

## Report Transmission Cover Page

Bill To: J. Gibson & Associates	Project:	Lot ID: <b>1137891</b>
Report To: J. Gibson & Associates	ID: Rock Haven Res.	Control Number: C0049877
Box 20913	Name: Klaza	Date Received: May 16, 2016
Whitehorse, YT, Canada	Location: Surface H2O	Date Reported: May 20, 2016
Y1A 6P2	LSD:	Report Number: 2103780
Attn: John Gibson	P.O.:	
Sampled By: J. Gibson	Acct code:	
Company:		

Contact & Affiliation	Address	Delivery Commitments
John Gibson J. Gibson & Associates	Box 20913, Whitehorse, Yukon Territory Y1A 6P2 Phone: (867) 633-4522 Fax: (867) 668-6895 Email: <a href="mailto:ludditegibson@gmail.com">ludditegibson@gmail.com</a>	On [Lot Verification] send (COA) by Email - Single Report On [Report Approval] send (COC, Test Report) by Email - Merge Reports On [Report Approval] send (Test Report) by Email - Single Report On [Lot Approval and Final Test Report Approval] send (Invoice) by Email - Single Report On [Lot Creation] send (COR) by Email - Single Report

### Notes To Clients:

- An appropriately preserved sample was not received for total phosphorus analysis of samples 1137891-12 and -13. Analysis was performed on unpreserved sample.
- Sample 1137891-8; 5411708 Reduction of analytical volume was necessary for Trace Metals analysis due to matrix effects in sample #1137891-8. Detection limits are adjusted accordingly.
- Sample 1137891-8; 5411708 Reduction of analytical volume was necessary for TP due to matrix effects in sample 1137891-8. Detection limits are adjusted accordingly.
- Sample 1137891-12; 5411712 Reduction of analytical volume was necessary for anions analysis due to matrix effects in sample # 1137891-12. Detection limits are adjusted accordingly.
- Sample 1137891-13; 5411713 Reduction of analytical volume was necessary for Trace Metals analysis due to matrix effects in sample #1137891-13 for Zn. Detection limits are adjusted accordingly.

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## Analytical Report

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

			Reference Number	1137891-1	1137891-2	1137891-3	
			Sample Date	May 12, 2016	May 12, 2016	May 12, 2016	
			Sample Time	NA	NA	NA	
			Sample Location				
			Sample Description	KZ-1	KZ-2	KZ-3	
			Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit	
<b>Inorganic Nonmetallic Parameters</b>							
Organic Carbon	Total Nonpurgeable	mg/L	13.6	13.1	17.2	0.5	
Cyanide	Total	mg/L	<0.002	<0.002	<0.002	0.002	
Ammonia - N		mg/L	<0.01	<0.01	<0.01	0.01	
Phosphorus	Total	mg/L	0.012	0.012	0.018	0.003	
<b>Metals Total</b>							
Calcium	Total	mg/L	6.23	5.12	3.53	0.05	
Magnesium	Total	mg/L	1.29	0.75	0.73	0.05	
Potassium	Total	mg/L	0.6	0.9	0.6	0.1	
Silicon	Total	mg/L	2.26	1.63	1.53	0.05	
Sulfur	Total	mg/L	0.4	0.2	0.3	0.1	
Sodium	Total	mg/L	0.70	0.38	0.54	0.02	
Titanium	Total	mg/L	0.002	0.002	0.002	0.001	
Mercury	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001	
<b>Physical and Aggregate Properties</b>							
Solids	Total Suspended	mg/L	<2	<2	<2	2	
Solids	Total Dissolved	mg/L	98	<5	38	5	
<b>Routine Water</b>							
pH - Holding Time			Exceeded	Exceeded	Exceeded		
pH	at 25 °C		6.81	6.64	6.29		
Electrical Conductivity		µS/cm at 25 C	36	29	22	1	
Calcium	Dissolved	mg/L	6.2	5.1	3.5	0.1	
Iron	Dissolved	mg/L	0.067	0.036	0.146	0.005	
Magnesium	Dissolved	mg/L	1.3	0.7	0.7	0.1	
Manganese	Dissolved	mg/L	<0.001	<0.001	0.008	0.001	
Potassium	Dissolved	mg/L	0.5	0.9	0.6	0.1	
Silicon	Dissolved	mg/L	2.22	1.60	1.49	0.05	
Sodium	Dissolved	mg/L	0.7	0.4	0.6	0.1	
Sulfur	Dissolved	mg/L	0.4	0.2	0.3	0.2	
Bicarbonate		mg/L	20	14	<5	5	
Carbonate		mg/L	<6	<6	9	6	
Hydroxide		mg/L	<5	<5	<5	5	
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5	
T-Alkalinity	as CaCO3	mg/L	16	12	7	5	
Chloride	Dissolved	mg/L	0.47	0.15	0.39	0.05	
Nitrate - N	Dissolved	mg/L	0.05	0.01	0.01	0.01	
Nitrite - N	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01	

## Analytical Report

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 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
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	Reference Number	1137891-1	1137891-2	1137891-3	
	Sample Date	May 12, 2016	May 12, 2016	May 12, 2016	
	Sample Time	NA	NA	NA	
	Sample Location				
	Sample Description	KZ-1	KZ-2	KZ-3	
	Matrix	Water	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit
<b>Routine Water - Continued</b>					
Sulfate (SO4)	Dissolved mg/L	0.7	<0.5	<0.5	0.5
Hardness	as CaCO3 mg/L	21	16	10	5
Hardness	Total mg CaCO3/L	20.9	15.9	11.8	1
<b>Trace Metals Dissolved</b>					
Digestion	Dissolved	Field Filtered	Field Filtered	Field Filtered	
Titanium	Dissolved mg/L	<0.01	<0.01	<0.01	0.01
Aluminum	Dissolved mg/L	0.168	0.118	0.284	0.005
Antimony	Dissolved mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Dissolved mg/L	<0.0002	0.0005	<0.0002	0.0002
Barium	Dissolved mg/L	0.023	0.031	0.019	0.001
Beryllium	Dissolved mg/L	<0.00004	<0.00004	0.00004	0.00004
Bismuth	Dissolved mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved mg/L	<0.004	<0.004	<0.004	0.004
Cadmium	Dissolved mg/L	0.00002	0.00005	0.00003	0.00001
Chromium	Dissolved mg/L	<0.0004	<0.0004	<0.0004	0.0004
Cobalt	Dissolved mg/L	0.00003	0.00002	0.00007	0.00002
Copper	Dissolved mg/L	0.0014	0.0018	0.0028	0.0002
Lead	Dissolved mg/L	<0.0001	<0.0001	<0.0001	0.0001
Lithium	Dissolved mg/L	<0.001	<0.001	<0.001	0.001
Molybdenum	Dissolved mg/L	<0.0001	<0.0001	<0.0001	0.0001
Nickel	Dissolved mg/L	<0.001	<0.001	<0.001	0.001
Selenium	Dissolved mg/L	<0.0006	<0.0006	<0.0006	0.0006
Silver	Dissolved mg/L	<0.00001	0.00001	<0.00001	0.00001
Strontium	Dissolved mg/L	0.044	0.020	0.025	0.001
Tellurium	Dissolved mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Dissolved mg/L	<0.00001	<0.00001	<0.00001	0.00001
Thorium	Dissolved mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Dissolved mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Dissolved mg/L	<0.0004	<0.0004	<0.0004	0.0004
Vanadium	Dissolved mg/L	0.0002	<0.0001	0.0001	0.0001
Zinc	Dissolved mg/L	0.0019	0.0036	0.0043	0.0005
Zirconium	Dissolved mg/L	0.0002	0.0001	0.0001	0.0001
<b>Trace Metals Total</b>					
Aluminum	Total mg/L	0.172	0.131	0.306	0.001
Antimony	Total mg/L	0.00006	0.00006	0.00003	0.00002
Arsenic	Total mg/L	0.0002	0.0006	0.0002	0.0001

## Analytical Report

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 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

	Reference Number	1137891-1	1137891-2	1137891-3		
	Sample Date	May 12, 2016	May 12, 2016	May 12, 2016		
	Sample Time	NA	NA	NA		
	Sample Location					
	Sample Description	KZ-1	KZ-2	KZ-3		
	Matrix	Water	Water	Water		
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Trace Metals Total - Continued</b>						
Barium	Total	mg/L	0.0243	0.0329	0.0194	0.0001
Beryllium	Total	mg/L	0.00005	<0.00005	0.00006	0.00005
Bismuth	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Boron	Total	mg/L	<0.002	<0.002	<0.002	0.002
Cadmium	Total	mg/L	0.00002	0.00004	0.00003	0.00001
Chromium	Total	mg/L	<0.00005	0.00011	0.00010	0.00005
Cobalt	Total	mg/L	0.00004	0.00003	0.00010	0.00002
Copper	Total	mg/L	0.0018	0.0019	0.0015	0.0025
Iron	Total	mg/L	0.076	0.060	0.187	0.002
Lead	Total	mg/L	0.00005	0.00014	0.00002	0.00001
Lithium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Manganese	Total	mg/L	0.001	0.002	0.010	0.001
Molybdenum	Total	mg/L	0.00006	0.00006	0.00004	0.00002
Nickel	Total	mg/L	0.0003	0.0002	0.0006	0.0002
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.00001	0.00002	<0.00001	0.00001
Strontium	Total	mg/L	0.0443	0.0192	0.0246	0.0001
Tellurium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Thallium	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Thorium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.0001	<0.0001	0.0001	0.0001
Uranium	Total	mg/L	0.00023	0.00006	0.00007	0.00001
Vanadium	Total	mg/L	0.00017	0.00011	0.00022	0.00005
Zinc	Total	mg/L	0.0011	0.0021	0.0026	0.0005
Zirconium	Total	mg/L	0.0003	0.0002	0.0002	0.0001

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Report To: J. Gibson & Associates	ID: Rock Haven Res.	Control Number: C0049877
Box 20913	Name: Klaza	Date Received: May 16, 2016
Whitehorse, YT, Canada	Location: Surface H2O	Date Reported: May 20, 2016
Y1A 6P2	LSD:	Report Number: 2103780
Attn: John Gibson	P.O.:	
Sampled By: J. Gibson	Acct code:	
Company:		

		Reference Number	1137891-4	1137891-5	1137891-6	
		Sample Date	May 13, 2016	May 12, 2016	May 13, 2016	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	KZ-4	KZ-5	KZ-6	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
<b>Inorganic Nonmetallic Parameters</b>						
Organic Carbon	Total Nonpurgeable	mg/L	14.0	11.8	13.5	0.5
Cyanide	Total	mg/L	<0.002	<0.002	<0.002	0.002
Ammonia - N		mg/L	<0.01	<0.01	0.02	0.01
Phosphorus	Total	mg/L	0.037	0.011	0.024	0.003
<b>Metals Total</b>						
Calcium	Total	mg/L	7.24	5.47	7.47	0.05
Magnesium	Total	mg/L	1.52	1.30	1.57	0.05
Potassium	Total	mg/L	0.8	0.6	0.8	0.1
Silicon	Total	mg/L	2.33	2.56	2.30	0.05
Sulfur	Total	mg/L	1.0	0.7	1.0	0.1
Sodium	Total	mg/L	0.71	0.91	0.73	0.02
Titanium	Total	mg/L	0.013	0.001	0.009	0.001
Mercury	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
<b>Physical and Aggregate Properties</b>						
Solids	Total Suspended	mg/L	16	<2	7	2
Solids	Total Dissolved	mg/L	52	40	<5	5
<b>Routine Water</b>						
pH - Holding Time			Exceeded	Exceeded	Exceeded	
pH	at 25 °C		6.73	6.58	6.89	
Electrical Conductivity		µS/cm at 25 C	44	37	54	1
Calcium	Dissolved	mg/L	6.9	5.5	7.5	0.1
Iron	Dissolved	mg/L	0.196	0.112	0.181	0.005
Magnesium	Dissolved	mg/L	1.4	1.3	1.5	0.1
Manganese	Dissolved	mg/L	0.108	<0.001	0.077	0.001
Potassium	Dissolved	mg/L	0.7	0.6	0.7	0.1
Silicon	Dissolved	mg/L	1.81	2.55	1.97	0.05
Sodium	Dissolved	mg/L	0.7	1	0.7	0.1
Sulfur	Dissolved	mg/L	1	0.7	1	0.2
Bicarbonate		mg/L	20	18	27	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	17	15	22	5
Chloride	Dissolved	mg/L	0.20	0.18	0.15	0.05
Nitrate - N	Dissolved	mg/L	<0.01	0.02	<0.01	0.01
Nitrite - N	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01

## Analytical Report

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
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		Reference Number	1137891-4	1137891-5	1137891-6	
		Sample Date	May 13, 2016	May 12, 2016	May 13, 2016	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	KZ-4	KZ-5	KZ-6	
		Matrix	Water	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Routine Water - Continued</b>						
Sulfate (SO4)	Dissolved	mg/L	2.3	1.6	2.3	0.5
Hardness	as CaCO3	mg/L	23	19	25	5
Hardness	Total	mg CaCO3/L	24.3	19.0	25.1	1
<b>Trace Metals Dissolved</b>						
Digestion	Dissolved		Field Filtered	Field Filtered	Field Filtered	
Titanium	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Aluminum	Dissolved	mg/L	0.093	0.105	0.086	0.005
Antimony	Dissolved	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Arsenic	Dissolved	mg/L	0.0009	0.0002	0.0008	0.0002
Barium	Dissolved	mg/L	0.055	0.029	0.056	0.001
Beryllium	Dissolved	mg/L	<0.00004	<0.00004	<0.00004	0.00004
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Boron	Dissolved	mg/L	<0.004	<0.004	<0.004	0.004
Cadmium	Dissolved	mg/L	0.00010	0.00003	0.00009	0.00001
Chromium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Cobalt	Dissolved	mg/L	0.00013	0.00004	0.00009	0.00002
Copper	Dissolved	mg/L	0.0022	0.0016	0.0024	0.0002
Lead	Dissolved	mg/L	0.0001	0.0001	0.0002	0.0001
Lithium	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Molybdenum	Dissolved	mg/L	0.0002	<0.0001	0.0002	0.0001
Nickel	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Selenium	Dissolved	mg/L	<0.0006	<0.0006	<0.0006	0.0006
Silver	Dissolved	mg/L	<0.00001	<0.00001	0.00001	0.00001
Strontium	Dissolved	mg/L	0.051	0.038	0.055	0.001
Tellurium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Thallium	Dissolved	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Thorium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Tin	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004	0.0004
Vanadium	Dissolved	mg/L	<0.0001	0.0001	0.0001	0.0001
Zinc	Dissolved	mg/L	0.0043	0.0042	0.0044	0.0005
Zirconium	Dissolved	mg/L	0.0001	0.0001	0.0001	0.0001
<b>Trace Metals Total</b>						
Aluminum	Total	mg/L	0.397	0.110	0.268	0.001
Antimony	Total	mg/L	0.00013	0.00005	0.00014	0.00002
Arsenic	Total	mg/L	0.0027	0.0003	0.0016	0.0001

## Analytical Report

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 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
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 Control Number: C0049877  
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	Reference Number	1137891-4	1137891-5	1137891-6		
	Sample Date	May 13, 2016	May 12, 2016	May 13, 2016		
	Sample Time	NA	NA	NA		
	Sample Location					
	Sample Description	KZ-4	KZ-5	KZ-6		
	Matrix	Water	Water	Water		
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Trace Metals Total - Continued</b>						
Barium	Total	mg/L	0.0731	0.0301	0.0646	0.0001
Beryllium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Bismuth	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Boron	Total	mg/L	<0.002	<0.002	<0.002	0.002
Cadmium	Total	mg/L	0.00015	0.00002	0.00009	0.00001
Chromium	Total	mg/L	0.00037	<0.00005	0.00020	0.00005
Cobalt	Total	mg/L	0.00031	0.00004	0.00019	0.00002
Copper	Total	mg/L	0.0030	0.0014	0.0029	0.0025
Iron	Total	mg/L	0.985	0.128	0.594	0.002
Lead	Total	mg/L	0.00162	0.00003	0.00095	0.00001
Lithium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Manganese	Total	mg/L	0.165	0.002	0.097	0.001
Molybdenum	Total	mg/L	0.00027	0.00007	0.00030	0.00002
Nickel	Total	mg/L	0.0008	0.0004	0.0006	0.0002
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	0.00004	<0.00001	0.00002	0.00001
Strontium	Total	mg/L	0.0547	0.0365	0.0556	0.0001
Tellurium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Thallium	Total	mg/L	0.00001	<0.00001	<0.00001	0.00001
Thorium	Total	mg/L	0.00008	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Uranium	Total	mg/L	0.00026	0.00012	0.00027	0.00001
Vanadium	Total	mg/L	0.00096	0.00014	0.00063	0.00005
Zinc	Total	mg/L	0.0073	0.0021	0.0041	0.0005
Zirconium	Total	mg/L	0.0002	0.0002	0.0002	0.0001

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Box 20913	Name: Klaza	Date Received: May 16, 2016
Whitehorse, YT, Canada	Location: Surface H2O	Date Reported: May 20, 2016
Y1A 6P2	LSD:	Report Number: 2103780
Attn: John Gibson	P.O.:	
Sampled By: J. Gibson	Acct code:	
Company:		

Reference Number		1137891-7	1137891-8	1137891-9		
Sample Date		May 13, 2016	May 13, 2016	May 13, 2016		
Sample Time		NA	NA	NA		
Sample Location						
Sample Description		KZ-7	KZ-8	KZ-9		
Matrix		Water	Water	Water		
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Inorganic Nonmetallic Parameters</b>						
Organic Carbon	Total Nonpurgeable	mg/L	15.5	11.0	11.2	0.5
Cyanide	Total	mg/L	<0.002	<0.002	<0.002	0.002
Ammonia - N		mg/L	<0.01	0.03	<0.01	0.01
Phosphorus	Total	mg/L	0.033	0.58	0.020	0.003
<b>Metals Total</b>						
Calcium	Total	mg/L	8.72	21.5	5.99	0.05
Magnesium	Total	mg/L	1.96	9.10	1.53	0.05
Potassium	Total	mg/L	0.8	4.6	0.6	0.1
Silicon	Total	mg/L	2.89	41.8	2.87	0.05
Sulfur	Total	mg/L	2.8	8.5	0.7	0.1
Sodium	Total	mg/L	1.08	2.95	0.98	0.02
Titanium	Total	mg/L	0.015	0.695	0.004	0.001
Mercury	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
<b>Physical and Aggregate Properties</b>						
Solids	Total Suspended	mg/L	10	682	8	2
Solids	Total Dissolved	mg/L	26	64	<5	5
<b>Routine Water</b>						
pH - Holding Time			Exceeded	Exceeded	Exceeded	
pH	at 25 °C		6.76	6.95	6.68	
Electrical Conductivity		µS/cm at 25 C	59	113	41	1
Calcium	Dissolved	mg/L	9.8	15.2	6.0	0.1
Iron	Dissolved	mg/L	0.252	0.336	0.105	0.005
Magnesium	Dissolved	mg/L	1.9	3.8	1.5	0.1
Manganese	Dissolved	mg/L	0.052	0.118	0.005	0.001
Potassium	Dissolved	mg/L	0.9	0.8	0.6	0.1
Silicon	Dissolved	mg/L	2.65	3.69	2.70	0.05
Sodium	Dissolved	mg/L	1.5	1.8	1	0.1
Sulfur	Dissolved	mg/L	2.9	8.2	0.7	0.2
Bicarbonate		mg/L	21	36	21	5
Carbonate		mg/L	<6	<6	<6	6
Hydroxide		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	17	29	17	5
Chloride	Dissolved	mg/L	0.45	0.15	0.22	0.05
Nitrate - N	Dissolved	mg/L	<0.01	0.02	0.03	0.01
Nitrite - N	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01





**Analytical Report**

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

		Reference Number	1137891-7	1137891-8	1137891-9	
		Sample Date	May 13, 2016	May 13, 2016	May 13, 2016	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	KZ-7	KZ-8	KZ-9	
		Matrix	Water	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Routine Water - Continued</b>						
Sulfate (SO4)	Dissolved mg/L	7.4	22.7	1.5	0.5	
Hardness	as CaCO3 mg/L	33	54	21	5	
Hardness	Total mg CaCO3/L	29.9	91.1	21.3	1	
<b>Trace Metals Dissolved</b>						
Digestion	Dissolved	Field Filtered	Field Filtered	Field Filtered		
Titanium	Dissolved mg/L	0.022	<0.01	<0.01	0.01	
Aluminum	Dissolved mg/L	0.260	0.105	0.103	0.005	
Antimony	Dissolved mg/L	0.0002	0.0003	<0.0002	0.0002	
Arsenic	Dissolved mg/L	0.0009	0.0020	0.0003	0.0002	
Barium	Dissolved mg/L	0.019	0.025	0.030	0.001	
Beryllium	Dissolved mg/L	<0.00004	<0.00004	<0.00004	0.00004	
Bismuth	Dissolved mg/L	<0.001	<0.001	<0.001	0.001	
Boron	Dissolved mg/L	0.009	<0.004	<0.004	0.004	
Cadmium	Dissolved mg/L	0.00019	0.00016	0.00004	0.00001	
Chromium	Dissolved mg/L	<0.0004	<0.0004	<0.0004	0.0004	
Cobalt	Dissolved mg/L	0.00015	0.00064	0.00004	0.00002	
Copper	Dissolved mg/L	0.0036	0.0172	0.0015	0.0002	
Lead	Dissolved mg/L	0.0011	0.0007	0.0001	0.0001	
Lithium	Dissolved mg/L	<0.001	0.001	<0.001	0.001	
Molybdenum	Dissolved mg/L	0.0002	0.001	<0.0001	0.0001	
Nickel	Dissolved mg/L	0.001	<0.001	<0.001	0.001	
Selenium	Dissolved mg/L	<0.0006	<0.0006	<0.0006	0.0006	
Silver	Dissolved mg/L	<0.00001	0.00003	<0.00001	0.00001	
Strontium	Dissolved mg/L	0.067	0.144	0.044	0.001	
Tellurium	Dissolved mg/L	<0.0001	<0.0001	<0.0001	0.0001	
Thallium	Dissolved mg/L	<0.00001	<0.00001	<0.00001	0.00001	
Thorium	Dissolved mg/L	<0.0004	<0.0004	<0.0004	0.0004	
Tin	Dissolved mg/L	0.0002	<0.0001	<0.0001	0.0001	
Uranium	Dissolved mg/L	<0.0004	0.0005	<0.0004	0.0004	
Vanadium	Dissolved mg/L	0.0006	0.0004	0.0002	0.0001	
Zinc	Dissolved mg/L	0.0195	0.0043	0.0042	0.0005	
Zirconium	Dissolved mg/L	0.0002	0.0003	0.0001	0.0001	
<b>Trace Metals Total</b>						
Aluminum	Total mg/L	0.350	15.2	0.183	0.001	
Antimony	Total mg/L	0.00011	0.00257	0.00007	0.00002	
Arsenic	Total mg/L	0.0011	0.0541	0.0005	0.0001	

## Analytical Report

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

	Reference Number	1137891-7	1137891-8	1137891-9		
	Sample Date	May 13, 2016	May 13, 2016	May 13, 2016		
	Sample Time	NA	NA	NA		
	Sample Location					
	Sample Description	KZ-7	KZ-8	KZ-9		
	Matrix	Water	Water	Water		
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Trace Metals Total - Continued</b>						
Barium	Total	mg/L	0.0207	0.251	0.0331	0.0001
Beryllium	Total	mg/L	<0.00005	0.00062	<0.00005	0.00005
Bismuth	Total	mg/L	<0.0001	0.0021	<0.0001	0.0001
Boron	Total	mg/L	<0.002	0.004	<0.002	0.002
Cadmium	Total	mg/L	0.00016	0.00167	0.00003	0.00001
Chromium	Total	mg/L	0.00029	0.0137	0.00028	0.00005
Cobalt	Total	mg/L	0.00021	0.0108	0.00007	0.00002
Copper	Total	mg/L	0.0023	0.143	0.0016	0.0025
Iron	Total	mg/L	0.478	26.2	0.204	0.002
Lead	Total	mg/L	0.00190	0.0476	0.00041	0.00001
Lithium	Total	mg/L	<0.0005	0.0098	<0.0005	0.0005
Manganese	Total	mg/L	0.057	0.396	0.008	0.001
Molybdenum	Total	mg/L	0.00014	0.00331	0.00011	0.00002
Nickel	Total	mg/L	0.0005	0.0101	0.0005	0.0002
Selenium	Total	mg/L	<0.0002	0.0017	<0.0002	0.0002
Silver	Total	mg/L	0.00002	0.00086	0.00001	0.00001
Strontium	Total	mg/L	0.0669	0.200	0.0435	0.0001
Tellurium	Total	mg/L	<0.00005	0.00014	<0.00005	0.00005
Thallium	Total	mg/L	0.00001	0.00030	<0.00001	0.00001
Thorium	Total	mg/L	<0.00005	0.00350	<0.00005	0.00005
Tin	Total	mg/L	<0.0001	0.0003	<0.0001	0.0001
Uranium	Total	mg/L	0.00018	0.00294	0.00017	0.00001
Vanadium	Total	mg/L	0.00095	0.0370	0.00059	0.00005
Zinc	Total	mg/L	0.0052	0.149	0.0021	0.0005
Zirconium	Total	mg/L	0.0009	0.0193	0.0002	0.0001



**Analytical Report**

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

	Reference Number	1137891-10	1137891-11	1137891-12		
	Sample Date	May 12, 2016	May 13, 2016	May 12, 2016		
	Sample Time	NA	NA	NA		
	Sample Location					
	Sample Description	KZ-10	KZ-6 Duplicate	MW15-01D		
	Matrix	Water	Water	Water		
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Metals Total</b>						
Calcium	Total	mg/L	5.75	7.41	96.7	0.05
Magnesium	Total	mg/L	1.53	1.56	18.9	0.05
Potassium	Total	mg/L	0.7	0.8	2.8	0.1
Silicon	Total	mg/L	1.73	2.32	7.00	0.05
Sulfur	Total	mg/L	0.4	1.0	45.4	0.1
Sodium	Total	mg/L	0.77	0.75	16.6	0.02
Titanium	Total	mg/L	0.004	0.01	0.019	0.001
Mercury	Total	mg/L	<0.00001		<0.00001	0.00001
<b>Routine Water</b>						
Nitrate and Nitrite - N		mg/L			0.02	0.01
Acidity	titrate to pH of 8.3	mg/L as CaCO3			16	5
pH - Holding Time			Exceeded		Exceeded	
Digestion	Dissolved				Field Filtered	
pH	at 25 °C		6.71		7.29	
Electrical Conductivity		µS/cm at 25 C	39		602	1
Calcium	Dissolved	mg/L	5.7	7.3	88.9	0.1
Iron	Dissolved	mg/L	0.143	0.184		0.005
Magnesium	Dissolved	mg/L	1.5	1.5	18.3	0.1
Manganese	Dissolved	mg/L	0.004	0.075		0.001
Potassium	Dissolved	mg/L	0.7	0.7	2.7	0.1
Silicon	Dissolved	mg/L	1.58	1.94	7.74	0.05
Sodium	Dissolved	mg/L	0.7	0.7	15.6	0.1
Sulfur	Dissolved	mg/L	0.3	1	42.1	0.2
Bicarbonate		mg/L	18		245	5
Carbonate		mg/L	<6		<6	6
Hydroxide		mg/L	<5		<5	5
P-Alkalinity	as CaCO3	mg/L	<5		<5	5
T-Alkalinity	as CaCO3	mg/L	15		201	5
Chloride	Dissolved	mg/L	0.27		3.42	0.05
Fluoride	Dissolved	mg/L			1.76	0.01
Nitrate - N	Dissolved	mg/L	0.02			0.01
Nitrite - N	Dissolved	mg/L	<0.01			0.01
Sulfate (SO4)	Dissolved	mg/L	0.5		126	0.5
Hardness	as CaCO3	mg/L	21	25	297	5
Hardness	Total	mg CaCO3/L	20.7		319	1

## Analytical Report

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

	Reference Number	1137891-10	1137891-11	1137891-12	
	Sample Date	May 12, 2016	May 13, 2016	May 12, 2016	
	Sample Time	NA	NA	NA	
	Sample Location				
	Sample Description	KZ-10	KZ-6 Duplicate	MW15-01D	
	Matrix	Water	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Calculated Value	mg/L		398	1
Ionic Balance	Dissolved	%		99.5	90-110
<b>Trace Metals Dissolved</b>					
Digestion	Dissolved		Field Filtered	Field Filtered	Field Filtered
Titanium	Dissolved	mg/L	<0.01	<0.01	0.019
Aluminum	Dissolved	mg/L	0.215	0.085	0.669
Antimony	Dissolved	mg/L	<0.0002	<0.0002	0.0012
Arsenic	Dissolved	mg/L	0.0004	0.0008	0.0035
Barium	Dissolved	mg/L	0.074	0.056	0.252
Beryllium	Dissolved	mg/L	0.00006	<0.00004	0.00006
Bismuth	Dissolved	mg/L	<0.001	<0.001	<0.001
Boron	Dissolved	mg/L	<0.004	<0.004	0.007
Cadmium	Dissolved	mg/L	0.00007	0.00007	0.00021
Chromium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004
Cobalt	Dissolved	mg/L	0.00007	0.00009	0.00050
Copper	Dissolved	mg/L	0.0049	0.0024	0.0012
Iron	Dissolved	mg/L			0.492
Lead	Dissolved	mg/L	0.0002	0.0002	0.0013
Lithium	Dissolved	mg/L	<0.001	<0.001	0.007
Manganese	Dissolved	mg/L			1.06
Molybdenum	Dissolved	mg/L	<0.0001	0.0002	0.0037
Nickel	Dissolved	mg/L	<0.001	<0.001	<0.001
Selenium	Dissolved	mg/L	<0.0006	<0.0006	<0.0006
Silver	Dissolved	mg/L	0.00001	<0.00001	0.00002
Strontium	Dissolved	mg/L	0.039	0.054	1.780
Tellurium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001
Thallium	Dissolved	mg/L	<0.00001	<0.00001	0.00002
Thorium	Dissolved	mg/L	<0.0004	<0.0004	<0.0004
Tin	Dissolved	mg/L	<0.0001	<0.0001	0.0006
Uranium	Dissolved	mg/L	0.0004	<0.0004	0.0044
Vanadium	Dissolved	mg/L	0.0001	0.0001	0.0015
Zinc	Dissolved	mg/L	0.0081	0.0033	0.0078
Zirconium	Dissolved	mg/L	0.0003	0.0001	0.0003
<b>Trace Metals Total</b>					
Aluminum	Total	mg/L	0.297	0.276	0.485
Antimony	Total	mg/L	0.00008	0.00013	0.00090



**Analytical Report**

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

	Reference Number	1137891-10	1137891-11	1137891-12		
	Sample Date	May 12, 2016	May 13, 2016	May 12, 2016		
	Sample Time	NA	NA	NA		
	Sample Location					
	Sample Description	KZ-10	KZ-6 Duplicate	MW15-01D		
	Matrix	Water	Water	Water		
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
<b>Trace Metals Total - Continued</b>						
Arsenic	Total	mg/L	0.0004	0.0017	0.0033	0.0001
Barium	Total	mg/L	0.0800	0.0661	0.282	0.0001
Beryllium	Total	mg/L	0.00006	<0.00005	<0.00005	0.00005
Bismuth	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Boron	Total	mg/L	<0.002	<0.002	0.007	0.002
Cadmium	Total	mg/L	0.00007	0.00010	0.00052	0.00001
Chromium	Total	mg/L	0.00026	0.00020	0.00153	0.00005
Cobalt	Total	mg/L	0.00005	0.00020	0.00073	0.00002
Copper	Total	mg/L	0.0037	0.0029	0.0053	0.0025
Iron	Total	mg/L	0.206	0.603	1.12	0.002
Lead	Total	mg/L	0.00022	0.00104	0.00332	0.00001
Lithium	Total	mg/L	0.0005	<0.0005	0.0066	0.0005
Manganese	Total	mg/L	0.006	0.092	1.11	0.001
Molybdenum	Total	mg/L	0.00012	0.00030	0.00336	0.00002
Nickel	Total	mg/L	0.0008	0.0007	0.0020	0.0002
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	0.00002	0.00002	0.00005	0.00001
Strontium	Total	mg/L	0.0377	0.0548	1.80	0.0001
Tellurium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Thallium	Total	mg/L	<0.00001	<0.00001	0.00001	0.00001
Thorium	Total	mg/L	0.00007	<0.00005	0.00005	0.00005
Tin	Total	mg/L	<0.0001	<0.0001	0.0015	0.0001
Uranium	Total	mg/L	0.00042	0.00030	0.00571	0.00001
Vanadium	Total	mg/L	0.00037	0.00073	0.00163	0.00005
Zinc	Total	mg/L	0.0072	0.0043	0.0200	0.0005
Zirconium	Total	mg/L	0.0003	0.0002	0.0002	0.0001

## Analytical Report

Bill To: J. Gibson & Associates	Project:	Lot ID: <b>1137891</b>
Report To: J. Gibson & Associates	ID: Rock Haven Res.	Control Number: C0049877
Box 20913	Name: Klaza	Date Received: May 16, 2016
Whitehorse, YT, Canada	Location: Surface H2O	Date Reported: May 20, 2016
Y1A 6P2	LSD:	Report Number: 2103780
Attn: John Gibson	P.O.:	
Sampled By: J. Gibson	Acct code:	
Company:		

	Reference Number	1137891-10	1137891-12	1137891-13	
	Sample Date	May 12, 2016	May 12, 2016	May 13, 2016	
	Sample Time	NA	NA	NA	
	Sample Location				
	Sample Description	KZ-10	MW15-01D	MW15-02S	
	Matrix	Water	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit
<b>Inorganic Nonmetallic Parameters</b>					
Ammonium - N	mg/L		0.214	0.042	0.025
Kjeldahl Nitrogen	Total mg/L		1.45	0.40	0.07
Phosphorus	Total mg/L		0.10	0.10	0.05
Orthophosphate-P	Dissolved mg/L		0.02	<0.01	0.01
Organic Carbon	Total Nonpurgeable mg/L	19.0			0.5
Organic Carbon	Dissolved Nonpurgeable mg/L		16.6	3.2	0.5
Cyanide	Total mg/L	<0.002			0.002
Ammonia - N	mg/L	<0.01			0.01
Phosphorus	Total mg/L	0.016			0.003
<b>Physical and Aggregate Properties</b>					
Solids	Total Suspended mg/L	6			2
Solids	Total Dissolved mg/L	44	396	222	5

## Analytical Report

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

**Reference Number** 1137891-13  
**Sample Date** May 13, 2016  
**Sample Time** NA  
**Sample Location**  
**Sample Description** MW15-02S  
**Matrix** Water

Analyte	Units	Results	Results	Results	Nominal Detection Limit
<b>Metals Total</b>					
Calcium	Total	mg/L	35.8		0.05
Magnesium	Total	mg/L	8.09		0.05
Potassium	Total	mg/L	1		0.1
Silicon	Total	mg/L	14.0		0.05
Sulfur	Total	mg/L	21.8		0.1
Sodium	Total	mg/L	6.93		0.02
Titanium	Total	mg/L	0.048		0.001
Mercury	Total	mg/L	<0.00001		0.00001
<b>Routine Water</b>					
Nitrate and Nitrite - N		mg/L	1.71		0.01
Acidity	titate to pH of 8.3	mg/L as CaCO3	30		5
pH - Holding Time			Exceeded		
Digestion	Dissolved		Field Filtered		
pH	at 25 °C		6.09		
Electrical Conductivity		µS/cm at 25 C	266		1
Calcium	Dissolved	mg/L	35.7		0.1
Magnesium	Dissolved	mg/L	8.0		0.1
Potassium	Dissolved	mg/L	2.8		0.1
Silicon	Dissolved	mg/L	9.29		0.05
Sodium	Dissolved	mg/L	7.0		0.1
Sulfur	Dissolved	mg/L	21.5		0.2
Bicarbonate		mg/L	76		5
Carbonate		mg/L	<6		6
Hydroxide		mg/L	<5		5
P-Alkalinity	as CaCO3	mg/L	<5		5
T-Alkalinity	as CaCO3	mg/L	62		5
Chloride	Dissolved	mg/L	0.89		0.05
Fluoride	Dissolved	mg/L	<0.01		0.01
Sulfate (SO4)	Dissolved	mg/L	57.7		0.5
Hardness	as CaCO3	mg/L	120		5
Hardness	Total	mg CaCO3/L	123		1
Total Dissolved Solids	Calculated Value	mg/L	175		1
Ionic Balance	Dissolved	%	114		90-110
<b>Trace Metals Dissolved</b>					
Digestion	Dissolved		Field Filtered		



**Analytical Report**

Bill To: J. Gibson & Associates  
 Report To: J. Gibson & Associates  
 Box 20913  
 Whitehorse, YT, Canada  
 Y1A 6P2  
 Attn: John Gibson  
 Sampled By: J. Gibson  
 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

**Reference Number** 1137891-13  
**Sample Date** May 13, 2016  
**Sample Time** NA  
**Sample Location**  
**Sample Description** MW15-02S  
**Matrix** Water

Analyte	Units	Results	Results	Results	Nominal Detection Limit
<b>Trace Metals Dissolved - Continued</b>					
Titanium	Dissolved	mg/L	0.183		0.01
Aluminum	Dissolved	mg/L	0.140		0.005
Antimony	Dissolved	mg/L	<0.0002		0.0002
Arsenic	Dissolved	mg/L	0.0045		0.0002
Barium	Dissolved	mg/L	0.362		0.001
Beryllium	Dissolved	mg/L	0.00006		0.00004
Bismuth	Dissolved	mg/L	<0.001		0.001
Boron	Dissolved	mg/L	<0.004		0.004
Cadmium	Dissolved	mg/L	0.00954		0.00001
Chromium	Dissolved	mg/L	0.0006		0.0004
Cobalt	Dissolved	mg/L	0.00033		0.00002
Copper	Dissolved	mg/L	0.0107		0.0002
Iron	Dissolved	mg/L	0.497		0.005
Lead	Dissolved	mg/L	0.0040		0.0001
Lithium	Dissolved	mg/L	0.002		0.001
Manganese	Dissolved	mg/L	0.181		0.001
Molybdenum	Dissolved	mg/L	0.0002		0.0001
Nickel	Dissolved	mg/L	0.004		0.001
Selenium	Dissolved	mg/L	<0.0006		0.0006
Silver	Dissolved	mg/L	0.00006		0.00001
Strontium	Dissolved	mg/L	0.180		0.001
Tellurium	Dissolved	mg/L	<0.0001		0.0001
Thallium	Dissolved	mg/L	0.00002		0.00001
Thorium	Dissolved	mg/L	<0.0004		0.0004
Tin	Dissolved	mg/L	0.0007		0.0001
Uranium	Dissolved	mg/L	<0.0004		0.0004
Vanadium	Dissolved	mg/L	0.0005		0.0001
Zinc	Dissolved	mg/L	5.290		0.0005
Zirconium	Dissolved	mg/L	0.0009		0.0001
<b>Trace Metals Total</b>					
Aluminum	Total	mg/L	1.57		0.001
Antimony	Total	mg/L	0.00038		0.00002
Arsenic	Total	mg/L	0.0231		0.0001
Barium	Total	mg/L	0.438		0.0001
Beryllium	Total	mg/L	0.00015		0.00005
Bismuth	Total	mg/L	0.0001		0.0001



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 Company:

Project:  
 ID: Rock Haven Res.  
 Name: Klaza  
 Location: Surface H2O  
 LSD:  
 P.O.:  
 Acct code:

Lot ID: **1137891**  
 Control Number: C0049877  
 Date Received: May 16, 2016  
 Date Reported: May 20, 2016  
 Report Number: 2103780

Reference Number 1137891-13  
 Sample Date May 13, 2016  
 Sample Time NA  
 Sample Location  
 Sample Description MW15-02S  
 Matrix Water

Analyte	Units	Results	Results	Results	Nominal Detection Limit
<b>Trace Metals Total - Continued</b>					
Boron	Total	mg/L	0.002		0.002
Cadmium	Total	mg/L	0.00953		0.00001
Chromium	Total	mg/L	0.00279		0.00005
Cobalt	Total	mg/L	0.00078		0.00002
Copper	Total	mg/L	0.0123		0.0025
Iron	Total	mg/L	3.14		0.002
Lead	Total	mg/L	0.0165		0.00001
Lithium	Total	mg/L	0.0026		0.0005
Manganese	Total	mg/L	0.253		0.001
Molybdenum	Total	mg/L	0.00034		0.00002
Nickel	Total	mg/L	0.0042		0.0002
Selenium	Total	mg/L	0.0003		0.0002
Silver	Total	mg/L	0.00177		0.00001
Strontium	Total	mg/L	0.177		0.0001
Tellurium	Total	mg/L	<0.00005		0.00005
Thallium	Total	mg/L	0.00006		0.00001
Thorium	Total	mg/L	0.00094		0.00005
Tin	Total	mg/L	0.0018		0.0001
Uranium	Total	mg/L	0.00050		0.00001
Vanadium	Total	mg/L	0.00303		0.00005
Zinc	Total	mg/L	0.310		0.0005
Zirconium	Total	mg/L	0.0123		0.0001

Approved by:   
 Mathieu Simoneau  
 Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: J. Gibson & Associates	Project:	Lot ID: <b>1137891</b>
Report To: J. Gibson & Associates	ID: Rock Haven Res.	Control Number: C0049877
Box 20913	Name: Klaza	Date Received: May 16, 2016
Whitehorse, YT, Canada	Location: Surface H2O	Date Reported: May 20, 2016
Y1A 6P2	LSD:	Report Number: 2103780
Attn: John Gibson	P.O.:	
Sampled By: J. Gibson	Acct code:	
Company:		

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Acidity in water (Surrey)	APHA	* Acidity - Titration Method, 2310 B	19-May-16	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	17-May-16	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	17-May-16	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	17-May-16	Exova Surrey
Ammonia-N in Water (Surrey)	APHA	* Flow Injection Analysis, 4500-NH3 H	17-May-16	Exova Surrey
Ammonium-N in Water	APHA	* Automated Phenate Method, 4500-NH3 G	19-May-16	Exova Edmonton
Anions (Routine) by Ion Chromatography	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	19-May-16	Exova Edmonton
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	17-May-16	Exova Surrey
Carbon Organic (Dissolved) in water (DOC)	APHA	High-Temperature Combustion Method, 5310 B	19-May-16	Exova Edmonton
Carbon Organic (Total) in water (TOC)	APHA	High-Temperature Combustion Method, 5310 B	18-May-16	Exova Edmonton
Cyanide (Total) in water	US EPA	* US EPA method, 335.3	20-May-16	Exova Edmonton
Filtration of water for dissolved analysis	APHA	* Filtration for Dissolved and Suspended Metals / Total Organic Carbon, 3030 B / 5310 A	18-May-16	Exova Edmonton
Mercury Low Level (Total) in water (Surrey)	EPA	* Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, 245.7	20-May-16	Exova Surrey
Metals SemiTrace (Dissolved) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	16-May-16	Exova Surrey
Metals SemiTrace (Total) in Water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	16-May-16	Exova Surrey
Orthophosphate-P in Water	APHA	* Automated Ascorbic Acid Reduction Method, 4500-P F	18-May-16	Exova Edmonton
Phosphorus - total by Smartchem (Surrey)	APHA	* Persulfate digestion method, 4500-P B5	17-May-16	Exova Surrey
Phosphorus - Total in Water	APHA	* Automated Ascorbic Acid Reduction Method, 4500-P F	18-May-16	Exova Edmonton
Solids Dissolved (Total, Fixed and Volatile) - Surrey	APHA	* Total Dissolved Solids Dried at 180 C, 2540 C	17-May-16	Exova Surrey
Solids Suspended (Total, Fixed and Volatile) - Surrey	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	17-May-16	Exova Surrey
Total and Kjeldahl Nitrogen (Total) in Water	ISO	* Water Quality - Determination of nitrogen, ISO/TR 11905-2	18-May-16	Exova Edmonton
Trace Metals (dissolved) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	16-May-16	Exova Surrey
Trace Metals (dissolved) in Water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	16-May-16	Exova Surrey
Trace Metals (Total) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	16-May-16	Exova Surrey

## Methodology and Notes

Bill To: J. Gibson & Associates	Project:	Lot ID: <b>1137891</b>
Report To: J. Gibson & Associates	ID: Rock Haven Res.	Control Number: C0049877
Box 20913	Name: Klaza	Date Received: May 16, 2016
Whitehorse, YT, Canada	Location: Surface H2O	Date Reported: May 20, 2016
Y1A 6P2	LSD:	Report Number: 2103780
Attn: John Gibson	P.O.:	
Sampled By: J. Gibson	Acct code:	
Company:		

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Method Name	Reference	Method	Date Analysis Started	Location
Trace Metals (Total) in Water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	16-May-16	Exova Surrey

*\* Reference Method Modified*

## References

APHA	Standard Methods for the Examination of Water and Wastewater
EPA	Environmental Protection Agency Test Methods - US
ISO	International Organization for Standardization
US EPA	US Environmental Protection Agency Test Methods

## Comments:

- An appropriately preserved sample was not received for total phosphorus analysis of samples 1137891-12 and -13. Analysis was performed on unpreserved sample.
- Sample 1137891-8; 5411708 Reduction of analytical volume was necessary for Trace Metals analysis due to matrix effects in sample #1137891-8. Detection limits are adjusted accordingly.
- Sample 1137891-8; 5411708 Reduction of analytical volume was necessary for TP due to matrix effects in sample 1137891-8. Detection limits are adjusted accordingly.
- Sample 1137891-12; 5411712 Reduction of analytical volume was necessary for anions analysis due to matrix effects in sample # 1137891-12. Detection limits are adjusted accordingly.
- Sample 1137891-13; 5411713 Reduction of analytical volume was necessary for Trace Metals analysis due to matrix effects in sample #1137891-13 for Zn. Detection limits are adjusted accordingly.

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

**Project Information**

Project ID: ROCK HAVEN RES,  
 Project Name: KLAZA  
 Project Location: SURFACE H<sub>2</sub>O  
 Legal Location: \_\_\_\_\_  
 PO/AFE#: \_\_\_\_\_  
 Proj. Acct. Code: \_\_\_\_\_  
 Quote #: \_\_\_\_\_

**Invoice to:**

Company: JOHN GIBSON  
 Address: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Cell: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-mail: \_\_\_\_\_  
 Agreement ID: 6046  
 Copy of report: \_\_\_\_\_

**Report To:**

Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Cell: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-mail 1: \_\_\_\_\_  
 E-mail 2: \_\_\_\_\_  
 Copy of invoice: \_\_\_\_\_

**Report Results**

E-Mail	HCDWQG
Mail	Ab Tier 1
Online	SPIGEC
Fax	BCCSR
PDF	Other (list below)
Excel	
QA/QC	

**Regulatory Requirement**

**Sample Custody (please print)**

Sampled by: J GIBSON

**RUSH Priority**

Emergency (contact lab for turnaround and pricing)  
 Priority 1-2 working days (100% surcharge)  
 Urgent 2-3 working days (50% surcharge)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required: \_\_\_\_\_ Signature: \_\_\_\_\_

Special Instructions/Comments (please include contact information including ph. # if different from above).

RCHGM = PH, EC, TP, N<sub>2</sub>, N<sub>3</sub>, TALK, CL, SO<sub>4</sub>, HARDT, TSS, TDS.

Number of Containers	<u>RCHGM</u>	<u>NH<sub>4</sub></u>	<u>TOC</u>	<u>TEN</u>	<u>TW24ew</u>	<u>THg</u>	<u>TW23ew (F)</u>
	7	7	7	7	7	7	7
	7	7	7	7	7	7	7
	7	7	7	7	7	7	7
	7	7	7	7	7	7	7
	7	7	7	7	7	7	7

Company: \_\_\_\_\_

**This section for Lab use only**

Date/Time stamp:  
**RECEIVED**  
**MAY 16 2016**

	Site I.D.	Sample Description	Depth start end in cm m	Date/Time Sampled	Matrix	Sampling Method	Enter tests above (√ relevant samples below)									
							1	2	3	4	5	6	7	8		
1	KZ-1			MAY 12	H <sub>2</sub> O	GRAB	7	√	√	√	√	√	√	√	√	√
2	KZ-2			"			7	√	√	√	√	√	√	√	√	√
3	KZ-3			"			7	√	√	√	√	√	√	√	√	√
4	KZ-4			MAY 13			7	√	√	√	√	√	√	√	√	√
5	KZ-5			MAY 12			7	√	√	√	√	√	√	√	√	√
6	KZ-6			MAY 13			7	√	√	√	√	√	√	√	√	√
7	KZ-7			"			7	√	√	√	√	√	√	√	√	√
8	KZ-8			"			7	√	√	√	√	√	√	√	√	√
9	KZ-9			"			7	√	√	√	√	√	√	√	√	√
10	KZ-10			MAY 12			7	√	√	√	√	√	√	√	√	√
11																
12	KZ-6 DUPLICATE			MAY 13			2				√		√			
13																
14	NOTES: TW23 FIELD Filtered,			METAST + NITRIC THg + HCL, DC + HCL												
15				NH <sub>4</sub> + SWFUR												

Indicate in the space allotted any deficiencies by the corresponding number.

1. Indicate any samples that were not packaged well
2. Indicate any samples not received in Exova supplies
3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

Submission of this form acknowledges acceptance of Exova's Standard Terms and Conditions (<http://www.exova.com/about/terms-and-conditions/>)

Please indicate any potentially hazardous samples

Lot: 1137891 COC



Shipping: COD Y/ N

# and size of coolers

Temp. received: 8C

Delivery Method:

Waybill:

Received by:

**Project Information**

Project ID: ROCK HAVEN RES.  
 Project Name: KLAZA  
 Project Location: GROUND H<sub>2</sub>O  
 Legal Location: \_\_\_\_\_  
 PO/AFE#: \_\_\_\_\_  
 Proj. Acct. Code: \_\_\_\_\_  
 Quote #: \_\_\_\_\_

**Invoice to:**

Company: JOHN GIBSON  
 Address: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Cell: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-mail: \_\_\_\_\_  
 Agreement ID: 6646  
 Copy of report: \_\_\_\_\_

**Report To:**

Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Cell: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-mail 1: \_\_\_\_\_  
 E-mail 2: \_\_\_\_\_  
 Copy of invoice: \_\_\_\_\_

**Report Results**

E-Mail	HCDWQG
Mail	Ab Tier 1
Online	SPIGEC
Fax	BCCSR
PDF	Other (list below)
Excel	
QA/QC	

**Regulatory Requirement**

**Sample Custody (please print)**

Sampled by: J GIBSON  
 Company: \_\_\_\_\_

**This section for Lab use only**

Date/Time stamp:  
**RECEIVED**  
**MAY 16 2016**

Indicate in the space allotted any deficiencies by the corresponding number.

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8. Indicate any samples received in an inappropriate container

**RUSH Priority**

Emergency (contact lab for turnaround and pricing)	When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.
Priority 1-2 working days (100% surcharge)	
Urgent 2-3 working days (50% surcharge)	

Date Required: \_\_\_\_\_ Signature: \_\_\_\_\_

Special Instructions/Comments (please include contact information including ph. # if different from above).

RETURN = PH, EC, TDS, DOC, OH, TANK, ACIDITY  
NUTRIENTS + IONS = NH<sub>3</sub>, NO<sub>3</sub>, NO<sub>2</sub>, TKN, O-PH<sub>4</sub>, P, SO<sub>4</sub>, FI, CL,

Site I.D.	Sample Description	Depth start in cm	Depth end in cm	Date/Time Sampled	Matrix	Sampling Method	Number of Containers
1							
2	MW15-01D	18.38		MAY 12 0700	H <sub>2</sub> O	P+G	8
3							
4	MW15-02S	4.44		MAY 13 1130	H <sub>2</sub> O	P+G	8
5							
6							
7							
8							
9							
10							
11							
12	<u>SEE ATTACHED LIST</u>						
13	<u>NOTES: MW15-01D TW23 NOT FIELD FILTERED OR PLES.</u>						
14	<u>TKN 2 BOTTLES - PLES IN #2</u>						
15	<u>METALS + NITRIC, NH<sub>4</sub> + SULFURIC, THg + HCL</u>						

RUSHOM  
 NUTRIENT  
 NH<sub>4</sub>  
 TKN  
 TW24  
 TW23  
 THg

Enter tests above (√ relevant samples below)

Submission of this form acknowledges acceptance of Exova's Standard Terms and Conditions (<http://www.exova.com/about/terms-and-conditions/>)

Indicate lot # or affix barcode here

Shipping: COD Y/ N

Please indicate any potentially hazardous samples

# and size of coolers

Temp. received: \_\_\_\_\_

Delivery Method: \_\_\_\_\_

Waybill: \_\_\_\_\_

Received by: \_\_\_\_\_

May 15, 2016

TO: Exova in Surrey

RE: COC# 0049876

Analysis parameters

Analysis parameters would not all fit on COC so include a list:

Routine Chem = Acidity, T.Alk, Hard T, pH, EC, TDS, DOC, OH, ion Balance

Major ions = K, Na, Mg, HCO<sub>3</sub>, CO<sub>3</sub>, SO<sub>4</sub>, F, Cl

Nutrients= NH<sub>3</sub>, NO<sub>3</sub>, NO<sub>2</sub>, O-P0<sub>4</sub>, P

Sample volume is 1 X 500 ml R.CHEM and 1x 250 ml NUT

Hope volume is enough, analysis list not my list but given to me by engineering outfit – sorry for any confusion.

Analysis detection limits to > CCME Guidelines Drinking Water

John Gibson