Aug-18	ARCH	516	1495	-	-
	GN-13	09-Aug-18	ARCH	496	1330	-	-
	GN-14	12-Aug-18	ARCH	432	930	-	-
	GN-14	12-Aug-18	ARCH	400	690	-	-
	GN-14	12-Aug-18	ARCH	388	620	-	-
	GN-14	12-Aug-18	ARCH	298	270	-	-
	GN-14	12-Aug-18	ARCH	570	1940	-	-
	GN-14	12-Aug-18	ARCH	550	2070	-	-
	GN-14	12-Aug-18	ARCH	520	1620	-	-
	GN-14	12-Aug-18	ARCH	435	970	-	-
	GN-14	12-Aug-18	ARCH	402	710	-	-
	GN-14	12-Aug-18	FHSC	290	280	-	-
	GN-14	12-Aug-18	SHSC	188	52	-	-
	GN-14	12-Aug-18	SHSC	174	40	-	-
	GN-14	12-Aug-18	ARCH	536	1730	-	-
	GN-14	12-Aug-18	ARCH	360	480	-	-
	GN-14	12-Aug-18	ARCH	550	2020	-	-
	GN-14	12-Aug-18	SHSC	180	46	-	-
	GN-14	12-Aug-18	SHSC	166	40	-	-
	GN-14	12-Aug-18	FHSC	242	160	-	-
	GN-14	12-Aug-18	FHSC	270	230	-	-
	GN-14	12-Aug-18	FHSC	250	160	-	-
	GN-14	12-Aug-18	FHSC	220	110	-	-
	GN-14	12-Aug-18	SHSC	230	120	-	-
	GN-14	12-Aug-18	ARCH	543	-	-	-
	GN-14	12-Aug-18	ARCH	536	-	-	-
	GN-14	12-Aug-18	ARCH	460	-	-	-
	GN-14	12-Aug-18	ARCH	486	-	-	-
	GN-14	12-Aug-18	ARCH	487	-	_	_
	GN-14	12-Aug-18	ARCH	474	-	-	_
	GN-14	12-Aug-18	ARCH	643	_	-	_
	GN-14	12-Aug-18	ARCH	398	-	-	_
	GN-15	12-Aug-18	ARCH	536	1860	-	_
	GN-15	12-Aug-18	ARCH	456	1060	-	_
	GN-15	12-Aug-18	ARCH	490	1400	_	_
	GN-15	12-Aug-18	ARCH	366	495	-	_
	GN-15	12-Aug-18	ARCH	350	440	_	_
	GN-15	12-Aug-18	ARCH	692	2850	-	_
	GN-15	12-Aug-18	ARCH	436	880	_	_
	GN-15	12-Aug-18	FHSC	240	170	_	_
	GN-15	12-Aug-18	ARCH	691	-	-	_
	GN-15	12-Aug-18	ARCH	402	_	_	_
	GN-15	12-Aug-18	ARCH	346	_	_	_
	GN-15	12-Aug-18	ARCH	410	_	_	_
	GN-15	12-Aug-18	ARCH	354	_	-	-
	GN-15 GN-16	12-Aug-18	ARCH	290	150	-	-
	GN-16 GN-16	12-Aug-16 12-Aug-18	ARCH	398	610	-	-
	GN-16	12-Aug-18	ARCH	416	680	-	-
	GN-16	12-Aug-18	ARCH	466	1150		-
	GN-16	12-Aug-18	ARCH	478	1040	-	
	GN-16 GN-16	12-Aug-16 12-Aug-18	ARCH	430	840	-	-
				1			-
	GN-16	12-Aug-18 12-Aug-18	FHSC	254	197	-	-
	GN-16	12-Aug-18 12-Aug-18	FHSC	220	43	-	 -
	GN-16		FHSC	200	40	-	-
	GN-17	12-Aug-18	FHSC	212	71	-	-
	GN-17	12-Aug-18	FHSC	194	62	-	-
	GN-17	12-Aug-18	FHSC	232	112	-	-
	GN-17	12-Aug-18	FHSC	228	110	-	-
	GN-17	12-Aug-18	SHSC	140	7	-	-
	GN-17	12-Aug-18	SHSC	168	40	-	-
	GN-17	12-Aug-18	SHSC	170	33	-	-
	GN-17	12-Aug-18	SHSC	160	41	-	-
	GN-17	12-Aug-18	SHSC	200	70	-	-
	GN-17	12-Aug-18	FHSC	174	38	-	-
	GN-17	12-Aug-18	FHSC	170	40	-	-
	GN-17	12-Aug-18	FHSC	180	64		-
1	GN-17	12-Aug-18	SHSC	182	60	-	-
	GN-17	12-Aug-18	FHSC	240	130		

ANNEXE G-2 2018 MEEMP Fish Data

	GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-18 GN-18 GN-18 GN-18 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22 GN-22 GN-22	12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC FHSC FHSC FHSC FHSC	240 240 220 250 220 238 218 212 240 240 246 206 258 185 142 170 - 270 156 176 749 272	127 141 103 180 110 130 120 110 140 140 250 150 200 60 37 57 - 300 25 30 5000	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -
	GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21	12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC FHSC FHSC FHSC FHSC	220 250 220 238 218 212 240 240 246 206 258 185 142 170 - 270 156 176 749	103 180 110 130 120 110 140 140 250 150 200 60 37 57 - 300 25 30 5000		- - - - - - - - - - - - - - - - - - -
	GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21	12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC FHSC FHSC FHSC FHSC	250 220 238 218 212 240 240 246 206 258 185 142 170 - 270 156 176 749	180 110 130 120 1110 140 140 250 150 200 60 37 57 - 300 25 30 5000		- - - - - - - - J J
	GN-17 GN-17 GN-17 GN-17 GN-17 GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21	12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC FHSC FHSC FHSC FHSC	220 238 218 212 240 240 246 206 258 185 142 170 - 270 156 176 749	110 130 120 110 140 140 250 150 200 60 37 57 - 300 25 30 5000	-	- - - - - - - J J
	GN-17 GN-17 GN-17 GN-17 GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22 GN-22 GN-22	12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC FHSC FHSC FHSC FHSC	238 218 212 240 246 206 258 185 142 170 - 270 156 176 749	130 120 110 140 140 250 150 200 60 37 57 - 300 25 30 5000	-	- - - - - - - J J
	GN-17 GN-17 GN-17 GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22 GN-22	12-Aug-18 12-Aug-18 12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC FHSC FHSC ARCH ARCH FHSC FHSC FHSC ARCH SHSC FHSC FHSC FHSC FHSC FHSC FHSC FH	218 212 240 246 206 258 185 142 170 - 270 156 176 749	120 110 140 140 250 150 200 60 37 57 - 300 25 30 5000		- - - - - - J J - - - -
	GN-17 GN-17 GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	12-Aug-18 12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC ARCH ARCH FHSC FHSC - SHSC FHSC ARCH SHSC FHSC FHSC FHSC FHSC FHSC FHSC FH	212 240 246 206 258 185 142 170 - 270 156 176 749	110 140 140 250 150 200 60 37 57 - 300 25 30 5000		- - - - - - - - - - - -
	GN-17 GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	12-Aug-18 12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC FHSC ARCH ARCH FHSC FHSC SHSC FHSC FHSC ARCH SHSC FHSC	240 240 246 206 258 185 142 170 - 270 156 176 749	140 140 250 150 200 60 37 57 - 300 25 30 5000	- - - - - - - - - -	- J J - - - -
	GN-17 GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	12-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC FHSC ARCH ARCH FHSC FHSC - SHSC FHSC FHSC ARCH SHSC FHSC	240 246 206 258 185 142 170 - 270 156 176 749	140 250 150 200 60 37 57 - 300 25 30 5000	- - - - - - - -	- J J - - - -
	GN-18 GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22 GN-22	20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC ARCH ARCH FHSC FHSC - SHSC FHSC FHSC ARCH SHSC FHSC FHSC FHSC FHSC FHSC FHSC	246 206 258 185 142 170 - 270 156 176 749	250 150 200 60 37 57 - 300 25 30 5000	- - - - - - - -	- J J - - - -
	GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22 GN-22	20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC ARCH ARCH FHSC FHSC - SHSC FHSC FHSC ARCH SHSC FHSC	206 258 185 142 170 - 270 156 176 749	150 200 60 37 57 - 300 25 30 5000		- J J - - - -
	GN-18 GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22 GN-22	20-Aug-18 20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	ARCH ARCH FHSC FHSC - SHSC FHSC FHSC ARCH SHSC FHSC	258 185 142 170 - 270 156 176 749	200 60 37 57 - 300 25 30 5000	- - - - -	J J - - - -
	GN-18 GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	20-Aug-18 20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	ARCH FHSC FHSC - SHSC FHSC FHSC ARCH SHSC FHSC	185 142 170 - 270 156 176 749	60 37 57 - 300 25 30 5000		- - - - -
	GN-19 GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	20-Aug-18 20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC - SHSC FHSC FHSC ARCH SHSC FHSC	142 170 - 270 156 176 749	37 57 - 300 25 30 5000	- - - -	-
	GN-19 GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	20-Aug-18 21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC - SHSC FHSC FHSC ARCH SHSC FHSC	170 - 270 156 176 749	57 - 300 25 30 5000	- - - -	- - - -
	GN-20 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	21-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	SHSC FHSC FHSC ARCH SHSC FHSC	- 270 156 176 749	300 25 30 5000	- - -	
	GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	SHSC FHSC FHSC ARCH SHSC FHSC	156 176 749	25 30 5000	-	-
	GN-21 GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC FHSC ARCH SHSC FHSC	156 176 749	25 30 5000	-	-
	GN-21 GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	FHSC ARCH SHSC FHSC	176 749	30 5000	-	-
	GN-21 GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	ARCH SHSC FHSC	749	5000		- Δ
	GN-21 GN-21 GN-21 GN-22 GN-22 GN-22	25-Aug-18 25-Aug-18 25-Aug-18 25-Aug-18	SHSC FHSC			M	Δ
	GN-21 GN-21 GN-22 GN-22 GN-22	25-Aug-18 25-Aug-18 25-Aug-18	FHSC	272			
	GN-21 GN-22 GN-22 GN-22	25-Aug-18 25-Aug-18			275	-	-
	GN-22 GN-22 GN-22	25-Aug-18	FLICA	238	150	-	-
	GN-22 GN-22		FHSC	220	100	-	-
	GN-22		SHSC	292	300	-	-
		25-Aug-18	FHSC	212	90	-	-
		25-Aug-18	SHSC	179	50	-	-
	GN-22	25-Aug-18	FHSC	160	50	-	-
1	GN-23	26-Aug-18	ARCH	440	2350	-	-
	GN-23	26-Aug-18	FHSC	170	44	-	-
	GN-23	26-Aug-18	FHSC	210	100	-	-
	GN-23	26-Aug-18	FHSC	192	60	-	-
	GN-23	26-Aug-18	FHSC	163	38	-	-
	GN-23	26-Aug-18	FHSC	235	120	-	-
	GN-23	26-Aug-18	FHSC	126	110	-	-
	GN-23	26-Aug-18	FHSC	220	105	-	-
	GN-23	26-Aug-18	FHSC	212	125	-	-
	GN-23	26-Aug-18	FHSC	254	220	-	-
	GN-23	26-Aug-18	FHSC	226	90	-	-
	GN-23	26-Aug-18	FHSC	180	60	-	-
	GN-23	26-Aug-18	FHSC	234	110	-	-
	GN-23	26-Aug-18	FHSC	185	45	-	-
	GN-23	26-Aug-18	FHSC	169	47	-	-
	GN-23	26-Aug-18	SHSC	108	10	-	-
	GN-23	26-Aug-18	SHSC	209	75	-	-
I	GN-23	26-Aug-18	FHSC	162	38	-	-
I	GN-23	26-Aug-18	FHSC	152	35	-	-
	GN-23	26-Aug-18	FHSC	240	110	-	-
	GN-23	26-Aug-18	FHSC	260	220	-	-
	GN-23	26-Aug-18	FHSC	268	200	-	-
l —	GN-23	26-Aug-18	FHSC	251	125	-	-
	GN-23	26-Aug-18	FHSC	238	100	-	-
	GN-23	26-Aug-18	FHSC	249	150	-	-
	GN-23	26-Aug-18	FHSC	256	175	-	-
	GN-23	26-Aug-18	FHSC	230	125	-	-
	GN-23	26-Aug-18	FHSC	240	150	_	_
	GN-23	26-Aug-18	FHSC	216	100	_	_
	GN-23	26-Aug-18	FHSC	188	50	-	-
	GN-23	26-Aug-18	FHSC	168	41	-	_
	GN-23	26-Aug-18	FHSC	206	75	-	
I —	GN-23	26-Aug-18	FHSC	272	175	-	-
	GN-23	26-Aug-18	FHSC	240	150	-	-
	GN-23	26-Aug-18	FHSC	275	200	-	-
	GN-23	26-Aug-18	FHSC	198	75	-	-
	GN-23	26-Aug-18	FHSC	213	80	-	-
	GN-23 GN-23	26-Aug-18 26-Aug-18	FHSC	213	125	-	-
	GN-23	26-Aug-18	FHSC	242	100	-	- -
	GN-23 GN-23	26-Aug-18	FHSC	147	33	-	-
	GN-23 GN-24	26-Aug-18 26-Aug-18	FHSC	246	100	-	-

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ANNEXE G-2 2018 MEEMP Fish Data

Fishing Method	Site #	Date	Species ¹	Weight (g) ²	Length (mm ⁾²	Sex ²	Life Stage ²
	GN-24	26-Aug-18	FHSC	238	125	-	-
	GN-24	26-Aug-18	SHSC	152	35	-	-
	GN-24	26-Aug-18	FHSC	208	60	-	-
	GN-24	26-Aug-18	FHSC	205	50	-	-
	GN-24	26-Aug-18	FHSC	210	45	-	-
	GN-24	26-Aug-18	FHSC	158	39	-	-
	GN-24	26-Aug-18	FHSC	106	11	-	-
	GN-24	26-Aug-18	SHSC	81	7	-	-
	GN-24	26-Aug-18	FHSC	130	20	-	-
	GN-24	26-Aug-18	FHSC	204	75	-	-
	SN-01	21-Aug-18	-	-	-	-	-
	SN-02	21-Aug-18	SHSC	76	-	-	-
	SN-03	21-Aug-18	-	-	-	-	-
	SN-04	26-Aug-18	SHSC	62	3	U	J
	SN-05	26-Aug-18	FHSC	62	2	U	J
Seine Net	SN-05	26-Aug-18	FHSC	70	2	U	J
Sellie Net	SN-05	26-Aug-18	SHSC	61	2	U	J
	SN-05	26-Aug-18	SHSC	52	2	U	J
	SN-05	26-Aug-18	UKWN	-	-	U	F
	SN-06	26-Aug-18	FHSC	60	2	U	-
	SN-06	26-Aug-18	UKSC	34	-	U	J
	SN-06	26-Aug-18	UKSC	39	-	U	J

Notes:

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¹Species Codes: ;ARCH = Arctic char; ARCO = Arctic Cod; ARSC = Arctic sculpin; FHSC = Fourhorn sculpin; SHSC = Shorthorn sculpin; NRSL = Northern sand lance; UKWN = Unknown species; UKSC = Unknown sculpin

²A = adult, F = fry, J = juvenile, M = male, U = unknown, (-) = no data

Fish ID	Source	Taxonomic Group	Taxon ¹	Stage	Abundance	Total WW	WW per individual (g) ³
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Parts	n/a	0.43	0.432
GN3-1	Benthic	Arthropoda Diptera	Diamesa sp.	Larvae	1	<0.01	0.001
	Benthic	Arthropoda Diptera	Diptera indet.	Larvae Parts	1	<0.01	<0.001
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	34	0.10	0.003
GN7-1	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult	7	0.04	0.005
OIV7-I	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.92	0.918
	Planktonic	Arthropoda Mysida	Mysis sp.	Adult Parts	112	0.54	0.005
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	15	0.05	0.003
	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult	2	0.03	0.013
GN7-2	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.66	0.656
	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Adult Parts	3	0.02	0.008
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	169	0.81	0.005
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Parts	n/a	0.01	0.014
GN7-3	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	3	<0.01	0.001
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	10	0.04	0.004
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	28	0.06	0.002
GN7-4	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	2	0.01	0.005
GIV7-4	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.14	0.141
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	25	0.14	0.006
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	77	0.22	0.003
GN7-5	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	7	0.03	0.004
	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.02	0.022
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	65	0.32	0.005

Fish ID	Source	Taxonomic Group	Taxon ¹	Stage	Abundance	Total WW	WW per individual (g) ³
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Parts	n/a	0.04	0.045
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult	1	0.01	0.011
	Planktonic	Chordata Scorpaeniformes	Cottidae indet.	Adult	1	0.85	0.853
GN7-6	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.67	0.672
	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Adult	1	0.01	0.009
	Planktonic	Chordata Vertebrata	Pisces indet.	Juvenile	1	0.01	0.006
	Planktonic	Arthropoda Calanoida	Pseudocalanus sp.	Adult	3	0.02	0.005
GN7-7	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	14	0.08	0.005
GN/-/	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	8	0.03	0.004
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	180	0.73	0.004
GN7-8	Planktonic	Arthropoda Calanoida	Calanus glacialis	Adult	16	0.10	0.006
GN7-8	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult	1	0.01	0.006
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	164	0.78	0.005
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	35	0.10	0.003
P	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult	1	0.01	0.006
GN7-9	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.61	0.611
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	n/a	<0.01	0.003
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	63	0.20	0.003
	Planktonic	Arthropoda Calanoida	Calanus glacialis	Adult	7	0.03	0.004
	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult	1	<0.01	0.005
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult	1	<0.01	0.002
GN7-10	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.41	0.415
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	21	0.08	0.004
	Planktonic	Arthropoda Mysida	Mysis sp.	Adult Parts	15	0.65	0.043
	Epibenthic	Arthropoda Amphipoda	Onisimus sp.	Adult	2	0.04	0.018
	Planktonic	Arthropoda Amphipoda	Themisto sp.	Adult Parts	10	0.10	0.010

Fish ID	Source	Taxonomic Group	Taxon ¹	Stage	Abundance	Total WW	WW per individual (g) ³
GN8-2	Planktonic	Arthropoda Calanoida	Calanoida indet.	Parts	n/a	0.24	0.239
GN8-3	Planktonic	Arthropoda Mysida	Mysida indet.	Parts	n/a	0.04	0.006
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	154	0.29	0.002
	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult Parts	3	0.01	0.005
GN8-4	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	18	0.04	0.002
	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Juvenile Parts	1	<0.01	0.001
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	49	0.11	0.002
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	27	0.12	0.004
	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult Parts	1	0.01	0.007
0110 5	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	3	0.01	0.002
GN8-5	Planktonic	Arthropoda Decapoda	Caridea indet.	Megalopa	1	<0.01	0.003
F	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.06	0.060
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	20	0.09	0.004
F	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	23	0.10	0.004
	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult Parts	2	0.01	0.007
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	2	<0.01	0.002
GN8-7	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.31	0.306
	Epibenthic	Arthropoda Amphipoda	Gammaroidea indet.	Adult	1	0.01	0.013
	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Adult	3	0.14	0.046
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	24	0.25	0.010
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	6	0.02	0.003
CNIC C	Benthic	Arthropoda Decapoda	Caridea indet.	Intermediate Parts	1	0.06	0.062
GN8-8	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	1.44	1.442
}	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	45	0.24	0.005
CNIC -	Planktonic	Arthropoda Calanoida	Calanoida indet.	Parts	n/a	0.01	0.014
GN8-9	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.06	0.059

Fish ID	Source	Taxonomic Group	Taxon ¹	Stage	Abundance	Total WW	WW per individual (g) ³
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	104	0.15	0.001
	Planktonic	Arthropoda Calanoida	Calanus hyperboreus	Adult	3	0.01	0.004
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult	6	0.02	0.003
GN8-10	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.24	0.242
GIN9-10	Planktonic	Arthropoda Isopoda	Isopoda indet.	Cryptoniscid	2	<0.01	<0.001
	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Adult	2	0.01	0.003
	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Juvenile	1	<0.01	<0.001
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	72	0.16	0.002
	Planktonic	Arthropoda Calanoida	Calanoida indet.	Adult Parts	35	0.10	0.003
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult	4	0.03	0.006
	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.56	0.560
GN8-11	Epibenthic	Arthropoda Amphipoda	Gammarus sp.	Adult Parts	1	0.03	0.034
	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Juvenile Parts	5	0.01	0.002
	Planktonic	Arthropoda	Mysida indet.	Adult Parts	133	0.48	0.004
	Mysida Enihenthic Arthropoda		Onisimus sp.	Adult Parts	7	0.17	0.024
	Epibenthic Amphipoda Planktonic Arthropoda Arthropoda Calanoida		Calanoida indet.	Adult Parts	27	0.09	0.003
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult	13	0.07	0.005
GN8-12	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.71	0.715
	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	76	0.29	0.004
	Planktonic	Chordata Vertebrata	Pisces indet.	Larvae	1	<0.01	0.004
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	3	0.02	0.006
	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	0.97	0.969
GN12-1	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	12	0.05	0.004
	Planktonic	Arthropoda Amphipoda	Themisto sp.	Juvenile Parts	192	5.19	0.027
	Planktonic	Arthropoda Decapoda	Caridea indet.	Megalopa	1	0.01	0.005
	Planktonic	Arthropoda	Crustacea indet.	Parts	n/a	2.20	2.202
GN12-2	Epibenthic	Amphipada	Onisimus sp.	Adult	15	0.41	0.027
	Planktonic	Amphipoda Arthropoda Amphipoda	Themisto sp.	Parts Juvenile Parts	356	7.57	0.021

Fish ID	Source	Taxonomic Group	Taxon ¹	Stage	Abundance	Total WW	WW per individual (g) ³
	Planktonic	Arthropoda Calanoida	Calanus sp.	Adult Parts	4	0.03	0.008
	Planktonic	Arthropoda Crustacea	Crustacea indet.	Parts	n/a	6.09	6.087
-	Epibenthic	Arthropoda Amphipoda	Lysianassoidea indet.	Juvenile Parts	4	0.16	0.039
CN42.2	Planktonic	Arthropoda Mysida	Mysida indet.	Adult Parts	26	0.32	0.012
GN12-3	Planktonic	Arthropoda Mysida	Mysis sp.	Adult Parts	6	0.37	0.062
F	Epibenthic	Arthropoda Amphipoda	Onisimus sp.	Adult Parts	15	0.40	0.026
	Planktonic	Arthropoda Amphipoda	Themisto libellula	Adult Parts	2	0.40	0.198
	Planktonic	Arthropoda Amphipoda	Themisto sp.	Juvenile Parts	192	3.91	0.020

Notes:

¹ Taxon, indet = indeterminate

² Abundance is the Total Number of individuals

³ WW = wet weight (g)



Abbreviations & Definitions

Worksheets:

1. Abbreviations & Definitions

2. Data Long-Whole Fish Raw data from fish dissections and otolith aging. 3. Data Long-Fish Stomachs Abundance and biomass data for fish stomach contents.

Abundance Data:

Benthic Organisms found in the sediment of aquatic habitats

Epibenthic Organisms found onand in the surface sediment including some sub-surface layers

Non-Food Items not considered food, organic and inorganic (not weighed)

Parasite Parasitic organism found in host Planktonic Organisms found in the water column

Semi-Terrestrial Organisms found in both aquatic and terrestrial environments

Surface dweller Organisms found on the surface of the water/may dive in to the water as well

Terrestrial Terrestrial organisms

Undetermined Digested tissue or fragments that are unidentifiable and therefore, unable to determine whether it is benthic or planktonic

Adult Α

Int Intermediate - has adult features but not of typical reproductive size

J Juvenile L Larvae Ν Nymph Р Pupa Col Colony Deutonymph Deut

Major Taxonomic Groups:

Ephemeroptera, Plecoptera, Trichoptera

Miscellaneous

AMPH Amphibia BRYO Bryozoa

CNHY Cnidaria Hydrozoa CNXX Cnidaria NTEA Nemertea PIXX Pisces PLTY Platyhelminthes PORI Porifera ROTI Rotifera TARD Tardigrada **EGGS** Invertebrate eggs

Annelida

ANHI Annelida Hirudinea ANOL Annelida Oligochaeta

ANXX Annelida

Arthropoda

Chelicerata Arachnida CHAR

CHXX Chelicerata

CRAM Crustacea Amphipoda CRCL Crustacea Cladocera CRCO Crustacea Copepoda **CRCU** Crustacea Cumacea CRIS Crustacea Isopoda CRMY Crustacea Mysidacea **CROS** Crustacea Ostracoda

CRXX Crustacea

Insecta

Insecta Collembola INCM INCO Insecta Coleoptera INDI Insecta Diptera INFP Insecta Ephemeroptera INHM Insecta Hemiptera INHY Insecta Hymenoptera INLE Insecta Lepidoptera INMG Insecta Megaloptera INOD Insecta Odonata INPL Insecta Plecoptera INTR Insecta Tricoptera INXX Insecta

Mollusca

Mollusca Bivalvia MOBI MOGA Mollusca Gastropoda

MOXX Mollusca



 ${\bf Raw\ data\ from\ fish\ dissections\ and\ otolith\ aging\ for\ Golder\ Baffinlands\ Fish\ 2018.}$

Client	Project	Year	Sample Type	Client ID	Date Sampled	Biologica Sample #	Fork Length (cm)	Weight (kg)	Sex	Otolith Age (years)	Lesions	Tumors	Tissue Extracted for Metals	Stomach Dissected	Otoliths Removed	Note
Golder	Baffinlands	2018	Whole Fish	GN-3	30-Jul-18	ms18-108-001	40.6	0.62	Female	12	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-1	02-Aug-18	ms18-108-002	36.3	0.50	Male	5	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-2	02-Aug-18	ms18-108-003	37.4	0.48	Male	11	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-3	02-Aug-18	ms18-108-004	33.8	0.31	Male	12	n/a	n/a	yes	yes	L	
Golder	Baffinlands	2018	Whole Fish	GN-7-4	02-Aug-18	ms18-108-005	48.0	1.25	Male	13	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-5	02-Aug-18	ms18-108-006	45.7	1.03	Female	13	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-6	02-Aug-18	ms18-108-007	26.7	0.17	Female	11	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-7	02-Aug-18	ms18-108-008	37.8	0.58	Male	12	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-8	02-Aug-18	ms18-108-009	45.7	1.12	Female	14	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-9	02-Aug-18	ms18-108-010	34.3	0.55	Female	9	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-7-10	02-Aug-18	ms18-108-011	50.8	1.47	Female	9	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-1	03-Aug-18	ms18-108-012	39.9	0.69	Female	7	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-2	03-Aug-18	ms18-108-013	48.2	1.24	Female	9	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-3	03-Aug-18	ms18-108-014	50.4	1.41	Female	17	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-4	03-Aug-18	ms18-108-015	51.4	1.26	Male	11	n/a	n/a	yes	yes	L+R	Label corrected upon reciept
Golder	Baffinlands	2018	Whole Fish	GN-8-5	03-Aug-18	ms18-108-016	37.9	0.94	Male	12	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-6	03-Aug-18	ms18-108-017	43.6	0.62	Female	11	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-7	03-Aug-18	ms18-108-018	38.6	1.06	Female	10	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-8	03-Aug-18	ms18-108-019	31.6	0.76	Female	12	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-8-9	03-Aug-18	ms18-108-020	32.2	0.11	Male	7	n/a	n/a	yes	yes	L+R	
																Listed on the COC. Fish not
Golder	Baffinlands	2018	Whole Fish	GN-8-10	03-Aug-18	ms18-108-021	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	received at Biologica
																Listed on the COC. Fish not
Golder	Baffinlands	2018	Whole Fish	GN-8-11	03-Aug-18	ms18-108-022	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	received at Biologica
																Listed on the COC. Fish not
																received at Biologica
Golder	Baffinlands	2018	Whole Fish	GN-8-12	03-Aug-18	ms18-108-023	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Golder	Baffinlands	2018	Whole Fish	GN-9-1	30-Jul-18	ms18-108-024	50.3	1.48	Male	8	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands		Whole Fish	GN-9-2	30-Jul-18	ms18-108-025	39.2	0.52	Female	12	n/a	n/a	yes	yes	L+R	
Golder			Whole Fish	GN-9-3	30-Jul-18	ms18-108-026	34.7	0.47	Male	11	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands		Whole Fish	GN-12-1	09-Aug-18	ms18-108-027	37.3	0.34	Male	10	n/a	n/a	yes	yes	L+R	
Golder			Whole Fish	GN-12-2	09-Aug-18	ms18-108-028	38.9	0.74	Male	7	n/a	n/a	yes	yes	L+R	
Golder	Baffinlands	2018	Whole Fish	GN-12-3	09-Aug-18	ms18-108-029	38.6	1.35	Female	13	n/a	n/a	yes	yes	L+R	

Abundance and biomass data for fish stomach contents for Golder Baffinlands Fish 2018.

										_			_					_						
Client Golder	Project Baffinlands	Year 2018	Sample Type Fish Stomach	Biologica Sample ID ms18-108-001	Client Sample ID GN-3	Date Sampled 2018-07-30	% Fullness 50	% Material Digested 75	Full Stomach Weight (g): 13.08812	Source Planktonic	Phylum Arthropoda	Subphylum Crustacea	Class Maxillopoda	Subclass Copepoda	Order Calanoida	Family	GroupCode CRCO	Taxon Calanoida indet.	Stage Parts	Abundance n/a	Total Taxa 1	Total WW (g) 0.43243	WW/Individual (g) 0.43243	Comments
Golder	Baffinlands		Fish Stomach	ms18-108-001	GN-3	2018-07-30	50	75	13.08812	Benthic	Arthropoda		Insecta	Pterygota	Diptera	Chironomidae	INDI	Diamesa sp.	L	1	1	0.00089	0.00089	
Golder	Baffinlands		Fish Stomach	ms18-108-001	GN-3	2018-07-30	50	75	13.08812	Benthic	Arthropoda		Insecta	Pterygota	Diptera		INDI	Diptera indet.	L/parts	1		0.00012	0.00012	
Golder	Baffinlands		Fish Stomach	ms18-108-001	GN-3	2018-07-30	50	75	13.08812	Undetermined							XXXX	Unidentified tissue		n/a		0.68472	0.68472	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-002 ms18-108-002	GN-7-1 GN-7-1	2018-08-02 2018-08-02	75 75	75 75	9.61075 9.61075	Planktonic Planktonic	Arthropoda Arthropoda		Maxillopoda Maxillopoda	Copepoda Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus hyperboreus	A/parts A	34 7	1	0.10177 0.03756	0.00299 0.00537	
Golder	Baffinlands		Fish Stomach	ms18-108-002	GN-7-1	2018-08-02	75	75	9.61075	Planktonic	Arthropoda		Waxiiiopoda	сорерода	Calanolaa	Calamaac	CRXX	Crustacea indet.	Parts	n/a		0.91810	0.91810	Copepoda, Mysida, and Decapoda
Golder	Baffinlands	2018	Fish Stomach	ms18-108-002	GN-7-1	2018-08-02	75	75	9.61075	Planktonic	Arthropoda		Malacostraca	Eumalacostraca	Mysida	Mysidae	CRMY	Mysis sp.	A/parts	112	1	0.53714	0.00480	
Golder			Fish Stomach	ms18-108-002	GN-7-1	2018-08-02	75	75	9.61075	Undetermined							XXXX	Unidentified tissue		n/a		0.67509	0.67509	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-003 ms18-108-003	GN-7-2 GN-7-2	2018-08-02 2018-08-02	50 50	75 75	14.44895 14.44895	Planktonic Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO CRCO	Calanoida indet.	A/parts	15 2	1	0.04552 0.02507	0.00303 0.01254	
Golder	Baffinlands		Fish Stomach	ms18-108-003 ms18-108-003	GN-7-2 GN-7-2	2018-08-02	50	75 75	14.44895	Planktonic	Arthropoda Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRXX	Calanus hyperboreus Crustacea indet.	Parts	n/a	1	0.65557	0.65557	
Golder	Baffinlands		Fish Stomach	ms18-108-003	GN-7-2	2018-08-02	50	75	14.44895	Epibenthic	Arthropoda		Malacostraca	Eumalacostraca	Amphipoda		CRAM	Lysianassoidea indet.	A/parts	3	1	0.02311	0.00770	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-003	GN-7-2	2018-08-02	50	75	14.44895	Planktonic	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	169	1	0.80573	0.00477	
Golder			Fish Stomach	ms18-108-003	GN-7-2	2018-08-02	50	75	14.44895	Undetermined							XXXX	Unidentified tissue		n/a		0.73654	0.73654	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-004 ms18-108-004	GN-7-3 GN-7-3	2018-08-02 2018-08-02	25 25	75 75	5.49124 5.49124	Planktonic Planktonic	Arthropoda Arthropoda		Maxillopoda Maxillopoda	Copepoda Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus sp.	Parts A/parts	n/a 3	1	0.01411 0.00338	0.01411 0.00113	
Golder	Baffinlands		Fish Stomach	ms18-108-004	GN-7-3 GN-7-3	2018-08-02	25	75	5.49124	Planktonic	Arthropoda		Malacostraca	Eumalacostraca	Mysida	Calaliluae	CRMY	Mysida indet.	A/parts	10	1	0.03341	0.00374	
Golder			Fish Stomach	ms18-108-004	GN-7-3	2018-08-02	25	75	5.49124	Undetermined					,		xxxx	Unidentified tissue		n/a		0.08279	0.08279	
Golder	Baffinlands		Fish Stomach	ms18-108-005	GN-7-4	2018-08-02	50	75	26.00873	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	A/parts	28		0.06147	0.00220	
Golder			Fish Stomach	ms18-108-005	GN-7-4	2018-08-02	50 50	75	26.00873	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A/parts	2	1	0.00962	0.00481	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-005 ms18-108-005	GN-7-4 GN-7-4	2018-08-02 2018-08-02	50	75 75	26.00873 26.00873	Planktonic Planktonic	Arthropoda Arthropoda		Malacostraca	Eumalacostraca	Mysida		CRXX CRMY	Crustacea indet. Mysida indet.	Parts A/parts	n/a 25	1	0.14091 0.13945	0.14091 0.00558	
Golder	Baffinlands		Fish Stomach	ms18-108-005	GN-7-4	2018-08-02	50	75	26.00873	Undetermined	7 ii tiii opodd	Crustaccu	Waldedstraed	Lamadoostraca	11175.00		xxxx	Unidentified tissue	, y parts	n/a	-	2.41986	2.41986	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-006	GN-7-5	2018-08-02	50	75	15.84194	Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	A/parts	77		0.21703	0.00282	
Golder	Baffinlands		Fish Stomach	ms18-108-006	GN-7-5	2018-08-02	50	75	15.84194	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A/parts	7	1	0.02538	0.00363	
Golder			Fish Stomach	ms18-108-006	GN-7-5	2018-08-02	50 50	75	15.84194	Planktonic	Arthropoda		Malaaaa	F	B. de		CRXX	Crustacea indet.	Parts	n/a 65		0.02243	0.02243	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-006 ms18-108-006	GN-7-5 GN-7-5	2018-08-02 2018-08-02	50	75 75	15.84194 15.84194	Planktonic Undetermined	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	iviysida		CRMY XXXX	Mysida indet. Unidentified tissue	A/parts	n/a	1	0.31788 0.53092	0.00489 0.53092	
Golder			Fish Stomach	ms18-108-007	GN-7-6	2018-08-02	75	75	4.71476	Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	Parts	n/a		0.04458	0.04458	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-007	GN-7-6	2018-08-02	75	75	4.71476	Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	Α	1	1	0.01070	0.01070	
Golder	Baffinlands		Fish Stomach	ms18-108-007	GN-7-6	2018-08-02	75	75 	4.71476	Planktonic		Vertebrata	Actinopterygii		Scorpaeniformes	Cottidae	PIXX	Cottidae indet.	A	1	1	0.85342	0.85342	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-007 ms18-108-007	GN-7-6 GN-7-6	2018-08-02 2018-08-02	75 75	75 75	4.71476 4.71476	Planktonic Epibenthic	Arthropoda Arthropoda		Malacostraca	Eumalacostraca	Amphipoda		CRXX CRAM	Crustacea indet. Lysianassoidea indet.	Parts A	n/a 1	1	0.67233 0.00913	0.67233 0.00913	
Golder			Fish Stomach	ms18-108-007	GN-7-6 GN-7-6	2018-08-02	75 75	75 75	4.71476	Planktonic		Vertebrata	Pisces-Actinopterygii	Euiliaiacostraca	Ampilipoda		PIXX	Pisces indet.	J	1	1	0.00603	0.00603	
Golder	Baffinlands		Fish Stomach	ms18-108-007	GN-7-6	2018-08-02	75	75	4.71476	Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp.	A	3	1	0.01579	0.00526	
Golder	Baffinlands		Fish Stomach	ms18-108-008	GN-7-7	2018-08-02	25	50	9.85725	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	A/parts	14	1	0.07644	0.00546	
Golder	Baffinlands		Fish Stomach	ms18-108-008	GN-7-7	2018-08-02	25	50	9.85725	Planktonic	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	8	1	0.03349	0.00419	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-008 ms18-108-009	GN-7-7 GN-7-8	2018-08-02 2018-08-02	25 50	50 75	9.85725 37.46218	Undetermined Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida		CRCO	Unidentified tissue Calanoida indet.	A/parts	n/a 180		0.69554 0.73384	0.69554 0.00408	
Golder	Baffinlands		Fish Stomach	ms18-108-009	GN-7-8	2018-08-02	50	75	37.46218	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	A parts	16	1	0.09924	0.00620	
Golder	Baffinlands		Fish Stomach	ms18-108-009	GN-7-8	2018-08-02	50	75	37.46218	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	Α	1	1	0.00604	0.00604	
Golder	Baffinlands		Fish Stomach	ms18-108-009	GN-7-8	2018-08-02	50	75	37.46218	Planktonic	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	164	1	0.77296	0.00471	
Golder	Baffinlands		Fish Stomach	ms18-108-009	GN-7-8	2018-08-02	50	75	37.46218	Undetermined	A -+ l	C	Marrillanada	Commende	Calanaida		XXXX	Unidentified tissue	A /	n/a		1.11500	1.11500	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-010 ms18-108-010	GN-7-9 GN-7-9	2018-08-02 2018-08-02	50 50	75 75	9.98042 9.98042	Planktonic Planktonic	Arthropoda Arthropoda		Maxillopoda Maxillopoda	Copepoda Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus hyperboreus	A/parts A	35 1	1	0.10391 0.00586	0.00297 0.00586	
Golder	Baffinlands		Fish Stomach	ms18-108-010	GN-7-9	2018-08-02	50	75	9.98042	Planktonic	Arthropoda		Wiaxiliopoda	сорсроиа	Calaliolaa	Calamaac	CRXX	Crustacea indet.	Parts	n/a	-	0.61122	0.61122	Copepoda, Mysida, and Decapoda
Golder	Baffinlands	2018	Fish Stomach	ms18-108-010	GN-7-9	2018-08-02	50	75	9.98042	Planktonic	Arthropoda		Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	n/a	1	0.00349	0.00349	
Golder			Fish Stomach	ms18-108-010	GN-7-9	2018-08-02	50	75	9.98042	Undetermined							XXXX	Unidentified tissue		n/a		0.43162	0.43162	
Golder	Baffinlands		Fish Stomach	ms18-108-011	GN-7-10	2018-08-02	50	50 50	26.22237	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidas	CRCO	Calanoida indet.	A/parts	63		0.19924	0.00316	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-011 ms18-108-011	GN-7-10 GN-7-10	2018-08-02 2018-08-02	50 50	50	26.22237 26.22237	Planktonic Planktonic	Arthropoda Arthropoda		Maxillopoda Maxillopoda	Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis Calanus hyperboreus	Α	1	1	0.02597 0.00479	0.00371 0.00479	
Golder			Fish Stomach	ms18-108-011	GN-7-10	2018-08-02	50	50	26.22237	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A	1	-	0.00213	0.00213	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-011	GN-7-10	2018-08-02	50	50	26.22237	Planktonic	Arthropoda	Crustacea					CRXX	Crustacea indet.	Parts	n/a		0.41452	0.41452	
Golder			Fish Stomach	ms18-108-011	GN-7-10	2018-08-02	50	50	26.22237	Planktonic	Arthropoda		Malacostraca	Eumalacostraca	,		CRMY	Mysida indet.	A/parts	21		0.08235	0.00392	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-011 ms18-108-011	GN-7-10 GN-7-10	2018-08-02 2018-08-02	50 50	50 50	26.22237 26.22237	Planktonic Epibenthic	Arthropoda		Malacostraca	Eumalacostraca	Mysida	Mysidae Uristidae	CRMY CRAM	Mysis sp. Onisimus sp.	A/parts	15	1	0.64532 0.03518	0.04302 0.01759	Found on ice and in sediment
Golder	Baffinlands		Fish Stomach	ms18-108-011	GN-7-10 GN-7-10	2018-08-02	50	50	26.22237	Planktonic	Arthropoda Arthropoda		Malacostraca Malacostraca	Eumalacostraca Eumalacostraca	Amphipoda Amphipoda	Hyperiidae	CRAM	Themisto sp.	A/parts	10	1	0.09568	0.00957	round on ice and in sediment
Golder	Baffinlands		Fish Stomach	ms18-108-011	GN-7-10	2018-08-02	50	50	26.22237	Undetermined						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	XXXX	Unidentified tissue		n/a		0.28733	0.28733	
Golder	Baffinlands		Fish Stomach	ms18-108-012	GN-8-1	2018-08-03	10	100	9.53104	Undetermined							XXXX	Unidentified tissue		n/a	1	0.09742	0.09742	
Golder	Baffinlands		Fish Stomach	ms18-108-013	GN-8-2	2018-08-03	25	100	22.33021	Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	Parts	n/a	1	0.23873	0.23873	
Golder	Baffinlands Baffinlands	2018	Fish Stomach Fish Stomach	ms18-108-013 ms18-108-014	GN-8-2 GN-8-3	2018-08-03 2018-08-03	25 25	100 75	22.33021 22.76243	Undetermined Planktonic	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Unidentified tissue Mysida indet.	A/narts	n/a	1	0.24746 0.03894	0.24746 0.00649	
Golder	Baffinlands		Fish Stomach	ms18-108-014	GN-8-3	2018-08-03	25	75	22.76243	Undetermined	7 ii tiii opodd	Crustaccu	Waldedstraed	Lamadoostraca	11175.00		XXXX	Unidentified tissue	, y pui to	n/a	-	1.09652	1.09652	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-015	GN-8-4	2018-08-03	50	75	25.66247	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	A/parts	154		0.29059	0.00189	
Golder	Baffinlands		Fish Stomach	ms18-108-015	GN-8-4	2018-08-03	50	75	25.66247	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	A/parts	3	1	0.01367	0.00456	
Golder Golder	Baffinlands Baffinlands		Fish Stomach	ms18-108-015	GN-8-4 GN-8-4	2018-08-03 2018-08-03	50 50	75 75	25.66247	Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO Non-Food	Calanus sp.	A/parts	18 n/a		0.04422	0.00246	
Golder	Baffinlands		Fish Stomach Fish Stomach	ms18-108-015 ms18-108-015	GN-8-4 GN-8-4	2018-08-03	50 50	75 75	25.66247 25.66247	Non-Food Epibenthic	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphinoda		CRAM	Feather fragment Lysianassoidea indet.	J/parts	n/a 1	1	n/a 0.00101	n/a 0.00101	
Golder	Baffinlands		Fish Stomach	ms18-108-015	GN-8-4	2018-08-03	50	75	25.66247	Planktonic	Arthropoda		Malacostraca	Eumalacostraca			CRMY	Mysida indet.	A/parts	49	1	0.10863	0.00222	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-015	GN-8-4	2018-08-03	50	75	25.66247	Non-Food							Non-Food	Plant material		n/a		n/a	n/a	
Golder	Baffinlands		Fish Stomach	ms18-108-015	GN-8-4	2018-08-03	50	75	25.66247	Undetermined							XXXX	Unidentified tissue		n/a		2.13924	2.13924	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-016 ms18-108-016	GN-8-5 GN-8-5	2018-08-03 2018-08-03	50 50	75 75	16.87758 16.87758	Planktonic Planktonic	Arthropoda Arthropoda		Maxillopoda Maxillopoda	Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus hyperboreus	A/parts A/parts	27	1	0.11849 0.00697	0.00439 0.00697	
Golder	Baffinlands		Fish Stomach	ms18-108-016	GN-8-5	2018-08-03	50	75 75	16.87758	Planktonic	Arthropoda		Maxillopoda	Copepoda Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A/parts	3	1	0.00697	0.00224	
Golder	Baffinlands		Fish Stomach	ms18-108-016	GN-8-5	2018-08-03	50	75	16.87758	Planktonic	Arthropoda		Malacostraca				CRDE	Caridea indet.	Megalopa	1	1	0.00336	0.00336	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-016	GN-8-5	2018-08-03	50	75	16.87758	Planktonic	Arthropoda	Crustacea					CRXX	Crustacea indet.	Parts	n/a		0.05956	0.05956	
Golder	Baffinlands		Fish Stomach	ms18-108-016	GN-8-5	2018-08-03	50	75	16.87758	Planktonic	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	20	1	0.08898	0.00445	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-016 ms18-108-017	GN-8-5 GN-8-6	2018-08-03 2018-08-03	50 0	75 100	16.87758 13.16227	Undetermined n/a							XXXX n/a	Unidentified tissue Empty Stomach		n/a n/a		2.64181 n/a	2.64181 n/a	
Golder			Fish Stomach	ms18-108-017 ms18-108-018	GN-8-7	2018-08-03	50	75	19.64154	nya Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida		n/a CRCO	Calanoida indet.	A/parts	n/a 23		n/a 0.09862	n/a 0.00429	
Golder	Baffinlands		Fish Stomach	ms18-108-018	GN-8-7	2018-08-03	50	75	19.64154	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	A/parts	2	1	0.01311	0.00656	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-018	GN-8-7	2018-08-03	50	75	19.64154	Planktonic	Arthropoda	Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A/parts	2		0.00430	0.00215	
Golder			Fish Stomach	ms18-108-018	GN-8-7	2018-08-03	50	75 75	19.64154	Planktonic	Arthropoda		Malacostrass	Eumalaga-+	Amphined-		CRXX	Crustacea indet.	Parts	n/a 1	1	0.30591	0.30591	
Golder Golder	Baffinlands Baffinlands		Fish Stomach Fish Stomach	ms18-108-018 ms18-108-018	GN-8-7 GN-8-7	2018-08-03 2018-08-03	50 50	75 75	19.64154 19.64154	Epibenthic Epibenthic	Arthropoda Arthropoda		Malacostraca Malacostraca	Eumalacostraca Eumalacostraca			CRAM CRAM	Gammaroidea indet. Lysianassoidea indet.	A A	1	1	0.01388 0.13685	0.01388 0.04562	
Golder	Baffinlands		Fish Stomach	ms18-108-018	GN-8-7	2018-08-03	50	75 75	19.64154	Planktonic	Arthropoda		Malacostraca	Eumalacostraca			CRMY	Mysida indet.	A/parts	24	1	0.25172	0.01049	
Golder	Baffinlands		Fish Stomach	ms18-108-018	GN-8-7	2018-08-03	50	75	19.64154	Undetermined					•		XXXX	Unidentified tissue		n/a		1.76507	1.76507	
Golder	Baffinlands		Fish Stomach	ms18-108-019	GN-8-8	2018-08-03	50	75	12.82741	Planktonic	Arthropoda		Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A/parts	6	1	0.02041	0.00340	
Golder	Baffinlands Paffinlands		Fish Stomach	ms18-108-019	GN-8-8	2018-08-03	50 50	75 75	12.82741	Benthic	Arthropoda		Malacostraca	Eumalacostraca	Decapoda		CRDE	Caridea indet.	Int/parts	1 n/2	1	0.06182	0.06182	
Golder Golder			Fish Stomach Fish Stomach	ms18-108-019 ms18-108-019	GN-8-8 GN-8-8	2018-08-03 2018-08-03	50 50	75 75	12.82741 12.82741	Planktonic Planktonic	Arthropoda Arthropoda		Malacostraca	Eumalacostraca	Mysida		CRXX CRMY	Crustacea indet. Mysida indet.	Parts A/parts	n/a 45	1	1.44275 0.24362	1.44275 0.00541	
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Appendix G-

Abundance and biomass data for fish stomach contents for Golder Baffinlands Fish 2018.

Client	Project	Year	Sample Type	Biologica Sample ID	Client Sample ID	Date Sampled	% Fullness	% Material Digested	Full Stomach Weight (g):	Source	Phylum Subphylum	Class	Subclass	Order	Family	GroupCode	Taxon	Stage	Abundance	Total Taxa	Total WW (g)	WW/Individual (g)	Comments
Golder	Baffinlands	2018	Fish Stomach	ms18-108-020	GN-8-9	2018-08-03	75	100	8.64271	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida	•	CRCO	Calanoida indet.	Parts	n/a	1	0.01363	0.01363	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-020	GN-8-9	2018-08-03	75	100	8.64271	Planktonic	Arthropoda Crustacea					CRXX	Crustacea indet.	Parts	n/a		0.05857	0.05857	Copepoda, Mysida, and Decapoda
Golder	Baffinlands	2018	Fish Stomach	ms18-108-020	GN-8-9	2018-08-03	75	100	8.64271	Undetermined						XXXX	Unidentified tissue		n/a		1.54614	1.54614	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	A/parts	104		0.14627	0.00141	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	A	3	1	0.01257	0.00419	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	Α	6		0.01667	0.00278	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Planktonic	Arthropoda Crustacea					CRXX	Crustacea indet.	Parts	n/a		0.24235	0.24235	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Isopoda		CRIS	Isopoda indet.	Cryptoniscid	2	1	0.00028	0.00014	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Amphipoda		CRAM	Lysianassoidea indet.	Α	2	1	0.00624	0.00312	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Amphipoda		CRAM	Lysianassoidea indet.	J	1		0.00010	0.00010	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	72	1	0.15818	0.00220	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-024	GN-9-1	2018-07-30	50	75	24.79437	Undetermined						XXXX	Unidentified tissue		n/a		1.27763	1.27763	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	A/parts	35		0.09793	0.00280	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	Α	4	1	0.02529	0.00632	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Planktonic	Arthropoda Crustacea					CRXX	Crustacea indet.	Parts	n/a		0.56031	0.56031	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Gammaridae	CRAM	Gammarus sp.	A/parts	1	1	0.03409	0.03409	Found on ice and in sediment
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Amphipoda		CRAM	Lysianassoidea indet.	J/parts	5		0.00937	0.00187	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	133	1	0.47708	0.00359	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Uristidae	CRAM	Onisimus sp.	A/parts	7	1	0.17018	0.02431	Found on ice and in sediment
Golder	Baffinlands	2018	Fish Stomach	ms18-108-025	GN-9-2	2018-07-30	50	50	12.19321	Undetermined						XXXX	Unidentified tissue		n/a		0.22399	0.22399	
Golder	Baffinlands		Fish Stomach	ms18-108-026	GN-9-3	2018-07-30	75	75	10.92328	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida		CRCO	Calanoida indet.	A/parts	27		0.09086	0.00337	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-026	GN-9-3	2018-07-30	75	75	10.92328	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A	13	1	0.06671	0.00513	
Golder	Baffinlands		Fish Stomach	ms18-108-026	GN-9-3	2018-07-30	75	75	10.92328	Planktonic	Arthropoda Crustacea					CRXX	Crustacea indet.	Parts	n/a		0.71485	0.71485	
Golder	Baffinlands		Fish Stomach	ms18-108-026	GN-9-3	2018-07-30	75	75	10.92328	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Mysida		CRMY	Mysida indet.	A/parts	76	1	0.29214	0.00384	
Golder	Baffinlands		Fish Stomach	ms18-108-026	GN-9-3	2018-07-30	75	75	10.92328	Planktonic	Chordata Vertebrata	Pisces-Actinopterygii				PIXX	Pisces indet.	L	1	1	0.00358	0.00358	
Golder	Baffinlands		Fish Stomach	ms18-108-026	GN-9-3	2018-07-30	75	75	10.92328	Undetermined						XXXX	Unidentified tissue		n/a		0.16563	0.16563	
Golder			Fish Stomach	ms18-108-027	GN-12-1	2018-08-09	100	75	17.95185	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A/parts	3	1	0.01764	0.00588	
Golder	Baffinlands		Fish Stomach	ms18-108-027	GN-12-1	2018-08-09	100	75	17.95185	Planktonic	Arthropoda Crustacea					CRXX	Crustacea indet.	Parts	n/a		0.96921	0.96921	
Golder	Baffinlands		Fish Stomach	ms18-108-027	GN-12-1	2018-08-09	100	75	17.95185	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	,		CRMY	Mysida indet.	A/parts	12	1	0.05138	0.00428	
Golder			Fish Stomach	ms18-108-027	GN-12-1	2018-08-09	100	75	17.95185	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca		Hyperiidae	CRAM	Themisto sp.	J/parts	192	1	5.18852	0.02702	
Golder			Fish Stomach	ms18-108-028	GN-12-2	2018-08-09	100	75	25.33769	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Decapoda		CRDE	Caridea indet.	Megalopa	1	1	0.00519	0.00519	
Golder			Fish Stomach	ms18-108-028	GN-12-2	2018-08-09	100	75	25.33769	Planktonic	Arthropoda Crustacea					CRXX	Crustacea indet.	Parts	n/a		2.20216	2.20216	
Golder			Fish Stomach	ms18-108-028	GN-12-2	2018-08-09	100	75	25.33769	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca		Uristidae	CRAM	Onisimus sp.	A/parts	15	1	0.41011	0.02734	Found on ice and in sediment
Golder			Fish Stomach	ms18-108-028	GN-12-2	2018-08-09	100	75	25.33769	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca		Hyperiidae	CRAM	Themisto sp.	J/parts	356	1	7.57064	0.02127	
Golder			Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	75	31.35000	Planktonic	Arthropoda Crustacea	Maxillopoda	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	A/parts	4	1	0.03346	0.00837	
Golder			Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	75	31.35000	Planktonic	Arthropoda Crustacea					CRXX	Crustacea indet.	Parts	n/a		6.08704	6.08704	
Golder			Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	75	31.35000	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca			CRAM	Lysianassoidea indet.	J/parts	4		0.15704	0.03926	
Golder			Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	75	31.35000	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca			CRMY	Mysida indet.	A/parts	26		0.32305	0.01243	
Golder			Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	75	31.35000	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca		Mysidae	CRMY	Mysis sp.	A/parts	6	1	0.37028	0.06171	
Golder			Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	/5	31.35000	Epibenthic	Arthropoda Crustacea	Malacostraca	Eumalacostraca		Uristidae	CRAM	Onisimus sp.	A/parts	15	1	0.39608	0.02641	Found on ice and in sediment
Golder			Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	75	31.35000	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca		Hyperiidae	CRAM	Themisto libellula	A/parts	2	1	0.39581	0.19791	
Golder	Baffinlands	2018	Fish Stomach	ms18-108-029	GN-12-3	2018-08-09	75	/5	31.35000	Planktonic	Arthropoda Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto sp.	J/parts	192		3.91050	0.02037	



Your Project #: 18-108 Your C.O.C. #: 08455981

2018/11/20 2018/11/21 BBY8SOP-00017

Attention: TARA MACDONALD

Biologica Environmental Services, Ltd. 488-F Bay St. Victoria, BC Canada V8T 5H2

Report Date: 2018/12/17

BCMOE BCLM Dec2000 m

Report #: R2664900 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B894732 Received: 2018/10/29, 10:10 Sample Matrix: TISSUE # Samples Received: 26

Date Outline

Analyses

Quantity Extracted Analyzed Laboratory Method Analytical Method

Elements by CRC ICPMS - Tissue Wet Wt

20 2018/11/16 2018/11/22 BBY7SOP-00021, EPA 6020b R2 m

Elements by CRC ICPMS - Tissue Wet Wt

6 2018/11/16 2018/11/30 BBY7SOP-00021, EPA 6020b R2 m

26

Remarks:

Moisture in Tissue

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing. Maxxam is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Maxxam, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

aynatinique

Project Manager 17 Dec 2018 12:27:28

 $\label{thm:please} \textit{Please direct all questions regarding this Certificate of Analysis to your Project Manager.}$

BC Env Customer Service, BC Environmental Customer Service

Email: Enviro.CS.BC@maxxam.ca

Phone# (604) 734 7276



Your Project #: 18-108 Your C.O.C. #: 08455981

Attention: TARA MACDONALD

Biologica Environmental Services, Ltd. 488-F Bay St. Victoria, BC Canada V8T 5H2

Report Date: 2018/12/17

Report #: R2664900 Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B894732 Received: 2018/10/29, 10:10

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



Biologica Environmental Services, Ltd.

Client Project #: 18-108

Maxxam ID		UQ8058	UQ8059	UQ8060	UQ8061	UQ8062		
Sampling Date		2018/07/30	2018/08/02	2018/08/02	2018/08/02	2018/08/02		
COC Number		08455981	08455981	08455981	08455981	08455981		
	UNITS	MS18-108-001	MS18-108-002	MS18-108-003	MS18-108-004	MS18-108-005	RDL	QC Batch
Total Metals by ICPMS			<u> </u>		<u> </u>			<u> </u>
Total (Wet Wt) Aluminum (Al)	mg/kg	<0.20	0.24	<0.20	<0.20	<0.20	0.20	9230652
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Arsenic (As)	mg/kg	0.742	0.495	0.332	0.305	0.477	0.0040	9230652
Total (Wet Wt) Barium (Ba)	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9230652
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	9230652
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0096	0.0080	0.0027	0.0165	0.0013	0.0010	9230652
Total (Wet Wt) Calcium (Ca)	mg/kg	96.0	146	88.9	131	64.1	2.0	9230652
Total (Wet Wt) Chromium (Cr)	mg/kg	<0.010	0.010	0.013	0.015	<0.010	0.010	9230652
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0042	0.0042	0.0051	0.0054	0.0046	0.0013	9230652
Total (Wet Wt) Copper (Cu)	mg/kg	0.551	0.498	0.562	0.450	0.501	0.010	9230652
Total (Wet Wt) Iron (Fe)	mg/kg	4.40	4.39	4.90	4.74	4.22	0.25	9230652
Total (Wet Wt) Lead (Pb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Magnesium (Mg)	mg/kg	289	272	272	279	264	0.40	9230652
Total (Wet Wt) Manganese (Mn)	mg/kg	0.102	0.111	0.097	0.114	0.089	0.010	9230652
Total (Wet Wt) Mercury (Hg)	mg/kg	0.0542	0.0271	0.0632	0.0392	0.0347	0.0020	9230652
Total (Wet Wt) Molybdenum (Mo)	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	9230652
Total (Wet Wt) Nickel (Ni)	mg/kg	<0.010	0.011	0.011	0.020	0.016	0.010	9230652
Total (Wet Wt) Phosphorus (P)	mg/kg	3030	3040	3000	2910	2820	2.0	9230652
Total (Wet Wt) Potassium (K)	mg/kg	4620	4380	4570	4280	4450	2.0	9230652
Total (Wet Wt) Selenium (Se)	mg/kg	0.353	0.339	0.326	0.405	0.295	0.010	9230652
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0010	0.0010	<0.0010	0.0018	<0.0010	0.0010	9230652
Total (Wet Wt) Sodium (Na)	mg/kg	498	488	496	575	489	2.0	9230652
Total (Wet Wt) Strontium (Sr)	mg/kg	0.257	0.314	0.181	0.292	0.135	0.010	9230652
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00334	0.00279	0.00407	0.00365	0.00296	0.00040	9230652
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Titanium (Ti)	mg/kg	0.154	0.128	0.145	0.134	0.130	0.020	9230652
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.00040	9230652
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Zinc (Zn)	mg/kg	6.65	6.26	5.99	6.62	4.53	0.040	9230652
RDL = Reportable Detection Limit								



Biologica Environmental Services, Ltd.

Client Project #: 18-108

Maxxam ID		UQ8063	UQ8064	UQ8065	UQ8066	UQ8067		
Sampling Date		2018/08/02	2018/08/02	2018/08/02	2018/08/02	2018/08/02		
COC Number		08455981	08455981	08455981	08455981	08455981		
	UNITS	MS18-108-006	MS18-108-007	MS18-108-008	MS18-108-009	MS18-108-010	RDL	QC Batch
Total Metals by ICPMS								
Total (Wet Wt) Aluminum (Al)	mg/kg	<0.20	0.23	<0.20	<0.20	0.21	0.20	9230652
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Arsenic (As)	mg/kg	0.411	0.348	0.668	0.379	0.533	0.0040	9230652
Total (Wet Wt) Barium (Ba)	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9230652
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	0.21	<0.20	<0.20	0.20	9230652
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0013	0.0022	0.0014	0.0021	0.0014	0.0010	9230652
Total (Wet Wt) Calcium (Ca)	mg/kg	50.9	141	248	76.9	75.7	2.0	9230652
Total (Wet Wt) Chromium (Cr)	mg/kg	<0.010	<0.010	0.016	<0.010	<0.010	0.010	9230652
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0043	0.0111	0.0061	0.0051	0.0044	0.0013	9230652
Total (Wet Wt) Copper (Cu)	mg/kg	0.491	0.379	0.621	0.451	0.504	0.010	9230652
Total (Wet Wt) Iron (Fe)	mg/kg	3.85	3.02	5.06	3.34	3.87	0.25	9230652
Total (Wet Wt) Lead (Pb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	0.0016	0.0010	9230652
Total (Wet Wt) Magnesium (Mg)	mg/kg	286	283	287	274	278	0.40	9230652
Total (Wet Wt) Manganese (Mn)	mg/kg	0.078	0.086	0.134	0.084	0.086	0.010	9230652
Total (Wet Wt) Mercury (Hg)	mg/kg	0.0561	0.101	0.0473	0.0484	0.0305	0.0020	9230652
Total (Wet Wt) Molybdenum (Mo)	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	9230652
Total (Wet Wt) Nickel (Ni)	mg/kg	0.018	<0.010	0.019	0.021	0.012	0.010	9230652
Total (Wet Wt) Phosphorus (P)	mg/kg	3040	2980	3150	3000	2940	2.0	9230652
Total (Wet Wt) Potassium (K)	mg/kg	4660	4280	4390	4390	4450	2.0	9230652
Total (Wet Wt) Selenium (Se)	mg/kg	0.354	0.464	0.330	0.313	0.324	0.010	9230652
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Sodium (Na)	mg/kg	360	504	482	386	448	2.0	9230652
Total (Wet Wt) Strontium (Sr)	mg/kg	0.112	0.281	0.637	0.142	0.191	0.010	9230652
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00346	0.00644	0.00319	0.00257	0.00280	0.00040	9230652
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Titanium (Ti)	mg/kg	0.124	0.122	0.135	0.143	0.117	0.020	9230652
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	<0.00040	<0.00040	0.00058	0.00040	9230652
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Zinc (Zn)	mg/kg	4.97	6.15	7.43	5.28	4.96	0.040	9230652
RDL = Reportable Detection Limit								



 ${\bf Biologica\ Environmental\ Services,\ Ltd.}$

Client Project #: 18-108

Maxxam ID		UQ8068	UQ8069	UQ8070	UQ8071	UQ8072		
Sampling Date		2018/08/02	2018/08/03	2018/08/03	2018/08/03	2018/08/03		
COC Number		08455981	08455981	08455981	08455981	08455981		
	UNITS	MS18-108-011	MS18-108-012	MS18-108-013	MS18-108-014	MS18-108-015	RDL	QC Batch
Total Metals by ICPMS								
Total (Wet Wt) Aluminum (Al)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	9230652
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Arsenic (As)	mg/kg	0.438	1.11	0.560	0.601	0.330	0.0040	9230652
Total (Wet Wt) Barium (Ba)	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9230652
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	9230652
Total (Wet Wt) Cadmium (Cd)	mg/kg	<0.0010	0.0015	0.0017	0.0022	0.0013	0.0010	9230652
Total (Wet Wt) Calcium (Ca)	mg/kg	47.4	81.5	46.3	42.7	50.0	2.0	9230652
Total (Wet Wt) Chromium (Cr)	mg/kg	0.014	<0.010	0.048	<0.010	<0.010	0.010	9230652
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0032	0.0044	0.0047	0.0036	0.0041	0.0013	9230652
Total (Wet Wt) Copper (Cu)	mg/kg	0.492	0.598	0.502	0.469	0.540	0.010	9230652
Total (Wet Wt) Iron (Fe)	mg/kg	3.62	4.96	4.50	4.05	4.52	0.25	9230652
Total (Wet Wt) Lead (Pb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Magnesium (Mg)	mg/kg	270	296	287	276	264	0.40	9230652
Total (Wet Wt) Manganese (Mn)	mg/kg	0.067	0.115	0.090	0.080	0.080	0.010	9230652
Total (Wet Wt) Mercury (Hg)	mg/kg	0.0352	0.0310	0.0288	0.0464	0.0360	0.0020	9230652
Total (Wet Wt) Molybdenum (Mo)	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	9230652
Total (Wet Wt) Nickel (Ni)	mg/kg	0.014	<0.010	0.037	<0.010	0.011	0.010	9230652
Total (Wet Wt) Phosphorus (P)	mg/kg	2830	3070	3020	2860	2860	2.0	9230652
Total (Wet Wt) Potassium (K)	mg/kg	4190	4580	4590	4150	4320	2.0	9230652
Total (Wet Wt) Selenium (Se)	mg/kg	0.335	0.343	0.310	0.304	0.309	0.010	9230652
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Sodium (Na)	mg/kg	388	550	607	541	491	2.0	9230652
Total (Wet Wt) Strontium (Sr)	mg/kg	0.079	0.193	0.112	0.108	0.106	0.010	9230652
Total (Wet Wt) Thallium (TI)	mg/kg	0.00293	0.00279	0.00219	0.00257	0.00294	0.00040	9230652
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Titanium (Ti)	mg/kg	0.105	0.130	0.150	0.116	0.119	0.020	9230652
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.00040	9230652
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Zinc (Zn)	mg/kg	4.50	6.08	5.02	4.74	4.77	0.040	9230652
RDL = Reportable Detection Limit								



 ${\bf Biologica\ Environmental\ Services,\ Ltd.}$

Client Project #: 18-108

Maxxam ID		UQ8073	UQ8074	UQ8075	UQ8076	UQ8077		
Sampling Date		2018/08/03	2018/08/03	2018/08/03	2018/08/03	2018/08/03		
COC Number		08455981	08455981	08455981	08455981	08455981		
	UNITS	MS18-108-016	MS18-108-017	MS18-108-018	MS18-108-019	MS18-108-020	RDL	QC Batch
Total Metals by ICPMS								
Total (Wet Wt) Aluminum (Al)	mg/kg	<0.20	<0.20	<0.20	<0.20	0.36	0.20	9230652
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Arsenic (As)	mg/kg	0.508	0.428	0.393	0.356	0.445	0.0040	9230652
Total (Wet Wt) Barium (Ba)	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9230652
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	9230652
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0033	0.0041	0.0016	0.0122	0.0052	0.0010	9230652
Total (Wet Wt) Calcium (Ca)	mg/kg	56.2	69.9	51.5	63.5	90.7	2.0	9230652
Total (Wet Wt) Chromium (Cr)	mg/kg	0.019	<0.010	0.017	0.014	0.018	0.010	9230652
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0043	0.0040	0.0039	0.0050	0.0049	0.0013	9230652
Total (Wet Wt) Copper (Cu)	mg/kg	0.427	0.347	0.438	0.430	0.392	0.010	9230652
Total (Wet Wt) Iron (Fe)	mg/kg	3.38	3.98	3.54	3.63	4.20	0.25	9230652
Total (Wet Wt) Lead (Pb)	mg/kg	<0.0010	0.0026	<0.0010	0.0015	0.0015	0.0010	9230652
Total (Wet Wt) Magnesium (Mg)	mg/kg	267	294	280	263	288	0.40	9230652
Total (Wet Wt) Manganese (Mn)	mg/kg	0.076	0.093	0.075	0.089	0.095	0.010	9230652
Total (Wet Wt) Mercury (Hg)	mg/kg	0.0299	0.0614	0.0532	0.0342	0.0271	0.0020	9230652
Total (Wet Wt) Molybdenum (Mo)	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	9230652
Total (Wet Wt) Nickel (Ni)	mg/kg	0.023	0.011	0.024	0.014	0.015	0.010	9230652
Total (Wet Wt) Phosphorus (P)	mg/kg	2950	3040	2950	2870	2940	2.0	9230652
Total (Wet Wt) Potassium (K)	mg/kg	4450	4560	4350	4350	4310	2.0	9230652
Total (Wet Wt) Selenium (Se)	mg/kg	0.305	0.329	0.320	0.295	0.318	0.010	9230652
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230652
Total (Wet Wt) Sodium (Na)	mg/kg	480	796	478	483	678	2.0	9230652
Total (Wet Wt) Strontium (Sr)	mg/kg	0.096	0.229	0.101	0.142	0.277	0.010	9230652
Total (Wet Wt) Thallium (TI)	mg/kg	0.00304	0.00297	0.00254	0.00285	0.00268	0.00040	9230652
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Titanium (Ti)	mg/kg	0.125	0.131	0.144	0.113	0.127	0.020	9230652
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.00040	9230652
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230652
Total (Wet Wt) Zinc (Zn)	mg/kg	5.07	5.26	4.91	5.39	5.68	0.040	9230652
RDL = Reportable Detection Limit								



 ${\bf Biologica\ Environmental\ Services,\ Ltd.}$

Client Project #: 18-108

Maxxam ID		UQ8078	UQ8079	UQ8080	UQ8081	UQ8082		
Sampling Date		2018/07/30	2018/07/30	2018/07/30	2018/08/09	2018/08/09		
COC Number		08455981	08455981	08455981	08455981	08455981		
	UNITS	MS18-108-024	MS18-108-025	MS18-108-026	MS18-108-027	MS18-108-028	RDL	QC Batch
Total Metals by ICPMS	-		•		•		•	-
Total (Wet Wt) Aluminum (Al)	mg/kg	0.58	<0.20	<0.20	0.35	0.52	0.20	9230928
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230928
Total (Wet Wt) Arsenic (As)	mg/kg	1.15	0.383	0.384	0.484	0.724	0.0040	9230928
Total (Wet Wt) Barium (Ba)	mg/kg	<0.010	<0.010	0.013	<0.010	<0.010	0.010	9230928
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230928
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230928
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	9230928
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0161	0.0092	0.0091	0.0207	0.0161	0.0010	9230928
Total (Wet Wt) Calcium (Ca)	mg/kg	59.8	93.0	135	109	80.3	2.0	9230928
Total (Wet Wt) Chromium (Cr)	mg/kg	0.050	<0.010	<0.010	0.021	<0.010	0.010	9230928
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0054	0.0052	0.0030	0.0054	0.0058	0.0013	9230928
Total (Wet Wt) Copper (Cu)	mg/kg	0.688 (1)	0.554	0.441	0.564	0.672	0.010	9230928
Total (Wet Wt) Iron (Fe)	mg/kg	5.70	5.24	4.53	4.33	5.51	0.25	9230928
Total (Wet Wt) Lead (Pb)	mg/kg	0.0013	0.0011	0.0015	0.0017	0.0022	0.0010	9230928
Total (Wet Wt) Magnesium (Mg)	mg/kg	291	289	296	310	292	0.40	9230928
Total (Wet Wt) Manganese (Mn)	mg/kg	0.087	0.088	0.094	0.112	0.107	0.010	9230928
Total (Wet Wt) Mercury (Hg)	mg/kg	0.0371	0.0442	0.0387	0.0484	0.0329	0.0020	9230928
Total (Wet Wt) Molybdenum (Mo)	mg/kg	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	9230928
Total (Wet Wt) Nickel (Ni)	mg/kg	0.019	0.012	<0.010	0.012	0.016	0.010	9230928
Total (Wet Wt) Phosphorus (P)	mg/kg	3010	3210	3060	3190	3120	2.0	9230928
Total (Wet Wt) Potassium (K)	mg/kg	4370	4640	4420	4570	4330	2.0	9230928
Total (Wet Wt) Selenium (Se)	mg/kg	0.394	0.338	0.316	0.366	0.335	0.010	9230928
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9230928
Total (Wet Wt) Sodium (Na)	mg/kg	412	402	440	607	430	2.0	9230928
Total (Wet Wt) Strontium (Sr)	mg/kg	0.093	0.195	0.247	0.239	0.171	0.010	9230928
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00379	0.00347	0.00338	0.00264	0.00211	0.00040	9230928
Total (Wet Wt) Tin (Sn)	mg/kg	0.036	<0.020	<0.020	<0.020	<0.020	0.020	9230928
Total (Wet Wt) Titanium (Ti)	mg/kg	0.085	0.116	0.097	0.115	0.115	0.020	9230928
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.00040	9230928
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9230928
Total (Wet Wt) Zinc (Zn)	mg/kg	4.75	7.74	5.90	7.26	5.56	0.040	9230928
DDI - Departable Detection Limit								

RDL = Reportable Detection Limit

⁽¹⁾ Matrix Spike outside acceptance criteria (10% of analytes failure allowed).



Biologica Environmental Services, Ltd. Client Project #: 18-108

Maxxam ID		UQ8083		
Sampling Date		2018/08/09		
COC Number		08455981		
	UNITS	MS18-108-029	RDL	QC Batch
Total Metals by ICPMS				
Total (Wet Wt) Aluminum (Al)	mg/kg	0.81	0.20	9230928
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0010	0.0010	9230928
Total (Wet Wt) Arsenic (As)	mg/kg	0.714	0.0040	9230928
Total (Wet Wt) Barium (Ba)	mg/kg	<0.010	0.010	9230928
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0010	0.0010	9230928
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0010	0.0010	9230928
Total (Wet Wt) Boron (B)	mg/kg	<0.20	0.20	9230928
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0087	0.0010	9230928
Total (Wet Wt) Calcium (Ca)	mg/kg	75.0	2.0	9230928
Total (Wet Wt) Chromium (Cr)	mg/kg	0.037	0.010	9230928
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0052	0.0013	9230928
Total (Wet Wt) Copper (Cu)	mg/kg	0.635	0.010	9230928
Total (Wet Wt) Iron (Fe)	mg/kg	5.77	0.25	9230928
Total (Wet Wt) Lead (Pb)	mg/kg	0.0026	0.0010	9230928
Total (Wet Wt) Magnesium (Mg)	mg/kg	293	0.40	9230928
Total (Wet Wt) Manganese (Mn)	mg/kg	0.100	0.010	9230928
Total (Wet Wt) Mercury (Hg)	mg/kg	0.0343	0.0020	9230928
Total (Wet Wt) Molybdenum (Mo)	mg/kg	<0.0040	0.0040	9230928
Total (Wet Wt) Nickel (Ni)	mg/kg	0.018	0.010	9230928
Total (Wet Wt) Phosphorus (P)	mg/kg	2910	2.0	9230928
Total (Wet Wt) Potassium (K)	mg/kg	4030	2.0	9230928
Total (Wet Wt) Selenium (Se)	mg/kg	0.356	0.010	9230928
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0010	0.0010	9230928
Total (Wet Wt) Sodium (Na)	mg/kg	527	2.0	9230928
Total (Wet Wt) Strontium (Sr)	mg/kg	0.171	0.010	9230928
Total (Wet Wt) Thallium (TI)	mg/kg	0.00271	0.00040	9230928
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	0.020	9230928
Total (Wet Wt) Titanium (Ti)	mg/kg	0.119	0.020	9230928
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	0.00040	9230928
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	0.020	9230928
Total (Wet Wt) Zinc (Zn)	mg/kg	5.61	0.040	9230928
RDL = Reportable Detection Limit				



Biologica Environmental Services, Ltd. Client Project #: 18-108

PHYSICAL TESTING (TISSUE)

					(
Maxxam ID		UQ8058	UQ8059	UQ8060	UQ8061	UQ8062	UQ8063		
Sampling Date		2018/07/30	2018/08/02	2018/08/02	2018/08/02	2 2018/08/02	2 2018/08/02	2	
COC Number		08455981	08455981	08455981	08455981	08455981	08455981		
	UNITS	MS18-108-001	MS18-108-002	MS18-108-0	03 MS18-108-0	04 MS18-108-0	05 MS18-108-0	06 RI	OL QC Bato
Physical Properties									
Moisture	%	77	73	76	75	76	73	0.	30 923495
RDL = Reportable Detection	Limit	•						•	
Maxxam ID		UQ8064	UQ8065	UQ8066	UQ8067	UQ8068	UQ8069		
Sampling Date		2018/08/02	2018/08/02	2018/08/02				3	
COC Number		08455981	08455981	08455981	08455981	08455981			
	UNITS		MS18-108-008	MS18-108-0				12 RI	DL QC Batc
Physical Properties		•	•	•	<u> </u>			•	
Moisture	%	76	73	73	74	73	72	0.	30 923495
RDL = Reportable Detection	Limit		•	•		1	1		
Maxxam ID		UQ8070	UQ8071	UQ8072	UQ8073	UQ8074	UQ8075		
Sampling Date		2018/08/03	2018/08/03	2018/08/03	3 2018/08/03	3 2018/08/03	3 2018/08/03	3	
COC Number		08455981	08455981	08455981	08455981	08455981	08455981		
	UNITS	MS18-108-013	MS18-108-014	MS18-108-0	15 MS18-108-0	16 MS18-108-0	17 MS18-108-0	18 RI	OL QC Bato
Physical Properties									
Moisture	%	74	74	75	75	76	74	0.	30 923495
RDL = Reportable Detection	Limit								
Maxxam ID		UQ8076	UQ8077		UQ8078	UQ8079	UQ8080		
Sampling Date		2018/08/03		3	2018/07/30	2018/07/30	2018/07/30		
COC Number		08455981			08455981	08455981	08455981		
	UN	ITS MS18-108-0	19 MS18-108-0	20 QC Batch	MS18-108-024	MS18-108-025	MS18-108-026	RDL	QC Batch
Physical Properties									
Moisture	%	6 76	76	9234956	72	76	76	0.30	9234961
RDL = Reportable Detection	on Limit	•	•	ı			•	•	

Maxxam ID		UQ8081	UQ8082	UQ8083		
Sampling Date		2018/08/09	2018/08/09	2018/08/09		
COC Number		08455981	08455981	08455981		
	UNITS	MS18-108-027	MS18-108-028	MS18-108-029	RDL	QC Batch
Physical Properties						
Moisture	%	74	72	75	0.30	9234961



Biologica Environmental Services, Ltd. Client Project #: 18-108

GENERAL COMMENTS

Results relate only to the items tested.		



QUALITY ASSURANCE REPORT

Biologica Environmental Services, Ltd. Client Project #: 18-108

			Matrix	Spike	Spiked	Blank	Method E	Method Blank		D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value UNITS		Value (%)	QC Limits	% Recovery	QC Limits
9230652	Total (Wet Wt) Aluminum (Al)	2018/11/22					<0.20	mg/kg	32	40	100	75 - 125
9230652	Total (Wet Wt) Antimony (Sb)	2018/11/22	98	75 - 125	102	75 - 125	<0.0010	mg/kg	NC	40		
9230652	Total (Wet Wt) Arsenic (As)	2018/11/22	85	75 - 125	91	75 - 125	<0.0040	mg/kg	1.1	40	98	75 - 125
9230652	Total (Wet Wt) Barium (Ba)	2018/11/22	100	75 - 125	112	75 - 125	<0.010	mg/kg	NC	40		
9230652	Total (Wet Wt) Beryllium (Be)	2018/11/22	83	75 - 125	89	75 - 125	<0.0010	mg/kg	NC	40		
9230652	Total (Wet Wt) Bismuth (Bi)	2018/11/22					<0.0010	mg/kg	NC	40		
9230652	Total (Wet Wt) Boron (B)	2018/11/22					<0.20	mg/kg	NC	40		
9230652	Total (Wet Wt) Cadmium (Cd)	2018/11/22	83	75 - 125	93	75 - 125	<0.0010	mg/kg	2.4	40	96	75 - 125
9230652	Total (Wet Wt) Calcium (Ca)	2018/11/22					<2.0	mg/kg	21	60		
9230652	Total (Wet Wt) Chromium (Cr)	2018/11/22	82	75 - 125	92	75 - 125	<0.010	mg/kg	20	40	79	75 - 125
9230652	Total (Wet Wt) Cobalt (Co)	2018/11/22	81	75 - 125	90	75 - 125	< 0.0013	mg/kg	5.0	40	88	75 - 125
9230652	Total (Wet Wt) Copper (Cu)	2018/11/22	77	75 - 125	90	75 - 125	<0.010	mg/kg	0.67	40	87	75 - 125
9230652	Total (Wet Wt) Iron (Fe)	2018/11/22					<0.25	mg/kg	11	40	89	75 - 125
9230652	Total (Wet Wt) Lead (Pb)	2018/11/22	83	75 - 125	96	75 - 125	<0.0010	mg/kg	NC	40	60 (1)	75 - 125
9230652	Total (Wet Wt) Magnesium (Mg)	2018/11/22					<0.40	mg/kg	0.77	40		
9230652	Total (Wet Wt) Manganese (Mn)	2018/11/22	85	75 - 125	92	75 - 125	<0.010	mg/kg	1.9	40		
9230652	Total (Wet Wt) Mercury (Hg)	2018/11/22	91	75 - 125	104	75 - 125	<0.0020	mg/kg	0.31	40	92	75 - 125
9230652	Total (Wet Wt) Molybdenum (Mo)	2018/11/22	98	75 - 125	103	75 - 125	<0.0040	mg/kg	NC	40	98	75 - 125
9230652	Total (Wet Wt) Nickel (Ni)	2018/11/22	80	75 - 125	90	75 - 125	<0.010	mg/kg	27	40	83	75 - 125
9230652	Total (Wet Wt) Phosphorus (P)	2018/11/22					<2.0	mg/kg	0.89	40	94	75 - 125
9230652	Total (Wet Wt) Potassium (K)	2018/11/22					<2.0	mg/kg	0.68	40		
9230652	Total (Wet Wt) Selenium (Se)	2018/11/22	89	75 - 125	89	75 - 125	<0.010	mg/kg	0.16	40	97	75 - 125
9230652	Total (Wet Wt) Silver (Ag)	2018/11/22	81	75 - 125	95	75 - 125	<0.0010	mg/kg	NC	40		
9230652	Total (Wet Wt) Sodium (Na)	2018/11/22					<2.0	mg/kg	0.053	40	89	75 - 125
9230652	Total (Wet Wt) Strontium (Sr)	2018/11/22	87	75 - 125	94	75 - 125	<0.010	mg/kg	17	60		
9230652	Total (Wet Wt) Thallium (TI)	2018/11/22	85	75 - 125	97	75 - 125	<0.00040	mg/kg	7.5	40		
9230652	Total (Wet Wt) Tin (Sn)	2018/11/22	96	75 - 125	102	75 - 125	<0.020	mg/kg	NC	40	129 (1)	75 - 125
9230652	Total (Wet Wt) Titanium (Ti)	2018/11/22	94	75 - 125	97	75 - 125	<0.020	mg/kg	0.51	40		
9230652	Total (Wet Wt) Uranium (U)	2018/11/22	86	75 - 125	95	75 - 125	<0.00040	mg/kg	NC	40	106	75 - 125
9230652	Total (Wet Wt) Vanadium (V)	2018/11/22	88	75 - 125	92	75 - 125	<0.020	mg/kg	NC	40		
9230652	Total (Wet Wt) Zinc (Zn)	2018/11/22	NC	75 - 125	93	75 - 125	0.058, RDL=0.040 (2)	mg/kg	0.90	40	90	75 - 125
9230928	Total (Wet Wt) Aluminum (Al)	2018/11/30					<0.20	mg/kg	21	40	106	75 - 125



QUALITY ASSURANCE REPORT(CONT'D)

Biologica Environmental Services, Ltd. Client Project #: 18-108

			Matrix	Spike	Spiked	Blank	Method I	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value UNITS		Value (%)	QC Limits	% Recovery	QC Limits
9230928	Total (Wet Wt) Antimony (Sb)	2018/11/30	104	75 - 125	89	75 - 125	<0.0010	mg/kg	NC	40		
9230928	Total (Wet Wt) Arsenic (As)	2018/11/30	NC	75 - 125	97	75 - 125	<0.0040	mg/kg	1.7	40	97	75 - 125
9230928	Total (Wet Wt) Barium (Ba)	2018/11/30	103	75 - 125	112	75 - 125	<0.010	mg/kg	NC	40		1
9230928	Total (Wet Wt) Beryllium (Be)	2018/11/30	85	75 - 125	95	75 - 125	<0.0010	mg/kg	NC	40		,
9230928	Total (Wet Wt) Bismuth (Bi)	2018/11/30					<0.0010	mg/kg	NC	40		,
9230928	Total (Wet Wt) Boron (B)	2018/11/30					<0.20	mg/kg	NC	40		,
9230928	Total (Wet Wt) Cadmium (Cd)	2018/11/30	88	75 - 125	94	75 - 125	<0.0010	mg/kg	1.1	40	91	75 - 125
9230928	Total (Wet Wt) Calcium (Ca)	2018/11/30					<2.0	mg/kg	24	60		,
9230928	Total (Wet Wt) Chromium (Cr)	2018/11/30	80	75 - 125	95	75 - 125	<0.010	mg/kg	20	40	82	75 - 125
9230928	Total (Wet Wt) Cobalt (Co)	2018/11/30	79	75 - 125	96	75 - 125	<0.0013	mg/kg	2.1	40	94	75 - 125
9230928	Total (Wet Wt) Copper (Cu)	2018/11/30	71 (3)	75 - 125	96	75 - 125	<0.010	mg/kg	3.3	40	90	75 - 125
9230928	Total (Wet Wt) Iron (Fe)	2018/11/30					<0.25	mg/kg	10	40	96	75 - 125
9230928	Total (Wet Wt) Lead (Pb)	2018/11/30	87	75 - 125	99	75 - 125	<0.0010	mg/kg	23	40	61 (1)	75 - 125
9230928	Total (Wet Wt) Magnesium (Mg)	2018/11/30					<0.40	mg/kg	1.2	40		,
9230928	Total (Wet Wt) Manganese (Mn)	2018/11/30	80	75 - 125	97	75 - 125	<0.010	mg/kg	2.3	40		,
9230928	Total (Wet Wt) Mercury (Hg)	2018/11/30	101	75 - 125	93	75 - 125	<0.0020	mg/kg	0.49	40	90	75 - 125
9230928	Total (Wet Wt) Molybdenum (Mo)	2018/11/30	105	75 - 125	91	75 - 125	<0.0040	mg/kg	NC	40	95	75 - 125
9230928	Total (Wet Wt) Nickel (Ni)	2018/11/30	78	75 - 125	98	75 - 125	<0.010	mg/kg	15	40	89	75 - 125
9230928	Total (Wet Wt) Phosphorus (P)	2018/11/30					<2.0	mg/kg	1.2	40	101	75 - 125
9230928	Total (Wet Wt) Potassium (K)	2018/11/30					<2.0	mg/kg	1.1	40		,
9230928	Total (Wet Wt) Selenium (Se)	2018/11/30	86	75 - 125	95	75 - 125	<0.010	mg/kg	3.3	40	101	75 - 125
9230928	Total (Wet Wt) Silver (Ag)	2018/11/30	85	75 - 125	95	75 - 125	<0.0010	mg/kg	NC	40		,
9230928	Total (Wet Wt) Sodium (Na)	2018/11/30					<2.0	mg/kg	0.55	40	98	75 - 125
9230928	Total (Wet Wt) Strontium (Sr)	2018/11/30	89	75 - 125	97	75 - 125	<0.010	mg/kg	44	60		
9230928	Total (Wet Wt) Thallium (TI)	2018/11/30	88	75 - 125	99	75 - 125	<0.00040	mg/kg	1.3	40		,
9230928	Total (Wet Wt) Tin (Sn)	2018/11/30	99	75 - 125	86	75 - 125	<0.020	mg/kg	NC	40	132 (1)	75 - 125
9230928	Total (Wet Wt) Titanium (Ti)	2018/11/30	97	75 - 125	94	75 - 125	<0.020	mg/kg	24	40		,
9230928	Total (Wet Wt) Uranium (U)	2018/11/30	89	75 - 125	97	75 - 125	<0.00040	mg/kg	NC	40	106	75 - 125
9230928	Total (Wet Wt) Vanadium (V)	2018/11/30	82	75 - 125	96	75 - 125	<0.020	mg/kg	NC	40		
9230928	Total (Wet Wt) Zinc (Zn)	2018/11/30	NC	75 - 125	95	75 - 125	<0.040	mg/kg	1.1	40	93	75 - 125
9234956	Moisture	2018/11/21					<0.30	%	0.13	20		



QUALITY ASSURANCE REPORT(CONT'D)

Biologica Environmental Services, Ltd. Client Project #: 18-108

			Matrix	Spike	Spiked	Blank	Method E	Blank	RPI)	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9234961	Moisture	2018/11/21					<0.30	%	0.67	20		

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

- (1) Reference outside acceptance criteria due to digestion limitation.
- (2) Method Blank exceeds acceptance limits for Zn. Sample values for Zn are >10x the concentration of the method blank and the contamination is considered irrelevant
- (3) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



Biologica Environmental Services, Ltd. Client Project #: 18-108

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Rob Reinert, B.Sc., Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.





Biologica Environmental Services

Burnaby: 4606 Canada Way, Burnaby, BC V5G 1K5 Toll Free (800) 665 8566 Victoria: 460 Tennyson Place, Unit 1, Victoria, BC V8Z 658 Toil Free (866) 385-6112

Report Information (If differs from invoice)

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Project Information

Turnaround Time (TAT) Required 5 - 7 Days Regular (Most analyses)

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Victoria: 460 Tennyson Place, Unit 1, Victoria, BC V8Z 658 TOIl Free (866) 385-6112

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CHAIN OF CUSTODY RECORD

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Fish Tissue Analysis Methods Client: Golder Project: Baffinlands Iron Mine

Sample Inventory

Sample arrival: August 31, 2018

Number of samples: 26

Biologica project number: 18-108

Upon arrival, the samples were examined and double checked against the chain of custody to ensure all samples were accounted for. Any discrepancies were reported to the client and were resolved before further sample handling. Samples were then assigned a unique identification number.

Table 1. Summary of fish stomachs processed for Golder Baffin Island Iron Mine 2018.

Client	Date	Biologica	Fish Fork	Fish Weight
Sample #	Sampled	Sample #	Length (cm)	(kg)
GN-3	30-Jul-18	ms18-108-001	40.6	0.62
GN-7-1	2-Aug-18	ms18-108-002	36.3	0.50
GN-7-2	2-Aug-18	ms18-108-003	37.4	0.48
GN-7-3	2-Aug-18	ms18-108-004	33.8	0.31
GN-7-4	2-Aug-18	ms18-108-005	48.0	1.25
GN-7-5	2-Aug-18	ms18-108-006	45.7	1.03
GN-7-6	2-Aug-18	ms18-108-007	26.7	0.17
GN-7-7	2-Aug-18	ms18-108-008	37.8	0.58
GN-7-8	2-Aug-18	ms18-108-009	45.7	1.12
GN-7-9	2-Aug-18	ms18-108-010	34.3	0.55
GN-7-10	2-Aug-18	ms18-108-011	50.8	1.47
GN-8-1	3-Aug-18	ms18-108-012	39.9	0.69
GN-8-2	3-Aug-18	ms18-108-013	48.2	1.24
GN-8-3	3-Aug-18	ms18-108-014	50.4	1.41
GN-8-4	3-Aug-18	ms18-108-015	51.4	1.26
GN-8-5	3-Aug-18	ms18-108-016	37.9	0.94
GN-8-6	3-Aug-18	ms18-108-017	43.6	0.62
GN-8-7	3-Aug-18	ms18-108-018	38.6	1.06
GN-8-8	3-Aug-18	ms18-108-019	31.6	0.76
GN-8-9	3-Aug-18	ms18-108-020	32.2	0.11
GN-9-1	30-Jul-18	ms18-108-024	50.3	1.48
GN-9-2	30-Jul-18	ms18-108-025	39.2	0.52
GN-9-3	30-Jul-18	ms18-108-026	34.7	0.47
GN-12-1	9-Aug-18	ms18-108-027	37.3	0.34
GN-12-2	9-Aug-18	ms18-108-028	38.9	0.74
GN-12-3	9-Aug-18	ms18-108-029	38.6	1.35

Sample Processing

Latex gloves were worn when handling the fish samples, and changed between each sample to avoid potential contamination. All fish were weighed and the fork length measured.

Tissue Collection:

The fish samples were examined for any lesions or tumors. None were noted. The internal organs (e.g. stomachs, intestines, gonads, etc.) and heads were then removed with a knife. To avoid contamination, cleaned dissecting trays were used between fish, and the knife was rinsed with distilled water and dried in between samples. The sex of each fish was determined through examination of the gonads. One fillet was removed for analysis of metal contamination. The fillet samples were rinsed with distilled water, wrapped in clean, food grade aluminum foil (with the dull side in contact with the fish), and placed in clean, pre-labelled food grade plastic bags. Samples were placed back in the freezer as quickly as possible, and delivered to Maxxam Analytics in a cooler with icepacks for analysis.

Otoliths:

Otoliths were removed from each fish head using a fillet knife, were subsequently rinsed, and stored in water. Otoliths were then mounted, polished as necessary and then aged by viewing the number of annuli through a compound microscope.

Fish Stomachs:

Fish stomachs were removed and preserved in 10% Formalin for subsequent taxonomic analysis.

Sample Processing and Data Analysis

Tissue sample processing was performed at the Maxxam Analytics' laboratory in Victoria, BC. Results were provided to the Golder project manager in Excel spreadsheets via email.

References

Kasich J, Taylor GM, Scott JN. 2012. Fish Tissue Collection Manual. Cooperative Fish Tissue Monitoring Program. US EPA. Ohio.

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. 2000. Vol 1: Fish Sampling and Analysis. 3rd ed. Office of Water. US EPA. Washington.

31 May 2019 1663724-092-R-Rev1-14000

ANNEXE H

Zooplankton and Ichthyoplankton Data





Ichthyoplankton Preliminary Counts Golder Baffinlands 2018.

Client	Project	Year	Sample Type	Client ID	Date Sampled	Biologica Sample #	Ichthyoplankton Preliminary Count	Identification
Golder	Baffinlands	2018	Zooplankton	ZH1	9-Aug-18	mz18-108-005	1	Clupea sp.
Golder	Baffinlands	2018	Zooplankton	ZH1	9-Aug-18	mz18-108-005	6	Gadiidae indet.
Golder	Baffinlands	2018	Zooplankton	ZH2	9-Aug-18	mz18-108-006	2	Gadiidae indet.
Golder	Baffinlands	2018	Zooplankton	ZH3	9-Aug-18	mz18-108-007	1	Clupea sp.
Golder	Baffinlands	2018	Zooplankton	ZH4	9-Aug-18	mz18-108-008	1	Gadiidae indet.



Abbreviations & Definitions

Worksheets:

Abbreviations & Definitions Glossary of terms and outline of report

2. Data - Matrix Abundance data in matrix format, including total taxa (species richness) count per sample, and total abundance per sample

3. Data - Long Abundance data in long format

4. QA/QC Quality control report of zooplankton enumeration in QA samples

Abundance Data:

Total Taxa

Number of taxa present, not including fish eggs or higher-order taxa of which there are identified lower-level taxa (e.g. not including Calanoida

indet. if Microcalanus sp. present).

MEMO Incidental organisms, not part of the (not included in final count or in total taxa)

Benthic Organisms from the benthic community (not included in final count or in total taxa)

Nauplius Crustacean early larval stage

J Juvenile; a non-larva without adult features
A Adult; animal of reproductive size with adult features

L Larvae; larval form

Size Class:

Annelids:

Epitoke Posterior portion of an annelida capable of sexual reproduction

 Metatrochophore
 Early stage of annelida larvae with 2-3 segments, appearing as a trochophore with segments

 Nectochaete
 Annelida larval stage with >3 segments, appearing ready to settle (i.e. juvenile form

Trochophore Annelida laral stage with a spherical body, and a band(s) of cilia

Arthropods:

Calyptopis Larval Euphausiacea

Cryptoniscid larvae Larval Isopod Cypris Cirripede larva

Cirripede larval stage that is ready to settle Larval Euphausiacea

Furcilia Larval Euphausiacea Megalopa Larval Decapoda Nauplius Crustacean early larval stage Protozoea Larval Decapoda

Protozoea Larval Decapoda Zoea Larval Crustacean

Bryozoans:

Cyphonautes Bryozoan larval stage

Copepods:

III Calanoid copepod stage 3; with 3 abdominal segments
IV Calanoid copepod stage 4: with 4 abdominal segments
V Calanoid copepod stage 5: with 5 abdominant segments

VIf Calanoid copepod Stage 6 (reproductive, adult stage), with 6 abdominal segments. Female. VIm Calanoid copepod Stage 6 (reproductive, adult stage), with 6 abdominal segments. Male.

Cnidarians:

Bract Defensive structure

Gastrozooid Nutritive polyp, for feeding and digestion Gonozoid Medusoid bud of a hydroid, sexual zooid

Medusa Mobile form of Cnidarian

Nectophore Medusoid locomotory structure of a siphonophore

Pneumatophore Cnidarian gas-filled bladder Polyp Sedentary form of Cnidarian

Ctenophore:

Cydippid Ctenophore larva of any stage

Echinoderms:

Auricularia Holothuroidea larvae (sea cucumber) with a singal longitudinal ciliated band

Bipinnaria Asteroidea larvae (sea star), first stage
Brachiolaria Asteroidea larvae (sea star), second stage
Ophiopleutus Ophiuroidea larvae (brittle star)
Pentacula Holothuroidea larvae (sea cucumber)
Echinopluteus Echinoidea larvae (sea urchin)

Pluteus Echinoderm larvae

Molluscs:

Veliger Mollusc larval stage with shell and velar lobes

Nemerteans:

Pilidium Larval Nemertean

Phoronids:

Actinotroch Larval Phoronidae

 ${\it Sipunculids:}$

Pelagosphera Larval sipunculid

Abundance data in matrix format, including total taxa (species richness) count per sample and total abundance per sample for Golder Baffinlands 2018.

Diele.			mat, melaanig te	otal taxa (species in	inicis, count per so	ample and total abunda	nce per sample for Golder Damillands 2010.			10 100 001	10 100 003	10 100 003	10 100 004	10 100 005	10 100 000	10 100 007	10 100 000	10 100 000	10 100 010	10 100 011	10 100 013		10 100 014	10 100 015	10 100 016	10 100 017	10 100 001	. 0410.1	100 000 04
Clier	gica Sample t Sample #	2#								BR1	mz18-108-002 BR2	mz18-108-003 BR3	mz18-108-004 BR4	mz18-108-005 ZH1	mz18-108-006 ZH2	ZH3	mz18-108-008 ZH4	mz18-108-009 ZH5	mz18-108-010 ZH6	mz18-108-011 ZV1	mz18-108-012 ZV2	mz18-108-013 ZV3	mz18-108-014 ZV4	mz18-108-015 ZV5	mz18-108-016 ZV6	mz18-108-017 NBWD_Acadia	BR1_QA	Zŀ	H4_QA
	Sampled							Grand		2018-08-08	2018-08-08	2018-08-08	2018-08-08	2018-08-09	2018-08-09	2018-08-09	2018-08-09	2018-08-09	2018-08-09	2018-08-01	2018-08-01	2018-08-01	2018-08-09	2018-08-09	2018-08-01	2018-08-03			18-08-09
Phyl		Subphylum	Class	Subclass	Order	Family		Unique Taxa To			Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundance	Total Abundano	e Total Abunda	nce Total A	Abundance
Bryo	zoa tognatha		Canistaldan	A-b		Sagittidae	Bryozoa indet. Parasagitta elegans	1	16 7.093	16 11	-	-	0	1.536	568	3 2.560	832	800	288	80	40	72		72	2 211		2	11	896
	tognatha		Sagittoidea Sagittoidea	Aphragmophora Aphragmophora		Sagittidae	Parasagitta sp.	1	1,543	11	2	5	16	1,556	455		256		200 64			40		. 72			9	11	192
Cnid			Hydrozoa	Hvdroidolina	Anthoathecata	Corymorphidae	Euphysa sp.	1	1,343		٥		10	120	433	304	230	1	1	10		40		80	, 10		•		152
Cnid			Hydrozoa	Hydroidolina	Anthoathecata	Pandeidae	Catablema vesicarium	1	8					2		1	1	1		-			2	1					1
Cnid			Hydrozoa	Hydroidolina	Siphonophorae	randelade	Siphonophorae indet.	1	64					-		-	-	-	64				-	-					-
Cnid	aria		Hydrozoa	Trachylinae	Narcomedusae	Solmundaeginidae	Aeginopsis laurentii	1	104		16	16	8								8	8		32	2 16				
Cnid	aria		Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae		1	56				12					1				32		3	3		5		
Cnid	aria		Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae			19			8		1						5	4		1						
Cnid	aria						Cnidaria indet.		1,602	96	72	24	72	10	341	1 258	192	99	86	130	26	24	3		129		40	96	256
Arth	opoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Calliopiidae	Apherusa sp.	1	4		2	2																	
	opoda	Crustacea	Malacostraca	Eumalacostraca		Hyperiidae	Hyperiidae indet.	1	429		8				228	3	128					16		1	16				128
	opoda		Malacostraca	Eumalacostraca		Hyperiidae	Themisto libellula	1	37					8		6	8					1							8
Arth	opoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	Themisto sp.		809					32	64	4 640	1	32		16	24								1
	opoda	Crustacea	Malacostraca	Eumalacostraca		Uristidae	Onisimus litoralis	1	1												1								
	opoda	Crustacea	Malacostraca	Eumalacostraca		Uristidae	Onisimus sp.		23	1	1	2		1	8	3 2	5	2							1			1	5
	opoda	Crustacea	Malacostraca		Amphipoda		Lysianassoidea indet.		50				1		48	-	1												1
	opoda	Crustacea		Thecostraca	Sessilia		Balanomorpha indet.	1	482	16	24	16	40		114				128		_	16					_	16	64
	opoda	Crustacea		Copepoda	Calanoida	Acartiidae	Acartia sp.	1	2,332	16	48	16	32		228		128			10	8	8 56	64				8	16	64
	opoda	Crustacea Crustacea		Copepoda	Calanoida	Calanidae	Calanus finmarchicus	1	17,462	144	40	96	120		910												24 56	112	1,472
	opoda opoda	Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	Calanus glacialis Calanus hyperboreus	1	28,922 1,120	112	104	120	120	6,144 48	4,210 72		3,968 192		1,472 24						2 208		8	112	4,416 256
	opoda	Crustacea		Copepoda	Calanoida	Calanidae	Calanus nyperboreus Calanus sp.	1	48,192	496	576	840	688	12,416	6,144										_		8 72	480	4,928
	opoda	Crustacea		Copepoda	Calanoida	Centropagidae	Centropages sp.	1	136	450	370	840	000	12,410	0,144	+ 5,344	3,508	2,304	128		250	304	1,132	370	, /32	*	72	460	4,520
	opoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	Ctenocalanus sp.	-	114						114	1			120										
	opoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	Ctenocalanus vanus	1	128						114	128													
	opoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	Microcalanus sp.	1	330			8		128	114				64					16	i				
	opoda	Crustacea			Calanoida	Clausocalanidae	Pseudocalanus sp. complex	1	17,879	80	88	72	184	3,200	3,527	, 7 5,760	2,112	800	1,216	32	16	8	448	144	176		16	64	2,432
Arth	opoda	Crustacea		Copepoda	Calanoida	Metridinidae	Metridia sp.	1	144	16							128												
	opoda	Crustacea		Copepoda	Calanoida	Scolecitrichidae	Scolecithricella sp.	1	514						114	1 256	128					8					8		128
Arth	opoda	Crustacea		Copepoda	Calanoida		Calanoida indet.		27,045	304	344	368	240	4,352	4,437	7 7,680	2,688	1,568	1,408	88	56	2,312	752	144	208		96	240	3,200
Arth	opoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	Oithona atlantica	1	16														16						64
Arth	opoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	Oithona similis	1	5,371	80				128		256				128	256	512	2,560	512	768	1	71	80	64
Arth	opoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	Oithona sp.		136,535	336	3,712	2,432	3,712	256	114	1 384	64			4,096								416	128
	opoda	Crustacea		Copepoda	Cyclopoida		Cyclopoida indet.		2,875		128									256	256	16	1,024	512	512		71		
	opoda	Crustacea		Copepoda	Harpacticoida	Ectinosomatidae	Microsetella norvegica	1	195	16	8															1	71		
	opoda	Crustacea		Copepoda	Harpacticoida	Ectinosomatidae	Microsetella sp.		512															512	2				
	opoda	Crustacea		Copepoda	Harpacticoida		Harpacticoida indet.	1	8			8																	
	opoda	Crustacea		Copepoda	Poecilostomatoida	a Oncaeidae	Oncaea sp.	1	6,104	80	776		512							128								48	
	opoda	Crustacea		Copepoda	B	6	Copepoda indet.		364,880	2,512	6,528	6,784	5,632	128						17,408	33,024	71,680	64,000	70,144	57,856	29,1	84	2,192	
	opoda opoda	Crustacea Crustacea	Malacostraca Malacostraca	Eumalacostraca Eumalacostraca	Decapoda	Crangonidae	Crangonidae indet.		1 51	1				2	32			-	4			1	2						1
	opoda	Crustacea	Malacostraca		Decapoda	Crangonidae Hippolytidae	Sabinea septemcarinata Hippolytidae indet.	1	21	1				2	32	2 3	1	3	4		2		3					1	1
	opoda	Crustacea	Malacostraca	Eumalacostraca		пірроїупиае	Caridea indet.	1	17						9	2	1				2								1
	opoda	Crustacea	Malacostraca	Eumalacostraca			Euphausiacea indet.	1	1,184		128				0	512		32	0				512						-
	opoda	Crustacea	Malacostraca	Eumalacostraca			Isopoda indet.	1	256		120			128		312		32	64				16		5 16		16		
	opoda		Malacostraca	Eumalacostraca		Mysidae	Erythrops sp.	1	1					-20					0.4			1	10	10	10				
	opoda	Crustacea	Malacostraca	Eumalacostraca		Mysidae	Mysis sp.	1	88				8							11	4	1					64		
Arth	opoda	Crustacea	Ostracoda		•	•	Ostracoda indet.	1	320							256	64												
Arth	opoda	Crustacea					Crustacea indet.		672		128	128	128					32							256				
Cten	ophora		Nuda		Beroida	Beroidae	Beroe sp.	1	26							1		1						8	3 16				
		Echinozoa	Echinoidea				Echinoidea indet.	1	160	16		16	128																
Moll			Bivalvia				Bivalvia indet.	1	12,576	32	128		1,152							640	512			-,			12	16	
Moll			Gastropoda	Heterobranchia		Clionidae	Clione limacina	1	306			128		3	24	1 4	4	4	67	2	17	1		35	17				4
Moll			Gastropoda	Heterobranchia	Pteropoda	Limacinidae	Limacina helicina	1	8						8	3													
Moll			Gastropoda				Gastropoda indet.		30,763	224	2,560	128	4,096	1,280	1,707	7 4,864	1,984	800	832	256	1,024	2,560	4,096	2,560	1,792			272	2,624
Chor			Actinopteri		Perciformes	Ammodytidae	Ammodytes sp.	1	2					1	_	. 1													
Chor		Vertebrata	Actinopteri		Gadiformes	Gadidae	Gadidae indet.	1	23					6	16		1												1
Anne		Tuelanta	Polychaeta		Canalata	Fritillariidaa	Polychaeta indet.	1	192							128	64			355									
Chor		Tunicata	Appendicularia		Copelata	Fritillariidae	Fritillaria sp.	1	256		246	**	25	25			250	250	350	256		340	_	•			00	112	204
Chor		Tunicata	Appendicularia		Copelata	Oikopleuridae	Oikopleura sp. Unidentified (eggs)	1	2,841	88 144	216 384	48 128	96 384	96		640 1,408	256 64		256	184	104 1,792		2,560	6,144			96	112 96	384
Unkr	IOWII						omaemmed (eggs)		22,224	144	384	128	384			1,408	64				1,/92		2,560	0,144	• 5,632	3,5	04	30	
							Total Abundance: Total Unique Taxa (species Richness):	44	745,124	4,838 19	16,033 18	11,393 16	17,390 16	36,306 20	23,604 19		18,711 19			-			-				13 14	4,382 15	21,719 18
MEN							Amphipoda indet. (benthic)		96									32	64										
MEN	IU						Chironomidae indet. (benthic)		64										64										

Biologica Environmental Services Ltd.

Abundance data in long format for Golder Baffinlands 2018.

Clien	Project	Year	Biologica Sample #	Client Sample #	Date Sampled	Fraction	Split	Phylum	Subphylum	Class	Subclass	Order	Family	Groupcode	Taxon	Stage	Raw Abundance	Split Multiplier	Total Abundance	Unique Taxa Count	Size (mm)	Comment
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	1	16.00	16	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea	a	Thecostraca	Sessilia		CRCI	Balanomorpha indet.	Cypris	1	16.00	16	1		
Gold Gold			mz18-108-001 mz18-108-001	BR1 BR1	2018-08-08 2018-08-08	Fine Fine	1/16 1/16	Mollusca Bryozoa		Bivalvia				MOBI BRYO	Bivalvia indet. Bryozoa indet.	Veliger Cyphonautes	1	16.00 16.00	32 16	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	19	16.00	304	1		
Gold	er Baffinlands Iron Mine	2018	mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	8	16.00	128	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	VIm	1	16.00	16			
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	5	16.00	80	1		
Gold Gold			mz18-108-001 mz18-108-001	BR1 BR1	2018-08-08 2018-08-08	Fine	1/16 1/16	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis	VIf VIm	1	16.00 16.00	16 16			
Gold			mz18-108-001	BR1	2018-08-08	Fine Coarse 1	Whole		Crustacea		Copepoda Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis Calanus hyperboreus	V	1	1.00	1	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	31	16.00	496	_		
Gold	er Baffinlands Iron Mine	2018	mz18-108-001	BR1	2018-08-08	Fine	1/16	Cnidaria						CNXX	Cnidaria indet.	Medusa	6	16.00	96	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda			CRCO	Copepoda indet.		157	16.00	2,512			
Gold Gold			mz18-108-001 mz18-108-001	BR1 BR1	2018-08-08 2018-08-08	Fine	1/16 1/16	Echinodermata	Echinozoa	Echinoidea				ECEC MOGA	Echinoidea indet.		1 14	16.00 16.00	16 224	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine Fine	1/16	Mollusca Arthropoda	Crustacea	Gastropoda	Copepoda	Calanoida	Metridinidae	CRCO	Gastropoda indet. Metridia sp.	Veliger V	14	16.00	16	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Harpacticoida	Ectinosomatidae	CRCO	Microsetella norvegica	V	1	16.00	16	1		
Gold	er Baffinlands Iron Mine	2018	mz18-108-001	BR1	2018-08-08	Coarse 2	1/8	Chordata	Tunicata	Appendicularia		Copelata	Oikopleuridae	URAP	Oikopleura sp.	Α	11	8.00	88	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	3	16.00	48	1		
Gold Gold			mz18-108-001 mz18-108-001	BR1 BR1	2018-08-08 2018-08-08	Fine Fine	1/16 1/16	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Cyclopoida Cyclopoida	Oithonidae Oithonidae	CRCO CRCO	Oithona similis Oithona sp.	VIm V	21	16.00 16.00	32 336			
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	v	5	16.00	80	1		
Gold			mz18-108-001	BR1	2018-08-08	Coarse 1	Whole		Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Uristidae	CRAM	Onisimus sp.	J	1	1.00	1	1		
Gold			mz18-108-001	BR1	2018-08-08	Coarse 1	Whole	_		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	Α	11	1.00	11	1		
Gold			mz18-108-001	BR1	2018-08-08	Fine	1/16	Arthropoda	Crustacea	Mala t	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	5	16.00	80	1		
Gold Gold			mz18-108-001 mz18-108-001	BR1 BR1	2018-08-08 2018-08-08	Coarse 1 Fine	Whole 1/16	Arthropoda Unknown	Crustacea	Malacostraca	Eumalacostraca	Decapoda	Crangonidae	CRDE XXXX	Sabinea septemcarinata Unidentified	Megalopa Egg	0	1.00 16.00	144	1		
Gold			mz18-108-001 QA	BR1 QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V V	1	16.00	16	1		
Gold	er Baffinlands Iron Mine	2018	mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Thecostraca	Sessilia		CRCI	Balanomorpha indet.	Cypris	1	16.00	16	1		
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Mollusca		Bivalvia				MOBI	Bivalvia indet.	Veliger	1	16.00	16	1		
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Colomida	CRCO	Calanoida indet.	I-IV	15	16.00	240	4		
Gold Gold			mz18-108-001_QA mz18-108-001_QA	BR1_QA BR1_QA	2018-08-08 2018-08-08	Fine Fine	1/16 1/16	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus finmarchicus Calanus glacialis	V	6	16.00 16.00	112 96	1		
Gold			mz18-108-001_QA	BR1 QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf	1	16.00	16	1		
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Coarse 1	Whole		Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	1	1.00	1	1		
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	30	16.00	480			
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Cnidaria	C		Commenda			CNXX	Cnidaria indet.		6	16.00	96	1		
Gold Gold			mz18-108-001_QA mz18-108-001_QA	BR1_QA BR1_QA	2018-08-08 2018-08-08	Fine Fine	1/16 1/16	Arthropoda Mollusca	Crustacea	Gastropoda	Copepoda			CRCO MOGA	Copepoda indet. Gastropoda indet.	Nauplius Veliger	137 17	16.00 16.00	2,192 272	1		
Gold			mz18-108-001_QA	BR1 QA	2018-08-08	Coarse 2	1/8	Chordata	Tunicata	Appendicularia		Copelata	Oikopleuridae	URAP	Oikopleura sp.	A	14	8.00	112	1		
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	3	16.00	48	1		
Gold	er Baffinlands Iron Mine	2018	mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIm	2	16.00	32			
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	26	16.00	416			
Gold Gold			mz18-108-001_QA mz18-108-001_QA	BR1_QA BR1_QA	2018-08-08 2018-08-08	Fine Coarse 1	1/16 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Poecilostomatoida Amphipoda	Oncaeidae Uristidae	CRCO CRAM	Oncaea sp. Onisimus sp.	V	3	16.00 1.00	48	1		
Gold			mz18-108-001_QA	BR1 QA	2018-08-08	Coarse 1	Whole		Crustacea	Sagittoidea	Aphragmophora	Ampinpoda	Sagittidae	CHAE	Parasagitta elegans	A	11	1.00	11	1		
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea	· ·	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	3	16.00	48	1		
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Fine	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	1	16.00	16			
Gold			mz18-108-001_QA	BR1_QA	2018-08-08	Coarse 1	Whole		Crustacea	Malacostraca	Eumalacostraca	Decapoda	Crangonidae	CRDE	Sabinea septemcarinata	Megalopa	1	1.00	1 96	1		
Gold Gold			mz18-108-001_QA mz18-108-002	BR1_QA BR2	2018-08-08 2018-08-08	Fine Coarse 2	1/16 1/8	Unknown Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	XXXX CRCO	Unidentified Acartia sp.	Egg V	6	16.00 8.00	48	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Cnidaria	Crastacea	Hydrozoa	Trachylinae	Narcomedusae	Solmundaeginidae	CNHY	Aeginopsis laurentii	Medusa	2	8.00	16	1		
Gold	er Baffinlands Iron Mine	2018	mz18-108-002	BR2	2018-08-08	Coarse 1	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Calliopiidae	CRAM	Apherusa sp.	Α	1	1.00	1	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 1	Whole		Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Calliopiidae	CRAM	Apherusa sp.	J	1	1.00	1			
Gold Gold			mz18-108-002 mz18-108-002	BR2 BR2	2018-08-08 2018-08-08	Coarse 2 Fine	1/8 1/128	Arthropoda Mollusca	Crustacea	Divahila	Thecostraca	Sessilia		CRCI MOBI	Balanomorpha indet. Bivalvia indet.	Cypris	3	8.00 128.00	24 128	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/128	Arthropoda	Crustacea	Bivalvia	Copepoda	Calanoida		CRCO	Calanoida indet.	Veliger I-IV	43	8.00	344	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus		5	8.00	40	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	٧	12	8.00	96	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf V	1	8.00	8	1		
Gold Gold			mz18-108-002 mz18-108-002	BR2 BR2	2018-08-08 2018-08-08	Coarse 1 Coarse 2	whole	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus hyperboreus Calanus sp.	V I-IV	1 72		1 576	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Cnidaria	Crustuccu		сорероци	culariolda	Calamaac	CNXX	Cnidaria indet.		9	8.00	72			
Gold	er Baffinlands Iron Mine	2018	mz18-108-002	BR2	2018-08-08	Fine	1/128	Arthropoda	Crustacea		Copepoda			CRCO	Copepoda indet.	Nauplius	51	128.00	6,528			
Gold			mz18-108-002	BR2	2018-08-08	Fine		Arthropoda	Crustacea					CRXX	Crustacea indet.		1	128.00	128			
Gold			mz18-108-002	BR2	2018-08-08	Fine		Arthropoda	Crustacea	Mala t	Copepoda	Cyclopoida		CRCO	Cyclopoida indet.	I-IV	1	128.00	128	4		
Gold Gold			mz18-108-002 mz18-108-002	BR2 BR2	2018-08-08 2018-08-08	Fine Fine	1/128	Arthropoda Mollusca	Crustacea	Malacostraca Gastropoda	Eumalacostraca	Eupnausiacea		CREU MOGA	Euphausiacea indet. Gastropoda indet.	Nauplius Veliger	20	128.00 128.00	128 2,560	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/128	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Hyperiidae indet.	J	1	8.00	8	1		
Gold	er Baffinlands Iron Mine	2018	mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Harpacticoida	Ectinosomatidae	CRCO	Microsetella norvegica	٧	1	8.00	8	1		
Gold			mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Chordata	Tunicata	Appendicularia		Copelata	Oikopleuridae	URAP	Oikopleura sp.	A	27	8.00	216	1		
Gold			mz18-108-002	BR2 BR2	2018-08-08	Fine	1/128		Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV V	18	128.00 128.00	2,304 1,408	1		
Gold Gold			mz18-108-002 mz18-108-002	BR2	2018-08-08 2018-08-08	Fine Coarse 2	1/128 1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Cyclopoida Poecilostomatoida	Oithonidae Oncaeidae	CRCO CRCO	Oithona sp. Oncaea sp.	V VIm	11 1	8.00	1,408			
Gold			mz18-108-002	BR2	2018-08-08	Fine		Arthropoda	Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	I-IV	1	128.00	128	1		
Gold			mz18-108-002	BR2	2018-08-08	Fine		Arthropoda	Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	V	5	128.00	640			
Gold			mz18-108-002	BR2	2018-08-08	Coarse 1		Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Uristidae	CRAM	Onisimus sp.	J	1	1.00	1	1	. 20	
Gold Gold			mz18-108-002 mz18-108-002	BR2 BR2	2018-08-08 2018-08-08	Coarse 1 Coarse 2	Whole 1/8	Chaetognatha		Sagittoidea Sagittoidea	Aphragmophora Aphragmophora		Sagittidae Sagittidae	CHAE CHAE	Parasagitta elegans	A	5	1.00 8.00	5 8	1	>20	
Gold			mz18-108-002 mz18-108-002	BR2	2018-08-08	Coarse 2	1/8	Chaetognatha Arthropoda	Crustacea	Jagittulued	Aphragmophora Copepoda	Calanoida	Clausocalanidae	CRCO	Parasagitta sp. Pseudocalanus sp. complex	Λ	11	8.00	88	1		
Gold			mz18-108-002	BR2	2018-08-08	Fine	1/128							XXXX	Unidentified	Egg	3	128.00	384			
Gold	er Baffinlands Iron Mine	2018	mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	2	8.00	16	1		

biologica Abundance data in long format for Golder Baffinlands 2018.

Clia	mt [trainet	Voor	Biologica Sample #	Client Sample #	Date Sampled	Eraction	Calit	Dhulum	Cubabulum	Class	Subclass	Ordor	Family	Grauncada	Tayon	Stage	Raw Abundance	Split Multiplier	Total Abundance	Unique Taxa Count	Sizo (mm)	Comment
Clie Gol		roject affinlands Iron Mine	Year 2018	mz18-108-003	Client Sample # BR3	2018-08-08	Fraction Coarse 2	Split 1/8	Phylum Cnidaria	Subphylum	Hydrozoa	Trachylinae	Order Narcomedusae	Family Solmundaeginidae	Groupcode CNHY	Taxon Aeginopsis laurentii	Medusa	2	8.00	16	1	Size (mm)	Comment
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Cnidaria		Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae		Aglantha sp.	Medusa	1	8.00	8	1		
Gol			2018	mz18-108-003	BR3	2018-08-08	Coarse 1	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Calliopiidae	CRAM	Apherusa sp.	Α	2	1.00	2	1		
Gol			2018	mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Thecostraca	Sessilia		CRCI	Balanomorpha indet.	Cypris	2	8.00	16	1		
Gol Gol			2018 2018	mz18-108-003 mz18-108-003	BR3 BR3	2018-08-08 2018-08-08	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus finmarchicus	I-IV V	46 11	8.00 8.00	368 88	1		
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	VIm	1	8.00	8	-		
Gol	der E	affinlands Iron Mine	2018	mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	14	8.00	112	1		
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIm	1	8.00	8			
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea	Castronada	Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	105	8.00	840	1		
Gol Gol				mz18-108-003 mz18-108-003	BR3 BR3	2018-08-08 2018-08-08	Fine Coarse 2	1/128 1/8	Mollusca Cnidaria		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA CNXX	Clione limacina Cnidaria indet.	J Medusa	3	128.00 8.00	128 24	1		
Gol		affinlands Iron Mine		mz18-108-003	BR3	2018-08-08	Fine	٠.	Arthropoda	Crustacea		Copepoda			CRCO	Copepoda indet.	Nauplius	53	128.00	6,784			
Gol	der E	affinlands Iron Mine	2018	mz18-108-003	BR3	2018-08-08	Fine	1/128	Arthropoda	Crustacea					CRXX	Crustacea indet.	Nauplius	1	128.00	128			
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8		Echinozoa	Echinoidea				ECEC	Echinoidea indet.	Pluteus	2	8.00	16	1		
Gol Gol				mz18-108-003 mz18-108-003	BR3 BR3	2018-08-08 2018-08-08	Fine Coarse 2	1/128 1/8	Mollusca Arthropoda	Crustacea	Gastropoda	Copepoda	Harpacticoida		MOGA CRCO	Gastropoda indet. Harpacticoida indet.	Veliger I-IV	1	128.00 8.00	128 8	1		
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Microcalanus sp.	V	1	8.00	8	1		
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Chordata	Tunicata	Appendicularia		Copelata	Oikopleuridae	URAP	Oikopleura sp.	Α	6	8.00	48	1		
Gol				mz18-108-003	BR3	2018-08-08	Fine		Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV	14	128.00	1,792	1		
Gol				mz18-108-003	BR3	2018-08-08	Fine		Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	5	128.00	640			
Gol Gol				mz18-108-003 mz18-108-003	BR3 BR3	2018-08-08 2018-08-08	Coarse 1 Coarse 1		Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca Malacostraca	Eumalacostraca Eumalacostraca	Amphipoda Amphipoda	Uristidae Uristidae	CRAM CRAM	Onisimus sp. Onisimus sp.	A	1	1.00 1.00	1	1		
Gol		affinlands Iron Mine		mz18-108-003	BR3	2018-08-08	Coarse 1		Chaetognatha	Crustaccu	Sagittoidea	Aphragmophora	Ampinpoda	Sagittidae	CHAE	Parasagitta elegans	A	5	1.00	5	1		
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea	· ·	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	8	8.00	64	1		
Gol				mz18-108-003	BR3	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	1	8.00	8			
Gol				mz18-108-003	BR3	2018-08-08	Fine	1/128	Unknown	C		Commende	Calamatida	A	XXXX	Unidentified	Egg	1	128.00	128	4		
Gol Gol				mz18-108-004 mz18-108-004	BR4 BR4	2018-08-08 2018-08-08	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Cnidaria	Crustacea	Hydrozoa	Copepoda Trachylinae	Calanoida Narcomedusae	Acartiidae Solmundaeginidae	CRCO CNHY	Acartia sp. Aeginopsis laurentii	v Medusa	1	8.00 8.00	32 8	1		
Gol				mz18-108-004	BR4	2018-08-08	Coarse 1		Cnidaria		Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae		Aglantha digitale	Medusa	4	1.00	4	1	5-10	
Gol				mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Cnidaria		Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae		Aglantha digitale	Medusa	1	8.00	8		2-3	
Gol				mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Thecostraca	Sessilia		CRCI	Balanomorpha indet.	Cypris	5	8.00	40	1		
Gol				mz18-108-004	BR4	2018-08-08	Fine	1/128	Mollusca	C	Bivalvia	Commende	Calamatida		MOBI	Bivalvia indet.	Veliger	9	128.00	1,152	1		
Gol Gol			2018 2018	mz18-108-004 mz18-108-004	BR4 BR4	2018-08-08 2018-08-08	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus finmarchicus	I-IV V	30 15	8.00 8.00	240 120	1		
Gol				mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	15	8.00	120	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	86	8.00	688			
Gol		affinlands Iron Mine		mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Cnidaria						CNXX	Cnidaria indet.	Medusa	9	8.00	72			
Gol			2018	mz18-108-004	BR4	2018-08-08	Fine		Arthropoda	Crustacea		Copepoda			CRCO CRXX	Copepoda indet.	Nauplius	44	128.00	5,632			
Gol Gol		affinlands Iron Mine affinlands Iron Mine		mz18-108-004 mz18-108-004	BR4 BR4	2018-08-08 2018-08-08	Fine Fine		Arthropoda Echinodermata	Crustacea Echinozoa	Echinoidea				ECEC	Crustacea indet. Echinoidea indet.	Nauplius Pluteus	1	128.00 128.00	128 128	1		
Gol				mz18-108-004	BR4	2018-08-08	Fine		Mollusca		Gastropoda				MOGA	Gastropoda indet.	Veliger	32	128.00	4,096	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-004	BR4	2018-08-08	Coarse 1	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda		CRAM	Lysianassoidea indet.	J	1	1.00	1	1		
Gol			2018	mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	•	Mysidae	CRMY	Mysis sp.	A	1	8.00	8	1		
Gol Gol		affinlands Iron Mine affinlands Iron Mine	2018	mz18-108-004 mz18-108-004	BR4 BR4	2018-08-08 2018-08-08	Coarse 2 Coarse 2	1/8 1/8	Chordata Chordata	Tunicata Tunicata	Appendicularia Appendicularia		Copelata Copelata	Oikopleuridae Oikopleuridae	URAP URAP	Oikopleura sp. Oikopleura sp.	A	11	8.00 8.00	88 8	1		
Gol				mz18-108-004	BR4	2018-08-08	Fine		Arthropoda	Crustacea	Appendicularia	Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV	24	128.00	3,072	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-004	BR4	2018-08-08	Fine			Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	5	128.00	640			
Gol		affinlands Iron Mine		mz18-108-004	BR4	2018-08-08	Fine		Arthropoda	Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	V	2	128.00	256			
Gol			2018	mz18-108-004	BR4	2018-08-08	Fine		Arthropoda Chaetognatha	Crustacea	Conittoidos	Copepoda	Poecilostomatoida	Oncaeidae	CRCO CHAE	Oncaea sp.	I-IV	2	128.00	256 9	1		
Gol Gol		affinlands Iron Mine affinlands Iron Mine	2018 2018	mz18-108-004 mz18-108-004	BR4 BR4	2018-08-08 2018-08-08	Coarse 1 Coarse 2	1/8	Chaetognatha		Sagittoidea Sagittoidea	Aphragmophora Aphragmophora		Sagittidae Sagittidae	CHAE	Parasagitta elegans Parasagitta sp.	J	2	1.00 8.00	16	1		
Gol			2018	mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea	6	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	19	8.00	152	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-004	BR4	2018-08-08	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	4	8.00	32			
Gol			2018	mz18-108-004	BR4	2018-08-08	Fine	٠.	Unknown						XXXX	Unidentified	Egg	3	128.00	384	_		
Gol		affinlands Iron Mine affinlands Iron Mine		mz18-108-005 mz18-108-005	ZH1	2018-08-09 2018-08-09	Fine Coarse 1		Arthropoda Cnidaria	Crustacea	Hydrozoa	Copepoda Trachylinae	Calanoida Trachymedusae	Acartiidae Rhopalonematidae	CRCO CNHY	Acartia sp. Aglantha sp.	v Medusa	1	128.00 1.00	256	1		
Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Fine		Arthropoda	Crustacea	TTYGTOZOG	Thecostraca	Sessilia	Кпораюнетациае	CRCI	Balanomorpha indet.	Cypris	1	128.00	128	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Fine	1/128	Mollusca		Bivalvia				MOBI	Bivalvia indet.	Veliger	1	128.00	128	1		
Gol				mz18-108-005	ZH1	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	34	128.00	4,352			
Gol Gol		affinlands Iron Mine affinlands Iron Mine		mz18-108-005 mz18-108-005	ZH1 ZH1	2018-08-09 2018-08-09	Fine Fine		Arthropoda Arthropoda	Crustacea Crustacea		Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus finmarchicus Calanus finmarchicus	V VIf	43	128.00 128.00	5,504 128	1		
Gol		affinlands Iron Mine		mz18-108-005	ZH1 ZH1	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	VIII	1	128.00	128			
Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	46	128.00	5,888	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Fine	1/128	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf	2	128.00	256			
Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Coarse 2		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	3	16.00	48	1		
Gol Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09 2018-08-09	Fine		Arthropoda Cnidaria	Crustacea	Hudrozoa	Copepoda	Calanoida	Calanidae	CRCO CNHY	Calanus sp.	I-IV Moduca	97	128.00	12,416 2	1		
Gol		affinlands Iron Mine affinlands Iron Mine		mz18-108-005 mz18-108-005	ZH1 ZH1	2018-08-09	Coarse 1 Coarse 1		Mollusca		Hydrozoa Gastropoda	Hydroidolina Heterobranchia	Anthoathecata Pteropoda	Pandeidae Clionidae	MOGA	Catablema vesicarium Clione limacina	Medusa A	2	1.00 1.00	2	1		
Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Coarse 1		Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	A	1	1.00	1	-		
Gol	der E	affinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Coarse 1	Whole	Chordata	Vertebrata	Actinopteri		Perciformes	Ammodytidae	PIXX	Ammodytes sp.	L	1	1.00	1	1		
Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Coarse 1		Cnidaria	C		6			CNXX	Cnidaria indet.	Medusa	10	1.00	10			Fragmented
Gol Gol		affinlands Iron Mine affinlands Iron Mine		mz18-108-005 mz18-108-005	ZH1 ZH1	2018-08-09 2018-08-09	Fine Coarse 1		Arthropoda Chordata	Crustacea	Actinopteri	Copepoda	Gadiformes	Gadidae	CRCO PIXX	Copepoda indet.	Nauplius I	1	128.00 1.00	128 6	1		
Gol		affinlands Iron Mine		mz18-108-005 mz18-108-005	ZH1 ZH1	2018-08-09	Fine		Mollusca	Vertebrata	Actinopteri Gastropoda		Jaunollies	Jaulude	MOGA	Gadidae indet. Gastropoda indet.	L Veliger	10	1.00	1,280	-		
Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Fine		Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Isopoda		CRIS	Isopoda indet.	Cryptoniscid	1	128.00	128	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Microcalanus sp.	٧ .	1	128.00	128	1		
Gol		affinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Coarse 2	1/16	Chordata	Tunicata	Appendicularia	Common !	Copelata	Oikopleuridae	URAP	Oikopleura sp.	A	6	16.00	96	1		
Gol Gol		affinlands Iron Mine affinlands Iron Mine		mz18-108-005 mz18-108-005	ZH1 ZH1	2018-08-09 2018-08-09	Fine Fine		Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Cyclopoida Cyclopoida	Oithonidae Oithonidae	CRCO CRCO	Oithona similis Oithona sp.	VIf V	2	128.00 128.00	128 256	1		
Gol		affinlands Iron Mine		mz18-108-005	ZH1 ZH1	2018-08-09	Coarse 1		Arthropoda	Crustacea	Malacostraca	Eumalacostraca		Uristidae	CRAM	Onisimus sp.	A	1	1.00	1	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Fine		Chaetognatha		Sagittoidea	Aphragmophora	•	Sagittidae	CHAE	Parasagitta elegans	Α	12	128.00	1,536	1		
Gol	der E	affinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Fine	1/128	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta sp.	J	1	128.00	128			

biologica Abundance data in long format for Golder Baffinlands 2018.

Cli	ent	Project	Year	Biologica Sample #	Client Sample #	Date Sampled	Fraction	Split	Phylum	Subphylum	Class	Subclass	Order	Family	Groupcode	Taxon	Stage	Raw Abundance	Split Multiplier	Total Abundance	Unique Taxa Count	Size (mm)	Comment
	older	Baffinlands Iron Mine		mz18-108-005	ZH1	2018-08-09	Fine	1/128	Arthropoda	Crustacea	Class	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	24	128.00	3,072	1	Size (IIIII)	comment
Go	older	Baffinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Fine	1/128	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIm	1	128.00	128			
	older	Baffinlands Iron Mine Baffinlands Iron Mine	2018	mz18-108-005	ZH1	2018-08-09	Coarse 1	Whole		Crustacea	Malacostraca	Eumalacostraca	Decapoda	Crangonidae	CRDE CRAM	Sabinea septemcarinata	Megalopa	2	1.00	2	1		
	older older	Baffinlands Iron Mine		mz18-108-005 mz18-108-005	ZH1 ZH1	2018-08-09 2018-08-09	Coarse 1 Coarse 2		Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca Malacostraca	Eumalacostraca Eumalacostraca	Amphipoda Amphipoda	Hyperiidae Hyperiidae	CRAM	Themisto libellula Themisto sp.	J	2	1.00 16.00	32	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	2	113.78	228	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Arthropoda	Crustacea		Thecostraca	Sessilia		CRCI	Balanomorpha indet.	Cypris	1	113.78	114	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Colonidos	CRCO	Calanoida indet.	I-IV V	39	113.78	4,437	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine	2018	mz18-108-006 mz18-108-006	ZH2 ZH2	2018-08-09 2018-08-09	Fine Fine		Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus finmarchicus Calanus glacialis	V	8 35	113.78 113.78	910 3,982	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf	1	113.78	114			
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIm	1	113.78	114			
	older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-006	ZH2 ZH2	2018-08-09	Coarse	1/8	Arthropoda	Crustacea		Copepoda	Calanoida Calanoida	Calanidae	CRCO	Calanus hyperboreus	V VIf	5 4	8.00 8.00	40	1		
	older older	Baffinlands Iron Mine		mz18-108-006 mz18-108-006	ZH2 ZH2	2018-08-09 2018-08-09	Coarse Fine		Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus hyperboreus Calanus sp.	I-IV	54	113.78	32 6,144			
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Coarse	1/8	Arthropoda	Crustacea	Malacostraca	1 1	Decapoda		CRDE	Caridea indet.	Zoea	1	8.00	8			
	older		2018	mz18-108-006	ZH2	2018-08-09	Coarse	1/8	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	Α	2	8.00	16	1		
	older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-006	ZH2 ZH2	2018-08-09 2018-08-09	Coarse	1/8	Mollusca Cnidaria		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA CNXX	Clione limacina	Madusa	1	8.00 113.78	8 341	1		
	older older	Baffinlands Iron Mine		mz18-108-006 mz18-108-006	ZH2 ZH2	2018-08-09	Fine Fine	· .	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Cnidaria indet. Ctenocalanus sp.	Medusa V	1	113.78	114	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Coarse	1/8	Chordata	Vertebrata	Actinopteri		Gadiformes	Gadidae	PIXX	Gadidae indet.	L	2	8.00	16	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Mollusca		Gastropoda				MOGA	Gastropoda indet.	Veliger	15	113.78	1,707			
	older	Baffinlands Iron Mine		mz18-108-006 mz18-108-006	ZH2 ZH2	2018-08-09 2018-08-09	Fine		Arthropoda	Crustacea	Malacostraca		Amphipoda	Hyperiidae	CRAM MOGA	Hyperiidae indet.	J	2	113.78 8.00	228	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-006	ZH2 ZH2	2018-08-09	Coarse Coarse	1/8 1/8	Mollusca Arthropoda	Crustacea	Gastropoda Malacostraca		Pteropoda Amphipoda	Limacinidae	CRAM	Limacina helicina Lysianassoidea indet.	J	6	8.00	48	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine	· .	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Microcalanus sp.	V	1	113.78	114	1		
Go	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine	9/1024	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	1	113.78	114	1		
	older		2018	mz18-108-006	ZH2	2018-08-09	Coarse	1/8	Arthropoda	Crustacea	Malacostraca		Amphipoda	Uristidae	CRAM	Onisimus sp.	A	1 71	8.00	8	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-006 mz18-108-006	ZH2 ZH2	2018-08-09 2018-08-09	Coarse Fine	1/8 9/1024	Chaetognatha Chaetognatha		Sagittoidea Sagittoidea	Aphragmophora Aphragmophora		Sagittidae Sagittidae	CHAE CHAE	Parasagitta elegans Parasagitta sp.	A I	4	8.00 113.78	568 455	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Arthropoda	Crustacea	Sugittolucu	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	31	113.78	3,527	1		
Go	older	Baffinlands Iron Mine	2018	mz18-108-006	ZH2	2018-08-09	Coarse	1/8	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Decapoda	Crangonidae	CRDE	Sabinea septemcarinata	Zoea	4	8.00	32	1		
	older	Baffinlands Iron Mine		mz18-108-006	ZH2	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Scolecitrichidae	CRCO	Scolecithricella sp.	V	1	113.78	114	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-006 mz18-108-007	ZH2 ZH3	2018-08-09 2018-08-09	Coarse Fine	1/8	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Eumalacostraca Copepoda	Amphipoda Calanoida	Hyperiidae Acartiidae	CRAM CRCO	Themisto sp. Acartia sp.	A V	8	8.00 128.00	64 512	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Coarse		Ctenophora	Crustacea	Nuda	сорероца	Beroida	Beroidae	CTEN	Beroe sp.	A	1	1.00	1	1	>10	
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	60	128.00	7,680			
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	27	128.00	3,456	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-007 mz18-108-007	ZH3 ZH3	2018-08-09 2018-08-09	Fine Fine		Arthropoda	Crustacea		Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis	V VIf	73 2	128.00 128.00	9,344 256	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis Calanus glacialis		3	128.00	384			
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Coarse		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	VIf	1	1.00	1			
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	5	128.00	640	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-007 mz18-108-007	ZH3 ZH3	2018-08-09 2018-08-09	Fine Coarse		Arthropoda Cnidaria	Crustacea	Hydrozoa	Copepoda Hydroidolina	Calanoida Anthoathecata	Calanidae Pandeidae	CRCO CNHY	Calanus sp. Catablema vesicarium	I-IV Medusa	73	128.00 1.00	9,344	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Coarse		Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	A	4	1.00	4	1	>10	
Go	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Coarse	Whole	Chordata	Vertebrata	Actinopteri		Perciformes	Ammodytidae	PIXX	Ammodytes sp.	L	1	1.00	1	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Coarse		Cnidaria						CNXX	Cnidaria indet.	Medusa	2	1.00	2		5-10	Damaged
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-007 mz18-108-007	ZH3 ZH3	2018-08-09 2018-08-09	Fine Fine		Cnidaria Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CNXX CRCO	Cnidaria indet. Ctenocalanus vanus	Medusa V	2	128.00 128.00	256 128	1	<5	
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea	Malacostraca		Euphausiacea	Cidasocalarilade	CREU	Euphausiacea indet.	Nauplius	4	128.00	512	1		
Go	older	Baffinlands Iron Mine	2018	mz18-108-007	ZH3	2018-08-09	Fine		Mollusca		Gastropoda				MOGA	Gastropoda indet.	Veliger	38	128.00	4,864			
	older		2018	mz18-108-007	ZH3	2018-08-09	Fine		Chordata	Tunicata	Appendicularia	Commende	Copelata	Oikopleuridae	URAP	Oikopleura sp.	A VIf	5	128.00	640	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine	2018	mz18-108-007 mz18-108-007	ZH3 ZH3	2018-08-09 2018-08-09	Fine Fine		Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Cyclopoida Cyclopoida	Oithonidae Oithonidae	CRCO CRCO	Oithona similis Oithona sp.	V	3	128.00 128.00	256 384	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Coarse		Arthropoda	Crustacea	Malacostraca	Eumalacostraca		Uristidae	CRAM	Onisimus sp.	A	2	1.00	2	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine	1/128	Arthropoda	Crustacea	Ostracoda				CROS	Ostracoda indet.	Α	2	128.00	256	1		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-007 mz18-108-007	ZH3 ZH3	2018-08-09 2018-08-09	Fine Fine		Chaetognatha Chaetognatha		Sagittoidea Sagittoidea	Aphragmophora		Sagittidae Sagittidae	CHAE CHAE	Parasagitta elegans Parasagitta sp.	A	20	128.00 128.00	2,560 384	1		
	older		2018	mz18-108-007	ZH3	2018-08-09	Fine		Annelida		Polychaeta	Aphragmophora		Sagittidae	POXX	Polychaeta indet.	Nectochaete	1	128.00	128	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	42	128.00	5,376	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	2	128.00	256			
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-007 mz18-108-007	ZH3 ZH3	2018-08-09 2018-08-09	Fine Coarse		Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Calanoida Decapoda	Clausocalanidae Crangonidae	CRCO CRDE	Pseudocalanus sp. complex Sabinea septemcarinata	VIm Megalopa	1	128.00 1.00	128	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea	iviaiacostraca	Copepoda	Calanoida	Scolecitrichidae	CRCO	Scolecithricella sp.	V	2	128.00	256	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Coarse		Arthropoda	Crustacea	Malacostraca		Amphipoda	Hyperiidae	CRAM	Themisto libellula	A	6	1.00	6	1		
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto sp.	J	5	128.00	640			
	older	Baffinlands Iron Mine		mz18-108-007	ZH3	2018-08-09	Fine		Unknown	C		Commende	Calamatida	A until al	XXXX	Unidentified	Egg	11	128.00	1,408	4		
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008 mz18-108-008	ZH4 ZH4	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Acartiidae	CRCO CRCO	Acartia sp. Calanoida indet.	V I-IV	42	64.00 64.00	128 2,688	1		
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	23	64.00	1,472	1		
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	59	64.00	3,776	1		
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf	1	64.00	64			
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008 mz18-108-008	ZH4 ZH4	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis Calanus hyperboreus	VIm V	2	64.00 64.00	128 192	1		
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	62	64.00	3,968			
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Coarse		Arthropoda	Crustacea	Malacostraca		Decapoda		CRDE	Caridea indet.	Megalopa	1	1.00	1			
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Coarse		Cnidaria		Hydrozoa	Hydroidolina	Anthoathecata	Pandeidae	CNHY	Catablema vesicarium	Medusa	1	1.00	1	1	×10	
	older older	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008 mz18-108-008	ZH4 ZH4	2018-08-09 2018-08-09	Coarse Fine		Mollusca Cnidaria		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA CNXX	Clione limacina Cnidaria indet.	A Medusa	3	1.00 64.00	4 192	1	>10	
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Coarse		Chordata	Vertebrata	Actinopteri		Gadiformes	Gadidae	PIXX	Gadidae indet.	L	1	1.00	1	1		
	older	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Mollusca		Gastropoda				MOGA	Gastropoda indet.	Veliger	31	64.00	1,984			
Go	older	Baffinlands Iron Mine	2018	mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Hyperiidae indet.	J	2	64.00	128	1		

Abundance data in long format for Golder Baffinlands 2018.

Client	Project	Year	Biologica Sample #	Client Sample #	Date Sampled	Fraction	Split	Phylum	Subphylum	Class	Subclass	Order	Family	Groupcode	Taxon	Stage	Raw Abundance	Split Multiplier	Total Abundance	Unique Taxa Count	Size (mm)	Comment
Golder	Baffinlands Iron Mine	2018	mz18-108-008	ZH4	2018-08-09	Coarse	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	•	CRAM	Lysianassoidea indet.	J	1	1.00	1			
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Metridinidae	CRCO	Metridia sp.	V	1	64.00	64	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008 mz18-108-008	ZH4 ZH4	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Arthropoda Chordata	Crustacea Tunicata	Appendicularia	Copepoda	Calanoida Copelata	Metridinidae Oikopleuridae	CRCO URAP	Metridia sp. Oikopleura sp.	VIf Δ	1	64.00 64.00	64 256	1		
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea	rippendicularia	Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	1	64.00	64	1		
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Coarse	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Uristidae	CRAM	Onisimus sp.	Α	5	1.00	5	1		
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea	Ostracoda	A		Conittidoo	CROS	Ostracoda indet.	A	1	64.00	64	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008 mz18-108-008	ZH4 ZH4	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Chaetognatha Chaetognatha		Sagittoidea Sagittoidea	Aphragmophora Aphragmophora		Sagittidae Sagittidae	CHAE CHAE	Parasagitta elegans Parasagitta sp.	A	13 4	64.00 64.00	832 256	1		
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Annelida		Polychaeta	Apmagmophora		Sugittiduc	POXX	Polychaeta indet.	Nectochaete	1	64.00	64	1		
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	30	64.00	1,920	1		
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	2	64.00	128			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008 mz18-108-008	ZH4 ZH4	2018-08-09 2018-08-09	Fine Coarse	1/64 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Calanoida Decapoda	Clausocalanidae Crangonidae	CRCO CRDE	Pseudocalanus sp. complex Sabinea septemcarinata	VIm Megalopa	1	64.00 1.00	64 1	1		
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea	Walacosti aca	Copepoda	Calanoida	Scolecitrichidae	CRCO	Scolecithricella sp.	V	1	64.00	64	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-008	ZH4	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Scolecitrichidae	CRCO	Scolecithricella sp.	VIf	1	64.00	64			
Golder	Baffinlands Iron Mine		mz18-108-008	ZH4 ZH4	2018-08-09	Coarse	Whole		Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto libellula	A	8	1.00 1.00	8	1	>10 <5	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008 mz18-108-008	ZH4 ZH4	2018-08-09 2018-08-09	Coarse Fine	Whole 1/64	Arthropoda Unknown	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM XXXX	Themisto sp. Unidentified	Egg	1	64.00	64		<>	
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	1	64.00	64	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Thecostraca	Sessilia		CRCI	Balanomorpha indet.	Cypris	1	64.00	64	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008_QA mz18-108-008_QA	ZH4_QA ZH4_QA	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus finmarchicus	I-IV V	50 22	64.00 64.00	3,200 1,408	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	VIf	1	64.00	64	-		
Golder	Baffinlands Iron Mine	2018	mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	64	64.00	4,096	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf	3	64.00	192			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008_QA mz18-108-008_QA	ZH4_QA ZH4_QA	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis Calanus hyperboreus	VIm V	2	64.00 64.00	128 128	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	VIf	2	64.00	128	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	77	64.00	4,928			
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Coarse	Whole		Crustacea	Malacostraca	Eumalacostraca	Decapoda		CRDE	Caridea indet.	Megalopa	1	1.00	1			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008_QA mz18-108-008_QA	ZH4_QA ZH4_QA	2018-08-09 2018-08-09	Coarse Coarse	Whole Whole	Cnidaria Mollusca		Hydrozoa Gastropoda	Hydroidolina Heterobranchia	Anthoathecata Pteropoda	Pandeidae Clionidae	CNHY MOGA	Catablema vesicarium Clione limacina	Medusa A	1	1.00 1.00	1	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Cnidaria		Gastropoda	ricterobranenia	тегороци	Ciloridae	CNXX	Cnidaria indet.	Medusa	4	64.00	256	<u> </u>		
Golder	Baffinlands Iron Mine	2018	mz18-108-008_QA	ZH4_QA	2018-08-09	Coarse	Whole		Vertebrata	Actinopteri		Gadiformes	Gadidae	PIXX	Gadidae indet.	L	1	1.00	1	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Mollusca		Gastropoda				MOGA	Gastropoda indet.	Veliger	41	64.00	2,624			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008_QA mz18-108-008_QA	ZH4_QA ZH4_QA	2018-08-09 2018-08-09	Fine Coarse	1/64 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca Malacostraca	Eumalacostraca Eumalacostraca	Amphipoda Amphipoda	Hyperiidae	CRAM CRAM	Hyperiidae indet. Lysianassoidea indet.	J	1	64.00 1.00	128	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Chordata	Tunicata	Appendicularia	Lamaiacostraca	Copelata	Oikopleuridae	URAP	Oikopleura sp.	A	6	64.00	384	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona atlantica	VIf	1	64.00	64	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	1	64.00	64	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008_QA mz18-108-008_QA	ZH4_QA ZH4_QA	2018-08-09 2018-08-09	Fine Coarse	1/64 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Cyclopoida Amphipoda	Oithonidae Uristidae	CRCO CRAM	Oithona sp. Onisimus sp.	V A	5	64.00 1.00	128 5	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Chaetognatha	crustacea	Sagittoidea	Aphragmophora	,ppodd	Sagittidae	CHAE	Parasagitta elegans	A	14	64.00	896	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta sp.	J	3	64.00	192			
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	35	64.00	2,240	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-008_QA mz18-108-008_QA	ZH4_QA ZH4_QA	2018-08-09 2018-08-09	Fine Coarse	1/64 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Calanoida Decapoda	Clausocalanidae Crangonidae	CRCO CRDE	Pseudocalanus sp. complex Sabinea septemcarinata	VIf Megalopa	1	64.00 1.00	192 1	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Fine		Arthropoda	Crustacea	Maidcostraca	Copepoda	Calanoida	Scolecitrichidae	CRCO	Scolecithricella sp.	V	2	64.00	128	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA	ZH4_QA	2018-08-09	Coarse	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto libellula	Α	8	1.00	8	1		
Golder	Baffinlands Iron Mine		mz18-108-008_QA mz18-108-009	ZH4_QA	2018-08-09	Coarse	Whole		Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto sp.	J	1	1.00	1	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-009	ZH5 ZH5	2018-08-09 2018-08-09	Fine Coarse	1/32 Whole	Arthropoda Cnidaria	Crustacea	Hydrozoa	Copepoda Trachylinae	Calanoida Trachymedusae	Acartiidae Rhopalonematidae	CRCO CNHY	Acartia sp. Aglantha digitale	v Medusa	1	32.00 1.00	224 1	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Fine	1/32	MEMO		, 0	. radinyac	· · delly · · · edusac	moparomematidae	MEMO	Amphipoda indet.	J	1	32.00	32	-		Benthic
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Coarse	Whole	Ctenophora		Nuda		Beroida	Beroidae	CTEN	Beroe sp.	Α	1	1.00	1	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-009 mz18-108-009	ZH5 ZH5	2018-08-09 2018-08-09	Fine Fine	1/32 1/32	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus finmarchicus	I-IV	49	32.00 32.00	1,568 672	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5 ZH5	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	44	32.00	1,408	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-009	ZH5	2018-08-09	Fine	1/32	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf	2	32.00	64			
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Coarse		Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	VIf	1	1.00	1	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-009 mz18-108-009	ZH5 ZH5	2018-08-09 2018-08-09	Fine Coarse		Arthropoda Cnidaria	Crustacea	Hydrozoa	Copepoda Hydroidolina	Calanoida Anthoathecata	Calanidae Pandeidae	CRCO CNHY	Calanus sp. Catablema vesicarium	I-IV Medusa	72 1	32.00 1.00	2,304 1	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Coarse	Whole			Gastropoda	Heterobranchia		Clionidae	MOGA	Clione limacina	A	4	1.00	4	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-009	ZH5	2018-08-09	Coarse	Whole	Cnidaria						CNXX	Cnidaria indet.	Medusa	3	1.00	3		5-10	
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Fine	1/32	Cnidaria	Countries					CNXX	Cnidaria indet.	Medusa	3	32.00	96		<5	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-009 mz18-108-009	ZH5 ZH5	2018-08-09 2018-08-09	Fine Fine		Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Eumalacostraca	Funhausiacea		CRXX CREU	Crustacea indet. Euphausiacea indet.	Nauplius Nauplius	1	32.00 32.00	32 32	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Coarse	Whole		Crastacca	Hydrozoa	Hydroidolina	Anthoathecata	Corymorphidae	CNHY	Euphysa sp.	Medusa	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-009	ZH5	2018-08-09	Fine	1/32	Mollusca		Gastropoda				MOGA	Gastropoda indet.	Veliger	25	32.00	800			
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Fine	1/32	Arthropoda	Crustacea	Malacostraca	Eumalacostraca		Hyperiidae	CRAM	Hyperiidae indet.	J	1	32.00	32	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-009 mz18-108-009	ZH5 ZH5	2018-08-09 2018-08-09	Fine Coarse	1/32 Whole	Chordata Arthropoda	Tunicata Crustacea	Appendicularia Malacostraca	Eumalacostraca	Copelata Amphinoda	Oikopleuridae Uristidae	URAP CRAM	Oikopleura sp. Onisimus sp.	A A	8	32.00 1.00	256 1	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Coarse		Arthropoda	Crustacea	Malacostraca	Eumalacostraca		Uristidae	CRAM	Onisimus sp.	J	1	1.00	1	-		
Golder	Baffinlands Iron Mine	2018	mz18-108-009	ZH5	2018-08-09	Fine	1/32	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	Α	25	32.00	800	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Fine	1/32	Chaetognatha	C	Sagittoidea	Aphragmophora	Colonicit	Sagittidae	CHAE	Parasagitta sp.	J	2	32.00	64	4		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-009 mz18-108-009	ZH5 ZH5	2018-08-09 2018-08-09	Fine Coarse	1/32 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Calanoida Decapoda	Clausocalanidae Crangonidae	CRCO CRDE	Pseudocalanus sp. complex Sabinea septemcarinata	V Megalopa	25 5	32.00 1.00	800 5	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Coarse		Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto libellula	A	13	1.00	13	1		
Golder	Baffinlands Iron Mine		mz18-108-009	ZH5	2018-08-09	Fine	1/32	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto sp.	J	1	32.00	32			
Golder	Baffinlands Iron Mine		mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	4	64.00	256	1		
Golder	Baffinlands Iron Mine		mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	VIf	3	64.00	192 64			Renthic
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-010 mz18-108-010	ZH6 ZH6	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	MEMO Arthropoda	Crustacea		Thecostraca	Sessilia		MEMO CRCI	Amphipoda indet. Balanomorpha indet.	J Cypris	2	64.00 64.00	128	1		Benthic
30.001			010	· ·			-,					- ********				-16		- ::==				

biologica Abundance data in long format for Golder Baffinlands 2018.

Client	Project	Year	Biologica Sample #	Client Sample #	Date Sampled	Fraction	Split	Phylum	Subphylum	Class	Subclass	Order	Family	Groupcode	Taxon	Stage	Raw Abundance	Split Multiplier	Total Abundance	Unique Taxa Count	Size (mm)	Comment
Goldei	Baffinlands Iron Mine		mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	22	64.00	1,408			
Golder			mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	48	64.00	3,072	1		
Goldei Goldei	Baffinlands Iron Mine Baffinlands Iron Mine	2018 2018	mz18-108-010 mz18-108-010	ZH6 ZH6	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus finmarchicus Calanus finmarchicus	VIf VIm	1	64.00 64.00	64 64			
Goldei		2018	mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	22	64.00	1,408	1		
Golder		2018	mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIm	1	64.00	64	_		
Golder	Baffinlands Iron Mine	2018	mz18-108-010	ZH6	2018-08-09	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	3	8.00	24	1		
Goldei			mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	113	64.00	7,232			
Golder			mz18-108-010 mz18-108-010	ZH6 ZH6	2018-08-09	Coarse 2	1/8	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Decapoda	Contropagidae	CRDE CRCO	Caridea indet.	Zoea V	1	8.00 64.00	8 64	1		
Goldei Goldei			mz18-108-010	ZH6	2018-08-09 2018-08-09	Fine Fine	1/64 1/64	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Centropagidae Centropagidae	CRCO	Centropages sp. Centropages sp.	V VIm	1	64.00	64	1		
Goldei			mz18-108-010	ZH6	2018-08-09	Fine	1/64	MEMO	Crustaccu		сорсроии	Culariolda	centropagidae	MEMO	Chironomidae indet.	L	1	64.00	64			Benthic
Golder	Baffinlands Iron Mine	2018	mz18-108-010	ZH6	2018-08-09	Coarse 1	Whole	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	Α	3	1.00	3	1		
Golder			mz18-108-010	ZH6	2018-08-09	Fine	1/64	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	J	1	64.00	64		3	
Golder			mz18-108-010	ZH6	2018-08-09	Coarse 1	Whole	Cnidaria						CNXX	Cnidaria indet.	Medusa	6	1.00	6		>10	Damaged
Goldei Goldei			mz18-108-010 mz18-108-010	ZH6 ZH6	2018-08-09 2018-08-09	Coarse 2 Fine	1/8 1/64	Cnidaria Cnidaria						CNXX	Cnidaria indet. Cnidaria indet.	Medusa Medusa	2	8.00 64.00	16 64		<5 5-10	
Goldei			mz18-108-010	ZH6	2018-08-09	Coarse 1	Whole	Cnidaria		Hydrozoa	Hydroidolina	Anthoathecata	Corymorphidae	CNHY	Euphysa sp.	Medusa	1	1.00	1	1	3 10	
Golder	Baffinlands Iron Mine	2018	mz18-108-010	ZH6	2018-08-09	Fine	1/64	Mollusca		Gastropoda				MOGA	Gastropoda indet.	Veliger	13	64.00	832			
Golder			mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Isopoda		CRIS	Isopoda indet.	Cryptoniscid	1	64.00	64	1		
Golder			mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea	A	Copepoda	Calanoida	Clausocalanidae	CRCO	Microcalanus sp.	V	1	64.00	64	1		
Goldei Goldei			mz18-108-010 mz18-108-010	ZH6 ZH6	2018-08-09 2018-08-09	Coarse 2 Coarse 2	1/8 1/8	Chordata Chaetognatha	Tunicata	Appendicularia Sagittoidea	Aphragmophora	Copelata	Oikopleuridae Sagittidae	URAP CHAE	Oikopleura sp. Parasagitta elegans	A	32 36	8.00 8.00	256 288	1		
Goldei			mz18-108-010	ZH6	2018-08-09	Fine	1/64	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta sp.	J	1	64.00	64	-		
Golder	Baffinlands Iron Mine	2018	mz18-108-010	ZH6	2018-08-09	Fine	1/64	Arthropoda	Crustacea	· ·	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	19	64.00	1,216	1		
Golder			mz18-108-010	ZH6	2018-08-09	Coarse 1	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Decapoda	Crangonidae	CRDE	Sabinea septemcarinata	Megalopa	4	1.00	4	1	>10	
Goldei			mz18-108-010	ZH6	2018-08-09	Fine	1/64	Cnidaria		Hydrozoa	Hydroidolina	Siphonophorae		CNHY	Siphonophorae indet.	Nectophore	1	64.00	64	1	4.0	
Goldei Goldei			mz18-108-010 mz18-108-011	ZH6 ZV1	2018-08-09 2018-08-01	Coarse 1 Coarse 2	Whole 1/8	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Eumalacostraca Copepoda	Amphipoda Calanoida	Hyperiidae Acartiidae	CRAM CRCO	Themisto libellula Acartia sp.	A V	1	1.00 8.00	1 16	1	>10 >10	
Goldei		2018	mz18-108-011	ZV1	2018-08-01	Coarse 1	Whole	Cnidaria	Crustacea	Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae	CNHY	Aglantha sp.	Medusa	5	1.00	5	1	>10	
Golder			mz18-108-011	ZV1	2018-08-01	Fine	1/128	Mollusca		Bivalvia	,	,		МОВІ	Bivalvia indet.		5	128.00	640	1		
Goldei	Baffinlands Iron Mine	2018	mz18-108-011	ZV1	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	11	8.00	88		>10	
Golder			mz18-108-011	ZV1	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	11	8.00	88	1		
Goldei Goldei			mz18-108-011	ZV1	2018-08-01 2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO CRCO	Calanus glacialis	V	9	8.00 8.00	72 16	1		
Goldei			mz18-108-011 mz18-108-011	ZV1 ZV1	2018-08-01	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO	Calanus hyperboreus Calanus hyperboreus	V	1	8.00	8	1		
Golder			mz18-108-011	ZV1	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	44	8.00	352		>10	
Golder	Baffinlands Iron Mine	2018	mz18-108-011	ZV1	2018-08-01	Coarse 1	Whole	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	Α	2	1.00	2	1		
Goldei			mz18-108-011	ZV1	2018-08-01	Coarse 1	Whole	Cnidaria						CNXX	Cnidaria indet.	Medusa	2	1.00	2		5-10	
Golder			mz18-108-011 mz18-108-011	ZV1	2018-08-01	Coarse 2	1/8	Cnidaria	Crustona		Cananada			CNXX CRCO	Cnidaria indet.	Medusa	16	8.00 128.00	128		<5	
Goldei Goldei			mz18-108-011	ZV1 ZV1	2018-08-01 2018-08-01	Fine Fine	1/128 1/128	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Cyclopoida		CRCO	Copepoda indet. Cyclopoida indet.	Nauplius I-IV	136	128.00	17,408 128			
Goldei			mz18-108-011	ZV1	2018-08-01	Fine	1/128	Arthropoda	Crustacea		Copepoda	Cyclopoida		CRCO	Cyclopoida indet.	V	1	128.00	128			
Golder	Baffinlands Iron Mine	2018	mz18-108-011	ZV1	2018-08-01	Coarse 1	Whole	Cnidaria		Hydrozoa	Hydroidolina	Anthoathecata	Corymorphidae	CNHY	Euphysa sp.	Medusa	1	1.00	1	1		
Golder			mz18-108-011	ZV1	2018-08-01	Fine	1/128	Chordata	Tunicata	Appendicularia		Copelata	Fritillariidae	URAP	Fritillaria sp.	Α	2	128.00	256	1		
Golder		2018	mz18-108-011	ZV1	2018-08-01	Fine	1/128	Mollusca	Country	Gastropoda	5	B.A I.d	A Accelolance	MOGA	Gastropoda indet.	Veliger	2	128.00	256	4		
Goldei Goldei			mz18-108-011 mz18-108-011	ZV1 ZV1	2018-08-01 2018-08-01	Coarse 1 Coarse 2	Whole 1/8	Arthropoda Chordata	Crustacea Tunicata	Malacostraca Appendicularia	Eumalacostraca	Mysida Copelata	Mysidae Oikopleuridae	CRMY URAP	Mysis sp. Oikopleura sp.	A	11 23	1.00 8.00	11 184	1	>10	
Goldei			mz18-108-011	ZV1	2018-08-01	Fine	· .	Arthropoda	Crustacea	Арренисиина	Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	1	128.00	128	1	710	
Golder	Baffinlands Iron Mine	2018	mz18-108-011	ZV1	2018-08-01	Fine	1/128		Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV	13	128.00	1,664			
Golder			mz18-108-011	ZV1	2018-08-01	Fine	1/128	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	19	128.00	2,432			
Golder			mz18-108-011	ZV1	2018-08-01	Fine	1/128	Arthropoda	Crustacea	Citt-id	Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	V	1	128.00	128 80	1	. 10	
Goldei Goldei		2018 2018	mz18-108-011 mz18-108-011	ZV1 ZV1	2018-08-01 2018-08-01	Coarse 2 Coarse 2	1/8 1/8	Chaetognatha Chaetognatha		Sagittoidea Sagittoidea	Aphragmophora Aphragmophora		Sagittidae Sagittidae	CHAE CHAE	Parasagitta elegans Parasagitta sp.	A I	10	8.00 8.00	80 16	1	>10	
Goldei		2018	mz18-108-011	ZV1	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea	Sugittolucu	Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	4	8.00	32	1	>10	
Golder	Baffinlands Iron Mine	2018	mz18-108-011	ZV1	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Themisto sp.	J	2	8.00	16	1	>10	
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	1	8.00	8	1		
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Cnidaria		Hydrozoa	Trachylinae	Narcomedusae	Solmundaeginidae	CNHY	Aeginopsis laurentii	Medusa	1	8.00	8	1		
Goldei Goldei			mz18-108-012 mz18-108-012	ZV2 ZV2	2018-08-01 2018-08-01	Coarse 1 Fine	Whole 1/256	Cnidaria Mollusca		Hydrozoa Bivalvia	Trachylinae	Trachymedusae	Rhopalonematidae	CNHY MOBI	Aglantha sp. Bivalvia indet.	Medusa Veliger	2	1.00 256.00	4 512	1		
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	7	8.00	56	_		
Goldei	Baffinlands Iron Mine	2018	mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	23	8.00	184	1		
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	8	8.00	64	1		
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8 Whole	Arthropoda	Crustacea		Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO	Calanus glacialis	VIf VIf	2	8.00	8			
Goldei Goldei			mz18-108-012 mz18-108-012	ZV2 ZV2	2018-08-01 2018-08-01	Coarse 1 Coarse 2	1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida	Calanidae	CRCO CRCO	Calanus hyperboreus Calanus hyperboreus		5	1.00 8.00	40	1		
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	37	8.00	296			
Golder	Baffinlands Iron Mine	2018	mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Centropagidae	CRCO	Centropages sp.	V	1	8.00	8	1		
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 1	Whole			Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	A	1	1.00	1	1		
Golder			mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8 Whole	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	Meduca	2	8.00	16 2		5_10	
Goldei Goldei			mz18-108-012 mz18-108-012	ZV2 ZV2	2018-08-01 2018-08-01	Coarse 1 Coarse 2	Whole 1/8	Cnidaria Cnidaria						CNXX	Cnidaria indet. Cnidaria indet.	Medusa Medusa	3	1.00 8.00	24		5-10 <5	
Goldei			mz18-108-012	ZV2	2018-08-01	Fine	· .	Arthropoda	Crustacea		Copepoda			CRCO	Copepoda indet.	Nauplius	129	256.00	33,024		-	
Golder			mz18-108-012	ZV2	2018-08-01	Fine	1/256	Arthropoda	Crustacea		Copepoda	Cyclopoida		CRCO	Cyclopoida indet.	I-IV	1	256.00	256			
Golder			mz18-108-012	ZV2	2018-08-01	Fine	1/256			Gastropoda				MOGA	Gastropoda indet.		4	256.00	1,024			
Goldei Goldei			mz18-108-012 mz18-108-012	ZV2 ZV2	2018-08-01 2018-08-01	Coarse 1 Coarse 1	Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca Malacostraca	Eumalacostraca Eumalacostraca	Decapoda Mysida	Hippolytidae Mysidae	CRDE CRMY	Hippolytidae indet. Mysis sp.	Zoea A	2	1.00 1.00	2	1		
Goldei			mz18-108-012	ZV2 ZV2	2018-08-01	Coarse 1	1/8	Chordata	Tunicata	Appendicularia	_umalacusti dtd	Copelata	Oikopleuridae	URAP	Oikopleura sp.	A	13	8.00	104	1		
Goldei			mz18-108-012	ZV2	2018-08-01	Fine	· .	Arthropoda	Crustacea	P.P.	Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	1	256.00	256	1		
Goldei			mz18-108-012	ZV2	2018-08-01	Fine	1/256		Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV	5	256.00	1,280			
Golder			mz18-108-012	ZV2	2018-08-01	Fine		Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	11	256.00	2,816	1		
Goldei Goldei			mz18-108-012 mz18-108-012	ZV2 ZV2	2018-08-01 2018-08-01	Fine Coarse 1	1/256 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Poecilostomatoida Amphipoda	Oncaeidae Uristidae	CRCO CRAM	Oncaea sp. Onisimus litoralis	V A	1	256.00 1.00	256 1	1 1		
Goldel	Sammanas mon winte	-010	100 012		2020 00 01	Course 1		opoua	c. astacea			ppoud		C		• •	=		-	-		

Abundance data in long format for Golder Baffinlands 2018.

Client	Project	Year	Biologica Sample #	Client Sample #	Date Sampled	Fraction	Split	Phylum	Subphylum	Class	Subclass	Order	Family	Groupcode	Taxon	Stage	Raw Abundance	Split Multiplier	Total Abundance	Unique Taxa Count	Size (mm)	Comment
Golder	Baffinlands Iron Mine		mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	Α	5	8.00	40	1		
Golder	Baffinlands Iron Mine		mz18-108-012	ZV2	2018-08-01	Coarse 2	1/8	Chaetognatha	Countries	Sagittoidea	Aphragmophora	Calamatida	Sagittidae	CHAE	Parasagitta sp.	J	1	8.00	8	4		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-012 mz18-108-012	ZV2 ZV2	2018-08-01 2018-08-01	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Calanoida Amphipoda	Clausocalanidae Hyperiidae	CRCO CRAM	Pseudocalanus sp. complex Themisto sp.	V	3	8.00 8.00	16 24	1		
Golder	Baffinlands Iron Mine		mz18-108-012	ZV2	2018-08-01	Fine	1/256	Unknown	Crastacca	Maidcostraca	Zamaiacostraca	,ppodd	,permade	XXXX	Unidentified	Egg	7	256.00	1,792	-		
Golder	Baffinlands Iron Mine	2018	mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	1	8.00	8	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Cnidaria		Hydrozoa	Trachylinae	Narcomedusae	Solmundaeginidae	CNHY	Aeginopsis laurentii	Medusa	1	8.00	8	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-013 mz18-108-013	ZV3 ZV3	2018-08-01 2018-08-01	Coarse 2 Coarse 2	1/8 1/8	Cnidaria Arthropoda	Crustacea	Hydrozoa	Trachylinae Thecostraca	Trachymedusae Sessilia	Rhopalonematidae	CNHY CRCI	Aglantha digitale Balanomorpha indet.	Medusa Cypris	4	8.00 8.00	32 16	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Fine	1/512	Mollusca	Crustacea	Bivalvia	mecostraca	Sessilla		MOBI	Bivalvia indet.	Veliger	1	512.00	512	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	33	8.00	264			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Fine	1/512	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	4	512.00	2,048			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	7 12	8.00	56 96	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-013 mz18-108-013	ZV3 ZV3	2018-08-01 2018-08-01	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis Calanus glacialis	V	4	8.00 8.00	32	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIm	1	8.00	8			
Golder	Baffinlands Iron Mine	2018	mz18-108-013	ZV3	2018-08-01	Coarse 1	Whole	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	VIf	1	1.00	1			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	2	8.00	16	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-013 mz18-108-013	ZV3 ZV3	2018-08-01 2018-08-01	Coarse 2 Coarse 1	1/8 Whole	Arthropoda Mollusca	Crustacea	Gastropoda	Copepoda Heterobranchia	Calanoida Pteropoda	Calanidae Clionidae	CRCO MOGA	Calanus sp. Clione limacina	I-IV A	73 1	8.00 1.00	584 1	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Cnidaria		Gastropoda	ricterobranema	тегорош	chomade	CNXX	Cnidaria indet.		3	8.00	24	-		
Golder	Baffinlands Iron Mine	2018	mz18-108-013	ZV3	2018-08-01	Fine	1/512	Arthropoda	Crustacea		Copepoda			CRCO	Copepoda indet.		140	512.00	71,680			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 1	Whole	-	Crustacea	Malacostraca	Eumalacostraca	•	Crangonidae	CRDE	Crangonidae indet.	Zoea	1	1.00	1	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-013 mz18-108-013	ZV3 ZV3	2018-08-01 2018-08-01	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Cyclopoida Cyclopoida		CRCO CRCO	Cyclopoida indet. Cyclopoida indet.	V VIf	1	8.00 8.00	8			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 1	Whole		Crustacea	Malacostraca	Eumalacostraca		Mysidae	CRMY	Erythrops sp.	A	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-013	ZV3	2018-08-01	Fine	1/512	Mollusca		Gastropoda		•	•	MOGA	Gastropoda indet.	Veliger	5	512.00	2,560			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea	Malacostraca	Eumalacostraca		Hyperiidae	CRAM	Hyperiidae indet.	J	2	8.00	16	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-013 mz18-108-013	ZV3 ZV3	2018-08-01 2018-08-01	Coarse 1 Coarse 2	Whole 1/8	Arthropoda Chordata	Crustacea Tunicata	Malacostraca Appendicularia	Eumalacostraca	Mysida Copelata	Mysidae Oikopleuridae	CRMY URAP	Mysis sp. Oikopleura sp.	J	30	1.00 8.00	1 240	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Fine		Arthropoda	Crustacea	Appendicularia	Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	1	512.00	512	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Fine		Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV	36	512.00	18,432			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Fine	1/512		Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	12	512.00	6,144			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-013 mz18-108-013	ZV3 ZV3	2018-08-01 2018-08-01	Fine Fine	1/512 1/512	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Poecilostomatoida Poecilostomatoida	Oncaeidae Oncaeidae	CRCO CRCO	Oncaea sp. Oncaea sp.	I-IV V	1	512.00 512.00	512 512	1		
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Chaetognatha	Crustacea	Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	A	9	8.00	72	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta sp.	J	5	8.00	40			
Golder	Baffinlands Iron Mine		mz18-108-013	ZV3	2018-08-01	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	1	8.00	8	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-013 mz18-108-013	ZV3 ZV3	2018-08-01 2018-08-01	Coarse 2 Coarse 1	1/8 Whole	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Calanoida Amphipoda	Scolecitrichidae Hyperiidae	CRCO CRAM	Scolecithricella sp. Themisto libellula	V A	1	8.00 1.00	8	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea	Maidcostraca	Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	v	3	16.00	48	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	VIm	1	16.00	16			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-014 mz18-108-014	ZV4 ZV4	2018-08-09 2018-08-09	Coarse 1 Fine	Whole 1/512	Cnidaria Mollusca		Hydrozoa Bivalvia	Trachylinae	Trachymedusae	Rhopalonematidae	CNHY MOBI	Aglantha sp. Bivalvia indet.	Medusa Veliger	1	1.00 512.00	1 3,584	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea	Divaivia	Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	47	16.00	752	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	26	16.00	416	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	VIf V	2	16.00	32	4		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-014 mz18-108-014	ZV4 ZV4	2018-08-09 2018-08-09	Coarse 2 Coarse 2	1/16 1/16	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis Calanus glacialis	V VIm	24 1	16.00 16.00	384 16	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	3	16.00	48	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	72	16.00	1,152			
Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 1	Whole	Cnidaria Cnidaria		Hydrozoa	Hydroidolina	Anthoathecata	Pandeidae	CNHY	Catablema vesicarium		2	1.00 1.00	2	1		
Golder Golder	Baffinlands Iron Mine		mz18-108-014 mz18-108-014	ZV4 ZV4	2018-08-09 2018-08-09	Coarse 1 Fine		Arthropoda	Crustacea		Copepoda			CRCO	Cnidaria indet. Copepoda indet.		125	512.00	64,000			
Golder	Baffinlands Iron Mine	2018	mz18-108-014	ZV4	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Cyclopoida		CRCO	Cyclopoida indet.	-	2	512.00	1,024			
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Fine		Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Euphausiacea		CREU	Euphausiacea indet.		1	512.00	512	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-014 mz18-108-014	ZV4 ZV4	2018-08-09 2018-08-09	Fine Coarse 2	1/512 1/16	Mollusca Arthropoda	Crustacea	Gastropoda Malacostraca	Eumalacostraca	Isanada		MOGA CRIS	Gastropoda indet. Isopoda indet.	Veliger Cryptoniscid	8	512.00 16.00	4,096 16	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 1	Whole		Tunicata	Appendicularia	Lumaiacostraca	Copelata	Oikopleuridae	URAP	Oikopleura sp.	A	1	1.00	1	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 2	1/16	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona atlantica	VIf	1	16.00	16	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	3	512.00	1,536	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-014 mz18-108-014	ZV4 ZV4	2018-08-09 2018-08-09	Fine Fine		Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Cyclopoida Cyclopoida	Oithonidae Oithonidae	CRCO CRCO	Oithona similis Oithona sp.	VIm I-IV	38	512.00 512.00	1,024 19,456			
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Fine		Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	30	512.00	15,360			
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Fine			Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	V	1	512.00	512	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Coarse 1		Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	A	1	1.00	1	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-014 mz18-108-014	ZV4 ZV4	2018-08-09 2018-08-09	Coarse 2 Coarse 1		Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Calanoida Decapoda	Clausocalanidae Crangonidae	CRCO CRDE	Pseudocalanus sp. complex Sabinea septemcarinata	V Zoea	28	16.00 1.00	448 3	1		
Golder	Baffinlands Iron Mine		mz18-108-014	ZV4	2018-08-09	Fine		Unknown	Crustacea	Maiacostraca	Lumaiacostraca	Decapoda	Crangomuae	XXXX	Unidentified		5	512.00	2,560	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	V	11	16.00	176	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	VIf	1	16.00	16			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-015 mz18-108-015	ZV5 ZV5	2018-08-09 2018-08-09	Coarse 3 Coarse 1	1/16 Whole	Cnidaria Cnidaria		Hydrozoa Hydrozoa	Trachylinae Trachylinae	Narcomedusae Trachymedusae	Solmundaeginidae Rhopalonematidae	CNHY CNHY	Aeginopsis laurentii Aglantha digitale	Medusa Medusa	2	16.00 1.00	32	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5 ZV5	2018-08-09	Coarse 1	1/8	Ctenophora		Nuda	паспушае	Beroida	Beroidae	CTEN	Beroe sp.	A	1	8.00	8	1	>5	
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Fine	1/512	Mollusca		Bivalvia		*****	*:=:===	MOBI	Bivalvia indet.	Veliger	7	512.00	3,584	1	-	
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	9	16.00	144			
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	23	16.00	368	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-015 mz18-108-015	ZV5 ZV5	2018-08-09 2018-08-09	Coarse 3 Coarse 3	1/16 1/16	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis Calanus sp.	V I-IV	17 36	16.00 16.00	272 576	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 1	Whole			Hydrozoa	Hydroidolina	Anthoathecata	Pandeidae	CNHY	Catablema vesicarium	Medusa	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-015	ZV5	2018-08-09	Coarse 1	Whole	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	Α	3	1.00	3	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Mollusca	Crustana	Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	J	2	16.00	32			
Golder	Baffinlands Iron Mine	2018	mz18-108-015	ZV5	2018-08-09	Fine	1/312	Arthropoda	Crustacea		Copepoda			CRCO	Copepoda indet.	Nauplius	137	512.00	70,144			

biologica Abundance data in long format for Golder Baffinlands 2018.

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Client	Project Baffinlands Iron Mine	Year 2018	Biologica Sample # mz18-108-015	Client Sample # ZV5	Date Sampled 2018-08-09	Fraction Fine	Split 1/512	Phylum Arthropoda	Subphylum	Class	Subclass	Order	Family	Groupcode CRCO	Taxon Cyclonoida indet	Stage V	Raw Abundance	Split Multiplier 512.00	Total Abundance 512	Unique Taxa Count	Size (mm)	Comment
Golder Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Fine	1/512	Mollusca	Crustacea	Gastropoda	Copepoda	Cyclopoida		MOGA	Cyclopoida indet. Gastropoda indet.	=	5	512.00	2,560			
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 1	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Hyperiidae indet.	J	1	1.00	1	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Isopoda		CRIS	Isopoda indet.	Cryptoniscid	1	16.00	16	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Microcalanus sp.	V	1	16.00	16	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Fine	1/512	Arthropoda	Crustacea		Copepoda	Harpacticoida	Ectinosomatidae	CRCO	Microsetella sp.	V	1	512.00	512	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 2	1/8	Chordata	Tunicata	Appendicularia	Cananada	Copelata	Oikopleuridae	URAP	Oikopleura sp.	A VIf	1	8.00	8	1	>5	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-015 mz18-108-015	ZV5 ZV5	2018-08-09 2018-08-09	Fine Fine	1/512	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda	Cyclopoida Cyclopoida	Oithonidae Oithonidae	CRCO CRCO	Oithona similis	I-IV	46	512.00 512.00	512 23,552	1		
Golder Golder	Baffinlands Iron Mine		mz18-108-015	ZV5 ZV5	2018-08-09	Fine	1/512		Crustacea		Copepoda Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp. Oithona sp.	V	34	512.00	17,408			
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Fine	1/512		Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	I-IV	2	512.00	1,024	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-015	ZV5	2018-08-09	Fine	1/512	Arthropoda	Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	V	3	512.00	1,536			
Golder	Baffinlands Iron Mine	2018	mz18-108-015	ZV5	2018-08-09	Coarse 2	1/8	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	Α	9	8.00	72	1		
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta sp.	J	5	16.00	80			
Golder	Baffinlands Iron Mine		mz18-108-015	ZV5	2018-08-09	Coarse 3	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V 5	9	16.00	144	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-015 mz18-108-016	ZV5 ZV6	2018-08-09 2018-08-01	Fine Coarse 1	1/512 1/16	Unknown Arthropoda	Crustacoa		Cononoda	Calanoida	Acartiidae	CRCO	Unidentified Acartia sp.	Egg	12	512.00 16.00	6,144 128	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Cnidaria	Crustacea	Hydrozoa	Copepoda Trachylinae	Narcomedusae	Solmundaeginidae	CNHY	Aeginopsis laurentii	Medusa	1	16.00	16	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 2	Whole	Cnidaria		Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae	CNHY	Aglantha digitale	Medusa	3	1.00	3	1	10	
Golder	Baffinlands Iron Mine	2018	mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Ctenophora		Nuda	•	Beroida	Beroidae	CTEN	Beroe sp.	J	1	16.00	16	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-016	ZV6	2018-08-01	Fine	1/256	Mollusca		Bivalvia				MOBI	Bivalvia indet.	Veliger	7	256.00	1,792	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Arthropoda	Crustacea		Copepoda	Calanoida		CRCO	Calanoida indet.	I-IV	13	16.00	208			
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus finmarchicus	V	14	16.00	224	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-016 mz18-108-016	ZV6 ZV6	2018-08-01 2018-08-01	Coarse 1 Coarse 1	1/16 1/16	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae Calanidae	CRCO CRCO	Calanus glacialis Calanus glacialis	V VIm	12	16.00 16.00	192 16	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 2	Whole	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	1	1.00	1	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	47	16.00	752	-		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	J	1	16.00	16			
Golder	Baffinlands Iron Mine	2018	mz18-108-016	ZV6	2018-08-01	Coarse 2	Whole	Mollusca		Gastropoda	Heterobranchia	Pteropoda	Clionidae	MOGA	Clione limacina	A	1	1.00	1	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Cnidaria						CNXX	Cnidaria indet.	Medusa	8	16.00	128		>5	
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 2		Cnidaria						CNXX	Cnidaria indet.	Medusa	1	1.00	1		5-10	
Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Fine	1/256		Crustacea		Copepoda			CRCO CRXX	Copepoda indet.	Nauplius	226 1	256.00	57,856			
Golder Golder	Baffinlands Iron Mine		mz18-108-016 mz18-108-016	ZV6 ZV6	2018-08-01 2018-08-01	Fine Fine	1/256	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda	Cyclopoida		CRCO	Crustacea indet. Cyclopoida indet.	Nauplius I-IV	1	256.00 256.00	256 256			
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Fine	1/256	Arthropoda	Crustacea		Copepoda	Cyclopoida		CRCO	Cyclopoida indet.	V	1	256.00	256			
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Fine	1/256	Mollusca		Gastropoda		.,,		MOGA	Gastropoda indet.	Veliger	7	256.00	1,792			
Golder	Baffinlands Iron Mine	2018	mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Hyperiidae	CRAM	Hyperiidae indet.	J	1	16.00	16	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Arthropoda	Crustacea	Malacostraca	Eumalacostraca			CRIS	Isopoda indet.	Cryptoniscid	1	16.00	16	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Chordata	Tunicata	Appendicularia		Copelata	Oikopleuridae	URAP	Oikopleura sp.	A	16	16.00	256	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-016 mz18-108-016	ZV6 ZV6	2018-08-01 2018-08-01	Fine Fine	1/256 1/256	Arthropoda	Crustacea Crustacea		Copepoda	Cyclopoida Cyclopoida	Oithonidae Oithonidae	CRCO CRCO	Oithona similis Oithona similis	VIf VIm	1	256.00 256.00	256 512	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Fine	1/256	Arthropoda Arthropoda	Crustacea		Copepoda Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV	35	256.00	8,960			
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Fine	1/256	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	V	20	256.00	5,120			
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Fine	1/256	Arthropoda	Crustacea		Copepoda	Poecilostomatoida	Oncaeidae	CRCO	Oncaea sp.	V	1	256.00	256	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-016	ZV6	2018-08-01	Coarse 2	Whole	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	Amphipoda	Uristidae	CRAM	Onisimus sp.	J	1	1.00	1	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	A	13	16.00	208	1	5-10	
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 2	Whole	Chaetognatha		Sagittoidea	Aphragmophora		Sagittidae	CHAE	Parasagitta elegans	A	3	1.00 16.00	3 16		>10	
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-016 mz18-108-016	ZV6 ZV6	2018-08-01 2018-08-01	Coarse 1 Coarse 1	1/16 1/16	Chaetognatha Arthropoda	Crustacea	Sagittoidea	Aphragmophora Copepoda	Calanoida	Sagittidae Clausocalanidae	CRCO	Parasagitta sp. Pseudocalanus sp. complex)	9	16.00	144	1		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Coarse 1	1/16	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	2	16.00	32	-		
Golder	Baffinlands Iron Mine		mz18-108-016	ZV6	2018-08-01	Fine	1/256	Unknown						XXXX	Unidentified	Egg	22	256.00	5,632			
Golder	Baffinlands Iron Mine	2018	mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Acartiidae	CRCO	Acartia sp.	I-IV	1	8.00	8	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 1	Whole	Cnidaria		Hydrozoa	Trachylinae	Trachymedusae	Rhopalonematidae	CNHY	Aglantha digitale	Medusa	5	1.00	5	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Fine	3/512	Mollusca	C	Bivalvia	C	Calamatida		MOBI	Bivalvia indet.	- 0-	3	170.67	512	1		
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-017 mz18-108-017	NBWD_Acadia NBWD_Acadia	2018-08-03 2018-08-03	Coarse 2 Coarse 2	1/8 1/8	Arthropoda Arthropoda	Crustacea Crustacea		Copepoda Copepoda	Calanoida Calanoida	Calanidae	CRCO CRCO	Calanoida indet. Calanus finmarchicus	I-IV V	12 28	8.00 8.00	96 224	1		
Golder	Baffinlands Iron Mine			NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	V	5	8.00	40	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus glacialis	VIf	2	8.00	16			
Golder	Baffinlands Iron Mine	2018	mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus hyperboreus	V	1	8.00	8	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Calanidae	CRCO	Calanus sp.	I-IV	59	8.00	472			
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Cnidaria						CNXX	Cnidaria indet.		5	8.00	40			
Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-017 mz18-108-017	NBWD_Acadia	2018-08-03	Fine	3/512		Crustacea		Copepoda	Cualamaida		CRCO CRCO	Copepoda indet.	Nauplius I-IV	171	170.67 170.67	29,184 171			
Golder Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia NBWD_Acadia	2018-08-03 2018-08-03	Fine Coarse 2	3/512 1/8	Arthropoda Arthropoda	Crustacea Crustacea	Malacostraca	Copepoda Eumalacostraca	Cyclopoida Isopoda		CRIS	Cyclopoida indet. Isopoda indet.	Cryptoniscid	2	8.00	16	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Fine	3/512	Arthropoda	Crustacea	ividiacostraca	Copepoda	Harpacticoida	Ectinosomatidae	CRCO	Microsetella norvegica	I-IV	1	170.67	171	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea	Malacostraca	Eumalacostraca	•	Mysidae	CRMY	Mysis sp.	A	8	8.00	64	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Chordata	Tunicata	Appendicularia		Copelata	Oikopleuridae	URAP	Oikopleura sp.	Α	12	8.00	96	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Fine	3/512	Arthropoda	Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona similis	VIf	1	170.67	171	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Fine	3/512		Crustacea		Copepoda	Cyclopoida	Oithonidae	CRCO	Oithona sp.	I-IV	12	170.67	2,048			
Golder Golder	Baffinlands Iron Mine Baffinlands Iron Mine		mz18-108-017 mz18-108-017	NBWD_Acadia	2018-08-03 2018-08-03	Fine Coarse 1	3/512 Whole		Crustacea	Sagittoidos	Copepoda	Cyclopoida	Oithonidae Sagittidae	CRCO CHAE	Oithona sp. Parasagitta elegans	V	3	170.67 1.00	853 3	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia NBWD_Acadia	2018-08-03	Coarse 1	1/8	Chaetognatha Chaetognatha		Sagittoidea Sagittoidea	Aphragmophora Aphragmophora		Sagittidae	CHAE	Parasagitta sp.	J	1	8.00	8	±		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	V	1	8.00	8	1		
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Clausocalanidae	CRCO	Pseudocalanus sp. complex	VIf	1	8.00	8			
Golder	Baffinlands Iron Mine		mz18-108-017	NBWD_Acadia	2018-08-03	Coarse 2	1/8	Arthropoda	Crustacea		Copepoda	Calanoida	Scolecitrichidae	CRCO	Scolecithricella sp.	V	1	8.00	8	1		
Golder	Baffinlands Iron Mine	2018	mz18-108-017	NBWD_Acadia	2018-08-03	Fine	3/512	Unknown						XXXX	Unidentified	Egg	21	170.67	3,584			



Zooplankton QA/QC recounts summary for Golder Baffinlands 2018.

Biologica QA Sample Number	Client QA Sample Number	Abundance (Original Replicate) (A)	Abundance (QA Replicate) (B)	Percent Agreement (%)
mz18-108-001	BR1	4,414	4,382	99.28
mz18-108-008	ZH4	18,711	21,719	83.92
			Average	91.60

Percent Agreement: 100 - ([(difference in abundance between samples) / total abundance of original sample)] *100%)



Marine Zooplankton Enumeration and Identification Methods Client: Golder Project: Baffinlands Iron Mine

Sample Inventory

Sample arrival: September 18, 2018

Number of samples: 17 Number of jars: 17 Screen size: 63 µm

Biologica project number: mz18-108

Upon arrival, the samples were examined and double-checked against the chain of custody to ensure (1) all samples were accounted for, (2) each sample had the appropriate number of jars as indicated on the COC. Any discrepancies were reported to the client and were resolved before further sample handling. Samples were transferred from formalin into 70% ethanol and assigned a unique identification number.

Sample Processing

Marine zooplankton samples were analyzed in two fractions as follows:

- (1) A 'Fine' fraction (<0.5 mm), in which all other organisms were identified and enumerated. Processing of the fine fraction was completed to a 300 count as specified by the client;
- (2) A 'Coarse' fraction comprised of large organisms (>0.5 mm) in the sample.

The Coarse fraction was analyzed through a stereo microscope at 10–40x magnification. All organisms were identified by taxonomic experts to the lowest taxonomic level using a compound microscope (100–400x magnification), appropriate dissection tools, and standard taxonomic references. For copepods, the stage of development was also recorded (copepodite stages I–V) as is the sex for mature individuals (copepod stage VI).

Subsampling for all fractions was performed using a Folsom plankton splitter.

Zooplankton were identified to species wherever possible, although immature copepods lack differentiating features required for identification beyond order (e.g., Calanoida, Cyclopoida, or Harpacticoida). All identifications were performed using taxonomic references and collaborations with external experts, where necessary.

Table 1. Summary of zooplankton samples processed for Golder Baffinlands Iron Mine 2018.

Client Sample	Date	Biologica			Specimens
#	Sampled	Sample #	Fraction	Split	Counted
BR1	8-Aug-18	mz18-108-001	Coarse 1	Whole	14
			Coarse 2	1/8	11
			Fine	1/16	296
BR2	8-Aug-18	mz18-108-002	Coarse 1	Whole	9
			Coarse 2	1/8	195
			Fine	1/128	113
BR3	8-Aug-18	mz18-108-003	Coarse 1	Whole	9
			Coarse 2	1/8	207
			Fine	1/128	76
BR4	8-Aug-18	mz18-108-004	Coarse 1	Whole	14
			Coarse 2	1/8	204
			Fine	1/128	123
ZH1	9-Aug-18	mz18-108-005	Coarse 1	Whole	34
			Coarse 2	1/16	11
			Fine	1/128	282
ZH2	9-Aug-18	mz18-108-006	Coarse	1/8	106
			Fine	9/1024	200
ZH3	9-Aug-18	mz18-108-007	Coarse	Whole	21
			Fine	1/128	391
ZH4	9-Aug-18	mz18-108-008	Coarse	Whole	23
			Fine	1/64	292
ZH5	9-Aug-18	mz18-108-009	Coarse	Whole	32
			Fine	1/32	288
ZH6	9-Aug-18	mz18-108-010	Coarse 1	Whole	15
			Coarse 2	1/8	74
			Fine	1/64	259
ZV1	1-Aug-18	mz18-108-011	Coarse 1	Whole	21
			Coarse 2	1/8	137
			Fine	1/128	181
ZV2	1-Aug-18	mz18-108-012	Coarse 1	Whole	16
			Coarse 2	1/8	113
			Fine	1/256	161
ZV3	1-Aug-18	mz18-108-013	Coarse 1	Whole	6
			Coarse 2	1/8	193
			Fine	1/512	201
ZV4	9-Aug-18	mz18-108-014	Coarse 1	Whole	11
			Coarse 2	1/16	209
			Fine	1/512	222
ZV5	9-Aug-18	mz18-108-015	Coarse 1	Whole	8
			Coarse 2	1/8	11
			Coarse 3	1/16	117
			Fine	1/512	249

Client Sample	Date	Biologica			Specimens
#	Sampled	Sample #	Fraction	Split	Counted
ZV6	1-Aug-18	mz18-108-016	Coarse 1	1/16	149
			Coarse 2	Whole	10
			Fine	1/256	324
NBWD_Acadia	3-Aug-18	mz18-108-017	Coarse 1	Whole	8
			Coarse 2	1/8	139
			Fine	3/512	215

QA/QC

Ten percent (10%) of samples were reanalyzed to assess subsampling accuracy and taxonomic consistency. The sample(s) were chosen at random and processed at different times to reduce counting and identification bias. The percent agreement between QA samples is reported in Table 2.

Table 2. Summary of taxonomic QA/QC results for Golder Baffinlands Iron Mine 2018.

Biologica Sample #	Client Sample #	Original Count	QA Count	Percent Agreement
mz18-108-001	BR1	4,414	4,382	99.28
mz18-108-008	ZH4	18,711	21,719	83.92
			Average:	91.60

Percent Agreement:

{100 – [(difference in abundance between samples/total abundance of original sample) x 100]} %

Data

Taxonomic data were recorded in Biologica's custom database. Results were provided to the Golder project manager in Excel spreadsheets via email.

Methodological and Taxonomic References

- Alvarino, A. 1971. Siphonophores of the Pacific with a review of the world distribution. Bulletin of the Scripps Institution of Oceanography 16: 1–368
- Brinton, E., Fleminger, A., and Siegel-Causey, D. 1986. The temperate and tropical planktonic biotas of the Gulf of California. CalCOFI Reports 27: 228–266.
- Brodskii, K.A. 1950. Calanoida of the far eastern seas and polar basin of the USSR. Keys to the fauna of the USSR No. 35.
- Gardner, G.A. and Szabo, I. 1982. British Columbia pelagic marine Copepoda: an identification manual and annotated bibliography. Canadian Special Publication of Fisheries and Aquatic Sciences 62: 1–536.
- Kathman, R.D., Austin, W.C., Saltman, J.C., and Fulton, J.D. 1986. Identification manual to the Mysidacea and Euphausiacea of the northeast Pacific. Canadian Special Publication of Fisheries and Aquatic Sciences 93: 1–411.
- Kamp, P.L. 1968. The hydromedusae of the Pacific and Indian Oceans. Dana Reports 72: 1–200.
- Razouls, C., de Bovée, F., Kouwenberg, J., and Desreumaux, J. 2005–2015. Diversity and Geographic Distribution of Marine Planktonic Copepods. Available at http://copepodes.obs-banyuls.fr/en.
- Shanks, A. 2001. An identification guide to the larval marine invertebrates of the Pacific Northwest. Oregon State University Press.
- Smith, D. and Johnson, K.B. 1977. Marine Coastal Plankton y Marine Invertebrate Larvae. Kendall/Hunt Publishing Company.
- Young, C.M., Sewell, M.A., and Rice, M.E. 2001. Atlas of Marine Invertebrate Larvae. Academic Press, 630 p.

ANNEXE I

Benthic Infauna Taxonomic List (2014-2018)

Psychologic Classification	Dhylum	Class/Order	Family.	TAXA	2010	2013	2015	2016	2017	2018
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Arthropd Amphipoda Phoxocephalidae Phoxocephalus holbolli X Arthropd Amphipoda Podoceridae Dyopedos sp. X X Arthropd Amphipoda Pontoporeiidae Monoporeia affinis X X X X	Arthropo	Amphipoda	Phoxocephalidae	'	Х	1				
Arthropd Amphipoda Podoceridae Dyopedos sp. X X Arthropd Amphipoda Pontoporeiidae Monoporeia affinis X X X X	Arthropo	Amphipoda	Phoxocephalidae	Harpinia sp.			Х	Х	Х	Х
Arthropd Amphipoda Pontoporeiidae <i>Monoporeia affinis</i> X X X X X X X	Arthropo	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli				Х		
	Arthropo	Amphipoda	Podoceridae	Dyopedos sp.					Х	Х
	Arthropo	Amphipoda	Pontoporeiidae	Monoporeia affinis	Х	Х	Х	Х	Х	Х
Arthropd Amphipoda Pontoporeiidae Pontoporeia femorata X X X X X X X X			Pontoporeiidae	Pontoporeia femorata	Х	Х	Х	Х	Х	Х

T	T	1		1		1	1	1	1
	Amphipoda	Pontoporeiidae	Pontoporeiidae indet.					Х	
	Amphipoda	Stenothoidae	Hardametopa nasuta					Х	
	Amphipoda	Stenothoidae	Metopa sp.		Х				
Arthropo	Amphipoda	Stenothoidae	Stenothoidae indet.	Х			X	Х	Χ
Arthropo	Amphipoda	Tryphosidae	Hippomedon denticulatus			Χ			
Arthropo	Amphipoda	Tryphosidae	Hippomedon serratus				Χ		
Arthropo	Amphipoda	Tryphosidae	Orchomene macroserratus	Χ					
Arthropo	Amphipoda	Tryphosidae	Orchomene sp.					Х	Χ
Arthropo	Amphipoda	Tryphosidae	Orchomenella minuta		X		Χ		Χ
Arthropo	Amphipoda	Tryphosidae	Orchomenella pinguis				Х	Х	Х
Arthropo	Amphipoda	Tryphosidae	Orchomenella sp.		Х		Х		
Arthropo	Amphipoda	Uristidae	Anonyx nugax	Х	Х	Х	Х	Х	
Arthropo	Amphipoda	Uristidae	Anonyx ochoticus				Х		
	Amphipoda	Uristidae	Anonyx pacificus				Х		
	Amphipoda	Uristidae	Anonyx sarsi			Х	Х	Х	Х
	Amphipoda	Uristidae	Anonyx sp.		х	Х	Х	Х	Х
	Amphipoda	Uristidae	Menigrates obtusifrons			· ·		X	, , , , , , , , , , , , , , , , , , ,
	Amphipoda	Uristidae	Onisimus barentsi Group					X	Х
<u>-</u>	Amphipoda	Uristidae	Onisimus brevicaudatus					^	X
	Amphipoda	Uristidae	Onisimus litoralis			Х			^
						X			
	Amphipoda	Uristidae	Onisimus normani			Х	.,		
	Amphipoda	Uristidae	Onisimus plautus				Х		
	Amphipoda	Uristidae	Onisimus sp.	Х				Х	Х
	Amphipoda	Uristidae	Uristidae indet.					Х	
Arthropo	Amphipoda		Amphipoda indet.	Х	Х	Χ	X	Х	Χ
Arthropo	Arachnida	Acariopodae	Acari indet.	Χ	Х				
Arthropo	Cirripedia	Archaeobalanidae	Semibalanus balanoides	Χ					
Arthropo	Cirripedia	Balanidae	Balanus sp.	Х			Х		
Arthropo	Cirripedia		Balanomorpha indet.					Х	Х
Arthropo	Cirripedia		Cirripedia indet.			Х	Х		
	Coleoptera	Curculionidae	Curculionidae indet.						Х
	Cumacea	Bodotriidae	Cyclaspis longicaudata	Х					
	Cumacea	Diastylidae	Brachydiastylis resima	X	Х	Х	Х	Х	Х
	Cumacea	Diastylidae	Diastylidae indet.			^		X	X
	Cumacea	Diastylidae	Diastylis alaskensis					X	^
			,					X	Х
Arthropo	Cumacea	Diastylidae	Diastylis bradyi						Χ
	•	5: 1:1	· · · · · · · · · · · · · · · · · · ·		-		.,	^	
	Cumacea	Diastylidae	Diastylis echinata			Х	Х		
Arthropo	Cumacea	Diastylidae	Diastylis echinata Diastylis goodsiri	X		Х	Х	X	Х
Arthropo Arthropo	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera			X X	Х	X X	Х
Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei	X	Х	X X X		X X X	X X
Arthropo Arthropo Arthropo	Cumacea Cumacea	Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera		Х	X X	X X	X X	Х
Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei	X	X	X X X		X X X	X X
Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes	X		X X X		X X X	X X
Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta	X	X	X X X	X	X X X X	X X X
Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp.	X	X	X X X X	X	X X X X	x x x
Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa	X	X	X X X X	X	X X X X	x x x
Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus	X	X	X X X X	X	X X X X	x x x
Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus	X	X	X X X X	X	X X X X X X	X X X X X
Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lamprops fuscatus	X X	x x	X X X X	X X	X X X X X X	X X X X X
Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo Arthropo	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lamprops fuscatus Lamprops sp.	X X	x x	X X X X X	X X X	X X X X X X	X X X X X
Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope Arthrope	Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Lempropidae Lempropidae Lempropidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lamprops fuscatus Lamprops sp. Eudorella emarginata	X X X	x x	X X X X X X X	X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X
Arthrope Art	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp.	X X	x x	X X X X X X X X	X X X X X	x x x x x x x x x x x x x x x x x x x	X X X X X X
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula	X X X	x x	X X X X X X X	X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorellopsis sp.	X X X X	X X X	X X X X X X X X X	X X X X X X	x x x x x x x x x x x x x x x x x x x	X X X X X X
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides	X X X	x x	X X X X X X X X X	X X X X X	x x x x x x x x x x x x x x x x x x x	x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp.	X X X X	X X X	X X X X X X X X X	X X X X X X	x x x x x x x x x x x x x x x x x x x	x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet.	X X X X	X X X	X X X X X X X X X	X X X X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda	X X X X	X X X	X X X X X X X X X	X X X X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp.	X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda	X X X X	X X X	X X X X X X X X X	X X X X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp.	X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis scorpiodes Diastylis scoulpta Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet.	X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis scorpiodes Diastylis sp. Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet.	X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X	x x x x x x x x x x x x x x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Crangonidae Crangonidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis scorpiodes Diastylis scorpiodes Diastylis spilicatus Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata	X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Ceuconidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata Sclerocrangon boreas	X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	X
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Crangonidae Nannastacidae Nannastacidae Crangonidae Crangonidae Thoridae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata Sclerocrangon boreas Lebbeus polaris Harpacticoida indet.	X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	X
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Crangonidae Crangonidae Crangonidae Crangonidae Crironomidae Chironomidae	Diastylis echinata Diastylis goodsiri Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata Sclerocrangon boreas Lebbeus polaris Harpacticoida indet. Chironomidae indet.	X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	X
Arthrope Arthrope	Cumacea Cumacea	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Crangonidae Crangonidae Thoridae Chironomidae Chironomidae	Diastylis echinata Diastylis goodsiri Diastylis lucifera Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis sculpta Diastylis sp. Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leucon facionales Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata Sclerocrangon boreas Lebbeus polaris Harpacticoida indet. Chironominae indet.	X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	X
Arthrope Arthrope	Cumacea Cumace	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Crangonidae Crangonidae Crangonidae Crangonidae Crironomidae Chironomidae	Diastylis echinata Diastylis goodsiri Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis scorpiodes Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata Sclerocrangon boreas Lebbeus polaris Harpacticoida indet. Chironominae indet. Crithocladiinae	X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	X
Arthrope Arthrope	Cumacea Cumace	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Cerangonidae Crangonidae Crangonidae Crangonidae Crangonidae Crangonidae Crangonidae Chironomidae Chironomidae Chironomidae Orthocladiinae	Diastylis echinata Diastylis goodsiri Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis scorpiodes Diastylis sp. Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata Sclerocrangon boreas Lebbeus polaris Harpacticoida indet. Chironomiae indet. Chironomiae indet. Orthocladiinae Diptera indet.	X X X X X X X X X X X X X X X X X X X	x x x	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	X
Arthrope Arthrope	Cumacea Cumace	Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Diastylidae Lampropidae Lampropidae Lampropidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Leuconidae Crangonidae Crangonidae Thoridae Chironomidae Chironomidae	Diastylis echinata Diastylis goodsiri Diastylis goodsiri Diastylis lucifera Diastylis rathkei Diastylis scorpiodes Diastylis scorpiodes Diastylis spinulosa Diastylis spinulosa Diastyloides biplicatus Hemilamprops cristatus Lampropidae indet. Lamprops fuscatus Lamprops sp. Eudorella emarginata Eudorella sp. Eudorella truncatula Eudorellopsis sp. Leucon nasicoides Leucon sp. Leuconidae indet. Campylaspis rubicunda Campylaspis sp. Cumacea indet. Cyclopoida indet. Sabinea septemcarinata Sclerocrangon boreas Lebbeus polaris Harpacticoida indet. Chironominae indet. Crithocladiinae	X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X	X X X X X X X	X X X X X X X X X X X X X X X X X X X	X

Arthropo	Isopoda	Desmosomatidae	Eugerda sp.	Χ					
Arthropo	Isopoda	Gnathiidae	Gnathia maxillaris				Х		
Arthropo	Isopoda	Gnathiidae	Gnathia sp.	Χ	Χ			Χ	
Arthropo	Isopoda	Gnathiidae	Gnathiidae indet.					Χ	Χ
Arthropo	Isopoda	Isopoopodae	Isopoda sp. A				Х		
Arthropo		Paramunnidae	Pleurogonium rubicundum					Х	
Arthropo	'	Paramunnidae	Pleurogonium sp.					Х	
Arthropo	'	Paramunnidae	Pleurogonium spinosissimum	Х				X	Х
Arthropo	'	. a.aa	Asellota indet.	· ·				X	
	Myodocopa		Myodocopa indet.	Х	Х	Х	Х	Λ	
Arthropo	, ,	Mysidae	Mysis mixta	^	X	^	X	Х	
	,	,			X		^	^	X
Arthropo	·	Mysidae	Mysis sp.		۸			.,	Χ
Arthropo			Mysida indet.					X	
	Ostracoda	Philomedidae	Philomedes sp.					Х	Х
	Ostracoda	Trachylenerididae	Robertsonites tuberculatus*					Χ	
	Ostracoda		Ostracoda indet.					Х	
	Pycnogonida	Ammotheidae	Achelia spinosa				Х		
Arthropo	Pycnogonida		Pycnogonida indet.	Χ		Χ		Χ	
Arthropo	Pycnogonida	Ammotheidae	Achelia sp.					Χ	
Arthropo	Pycnogonida	Numphonidae	Nymphon sp.					Χ	Χ
Arthropo	Tanaidacea	Akanthophoreidae	Akanthophoreus gracilis					Χ	
Arthropo	Tanaidacea	Akanthophoreidae	Akanthophoreus sp.					Χ	Χ
Arthropo	Tanaidacea	Pseudotanaidae	Pseudotanais sp.					Х	Χ
	Tanaidacea	Sphyrapodidae	Pseudosphyrapus anomalus	Х			Х	Х	Х
	Tanaidacea	Typhlotanaidae	Typhlotanais sp.					X	X
	Tanaidacea	Туртпосапагаас	Tanaidacea indet.	v	Х	Y	Х	v	X
	Trombidiformes	Halacaridae	Halacaridae indet.	^	^	^	^	X	X
	Cheilostomatida							^	X
		Calloporidae	Calloporidae indet.						
	Cheilostomatida	Candidae	Scrupocellaria sp.						X
	Cheilostomatida	Myriaporidae	Leieschara sp.						Х
	Ctenostomata	Vesiculariidae	Bowerbankia sp.					Х	
	Ctenostomata		Ctenostomata indet.					Х	X
	Ctenostomatida	Alcyonidiidae	Alcyonidium sp.						Χ
Bryozoa	Ctenostomatida	Triticellidae	Triticella sp.						Χ
Bryozoa		Crisiidae	Crisia sp.					X	Χ
Bryozoa		Epistomiidae	Synnotum sp.					Χ	
Bryozoa		Hippothoidae	Celleporella hyalina*					Х	
Bryozoa			Bryozoa indet.					Χ	Χ
Cephalor	Priapulida	Priapulidae	Priapulus caudatus	Х		Х	Х	Х	Χ
	Priapulida	Priapulidae	Priapulus sp.					Х	X
	Priapulida		Priapulid indet.		Х				
	Ascidiacea	Ascidiidae	Ascidia callosa		X				
	Ascidiacea	Ascidiidae	Ascidia sp.		X	Х		Х	Х
	Ascidiacea	Pyuridae	Boltenia echinata		^	X		X	X
	Ascidiacea	,	Polycarpa fibrosa			^		^ X	X
		Styelidae	, , ,						^
	Ascidiacea		Ascidiacea indet.					Х	V
	Ascidiacea		Aplousobranchia indet.		.,				X
	Ascidiacea		Molgula sp.		Х				Х
	Ascidiacea		Tunicate sp.				Х		
Chordata			Pisces indet.					Χ	
	Anthozoa	Actiniidae	Urticina sp.*					Χ	
	Anthozoa	Hormathiidae	Hormathia digitata *					Х	
Cnidaria	Anthozoa	Parazoanthidae	Parazoanthus sp.					Χ	
Cnidaria	Hydrozoa	Bougainvilliidae	Bougainvilliidae indet.					Χ	Χ
Cnidaria	Hydrozoa	Olindiidae	Monobrachium parasitum					Χ	X
Cnidaria	Hydrozoa		Hydrozoa					Х	
Echinode	Echinoidea	Strongylocentrotida	Strongylocentrotus droebachiensis	Х		Х	Х	Х	Х
	Echinoidea		Strongylocentrotus sp.		Х	İ		Х	Х
	•		Asteriidae indet.			Х			
Echinode	Holothuroidea	Asteriidae			I		ļ		
	Holothuroidea Holothuroidea	Asteriidae Leieschara					X		
Echinode	Holothuroidea	Leieschara	Myriotrochus rinkii				Х	X	Χ
Echinode Echinode	Holothuroidea Holothuroidea	Leieschara Myriotrochidae	Myriotrochus rinkii Psolus phantapus				Х	X	X
Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea	Leieschara	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A				X	Х	Х
Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida	Leieschara Myriotrochidae Psolidae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet.				X		X X
Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida Ophiuroidea	Leieschara Myriotrochidae Psolidae Ophiuridae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet. Ophiocten affinis				X	Х	Х
Echinode Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida Ophiuroidea Ophiuroidea	Leieschara Myriotrochidae Psolidae Ophiuridae Ophiuridae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet. Ophiocten affinis Ophiocten sericeum	X	X			X X	X X X
Echinode Echinode Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida Ophiuroidea Ophiuroidea Ophiuroidea	Leieschara Myriotrochidae Psolidae Ophiuridae Ophiuridae Ophiuridae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet. Ophiocten affinis Ophiocten sericeum Ophiura robusta	Х		x	x	X X X	X X X
Echinode Echinode Echinode Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea	Leieschara Myriotrochidae Psolidae Ophiuridae Ophiuridae Ophiuridae Ophiuridae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet. Ophiocten affinis Ophiocten sericeum Ophiura robusta Ophiura sarsi		X	Х		X X X X	X X X
Echinode Echinode Echinode Echinode Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea	Leieschara Myriotrochidae Psolidae Ophiuridae Ophiuridae Ophiuridae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet. Ophiocten affinis Ophiocten sericeum Ophiura robusta Ophiura sarsi Ophiura sp.	Х		X X	x	X X X	X X X
Echinode Echinode Echinode Echinode Echinode Echinode Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea	Leieschara Myriotrochidae Psolidae Ophiuridae Ophiuridae Ophiuridae Ophiuridae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet. Ophiocten affinis Ophiocten sericeum Ophiura robusta Ophiura sarsi	Х		Х	x	X X X X	X X X X
Echinode Echinode Echinode Echinode Echinode Echinode Echinode Echinode Echinode Echinode	Holothuroidea Holothuroidea Holothuroidea Molpadida Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea Ophiuroidea	Leieschara Myriotrochidae Psolidae Ophiuridae Ophiuridae Ophiuridae Ophiuridae	Myriotrochus rinkii Psolus phantapus Holothuroidea sp. A Molpadida indet. Ophiocten affinis Ophiocten sericeum Ophiura robusta Ophiura sarsi Ophiura sp.	Х		X X	x	X X X X	X X X

Mollusca E	Bivalvia	Arcidae	Bathyarca glacialis						Χ
Mollusca E	Bivaliva	Astartidae	Astarte borealis	Χ	Χ	X	Х	Х	Χ
Mollusca E	Bivaliva	Astartidae	Astarte montagui	Χ		X	Х	Х	Χ
Mollusca E	Bivaliva	Astartidae	Astarte sp.	Χ	Χ	Χ	Х	Х	Χ
Mollusca E	Bivaliva	Bivalscae	Bivalve indet.		Χ	Χ	X	X	
Mollusca E	Bivaliva	Bivalscae	Bivalve sp. A				X		
Mollusca E	Bivaliva	Cardiidae	Ciliatocardium ciliatum	Χ		Χ	X	Χ	Χ
Mollusca E	Bivaliva	Cardiidae	Serripes groenlandicus		Х	Х	Х	Х	Χ
Mollusca E	Bivaliva	Cardiidae	Serripes sp.		Х				
Mollusca E	Bivaliva	Cardiidae	Cardiidae indet.					Х	
Mollusca E	Bivaliva	Cuspidariidae	Cuspidaria arctica			Х			
Mollusca E	Bivaliva	Cuspidariidae	Cuspidaria sp.	Х					X
Mollusca E	Bivaliva	Hiatellidae	Hiatella arctica	Х	Х	Х	Х	Х	Х
Mollusca E		Lyonsiidae	Lyonsia arenosa					Х	Х
Mollusca E		Margaritidae	Margarites groenlandicus		Х	Х	Х	Х	X
Mollusca E		Margaritidae	Margarites helicinus					X	X
Mollusca E		Margaritidae	Margarites olivaceus	Х				^	X
Mollusca E		Margaritidae	Margarites sp.	^				Х	X
Mollusca E		Myidae	Mya sp.					X	X
Mollusca E			, ·	Х	Х	V	V	X	X
		Myidae	Mya truncata			X	X		
Mollusca		Mytilidae	Crenella faba	Х	X	Х	Х	Х	Х
Mollusca		Mytilidae	Crenella sp.	<u> </u>	Х				.,
Mollusca		Mytilidae	Dacrydium vitreum	X					X
Mollusca		Mytilidae	Musculus discors	Х	Х	Х	Х	Х	Х
Mollusca E		Mytilidae	Musculus niger*		Χ			Х	
Mollusca E		Mytilidae	Musculus sp.	Х				Х	
Mollusca E	Bivaliva	Mytilidae	Mya arenaria			Χ	X		
Mollusca E	Bivaliva	Mytilidae	Mytilidae indet.	Χ				Χ	Χ
Mollusca E	Bivaliva	Mytilidae	Mytilus edulis		Χ				
Mollusca E	Bivaliva	Mytilidae	Mytilus sp.					Х	
Mollusca E	Bivaliva	Nuculanidae	Nuculana minuta		Χ	Χ	Х	Х	Χ
Mollusca E	Bivaliva	Nuculanidae	Nuculana pernula	Χ	Χ	Х	Х	Х	Х
Mollusca		Nuculanidae	Nuculana sp.			Х		Х	Х
Mollusca E		Nuculanoidea	Nuculanoidea indet.					Х	Х
Mollusca E		Nuculidae	Ennucula tenuis	Х				X	X
Mollusca E		Nuculidae	Nucula sp.	^		Х		^	^
Mollusca E		Nuculidae	Pronucula tenuis		Х	X	Х		
Mollusca E		Pectinidae	Chlamys islandica		^	X	X	Х	X
Mollusca E			,			^	^	X	X
		Pectinidae	Pectinidae indet.	v		· ·	· ·	۸	
Mollusca		Pectinidae	Similipecten greenlandicus	Х		Х	Х		Х
Mollusca		Pectinoidea	Pectinoidea indet.					X	
Mollusca		Periplomatidae	Periploma aleuticum	Х				X	Х
Mollusca		Propeamussiidae	Similipecten greenlandicus					X	
Mollusca		Propeamussiidae	Propeamussiidae indet.					Х	Х
Mollusca E		Tellinidae	Macoma balthica			Х	Х	Х	Х
Mollusca E		Tellinidae	Macoma calcarea	Х	X	X	Х		Х
Mollusca E		Tellinidae	Macoma moesta					Х	Х
Mollusca		Tellinidae	Macoma sp.					Х	Х
Mollusca E		Thraciidae	Thracia myopsis			Х	Х	Χ	Χ
Mollusca E	Bivaliva	Thraciidae	Thracia sp.					Χ	Χ
Mollusca E	Bivaliva	Thyasiridae	Axinopsida sp.						Χ
Mollusca E	Bivaliva	Thyasiridae	Axinopsida serricata*					Х	
Mollusca E	Bivaliva	Thyasiridae	Thyasira flexuosa		Х	Х	Х		
Mollusca E	Bivaliva	Thyasiridae	Thyasira gouldi	Х					
Mollusca		Thyasiridae	Thyasira sp.	1	1			Х	Х
Mollusca E		Thyasiridae	Thyasiridae indet.	1	1			Х	X
Mollusca E		Yoldiidae	Portlandia arctica	Х	Х	Х	Х	X	
Mollusca E		Yoldiidae	Yoldiella lenticula	X					X
Mollusca E		Yoldiidae	Yoldiella frigida	† ·	†				X
Mollusca E		Yoldiidae	Yoldiella intermedia						X
Mollusca		Yoldiidae	Yoldiella nana	Х	 			1	^
			Yoldiidae indet.	^	-			X	X
Mollusca E		Yoldiidae Chaotodormatidae		-	-	v	v		
Mallings	Chaetodermatida		Chaetoderma sp.	 	 	Х	Х	Х	X
	C t	Buccinidae	Buccinum hydrophanum	<u> </u>	<u> </u>				X
Mollusca	Gastropoda			i	1	1	1	X	Χ
Mollusca (Gastropoda	Buccinidae	Buccinidae indet.						
Mollusca (Mollusca (Mollusca (Gastropoda Gastropoda	Buccinidae Buccinidae	Colus sp.					Х	Х
Mollusca (Mollusca (Mollusca (Mollusca (Gastropoda Gastropoda Gastropoda	Buccinidae Buccinidae Buccinidae	Colus sp. Volutopsius norwegicus						Х
Mollusca (Mollusca (Mollusca (Mollusca (Gastropoda Gastropoda Gastropoda Gastropoda	Buccinidae Buccinidae Buccinidae Cancellariidae	Colus sp. Volutopsius norwegicus Admete viridula				Х	X X	X X
Mollusca (Mollusca (Mollusca (Mollusca (Gastropoda Gastropoda Gastropoda	Buccinidae Buccinidae Buccinidae	Colus sp. Volutopsius norwegicus			X	X X	Х	Х

Mollusca Gastropoda	Colloniidae	Moelleria costulata *					х	х
Mollusca Gastropoda	Columbellidae	Columbellidae indet.						X
Mollusca Gastropoda	Cylichnidae	Acteocina canaliculata	Х					
Mollusca Gastropoda	Cylichnidae	Acteocina sp.					х	
Mollusca Gastropoda	Cylichnidae	Cylichna alba	х		х	х		Х
Mollusca Gastropoda	Cylichnidae	Cylichna gouldi			X	X		<u></u>
Mollusca Gastropoda	Cylichnidae	Cylichna sp.					Х	Х
Mollusca Gastropoda	Cylichnidae	Cylichnidae indet.					X	X
Mollusca Gastropoda	Cylichnidae	Cylichnoides occultus	Х				X	X
Mollusca Gastropoda	Gastrscae	Gastropod sp. A				Х		, ·
Mollusca Gastropoda	Lepetidae	Lepeta caeca	Х	х	Х	X	Х	Х
Mollusca Gastropoda	Lottiidae	Lottiidae indet.		^	^	^	X	X
Mollusca Gastropoda	Lottiidae	Testudinalia testudinalis	х	х	х		^	X
Mollusca Gastropoda	Mangeliidae	Oenopota sp.	^			х		X
Mollusca Gastropoda	Mangeliidae	Oenopota violacea		х	х	x		^
Mollusca Gastropoda	Mangeliidae	Propebela sp.		^	^	^	х	
Mollusca Gastropoda	Mangeliidae	Propepela nobilis				х	^	
Mollusca Gastropoda	Naticidae	Bulbus sp.		х		^		
Mollusca Gastropoda	Naticidae	Cryptonatica affinis		^	х	х	х	Х
Mollusca Gastropoda	Naticidae	Euspira pallida	х		^	^	X	X
Mollusca Gastropoda	Naticidae	Naticidae (juvenile)	^		х		^	^
Mollusca Gastropoda	Retusidae	Retusa obtusa		v	^			
Mollusca Gastropoda	Retusidae	Retusidae indet.		X				
Mollusca Gastropoda	Rissoidae	Boreocingula castanea		X		X		Х
'				^		^	V	X
Mollusca Gastropoda	Rissoidae	Rissoidae indet.		Х			^	Χ
Mollusca Gastropoda	Skeneopsidae	Skeneopsis planorbis	X	Х			\ <u>'</u>	Х
Mollusca Gastropoda	Trochidae	Trochidae indet.	X				X	Х
Mollusca Gastropoda	Turridae	Turridae indet.	Χ				Λ	v
Mollusca Gastropoda	Velutinidae	Velutinidae indet.			V		X	X
Mollusca Gastropoda		Gastropoda indet.		V	X		X	Х
Mollusca Gastropoda	Taraba a Utaba a	Patellogastropoda indet.	V	Х		V	1	v
Mollusca Polyplacophora	Tonicellidae	Tonicella marmorea	Х		Х	Х	X	Х
Mollusca Polyplacophora	I to at do a	Polyplacophora indet.*		V	V		X	v
Nemerte Anopla	Lineidae	Cerebratulus sp.		Х	Х		X	X
Nemerte Anopla	-	Anopla indet.					X	Х
Nemerte Enopla	Tetrastemmatidae	'					X	.,
Nemerte Enopla	0 1 1 1 1 1 1 1	Enopla					X	X
Nemerte Palaeonemertea	Cephalothricidae	Cephalothrix sp.	1				Х	X
Nemerte Palaeonemertea	Carinomidae	Carinoma sp.						X
Nemerte Palaeonemertea	Tubulanidae	Tubulanus sp.						X
Nemertea		Nemertean indet.		Х	Х	X	Х	Х
Nemertea		Nemertean sp.				Х	.,	.,
Platyhelminthes	-	Platyhelminthes indet.	ļ				X	X
Porifera Calcarea	- 10	Calcarea indet.					X	X
Sipuncul Sipunculidea	Golfingiidae	Golfingia sp.					X	Х
Sipuncul Sipunculidea	Golfingiidae	Nephasoma sp.					Х	
Sipuncula		Sipunculid indet.			Х	Х		
		Total # Taxa	135	147	156	188	237	320
		# Unique Taxa	135	84	53	50	113	47

Notes: taxa identified to the lowest practical taxonomic level; presence/absence for previous years taken from SEM 2017. *=taxa identified only at Ragged Island;

ANNEXE I-2 Status Review of Benthic Infuana Taxa First Observed in Milne Inlet in 2018

Taxa	Phylum	Class	Order	Description
Kirkegaardia sp. Parougia caeca	Annelida Annelida	Polychaeta Polychaeta	Cirratulidae Echiuridae	Genus containing described species with North Atlantic distributions Widely distributed in the Canadian Arctic and the North Atlantic
Pseudofabricia sp. nr. aberrans	Annelida	Polychaeta	Fabriciidae	Notery distributed in the Canadian Actac and the North Adamtic. Only described species within genus, with limited description, possibly endemic to Mediterrane Sea, or incomplete range on record. Possible Arctic cryptid (Giangrande and Cantone 1990). S. Manayunkia aesturiana for specimen reidentification following independent verification.
Manayunkia aesturiana	Annelida	Polychaeta	Fabriciidae	Identification following independent verification oPseudofabricia sp. nr. aberrans. Polychaete species with Canadian Arctic and North Atlantic distributions, recorded occurrences on Baffin Island (Goldsmit 2016)
Gyptis sp.*	Annelida	Polychaeta	Hesionidae	Genus containing described species with Canadian Arctic and North Atlantic distributions
Microphthalmus sp.	Annelida	Polychaeta	Hesionidae	Genus containing described species with Canadian Arctic and North West Atlantic distributions recorded occurrences on Baffin Island (Cusson 2018, Goldsmit 2016)
Scoletoma sp.	Annelida	Polychaeta	Lumbrineridae	Genus containing described species with Canadian Arctic and North Atlantic distributions, recorded occurrences on Baffin Island (Goldsmit 2016)
Nicomache sp.	Annelida	Polychaeta	Maldanidae	Genus containing described species with Canadian Arctic and North West Atlantic distributions recorded occurrences on Baffin Island (Cusson 2018)
Praxillella gracilis	Annelida	Polychaeta	Maldanidae	Polychaete species with a large North Atlantic distribution, including the Canadian Arctic, recorded occurrences on Baffin Island (Cusson 2018)
Rhodine gracilior	Annelida	Polychaeta	Maldanidae	Possible identification from Independent verification of a possible R. loveni specimen. R. gracil has a described distribution of North Atlantic and Canadian Arctic waters, recorded occurrenc on Baffin Island (Cusson 2018)
Aglaophamus sp.	Annelida	Polychaeta	Nephtyidae	Genus containing described species with Canadian Arctic and North West Atlantic distributions recorded occurrences near Baffin Island (Cusson 2018)
Nephtys bucera	Annelida	Polychaeta	Nephtyidae	Polychaete species with a North Atlantic distribution, Gulf of St. Lawrence and Bay of Fundy
Ophelina cylindricaudata	Annelida	Polychaeta	Opheliidae	Polychaete species with a North Atlantic distribution, including the Scandinavian Arctic, and No West Atlantic, recorded occurrences on Baffin Island (Cusson 2018, DFO 2016)
Eulalia sp.	Annelida	Polychaeta	Phyllodocidae	Genus containing described species with distributions including the Arctic Ocean and North World Atlantic, recorded occurrences on Baffin Island (Goldsmit 2016)
Bylgides sp.	Annelida	Polychaeta	Polynoidae	Genus containing described species with distributions including the Arctic Ocean, Canadian Ar and North West Atlantic, recorded occurrences on Baffin Island (Cusson 2018)
Melaenis loveni	Annelida	Polychaeta	Polynoidae	Polychaete species local to the Canadian Arctic, the North Atlantic and the Arctic Ocean
Protodrilus sp.	Annelida	Polychaeta	Protodrilidae	Genus containing described species with North Atlantic distributions and in Scandinavian water
Bispira sp.	Annelida	Polychaeta	Sabellidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi Greenland waters
Dipolydora concharum	Annelida	Polychaeta	Spionidae	Polychaete species with a North West Atlantic distribution, Gulf of St. Lawrence and Bay of Fundy
Dipolydora socialis	Annelida	Polychaeta	Spionidae	Polychaete species with a North West Atlantic distribution, recorded occurrences on Baffin Isl. (Goldsmit 2016)
Laonice cirrata	Annelida	Polychaeta	Spionidae	Polychaete species with a wide distribution including the Canadian Arctic and the North Atlant recorded occurrences on Baffin Island (Cusson 2018)
Scolelepis sp.	Annelida	Polychaeta	Spionidae	Cosmopolitan genus with recorded occurrences on Baffin Island (Goldsmit 2016, Cusson 201
Eusyllis sp.	Annelida	Polychaeta	Syllidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi recorded occurrences on Baffin Island (Goldsmit 2016, Cusson 2018)
Pionosyllis sp.	Annelida	Polychaeta	Syllidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi recorded occurrences on Baffin Island (Cusson 2018)
Syllides longocirratus	Annelida	Polychaeta	Syllidae	Polychaete species with North Atlantic and Scandinavian distributions, recorded occurrences an unknown species in same genus on Baffin Island (Goldsmit 2016)
Amaeana sp.	Annelida	Polychaeta	Terebellidae	Genus containing described species with North Atlantic distributions and in Scandinavian water
Proclea graffii	Annelida	Polychaeta	Terebellidae	Polychaete species with North Atlantic and Canadian Arctic distributions, including recorded occurrences on Baffin Island (Cusson 2018)
Amphilochus sp.	Arthropoda	Amphipoda	Amphilochidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi recorded occurrences on Baffin Island (Cusson 2018)
Eurycope sp.	Arthropoda	Amphipoda	Munnopsidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi recorded occurrences on Baffin Island (Cusson 2018)
Aceroides sp.	Arthropoda	Amphipoda	Oedicerotidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi recorded occurrences on Baffin Island (Cusson 2018)
Arrhis sp.*	Arthropoda	Amphipoda	Oedicerotidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi
Onisimus brevicaudatus	Arthropoda	Amphipoda	Uristidae	recorded occurrences on Baffin Island (Cusson 2018, DFO 2016) Amphipod species with North Atlantic distribution, including a recorded occurrence in the
Curculionidae indet.	Arthropoda	Coleoptera	Curculionidae	Canadian Arctic (as Boeckosimus brevicaudatus, Cusson 2018) Large coleopteran family with global representation, including Arctic distribution (EOL 2019)
Calloporidae indet.	Bryozoa	Cheilostomatida	Calloporidae	Bryozoan family with North Atlantic and Arctic distributions, recorded occurrences on Baffin Is (Goldsmit 2016)
Scrupocellaria sp.	Bryozoa	Cheilostomatida	Candidae	Bryozoan family with North Atlantic and Arctic distributions, recorded occurrence os. minor on Baffin Island (Goldsmit 2016)
Leieschara sp.	Bryozoa	Cheilostomatida	Myriaporidae	Genus containing described species with North Atlantic distributions and in Scandinavian water
Alcyonidium sp.	Bryozoa	Ctenostomatida	Alcyonidiidae	Genus containing described species with North Atlantic and Arctic Ocean distributions, includi recorded occurrences on Baffin Island (Cusson 2018)
Triticella sp.	Bryozoa	Ctenostomatida	Triticellidae	Genus containing described species with North West Atlantic distributions
Aplousobranchia indet.	Chordata	Ascidiacea		Order of ascidians with global distributions, including recorded occurrences in the Canadian A and Baffin Island (DFO 2016)
Ophiocten affinis	Echinodermata	Ophiuroidea	Ophiuridae	Brittle star species with a North East Atlantic and Scandinavian recorded distribution, specime collected in Arctic waters.
Bathyarca glacialis	Mollusca	Bivalvia	Arcidae	Bivalve species with documented distribution in the Canadian Arctic, recorded occurrences ne Baffin Island (Cusson 2018, DFO 2016)
Yoldiella frigida	Mollusca	Bivalvia	Yoldiidae	Bivalve species with documented distribution in the Canadian Arctic, recorded occurrences ne Baffin Island (Cusson 2018)
Yoldiella intermedia	Mollusca	Bivalvia	Yoldiidae	Bivalve species with documented distribution in the Canadian Arctic, recorded occurrences no Baffin Island (Cusson 2018)
Buccinum hydrophanum	Mollusca	Gastropoda	Buccinidae	Gastropod species with documented distribution in the Canadian Arctic, recorded occurrence near Baffin Island (Cusson 2018)
Columbellidae indet.	Mollusca	Gastropoda	Columbellidae	Gastropod family with documented global distribution including the Canadian Arctic, recorded occurrences of a representative species #styris rosacea) near Baffin Island (Cusson 2018)
Carinoma sp.	Nemertea	Palaeonemertea	Carinomidae	Genus containing described species with North Atlantic distributions Genus containing described species with North Atlantic and Arctic Ocean distributions, includi
Tubulanus sp.	Nemertea	Palaeonemertea	Tubulanidae	Sweden and Iceland

ANNEXE J

Macroflora, Benthic Epifauna and Fish Taxonomic List (2014 – 2018)



ANNEXE J - Benthic Epifauna, Fish and Macroflora from Surveys in Milne Port (2010-2018)

	Sampling Year										
Таха	2010	2013	2014	2015	2016	2017	2018				
PELAGIC FAUNA											
Clione limnacina		х	Х		х	х	Х				
Ctenophora indet.			х	х	х	х	Х				
Limacina helicina		х	х	х	х	х	Х				
BENTHIC EPIFAUNA											
Actiniaria indet.	х	Х	х	х	х	х	х				
Anonyx sp.						х					
Arctica islandia					Х	х					
Asteroidea indet.		х	Х	Х	Х	Х	х				
Bivalvia indet.	х		х	х	х	х	Х				
Bourgueticrininia sp.					Х		х				
Bryozoa indet.	Х										
Buccinum undatum		х	х	х	х	х	Х				
Cerianthidae indet.	Х										
Chlamys islandica						х	х				
Cnidaria indet.		х		х	Х	х	х				
Crossaster pappuosus			х	х	Х	х	х				
Ctenodiscus crispatus			х		х	х	Х				
Cyrtodaria siliqua					х						
Echinocardium cordatum				х	х	х	х				
Echinoidea indet.			х	х	х	х	х				
Ennucula tenuis		х									
Gorgonocephalus sp.			х	х			Х				
Hiatella arctica		х				х	Х				
Holothuroidea indet.	х	Х	х		Х	Х	Х				
Macoma calcarea		х									
Musculus laevigatus		Х									
Mytilidae indet.	х	Х		Х	Х	Х					
Mya truncata		Х									
Nemertea indet.							Х				
Nymphon sp.						Х	Х				
Ophiura sarsii		Х			Х	Х	Х				
Ophiuridea indet.	х	Х	Х	Х	Х	Х	Х				
Pandalus sp.		Х		Х	Х	Х	Х				
Pandalus montagui		Х									
Pecten albicans	х			Х	Х		Х				
Pectinariidae indet.							Х				
Pista maculata						Х	Х				
Polychaetea indet.		Х		Х	Х	Х	Х				
Sabellidae indet.					Х	Х	Х				
Siliqua sp.					Х						
Strongylocentrotus droebachiensis	Х	Х	Х	Х	Х	Х	Х				
Styelidae indet.						Х	Х				
Weyprechtia pinguis	ĺ	Х	Х	Х							

ANNEXE J - Benthic Epifauna, Fish and Macroflora from Surveys in Milne Port (2010-2018)

	Sampling Year											
Таха	2010	2013	2014	2015	2016	2017	2018					
FISH												
Ammodytes spp.						Х	Х					
Arctogadus glacialis							Х					
Artediellus atlanticus			Х	Х								
Cottidae indet.				Х			Х					
Cyclopterus lumpus			Х									
Eumesogrammus praecisus			Х	Х	Х							
Gadus ogac	х		Х									
Gymnelis viridis		Х		Х								
Myoxocephalus octodecemspinosus		Х	Х	Х	Х							
Myoxocephalus scorpioides			Х	Х		Х	х					
Myoxocephalus scorpius	х	Х	Х	Х	Х	Х	х					
Myoxocephalus quadricornis	Х	Х	Х	Х	Х	Х	х					
Myoxocephalus spp.	Х	Х	Х	Х	Х	Х	х					
Salvelinus alpinus	х	Х	Х	Х	Х	Х	х					
Stichaeidae indet.							Х					
Pisces indet.							Х					
MACROFLORA												
Agarum cibrosum			Х	Х	Х	Х	х					
Brown algae			Х	Х	Х	Х	х					
Chlorophyta indet.			Х	х		Х	х					
Chondrus crispus			Х	Х	Х	Х	х					
Corallinophycidae indet.							х					
Desmarestia sp.			х	Х	Х	Х						
Fucus sp.			х		Х	Х	х					
Laminaria sp.			х	х	х	Х	х					
Not Classified							х					
Red algae			Х	Х	Х	Х	х					

Notes: Taxa identified to the lowest practical taxonomic level; presence/absence for previous years taken from SEM 2015, 2016, 2017; indet.=indeterminate (taxa which could not be identified beyond the taxonomic level listed); sp.=species.

ANNEXE K

Encrusting Epifauna



Abbreviations & Definitions

Worksheets:

1. Abbreviations & Definitions Glossary of terms and outline of report.

2. Data - Matrix Total abundance data in matrix format, including total taxa count per sample and total abundance per sample.

3. Data - Long Raw abundance data in long format.

Life Stages:

Adult Int

Intermediate - has adult features but not of typical reproductive size

J Juvenile Larvae Ν Nymph Pupa Col Colony Deut Deutonymph

MEMO Incidental taxa/fragments not included in data, or whose abundance is not generally captured accurately by 1.0-mm screen.

Number of unique taxa (=species richness), not including higher-order taxa for which there exists a lower-order identification

(e.g. not including *Lumbrineris* sp. if there exists *Lumbrineris cruzensis* in the data)

Total Number of Taxa

Total Number of Organisms Total Abundance, not including incidental taxa

Biologica Coding

Major Taxonomic Groups:

Miscellaneous

BRAC Brachiopoda BRYO Bryozoa Cnidaria Anthozoa CNAN CNHY Cnidaria Hydrozoa CNXX Cnidaria

ENTO Entoprocta EURA Echiura HEMI Hemichordata KINO Kinorhyncha NTEA Nemertea PHOR Phoronida PIXX Pisces PLTY Platyhelminthes PORI Porifera PRIA Priapulida

SIPN Sipuncula TARD Tardigrada URAS Ascidiacea

Annelida

Annelida Hirudinea ANHI ANOL Annelida Oligochaeta POER Polychaeta Errantia POSE Polychaeta Sedentaria POLY Polychaeta Polychaeta indet. POXX

Arthropoda

CHPY Chelicerata Pycnogonida CHAC Chelicerata Arachnida CRAM Crustacea Amphipoda CRCI Crustacea Cirripedia CRCO Crustacea Copepoda CRCU Crustacea Cumacea CRDE Crustacea Decapoda CRIS Crustacea Isopoda CRLE Crustacea Leptostraca CRMY Crustacea Mysidacea Crustacea Ostracoda CROS CRTA Crustacea Tanaidacea

Echinodermata

ECAS Echinodermata Asteroidea ECCR Echinodermata Crinoidea ECEC Echinodermata Echinoidea ECHO Echinodermata Holothuroidea ECOP Echinodermata Ophiuroidea

Crustacea

Mollusca

CRXX

Mollusca Aplacophora MOAP MOBI Mollusca Bivalvia MOCE Mollusca Cephalopoda MOGA Mollusca Gastropoda MOPO Mollusca Polyplacophora MOSC Mollusca Scaphopoda



Total abundance data in matrix format, including total taxa count per sample and total abundance per sample for Golder Baffinlands Epifauna 2018.

Biologica Sample #

Client Sa Date San	•									SBWO-1 13-Aug-18	SPEO-1 13-Aug-18
								Grand	Total	Total	Total
taxcode	grpcode	Phylum	Class	Order	Superfamily	Family	Taxon Name	Unique Taxa	Abundance	Abundance	Abundance
ANNE	POSE	Annelida	Polychaeta	Sabellida		Serpulidae	Circeis sp.	1	2		2
ARTH	CRCI	Arthropoda	Maxillopoda	Sessilia			Balanomorpha indet.	1	1674	1673	1
MISC	BRYO	Bryozoa	Gymnolaemata	Ctenostomatida		Alcyonidiidae	Alcyonidium disciforme	1	1		1
MISC	BRYO	Bryozoa	Gymnolaemata	Ctenostomatida		Alcyonidiidae	Alcyonidium gelatinosum	1	1	1	
MISC	BRYO	Bryozoa	Stenolaemata	Cyclostomatida		Cytididae	Infundibulipora prolifera	1	1	1	
MISC	BRYO	Bryozoa	Stenolaemata	Cyclostomatida		Lichenoporidae	Disporella hispida	1	7		7
MISC	BRYO	Bryozoa	Stenolaemata	Cyclostomatida		Lichenoporidae	Disporella sp.		16	16	
MOLL	MOBI	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae	Hiatella arctica	1	29	26	3
MOLL	MOBI	Mollusca	Bivalvia	Myida	Myoidea	Myidae	Mya sp.	1	2	2	
							Total Abundance		1733	1719	14
							Total Unique Taxa	8		6	5
MEMO	MEMO	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae	Hiatella arctica (fragments)		5	5	

mb18-108-072 mb18-108-073



Raw abundance data in long format for Golder Baffinlands Epifauna 2018.

Client	Project	Year	Sample Type	Split	Biologica Sample ID	Client Sample ID	Date Sampled	Phylum	Class	Order	Superfamily	Family	taxcode	grpcode	Taxon Name	Α	Int	J	Raw Count	Split Multiplier	Total Abundance	Unique Taxa Count	Comments
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-072	SBWO-1	13-Aug-18	Bryozoa	Gymnolaemata	Ctenostomatida		Alcyonidiidae	MISC	BRYO	Alcyonidium gelatinosum	1			1	1	1	1	
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-072	SBWO-1	13-Aug-18	Arthropoda	Maxillopoda	Sessilia			ARTH	CRCI	Balanomorpha indet.			1673	1673	1	1673	1	
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-072	SBWO-1	13-Aug-18	Bryozoa	Stenolaemata	Cyclostomatida		Lichenoporidae	MISC	BRYO	Disporella sp.	16			16	1	16	1	
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-072	SBWO-1	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae	MOLL	MOBI	Hiatella arctica			26	26	1	26	1	Damaged
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-072	SBWO-1	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae	MEMO	MEMO	Hiatella arctica (fragments)	5			5	1	5		Fragments with no hinge
																							Infundibulipora lucernaria var.
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-072	SBWO-1	13-Aug-18	Bryozoa	Stenolaemata	Cyclostomatida		Cytididae	MISC	BRYO	Infundibulipora prolifera	1			1	1	1	1	prolifera Kluge, 1946
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-072	SBWO-1	13-Aug-18	Mollusca	Bivalvia	Myida	Myoidea	Myidae	MOLL	MOBI	Mya sp.			2	2	1	2	1	
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-073	SPEO-1	13-Aug-18	Bryozoa	Gymnolaemata	Ctenostomatida		Alcyonidiidae	MISC	BRYO	Alcyonidium disciforme	1			1	1	1	1	
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-073	SPEO-1	13-Aug-18	Arthropoda	Maxillopoda	Sessilia			ARTH	CRCI	Balanomorpha indet.			1	1	1	1	1	Damaged
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-073	SPEO-1	13-Aug-18	Annelida	Polychaeta	Sabellida		Serpulidae	ANNE	POSE	Circeis sp.	1	1		2	1	2	1	
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-073	SPEO-1	13-Aug-18	Bryozoa	Stenolaemata	Cyclostomatida		Lichenoporidae	MISC	BRYO	Disporella hispida	7			7	1	7	1	
Golder	Baffinland	s 2018	Epifauna	Whole	mb18-108-073	SPEO-1	13-Aug-18	Mollusca	Bivalvia	Adapedonta	Hiatelloidea	Hiatellidae	MOLL	MOBI	Hiatella arctica			3	3	1	3	1	

ANNEXE L

Physical Oceanography Report



REPORT

Baffinland Iron Mines Corporation Mary River Project

2018 Physical Oceanography Program

Submitted to:

Baffinland Iron Mines Corporation

2275 Upper Middle Road East - Suite 300 Oakville, ON L6H 0C3

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1.0 INTRODUCTION

In 2018, Baffinland Iron Mines Corporation (Baffinland) undertook physical oceanographic monitoring at three sites in Milne Inlet, two at Milne Port and one at Bruce Head. The physical oceanographic monitoring program is intended to satisfy requirements of the 2018 marine-based Ecological Effects Monitoring (EEM) programs and address select Terms and Conditions of Project Certificate (PC) No. 005. This includes collection of physical oceanographic data to support the 2018 Marine Ecological Effects Monitoring Program (MEEMP), the 2018 Bruce Head Monitoring Program, the 2018 Narwhal Tagging Program, and validation of the ballast water dispersion modelling at the head of Milne Inlet. Additionally, results from the physical oceanographic monitoring program provide information to the Nunavut Impact Review Board (NIRB) in support of its yearly review of the Mary River Project. This report presents the results of the physical oceanographic monitoring program during the 2018 openwater season.

1.1 Background

The Mary River Project (hereafter, "the Project"), as currently approved, consists of the exploration, construction, operation, closure and reclamation of an open-pit mine and associated infrastructure for extraction, transportation and shipment of iron ore. There are three main project locations – the Mine Site, Milne Port (connected to the Mine Site via the 100-km long Milne Tote Road), and Steensby Port (currently undeveloped).

The Project was approved by NIRB and PC No. 005 was issued on December 28, 2012. An amendment to PC No. 005 was approved by NIRB on May 28, 2014, to accommodate the Early Revenue Phase (ERP) of the Project, which became operational in August 2015. The ERP involves shipping of up to 4.2 million tonnes of ore per year from Milne Port to European markets during the open water season (typically July to October) using chartered ore carrier vessels. During the first year of ERP operations in 2015, Baffinland shipped approximately 900,000 tonnes via 13 ore carrier voyages. The amount of ore shipped has since increased to approximately 5.1 million tonnes in 2018 via 71 return ore carrier voyages.

As part of regulatory commitments, Baffinland has developed and implemented the multi-parameter EEM program for the marine environment, collectively referred to as the MEEMP. The MEEMP was designed to evaluate potential Project-related impacts on the marine environment as predicted in the Final Environmental Impact Statement (FEIS; Baffinland 2013) and FEIS Addendum (Baffinland 2013). Additionally, the annual MEEMP monitoring report provides information to the NIRB in their annual assessment on the compliance status of PC No. 005.

1.2 Objectives

The 2018 physical oceanographic monitoring program was designed to address the following objectives:

- Satisfy requirements of the 2018 marine-based EEM programs including collection of physical environmental data to support the 2018 MEEMP, the 2018 Bruce Head Monitoring Program, and the 2018 Narwhal Tagging Program.
- Improve spatial and temporal resolution of measurements of water column properties, such as salinity and temperature, in Milne Inlet near Bruce Head and Milne Port.



- Monitor relative sea level and any storm surges at Milne Port.
- Provide additional current, temperature and salinity data to update, through further validation, the ballast water dispersion model developed for the Project in 2018 (Golder 2018).

The objectives of the physical oceanographic monitoring program aim to specifically address the Projectspecific monitoring requirements outlined in the following Terms and Conditions of PC No. 005:

- Condition No. 1 and 83 "The Proponent shall install tidal gauges at the Steensby Inlet Port and Milne Inlet Port sites to monitor relative sea level and storm surges."
- Condition No. 86 "Prior to commercial shipping of iron ore, the Proponent shall use more detailed bathymetry collected from Steensby Inlet and Milne Inlet to model the anticipated ballast water discharges from ore carriers. The results from this modelling shall be used to update ballast water discharge impact predictions and should account for density dependent flow and annual timescales over the project life. Additional sampling should also be undertaken to validate the model and to inform sampling sites and the monitoring plan."
- Condition No. 88 "Prior to commercial shipping of iron ore and in conjunction with the Marine Environment Working Group, the Proponent shall provide an updated risk analysis regarding ballast water discharge to assess the adequacy of treatment and implications on the receiving environment. This risk analysis shall consider, but not be limited to:
 - a. Invasive species;
 - b. Seasonal oceanography;
 - c. Ballast water quality and quantity;
 - d. Receiving water quality:
 - e. Residual physical, chemical, and/or biological effects; and
 - f. Any risk assessment analysis regarding ballast water exchange and treatment efficacy in arctic waters."
- Condition No. 89 "The Proponent shall develop and implement an effective ballast water management program that may include the treatment and monitoring of ballast water discharges in a manner consistent with applicable regulations and/or exceed those regulations if they are determined to be ineffective for providing the desired and predicted results. The ballast water management program shall include, without limitation, a provision that requires ship owners to test their ballast water to confirm that it meets the salinity requirements of the applicable regulations prior to discharge at the Milne Port, and a requirement noting that the Proponent, in choosing shipping contractors will, whenever feasible, give preference to contractors that use ballast water treatment in addition to ballast water exchange."



1.3 Study Area

Milne Inlet is located along the Northwest coast of Baffin Island in the Qikiqtani Region of Nunavut. The inlet is connected to Baffin Bay at its northern terminus through Eclipse Sound and Navy Board Inlet which are separated by Bylot Island (Figure 1). The northern section of Milne Inlet, extending from Ragged Island to Bruce Head, is approximately 50 km long, up to 800 m deep, and tapers from approximately 15 km across at Ragged Island to less than 8 km across at Bruce Head. The southern section of Milne Inlet, extending from Bruce Head to the head of Milne Inlet, is approximately 25 km long, up to 400 m deep, and tapers from approximately 8 to 14 km across near Koluktoo Bay to less than 3 km across at the southern terminus.

The southern and northern sections of Milne Inlet have a predominant north-south orientation, except between Bruce Head and Stephens Island where there is a northwest-southeast orientation. At Bruce Head the bathymetry is characterized by a sill (an area of decreased depth) between Bruce Head and Poirier Island. Just north of Bruce Head is Stephens Island, both Stephens Island and Poirier Island act to bifurcate the channel and subsequently create some of the narrowest sections of Milne Inlet, some sections reaching less than 3 km. Sills are also present at the north end of Stephens Island and at Ragged Island. Along all sections of the Milne Inlet the topography is characterized by mountainous terrain and steep cliffs vegetated with tundra.

At the head of Milne Inlet is Milne Port which supports Baffinland's iron ore exports via the Northern Shipping Route (from Milne Inlet to Baffin Bay) during the open-water season. The bathymetry of Milne Port is between 10 m and 100 m and characterized by a steep nearshore shelf that drops off into a gradual sloping bed extending northward away from the port. Near Milne Port, there are two sources of freshwater discharge, Phillips Creek to the west and Robertson River to the east of the port.

In 2018, the physical oceanography monitoring program focused on data collection overtop of the sill at Bruce Head and at the head of Milne Inlet near Milne Port. These locations were selected primarily to increase the quantity and quality of current measurements in the southern section of the inlet in the region of port development and ballast water discharge to improve understanding of circulation in this area and to further validate the oceanographic numerical model in this key region of Project activity.



EXISTING ORE DOCK

PROJECT NO

1663724

CONTROL

19000

FIGURE

Α

2.0 METHODS

The physical oceanographic monitoring program consists of three subsurface tautline moorings deployed in Milne Inlet, one at Bruce Head and two near Milne Port, through water column conductivity, temperature and depth (CTD) profiles, and a tide gauge deployed at Milne Port. All measurements are taken during the open-water season. The moorings are designed to provide a time series of instrument depth, current speed and direction through the water column, and conductivity, salinity and temperature at select depths. Continuous in-situ measurements from the moorings are supplemented by CTD profiles taken adjacent to the moorings at select times during the deployment. The Milne Port tide gauge is designed to provide a time series of water surface elevations and conductivity, salinity and temperature at a select depth.

This section presents the design, any applicable calibration and maintenance, the deployment and recovery, and data processing of the oceanographic moorings, CTD profiles, and the Milne Port tide gauge.

2.1 Unit Conventions

All dates and times are reported in Coordinated Universal Time (UTC), four hours ahead of the local time zone, Eastern Daylight Time (EDT). All horizontal positions are reported in Universal Transverse Mercator (UTM) coordinates referenced to the North American Datum of 1983 (NAD83) or in decimal degrees. Instrument elevations on moorings are reported as meters Mean Sea Level (MSL). Where MSL is a relative measure of the average water surface elevation during deployment. Elevations of the tide gauge are referenced to the Canadian Geodetic Vertical Datum (CGVD).

2.2 Oceanographic Moorings

2.2.1 Design

The moorings deployed at Bruce Head and southern Milne Inlet are a subsurface tautline design with in-line buoyancy and steel anchor weights. Steps in mooring design included selection of instruments and mooring hardware including shackles, and line, and calculation of buoyancy and anchor requirements based on immersed weight of mooring components. Additional considerations included the gross and net vertical forces induced by buoyancy and anchors during deployment as well as horizontal forces induced by expected near bed and through water column currents (assumed maximum 50 cm/s). All moorings were designed with a tandem acoustic release system connected to the steel anchors with 1m of galvanized chain and the top of each mooring was equipped with an Iridium GPS transceiver to aid in mooring recovery.

At Bruce Head the mooring design included five Viny floats on a pentagonal steel frame with an upward-looking 300 kHz Acoustic Doppler Current Profiler (ADCP), downward-looking 600 kHz ADCP, and temperature and salinity sensor. The mooring was approximately 45m in length. At Milne Port mooring 01 the design included four Viny floats on a rectangular steel frame with an upward-looking 300 kHz ADCP and temperature and salinity sensor. The mooring was approximately 3m in length. At Milne Port mooring 02 the design included one ellipsoid mooring float with one temperature and salinity sensor and one temperature, salinity and depth sensor attached 2m and 12m below the float, respectively. The mooring was approximately 45m in length.

The mooring layout and specifications are shown in Figure 2 through Figure 4. The instrumentation on the three moorings and sampling specifications are summarized in Table 1 through Table 3.



Table 1: Bruce Head Mooring Instrumentation and Sampling Strategy

Instrumentation	Sampling Strategy	Instrument Uncertainty
Sensor: Teledyne RDI (TRDI) 300 kHz WorkHorse Sentinel ADCP (SN 21735), measuring water column currents (u, v, w) and relative water surface elevations Sensor direction: Upward-looking Target depth: -107 m Mean Sea Level (MSL)	Ensemble interval: 600 s Pings per ensemble: 50 pings Ping interval: 12 s Bin size: 4 m Blanking Distance: 1.76 m Bandwidth: Narrow	Horizontal standard deviation: 1.05 cm/s Compass direction accuracy: ±2°
Sensor: TRDI 600 kHz WorkHorse Sentinel ADCP (SN 21100), measuring water column currents (u, v, w) and relative water surface elevations Sensor direction: Downward-looking Target depth: -107.5 m MSL	Ensemble interval: 600 s Pings per ensemble: 50 pings Ping interval: 12 s Bin size: 3 m Blanking Distance: 0.88 m Bandwidth: Narrow	Horizontal standard deviation: 0.70 cm/s Compass direction accuracy: ±2°
Sensor: RBRduo conductivity (salinity) and temperature (CT) data logger (SN 61586) Target depth: -107.5 m MSL	Measurement Interval: 30 s Sampling Rate: 1 Hz Sampling Regime: Continuous	Temperature accuracy: ±0.002°C Conductivity accuracy: ±0.003 mS/cm

Table 2: Milne Port 01 Mooring Instrumentation and Sampling Strategy

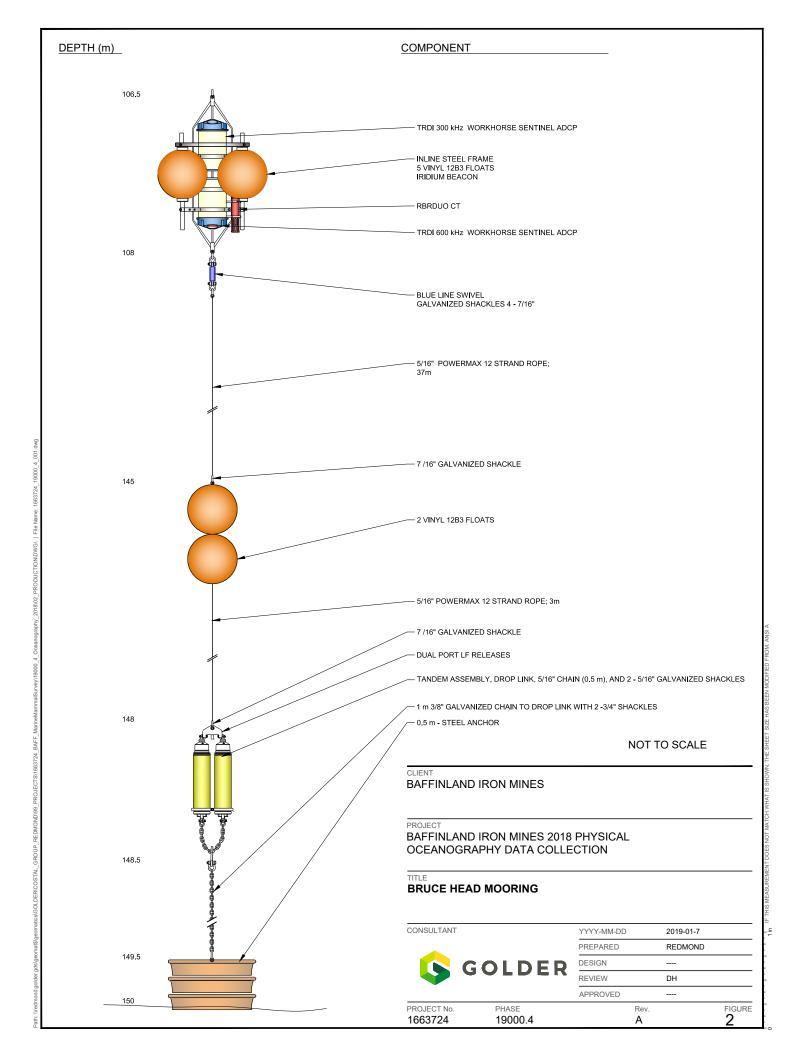
Instrumentation	Sampling Strategy	Instrument Uncertainty
Sensor: TRDI 300 kHz WorkHorse Sentinel ADCP (SN 10985), measuring water column currents (u, v, w) and relative water surface elevations Sensor direction: Upward-looking Target depth: -77 m Mean Sea Level (MSL)	Ensemble interval: 600 s Pings per ensemble: 50 pings Ping interval: 12 s Bin size: 3 m Blanking Distance: 1.76 m Bandwidth: Narrow	Horizontal standard deviation: 1.39 cm/s Compass direction accuracy: ±2°
Sensor: Sea-Bird Electronics (SBE) 37-SM MicroCAT CT data logger (SN 12345) Target depth: -77.5 m MSL	Measurement Interval: 60 s Sampling Rate: 1 Hz	Temperature accuracy: ±0.002°C Conductivity accuracy: ±0.003 mS/cm

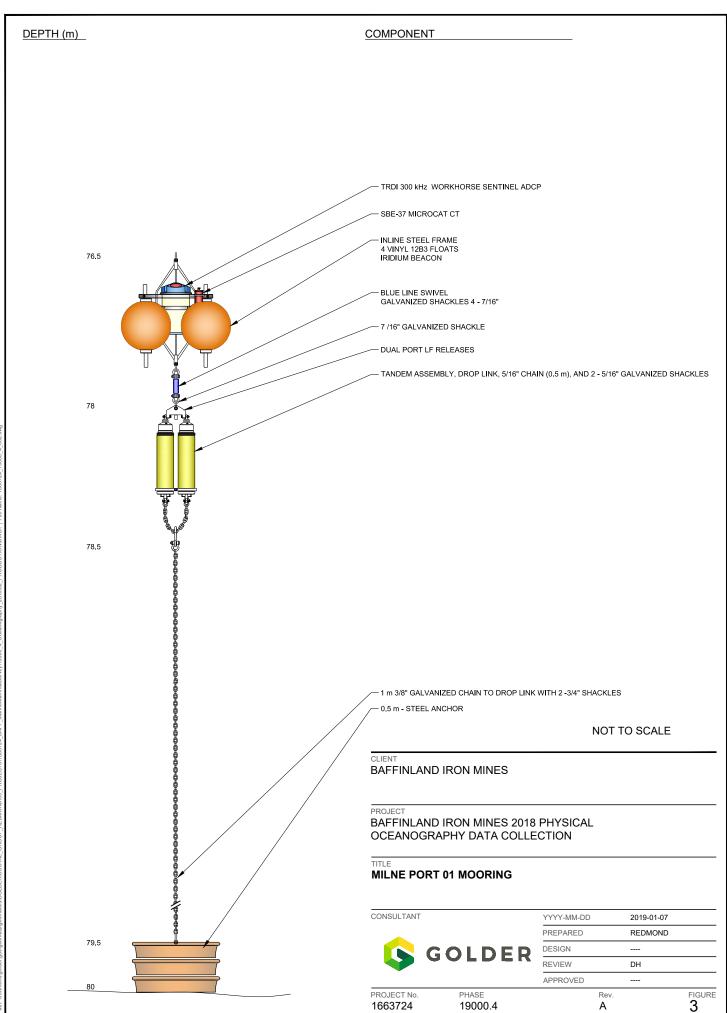


Table 3: Milne Port 02 Mooring Instrumentation and Sampling Strategy

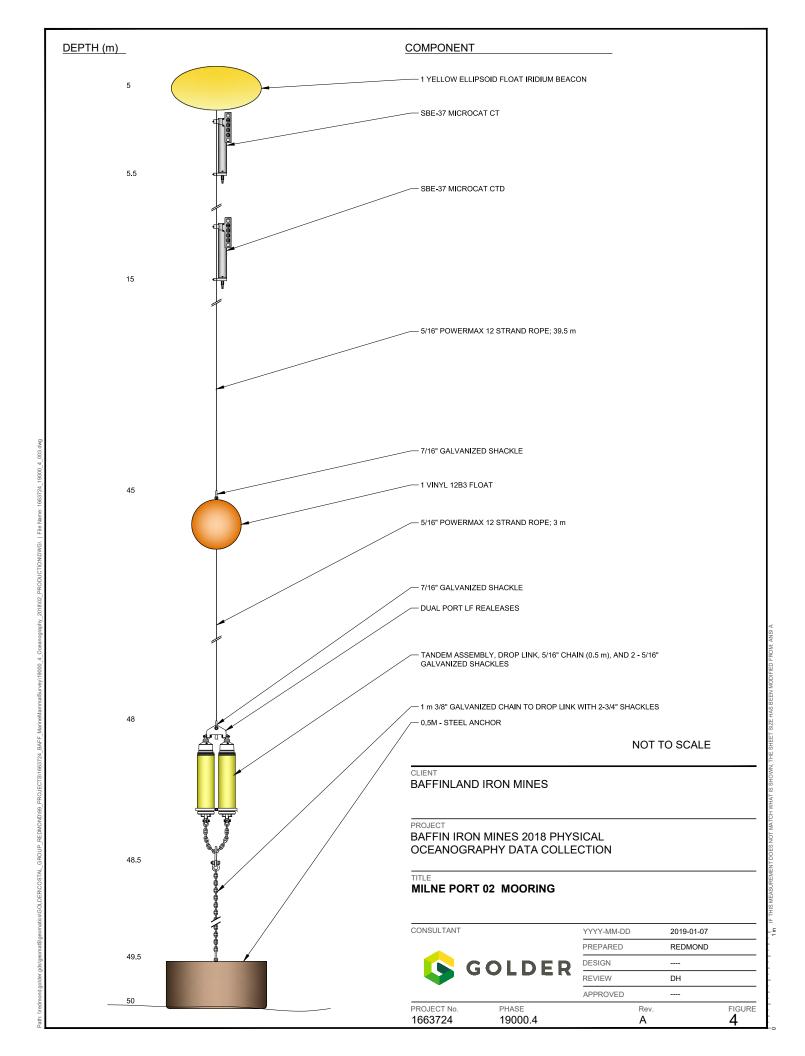
Instrumentation	Sampling Strategy	Instrument Uncertainty
Sensor: SBE 37-SM MicroCAT CT data logger (SN 12344)	Measurement Interval: 60 s Sampling Rate: 1 Hz	Temperature accuracy: ±0.002°C Conductivity accuracy: ±0.003 mS/cm
Target depth: -5.5 m MSL		
Sensor: SBE 37-SM MicroCAT	Measurement Interval: 60 s	Temperature accuracy: ±0.002°C
conductivity (salinity), temperature and depth (CTD) data logger (SN	Sampling Rate: 1 Hz	Conductivity accuracy: ±0.003
11252)		Pressure accuracy: ±0.1% of full
		scale range
Target depth: -15 m MSL		







I IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIEF



2.2.2 Instrument Calibration

The conductivity, temperature and depth (where applicable) sensors were calibrated for the RBRduo and SBE 37-SM MicroCAT instruments at the factory prior to deployment. The calibration certificates for these instruments are included in APPENDIX A.

Calibration and verification of the ADCP compasses near the approximate latitude where they will be deployed is advisable prior to deployment to account for the hard and soft iron effects. Care must be taken to eliminate sources of ferrous material from the mooring cages and in the immediate vicinity of the calibration activities, as well as any other sources of magnetic interference not stemming from the earths magnetic field. During the 2018 physical oceanographic monitoring program the combination of reduced horizontal component in earths magnetic field coupled with the presence of iron ore at Milne Port introduced significant errors to the calibration parameters computed for the ADCP compass in the Milne Port area. As a result, it was determined that the factory compass calibration settings, computed at a more southern latitude, would be used in place of locally determined calibration parameters.

2.2.3 Deployment and Recovery

Table 4 summarizes the post-deployment triangulated mooring positions, the mooring deployment and recovery times, and the deployed water depth for the clump weight anchors as measured by the vessel based depth sounder. The triangulated mooring position was 1 m and 3.2 m (horizontally) off the targeted mooring position for Milne Port 01 mooring and Milne Port 02 mooring, respectively. A triangulated position for the Bruce Head mooring could not be obtained as ice flows near the vessel made maneuvering difficult. Instead the position of the vessel at the time of deployment is reported for the Bruce Head mooring.

Table 4: Deployment and Recovery Details for Deployed Moorings

Mooring	Latitude (WGS 84)	Longitude (WGS 84)	Easting (m)	Northing (m)	UTM Zone	Date/Time Deployed (UTC)	Date/Time Recovered (UTC)	Measured Water Depth (m, MSL)
Bruce Head ¹	72.092°	-80.429°	519588	7999246	17X	August 04, 2018 13:46:00	September 28, 2018 16:09:30	-156
Milne Port 01	71.895	-80.898	503530	7977255	17W	August 04, 2018 19:06:01	September 28, 2018 20:24:01	-75
Milne Port 02 ²	71.893	-80.864	504688	7977031	17W	August 06, 2018 15:36:01	September 28, 2018 20:10:00	-57

Notes:

¹Mooring position is reported as vessel position at time of deployment; ²Deployment of Milne Port 02 was unsuccessful on August 04, 2018 and was successfully deployed on August 06, 2018'



Mooring deployment was conducted onboard the Ocean Raynald T tug and recovery onboard the Ocean K. Rusby tug based out of Quebec City, QC, operated by Ocean Group. The moorings were loaded onto the Ocean Raynald T on August 03 2018 through multiple trips with a small center console vessel. The small vessel was loaded via a crane from the Milne Port ore dock.

On August 04 2018, the weather conditions in Milne Inlet were 4-6 °C and overcast with light winds in the morning shifting to moderate southwesterly wind and rain in the afternoon. The sea state was calm in the morning with 0.3 m to 0.5 m high waves developing in the afternoon. The long moorings (Bruce Head and Milne Port 02) were deployed off the starboard side using the vessel's crane to first lift and lower the mooring floats onto the water. Then a length of rope (i.e., pass through line) was passed through the anchor shackle and tied off to a vessel cleat. The anchor was lifted and lowered into the water until the acoustic releases and inline floats were submerged and the pass through line was taught. The anchor and mooring floats were disconnected from the vessel crane using a Seacatch Quick Release. The anchor was released from the vessel by cutting the pass through line once the vessel was over the target deployment position which pulled the mooring down into position on the seabed.

The Milne Port 02 mooring was deployed off the starboard side using the vessel crane to lift and lower the entire mooring into the water until the mooring components were inline. The mooring float was disconnected from the vessel crane using a Seacatch Quick Release once the vessel was over the target deployment position which pulled the mooring down into position on the seabed. During deployment of the Milne Port 02 mooring the release link on one of the acoustic releases failed causing the mooring to resurface at the stern of the vessel shortly after deployment. It was discovered that the failed link caused fatal damage to the acoustic release and so the mooring was reconfigured with a single acoustic release. The mooring was successfully redeployed on August 06, 2018 after fabrication of new steel anchors on August 05, 2018. Weather conditions near Milne Port on August 06, 2018 were 5-7 °C and overcast with light winds.

On September 28 2018, the weather conditions in Milne Inlet were -5 °C and partly cloudy with light winds. The sea state was calm, waves less than 0.1 m in height. The moorings were released to the surface by sending the acoustic release code while the vessel was positioned approximately 200 m away from the mooring position. After the floats had surfaced, a small tender approached the mooring and assisted in connecting the mooring to the vessel crane. The mooring was then lifted onto the starboard side of the vessel. The recovered moorings were observed to be in good condition with a thin layer of sediment accumulated on the instruments.





Figure 5: A) Recovered 300 kHz ADCP off the Bruce Head mooring with thin layer of sedimentation and B) Ocean Raynald T tug onsite at Bruce Head for mooring deployment on August 04, 2018.

2.2.4 Data Processing

A preliminary check of the data recorded by instruments on the moorings was performed following the recovery. Quality checks included the following:

- Reviewing time series measured by the instruments, including various diagnostic parameters;
- Checking the instrument clock for drift during the deployment;
- Checking internal recorder and file status; and
- Plotting and viewing the time series data.

Checking the instruments for clock drift involved comparing the clock time upon recovery to a Global Positioning System (GPS) receiver clock to determine any drift ahead (fast) or behind (slow) GPS time. Due to the relatively small overall deviations the data were not corrected for clock drift for the purposes of this report. The data record start and end times and clock drift for the instruments on the moorings are provided in Table 5. Quality Controlled (QC) data are provided in APPENDIX C.

Table 5: Summary of Recorded Data Start and End Times for Instruments on the Moorings

Instrument	Mooring	Start of Data Logging (UTC)	End of Data Logging (UTC)	Clock Drift (hh:mm:ss)
TRDI 300 kHz WorkHorse Sentinel ADCP (SN 21735)	Bruce Head	August 03, 2018 12:00:00	September 30, 2018 14:00:00	00:00:03 fast
TRDI 600 kHz WorkHorse Sentinel ADCP (SN 21100)	Bruce Head	August 03, 2018 12:00:00	<u> </u>	
RBRduo CT (SN 61586)	Bruce Head	August 03, 2018 12:00:00	September 30, 2018 13:18:30	00:00:02 fast
TRDI 300 kHz WorkHorse Sentinel ADCP (SN 10985)	Milne Port 01	August 03, 2018 12:00:00	September 30, 2018 14:20:00	00:01:47 slow
SBE 37-SM MicroCAT CT (SN 12345)	Milne Port 01	August 03, 2018 12:00:00	September 30, 2018 20:57:00	00:00:03 slow
SBE 37-SM MicroCAT CT (SN 12344)	Milne Port 02	August 03, 2018 12:00:00	September 30, 2018 18:48:01	00:00:00
SBE 37-SM MicroCAT CT (SN 11252)	Milne Port 02	August 03, 2018 12:00:00	September 30, 2018 20:26:00	00:00:01 fast



2.2.4.1 ADCP

The data from each ADCP were exported from raw binary format to ASCII format using the TRDI software WinSC®. Measured water depths and water temperature were output directly from the ADCP through WinSC®. Plots of current speed and direction and ancillary parameters, along with tabulated bulk statistics (minimum, median, mean, maximum, and standard deviation) for select bin depths of each instrument were generated.

Post-processing and quality-checking was completed using the MATLAB® (Mathworks 2015) scientific computing software and included the following:

- Plotting and inspection of heading, tilt (vector sum of pitch and roll angles), battery voltage, and instrument depth and water temperature (Figure 6 through Figure 8). Tilt was inspected to identify periods of increased mooring layover that could affect the integrity of current measurements. Data associated with tilts greater than 10° was replaced with a -999 value.
- Horizontal components (east and north) of velocities were corrected from magnetic north to true north direction using the magnetic declination for the location at the time of deployment. A magnetic declination of 32.93° E was applied to the moorings and based on the Natural Resources Canada numerical model for the International Geomagnetic Reference Field (Natural Resources Canada 2017).
- Signal amplitude was plotted to check the quality of the instrument signal return and filtered for amplitudes below the noise floor of the respective instrument (TRDI 2010). Filtered data were replaced with a -999 value.
- Data were filtered for sidelobe interference using a beam slant angle of 20° (TRDI 2010). Filtered data were replaced with a -999 value. The filtered range corresponds to the top 10% of the measured water column, surface or bottom depending on whether the instrument was up-looking or down-looking.
- Measurements made by the instrument while it was out of water, as determined from the pressure gauge, were replaced with a -999 value.
- Data were filtered for vertical velocities greater than 0.3 m/s and error velocities, computed onboard the ADCP, greater than 0.15 m/s.
- Flagged and missing data values, identified onboard the ADCP, were replaced with a -999 value. Additional manual editing to remove or flag spurious data was performed as necessary.
- Data from the up-looking 300 kHz and down-looking 600 kHz ADCP on the Bruce Head mooring were combined to a single timeseries. A discrepancy in current direction between adjacent bins of the 300 kHz and the 600 kHz ADCP was identified. To address this, a time varying offset was applied to the current direction in the 600 kHz ADCP, assuming the 300 kHz ADCP current direction was correct.
- The percentage of good data for each ADCP instrument was calculated and presented in Table 6.

Table 6: Recorded Data Statistics for ADCP's on the Moorings

Mooring/Instrument	Total Records Recorded (#)	Total Records Expected (#)	Flagged and Missing Data (#)	Percent Valid Data (%)
Bruce Head – 300 kHz ADCP	7914	7920	6	99.99
Bruce Head – 600 kHz ADCP	7914	7920	6	99.99
Milne Port 01 – 300 kHz ADCP	7929	7929	0	100.00



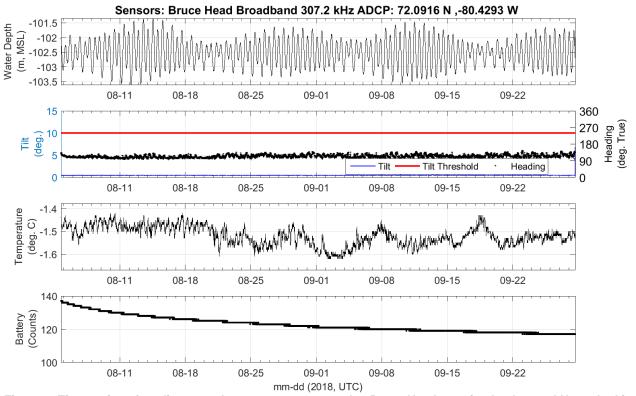


Figure 6: Time series of quality control parameters measured at Bruce Head mooring by the 300 kHz up-looking ADCP including instrument depth, instrument tilt, water temperature, and battery voltage for August 04 to September 28, 2018 in UTC.

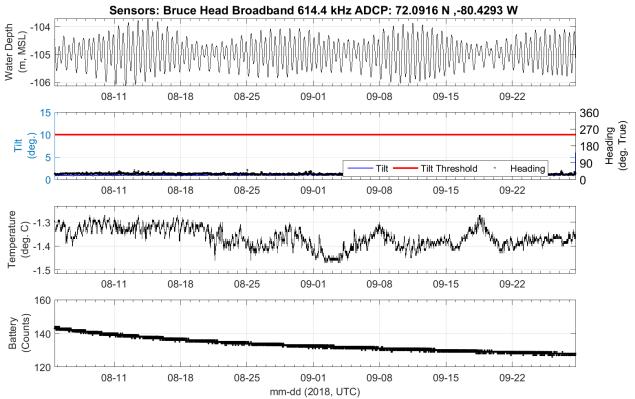


Figure 7: Time series of quality control parameters measured at Bruce Head mooring by the 600 kHz down-looking ADCP including instrument depth, instrument tilt, water temperature, and battery voltage for August 04 to September 28, 2018 in UTC.

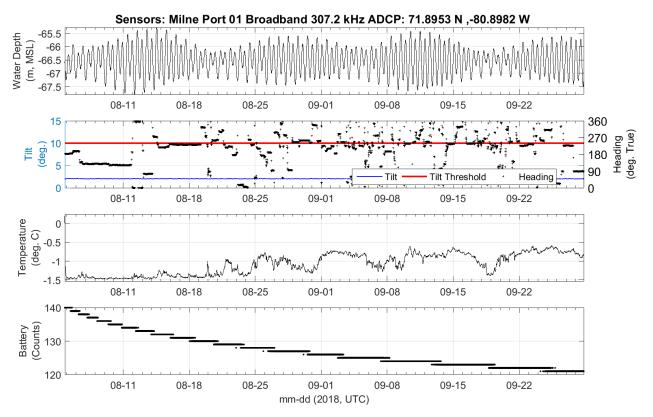


Figure 8: Time series of quality control parameters measured at Milne Port 01 mooring by the 300 kHz up-looking ADCP including instrument depth, instrument tilt, water temperature, and battery voltage for August 04 to September 28, 2018 in UTC.

2.2.4.2 CT/CTD

The data from the RBRduo CT and SBE 37-SM MicroCAT CT/CTD sensors were exported from raw instrument format to ASCII format using Ruskin® and SBE Data Processing® softwares, respectively. Plots of measured water quality parameters were generated. Post-processing and quality-checking was completed using the MATLAB® (Mathworks 2015) scientific computing software and included the following:

- Measurements made by the instrument while it was out of water, as determined from either the pressure or salinity gauge, were replaced with a -999 value.
- Data were filtered for values above a maximum water temperature and outside an accepted salinity range. The maximum water temperature was defined as 10 °C and the salinity range was 31-36PSU Filtered values were replaced with a -999 value.
- Where applicable, data were filtered for periods when the change in pressure between consecutive samples exceeded 0.5 dbar (approximately 0.5 m of water). Filtered values were replaced with a -999 value.
- Flagged and missing data values, identified onboard the instrument, were replaced with a -999 value. Additional manual editing to remove or flag spurious data was performed as necessary.
- The percentage of good data for each CT/CTD instrument was calculated and presented in Table 7.

Table 7: Recorded Data Statistics for CT/CTD's on the Moorings

Mooring/Instrument	Total Records Recorded (#)	Total Records Expected (#)	Flagged and Missing Data (#)	Percent Valid Data (%)
Bruce Head – RBRduo CT	158542	158687	145	99.99
Milne Port 01 – SBE 37-SM MicroCAT CT	79133	79278	145	99.80
Milne Port 02 – SBE 37-SM MicroCAT CT	76595	76595	0	100.00
Milne Port 02 – SBE 37-SM MicroCAT CTD	76595	76595	0	100.00

2.3 CTD Profiles

2.3.1 Design

A SBE 19plus V2 SeaCAT Profiler (herein "SBE 19plus) was used to measure CTD profiles between Milne Port and Bruce Head. The SBE 19plus (SN: 19P72752-7329) is designed to measure conductivity (salinity), temperature and pressure and includes auxiliary instruments to measure pH, turbidity, and dissolved oxygen. It uses an internally mounted strain-gauge pressure sensor and pumped CT duct, which ensures the temperature and conductivity measurements are made on the same parcel of water. Auxiliary sensors are attached to the outside of the SBE 19plus near the pumped CT duct intake. The SBE 19plus and all auxiliary sensors was mounted to a rectangular steel frame affixed with a stainless-steel shackle. The instrumentation on the SBE 19plus and the sampling specifications are summarized in Table 8.

Table 8: CTD Profile Instrumentation and Sampling Strategy

Instrumentation	Sampling Strategy	Instrument Accuracy
Sensor: SBE 19plus V2 SeaCAT Profiler (SN 19P72752-7329), measuring through water column CTD profiles	Profiling: 4 Hz Depth Rating: 600 m	Temperature accuracy: ±0.002°C Conductivity accuracy: ±0.005 mS/cm Pressure accuracy: ±0.1% of full scale range
Sensor: SBE 43 Dissolved Oxygen	Profiling: 4 Hz Depth Rating: 600 m	Oxygen accuracy: ±2% of saturation
Sensor: SBE 18 pH	Profiling: 4 Hz Depth Rating: 1200 m	pH accuracy: ±0.1 pH
Sensor: WET Labs Optical Turbidity	Profiling: 4 Hz Depth Rating: 6000 m	Turbidity accuracy: 0.01 NTU



2.3.2 Deployment and Recovery

Profiles were collected adjacent to the Bruce Head, Milne Port 01 and Milne Port 02 moorings and at five additional locations between Milne Port and Bruce Head on August 07, 2018 onboard a small aluminum fishing vessel. Prior to deployment all instruments were checked, programed, and synchronized to UTC time. The steel frame, containing the SBE 19plus and all accompanying auxiliary sensors, was then attached to the wire cable of the vessels davit. During deployment the instrument package was lowered into the water until fully submerged and allowed to soak for 60 seconds so that instruments could come to equilibrium with the surrounding water. Additionally, the time, position, and water depth were noted. Profiles were taken by lowering the instrument package through the water column at a rate of 0.5 m/s on the downcast. The coordinates of each profile, time of deployment, and measured water depth at the deployment site is summarized in Table 9.

Table 9: CTD Profile Locations and Times for August 07, 2018

Profile ID	Latitude (WGS 84)	Longitude (WGS 84)	Easting (m)	Northing (m)	UTM Zone	Date/Time Deployed (UTC)	Measured Water Depth (m, MSL)
Bruce Head	72.10	-80.49	517352	8001078	17X	August 07, 2018, 15:25	-174
Milne Port 01	71.89	-80.89	503579.18	7977308	17W	August 07, 2018, 13:40	-53
Milne Port 02	71.89	-80.86	504619.78	7977079	17W	August 07, 2018, 13:25	-58
Site 06	71.94	-80.79	507180	7982577	17W	August 07, 2018, 20:00	-55
Site 07	71.98	-80.77	507658	7987817	17W	August 07, 2018, 19:45	-59
Site 08	72.07	-80.82	505897	7997139	17X	August 07, 2018, 19:20	-59
Site 09	72.03	-80.63	512588	7993414	17X	August 07, 2018, 15:00	-235
Site 10	72.14	-80.49	517327	8004838	17X	August 07, 2018, 16:00	-234

2.3.3 Data Processing

The data from the SBE 19plus and accompanying auxiliary sensors was extracted from Raw instrument format to ASCII using the SBE Data Processing® software. Plots of measured water quality parameters were generated and post-processing and quality-checking of data was completed using the MATLAB® (Mathworks 2015) scientific computing software. Data measured during the initial 60 second instrument calibration period and on the upcast (when the instrument was being raised back to the vessel) were removed. Flagged and missing data values, identified onboard the instrument, were replaced with a -999 value, and additional manual editing to remove or flag spurious data was performed as necessary.



2.4 Milne Port Tide Gauge

2.4.1 Design

The approach to the tide gauge design for 2018 was identical to that of 2017 (Golder 2017). This was necessary to keep a repeatable installation location and elevation from season to season, which is critical to support an interannual comparison of water level data.

An RBRconcerto CTD sensor (herein "RBR") was used to measure conductivity, temperature and water levels at the Milne Port Ore dock. The RBR is designed to be a simple and self-contained CTD sensor capable of working in cold (rated to -5 °C) and corrosive (i.e. salty) environments. The RBR was mounted in an aluminum housing which was secured to the Milne Port ore dock ladder through two welded L-brackets. The ladder was installed at the start of open-water season (typically mid-July) and removed before ice-on (typically October). The ore dock ladder was chosen as it provides a stable mounting point that can be reinstalled each year at the same location as part of standard port operations. The instrumentation on the RBRconcerto and the sampling specifications are summarized in Table 10. Additional details on the tide gauge design, installation and recovery, and mounting hardware are provided in the Milne Port Tide Gauge Installation and Recovery Instructions (APPENDIX B).

Table 10: Tide Gauge Instrumentation and Sampling Strategy

Instrumentation	Sampling Strategy	Instrument Accuracy
Sensor: RBRconcerto CTD (SN 60550)	Measurement Interval: 300 s Sampling Rate: 1 Hz Averaging Duration: 60 s	Temperature accuracy: ±0.002°C Conductivity accuracy: ±0.005 mS/cm Pressure accuracy: ±0.05% of full scale range

2.4.2 Deployment and Recovery

Prior to deployment the RBR sensor was calibrated at the factory. The calibration certificates are included in APPENDIX A. Additionally, the tide gauge was given a visual inspection, programmed, and synchronized to UTC time. The deployment and recovery of the RBR sensor, attached to the Milne Port ore dock ladder, was conducted by Baffinland personnel with coordination from Golder personnel on June 30 and October 19, 2018, respectively. Prior to shipment of the RBR to Milne Port the sensor was programed to start recording on June 28, 2018. Post-deployment, a GPS RTK (real-time kinematic) survey was conducted to determine the elevation and position of the ladder top plate (Table 11). This involved surveying five points in close proximity on the ladder top plate and calculating an average elevation. Following recovery of the RBR sensor the data was downloaded by Baffinland personnel and shipped to Golder for sensor inspection and demobilization.

Table 11: Deployment and Recovery Details for the RBR Tide Gauge

Survey Point	Easting (m)	Northing (m)	UTM Zone	Elevation (m, CGVD)	Tide Gauge Elevation (m, CGVD) ¹
Point 01	503227.211	7976633.252	17W	3.505	-2.915
Point 02	503227.205	7976633.246	17W	3.516	-2.904
Point 03	503227.205	7976633.242	17W	3.491	-2.93
Point 04	503227.197	7976633.241	17W	3.495	-2.925
Point 05	503227.215	7976633.268	17W	3.496	-2.924
Average Elevation	on	3.501	-2.920		

Notes: CGVD=Canadian Geodetic Vertical Datum; ¹Distance from the tide gauge pressure sensor to the surveyed steel ladder top plate is 6.42 m



2.4.3 Data Processing

A preliminary review of the data recorded by the RBR was performed following the recovery. Quality checks included the following:

- Reviewing time series measured by the instruments, including various diagnostic parameters;
- Checking internal recorder and file status; and
- Plotting and viewing the time series data.

The data from the RBR sensor was extracted from Raw instrument format to ASCII using the instrument specific software Ruskin®. Plots of measured water quality parameters were generated, and post-processing and quality-checking of data was completed using the MATLAB® (Mathworks 2015) scientific computing software and included:

- Measurements made by the instrument while it was out of water, as determined from either the pressure or salinity gauge, were replaced with a -999 value.
- Data were filtered for values above a maximum water temperature and salinity. The maximum water temperature was defined as 10 °C and salinity as 36 PSU. Filtered values were replaced with a -999 value.
- Where applicable, data were filtered for periods when the change in pressure between consecutive samples exceeded 0.5 dbar (approximately 0.5 m of water). Filtered values were replaced with a -999 value.
- Flagged and missing data values, identified onboard the instrument, were replaced with a -999 value. Additional manual editing to remove, or flag spurious data was performed as necessary.

The instrument deployment and recovery dates and percentage of good data during the deployment period is provided in Table 12Table 5. Quality Controlled (QC) data are provided in APPENDIX C.

Table 12: Recorded Data Statistics for the RBR Sensor

Instrument	Date/Time Deployed (UTC)	Date/Time Recovered (UTC)	Total Records Recorded (#)	Total Records Expected (#)	Flagged and Missing Data (#)	Percent Valid Data (%)
RBRconcerto CTD	June 30, 2018, 15:55:00	October 19, 2018, 17:45:00	31990	31990	0	100.00



3.0 DATA SUMMARY

3.1 Environmental Conditions

Weather and water level conditions for the period August 03 through September 30 2018 are summarized in Figure 9. Meteorological data were obtained from the Milne Port meteorological station and water level data from Milne Port 01 mooring. During the period August 28 through September 03 2018 the meteorological station experienced a sensor failure and no data was recorded. At the beginning of the record the air temperature was between 5 and 10 °C and decreased rapidly in early September reaching less than -15 °C by the end of September. The wind direction during this period was predominantly out of the northeast and southeast with the occasional winds from the north and west. Wind speed averaged 5 m/s with occasional storms peaking above 10 m/s and a maximum recorded wind of 18.4 m/s on September 19 2018. Wind directions in Milne Inlet are strongly influenced by local topography (i.e. mountains and cliffs), with typical summer winds out of the southeast and winter winds out of the northeast and north. Observed water levels at Milne Port 01 mooring ranged from approximately -1.25 m to 1.25 m MSL. The 154 day mooring deployment spanned four spring tide (largest water level fluctuations) and three neap tide cycles (smallest water level fluctuations).

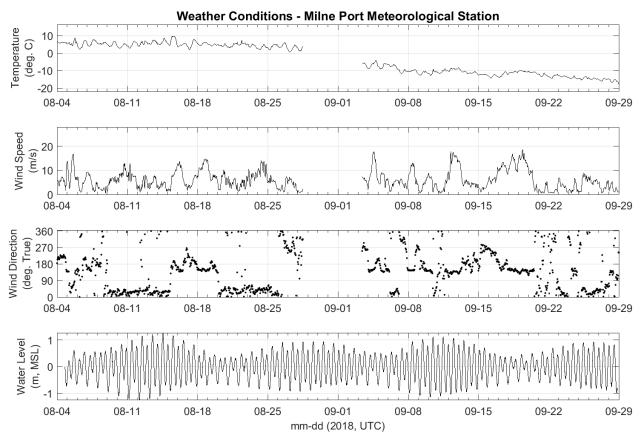


Figure 9: Time series of observed water level at the Milne Port 01 mooring and observed wind speed and direction and air temperature at the Milne Port meteorological station from August 03 to September 30, 2018 in UTC.

3.2 Oceanographic Moorings

3.2.1 Currents

Figure 10 through Figure 17 illustrate the temporal and vertical variations in current speed and direction as measured by the ADCP's at the location of the Bruce Head and Milne Port 01 moorings. Current directions are reported as the direction they are flowing towards (i.e. oceanographic convention).

A contour plot of current speed, direction, and acoustic backscatter amplitude (echo intensity) from August 04 to September 28, 2018 at Bruce Head and at Milne Port 01 as measured by the ADCPs is shown in Figure 10 and Figure 11, respectively. At both sites, the maximum current speeds are approximately 15-25 cm/s and occur in the upper 50 m of the water column, suggesting that wind is the primary driver of currents near the surface. Below the depth of wind mixing (approximately -50 m MSL) variations in current speed and direction are driven primarily by mixed semidiurnal tides. This is observed as a twice daily oscillation in current direction (i.e., from the northwest and southeast at Bruce Head) and speed. Additionally, in both locations the current direction is not uniform throughout the water column for a given point in time. This is particularly apparent above and below the thermocline (i.e., region of maximum temperature and salinity stratification). At Bruce Head the thermocline is between -10 and -40 m MSL and at Milne Port 01 the thermocline is between -5 to -20 m MSL. This nonuniformity in thermocline position suggests that there is a separate outflow and inflow of water near the bed, likely a result of saltier (denser) water.

Figure 12 and Figure 13 show contour plots of northerly and easterly current velocities at Bruce Head and Milne Port 01 mooring from August 04 to September 28, 2018. At Bruce Head the oscillation in current direction from northwest (ebb tide) to southeast (flood tide) is clearly visible. Additionally, the strongest currents are from the northwest and associated with strong winds that drive mixing and circulation, at times to a depth of approximately -50 m MSL (i.e. August 28 through September 03). At Milne Port 01 the currents don't show as clear a tidal oscillation as Bruce Head. This is likely because of the moorings position at the head of the inlet where complex circulation patterns, such as upwelling/downwelling and eddies and gyres, are wind driven In both locations, internal waves (i.e., vertical oscillations of the water column around the depth of the thermocline) can be seen and contribute to circulation and mixing.

Rose plots of current speed and direction for selected depths, binned in 15° increments, and time series of depth averaged current speed and direction at Bruce Head and Milne Port 01 are shown in Figure 14 through Figure 17. In both locations the strongest flows occur near the surface, a result of the wind. At Bruce Head the near surface flows are dominantly from the northwest (i.e., direction of longest fetch) and take on a bimodal direction with depth, becoming northeast and southwest near the bed. The bimodal direction can be attributed to tidal flows and the turning of the current direction with depth is likely due to differing flows above and below the thermocline. In general, the depth average currents at Bruce Head are between 2-4 cm/s but peak as high as 8 cm/s during wind events. At Milne Port 01 the surface currents show no dominant direction, typically coming from the west through southeast directions, with minimal flows from the southwest (i.e., shortest fetch and direction of land). At depth the Milne Port 01 currents become bimodal and are dominantly from the northwest direction near the bed. The dominant flows from the northwest near the bed are likely attributed to flood tide events and the mixed current directions near the surface are likely a result of the complex flow patterns present at the head of the inlet. In general, the depth average currents at Milne port 01 are between 1-2 cm/s but peak as high as 7 cm/s during wind events.



Summary statistics for current speeds and directions at select depths at Bruce Head and Milne Port 01 mooring are presented in Table 13 and Table 14.

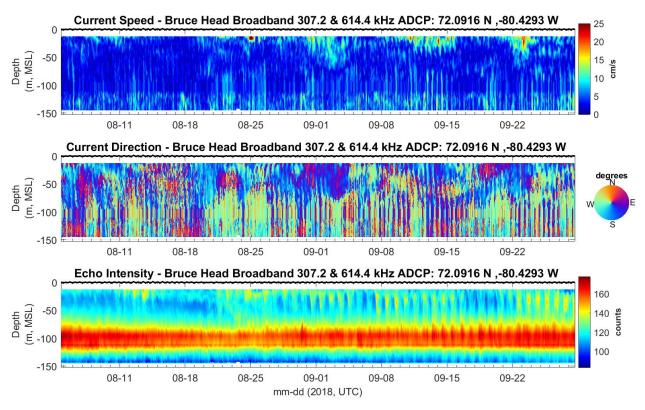


Figure 10: Contour plot of current speed, direction, and echo intensity profiles measured at Bruce Head mooring by the 300 kHz up-looking ADCP and down-looking 600 kHz ADCP from August 04 to September 28, 2018 in UTC. The black line indicates the water level during deployment.

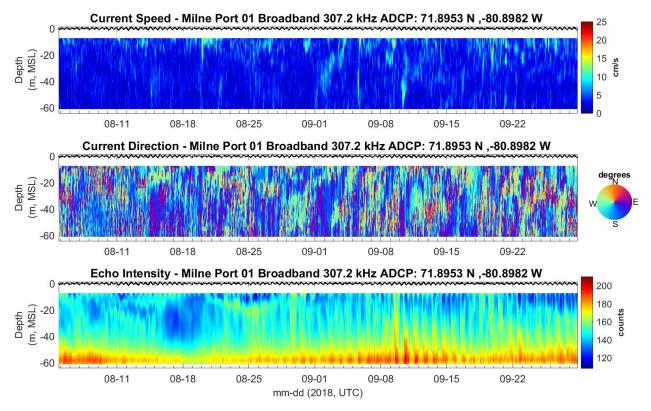


Figure 11: Contour plot of current speed, direction, and echo intensity profiles measured at Milne Port 01 mooring by the 300 kHz up-looking ADCP from August 04 to September 28, 2018 in UTC. The black line indicates the water level during deployment.

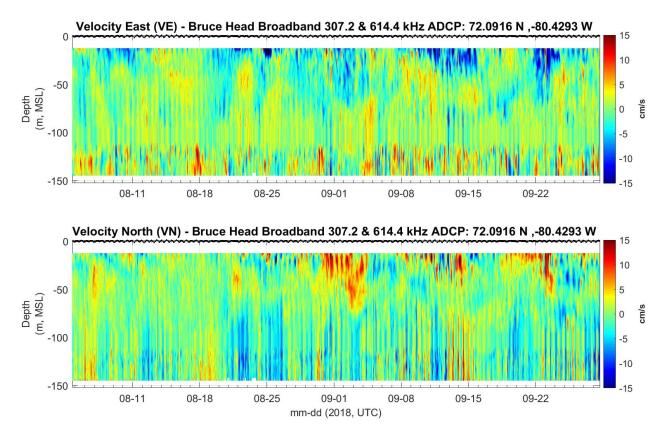


Figure 12: Contour plot of northerly and easterly velocity components measured at Bruce Head mooring by the 300 kHz up-looking ADCP and down-looking 600 kHz ADCP from August 04 to September 28, 2018 in UTC. The black line indicates the water level during deployment.

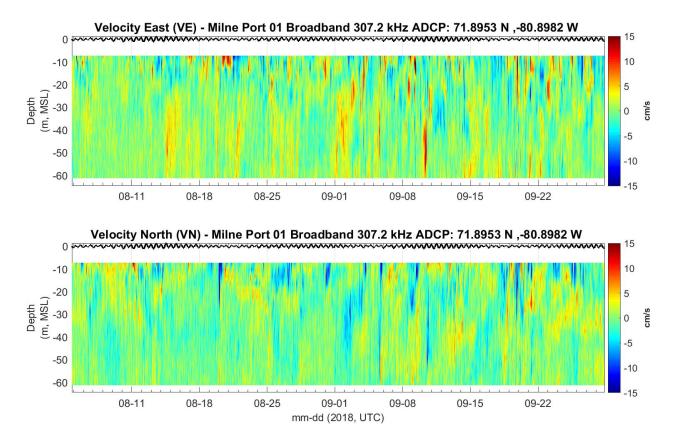


Figure 13: Contour plot of northerly and easterly velocity components measured at Milne Port 01 mooring by the 300 kHz up-looking ADCP from August 04 to September 28, 2018 in UTC. The black line indicates the water level during deployment.

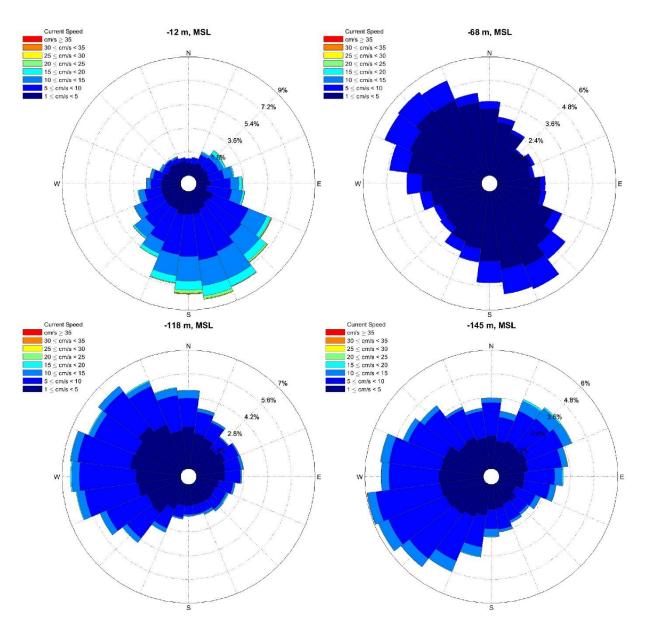


Figure 14: Current roses for select bin depths measured at 12, 68, 118, and 145 m below MSL at Bruce Head mooring by the 300 kHz up-looking ADCP and down-looking 600 kHz ADCP from August 04 to September 28, 2018 in UTC.

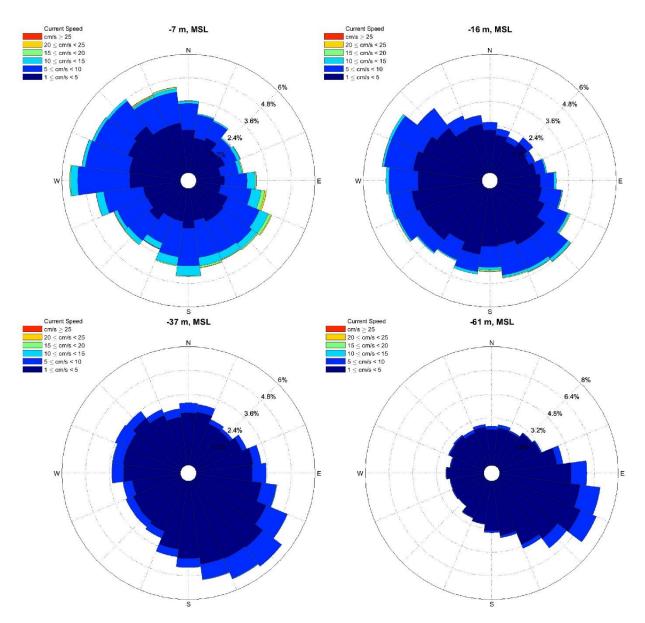
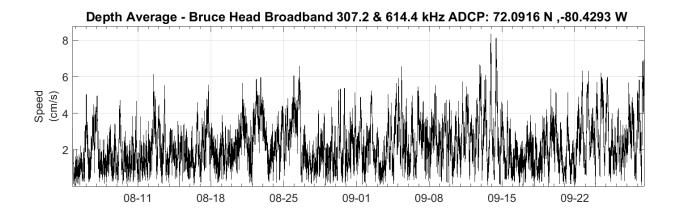


Figure 15: Current roses for select bin depths measured at 7, 16, 37, and 61 m below MSL at Milne Port 01 mooring by the 300 kHz up-looking ADCP from August 04 to September 28, 2018 in UTC.



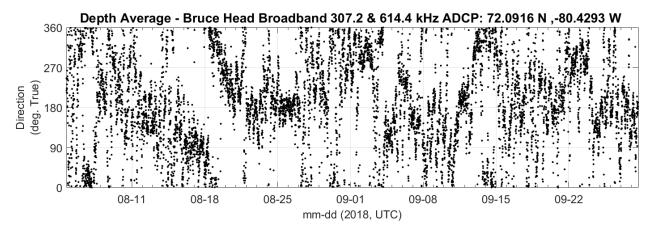
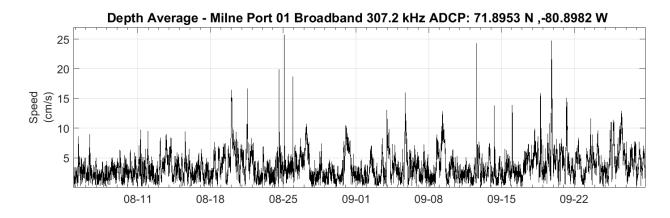


Figure 16: Full water column depth average current speed and direction measured at Bruce Head mooring by the 300 kHz up-looking ADCP and down-looking 600 kHz ADCP from August 04 to September 28, 2018 in UTC.



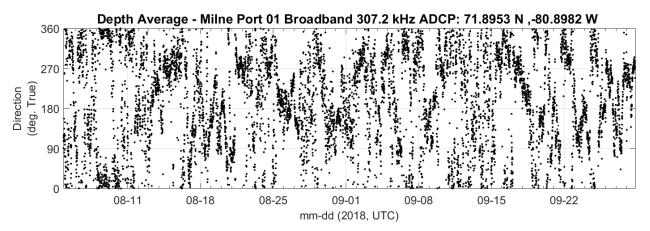


Figure 17: Full water column depth average current speed and direction measured at Milne Port 01 mooring by the 300 kHz up-looking ADCP from August 04 to September 28, 2018 in UTC.

Table 13: Statistics of current speed and direction for selected depths as measured at Bruce Head mooring by the 300 kHz up-looking ADCP and down-looking 600 kHz ADCP from August 04 to September 28, 2018 in UTC.

Depth (m, MSL)	Bin No.	Min Speed (cm/s)	Median Speed (cm/s)	Mean Speed (cm/s)	Max Speed (cm/s)	Std Speed (cm/s)	Mean Direction (degrees)	Percent Valid Data (%)
-12	14	0.00	6.90	7.50	40.0	4.60	167	100
-68	28	0.00	2.90	3.20	11.0	1.80	254	100
-118	39	0.00	4.70	5.10	19.0	2.91	300	100
-145	48	0.00	5.50	5.90	19.4	3.04	278	98.4

Table 14: Statistics of current speed and direction for selected depths as measured at Milne Port 01 mooring by the 300 kHz up-looking ADCP and down-looking 600 kHz ADCP from August 04 to September 28, 2018 in UTC

Depth (m, MSL)	Bin No.	Min Speed (cm/s)	Median Speed (cm/s)	Mean Speed (cm/s)	Max Speed (cm/s)	Std Speed (cm/s)	Mean Direction (degrees)	Percent Valid Data (%)
-7	19	0.00	4.80	5.30	27.2	3.30	256	99.9
-16	16	0.00	3.87	3.90	22.1	2.40	224	100
-37	9	0.00	2.80	3.10	11.9	1.74	155	100
-61	1	0.00	2.40	2.63	10.0	1.50	115	100

3.2.2 Temperature and Salinity

Figure 18 through Figure 21 illustrate the time varying water temperature, conductivity, salinity and depth as measured by the CT and CTD instruments on the Bruce Head, Milne Port 01, and Milne Port 02 moorings. At Bruce Head the CT sensor was at a depth of approximately -103 m MSL. The temperature and salinity was relatively constant during the deployment, between -1.3 and -1.5 °C and 32 and 32.4 PSU, and exhibits a semidiurnal fluctuation, likely from tidal forcing. At Milne Port 01 the CT sensor was at a depth of approximately -66 m MSL. The temperature and salinity, much like Bruce Head, is relatively constant during the deployment, but shows a minor warming trend over the length of the deployment and a fluctuation in temperature occurring over multiday timescales, longer than tidal forcing. This is likely a result of the water column cooling from the surface down which drives mixing towards the bed. At Milne Port 02 the CTD sensor was at a depth of approximately -23 m MSL and the CT sensor at a depth of -13 m MSL. Both sensors showed large fluctuations in temperature and to a lesser extent salinity. This is likely a result of wind events driving currents and mixing at the depth of the thermocline (approximately 5 to 20 m MSL), this is seen in both sensors during a large storm event on August 26 and 27. Between August 12 and 16 the -13 m MSL CT sensor shows a large daily increase in temperature and corresponding decrease in salinity. It's possible that these spikes could be associated with wind mixing however the meteorological station was not functioning in this period and therefore local wind information is not available to support this hypothesis. Freshwater inflows from Phillips Creek are another mechanism that could contribute to these fluctuations.



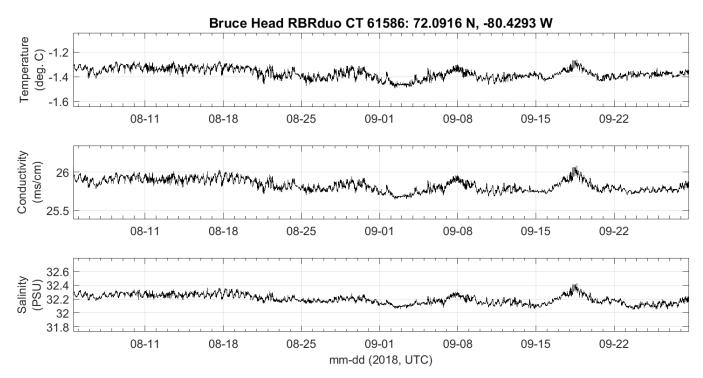


Figure 18: Time series of temperature, conductivity, and salinity measured at Bruce Head mooring by the RBRduo CT from August 04 to September 28, 2018 in UTC.

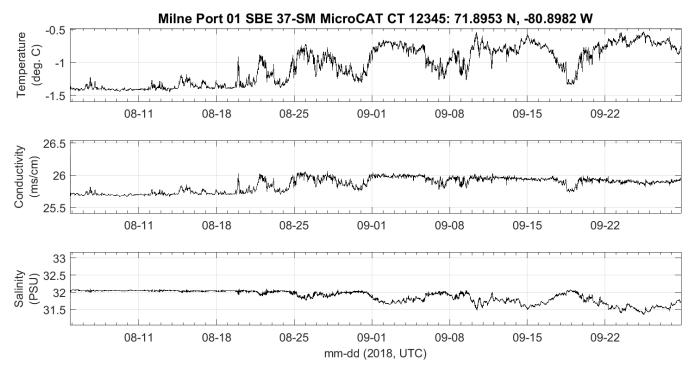


Figure 19: Time series of temperature, conductivity, and salinity measured at Milne Port 01 mooring by the SBE 37-SM MicroCAT CT from August 04 to September 28, 2018 in UTC.

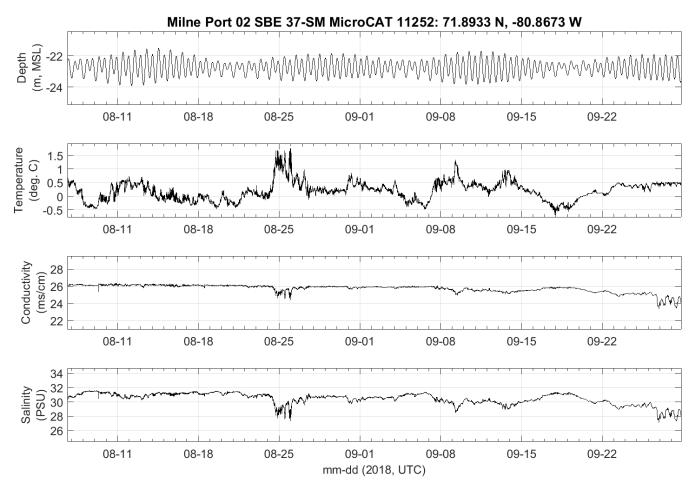


Figure 20: Time series of depth (pressure), temperature, conductivity, and salinity measured at Milne Port 02 mooring by the SBE 37-SM MicroCAT CT from August 06 to September 29, 2018 in UTC.

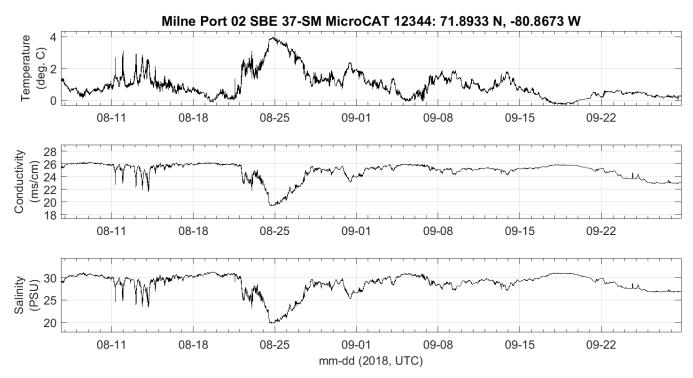


Figure 21: Time series of temperature, conductivity, and salinity measured at Milne Port 01 mooring by the SBE 37-SM MicroCAT CTD from August 06 to September 29 2018 in UTC.

3.3 CTD Profiles

Figure 22 through Figure 24 are plots of CTD and turbidity profiles measured near the Bruce Head, Milne Port 01, and Milne Port 02 moorings on August 07 2018. At all profiles The surface water in all profiles appears to be influenced by fresh water, with temperature of approximately 6 °C and a salinity of approximately 10 PSU. The temperature decreases and salinity increases with depth through the water column. The greatest change in temperature and salinity occurs in the profiles at Milne Port 01 and 02 with the thermocline occurring between the surface and -20 m MSL. At Bruce Head the thermocline is between the surface and -40 m MSL. Below the thermocline the temperature and salinity become uniform and represent a well mixed water column. In all locations the thermocline acts as a barrier to wind generated circulation and mixing. This means the strongest currents are expected above or at the thermocline. Additionally, the near surface water is very fresh and is likely from runoff, rain events, sea ice melt, snowmelt, and iceberg melt.

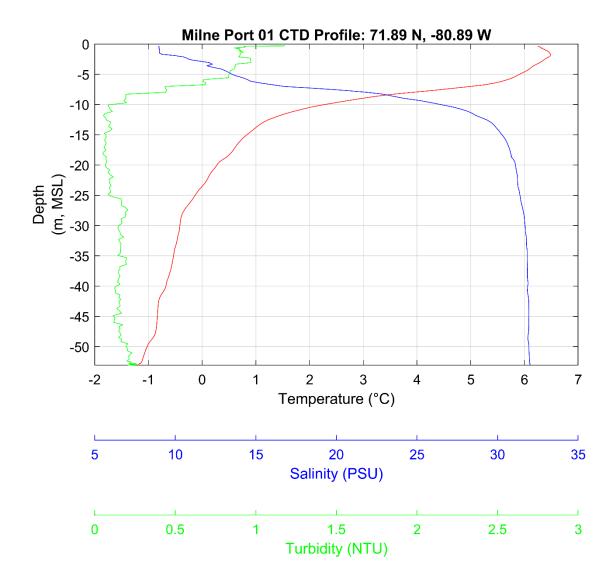


Figure 22: CTD and turbidity profile measured at the Milne Port 01 mooring on August 07, 2018 in UTC. The red line is temperature, blue line is salinity, and green line is turbidity.

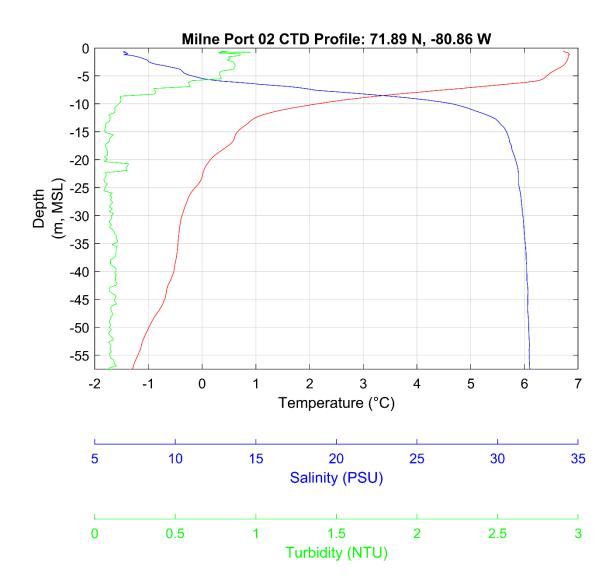


Figure 23: CTD and turbidity profile measured at the Milne Port 02 mooring on August 07, 2018 in UTC. The red line is temperature, blue line is salinity, and green line is turbidity.

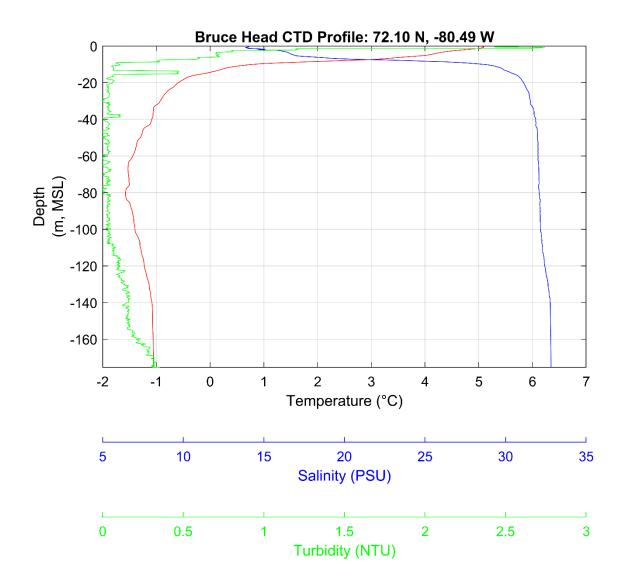


Figure 24: CTD and turbidity profile measured at the Bruce Head mooring on August 07, 2018 in UTC. The red line is temperature, blue line is salinity, and green line is turbidity.

3.4 Tide Gauge

Time series of temperature, conductivity, salinity and water level referenced to CGVD as measured by the RBR at the Milne Port ore dock over the length of the deployment are shown in Figure 25. The red and blue dashed lines indicate the insets shown in Figure 26 and Figure 27. In the first month of the deployment the RBR measured large fluctuations in temperature and salinity. The temperature oscillated between 0 and 10 °C and the salinity between 1 and 30 PSU. This is most likely a result of freshwater runoff accompanying the spring freshet and the



melting of sea ice in Milne Inlet near Milne Port. Temperature and salinity variations are typically diurnal. After the spring freshet, approximately July 25 the temperature and salinity profiles become more stable but continue to exhibit a diurnal fluctuation. It is likely that these fluctuations are driven by upwelling/downwelling at the ore dock during wind events and by tidal forcing combined with freshwater inputs during melting. Figure 27 shows temperature and salinity measurements adjacent (approximately 15 m horizontally) to two berthed vessels during ballast water discharge events. The temperature and salinity of the ballast water during the two events are known and differ from the ambient characteristics at that time (i.e. minimum salinity under Transport Canada is 30 PSU). However, there are no distinguishable variations in temperature and salinity during the two events shown in the tide gauge record (Figure 27). In the fall, the temperature and surface water in Milne Port begin to cool and the surface layer becomes well mixed with layers below. This is evident in the more stable temperature and salinity measurements from September 01 to the end of the deployment (Figure 25). During the deployment the RBR measured seven spring tide and eight neap tide events. The proximity of the ballast water discharge to the RBR location is shown in Figure 28.

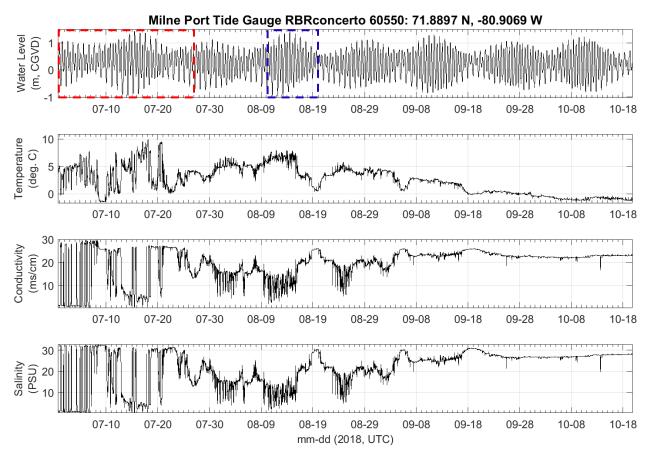


Figure 25: Time series of water level, temperature, conductivity, and salinity measured at Milne Port Tide Gauge by the RBRconcerto CTD from June 30 to October 19, 2018 in UTC. The red and blue dashed lines indicate the insets for Figure 26 and Figure 27.

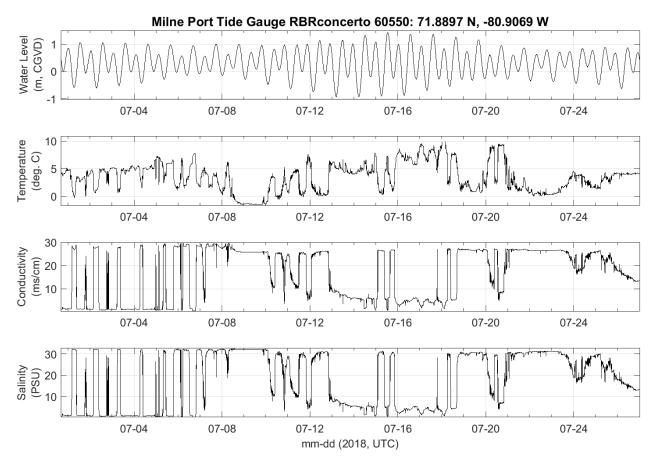


Figure 26: Time series of water level, temperature, conductivity, and salinity measured at Milne Port Tide Gauge by the RBRconcerto CTD from June 30 to July 27, 2018 in UTC.

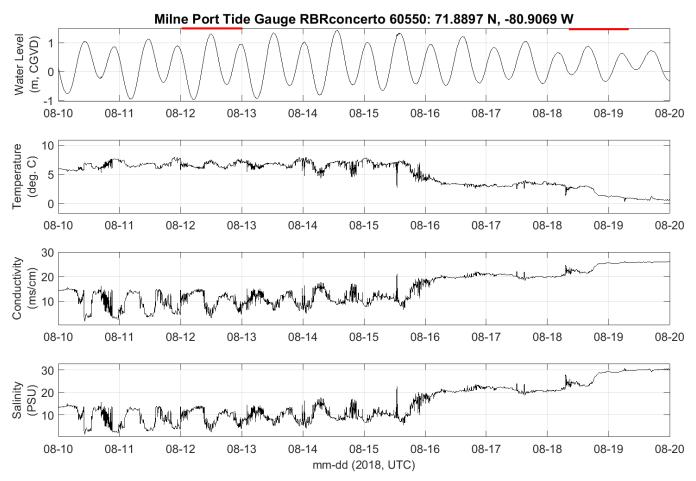


Figure 27: Time series of water level, temperature, conductivity, and salinity measured at Milne Port Tide Gauge by the RBRconcerto CTD from August 10 to August 20, 2018 in UTC. The red lines indicate periods when ore vessels were berthed adjacent to the tide gauge.

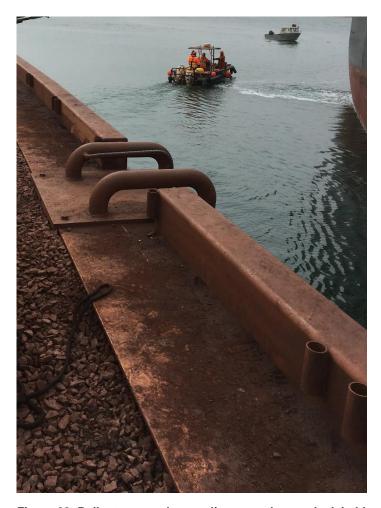


Figure 28: Ballast water release adjacent to the ore dock ladder and RBR on August 03, 2018 at 16:00 UTC.

4.0 DATA DELIVERABLE

In addition to this report, Golder is issuing the oceanographic data that was processed and quality checked following the methods described in Section 2.0. The data are provided as text files. All dates and times are reported in UTC time. The data include the following files:

Bruce Head Mooring

- 'BruceHeadMooring_RBRduo_61586_Header&Data.txt'
- 'BruceHeadMooring 300kHz_ADCP_21735_InstrumentParameters.txt'
- 'BruceHeadMooring_600kHz_ADCP_21100_InstrumentParameters.txt'
- 'BruceHeadMooring_300kHz_600kHz_ADCP_Bindepth.txt'
- 'BruceHeadMooring_300kHz_600kHz_ADCP_EAA.txt'
- 'BruceHeadMooring 300kHz_600kHz_ADCP CurrentDirection.txt'
- 'BruceHeadMooring_300kHz_600kHz_ADCP_CurrentSpeed.txt'
- 'BruceHeadMooring_300kHz_600kHz_ADCP_VelocityEast.txt'
- 'BruceHeadMooring_300kHz_600kHz_ADCP_VelocityNorth.txt'

Milne Port 01 Mooring

- 'MilnePort01Mooring SBE37 12345 Header&Data.txt'
- 'MilnePort01Mooring_300kHz_ADCP_10985_InstrumentParameters.txt'
- 'MilnePort01Mooring_300kHz_ADCP_Bindepth.txt'
- 'MilnePort01Mooring_300kHz_ADCP_EAA.txt'
- 'MilnePort01Mooring_300kHz_ADCP_CurrentDirection.txt'
- 'MilnePort01Mooring_300kHz_ADCP_CurrentSpeed.txt'
- 'MilnePort01Mooring_300kHz_ADCP_VelocityEast.txt'
- 'MilnePort01Mooring_300kHz_ADCP_VelocityNorth.txt'

Milne Port 02 Mooring

- 'MilnePort02Mooring_SBE37_12344_Header&Data.txt'
- 'MilnePort02Mooring_SBE37_11252_Header&Data.txt'



CTD Profiles

- 'BruceHead_CTD_Cast.txt'
- 'MilnePort01_CTD_Cast.txt'
- 'MilnePort02_CTD_Cast.txt'
- 'Site06_CTD_Cast.txt'
- 'Site07_CTD_Cast.txt'
- 'Site08_CTD_Cast.txt'
- 'Site09_CTD_Cast.txt'
- 'Site10_CTD_Cast.txt'

Milne Port Tide Gauge

'MilnePortTideGauge_SBE37_60550_Header&Data.txt'



5.0 CLOSURE

This report presents the results of the 2018 Physical Oceanographic Monitoring Program for Milne Inlet. We trust the information contained in this report is sufficient for your present needs. Should you have any additional questions regarding the project, please do not hesitate to contact the undersigned.

Golder Associates Ltd.

David Hurley, MASc, EIT Coastal Specialist

Quis Ming

Phil Osborne, PhD, PGeo Principal, Senior Coastal Geomorphologist

DH/PO/lih

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6.0 REFERENCES

Golder 2018. Baffinland Iron Mines Corporation Mary River Project – Phase 2 Proposal. 1663724-076-R-Rev0- v 21000.

Golder 2017. Baffinland Milne Port Tide Gauge Data Collation – 2017 Ice Free Season.



APPENDIX A

Calibration Documents



RBRduo C.T s/n: 61586

References: Autosal8400B#66289, MS-315#15506, SSW P160, RC#002

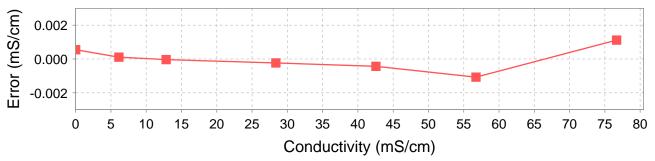
Coefficients		Calibration Error	Measured Conductivity	Voltage	Reference Conductivity	Reference Resistance
0.0485	C0:	(mS/cm)	(mS/cm)	Ratio, V	(mS/cm)	(ohm)
159.1156	C1:	0.0005	0.0005	-0.000301	0.0000	open
0.000347	wo.	0.0001	6.1325	0.038236	6.1324	694.020
	X0:	-0.0000	12.8223	0.080280	12.8224	331.920
-0.000006	X1:	-0.0002	28.3712	0.178001	28.3714	150.010
0.000006	X2:	-0.0004	42.5536	0.267133	42.5540	100.014
15.0	х3:	-0.0011	56.7330	0.356248	56.7341	75.017
10	X4:	0 0011	76 6664	0 481523	76 6653	55 514

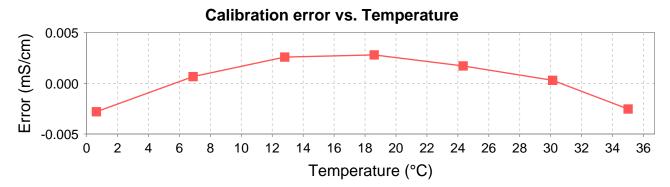
$$C_{cor} = \frac{C_0 + C_1 * V - X_0 * (T - X_3)}{1 + X_1 * (T - X_3) + X_2 * (P - X_4))}$$

Bath	Voltage Ratio	Temperature (ITS-90)	Salinity (PSS-78)	Conductivity (mS/cm)
T15S35	0.2693411	14.97909	35.0072	42.9049
T25S35	0.3282111	24.22043	35.0102	52.2719

Cell Constant @T15S35 = 4.25600 1/cm

Calibration error vs. Conductivity





Calibration Date: 23/May/2018 Issue Date: 24/May/2018

File Name: 061586_20180523_1612C.rsk

Operator: / Ukwelheli
takuetteh

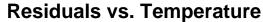
shucknor

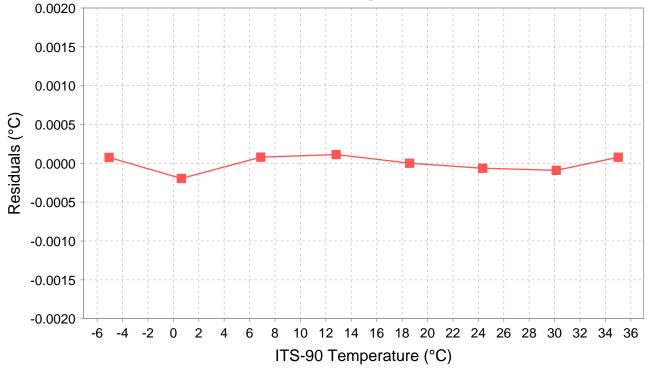


R Temperature Calibration Certificate

Logger ID: RBRduo Serial No: 61586 Channel No: 2

Reference Temperature, ITS-90	Voltage ratio, V	Measured Temperature, ITS-90	Calibration error	Coefficients
-5.05630	0.693383	-5.05623	0.00008	CO: 0.003520825965266
0.62768	0.626105	0.62748	-0.00019	C1: -0.000254287204050
6.87991	0.549118	6.87999	0.00008	C2: 0.000002516023787
12.80822	0.476584	12.80834	0.00011	C3: -0.000000078325904
18.58925	0.409152	18.58925	0.00000	
24.33838	0.347395	24.33832	-0.00006	
30.12979	0.291802	30.12970	-0.00009	
35.00621	0.250536	35.00629	0.00008	





Calibration Date: 18/May/2018 Issue Date: 23/May/2018 Calibration ID: 26540

Operator:

takuetteh



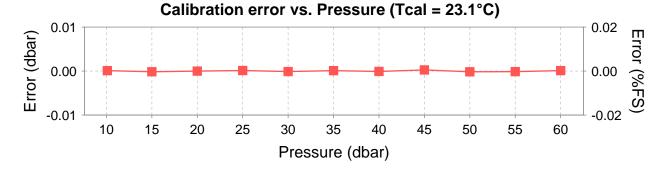
Pressure Calibration Certificate

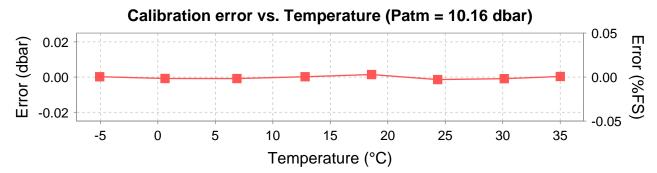
RBRconcerto C.T.D|fast6 s/n: 60550 Sensor rating: 50 dbar s/n: H130848 Nominal accuracy: 0.05%FS (0.025 dbar)

Reference instrument: Mensor CPC6000 s/n: 612676

Applied pressure,		Measured pressure,	Calibration	Coef	ficients
P _{app} (dbar)	Voltage ratio, V	P _{meas} (dbar)	error (dbar)	C0:	-3.29715396
• •	•	` ,	` ,	C1:	244.89704285
10.1001	0.055304	10.1002	0.0001	C2:	1.31437155
15.0001	0.075300	14.9999	-0.0002	C3:	-2.58778200
20.0000	0.095703	20.0000	-0.0000		
25.0000	0.116104	25.0001	0.0001	X0(Patm):	10.100
30.0000	0.136503	29.9999	-0.0001	X1:	0.01918464
35.0000	0.156902	35.0001	0.0001	X2:	0.00008026
				х3:	0.0000036
40.0001	0.177300	40.0000	-0.0001	X4:	0.00021423
45.0001	0.197700	45.0004	0.0003		
50.0000	0.218097	49.9998	-0.0002	X5(Tcal):	23.1
54.9999	0.238497	54.9998	-0.0001		
60.0000	0.258901	60.0001	0.0001		

$$P_{meas} = C_0 + C_1 \cdot V + C_2 \cdot V^2 + C_3 \cdot V^3 \qquad P_{tcor} = X_0 + \frac{P_{meas} - X_0 - X_1 (T - X_5) - X_2 (T - X_5)^2 - X_3 \cdot (T - X_5)^3}{1 + X_4 (T - X_5)} \qquad \text{Head (mm)} = 150$$





Calibration Date: 24/May/2018 Issue Date: 24/May/2018

File Name: 060550_20180524_1554P.rsk

Operator: / UkweTheli
takuetteh

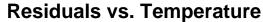
Approver: W · E · · · · · ·

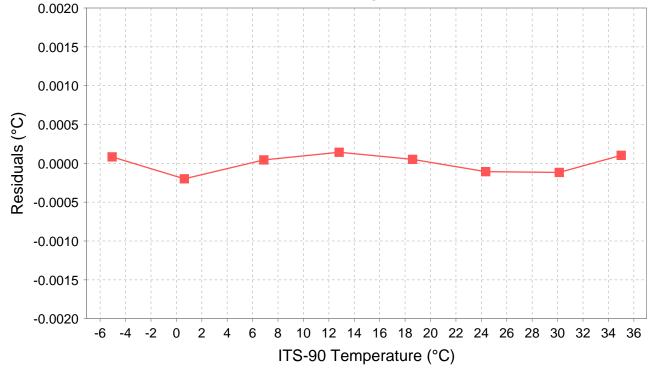


RBR Temperature Calibration Certificate

Logger ID: RBRconcerto Serial No: 60550 Channel No: 2

Reference Temperature, ITS-90	Voltage ratio, V	Measured Temperature, ITS-90	Calibration error	Coefficients
-5.05628	0.818309	-5.05620	0.00008	C0: 0.003342607509750
0.62768	0.769899	0.62748	-0.00020	C1: -0.000253720303191
6.87991	0.709462	6.87995	0.00004	C2: 0.000002331000046
12.80820	0.646827	12.80834	0.00014	C3: -0.000000093466584
18.58928	0.582831	18.58933	0.00005	
24.33838	0.518572	24.33827	-0.00011	
30.12978	0.455390	30.12967	-0.00012	
35.00621	0.404769	35.00631	0.00010	





Calibration Date: 18/May/2018 Issue Date: 23/May/2018 Calibration ID: 26537

Operator:

takuetteh



3 Conductivity Calibration Certificate

RBRconcerto C.T.D|fast6 s/n: 60550

References: Autosal8400B#66289, MS-315#15506, SSW P160, RC#002

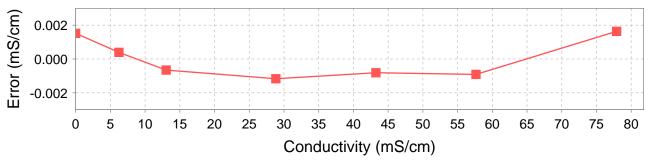
Coefficients		Calibration Error	Measured Conductivity	Voltage	Reference Conductivity	Reference Resistance
0.0284	C0:	(mS/cm)	(mS/cm)	Ratio, V	(mS/cm)	(ohm)
158.7600	C1:	0.0015	0.0015	-0.000169	0.0000	open
0.000346	***	0.0004	6.2315	0.039072	6.2311	694.020
0.000346	x0:	-0.0007	13.0281	0.081883	13.0288	331.920
-0.000015	X1:	-0.0012	28.8270	0.181398	28.8282	150.010
0.000006	x2:	-0.0008	43.2383	0.272172	43.2391	100.014
15.0	х3:	-0.0009	57.6466	0.362927	57.6476	75.017
10	X4:	0.0016	77.9012	0.490507	77.8996	55.514

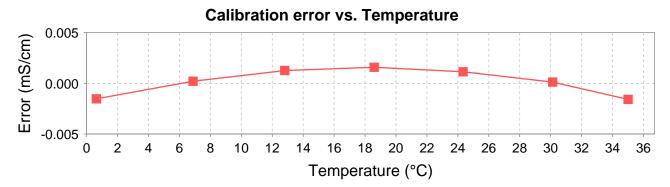
$$C_{cor} = \frac{C_0 + C_1 * V - X_0 * (T - X_3)}{1 + X_1 * (T - X_3) + X_2 * (P - X_4))}$$

Bath	Voltage Ratio	Temperature (ITS-90)	Salinity (PSS-78)	Conductivity (mS/cm)
T15s35	0.2702672	15.01069	35.0072	42.9360
T25S35	0.3298043	24.34064	35.0064	52.3920

Cell Constant @T15S35 = $4.32452 \ 1/cm$

Calibration error vs. Conductivity





Calibration Date: 28/May/2018 Issue Date: 28/May/2018

File Name: 060550_20180528_1413C.rsk

> Operator: takuetteh

SENSOR SERIAL NUMBER: 11252 CALIBRATION DATE: 08-Jun-18 SBE 37 V2 CONDUCTIVITY CALIBRATION DATA PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

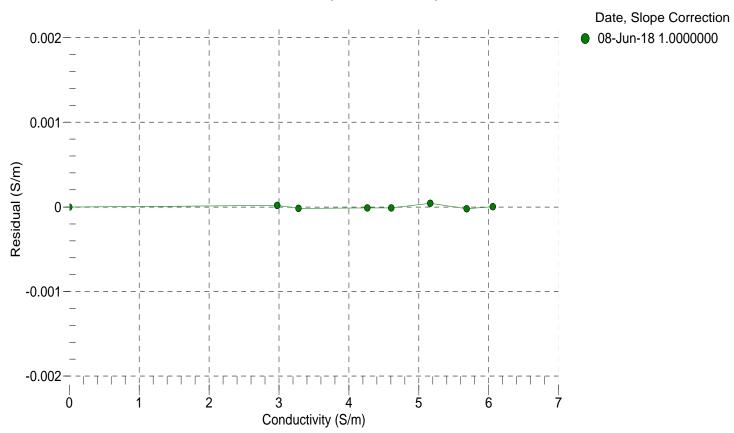
BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.0000	2653.47	0.0000	0.00000
1.0000	34.8031	2.97494	5334.05	2.97496	0.00002
4.5000	34.7834	3.28193	5536.67	3.28191	-0.00002
15.0000	34.7409	4.26334	6139.06	4.26333	-0.00001
18.4999	34.7316	4.60833	6336.95	4.60832	-0.00001
24.0000	34.7212	5.16604	6644.13	5.16609	0.00004
29.0000	34.7159	5.68772	6918.74	5.68770	-0.00002
32.5000	34.7118	6.05983	7107.99	6.05983	0.00000

f = Instrument Output(Hz) * sqrt(1.0 + WBOTC * t) / 1000.0

 $t = temperature (^{\circ}C); p = pressure (decibars); \delta = CTcor; \epsilon = CPcor;$

Conductivity $(S/m) = (g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity



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SENSOR SERIAL NUMBER: 12344 CALIBRATION DATE: 01-Jun-18 SBE 37 V2 CONDUCTIVITY CALIBRATION DATA PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

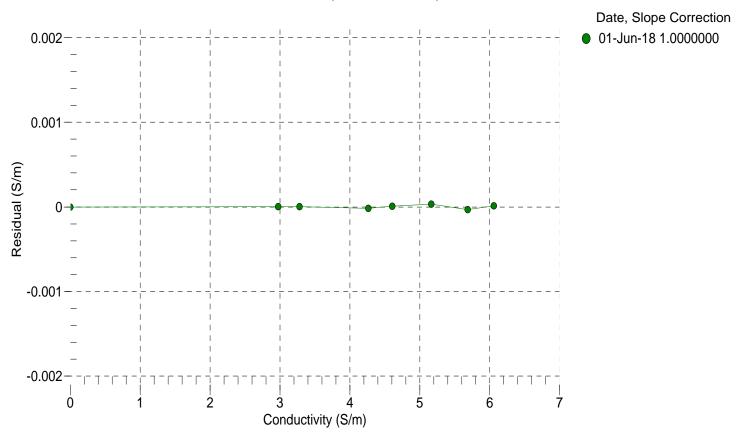
BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2393.11	0.00000	0.00000
1.0000	34.8098	2.97546	4806.89	2.97546	0.00000
4.5000	34.7899	3.28248	4989.39	3.28248	0.00000
15.0000	34.7472	4.26403	5531.86	4.26401	-0.00002
18.4999	34.7378	4.60907	5710.08	4.60907	0.00001
24.0000	34.7273	5.16685	5986.68	5.16688	0.00003
29.0000	34.7217	5.68857	6233.95	5.68853	-0.00003
32.5000	34.7178	6.06075	6404.38	6.06076	0.00001

f = Instrument Output(Hz) * sqrt(1.0 + WBOTC * t) / 1000.0

 $t = temperature (^{\circ}C); p = pressure (decibars); \delta = CTcor; \epsilon = CPcor;$

Conductivity $(S/m) = (g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity



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SENSOR SERIAL NUMBER: 12345 CALIBRATION DATE: 08-Jun-18 SBE 37 V2 CONDUCTIVITY CALIBRATION DATA PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

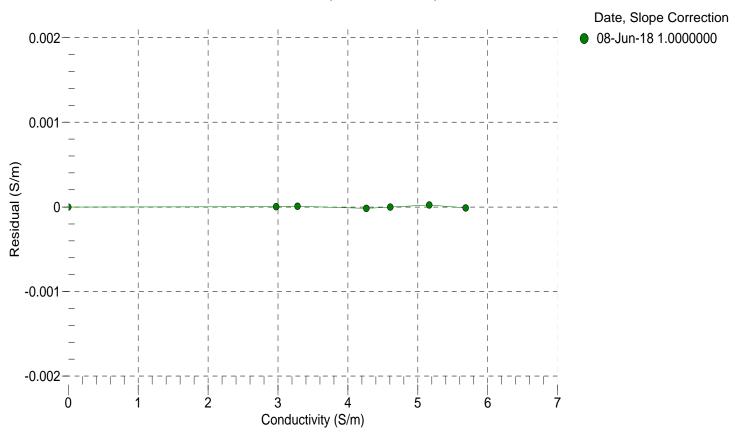
BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2391.64	0.00000	0.00000
22.0000	0.0000	0.0000	2371.01	0.0000	0.00000
1.0000	34.8031	2.97494	4803.48	2.97494	0.00000
4.5000	34.7834	3.28193	4985.93	3.28193	0.00001
15.0000	34.7409	4.26334	5528.32	4.26332	-0.00002
18.4999	34.7316	4.60833	5706.53	4.60833	-0.00000
24.0000	34.7212	5.16604	5983.15	5.16606	0.00002
29.0000	34.7159	5.68772	6230.50	5.68771	-0.00001
32.5000	34.7118	6.05983	6400.98	6.05992	0.00009

f = Instrument Output(Hz) * sqrt(1.0 + WBOTC * t) / 1000.0

t = temperature (°C); p = pressure (decibars); δ = CTcor; ϵ = CPcor;

Conductivity $(S/m) = (g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity





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SENSOR SERIAL NUMBER: 11252 CALIBRATION DATE: 25-May-18

SBE 37 V2 PRESSURE CALIBRATION DATA 160 psia S/N 3906061

COEFFICIENTS:

PA0 =	2.690688e-002	PTCA0	=	5.259889e+005
PA1 =	5.071149e-004	PTCA1	=	2.022164e+000
PA2 =	-3.287246e-012	PTCA2	=	1.385508e-002
PTEMPAC	= -6.712914e+001	PTCB0	=	2.512175e+001
PTEMPA1	= 5.239464e - 002	PTCB1	=	-5.000000e-005
PTEMPA2	t = -6.444972e - 007	PTCB2	=	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
14.62	554752.0	1750.0	14.58	-0.02	32.50	1948	556312.70
29.80	584808.0	1756.0	29.82	0.01	29.00	1878	556288.21
59.74	643996.0	1756.0	59.80	0.04	24.00	1778	556271.45
94.84	713170.0	1756.0	94.81	-0.02	18.50	1669	556266.01
124.84	772514.0	1755.0	124.82	-0.01	15.00	1599	556265.65
159.84	841854.0	1755.0	159.86	0.02	4.50	1391	556238.49
124.84	772534.0	1756.0	124.83	-0.00	1.00	1322	556220.52
94.85	713195.0	1756.0	94.82	-0.01			
59.85	644069.0	1759.0	59.84	-0.01	TEMPER	RATURE (°C)	SPAN
29.80	584853.0	1759.0	29.84	0.03		-5.00	25.12
14.62	554756.0	1761.0	14.59	-0.02		35.00	25.12

y = thermistor output (counts)

 $t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^{2}$

x = instrument output - PTCA0 - PTCA1 * t - PTCA2 * t²

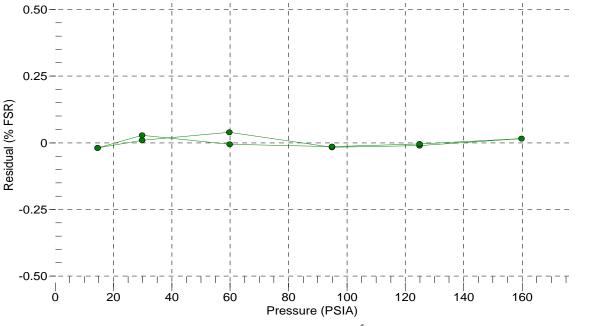
 $n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^{2})$

pressure (PSIA) = $PA0 + PA1 * n + PA2 * n^2$

Residual~(%FSR) = (computed~pressure - true~pressure) * 100 / Full~Scale~Range

Date, Offset (%FSR)

25-May-18 0.00



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SENSOR SERIAL NUMBER: 11252 CALIBRATION DATE: 08-Jun-18 SBE 37 V2 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

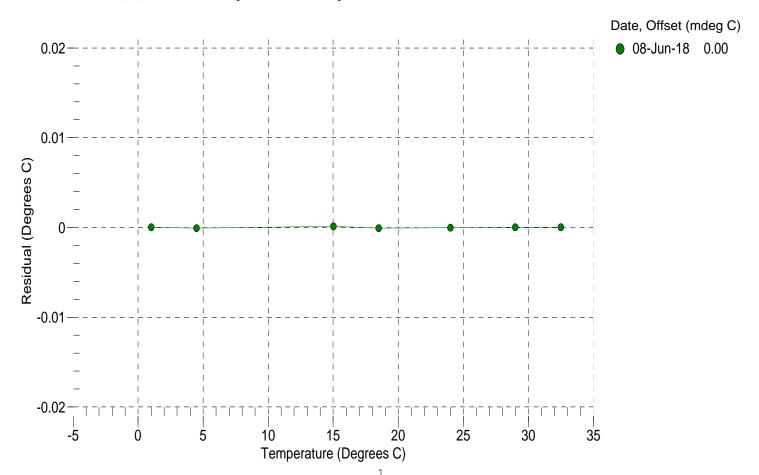
a0 = -8.791366e-005 a1 = 3.060765e-004 a2 = -4.565337e-006 a3 = 2.030932e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
1.0000	586049.2	1.0000	0.0000
4.5000	500593.0	4.4999	-0.0001
15.0000	318210.3	15.0001	0.0001
18.4999	275335.2	18.4998	-0.0001
24.0000	220648.9	24.0000	-0.0000
29.0000	181535.0	29.0000	0.0000
32.5000	158892.7	32.5000	0.0000

n = Instrument Output (counts)

Temperature ITS-90 (°C) = $1/{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]} - 273.15$

Residual (${}^{\circ}C$) = instrument temperature - bath temperature



+1 425-643-9866 seabird@seabird.com www.seabird.com

SENSOR SERIAL NUMBER: 12344 CALIBRATION DATE: 01-Jun-18 SBE 37 V2 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

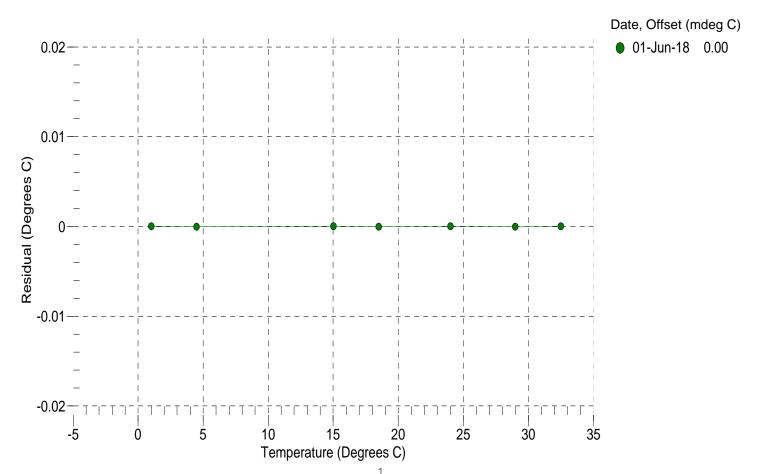
a0 = -8.215480e-005 a1 = 3.029415e-004 a2 = -4.212222e-006 a3 = 1.935234e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	578134.3	1.0000	0.0000
4.5000	494120.6	4.5000	-0.0000
15.0000	314645.9	15.0000	0.0000
18.4999	272404.8	18.4999	-0.0000
24.0000	218492.8	24.0000	0.0000
29.0000	179903.2	29.0000	-0.0000
32.5000	157549.1	32.5000	0.0000

n = Instrument Output (counts)

Temperature ITS-90 (°C) = $1/{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]} - 273.15$

Residual (${}^{\circ}C$) = instrument temperature - bath temperature



+1 425-643-9866 seabird@seabird.com www.seabird.com

SENSOR SERIAL NUMBER: 12345 CALIBRATION DATE: 08-Jun-18 SBE 37 V2 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

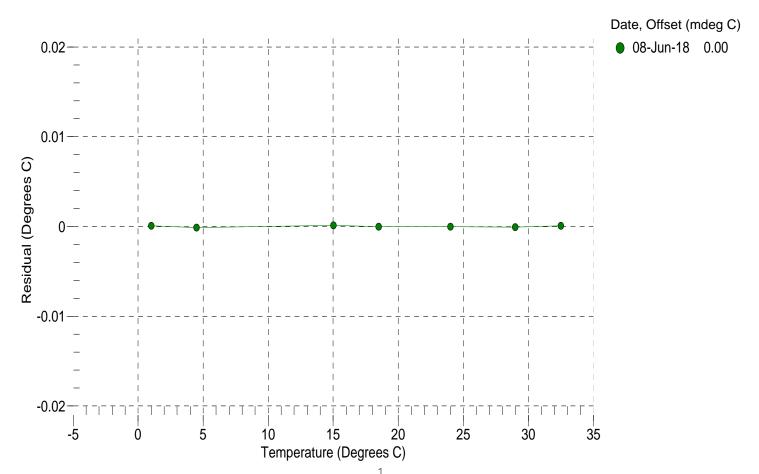
a0 = -8.984541e-005 a1 = 3.014890e-004 a2 = -4.044746e-006 a3 = 1.921871e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	579313.6	1.0001	0.0001
4.5000	495735.1	4.4999	-0.0001
15.0000	316757.9	15.0001	0.0001
18.4999	274529.7	18.4999	-0.0000
24.0000	220556.2	24.0000	-0.0000
29.0000	181858.9	28.9999	-0.0001
32.5000	159412.7	32.5001	0.0001

n = Instrument Output (counts)

Temperature ITS-90 (°C) = $1/{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]} - 273.15$

Residual (${}^{\circ}C$) = instrument temperature - bath temperature



APPENDIX B

Tide Gauge Installation Instructions

MILNE PORT TIDE GAUGE INSTALLATION AND RECOVERY INSTRUCTIONS

Golder Associates Ltd. (Golder) was retained by Baffinland in 2018 to re-install the tide gauge, an RBR concerto CTD, first deployed in 2017 at Milne Port to provide water level monitoring on-site during the open-water season (typically July to October) of 2018. The objective of this technical memorandum is to provide installation instructions for the tide gauge at Milne Port and itemize the necessary consumables for installation.

1.0 ALUMINUM MOUNTING SYSTEM OVERVIEW

The tide gauge is housed inside a 26-inch long aluminum square tube (4-inch diameter) to provide protection from vessels and reduce wind and wave effects. The aluminum square tube is mounted to the ladder with two steel L brackets that will be welded to the side of the bottom of the steel ladder located on the ore dock (Figure 1).

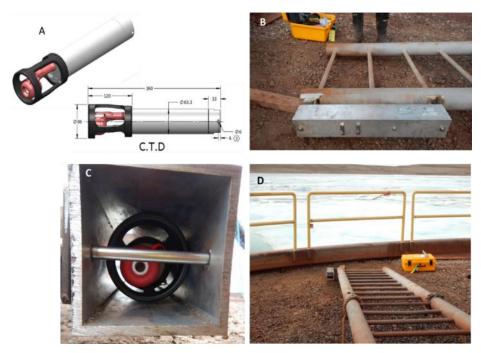


Figure 1: Overview of tide gauge installation

2.0 TIDE GAUGE INSTALLATION

Step 1) Two 1/4" diameter holes need to be drilled in the aluminum tube. These holes will be used to add a length of 3mm 316 stainless steel wire rope as redundant security against a hardware failure (Figure 2). On the outside of the aluminum tube two zinc anodes should be replaced with new anodes and secured with one stainless steel bolt (316 stainless 1/2" x 1") per anode (Figure 5).



Figure 2: Hardware attaching aluminum tube to steel L brackets and wire rope for redundancy of the L bracket attachments

Step 2) The tide gauge (RBR concerto – white Delrin cylinder) should be mounted inside the aluminum square tube with one stainless steel bolt (316 stainless 1/4" x 4 1/2"), washer, nylon shoulder washer, lock nut (Figure 3) and two stainless steel hose clamps wrapping around the tide gauge body, using caution to not overtighten against the plastic housing. The bolt should be passed through the hole on the end cap of the tide gauge, making sure not to twist the end cap in the process, and secured to the square tube with nylon shoulder washers inserted in the drilled holes on the aluminium square tube (Figure 5).





Figure 3: Hardware attaching aluminum tube to L brackets and view of the tide gauge mounted in the tube. Arrow shows location of the $\frac{1}{4}$ " bolt that should pass through the end cap of the tide gauge.



Figure 4: Hardware attaching aluminum tube to L brackets and view of the tide gauge mounted in the tube. Arrow shows location of the $\frac{1}{4}$ " bolt that should pass through the end cap of the tide gauge.

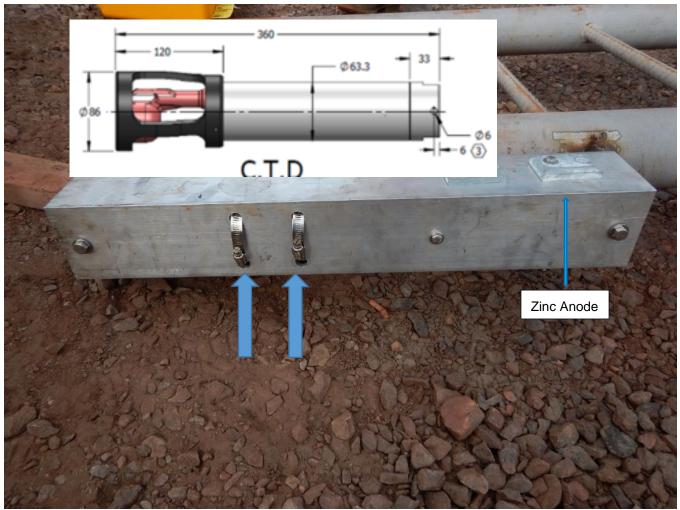


Figure 5: Hardware attaching tide gauge to tube. Arrows show the location of the hose clamps which mount the tide gauge to the square tube and the zinc anodes.

Step 3)

The aluminum square tube is mounted to the ladder at two steel L brackets that are welded to the side of the bottom of the steel ladder located on the ore dock. The tide gauge should be mounted such that the red and black end cap is pointing downwards towards the sea bed. The integrity of the welds on the ladder should be inspected before mounting the square tube. Mount the aluminum tube to the L brackets with stainless steel bolts (316 stainless 3/8" x 5"), washers, nylon shoulder washers, lock washers and lock nuts (Figure 6).



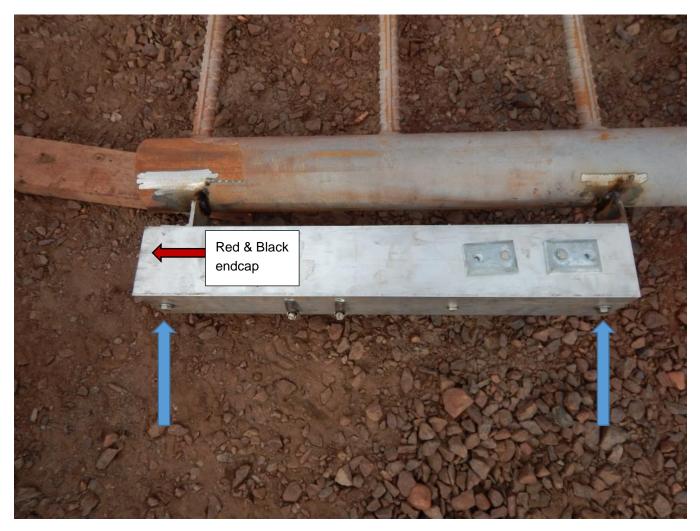


Figure 6: Aluminum square tube mounted to the bottom of the steel ladder located at the ore dock. Arrows show location of mounting bolts which attach the square tube to the welding tabs on the steel ladder.

Step 4)

Add a length of 3mm 316 stainless steel wire rope passed through the two holes on the square tube, and around the bottom ladder rung, and join wire rope together with 2 wire rope clips (1/8" stainless steel). This is to provide a redundant mounting system (Figure 2).

Step 5)

Take photos during each step of the installation process for documentation purposes and provide a record of hardware used and any changes to the above steps.



Step 6)

In 2018 the elevation and position of the ladder was surveyed using five survey points measured from an RTK GPS system. The following table provides the survey position and elevation of the pressure sensor in 2018. The pressure sensor is located behind the plastic sensor cover on the downward facing end of the instrument (Figure 7). The distance from the bottom of the aluminum tube to a point at the top plate of the ladder and from the pressure sensor to a point at the top plate of the ladder was measured as 6.57 m and 6.42 m in 2018, respectively.

An RTK GPS survey will need to be conducted in 2019 to reference the steel ladder top plate and provide a reference for instrument to chart datum. Additionally, the distance from the pressure sensor to the ladder top plate and from the bottom of the aluminum tube to the ladder top plate should be measured.

Table 1: RTK GPS survey 2018

Northing	Easting	Ladder Top Plate Elevation (m, CGVD)	Tide Gauge Elevation (m, CGVD) ¹
7976633.252	503227.211	3.505	-2.915
7976633.246	503227.205	3.516	-2.904
7976633.242	503227.205	3.491	-2.93
7976633.241	503227.197	3.495	-2.925
7976633.268	503227.215	3.496	-2.924
Average Elevation		3.501	-2.920

Notes:

CGVD=Canadian Geodetic Vertical Datum; ¹Distance from the tide gauge pressure sensor to the surveyed steel ladder top plate is 6.42 m





Figure 7: Pressure sensor location on the downward facing end of the tide gauge



Figure 8: RTK GPS survey conducted in 2018

3.0 HARDWARE LIST

The following is a list of necessary hardware to complete the tide gauge installation:

Item Description	Quantity
26" aluminum square tube	1
Stainless steel L-brackets	2
316 stainless steel hex bolt 5"- 3/8"	2
316 stainless steel lock nut 3/8"	2
316 stainless steel lock washer 3/8"	2
316 stainless steel washer 3/8"	4
Nylon shoulder washer 3/8"	4
316 stainless steel hex bolt 4 1/2"- 1/4"	2
316 stainless steel lock nut 1/4"	2
316 stainless steel washer 1/4"	4



Item Description	Quantity
Nylon shoulder washer 1/4"	2
Zinc anode	2
316 stainless steel hex bolt 1" – 1/2"	2
316 stainless steel washer 1/2"	2
316 stainless steel lock nut 1/2"	2
316 stainless steel ½" band width hose clamps 2 9/16"-3 1/2" diameter	2
3mm 316 stainless steel wire rope	1 roll
1/8" stainless steel wire rope clip	2

4.0 TIDE GAUGE RECOVERY

Upon recovery of the tide gauge from the ore dock ladder the following steps should be done.

Step 1)

The distance from the tide gauge pressure sensor (Figure 7) and the bottom of the aluminum tube to the steel ladder top plate (Figure 8) should be recorded and accompanied by a photo of the measurements (i.e. a photo of the tape measure).

Step 2)

If determined applicable, data from the tide gauge should be downloaded using the computer software program Ruskin before shipping. The software program Ruskin can be obtained from https://rbr-global.com/products/software. The following steps should be followed when using Ruskin:

- Unscrew the tide gauge end cap to expose the USB port and battery compartment.
- Plug one end of the Apple 30 pin cable, found in the tide gauge box, into the tide gauge and the remaining end into the computer (Figure 9)
- Open the software program Ruskin. The instrument should appear in the Navigator tab under the subheading Instruments.
- Click on the Download tab and select "download". Save the .RSK file to a location on the local machine.
- Disconnect the USB cable from the logger and computer.
- Screw the tide gauge end cap back on.
- DO NOT select stop logging or enable logging.
- DO NOT remove the batteries from the instrument.





Figure 9: Apple 30 pin cable for tide gauge data download



APPENDIX C

Data Deliverable (delivered electronically)

Agency / Organization: Parks Canada

Date of Comment Submission: March 29, 2019

	Document	Section	Comment	Baffinland Response
#	Name	Reference		
8	2018 Milne Inlet Marine Environmental Effects Monitoring Program and Alien Invasive Species Monitoring Program	5.2.2. Benthic Infauna	Pseudofabricia sp. Nr. Aberrans was first observed in Milne Inlet in 2017 and is thought to be endemic to the Mediterranean. In 2018, this species was found at several of the sampled stations, which were not sampled previously. Baffinland states that this species cannot be identified as an AIS since it is unknown if this species was found in Milne Inlet previously and missed in previous surveys. What active management and monitoring measures are being done to see if this species does exists naturally in the Arctic and better address this knowledge gap?	Independent taxonomic verification for this species was conducted by Philippe Archambault's Benthic Ecology Lab at Université Laval. This analysis indicated that the <i>P. sp. nr. aberrans</i> specimens collected in 2018 may actually have been <i>Manayunkia aesturiana</i> , a species which has a documented Arctic range.
9	2018 Milne Inlet Marine Environmental Effects Monitoring Program and Alien Invasive Species Monitoring Program	5.2.2 Benthic Infauna	The amphipod Monocorophium insidosium was first seen in 2017 and was identified again in 2018. Baffinland has previous stated that this species cannot be positively identified as an AIS due to uncertainties within its range. Again, what is Baffinland doing to address these gaps in species identification and their possible natural occurrences	Independent taxonomic verification for this species was conducted by Philippe Archambault's Benthic Ecology Lab at Université Laval. This analysis indicated that the <i>M. insidosium</i> specimens collected in 2017 and 2018 may actually have been <i>Crassicorophium bonelli</i> , a species which has a known range covering eastern North America and the northeastern Atlantic Ocean.

#	Document Name	Section Reference	Comment	Baffinland Response
			in the Arctic. Are any sites being proposed as a control site for AIS?	
10	2018 Milne Inlet Marine Environmental Effects Monitoring Program and Alien Invasive Species Monitoring Program	6.0 Conclusions and Recommend ations	Results are not compared back to the thresholds established by Baffinland (FEIS 2013). These thresholds should be restated in each report and all results should be related back to this overall impact statements.	Indicator thresholds from the Final Environmental Impact Statement (FEIS) and FEIS Addendum (Baffinland 2012, 2013) are referenced in the revised report and related back to results.
11	2018 Milne Inlet Marine Environmental Effects Monitoring Program and Alien Invasive Species Monitoring Program	3.1.2 Sediment quality	It is stated that no large foreign objects were identified within sediment samples. Is there a specific threshold of size for an object to be counted as a large foreign object? Were foreign objects of any kind found within the sediment samples?	This statement related to general sediment collection methodology and refers to objects that have the potential to compromise the integrity of the collected sediment and benthic infaunal samples by either 1) preventing the sediment grab sampler to fully close during a sampling event, or 2) by occupying too much space in the grab sampler thus preventing collection of a sufficient sample volume. Foreign objects can be large pieces of debris, rocks, or anthropogenic debris, such as cables, fishing nets, metal parts, bottles or other household items.

#	Document Name	Section Reference	Comment	Baffinland Response
12	2018 Milne Inlet Marine Environmental Effects Monitoring Program and Alien Invasive Species Monitoring Program	3.1.3 Substrate, Macroflora, and Benthic Epifauna	It is great to see comments from previous MEEMP reviews being adapted into the monitoring program this past field season, such as the establishment of permanent belt-transects in the area.	Comment noted.
13	General comment re: Marine Environmental Effects Monitoring Program and Alien Invasive Species Monitoring Program	Entire program	Parks Canada would like to see this program expanded to monitor, and where required mitigate for effects of anchoring on bottom ecosystems to ensure no irreversible damage to the bottom from anchoring – e.g. data on how often, how many and how long ships are anchored, what is the bottom type, plants/rock, soft-substrate, and what species are negatively affected It is also worth examining if permanent moorings may be required to minimize bottom damage.	Effects from ship anchoring at Ragged Island or in Milne Port were not assessed as a part of the FEIS. As such, no monitoring is proposed to verify impact predictions made in the FEIS.



Name: D. Bruce Stewart and Jeff W. Higdon

Agency / Organization: Qikiqtani Inuit Association

Date of Comment Submission: 24 March 2019

#	Document Name	Section Reference	Comment	Baffinland Response
1	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report DRAFT FOR MEWG.pdf")	Pg. ii, Executive Summary	RE: sampling of incidental fish mortalities. Are fish mortalities during salvage operations sampled? If not, such sampling should be considered in future to increase sample sizes.	All incidental fish mortalities that occurred during the MEEMP surveys were retained for laboratory analysis for the following parameters: age, sex, stomach content and metals in tissue (body burden) analysis. There have not been any fish salvage operations in the marine environment in 2018 or in previous years. If fish salvage operations occur in future, fish mortalities would be retained to increase sample sizes as advised.
2	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. iii, Executive Summary	RE: Chlorophyll a and dissolved oxygen concentrations indicating low phytoplankton productivity. Chlorophyll a is a measure of biomass not of productivity, which describes rate of production. Dissolved oxygen can also be influenced by many factors, so these measurements suggest but do not necessarily indicate low productivity.	Text in the report has been changed to read "Chlorophyll a and dissolved oxygen concentrations were low suggesting low phytoplankton production during the time of the surveys."



#	Document Name	Section Reference	Comment	Baffinland Response		
3	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. iv, Executive Summary	RE: a revised approach for monitoring marine benthic communities. When transitioning from one monitoring method to another there should be overlap of the two methods for ca. 3 years to facilitate comparisons of old and new results and ensure that the better of the two methods can be retained without loss of data.	Comment noted. However, analysis of the 2014-2017 data indicated that that due to the non-linear relationship between distance from transect origin and both macroflora cover and epifauna abundance, it was not possible to use ANCOVA to analyze yearly differences in these two variables. In an attempt to overcome this shortcoming, an analysis of percent cover of macroflora and epifauna abundance was performed using ANOVA, with 'distance' binned into 250 m intervals. The discretization of continuous data usually renders data less informative. In addition, not all distance bins were sampled in all years, and the 2017 North Transect data were omitted from the analysis because no macroflora was observed in the entirety of the transect, and because epifauna abundance was very high in two distinct parts of the transect. These two high-abundance segments of the transect had a very high density of smaller brittle stars, likely following a large settlement event. Due to these limitations, it was not practical or informative to continue monitoring using the same design. Instead, a new benthic infaunal sampling program was devised and implemented in consultation with the MEWG.		



#	Document Name	Section	Comment	Baffinland Response
		Reference		· ·
4	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. iv, Executive Summary	RE: Fukui traps were less effective and less efficient in 2018. If no explanation can be found in the sampling methodology (e.g., differences in location, depth, bait, check frequency, etc.). Other static sampling methods should be considered and tested against the Fukui traps to improve catches. Bottom set hoopnets with a series of chambers that have progressively smaller openings and leads to guide benthic species into the main opening might be worth trying. Again, operate these in tandem with the Fukui traps for ca. 3 years to ensure that the best method	Bottom trawls will be added to the fish sampling program in 2019, which targets the same fish species as would be collected in Fukui traps (demersal fish and mobile benthic invertebrates). Effort to improve effectiveness of fish collection using Fukui trap methods will also be made by varying sampling methodology (e.g., location, depth, bait, checking frequency, etc.). Should this method (Fukui traps) be determined to still be ineffective, other gear / methods (e.g. hoop nets) will be considered as part of future monitoring efforts.
5	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. v, Executive Summary Pg. 78, S. 4.1.5.2 Fish length and weight	is kept. RE: body size is not a good predictor of char age (see also pg. 78, Figure 4-27). This is contrary to other work in the region (e.g., Read 2004) and suggests problems with the method used to determine char age or that the length at age data were jumbled sometime between collection and reporting. Read, C.J. 2004. An assessment of the Arctic char population of Tugaat River, Nunavut. Can. Manuscr. Rep. Fish. Aquat. Sci. 2699: v + 35 p.	Body size was not used to determine Arctic char age. Length at age data was only provided for incidental Arctic char mortalities for which age was determined using otolith analysis methods by an accredited laboratory. The method is provided in Section 3.1.5.3 Fish Processing. The following text edits were incorporated into the Executive Summary: "No relationship between body length and age in the analyzed incidental Arctic char mortalities was observed, indicating body size is not a good predictor for Arctic char age in the Milne Port area." (italics indicate new text added).



	Document Name	Section	Comment	Raffinland Response
"	Document Name	Reference	Comment	barrillana Nesponse
6	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Reference Pg. v, Executive Summary	RE: Health Canada guideline (0.5 mg/kg) for mercury in fish tissue. The 0.5 mg/kg maximum is for fish sold commercially. In the past a guideline of 0.2 mg/kg was used for domestic consumption, based on the reasoning that subsistence harvesters tend to eat larger quantities of fish. The updated guidelines are based more on quantities of fish tissue (flesh), rather than measurements of mercury content. https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/chemical-contaminants/environmental-contaminants/mercury/mercury-fish.html https://www.canada.ca/en/health-canada/services/food-nutrition/reports-publications/human-health-risk-assessment-mercury-	The Health Canada guideline of 0.5 mg/kg for mercury used in the MEEMP study is based on guidance from Environment and Climate Change Canada (EC 2012) and is consistent with the Metal and Diamond Mining Effluent Regulations Canada (SOR/2002-222), which defines 0.5 mg/kg (wet weight) as the fish tissue concentration threshold for toxicological effects. The reference literature provided in the comment state that the value of 0.2 ppm 'was arbitrarily chosen but is less than half the current standard of 0.5 ppm'. In any case, observed concentrations of mercury in fish tissue collected in Milne Inlet were well below the more stringent concentration of 0.2 mg/kg for all samples collected to date (mean mercury concentrations recorded in 2018 was 0.04 ± 0.02 mg/kg).



#	Document Name	Section Reference	Comment	Baffinland Response
6	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. v, Executive Summary	New species caught in 2018 were not identified as invasive or non-indigenous, but the majority of the new taxa were not identified to species. Most of these taxa were described as having known ranges that extend into Arctic waters or unknown northern limits with ranges reaching into the north Atlantic and Norwegian Sea. Which of the new taxa fit these criteria and why are they assumed to be indigenous, given that they were not identified to species?	Analysis of the available literature and species databases indicated that all of the 46 newly identified taxa in 2018 had known ranges that include Arctic waters or had unknown northern limits with ranges including the north Atlantic as far north as Greenland and the Norwegian Sea and, presumably, could have ranges that extend to Arctic waters. The sabellid worm species that was initially identified as potentially nonnative or invasive (<i>P. aberrans</i>) was sent for a secondary taxonomic evaluation by Philippe Archambault's Benthic Ecology Lab at Université Laval. The re-analysis suggested that the taxa in question is likely native in Arctic waters (reassigned as <i>M. aesturiana</i>). Each taxon identified to genus level or higher contained at least one species with a known occurrence in the Arctic or a taxon with a global distribution.
6	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. v, Executive Summary	RE: Further investigation into the status of <i>Pseudofabricia</i> sp. Nr. aberrans is in progress in consultation with DFO. QIA welcomes and encourages such cooperation with other agencies and individuals as a means of improving monitoring for the arrival of invasive species, and in other monitoring programs.	Comment noted. Future engagement with DFO and the MEWG will continue where relevant opportunities occur.



#	Document Name	Section Reference	Comment	Baffinland Response
7	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. v, Executive Summary	RE: the invasive status of Monocorophium insidosium could not be determined due to uncertainties surrounding its native range. The nearest report of this species to Milne Inlet is about 3000 km to the south along the east coast of Newfoundland (Fofonoff et al. 2019; WoRMS database). Fofonoff PW, Ruiz GM, Steves B, Simkanin C, & Carlton JT. 2019. National Exotic Marine and Estuarine Species Information System. Monocorophium insidiosum http://invasions.si.edu/nemesis/ . Access Date: 18-Mar -2019 RE: representative specimens have been sent to	Independent taxonomic verification for this species was conducted by Philippe Archambault's Benthic Ecology Lab at Université Laval. This analysis indicated that the <i>M. insidosium</i> specimens collected in 2017 and 2018 may actually have been <i>Crassicorophium bonelli</i> , which has a known range covering eastern North America and the northeastern Atlantic Ocean. The practice of Independent taxonomic verification for species potentially flagged as invasive or non-native will continue in future sampling years, as deemed necessary.
8	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. v, Executive Summary See also Pg. 102, S. 6.0 Conclusions and recommendati ons	a separate laboratory for confirmative taxonomic analysis. QIA recommends that this practice be continued in future and that DNA analysis be conducted where a species' origin remains uncertain. Inability to identify hull biofouling species using video or to collect samples for identification is an important weakness of the hull fouling surveys. How have others solved this problem? QIA recommends the use of higher resolution video equipment and development of methods to	All vessels called to Milne Port are required to follow guidance and regulations from the International Maritime Organization (IMO) and Transport Canada (TC) related to the control and management of biofouling. A higher-resolution Remotely Operated Vehicle (ROV) video system with an improved lighting



#	Document Name	Section Reference	Comment	Baffinland Response
			collect samples suitable for species identification.	system will be used in the 2019 MEEMP surveys. Data collection will include physical collection of fouling species for subsequent taxonomic identification, as possible.
9	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 1, S. 1.1 Background	RE: "Potential effects on the marine environment may include." Why was there no mention of potential changes in marine habitat and biota related to species introductions?	The potential for aquatic invasive species (AIS) introductions is addressed by the AIS Monitoring Program and not the MEEMP, as stated in the subsequent paragraph (Pg. 3, S. 1.1)
10	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 2, S. 1.1 Background	RE: The Aquatic Invasive Species (AIS) monitoring being designed to address the risk of invasive species introductions. It does not address these risks as it does not assess the presence and abundance of potentially harmful species in the incoming ballast water to understand risk and prevent introductions (see Project Certificate Conditions 88), rather it is designed to assess whether introductions have occurred. Sampling of ships ballast water and hull fouling is needed to verify compliance with regulatory requirements (exchange and/or, treatment), and to verify the efficacy of these measures for reducing risk of	All vessels called to Milne Port are required to operate in accordance with Transport Canada's Ballast Water Control and Management Regulations (Regulations; SOR/2011-237) pursuant to the Canada Shipping Act, 2001 (S.C. 2001, c. 26) and the International Maritime Organization's International Convention for the Control and Management of Ship's Ballast Water and Sediment (IMO 2017). Baffinland currently conducts regular monitoring of ballast water of all ore carriers for compliance with the Regulations and the D-1 standard of the Convention.



#	Document Name	Section Reference	Comment	Baffinland Response
			introduction. QIA recommends that the monitoring program add monitoring designed to assess the actual risk of introduction and inform the use of preventative measures designed to reduce risk.	
11	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 2, S. 1.1 Background	RE: detection of a single aquatic invasive species is the threshold for triggering adaptive management measures. If this is the case why did the 4 species QIA identified not trigger adaptive management? This approach looks for a failure in the system before triggering measures that should be undertaken to prevent such a failure. This shifts the longterm risk to the receiving environment and others who depend upon it. QIA recommends that proactive monitoring be conducted to inform risk and the application of adaptive management measures designed to prevent introductions, rather than relying entirely on the current reactive approach, since eradication of introduced species is very difficult.	All vessels called to Milne Port are required to operate in accordance with Transport Canada's Ballast Water Control and Management Regulations (Regulations; SOR/2011-237) pursuant to the Canada Shipping Act, 2001 (S.C. 2001, c. 26) and the International Maritime Organization's International Convention for the Control and Management of Ship's Ballast Water and Sediment (IMO 2017). Taxa flagged during the AIS Program as potential concern (i.e., potentially invasive or non-native species) first trigger taxonomic verification by a second independent laboratory as a first response. If the independent laboratory confirms the species is invasive or non-native, then the next step would be for Baffinland to consult with DFO subject matter experts on developing a response strategy. The species that were initially identified as potentially non-native were re-analyzed by Philippe Archambault's Benthic Ecology Lab at Université Laval. The re-analysis suggests that the taxa in question are likely native to Arctic waters.



#	Document Name	Section Reference	Comment	Baffinland Response
12	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 2, S. 1.1 Background	RE: the aquatic invasive species monitoring evaluating potential changes in community structure. These AIS programs are described (pg. 11, S. 2. 2 AIS Monitoring) as "surveillance level" whereas assessing changes in community structure with any sensitivity requires much broader and in-depth understanding of species' presence, habitat use, abundance, agedistributions, etc. QIA requests that Baffinland clarify how the AIS monitoring is evaluating changes in community structure.	The AIS Program focuses on the detection of potential non-native or invasive species via surveillance-level surveys. Changes in community structure are monitored as part of the MEEMP study components. If a significant change in community structure is observed as part of the MEEMP, multiple vectors are considered when evaluating the potential driver(s) of the observed change, including potential AIS introductions (based on records from the AIS database).
13	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 2, S. 1.1 Background	QIA supports Baffinland's recommendation that AIS monitoring of ballast water be conducted, and further recommends that it be increased to a level that properly informs risk of species introductions and adaptive management.	AIS monitoring of ballast water is not being considered for 2019. Baffinland will continue with salinity and temperature testing for all foreign flag vessels in 2019 as described in Baffinland's Ballast Water Management Plan. Current ballast water sampling by Baffinland remains a voluntary measure that exceeds federal and international guidelines for ballast water management. Biological testing may be considered following additional guidance from IMO and Transport Canada regarding onboard treatment of ballast water (e.g. D2 Standard).



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14	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 2, S. 1.2 Objectives Pg. 13, S. 3.1.1.1 Vertical physical profiles Annexe L. Physical oceanography report, Pg. 1 (640 of 714), S. 1.2 Objectives	Lack of through the season salinity and temperature profiles at appropriate locations was identified as a weakness that prevented verification of the ballast water dispersion model (Baffinland FEIS Phase 2 Addendum TSD 18, Appendix B, S. B-3.0 Calibration Summary, pg. 17 (pg. 56 of 57). One of the objectives of the MEEMP, as required by Project Certificate Condition No. 86, was to "Provide additional current, temperature and salinity data to update, through further validation, the ballast water dispersion model developed for the Project in 2018 (Golder 2018)" (S. 1.2, pg. 2). What were the rationales for sampling over such a narrow window? How useful is collection of single vertical profiles per site over a 3-day period (August 7-9, 2018) for dispersion model validation, given that water temperature, salinity, and current at a particular depth and location change during the shipping season? What are the limitations of this approach for understanding the seasonal progression of the pycnocline in relation to monitoring sites?	The sampling window was selected to coincide with the shipping season (i.e. ballast water discharge periods) and MEEMP program and is constrained outside these periods by sea ice. Full water column CTD profiles are available only for a narrow range of dates, however, continuous time series of CTD are available at multiple vertical and horizontal positions. This includes continuous measurements of near surface salinity and temperature at the Milne Port tide gauge and Milne Port CTD moorings. These moorings measure salinity and temperature at and near the depth of the pycnocline. Additionally, water column currents and backscatter act as indicators of the pycnocline depth (i.e. change in current direction and backscatter intensity). The ballast water discharge model is validated to a suite of parameters that include temperature, salinity, water levels, and current speed and direction. Model validation to select CTD profiles and point measurements is considered robust, however, further work is being done to demonstrate model validity in the area of Milne Port. During 2019, two oceanographic moorings will be placed near the ore dock at Milne Port and one will be placed near Bruce Head. These will record conductivity, temperature, currents and water column stratification over an extended time period (early August to late September). CTD profiles will be taken adjacent to the 2 two Milne Port moorings approximately once a



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				week during August and when possible in September, as well at 4 four additional locations in a transect oriented approximately N-S from the ore dock (i.e. radially outwards).
				In 2019, as part of the MEEMP program, CTD profiles will be also be taken at multiple stations throughout Milne Port and in Milne Inlet (up to Ragged Island). Sampling effort will increase from what was completed for 2018, with the aim of better characterizing physical water properties (i.e. salinity and temperature) in these areas.
				Finally, an intensive data collection period focused on gathering multiple CTD measurements taken prior to, during and following two ballast water discharge events is proposed for 2019. A total of 24 CTD profiles will be taken along three transects (eight profiles per transect), moving radially outward from a point as close to the ore
				carrier discharge as allowed by the vessel Master and Milne Port operations. The three transects will be taken perpendicular and at an angle to the vessel. It should be noted that CTD profiles of a ballast water event may not distinguish between ballast water and normal seawater in the ambient environment.



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15	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 7, S. 2.1 MEEMP	The MEEMP study components also included Benthic infauna (Pg. 36, S. 3.3.1.4).	The MEEMP study components outlined in this paragraph refer to the components that were studied prior to 2018 survey season which did not include benthic infaunal sampling. Benthic Infauna was added as a new MEEMP study component in 2018. Text has been added to this section to clarify.	
16	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 9, S. 2.1 .1 Modifications to the MEEMP	When modifying the monitoring design, what consideration was given to construction of the freight dock, which is to take place east of the proposed Ore Dock 2, possibly at or near the same time?	Consideration was given to the freight dock and the new ore dock when modifying the survey design. Sampling station locations have been added both west and east of the proposed freight dock. In 2019, a monitoring transect will also be added extending north offshore from the new ore dock. It will run parallel to the existing North Transect.	
17	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 11, S. 2.1.1 Modifications to the MEEMP See also Pg. 95. S. 5.1.2 Sediment quality Pg. 100, S. 6.0 Conclusions and recommendati ons	QIA supports the changes made to the sampling program (belt plots, additional sediment sampling stations, use of Hiatella arctica, and extension of the fish sampling program). QIA recommends that sampling at both new and old sediment stations be continued in 2019 and 2020 to increase overlap and thereby comparability of data collected before and after the changes are made.	Sampling at both new and old sediment stations will be continued in 2019 and 2020 (until construction of the new ore dock is complete) to increase overlap and thereby comparability of data collected before and after the changes are made.	



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18	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 12, S. 2.2.1 Modifications to the AIS program	In accordance with PC Condition 91, ROV-based underwater video was used to survey the hulls of three ships in 2018. QIA recognizes that this is a step forward towards meeting this condition but notes that the video resolution was insufficient to permit species identification and that specimens were not collected for identification. QIA recommends that this monitoring program be modified to enable it to meet the requirements of Project Certificate Condition 91.	The monitoring program will be modified in 2019 and will include use of a higher resolution video system with an improved lighting system than was used in 2018. Baffinland is also investigating a reasonably practical and safe means to collect biological samples from the ship hulls for taxonomic identification.
19	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 15, S. 3.1.1.2 Discrete water quality sampling	In previous years "[s]alinity was calculated using an online calculator from conductivity (i.e. specific conductivity) and temperature (25°C)." How was salinity determined in 2018?	Salinity in discrete water quality samples was calculated by the laboratory (ALS) using the APHA 2520B Electrical Conductivity Method (by conductivity meter).
20	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 20, S. 3.1.4 Benthic infauna See also: Pg. 101, S. 6.0 Conclusions and recommendati ons Pg. 533ff of 714, Annexe F. Shellfish tissue chemical	QIA supports the continuation of shellfish weight at length sampling in 2019 and recommends that the ages of shellfish taken from benthic invertebrate samples or used for tissue analysis be determined so this information can be used to interpret any changes in growth and metal uptake. Typo on page 20, change "crashing with" to "crushing by"?	Baffinland is investigating the possibility of undertaking age determination of shellfish samples collected for weight-to-length and body burden analysis. Comment noted - the typo has been corrected.



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		analysis and weight and length data		
21	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 21, S. 3.1.4 Benthic infauna, Figure 3-2	Sediment and benthic sampling stations located near the proposed ore dock or planned freight dock may be lost if these docks are constructed. While there are monitoring transects along the coast and offshore the existing dock, there are no monitoring stations offshore the proposed ore dock and planned freight dock. QIA recommends adding a monitoring transect extending offshore from the freight dock roughly parallel to the SN stations consisting of 4 stations.	A monitoring transect will be added extending north offshore from the new ore dock. It will run parallel to the existing North Transect.
22	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 22, S. 3.1.5.2 Fish collection	Jigging and trolling effort was low (~10.5 h), conducted over a short period (17 d), and at depths of less than 25 m (Fig. 3-3, pg. 26). This level of effort is essentially synoptic sampling rather than monitoring. Few of the sample sites were the same as those in 2017 and their numbering changed (2017 MEEMP Report, Figure 7, pg. 21). QIA recommends that the rationale for this approach and level of effort be reconsidered in order to	Comment noted. The approach and level of effort for jigging and trolling in 2019 will be improved to allow for more consistent and repeatable sampling between monitoring years. New methods may be added, such as bottom trawling. Sampling effort for some of the existing methods will also be increased. Bottom trawls will be added to the fish sampling program in 2019, which targets the same fish species as would be collected in Fukui traps (demersal fish and mobile benthic invertebrates). Effort to improve effectiveness of fish collection using



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23	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 23, S. 3.1.5.2 Fish collection	ensure spatial and temporal comparability of the monitoring results. Resuming sculpin mark-recapture, which was discontinued due to low recapture rates should also be considered, since these rates may reflect low sampling effort rather than low population size. Gillnets were suspended just below the surface and checked every 2 hours for fish presence over the duration of deployment. These pelagic sets would explain the low catches of benthic species like sculpins, which can be abundant in Arctic waters. Gillnet sampling effort over the open water season was low (151 h 45 m), essentially synoptic sampling rather than monitoring.	Fukui trap methods will also be made by varying sampling methodology (e.g., location, depth, bait, checking frequency, etc.). Should this method (Fukui traps) be determined to still be ineffective, other gear / methods (e.g. hoop nets) will be considered as part of future monitoring efforts. Changes in fishing methods, such as discontinuation of sculpin markrecapture, have been implemented through consultation with the Pond Inlet HTO and MEWG members. Reinitiating the mark-recapture program is not being considered. Gillnets were deployed in shallow subtidal areas with the net extending from surface to seabed in the nearshore; thus considered effective at sampling both benthic and nearshore pelagic species. Gillnet fishing effort was higher in 2018 than in all previous years of monitoring and baseline studies. Gill net sampling effort was limited by permit requirements regarding non-lethal sampling which necessitated inspecting gill nets every 2 hours (permit requirement). This requirement precluded leaving the nets soaking for longer durations, and during periods of inclement weather and low visibility (e.g., overnight). Fish sampling in 2018 also yielded higher sculpin catches than any previous year of sampling.



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24	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 24, S. 3.1.5.2 Fish collection	The mesh size of the seine net should be included so future studies can replicate the hauls. Depending on the sampling conditions it might be worth trying a shorter (e.g., 5 m) seine as it can be moved through the water more quickly and is easier to manoeuvre if the bottom is uneven.	The mesh size of the seine net has been clarified in the methods section of the report (Section 3.1.5.2), as follows: 'Each gill net consisted of six panels with each panel measuring 15.2 m in length and 2.4 m in width, with mesh sizes of each panel consisting of 2.5 cm, 3.8 cm, 5.1 cm, 6.4 cm, 7.6 cm and 10.2 cm.' All future seine net sampling will use the same mesh size to allow for inter-annual comparisons. Baffinland will consider the use of different length seine nets for 2019; however, the use of a shorter net will reduce effort per sampling event.	
25	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 25, S. 3.1.5.3 Fish processing	RE: fish age determination. Arctic char have relatively small otoliths and can be long-lived (anadromous up to about 30 y, landlocked over 70 y). Polishing the convex surface and clearing the otoliths in sodium benzoate can make the fine edge rings more visible. See pg. 2 of: Read, C.J. 2004. An assessment of the Arctic char population of Tugaat River, Nunavut. Can. Manuscr. Rep. Fish. Aquat. Sci. 2699: v + 35 p.	Arctic char age determination was conducted by qualified personnel in laboratory conditions. A description of Arctic char age determination methods has been added as an appendix to the report.	



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26	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 27, S. 3.2.1 Zooplankton	Should the second line of the second paragraph read 2017 not 2018?	Yes, it should read as 2017. It was a typo and has been corrected in the revised report.
27	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 29, S. 3.2.5 Encrusting epifauna	Deploying settlement plates in sets so their recovery can be staggered would allow longer soak durations and thereby the collection of older specimens of the fouling taxa that are easier to identify. It is not clear at what depths the plates and baskets are deployed. Optimally some should be deployed above and others below the pycnocline to capture fouling taxa with different salinity and temperature preferences.	Settlement baskets were deployed in sets of three; each basket contains several rocks. Five settlement plates were also deployed with each set of settlement baskets. Only a part of rocks and plates were collected and sent for taxonomic determination; the rest of the rocks and plates were redeployed to allow for longer soak duration. Deployment of the plates and baskets below the pycnocline is challenging for Milne Port because the pycnocline at Milne Port extends as deep as 14 to 20 m.
28	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	General comment on S. 4.0 Results	Figures used to illustrate results of the MEEMP and AIS monitoring were often difficult to interpret. Some involve shifting Y-scales that prevent direct comparisons, others follow sequences that obscure along-transect differences, colours that are indistinguishable for different transects or species, or keys that follow the opposite sequence as the bars. QIA recommends that these issues be corrected in these and future monitoring reports.	Comment noted. Where possible, figures have been revised to improve readability / interpretation. However, some of figure features are default settings of the graphing / statistical programs that were used for the analyses (SigmaPlot and SYSTAT).



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29	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 48, S. 4.1.2 Sediment quality	The polycyclic aromatic hydrocarbon dibenz[a,h]anthracene is a common pollutant of smoke and oils. It is stable and highly genotoxic in bacterial and mammalian cell systems. Has this contaminant been detected in air quality samples? Using a different colour of dot to identify data from each transect would make Figure 4-5 easier to interpret and more useful.	This is an air-quality focused question and outside the scope of the marine monitoring programs.
30	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 48, S. 4.1.2 Sediment quality	Figures 4-6 (upper panel), 4-7 (both panels), and 4-9 and 4-10 (upper panels) would provide a more coherent illustration of the sediment composition if the station sequence on the x-axis was changed to follow the coastal station sequence on the maps and in the environment, i.e., by reordering it to proceed (L-R) from SW-5 to SW-1 and then SE-1 Organizing the Figure 4-6 key in the same sequence as the columns would make it easier to interpret.	Comment noted. The station sequence in the referenced figures has been revised to follow the coastal station sequence on the maps.



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31	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 59 and 60, S. 4.1.2.2 EEM – iron concentrations	RE: Following correction for fines content no consistent interannual trend was observed in substrate iron concentration along the sediment transects (Table 4-7 and last line of pg. 59). Figure 4-14 (pg. 60) suggests that annual and interannual variability in iron content are greater at sampling stations nearest the dock and that iron concentrations at these nearfield stations were greater in 2018 than in other years, albeit not significantly. Is the variability obscuring trends in change near the docks and what is the probability of an increasing trend over time at sites near the dock? Consistent y-scales should be used in Figure 4-14 to facilitate direct comparisons.	Yes, high intra- and interannual variability is generally prevalent within the dataset. In future MEEMP reports, the analyses will be accompanied by a power analysis to assess statistical power under observed and simulated effect sizes. The figure used three y-axis scales (as opposed to a different y-axis scale for every panel) to maintain consistency. However, the use of a single scale for all panels would result in difficulty reading the interannual differences for transects where lower iron content values were estimated.	
32	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 61, S. 4.1.3 Substrate, macroflora, and benthic epifauna	Belt transect TP-6 was not included in the analysis because it was not properly installed (i.e., fully spread). Was the transect installation corrected so TP-6 can be included in 2019 monitoring?	TP-6 will be re-installed and included in the 2019 monitoring program.	



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33	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 62, S. 4.1.3 Substrate, macroflora, and benthic epifauna See also: Pg. 100, S. 6.0 Conclusions	Video resolution limits taxonomic resolution, which in turn limits the ability of these studies to detect and interpret changes. QIA supports the recommendation that higher resolution video be used in 2019.	The monitoring program will be modified in 2019 and will include use of a higher resolution video system with an improved lighting system than that was used in 2018. Comment noted. The key in the referenced figure has been revised to follow the same sequence as in the columns.
	, ,	and recommendati ons	Organizing the Figure 4-15 key in the same sequence as the columns would make it easier to interpret.	
34	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 63, S. 4.1.3 Substrate, macroflora, and benthic epifauna	The colour palette used in Figure 4-16 (bottom) does not enable readers to distinguish between species listed in the key (i.e., similar colour for fish and clams, for sun star and whelk, and for brittle star and sea urchin). Organizing the Figure 4-16 key in the same sequence as the columns would make it easier to interpret.	Comment noted. The colour palette has been changed to better enable readers to distinguish between species listed.
35	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 64, S. 4.1.4.1 Community studies See also Pg. 89, S. 4.2.2 Benthic fauna	The three incidental taxa removed from analysis should be identified in text.	The incidental taxa removed from the analysis (Orthocladiinae indet., Chironomidae indet. and Curculionidae indet.) have been identified in the text of the revised report. These taxa are also listed in the data appendix (E-1) for benthic infauna.



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36	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 66, S. 4.1.4.1 Community studies	Organizing the Figure 4-20 key in the same sequence as the columns would make it easier to interpret.	The legend symbol appearance has been revised in the report to follow the same sequence as in the columns.
37	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pgs. 68- 71, S. 4.1.4.2 Tissue analysis	Column sequencing may be obscuring patterns of tissue chemical concentrations in Figures 4-21 through 4-24 (all panels). QIA recommends re-ordering the BW columns so they proceed from west to east (and then south to north) beginning on the left with BW-5 through BW-1 then SE-1SN-3)"	The station sequence of the graph has been changed to follow the coastal station sequence on the maps (from west to east) and from south to north.
38	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 72, S. 4.1.5.1 Catch data	RE: A total of 4 fish were caught in the Fukui trap surveys. More effective methods of monitoring should be considered given that these traps were set for over 1550 h. A multichambered trap such as a hoop net, with a progressively smaller opening between successive chambers that limits opportunities for big fish to eat small fish and leads to direct fish into the mouth of the trap, might offer an alternative and improve catch per unit effort. To ensure comparability of the existing and alternative methods they should be run in parallel for about 3 years.	Bottom trawls will be added to the fish sampling program in 2019, which targets the same fish species as would be collected in Fukui traps (demersal fish and mobile benthic invertebrates). Effort to improve effectiveness of fish collection using Fukui trap methods will also be made by varying sampling methodology (e.g., location, depth, bait, checking frequency, etc.). Should this method (Fukui traps) be determined to still be ineffective, other gear / methods (e.g. hoop nets) will be considered as part of future monitoring efforts.



#	Document Name	Section Reference	Comment	Baffinland Response
39	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 75, S. 4.1.5.1 Catch data	RE: char were "most abundant". This is poor use of terminology. The char were caught most frequently but they were not necessarily most abundant in the area, since catch success depends upon how vulnerable a species is to capture by a particular method of fishing. Bottom set gillnets, for example, may catch many sculpins but pelagic set nets few in the same area. Catchability also depends upon mesh sizes, morphology (e.g., horns that get caught in gillnets cf smooth snouts), fish mobility, etc.	Term "most abundant" was replaced with "most frequently-captured".
40	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 78, S. 4.1.5.2 Fish length and weight	Figure 4-27 is missing the weight at length plots.	The plots disappeared during Word-to-PDF conversion of the report. The revised version of the report has been corrected (weight at length plots are now visible).
41	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 82, S. 4.2.1 Zooplankton, Table 4-17	Table 4-17 lists Apodichthys sp., a fish of the gunnel family (F. Pholidae), which was identified in the 2017 MEEMP (Golder 2018, pg. 87). If this identification is correct the fish was well outside the known range of the genus Apodichthys and likely introduced. Has this identification been independently confirmed or refuted?	The specimen identified as Apodichthys sp. in 2017 was reconfirmed by the laboratory to be banded gunnel (Pholis fasciata) which has a known range in the Arctic. The text in the 2018 MEEMP report has been revised accordingly.



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42	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 84, S. 4.2.1 Zooplankton	The footnote of Table 4-17 uses double asterisks (**) to identify some species as not having been caught in 2017, but some of these species are listed in the table as having been caught in 2017. Which is correct?	This was a typo. It was intended to state "taxa not identified in 2014, 2015 or 2016 but identified during baseline studies in 2008 or 2010." The text in the report has been revised accordingly.
43	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 84, S. 4.2.1 Zooplankton	RE: None of the newly identified zooplankton taxa could be identified as nonnative and none could be identified to species. If the new taxa were not identified to species how was the conclusion that they are indigenous species reached? Table 4-18 (pg. 84) suggests some possibilities but is in no way confirmative. Have specimens of these species been sent to other labs to see if the identifications can be confirmed?	Most of the taxa identified to genus level or higher in 2018 contained at least one species with a known occurrence in the Arctic or a taxon with a global distribution. Also, these taxa weren't identified in the invasive species databases. Taxa that raised potential concerns were verified by an independent laboratory. This included (names prior to re-assessment): Polydora sp., Pseudofabricia sp. nr. aberrans, Rhodine loveni, Eteone sp., Monocorophium insidosium, Mya arenaria, and Polycarpa pomaria.
44	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 87, S. 4.2.2 Benthic fauna	Of the 45 new benthic taxa 15 (33%) were identified to species, 26 to genus (58%), and 4 (9%) to a higher taxonomic level (Table 4-20). These percentages based on the table do not match those provided in the paragraph preceding the table. They also raise questions regarding the effectiveness of the AIS monitoring. Why were so many of the new taxa not identifiable to species? If there are intact specimens that could not be identified have they been	Reasons that certain specimens were not identified to species included: 1. The specimen was immature, and had not developed adult features required for species identification 2. The specimen was damaged during collection and did not have identifying features required for species identification 3. There was a paucity of literature for that taxa for the geographic region, thus information was lacking to identify a certain taxon to species with 100% confidence.



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			sent to other labs for identification?	All benthic invertebrate taxa were identified to the lowest level practical. Most of the taxa to genus level or higher in 2018 contained at least one species with a known occurrence in the Arctic or a taxon with a global distribution. It should be noted that species that are truly invasive worldwide tend to be well-known. If a well-established invasive species were present in the samples, and was mature enough and in good condition, it would be identified to species. Taxa that were flagged as potential concern (e.g., taxa that included a potentially invasive or non-native species) were verified by an independent laboratory. The report, including Table 4-20, has been revised to identify when a secondary species verification was undertaken by the independent laboratory.
45	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 89, S. 4.2.2 Benthic fauna	Which new benthic taxa were previously known from Arctic waters and from where? Which new taxa had unknown northern limits and from where have they been reported?	The report has been updated to reflect known benthic taxa ranges.



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46	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 91, S. 4.2.4 Fish and mobile epifauna	RE: marine fish identification, occurrence and ecology in Arctic Canada. There is an excellent new reference available: Coad, B.W., and Reist, J.D. (eds.). 2018. Marine fishes of Arctic Canada. Canada Museum of Nature and University of Toronto Press, Toronto. xiii + 618 pp.	Comment noted. This reference will be added to Baffinland's reference sources supportive of this program.	
47	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 92, S. 4.2.5 Encrusting epifauna, Table 4-22	The known range of Disporella hispida extends north to New England in the western Atlantic and north to Svalbard in the eastern Atlantic (www.sealifebase.org/summ ary/Disporella-hispida.html). These reports are far removed from northern Baffin Island and, despite its northern latitude, Svalbard offers milder oceanographical conditions than northern Baffin Island. QIA recommends that further work be conducted to establish whether this species is or is not indigenous. Bock and Gordon 2018a and 2018b cited in Table 4-22 are not included in the References.	Further work will be conducted to establish the species status of <i>D. hispida</i> including potential verification of species identification. The references cited by QIA have been added to the report.	



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48	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 92, S. 4.2.5 Encrusting epifauna	QIA supports the use of higher definition cameras and recommends collection of samples for taxonomic verification if the image resolution is insufficient for this purpose.	A higher definition ROV system with improved lighting will be employed in 2019 for this work.	
49	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 97. S. 5.2.1 Zooplankton and S. 5.2.2 Benthic infauna	RE: " [zooplankton] specimens that could not be identified to species level could be invasive or nonnativeor native to the Arctic", and that some of the newly identified benthic infauna had "unknown northern limitsthat presumably could have ranges that extend to Arctic waters." Measures are being taken to confirm the identity of Pseudofabricia sp. nr. aberrans. What measures are being taken to address these uncertainties related to potential species introductions for the other species?	Fauna of the Canadian Arctic are not thoroughly described, and marine surveys have been non-exhaustive, therefore it is possible that newly identified species in the Project area represent a first observation within a native range and not the introduction of a non-native species, or represent a non-native new species. Species identified in the AIS program that had not been described as Arctic species were compared against available databases for invasive species and their known taxonomy was described. Independent taxonomic verification for <i>Pseudofabricia sp. nr. aberrans</i> was conducted by Philippe Archambault's Benthic Ecology Lab at Université Laval. This analysis indicated that the <i>P. sp. nr. aberrans</i> specimens collected in 2018 could be <i>Manayunkia aesturiana</i> , a species which has a documented Arctic range.	



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50	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 98. S. 5.2.4 Fish and mobile epifauna	See Herlinveaux (1970: pg. 4) for the original Pond Inlet herring report: Herlinveaux, R.H. 1970. ICEPACK 8/68 – oceanographic and biological observations. Fisheries Research Board of Canada, Tech. Rep. 159: 60 pp.	Comment noted. This reference has been reviewed and has been added to the reference materials.
51	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 98, S. 5.2.5 Encrusting epifauna	RE: the difficulty of identifying juvenile stages of fouling taxa. The objective of these fouling studies is to identify the species in case they are non-indigenous and potentially invasive. Adaptive management measures should be considered to solve this problem, such as genetic testing, examination by a taxonomist familiar with the juvenile stage, leaving the plates in place until the specimens are identifiable, or a combination of methods.	The settlement plates and rocks were redeployed to allow for longer soak duration after a part of them were collected for analysis. This would allow juvenile specimens to reach adult stages when they are better identifiable. Additional measures will also be considered if the problem persists in the future, such as verification by a taxonomist familiar with the juvenile stages.
52	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. ii, Executive summary. See also Pg. 100. S. 6.0 Conclusions and summary	One of the 2018 monitoring program modifications was characterized as "6) extending the duration of the fish monitoring program to occur over the full openwater shipping season." Why then did "open water" fishing only extend from July 29 to August 26 (pg. 22 to 24, S. 3.1.5.2) when "open water" shipping extended from July 24 to October 18 (MEWG meeting December 2018)?	Comment noted. The text in the Executive Summary was replaced with "extending the duration of the fish monitoring program to occur over a longer extent of the openwater shipping season than in the previous years of studies."



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53	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Reference Pg. 101, S. 6.0 Conclusions and recommendati ons	QIA supports continuation of fish monitoring in 2019 but recommends that: 1) the level of gillnet sampling effort be increased to facilitate spatial and temporal comparisons, 2) Arctic char age determinations be checked by someone with long experience reading char otoliths, and 3) alternatives to the Fukui traps be considered that might generate useful benthic catch per unit effort data.	Gillnet fishing effort was higher in 2018 than in all previous years of monitoring and baseline studies. Arctic char and sculpin catches in 2018 were also higher than in any previous years of sampling. Increased fishing effort in 2019 is being proposed for 2019 including additional sampling methods. Arctic char age determination was conducted by qualified personnel in laboratory conditions. A description of Arctic char age determination methods has been added as an appendix to the report. Bottom trawls will be added to the fish sampling program in 2019, which targets the same fish species as would be collected in Fukui traps (demersal fish and mobile benthic invertebrates). Effort to improve effectiveness of fish collection using Fukui trap methods will also be made by varying sampling methodology (e.g., location, depth, bait, checking frequency, etc.). Should this method (Fukui traps) be determined to still be ineffective, other gear / methods (e.g. hoop nets) will be considered as part of future monitoring efforts.



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54	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 102, S. 6.0 Conclusions and recommendati ons	The AIS program concluded, "[no] non-native or invasive zooplankton, benthic epifauna, macroflora or fish taxa were found during 2018 studies." and that "No non-native taxa were detected in encrusting epifaunal samples." These statements need to be put into context as they suggest a level of certainty that is not supported by the fact that numerous new taxa were not identified to species, video resolution was inadequate for species identification, fouling species were not collected from ship hulls for identification, and taxa on the fouling plates were juveniles and difficult to identify.	Comment noted. The text has been revised to read: 'Based on AIS monitoring conducted to date, no confirmed invasive or non-native zooplankton, benthic epifauna, macroflora or fish taxa have been identified in the RSA.'
55	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Pg. 568 ff of 714, Appendix G-2. 2018MEEMP fish data	Why are the fish age data not archived in this table?	Fish age data is presented in Annexe G of the 2018 MEEMP Report. Specifically, Annexe G4 - Table entitled "Raw data from fish dissection and otolith aging for Golder Baffinland Fish 2018" (p. 656).
56	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Annexe L. Physical oceanography report, Pg. 19 (658 of 714), S. 2.3.1 Design, Table 8	The instrument accuracy column in Table 8 lists "Turbidity accuracy: 0.025 ug/l Chl". Chlorophyll <i>a</i> is not a turbidity metric. Should accuracy be listed for both turbidity and Chl?	This was an error in the unit used – the sensor has an accuracy of 0.01 NTU. This has been revised in the report.



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57	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Annexe L. Physical oceanography report, Pg. 37 (676 of 714), S. 3.3 CTD profiles	RE: last sentence on page. Isn't melting sea ice a source of freshwater at the surface?	Sea ice melt is noted but should also include sea ice melt and snowmelt to be more complete, the sentence has been revised.
56	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Annexe L. Physical oceanography report, Pg. 38 (677 of 714), S. 3.3 CTD profiles	Low salinity in the upper 5 m will limit the presence of marine species during the open water period, particularly at the head of Milne Inlet, favouring those that are anadromous (e.g., char) or euryhaline (e.g., sculpins). This is an important factor to consider when designing monitoring programs and selecting sampling depths (i.e., above and below the pycnocline) for long-term comparisons, since the depth and dilution of this layer vary seasonally and spatially within the Inlet.	The pycnocline at Milne Port extends to approximately 14-15 m (up to 20 m). Biological sampling at Milne Port occurs both above and below the pycnocline. Benthic infauna samples are collected from different depths strata, e.g. 3-5 m, 15-25 m, 25-35 m, and up to 100 m. Zooplankton samples are collected throughout the entire water column in general, including locations at water depths greater than 15 m. Fishing effort also occurs at various depths targeting pelagic (Arctic char), euryhaline (sculpins) and demersal saltwater (cod) fish. Sediment sampling mostly occurs in water depths equivalent to the pycnocline depth (~15 m) depending on the season and below the pycnocline depth (in areas up to 100 m water depth). Physical oceanography sampling also occurs both below and above the pycnocline: Above pycnocline - Ore Dock CTD is a fixed sensor obtaining continuous measurement of salinity near surface in the inlet throughout the open water season.



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		Reference		Below the pycnocline is well represented by moored time series and CTD profiling.
59	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Annexe L. Physical oceanography report, Pg. 41 (680 of 714), S. 3.4 Tide gauge	RE: no distinguishable variations in temperature and salinity during the ballast water discharge events. This statement is meaningless unless the characteristics of the ballast water discharge and receiving waters are provided for context. Otherwise it is not clear whether the null observation reflects closely similar discharge and receiving characteristics, rapid mixing, or a coherent plume that missed the instrumentation.	The referenced statement has been updated in the revised report to provide clarification. The statement refers to no distinguishable variations in temperature and salinity during the two events discussed and presented in Figure 27 of Annexe L. Physical Oceanography. As noted, the events occurred at the surface and within 15 m of the tide gauge sensor. The salinity and temperature of the ballast water during the events is known and the ambient water characteristics are known at the location of the tide gauge. The two water masses differ in both salinity and temperature (i.e. density). The statement refers to the observation that during the close proximity ballast discharge events, the ballast water was not observed in the instrument record. The statement does not refer to where the ballast water went or the mechanism of travel (i.e. coherent plume, near-surface mixing, etc.). The statement has been updated in the revised report to reflect this.



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60	2018 Milne Inlet Environmental Effects Monitoring Program (MEEMP) and Aquatic Invasive Species (AIS) Monitoring Program Report draft (file name "Baffinland_2018_MEEMP Report_DRAFT FOR MEWG.pdf")	Annexe L. Physical oceanography report, Pg. 41 (709 of 714), Appendix B. Tide Gauge installation instructions	The Figure 7 caption mentions an arrow that is not visible on the pdf.	The figure caption has been revised in the revised report.



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