



28 December 2024

Mr. Mason Mantla
Chair–Wek’èezhii Land and Water Board
#1, 4905-48th Street Yellowknife, NT
X1A 3S3

RE: Surveillance Network Program November 2024 Monthly Report for Water Licence W2022L2-0001

Mr. Mantla,

Arctic Canadian Diamond Company Ltd, subsidiary of Burgundy Diamond Mines (Burgundy) is pleased to submit the SNP Report as Per Part “B” of the Surveillance Network Program (SNP) for the Water Licence W2022L2-0001, please find enclosed the SNP Monthly Report for November 2024.

We trust this report is clear and informative. If you have any questions or comments, please contact the undersigned at jonah.kelly@burgundydiamonds.com or 1.867.880.4400 ext. 2157.

Sincerely,

Jonah Kelly
Environment Team Leader, Operations
Burgundy Diamond Mines

Lab Report Enclosures: C494548

CC: *William Liu – Manager, Environmental Reporting & Permitting – william.liu@burgundydiamonds.com
Richard Ehlert – Team Leader, Environment Operations – richard.ehlert@burgundydiamonds.com
Regulatory Inbox – regulatory@burgundydiamonds.com*



Table of Contents

Sampling Summary for Licence W2022L2-0001	3
Part B. Flow and Volume Measurement Requirements	5
B(2) Volume in cubic metres of freshwater obtained from Lakes.	5
B(3) Lake Level and Minewater Storage Ponds Elevation During Open Water.....	5
B(4) Source and Volume of Recycled Water Used	5
B(5) Volume of Water or Waste Deposit to Containment Facilities.....	6
B(6) Volume of Water or Waste Discharged from Containment Facilities	6
B(7) Quantities of Minewater Pumped from each Open Pit and Underground Mine.....	7
B(8) and (9) Quantity of Sewage Effluent Discharged and Sewage Solids Removed from the Sewage Treatment Plant (STP)	7
B(10) Quantity of Sewage Delivered to STP from Sable Development.....	7
Part C. Other Monitoring Requirements.....	8
C(1) Precipitation Data from Koala Met Station	8
C(4) Quantity of Ore Produced	8
C(5a) Quantity of Waste Rock and Coarse Kimberlite Produced	8
C(5b) Waste Rock Disposal Locations	8
Appendix A – Field Parameters.....	1
Appendix B – Lab Report Enclosures.....	2



Sampling Summary for Licence W2022L2-0001

In accordance with the requirements of Water Licence W2022L2-0001, there was 1 water sample collected for the current reporting month. Refer to Figure 1 – Surveillance Network Program Monitoring Stations for locations of all Ekati sampling stations.

Job Lab Number	Sample ID	Collection Date	Comments
C494548	1616-46b	17-Nov-2024	



Part B. Flow and Volume Measurement Requirements

B(2) Volume in cubic metres of freshwater obtained from Lakes.

Lake Name	Current Month (m ³)	Year to Date (m ³)
Grizzly Lake	8,020	75,117
Lac de Gras	0	52,240
Little Lake	0	0
Falcon Lake	0	12,880
Thinner Lake	0	0
Lac de Sauvage	0	0
Ursula Lake	0	0
Upper Exeter Lakes	0	0

B(3) Lake Level and Minewater Storage Ponds Elevation During Open Water

Lake Name	Lake Elevation (masl)
Grizzly Lake	467.92**
Little Lake	449.11**
Upper/North Panda Lake	460.53**
Falcon Lake	469.56**
Thinner Lake	451.81*
Cell E LLCF	448.18*
King Pond Sedimentation Facility	445.60*
Lac du Sauvage	416.20*
Two Rock Sedimentation Pond (upstream cell)	487.06**
Lac de Gras	416.23**
Ursula Lake	462.87***
Upper Exeter Lake	443.58***

*The most recent survey result from October 2024.

**The most recent survey result from September 2024.

***The most recent survey result from August 2024.

B(4) Source and Volume of Recycled Water Used

Plant	Source	Current Month (m ³)	Year to Date (m ³)
Process	LLCF	464,536	4,916,286



B(5) Volume of Water or Waste Deposit to Containment Facilities

Location	Current Month (m ³)	Year to Date (m ³)
Into Long Lake Containment Facility		
Process Plant Liquids	27,691	1,351,021
Process Plant Solids	5,477	323,450
Minewater	0	0
Other	30	3,333
Into Beartooth Pit		
Minewater	0	0
Other	0	0
Into Koala Pit		
Process Plant Liquids	507,557	3,118,742
Process Plant Solids	100,383	845,994
Into Panda Pit		
Process Plant Liquids	0	1,579,315
Process Plant Solids	0	374,136
Into Two Rock Sedimentation Pond		
Minewater	0	41,680
Other	0	226
Into King Pond Settling Facility		
Minewater	34,468	847,433
Other	0	0
Into Lynx Pit		
Minewater	80	369,619
Other	0	0

B(6) Volume of Water or Waste Discharged from Containment Facilities

Location	Current Month (m ³)	Year to Date (m ³)
From LLCF		
To Leslie Lake	0	0
For Road Watering	0	0
From King Pond		
To Cujo Lake	0	465,685
For Road Watering	0	80
From Two Rock Sedimentation Pond		
To Horseshoe Lake	0	268,101
For Road Watering	0	36,320
Fox Berm Pond		
To South Fox Lake	0	0
For Road Watering	0	0



B(7) Quantities of Minewater Pumped from each Open Pit and Underground Mine

	Destination									
	LLCF (m ³)		Two Rock (m ³)		King Pond (m ³)		Lynx Pit (m ³)		Beartooth (m ³)	
Origin	Month	YTD	Month	YTD	Month	YTD	Month	YTD	Month	YTD
Pigeon Pit										
Sable Pit			0	41,680						
Beartooth Pit										
Misery UG					34,468	156,565				
Panda Pit										
Koala Pit										
Misery Sumps							0	118,454		
Point Lake					0	460,078	80	251,165		
Total	0	0	0	41,680	34,468	616,643	80	369,619	0	0

B(8) and (9) Quantity of Sewage Effluent Discharged and Sewage Solids Removed from the Sewage Treatment Plant (STP)

From STP	Current Month (m ³)	Year to Date (m ³)
Sewage Solids	30	335
Sewage Effluent	5,604	68,103

B(10) Quantity of Sewage Delivered to STP from Sable Development

Location Name	Current Month (m ³)	Year to Date (m ³)
Sable Development	1.5	16.75



Part C. Other Monitoring Requirements

C(1) Precipitation Data from Koala Met Station

Month	Precipitation (mm)
November	5.20
Year to Date (mm)	168.6

C(4) Quantity of Ore Produced

Material (tonnes)	Current Month	Year to Date
Processed Ore	320,895	3,810,391

Note: quantity reported represents all operating open pit and underground mines.

C(5a) Quantity of Waste Rock and Coarse Kimberlite Produced

Material (tonnes)	Current Month	Year to Date
Waste Rock Produced	889,144	7,006,904
Coarse Processed Kimberlite	93,740	1,066,937

Note: quantities of coarse processed kimberlite and waste rock reported represents all operating open pits and underground mines.

C(5b) Waste Rock Disposal Locations

Origin	Destination	Waste Rock Produced	Year To Date
Misery Underground	Misery WRSA	1,380	92,492
Point Lake	Point Lake WRSA	333,415	2,995,705
Point Lake	Point Lake OVBSP	545,839	1,430,110
Sable Pit	Sable West WRSA	0	118,044
Sable Pit	Sable South WRSA	0	41,191
Sable Pit	Sable South WRSA Ext	8,510	1,493,563
Sable Pit	Sable South Pad	0	50,349
Sable Pit	Sable East WRSA	0	785,450
Total		889,144	7,006,904

Note: all values are in metric tonnes. Waste Rock Storage Area (WRSA) & Overburden Stockpile (OVBSP).

Appendix A – Field Parameters

Date/ Time	Station Point	Air Temperature °C	Depth of Sample m	pH	Specific Conductivity µs/cm	Water Colour	Water Temperature	Weather	Wind Direction Degrees	Wind Speed km/hr
17-Nov-2024/14:20	1616-46b	N/D*	0	8.65	3,825	Dark Brown	17.8	N/D*	N/D*	N/D*

*No Data: sample collected underground; weather data not available.



BURGUNDY
DIAMOND MINES

ASX: BDM
www.burgundydiamonds.com

Appendix B – Lab Report Enclosures



Your P.O. #: 6404002992
 Site Location: MDMER/SNP/SEEPAGE
 Your C.O.C. #: 102582

Attention: COMPLIANCE TEAM

Arctic Canadian Diamond Company Ltd
 900, 606 4 Street SW
 Calgary, AB
 CANADA T2P 1T1

Report Date: 2024/12/03
 Report #: R3595735
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C494548

Received: 2024/11/20, 14:45

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Acidity pH 4.5 & pH 8.3 (as CaCO3)	1	N/A	2024/11/26	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	1	N/A	2024/11/23	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	1	N/A	2024/11/22	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/11/23	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/11/23	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	1	N/A	2024/12/02	BBY WI-00033	Auto Calc
Mercury (Total) by CV	1	2024/11/28	2024/11/29	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	1	2024/11/29	2024/12/01	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	1	2024/11/29	2024/11/29	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	1	N/A	2024/11/22	AB SOP-00007	SM 24 4500 NH3 A G m
NO2 (N); NO2 (N) + NO3 (N) in Water (LL)	1	N/A	2024/11/21	AB SOP-00091	SM 24 4500 NO3m
Nitrate + Nitrite-N (calculated) Low Lev	1	N/A	2024/11/27		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	1	N/A	2024/11/21	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	1	N/A	2024/11/23	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	1	N/A	2024/11/20	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	1	N/A	2024/11/21	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	1	N/A	2024/11/21	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	1	N/A	2024/11/22	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	1	N/A	2024/11/22		Auto Calc
Temperature (Field)	1	N/A	2024/11/20	Field Test	Field Test
Carbon (Inorganic)	1	N/A	2024/11/22	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	1	N/A	2024/11/22		Auto Calc
Nitrogen (Total)	1	2024/11/22	2024/11/22	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	1	N/A	2024/11/22	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Dissolved (5)	1	2024/11/22	2024/11/22	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total	1	2024/11/22	2024/11/22	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	1	2024/11/21	2024/11/21	AB SOP-00061	SM 24 2540 D m
Turbidity	1	N/A	2024/11/21	CAL SOP-00081	SM 24 2130 B m
Ion Balance (6)	1	N/A	2024/12/02		
Total Dissolved Solids (Calculated) (6)	1	N/A	2024/12/02		



Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102582

Attention: COMPLIANCE TEAM

Arctic Canadian Diamond Company Ltd
900, 606 4 Street SW
Calgary, AB
CANADA T2P 1T1

Report Date: 2024/12/03
Report #: R3595735
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C494548

Received: 2024/11/20, 14:45

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas 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.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas 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 Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas 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 Bureau Veritas, 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.

- (1) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
- (2) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
- (3) Orthophosphate > Total Phosphorus Imbalance: When applicable, Orthophosphate, Total Phosphorus and dissolved Phosphorus results were reviewed and data quality meets acceptable levels unless otherwise noted.
- (4) TOC present in the sample should be considered as non-purgeable TOC.
- (5) Dissolved Phosphorus > Total Phosphorus Imbalance: When applicable, Dissolved Phosphorus and Total Phosphorus results were reviewed and data quality meets acceptable levels unless otherwise noted.
- (6) Calculation was conducted as per client request using CAL PDF-00333.



Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102582

Attention: COMPLIANCE TEAM

Arctic Canadian Diamond Company Ltd
900, 606 4 Street SW
Calgary, AB
CANADA T2P 1T1

Report Date: 2024/12/03
Report #: R3595735
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C494548

Received: 2024/11/20, 14:45

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Geraldlyn Gouthro, Key Account Specialist
Email: geraldlyn.gouthro@bureauveritas.com
Phone# (403) 291-3077

=====
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor
validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible
for Alberta Environmental laboratory operations.



RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		DAS857		
Sampling Date		2024/11/17 14:20		
COC Number		102582		
	UNITS	1616-46B	RDL	QC Batch
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	465	0.50	B613031
Calculated Ion Balance (% Difference)	%	7.7		B614509
Nitrate plus Nitrite (N)	mg/L	110	0.10	B614511
Calculated Total Dissolved Solids	mg/L	2500	4.7	B614510
Total Total Kjeldahl Nitrogen (Calc)	mg/L	13	3.0	B613036
Field Parameters				
Field pH	pH	8.65	N/A	ONSITE
Field Temperature (Fd)	deg. C	17.8	N/A	ONSITE
Misc. Inorganics				
Fluoride (F)	mg/L	0.647	0.010	B617790
pH	pH	8.29	N/A	B617788
Reactive Silica	mg/L	17	0.25	B614871
Acidity (pH 4.5)	mg/L	<1.0	1.0	B617793
Alkalinity (Total as CaCO3)	mg/L	78.6	0.50	B617787
Total Organic Carbon (C)	mg/L	3.6	0.20	B616104
Acidity (pH 8.3)	mg/L	3.9	1.0	B617793
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B617787
Bicarbonate (HCO3)	mg/L	95.9	0.50	B617787
Carbonate (CO3)	mg/L	<0.50	0.50	B617787
Hydroxide (OH)	mg/L	<0.50	0.50	B617787
Total Suspended Solids	mg/L	530 (1)	3.0	B614568
Anions				
Orthophosphate (P)	mg/L	0.0022	0.0010	B615635
Chloride (Cl)	mg/L	390	2.5	B617282
Dissolved-Low Level Sulphate (SO4)	mg/L	680	3.0	B616701
Nutrients				
Total Carbon (C)	mg/L	24	0.50	B614508
Total Inorganic Carbon (C)	mg/L	20 (2)	4.0	B614679
Dissolved Phosphorus (P)	mg/L	0.079	0.0020	B616626
RDL = Reportable Detection Limit N/A = Not Applicable (1) Detection limit raised based on sample volume used for analysis. (2) Detection limits raised due to sample matrix.				



RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		DAS857		
Sampling Date		2024/11/17 14:20		
COC Number		102582		
	UNITS	1616-46B	RDL	QC Batch
Total Phosphorus (P)	mg/L	0.32 (1)	0.20	B616622
Total Ammonia (N)	mg/L	14	0.050	B616445
Nitrite (N)	mg/L	12	0.010	B615814
Nitrate (N)	mg/L	99	0.020	B615814
Dissolved Nitrate plus Nitrite (N)	mg/L	120	3.0	B614937
Total Nitrogen (N)	mg/L	130 (1)	2.0	B616124
Physical Properties				
Conductivity	uS/cm	3930	1.0	B617789
Physical Properties				
Turbidity - NTU	NTU	460	0.10	B615315
RDL = Reportable Detection Limit (1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.				



**BUREAU
VERITAS**

Bureau Veritas Job #: C494548
Report Date: 2024/12/03

Arctic Canadian Diamond Company Ltd
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		DAS857		
Sampling Date		2024/11/17 14:20		
COC Number		102582		
	UNITS	1616-46B	RDL	QC Batch
Elements				
Total Mercury (Hg)	mg/L	0.0000054	0.0000019	B622700
RDL = Reportable Detection Limit				



BUREAU
VERITAS

Bureau Veritas Job #: C494548
Report Date: 2024/12/03

Arctic Canadian Diamond Company Ltd
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		DAS857		
Sampling Date		2024/11/17 14:20		
COC Number		102582		
	UNITS	1616-46B	RDL	QC Batch
Elements				
Total Aluminum (Al)	mg/L	6.6	0.0030	B623664
Total Antimony (Sb)	mg/L	0.0020	0.00060	B623664
Total Arsenic (As)	mg/L	0.0067	0.00020	B623664
Total Barium (Ba)	mg/L	0.17	0.010	B623634
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B623664
Total Boron (B)	mg/L	0.38	0.020	B623634
Total Cadmium (Cd)	mg/L	0.00023	0.000020	B623664
Total Calcium (Ca)	mg/L	93	0.30	B623634
Total Chromium (Cr)	mg/L	0.080	0.0010	B623664
Total Cobalt (Co)	mg/L	0.018	0.00030	B623664
Total Copper (Cu)	mg/L	0.013	0.0010	B623664
Total Iron (Fe)	mg/L	16	0.060	B623634
Total Lead (Pb)	mg/L	0.0080	0.00020	B623664
Total Lithium (Li)	mg/L	0.096	0.020	B623634
Total Magnesium (Mg)	mg/L	56	0.20	B623634
Total Manganese (Mn)	mg/L	0.25	0.0040	B623634
Total Molybdenum (Mo)	mg/L	0.52	0.00020	B623664
Total Nickel (Ni)	mg/L	0.29	0.00050	B623664
Total Potassium (K)	mg/L	230	0.30	B623634
Total Selenium (Se)	mg/L	0.0029	0.00020	B623664
Total Silicon (Si)	mg/L	33	0.50	B623634
Total Silver (Ag)	mg/L	<0.00010	0.00010	B623664
Total Sodium (Na)	mg/L	550	2.5	B623634
Total Strontium (Sr)	mg/L	2.3	0.020	B623634
Total Sulphur (S)	mg/L	240	0.20	B623634
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B623664
Total Tin (Sn)	mg/L	<0.0010	0.0010	B623664
Total Titanium (Ti)	mg/L	0.31	0.0010	B623664
Total Uranium (U)	mg/L	0.020	0.00010	B623664
Total Vanadium (V)	mg/L	0.027	0.0010	B623664
Total Zinc (Zn)	mg/L	0.076	0.0030	B623664
RDL = Reportable Detection Limit				



GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.8°C
-----------	-------

Sample DAS857 [1616-46B] : Turbidity completed within five days of sampling. Data is satisfactory for compliance purposes. NO2 (N); NO2 (N) + NO3 (N) in Water (LL) completed within five days of sampling. Data is satisfactory for compliance purposes. Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C494548

Report Date: 2024/12/03

QUALITY ASSURANCE REPORT

Arctic Canadian Diamond Company Ltd

Site Location: MDMER/SNP/SEEPAGE

Your P.O. #: 6404002992

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B614568	Total Suspended Solids	2024/11/21	101	80 - 120	94	80 - 120	<1.0	mg/L	6.5	20		
B614679	Total Inorganic Carbon (C)	2024/11/22	119	80 - 120	108	80 - 120	<1.0	mg/L	NC	20		
B614871	Reactive Silica	2024/11/21	92	80 - 120	105	80 - 120	<0.050	mg/L	1.0	20		
B614937	Dissolved Nitrate plus Nitrite (N)	2024/11/21	111	80 - 120	100	80 - 120	0.0042, RDL=0.0030 (1)	mg/L	0.72	20		
B614937	Dissolved Nitrite (N)	2024/11/21	115	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B615315	Turbidity - NTU	2024/11/21			103	80 - 120	<0.10	NTU	9.4	20		
B615635	Orthophosphate (P)	2024/11/21	89	80 - 120	102	80 - 120	<0.0010	mg/L	8.3	20		
B615814	Nitrate (N)	2024/11/21	NC	80 - 120	99	80 - 120	<0.0020	mg/L	0.097	20		
B615814	Nitrite (N)	2024/11/21	NC	80 - 120	95	80 - 120	<0.0010	mg/L	0.19	20		
B616104	Total Organic Carbon (C)	2024/11/22	86	75 - 125	103	80 - 120	<0.20	mg/L	2.9	20		
B616124	Total Nitrogen (N)	2024/11/22	95	80 - 120	103	80 - 120	<0.020	mg/L	6.5	20	103	80 - 120
B616445	Total Ammonia (N)	2024/11/22	NC	80 - 120	102	80 - 120	<0.0050	mg/L	0.026	20		
B616622	Total Phosphorus (P)	2024/11/22	99	80 - 120	95	80 - 120	<0.0010	mg/L	5.9	20	92	80 - 120
B616626	Dissolved Phosphorus (P)	2024/11/22	98	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20	91	80 - 120
B616701	Dissolved-Low Level Sulphate (SO4)	2024/11/22	NC	80 - 120	101	80 - 120	<0.050	mg/L	0.24	20		
B617282	Chloride (Cl)	2024/11/22	NC	80 - 120	100	80 - 120	<0.50	mg/L	2.9	20		
B617787	Alkalinity (PP as CaCO3)	2024/11/23					<0.50	mg/L	NC	20		
B617787	Alkalinity (Total as CaCO3)	2024/11/23			98	80 - 120	<0.50	mg/L	0.11	20		
B617787	Bicarbonate (HCO3)	2024/11/23					<0.50	mg/L	0.11	20		
B617787	Carbonate (CO3)	2024/11/23					<0.50	mg/L	NC	20		
B617787	Hydroxide (OH)	2024/11/23					<0.50	mg/L	NC	20		
B617788	pH	2024/11/23			101	97 - 103			1.6	N/A		
B617789	Conductivity	2024/11/23			101	90 - 110	<1.0	uS/cm	0.51	20		
B617790	Fluoride (F)	2024/11/23	109	80 - 120	109	80 - 120	<0.010	mg/L	0.31	20		
B617793	Acidity (pH 4.5)	2024/11/26					<1.0	mg/L	NC	20		
B617793	Acidity (pH 8.3)	2024/11/26			99	80 - 120	<1.0	mg/L	11	20		
B622700	Total Mercury (Hg)	2024/11/29	104	80 - 120	101	80 - 120	<0.0000019	mg/L	NC	20		
B623634	Total Barium (Ba)	2024/12/01	101	80 - 120	104	80 - 120	<0.010	mg/L	2.7	20		
B623634	Total Boron (B)	2024/12/01	100	80 - 120	103	80 - 120	<0.020	mg/L	2.8	20		
B623634	Total Calcium (Ca)	2024/12/01	102	80 - 120	102	80 - 120	<0.30	mg/L	1.9	20		
B623634	Total Iron (Fe)	2024/12/01	113	80 - 120	117	80 - 120	<0.060	mg/L	3.1	20		



BUREAU
VERITAS

Bureau Veritas Job #: C494548

Report Date: 2024/12/03

QUALITY ASSURANCE REPORT(CONT'D)

Arctic Canadian Diamond Company Ltd

Site Location: MDMER/SNP/SEEPAGE

Your P.O. #: 6404002992

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B623634	Total Lithium (Li)	2024/12/01	101	80 - 120	104	80 - 120	<0.020	mg/L	2.0	20		
B623634	Total Magnesium (Mg)	2024/12/01	103	80 - 120	107	80 - 120	<0.20	mg/L	4.4	20		
B623634	Total Manganese (Mn)	2024/12/01	107	80 - 120	108	80 - 120	<0.0040	mg/L	3.4	20		
B623634	Total Potassium (K)	2024/12/01	100	80 - 120	102	80 - 120	<0.30	mg/L	2.8	20		
B623634	Total Silicon (Si)	2024/12/01	102	80 - 120	102	80 - 120	<0.50	mg/L	3.0	20		
B623634	Total Sodium (Na)	2024/12/01	NC	80 - 120	102	80 - 120	<0.50	mg/L	2.4	20		
B623634	Total Strontium (Sr)	2024/12/01	96	80 - 120	99	80 - 120	<0.020	mg/L	3.5	20		
B623634	Total Sulphur (S)	2024/12/01	109	80 - 120	105	80 - 120	<0.20	mg/L	3.3	20		
B623664	Total Aluminum (Al)	2024/11/29	102	80 - 120	104	80 - 120	<0.0030	mg/L	9.8	20		
B623664	Total Antimony (Sb)	2024/11/29	104	80 - 120	107	80 - 120	<0.00060	mg/L	NC	20		
B623664	Total Arsenic (As)	2024/11/29	102	80 - 120	103	80 - 120	<0.00020	mg/L	7.9	20		
B623664	Total Beryllium (Be)	2024/11/29	100	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
B623664	Total Cadmium (Cd)	2024/11/29	100	80 - 120	101	80 - 120	<0.000020	mg/L				
B623664	Total Chromium (Cr)	2024/11/29	96	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B623664	Total Cobalt (Co)	2024/11/29	97	80 - 120	99	80 - 120	<0.00030	mg/L	6.4	20		
B623664	Total Copper (Cu)	2024/11/29	96	80 - 120	98	80 - 120	<0.0010	mg/L	6.6	20		
B623664	Total Lead (Pb)	2024/11/29	98	80 - 120	101	80 - 120	<0.00020	mg/L	0.61	20		
B623664	Total Molybdenum (Mo)	2024/11/29	103	80 - 120	99	80 - 120	<0.00020	mg/L	3.0	20		
B623664	Total Nickel (Ni)	2024/11/29	96	80 - 120	98	80 - 120	<0.00050	mg/L	3.5	20		
B623664	Total Selenium (Se)	2024/11/29	99	80 - 120	104	80 - 120	<0.00020	mg/L	8.1	20		
B623664	Total Silver (Ag)	2024/11/29	97	80 - 120	98	80 - 120	<0.00010	mg/L	2.4	20		
B623664	Total Thallium (Tl)	2024/11/29	98	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20		
B623664	Total Tin (Sn)	2024/11/29	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B623664	Total Titanium (Ti)	2024/11/29	100	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20		
B623664	Total Uranium (U)	2024/11/29	98	80 - 120	97	80 - 120	<0.00010	mg/L	2.5	20		
B623664	Total Vanadium (V)	2024/11/29	100	80 - 120	99	80 - 120	<0.0010	mg/L	11	20		



BUREAU
VERITAS

Bureau Veritas Job #: C494548

Report Date: 2024/12/03

QUALITY ASSURANCE REPORT(CONT'D)

Arctic Canadian Diamond Company Ltd

Site Location: MDMER/SNP/SEEPAGE

Your P.O. #: 6404002992

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B623664	Total Zinc (Zn)	2024/11/29	96	80 - 120	100	80 - 120	<0.0030	mg/L	1.3	20		

N/A = Not Applicable

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) Method blank exceeds acceptance limits, 2x RDL acceptable for low level analysis



BUREAU
VERITAS

Bureau Veritas Job #: C494548
Report Date: 2024/12/03

Arctic Canadian Diamond Company Ltd
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Alberta Environmental laboratory operations.

