



January 26, 2012

File: S095

Mr. Willard Hagen, Chair
Mackenzie Valley Land and Water Board
Box 2130
7th Floor, 4910-50th Avenue
Yellowknife, NT.
X1A 2P6

Dear Mr. Hagen:

Re: **Snap Lake Mine**
Water License MV20021L2-0002, Land Use Permit – MV2010D00053
Follow-Up Report on Spill Report # 11-469

BACKGROUND

On December 29th, 2011, the Site Services staff at Snap Lake Mine was conducting the inspection of the perimeter sumps of the North Pile. The employee reported water overflowing from Temporary Sump 4 (TS4) and running outside of containment to the tundra (Figure 1). Upon further investigation, water was found to be flowing into TS4 along the east wall (Figure 2). Although the origins of the flowing water were not known, it was assumed to be flowing from within containment. The high inflow of water to TS4 caused the level to rise quickly and overflow the sump. The UTM coordinates for the spill area are NAD12, 0505039 Easting by 7052528 Northing.

Approximately 5500 m³ of untreated surface water flowed out of containment, north to the tundra, a distance greater than 100m from Snap Lake. On December 29th, 2011 a containment berm was immediately constructed on the tundra to contain the spill; concurrent with this activity, a diversion ditch was dug from TS4 north toward Perimeter Sump 5 (PS5) (Figures 3 -6). A sample of the spill water was collected at 10:45 and the visible flow was measured at 0.55m/s.



DE BEERS CANADA INC.
SUITE 300, 5101-50th AVENUE, YELLOWKNIFE, NT X1A 3S8
TEL 1 (867) 766-7300 FAX 1 (867) 766-7347
www.debeerscanada.com

SPILL INVESTIGATION AND CONTINUAL IMPROVEMENT (ADAPTIVE MANAGEMENT)

Site staff worked quickly to reduce the flow of water overflowing from TS4 and to contain the extent of the spill with a number of mitigation activities (i.e. installation of pumps, construction of a series of containment freeze berms, and a diversion ditch). The known area of impact is 7540 m² (Appendix I – Map of Extent). The approximate total volume of spill is 5500 m³.

The diversion ditch was completed at 18:00 on December 29th, 2012 at which time overflow water was directed through the diversion ditch towards PS5. Water flowed in this ditch until the evening of December 30th, 2011. A letter of notification of emergency measures (dated December 30th, 2011) was consequently sent by De Beers to the Board. An update to the emergency measures was sent to the Board on January 3rd, 2012.

The spill has been monitored closely since its discovery and every effort has been made to measure and track its potential extent. A full suite of water samples was collected on December 29th 2011, and sent to ALS Environmental Laboratory. The results for the sample collected are attached (Appendix II – ALS Lab # L1100411). An ice sample was collected from the furthest known extent on January 5th, 2012 with the AANDC Inspector and sent to ALS Environmental Laboratory. The sample results are attached (Appendix III – ALS Lab # L1101799).

A comprehensive sampling and monitoring program is being developed to document and investigate any potential impacts to environment during the upcoming freshet and summer seasons. Golder Associates Ltd. was retained by De Beers to provide expertise for the freshet monitoring plan. This plan will be submitted by April 1st, 2012 under separate cover.

A reclamation team is currently developing the reclamation plan for the impacted area and will be forwarded under separate cover.

As requested by the AANDC Letter of Warning dated January 24, 2012 a root cause analysis is being undertaken in an effort to understand the cause of this spill. This root cause analysis will be submitted under separate cover.

In addition to containing the spill, De Beers has also successfully lowered the water levels in onsite surface water containment structures, including TS4. Water levels in all sumps will continue to be monitored.





I trust the above has addressed any areas of concern. Should you have any questions, comments or require further clarification, please do not hesitate to contact me at 767-8506 or e-mail Maxwell.Morapeli@debeerscanada.com

Sincerely,
DE BEERS CANADA INC.

A handwritten signature in blue ink, appearing to read "Maxwell Morapeli".

Maxwell Morapeli
Mine General Manager
Snap Lake Mine

Copied to: M. Casas
T. Covey
D. Raymond
C. Bolstad
File

MVLWB
AANDC
DBCI
DBCI



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FIGURE 1. SPILL REPORT



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY		REPORT NUMBER	
A	REPORT DATE (mmm-dd-yy) Dec-29-11	REPORT TIME (hhmm) 1230hrs	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT OR <input type="checkbox"/> UPDATE # TO THE ORIGINAL SPILL REPORT
B	OCCURRENCE DATE (mmm-dd-yy) Dec-29-11	OCCURRENCE TIME (hhmm) 0700hrs	11-469
C	LAND USE PERMIT NUMBER (IF APPLICABLE) MV2001C0012	WATER LICENCE NUMBER (IF APPLICABLE) MV2001L2-0002	
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Temporary Sump 4	REGION <input checked="" type="checkbox"/> NWT <input type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E	UTM COORDINATES 12V NAD83 EASTING 505039 NORTHING 7052528 LATITUDE 63 36' 2" LONGITUDE 110 53' 54"		
F	RESPONSIBLE PARTY OR VESSEL NAME De Beers Canada Inc.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION c/o Deton 'Cho 100 Dickens Road Yellowknife, NT. X1A 2P6	
G	ANY CONTRACTOR INVOLVED n/a	CONTRACTOR ADDRESS OR OFFICE LOCATION n/a	
H	PRODUCT SPILLED Process Water	QUANTITY IN LITRES KILOGRAMS OR CUBIC METERS unknown	U/N NUMBER n/a
	SECOND PRODUCT SPILLED (IF APPLICABLE) n/a	QUANTITY IN LITRES KILOGRAMS OR CUBIC METERS n/a	U/N NUMBER n/a
I	SPILL SOURCE Temporary Sump 4	SPILL CAUSE Sump Overflow	AREA OF CONTAMINATION IN SQUARE METERS 4500 sq.m.
J	FACTORS AFFECTING SPILL OR RECOVERY Freezing temperatures, tundra	DESCRIBE ANY ASSISTANCE REQUIRED none	HAZARDS TO PERSONS PROPERTY OR EQUIPMENT none
ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS			
K	<p>At 7am Temporary Sump #4 was found to be overflowing to the tundra. Spill is greater than 100m from Snap Lake.</p> <p>A sudden inflow of water from the North Pile caused the sump water level to rise quickly overnight.</p> <p>A berm has been placed to prevent the water from moving across the tundra and a ditch is being dug to divert the water back into containment.</p> <p>Pumping from the sump is being initiated.</p> <p>A sample was collected from the spill and will be sent out to the lab for rush analysis.</p>		
L	REPORTED TO SPILL LINE BY Deborah Flemming	POSITION Environmental Coordinator	EMPLOYER De Beers Canada Inc.
M	ANY ALTERNATE CONTACT Alex Hood	POSITION Enviro & Permitting Superintendent	EMPLOYER De Beers Canada Inc.
		LOCATION CALLING FROM Snap Lake	TELEPHONE 867-767-8763
		ALTERNATE CONTACT LOCATION YELLOWKNIFE, NT	ALTERNATE TELEPHONE 867-445-0870
REPORT LINE USE ONLY			
N	RECEIVED AT SPILL LINE BY	POSITION	EMPLOYER
		STATION OPERATOR	
			LOCATION CALLED YELLOWKNIFE, NT
			REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> COG <input type="checkbox"/> GHVT <input type="checkbox"/> GH <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC SIGNIFICANCE MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN <input type="checkbox"/> FILE STATUS FILE <input type="checkbox"/> CLOSED <input type="checkbox"/>			
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

FIGURE 2: LOCATION OF SPILL 11-469



FIGURE 3: INFLOW TO TS4 AT SOUTHEAST CORNER OF SUMP

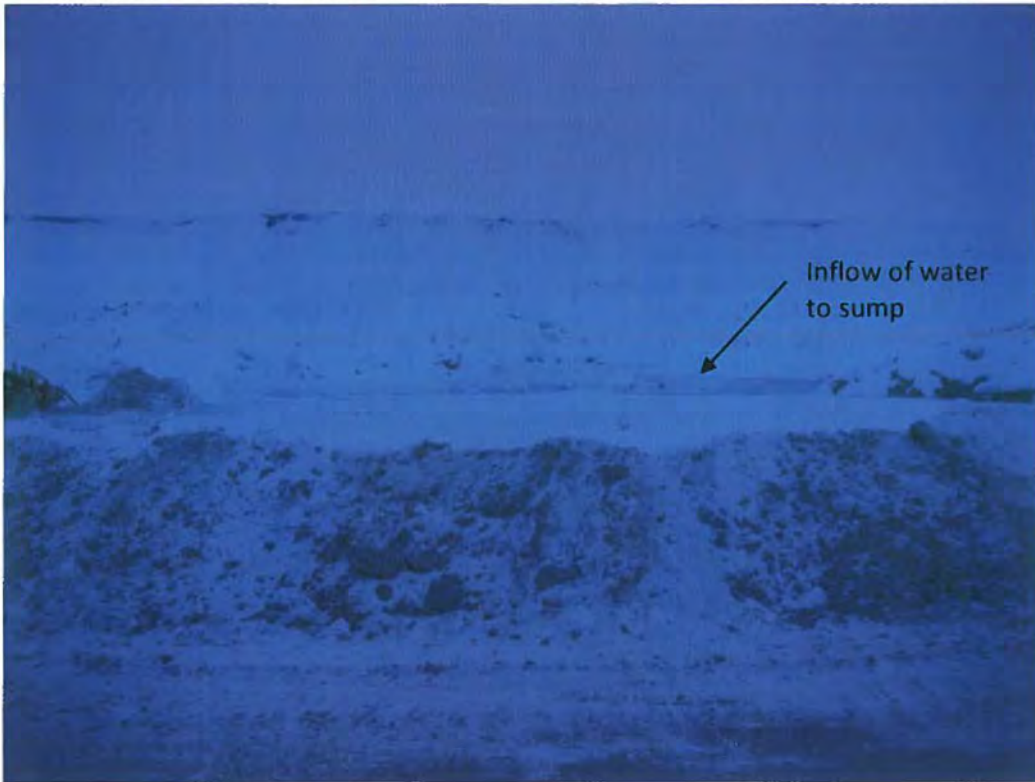


FIGURE 4: SPILL OVERVIEW

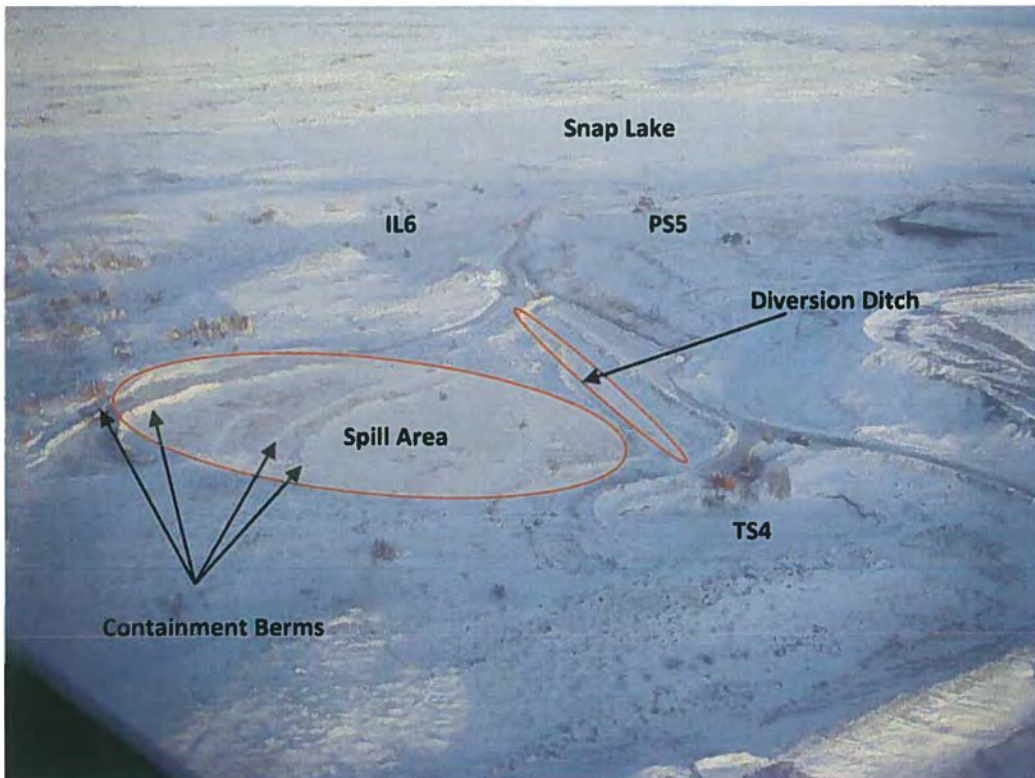


FIGURE 4: CONTAINMENT BERMS



FIGURE 5: FREEZE BERM AT 3RD CONTAINMENT BERM



FIGURE 6: DIVERSION DITCH – LOOKING NORTHWEST



APPENDIX I – MAP OF SPILL EXTENT
APPENDIX II – ALS LAB # L1100411
APPENDIX III – ALS LAB # L1101799





DeBeers Canada Inc.
ATTN: GAIL SETO
SNAP LAKE MINE c/o Deton'Cho Logist. Ltd
100 DICKENS STREET
YELLOWKNIFE NT X1A 2P9

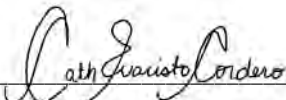
Date Received: 03-JAN-12
Report Date: 05-JAN-12 14:51 (MT)
Version: FINAL

Client Phone: 867-873-6970

Certificate of Analysis

Lab Work Order #: L1100411
Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:

Comments: L1100411-1; Analysis for N2N3, NO2 and NO3 was changed from low to regular level analysis



Catherine Evaristo-Cordero
Senior Account Manager

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

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ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

Debeers - ALS Sample Cross Reference Summary

Date Received	Debeers Sample ID	ALS Sample ID
03-JAN-2012	2011-1821	L1100411-1

ALS ENVIRONMENTAL CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qual.	D.L.	Units	Extracted	Analyzed	By
L1100411-1	2011-1821								
Sampled By: GUYLAINE GUEGUEN on 29-DEC-11 @ 11:04									
Matrix: WATER@W									
BTEX, F1 (C6-C10) and F2 (>C10-C16)									
BTEX and F1 (C6-C10)									
		Benzene	<0.00050		0.00050	mg/L	04-JAN-12	04-JAN-12	KHH
		Ethylbenzene	<0.00050		0.00050	mg/L	04-JAN-12	04-JAN-12	KHH
		F1(C6-C10)	<0.10		0.10	mg/L	04-JAN-12	04-JAN-12	KHH
		F1-BTEX	<0.10		0.10	mg/L	04-JAN-12	04-JAN-12	KHH
		Toluene	<0.00050		0.00050	mg/L	04-JAN-12	04-JAN-12	KHH
		Xylenes	<0.00071		0.00071	mg/L	04-JAN-12	04-JAN-12	KHH
		m+p-Xylene	<0.00050		0.00050	mg/L	04-JAN-12	04-JAN-12	KHH
		o-Xylene	<0.00050		0.00050	mg/L	04-JAN-12	04-JAN-12	KHH
F2 (>C10-C16)									
Surrogate:		2-Bromobenzotrifluoride	97.3		N/A	%	03-JAN-12	03-JAN-12	AO
		F2 (>C10-C16)	<0.25		0.25	mg/L	03-JAN-12	03-JAN-12	AO
Dissolved Metals - DeBeers									
Dissolved Metals in Water by CRC ICPMS									
		Aluminum (Al)-Dissolved	9.1		1.0	ug/L		04-JAN-12	CVM
		Antimony (Sb)-Dissolved	1.40		0.10	ug/L		04-JAN-12	CVM
		Arsenic (As)-Dissolved	0.34		0.10	ug/L		04-JAN-12	CVM
		Barium (Ba)-Dissolved	90.3		0.050	ug/L		04-JAN-12	CVM
		Beryllium (Be)-Dissolved	<0.50		0.50	ug/L		04-JAN-12	CVM
		Bismuth (Bi)-Dissolved	<0.050		0.050	ug/L		04-JAN-12	CVM
		Boron (B)-Dissolved	995	DLM	10	ug/L		04-JAN-12	CVM
		Cadmium (Cd)-Dissolved	0.024		0.010	ug/L		04-JAN-12	CVM
		Chromium (Cr)-Dissolved	0.22		0.10	ug/L		04-JAN-12	CVM
		Cobalt (Co)-Dissolved	1.53		0.10	ug/L		04-JAN-12	CVM
		Copper (Cu)-Dissolved	1.22		0.10	ug/L		04-JAN-12	CVM
		Lead (Pb)-Dissolved	<0.050		0.050	ug/L		04-JAN-12	CVM
		Lithium (Li)-Dissolved	47.4		5.0	ug/L		04-JAN-12	CVM
		Molybdenum (Mo)-Dissolved	63.8		0.050	ug/L		04-JAN-12	CVM
		Nickel (Ni)-Dissolved	34.3		0.10	ug/L		04-JAN-12	CVM
		Selenium (Se)-Dissolved	0.23		0.10	ug/L		04-JAN-12	CVM
		Silver (Ag)-Dissolved	<0.010		0.010	ug/L		04-JAN-12	CVM
		Strontium (Sr)-Dissolved	1990		0.10	ug/L		04-JAN-12	CVM
		Thallium (Tl)-Dissolved	0.088		0.050	ug/L		04-JAN-12	CVM
		Tin (Sn)-Dissolved	<0.10		0.10	ug/L		04-JAN-12	CVM
		Titanium (Ti)-Dissolved	<0.30		0.30	ug/L		04-JAN-12	CVM
		Uranium (U)-Dissolved	4.03		0.010	ug/L		04-JAN-12	CVM
		Vanadium (V)-Dissolved	0.66		0.10	ug/L		04-JAN-12	CVM
		Zinc (Zn)-Dissolved	12.0		1.0	ug/L		04-JAN-12	CVM
		Iron (Fe)-Dissolved	<10		10	ug/L		03-JAN-12	JWU
		Manganese (Mn)-Dissolved	72.5		2.0	ug/L		03-JAN-12	JWU
		Cesium (Cs)-Dissolved	0.58		0.10	ug/L		04-JAN-12	CVM
		Rubidium (Rb)-Dissolved	61.2		1.0	ug/L		04-JAN-12	CVM
		Mercury (Hg)-Dissolved	<0.020		0.020	ug/L		04-JAN-12	MVE
Total Metals - DeBeers									
Total Metals in Water by CRC ICPMS									
		Aluminum (Al)-Total	283		1.0	ug/L		04-JAN-12	CVM
		Antimony (Sb)-Total	1.57		0.10	ug/L		04-JAN-12	CVM
		Arsenic (As)-Total	0.44		0.10	ug/L		04-JAN-12	CVM
		Barium (Ba)-Total	99.2		0.050	ug/L		04-JAN-12	CVM
		Beryllium (Be)-Total	<0.50		0.50	ug/L		04-JAN-12	CVM
		Bismuth (Bi)-Total	<0.050		0.050	ug/L		04-JAN-12	CVM
		Boron (B)-Total	1280	DLM	10	ug/L		04-JAN-12	CVM
		Cadmium (Cd)-Total	0.023		0.010	ug/L		04-JAN-12	CVM

ALS ENVIRONMENTAL CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qual.	D.L.	Units	Extracted	Analyzed	By
L1100411-1	2011-1821								
Sampled By: GUYLAINE GUEGUEN on 29-DEC-11 @ 11:04									
Matrix: WATER@W									
Total Metals - DeBeers									
Total Metals in Water by CRC ICPMS									
		Chromium (Cr)-Total	0.86		0.10	ug/L		04-JAN-12	CVM
		Cobalt (Co)-Total	1.85		0.10	ug/L		04-JAN-12	CVM
		Copper (Cu)-Total	1.92		0.10	ug/L		04-JAN-12	CVM
		Lead (Pb)-Total	0.582		0.050	ug/L		04-JAN-12	CVM
		Lithium (Li)-Total	66.6		5.0	ug/L		04-JAN-12	CVM
		Molybdenum (Mo)-Total	75.3		0.050	ug/L		04-JAN-12	CVM
		Nickel (Ni)-Total	37.5		0.10	ug/L		04-JAN-12	CVM
		Selenium (Se)-Total	0.24		0.10	ug/L		04-JAN-12	CVM
		Silver (Ag)-Total	<0.010		0.010	ug/L		04-JAN-12	CVM
		Strontium (Sr)-Total	2320		0.10	ug/L		04-JAN-12	CVM
		Thallium (Tl)-Total	0.108		0.050	ug/L		04-JAN-12	CVM
		Tin (Sn)-Total	<0.10		0.10	ug/L		04-JAN-12	CVM
		Titanium (Ti)-Total	19.5		0.30	ug/L		04-JAN-12	CVM
		Uranium (U)-Total	4.79		0.010	ug/L		04-JAN-12	CVM
		Vanadium (V)-Total	1.66		0.10	ug/L		04-JAN-12	CVM
		Zinc (Zn)-Total	15.3		1.0	ug/L		04-JAN-12	CVM
		Mercury (Hg)-Total	<0.020		0.020	ug/L		04-JAN-12	MVE
		Cesium (Cs)-Total	0.73		0.10	ug/L		04-JAN-12	CVM
		Iron (Fe)-Total	444		10	ug/L		04-JAN-12	JWU
		Manganese (Mn)-Total	91.7		2.0	ug/L		04-JAN-12	JWU
		Rubidium (Rb)-Total	66.8		1.0	ug/L		04-JAN-12	CVM
NO2, NO3, & (NO2+NO3) in Water									
		Nitrate (as N)	124	DLM	0.50	mg/L		03-JAN-12	AMY/S
		Nitrate and Nitrite (as N)	125		0.50	mg/L		04-JAN-12	
		Nitrite (as N)	0.580	RRV	0.050	mg/L		03-JAN-12	AMY/S
Routine Water Analysis - Low Level									
Diss. Metals in Water by ICPOES (Low)									
		Calcium (Ca)-Dissolved	130		0.50	mg/L		03-JAN-12	JWU
		Magnesium (Mg)-Dissolved	65.2		0.10	mg/L		03-JAN-12	JWU
		Potassium (K)-Dissolved	37.1		0.10	mg/L		03-JAN-12	JWU
		Sodium (Na)-Dissolved	127		1.0	mg/L		03-JAN-12	JWU
Ion Balance Calculation									
		Hardness (as CaCO3)	593			mg/L		04-JAN-12	
		Ion Balance	90.9			%		04-JAN-12	
		TDS (Calculated)	1440			mg/L		04-JAN-12	
pH, Conductivity and Total Alkalinity									
		Alkalinity, Total (as CaCO3)	46.2		5.0	mg/L		03-JAN-12	CLTT
		Bicarbonate (HCO3)	56.4		5.0	mg/L		03-JAN-12	CLTT
		Carbonate (CO3)	<5.0		5.0	mg/L		03-JAN-12	CLTT
		Conductivity (EC)	2420		0.20	uS/cm		03-JAN-12	CLTT
		Hydroxide (OH)	<5.0		5.0	mg/L		03-JAN-12	CLTT
		pH	7.67		0.10	pH		03-JAN-12	CLTT
		Chloride (Cl)	318	RRV	0.50	mg/L		03-JAN-12	AMY/S
		Fluoride (F)	1.30	RRV	0.050	mg/L		03-JAN-12	AMY/S
		Sulfate (SO4)	179	RRV	0.050	mg/L		03-JAN-12	AMY/S
		Acidity (as CaCO3)	<5.0		5.0	mg/L		04-JAN-12	MLIM
		Ammonia (as N)	30.8		0.0050	mg/L		04-JAN-12	LMK
		Orthophosphate-Dissolved (as P)	0.0052		0.0010	mg/L		04-JAN-12	JHN
		Sum Of BTEX	<0.00071		0.00071	mg/L		04-JAN-12	
		Total Kjeldahl Nitrogen	26.6	TBLN	0.050	mg/L	04-JAN-12	04-JAN-12	LMK

ALS ENVIRONMENTAL CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qual.	D.L.	Units	Extracted	Analyzed	By
L1100411-1	2011-1821								
Sampled By:		GUYLAINE GUEGUEN on 29-DEC-11 @ 11:04							
Matrix:		WATER@W							
		Phosphorus (P)-Total Dissolved	0.0112		0.0010	mg/L		04-JAN-12	AMY
		Total Dissolved Solids	1440		10	mg/L		04-JAN-12	SVG
		Total Organic Carbon	2.5		1.0	mg/L		04-JAN-12	ZOW
		Phosphorus (P)-Total	0.0174		0.0010	mg/L		04-JAN-12	AMY
		Total Suspended Solids	13.0		3.0	mg/L		03-JAN-12	SVG
		Turbidity	8.99		0.10	NTU		03-JAN-12	SVG

Reference Information

Qualifiers for Individual Samples Listed:

Sample Number	Client ID	Qualifier	Description
L1100411-1	2011-1821	SFP	Sample was Filtered and Preserved at the laboratory - TDP-LOW

Sample Parameter Qualifier key listed:

Qualifier	Description
RRV	Reported Result Verified By Repeat Analysis
TBLN	TKN value biased low, likely due to nitrate interference.
DLM	Detection Limit Adjusted For Sample Matrix Effects

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ACIDITY-ED	Water	Acidity (as CaCO3)		APHA 2310 B - Potentiometric Titration
BTX,F1-ED	Water	BTEX and F1 (C6-C10)	EPA 5021	EPA 5021/8015&8260 GC-MS & FID
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CL-IC-ED	Water	Chloride by IC		APHA 4110 B-ION CHROMATOGRAPHY
CS-D-CCMS-ED	Water	Dissolved Cesium in Water by CRC ICPMS		APHA 3030 B / EPA SW-846 6020A
		This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).		
CS-T-CCMS-ED	Water	Total Cesium in Water by CRC ICPMS	APHA 3030E	APHA 3030 E / EPA SW-846 6020A
		This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).		
ETL-BTX-SUM-ED	Water	Sum of BTX		Calculation
F-IC-ED	Water	Fluoride by IC		APHA 4110 B-ION CHROMATOGRAPHY
F2-ED	Water	F2 (>C10-C16)		EPA 3510/CCME PHC CWS-GC-FID
FE-D-L-ICP-ED	Water	Diss. Fe in Water by ICPOES (Low Level)		APHA 3120 B-ICP-OES
FE-T-L-ICP-ED	Water	Total Fe in Water by ICPOES (Low Level)	APHA 3030E	APHA 3120 B-ICP-OES
HG-D-L-CVAA-ED	Water	Mercury (Hg) - Dissolved		EPA 245.7 / EPA 245.1
HG-T-L-CVAA-ED	Water	Mercury (Hg)		EPA 245.7 / EPA 245.1
IONBALANCE-ED	Water	Ion Balance Calculation		APHA 1030E
MET-D-CCMS-ED	Water	Dissolved Metals in Water by CRC ICPMS		APHA 3030 B&E / EPA SW-846 6020A
MET-D-L-ICP-ED	Water	Diss. Metals in Water by ICPOES (Low)		APHA 3120 B-ICP-OES
MET-T-CCMS-ED	Water	Total Metals in Water by CRC ICPMS	APHA 3030E	APHA 3030 B&E / EPA SW-846 6020A
MN-D-L-ICP-ED	Water	Diss. Mn in Water by ICPOES (Low Level)		APHA 3120 B ICP-OES
MN-T-L-ICP-ED	Water	Total Mn in Water by ICPOES (Low Level)	APHA 3030E	APHA 3120 B-ICP-OES
NH3-L-CFA-ED	Water	Ammonia in Water by Colour		APHA 4500 NH3-NITROGEN

Reference Information

			(AMMONIA)
	This analysis is carried out using procedures adapted from APHA Method 4500 NH3 "NITROGEN (AMMONIA)". Ammonia is determined using the automated phenate colourimetric method.		
NO2+NO3-CALC-ED	Water	Nitrate+Nitrite	CALCULATION
NO2-IC-ED	Water	Nitrite as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
NO3-IC-ED	Water	Nitrate as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
P-T-L-COL-ED	Water	Total P in Water by Colour	APHA 4500-P PHOSPHORUS
	This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Phosphorus is determined colourimetrically after persulphate digestion of the sample.		
P-TD-L-COL-ED	Water	Total Dissolved P in Water by Colour	APHA 4500-P PHOSPHORUS
	This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Dissolved Phosphorus is determined colourimetrically after persulphate digestion of a sample that has been lab or field filtered through a 0.45 micron membrane filter.		
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity	APHA 4500-H, 2510, 2320
	All samples analyzed by this method for pH will have exceeded the 15 minute recommended hold time from time of sampling (field analysis is recommended for pH where highly accurate results are needed)		
PO4-DO-L-COL-ED	Water	Diss. Orthophosphate in Water by Colour	APHA 4500-P PHOSPHORUS
	This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Dissolved Orthophosphate is determined colourimetrically on a sample that has been lab or field filtered through a 0.45 micron membrane filter.		
RB-D-CCMS-ED	Water	Dissolved Rubidium in Water by CRC ICPMS	APHA 3030 B / EPA SW-846 6020A
	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).		
RB-T-CCMS-ED	Water	Total Rubidium in Water by CRC ICPMS	APHA 3030 E / EPA SW-846 6020A
	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).		
SO4-L-IC-ED	Water	Sulfate by IC (Low Level)	APHA 4110 B-ION CHROMATOGRAPHY
SOLIDS-TDS-ED	Water	Total Dissolved Solids	APHA 2540 C
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
TKN-L-CFA-ED	Water	TKN in Water by Colour	APHA 4500-NORG (TKN)
	This analysis is carried out using procedures adapted from APHA Method 4500-Norg "Nitrogen (Organic)". Total Kjeldahl Nitrogen is determined by sample digestion at 380 celcius with analysis using an automated colourimetric finish.		
TURBIDITY-ED	Water	Turbidity	APHA 2130 B-Nephelometer

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

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	Laboratory Definition Code	Laboratory Location
ED	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA		

Reference Information

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

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

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

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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Workorder: L1100411

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ACIDITY-ED								
	Water							
Batch	R2308678							
WG1412124-3	DUP	L1100410-1						
Acidity (as CaCO3)		<5.0	<5.0	RPD-NA	mg/L	N/A	26	04-JAN-12
WG1412124-2	LCS							
Acidity (as CaCO3)			105.0		%		85-115	04-JAN-12
WG1412124-1	MB							
Acidity (as CaCO3)			<5.0		mg/L		5	04-JAN-12
BTX,F1-ED								
	Water							
Batch	R2308465							
WG1411659-2	LCS							
Benzene			92.9		%		70-130	04-JAN-12
Toluene			95.1		%		70-130	04-JAN-12
Ethylbenzene			88.1		%		70-130	04-JAN-12
o-Xylene			90.3		%		70-130	04-JAN-12
m+p-Xylene			90.0		%		70-130	04-JAN-12
WG1411659-3	LCS							
F1(C6-C10)			75.9		%		70-130	04-JAN-12
WG1411659-1	MB							
Benzene			<0.00050		mg/L		0.0005	04-JAN-12
Toluene			<0.00050		mg/L		0.0005	04-JAN-12
Ethylbenzene			<0.00050		mg/L		0.0005	04-JAN-12
o-Xylene			<0.00050		mg/L		0.0005	04-JAN-12
m+p-Xylene			<0.00050		mg/L		0.0005	04-JAN-12
F1(C6-C10)			<0.10		mg/L		0.1	04-JAN-12
C-TOT-ORG-ED								
	Water							
Batch	R2308646							
WG1412076-3	CVS							
Total Organic Carbon			105.6		%		80-160	04-JAN-12
WG1412076-4	DUP	L1100490-6						
Total Organic Carbon		32.2	33.0		mg/L	2.3	20	04-JAN-12
WG1412076-2	LCS							
Total Organic Carbon			102.0		%		80-120	04-JAN-12
WG1412076-1	MB							
Total Organic Carbon			<1.0		mg/L		1	04-JAN-12
WG1412076-5	MS	L1100490-6						
Total Organic Carbon			N/A	MS-B	%		-	04-JAN-12
CL-IC-ED								
	Water							



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CL-IC-ED		Water						
Batch	R2308609							
WG1411699-3	DUP	L1100337-1						
Chloride (Cl)		35.9	35.9		mg/L	0.035	20	03-JAN-12
WG1411699-2	LCS							
Chloride (Cl)			101.3		%		85-115	03-JAN-12
WG1411699-1	MB							
Chloride (Cl)			<0.50		mg/L		0.5	03-JAN-12
WG1411699-4	MS	L1100337-1						
Chloride (Cl)			105.5		%		75-125	03-JAN-12
CS-D-CCMS-ED		Water						
Batch	R2309074							
WG1412086-3	DUP	L1100411-1						
Cesium (Cs)-Dissolved		0.00058	0.00056		mg/L	2.5	20	04-JAN-12
WG1412086-1	MB							
Cesium (Cs)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
CS-T-CCMS-ED		Water						
Batch	R2308699							
WG1411953-4	DUP	L1100411-1						
Cesium (Cs)-Total		0.00073	0.00064		mg/L	13	20	04-JAN-12
WG1411953-1	MB							
Cesium (Cs)-Total			<0.00010		mg/L		0.0001	04-JAN-12
F-IC-ED		Water						
Batch	R2308609							
WG1411699-3	DUP	L1100337-1						
Fluoride (F)		2.13	2.13		mg/L	0.047	20	03-JAN-12
WG1411699-2	LCS							
Fluoride (F)			102.9		%		85-115	03-JAN-12
WG1411699-1	MB							
Fluoride (F)			<0.050		mg/L		0.05	03-JAN-12
WG1411699-4	MS	L1100337-1						
Fluoride (F)			N/A	MS-B	%		-	03-JAN-12
F2-ED		Water						
Batch	R2308703							
WG1412094-2	LCS							
F2 (>C10-C16)			87.8		%		65-135	03-JAN-12
WG1412094-1	MB							
F2 (>C10-C16)			<0.25		mg/L		0.25	03-JAN-12
Surrogate: 2-Bromobenzotrifluoride			99.9		%		65-135	03-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F2-ED Water								
Batch	R2308703							
WG1412094-3	MS	L1100410-1						
F2 (>C10-C16)			84.5		%		50-150	03-JAN-12
FE-D-L-ICP-ED Water								
Batch	R2308204							
WG1411504-2	CRM	EU-H-3_OPTWATER						
Iron (Fe)-Dissolved			101.5		%		80-120	03-JAN-12
WG1411504-1	MB							
Iron (Fe)-Dissolved			<0.010		mg/L		0.01	03-JAN-12
FE-T-L-ICP-ED Water								
Batch	R2308632							
WG1411953-4	DUP	L1100411-1						
Iron (Fe)-Total		0.444	0.452		mg/L	1.8	20	04-JAN-12
WG1411953-2	LCS							
Iron (Fe)-Total			82.7		%		80-120	04-JAN-12
WG1411953-1	MB							
Iron (Fe)-Total			<0.010		mg/L		0.01	04-JAN-12
HG-D-L-CVAA-ED Water								
Batch	R2308624							
WG1411834-4	DUP	L1096730-82						
Mercury (Hg)-Dissolved		<0.000020	<0.000020	RPD-NA	mg/L	N/A	20	04-JAN-12
WG1411834-2	LCS							
Mercury (Hg)-Dissolved			98.1		%		80-120	04-JAN-12
WG1411834-3	LCSD	WG1411834-2						
Mercury (Hg)-Dissolved		98.1	97		%	1.2	20	04-JAN-12
WG1411834-1	MB							
Mercury (Hg)-Dissolved			<0.000020		mg/L		0.00002	04-JAN-12
WG1411834-5	MS	L1096730-82						
Mercury (Hg)-Dissolved			96.3		%		70-130	04-JAN-12
HG-T-L-CVAA-ED Water								
Batch	R2308624							
WG1411834-2	LCS							
Mercury (Hg)-Total			98.1		%		80-120	04-JAN-12
WG1411834-3	LCSD	WG1411834-2						
Mercury (Hg)-Total		98.1	97		%	1.2	20	04-JAN-12
WG1411834-1	MB							
Mercury (Hg)-Total			<0.000020		mg/L		0.00002	04-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-CCMS-ED		Water						
Batch	R2309074							
WG1412086-2 CRM	ED-HIGH-WATRM							
Aluminum (Al)-Dissolved			96.5		%		80-120	04-JAN-12
Antimony (Sb)-Dissolved			99.5		%		80-120	04-JAN-12
Arsenic (As)-Dissolved			93.6		%		80-120	04-JAN-12
Barium (Ba)-Dissolved			95.8		%		80-120	04-JAN-12
Beryllium (Be)-Dissolved			102.6		%		80-120	04-JAN-12
Bismuth (Bi)-Dissolved			102.5		%		80-120	04-JAN-12
Boron (B)-Dissolved			96.6		%		80-120	04-JAN-12
Cadmium (Cd)-Dissolved			98.5		%		80-120	04-JAN-12
Chromium (Cr)-Dissolved			93.1		%		80-120	04-JAN-12
Cobalt (Co)-Dissolved			93.9		%		80-120	04-JAN-12
Copper (Cu)-Dissolved			92.0		%		80-120	04-JAN-12
Lead (Pb)-Dissolved			101.2		%		80-120	04-JAN-12
Lithium (Li)-Dissolved			103.6		%		80-120	04-JAN-12
Molybdenum (Mo)-Dissolved			101.4		%		80-120	04-JAN-12
Nickel (Ni)-Dissolved			93.9		%		80-120	04-JAN-12
Selenium (Se)-Dissolved			99.7		%		80-120	04-JAN-12
Silver (Ag)-Dissolved			97.4		%		80-120	04-JAN-12
Strontium (Sr)-Dissolved			103.6		%		80-120	04-JAN-12
Thallium (Tl)-Dissolved			103.3		%		80-120	04-JAN-12
Titanium (Ti)-Dissolved			102.8		%		80-120	04-JAN-12
Tin (Sn)-Dissolved			100.2		%		80-120	04-JAN-12
Uranium (U)-Dissolved			102.2		%		80-120	04-JAN-12
Vanadium (V)-Dissolved			94.9		%		80-120	04-JAN-12
Zinc (Zn)-Dissolved			95.5		%		80-120	04-JAN-12
WG1412086-3 DUP		L1100411-1						
Aluminum (Al)-Dissolved		0.0091	0.0093		mg/L	3.0	20	04-JAN-12
Antimony (Sb)-Dissolved		0.00140	0.00134		mg/L	4.2	20	04-JAN-12
Arsenic (As)-Dissolved		0.00034	0.00038		mg/L	12	20	04-JAN-12
Barium (Ba)-Dissolved		0.0903	0.0917		mg/L	1.5	20	04-JAN-12
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	04-JAN-12
Bismuth (Bi)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	04-JAN-12
Boron (B)-Dissolved		0.995	0.945		mg/L	5.2	20	04-JAN-12
Cadmium (Cd)-Dissolved		0.000024	0.000023		mg/L	3.2	20	04-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-CCMS-ED								
	Water							
Batch	R2309074							
WG1412086-3	DUP	L1100411-1						
Chromium (Cr)-Dissolved		0.00022	0.00018	J	mg/L	0.00004	0.0002	04-JAN-12
Cobalt (Co)-Dissolved		0.00153	0.00151		mg/L	1.1	20	04-JAN-12
Copper (Cu)-Dissolved		0.00122	0.00115		mg/L	6.2	20	04-JAN-12
Lead (Pb)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	04-JAN-12
Lithium (Li)-Dissolved		0.0474	0.0449		mg/L	5.3	20	04-JAN-12
Molybdenum (Mo)-Dissolved		0.0638	0.0640		mg/L	0.31	20	04-JAN-12
Nickel (Ni)-Dissolved		0.0343	0.0343		mg/L	0.037	20	04-JAN-12
Selenium (Se)-Dissolved		0.00023	0.00021		mg/L	8.2	20	04-JAN-12
Silver (Ag)-Dissolved		<0.000010	<0.000010	RPD-NA	mg/L	N/A	20	04-JAN-12
Strontium (Sr)-Dissolved		1.99	1.98		mg/L	0.44	20	04-JAN-12
Thallium (Tl)-Dissolved		0.000088	0.000095		mg/L	6.7	20	04-JAN-12
Titanium (Ti)-Dissolved		<0.00030	<0.00030	RPD-NA	mg/L	N/A	20	04-JAN-12
Tin (Sn)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	04-JAN-12
Uranium (U)-Dissolved		0.00403	0.00409		mg/L	1.4	20	04-JAN-12
Vanadium (V)-Dissolved		0.00066	0.00070		mg/L	5.3	20	04-JAN-12
Zinc (Zn)-Dissolved		0.0120	0.0124		mg/L	3.4	20	04-JAN-12
WG1412086-1	MB							
Aluminum (Al)-Dissolved			<0.0010		mg/L		0.001	04-JAN-12
Antimony (Sb)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Arsenic (As)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Barium (Ba)-Dissolved			<0.000050		mg/L		0.00005	04-JAN-12
Beryllium (Be)-Dissolved			<0.00050		mg/L		0.0005	04-JAN-12
Bismuth (Bi)-Dissolved			<0.000050		mg/L		0.00005	04-JAN-12
Boron (B)-Dissolved			<0.0020		mg/L		0.002	04-JAN-12
Cadmium (Cd)-Dissolved			<0.000010		mg/L		0.00001	04-JAN-12
Chromium (Cr)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Cobalt (Co)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Copper (Cu)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Lead (Pb)-Dissolved			<0.000050		mg/L		0.00005	04-JAN-12
Lithium (Li)-Dissolved			<0.0050		mg/L		0.005	04-JAN-12
Molybdenum (Mo)-Dissolved			<0.000050		mg/L		0.00005	04-JAN-12
Nickel (Ni)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Selenium (Se)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-CCMS-ED		Water						
Batch	R2309074							
WG1412086-1 MB								
Silver (Ag)-Dissolved			<0.000010		mg/L		0.00001	04-JAN-12
Strontium (Sr)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Thallium (Tl)-Dissolved			<0.000050		mg/L		0.00005	04-JAN-12
Titanium (Ti)-Dissolved			<0.00030		mg/L		0.0003	04-JAN-12
Tin (Sn)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Uranium (U)-Dissolved			<0.000010		mg/L		0.00001	04-JAN-12
Vanadium (V)-Dissolved			<0.00010		mg/L		0.0001	04-JAN-12
Zinc (Zn)-Dissolved			<0.0010		mg/L		0.001	04-JAN-12
MET-D-L-ICP-ED		Water						
Batch	R2308204							
WG1411504-2 CRM	EU-H-3_OPTWATER							
Calcium (Ca)-Dissolved			102.3		%		80-120	03-JAN-12
Magnesium (Mg)-Dissolved			103.9		%		80-120	03-JAN-12
Potassium (K)-Dissolved			100.1		%		80-120	03-JAN-12
Sodium (Na)-Dissolved			102.0		%		80-120	03-JAN-12
WG1411504-3 DUP	L1099374-1							
Calcium (Ca)-Dissolved		117	108		mg/L	8.6	20	03-JAN-12
Magnesium (Mg)-Dissolved		11.9	11.0		mg/L	7.3	20	03-JAN-12
Potassium (K)-Dissolved		3.77	3.51		mg/L	7.1	20	03-JAN-12
Sodium (Na)-Dissolved		58.1	55.0		mg/L	5.4	20	03-JAN-12
WG1411504-1 MB								
Calcium (Ca)-Dissolved			<0.20		mg/L		0.2	03-JAN-12
Magnesium (Mg)-Dissolved			<0.10		mg/L		0.1	03-JAN-12
Potassium (K)-Dissolved			<0.10		mg/L		0.1	03-JAN-12
Sodium (Na)-Dissolved			<0.50		mg/L		0.5	03-JAN-12
MET-T-CCMS-ED		Water						
Batch	R2308699							
WG1411953-4 DUP	L1100411-1							
Aluminum (Al)-Total		0.283	0.281		mg/L	0.64	20	04-JAN-12
Antimony (Sb)-Total		0.00157	0.00139		mg/L	13	20	04-JAN-12
Arsenic (As)-Total		0.00044	0.00043		mg/L	2.6	20	04-JAN-12
Barium (Ba)-Total		0.0992	0.0996		mg/L	0.46	20	04-JAN-12
Beryllium (Be)-Total		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	04-JAN-12
Bismuth (Bi)-Total		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	04-JAN-12



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Workorder: L1100411

Report Date: 05-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-CCMS-ED								
	Water							
Batch	R2308699							
WG1411953-4	DUP	L1100411-1						
Boron (B)-Total		1.28	1.11		mg/L	14	20	04-JAN-12
Cadmium (Cd)-Total		0.000023	0.000026		mg/L	9.9	20	04-JAN-12
Chromium (Cr)-Total		0.00086	0.00090		mg/L	4.0	20	04-JAN-12
Cobalt (Co)-Total		0.00185	0.00185		mg/L	0.068	20	04-JAN-12
Copper (Cu)-Total		0.00192	0.00196		mg/L	1.9	20	04-JAN-12
Lead (Pb)-Total		0.000582	0.000523		mg/L	11	20	04-JAN-12
Lithium (Li)-Total		0.0666	0.0572		mg/L	15	20	04-JAN-12
Molybdenum (Mo)-Total		0.0753	0.0665		mg/L	12	20	04-JAN-12
Nickel (Ni)-Total		0.0375	0.0379		mg/L	0.97	20	04-JAN-12
Selenium (Se)-Total		0.00024	0.00023		mg/L	0.77	20	04-JAN-12
Silver (Ag)-Total		<0.000010	<0.000010	RPD-NA	mg/L	N/A	20	04-JAN-12
Strontium (Sr)-Total		2.32	2.05		mg/L	12	20	04-JAN-12
Thallium (Tl)-Total		0.000108	0.000092		mg/L	15	20	04-JAN-12
Tin (Sn)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	04-JAN-12
Titanium (Ti)-Total		0.0195	0.0192		mg/L	1.8	20	04-JAN-12
Uranium (U)-Total		0.00479	0.00421		mg/L	13	20	04-JAN-12
Vanadium (V)-Total		0.00166	0.00166		mg/L	0.054	20	04-JAN-12
Zinc (Zn)-Total		0.0153	0.0156		mg/L	1.7	20	04-JAN-12
WG1411953-2	LCS							
Aluminum (Al)-Total			80.6		%		80-120	04-JAN-12
Antimony (Sb)-Total			84.5		%		80-120	04-JAN-12
Arsenic (As)-Total			83.0		%		80-120	04-JAN-12
Barium (Ba)-Total			85.0		%		80-120	04-JAN-12
Bismuth (Bi)-Total			86.2		%		80-120	04-JAN-12
Cadmium (Cd)-Total			87.2		%		80-120	04-JAN-12
Chromium (Cr)-Total			83.1		%		80-120	04-JAN-12
Cobalt (Co)-Total			86.0		%		80-120	04-JAN-12
Copper (Cu)-Total			84.2		%		80-120	04-JAN-12
Lead (Pb)-Total			85.1		%		80-120	04-JAN-12
Molybdenum (Mo)-Total			89.6		%		80-120	04-JAN-12
Nickel (Ni)-Total			84.8		%		80-120	04-JAN-12
Selenium (Se)-Total			85.1		%		80-120	04-JAN-12
Silver (Ag)-Total			81.6		%		80-120	04-JAN-12



Quality Control Report

Workorder: L1100411

Report Date: 05-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-CCMS-ED		Water						
Batch	R2308699							
WG1411953-2 LCS								
Strontium (Sr)-Total			90.5		%		80-120	04-JAN-12
Thallium (Tl)-Total			87.0		%		80-120	04-JAN-12
Tin (Sn)-Total			84.5		%		80-120	04-JAN-12
Uranium (U)-Total			86.9		%		80-120	04-JAN-12
Vanadium (V)-Total			84.0		%		80-120	04-JAN-12
Zinc (Zn)-Total			85.3		%		80-120	04-JAN-12
WG1411953-1 MB								
Antimony (Sb)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Arsenic (As)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Barium (Ba)-Total			<0.000050		mg/L		0.00005	04-JAN-12
Beryllium (Be)-Total			<0.00050		mg/L		0.0005	04-JAN-12
Bismuth (Bi)-Total			<0.000050		mg/L		0.00005	04-JAN-12
Cadmium (Cd)-Total			<0.000010		mg/L		0.00001	04-JAN-12
Chromium (Cr)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Cobalt (Co)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Copper (Cu)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Lead (Pb)-Total			<0.000050		mg/L		0.00005	04-JAN-12
Lithium (Li)-Total			<0.0050		mg/L		0.005	04-JAN-12
Molybdenum (Mo)-Total			<0.000050		mg/L		0.00005	04-JAN-12
Nickel (Ni)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Selenium (Se)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Silver (Ag)-Total			<0.000010		mg/L		0.00001	04-JAN-12
Strontium (Sr)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Thallium (Tl)-Total			<0.000050		mg/L		0.00005	04-JAN-12
Tin (Sn)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Titanium (Ti)-Total			<0.00030		mg/L		0.0003	04-JAN-12
Uranium (U)-Total			<0.000010		mg/L		0.00001	04-JAN-12
Vanadium (V)-Total			<0.00010		mg/L		0.0001	04-JAN-12
Zinc (Zn)-Total			<0.0030		mg/L		0.003	04-JAN-12
MN-D-L-ICP-ED		Water						
Batch	R2308204							
WG1411504-2 CRM		EU-H-3_OPTWATER						
Manganese (Mn)-Dissolved			104.1		%		80-120	03-JAN-12
WG1411504-1 MB								



Quality Control Report

Workorder: L1100411

Report Date: 05-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MN-D-L-ICP-ED								
	Water							
Batch	R2308204							
WG1411504-1	MB							
Manganese (Mn)-Dissolved			<0.0020		mg/L		0.002	03-JAN-12
MN-T-L-ICP-ED								
	Water							
Batch	R2308632							
WG1411953-4	DUP	L1100411-1						
Manganese (Mn)-Total		0.0917	0.0945		mg/L	3.0	20	04-JAN-12
WG1411953-2	LCS							
Manganese (Mn)-Total			85.1		%		80-120	04-JAN-12
WG1411953-1	MB							
Manganese (Mn)-Total			<0.0020		mg/L		0.002	04-JAN-12
NH3-L-CFA-ED								
	Water							
Batch	R2308420							
WG1411768-3	DUP	L1100413-1						
Ammonia (as N)		1.19	1.20		mg/L	1.2	20	04-JAN-12
NO2-IC-ED								
	Water							
Batch	R2308609							
WG1411699-3	DUP	L1100337-1						
Nitrite (as N)		<0.050	<0.050	RPD-NA	mg/L	N/A	20	03-JAN-12
WG1411699-2	LCS							
Nitrite (as N)			95.7		%		85-115	03-JAN-12
WG1411699-1	MB							
Nitrite (as N)			<0.050		mg/L		0.05	03-JAN-12
WG1411699-4	MS	L1100337-1						
Nitrite (as N)			97.1		%		75-125	03-JAN-12
NO3-IC-ED								
	Water							
Batch	R2308609							
WG1411699-3	DUP	L1100337-1						
Nitrate (as N)		<0.050	<0.050	RPD-NA	mg/L	N/A	20	03-JAN-12
WG1411699-2	LCS							
Nitrate (as N)			99.5		%		85-115	03-JAN-12
WG1411699-1	MB							
Nitrate (as N)			<0.050		mg/L		0.05	03-JAN-12
WG1411699-4	MS	L1100337-1						
Nitrate (as N)			95.3		%		75-125	03-JAN-12
P-T-L-COL-ED								
	Water							



Quality Control Report

Workorder: L1100411

Report Date: 05-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
P-T-L-COL-ED		Water						
Batch	R2308673							
WG1411935-4	DUP	L1098334-1						
Phosphorus (P)-Total		0.0500	0.0505		mg/L	1.0	20	04-JAN-12
WG1411935-3	LCS							
Phosphorus (P)-Total			95.0		%		80-120	04-JAN-12
WG1411935-2	MB							
Phosphorus (P)-Total			<0.0010		mg/L		0.001	04-JAN-12
WG1411935-5	MS	L1098334-1						
Phosphorus (P)-Total			89.3		%		70-130	04-JAN-12
P-TD-L-COL-ED		Water						
Batch	R2308673							
WG1411935-3	LCS							
Phosphorus (P)-Total Dissolved			95.0		%		80-120	04-JAN-12
WG1411935-2	MB							
Phosphorus (P)-Total Dissolved			<0.0010		mg/L		0.001	04-JAN-12
PH/EC/ALK-ED		Water						
Batch	R2308104							
WG1411398-6	DUP	L1100328-1						
pH		8.77	8.78	J	pH	0.01	0.2	03-JAN-12
Conductivity (EC)		786	783		uS/cm	0.38	10	03-JAN-12
Bicarbonate (HCO3)		256	255		mg/L	0.50	25	03-JAN-12
Carbonate (CO3)		14.6	14.7		mg/L	0.79	25	03-JAN-12
Hydroxide (OH)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	03-JAN-12
Alkalinity, Total (as CaCO3)		234	234		mg/L	0.36	6.5	03-JAN-12
WG1411398-7	DUP	L1100411-1						
pH		7.67	7.68	J	pH	0.01	0.2	03-JAN-12
Conductivity (EC)		2420	2420		uS/cm	0.0	10	03-JAN-12
Bicarbonate (HCO3)		56.4	56.2		mg/L	0.34	25	03-JAN-12
Carbonate (CO3)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	03-JAN-12
Hydroxide (OH)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	03-JAN-12
Alkalinity, Total (as CaCO3)		46.2	46.1		mg/L	0.34	6.5	03-JAN-12
WG1411398-2	LCS							
Conductivity (EC)			98.8		%		90-110	03-JAN-12
WG1411398-3	LCS							
pH			7.00		pH		6.9-7.1	03-JAN-12
WG1411398-4	LCS							
Alkalinity, Total (as CaCO3)			100.5		%		85-115	03-JAN-12



Quality Control Report

Workorder: L1100411

Report Date: 05-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PH/EC/ALK-ED		Water						
Batch	R2308104							
WG1411398-5	LCS							
Conductivity (EC)			98.0		%		90-110	03-JAN-12
WG1411398-1	MB							
Bicarbonate (HCO3)			<5.0		mg/L		5	03-JAN-12
Carbonate (CO3)			<5.0		mg/L		5	03-JAN-12
Hydroxide (OH)			<5.0		mg/L		5	03-JAN-12
Alkalinity, Total (as CaCO3)			<5.0		mg/L		5	03-JAN-12
PO4-DO-L-COL-ED		Water						
Batch	R2308681							
WG1412119-4	DUP	L1100412-4						
Orthophosphate-Dissolved (as P)		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	04-JAN-12
WG1412119-3	LCS							
Orthophosphate-Dissolved (as P)			97.6		%		80-120	04-JAN-12
WG1412119-2	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	04-JAN-12
WG1412119-5	MS	L1100412-4						
Orthophosphate-Dissolved (as P)			100.2		%		70-130	04-JAN-12
RB-D-CCMS-ED		Water						
Batch	R2309074							
WG1412086-3	DUP	L1100411-1						
Rubidium (Rb)-Dissolved		0.0612	0.0628		mg/L	2.7	20	04-JAN-12
WG1412086-1	MB							
Rubidium (Rb)-Dissolved			<0.0010		mg/L		0.001	04-JAN-12
RB-T-CCMS-ED		Water						
Batch	R2308699							
WG1411953-4	DUP	L1100411-1						
Rubidium (Rb)-Total		0.0668	0.0672		mg/L	0.53	20	04-JAN-12
WG1411953-1	MB							
Rubidium (Rb)-Total			<0.0010		mg/L		0.001	04-JAN-12
SO4-L-IC-ED		Water						
Batch	R2308609							
WG1411699-2	LCS							
Sulfate (SO4)			103.6		%		85-115	03-JAN-12
WG1411699-1	MB							
Sulfate (SO4)			<0.050		mg/L		0.05	03-JAN-12
SOLIDS-TDS-ED		Water						



Quality Control Report

Workorder: L1100411

Report Date: 05-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
SOLIDS-TDS-ED		Water						
Batch	R2308508							
WG1411680-3 DUP		L1100327-1						
Total Dissolved Solids		1160	1160		mg/L	0.086	20	04-JAN-12
WG1411680-2 LCS								
Total Dissolved Solids			99.2		%		85-115	04-JAN-12
WG1411680-1 MB								
Total Dissolved Solids			<10		mg/L		10	04-JAN-12
SOLIDS-TOTSUS-ED		Water						
Batch	R2308263							
WG1411420-3 DUP		L1100327-1						
Total Suspended Solids		<3.0	<3.0	RPD-NA	mg/L	N/A	20	03-JAN-12
WG1411420-2 LCS								
Total Suspended Solids			98.0		%		85-115	03-JAN-12
WG1411420-1 MB								
Total Suspended Solids			<3.0		mg/L		3	03-JAN-12
TKN-L-CFA-ED		Water						
Batch	R2308414							
WG1411767-6 DUP		L1100413-1						
Total Kjeldahl Nitrogen		1.24	1.27		mg/L	2.1	20	04-JAN-12
WG1411767-2 LCS								
Total Kjeldahl Nitrogen			101		%		75-125	04-JAN-12
WG1411767-3 LCS								
Total Kjeldahl Nitrogen			99		%		75-125	04-JAN-12
WG1411767-4 LCS								
Total Kjeldahl Nitrogen			98		%		75-125	04-JAN-12
WG1411767-1 MB								
Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	04-JAN-12
TURBIDITY-ED		Water						
Batch	R2308407							
WG1411596-3 DUP		L1100411-1						
Turbidity		8.99	9.04		NTU	0.55	15	03-JAN-12
WG1411596-2 LCS								
Turbidity			100.0		%		70-130	03-JAN-12
WG1411596-1 MB								
Turbidity			<0.10		NTU		0.1	03-JAN-12

Quality Control Report

Workorder: L1100411

Report Date: 05-JAN-12

Client: DeBeers Canada Inc.
SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
YELLOWKNIFE NT X1A 2P9
Contact: GAIL SETO

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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.
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.

Quality Control Report

Workorder: L1100411

Report Date: 05-JAN-12

Client: DeBeers Canada Inc.
SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
YELLOWKNIFE NT X1A 2P9
Contact: GAIL SETO

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Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Turbidity	1	29-DEC-11 11:04	03-JAN-12 00:00	48	109	hours	EHTR
Leachable Anions & Nutrients							
Diss. Orthophosphate in Water by Colour	1	29-DEC-11 11:04	04-JAN-12 00:00	48	133	hours	EHTR
Anions and Nutrients							
Nitrate as N by IC	1	29-DEC-11 11:04	03-JAN-12 14:36	48	124	hours	EHTR
Nitrite as N by IC	1	29-DEC-11 11:04	03-JAN-12 14:12	48	123	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 L1100411 were received on 03-JAN-12 09:34.

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.

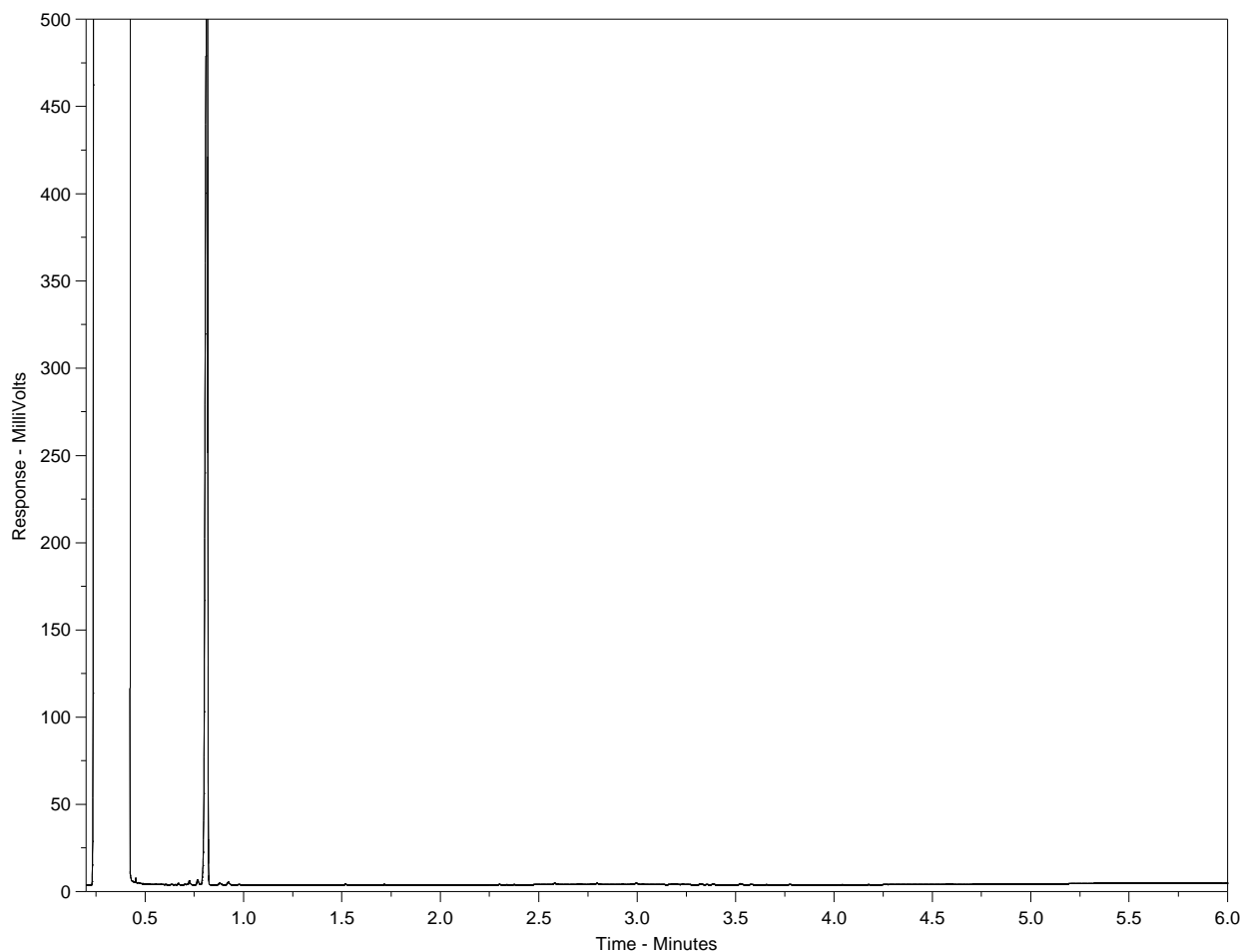
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide 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.

Hydrocarbon Distribution Report



ALS Sample ID: L1100411-1
Client ID: 2011-1821



<-nC10-----nC16-----nC34-----nC50->
<-----Gasoline-----> |-----Diesel-----| <-----Heavy Oils----->

The Canada Wide Standard Hydrocarbon Distribution Report 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 as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

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.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.



L1100411

De Beers Canada
SNAP LAKE MINE
Chain-of-Custody Record

Created: 9/4/2006 7:27:28 PM

From:
De Beers Canada Inc.
Snap Lake Mine
c/o Det'on Cho Logistics
100 Dickens Street
Yellowknife, NT X1A 2P9
(867) 767-8763 (Snap Lake)

Contact: Gail Seto / Deborah Flemming

To:

Lab Name:	ALS Laboratory Group
Address:	9936 67th Ave, Edmonton, AB
Telephone:	(780) 413-6079
Fax:	(780) 437-2311
Contact:	Catherine Evaristo


Invoice:

Company Name:	De Beers Canada Inc.
Address:	300-5102-50th Avenue Yellowknife, NT.
Telephone/Fax:	867-767-8763 867-767-8963
Attn:	Gail Seto / Deborah Flemming Gail.Seto@ca.debeersgroup.com

Results:

Company Name:	De Beers Canada Inc. c/o Det'on Cho Logistics
Address:	100 Dickens Street Yellowknife, NT X1A 2P9
Telephone/Fax:	867-767-8763 867-767-8963
Attn:	Gail Seto / Deborah Flemming
Email:	Gail.Seto@ca.debeersgroup.com

FIELD SAMPLE INFORMATION											FIELD MEASUREMENTS							COMMENTS e.g., High Levels Expected or Biohazard				
Sample Control Number	Sample Name	Sample Series	Date Sampled	Time Sampled	Matrix	Sample Depth (metres)	Sample QAQC Type	Related Sample Control Number	Sample Collection Type	Sampling Equipment	Number of Containers	GPS UTM (Northing NAD 83)	GPS UTM (Easting NAD 83)	pH	Eh (mV)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)		Alkalinity/Acidity as CaCO ₃ (mg/L)	Water Temperature (°C)		
2011-1821	Spill Monitoring		29-Dec-11	11:04	Managed Water	0			Grab	None	10										RUSH ANALYSIS	
-	-	-	-	-	-	-			-	-	-											-
-	-	-	-	-	-	-			-	-	-											-
-	-	-	-	-	-	-			-	-	-											-
-	-	-	-	-	-	-			-	-	-											-



* 1 1 1 0 0 4 1 1 - C O F C *

Sampler (Printed Name) Guylaine Gueguen	Sample Storage Temp. (°C):	Form Reviewed by (Signature)	Date/Time	Data Entry by (Signature)	Date/Time	Comment:	
Relinquished by (Sampler Signature)	Date/Time	Company DBCI	Received by (Signature) MKL	Date/Time 03-JAN-12	Company ALS	Receipt Temp. (°C) -0.6°C	Waybill No.
Relinquished by (Signature)	Date/Time	Company	Received by (Signature)	Date/Time 09.34	Company	Receipt Temp. (°C)	Waybill No.

Field Sample ID:																
Date Sampled (DD-MMM-YY):		29-Dec-11														
Sample Control Number:		2011-1821														
Lab Sample Number:																
Bottle	FRACTION (W=Whole; D=Decant; S=Solids):	W	D	S	W	D	S	W	D	S	W	D	S	W	D	S
Taiga - Green ETL - "Routine"	PHYSICAL/ROUTINE Rush?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Colour	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Specific Conductivity	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dissolved Oxygen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Moisture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	pH	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Dissolved Solids (TDS)	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Suspended Solids (TSS)	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Turbidity	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Other:															
	MAJOR IONS Rush?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Alkalinity/Acidity as CaCO3	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bicarbonate	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Calcium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chloride	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hardness	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hydroxide	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ion Balance	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Magnesium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Potassium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Reactive Silica as SiO2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sodium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sulphate	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other:																
Taiga - Black ETL - Unpreserved - "Nutrients"	NUTRIENTS Rush?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<i>Preserved?</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Biological Oxygen Demand (5-day)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chemical Oxygen Demand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ammonia as N	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nitrate as N	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nitrite as N	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nitrate/Nitrite as N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Kjeldahl Nitrogen (TKN)	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Phosphorous	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dissolved Phosphorous	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ortho-Phosphate as P	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Inorganic Phosphorous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dissolved Inorganic Phosphorous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Organic Phosphorous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Phosphorous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Organic Carbon (TOC)	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dissolved Organic Carbon (DOC) - Not Field Filtered	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dissolved Organic Carbon (DOC) - Field Filtered	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other:																
O&G - Yellow	ORGANICS Rush?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<i>Preserved?</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	BTEX	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Extractable Hydrocarbon (TEH)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hydrocarbon Fraction 1 (F1)	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hydrocarbon Fraction 2 (F2)	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hydrocarbon Fraction 3 (F3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hydrocarbon Fraction 3 (F3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil & Grease (O&G)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other:																
Autoclave	MICROBIOLOGY Rush?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cytosperidium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E. coli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fecal Coliform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fecal Streptococcus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Giardia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Coliforms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Heterotrophic Plate Count	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other:																
BIOTA	BIOTA Rush?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chlorophyll "A"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Microcystin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other:																
TOXICOLOGY	TOXICOLOGY Rush?	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acute Daphnia (48 hours)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Rainbow Trout (96 hours)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Field Sample ID:																
Date Sampled (DD-MMM-YY):		29-Dec-11														
Sample Control Number:		2011-1821														
Lab Sample Number:																
Bottle	FRACTION (W=Whole; D=Decant; S=Solids):	W	D	S	W	D	S	W	D	S	W	D	S	W	D	S
20 L Contain	Chronic Fathead Minnow (7 days)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chronic Ceriodaphnia (7 days)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chronic Selenastrum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Other:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
METALS Rush?		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Low Level TOTAL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Low Level DISSOLVED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ultra-Low Level TOTAL (ETL Only)		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ultra-Low Level DISSOLVED (ETL Only)		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preserved?		Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Filtered (for Dissolved only)?		Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taiga Low Level - Red ETL Low Level - Blue Flett - Teflon Bottle for Methyl Mercury, otherwise Plastic ARC - Plastic Bottle for Silver and Cadmium	Aluminum	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Antimony	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Arsenic	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Barium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Beryllium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Bismuth	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boron	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cesium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chromium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hexavalent Chromium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cobalt	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Copper	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Iron	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Lead	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Lithium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Manganese	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mercury	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Methyl Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Molybdenum	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nickel	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Rubidium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Selenium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Strontium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Thallium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Titanium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Uranium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Vanadium	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Zinc	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Comments:



DeBeers Canada Inc.
ATTN: GAIL SETO
SNAP LAKE MINE c/o Deton'Cho Logist. Ltd
100 DICKENS STREET
YELLOWKNIFE NT X1A 2P9

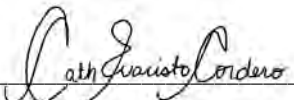
Date Received: 06-JAN-12
Report Date: 08-JAN-12 18:33 (MT)
Version: FINAL

Client Phone: 867-873-6970

Certificate of Analysis

Lab Work Order #: L1101799
Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:

Comments: L1101799-1; Analysis for N2N3, NO2 and NO3 was changed from low level to regular level analysis


Catherine Evaristo-Cordero
Senior Account Manager

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ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

Debeers - ALS Sample Cross Reference Summary

Date Received	Debeers Sample ID	ALS Sample ID
06-JAN-2012	2012-0037	L1101799-1

ALS ENVIRONMENTAL CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qual.	D.L.	Units	Extracted	Analyzed	By
L1101799-1	2012-0037								
Sampled By:		DEBORAH FLEMMING on 05-JAN-12 @ 12:00							
Matrix:		WATER@W							
Dissolved Metals - DeBeers									
Dissolved Metals in Water by CRC ICPMS									
		Aluminum (Al)-Dissolved	41.6		1.0	ug/L		06-JAN-12	CVM
		Antimony (Sb)-Dissolved	0.91		0.10	ug/L		06-JAN-12	CVM
		Arsenic (As)-Dissolved	0.18		0.10	ug/L		06-JAN-12	CVM
		Barium (Ba)-Dissolved	106		0.050	ug/L		06-JAN-12	CVM
		Beryllium (Be)-Dissolved	<0.50		0.50	ug/L		06-JAN-12	CVM
		Bismuth (Bi)-Dissolved	<0.050		0.050	ug/L		06-JAN-12	CVM
		Boron (B)-Dissolved	683		2.0	ug/L		06-JAN-12	CVM
		Cadmium (Cd)-Dissolved	0.533		0.010	ug/L		06-JAN-12	CVM
		Chromium (Cr)-Dissolved	0.47		0.10	ug/L		06-JAN-12	CVM
		Cobalt (Co)-Dissolved	6.38		0.10	ug/L		06-JAN-12	CVM
		Copper (Cu)-Dissolved	14.7		0.10	ug/L		06-JAN-12	CVM
		Lead (Pb)-Dissolved	0.165		0.050	ug/L		06-JAN-12	CVM
		Lithium (Li)-Dissolved	38.9		5.0	ug/L		06-JAN-12	CVM
		Molybdenum (Mo)-Dissolved	0.692		0.050	ug/L		06-JAN-12	CVM
		Nickel (Ni)-Dissolved	17.9		0.10	ug/L		06-JAN-12	CVM
		Selenium (Se)-Dissolved	0.22		0.10	ug/L		06-JAN-12	CVM
		Silver (Ag)-Dissolved	<0.010		0.010	ug/L		06-JAN-12	CVM
		Strontium (Sr)-Dissolved	1010		0.10	ug/L		06-JAN-12	CVM
		Thallium (Tl)-Dissolved	0.055		0.050	ug/L		06-JAN-12	CVM
		Tin (Sn)-Dissolved	<0.10		0.10	ug/L		06-JAN-12	CVM
		Titanium (Ti)-Dissolved	<0.30		0.30	ug/L		06-JAN-12	CVM
		Uranium (U)-Dissolved	0.033		0.010	ug/L		06-JAN-12	CVM
		Vanadium (V)-Dissolved	0.12		0.10	ug/L		06-JAN-12	CVM
		Zinc (Zn)-Dissolved	80.8		1.0	ug/L		06-JAN-12	CVM
		Iron (Fe)-Dissolved	92		10	ug/L		07-JAN-12	CLR
		Manganese (Mn)-Dissolved	687		2.0	ug/L		07-JAN-12	CLR
		Cesium (Cs)-Dissolved	0.31		0.10	ug/L		06-JAN-12	CVM
		Rubidium (Rb)-Dissolved	49.5		1.0	ug/L		06-JAN-12	CVM
		Mercury (Hg)-Dissolved	<0.020		0.020	ug/L		07-JAN-12	MVE
Total Metals - DeBeers									
Total Metals in Water by CRC ICPMS									
		Aluminum (Al)-Total	290		3.0	ug/L		06-JAN-12	QLI
		Antimony (Sb)-Total	4.10		0.10	ug/L		06-JAN-12	QLI
		Arsenic (As)-Total	0.22		0.10	ug/L		06-JAN-12	QLI
		Barium (Ba)-Total	95.9		0.050	ug/L		06-JAN-12	QLI
		Beryllium (Be)-Total	<0.50		0.50	ug/L		06-JAN-12	QLI
		Bismuth (Bi)-Total	<0.050		0.050	ug/L		06-JAN-12	QLI
		Boron (B)-Total	492		2.0	ug/L		06-JAN-12	QLI
		Cadmium (Cd)-Total	0.402		0.010	ug/L		06-JAN-12	QLI
		Chromium (Cr)-Total	2.92		0.10	ug/L		06-JAN-12	QLI
		Cobalt (Co)-Total	5.16		0.10	ug/L		06-JAN-12	QLI
		Copper (Cu)-Total	3.98		0.10	ug/L		06-JAN-12	QLI
		Lead (Pb)-Total	0.710		0.050	ug/L		06-JAN-12	QLI
		Lithium (Li)-Total	28.3		5.0	ug/L		06-JAN-12	QLI
		Molybdenum (Mo)-Total	0.590		0.050	ug/L		06-JAN-12	QLI
		Nickel (Ni)-Total	16.6		0.10	ug/L		06-JAN-12	QLI
		Selenium (Se)-Total	0.16		0.10	ug/L		06-JAN-12	QLI
		Silver (Ag)-Total	0.012	RRV	0.010	ug/L		06-JAN-12	QLI
		Strontium (Sr)-Total	794		0.10	ug/L		06-JAN-12	QLI
		Thallium (Tl)-Total	<0.050		0.050	ug/L		06-JAN-12	QLI
		Tin (Sn)-Total	0.86		0.10	ug/L		06-JAN-12	QLI
		Titanium (Ti)-Total	8.19		0.30	ug/L		06-JAN-12	QLI
		Uranium (U)-Total	0.049		0.010	ug/L		06-JAN-12	QLI

ALS ENVIRONMENTAL CHEMICAL ANALYSIS REPORT

Lab ID	Sample ID	Test Description	Result	Qual.	D.L.	Units	Extracted	Analyzed	By
L1101799-1	2012-0037								
Sampled By: DEBORAH FLEMMING on 05-JAN-12 @ 12:00									
Matrix: WATER@W									
Total Metals - DeBeers									
Total Metals in Water by CRC ICPMS									
	Vanadium (V)-Total	0.35			0.10	ug/L		06-JAN-12	QLI
	Zinc (Zn)-Total	66.9			3.0	ug/L		06-JAN-12	QLI
	Mercury (Hg)-Total	<0.020			0.020	ug/L		07-JAN-12	MVE
	Cesium (Cs)-Total	0.24			0.10	ug/L		06-JAN-12	QLI
	Iron (Fe)-Total	298			10	ug/L		07-JAN-12	CLR
	Manganese (Mn)-Total	568			2.0	ug/L		08-JAN-12	CLR
	Rubidium (Rb)-Total	34.0			1.0	ug/L		06-JAN-12	QLI
NO2, NO3, & (NO2+NO3) in Water									
	Nitrate (as N)	101	DLA		0.50	mg/L		06-JAN-12	SHC
	Nitrate and Nitrite (as N)	101			0.50	mg/L		06-JAN-12	
	Nitrite (as N)	0.153			0.050	mg/L		06-JAN-12	SHC
Routine Water Analysis - Low Level									
Diss. Metals in Water by ICPOES (Low)									
	Calcium (Ca)-Dissolved	126			0.50	mg/L		07-JAN-12	CLR
	Magnesium (Mg)-Dissolved	66.9			0.10	mg/L		07-JAN-12	CLR
	Potassium (K)-Dissolved	25.2			0.10	mg/L		07-JAN-12	CLR
	Sodium (Na)-Dissolved	97.6			1.0	mg/L		07-JAN-12	CLR
Ion Balance Calculation									
	Hardness (as CaCO3)	590				mg/L		07-JAN-12	
	Ion Balance	90.8				%		07-JAN-12	
	TDS (Calculated)	1250				mg/L		07-JAN-12	
pH, Conductivity and Total Alkalinity									
	Alkalinity, Total (as CaCO3)	<5.0	RRV		5.0	mg/L		06-JAN-12	WYA
	Bicarbonate (HCO3)	<5.0	RRV		5.0	mg/L		06-JAN-12	WYA
	Carbonate (CO3)	<5.0	RRV		5.0	mg/L		06-JAN-12	WYA
	Conductivity (EC)	2060	RRV		0.20	uS/cm		06-JAN-12	WYA
	Hydroxide (OH)	<5.0	RRV		5.0	mg/L		06-JAN-12	WYA
	pH	6.15	RRV		0.10	pH		06-JAN-12	WYA
	Chloride (Cl)	260	RRV		0.50	mg/L		06-JAN-12	SHC
	Fluoride (F)	0.203			0.050	mg/L		06-JAN-12	SHC
	Sulfate (SO4)	230	RRV		0.050	mg/L		06-JAN-12	SHC
	Acidity (as CaCO3)	<5.0			5.0	mg/L		06-JAN-12	TL
	Ammonia (as N)	12.6			0.0050	mg/L		06-JAN-12	LMK
	Orthophosphate-Dissolved (as P)	0.0301			0.0010	mg/L		06-JAN-12	JHN
	Total Kjeldahl Nitrogen	15.3			0.050	mg/L	07-JAN-12	07-JAN-12	LIW
	Phosphorus (P)-Total Dissolved	0.0475			0.0010	mg/L		06-JAN-12	AMY
	Total Dissolved Solids	1290			10	mg/L		09-JAN-12	SVG
	Total Organic Carbon	12.9			1.0	mg/L		06-JAN-12	ZOW
	Phosphorus (P)-Total	0.0604			0.0010	mg/L		06-JAN-12	AMY
	Total Suspended Solids	19.0			3.0	mg/L		06-JAN-12	SVG
	Turbidity	4.41			0.10	NTU		06-JAN-12	SVG

Reference Information

Qualifiers for Individual Samples Listed:

Sample Number	Client ID	Qualifier	Description
L1101799-1	2012-0037	SFP	Sample was Filtered and Preserved at the laboratory - TDP-LOW

Sample Parameter Qualifier key listed:

Qualifier	Description
RRV	Reported Result Verified By Repeat Analysis
DLA	Detection Limit Adjusted For required dilution

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ACIDITY-ED	Water	Acidity (as CaCO3)		APHA 2310 B - Potentiometric Titration
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CL-IC-ED	Water	Chloride by IC		APHA 4110 B-ION CHROMATOGRAPHY
CS-D-CCMS-ED	Water	Dissolved Cesium in Water by CRC ICPMS This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).		APHA 3030 B / EPA SW-846 6020A
CS-T-CCMS-ED	Water	Total Cesium in Water by CRC ICPMS This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).	APHA 3030E	APHA 3030 E / EPA SW-846 6020A
F-IC-ED	Water	Fluoride by IC		APHA 4110 B-ION CHROMATOGRAPHY
FE-D-L-ICP-ED	Water	Diss. Fe in Water by ICPOES (Low Level)		APHA 3120 B-ICP-OES
FE-T-L-ICP-ED	Water	Total Fe in Water by ICPOES (Low Level)	APHA 3030E	APHA 3120 B-ICP-OES
HG-D-L-CVAA-ED	Water	Mercury (Hg) - Dissolved		EPA 245.7 / EPA 245.1
HG-T-L-CVAA-ED	Water	Mercury (Hg)		EPA 245.7 / EPA 245.1
IONBALANCE-ED	Water	Ion Balance Calculation		APHA 1030E
MET-D-CCMS-ED	Water	Dissolved Metals in Water by CRC ICPMS		APHA 3030 B&E / EPA SW-846 6020A
MET-D-L-ICP-ED	Water	Diss. Metals in Water by ICPOES (Low)		APHA 3120 B-ICP-OES
MET-T-CCMS-ED	Water	Total Metals in Water by CRC ICPMS	APHA 3030E	APHA 3030 B&E / EPA SW-846 6020A
MN-D-L-ICP-ED	Water	Diss. Mn in Water by ICPOES (Low Level)		APHA 3120 B ICP-OES
MN-T-L-ICP-ED	Water	Total Mn in Water by ICPOES (Low Level)	APHA 3030E	APHA 3120 B-ICP-OES
NH3-L-CFA-ED	Water	Ammonia in Water by Colour This analysis is carried out using procedures adapted from APHA Method 4500 NH3 "NITROGEN (AMMONIA)". Ammonia is determined using the automated phenate colourimetric method.		APHA 4500 NH3-NITROGEN (AMMONIA)
NO2+NO3-CALC-ED	Water	Nitrate+Nitrite		CALCULATION
NO2-IC-ED	Water	Nitrite as N by IC		APHA 4110 B-ION CHROMATOGRAPHY
NO3-IC-ED	Water	Nitrate as N by IC		APHA 4110 B-ION

Reference Information

P-T-L-COL-ED	Water	Total P in Water by Colour	CHROMATOGRAPHY APHA 4500-P PHOSPHORUS
This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Phosphorus is determined colourimetrically after persulphate digestion of the sample.			
P-TD-L-COL-ED	Water	Total Dissolved P in Water by Colour	APHA 4500-P PHOSPHORUS
This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Dissolved Phosphorus is determined colourimetrically after persulphate digestion of a sample that has been lab or field filtered through a 0.45 micron membrane filter.			
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity	APHA 4500-H, 2510, 2320
All samples analyzed by this method for pH will have exceeded the 15 minute recommended hold time from time of sampling (field analysis is recommended for pH where highly accurate results are needed)			
PO4-DO-L-COL-ED	Water	Diss. Orthophosphate in Water by Colour	APHA 4500-P PHOSPHORUS
This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Dissolved Orthophosphate is determined colourimetrically on a sample that has been lab or field filtered through a 0.45 micron membrane filter.			
RB-D-CCMS-ED	Water	Dissolved Rubidium in Water by CRC ICPMS	APHA 3030 B / EPA SW-846 6020A
This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).			
RB-T-CCMS-ED	Water	Total Rubidium in Water by CRC ICPMS	APHA 3030 E / EPA SW-846 6020A
This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).			
SO4-L-IC-ED	Water	Sulfate by IC (Low Level)	APHA 4110 B-ION CHROMATOGRAPHY
SOLIDS-TDS-ED	Water	Total Dissolved Solids	APHA 2540 C
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
TKN-L-CFA-ED	Water	TKN in Water by Colour	APHA 4500-NORG (TKN)
This analysis is carried out using procedures adapted from APHA Method 4500-Norg "Nitrogen (Organic)". Total Kjeldahl Nitrogen is determined by sample digestion at 380 celcius with analysis using an automated colourimetric finish.			
TURBIDITY-ED	Water	Turbidity	APHA 2130 B-Nephelometer

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

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	Laboratory Definition Code	Laboratory Location
ED	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA		

Reference Information

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

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

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

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.



Quality Control Report

Workorder: L1101799

Report Date: 08-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ACIDITY-ED	Water							
Batch	R2309608							
WG1413184-3 DUP		L1101799-1						
Acidity (as CaCO3)		<5.0	<5.0	RPD-NA	mg/L	N/A	26	06-JAN-12
WG1413184-2 LCS								
Acidity (as CaCO3)			101.0		%		85-115	06-JAN-12
WG1413184-1 MB								
Acidity (as CaCO3)			<5.0		mg/L		5	06-JAN-12
C-TOT-ORG-ED	Water							
Batch	R2309637							
WG1413197-1 LCS								
Total Organic Carbon			93.5		%		80-120	06-JAN-12
CL-IC-ED	Water							
Batch	R2309642							
WG1413204-1 MB								
Chloride (Cl)			<0.50		mg/L		0.5	06-JAN-12
CS-D-CCMS-ED	Water							
Batch	R2309597							
WG1412976-1 MB								
Cesium (Cs)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
CS-T-CCMS-ED	Water							
Batch	R2309871							
WG1413309-1 MB								
Cesium (Cs)-Total			<0.00010		mg/L		0.0001	06-JAN-12
F-IC-ED	Water							
Batch	R2309642							
WG1413204-1 MB								
Fluoride (F)			<0.050		mg/L		0.05	06-JAN-12
FE-D-L-ICP-ED	Water							
Batch	R2309773							
WG1413280-2 CRM		EU-H-3_OPTWATER						
Iron (Fe)-Dissolved			89.9		%		80-120	07-JAN-12
WG1413280-1 MB								
Iron (Fe)-Dissolved			<0.010		mg/L		0.01	07-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
FE-T-L-ICP-ED	Water							
Batch	R2309774							
WG1413309-2	LCS							
Iron (Fe)-Total			82.8		%		80-120	07-JAN-12
WG1413309-1	MB							
Iron (Fe)-Total			<0.010		mg/L		0.01	07-JAN-12
HG-D-L-CVAA-ED	Water							
Batch	R2309753							
WG1413307-2	LCS							
Mercury (Hg)-Dissolved			102.9		%		80-120	07-JAN-12
WG1413307-3	LCSD	WG1413307-2						
Mercury (Hg)-Dissolved		102.9	97		%	5.9	20	07-JAN-12
WG1413307-1	MB							
Mercury (Hg)-Dissolved			<0.000020		mg/L		0.00002	07-JAN-12
HG-T-L-CVAA-ED	Water							
Batch	R2309753							
WG1413307-2	LCS							
Mercury (Hg)-Total			102.9		%		80-120	07-JAN-12
WG1413307-3	LCSD	WG1413307-2						
Mercury (Hg)-Total		102.9	97		%	5.9	20	07-JAN-12
WG1413307-1	MB							
Mercury (Hg)-Total			<0.000020		mg/L		0.00002	07-JAN-12
MET-D-CCMS-ED	Water							
Batch	R2309597							
WG1412976-1	MB							
Aluminum (Al)-Dissolved			<0.0010		mg/L		0.001	06-JAN-12
Antimony (Sb)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Arsenic (As)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Barium (Ba)-Dissolved			<0.000050		mg/L		0.00005	06-JAN-12
Beryllium (Be)-Dissolved			<0.00050		mg/L		0.0005	06-JAN-12
Bismuth (Bi)-Dissolved			<0.000050		mg/L		0.00005	06-JAN-12
Boron (B)-Dissolved			<0.0020		mg/L		0.002	06-JAN-12
Cadmium (Cd)-Dissolved			<0.000010		mg/L		0.00001	06-JAN-12
Chromium (Cr)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Cobalt (Co)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Copper (Cu)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Lead (Pb)-Dissolved			<0.000050		mg/L		0.00005	06-JAN-12
Lithium (Li)-Dissolved			<0.0050		mg/L		0.005	06-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-CCMS-ED Water								
Batch R2309597								
WG1412976-1 MB								
Molybdenum (Mo)-Dissolved			<0.000050		mg/L		0.00005	06-JAN-12
Nickel (Ni)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Selenium (Se)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Silver (Ag)-Dissolved			<0.000010		mg/L		0.00001	06-JAN-12
Strontium (Sr)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Thallium (Tl)-Dissolved			<0.000050		mg/L		0.00005	06-JAN-12
Titanium (Ti)-Dissolved			<0.00030		mg/L		0.0003	06-JAN-12
Tin (Sn)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Uranium (U)-Dissolved			<0.000010		mg/L		0.00001	06-JAN-12
Vanadium (V)-Dissolved			<0.00010		mg/L		0.0001	06-JAN-12
Zinc (Zn)-Dissolved			<0.0010		mg/L		0.001	06-JAN-12
MET-D-L-ICP-ED Water								
Batch R2309773								
WG1413280-2 CRM								
		EU-H-3_OPTWATER						
Calcium (Ca)-Dissolved			92.2		%		80-120	07-JAN-12
Magnesium (Mg)-Dissolved			93.3		%		80-120	07-JAN-12
Potassium (K)-Dissolved			95.5		%		80-120	07-JAN-12
Sodium (Na)-Dissolved			94.6		%		80-120	07-JAN-12
WG1413280-1 MB								
Calcium (Ca)-Dissolved			<0.20		mg/L		0.2	07-JAN-12
Magnesium (Mg)-Dissolved			<0.10		mg/L		0.1	07-JAN-12
Potassium (K)-Dissolved			<0.10		mg/L		0.1	07-JAN-12
Sodium (Na)-Dissolved			<0.50		mg/L		0.5	07-JAN-12
MET-T-CCMS-ED Water								
Batch R2309871								
WG1413309-1 MB								
Antimony (Sb)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Arsenic (As)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Barium (Ba)-Total			<0.000050		mg/L		0.00005	06-JAN-12
Beryllium (Be)-Total			<0.00050		mg/L		0.0005	06-JAN-12
Bismuth (Bi)-Total			<0.000050		mg/L		0.00005	06-JAN-12
Boron (B)-Total			<0.0020		mg/L		0.002	06-JAN-12
Cadmium (Cd)-Total			<0.000010		mg/L		0.00001	06-JAN-12
Chromium (Cr)-Total			<0.00010		mg/L		0.0001	06-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-CCMS-ED	Water							
Batch	R2309871							
WG1413309-1 MB								
Cobalt (Co)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Copper (Cu)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Lead (Pb)-Total			<0.000050		mg/L		0.00005	06-JAN-12
Lithium (Li)-Total			<0.0050		mg/L		0.005	06-JAN-12
Molybdenum (Mo)-Total			<0.000050		mg/L		0.00005	06-JAN-12
Nickel (Ni)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Selenium (Se)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Silver (Ag)-Total			<0.000010		mg/L		0.00001	06-JAN-12
Strontium (Sr)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Thallium (Tl)-Total			<0.000050		mg/L		0.00005	06-JAN-12
Tin (Sn)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Titanium (Ti)-Total			<0.00030		mg/L		0.0003	06-JAN-12
Uranium (U)-Total			<0.000010		mg/L		0.00001	06-JAN-12
Vanadium (V)-Total			<0.00010		mg/L		0.0001	06-JAN-12
Zinc (Zn)-Total			<0.0030		mg/L		0.003	06-JAN-12
MN-D-L-ICP-ED	Water							
Batch	R2309773							
WG1413280-2 CRM		EU-H-3_OPTWATER						
Manganese (Mn)-Dissolved			94.0		%		80-120	07-JAN-12
WG1413280-1 MB								
Manganese (Mn)-Dissolved			<0.0020		mg/L		0.002	07-JAN-12
MN-T-L-ICP-ED	Water							
Batch	R2309774							
WG1413309-2 LCS								
Manganese (Mn)-Total			83.3		%		80-120	07-JAN-12
WG1413309-1 MB								
Manganese (Mn)-Total			<0.0020		mg/L		0.002	07-JAN-12
NH3-L-CFA-ED	Water							
Batch	R2309291							
WG1412742-5 DUP		L1101384-1						
Ammonia (as N)		4.71	4.80		mg/L	1.9	20	06-JAN-12
N02-IC-ED	Water							



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
N02-IC-ED	Water							
Batch	R2309642							
WG1413204-1 MB								
Nitrite (as N)			<0.050		mg/L		0.05	06-JAN-12
N03-IC-ED	Water							
Batch	R2309642							
WG1413204-1 MB								
Nitrate (as N)			<0.050		mg/L		0.05	06-JAN-12
P-T-L-COL-ED	Water							
Batch	R2309632							
WG1413105-4 DUP		L1100410-1						
Phosphorus (P)-Total		0.0120	0.0125		mg/L	4.1	20	06-JAN-12
WG1413105-3 LCS								
Phosphorus (P)-Total			91.2		%		80-120	06-JAN-12
WG1413105-2 MB								
Phosphorus (P)-Total			<0.0010		mg/L		0.001	06-JAN-12
WG1413105-5 MS		L1100410-1						
Phosphorus (P)-Total			97.5		%		70-130	06-JAN-12
P-TD-L-COL-ED	Water							
Batch	R2309632							
WG1413105-3 LCS								
Phosphorus (P)-Total Dissolved			91.2		%		80-120	06-JAN-12
WG1413105-2 MB								
Phosphorus (P)-Total Dissolved			<0.0010		mg/L		0.001	06-JAN-12
PH/EC/ALK-ED	Water							
Batch	R2309627							
WG1412752-6 DUP		L1101344-1						
pH		8.02	8.05	J	pH	0.03	0.2	06-JAN-12
Conductivity (EC)		6380	6370		uS/cm	0.16	10	06-JAN-12
Bicarbonate (HCO3)		1260	1260		mg/L	0.020	25	06-JAN-12
Carbonate (CO3)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	06-JAN-12
Hydroxide (OH)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	06-JAN-12
Alkalinity, Total (as CaCO3)		1030	1030		mg/L	0.020	6.5	06-JAN-12
WG1412752-2 LCS								
Conductivity (EC)			102.1		%		90-110	06-JAN-12
WG1412752-3 LCS								
pH			7.05		pH		6.9-7.1	06-JAN-12



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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PH/EC/ALK-ED Water								
Batch R2309627								
WG1412752-4	LCS							
Alkalinity, Total (as CaCO3)			98.6		%		85-115	06-JAN-12
WG1412752-5	LCS							
Conductivity (EC)			98.4		%		90-110	06-JAN-12
WG1412752-1	MB							
Bicarbonate (HCO3)			<5.0		mg/L		5	06-JAN-12
Carbonate (CO3)			<5.0		mg/L		5	06-JAN-12
Hydroxide (OH)			<5.0		mg/L		5	06-JAN-12
Alkalinity, Total (as CaCO3)			<5.0		mg/L		5	06-JAN-12
P04-D0-L-C0L-ED Water								
Batch R2309607								
WG1413069-4	DUP	L1101384-4						
Orthophosphate-Dissolved (as P)		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	06-JAN-12
WG1413069-3	LCS							
Orthophosphate-Dissolved (as P)			98.6		%		80-120	06-JAN-12
WG1413069-2	MB							
Orthophosphate-Dissolved (as P)			<0.0010		mg/L		0.001	06-JAN-12
WG1413069-5	MS	L1101384-4						
Orthophosphate-Dissolved (as P)			106.0		%		70-130	06-JAN-12
RB-D-CCMS-ED Water								
Batch R2309597								
WG1412976-1	MB							
Rubidium (Rb)-Dissolved			<0.0010		mg/L		0.001	06-JAN-12
RB-T-CCMS-ED Water								
Batch R2309871								
WG1413309-1	MB							
Rubidium (Rb)-Total			<0.0010		mg/L		0.001	06-JAN-12
S04-L-IC-ED Water								
Batch R2309642								
WG1413204-1	MB							
Sulfate (SO4)			<0.050		mg/L		0.05	06-JAN-12
SOLIDS-TDS-ED Water								



Quality Control Report

Workorder: L1101799

Report Date: 08-JAN-12

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Client: DeBeers Canada Inc.
 SNAP LAKE MINE c/o Deton'Cho Logist. Ltd 100 DICKENS STREET
 YELLOWKNIFE NT X1A 2P9

Contact: GAIL SETO

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
SOLIDS-TDS-ED Water								
Batch	R2309738							
WG1412874-3 DUP		L1100767-3						
Total Dissolved Solids		N/A	522		mg/L	5.1	20	09-JAN-12
WG1412874-2 LCS								
Total Dissolved Solids			90.8		%		85-115	09-JAN-12
WG1412874-1 MB								
Total Dissolved Solids			<10		mg/L		10	09-JAN-12
SOLIDS-TOTSUS-ED Water								
Batch	R2309557							
WG1412773-3 DUP		L1101233-1						
Total Suspended Solids		<3.0	<3.0	RPD-NA	mg/L	N/A	20	06-JAN-12
WG1412773-2 LCS								
Total Suspended Solids			88.0		%		85-115	06-JAN-12
WG1412773-1 MB								
Total Suspended Solids			<3.0		mg/L		3	06-JAN-12
TKN-L-CFA-ED Water								
Batch	R2309771							
WG1413275-1 MB								
Total Kjeldahl Nitrogen			<0.050		mg/L		0.05	07-JAN-12
TURBIDITY-ED Water								
Batch	R2309494							
WG1413078-3 DUP		L1101799-1						
Turbidity		4.41	4.36		NTU	1.1	15	06-JAN-12
WG1413078-2 LCS								
Turbidity			100.0		%		70-130	06-JAN-12
WG1413078-1 MB								
Turbidity			<0.10		NTU		0.1	06-JAN-12

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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.
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 pre-determined 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.



L11017 99

De Beers Canada
SNAP LAKE MINE
Chain-of-Custody Record

RUSH ANALYSIS

Created: 1/5/2012 2:54:45 PM

From:
De Beers Canada Inc.
Snap Lake Mine
c/o Det'on Cho Logistics
100 Dickens Street
Yellowknife, NT X1A 2P9
(867) 767-8763 (Snap Lake)

Contact: Gail Seto / Deborah Flemming

To:

Lab Name:	ALS Laboratory Group
Address:	9936 67th Ave, Edmonton, AB
Telephone:	(780) 413-6079
Fax:	(780) 437-2311
Contact:	Catherine Evaristo

Invoice:

Company Name:	De Beers Canada Inc.
Address:	300-5102-50th Avenue Yellowknife, NT.
Telephone/Fax:	867-767-8763 867-767-8963
Attn:	Gail Seto / Deborah Flemming Gail.Seto@ca.debeersgroup.com

Results:

Company Name:	De Beers Canada Inc. c/o Det'on Cho Logistics
Address:	100 Dickens Street Yellowknife, NT X1A 2P9
Telephone/Fax:	867-767-8763 867-767-8963
Attn:	Gail Seto / Deborah Flemming
Email:	Gail.Seto@ca.debeersgroup.com

FIELD SAMPLE INFORMATION										FIELD MEASUREMENTS						COMMENTS e.g., High Levels Expected or Biohazard					
Sample Control Number	Sample Name	Sample Series	Date Sampled	Time Sampled	Matrix	Sample Depth (metres)	Sample QAQC Type	Related Sample Control Number	Sample Collection Type	Sampling Equipment	Number of Containers	GPS UTM (Northing NAD 83)	GPS UTM (Easting NAD 83)	pH	EH (mV)		Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Alkalinity/Acidity as CaCO ₃ (mg/L)	Water Temperature (°C)	
2012-0037	Spill Monitoring		5-Jan-12	12:00:00	Water-NOS	0			Grab	Jug	5									Chiselled ice melted and preserved	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SUPER RUSH
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	RUSH ANALYSIS
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sampler (Printed Name) Deborah Flemming			Sample Storage Temp. (°C):		Form Reviewed by (Signature)		Date/Time		Data Entry by (Signature)			Date/Time		Comment:							
Relinquished by (Sampler Signature)		Date/Time		Company DBCI		Received by (Signature)		Date/Time 06 Jan 12		Company		Receipt Temp. (°C):		Waybill No.							
Relinquished by (Signature)		Date/Time		Company		Received by (Signature)		Date/Time 12:00		Company		Receipt Temp. (°C):		Waybill No.							

