30 September 2024

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

RE: Surveillance Network Program August 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 August 2024.

For 2024, the year-to-date precipitation presented in the SNP Reports was inaccurate. This oversight has been addressed. Refer to Part C. Other Monitoring Requirements.

On June 20, 2024, Burgundy requested authorization to commence discharging water from the Two Rock Sedimentation Pond (TRSP) into Horseshoe Lake, along with authorization to use water from the lower cell of TRSP for road watering purposes. After reviewing the water quality sample results, the Inspector agreed that all regulated parameters are below the effluent water quality criteria specified in Part H, Condition 26(d) of Water Licence W2022L2-0001. Authorization to pump from TRSP to Horseshoe Lake was granted under Part H, Condition 22 of the Water Licence.

Burgundy began Discharging water from TRSP into Horseshoe Lake on August 3, 2024. On August 7, 2024 (first week of Discharge), Burgundy collected a bioassay test for rainbow trout LC50 multi-concentration, which passed. A sublethal toxicity test (*Pseudokirchneriella subcapitata)* was also collected on this date. Results for the *Pseudokirchneriella subcapitata* 72H Growth Inhibition Test showed significant growth stimulation was found in the 45.455% v/v concentration.

On August 7, 2024, Burgundy also collected a *Daphnia Magna* LC50 multi concentration test. On August 12, 2024, Bureau Veritas Labs informed Burgundy that the *Daphnia Magna* test could not be completed due to the sub-sample for *Daphnia Magna* being missed.

On August 27, 2024, Burgundy collected *Daphnia Magna* LC50 multi concentration and *Ceriodaphnia* – Chronic Bioassay (%). The results of the *Daphnia magna* LC50 multi-concentration test passed. On September 23, 2024, Bureau Veritas Labs informed Burgundy that there was an issue with the *Ceriodaphnia* shipment, and the sample never arrived at their laboratory in Quebec.

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:
C460552, C460530, C460549, C460308, C462652, C462649, C462640, C464875, C469924, C469880, C469899, C466889

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

In accordance with the requirements of Water Licence W2022L2-0001, there were 27 water samples 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
C460552	0008-Sa10	3-Aug-2024	
C460552	0008-Sa3	3-Aug-2024	First Day of Discharge
C460552	0008-Sa32	3-Aug-2024	
C460552	0008-Sa9b	3-Aug-2024	
C460530	1616-46a	4-Aug-2024	
C460549	0008-Sa2	5-Aug-2024	
C460308	0008-Sa3_Discharge	7-Aug-2024	First Week of Discharge
C462652	1616-46a	11-Aug-2024	
C462649	1616-46b	11-Aug-2024	
C462640	0008-494	12-Aug-2024	Travel Blank
C462640	0008-Sa9b	12-Aug-2024	
C462640	0008-Sa3	12-Aug-2024	
C462640	0008-Sa10	12-Aug-2024	
C462640	0008-Sa103	12-Aug-2024	Duplicate 0008-Sa10
C464875	0008-494	19-Aug-2024	Travel Blank
C464875	0008-Sa9b	19-Aug-2024	
C464875	0008-Sa3	19-Aug-2024	
C464875	0008-Sa10	19-Aug-2024	
C469924	1616-12	24-Aug-2024	
C469924	1616-290	24-Aug-2024	Duplicate 1616-12
C469880	1616-43	24-Aug-2024	
C469899	0008-Sa10	26-Aug-2024	
C469899	0008-Sa9b	26-Aug-2024	
C469899	0008-Sa3	26-Aug-2024	
C466889	0008-Sa3_Discharge	27-Aug-2024	Bioassay

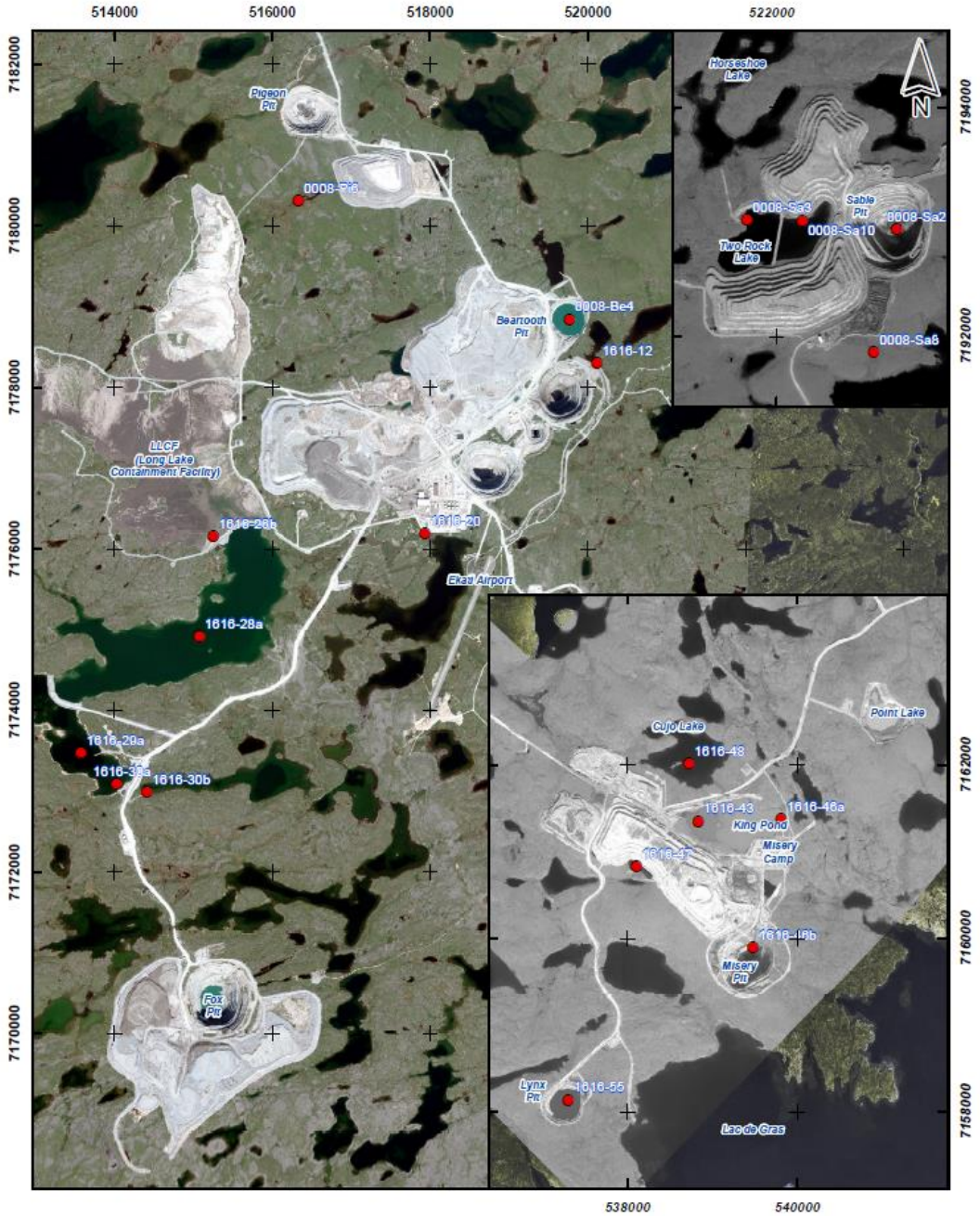

Figure 1. W2022L2-0001 Surveillance Network Monitoring Stations

1:40,000 to 60,000
Imagery acquired JUL2019/AUG2021 insets

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	7,622	53,300
Lac de Gras	5,600	52,240
Little Lake	0	0
Falcon Lake	160	12,880
Thinner Lake	0	0
Lac de Sauvage	0	0
Ursula Lake	0	0
Upper Exeter Lakes	0	0

B(3) Lake Level Elevation During Open Water

Lake Name	Lake Elevation (masl)
Grizzly Lake	467.86
Little Lake	448.91
Upper/North Panda Lake	460.54
Falcon Lake	469.62
Thinner Lake	451.89
Cell E LLCF	448.31
King Pond Settling Facility	444.52
Lac du Sauvage	415.93
Lac de Gras	415.80
Ursula Lake	462.87
Upper Exeter Lake	443.58

B(4) Source and Volume of Recycled Water Used

Plant	Source	Current Month (m^3)	Year to Date (m^3)
Process	LLCF	463,235	3,653,800

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	179,218	814,398
Process Plant Solids	40,660	216,360
Minewater	0	0
Other	430	2,479
Into Beartooth Pit		
Minewater	0	0
Other	0	0
Into Koala Pit		
Process Plant Liquids	86,010	2,451,270
Process Plant Solids	19,514	713,881
Into Panda Pit		
Process Plant Liquids	338,493	1,052,425
Process Plant Solids	76,796	266,422
Into Two Rock Sedimentation Pond		
Minewater	2,640	13,040
Other	0	116
Into King Pond Settling Facility		
Minewater	138,250	349,320
Other	0	0
Into Lynx Pit		
Minewater	81,973	339,919
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	0
From Two Rock Sedimentation Pond		
To Horseshoe Lake	177,171	177,171
For Road Watering	7,120	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			2,640	13,040						
Beartooth Pit										
Misery UG					5,891	41,778				
Panda Pit										
Koala Pit										
Misery Sumps					47,665	222,848	75,493	118,454		
Point Lake					84,694	84,694	6,480	221,645		
Total	**0**	**0**	**2,640**	**13,040**	**138,250**	**349,320**	**81,973**	**340,099**	**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	31	244
Sewage Effluent	9,743	46,173

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

Location Name	Current Month (m^3)	Year to Date (m^3)
Sable Development	1.55	12.20

Part C. Other Monitoring Requirements

C(1) Precipitation Data from Koala Met Station

Month	Precipitation (mm)
July	48.8
Year to Date (mm)	569.6

Note: total rainwater year-to-date (2024) is 569.6 (mm).

C(4) Quantity of Ore Produced

Material (tonnes)	Current Month	Year to Date
Processed Ore	392,905	2,809,056

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	991,305	4,298,589
Coarse Processed Kimberlite	121,151	779,931

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	14,482	79,980
Point Lake	Point Lake WRSA	891,526	1,378,384
Point Lake	Point Lake OVBSP	70,358	472,936
Sable Pit	Sable West WRSA	0	118,044
Sable Pit	Sable South WRSA	0	41,102
Sable Pit	Sable South WRSA Ext	13,387	1,372,671
Sable Pit	Sable South Pad	1,552	50,022
Sable Pit	Sable East WRSA	0	785,450
Total		**991,305**	**4,298,589**

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
19/08/24 08:25	1616-43	14.0	0	7.82	417.2	Colourless	13.2	Light Cloud	206	3.2
19/08/24 08:49	0008-Sa3_Discharge	14.2	0	7.69	181.4	Colourless	14.0	sunny	176	12.0
19/08/24 14:23	0008-Sa9b	16.9	0	7.5	43.3	Colourless	14.0	Overcast	169	19.8
19/08/24 15:19	0008-Sa3	18.4	0	7.27	184.8	Colourless	15.3	Overcast	166	22.0
19/08/24 15:30	0008-Sa10	18.2	0	8.11	450.6	Colourless	16.2	Overcast	165	22.0
24/08/24 11:03	1616-12	12.2	0	6.63	245.5	Colourless	12.6	sunny	270	4.0
24/08/24 11:10	1616-290	12.6	0	6.63	245.5	Colourless	12.6	sunny	296	9.4
24/08/24 13:14	1616-43	9.7	0	7.73	418.5	Colourless	12.7	Sunny/Partly Cloudy	356	19.0
26/08/24 11:41	0008-Sa9b	16.3	0	6.72	57.2	Colourless	12.3	sunny	232	15.6
26/08/24 13:05	0008-Sa3	17.1	0	7.62	193.1	Colourless	13.5	sunny	220	20.1
26/08/24 13:20	0008-Sa10	17.4	0	7.73	451.1	Colourless	14.7	sunny	197	20.1
26/08/24 16:40	1616-30	17.4	0	7.85	667.0	Colourless	14.3	sunny/windy	205	18.7
03/08/24 10:29	0008-Sa3	17.9	0	7.24	174.6	Colourless	15.5	sunny	333	7.9
03/08/24 10:41	0008-Sa32	17.8	0	7.24	174.6	Colourless	15.5	sunny	332	9.0
03/08/24 11:00	0008-Sa9b	18.3	0	7.1	28.3	Colourless	14.0	sunny	312	6.6
03/08/24 12:07	0008-Sa10	18.9	0	7.27	447.5	Colourless	15.53	sunny	302	7.5
04/08/24 10:51	1616-46a	9.4	0	8.64	2177	Cloudy	17.6	Overcast	73	14.4
05/08/24 10:25	0008-Sa2	12.9	0	9.14	2716	Lightly Tea Stained	7.9	sunny	327	8.6
07/08/24 8:22	0008-Sa3_Discharge	16.7	0	6.96	194.2	Lightly Tea Stained	14.7	Sunny, no clouds	171	0.8
11/08/24 11:35	1616-46b	31.00	0	8.02	3912	Colourless	23.7	Sunny/smoky	171	0.8
11/08/24 14:25	1616-46a	30.7	0	7.7	716.1	Colourless	19.8	Sunny, Smokey, Windy	222	21.0
12/08/24 13:30	0008-Sa9b	21.8	0	7.13	34.0	Colourless	17.3	Sunny, Smokey, Windy	235	14.4
12/08/24 14:32	0008-Sa3	22.7	0	7.37	179.7	Colourless	17.8	Sunny, Smokey	294	16.9
12/08/24 15:45	0008-Sa10	22.9	0	7.81	451.2	Colourless	16.7	Sunny, Smokey	336	17.0
12/08/24 15:55	0008-Sa103	21.8	0	7.81	451.2	Colourless	16.7	Sunny, Smokey	329	15.0

Appendix B – Analytical Results

Analytical results compared against W2022L2-0001 EQCs

		Station Point	**0008-Sa3**	**0008-Sa3**	**0008-Sa3**	**0008-Sa3**
		Date Sampled	3-Aug-24	12-Aug-24	19-Aug-24	26-Aug-24
		BV Job No.	C460552	C462640	C464875	C469899
	Maximum Average Concentration	**Maximum Concentration Any Grab Sample**				
Hardness (CaCO3)			57.5	67.3	63.5	66.5
pH	6-9		6.82	6.42	6.48	6.85
Solids	15	25	<1.0	4.3	<0.99	<1.0
Turbidity	10	15	<0.10	2.3	<0.10	1.5
Ammonia (N)	4	8	0.023	0.048	0.018	0.041
Nitrate (N)	20	40	0.64	0.84	1.1	1.4
Nitrite (N)	1	2	0.0059	0.0056	0.0056	0.0052
Phosphorus (P)	0.2	0.4	0.0039	0.0073	0.0032	0.0042
Aluminum (Al)	1	2	0.017	0.11	0.038	0.012
Arsenic (As)	0.05	0.1	0.00046	0.00048	0.0005	0.00049
Copper (Cu)	0.02	0.04	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium (Cd)	0.0015	0.003	<0.000020	<0.000020	<0.000020	<0.000020
Chromium (Cr)	0.02	0.04	<0.0010	<0.0010	<0.0010	<0.0010
Lead (Pb)	0.01	0.02	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)	0.03	0.06	<0.0030	<0.0030	<0.0030	<0.0030
Nickel (Ni)	0.05	0.1	0.0026	0.0038	0.0034	0.0027

Appendix C – Bioassay Test Results

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101951

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/06
Report #: R3552320
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460308
Received: 2024/08/08, 09:28

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Ecotox Report Attachment (1)	1	2024/09/06	2024/09/06		
pH (Field)	1	N/A	2024/08/08	Field Test	Field Test
Temperature (Field)	1	N/A	2024/08/08	Field Test	Field Test
Rainbow Trout LC50 Multi-Concentration (2)	1	N/A	2024/08/10	EENVSOP-00160	EPS 1 RM13 2nd ed m

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.

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) This test was performed by Bureau Veritas Vancouver, 4606 Canada Way , Burnaby, BC, V5G 1K5
(2) This test was performed by Bureau Veritas Edmonton Environmental, 4326 76 Avenue NW , Edmonton, AB, T6B 2H8

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101951

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/06
Report #: R3552320
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460308
Received: 2024/08/08, 09:28

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

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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.

Bureau Veritas Job #: C460308
Report Date: 2024/09/06

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSV895	
Sampling Date		2024/08/07 08:22	
COC Number		101951	
	UNITS	**0008-SA3_DISCHARGE**	**QC Batch**
Ecotox			
No Parameter	N/A	ATTACHED	B506490
Field Parameters			
Field pH	pH	6.96	ONSITE
Field Temperature (Fd)	deg. C	14.7	ONSITE

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

TOXICOLOGY (WATER)

Bureau Veritas ID		CSV895	
Sampling Date		2024/08/07 08:22	
COC Number		101951	
	UNITS	**0008-SA3_DISCHARGE**	**QC Batch**
Rainbow Trout			
LC50	% vol/vol	ATTACHED	B472921

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

GENERAL COMMENTS

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

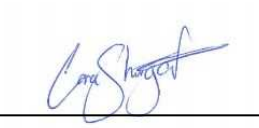
Package 1	1.7°C
Package 2	9.7°C
Package 3	9.8°C
Package 4	9.6°C
Package 5	9.7°C

Results relate only to the items tested.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

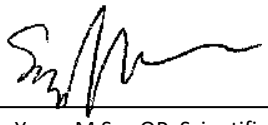
VALIDATION SIGNATURE PAGE

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



Cara Shurgot, Analyst 2

Kimberly Tamaki, Scientist, Ecotoxicology



Sandy Yuan, M.Sc., QP, Scientific Specialist

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

C460308
2024/08/08 09:28

COR FCD-00265 / 5
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ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.7	0.4	0.1
INTACT		✓		1	2	3
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.8	9.4	9.7
INTACT		✓		1	2	3
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.9	9.8	9.7
INTACT		✓		1	2	3
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.5	9.8	9.4
INTACT		✓		1	2	3
ICE PRESENT	✓	~~✓~~ IC				
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.8	9.5	9.8
INTACT		✓		1	2	3
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Shaira Cura	2024/08/08	09:28

C460308
2024/08/08 09:28

Burgundy Diamond Mines

900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS 1828

BUREAU VERITAS

COC# 101951

SO# 61985

For Lab Use	Sample Point	Station Type	Date	Time	Matrix	Type	Bioassay Chronic Toxicity [illegible]Pseudokirc	Daphnia Magna LC50 Multi-concentration	Rainbow Trout LC50 Multi-concentration	pH Field (pH)	Water Temp (°C)
✓	0008-Sa3_Discharge	EKA 2002 0008	07-Aug-2024	08:22	Water	SNP	Y	Y	Y	6.96	14.7

SAMPLE INFORMATION — ANALYSIS REQUESTED: Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

FOR LAB USE ONLY

MCAL-2024-08-603

Special Instructions (Billing details, QC reporting etc):

To monitor the quality of effluent leaving Two Rock Sedimentation Pond prior to Discharge entering the Receiving Environment.
Frequency: First week of discharge & last week of discharge
Parameters: Acute and chronic toxicity tests
Sent results to Tania.robitaille@burgundydiamonds.com, Landon.Murphy@burgundydiamonds.com & compliance.team@burgundydiamonds.com

Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by: [signature]	Date 07-Aug-2024 Time 9:57	Received by: Shaira Cura [signature]	Date 2024/08/08 Time 09:28
Relinquished by:	Date Time	Received by:	Date Time

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

See ACTR

Send Analytical Results to: compliance.team@burgundydiamonds.com

RESULTS OF RAINBOW TROUT LC50 MULTI-CONCENTRATION

Client : 13553 Arctic Canadian Diamond Company Ltd Job Number: C460308

Client Project Name & Number: MDMER/SNP/SEEPAGE

Test Result:

96 hrs LC50 % vol/vol (95% CL): >100% (N/A) Statistical Method: Visual

Sample Name : 0008-SA3_DISCHARGE Sample Matrix : Water

Description: Colourless, clear Sample Number: CSV895-01

Sample Collected: Aug 07, 2024 08:22 AM Sampling Method : N/A Site Collection: EKA 2002 0008

Sample Collected By: N/A Volume Received: 40 L Avg Temp Arrival: 8 °C Storage: 2-6°C

Sample Received: Aug 08, 2024 09:28 AM pH: 7.5 Dissolved Oxygen: 101.0 %

Analysis Start : Aug 10, 2024 08:45 AM Temperature : 14 °C Sample Conductance: 160 µS/cm

Concentration	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)
% vol/vol	Start	Start	Start	Start	24 hrs	24 hrs	24 hrs	24 hrs	48 hrs	48 hrs	48 hrs	48 hrs
0	14	8.0	373	9.5	0	0	0	0	0	0	0	0
6.25	14	8.0	361	9.5	0	0	0	0	0	0	0	0
12.5	14	8.0	348	9.5	0	0	0	0	0	0	0	0
25	14	7.9	323	9.5	0	0	0	0	0	0	0	0
50	15	7.9	273	9.5	0	0	0	0	0	0	0	0
100	15	7.6	175	9.5	0	0	0	0	0	0	0	0

Concentration	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)
% vol/vol	72 hrs	72 hrs	72 hrs	72 hrs	96 hrs	96 hr	96 hrs	96 hrs	96 hrs	96 hrs	96 hrs	96 hrs
0	0	0	0	0	14	7.8	376	9.3	0	0	0	0
6.25	0	0	0	0	14	8.0	365	9.2	0	0	0	0
12.5	0	0	0	0	14	8.0	351	9.1	0	0	0	0
25	0	0	0	0	14	8.0	327	9.2	0	0	0	0
50	0	0	0	0	14	7.9	276	9.2	0	0	0	0
100	0	0	0	0	14	7.8	181	9.2	0	0	0	0

Comments : None

Culture/Control/Dilution Water City of Edmonton dechlorinated tap water

Hardness: 180 mg/L $CaCO_3$ Other parameters available on request.

Test Conditions Test concentration : 0,6.25,12.5,25,50,100 (% vol/vol)

Organisms per Vessel :	10	Test Temperature :	15 ± 1 °C	Solution Depth :	>15 cm
Total # of Organisms Used :	60	Pre-aeration Time :	30 min.	Rate of Aeration	6.5±1 mL/ (min*L)
Test Volume :	20 L	Vessel Volume :	38L	Test pH Adjusted:	No
Loading Density :	0.3 g/L	Photoperiod :	16:8 (light: dark)		

Test Organism : Rainbow Trout *(Oncorhynchus mykiss)* Source : LSL Trout Hatchery

Culture Temperature :	15 ± 2 °C	Weight (Mean) +- SD :	0.6 ± 0.2 g	Length (Mean) +- SD :	3.97 ± 0.41 cm
Culture Water Renewal :	≥ 1.0 L/min/kg fish	Weight (Range) :	0.4 – 1.1 g	Length (Range) :	3.50 – 4.80 cm
Culture Photoperiod :	16:8 (light: dark)			% Mortality within 7 days :	0%
Feeding rate and frequency :	daily: 1-5% biomass of trout.			Acclimation Time:	>14 days

Reference chemical: Phenol Test Date: Jul 19, 2024

Test Endpoint 96 hrs LC50 (95% confidence interval) : 9.36 (8.48, 10.2)mg/L Statistical Method : Probit

Historical Mean LC50 (warning limits) : 7.73 (4.37, 13.7) mg/L Concentration : 0,7.59,9.15,11,13.3,16 mg/L

RESULTS OF RAINBOW TROUT LC50 MULTI-CONCENTRATION

Client : 13553 Arctic Canadian Diamond Company Ltd

Job Number: C460308

Client Project Name & Number: MDMER/SNP/SEEPAGE

Sample Number: CSV895-01

Test Method EPS 1/RM/13

Method Deviations : None

Note: The results contained in this report refer only to the testing of the sample submitted. Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation, including the toxicity parameters reported herein. The conductivity, dissolved oxygen and pH data contained within the toxicity report are provided for information purposes and are not individually accredited parameters. This report may not be reproduced, except in its entirety, without the written approval of the laboratory.

Analyst : Cara Shurgot, Joey Pilgrim, Kyle Monaghan, Maninder Brar

Verified By : Cara Shurgot, Analyst 2

Date: Aug 21, 2024 12:11 PM

www.bvlabs.com

BUREAU VERITAS
4606 Canada Way
Burnaby, BC V5G 1K5

Office 604 734 7276
Toll Free 800 665 8566
Fax 604 731 2386

SUBLETHAL TOXICITY TEST ON:

0008-SA3_DISCHARGE

SAMPLING DATE:

AUGUST 07, 2024

Prepared for:

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

Prepared by:

Ecotoxicology Group
Bureau Veritas

Job No.: C460308
September 2024

Summary of Test Results for Samples from
Arctic Canadian Diamond Company
Sample Date: August 07, 2024
Job C460308

Sample: 0008-SA3_DISCHARGE

Test		IC25 or LC25 (%v/v)
P. subcapitata:	Cell yield	>90.9 (N/A, N/A)

Pseudokirchneriella subcapitata Test Data Summary

Client Name/Location	Arctic Canadian Diamond Company / Calgary, AB
Testing Lab/Location	Bureau Veritas / Burnaby, BC
Collection Approach	1 sample
Effluent Sample	
Name of Samples	0008-SA3_DISCHARGE
Information on labelling/coding	Submissions logged under Job # C460308. See Certificate of Analysis for details.
Sample collection date (y/m/d)	2024/Aug/07
Date (y/m/d) of sample receipt at lab	2024/Aug/08 @ 09:28
Test Organisms	
Species	*Pseudokirchneriella subcapitata*
Strain number and origin of culture	Strain CPCC #37 was obtained from the Canadian Phycological Culture Centre
Age of culture used to provide inoculum, at start of test	3 days old
Culture in logarithmic growth phase?	See attached growth curve
Inoculum prepared less than 2-3 hrs before microplate incubation?	Yes, at 11:22
Initial cell density of inoculum	10364 cells/mL
Appearance, behaviour, or treatment of known-age culture before use	See “Data Summary” data sheet
Test Conditions & Facilities	
Test method	EPS 1/RM/25, 2nd Edition, March 2007 BBY2SOP-00006 - *Pseudokirchneriella subcapitata* 72H Growth Inhibition Test
Date & time test(s) started	2024/Aug/09 @ 11:36
Date & time test(s) ended	2024/Aug/12 @ 10:45
Persons performing test(s)	P. Fang, M. Thompson, M. Mazziotti, D. Lai
Mean test temperature	25°C
Procedure/rate/duration of aeration of sample(s) before test	No aeration of the sample
pH adjustment	No pH adjustments

pH of aqueous sample(s) before preparation and use in toxicity test	See “Data Summary” data sheet
pH of sample before any dilution at start of test	See “Data Summary” data sheet
pH from two controls at start & end of test	See “Data Summary” data sheet
Procedure for sample filtration	10 mL sub-sample was filtered through a pre-conditioned 0.45 µm pore diameter filter
Type & source of control/dilution water	Reconstituted water
Type & quantity of chemicals added to control/dilution H_2O	$NaHCO_3$, $CaSO_4$, $MgSO_4$, and KCl in the ratio of 1.6:0.8:1.0:0.07
# and conc. of test solutions	See Cell Counts sheet
# of replicates per conc.	See Cell Counts sheet
Absorbance not used	Cell counts done by Nexcelom Cellometer® Auto X4HM cell counter
Culture/test incubators & apparatus	Conviron Environmental Chamber – Costar Microplate- w/96 u-shaped wells
Microplate final volume	220 µL / well (200 µL sample, 10 µL enrichment media, and 10 µL algal inoculum)
Light intensity & quality	Full spectrum fluorescent lights, 3740-4022 lux
Composition of growth medium	As per Table 1 in EPS 1/RM/25
Test observations and/or deviations from test method and standard practices	There was nothing unusual about the test, no deviations from the test method, and no problems with the test.
Results	Results contained in this report refer only to the testing of samples as submitted.
Date cells counted (y/m/d)	2024/Aug/12
Cell counts in each replicate	See Cell Counts sheet
Any findings of growth stimulation at any concentration?	Yes, significant growth stimulation was found in the 45.455% v/v concentration. See Dunnett Multiple Comparison Test in CETIS.
Name and citation of program(s) and methods used for calculating statistical endpoint(s)	CETIS v2.1.2.3: Linear Interpolation (ICPIN)
Weighting techniques applied?	N/A
Residuals Analysis	N/A
Outliers?	None

QA	
Did the test pass the test validity criteria: • Homogeneity in the control (CV is ≤20%) • No trend or gradient in the control • Increase by a factor of >16 in the control	Yes, • % CV: 15% • Trend in the control: No • Algal cells increased by: 46.35
Ref tox test IC50 (95% CL) (mg Zn/L) and duration of test	0.0371; 2SD: (0.0303, 0.0454) duration was ~72 hrs
Ref tox test historic mean & 2SD range (mg Zn/L)	0.0438; 2SD: (0.027, 0.071)
Invalid Ref tox test?	No
Date of ref tox test (y/m/d)	2024/Aug/16
Conditions of ref tox test	Same as test conditions

CETIS Analytical Report

Alga Growth Inhibition Test — **Bureau Veritas**

Analysis ID:	10-1811-1563	**Endpoint:**	Cell Yield	**CETIS Version:**	CETISv2.1.2
Analyzed:	12 Aug-24 14:23	**Analysis:**	Parametric-Control vs Treatments	**Status Level:**	1
Edit Date:		**MD5 Hash:**	6D965A8A060AEBDC84A4B091687A25F4	**Editor ID:**	
Batch ID:	06-8029-0056	**Test Type:**	Cell Growth	**Analyst:**	P. Fang
Start Date:	09 Aug-24 11:31	**Protocol:**	EC/EPS 1/RM/25	**Diluent:**	Algal Culture Media
Ending Date:	12 Aug-24 10:45	**Species:**	Pseudokirchneriella subcapitata	**Brine:**	Not Applicable
Test Length:	71h	**Taxon:**	Chlorophyta	**Source:**	Canadian Phycological Cult **Age:**
Sample ID:	06-7190-5612	**Code:**	C460308	**Project:**	2-11-0691
Sample Date:	07 Aug-24 08:22	**Material:**	Water	**Source:**	Arctic Canadian Diamond
Receipt Date:	08 Aug-24 09:28	**CAS (PC):**		**Station:**	0008-SA3_DISCHARGE
Sample Age:	51h	**Client:**	Arctic Canadian Diamond Company		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Untransformed	C <> T	22.728	45.455	32.14	4.4	19.28	41.59%

Dunnett Multiple Comparison Test

Control	vs	Conc-%	df	Test Stat	Critical	MSD	P-Type	P-Value	Decision(α:5%)
Lab Control 1		1.42	9	0.8	2.919	19.28	CDF	0.9659	Non-Significant Effect
		2.841	9	1.057	2.919	19.28	CDF	0.8769	Non-Significant Effect
		5.682	9	0.9944	2.919	19.28	CDF	0.9050	Non-Significant Effect
		11.364	9	1.618	2.919	19.28	CDF	0.5221	Non-Significant Effect
		22.728	9	2.347	2.919	19.28	CDF	0.1601	Non-Significant Effect
		45.455*	9	3.253	2.919	19.28	CDF	0.0239	Significant Effect
		90.91	9	2.804	2.919	19.28	CDF	0.0639	Non-Significant Effect

Auxiliary Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:5%)
Outlier	Grubbs Extreme Value Test	2.277	2.893	0.5080	No Outliers Detected
Control Trend	Mann-Kendall Trend Test	0.9049	0.05	0.9049	Non-Significant Control Trend

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	3139.96	448.565	7	4.714	0.0026	Significant Effect
Error	1998.22	95.1531	21			
Total	5138.17		28			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	8.608	18.48	0.2821	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.9407	0.9004	0.1044	Normal Distribution

Cell Yield Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N1	8	46.35	40.48	52.22	49.3	34.55	52.85	2.481	15.14%	0.00%
1.42		3	41.07	31.74	50.39	42.3	36.85	44.05	2.168	9.14%	11.40%
2.841		3	39.37	10.43	68.31	39.3	27.75	51.05	6.726	29.59%	15.07%
5.682		3	39.78	0.0524	79.51	45.35	21.75	52.25	9.234	40.20%	14.17%
11.364		3	57.03	44.01	70.05	56.55	52.05	62.5	3.026	9.19%	-23.05%
22.728		3	61.85	37.9	85.8	64.2	51.25	70.1	5.567	15.59%	-33.44%
45.455		3	67.83	25.68	110	74.2	48.6	80.7	9.798	25.02%	-46.35%
90.91		3	64.87	56	73.73	66.75	60.75	67.1	2.061	5.50%	-39.95%

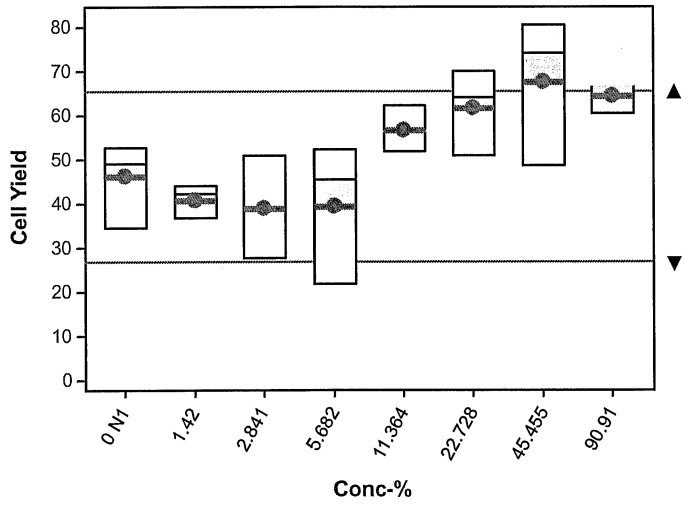
Alga Growth Inhibition Test — **Bureau Veritas**

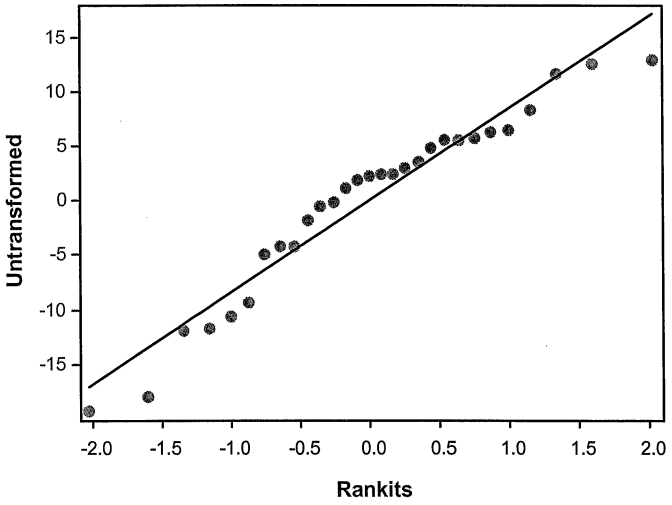
Analysis ID:	10-1811-1563	**Endpoint:**	Cell Yield	**CETIS Version:**	CETISv2.1.2
Analyzed:	12 Aug-24 14:23	**Analysis:**	Parametric-Control vs Treatments	**Status Level:**	1
Edit Date:		**MD5 Hash:**	6D965A8A060AEBDC84A4B091687A25F4	**Editor ID:**	

Cell Yield Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
0	N1	37.05	52	52.85	44.55	34.55	51.2	49.8	48.8
1.42		42.3	36.85	44.05					
2.841		27.75	51.05	39.3					
5.682		52.25	21.75	45.35					
11.364		52.05	56.55	62.5					
22.728		51.25	70.1	64.2					
45.455		80.7	48.6	74.2					
90.91		66.75	67.1	60.75					

Graphics





CETIS Analytical Report

Alga Growth Inhibition Test — **Bureau Veritas**

Analysis ID:	03-7796-6739	**Endpoint:**	Cell Yield	**CETIS Version:**	CETISv2.1.2
Analyzed:	12 Aug-24 14:24	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1
Edit Date:		**MD5 Hash:**	6D965A8A060AEBDC84A4B091687A25F4	**Editor ID:**	
Batch ID:	06-8029-0056	**Test Type:**	Cell Growth	**Analyst:**	P. Fang
Start Date:	09 Aug-24 11:31	**Protocol:**	EC/EPS 1/RM/25	**Diluent:**	Algal Culture Media
Ending Date:	12 Aug-24 10:45	**Species:**	Pseudokirchneriella subcapitata	**Brine:**	Not Applicable
Test Length:	71h	**Taxon:**	Chlorophyta	**Source:**	Canadian Phycological Cult **Age:**
Sample ID:	06-7190-5612	**Code:**	C460308	**Project:**	2-11-0691
Sample Date:	07 Aug-24 08:22	**Material:**	Water	**Source:**	Arctic Canadian Diamond
Receipt Date:	08 Aug-24 09:28	**CAS (PC):**		**Station:**	0008-SA3_DISCHARGE
Sample Age:	51h	**Client:**	Arctic Canadian Diamond Company		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Log(X+1)	Linear	1013284	200	Yes	Two-Point Interpolation

Point Estimates

Level	%	95% LCL	95% UCL	Tox Units	95% LCL	95% UCL
IC15	>90.91	---	---	<1.1	---	---
IC20	>90.91	---	---	<1.1	---	---
IC25	>90.91	---	---	<1.1	---	---
IC40	>90.91	---	---	<1.1	---	---
IC50	>90.91	---	---	<1.1	---	---

Cell Yield Summary

			Calculated Variate						Isotonic Variate	
Conc-%	Code	Count	Mean	Median	Min	Max	CV%	%Effect	Mean	%Effect
0	N1	8	46.35	49.3	34.55	52.85	15.14%	0.00%	52.27	0.00%
1.42		3	41.07	42.3	36.85	44.05	9.14%	11.40%	52.27	0.00%
2.841		3	39.37	39.3	27.75	51.05	29.59%	15.07%	52.27	0.00%
5.682		3	39.78	45.35	21.75	52.25	40.20%	14.17%	52.27	0.00%
11.364		3	57.03	56.55	52.05	62.5	9.19%	-23.05%	52.27	0.00%
22.728		3	61.85	64.2	51.25	70.1	15.59%	-33.44%	52.27	0.00%
45.455		3	67.83	74.2	48.6	80.7	25.02%	-46.35%	52.27	0.00%
90.91		3	64.87	66.75	60.75	67.1	5.50%	-39.95%	52.27	0.00%

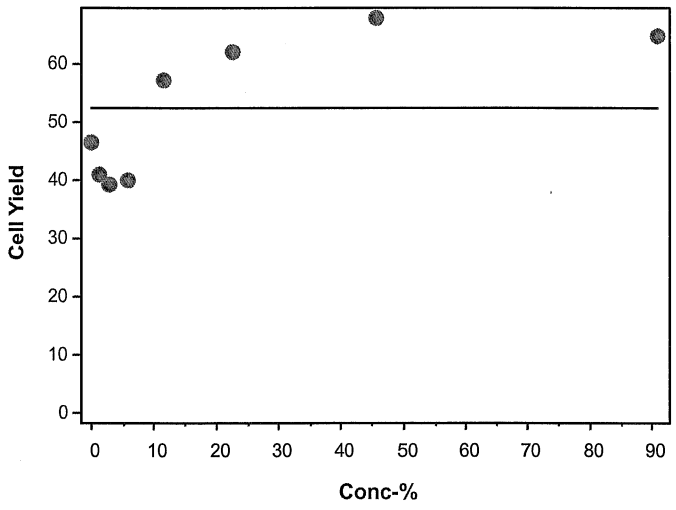
Cell Yield Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
0	N1	37.05	52	52.85	44.55	34.55	51.2	49.8	48.8
1.42		42.3	36.85	44.05					
2.841		27.75	51.05	39.3					
5.682		52.25	21.75	45.35					
11.364		52.05	56.55	62.5					
22.728		51.25	70.1	64.2					
45.455		80.7	48.6	74.2					
90.91		66.75	67.1	60.75					

Alga Growth Inhibition Test **Bureau Veritas**

Analysis ID:	03-7796-6739	**Endpoint:**	Cell Yield	**CETIS Version:**	CETISv2.1.2
Analyzed:	12 Aug-24 14:24	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1
Edit Date:		**MD5 Hash:**	6D965A8A060AEBDC84A4B091687A25F4	**Editor ID:**	

Graphics



Analyst: dmw 2024 Aug 12 QA: mo 2024 Sep 05

Client Name: Arctic Canadian Diamond Company
Sample ID: 0008-SA3_DISCHARGE
Date Sampled: 2024 Aug 07
Job / Sample #: C460308 / CSV895
Date & Time Started: 2024 Aug 09 @ 11:36
Date & Time Ended: 2024 Aug 12 @ 10:45
Analyst(s): D. Lai
Instrument ID: BBY2-0006, BBY2-0549

Conc. (% v/v)	Well	Counts (*10^4 Cells/mL)		Cell Yield (*10^4 Cells/mL)	Mean Cell Yield (*10^4 Cells/mL)	Standard Deviation	%CV
		1	2				
Lab Control	D2	34.2	41.9	37.05	46.35	7.02	15
Lab Control	D3	56.5	49.5	52.00			
Lab Control	D4	46.9	60.8	52.85			
Lab Control	D5	43.0	48.1	44.55			
Lab Control	D8	37.2	33.9	34.55			
Lab Control	D9	52.9	51.5	51.20			
Lab Control	D10	56.4	45.2	49.80			
Lab Control	D11	48.4	51.2	48.80			
1.420	C8	37.0	49.6	42.30	41.07	3.76	9
1.420	E8	37.8	37.9	36.85			
1.420	F8	50.3	39.8	44.05			
2.841	C7	28.9	28.6	27.75	39.37	11.65	30
2.841	E7	50.9	53.2	51.05			
2.841	F7	41.0	39.6	39.30			
5.682	C6	51.6	54.9	52.25	39.78	15.99	40
5.682	E6	30.5	15.0	21.75			
5.682	F6	46.0	46.7	45.35			
11.364	C5	46.8	59.3	52.05	57.03	5.24	9
11.364	E5	66.9	48.2	56.55			
11.364	F5	69.4	57.6	62.50			
22.728	C4	54.3	50.2	51.25	61.85	9.64	16
22.728	E4	67.6	74.6	70.10			
22.728	F4	68.9	61.5	64.20			
45.455	C3	92.7	70.7	80.70	67.83	16.97	25
45.455	E3	49.7	49.5	48.60			
45.455	F3	66.6	83.8	74.20			
90.91	C2	72.5	63.0	66.75	64.87	3.57	6
90.91	E2	67.2	69.0	67.10			
90.91	F2	71.6	51.9	60.75			

Proofed : mo 2024 Sep 05

Client Name: Arctic Canadian Diamond Company

Job / Sample #: C460308 / CSV895

Date Sampled: 2024 Aug 07

Sample ID: 0008-SA3_DISCHARGE

Date Received: 2024 Aug 08

Culture Date: 2024 Aug 06 A

Date & Time Started: 2024 Aug 09 @ 11:36

Culture Description: light green

Date & Time Ended: 2024 Aug 12 @ 10:45

Light Intensity at Surface (lux): 3740 - 4022

Analyst(s): P. Fang M.Thompson, M. Mozzioth D.Lai

Instrument ID(s): BBY2-0549, BBY2-0550, BBY2-0006, BBY2-0128, BBY2-0111, BBY2-0077, BBY2-0042, BBY2-0548

Reagent Water Preparation:

Date of reconstituted water prep: 2024 Aug 08

Hardness (~20 mg/L $CaCO_3$): 21

Volume prepared: 150 mL reconstituted water to 1L DI water

Analyst: B

Temperature (°C):

Day 0: 25 Day 1: 25 Day 2: 25 Day 3: 25

Sample Water Quality

Initial pH: 7.8 Initial Temp (°C): 24.4 Sample Description: clear, colourless

Initial Filtered pH (well B2): 8.1

Final Filtered pH (well B2): 7.8

Control Water Quality

Initial Filtered pH (well D6): 7.9

Final Filtered pH (well D7): 7.4

Determination of Initial Cell Concentration of Inoculum:

Prepared inoculum final concentration (**X**): 22.8 (*10^4 cells/mL)

Time of inoculum prep: 11:22

Therefore, (**Xi**) 2280 cells were initially put into each test well and the initial cell density was (**Xd**) 10364 cells/mL.

To calculate # cells initially put into each test well:

Xi = [(0.5 * X) * 0.02] = [(0.5 * 22.8x10⁴) * 0.02] = 2280 cells

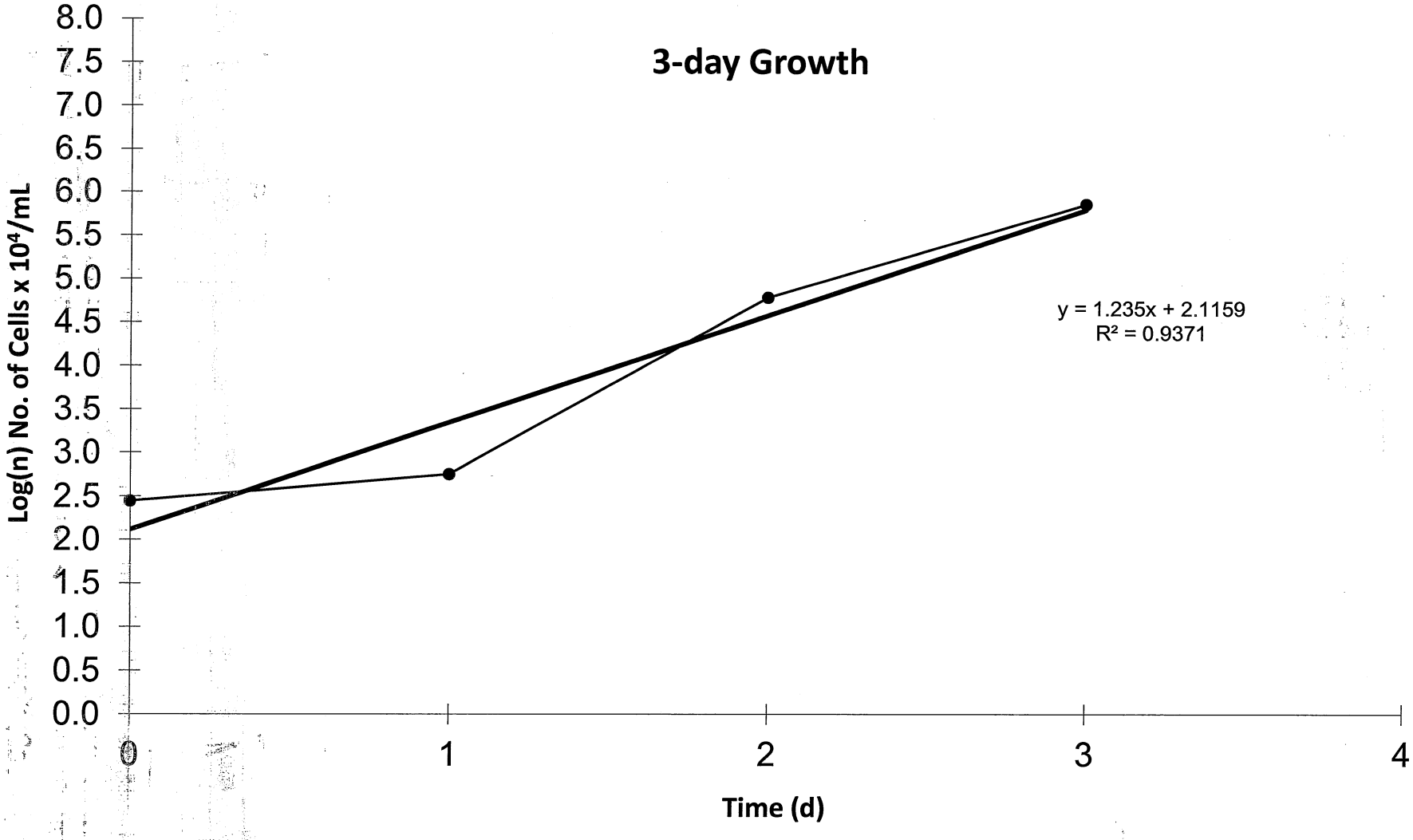
To calculate the initial cell density:

Xd = [(Xi) * (1000/220)] = [(2280) * (4.5455)] = 10364 cells/mL

Observations during Test (Y/N):

Date	Algal Growth	Condensation	Rotated Plates	Analyst
2024 Aug 10	Y	Y	Y	MT
2024 Aug 11	Y	Y	Y	MM
2024 Aug 12	Y	Y		dml

***Pseudokirchneriella subcapitata* Growth Curve using CP240703; Date: 2024/Jul/09**
EC~4000lux, 24°C, 0.5ml culture to 50 mL nutrient medium



Your P.O. #: 6404002992
Your Project #: 61053
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102019

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/23
Report #: R3560259
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C466889
Received: 2024/08/28, 17:11

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Daphnia magna LC50 Multi-Concentration (1)	1	N/A	2024/08/31	EENVSOP-00154	EPS 1 RM14 2nd ed m

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.

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) This test was performed by Bureau Veritas Edmonton Environmental, 4326 76 Avenue NW , Edmonton, AB, T6B 2H8

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Your Project #: 61053
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102019

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/23
Report #: R3560259
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C466889
Received: 2024/08/28, 17:11

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

==========

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Bureau Veritas Job #: C466889
Report Date: 2024/09/23

Arctic Canadian Diamond Company Ltd
Client Project #: 61053
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CUG256	
Sampling Date		2024/08/27 15:37	
COC Number		102019	
	UNITS	**0008-SA3_DISCHARGE**	**QC Batch**
Daphnia Magna			
LC50	% vol/vol	ATTACHED	B499182

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

GENERAL COMMENTS

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

Package 1	5.5°C
Package 2	5.9°C

Results relate only to the items tested.

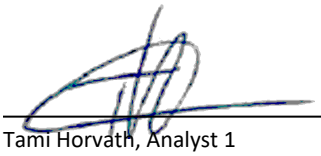
Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C466889
Report Date: 2024/09/23

Arctic Canadian Diamond Company Ltd
Client Project #: 61053
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:



Tami Horvath, Analyst 1

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

C466889
2024/08/28 17:11

CHAIN OF CUSTODY FORM

COC# 102019

SO# 61053

BUREAU VERITAS

Burgundy Diamond Mines

900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

For Lab Use	SAMPLE INFORMATION						ANALYSIS REQUESTED (Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below)			
	Sample Point	Station Type	Date	Time	Matrix	Type	Bioassay Ceriodaphnia	Bioassay Daphnia Magna LC50	pH Field (pH)	Water Temp (°C)
	0008-Sa3_Discharge	EKA 2002 0008	27-Aug-2024	15:37	Water	SNP	Y	Y	7.57	13.1

FOR LAB USE ONLY

MCAL-2024-08-2973

Special Instructions (Billing details, QC reporting etc):
To monitor the quality of effluent leaving Two Rock Sedimentation Pond prior to Discharge entering the Receiving Environment.
Frequency: First week of discharge & last week of discharge
Parameters: Acute and chronic toxicity tests
Sent results to Tania.robitaille@burgundydiamonds.com, Landon.Murphy@burgundydiamonds.com & compliance.team@burgundydiamonds.com

DO NOT TAKE PKS only Cerio****

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 28-Aug-2024 Time 7:15	Leo Chi Leolh	Date 2024/08/28 Time 17:11
	Date Time		Date Time

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☑ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☑ Yes ☒ No

Send Analytical Results to: compliance.team@burgundydiamonds.com

Temp - 5.3/5.5/5.8
6.1/6.3/5.4

RESULTS OF *DAPHNIA MAGNA* LC50 MULTI-CONCENTRATION

Client : 13553 Arctic Canadian Diamond Company Ltd Job Number: C466889

Client Project Name & Number: MDMER/SNP/SEEPAGE 61053 Sample Number: CUG256-02

Test Result:

48 hrs LC50 % vol/vol (95% CL): >100% (N/A) Statistical Method: Visual

Sample Name : 0008-SA3_DISCHARGE Sample Matrix : Water

Description: Colourless, clear Sample Prior to Analysis:

Sample Collected: Aug 27, 2024 03:37 PM Sampling Method : N/A pH: 7.8

Sample Collected By: N/A Site Collection: EKA 2002 0008 Temperature : 20 °C

Sample Received: Aug 28, 2024 05:11 PM Volume Received: 1 L Dissolved Oxygen: 116.0 %

Analysis Start : Aug 31, 2024 12:30 PM Avg Temp Arrival: 6 °C Sample Conductance: 189 µS/cm

End : Sep 02, 2024 11:40 AM Storage: 2-6°C Hardness: 80 mg $CaCO_3$/L

Concentration	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Mortality (#)	Mortality (%)	Immobility (#)	Immobility (%)	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)
% vol/vol	Start	Start	Start	Start	24 hrs	24 hrs	24 hrs	24 hrs	48 hrs	48 hr	48 hrs	48 hrs
0	20	8.3	362	8.3	0	0	0	0	19	8.2	366	7.7
6.25	20	8.3	353	8.3	0	0	0	0	20	8.3	359	7.7
12.5	20	8.3	342	8.4	0	0	0	0	20	8.3	344	7.8
25	20	8.3	322	8.5	0	0	0	0	20	8.3	325	7.9
50	20	8.3	283	8.7	0	0	0	0	20	8.2	290	7.8
100	20	7.9	192	9.5	0	0	0	0	20	8.0	201	7.8

Concentration	Mortality (#)	Mortality (%)	Immobility (#)	Immobility (%)
% vol/vol	48 hrs	48 hrs	48 hrs	48 hrs
0	0	0	0	0
6.25	0	0	0	0
12.5	0	0	0	0
25	0	0	0	0
50	0	0	0	0
100	0	0	0	0

Comments : None

Culture/Control/Dilution Water: City of Edmonton dechlorinated tap water

Hardness: 200 mg/L $CaCO_3$ Other parameters available on request.

Test Conditions Test concentration : 0,6.25,12.5,25,50,100 (% vol/vol)

Organisms per Vessel :	10	Pre-aeration Time :	30 min	Rate of Pre-aeration :	25-50 mL/(min*L)
Total # of Organisms Used :	60	Test Temperature :	20 ± 2 °C	Test Hardness Adjusted :	No
Test Volume :	150 mL	Vessel Volume :	200 mL	Test pH Adjusted:	No
Loading Density :	15.0 mL/Daphnia	Photoperiod :	16:8 (light: dark)		

Test Organism : *Daphnia magna* Source : In House Culture

Age at Test Initiation :	<24 hrs	Average Brood Size :	21.8
Culture Photoperiod :	16:8 (light: dark)	% Mortality within 7 days :	13.3
Culture Temperature :	20 ± 2 °C	Time To First Brood :	10 Days

Culture Diet Culture is fed algae: 800-1800uL; YCT: 200-800uL Daily. New cultures weekly, 63 daphnids distributed into 6 culture vessels and 3 reproductive vessels.

RESULTS OF *DAPHNIA MAGNA* LC50 MULTI-CONCENTRATION

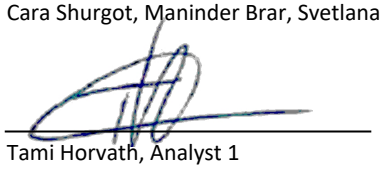
Client :	13553	Arctic Canadian Diamond Company Ltd	Job Number:	C466889
Client Project Name & Number:		MDMER/SNP/SEEPAGE 61053	Sample Number:	CUG256-02

Reference chemical:	Sodium Chloride	Test Date:	Sep 04, 2024
Test Endpoint 48 hrs LC50 (95% confidence interval) :	6.17 (5.50, 6.93)g/L	Statistical Method :	Untrimmed Spearman-Kärber
Historical Mean LC50 (warning limits) :	6.13 (4.93, 7.61) g/L	Concentration :	0,1.71,2.56,3.82,5.7,8.5 g/L

Test Method	EPS 1/RM/14
Method Deviations:	None

Note: The results contained in this report refer only to the testing of the sample submitted. Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation, including the toxicity parameters reported herein. The conductivity, dissolved oxygen and pH data contained within the toxicity report are provided for information purposes and are not individually accredited parameters.This report may not be reproduced, except in its entirety, without the written approval of the laboratory.

Analyst : Cara Shurgot, Maninder Brar, Svetlana Sofrenovic



Verified By : Tami Horvath, Analyst 1 Date: Sep 11, 2024 07:15 AM

Lab Report Enclosures

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101949

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/18
Report #: R3543111
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460552
Received: 2024/08/08, 13:15

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	5	N/A	2024/08/09	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	5	N/A	2024/08/14	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	5	N/A	2024/08/09	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	5	N/A	2024/08/14	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	5	N/A	2024/08/14	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	5	N/A	2024/08/15	BBY WI-00033	Auto Calc
Mercury (Total) by CV	5	2024/08/09	2024/08/13	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	5	2024/08/14	2024/08/14	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	5	2024/08/14	2024/08/14	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	5	N/A	2024/08/13	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	5	N/A	2024/08/12		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	5	N/A	2024/08/08	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	5	N/A	2024/08/14	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	4	N/A	2024/08/08	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	5	N/A	2024/08/08	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	5	N/A	2024/08/15	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	1	N/A	2024/08/13	AB SOP-00026	SM 24 4110 B m
Sulphate (SO4) by IC	4	N/A	2024/08/09	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	5	N/A	2024/08/12		Auto Calc
Temperature (Field)	4	N/A	2024/08/08	Field Test	Field Test
Carbon (Inorganic)	5	N/A	2024/08/12	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	5	N/A	2024/08/12	BBY WI-00033	Auto Calc
Nitrogen (Total)	5	2024/08/11	2024/08/12	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	5	N/A	2024/08/12	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Total	5	2024/08/11	2024/08/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	5	2024/08/09	2024/08/09	AB SOP-00061	SM 24 2540 D m
Turbidity	5	N/A	2024/08/08	CAL SOP-00081	SM 24 2130 B m
Ion Balance (5)	5	N/A	2024/08/15		
Total Dissolved Solids (Calculated) (5)	5	N/A	2024/08/15		

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101949

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/18
Report #: R3543111
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460552
Received: 2024/08/08, 13:15

Remarks:

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Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

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) Calculation was conducted as per client request using CAL PDF-00333.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101949

Attention: COMPLIANCE TEAM

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

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Geraldlyn Gouthro, Key Account Specialist
Email: geraldlyn.gouthro@bureauveritas.com
Phone# (403) 291-3077
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Bureau Veritas Job #: C460552
Report Date: 2024/08/18

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW888			CSW889			CSW890		
Sampling Date		2024/08/03 10:34			2024/08/03 12:07			2024/08/03 10:41		
COC Number		101949			101949			101949		
	UNITS	0008-121	RDL	QC Batch	0008-SA10	RDL	QC Batch	0008-SA32	RDL	QC Batch
Calculated Parameters										
Total Hardness (CaCO3)	mg/L	<0.50	0.50	B470597	141	0.50	B470597	58.0	0.50	B470597
Calculated Ion Balance (% Difference)	%	NC		B470466	3.0		B470466	4.9		B470466
Nitrate plus Nitrite (N)	mg/L	<0.0022	0.0022	B470451	17	0.010	B470451	0.65	0.0022	B470451
Calculated Total Dissolved Solids	mg/L	<0.98	0.98	B470468	270	1.8	B470468	95	0.95	B470468
Total Total Kjeldahl Nitrogen (Calc)	mg/L	<0.020	0.020	B470612	0.26	0.20	B470612	0.385	0.020	B470612
Field Parameters										
Field pH	pH				7.27	N/A	ONSITE	7.24	N/A	ONSITE
Field Temperature (Fd)	deg. C				15.63	N/A	ONSITE	15.50	N/A	ONSITE
Misc. Inorganics										
Fluoride (F)	mg/L	<0.010	0.010	B476061	0.178	0.010	B476061	0.215	0.010	B476061
pH	pH	5.92	N/A	B476063	6.51	N/A	B476063	6.80	N/A	B476063
Reactive Silica	mg/L	<0.25 (1)	0.25	B478922	0.25	0.050	B478922	0.27	0.050	B478922
Acidity (pH 4.5)	mg/L	<1.0	1.0	B471218	<1.0	1.0	B471218	<1.0	1.0	B471218
Alkalinity (Total as CaCO3)	mg/L	0.59	0.50	B476056	23.7	0.50	B476056	41.8	0.50	B476056
Total Organic Carbon (C)	mg/L	0.38	0.20	B474014	2.4	0.20	B474014	3.4	0.20	B474014
Acidity (pH 8.3)	mg/L	<1.0	1.0	B471218	<1.0	1.0	B471218	<1.0	1.0	B471218
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B476056	<0.50	0.50	B476056	<0.50	0.50	B476056
Bicarbonate (HCO3)	mg/L	0.72	0.50	B476056	29.0	0.50	B476056	51.0	0.50	B476056
Carbonate (CO3)	mg/L	<0.50	0.50	B476056	<0.50	0.50	B476056	<0.50	0.50	B476056
Hydroxide (OH)	mg/L	<0.50	0.50	B476056	<0.50	0.50	B476056	<0.50	0.50	B476056
Total Suspended Solids	mg/L	<1.0	1.0	B471350	<1.0	1.0	B471350	<1.0	1.0	B471350
Anions										
Orthophosphate (P)	mg/L	<0.0010	0.0010	B470849	<0.0010	0.0010	B470849	<0.0010	0.0010	B470849
Chloride (Cl)	mg/L	<0.50	0.50	B472198	8.9	0.50	B472198	3.2	0.50	B472639
Dissolved-Low Level Sulphate (SO4)	mg/L	<0.30	0.30	B472147	100	1.5	B472147	34	0.30	B472147
Nutrients										
Total Carbon (C)	mg/L	<0.50	0.50	B470381	7.1	0.50	B470381	13	0.50	B470381
Total Inorganic Carbon (C)	mg/L	<1.0	1.0	B474185	4.7	1.0	B474185	9.2	1.0	B474141
Total Phosphorus (P)	mg/L	<0.0020	0.0020	B473551	<0.0020	0.0020	B473551	0.0042	0.0020	B473551
Total Ammonia (N)	mg/L	<0.0050	0.0050	B475364	0.026	0.0050	B475354	0.025	0.0050	B475354

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to matrix interference.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW888			CSW889			CSW890		
Sampling Date		2024/08/03 10:34			2024/08/03 12:07			2024/08/03 10:41		
COC Number		101949			101949			101949		
	UNITS	**0008-121**	**RDL**	**QC Batch**	**0008-SA10**	**RDL**	**QC Batch**	**0008-SA32**	**RDL**	**QC Batch**
Nitrite (N)	mg/L	<0.0010	0.0010	B470568	0.062	0.0010	B470568	0.0060	0.0010	B470568
Nitrate (N)	mg/L	<0.0020	0.0020	B470568	17	0.010	B470568	0.64	0.0020	B470568
Total Nitrogen (N)	mg/L	<0.020	0.020	B473382	17 (1)	0.20	B473390	1.0	0.020	B473390
Physical Properties										
Conductivity	uS/cm	<1.0	1.0	B476060	454	1.0	B476060	174	1.0	B476060
Physical Properties										
Turbidity - NTU	NTU	<0.10	0.10	B470654	<0.10	0.10	B470654	<0.10	0.10	B470654

RDL = Reportable Detection Limit
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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Bureau Veritas Job #: C460552
Report Date: 2024/08/18

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW891		CSW892		
Sampling Date		2024/08/03 10:29		2024/08/03 11:00		
COC Number		101949		101949		
	UNITS	0008-SA3	QC Batch	0008-SA9B	RDL	QC Batch
Calculated Parameters						
Total Hardness (CaCO3)	mg/L	57.5	B470597	9.32	0.50	B470597
Calculated Ion Balance (% Difference)	%	5.4	B470466	4.0		B470466
Nitrate plus Nitrite (N)	mg/L	0.65	B470451	<0.0022	0.0022	B470451
Calculated Total Dissolved Solids	mg/L	95	B470468	14	0.95	B470468
Total Total Kjeldahl Nitrogen (Calc)	mg/L	0.362	B470612	0.399	0.020	B470612
Field Parameters						
Field pH	pH	7.24	ONSITE	7.10	N/A	ONSITE
Field Temperature (Fd)	deg. C	15.60	ONSITE	14.0	N/A	ONSITE
Misc. Inorganics						
Fluoride (F)	mg/L	0.215	B476061	0.039	0.010	B476061
pH	pH	6.82	B476063	6.42	N/A	B476063
Reactive Silica	mg/L	0.27	B478922	0.15	0.050	B478922
Acidity (pH 4.5)	mg/L	<1.0	B471218	<1.0	1.0	B471218
Alkalinity (Total as CaCO3)	mg/L	41.3	B476056	9.37	0.50	B476056
Total Organic Carbon (C)	mg/L	3.4	B474014	5.9	0.20	B474014
Acidity (pH 8.3)	mg/L	<1.0	B471218	1.4	1.0	B471218
Alkalinity (PP as CaCO3)	mg/L	<0.50	B476056	<0.50	0.50	B476056
Bicarbonate (HCO3)	mg/L	50.4	B476056	11.4	0.50	B476056
Carbonate (CO3)	mg/L	<0.50	B476056	<0.50	0.50	B476056
Hydroxide (OH)	mg/L	<0.50	B476056	<0.50	0.50	B476056
Total Suspended Solids	mg/L	<1.0	B471350	<1.0	1.0	B471350
Anions						
Orthophosphate (P)	mg/L	<0.0010	B470849	<0.0010	0.0010	B470849
Chloride (Cl)	mg/L	3.6	B472198	<0.50	0.50	B472639
Dissolved-Low Level Sulphate (SO4)	mg/L	34	B472147	3.2	0.30	B472340
Nutrients						
Total Carbon (C)	mg/L	11	B470381	8.3	0.50	B470381
Total Inorganic Carbon (C)	mg/L	7.3	B474185	2.4	1.0	B474185
Total Phosphorus (P)	mg/L	0.0039	B473551	0.0046	0.0020	B473551
Total Ammonia (N)	mg/L	0.023	B475354	0.020	0.0050	B475354
Nitrite (N)	mg/L	0.0059	B470568	<0.0010	0.0010	B470568

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C460552
Report Date: 2024/08/18

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW891		CSW892		
Sampling Date		2024/08/03 10:29		2024/08/03 11:00		
COC Number		101949		101949		
	UNITS	**0008-SA3**	**QC Batch**	**0008-SA9B**	**RDL**	**QC Batch**
Nitrate (N)	mg/L	0.64	B470568	<0.0020	0.0020	B470568
Total Nitrogen (N)	mg/L	1.0	B473382	0.40	0.020	B473382
Physical Properties						
Conductivity	uS/cm	173	B476060	29.7	1.0	B476060
Physical Properties						
Turbidity - NTU	NTU	<0.10	B470654	1.4	0.10	B470654
RDL = Reportable Detection Limit						

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Bureau Veritas Job #: C460552
Report Date: 2024/08/18

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

MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CSW888	CSW889	CSW890	CSW891	CSW892		
Sampling Date		2024/08/03 10:34	2024/08/03 12:07	2024/08/03 10:41	2024/08/03 10:29	2024/08/03 11:00		
COC Number		101949	101949	101949	101949	101949		
	UNITS	**0008-121**	**0008-SA10**	**0008-SA32**	**0008-SA3**	**0008-SA9B**	**RDL**	**QC Batch**
Elements								
Total Mercury (Hg)	mg/L	<0.0000019	<0.0000019	<0.0000019	<0.0000019	<0.0000019	0.0000019	B471735
RDL = Reportable Detection Limit								

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CSW888	CSW889	CSW890	CSW891	CSW892		
Sampling Date		2024/08/03 10:34	2024/08/03 12:07	2024/08/03 10:41	2024/08/03 10:29	2024/08/03 11:00		
COC Number		101949	101949	101949	101949	101949		
	UNITS	**0008-121**	**0008-SA10**	**0008-SA32**	**0008-SA3**	**0008-SA9B**	**RDL**	**QC Batch**
Elements								
Total Aluminum (Al)	mg/L	<0.0030	0.019	0.015	0.017	0.011	0.0030	B477803
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B477803
Total Arsenic (As)	mg/L	<0.00020	0.00025	0.00043	0.00046	0.00035	0.00020	B477803
Total Barium (Ba)	mg/L	<0.010	0.081	0.015	0.015	<0.010	0.010	B477811
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B477803
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B477811
Total Cadmium (Cd)	mg/L	<0.000020	0.000025	<0.000020	<0.000020	<0.000020	0.000020	B477803
Total Calcium (Ca)	mg/L	<0.30	23	10	9.8	1.5	0.30	B477811
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B477803
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B477803
Total Copper (Cu)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B477803
Total Iron (Fe)	mg/L	<0.060	<0.060	0.13	0.12	0.18	0.060	B477811
Total Lead (Pb)	mg/L	<0.00020	0.00022	<0.00020	<0.00020	<0.00020	0.00020	B477803
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B477811
Total Magnesium (Mg)	mg/L	<0.20	20	8.1	8.0	1.3	0.20	B477811
Total Manganese (Mn)	mg/L	<0.0040	<0.0040	0.036	0.036	0.016	0.0040	B477811
Total Molybdenum (Mo)	mg/L	<0.00020	0.033	0.0018	0.0018	<0.00020	0.00020	B477803
Total Nickel (Ni)	mg/L	<0.00050	0.024	0.0027	0.0026	0.00079	0.00050	B477803
Total Potassium (K)	mg/L	<0.30	17	5.5	5.4	0.98	0.30	B477811
Total Selenium (Se)	mg/L	<0.00020	0.00022	<0.00020	<0.00020	<0.00020	0.00020	B477803
Total Silicon (Si)	mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	B477811
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B477803
Total Sodium (Na)	mg/L	<0.50	14	5.4	5.3	1.3	0.50	B477811
Total Strontium (Sr)	mg/L	<0.020	0.28	0.081	0.080	<0.020	0.020	B477811
Total Sulphur (S)	mg/L	<0.20	33	10	10	0.92	0.20	B477811
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B477803
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B477803
Total Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B477803
Total Uranium (U)	mg/L	<0.00010	0.0026	0.0021	0.0020	<0.00010	0.00010	B477803
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B477803
Total Zinc (Zn)	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0030	B477803

RDL = Reportable Detection Limit

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GENERAL COMMENTS

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

Package 1	9.3°C
Package 2	8.0°C
Package 3	8.7°C
Package 4	7.2°C
Package 5	7.8°C
Package 6	8.8°C
Package 7	9.6°C
Package 8	4.9°C
Package 9	9.2°C
Package 10	5.4°C
Package 11	5.8°C
Package 12	5.8°C
Package 13	6.3°C
Package 14	8.4°C
Package 15	6.0°C
Package 16	8.0°C
Package 17	5.0°C
Package 18	7.2°C
Package 19	6.0°C
Package 20	5.0°C
Package 21	5.8°C
Package 22	8.1°C
Package 23	6.5°C
Package 24	6.5°C
Package 25	7.9°C
Package 26	6.2°C
Package 27	6.8°C
Package 28	6.2°C

Sample CSW888 [0008-121] : Turbidity 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.

Sample CSW889 [0008-SA10] : Turbidity 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.

Sample CSW890 [0008-SA32] : Turbidity 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.

Sample CSW891 [0008-SA3] : Turbidity 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.

Sample CSW892 [0008-SA9B] : Turbidity 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.

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Bureau Veritas Job #: C460552
Report Date: 2024/08/18

QUALITY ASSURANCE REPORT

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

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B470568	Nitrate (N)	2024/08/08	101	80 - 120	100	80 - 120	<0.0020	mg/L	0.074	20		
B470568	Nitrite (N)	2024/08/08	94	80 - 120	93	80 - 120	<0.0010	mg/L	2.9	20		
B470654	Turbidity - NTU	2024/08/08			102	80 - 120	<0.10	NTU	NC	20		
B470849	Orthophosphate (P)	2024/08/08	89	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
B471218	Acidity (pH 4.5)	2024/08/09					<1.0	mg/L	NC	20		
B471218	Acidity (pH 8.3)	2024/08/09			94	80 - 120	<1.0	mg/L	5.5	20		
B471350	Total Suspended Solids	2024/08/09	102	80 - 120	103	80 - 120	<1.0	mg/L	NC	20		
B471735	Total Mercury (Hg)	2024/08/13	96	80 - 120	97	80 - 120	<0.0000019	mg/L	NC	20		
B472147	Dissolved-Low Level Sulphate (SO4)	2024/08/09	105	80 - 120	102	80 - 120	<0.050	mg/L	1.7	20		
B472198	Chloride (Cl)	2024/08/09	102	80 - 120	101	80 - 120	<0.50	mg/L	NC	20		
B472340	Dissolved-Low Level Sulphate (SO4)	2024/08/09	103	80 - 120	102	80 - 120	<0.050	mg/L	5.6	20		
B472639	Chloride (Cl)	2024/08/09	99	80 - 120	99	80 - 120	<0.50	mg/L	1.3	20		
B473382	Total Nitrogen (N)	2024/08/12	101	80 - 120	98	80 - 120	<0.020	mg/L	NC	20	102	80 - 120
B473390	Total Nitrogen (N)	2024/08/12	NC	80 - 120	100	80 - 120	<0.020	mg/L	1.0	20	104	80 - 120
B473551	Total Phosphorus (P)	2024/08/12	101	80 - 120	96	80 - 120	<0.0010	mg/L	13	20	91	80 - 120
B474014	Total Organic Carbon (C)	2024/08/12	99	80 - 120	101	80 - 120	<0.20	mg/L	NC	20		
B474141	Total Inorganic Carbon (C)	2024/08/12	NC	80 - 120	109	80 - 120	<1.0	mg/L	1.9	20		
B474185	Total Inorganic Carbon (C)	2024/08/12	112	80 - 120	110	80 - 120	<1.0	mg/L	0.73	20		
B475354	Total Ammonia (N)	2024/08/13	105	80 - 120	103	80 - 120	<0.0050	mg/L	2.6	20		
B475364	Total Ammonia (N)	2024/08/13	105	80 - 120	104	80 - 120	<0.0050	mg/L	6.9	20		
B476056	Alkalinity (PP as CaCO3)	2024/08/14					<0.50	mg/L	NC	20		
B476056	Alkalinity (Total as CaCO3)	2024/08/14			97	80 - 120	<0.50	mg/L	8.1	20		
B476056	Bicarbonate (HCO3)	2024/08/14					<0.50	mg/L	8.1	20		
B476056	Carbonate (CO3)	2024/08/14					<0.50	mg/L	NC	20		
B476056	Hydroxide (OH)	2024/08/14					<0.50	mg/L	NC	20		
B476060	Conductivity	2024/08/14			103	90 - 110	<1.0	uS/cm	0.37	20		
B476061	Fluoride (F)	2024/08/14	104	80 - 120	102	80 - 120	<0.010	mg/L	NC	20		
B476063	pH	2024/08/14			101	97 - 103			1.5	N/A		
B477803	Total Aluminum (Al)	2024/08/14	111	80 - 120	107	80 - 120	<0.0030	mg/L	2.4	20		
B477803	Total Antimony (Sb)	2024/08/14	95	80 - 120	85	80 - 120	<0.00060	mg/L	NC	20		
B477803	Total Arsenic (As)	2024/08/14	93	80 - 120	91	80 - 120	<0.00020	mg/L	0.12	20		
B477803	Total Beryllium (Be)	2024/08/14	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B477803	Total Cadmium (Cd)	2024/08/14	95	80 - 120	94	80 - 120	<0.000020	mg/L				

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B477803	Total Chromium (Cr)	2024/08/14	99	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B477803	Total Cobalt (Co)	2024/08/14	100	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20		
B477803	Total Copper (Cu)	2024/08/14	98	80 - 120	97	80 - 120	<0.0010	mg/L	2.2	20		
B477803	Total Lead (Pb)	2024/08/14	94	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20		
B477803	Total Molybdenum (Mo)	2024/08/14	100	80 - 120	89	80 - 120	<0.00020	mg/L	NC	20		
B477803	Total Nickel (Ni)	2024/08/14	98	80 - 120	97	80 - 120	<0.00050	mg/L	11	20		
B477803	Total Selenium (Se)	2024/08/14	89	80 - 120	88	80 - 120	<0.00020	mg/L	NC	20		
B477803	Total Silver (Ag)	2024/08/14	98	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20		
B477803	Total Thallium (Tl)	2024/08/14	97	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20		
B477803	Total Tin (Sn)	2024/08/14	99	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20		
B477803	Total Titanium (Ti)	2024/08/14	102	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20		
B477803	Total Uranium (U)	2024/08/14	103	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20		
B477803	Total Vanadium (V)	2024/08/14	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B477803	Total Zinc (Zn)	2024/08/14	86	80 - 120	87	80 - 120	<0.0030	mg/L	3.3	20		
B477811	Total Barium (Ba)	2024/08/14	102	80 - 120	97	80 - 120	<0.010	mg/L	NC	20		
B477811	Total Boron (B)	2024/08/14	97	80 - 120	96	80 - 120	<0.020	mg/L	NC	20		
B477811	Total Calcium (Ca)	2024/08/14	97	80 - 120	93	80 - 120	<0.30	mg/L	0.43	20		
B477811	Total Iron (Fe)	2024/08/14	NC	80 - 120	97	80 - 120	<0.060	mg/L	0.13	20		
B477811	Total Lithium (Li)	2024/08/14	93	80 - 120	91	80 - 120	<0.020	mg/L	NC	20		
B477811	Total Magnesium (Mg)	2024/08/14	98	80 - 120	95	80 - 120	<0.20	mg/L	0.54	20		
B477811	Total Manganese (Mn)	2024/08/14	96	80 - 120	95	80 - 120	<0.0040	mg/L	0.72	20		
B477811	Total Potassium (K)	2024/08/14	103	80 - 120	95	80 - 120	<0.30	mg/L	0.85	20		
B477811	Total Silicon (Si)	2024/08/14	315 (1)	80 - 120	97	80 - 120	<0.50	mg/L	0.43	20		
B477811	Total Sodium (Na)	2024/08/14	NC	80 - 120	92	80 - 120	<0.50	mg/L	0.13	20		
B477811	Total Strontium (Sr)	2024/08/14	92	80 - 120	94	80 - 120	<0.020	mg/L	0.12	20		
B477811	Total Sulphur (S)	2024/08/14	100	80 - 120	84	80 - 120	<0.20	mg/L	0.099	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B478922	Reactive Silica	2024/08/15	102	80 - 120	107	80 - 120	<0.050	mg/L	8.0	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) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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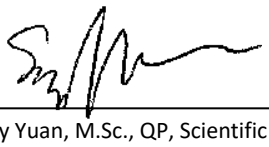
VALIDATION SIGNATURE PAGE

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



Sandy Yuan, M.Sc., QP, Scientific Specialist

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BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	10.1 (1)	9.1 (2)	8.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.9 (1)	8.2 (2)	6.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	10.4 (1)	7.4 (2)	8.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.6 (1)	7.1 (2)	6.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.9 (1)	7.9 (2)	7.7 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.3 (1)	8.5 (2)	8.5 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.8 (1)	10.2 (2)	8.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.3 (1)	6.1 (2)	4.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.4 (1)	9.6 (2)	9.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.8 (1)	4.5 (2)	6.9 (3)
INTACT		✓				
ICE PRESENT	✓					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.2 (1)	7.1 (2)	6.1 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.1 (1)	6.6 (2)	5.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.9 (1)	6.5 (2)	6.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.1 (1)	8.9 (2)	8.3 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.9 (1)	7.3 (2)	5.9 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.8 (1)	7.9 (2)	8.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.1 (1)	5.3 (2)	5.5 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.0 (1)	7.6 (2)	6.9 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.1 (1)	6.4 (2)	6.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.7 (1)	4.3 (2)	4.9 (3)
INTACT		✓				
ICE PRESENT	✓					

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
Shaira	Shaira Cura	2024/08/08	13 15

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

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COOLER OBSERVATIONS:

CUSTODY SEAL PRESENT (YES / NO)	CUSTODY SEAL INTACT (YES / NO)	ICE PRESENT (YES / NO)	COOLER ID	TEMP 1	TEMP 2	TEMP 3
NO /	NO /	YES /		4.3	5.8	7.3
NO /	NO /	YES /		8.4	8.7	10.1
NO /	NO /	YES /		7.4	6.1	6.1
NO /	NO /	YES /		7.6	7.6	4.3
NO /	NO /	YES /		9.1	8.6	6.1
NO /	NO /	YES /		6.1	6.7	5.8
NO /	NO /	YES /		7.0	7.1	6.3
NO /	NO /	YES /		6.2	6.2	6.2

BV JOB#:

CUSTODY SEAL PRESENT (YES / NO)	CUSTODY SEAL INTACT (YES / NO)	ICE PRESENT (YES / NO)	COOLER ID	TEMP 1	TEMP 2	TEMP 3

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Shaira Lura	2024/08/08	13 15

C460552
2024/08/08 13:15

Burgundy Diamond Mines
900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS 1828

COC# 101949
SO# 61048

ANALYSIS REQUESTED — Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

For Lab Use	Sample Point	Station Type	Date	Time	Matrix	Type	Major Ions	SNP Total Nutrients	Standard Total Metals	pH Field (pH)	Water Temp (°C)
Field Blank	0008-121	EKA 2002 0008	03-Aug-2024	10:34	Water	SNP	Y	Y	Y		
	0008-Sa10	EKA 2002 0008	03-Aug-2024	12:07	Water	SNP	Y	Y	Y	7.27	15.53
	0008-Sa32	EKA 2002 0008	03-Aug-2024	10:41	Water	SNP	Y	Y	Y	7.24	15.50
	0008-Sa3	EKA 2002 0008	03-Aug-2024	10:29	Water	SNP	Y	Y	Y	7.24	15.50
	0008-Sa9b	EKA 2002 0008	03-Aug-2024	11:00	Water	SNP	Y	Y	Y	7.10	14.0

FOR LAB USE ONLY

MCAL-2024-08-636

Special Instructions (Billing details, QC reporting etc):
Frequency: On the first day of Discharge, weekly during periods of Discharge, and on the final day of Discharge.
Parameters: TSS, major ion, physical parameters, total metals and nutrients.
*** Sample :0008-Sa3, 0008-Sa9b with Profil, 0008-Sa10***
Sent results to Tania.robitaille@burgundydiamonds.com, Landon.Murphy@burgundydiamonds.com & compliance.team@burgundydiamonds.com

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 08Aug2024 Time 0714	Shaira Cura	Date 2024/08/08 Time 8C 5°C 13:15
Relinquished by:	Date Time	Received by:	Date Time

FOR LAB USE ONLY
Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A
Sample temperature upon receipt: Frozen? ☐ Yes ☐ No
See Attn
Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101969

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/21
Report #: R3544587
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460530
Received: 2024/08/08, 13:15

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	1	N/A	2024/08/09	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	1	N/A	2024/08/13	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	1	N/A	2024/08/09	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/08/13	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/08/13	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	1	N/A	2024/08/14	BBY WI-00033	Auto Calc
Mercury (Total) by CV	1	2024/08/09	2024/08/09	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	1	2024/08/13	2024/08/13	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	1	2024/08/13	2024/08/13	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	1	N/A	2024/08/13	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	1	N/A	2024/08/14		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	1	N/A	2024/08/09	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	1	N/A	2024/08/13	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	1	N/A	2024/08/08	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	1	N/A	2024/08/19	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	1	N/A	2024/08/08	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	1	N/A	2024/08/09	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	1	N/A	2024/08/20		Auto Calc
Temperature (Field)	1	N/A	2024/08/08	Field Test	Field Test
Carbon (Inorganic)	1	N/A	2024/08/12	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	1	N/A	2024/08/14	BBY WI-00033	Auto Calc
Nitrogen (Total)	1	2024/08/10	2024/08/12	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	1	N/A	2024/08/20	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Dissolved (5)	1	2024/08/18	2024/08/19	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total	1	2024/08/10	2024/08/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	1	2024/08/10	2024/08/10	AB SOP-00061	SM 24 2540 D m
Turbidity	1	N/A	2024/08/08	CAL SOP-00081	SM 24 2130 B m
Ion Balance (6)	1	N/A	2024/08/14		
Total Dissolved Solids (Calculated) (6)	1	N/A	2024/08/14		

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Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101969

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/21
Report #: R3544587
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460530
Received: 2024/08/08, 13:15

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.

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.

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Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101969

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/21
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Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460530
Received: 2024/08/08, 13:15

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

==========

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C460530
Report Date: 2024/08/21

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW743		
Sampling Date		2024/08/04 10:51		
COC Number		101969		
	UNITS	**1616-46A**	**RDL**	**QC Batch**
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	252	0.50	B469852
Calculated Ion Balance (% Difference)	%	1.8		B470466
Nitrate plus Nitrite (N)	mg/L	160	0.045	B470451
Calculated Total Dissolved Solids	mg/L	2500	4.0	B470468
Total Total Kjeldahl Nitrogen (Calc)	mg/L	22.8	2.0	B469752
Field Parameters				
Field pH	pH	8.64	N/A	ONSITE
Field Temperature (Fd)	deg. C	17.6	N/A	ONSITE
Misc. Inorganics				
Fluoride (F)	mg/L	0.362	0.010	B475951
pH	pH	8.37	N/A	B475949
Reactive Silica	mg/L	11	0.25	B470121
Acidity (pH 4.5)	mg/L	<1.0	1.0	B471218
Alkalinity (Total as CaCO3)	mg/L	127	0.50	B475931
Total Organic Carbon (C)	mg/L	2.9	0.20	B483498
Acidity (pH 8.3)	mg/L	<1.0	1.0	B471218
Alkalinity (PP as CaCO3)	mg/L	3.52	0.50	B475931
Bicarbonate (HCO3)	mg/L	146	0.50	B475931
Carbonate (CO3)	mg/L	4.23	0.50	B475931
Hydroxide (OH)	mg/L	<0.50	0.50	B475931
Total Suspended Solids	mg/L	77	1.0	B472839
Anions				
Orthophosphate (P)	mg/L	0.019	0.0010	B483418
Chloride (Cl)	mg/L	230	2.5	B471342
Dissolved-Low Level Sulphate (SO4)	mg/L	710	3.0	B472147
Nutrients				
Total Carbon (C)	mg/L	34	0.50	B470381
Total Inorganic Carbon (C)	mg/L	31	1.0	B474141
Dissolved Phosphorus (P)	mg/L	0.0022	0.0020	B482417
Total Phosphorus (P)	mg/L	0.082 (1)	0.020	B473015

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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Bureau Veritas Job #: C460530
Report Date: 2024/08/21

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW743		
Sampling Date		2024/08/04 10:51		
COC Number		101969		
	UNITS	**1616-46A**	**RDL**	**QC Batch**
Total Ammonia (N)	mg/L	21	0.13	B475385
Nitrite (N)	mg/L	8.5	0.020	B470763
Nitrate (N)	mg/L	150	0.040	B470763
Total Nitrogen (N)	mg/L	180 (1)	2.0	B472858
Physical Properties				
Conductivity	uS/cm	3740	1.0	B475950
Physical Properties				
Turbidity - NTU	NTU	91	0.10	B470654

RDL = Reportable Detection Limit

(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CSW743		
Sampling Date		2024/08/04 10:51		
COC Number		101969		
	UNITS	**1616-46A**	**RDL**	**QC Batch**
Elements				
Total Mercury (Hg)	mg/L	<0.0000019	0.0000019	B471747
RDL = Reportable Detection Limit				

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CSW743		
Sampling Date		2024/08/04 10:51		
COC Number		101969		
	UNITS	1616-46A	RDL	QC Batch
Elements				
Total Aluminum (Al)	mg/L	2.8	0.0030	B475935
Total Antimony (Sb)	mg/L	0.0071	0.00060	B475935
Total Arsenic (As)	mg/L	0.0059	0.00020	B475935
Total Barium (Ba)	mg/L	0.12	0.010	B475946
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B475935
Total Boron (B)	mg/L	0.64	0.020	B475946
Total Cadmium (Cd)	mg/L	0.00018	0.000020	B475935
Total Calcium (Ca)	mg/L	39	0.30	B475946
Total Chromium (Cr)	mg/L	0.021	0.0010	B475935
Total Cobalt (Co)	mg/L	0.0057	0.00030	B475935
Total Copper (Cu)	mg/L	0.0040	0.0010	B475935
Total Iron (Fe)	mg/L	4.9	0.060	B475946
Total Lead (Pb)	mg/L	0.0021	0.00020	B475935
Total Lithium (Li)	mg/L	0.055	0.020	B475946
Total Magnesium (Mg)	mg/L	37	0.20	B475946
Total Manganese (Mn)	mg/L	0.078	0.0040	B475946
Total Molybdenum (Mo)	mg/L	0.60	0.00020	B475935
Total Nickel (Ni)	mg/L	0.094	0.00050	B475935
Total Potassium (K)	mg/L	270	0.30	B475946
Total Selenium (Se)	mg/L	0.0042	0.00020	B475935
Total Silicon (Si)	mg/L	21	0.50	B475946
Total Silver (Ag)	mg/L	<0.00010	0.00010	B475935
Total Sodium (Na)	mg/L	470	0.50	B475946
Total Strontium (Sr)	mg/L	1.4	0.020	B475946
Total Sulphur (S)	mg/L	260	0.20	B475946
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B475935
Total Tin (Sn)	mg/L	<0.0010	0.0010	B475935
Total Titanium (Ti)	mg/L	0.16	0.0010	B475935
Total Uranium (U)	mg/L	0.038	0.00010	B475935
Total Vanadium (V)	mg/L	0.0093	0.0010	B475935
Total Zinc (Zn)	mg/L	0.014	0.0030	B475935
RDL = Reportable Detection Limit				

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GENERAL COMMENTS

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

Package 1	9.3°C
Package 2	8.0°C
Package 3	8.7°C
Package 4	7.2°C
Package 5	7.8°C
Package 6	8.8°C
Package 7	9.6°C
Package 8	4.9°C
Package 9	9.2°C
Package 10	5.4°C
Package 11	5.8°C
Package 12	5.8°C
Package 13	6.3°C
Package 14	8.4°C
Package 15	6.0°C
Package 16	8.0°C
Package 17	5.0°C
Package 18	7.2°C
Package 19	6.0°C
Package 20	5.0°C
Package 21	5.8°C
Package 22	8.1°C
Package 23	6.5°C
Package 24	6.5°C
Package 25	7.9°C
Package 26	6.2°C
Package 27	6.8°C
Package 28	6.2°C

Sample CSW743 [1616-46A] : Turbidity 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. Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

RESULTS OF CHEMICAL ANALYSES OF WATER Comments

Sample CSW743 [1616-46A] Orthophosphate LL by Automated Analyzer: Sample was originally processed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B470121	Reactive Silica	2024/08/08	104	80 - 120	107	80 - 120	<0.050	mg/L	NC	20		
B470654	Turbidity - NTU	2024/08/08			102	80 - 120	<0.10	NTU	NC	20		
B470763	Nitrate (N)	2024/08/09	NC	80 - 120	100	80 - 120	<0.0020	mg/L	0.076	20		
B470763	Nitrite (N)	2024/08/09	NC	80 - 120	94	80 - 120	<0.0010	mg/L	0.015	20		
B471218	Acidity (pH 4.5)	2024/08/09					<1.0	mg/L	NC	20		
B471218	Acidity (pH 8.3)	2024/08/09			94	80 - 120	<1.0	mg/L	5.5	20		
B471342	Chloride (Cl)	2024/08/09	102	80 - 120	99	80 - 120	<0.50	mg/L	NC	20		
B471747	Total Mercury (Hg)	2024/08/09	96	80 - 120	97	80 - 120	<0.0000019	mg/L	NC	20		
B472147	Dissolved-Low Level Sulphate (SO4)	2024/08/09	105	80 - 120	102	80 - 120	<0.050	mg/L	1.7	20		
B472839	Total Suspended Solids	2024/08/10	93	80 - 120	106	80 - 120	<0.97	mg/L	10	20		
B472858	Total Nitrogen (N)	2024/08/12	103	80 - 120	103	80 - 120	<0.020	mg/L	1.4	20	107	80 - 120
B473015	Total Phosphorus (P)	2024/08/12	98	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20	92	80 - 120
B474141	Total Inorganic Carbon (C)	2024/08/12	NC	80 - 120	109	80 - 120	<1.0	mg/L	1.9	20		
B475385	Total Ammonia (N)	2024/08/13	104	80 - 120	104	80 - 120	<0.0050	mg/L	1.5	20		
B475931	Alkalinity (PP as CaCO3)	2024/08/13					<0.50	mg/L	NC	20		
B475931	Alkalinity (Total as CaCO3)	2024/08/13			98	80 - 120	<0.50	mg/L	5.5	20		
B475931	Bicarbonate (HCO3)	2024/08/13					<0.50	mg/L	5.5	20		
B475931	Carbonate (CO3)	2024/08/13					<0.50	mg/L	NC	20		
B475931	Hydroxide (OH)	2024/08/13					<0.50	mg/L	NC	20		
B475935	Total Aluminum (Al)	2024/08/13	123 (1)	80 - 120	112	80 - 120	<0.0030	mg/L	4.8	20		
B475935	Total Antimony (Sb)	2024/08/13	100	80 - 120	99	80 - 120	<0.00060	mg/L	NC	20		
B475935	Total Arsenic (As)	2024/08/13	94	80 - 120	93	80 - 120	<0.00020	mg/L	4.7	20		
B475935	Total Beryllium (Be)	2024/08/13	107	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B475935	Total Cadmium (Cd)	2024/08/14	96	80 - 120	95	80 - 120	<0.000020	mg/L				
B475935	Total Chromium (Cr)	2024/08/13	101	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
B475935	Total Cobalt (Co)	2024/08/13	100	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20		
B475935	Total Copper (Cu)	2024/08/13	98	80 - 120	97	80 - 120	<0.0010	mg/L	2.8	20		
B475935	Total Lead (Pb)	2024/08/13	98	80 - 120	98	80 - 120	<0.00020	mg/L	16	20		
B475935	Total Molybdenum (Mo)	2024/08/13	105	80 - 120	100	80 - 120	<0.00020	mg/L	4.3	20		
B475935	Total Nickel (Ni)	2024/08/13	99	80 - 120	98	80 - 120	<0.00050	mg/L	13	20		
B475935	Total Selenium (Se)	2024/08/13	90	80 - 120	89	80 - 120	<0.00020	mg/L	11	20		
B475935	Total Silver (Ag)	2024/08/13	98	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20		
B475935	Total Thallium (Tl)	2024/08/13	100	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B475935	Total Tin (Sn)	2024/08/13	104	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B475935	Total Titanium (Ti)	2024/08/13	101	80 - 120	97	80 - 120	<0.0010	mg/L	14	20		
B475935	Total Uranium (U)	2024/08/13	103	80 - 120	101	80 - 120	<0.00010	mg/L	2.3	20		
B475935	Total Vanadium (V)	2024/08/13	103	80 - 120	101	80 - 120	<0.0010	mg/L	7.0	20		
B475935	Total Zinc (Zn)	2024/08/13	89	80 - 120	87	80 - 120	<0.0030	mg/L	3.7	20		
B475946	Total Barium (Ba)	2024/08/14	100	80 - 120	101	80 - 120	<0.010	mg/L	1.6	20		
B475946	Total Boron (B)	2024/08/14	107	80 - 120	104	80 - 120	<0.020	mg/L	0.53	20		
B475946	Total Calcium (Ca)	2024/08/14	NC	80 - 120	96	80 - 120	<0.30	mg/L	1.7	20		
B475946	Total Iron (Fe)	2024/08/14	NC	80 - 120	114	80 - 120	<0.060	mg/L	2.2	20		
B475946	Total Lithium (Li)	2024/08/14	95	80 - 120	95	80 - 120	<0.020	mg/L	13	20		
B475946	Total Magnesium (Mg)	2024/08/14	NC	80 - 120	100	80 - 120	<0.20	mg/L	2.2	20		
B475946	Total Manganese (Mn)	2024/08/14	112	80 - 120	108	80 - 120	<0.0040	mg/L	0.56	20		
B475946	Total Potassium (K)	2024/08/14	100	80 - 120	99	80 - 120	<0.30	mg/L	1.6	20		
B475946	Total Silicon (Si)	2024/08/14	NC	80 - 120	109	80 - 120	<0.50	mg/L	0.38	20		
B475946	Total Sodium (Na)	2024/08/14	NC	80 - 120	96	80 - 120	<0.50	mg/L	1.6	20		
B475946	Total Strontium (Sr)	2024/08/14	96	80 - 120	99	80 - 120	<0.020	mg/L	2.7	20		
B475946	Total Sulphur (S)	2024/08/14	NC	80 - 120	104	80 - 120	<0.20	mg/L	0.074	20		
B475949	pH	2024/08/13			101	97 - 103			1.9	N/A		
B475950	Conductivity	2024/08/13			102	90 - 110	<1.0	uS/cm	0.29	20		
B475951	Fluoride (F)	2024/08/13	103	80 - 120	98	80 - 120	<0.010	mg/L	19	20		
B482417	Dissolved Phosphorus (P)	2024/08/19	102	80 - 120	99	80 - 120	<0.0010	mg/L	6.3	20	91	80 - 120
B483418	Orthophosphate (P)	2024/08/19	NC	80 - 120	105	80 - 120	<0.0010	mg/L	1.3	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B483498	Total Organic Carbon (C)	2024/08/20	98	75 - 125	102	80 - 120	<0.20	mg/L	NC	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) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

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

Sandy Yuan, M.Sc., QP, Scientific Specialist

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.

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BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID	TEMP 1	TEMP 2	TEMP 3
PRESENT		✓		4.3	5.8	7.3
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		8.4	8.7	10.1
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		7.4	6.1	6.1
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		7.6	7.6	4.3
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		9.1	8.6	6.1
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		6.1	6.7	5.8
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		7.0	7.1	6.3
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		6.2	6.2	6.2
INTACT		✓				
ICE PRESENT	✓					
PRESENT						
INTACT						
ICE PRESENT						
PRESENT						
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID	TEMP 1	TEMP 2	TEMP 3
PRESENT						
INTACT						
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[signature]	Shaira Cura	2024/08/08	13 15

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BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	10.1 (1)	9.1 (2)	8.6 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	8.9 (1)	8.2 (2)	6.8 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	10.4 (1)	7.4 (2)	8.4 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	7.6 (1)	7.1 (2)	6.8 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	7.9 (1)	7.9 (2)	7.7 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	9.3 (1)	8.5 (2)	8.5 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	9.8 (1)	10.2 (2)	8.8 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	4.3 (1)	6.1 (2)	4.4 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	8.4 (1)	9.6 (2)	9.6 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	4.8 (1)	4.5 (2)	6.9 (3)
ICE PRESENT	✓					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	4.2 (1)	7.1 (2)	6.1 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	5.1 (1)	6.6 (2)	5.8 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	5.9 (1)	6.5 (2)	6.6 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	8.1 (1)	8.9 (2)	8.3 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	4.9 (1)	7.3 (2)	5.9 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	7.8 (1)	7.9 (2)	8.4 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	4.1 (1)	5.3 (2)	5.5 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	7.0 (1)	7.6 (2)	6.9 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	5.1 (1)	6.4 (2)	6.6 (3)
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓				
INTACT		✓	TEMP	5.7 (1)	4.3 (2)	4.9 (3)
ICE PRESENT	✓					

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Shaira	Shaira Cura	2024/08/08	13 15

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Burgundy Diamond Mines

900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS

COC# 101969

SO# 61048

For Lab Use	SAMPLE INFORMATION						ANALYSIS REQUESTED																							
							Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below																							
	Sample Point	Station Type	Date	Time	Matrix	Type	Dissolved Nutrients	Major Ions	SNP Total Nutrients	Standard Total Metals																		pH Field (pH)	Water Temp (°C)	
	1616-46a	EKA 2001 1616	04-Aug-2024	10:51	Water	SNP	Y	Y	Y	Y																		8.64	17.6	

FOR LAB USE ONLY

MCAL-2024-08-646

Special Instructions (Billing details, QC reporting etc):
To monitor the quality of water entering the KPSP from Misery Pit.

Location: End of pumping pipe at KPSF

Frequency: Weekly during pumping
Parameters: TSS, major ions, physical parameters, total metals, nutrients.

Relinquished by:	Date 08/08/2024	Received by: Shaira Cura	Date 2024/08/08
	Time 07:14		Time 13:15
Relinquished by:	Date	Received by:	Date
	Time		Time

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

see ACTR

Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101876

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/21
Report #: R3544593
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460549
Received: 2024/08/08, 13:15

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	1	N/A	2024/08/09	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	1	N/A	2024/08/14	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	1	N/A	2024/08/09	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/08/14	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/08/14	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	1	N/A	2024/08/14	BBY WI-00033	Auto Calc
Mercury (Total) by CV	1	2024/08/09	2024/08/10	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	1	2024/08/13	2024/08/13	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	1	2024/08/13	2024/08/13	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	1	N/A	2024/08/18	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	1	N/A	2024/08/14		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	1	N/A	2024/08/18	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	1	N/A	2024/08/14	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	1	N/A	2024/08/08	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	1	N/A	2024/08/09	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	1	N/A	2024/08/08	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	1	N/A	2024/08/09	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	1	N/A	2024/08/12		Auto Calc
Temperature (Field)	1	N/A	2024/08/08	Field Test	Field Test
Carbon (Inorganic)	1	N/A	2024/08/12	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	1	N/A	2024/08/14	BBY WI-00033	Auto Calc
Nitrogen (Total)	1	2024/08/18	2024/08/19	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	1	N/A	2024/08/12	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Dissolved (5)	1	2024/08/12	2024/08/13	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total	1	2024/08/12	2024/08/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	1	2024/08/10	2024/08/12	AB SOP-00061	SM 24 2540 D m
Turbidity	1	N/A	2024/08/08	CAL SOP-00081	SM 24 2130 B m
Ion Balance (6)	1	N/A	2024/08/14		
Total Dissolved Solids (Calculated) (6)	1	N/A	2024/08/14		

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Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101876

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/21
Report #: R3544593
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460549
Received: 2024/08/08, 13:15

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.

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.

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Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
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Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/21
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460549
Received: 2024/08/08, 13:15

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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C460549
Report Date: 2024/08/21

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW881		
Sampling Date		2024/08/05 10:25		
COC Number		101876		
	UNITS	0008-SA2	RDL	QC Batch
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	183	0.50	B469852
Calculated Ion Balance (% Difference)	%	1.6		B470466
Nitrate plus Nitrite (N)	mg/L	59	0.022	B470451
Calculated Total Dissolved Solids	mg/L	1800	4.0	B470468
Total Total Kjeldahl Nitrogen (Calc)	mg/L	4.2	1.0	B470612
Field Parameters				
Field pH	pH	9.14	N/A	ONSITE
Field Temperature (Fd)	deg. C	7.9	N/A	ONSITE
Misc. Inorganics				
Fluoride (F)	mg/L	0.084	0.010	B476061
pH	pH	7.68	N/A	B476063
Reactive Silica	mg/L	3.8	0.050	B470121
Acidity (pH 4.5)	mg/L	<1.0	1.0	B471218
Alkalinity (Total as CaCO3)	mg/L	143	0.50	B476056
Total Organic Carbon (C)	mg/L	72	0.80	B474014
Acidity (pH 8.3)	mg/L	<1.0	1.0	B471218
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B476056
Bicarbonate (HCO3)	mg/L	174	0.50	B476056
Carbonate (CO3)	mg/L	<0.50	0.50	B476056
Hydroxide (OH)	mg/L	<0.50	0.50	B476056
Total Suspended Solids	mg/L	19	1.0	B472840
Anions				
Orthophosphate (P)	mg/L	0.0010	0.0010	B471444
Chloride (Cl)	mg/L	160	2.5	B471342
Dissolved-Low Level Sulphate (SO4)	mg/L	770	3.0	B472147
Nutrients				
Total Carbon (C)	mg/L	110	0.50	B470381
Total Inorganic Carbon (C)	mg/L	36	1.0	B474141
Dissolved Phosphorus (P)	mg/L	0.0053	0.0020	B474424
Total Phosphorus (P)	mg/L	0.076	0.0020	B473878
Total Ammonia (N)	mg/L	6.4	0.025	B482360

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C460549
Report Date: 2024/08/21

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSW881		
Sampling Date		2024/08/05 10:25		
COC Number		101876		
	UNITS	**0008-SA2**	**RDL**	**QC Batch**
Nitrite (N)	mg/L	34	0.010	B482134
Nitrate (N)	mg/L	24	0.020	B482134
Total Nitrogen (N)	mg/L	63	1.0	B482359
Physical Properties				
Conductivity	uS/cm	2980	1.0	B476060
Physical Properties				
Turbidity - NTU	NTU	8.3	0.10	B470625
RDL = Reportable Detection Limit				

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CSW881		
Sampling Date		2024/08/05 10:25		
COC Number		101876		
	UNITS	**0008-SA2**	**RDL**	**QC Batch**
Elements				
Total Mercury (Hg)	mg/L	0.0000149	0.0000019	B471742
RDL = Reportable Detection Limit				

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CSW881		
Sampling Date		2024/08/05 10:25		
COC Number		101876		
	UNITS	0008-SA2	RDL	QC Batch
Elements				
Total Aluminum (Al)	mg/L	0.47	0.0030	B475935
Total Antimony (Sb)	mg/L	0.0063	0.00060	B475935
Total Arsenic (As)	mg/L	0.0044	0.00020	B475935
Total Barium (Ba)	mg/L	0.080	0.010	B475946
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B475935
Total Boron (B)	mg/L	0.037	0.020	B475946
Total Cadmium (Cd)	mg/L	0.00019	0.000020	B475935
Total Calcium (Ca)	mg/L	16	0.30	B475946
Total Chromium (Cr)	mg/L	0.0059	0.0010	B475935
Total Cobalt (Co)	mg/L	0.0037	0.00030	B475935
Total Copper (Cu)	mg/L	0.0014	0.0010	B475935
Total Iron (Fe)	mg/L	1.3	0.060	B475946
Total Lead (Pb)	mg/L	0.00021	0.00020	B475935
Total Lithium (Li)	mg/L	<0.020	0.020	B475946
Total Magnesium (Mg)	mg/L	35	0.20	B475946
Total Manganese (Mn)	mg/L	0.032	0.0040	B475946
Total Molybdenum (Mo)	mg/L	0.70	0.00020	B475935
Total Nickel (Ni)	mg/L	0.063	0.00050	B475935
Total Potassium (K)	mg/L	310	0.30	B475946
Total Selenium (Se)	mg/L	0.0027	0.00020	B475935
Total Silicon (Si)	mg/L	6.9	0.50	B475946
Total Silver (Ag)	mg/L	<0.00010	0.00010	B475935
Total Sodium (Na)	mg/L	330	0.50	B475946
Total Strontium (Sr)	mg/L	0.33	0.020	B475946
Total Sulphur (S)	mg/L	280	0.20	B475946
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B475935
Total Tin (Sn)	mg/L	<0.0010	0.0010	B475935
Total Titanium (Ti)	mg/L	0.022	0.0010	B475935
Total Uranium (U)	mg/L	0.0018	0.00010	B475935
Total Vanadium (V)	mg/L	0.0044	0.0010	B475935
Total Zinc (Zn)	mg/L	<0.0030	0.0030	B475935
RDL = Reportable Detection Limit				

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GENERAL COMMENTS

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

Package 1	9.3°C
Package 2	8.0°C
Package 3	8.7°C
Package 4	7.2°C
Package 5	7.8°C
Package 6	8.8°C
Package 7	9.6°C
Package 8	4.9°C
Package 9	9.2°C
Package 10	5.4°C
Package 11	5.8°C
Package 12	5.8°C
Package 13	6.3°C
Package 14	8.4°C
Package 15	6.0°C
Package 16	8.0°C
Package 17	5.0°C
Package 18	7.2°C
Package 19	6.0°C
Package 20	5.0°C
Package 21	5.8°C
Package 22	8.1°C
Package 23	6.5°C
Package 24	6.5°C
Package 25	7.9°C
Package 26	6.2°C
Package 27	6.8°C
Package 28	6.2°C

Sample CSW881 [0008-SA2] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes. Sample was analyzed past method specified hold time for Nitrogen (Nitrite - Nitrate) Low Level. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B470121	Reactive Silica	2024/08/08	104	80 - 120	107	80 - 120	<0.050	mg/L	NC	20		
B470625	Turbidity - NTU	2024/08/08			102	80 - 120	<0.10	NTU	NC	20		
B471218	Acidity (pH 4.5)	2024/08/09					<1.0	mg/L	NC	20		
B471218	Acidity (pH 8.3)	2024/08/09			94	80 - 120	<1.0	mg/L	5.5	20		
B471342	Chloride (Cl)	2024/08/09	102	80 - 120	99	80 - 120	<0.50	mg/L	NC	20		
B471444	Orthophosphate (P)	2024/08/09	94	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
B471742	Total Mercury (Hg)	2024/08/10	99	80 - 120	98	80 - 120	<0.0000019	mg/L	NC	20		
B472147	Dissolved-Low Level Sulphate (SO4)	2024/08/09	105	80 - 120	102	80 - 120	<0.050	mg/L	1.7	20		
B472840	Total Suspended Solids	2024/08/12	NC	80 - 120	102	80 - 120	<1.0	mg/L	11	20		
B473878	Total Phosphorus (P)	2024/08/12	96	80 - 120	98	80 - 120	<0.0010	mg/L	0.77	20	94	80 - 120
B474014	Total Organic Carbon (C)	2024/08/12	99	75 - 125	101	80 - 120	<0.20	mg/L	NC	20		
B474141	Total Inorganic Carbon (C)	2024/08/12	NC	80 - 120	109	80 - 120	<1.0	mg/L	1.9	20		
B474424	Dissolved Phosphorus (P)	2024/08/13	95	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20	88	80 - 120
B475935	Total Aluminum (Al)	2024/08/13	123 (1)	80 - 120	112	80 - 120	<0.0030	mg/L	4.8	20		
B475935	Total Antimony (Sb)	2024/08/13	100	80 - 120	99	80 - 120	<0.00060	mg/L	NC	20		
B475935	Total Arsenic (As)	2024/08/13	94	80 - 120	93	80 - 120	<0.00020	mg/L	4.7	20		
B475935	Total Beryllium (Be)	2024/08/13	107	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B475935	Total Cadmium (Cd)	2024/08/14	96	80 - 120	95	80 - 120	<0.000020	mg/L				
B475935	Total Chromium (Cr)	2024/08/13	101	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
B475935	Total Cobalt (Co)	2024/08/13	100	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20		
B475935	Total Copper (Cu)	2024/08/13	98	80 - 120	97	80 - 120	<0.0010	mg/L	2.8	20		
B475935	Total Lead (Pb)	2024/08/13	98	80 - 120	98	80 - 120	<0.00020	mg/L	16	20		
B475935	Total Molybdenum (Mo)	2024/08/13	105	80 - 120	100	80 - 120	<0.00020	mg/L	4.3	20		
B475935	Total Nickel (Ni)	2024/08/13	99	80 - 120	98	80 - 120	<0.00050	mg/L	13	20		
B475935	Total Selenium (Se)	2024/08/13	90	80 - 120	89	80 - 120	<0.00020	mg/L	11	20		
B475935	Total Silver (Ag)	2024/08/13	98	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20		
B475935	Total Thallium (Tl)	2024/08/13	100	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20		
B475935	Total Tin (Sn)	2024/08/13	104	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B475935	Total Titanium (Ti)	2024/08/13	101	80 - 120	97	80 - 120	<0.0010	mg/L	14	20		
B475935	Total Uranium (U)	2024/08/13	103	80 - 120	101	80 - 120	<0.00010	mg/L	2.3	20		
B475935	Total Vanadium (V)	2024/08/13	103	80 - 120	101	80 - 120	<0.0010	mg/L	7.0	20		
B475935	Total Zinc (Zn)	2024/08/13	89	80 - 120	87	80 - 120	<0.0030	mg/L	3.7	20		
B475946	Total Barium (Ba)	2024/08/14	100	80 - 120	101	80 - 120	<0.010	mg/L	1.6	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B475946	Total Boron (B)	2024/08/14	107	80 - 120	104	80 - 120	<0.020	mg/L	0.53	20		
B475946	Total Calcium (Ca)	2024/08/14	NC	80 - 120	96	80 - 120	<0.30	mg/L	1.7	20		
B475946	Total Iron (Fe)	2024/08/14	NC	80 - 120	114	80 - 120	<0.060	mg/L	2.2	20		
B475946	Total Lithium (Li)	2024/08/14	95	80 - 120	95	80 - 120	<0.020	mg/L	13	20		
B475946	Total Magnesium (Mg)	2024/08/14	NC	80 - 120	100	80 - 120	<0.20	mg/L	2.2	20		
B475946	Total Manganese (Mn)	2024/08/14	112	80 - 120	108	80 - 120	<0.0040	mg/L	0.56	20		
B475946	Total Potassium (K)	2024/08/14	100	80 - 120	99	80 - 120	<0.30	mg/L	1.6	20		
B475946	Total Silicon (Si)	2024/08/14	NC	80 - 120	109	80 - 120	<0.50	mg/L	0.38	20		
B475946	Total Sodium (Na)	2024/08/14	NC	80 - 120	96	80 - 120	<0.50	mg/L	1.6	20		
B475946	Total Strontium (Sr)	2024/08/14	96	80 - 120	99	80 - 120	<0.020	mg/L	2.7	20		
B475946	Total Sulphur (S)	2024/08/14	NC	80 - 120	104	80 - 120	<0.20	mg/L	0.074	20		
B476056	Alkalinity (PP as CaCO3)	2024/08/14					<0.50	mg/L	NC	20		
B476056	Alkalinity (Total as CaCO3)	2024/08/14			97	80 - 120	<0.50	mg/L	8.1	20		
B476056	Bicarbonate (HCO3)	2024/08/14					<0.50	mg/L	8.1	20		
B476056	Carbonate (CO3)	2024/08/14					<0.50	mg/L	NC	20		
B476056	Hydroxide (OH)	2024/08/14					<0.50	mg/L	NC	20		
B476060	Conductivity	2024/08/14			103	90 - 110	<1.0	uS/cm	0.37	20		
B476061	Fluoride (F)	2024/08/14	104	80 - 120	102	80 - 120	<0.010	mg/L	NC	20		
B476063	pH	2024/08/14			101	97 - 103			1.5	N/A		
B482134	Nitrate (N)	2024/08/17	NC	80 - 120	98	80 - 120	<0.0020	mg/L	0.20	20		
B482134	Nitrite (N)	2024/08/17	99	80 - 120	98	80 - 120	<0.0010	mg/L	0.053	20		
B482359	Total Nitrogen (N)	2024/08/19	102	80 - 120	103	80 - 120	<0.020	mg/L	0.51	20	102	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B482360	Total Ammonia (N)	2024/08/18	114	80 - 120	102	80 - 120	<0.0050	mg/L	NC	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) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

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

Sandy Yuan, M.Sc., QP, Scientific Specialist

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

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

	YES	NO	COOLER ID			
CUSTODY SEAL						
PRESENT		✓	TEMP	10.1 (1)	9.1 (2)	8.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.9 (1)	8.2 (2)	6.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	10.4 (1)	7.4 (2)	8.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.6 (1)	7.1 (2)	6.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.9 (1)	7.9 (2)	7.7 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.3 (1)	8.5 (2)	8.5 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.8 (1)	10.2 (2)	8.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.3 (1)	6.1 (2)	4.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.4 (1)	9.6 (2)	9.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.8 (1)	4.5 (2)	6.9 (3)
INTACT		✓				
ICE PRESENT	✓					

	YES	NO	COOLER ID			
CUSTODY SEAL						
PRESENT		✓	TEMP	4.2 (1)	7.1 (2)	6.1 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.1 (1)	6.6 (2)	5.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.9 (1)	6.5 (2)	6.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.1 (1)	8.9 (2)	8.3 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.9 (1)	7.3 (2)	5.9 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.8 (1)	7.9 (2)	8.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.1 (1)	5.3 (2)	5.5 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.0 (1)	7.6 (2)	6.9 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.1 (1)	6.4 (2)	6.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.7 (1)	4.3 (2)	4.9 (3)
INTACT		✓				
ICE PRESENT	✓					

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
Shaira	Shaira Cura	2024/08/08	13 15

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

CUSTODY SEAL PRESENT (YES / NO)	CUSTODY SEAL INTACT (YES / NO)	ICE PRESENT (YES / NO)	COOLER ID	TEMP 1	TEMP 2	TEMP 3
NO ✓	NO ✓	YES ✓		4.3	5.8	7.3
NO ✓	NO ✓	YES ✓		8.4	8.7	10.1
NO ✓	NO ✓	YES ✓		7.4	6.1	6.1
NO ✓	NO ✓	YES ✓		7.6	7.6	4.3
NO ✓	NO ✓	YES ✓		9.1	8.6	6.1
NO ✓	NO ✓	YES ✓		6.1	6.7	5.8
NO ✓	NO ✓	YES ✓		7.0	7.1	6.3
NO ✓	NO ✓	YES ✓		6.2	6.2	6.2

BV JOB#:

CUSTODY SEAL PRESENT (YES / NO)	CUSTODY SEAL INTACT (YES / NO)	ICE PRESENT (YES / NO)	COOLER ID	TEMP 1	TEMP 2	TEMP 3

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Shaira Lura	2024/08/08	13 15

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

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COOLER OBSERVATIONS:

BV JOB#:

	YES	NO	COOLER ID			
CUSTODY SEAL						
PRESENT		✓	TEMP	10.1 (1)	9.1 (2)	8.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.9 (1)	8.2 (2)	6.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	10.4 (1)	7.4 (2)	8.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.6 (1)	7.1 (2)	6.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.9 (1)	7.9 (2)	7.7 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.3 (1)	8.5 (2)	8.5 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.8 (1)	10.2 (2)	8.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.3 (1)	6.1 (2)	4.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.4 (1)	9.6 (2)	9.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.8 (1)	4.5 (2)	6.9 (3)
INTACT		✓				
ICE PRESENT	✓					

	YES	NO	COOLER ID			
CUSTODY SEAL						
PRESENT		✓	TEMP	4.2 (1)	7.1 (2)	6.1 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.1 (1)	6.6 (2)	5.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.9 (1)	6.5 (2)	6.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.1 (1)	8.9 (2)	8.3 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.9 (1)	7.3 (2)	5.9 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.8 (1)	7.9 (2)	8.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.1 (1)	5.3 (2)	5.5 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.0 (1)	7.6 (2)	6.9 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.1 (1)	6.4 (2)	6.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.7 (1)	4.3 (2)	4.9 (3)
INTACT		✓				
ICE PRESENT	✓					

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
Shaira	Shaira Cura	2024/08/08	13 15

C460549
2024/08/08 13:15

Burgundy Diamond Mines
900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS 1828

COC# 101876
SO# 6148

ANALYSIS REQUESTED
Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

For Lab Use	Sample Point	Station Type	Date	Time	Matrix	Type	Dissolved Nutrients	Major Ions	SNP Total Nutrients	Standard Total Metals	pH Field (pH)	Water Temp (°C)
	0008-Sa2	EKA 2002 0008	05-Aug-2024	10:25	Water	SNP	Y	Y	Y	Y	9.14	7.9

FOR LAB USE ONLY

MCAL-2024-08-656

Special Instructions (Billing details, QC reporting etc):
To monitor the quality of water entering the Two Rock Sedimentation Pond.

Frequency: Weekly during discharge.
Parameters: TSS, physical parameters, major ions, total metals and nutrients

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 08Aug2024 Time 0714	Shaira Cura	Date 2024/08/08 Time 13:15
Relinquished by:	Date Time	Received by:	Date Time

FOR LAB USE ONLY
Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A
Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

See ACR

Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101951

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/06
Report #: R3552320
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460308
Received: 2024/08/08, 09:28

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Ecotox Report Attachment (1)	1	2024/09/06	2024/09/06		
pH (Field)	1	N/A	2024/08/08	Field Test	Field Test
Temperature (Field)	1	N/A	2024/08/08	Field Test	Field Test
Rainbow Trout LC50 Multi-Concentration (2)	1	N/A	2024/08/10	EENVSOP-00160	EPS 1 RM13 2nd ed m

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.

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) This test was performed by Bureau Veritas Vancouver, 4606 Canada Way , Burnaby, BC, V5G 1K5
(2) This test was performed by Bureau Veritas Edmonton Environmental, 4326 76 Avenue NW , Edmonton, AB, T6B 2H8

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 101951

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/06
Report #: R3552320
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C460308
Received: 2024/08/08, 09:28

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

==========

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Bureau Veritas Job #: C460308
Report Date: 2024/09/06

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CSV895	
Sampling Date		2024/08/07 08:22	
COC Number		101951	
	UNITS	**0008-SA3_DISCHARGE**	**QC Batch**
Ecotox			
No Parameter	N/A	ATTACHED	B506490
Field Parameters			
Field pH	pH	6.96	ONSITE
Field Temperature (Fd)	deg. C	14.7	ONSITE

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

TOXICOLOGY (WATER)

Bureau Veritas ID		CSV895	
Sampling Date		2024/08/07 08:22	
COC Number		101951	
	UNITS	**0008-SA3_DISCHARGE**	**QC Batch**
Rainbow Trout			
LC50	% vol/vol	ATTACHED	B472921

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

GENERAL COMMENTS

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

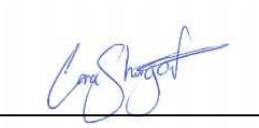
Package 1	1.7°C
Package 2	9.7°C
Package 3	9.8°C
Package 4	9.6°C
Package 5	9.7°C

Results relate only to the items tested.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

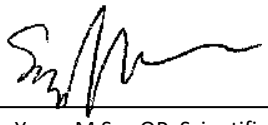
VALIDATION SIGNATURE PAGE

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



Cara Shurgot, Analyst 2

Kimberly Tamaki, Scientist, Ecotoxicology



Sandy Yuan, M.Sc., QP, Scientific Specialist

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

C460308
2024/08/08 09:28

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ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.7	0.4	0.1	PRESENT			TEMP			
INTACT		✓					INTACT						
ICE PRESENT	✓			1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.8	9.4	9.7	PRESENT			TEMP			
INTACT		✓					INTACT						
ICE PRESENT	✓			1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.9	9.8	9.7	PRESENT			TEMP			
INTACT		✓					INTACT						
ICE PRESENT	✓			1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.5	9.8	9.4	PRESENT			TEMP			
INTACT		✓					INTACT						
ICE PRESENT	✓	~~✓~~ SC		1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.8	9.5	9.8	PRESENT			TEMP			
INTACT		✓					INTACT						
ICE PRESENT	✓			1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP				PRESENT			TEMP			
INTACT							INTACT						
ICE PRESENT				1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP				PRESENT			TEMP			
INTACT							INTACT						
ICE PRESENT				1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP				PRESENT			TEMP			
INTACT							INTACT						
ICE PRESENT				1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP				PRESENT			TEMP			
INTACT							INTACT						
ICE PRESENT				1	2	3	ICE PRESENT				1	2	3
CUSTODY SEAL	YES	NO	COOLER ID				CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP				PRESENT			TEMP			
INTACT							INTACT						
ICE PRESENT				1	2	3	ICE PRESENT				1	2	3

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Shaira Cura	2024/08/08	09:28

C460308
2024/08/08 09:28

Burgundy Diamond Mines

900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS

COC# 101951

SO# 61985

For Lab Use	Sample Point	Station Type	Date	Time	Matrix	Type	Bioassay Chronic Toxicity [illegible] Pseudokirc	Daphnia Magna LC50 Multi-concentration	Rainbow Trout LC50 Multi-concentration	pH Field (pH)	Water Temp (°C)
✓	0008-Sa3_Discharge	EKA 2002 0008	07-Aug-2024	08:22	Water	SNP	Y	Y	Y	6.96	14.7

ANALYSIS REQUESTED: Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

FOR LAB USE ONLY

MCAL-2024-08-603

Special Instructions (Billing details, QC reporting etc):
To monitor the quality of effluent leaving Two Rock Sedimentation Pond prior to Discharge entering the Receiving Environment.
Frequency: First week of discharge & last week of discharge
Parameters: Acute and chronic toxicity tests
Sent results to Tania.robitaille@burgundydiamonds.com, Landon.Murphy@burgundydiamonds.com & compliance.team@burgundydiamonds.com

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 07-Aug-2024 Time 9:57	Shaira Cua [signature]	Date 2024/08/08 Time 09:28
	Date Time		Date Time

See ACTR

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102027

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/22
Report #: R3545479
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462652
Received: 2024/08/15, 10:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	1	N/A	2024/08/19	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	1	N/A	2024/08/21	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	1	N/A	2024/08/19	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/08/21	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/08/21	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	1	N/A	2024/08/21	BBY WI-00033	Auto Calc
Mercury (Total) by CV	1	2024/08/16	2024/08/17	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	1	2024/08/20	2024/08/20	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	1	2024/08/20	2024/08/20	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	1	N/A	2024/08/18	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	1	N/A	2024/08/20		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	1	N/A	2024/08/16	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	1	N/A	2024/08/21	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	1	N/A	2024/08/15	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	1	N/A	2024/08/16	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	1	N/A	2024/08/15	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	1	N/A	2024/08/17	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	1	N/A	2024/08/20		Auto Calc
Temperature (Field)	1	N/A	2024/08/15	Field Test	Field Test
Carbon (Inorganic)	1	N/A	2024/08/19	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	1	N/A	2024/08/21	BBY WI-00033	Auto Calc
Nitrogen (Total)	1	2024/08/16	2024/08/21	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	1	N/A	2024/08/20	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Dissolved (5)	1	2024/08/16	2024/08/19	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total	1	2024/08/17	2024/08/19	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	1	2024/08/16	2024/08/17	AB SOP-00061	SM 24 2540 D m
Turbidity	1	N/A	2024/08/16	CAL SOP-00081	SM 24 2130 B m
Ion Balance (6)	1	N/A	2024/08/21		
Total Dissolved Solids (Calculated) (6)	1	N/A	2024/08/22		

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
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900, 606 4 Street SW
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CANADA T2P 1T1

Report Date: 2024/08/22
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462652
Received: 2024/08/15, 10:00

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.

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.

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Your P.O. #: 6404002992
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Your C.O.C. #: 102027

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Report Date: 2024/08/22
Report #: R3545479
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462652
Received: 2024/08/15, 10:00

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

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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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C462652
Report Date: 2024/08/22

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI771		
Sampling Date		2024/08/11 14:25		
COC Number		102027		
	UNITS	**1616-46A**	**RDL**	**QC Batch**
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	57.1	0.50	B478857
Calculated Ion Balance (% Difference)	%	2.6		B479338
Nitrate plus Nitrite (N)	mg/L	<0.0022	0.0022	B478892
Calculated Total Dissolved Solids	mg/L	71	0.95	B479339
Total Total Kjeldahl Nitrogen (Calc)	mg/L	<2.0	2.0	B478554
Field Parameters				
Field pH	pH	7.70	N/A	ONSITE
Field Temperature (Fd)	deg. C	19.8	N/A	ONSITE
Misc. Inorganics				
Fluoride (F)	mg/L	0.068	0.010	B485632
pH	pH	6.42	N/A	B485628
Reactive Silica	mg/L	1.7	0.050	B478948
Acidity (pH 4.5)	mg/L	<1.0	1.0	B483483
Alkalinity (Total as CaCO3)	mg/L	27.8	0.50	B485624
Total Organic Carbon (C)	mg/L	8.8	0.20	B483498
Acidity (pH 8.3)	mg/L	1.3	1.0	B483483
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B485624
Bicarbonate (HCO3)	mg/L	33.9	0.50	B485624
Carbonate (CO3)	mg/L	<0.50	0.50	B485624
Hydroxide (OH)	mg/L	<0.50	0.50	B485624
Total Suspended Solids	mg/L	<1.0	1.0	B480101
Anions				
Orthophosphate (P)	mg/L	<0.0010	0.0010	B480997
Chloride (Cl)	mg/L	0.60	0.50	B481141
Dissolved-Low Level Sulphate (SO4)	mg/L	30	0.30	B481931
Nutrients				
Total Carbon (C)	mg/L	13	0.50	B479333
Total Inorganic Carbon (C)	mg/L	4.5	1.0	B483383
Dissolved Phosphorus (P)	mg/L	<0.0020	0.0020	B481038
Total Phosphorus (P)	mg/L	<0.020 (1)	0.020	B481955

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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Bureau Veritas Job #: C462652
Report Date: 2024/08/22

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI771		
Sampling Date		2024/08/11 14:25		
COC Number		102027		
	UNITS	**1616-46A**	**RDL**	**QC Batch**
Total Ammonia (N)	mg/L	0.010	0.0050	B482360
Nitrite (N)	mg/L	<0.0010	0.0010	B480413
Nitrate (N)	mg/L	<0.0020	0.0020	B480413
Total Nitrogen (N)	mg/L	<2.0 (1)	2.0	B481084
Physical Properties				
Conductivity	uS/cm	126	1.0	B485631
Physical Properties				
Turbidity - NTU	NTU	0.11	0.10	B480424

RDL = Reportable Detection Limit

(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly. Nitrogen < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CTI771		
Sampling Date		2024/08/11 14:25		
COC Number		102027		
	UNITS	**1616-46A**	**RDL**	**QC Batch**
Elements				
Total Mercury (Hg)	mg/L	<0.0000019	0.0000019	B480641
RDL = Reportable Detection Limit				

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CTI771		
Sampling Date		2024/08/11 14:25		
COC Number		102027		
	UNITS	1616-46A	RDL	QC Batch
Elements				
Total Aluminum (Al)	mg/L	0.066	0.0030	B484920
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B484920
Total Arsenic (As)	mg/L	0.0023	0.00020	B484920
Total Barium (Ba)	mg/L	0.013	0.010	B484927
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B484920
Total Boron (B)	mg/L	<0.020	0.020	B484927
Total Cadmium (Cd)	mg/L	<0.000020	0.000020	B484920
Total Calcium (Ca)	mg/L	10	0.30	B484927
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B484920
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B484920
Total Copper (Cu)	mg/L	0.0075	0.0010	B484920
Total Iron (Fe)	mg/L	0.10	0.060	B484927
Total Lead (Pb)	mg/L	0.00027	0.00020	B484920
Total Lithium (Li)	mg/L	<0.020	0.020	B484927
Total Magnesium (Mg)	mg/L	7.7	0.20	B484927
Total Manganese (Mn)	mg/L	0.016	0.0040	B484927
Total Molybdenum (Mo)	mg/L	0.00077	0.00020	B484920
Total Nickel (Ni)	mg/L	0.017	0.00050	B484920
Total Potassium (K)	mg/L	2.6	0.30	B484927
Total Selenium (Se)	mg/L	<0.00020	0.00020	B484920
Total Silicon (Si)	mg/L	0.88	0.50	B484927
Total Silver (Ag)	mg/L	<0.00010	0.00010	B484920
Total Sodium (Na)	mg/L	1.3	0.50	B484927
Total Strontium (Sr)	mg/L	0.056	0.020	B484927
Total Sulphur (S)	mg/L	10	0.20	B484927
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B484920
Total Tin (Sn)	mg/L	<0.0010	0.0010	B484920
Total Titanium (Ti)	mg/L	0.0012	0.0010	B484920
Total Uranium (U)	mg/L	0.0015	0.00010	B484920
Total Vanadium (V)	mg/L	<0.0010	0.0010	B484920
Total Zinc (Zn)	mg/L	<0.0030	0.0030	B484920
RDL = Reportable Detection Limit				

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GENERAL COMMENTS

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

Package 1	7.0°C
Package 2	6.8°C
Package 3	7.8°C
Package 4	7.7°C

Sample CTI771 [1616-46A] : Turbidity 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 Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B478948	Reactive Silica	2024/08/15	114	80 - 120	103	80 - 120	<0.050	mg/L	5.8	20		
B480101	Total Suspended Solids	2024/08/17	103	80 - 120	90	80 - 120	<1.0	mg/L	NC	20		
B480413	Nitrate (N)	2024/08/16	101	80 - 120	98	80 - 120	<0.0020	mg/L	0.017	20		
B480413	Nitrite (N)	2024/08/16	97	80 - 120	92	80 - 120	<0.0010	mg/L	0.92	20		
B480424	Turbidity - NTU	2024/08/16			100	80 - 120	<0.10	NTU	NC	20		
B480641	Total Mercury (Hg)	2024/08/17	90	80 - 120	97	80 - 120	<0.0000019	mg/L	NC	20		
B480997	Orthophosphate (P)	2024/08/16	97	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
B481038	Dissolved Phosphorus (P)	2024/08/19	106	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20	92	80 - 120
B481084	Total Nitrogen (N)	2024/08/21	102	80 - 120	103	80 - 120	<0.020	mg/L	NC	20	102	80 - 120
B481141	Chloride (Cl)	2024/08/16	96	80 - 120	100	80 - 120	<0.50	mg/L	2.6	20		
B481931	Dissolved-Low Level Sulphate (SO4)	2024/08/17	NC	80 - 120	100	80 - 120	<0.050	mg/L	0.10	20		
B481955	Total Phosphorus (P)	2024/08/19	97	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20	93	80 - 120
B482360	Total Ammonia (N)	2024/08/18	114	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20		
B483383	Total Inorganic Carbon (C)	2024/08/19	126 (1)	80 - 120	109	80 - 120	<1.0	mg/L				
B483483	Acidity (pH 4.5)	2024/08/19					<1.0	mg/L	NC	20		
B483483	Acidity (pH 8.3)	2024/08/19			98	80 - 120	<1.0	mg/L	NC	20		
B483498	Total Organic Carbon (C)	2024/08/20	98	75 - 125	102	80 - 120	<0.20	mg/L	NC	20		
B484920	Total Aluminum (Al)	2024/08/20	109	80 - 120	105	80 - 120	<0.0030	mg/L	NC	20		
B484920	Total Antimony (Sb)	2024/08/20	105	80 - 120	102	80 - 120	<0.00060	mg/L	NC	20		
B484920	Total Arsenic (As)	2024/08/20	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Beryllium (Be)	2024/08/20	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Cadmium (Cd)	2024/08/20	106	80 - 120	104	80 - 120	<0.000020	mg/L				
B484920	Total Chromium (Cr)	2024/08/20	100	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Cobalt (Co)	2024/08/20	103	80 - 120	104	80 - 120	<0.00030	mg/L	NC	20		
B484920	Total Copper (Cu)	2024/08/20	101	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Lead (Pb)	2024/08/20	102	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Molybdenum (Mo)	2024/08/20	105	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Nickel (Ni)	2024/08/20	101	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
B484920	Total Selenium (Se)	2024/08/20	104	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Silver (Ag)	2024/08/20	102	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
B484920	Total Thallium (Tl)	2024/08/20	106	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Tin (Sn)	2024/08/20	106	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Titanium (Ti)	2024/08/20	101	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B484920	Total Uranium (U)	2024/08/20	104	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
B484920	Total Vanadium (V)	2024/08/20	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Zinc (Zn)	2024/08/20	100	80 - 120	101	80 - 120	<0.0030	mg/L	NC	20		
B484927	Total Barium (Ba)	2024/08/20	97	80 - 120	95	80 - 120	<0.010	mg/L	NC	20		
B484927	Total Boron (B)	2024/08/20	98	80 - 120	96	80 - 120	<0.020	mg/L	NC	20		
B484927	Total Calcium (Ca)	2024/08/20	NC	80 - 120	96	80 - 120	<0.30	mg/L	NC	20		
B484927	Total Iron (Fe)	2024/08/20	102	80 - 120	101	80 - 120	<0.060	mg/L	NC	20		
B484927	Total Lithium (Li)	2024/08/20	90	80 - 120	89	80 - 120	<0.020	mg/L	NC	20		
B484927	Total Magnesium (Mg)	2024/08/20	99	80 - 120	97	80 - 120	<0.20	mg/L	NC	20		
B484927	Total Manganese (Mn)	2024/08/20	99	80 - 120	99	80 - 120	<0.0040	mg/L	NC	20		
B484927	Total Potassium (K)	2024/08/20	98	80 - 120	96	80 - 120	<0.30	mg/L	NC	20		
B484927	Total Silicon (Si)	2024/08/20	97	80 - 120	96	80 - 120	<0.50	mg/L	NC	20		
B484927	Total Sodium (Na)	2024/08/20	99	80 - 120	97	80 - 120	<0.50	mg/L	NC	20		
B484927	Total Strontium (Sr)	2024/08/20	94	80 - 120	91	80 - 120	<0.020	mg/L	NC	20		
B484927	Total Sulphur (S)	2024/08/20	96	80 - 120	94	80 - 120	<0.20	mg/L	NC	20		
B485624	Alkalinity (PP as CaCO3)	2024/08/21					<0.50	mg/L	NC	20		
B485624	Alkalinity (Total as CaCO3)	2024/08/21			101	80 - 120	<0.50	mg/L	5.1	20		
B485624	Bicarbonate (HCO3)	2024/08/21					<0.50	mg/L	5.1	20		
B485624	Carbonate (CO3)	2024/08/21					<0.50	mg/L	NC	20		
B485624	Hydroxide (OH)	2024/08/21					<0.50	mg/L	NC	20		
B485628	pH	2024/08/21			99	97 - 103			3.0	N/A		
B485631	Conductivity	2024/08/21			103	90 - 110	<1.0	uS/cm	0.47	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B485632	Fluoride (F)	2024/08/21	108	80 - 120	107	80 - 120	<0.010	mg/L	9.3	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) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

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.

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C462652
2024/08/15 10:00

Burgundy Diamond Mines
900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

BUREAU VERITAS 1828

CHAIN OF CUSTODY FORM

COC# 102027

SO#

ANALYSIS REQUESTED
Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

For Lab Use	SAMPLE INFORMATION						Dissolved Nutrients	Major Ions	SNP Total Nutrients	Standard Total Metals	pH Field (pH)	Water Temp (°C)
	Sample Point	Station Type	Date	Time	Matrix	Type						
	1616-46a	EKA 2001 1616	11-Aug-2024	14:25	Water	SNP	Y	Y	Y	Y	7.70	19.8

FOR LAB USE ONLY

MCAL-2024-08-1545

Special Instructions (Billing details, QC reporting etc):
To monitor the quality of water entering the KPSP from Misery Pit.

Location: End of pumping pipe at KPSF

Frequency: Weekly during pumping
Parameters: TSS, major ions, physical parameters, total metals, nutrients.

Relinquished by:	Date / Time	Received by:	Date / Time
Shu Bern.	Date 14-Aug-2024 Time	SEAN EM	Date 2024/08/15 Time ~~09:0~~ 10:00
Relinquished by:	Date Time	Received by:	Date SEL Time

ACTR

FOR LAB USE ONLY

Cooler seal intact upon receipt?	Sample temperature upon receipt:
☐ Yes ☐ No ☐ N/A	Frozen? ☐ Yes ☐ No

Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102004

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/27
Report #: R3547393
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462649
Received: 2024/08/15, 10:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	1	N/A	2024/08/19	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	1	N/A	2024/08/26	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	1	N/A	2024/08/16	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/08/26	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/08/26	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	1	N/A	2024/08/26	BBY WI-00033	Auto Calc
Mercury (Total) by CV	1	2024/08/16	2024/08/17	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	1	2024/08/24	2024/08/26	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	1	2024/08/24	2024/08/25	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	1	N/A	2024/08/18	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	1	N/A	2024/08/20		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	1	N/A	2024/08/16	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	1	N/A	2024/08/26	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	1	N/A	2024/08/15	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	1	N/A	2024/08/26	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	1	N/A	2024/08/22	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	1	N/A	2024/08/17	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	1	N/A	2024/08/21		Auto Calc
Temperature (Field)	1	N/A	2024/08/15	Field Test	Field Test
Carbon (Inorganic)	1	N/A	2024/08/20	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	1	N/A	2024/08/21	BBY WI-00033	Auto Calc
Nitrogen (Total)	1	2024/08/16	2024/08/21	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	1	N/A	2024/08/20	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Dissolved (5)	1	2024/08/16	2024/08/19	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total	1	2024/08/17	2024/08/19	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	1	2024/08/16	2024/08/17	AB SOP-00061	SM 24 2540 D m
Turbidity	1	N/A	2024/08/16	CAL SOP-00081	SM 24 2130 B m
Ion Balance (6)	1	N/A	2024/08/26		
Total Dissolved Solids (Calculated) (6)	1	N/A	2024/08/27		

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Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102004

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/27
Report #: R3547393
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462649
Received: 2024/08/15, 10:00

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.

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.

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Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102004

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/27
Report #: R3547393
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462649
Received: 2024/08/15, 10:00

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

==========

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI765		
Sampling Date		2024/08/11 11:35		
COC Number		102004		
	UNITS	**1616-46B**	**RDL**	**QC Batch**
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	317	0.50	B478857
Calculated Ion Balance (% Difference)	%	1.9		B479338
Nitrate plus Nitrite (N)	mg/L	150	0.045	B478892
Calculated Total Dissolved Solids	mg/L	2800	4.7	B479339
Total Total Kjeldahl Nitrogen (Calc)	mg/L	16.1	2.0	B478554
Field Parameters				
Field pH	pH	8.02	N/A	ONSITE
Field Temperature (Fd)	deg. C	23.7	N/A	ONSITE
Misc. Inorganics				
Fluoride (F)	mg/L	0.346	0.010	B490987
pH	pH	7.82	N/A	B490985
Reactive Silica	mg/L	12	0.25	B487844
Acidity (pH 4.5)	mg/L	<1.0	1.0	B483483
Alkalinity (Total as CaCO3)	mg/L	160	0.50	B490982
Total Organic Carbon (C)	mg/L	3.4	0.20	B483498
Acidity (pH 8.3)	mg/L	4.1	1.0	B483483
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B490982
Bicarbonate (HCO3)	mg/L	196	0.50	B490982
Carbonate (CO3)	mg/L	<0.50	0.50	B490982
Hydroxide (OH)	mg/L	<0.50	0.50	B490982
Total Suspended Solids	mg/L	340 (1)	2.7	B480101
Anions				
Orthophosphate (P)	mg/L	0.0060	0.0010	B492036
Chloride (Cl)	mg/L	280	2.5	B481141
Dissolved-Low Level Sulphate (SO4)	mg/L	800	3.0	B481931
Nutrients				
Total Carbon (C)	mg/L	34	0.50	B479333
Total Inorganic Carbon (C)	mg/L	30	1.0	B485050
Dissolved Phosphorus (P)	mg/L	0.0031 (2)	0.0020	B481038

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limit raised based on sample volume used for analysis.
(2) Phosphorus < Orthophosphate: Both values fall within the method uncertainty for duplicates and are likely equivalent.

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Bureau Veritas Job #: C462649
Report Date: 2024/08/27

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI765		
Sampling Date		2024/08/11 11:35		
COC Number		102004		
	UNITS	**1616-46B**	**RDL**	**QC Batch**
Total Phosphorus (P)	mg/L	0.19 (1)	0.020	B481956
Total Ammonia (N)	mg/L	17	0.050	B482360
Nitrite (N)	mg/L	13	0.020	B480413
Nitrate (N)	mg/L	140	0.040	B480413
Total Nitrogen (N)	mg/L	170 (1)	2.0	B481084
Physical Properties				
Conductivity	uS/cm	3990	1.0	B490986
Physical Properties				
Turbidity - NTU	NTU	230	0.10	B480424

RDL = Reportable Detection Limit
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CTI765		
Sampling Date		2024/08/11 11:35		
COC Number		102004		
	UNITS	**1616-46B**	**RDL**	**QC Batch**
Elements				
Total Mercury (Hg)	mg/L	0.0000034	0.0000019	B480641
RDL = Reportable Detection Limit				

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CTI765		
Sampling Date		2024/08/11 11:35		
COC Number		102004		
	UNITS	1616-46B	RDL	QC Batch
Elements				
Total Aluminum (Al)	mg/L	4.3	0.0030	B490920
Total Antimony (Sb)	mg/L	0.0034	0.00060	B490920
Total Arsenic (As)	mg/L	0.0055	0.00020	B490920
Total Barium (Ba)	mg/L	0.11	0.010	B490921
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B490920
Total Boron (B)	mg/L	0.58	0.020	B490921
Total Cadmium (Cd)	mg/L	0.00023	0.000020	B490920
Total Calcium (Ca)	mg/L	45	0.30	B490921
Total Chromium (Cr)	mg/L	0.052	0.0010	B490920
Total Cobalt (Co)	mg/L	0.014	0.00030	B490920
Total Copper (Cu)	mg/L	0.0096	0.0010	B490920
Total Iron (Fe)	mg/L	10	0.060	B490921
Total Lead (Pb)	mg/L	0.0046	0.00020	B490920
Total Lithium (Li)	mg/L	0.045	0.020	B490921
Total Magnesium (Mg)	mg/L	50	0.20	B490921
Total Manganese (Mn)	mg/L	0.15	0.0040	B490921
Total Molybdenum (Mo)	mg/L	0.68	0.00020	B490920
Total Nickel (Ni)	mg/L	0.25	0.00050	B490920
Total Potassium (K)	mg/L	270	0.30	B490921
Total Selenium (Se)	mg/L	0.0043	0.00020	B490920
Total Silicon (Si)	mg/L	23	0.50	B490921
Total Silver (Ag)	mg/L	0.00040	0.00010	B490920
Total Sodium (Na)	mg/L	580	2.5	B490921
Total Strontium (Sr)	mg/L	1.5	0.020	B490921
Total Sulphur (S)	mg/L	250	0.20	B490921
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B490920
Total Tin (Sn)	mg/L	<0.0010	0.0010	B490920
Total Titanium (Ti)	mg/L	0.19	0.0010	B490920
Total Uranium (U)	mg/L	0.017	0.00010	B490920
Total Vanadium (V)	mg/L	0.014	0.0010	B490920
Total Zinc (Zn)	mg/L	0.064	0.0030	B490920
RDL = Reportable Detection Limit				

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GENERAL COMMENTS

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

Package 1	7.0°C
Package 2	6.8°C
Package 3	7.8°C
Package 4	7.7°C

Sample CTI765 [1616-46B] : Turbidity 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. Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Alkalinity - Low Level.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B480101	Total Suspended Solids	2024/08/17	103	80 - 120	90	80 - 120	<1.0	mg/L	NC	20		
B480413	Nitrate (N)	2024/08/16	101	80 - 120	98	80 - 120	<0.0020	mg/L	0.017	20		
B480413	Nitrite (N)	2024/08/16	97	80 - 120	92	80 - 120	<0.0010	mg/L	0.92	20		
B480424	Turbidity - NTU	2024/08/16			100	80 - 120	<0.10	NTU	NC	20		
B480641	Total Mercury (Hg)	2024/08/17	90	80 - 120	97	80 - 120	<0.0000019	mg/L	NC	20		
B481038	Dissolved Phosphorus (P)	2024/08/19	106	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20	92	80 - 120
B481084	Total Nitrogen (N)	2024/08/21	102	80 - 120	103	80 - 120	<0.020	mg/L	NC	20	102	80 - 120
B481141	Chloride (Cl)	2024/08/16	96	80 - 120	100	80 - 120	<0.50	mg/L	2.6	20		
B481931	Dissolved-Low Level Sulphate (SO4)	2024/08/17	NC	80 - 120	100	80 - 120	<0.050	mg/L	0.10	20		
B481956	Total Phosphorus (P)	2024/08/19	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20	91	80 - 120
B482360	Total Ammonia (N)	2024/08/18	114	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20		
B483483	Acidity (pH 4.5)	2024/08/19					<1.0	mg/L	NC	20		
B483483	Acidity (pH 8.3)	2024/08/19			98	80 - 120	<1.0	mg/L	NC	20		
B483498	Total Organic Carbon (C)	2024/08/20	98	75 - 125	102	80 - 120	<0.20	mg/L	NC	20		
B485050	Total Inorganic Carbon (C)	2024/08/20	127 (1)	80 - 120	107	80 - 120	<1.0	mg/L				
B487844	Reactive Silica	2024/08/22	NC	80 - 120	107	80 - 120	<0.050	mg/L	1.7	20		
B490920	Total Aluminum (Al)	2024/08/25	NC	80 - 120	109	80 - 120	<0.0030	mg/L	2.0	20		
B490920	Total Antimony (Sb)	2024/08/25	95	80 - 120	86	80 - 120	<0.00060	mg/L	NC	20		
B490920	Total Arsenic (As)	2024/08/25	99	80 - 120	84	80 - 120	<0.00020	mg/L	NC	20		
B490920	Total Beryllium (Be)	2024/08/25	97	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
B490920	Total Cadmium (Cd)	2024/08/25	100	80 - 120	87	80 - 120	<0.000020	mg/L				
B490920	Total Chromium (Cr)	2024/08/25	98	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
B490920	Total Cobalt (Co)	2024/08/25	98	80 - 120	101	80 - 120	<0.00030	mg/L	7.1	20		
B490920	Total Copper (Cu)	2024/08/25	96	80 - 120	98	80 - 120	<0.0010	mg/L	2.7	20		
B490920	Total Lead (Pb)	2024/08/25	96	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20		
B490920	Total Molybdenum (Mo)	2024/08/25	100	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20		
B490920	Total Nickel (Ni)	2024/08/25	97	80 - 120	100	80 - 120	<0.00050	mg/L	4.4	20		
B490920	Total Selenium (Se)	2024/08/25	103	80 - 120	81	80 - 120	<0.00020	mg/L	NC	20		
B490920	Total Silver (Ag)	2024/08/25	98	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20		
B490920	Total Thallium (Tl)	2024/08/25	74 (1)	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20		
B490920	Total Tin (Sn)	2024/08/25	100	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20		
B490920	Total Titanium (Ti)	2024/08/25	86	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B490920	Total Uranium (U)	2024/08/25	101	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B490920	Total Vanadium (V)	2024/08/25	100	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
B490920	Total Zinc (Zn)	2024/08/25	106	80 - 120	81	80 - 120	<0.0030	mg/L	0.067	20		
B490921	Total Barium (Ba)	2024/08/26	92	80 - 120	94	80 - 120	<0.010	mg/L	2.1	20		
B490921	Total Boron (B)	2024/08/26	91	80 - 120	90	80 - 120	<0.020	mg/L	4.7	20		
B490921	Total Calcium (Ca)	2024/08/26	NC	80 - 120	97	80 - 120	<0.30	mg/L	1.5	20		
B490921	Total Iron (Fe)	2024/08/26	NC	80 - 120	101	80 - 120	<0.060	mg/L	2.0	20		
B490921	Total Lithium (Li)	2024/08/26	84	80 - 120	85	80 - 120	<0.020	mg/L	NC	20		
B490921	Total Magnesium (Mg)	2024/08/26	NC	80 - 120	91	80 - 120	<0.20	mg/L	1.8	20		
B490921	Total Manganese (Mn)	2024/08/26	92	80 - 120	92	80 - 120	<0.0040	mg/L	1.5	20		
B490921	Total Potassium (K)	2024/08/26	NC	80 - 120	91	80 - 120	<0.30	mg/L	1.9	20		
B490921	Total Silicon (Si)	2024/08/26	NC	80 - 120	89	80 - 120	<0.50	mg/L	1.9	20		
B490921	Total Sodium (Na)	2024/08/26	NC	80 - 120	97	80 - 120	<0.50	mg/L	1.7	20		
B490921	Total Strontium (Sr)	2024/08/26	85	80 - 120	89	80 - 120	<0.020	mg/L	1.8	20		
B490921	Total Sulphur (S)	2024/08/26	NC	80 - 120	90	80 - 120	<0.20	mg/L	0.25	20		
B490982	Alkalinity (PP as CaCO3)	2024/08/26					<0.50	mg/L	NC	20		
B490982	Alkalinity (Total as CaCO3)	2024/08/26			104	80 - 120	<0.50	mg/L	12	20		
B490982	Bicarbonate (HCO3)	2024/08/26					<0.50	mg/L	12	20		
B490982	Carbonate (CO3)	2024/08/26					<0.50	mg/L	NC	20		
B490982	Hydroxide (OH)	2024/08/26					<0.50	mg/L	NC	20		
B490985	pH	2024/08/26			100	97 - 103			1.2	N/A		
B490986	Conductivity	2024/08/26			99	90 - 110	<1.0	uS/cm	0.77	20		
B490987	Fluoride (F)	2024/08/26	96	80 - 120	94	80 - 120	<0.010	mg/L	0.28	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B492036	Orthophosphate (P)	2024/08/26	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	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) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

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

Sandy Yuan, M.Sc., QP, Scientific Specialist

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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

C462649
2024/08/15 10:00

Burgundy Diamond Mines
900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS

COC# 102004

SO#

For Lab Use	SAMPLE INFORMATION						ANALYSIS REQUESTED (Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below)					
	Sample Point	Station Type	Date	Time	Matrix	Type	Dissolved Nutrients	Major Ions	SNP Total Nutrients	Standard Total Metals	pH Field (pH)	Water Temp (°C)
	1616-46b	EKA 2001 1616	11-Aug-2024	11:35	Water	SNP	Y	Y	Y	Y	8.02	23.7

FOR LAB USE ONLY

MCAL-2024-08-1546

Special Instructions (Billing details, QC reporting etc):
To monitor the quality of water entering the KPSF/Lynx pit from Misery Underground. Sample can be canceled if the pump didn't pumped. Sample has to be taken 1 day prior sampling date, so underground tech can go sample the location.

Frequency: Monthly
Parameters: TSS, major ions, physical parameters, total metals, nutrients.

ROUTINE TAT

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 14-Aug-2024 Time	[signature] SEAN ENL	Date 2024/08/15 Time 10:00
	Date Time		Date Time

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

ACTR

Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102032

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/27
Report #: R3547618
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462640
Received: 2024/08/15, 10:00

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	5	N/A	2024/08/19	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	4	N/A	2024/08/21	AB SOP-00005	SM 24 2320 B m
Alkalinity - Low Level	1	N/A	2024/08/26	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	5	N/A	2024/08/16	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	5	N/A	2024/08/21	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	5	N/A	2024/08/21	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	5	N/A	2024/08/21	BBY WI-00033	Auto Calc
Mercury (Total) by CV	5	2024/08/16	2024/08/17	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	5	2024/08/20	2024/08/20	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	5	2024/08/20	2024/08/20	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	1	N/A	2024/08/16	AB SOP-00007	SM 24 4500 NH3 A G m
Ammonia-N Low Level (Preserved)	4	N/A	2024/08/18	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	5	N/A	2024/08/20		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	5	N/A	2024/08/16	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	5	N/A	2024/08/21	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	4	N/A	2024/08/15	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	5	N/A	2024/08/16	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	5	N/A	2024/08/15	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	5	N/A	2024/08/17	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	5	N/A	2024/08/20		Auto Calc
Temperature (Field)	4	N/A	2024/08/15	Field Test	Field Test
Carbon (Inorganic)	5	N/A	2024/08/19	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	5	N/A	2024/08/21	BBY WI-00033	Auto Calc
Nitrogen (Total)	5	2024/08/17	2024/08/20	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	5	N/A	2024/08/20	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Total	5	2024/08/17	2024/08/19	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	5	2024/08/17	2024/08/19	AB SOP-00061	SM 24 2540 D m
Turbidity	5	N/A	2024/08/15	CAL SOP-00081	SM 24 2130 B m
Ion Balance (5)	5	N/A	2024/08/21		
Total Dissolved Solids (Calculated) (5)	5	N/A	2024/08/22		

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Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102032

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/27
Report #: R3547618
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462640
Received: 2024/08/15, 10:00

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.

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) Calculation was conducted as per client request using CAL PDF-00333.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102032

Attention: COMPLIANCE TEAM

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

Report Date: 2024/08/27
Report #: R3547618
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C462640
Received: 2024/08/15, 10:00

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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C462640
Report Date: 2024/08/27

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI744			CTI745	CTI746		
Sampling Date		2024/08/12 13:27			2024/08/12 15:55	2024/08/12 15:45		
COC Number		102032			102032	102032		
	UNITS	**0008-494**	**RDL**	**QC Batch**	**0008-SA103**	**0008-SA10**	**RDL**	**QC Batch**
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	<0.50	0.50	B478857	155	157	0.50	B478857
Calculated Ion Balance (% Difference)	%	NC		B479338	1.5	1.6		B479338
Nitrate plus Nitrite (N)	mg/L	<0.0022	0.0022	B478892	17	17	0.010	B478892
Calculated Total Dissolved Solids	mg/L	<0.98	0.98	B479339	290	290	3.1	B479339
Total Total Kjeldahl Nitrogen (Calc)	mg/L	<0.20	0.20	B478554	<0.20	<0.20	0.20	B478554
Field Parameters								
Field pH	pH				7.81	7.81	N/A	ONSITE
Field Temperature (Fd)	deg. C				16.7	16.7	N/A	ONSITE
Misc. Inorganics								
Fluoride (F)	mg/L	0.014	0.010	B485632	0.199	0.198	0.010	B485632
pH	pH	4.83	N/A	B485628	6.31	6.41	N/A	B485628
Reactive Silica	mg/L	<0.25 (1)	0.25	B479696	0.39	0.39	0.050	B479696
Acidity (pH 4.5)	mg/L	<1.0	1.0	B483488	<1.0	<1.0	1.0	B483488
Alkalinity (Total as CaCO3)	mg/L	<0.50	0.50	B485624	23.5	24.0	0.50	B485624
Total Organic Carbon (C)	mg/L	<0.20	0.20	B483498	1.7	2.0	0.20	B483498
Acidity (pH 8.3)	mg/L	<1.0	1.0	B483488	<1.0	<1.0	1.0	B483488
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B485624	<0.50	<0.50	0.50	B485624
Bicarbonate (HCO3)	mg/L	<0.50	0.50	B485624	28.6	29.2	0.50	B485624
Carbonate (CO3)	mg/L	<0.50	0.50	B485624	<0.50	<0.50	0.50	B485624
Hydroxide (OH)	mg/L	<0.50	0.50	B485624	<0.50	<0.50	0.50	B485624
Total Suspended Solids	mg/L	<1.0	1.0	B481832	<1.0	<1.0	1.0	B481832
Anions								
Orthophosphate (P)	mg/L	<0.0010	0.0010	B480573	0.0033	<0.0010	0.0010	B480573
Chloride (Cl)	mg/L	<0.50	0.50	B480285	9.1	9.1	0.50	B480285
Dissolved-Low Level Sulphate (SO4)	mg/L	<0.30	0.30	B481931	110	110	3.0	B481931
Nutrients								
Total Carbon (C)	mg/L	<0.50	0.50	B479333	5.9	7.4	0.50	B479333
Total Inorganic Carbon (C)	mg/L	<1.0	1.0	B483383	4.2	5.4	1.0	B483383
Total Phosphorus (P)	mg/L	<0.0020	0.0020	B481955	<0.0020 (2)	<0.0020	0.0020	B481955

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to matrix interference.
(2) Phosphorus < Orthophosphate: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C462640
Report Date: 2024/08/27

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI744			CTI745	CTI746		
Sampling Date		2024/08/12 13:27			2024/08/12 15:55	2024/08/12 15:45		
COC Number		102032			102032	102032		
	UNITS	**0008-494**	**RDL**	**QC Batch**	**0008-SA103**	**0008-SA10**	**RDL**	**QC Batch**
Total Ammonia (N)	mg/L	<0.0050	0.0050	B480397	0.013	0.014	0.0050	B482360
Nitrite (N)	mg/L	<0.0010	0.0010	B480413	0.052	0.057	0.0010	B480413
Nitrate (N)	mg/L	<0.0020	0.0020	B480413	17	17	0.010	B480413
Total Nitrogen (N)	mg/L	<0.20 (1)	0.20	B481849	16 (2)	16 (2)	0.20	B481849
Physical Properties								
Conductivity	uS/cm	<1.0	1.0	B485631	463	460	1.0	B485631
Physical Properties								
Turbidity - NTU	NTU	<0.10	0.10	B479376	0.13	<0.10	0.10	B479376

RDL = Reportable Detection Limit

(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly. Nitrogen < Nitrate: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C462640
Report Date: 2024/08/27

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI747		CTI748		
Sampling Date		2024/08/12 14:32		2024/08/12 13:30		
COC Number		102032		102032		
	UNITS	0008-SA3	QC Batch	0008-SA9B	RDL	QC Batch
Calculated Parameters						
Total Hardness (CaCO3)	mg/L	67.3	B478857	11.5	0.50	B478857
Calculated Ion Balance (% Difference)	%	2.8	B479338	13		B479338
Nitrate plus Nitrite (N)	mg/L	0.85	B478892	<0.0022	0.0022	B478892
Calculated Total Dissolved Solids	mg/L	100	B479339	16	0.95	B479339
Total Total Kjeldahl Nitrogen (Calc)	mg/L	0.235	B478554	0.343	0.020	B478554
Field Parameters						
Field pH	pH	7.37	ONSITE	7.13	N/A	ONSITE
Field Temperature (Fd)	deg. C	17.8	ONSITE	17.3	N/A	ONSITE
Misc. Inorganics						
Fluoride (F)	mg/L	0.223	B485632	0.044	0.010	B485632
pH	pH	6.42	B485628	6.09	N/A	B485628
Reactive Silica	mg/L	0.32	B478948	0.19	0.050	B478948
Acidity (pH 4.5)	mg/L	<1.0	B483488	<1.0	1.0	B483488
Alkalinity (Total as CaCO3)	mg/L	38.6	B485624	8.90	0.50	B490982
Total Organic Carbon (C)	mg/L	3.0	B483498	4.3	0.20	B483498
Acidity (pH 8.3)	mg/L	<1.0	B483488	<1.0	1.0	B483488
Alkalinity (PP as CaCO3)	mg/L	<0.50	B485624	<0.50	0.50	B490982
Bicarbonate (HCO3)	mg/L	47.1	B485624	10.9	0.50	B490982
Carbonate (CO3)	mg/L	<0.50	B485624	<0.50	0.50	B490982
Hydroxide (OH)	mg/L	<0.50	B485624	<0.50	0.50	B490982
Total Suspended Solids	mg/L	4.3	B481832	2.4	1.0	B481832
Anions						
Orthophosphate (P)	mg/L	<0.0010	B480573	<0.0010	0.0010	B480573
Chloride (Cl)	mg/L	3.5	B480285	<0.50	0.50	B480285
Dissolved-Low Level Sulphate (SO4)	mg/L	36	B481931	3.9	0.30	B481931
Nutrients						
Total Carbon (C)	mg/L	11	B479333	5.8	0.50	B479333
Total Inorganic Carbon (C)	mg/L	8.2	B483383	1.5	1.0	B483383
Total Phosphorus (P)	mg/L	0.0073	B481955	0.0046	0.0020	B481955
Total Ammonia (N)	mg/L	0.048	B482360	0.010	0.0050	B482360
Nitrite (N)	mg/L	0.0056	B480413	<0.0010	0.0010	B480413

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C462640
Report Date: 2024/08/27

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTI747		CTI748		
Sampling Date		2024/08/12 14:32		2024/08/12 13:30		
COC Number		102032		102032		
	UNITS	**0008-SA3**	**QC Batch**	**0008-SA9B**	**RDL**	**QC Batch**
Nitrate (N)	mg/L	0.84	B480413	<0.0020	0.0020	B480413
Total Nitrogen (N)	mg/L	1.1	B481849	0.34	0.020	B481849
Physical Properties						
Conductivity	uS/cm	180	B485631	33.2	1.0	B485631
Physical Properties						
Turbidity - NTU	NTU	2.3	B479376	1.2	0.10	B479376
RDL = Reportable Detection Limit						

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C462640
Report Date: 2024/08/27

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

MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CTI744	CTI745	CTI746	CTI747	CTI748		
Sampling Date		2024/08/12 13:27	2024/08/12 15:55	2024/08/12 15:45	2024/08/12 14:32	2024/08/12 13:30		
COC Number		102032	102032	102032	102032	102032		
	UNITS	**0008-494**	**0008-SA103**	**0008-SA10**	**0008-SA3**	**0008-SA9B**	**RDL**	**QC Batch**
Elements								
Total Mercury (Hg)	mg/L	<0.0000019	<0.0000019	<0.0000019	<0.0000019	<0.0000019	0.0000019	B480493
RDL = Reportable Detection Limit								

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CTI744	CTI745	CTI746	CTI747	CTI748		
Sampling Date		2024/08/12 13:27	2024/08/12 15:55	2024/08/12 15:45	2024/08/12 14:32	2024/08/12 13:30		
COC Number		102032	102032	102032	102032	102032		
	UNITS	**0008-494**	**0008-SA103**	**0008-SA10**	**0008-SA3**	**0008-SA9B**	**RDL**	**QC Batch**
Elements								
Total Aluminum (Al)	mg/L	<0.0030	0.030	0.025	0.11	0.011	0.0030	B484920
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B484920
Total Arsenic (As)	mg/L	<0.00020	0.00040	0.00033	0.00048	0.00033	0.00020	B484920
Total Barium (Ba)	mg/L	<0.010	0.087	0.086	0.022	<0.010	0.010	B484927
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B484920
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B484927
Total Cadmium (Cd)	mg/L	<0.000020	0.000025	0.000024	<0.000020	<0.000020	0.000020	B484920
Total Calcium (Ca)	mg/L	<0.30	25	25	12	1.9	0.30	B484927
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B484920
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B484920
Total Copper (Cu)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B484920
Total Iron (Fe)	mg/L	<0.060	<0.060	<0.060	0.23	0.21	0.060	B484927
Total Lead (Pb)	mg/L	0.00025	<0.00020	<0.00020	<0.00020	0.00054	0.00020	B484920
Total Lithium (Li)	mg/L	<0.020	<0.020	0.021	<0.020	<0.020	0.020	B484927
Total Magnesium (Mg)	mg/L	<0.20	23	23	9.3	1.7	0.20	B484927
Total Manganese (Mn)	mg/L	<0.0040	<0.0040	0.0041	0.023	0.016	0.0040	B484927
Total Molybdenum (Mo)	mg/L	<0.00020	0.042	0.039	0.0025	<0.00020	0.00020	B484920
Total Nickel (Ni)	mg/L	<0.00050	0.027	0.025	0.0038	0.00062	0.00050	B484920
Total Potassium (K)	mg/L	<0.30	19	19	6.4	1.2	0.30	B484927
Total Selenium (Se)	mg/L	<0.00020	0.00036	0.00036	<0.00020	<0.00020	0.00020	B484920
Total Silicon (Si)	mg/L	<0.50	<0.50	<0.50	0.52	<0.50	0.50	B484927
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B484920
Total Sodium (Na)	mg/L	<0.50	16	16	6.3	1.6	0.50	B484927
Total Strontium (Sr)	mg/L	<0.020	0.29	0.29	0.090	<0.020	0.020	B484927
Total Sulphur (S)	mg/L	<0.20	37	37	12	1.5	0.20	B484927
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B484920
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B484920
Total Titanium (Ti)	mg/L	<0.0010	0.0010	0.0011	0.0049	<0.0010	0.0010	B484920
Total Uranium (U)	mg/L	<0.00010	0.0033	0.0031	0.0023	<0.00010	0.00010	B484920
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B484920
Total Zinc (Zn)	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0030	B484920

RDL = Reportable Detection Limit

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GENERAL COMMENTS

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

Package 1	7.0°C
Package 2	6.8°C
Package 3	7.8°C
Package 4	7.7°C

Sample CTI744 [0008-494] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Sample CTI745 [0008-SA103] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Sample CTI746 [0008-SA10] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Sample CTI747 [0008-SA3] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Sample CTI748 [0008-SA9B] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B478948	Reactive Silica	2024/08/15	114	80 - 120	103	80 - 120	<0.050	mg/L	5.8	20		
B479376	Turbidity - NTU	2024/08/15			100	80 - 120	<0.10	NTU	NC	20		
B479696	Reactive Silica	2024/08/15	96	80 - 120	106	80 - 120	<0.050	mg/L	20	20		
B480285	Chloride (Cl)	2024/08/16	100	80 - 120	100	80 - 120	<0.50	mg/L	1.9	20		
B480397	Total Ammonia (N)	2024/08/16	80	80 - 120	104	80 - 120	<0.0050	mg/L	1.4	20		
B480413	Nitrate (N)	2024/08/16	101	80 - 120	98	80 - 120	<0.0020	mg/L	0.017	20		
B480413	Nitrite (N)	2024/08/16	97	80 - 120	92	80 - 120	<0.0010	mg/L	0.92	20		
B480493	Total Mercury (Hg)	2024/08/17	97	80 - 120	96	80 - 120	<0.0000019	mg/L	NC	20		
B480573	Orthophosphate (P)	2024/08/16	90	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
B481832	Total Suspended Solids	2024/08/19	99	80 - 120	93	80 - 120	<0.99	mg/L	19	20		
B481849	Total Nitrogen (N)	2024/08/21	114	80 - 120	95	80 - 120	<0.020	mg/L	NC	20	94	80 - 120
B481931	Dissolved-Low Level Sulphate (SO4)	2024/08/17	NC	80 - 120	100	80 - 120	<0.050	mg/L	0.10	20		
B481955	Total Phosphorus (P)	2024/08/19	97	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20	93	80 - 120
B482360	Total Ammonia (N)	2024/08/18	114	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20		
B483383	Total Inorganic Carbon (C)	2024/08/19	126 (1)	80 - 120	109	80 - 120	<1.0	mg/L				
B483488	Acidity (pH 4.5)	2024/08/19					<1.0	mg/L	NC	20		
B483488	Acidity (pH 8.3)	2024/08/19			101	80 - 120	<1.0	mg/L	NC	20		
B483498	Total Organic Carbon (C)	2024/08/20	98	75 - 125	102	80 - 120	<0.20	mg/L	NC	20		
B484920	Total Aluminum (Al)	2024/08/20	109	80 - 120	105	80 - 120	<0.0030	mg/L	NC	20		
B484920	Total Antimony (Sb)	2024/08/20	105	80 - 120	102	80 - 120	<0.00060	mg/L	NC	20		
B484920	Total Arsenic (As)	2024/08/20	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Beryllium (Be)	2024/08/20	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Cadmium (Cd)	2024/08/20	106	80 - 120	104	80 - 120	<0.000020	mg/L				
B484920	Total Chromium (Cr)	2024/08/20	100	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Cobalt (Co)	2024/08/20	103	80 - 120	104	80 - 120	<0.00030	mg/L	NC	20		
B484920	Total Copper (Cu)	2024/08/20	101	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Lead (Pb)	2024/08/20	102	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Molybdenum (Mo)	2024/08/20	105	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Nickel (Ni)	2024/08/20	101	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
B484920	Total Selenium (Se)	2024/08/20	104	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Silver (Ag)	2024/08/20	102	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
B484920	Total Thallium (Tl)	2024/08/20	106	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20		
B484920	Total Tin (Sn)	2024/08/20	106	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B484920	Total Titanium (Ti)	2024/08/20	101	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Uranium (U)	2024/08/20	104	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20		
B484920	Total Vanadium (V)	2024/08/20	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B484920	Total Zinc (Zn)	2024/08/20	100	80 - 120	101	80 - 120	<0.0030	mg/L	NC	20		
B484927	Total Barium (Ba)	2024/08/20	97	80 - 120	95	80 - 120	<0.010	mg/L	NC	20		
B484927	Total Boron (B)	2024/08/20	98	80 - 120	96	80 - 120	<0.020	mg/L	NC	20		
B484927	Total Calcium (Ca)	2024/08/20	NC	80 - 120	96	80 - 120	<0.30	mg/L	NC	20		
B484927	Total Iron (Fe)	2024/08/20	102	80 - 120	101	80 - 120	<0.060	mg/L	NC	20		
B484927	Total Lithium (Li)	2024/08/20	90	80 - 120	89	80 - 120	<0.020	mg/L	NC	20		
B484927	Total Magnesium (Mg)	2024/08/20	99	80 - 120	97	80 - 120	<0.20	mg/L	NC	20		
B484927	Total Manganese (Mn)	2024/08/20	99	80 - 120	99	80 - 120	<0.0040	mg/L	NC	20		
B484927	Total Potassium (K)	2024/08/20	98	80 - 120	96	80 - 120	<0.30	mg/L	NC	20		
B484927	Total Silicon (Si)	2024/08/20	97	80 - 120	96	80 - 120	<0.50	mg/L	NC	20		
B484927	Total Sodium (Na)	2024/08/20	99	80 - 120	97	80 - 120	<0.50	mg/L	NC	20		
B484927	Total Strontium (Sr)	2024/08/20	94	80 - 120	91	80 - 120	<0.020	mg/L	NC	20		
B484927	Total Sulphur (S)	2024/08/20	96	80 - 120	94	80 - 120	<0.20	mg/L	NC	20		
B485624	Alkalinity (PP as CaCO3)	2024/08/21					<0.50	mg/L	NC	20		
B485624	Alkalinity (Total as CaCO3)	2024/08/21			101	80 - 120	<0.50	mg/L	5.1	20		
B485624	Bicarbonate (HCO3)	2024/08/21					<0.50	mg/L	5.1	20		
B485624	Carbonate (CO3)	2024/08/21					<0.50	mg/L	NC	20		
B485624	Hydroxide (OH)	2024/08/21					<0.50	mg/L	NC	20		
B485628	pH	2024/08/21			99	97 - 103			3.0	N/A		
B485631	Conductivity	2024/08/21			103	90 - 110	<1.0	uS/cm	0.47	20		
B485632	Fluoride (F)	2024/08/21	108	80 - 120	107	80 - 120	<0.010	mg/L	9.3	20		
B490982	Alkalinity (PP as CaCO3)	2024/08/26					<0.50	mg/L	NC	20		
B490982	Alkalinity (Total as CaCO3)	2024/08/26			104	80 - 120	<0.50	mg/L	12	20		
B490982	Bicarbonate (HCO3)	2024/08/26					<0.50	mg/L	12	20		
B490982	Carbonate (CO3)	2024/08/26					<0.50	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B490982	Hydroxide (OH)	2024/08/26					<0.50	mg/L	NC	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) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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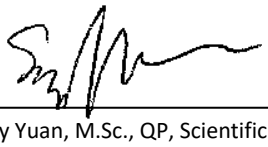
VALIDATION SIGNATURE PAGE

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



Sandy Yuan, M.Sc., QP, 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.

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C462640
2024/08/15 10:00

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

CUSTODY SEAL PRESENT (YES / NO)	INTACT (YES / NO)	ICE PRESENT (YES / NO)	COOLER ID	TEMP 1	TEMP 2	TEMP 3
NO ✓	NO ✓	YES ✓		7.1	6.9	7.0
NO ✓	NO ✓	YES ✓		6.8	6.1	7.5
NO ✓	NO ✓	YES ✓		7.8	7.6	8.1
NO ✓	NO ✓	YES ✓		8.1	8.2	6.9

BV JOB#:

CUSTODY SEAL PRESENT (YES / NO)	INTACT (YES / NO)	ICE PRESENT (YES / NO)	COOLER ID	TEMP 1	TEMP 2	TEMP 3

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	SEAN ENZ	2024/08/15	1000

C462640
2024/08/15 10:00

Burgundy Diamond Mines

900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS 1828

COC# 102032

SO#

ANALYSIS REQUESTED — Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

For Lab Use	Sample Point	Station Type	Date	Time	Matrix	Type	Major Ions	SNP Total Nutrients	Standard Total Metals	pH Field (pH)	Water Temp (°C)
	0008-494	EKA 2002 0008	12-Aug-2024	13:27	Water	SNP	Y	Y	Y		
	0008-Sa103	EKA 2002 0008	12-Aug-2024	15:55	Water	SNP	Y	Y	Y	7.81	16.7
	0008-Sa10	EKA 2002 0008	12-Aug-2024	15:45	Water	SNP	Y	Y	Y	7.81	16.7
	0008-Sa3	EKA 2002 0008	12-Aug-2024	14:32	Water	SNP	Y	Y	Y	7.37	17.8
	0008-Sa9b	EKA 2002 0008	12-Aug-2024	13:30	Water	SNP	Y	Y	Y	7.13	17.3

FOR LAB USE ONLY

MCAL-2024-08-1547

Special Instructions (Billing details, QC reporting etc):
Frequency: On the first day of Discharge, weekly during periods of Discharge, and on the final day of Discharge.
Parameters: TSS, major ion, physical parameters, total metals and nutrients.
*** Sample :0008-Sa3, 0008-Sa9b with Profil, 0008-Sa10***
Sent results to Tania.robitaille@burgundydiamonds.com, Landon.Murphy@burgundydiamonds.com & compliance.team@burgundydiamonds.com

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 14-Aug-2024 Time	[signature] SEAN ENC	Date 2024/08/15 Time 10:00
	Date Time		Date Time

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

Send Analytical Results to: compliance.team@burgundydiamonds.com

ACTR

Your P.O. #: 6404002992
Your Project #: 61052
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102057

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/06
Report #: R3552428
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C464875
Received: 2024/08/22, 09:30

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	3	N/A	2024/08/23	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	1	N/A	2024/08/26	AB SOP-00005	SM 24 2320 B m
Alkalinity - Low Level	2	N/A	2024/08/30	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	3	N/A	2024/08/23	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/08/26	AB SOP-00005	SM 24 2510 B m
Conductance - Low Level	2	N/A	2024/08/30	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/08/26	AB SOP-00005	SM 24 4500-F C m
Fluoride - Low Level	2	N/A	2024/08/30	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	3	N/A	2024/09/04	BBY WI-00033	Auto Calc
Mercury (Total) by CV	3	2024/08/28	2024/08/29	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	3	2024/09/03	2024/09/03	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	3	2024/09/03	2024/09/03	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	3	N/A	2024/08/23	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	3	N/A	2024/08/27		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	3	N/A	2024/08/23	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	1	N/A	2024/08/26	AB SOP-00005	SM 24 4500-H+B m
pH @25°C (2)	2	N/A	2024/08/30	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	3	N/A	2024/08/22	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	3	N/A	2024/08/23	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	3	N/A	2024/08/26	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	3	N/A	2024/08/23	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	1	N/A	2024/09/03		Auto Calc
Carbon (total) (Calc. - Org. + Inorg.)	2	N/A	2024/09/06		Auto Calc
Temperature (Field)	3	N/A	2024/08/22	Field Test	Field Test
Carbon (Inorganic)	2	N/A	2024/08/26	CAL SOP-00076	Modified AE 2411
Carbon (Inorganic)	1	N/A	2024/09/03	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	3	N/A	2024/08/30	BBY WI-00033	Auto Calc
Nitrogen (Total)	3	2024/08/30	2024/08/30	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	1	N/A	2024/09/03	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (4)	2	N/A	2024/09/05	AB SOP-00087	MMCW 119 1996 m

Your P.O. #: 6404002992
Your Project #: 61052
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102057

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/06
Report #: R3552428
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C464875
Received: 2024/08/22, 09:30

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Phosphorus Low Level Total	3	2024/08/30	2024/08/30	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	3	2024/08/25	2024/08/27	AB SOP-00061	SM 24 2540 D m
Turbidity	3	N/A	2024/08/22	CAL SOP-00081	SM 24 2130 B m
Ion Balance (5)	3	N/A	2024/09/04		
Total Dissolved Solids (Calculated) (5)	3	N/A	2024/09/04		

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.

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) Calculation was conducted as per client request using CAL PDF-00333.

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Your P.O. #: 6404002992
Your Project #: 61052
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102057

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/06
Report #: R3552428
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C464875
Received: 2024/08/22, 09:30

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

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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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C464875
Report Date: 2024/09/06

Arctic Canadian Diamond Company Ltd
Client Project #: 61052
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTV129			CTV130			CTV131		
Sampling Date		2024/08/19 15:30			2024/08/19 15:19			2024/08/19 14:23		
COC Number		102057			102057			102057		
	UNITS	0008-SA10	RDL	QC Batch	0008-SA3	RDL	QC Batch	0008-SA9B	RDL	QC Batch
Calculated Parameters										
Total Hardness (CaCO3)	mg/L	145	0.50	B488379	63.5	0.50	B488379	13.7	0.50	B488379
Calculated Ion Balance (% Difference)	%	2.3		B488293	6.5		B488293	3.8		B488293
Nitrate plus Nitrite (N)	mg/L	17	0.011	B488259	1.1	0.0022	B488259	0.0040	0.0022	B488259
Calculated Total Dissolved Solids	mg/L	280	1.8	B488296	110	0.95	B488296	21	0.95	B488296
Total Total Kjeldahl Nitrogen (Calc)	mg/L	<0.20	0.20	B487630	0.36	0.020	B488384	0.42	0.020	B488384
Field Parameters										
Field pH	pH	8.11	N/A	ONSITE	7.27	N/A	ONSITE	7.50	N/A	ONSITE
Field Temperature (Fd)	deg. C	16.2	N/A	ONSITE	15.3	N/A	ONSITE	14.0	N/A	ONSITE
Misc. Inorganics										
Fluoride (F)	mg/L	0.170	0.010	B498600	0.212	0.010	B490987	0.059	0.010	B498600
pH	pH	6.81	N/A	B498595	6.48	N/A	B490985	6.60	N/A	B498595
Reactive Silica	mg/L	0.57	0.050	B491853	0.37	0.050	B491853	0.29	0.050	B491853
Acidity (pH 4.5)	mg/L	<1.0	1.0	B488934	<1.0	1.0	B488934	<1.0	1.0	B488934
Alkalinity (Total as CaCO3)	mg/L	23.4	0.50	B498587	46.8	0.50	B490982	11.4	0.50	B498587
Total Organic Carbon (C)	mg/L	2.0	0.20	B503694	3.0	0.20	B501048	4.9	0.20	B503694
Acidity (pH 8.3)	mg/L	1.4	1.0	B488934	1.5	1.0	B488934	1.5	1.0	B488934
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B498587	<0.50	0.50	B490982	<0.50	0.50	B498587
Bicarbonate (HCO3)	mg/L	28.5	0.50	B498587	57.1	0.50	B490982	13.9	0.50	B498587
Carbonate (CO3)	mg/L	<0.50	0.50	B498587	<0.50	0.50	B490982	<0.50	0.50	B498587
Hydroxide (OH)	mg/L	<0.50	0.50	B498587	<0.50	0.50	B490982	<0.50	0.50	B498587
Total Suspended Solids	mg/L	<1.0	1.0	B491133	<0.99	0.99	B491133	2.4	1.0	B491133
Anions										
Orthophosphate (P)	mg/L	<0.0010	0.0010	B489676	<0.0010	0.0010	B489676	<0.0010	0.0010	B489676
Chloride (Cl)	mg/L	9.0	0.50	B490106	3.9	0.50	B490106	<0.50	0.50	B490106
Dissolved-Low Level Sulphate (SO4)	mg/L	110	1.5	B489369	38	0.30	B489369	6.6	0.30	B489369
Nutrients										
Total Carbon (C)	mg/L	7.0	0.50	B488288	11	0.50	B488288	7.3	0.50	B488288
Total Inorganic Carbon (C)	mg/L	5.0	1.0	B492012	8.3	1.0	B498271	2.3	1.0	B492012
Total Phosphorus (P)	mg/L	<0.0020	0.0020	B497906	0.0032	0.0020	B497906	0.0056	0.0020	B497906
Total Ammonia (N)	mg/L	0.0097	0.0050	B489310	0.018	0.0050	B489310	<0.0050	0.0050	B489310
Nitrite (N)	mg/L	0.054	0.0050	B488847	0.0056	0.0010	B488847	<0.0010	0.0010	B488847

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C464875
Report Date: 2024/09/06

Arctic Canadian Diamond Company Ltd
Client Project #: 61052
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CTV129			CTV130			CTV131		
Sampling Date		2024/08/19 15:30			2024/08/19 15:19			2024/08/19 14:23		
COC Number		102057			102057			102057		
	UNITS	**0008-SA10**	**RDL**	**QC Batch**	**0008-SA3**	**RDL**	**QC Batch**	**0008-SA9B**	**RDL**	**QC Batch**
Nitrate (N)	mg/L	17	0.010	B488847	1.1	0.0020	B488847	0.0040	0.0020	B488847
Total Nitrogen (N)	mg/L	17 (1)	0.20	B497639	1.5	0.020	B497639	0.43	0.020	B497639
Physical Properties										
Conductivity	uS/cm	461	1.0	B498597	181	1.0	B490986	44.3	1.0	B498597
Physical Properties										
Turbidity - NTU	NTU	0.11	0.10	B488627	<0.10	0.10	B488627	1.4	0.10	B488627

RDL = Reportable Detection Limit
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly. Nitrogen < Nitrate: Both values fall within the method uncertainty for duplicates and are likely equivalent.

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Arctic Canadian Diamond Company Ltd
Client Project #: 61052
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CTV129	CTV130	CTV131		
Sampling Date		2024/08/19 15:30	2024/08/19 15:19	2024/08/19 14:23		
COC Number		102057	102057	102057		
	UNITS	0008-SA10	0008-SA3	0008-SA9B	RDL	QC Batch
Elements						
Total Mercury (Hg)	mg/L	<0.0000019	<0.0000019	<0.0000019	0.0000019	B494951
RDL = Reportable Detection Limit						

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Arctic Canadian Diamond Company Ltd
Client Project #: 61052
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CTV129		CTV130		CTV131		
Sampling Date		2024/08/19 15:30		2024/08/19 15:19		2024/08/19 14:23		
COC Number		102057		102057		102057		
	UNITS	0008-SA10	RDL	0008-SA3	RDL	0008-SA9B	RDL	QC Batch
Elements								
Total Aluminum (Al)	mg/L	0.027	0.0030	0.038	0.0060	0.0091	0.0030	B500486
Total Antimony (Sb)	mg/L	<0.00060	0.00060	<0.00060	0.00060	<0.00060	0.00060	B500486
Total Arsenic (As)	mg/L	0.00036	0.00020	0.00050	0.00020	0.00029	0.00020	B500486
Total Barium (Ba)	mg/L	0.083	0.010	0.020	0.010	<0.010	0.010	B500492
Total Beryllium (Be)	mg/L	<0.0010	0.0010	<0.0010	0.0010	<0.0010	0.0010	B500486
Total Boron (B)	mg/L	<0.020	0.020	<0.020	0.020	<0.020	0.020	B500492
Total Cadmium (Cd)	mg/L	<0.000020	0.000020	<0.000020	0.000020	<0.000020	0.000020	B500486
Total Calcium (Ca)	mg/L	23	0.30	11	0.30	2.2	0.30	B500492
Total Chromium (Cr)	mg/L	<0.0010	0.0010	<0.0010	0.0010	<0.0010	0.0010	B500486
Total Cobalt (Co)	mg/L	<0.00030	0.00030	<0.00030	0.00030	<0.00030	0.00030	B500486
Total Copper (Cu)	mg/L	<0.0010	0.0010	<0.0010	0.0010	<0.0010	0.0010	B500486
Total Iron (Fe)	mg/L	<0.060	0.060	0.10	0.060	0.14	0.060	B500492
Total Lead (Pb)	mg/L	<0.00020	0.00020	<0.00020	0.00020	<0.00020	0.00020	B500486
Total Lithium (Li)	mg/L	<0.020	0.020	<0.020	0.020	<0.020	0.020	B500492
Total Magnesium (Mg)	mg/L	21	0.20	9.0	0.20	2.0	0.20	B500492
Total Manganese (Mn)	mg/L	<0.0040	0.0040	0.016	0.0040	0.014	0.0040	B500492
Total Molybdenum (Mo)	mg/L	0.042	0.00020	0.0034	0.00020	0.00021	0.00020	B500486
Total Nickel (Ni)	mg/L	0.025	0.00050	0.0034	0.00050	0.00082	0.00050	B500486
Total Potassium (K)	mg/L	18	0.30	6.1	0.30	1.4	0.30	B500492
Total Selenium (Se)	mg/L	0.00031	0.00020	<0.00020	0.00020	<0.00020	0.00020	B500486
Total Silicon (Si)	mg/L	<0.50	0.50	<0.50	0.50	<0.50	0.50	B500492
Total Silver (Ag)	mg/L	<0.00010	0.00010	<0.00010	0.00010	<0.00010	0.00010	B500486
Total Sodium (Na)	mg/L	14	0.50	5.9	0.50	1.9	0.50	B500492
Total Strontium (Sr)	mg/L	0.29	0.020	0.092	0.020	<0.020	0.020	B500492
Total Sulphur (S)	mg/L	33	0.20	11	0.20	2.0	0.20	B500492
Total Thallium (Tl)	mg/L	<0.00020	0.00020	<0.00020	0.00020	<0.00020	0.00020	B500486
Total Tin (Sn)	mg/L	<0.0010	0.0010	<0.0010	0.0010	<0.0010	0.0010	B500486
Total Titanium (Ti)	mg/L	<0.0010	0.0010	0.0011	0.0010	<0.0010	0.0010	B500486
Total Uranium (U)	mg/L	0.0037	0.00010	0.0024	0.00010	<0.00010	0.00010	B500486
Total Vanadium (V)	mg/L	<0.0010	0.0010	<0.0010	0.0010	<0.0010	0.0010	B500486
Total Zinc (Zn)	mg/L	<0.0030	0.0030	<0.0030	0.0030	<0.0030	0.0030	B500486

RDL = Reportable Detection Limit

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GENERAL COMMENTS

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

Package 1	11.4°C
Package 2	9.3°C
Package 3	8.6°C
Package 4	9.5°C
Package 5	8.2°C
Package 6	6.7°C
Package 7	7.6°C
Package 8	8.6°C
Package 9	6.7°C
Package 10	4.8°C
Package 11	7.6°C
Package 12	7.1°C
Package 13	7.7°C
Package 14	10.0°C
Package 15	9.3°C
Package 16	4.7°C
Package 17	8.7°C
Package 18	7.3°C
Package 19	7.4°C
Package 20	7.2°C
Package 21	8.4°C
Package 22	8.7°C
Package 23	7.2°C
Package 24	5.5°C
Package 25	6.8°C

Sample CTV129 [0008-SA10] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Sample CTV130 [0008-SA3] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes. Sample was analyzed past method specified hold time for Carbon (Inorganic). Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

Sample CTV131 [0008-SA9B] : Nitrogen (Nitrite - Nitrate) Low Level completed within five days of sampling. Data is satisfactory for compliance purposes.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B488627	Turbidity - NTU	2024/08/22			100	80 - 120	<0.10	NTU	0.47	20		
B488847	Nitrate (N)	2024/08/22	105	80 - 120	101	80 - 120	<0.0020	mg/L	1.4	20		
B488847	Nitrite (N)	2024/08/22	103	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
B488934	Acidity (pH 4.5)	2024/08/23					<1.0	mg/L	NC	20		
B488934	Acidity (pH 8.3)	2024/08/23			101	80 - 120	<1.0	mg/L	NC	20		
B489310	Total Ammonia (N)	2024/08/23	88	80 - 120	110	80 - 120	<0.0050	mg/L	1.9	20		
B489369	Dissolved-Low Level Sulphate (SO4)	2024/08/23	101	80 - 120	100	80 - 120	<0.050	mg/L	0.69	20		
B489676	Orthophosphate (P)	2024/08/23	96	80 - 120	103	80 - 120	0.0015, RDL=0.0010 (1)	mg/L	NC	20		
B490106	Chloride (Cl)	2024/08/23	107	80 - 120	102	80 - 120	<0.50	mg/L	4.5	20		
B490982	Alkalinity (PP as CaCO3)	2024/08/26					<0.50	mg/L	NC	20		
B490982	Alkalinity (Total as CaCO3)	2024/08/26			104	80 - 120	<0.50	mg/L	12	20		
B490982	Bicarbonate (HCO3)	2024/08/26					<0.50	mg/L	12	20		
B490982	Carbonate (CO3)	2024/08/26					<0.50	mg/L	NC	20		
B490982	Hydroxide (OH)	2024/08/26					<0.50	mg/L	NC	20		
B490985	pH	2024/08/26			100	97 - 103			1.2	N/A		
B490986	Conductivity	2024/08/26			99	90 - 110	<1.0	uS/cm	0.77	20		
B490987	Fluoride (F)	2024/08/26	96	80 - 120	94	80 - 120	<0.010	mg/L	0.28	20		
B491133	Total Suspended Solids	2024/08/27	114	80 - 120	92	80 - 120	<1.0	mg/L	NC	20		
B491853	Reactive Silica	2024/08/26	69 (2)	80 - 120	106	80 - 120	<0.050	mg/L	0.73	20		
B492012	Total Inorganic Carbon (C)	2024/08/26	NC	80 - 120	102	80 - 120	<1.0	mg/L	0.97	20		
B494951	Total Mercury (Hg)	2024/08/29	97	80 - 120	97	80 - 120	<0.0000019	mg/L	NC	20		
B497639	Total Nitrogen (N)	2024/08/30	NC	80 - 120	106	80 - 120	<0.020	mg/L	1.8	20	108	80 - 120
B497906	Total Phosphorus (P)	2024/09/03	97	80 - 120	97	80 - 120	<0.0010	mg/L	14	20	89	80 - 120
B498271	Total Inorganic Carbon (C)	2024/09/03	NC	80 - 120	110	80 - 120	<1.0	mg/L	0.71	20		
B498587	Alkalinity (PP as CaCO3)	2024/08/30					<0.50	mg/L	NC	20		
B498587	Alkalinity (Total as CaCO3)	2024/08/30			100	80 - 120	0.78, RDL=0.50 (1)	mg/L	7.4	20		
B498587	Bicarbonate (HCO3)	2024/08/30					0.95, RDL=0.50	mg/L	7.4	20		
B498587	Carbonate (CO3)	2024/08/30					<0.50	mg/L	NC	20		
B498587	Hydroxide (OH)	2024/08/30					<0.50	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B498595	pH	2024/08/30			100	97 - 103			1.5	N/A		
B498597	Conductivity	2024/08/30			102	90 - 110	<1.0	uS/cm	0	20		
B498600	Fluoride (F)	2024/09/03	86	80 - 120	89	80 - 120	<0.010	mg/L	15	20		
B500486	Total Aluminum (Al)	2024/09/03	159 (2)	80 - 120	115	80 - 120	<0.0030	mg/L	4.6	20		
B500486	Total Antimony (Sb)	2024/09/03	100	80 - 120	98	80 - 120	<0.00060	mg/L	NC	20		
B500486	Total Arsenic (As)	2024/09/03	93	80 - 120	98	80 - 120	<0.00020	mg/L	12	20		
B500486	Total Beryllium (Be)	2024/09/03	97	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B500486	Total Cadmium (Cd)	2024/09/03	98	80 - 120	100	80 - 120	<0.000020	mg/L	NC	20		
B500486	Total Chromium (Cr)	2024/09/03	100	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20		
B500486	Total Cobalt (Co)	2024/09/03	100	80 - 120	108	80 - 120	<0.00030	mg/L	NC	20		
B500486	Total Copper (Cu)	2024/09/03	96	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20		
B500486	Total Lead (Pb)	2024/09/03	96	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20		
B500486	Total Molybdenum (Mo)	2024/09/03	111	80 - 120	101	80 - 120	<0.00020	mg/L	2.9	20		
B500486	Total Nickel (Ni)	2024/09/03	99	80 - 120	107	80 - 120	<0.00050	mg/L	1.5	20		
B500486	Total Selenium (Se)	2024/09/03	90	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20		
B500486	Total Silver (Ag)	2024/09/03	99	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20		
B500486	Total Thallium (Tl)	2024/09/03	100	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20		
B500486	Total Tin (Sn)	2024/09/03	108	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B500486	Total Titanium (Ti)	2024/09/03	109	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20		
B500486	Total Uranium (U)	2024/09/03	102	80 - 120	107	80 - 120	<0.00010	mg/L	2.9	20		
B500486	Total Vanadium (V)	2024/09/03	101	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20		
B500486	Total Zinc (Zn)	2024/09/03	91	80 - 120	97	80 - 120	<0.0030	mg/L	NC	20		
B500492	Total Barium (Ba)	2024/09/03	101	80 - 120	100	80 - 120	<0.010	mg/L	3.6	20		
B500492	Total Boron (B)	2024/09/03	97	80 - 120	96	80 - 120	<0.020	mg/L	NC	20		
B500492	Total Calcium (Ca)	2024/09/03	NC	80 - 120	95	80 - 120	<0.30	mg/L	3.6	20		
B500492	Total Iron (Fe)	2024/09/03	98	80 - 120	99	80 - 120	<0.060	mg/L	4.3	20		
B500492	Total Lithium (Li)	2024/09/03	102	80 - 120	101	80 - 120	<0.020	mg/L	NC	20		
B500492	Total Magnesium (Mg)	2024/09/03	96	80 - 120	98	80 - 120	<0.20	mg/L	3.6	20		
B500492	Total Manganese (Mn)	2024/09/03	96	80 - 120	94	80 - 120	<0.0040	mg/L	3.1	20		
B500492	Total Potassium (K)	2024/09/03	98	80 - 120	98	80 - 120	<0.30	mg/L	4.1	20		
B500492	Total Silicon (Si)	2024/09/03	88	80 - 120	92	80 - 120	<0.50	mg/L	NC	20		
B500492	Total Sodium (Na)	2024/09/03	95	80 - 120	94	80 - 120	<0.50	mg/L	3.6	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B500492	Total Strontium (Sr)	2024/09/03	97	80 - 120	98	80 - 120	<0.020	mg/L	3.2	20		
B500492	Total Sulphur (S)	2024/09/03	94	80 - 120	92	80 - 120	<0.20	mg/L	4.3	20		
B501048	Total Organic Carbon (C)	2024/09/03	99	75 - 125	97	80 - 120	<0.20	mg/L	13	20		
B503694	Total Organic Carbon (C)	2024/09/05	107	75 - 125	110	80 - 120	<0.20	mg/L	1.8	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

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C464875
Report Date: 2024/09/06

Arctic Canadian Diamond Company Ltd
Client Project #: 61052
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:

Sandy Yuan, M.Sc., QP, Scientific Specialist

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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

C464875
2024/08/22 09:30

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	12.4 (1)	11.2 (2)	10.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.9 (1)	10.4 (2)	9.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.1 (1)	8.6 (2)	8.1 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.5 (1)	9.5 (2)	10.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.1 (1)	8.8 (2)	7.6 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.4 (1)	7.9 (2)	4.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	6.6 (1)	8.3 (2)	7.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.0 (1)	9.8 (2)	9.1 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	6.4 (1)	6.4 (2)	7.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.3 (1)	4.8 (2)	5.2 (3)
INTACT		✓				
ICE PRESENT	✓	~~✓~~				

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.9 (1)	7.8 (2)	8.0 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.2 (1)	7.2 (2)	7.4 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	7.4 (1)	7.5 (2)	8.3 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	10.6 (1)	9.4 (2)	10.1 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	9.3 (1)	9.4 (2)	9.3 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	4.5 (1)	5.8 (2)	3.9 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	8.4 (1)	8.0 (2)	9.8 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	6.2 (1)	7.6 (2)	8.2 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	5.1 (1)	8.6 (2)	8.5 (3)
INTACT		✓				
ICE PRESENT	✓					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT		✓	TEMP	6.1 (1)	7.4 (2)	8.7 (3)
INTACT		✓				
ICE PRESENT	✓	•				

2024/08/22

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
JC	Jeff Lonon	2024/08/22	0930

C464875
2024/08/22 09:30

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID	TEMP 1	TEMP 2	TEMP 3
PRESENT		✓		8.5	8.5	8.3
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		9.0	8.6	8.5
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		7.0	7.4	7.3
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		6.1	6.6	3.9
INTACT		✓				
ICE PRESENT	✓					
PRESENT		✓		6.6	7.2	6.5
INTACT		✓				
ICE PRESENT	✓					
PRESENT						
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INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID	TEMP 1	TEMP 2	TEMP 3
PRESENT						
INTACT						
ICE PRESENT						
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RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Jeff Lemon	2024/08/22	09:30

C464875
2024/08/22 09:30

MCAL-2024-08-2433

Burgundy Diamond Mines
900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

CHAIN OF CUSTODY FORM

BUREAU VERITAS 1828

COC# 102057
SO# 61052

For Lab Use	Sample Point	Station Type	Date	Time	Matrix	Type	Major Ions	SNP Total Nutrients	Standard Total Metals	pH Field (pH)	Water Temp (°C)
	0008-Sa10	EKA 2002 0008	19-Aug-2024	15:30	Water	SNP	Y	Y	Y	8.11	16.2
	0008-Sa3	EKA 2002 0008	19-Aug-2024	15:19	Water	SNP	Y	Y	Y	7.27	15.3
	0008-Sa9b	EKA 2002 0008	19-Aug-2024	14:23	Water	SNP	Y	Y	Y	7.50	14.0

(SAMPLE INFORMATION; ANALYSIS REQUESTED — Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below; FOR LAB USE ONLY)

Special Instructions (Billing details, QC reporting etc):
Frequency: On the first day of Discharge, weekly during periods of Discharge, and on the final day of Discharge.
Parameters: TSS, major ion, physical parameters, total metals and nutrients.
*** Sample :0008-Sa3, 0008-Sa9b with Profil, 0008-Sa10***
Sent results to Tania.robitaille@burgundydiamonds.com, Landon.Murphy@burgundydiamonds.com & compliance.team@burgundydiamonds.com

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 21-Aug-24 Time 7:00	[signature] Jeff Lomon	Date 2024/08/22 Time 09 30
	Date Time		Date Time

FOR LAB USE ONLY
Cooler seal intact upon receipt? ☐ Yes ☑ No ☐ N/A
Sample temperature upon receipt: Frozen? ☐ Yes ☑ No
Send Analytical Results to: compliance.team@burgundydiamonds.com

See ACTR

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102033

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/20
Report #: R3559152
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469924
Received: 2024/09/06, 12:50

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	2	N/A	2024/09/10	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	1	N/A	2024/09/11	AB SOP-00005	SM 24 2320 B m
Alkalinity - Low Level	1	N/A	2024/09/07	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	2	N/A	2024/09/07	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/09/11	AB SOP-00005	SM 24 2510 B m
Conductance - Low Level	1	N/A	2024/09/09	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/09/11	AB SOP-00005	SM 24 4500-F C m
Fluoride - Low Level	1	N/A	2024/09/09	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	2	N/A	2024/09/18	BBY WI-00033	Auto Calc
Mercury (Dissolved) by CV (2)	2	2024/09/13	2024/09/14	AB SOP-00084	BCMOE BCLM Oct2013 m
Mercury (Total) by CV	2	2024/09/13	2024/09/14	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Dissolved (2)	2	N/A	2024/09/07	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total	2	2024/09/17	2024/09/18	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Dissolved (2)	2	N/A	2024/09/08	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	2	2024/09/17	2024/09/18	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	2	N/A	2024/09/09	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	2	N/A	2024/09/09		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	2	N/A	2024/09/06	AB SOP-00023	SM 24 4110 B m
pH @25°C (3)	1	N/A	2024/09/11	AB SOP-00005	SM 24 4500-H+B m
pH @25°C (3)	1	N/A	2024/09/09	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	2	N/A	2024/09/06	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (4)	1	N/A	2024/09/19	AB SOP-00025	SM 24 4500-P A, F m
Orthophosphate LL by Automated Analyzer (4)	1	N/A	2024/09/09	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	2	N/A	2024/09/12	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	2	N/A	2024/09/09	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	2	N/A	2024/09/10		Auto Calc
Temperature (Field)	2	N/A	2024/09/06	Field Test	Field Test
Carbon (Inorganic)	2	N/A	2024/09/10	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	2	N/A	2024/09/09	BBY WI-00033	Auto Calc
Nitrogen (Total)	2	2024/09/09	2024/09/09	AB SOP-00093	SM 24 4500-N C m

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102033

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/20
Report #: R3559152
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469924
Received: 2024/09/06, 12:50

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon (Total Organic) (5)	2	N/A	2024/09/09	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Dissolved (6)	2	2024/09/09	2024/09/10	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total	2	2024/09/09	2024/09/10	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	2	2024/09/06	2024/09/10	AB SOP-00061	SM 24 2540 D m
Turbidity	2	N/A	2024/09/06	CAL SOP-00081	SM 24 2130 B m
Ion Balance (7)	2	N/A	2024/09/18		
Total Dissolved Solids (Calculated) (7)	2	N/A	2024/09/18		

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.

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) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) 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.
(4) Orthophosphate > Total Phosphorus Imbalance: When applicable, Orthophosphate, Total Phosphorus and dissolved Phosphorus results were reviewed and data quality meets

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102033

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/20
Report #: R3559152
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469924
Received: 2024/09/06, 12:50

acceptable levels unless otherwise noted.
(5) TOC present in the sample should be considered as non-purgeable TOC.
(6) Dissolved Phosphorus > Total Phosphorus Imbalance: When applicable, Dissolved Phosphorus and Total Phosphorus results were reviewed and data quality meets acceptable levels unless otherwise noted.
(7) Calculation was conducted as per client request using CAL PDF-00333.

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

==========

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Bureau Veritas Job #: C469924
Report Date: 2024/09/20

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CUW340		CUW341		
Sampling Date		2024/08/24 11:03		2024/08/24 11:10		
COC Number		102033		102033		
	UNITS	**1616-12**	**QC Batch**	**1616-290**	**RDL**	**QC Batch**
Calculated Parameters						
Total Hardness (CaCO3)	mg/L	23.2	B506513	23.7	0.50	B506513
Calculated Ion Balance (% Difference)	%	1.8	B506410	3.6		B506410
Nitrate plus Nitrite (N)	mg/L	<0.0022	B506354	<0.0022	0.0022	B506354
Calculated Total Dissolved Solids	mg/L	38	B506412	38	0.95	B506412
Total Total Kjeldahl Nitrogen (Calc)	mg/L	0.38	B505387	0.38	0.020	B505387
Field Parameters						
Field pH	pH	6.63	ONSITE	6.63	N/A	ONSITE
Field Temperature (Fd)	deg. C	12.6	ONSITE	12.6	N/A	ONSITE
Misc. Inorganics						
Fluoride (F)	mg/L	0.030	B509131	0.015	0.010	B507384
pH	pH	6.08	B509129	6.35	N/A	B507382
Reactive Silica	mg/L	0.27	B512918	0.25	0.050	B512918
Acidity (pH 4.5)	mg/L	<1.0	B509151	<1.0	1.0	B509151
Alkalinity (Total as CaCO3)	mg/L	8.56	B509125	8.13	0.50	B507380
Total Organic Carbon (C)	mg/L	5.0	B508764	5.3	0.20	B508764
Acidity (pH 8.3)	mg/L	<1.0	B509151	<1.0	1.0	B509151
Alkalinity (PP as CaCO3)	mg/L	<0.50	B509125	<0.50	0.50	B507380
Bicarbonate (HCO3)	mg/L	10.4	B509125	9.92	0.50	B507380
Carbonate (CO3)	mg/L	<0.50	B509125	<0.50	0.50	B507380
Hydroxide (OH)	mg/L	<0.50	B509125	<0.50	0.50	B507380
Total Suspended Solids	mg/L	1.6	B506489	2.1	1.0	B506489
Anions						
Orthophosphate (P)	mg/L	<0.0010	B527884	<0.0010	0.0010	B508202
Chloride (Cl)	mg/L	2.8	B506238	3.0	0.50	B506238
Dissolved-Low Level Sulphate (SO4)	mg/L	18	B508673	17	0.30	B508673
Nutrients						
Total Carbon (C)	mg/L	7.4	B506400	7.2	0.50	B506400
Total Inorganic Carbon (C)	mg/L	2.5	B510426	1.8	1.0	B510426
Dissolved Phosphorus (P)	mg/L	<0.0020	B508004	<0.0020	0.0020	B508004
Total Phosphorus (P)	mg/L	0.0065	B508669	0.0086	0.0020	B508669
Total Ammonia (N)	mg/L	0.029	B508166	0.028	0.0050	B508166

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C469924
Report Date: 2024/09/20

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

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CUW340		CUW341		
Sampling Date		2024/08/24 11:03		2024/08/24 11:10		
COC Number		102033		102033		
	UNITS	**1616-12**	**QC Batch**	**1616-290**	**RDL**	**QC Batch**
Nitrite (N)	mg/L	<0.0010	B506873	<0.0010	0.0010	B506873
Nitrate (N)	mg/L	<0.0020	B506873	<0.0020	0.0020	B506873
Total Nitrogen (N)	mg/L	0.38	B507929	0.38	0.020	B507929
Physical Properties						
Conductivity	uS/cm	74.8	B509130	75.3	1.0	B507383
Physical Properties						
Turbidity - NTU	NTU	1.6	B506484	1.3	0.10	B506484
RDL = Reportable Detection Limit						

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CUW340	CUW341		
Sampling Date		2024/08/24 11:03	2024/08/24 11:10		
COC Number		102033	102033		
	UNITS	1616-12	1616-290	RDL	QC Batch
Elements					
Dissolved Mercury (Hg)	mg/L	<0.0000019	<0.0000019	0.0000019	B515971
Total Mercury (Hg)	mg/L	<0.0000019	<0.0000019	0.0000019	B515969
RDL = Reportable Detection Limit					

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CUW340		CUW341		
Sampling Date		2024/08/24 11:03		2024/08/24 11:10		
COC Number		102033		102033		
	UNITS	1616-12	QC Batch	1616-290	RDL	QC Batch
Elements						
Dissolved Aluminum (Al)	mg/L	0.011	B507457	0.011	0.0030	B507453
Total Aluminum (Al)	mg/L	0.026	B520172	0.025	0.0030	B520172
Dissolved Antimony (Sb)	mg/L	<0.00060	B507457	<0.00060	0.00060	B507453
Total Antimony (Sb)	mg/L	<0.00060	B520172	<0.00060	0.00060	B520172
Dissolved Arsenic (As)	mg/L	0.00036	B507457	0.00025	0.00020	B507453
Total Arsenic (As)	mg/L	0.00046	B520172	0.00044	0.00020	B520172
Dissolved Barium (Ba)	mg/L	0.012	B507146	0.011	0.010	B507146
Total Barium (Ba)	mg/L	0.011	B520183	0.012	0.010	B520183
Dissolved Beryllium (Be)	mg/L	<0.0010	B507457	<0.0010	0.0010	B507453
Total Beryllium (Be)	mg/L	<0.0010	B520172	<0.0010	0.0010	B520172
Dissolved Boron (B)	mg/L	<0.020	B507146	<0.020	0.020	B507146
Total Boron (B)	mg/L	<0.020	B520183	<0.020	0.020	B520183
Dissolved Cadmium (Cd)	mg/L	<0.000020	B507457	<0.000020	0.000020	B507453
Total Cadmium (Cd)	mg/L	<0.000020	B520172	<0.000020	0.000020	B520172
Dissolved Calcium (Ca)	mg/L	4.0	B507146	4.0	0.30	B507146
Total Calcium (Ca)	mg/L	3.8	B520183	3.9	0.30	B520183
Dissolved Chromium (Cr)	mg/L	<0.0010	B507457	<0.0010	0.0010	B507453
Total Chromium (Cr)	mg/L	<0.0010	B520172	<0.0010	0.0010	B520172
Dissolved Cobalt (Co)	mg/L	<0.00030	B507457	<0.00030	0.00030	B507453
Total Cobalt (Co)	mg/L	<0.00030	B520172	<0.00030	0.00030	B520172
Dissolved Copper (Cu)	mg/L	<0.0010	B507457	<0.0010	0.0010	B507453
Total Copper (Cu)	mg/L	0.0013	B520172	0.0016	0.0010	B520172
Dissolved Iron (Fe)	mg/L	<0.060	B507146	<0.060	0.060	B507146
Total Iron (Fe)	mg/L	0.11	B520183	0.12	0.060	B520183
Dissolved Lead (Pb)	mg/L	<0.00020	B507457	<0.00020	0.00020	B507453
Total Lead (Pb)	mg/L	<0.00020	B520172	<0.00020	0.00020	B520172
Dissolved Lithium (Li)	mg/L	<0.020	B507146	<0.020	0.020	B507146
Total Lithium (Li)	mg/L	<0.020	B520183	<0.020	0.020	B520183
Dissolved Magnesium (Mg)	mg/L	3.4	B507146	3.4	0.20	B507146
Total Magnesium (Mg)	mg/L	3.3	B520183	3.4	0.20	B520183
Dissolved Manganese (Mn)	mg/L	<0.0040	B507146	<0.0040	0.0040	B507146
Total Manganese (Mn)	mg/L	0.0092	B520183	0.0094	0.0040	B520183
RDL = Reportable Detection Limit						

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CUW340		CUW341		
Sampling Date		2024/08/24 11:03		2024/08/24 11:10		
COC Number		102033		102033		
	UNITS	1616-12	QC Batch	1616-290	RDL	QC Batch
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B507457	0.00027	0.00020	B507453
Total Molybdenum (Mo)	mg/L	<0.00020	B520172	0.00036	0.00020	B520172
Dissolved Nickel (Ni)	mg/L	0.0011	B507457	0.00099	0.00050	B507453
Total Nickel (Ni)	mg/L	0.0015	B520172	0.0015	0.00050	B520172
Dissolved Potassium (K)	mg/L	1.9	B507146	1.9	0.30	B507146
Total Potassium (K)	mg/L	1.8	B520183	1.9	0.30	B520183
Dissolved Selenium (Se)	mg/L	<0.00020	B507457	<0.00020	0.00020	B507453
Total Selenium (Se)	mg/L	<0.00020	B520172	<0.00020	0.00020	B520172
Dissolved Silicon (Si)	mg/L	<0.50	B507146	<0.50	0.50	B507146
Total Silicon (Si)	mg/L	<0.50	B520183	<0.50	0.50	B520183
Dissolved Silver (Ag)	mg/L	<0.00010	B507457	<0.00010	0.00010	B507453
Total Silver (Ag)	mg/L	<0.00010	B520172	<0.00010	0.00010	B520172
Dissolved Sodium (Na)	mg/L	3.0	B507146	3.0	0.50	B507146
Total Sodium (Na)	mg/L	2.8	B520183	3.0	0.50	B520183
Dissolved Strontium (Sr)	mg/L	0.032	B507146	0.032	0.020	B507146
Total Strontium (Sr)	mg/L	0.031	B520183	0.032	0.020	B520183
Dissolved Sulphur (S)	mg/L	5.7	B507146	5.7	0.20	B507146
Total Sulphur (S)	mg/L	5.4	B520183	5.6	0.20	B520183
Dissolved Thallium (Tl)	mg/L	<0.00020	B507457	<0.00020	0.00020	B507453
Total Thallium (Tl)	mg/L	<0.00020	B520172	<0.00020	0.00020	B520172
Dissolved Tin (Sn)	mg/L	<0.0010	B507457	<0.0010	0.0010	B507453
Total Tin (Sn)	mg/L	<0.0010	B520172	<0.0010	0.0010	B520172
Dissolved Titanium (Ti)	mg/L	<0.0010	B507457	<0.0010	0.0010	B507453
Total Titanium (Ti)	mg/L	<0.0010	B520172	<0.0010	0.0010	B520172
Dissolved Uranium (U)	mg/L	<0.00010	B507457	<0.00010	0.00010	B507453
Total Uranium (U)	mg/L	<0.00010	B520172	<0.00010	0.00010	B520172
Dissolved Vanadium (V)	mg/L	<0.0010	B507457	<0.0010	0.0010	B507453
Total Vanadium (V)	mg/L	<0.0010	B520172	<0.0010	0.0010	B520172
Dissolved Zinc (Zn)	mg/L	<0.0030	B507457	<0.0030	0.0030	B507453
Total Zinc (Zn)	mg/L	<0.0030	B520172	<0.0030	0.0030	B520172
RDL = Reportable Detection Limit						

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GENERAL COMMENTS

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

Package 1	8.5°C
Package 2	8.1°C
Package 3	6.7°C
Package 4	5.2°C
Package 5	2.4°C
Package 6	5.2°C
Package 7	3.5°C
Package 8	3.8°C
Package 9	4.3°C
Package 10	2.3°C
Package 11	4.3°C

Sample CUW340 [1616-12] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Sample was analyzed past method specified hold time for Nitrogen (Nitrite - Nitrate) Low Level. Sample was analyzed past method specified hold time for Carbon (Inorganic). Sample was analyzed past method specified hold time for Acidity pH 4.5 & pH 8.3 (as CaCO3). Sample was analyzed past method specified hold time for Alkalinity - Low Level.

Sample CUW341 [1616-290] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Sample was analyzed past method specified hold time for Nitrogen (Nitrite - Nitrate) Low Level. Sample was analyzed past method specified hold time for Alkalinity - Low Level. Sample was analyzed past method specified hold time for Acidity pH 4.5 & pH 8.3 (as CaCO3). Sample was analyzed past method specified hold time for Carbon (Inorganic).

Results relate only to the items tested.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B506238	Chloride (Cl)	2024/09/07	NC	80 - 120	104	80 - 120	<0.50	mg/L	0.45	20		
B506484	Turbidity - NTU	2024/09/06			100	80 - 120	<0.10	NTU	9.5	20		
B506489	Total Suspended Solids	2024/09/10	108	80 - 120	103	80 - 120	<0.99	mg/L	NC	20		
B506873	Nitrate (N)	2024/09/06	105	80 - 120	103	80 - 120	<0.0020	mg/L	13	20		
B506873	Nitrite (N)	2024/09/06	104	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B507146	Dissolved Barium (Ba)	2024/09/07	101	80 - 120	107	80 - 120	<0.010	mg/L	6.8	20		
B507146	Dissolved Boron (B)	2024/09/07	NC	80 - 120	98	80 - 120	<0.020	mg/L	1.2	20		
B507146	Dissolved Calcium (Ca)	2024/09/07	NC	80 - 120	102	80 - 120	<0.30	mg/L	0.23	20		
B507146	Dissolved Iron (Fe)	2024/09/07	99	80 - 120	104	80 - 120	<0.060	mg/L	NC	20		
B507146	Dissolved Lithium (Li)	2024/09/07	99	80 - 120	103	80 - 120	<0.020	mg/L	2.1	20		
B507146	Dissolved Magnesium (Mg)	2024/09/07	99	80 - 120	105	80 - 120	<0.20	mg/L	1.0	20		
B507146	Dissolved Manganese (Mn)	2024/09/07	96	80 - 120	101	80 - 120	<0.0040	mg/L	0.64	20		
B507146	Dissolved Potassium (K)	2024/09/07	103	80 - 120	103	80 - 120	<0.30	mg/L	1.8	20		
B507146	Dissolved Silicon (Si)	2024/09/07	85	80 - 120	96	80 - 120	<0.50	mg/L	2.1	20		
B507146	Dissolved Sodium (Na)	2024/09/07	NC	80 - 120	103	80 - 120	<0.50	mg/L	0.50	20		
B507146	Dissolved Strontium (Sr)	2024/09/07	93	80 - 120	102	80 - 120	<0.020	mg/L	0.50	20		
B507146	Dissolved Sulphur (S)	2024/09/07	NC	80 - 120	97	80 - 120	<0.20	mg/L	0.35	20		
B507380	Alkalinity (PP as CaCO3)	2024/09/07					<0.50	mg/L	NC	20		
B507380	Alkalinity (Total as CaCO3)	2024/09/07			98	80 - 120	<0.50	mg/L	2.0	20		
B507380	Bicarbonate (HCO3)	2024/09/07					<0.50	mg/L	2.0	20		
B507380	Carbonate (CO3)	2024/09/07					<0.50	mg/L	NC	20		
B507380	Hydroxide (OH)	2024/09/07					<0.50	mg/L	NC	20		
B507382	pH	2024/09/09			100	97 - 103			1.5	N/A		
B507383	Conductivity	2024/09/09			100	90 - 110	<1.0	uS/cm	1.7	20		
B507384	Fluoride (F)	2024/09/09	94	80 - 120	94	80 - 120	<0.010	mg/L	NC	20		
B507453	Dissolved Aluminum (Al)	2024/09/08	96	80 - 120	99	80 - 120	<0.0030	mg/L	NC	20		
B507453	Dissolved Antimony (Sb)	2024/09/08	95	80 - 120	104	80 - 120	<0.00060	mg/L	NC	20		
B507453	Dissolved Arsenic (As)	2024/09/08	98	80 - 120	103	80 - 120	<0.00020	mg/L	2.2	20		
B507453	Dissolved Beryllium (Be)	2024/09/08	97	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
B507453	Dissolved Cadmium (Cd)	2024/09/08	93	80 - 120	102	80 - 120	<0.000020	mg/L	4.5	20		
B507453	Dissolved Chromium (Cr)	2024/09/08	93	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
B507453	Dissolved Cobalt (Co)	2024/09/08	95	80 - 120	97	80 - 120	<0.00030	mg/L	5.2	20		
B507453	Dissolved Copper (Cu)	2024/09/08	92	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B507453	Dissolved Lead (Pb)	2024/09/08	93	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20		
B507453	Dissolved Molybdenum (Mo)	2024/09/08	104	80 - 120	100	80 - 120	<0.00020	mg/L	3.3	20		
B507453	Dissolved Nickel (Ni)	2024/09/08	94	80 - 120	97	80 - 120	<0.00050	mg/L	11	20		
B507453	Dissolved Selenium (Se)	2024/09/08	93	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20		
B507453	Dissolved Silver (Ag)	2024/09/08	93	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20		
B507453	Dissolved Thallium (Tl)	2024/09/08	92	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20		
B507453	Dissolved Tin (Sn)	2024/09/08	98	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20		
B507453	Dissolved Titanium (Ti)	2024/09/08	91	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20		
B507453	Dissolved Uranium (U)	2024/09/08	97	80 - 120	98	80 - 120	<0.00010	mg/L	7.1	20		
B507453	Dissolved Vanadium (V)	2024/09/08	97	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B507453	Dissolved Zinc (Zn)	2024/09/08	90	80 - 120	102	80 - 120	<0.0030	mg/L	NC	20		
B507457	Dissolved Aluminum (Al)	2024/09/08	101	80 - 120	98	80 - 120	<0.0030	mg/L	NC	20		
B507457	Dissolved Antimony (Sb)	2024/09/08	94	80 - 120	102	80 - 120	<0.00060	mg/L	NC	20		
B507457	Dissolved Arsenic (As)	2024/09/08	93	80 - 120	104	80 - 120	<0.00020	mg/L	11	20		
B507457	Dissolved Beryllium (Be)	2024/09/08	96	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20		
B507457	Dissolved Cadmium (Cd)	2024/09/08	93	80 - 120	101	80 - 120	<0.000020	mg/L				
B507457	Dissolved Chromium (Cr)	2024/09/08	94	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20		
B507457	Dissolved Cobalt (Co)	2024/09/08	94	80 - 120	97	80 - 120	<0.00030	mg/L	NC	20		
B507457	Dissolved Copper (Cu)	2024/09/08	94	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B507457	Dissolved Lead (Pb)	2024/09/08	91	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20		
B507457	Dissolved Molybdenum (Mo)	2024/09/08	101	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20		
B507457	Dissolved Nickel (Ni)	2024/09/08	93	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
B507457	Dissolved Selenium (Se)	2024/09/08	92	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20		
B507457	Dissolved Silver (Ag)	2024/09/08	92	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20		
B507457	Dissolved Thallium (Tl)	2024/09/08	91	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20		
B507457	Dissolved Tin (Sn)	2024/09/08	98	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B507457	Dissolved Titanium (Ti)	2024/09/08	95	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20		
B507457	Dissolved Uranium (U)	2024/09/08	94	80 - 120	96	80 - 120	<0.00010	mg/L	2.5	20		
B507457	Dissolved Vanadium (V)	2024/09/08	96	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
B507457	Dissolved Zinc (Zn)	2024/09/08	88	80 - 120	102	80 - 120	<0.0030	mg/L	NC	20		
B507929	Total Nitrogen (N)	2024/09/09	101	80 - 120	100	80 - 120	<0.020	mg/L	1.3	20	101	80 - 120
B508004	Dissolved Phosphorus (P)	2024/09/10	98	80 - 120	94	80 - 120	<0.0020	mg/L	NC	20	87	80 - 120
B508166	Total Ammonia (N)	2024/09/09	105	80 - 120	103	80 - 120	<0.0050	mg/L	2.7	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B508202	Orthophosphate (P)	2024/09/09	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B508669	Total Phosphorus (P)	2024/09/10	100	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20	86	80 - 120
B508673	Dissolved-Low Level Sulphate (SO4)	2024/09/12	NC	80 - 120	99	80 - 120	<0.050	mg/L	0.53	20		
B508764	Total Organic Carbon (C)	2024/09/09	103	75 - 125	104	80 - 120	<0.20	mg/L	1.0	20		
B509125	Alkalinity (PP as CaCO3)	2024/09/11					<0.50	mg/L	NC	20		
B509125	Alkalinity (Total as CaCO3)	2024/09/11			98	80 - 120	<0.50	mg/L	2.9	20		
B509125	Bicarbonate (HCO3)	2024/09/11					<0.50	mg/L	2.9	20		
B509125	Carbonate (CO3)	2024/09/11					<0.50	mg/L	NC	20		
B509125	Hydroxide (OH)	2024/09/11					<0.50	mg/L	NC	20		
B509129	pH	2024/09/11			100	97 - 103			1.4	N/A		
B509130	Conductivity	2024/09/11			101	90 - 110	<1.0	uS/cm	0.48	20		
B509131	Fluoride (F)	2024/09/11	100	80 - 120	105	80 - 120	0.010, RDL=0.010 (1)	mg/L	11	20		
B509151	Acidity (pH 4.5)	2024/09/10					<1.0	mg/L	NC	20		
B509151	Acidity (pH 8.3)	2024/09/10			98	80 - 120	<1.0	mg/L	NC	20		
B510426	Total Inorganic Carbon (C)	2024/09/10	95	80 - 120	105	80 - 120	<1.0	mg/L	NC	20		
B512918	Reactive Silica	2024/09/12	103	80 - 120	106	80 - 120	<0.050	mg/L	5.0	20		
B515969	Total Mercury (Hg)	2024/09/14	106	80 - 120	104	80 - 120	<0.0000019	mg/L	NC	20		
B515971	Dissolved Mercury (Hg)	2024/09/14	106	80 - 120	106	80 - 120	<0.0000019	mg/L	NC	20		
B520172	Total Aluminum (Al)	2024/09/18	99	80 - 120	97	80 - 120	<0.0030	mg/L	2.4	20		
B520172	Total Antimony (Sb)	2024/09/18	109	80 - 120	98	80 - 120	<0.00060	mg/L	NC	20		
B520172	Total Arsenic (As)	2024/09/18	108	80 - 120	98	80 - 120	<0.00020	mg/L	8.0	20		
B520172	Total Beryllium (Be)	2024/09/18	101	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
B520172	Total Cadmium (Cd)	2024/09/18	106	80 - 120	97	80 - 120	<0.000020	mg/L	NC	20		
B520172	Total Chromium (Cr)	2024/09/18	102	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
B520172	Total Cobalt (Co)	2024/09/18	103	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20		
B520172	Total Copper (Cu)	2024/09/18	101	80 - 120	100	80 - 120	<0.0010	mg/L	4.2	20		
B520172	Total Lead (Pb)	2024/09/18	100	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20		
B520172	Total Molybdenum (Mo)	2024/09/18	103	80 - 120	99	80 - 120	<0.00020	mg/L	0.51	20		
B520172	Total Nickel (Ni)	2024/09/18	101	80 - 120	99	80 - 120	<0.00050	mg/L	12	20		
B520172	Total Selenium (Se)	2024/09/18	111	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20		
B520172	Total Silver (Ag)	2024/09/18	103	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20		
B520172	Total Thallium (Tl)	2024/09/18	101	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B520172	Total Tin (Sn)	2024/09/18	107	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
B520172	Total Titanium (Ti)	2024/09/18	101	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20		
B520172	Total Uranium (U)	2024/09/18	108	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20		
B520172	Total Vanadium (V)	2024/09/18	107	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
B520172	Total Zinc (Zn)	2024/09/18	104	80 - 120	95	80 - 120	<0.0030	mg/L	NC	20		
B520183	Total Barium (Ba)	2024/09/18	126 (2)	80 - 120	105	80 - 120	<0.010	mg/L	1.4	20		
B520183	Total Boron (B)	2024/09/18	NC	80 - 120	101	80 - 120	<0.020	mg/L	NC	20		
B520183	Total Calcium (Ca)	2024/09/18	NC	80 - 120	95	80 - 120	<0.30	mg/L	3.1	20		
B520183	Total Iron (Fe)	2024/09/18	103	80 - 120	105	80 - 120	<0.060	mg/L	0	20		
B520183	Total Lithium (Li)	2024/09/18	84	80 - 120	92	80 - 120	<0.020	mg/L	NC	20		
B520183	Total Magnesium (Mg)	2024/09/18	91	80 - 120	99	80 - 120	<0.20	mg/L	3.2	20		
B520183	Total Manganese (Mn)	2024/09/18	102	80 - 120	101	80 - 120	<0.0040	mg/L	0.53	20		
B520183	Total Potassium (K)	2024/09/18	68 (2)	80 - 120	96	80 - 120	<0.30	mg/L	1.9	20		
B520183	Total Silicon (Si)	2024/09/18	95	80 - 120	95	80 - 120	<0.50	mg/L	NC	20		
B520183	Total Sodium (Na)	2024/09/18	NC	80 - 120	96	80 - 120	<0.50	mg/L	1.2	20		
B520183	Total Strontium (Sr)	2024/09/18	NC	80 - 120	93	80 - 120	<0.020	mg/L	2.2	20		
B520183	Total Sulphur (S)	2024/09/18	NC	80 - 120	94	80 - 120	<0.20	mg/L	1.4	20		
B527884	Orthophosphate (P)	2024/09/19	111	80 - 120	99	80 - 120	<0.0010	mg/L	NC	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

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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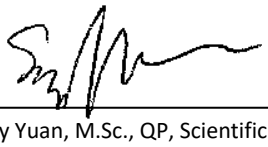
VALIDATION SIGNATURE PAGE

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



Sandy Yuan, M.Sc., QP, 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.

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BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

Custody Seal Present (Yes/No)	Custody Seal Intact (Yes/No)	Ice Present (Yes/No)	Cooler ID	Temp 1	Temp 2	Temp 3
No ✓	No ✓	Yes ✓		8.4	8.1	9.8
No ✓	No ✓	Yes ✓		8.0	8.4	8.0
No ✓	No ✓	Yes ✓		7.0	7.1	6.0
No ✓	No ✓	Yes ✓		5.4	3.9	6.4
No ✓	No ✓	Yes ✓		0.3	0.9	5.9
No ✓	No ✓	Yes ✓		4.6	5.1	5.9
No ✓	No ✓	Yes ✓		3.3	3.4	3.7
No ✓	No ✓	Yes ✓		3.8	3.8	3.9
No ✓	No ✓	Yes ✓		4.1	4.3	4.4
No ✓	No ✓	Yes ✓		2.1	2.3	2.4
No ✓	No ✓	Yes ✓		4.4	4.1	4.2

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Shaira Cura	2024/09/06	12:50

C469924
2024/09/06 12:50

Burgundy Diamond Mines

900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

CHAIN OF CUSTODY FORM

COC# 102033

SO# 62836

For Lab Use	SAMPLE INFORMATION						ANALYSIS REQUESTED (Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below)																	
	Sample Point	Station Type	Date	Time	Matrix	Type	Dissolved Nutrients	Major Ions	SNP Total Nutrients	Standard Dissolved Metals	Standard Total Metals											pH Field (pH)	Water Temp (°C)
✓	1616-12	EKA 2001 1616	24-Aug-2024	11:03	Water	SNP	Y	Y	Y	Y	Y											6.63	12.6
✓	1616-290	EKA 2001 1616	24-Aug-2024	11:10	Water	SNP	Y	Y	Y	Y	Y											6.63	12.6

FOR LAB USE ONLY

MCAL-2024-09-430

Special Instructions (Billing details, QC reporting etc):

Frequency: Monthly during periods of flow

Parameters: TSS, Major ions, Physical parameters, Total metals and Nutrients

Relinquished by:	Date: 05-Sep-24 Time: 8:00	Received by: Shaira Lira	Date: 2024/09/06 Time: 12:50
Relinquished by:	Date Time	Received by:	Date Time

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

See AGR

Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Site Location: AEMP
Your C.O.C. #: 102086

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/18
Report #: R3558018
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469880
Received: 2024/09/06, 12:50

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Low Level	1	N/A	2024/09/07	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	1	N/A	2024/09/09	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	1	N/A	2024/09/09	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	1	N/A	2024/09/09	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	1	N/A	2024/09/16	BBY WI-00033	Auto Calc
Mercury (Total) by CV	1	2024/09/11	2024/09/13	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICPMS LL (total undigested)	1	N/A	2024/09/16	CAL SOP-00265	EPA 6020 m
Ammonia-N Low Level (Preserved)	1	N/A	2024/09/09	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	1	N/A	2024/09/09		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	1	N/A	2024/09/06	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	1	N/A	2024/09/09	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	1	N/A	2024/09/06	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	1	N/A	2024/09/09	AB SOP-00025	SM 24 4500-P A, F m
Sulphate (SO4) by IC	1	N/A	2024/09/10	AB SOP-00026	SM 24 4110 B m
Temperature (Field)	1	N/A	2024/09/06	Field Test	Field Test
Total Kjeldahl Nitrogen (Total)	1	N/A	2024/09/09	BBY WI-00033	Auto Calc
Nitrogen (Total)	1	2024/09/09	2024/09/09	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	1	N/A	2024/09/16	AB SOP-00087	MMCW 119 1996 m
Total Phosphorus Low Level Total	1	2024/09/09	2024/09/10	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	1	2024/09/06	2024/09/10	AB SOP-00061	SM 24 2540 D m
Turbidity	1	N/A	2024/09/06	CAL SOP-00081	SM 24 2130 B m
Ion Balance (5)	1	N/A	2024/09/16		
Total Dissolved Solids (Calculated) (5)	1	N/A	2024/09/16		

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 Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Site Location: AEMP
Your C.O.C. #: 102086

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/18
Report #: R3558018
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469880
Received: 2024/09/06, 12:50

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.

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) Calculation was conducted as per client request using CAL PDF-00333.

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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Arctic Canadian Diamond Company Ltd
Site Location: AEMP
Your P.O. #: 6404002992

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CUV893		
Sampling Date		2024/08/24 13:14		
COC Number		102086		
	UNITS	**1616-43**	**RDL**	**QC Batch**
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	85.2	0.50	B505910
Calculated Ion Balance (% Difference)	%	3.6		B506410
Nitrate plus Nitrite (N)	mg/L	2.5	0.0022	B506354
Calculated Total Dissolved Solids	mg/L	250	0.66	B506412
Total Total Kjeldahl Nitrogen (Calc)	mg/L	<0.20	0.20	B505387
Field Parameters				
Field pH	pH	7.73	N/A	ONSITE
Field Temperature (Fd)	deg. C	12.7	N/A	ONSITE
Misc. Inorganics				
Fluoride (F)	mg/L	0.133	0.010	B507384
pH	pH	7.33	N/A	B507382
Alkalinity (Total as CaCO3)	mg/L	77.3	0.50	B507380
Total Organic Carbon (C)	mg/L	4.7	0.50	B518689
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B507380
Bicarbonate (HCO3)	mg/L	94.3	0.50	B507380
Carbonate (CO3)	mg/L	<0.50	0.50	B507380
Hydroxide (OH)	mg/L	<0.50	0.50	B507380
Total Suspended Solids	mg/L	2.9	1.0	B506489
Anions				
Orthophosphate (P)	mg/L	<0.0010	0.0010	B508202
Chloride (Cl)	mg/L	19	0.50	B508533
Dissolved-Low Level Sulphate (SO4)	mg/L	90	0.30	B508538
Nutrients				
Total Phosphorus (P)	mg/L	0.0069	0.0020	B508669
Total Ammonia (N)	mg/L	0.041	0.0050	B508174
Nitrite (N)	mg/L	0.010	0.0010	B506873
Nitrate (N)	mg/L	2.5	0.0020	B506873
Total Nitrogen (N)	mg/L	2.7 (1)	0.20	B507924
Physical Properties				
Conductivity	uS/cm	422	1.0	B507383

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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Bureau Veritas Job #: C469880
Report Date: 2024/09/18

Arctic Canadian Diamond Company Ltd
Site Location: AEMP
Your P.O. #: 6404002992

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CUV893		
Sampling Date		2024/08/24 13:14		
COC Number		102086		
	UNITS	**1616-43**	**RDL**	**QC Batch**
Physical Properties				
Turbidity - NTU	NTU	1.7	0.10	B505658
RDL = Reportable Detection Limit				

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Arctic Canadian Diamond Company Ltd
Site Location: AEMP
Your P.O. #: 6404002992

MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CUV893		
Sampling Date		2024/08/24 13:14		
COC Number		102086		
	UNITS	**1616-43**	**RDL**	**QC Batch**
Elements				
Total Mercury (Hg)	mg/L	<0.0000019	0.0000019	B512261
RDL = Reportable Detection Limit				

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CUV893		
Sampling Date		2024/08/24 13:14		
COC Number		102086		
	UNITS	1616-43	RDL	QC Batch
Total Metals by ICPMS				
Total Aluminum (Al)	mg/L	0.0327	0.00020	B511741
Total Antimony (Sb)	mg/L	0.000272	0.000020	B511741
Total Arsenic (As)	mg/L	0.000966	0.000020	B511741
Total Barium (Ba)	mg/L	0.0457	0.000020	B511741
Total Beryllium (Be)	mg/L	<0.000010	0.000010	B511741
Total Bismuth (Bi)	mg/L	<0.0000050	0.0000050	B511741
Total Boron (B)	mg/L	0.0340	0.0050	B511741
Total Cadmium (Cd)	mg/L	0.0000078	0.0000050	B511741
Total Chromium (Cr)	mg/L	0.000227	0.000050	B511741
Total Cobalt (Co)	mg/L	0.000187	0.0000050	B511741
Total Copper (Cu)	mg/L	0.00138	0.000050	B511741
Total Iron (Fe)	mg/L	0.119	0.0010	B511741
Total Lead (Pb)	mg/L	0.0000279	0.0000050	B511741
Total Lithium (Li)	mg/L	0.00828	0.00020	B511741
Total Manganese (Mn)	mg/L	0.0173	0.000050	B511741
Total Molybdenum (Mo)	mg/L	0.0374	0.000050	B511741
Total Nickel (Ni)	mg/L	0.00631	0.000020	B511741
Total Rubidium (Rb)	mg/L	0.0265	0.000050	B511741
Total Selenium (Se)	mg/L	0.000234	0.000040	B511741
Total Silicon (Si)	mg/L	0.305	0.050	B511741
Total Silver (Ag)	mg/L	<0.0000050	0.0000050	B511741
Total Strontium (Sr)	mg/L	0.225	0.000050	B511741
Total Tellurium (Te)	mg/L	0.000020	0.000020	B511741
Total Thallium (Tl)	mg/L	0.0000144	0.0000020	B511741
Total Tin (Sn)	mg/L	<0.000010	0.000010	B511741
Total Titanium (Ti)	mg/L	0.00160	0.00050	B511741
Total Tungsten (W)	mg/L	0.000330	0.000010	B511741
Total Uranium (U)	mg/L	0.0134	0.0000020	B511741
Total Vanadium (V)	mg/L	0.000212	0.000050	B511741
Total Zinc (Zn)	mg/L	0.00029	0.00010	B511741
Total Zirconium (Zr)	mg/L	<0.000050	0.000050	B511741
Total Calcium (Ca)	mg/L	15.5	0.010	B511741
RDL = Reportable Detection Limit				

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Arctic Canadian Diamond Company Ltd
Site Location: AEMP
Your P.O. #: 6404002992

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CUV893		
Sampling Date		2024/08/24 13:14		
COC Number		102086		
	UNITS	**1616-43**	**RDL**	**QC Batch**
Total Magnesium (Mg)	mg/L	11.3	0.0050	B511741
Total Potassium (K)	mg/L	21.9	0.010	B511741
Total Sodium (Na)	mg/L	36.4	0.010	B511741
Total Sulphur (S)	mg/L	30.2	0.50	B511741
RDL = Reportable Detection Limit				

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GENERAL COMMENTS

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

Package 1	8.5°C
Package 2	8.1°C
Package 3	6.7°C
Package 4	5.2°C
Package 5	2.4°C
Package 6	5.2°C
Package 7	3.5°C
Package 8	3.8°C
Package 9	4.3°C
Package 10	2.3°C
Package 11	4.3°C

Sample CUV893 [1616-43] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Sample was analyzed past method specified hold time for Nitrogen (Nitrite - Nitrate) Low Level. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR).

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B505658	Turbidity - NTU	2024/09/06			100	80 - 120	<0.10	NTU	1.9	20		
B506489	Total Suspended Solids	2024/09/10	108	80 - 120	103	80 - 120	<0.99	mg/L	NC	20		
B506873	Nitrate (N)	2024/09/06	105	80 - 120	103	80 - 120	<0.0020	mg/L	13	20		
B506873	Nitrite (N)	2024/09/06	104	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B507380	Alkalinity (PP as CaCO3)	2024/09/07					<0.50	mg/L	NC	20		
B507380	Alkalinity (Total as CaCO3)	2024/09/07			98	80 - 120	<0.50	mg/L	2.0	20		
B507380	Bicarbonate (HCO3)	2024/09/07					<0.50	mg/L	2.0	20		
B507380	Carbonate (CO3)	2024/09/07					<0.50	mg/L	NC	20		
B507380	Hydroxide (OH)	2024/09/07					<0.50	mg/L	NC	20		
B507382	pH	2024/09/09			100	97 - 103			1.5	N/A		
B507383	Conductivity	2024/09/09			100	90 - 110	<1.0	uS/cm	1.7	20		
B507384	Fluoride (F)	2024/09/09	94	80 - 120	94	80 - 120	<0.010	mg/L	NC	20		
B507924	Total Nitrogen (N)	2024/09/09	NC	80 - 120	104	80 - 120	<0.020	mg/L	4.2	20	102	80 - 120
B508174	Total Ammonia (N)	2024/09/09	105	80 - 120	104	80 - 120	<0.0050	mg/L	0.48	20		
B508202	Orthophosphate (P)	2024/09/09	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B508533	Chloride (Cl)	2024/09/09	NC	80 - 120	104	80 - 120	<0.50	mg/L				
B508538	Dissolved-Low Level Sulphate (SO4)	2024/09/12	NC	80 - 120	98	80 - 120	<0.050	mg/L	0.026	20		
B508669	Total Phosphorus (P)	2024/09/10	100	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20	86	80 - 120
B511741	Total Aluminum (Al)	2024/09/16	100	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20		
B511741	Total Antimony (Sb)	2024/09/16	100	80 - 120	100	80 - 120	<0.000020	mg/L	NC	20		
B511741	Total Arsenic (As)	2024/09/16	100	80 - 120	100	80 - 120	<0.000020	mg/L	NC	20		
B511741	Total Barium (Ba)	2024/09/16	101	80 - 120	101	80 - 120	<0.000020	mg/L	NC	20		
B511741	Total Beryllium (Be)	2024/09/16	101	80 - 120	105	80 - 120	<0.000010	mg/L	NC	20		
B511741	Total Bismuth (Bi)	2024/09/16	101	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20		
B511741	Total Boron (B)	2024/09/16	98	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20		
B511741	Total Cadmium (Cd)	2024/09/16	103	80 - 120	104	80 - 120	<0.0000050	mg/L	0.56	20		
B511741	Total Calcium (Ca)	2024/09/16	101	80 - 120	102	80 - 120	<0.010	mg/L	NC	20		
B511741	Total Chromium (Cr)	2024/09/16	101	80 - 120	102	80 - 120	<0.000050	mg/L	NC	20		
B511741	Total Cobalt (Co)	2024/09/16	100	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20		
B511741	Total Copper (Cu)	2024/09/16	99	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20		
B511741	Total Iron (Fe)	2024/09/16	102	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B511741	Total Lead (Pb)	2024/09/16	102	80 - 120	102	80 - 120	<0.0000050	mg/L	NC	20		
B511741	Total Lithium (Li)	2024/09/16	100	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B511741	Total Magnesium (Mg)	2024/09/16	99	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20		
B511741	Total Manganese (Mn)	2024/09/16	99	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20		
B511741	Total Molybdenum (Mo)	2024/09/16	106	80 - 120	107	80 - 120	<0.000050	mg/L	NC	20		
B511741	Total Nickel (Ni)	2024/09/16	100	80 - 120	100	80 - 120	<0.000020	mg/L	NC	20		
B511741	Total Potassium (K)	2024/09/16	101	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
B511741	Total Rubidium (Rb)	2024/09/16	107	80 - 120	103	80 - 120	<0.000050	mg/L	NC	20		
B511741	Total Selenium (Se)	2024/09/16	99	80 - 120	99	80 - 120	<0.000040	mg/L	NC	20		
B511741	Total Silicon (Si)	2024/09/16	98	80 - 120	99	80 - 120	<0.050	mg/L	NC	20		
B511741	Total Silver (Ag)	2024/09/16	100	80 - 120	101	80 - 120	<0.0000050	mg/L	NC	20		
B511741	Total Sodium (Na)	2024/09/16	104	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
B511741	Total Strontium (Sr)	2024/09/16	99	80 - 120	100	80 - 120	<0.000050	mg/L	NC	20		
B511741	Total Sulphur (S)	2024/09/16	101	80 - 120	103	80 - 120	<0.50	mg/L	NC	20		
B511741	Total Tellurium (Te)	2024/09/16	98	80 - 120	102	80 - 120	0.000021, RDL=0.000020 (1)	mg/L	NC	20		
B511741	Total Thallium (Tl)	2024/09/16	101	80 - 120	102	80 - 120	<0.0000020	mg/L	NC	20		
B511741	Total Tin (Sn)	2024/09/16	102	80 - 120	102	80 - 120	<0.000010	mg/L	NC	20		
B511741	Total Titanium (Ti)	2024/09/16	99	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
B511741	Total Tungsten (W)	2024/09/16	102	80 - 120	100	80 - 120	<0.000010	mg/L	NC	20		
B511741	Total Uranium (U)	2024/09/16	103	80 - 120	103	80 - 120	<0.0000020	mg/L	1.5	20		
B511741	Total Vanadium (V)	2024/09/16	101	80 - 120	102	80 - 120	<0.000050	mg/L	16	20		
B511741	Total Zinc (Zn)	2024/09/16	100	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
B511741	Total Zirconium (Zr)	2024/09/16	102	80 - 120	104	80 - 120	<0.000050	mg/L	NC	20		
B512261	Total Mercury (Hg)	2024/09/13	102	80 - 120	102	80 - 120	<0.0000019	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B518689	Total Organic Carbon (C)	2024/09/16	99	75 - 125	106	80 - 120	<0.50	mg/L	2.1	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 Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C469880
Report Date: 2024/09/18

Arctic Canadian Diamond Company Ltd
Site Location: AEMP
Your P.O. #: 6404002992

VALIDATION SIGNATURE PAGE

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

Sandy Yuan, M.Sc., QP, 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.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

C469880
2024/09/06 12:50

COR FCD-00265 / 5
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BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

COOLER ID	CUSTODY SEAL PRESENT (YES / NO)	CUSTODY SEAL INTACT (YES / NO)	ICE PRESENT (YES / NO)	TEMP 1	TEMP 2	TEMP 3
	NO ✓	NO ✓	YES ✓	8.4	8.1	9.0
	NO ✓	NO ✓	YES ✓	8.0	8.4	8.0
	NO ✓	NO ✓	YES ✓	7.0	7.1	6.0
	NO ✓	NO ✓	YES ✓	5.4	3.9	6.4
	NO ✓	NO ✓	YES ✓	0.3	0.9	5.9
	NO ✓	NO ✓	YES ✓	4.6	5.1	5.9
	NO ✓	NO ✓	YES ✓	3.3	3.4	3.7
	NO ✓	NO ✓	YES ✓	3.8	3.8	3.9
	NO ✓	NO ✓	YES ✓	4.1	4.3	4.4
	NO ✓	NO ✓	YES ✓	2.1	2.3	2.4
	NO ✓	NO ✓	YES ✓	4.4	4.1	4.2

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Snaira Cura	2024/09/06	12:50

C469880
2024/09/06 12:50

Burgundy Diamond Mines
900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

CHAIN OF CUSTODY FORM

COC# 102086

SO# 62836

BUREAU VERITAS

BURGUNDY DIAMOND MINES

For Lab Use	SAMPLE INFORMATION						ANALYSIS REQUESTED		
							Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below		
	Sample Point	Station Type	Date	Time	Matrix	Type	BV AEMP Quote C00394 WQ	pH Field (pH)	Water Temp (°C)
✓	1616-43	EKA 2001 1616	24-Aug-2024	13:14	Water		Y	7.73	12.7

FOR LAB USE ONLY

MCAL-2024-09-434

Special Instructions (Billing details, QC reporting etc):
Routine TAT.

This is to occur annually for all 3 sites regardless of if there was pumping from that location or not. If it is actively pumping, the samples can be taken from the spigot. If it is not currently pumping it can be a grab from the shoreline near the intake pump.

Please send analyis to Erin.Crawford@arcticcanadian.ca, Derek.Donald@arcticcanadian.ca and Leanne.Elchyshyn@erm.com

Relinquished by:	Date 05-Sep-24 Time 8:00	Received by: Shaira Cura	Date 2024/09/06 Time 12:50
Relinquished by:	Date Time	Received by:	Date Time

FOR LAB USE ONLY

Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A

Sample temperature upon receipt: Frozen? ☐ Yes ☐ No

Send Analytical Results to: compliance.team@burgundydiamonds.com

Your P.O. #: 6404002992
Your Project #: 62836
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102117

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/20
Report #: R3559574
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469899
Received: 2024/09/06, 12:50

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity pH 4.5 & pH 8.3 (as CaCO3)	3	N/A	2024/09/10	AB SOP-00005	SM 24 2310 B m
Alkalinity - Low Level	2	N/A	2024/09/11	AB SOP-00005	SM 24 2320 B m
Alkalinity - Low Level	1	N/A	2024/09/07	AB SOP-00005	SM 24 2320 B m
Low level chloride/sulphate by AC	3	N/A	2024/09/09	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductance - Low Level	2	N/A	2024/09/11	AB SOP-00005	SM 24 2510 B m
Conductance - Low Level	1	N/A	2024/09/09	AB SOP-00005	SM 24 2510 B m
Fluoride - Low Level	2	N/A	2024/09/11	AB SOP-00005	SM 24 4500-F C m
Fluoride - Low Level	1	N/A	2024/09/09	AB SOP-00005	SM 24 4500-F C m
Hardness Total (calculated as CaCO3) (1)	3	N/A	2024/09/18	BBY WI-00033	Auto Calc
Mercury (Total) by CV	3	2024/09/11	2024/09/13	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Total	3	2024/09/17	2024/09/17	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Total	3	2024/09/17	2024/09/17	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ammonia-N Low Level (Preserved)	3	N/A	2024/09/09	AB SOP-00007	SM 24 4500 NH3 A G m
Nitrate + Nitrite-N (calculated) Low Lev	3	N/A	2024/09/09		Auto Calc
Nitrogen (Nitrite - Nitrate) Low Level	3	N/A	2024/09/06	AB SOP-00023	SM 24 4110 B m
pH @25°C (2)	2	N/A	2024/09/11	AB SOP-00005	SM 24 4500-H+B m
pH @25°C (2)	1	N/A	2024/09/09	AB SOP-00005	SM 24 4500-H+B m
pH (Field)	3	N/A	2024/09/06	Field Test	Field Test
Orthophosphate LL by Automated Analyzer (3)	3	N/A	2024/09/09	AB SOP-00025	SM 24 4500-P A, F m
Silica (Reactive)	3	N/A	2024/09/12	AB SOP-00011	EPA 370.1 R1978 m
Sulphate (SO4) by IC	1	N/A	2024/09/12	AB SOP-00026	SM 24 4110 B m
Sulphate (SO4) by IC	2	N/A	2024/09/09	AB SOP-00026	SM 24 4110 B m
Carbon (total) (Calc. - Org. + Inorg.)	1	N/A	2024/09/10		Auto Calc
Carbon (total) (Calc. - Org. + Inorg.)	2	N/A	2024/09/17		Auto Calc
Temperature (Field)	3	N/A	2024/09/06	Field Test	Field Test
Carbon (Inorganic)	3	N/A	2024/09/10	CAL SOP-00076	Modified AE 2411
Total Kjeldahl Nitrogen (Total)	3	N/A	2024/09/09	BBY WI-00033	Auto Calc
Nitrogen (Total)	3	2024/09/09	2024/09/09	AB SOP-00093	SM 24 4500-N C m
Carbon (Total Organic) (4)	2	N/A	2024/09/17	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (4)	1	N/A	2024/09/09	AB SOP-00087	MMCW 119 1996 m

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Your Project #: 62836
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102117

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/20
Report #: R3559574
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469899
Received: 2024/09/06, 12:50

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Phosphorus Low Level Total	3	2024/09/09	2024/09/10	AB SOP-00024	SM 24 4500-P A,B,F m
Total Suspended Solids (NFR)	3	2024/09/06	2024/09/10	AB SOP-00061	SM 24 2540 D m
Turbidity	3	N/A	2024/09/06	CAL SOP-00081	SM 24 2130 B m
Ion Balance (5)	3	N/A	2024/09/18		
Total Dissolved Solids (Calculated) (5)	3	N/A	2024/09/18		

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.

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) Calculation was conducted as per client request using CAL PDF-00333.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your P.O. #: 6404002992
Your Project #: 62836
Site Location: MDMER/SNP/SEEPAGE
Your C.O.C. #: 102117

Attention: COMPLIANCE TEAM

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

Report Date: 2024/09/20
Report #: R3559574
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C469899
Received: 2024/09/06, 12:50

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

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Bureau Veritas Job #: C469899
Report Date: 2024/09/20

Arctic Canadian Diamond Company Ltd
Client Project #: 62836
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CUW081			CUW082		CUW083		
Sampling Date		2024/08/26 13:20			2024/08/26 13:05		2024/08/26 11:41		
COC Number		102117			102117		102117		
	UNITS	0008-SA10	RDL	QC Batch	0008-SA3	QC Batch	0008-SA9B	RDL	QC Batch
Calculated Parameters									
Total Hardness (CaCO3)	mg/L	150	0.50	B505910	66.5	B505910	17.4	0.50	B505910
Calculated Ion Balance (% Difference)	%	5.5		B506410	2.0	B506410	1.5		B506410
Nitrate plus Nitrite (N)	mg/L	17	0.010	B506354	1.4	B506354	0.046	0.0022	B506354
Calculated Total Dissolved Solids	mg/L	300	1.8	B506412	110	B506412	29	0.95	B506412
Total Total Kjeldahl Nitrogen (Calc)	mg/L	<0.20	0.20	B505387	0.31	B505387	0.40	0.020	B505387
Field Parameters									
Field pH	pH	7.73	N/A	ONSITE	7.62	ONSITE	6.72	N/A	ONSITE
Field Temperature (Fd)	deg. C	14.7	N/A	ONSITE	13.5	ONSITE	12.3	N/A	ONSITE
Misc. Inorganics									
Fluoride (F)	mg/L	0.183	0.010	B509131	0.205	B507384	0.083	0.010	B509131
pH	pH	6.21	N/A	B509129	6.85	B507382	6.09	N/A	B509129
Reactive Silica	mg/L	0.57	0.050	B513580	0.41	B513580	0.29	0.050	B513580
Acidity (pH 4.5)	mg/L	<1.0	1.0	B509151	<1.0	B509151	<1.0	1.0	B509151
Alkalinity (Total as CaCO3)	mg/L	27.3	0.50	B509125	40.4	B507380	13.4	0.50	B509125
Total Organic Carbon (C)	mg/L	2.4	0.20	B519938	3.3	B508764	4.9	0.20	B519938
Acidity (pH 8.3)	mg/L	<1.0	1.0	B509151	<1.0	B509151	<1.0	1.0	B509151
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	B509125	<0.50	B507380	<0.50	0.50	B509125
Bicarbonate (HCO3)	mg/L	33.3	0.50	B509125	49.3	B507380	16.3	0.50	B509125
Carbonate (CO3)	mg/L	<0.50	0.50	B509125	<0.50	B507380	<0.50	0.50	B509125
Hydroxide (OH)	mg/L	<0.50	0.50	B509125	<0.50	B507380	<0.50	0.50	B509125
Total Suspended Solids	mg/L	<1.0	1.0	B506489	<1.0	B506489	1.3	1.0	B506489
Anions									
Orthophosphate (P)	mg/L	<0.0010	0.0010	B508202	<0.0010	B508202	<0.0010	0.0010	B508202
Chloride (Cl)	mg/L	9.6	0.50	B508533	3.8	B508543	1.2	0.50	B508533
Dissolved-Low Level Sulphate (SO4)	mg/L	120	1.5	B508673	39	B508673	9.7	0.30	B508673
Nutrients									
Total Carbon (C)	mg/L	8.1	0.50	B506400	11	B506400	7.5	0.50	B506400
Total Inorganic Carbon (C)	mg/L	5.7	1.0	B510426	7.3	B510426	2.6	1.0	B510426
Total Phosphorus (P)	mg/L	<0.0020	0.0020	B508669	0.0042	B508669	0.0048	0.0020	B508669
Total Ammonia (N)	mg/L	0.035	0.0050	B508174	0.041	B508174	0.030	0.0050	B508174
Nitrite (N)	mg/L	0.059	0.0010	B506873	0.0052	B506873	<0.0010	0.0010	B506873

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C469899
Report Date: 2024/09/20

Arctic Canadian Diamond Company Ltd
Client Project #: 62836
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CUW081			CUW082		CUW083		
Sampling Date		2024/08/26 13:20			2024/08/26 13:05		2024/08/26 11:41		
COC Number		102117			102117		102117		
	UNITS	**0008-SA10**	**RDL**	**QC Batch**	**0008-SA3**	**QC Batch**	**0008-SA9B**	**RDL**	**QC Batch**
Nitrate (N)	mg/L	17	0.010	B506873	1.4	B506873	0.046	0.0020	B506873
Total Nitrogen (N)	mg/L	17 (1)	0.20	B507929	1.7	B507929	0.44	0.020	B507929
Physical Properties									
Conductivity	uS/cm	448	1.0	B509130	192	B507383	55.1	1.0	B509130
Physical Properties									
Turbidity - NTU	NTU	0.17	0.10	B506484	1.5	B506484	2.0	0.10	B506484

RDL = Reportable Detection Limit
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly. Nitrogen < Nitrate: Both values fall within the method uncertainty for duplicates and are likely equivalent.

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CUW081	CUW082	CUW083		
Sampling Date		2024/08/26 13:20	2024/08/26 13:05	2024/08/26 11:41		
COC Number		102117	102117	102117		
	UNITS	0008-SA10	0008-SA3	0008-SA9B	RDL	QC Batch
Elements						
Total Mercury (Hg)	mg/L	<0.0000019	<0.0000019	<0.0000019	0.0000019	B512261
RDL = Reportable Detection Limit						

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Bureau Veritas Job #: C469899
Report Date: 2024/09/20

Arctic Canadian Diamond Company Ltd
Client Project #: 62836
Site Location: MDMER/SNP/SEEPAGE
Your P.O. #: 6404002992

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		CUW081	CUW082	CUW083		
Sampling Date		2024/08/26 13:20	2024/08/26 13:05	2024/08/26 11:41		
COC Number		102117	102117	102117		
	UNITS	0008-SA10	0008-SA3	0008-SA9B	RDL	QC Batch
Elements						
Total Aluminum (Al)	mg/L	0.027	0.012	0.0081	0.0030	B519874
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	B519874
Total Arsenic (As)	mg/L	0.00038	0.00049	0.00027	0.00020	B519874
Total Barium (Ba)	mg/L	0.089	0.022	<0.010	0.010	B519879
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B519874
Total Boron (B)	mg/L	0.045	0.066	0.045	0.020	B519879
Total Cadmium (Cd)	mg/L	<0.000020	<0.000020	<0.000020	0.000020	B519874
Total Calcium (Ca)	mg/L	24	11	2.7	0.30	B519879
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B519874
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	0.00030	B519874
Total Copper (Cu)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B519874
Total Iron (Fe)	mg/L	<0.060	0.081	0.11	0.060	B519879
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B519874
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	B519879
Total Magnesium (Mg)	mg/L	22	9.4	2.6	0.20	B519879
Total Manganese (Mn)	mg/L	<0.0040	0.018	0.012	0.0040	B519879
Total Molybdenum (Mo)	mg/L	0.037	0.0037	0.00036	0.00020	B519874
Total Nickel (Ni)	mg/L	0.023	0.0027	0.00081	0.00050	B519874
Total Potassium (K)	mg/L	18	6.3	1.8	0.30	B519879
Total Selenium (Se)	mg/L	0.00032	<0.00020	<0.00020	0.00020	B519874
Total Silicon (Si)	mg/L	<0.50	<0.50	<0.50	0.50	B519879
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B519874
Total Sodium (Na)	mg/L	14	6.1	2.2	0.50	B519879
Total Strontium (Sr)	mg/L	0.30	0.097	0.021	0.020	B519879
Total Sulphur (S)	mg/L	36	12	3.0	0.20	B519879
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B519874
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B519874
Total Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B519874
Total Uranium (U)	mg/L	0.0030	0.0018	<0.00010	0.00010	B519874
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B519874
Total Zinc (Zn)	mg/L	<0.0030	<0.0030	<0.0030	0.0030	B519874
RDL = Reportable Detection Limit						

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GENERAL COMMENTS

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

Package 1	8.5°C
Package 2	8.1°C
Package 3	6.7°C
Package 4	5.2°C
Package 5	2.4°C
Package 6	5.2°C
Package 7	3.5°C
Package 8	3.8°C
Package 9	4.3°C
Package 10	2.3°C
Package 11	4.3°C

Sample CUW081 [0008-SA10] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Sample was analyzed past method specified hold time for Nitrogen (Nitrite - Nitrate) Low Level. Sample was analyzed past method specified hold time for Carbon (Inorganic). Sample was analyzed past method specified hold time for Acidity pH 4.5 & pH 8.3 (as CaCO3). Sample was analyzed past method specified hold time for Alkalinity - Low Level.

Sample CUW082 [0008-SA3] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Sample was analyzed past method specified hold time for Nitrogen (Nitrite - Nitrate) Low Level. Sample was analyzed past method specified hold time for Carbon (Inorganic). Sample was analyzed past method specified hold time for Acidity pH 4.5 & pH 8.3 (as CaCO3).

Sample CUW083 [0008-SA9B] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Sample was analyzed past method specified hold time for Orthophosphate LL by Automated Analyzer. Sample was analyzed past method specified hold time for Nitrogen (Nitrite - Nitrate) Low Level. Sample was analyzed past method specified hold time for Carbon (Inorganic). Sample was analyzed past method specified hold time for Acidity pH 4.5 & pH 8.3 (as CaCO3). Sample was analyzed past method specified hold time for Alkalinity - Low Level.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B506484	Turbidity - NTU	2024/09/06			100	80 - 120	<0.10	NTU	9.5	20		
B506489	Total Suspended Solids	2024/09/10	108	80 - 120	103	80 - 120	<0.99	mg/L	NC	20		
B506873	Nitrate (N)	2024/09/06	105	80 - 120	103	80 - 120	<0.0020	mg/L	13	20		
B506873	Nitrite (N)	2024/09/06	104	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B507380	Alkalinity (PP as CaCO3)	2024/09/07					<0.50	mg/L	NC	20		
B507380	Alkalinity (Total as CaCO3)	2024/09/07			98	80 - 120	<0.50	mg/L	2.0	20		
B507380	Bicarbonate (HCO3)	2024/09/07					<0.50	mg/L	2.0	20		
B507380	Carbonate (CO3)	2024/09/07					<0.50	mg/L	NC	20		
B507380	Hydroxide (OH)	2024/09/07					<0.50	mg/L	NC	20		
B507382	pH	2024/09/09			100	97 - 103			1.5	N/A		
B507383	Conductivity	2024/09/09			100	90 - 110	<1.0	uS/cm	1.7	20		
B507384	Fluoride (F)	2024/09/09	94	80 - 120	94	80 - 120	<0.010	mg/L	NC	20		
B507929	Total Nitrogen (N)	2024/09/09	101	80 - 120	100	80 - 120	<0.020	mg/L	1.3	20	101	80 - 120
B508174	Total Ammonia (N)	2024/09/09	105	80 - 120	104	80 - 120	<0.0050	mg/L	0.48	20		
B508202	Orthophosphate (P)	2024/09/09	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
B508533	Chloride (Cl)	2024/09/09	NC	80 - 120	104	80 - 120	<0.50	mg/L				
B508543	Chloride (Cl)	2024/09/09	108	80 - 120	104	80 - 120	<0.50	mg/L	NC	20		
B508669	Total Phosphorus (P)	2024/09/10	100	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20	86	80 - 120
B508673	Dissolved-Low Level Sulphate (SO4)	2024/09/12	NC	80 - 120	99	80 - 120	<0.050	mg/L	0.53	20		
B508764	Total Organic Carbon (C)	2024/09/09	103	75 - 125	104	80 - 120	<0.20	mg/L	1.0	20		
B509125	Alkalinity (PP as CaCO3)	2024/09/11					<0.50	mg/L	NC	20		
B509125	Alkalinity (Total as CaCO3)	2024/09/11			98	80 - 120	<0.50	mg/L	2.9	20		
B509125	Bicarbonate (HCO3)	2024/09/11					<0.50	mg/L	2.9	20		
B509125	Carbonate (CO3)	2024/09/11					<0.50	mg/L	NC	20		
B509125	Hydroxide (OH)	2024/09/11					<0.50	mg/L	NC	20		
B509129	pH	2024/09/11			100	97 - 103			1.4	N/A		
B509130	Conductivity	2024/09/11			101	90 - 110	<1.0	uS/cm	0.48	20		
B509131	Fluoride (F)	2024/09/11	100	80 - 120	105	80 - 120	0.010, RDL=0.010 (1)	mg/L	11	20		
B509151	Acidity (pH 4.5)	2024/09/10					<1.0	mg/L	NC	20		
B509151	Acidity (pH 8.3)	2024/09/10			98	80 - 120	<1.0	mg/L	NC	20		
B510426	Total Inorganic Carbon (C)	2024/09/10	95	80 - 120	105	80 - 120	<1.0	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B512261	Total Mercury (Hg)	2024/09/13	102	80 - 120	102	80 - 120	<0.0000019	mg/L	NC	20		
B513580	Reactive Silica	2024/09/12	108	80 - 120	106	80 - 120	<0.050	mg/L	NC	20		
B519874	Total Aluminum (Al)	2024/09/17	196 (2)	80 - 120	109	80 - 120	<0.0030	mg/L	10	20		
B519874	Total Antimony (Sb)	2024/09/17	105	80 - 120	102	80 - 120	<0.00060	mg/L	NC	20		
B519874	Total Arsenic (As)	2024/09/17	109	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20		
B519874	Total Beryllium (Be)	2024/09/17	106	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
B519874	Total Cadmium (Cd)	2024/09/17	108	80 - 120	104	80 - 120	<0.000020	mg/L	NC	20		
B519874	Total Chromium (Cr)	2024/09/17	106	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20		
B519874	Total Cobalt (Co)	2024/09/17	105	80 - 120	106	80 - 120	<0.00030	mg/L	NC	20		
B519874	Total Copper (Cu)	2024/09/17	104	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20		
B519874	Total Lead (Pb)	2024/09/17	106	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20		
B519874	Total Molybdenum (Mo)	2024/09/17	111	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20		
B519874	Total Nickel (Ni)	2024/09/17	103	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20		
B519874	Total Selenium (Se)	2024/09/17	105	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20		
B519874	Total Silver (Ag)	2024/09/17	107	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20		
B519874	Total Thallium (Tl)	2024/09/17	103	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20		
B519874	Total Tin (Sn)	2024/09/17	109	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20		
B519874	Total Titanium (Ti)	2024/09/17	107	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20		
B519874	Total Uranium (U)	2024/09/17	108	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20		
B519874	Total Vanadium (V)	2024/09/17	109	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20		
B519874	Total Zinc (Zn)	2024/09/17	105	80 - 120	105	80 - 120	<0.0030	mg/L	NC	20		
B519879	Total Barium (Ba)	2024/09/17	103	80 - 120	105	80 - 120	<0.010	mg/L	0.40	20		
B519879	Total Boron (B)	2024/09/17	100	80 - 120	101	80 - 120	<0.020	mg/L	NC	20		
B519879	Total Calcium (Ca)	2024/09/17	NC	80 - 120	96	80 - 120	<0.30	mg/L	1.3	20		
B519879	Total Iron (Fe)	2024/09/17	NC	80 - 120	104	80 - 120	<0.060	mg/L	NC	20		
B519879	Total Lithium (Li)	2024/09/17	99	80 - 120	97	80 - 120	<0.020	mg/L	NC	20		
B519879	Total Magnesium (Mg)	2024/09/17	NC	80 - 120	99	80 - 120	<0.20	mg/L	1.5	20		
B519879	Total Manganese (Mn)	2024/09/17	104	80 - 120	101	80 - 120	<0.0040	mg/L	0.17	20		
B519879	Total Potassium (K)	2024/09/17	97	80 - 120	97	80 - 120	<0.30	mg/L	1.4	20		
B519879	Total Silicon (Si)	2024/09/17	98	80 - 120	97	80 - 120	<0.50	mg/L	0.0036	20		
B519879	Total Sodium (Na)	2024/09/17	NC	80 - 120	95	80 - 120	<0.50	mg/L	2.3	20		
B519879	Total Strontium (Sr)	2024/09/17	NC	80 - 120	100	80 - 120	<0.020	mg/L	NC	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
B519879	Total Sulphur (S)	2024/09/17	NC	80 - 120	98	80 - 120	<0.20	mg/L	NC	20		
B519938	Total Organic Carbon (C)	2024/09/17	104	75 - 125	106	80 - 120	<0.20	mg/L	1.0	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

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Report Date: 2024/09/20

Arctic Canadian Diamond Company Ltd
Client Project #: 62836
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:

Sandy Yuan, M.Sc., QP, Scientific Specialist

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

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

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BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL PRESENT	CUSTODY SEAL INTACT	ICE PRESENT	COOLER ID	TEMP 1	TEMP 2	TEMP 3
NO ✓	NO ✓	YES ✓		8.4	8.1	9.0
NO ✓	NO ✓			8.0	8.4	8.0
NO ✓	NO ✓	YES ✓		7.0	7.1	6.0
NO ✓	NO ✓	YES ✓		5.4	3.9	6.4
NO ✓	NO ✓	YES ✓		0.3	0.9	5.9
NO ✓	NO ✓	YES ✓		4.6	5.1	5.9
NO ✓	NO ✓	YES ✓		3.3	3.4	3.7
NO ✓	NO ✓	YES ✓		3.8	3.8	3.9
NO ✓	NO ✓	YES ✓		4.1	4.3	4.4
NO ✓	NO ✓	YES ✓		2.1	2.3	2.4
NO ✓	NO ✓	YES ✓		4.4	4.1	4.2

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Shaira Cura	2024/09/06	12:50

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CHAIN OF CUSTODY FORM

COC# 102117

SO# 62836

BUREAU VERITAS 1828

Burgundy Diamond Mines
900 - 606 4 Street SW, Calgary, Alberta, Canada T2P 1T1
Tel: 867-880-4400 ext 2157
Burgundy Contact: Richard Ehlert / Jonah Kelly

BURGUNDY DIAMOND MINES

ANALYSIS REQUESTED
Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

For Lab Use	Sample Point	Station Type	Date	Time	Matrix	Type	Major Ions	SNP Total Nutrients	Standard Total Metals	pH Field (pH)	Water Temp (°C)
✓	0008-Sa10	EKA 2002 0008	26-Aug-2024	13:20	Water	SNP	Y	Y	Y	7.73	14.7
✓	0008-Sa3	EKA 2002 0008	26-Aug-2024	13:05	Water	SNP	Y	Y	Y	7.62	13.5
✓	0008-Sa9b	EKA 2002 0008	26-Aug-2024	11:41	Water	SNP	Y	Y	Y	6.72	12.3

FOR LAB USE ONLY

MCAL-2024-09-429

Special Instructions (Billing details, QC reporting etc):
Frequency: On the first day of Discharge, weekly during periods of Discharge, and on the final day of Discharge.
Parameters: TSS, major ion, physical parameters, total metals and nutrients.
*** Sample :0008-Sa3, 0008-Sa9b with Profil, 0008-Sa10***
Sent results to Tania.robitaille@burgundydiamonds.com, Landon.Murphy@burgundydiamonds.com & compliance.team@burgundydiamonds.com

Relinquished by:	Date / Time	Received by:	Date / Time
[signature]	Date 05-Sep-24 Time 8:00	Shaira Cura	Date 2024/09/06 Time 12:50
Relinquished by:	Date Time	Received by:	Date Time

FOR LAB USE ONLY
Cooler seal intact upon receipt? ☐ Yes ☐ No ☐ N/A
Sample temperature upon receipt: Frozen? ☐ Yes ☐ No
Send Analytical Results to: compliance.team@burgundydiamonds.com

See ACTR