

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9 Tel: (867)-767-9235 Fax: (867)-920-8740

#### - FINAL REPORT -

**Prepared For:** Hamlet of Ulukhaktok

**Address:** P.O. Box 157

Ulukhaktok,NT

X0E 0S0

Attn: William Bennett Facsimile: (867) 396-8001

#### Final report has been reviewed and approved by:

Glen Hudy

**Quality Assurance Officer** 

#### **NOTES:**

- For the thought and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) to ISO/IEC 17025 as a testing laboratory for specific tests registered with CALA.
- > Routine methods are based on recognized procedures from sources such as
  - o Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
  - o Environment Canada
  - o USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- > Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

ReportDate: Monday, July 31, 2017

Print Date: Monday, July 31, 2017





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### - CERTIFICATE OF ANALYSIS -

Client Sample ID: 1525-2 Taiga Sample ID: 001

Client Project: N7L3-1525 Sample Type: Water Received Date: 11-Jul-17 Sampling Date: 10-Jul-17 Sampling Time: 10:00

Location:

Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients						
Biochemical Oxygen Demand	20	2	mg/L	11-Jul-17	SM5210:B	
CBOD	14	2	mg/L	11-Jul-17	SM5210:B	
<u>Inorganics - Physicals</u>						
рН	7.59		pH units	11-Jul-17	SM4500-H:B	
Solids, Total Suspended	25	3	mg/L	13-Jul-17	SM2540:D	
<u>Microbiology</u>						
Coliforms, Fecal	23	1	CFU/100mL	11-Jul-17	SM9222:D	
<u>Organics</u>						
Hexane Extractable Material	< 2.0	2.0	mg/L	28-Jul-17	EPA1664A	





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### - CERTIFICATE OF ANALYSIS -

Client Sample ID: 1525-3 Taiga Sample ID: 002

Client Project: N7L3-1525 Sample Type: Water Received Date: 11-Jul-17 Sampling Date: 10-Jul-17 Sampling Time: 10:00

Location:

Report Status: Final

T. (D. )		Detection	T	Analysis	Analytical	
Test Parameter	Result	Limit	Units	Date	Method *	Qualifer
Inorganics - Physicals						_
рН	8.82		pH units	11-Jul-17	SM4500-H:B	
Solids, Total Suspended	8	3	mg/L	13-Jul-17	SM2540:D	
Trace Metals, Total						
Cadmium	< 0.1	0.1	μg/L	19-Jul-17	EPA200.8	
Chromium	0.2	0.1	μg/L	19-Jul-17	EPA200.8	
Cobalt	0.3	0.1	μg/L	19-Jul-17	EPA200.8	
Copper	3.7	0.2	μg/L	19-Jul-17	EPA200.8	
Iron	1890	5	μg/L	19-Jul-17	EPA200.8	
Lead	0.8	0.1	μg/L	19-Jul-17	EPA200.8	
Manganese	92.0	0.1	μg/L	19-Jul-17	EPA200.8	
Mercury	< 0.01	0.01	μg/L	19-Jul-17	EPA200.8	
Nickel	1.2	0.1	μg/L	19-Jul-17	EPA200.8	
Zinc	8.7	5	μg/L	19-Jul-17	EPA200.8	





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### - CERTIFICATE OF ANALYSIS -

Client Sample ID: 1525-5 Taiga Sample ID: 003

Client Project: N7L3-1525 Sample Type: Water Received Date: 11-Jul-17 Sampling Date: 10-Jul-17 Sampling Time: 10:00

Location:

Report Status: Final

Test Parameter	Res	ult	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients							
Biochemical Oxygen Demand	<	2	2	mg/L	11-Jul-17	SM5210:B	
CBOD	<	2	2	mg/L	11-Jul-17	SM5210:B	
Inorganics - Physicals							
pH	8.1	10		pH units	11-Jul-17	SM4500-H:B	
Solids, Total Suspended	5	;	3	mg/L	13-Jul-17	SM2540:D	
Microbiology							
Coliforms, Fecal	<	1	1	CFU/100mL	11-Jul-17	SM9222:D	
<u>Organics</u>							
Hexane Extractable Material	<	2.0	2.0	mg/L	28-Jul-17	EPA1664A	





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### - CERTIFICATE OF ANALYSIS -

Client Sample ID: 1525-1 Taiga Sample ID: 004

Client Project: N7L3-1525 Sample Type: Water Received Date: 11-Jul-17 Sampling Date: 10-Jul-17 Sampling Time: 10:00

Location:

Report Status: Final

Test Parameter	Res	ult	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
Inorganics - Nutrients							
Biochemical Oxygen Demand	<	2	2	mg/L	11-Jul-17	SM5210:B	
CBOD	<	2	2	mg/L	11-Jul-17	SM5210:B	
<u>Inorganics - Physicals</u>							
рН	8.2	27		pH units	11-Jul-17	SM4500-H:B	
Solids, Total Suspended	3		3	mg/L	13-Jul-17	SM2540:D	
<u>Microbiology</u>							
Coliforms, Fecal	<	1	1	CFU/100mL	11-Jul-17	SM9222:D	
<u>Organics</u>							
Hexane Extractable Material	<	2.0	2.0	mg/L	28-Jul-17	EPA1664A	



Taiga Batch No.: 170508

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### - CERTIFICATE OF ANALYSIS -

Client Sample ID: 1525-1 Taiga Sample ID: 004

\* Taiga analytical methods are based on the following standard analytical methods

SM - Standard Methods for the Examination of Water and Wastewater EPA - United States Environmental Protection Agency

Client Name	Faiga Sample II	lient Sample	Sample Typeing L	mple Collect D	nple Received	lest Group Na	Lab Section	Parameter Name	sult l	eported Res	Units	LC_MesulResu	Il Analysis Date o Me
Hamlet of Ulukhaktok	170508-001	1525-2	Water	10-Jul-17	11-Jul-17	POD	Inorganics - Nutrients	Biochemical Oxygen		20	mg/L	2	11-Jul-17
Hamlet of	170300-001	1323-2	vvalei	10-301-17	11-301-17	ВОВ	Inorganics -	Oxygen		20	IIIg/L	2	11-501-17
Ulukhaktok	170508-001	1525-2	Water	10-Jul-17	11-Jul-17	CBOD	Nutrients	CBOD		14	mg/L	2	11-Jul-17
Hamlet of							Inorganics -	Solids, Total					
Ulukhaktok	170508-001	1525-2	Water	10-Jul-17	11-Jul-17	TSS	Physicals	Suspended		25	mg/L	3	13-Jul-17
Hamlet of			l			J	Inorganics -	l					
Ulukhaktok Hamlet of	170508-001	1525-2	Water	10-Jul-17	11-Jul-17	рн	Physicals	pH Coliforms,		7.59	pH units CFU/100m		11-Jul-17
Ulukhaktok	170508-001	1525-2	Water	10-Jul-17	11-Jul-17	FC - CFU	Microbiology	Fecal		23	L	1	11-Jul-17
Hamlet of	170000 001	1020 2	Water	10 001 17	11 001 17	10 010	wiiciobiology	Hexane		20	-		11 001 17
Ulukhaktok	170508-001	1525-2	Water	10-Jul-17	11-Jul-17	HEM	Organics	Extractable	<	2.0	mg/L	2.0	28-Jul-17
Hamlet of							Inorganics -	Solids, Total					
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	TSS	Physicals	Suspended		8	mg/L	3	13-Jul-17
Hamlet of			l			J	Inorganics -	l					
Ulukhaktok Hamlet of	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	pH	Physicals Trace Metals.	pH		8.82	pH units		11-Jul-17
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11. Jul. 17	ICPMS3D	Total	Cadmium	<	0.1	μg/L	0.1	19-Jul-17
Hamlet of	170300-002	1323-3	vvalei	10-301-17	11-301-17	ICI WISSE	Trace Metals.	Caumum	-	0.1	pg/L	0.1	13-341-17
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total	Chromium		0.2	µg/L	0.1	19-Jul-17
Hamlet of							Trace Metals,						
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total	Cobalt		0.3	μg/L	0.1	19-Jul-17
Hamlet of							Trace Metals,						
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total	Copper		3.7	μg/L	0.2	19-Jul-17
Hamlet of Ulukhaktok	170508-002	1525-3	14/	10-Jul-17	44 1 45	ICPMS3D	Trace Metals, Total	lana.		1890		5	19-Jul-17
Hamlet of	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPIVIS3D	Trace Metals.	Iron		1890	μg/L	5	19-Jul-17
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total	Lead		0.8	μg/L	0.1	19-Jul-17
Hamlet of				10.00			Trace Metals,			-	F3-		
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total	Manganese		92.0	μg/L	0.1	19-Jul-17
Hamlet of							Trace Metals,						
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total	Mercury	<	0.01	μg/L	0.01	19-Jul-17
Hamlet of	470500 000	4505.0		40 1 147	44 1 14-	10011000	Trace Metals,	N					40 1 1 47
Ulukhaktok Hamlet of	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total Trace Metals,	Nickel		1.2	μg/L	0.1	19-Jul-17
Ulukhaktok	170508-002	1525-3	Water	10-Jul-17	11-Jul-17	ICPMS3D	Total	Zinc		8.7	μg/L	5	19-Jul-17
Hamlet of	170000 002	1020 0	Water	10 001 17	11 001 17	IOI WIOSE	Inorganics -	Biochemical		0.7	pg/L	J	15 dui 17
Ulukhaktok	170508-003	1525-5	Water	10-Jul-17	11-Jul-17	BOD	Nutrients	Oxygen	<	2	mg/L	2	11-Jul-17
Hamlet of							Inorganics -						
Ulukhaktok	170508-003	1525-5	Water	10-Jul-17	11-Jul-17	CBOD	Nutrients	CBOD	<	2	mg/L	2	11-Jul-17
Hamlet of							Inorganics -	Solids, Total		_			
Ulukhaktok Hamlet of	170508-003	1525-5	Water	10-Jul-17	11-Jul-17	TSS	Physicals	Suspended		5	mg/L	3	13-Jul-17
Ulukhaktok	170508-003	1525-5	Water	10-Jul-17	11-Jul-17	, pH	Inorganics - Physicals	рH		8.10	pH units		11-Jul-17
Hamlet of	170300-003	1323-3	vvalei	10-301-17	11-301-17	рп	rilysicals	Coliforms,		0.10	CFU/100m		11-501-17
Ulukhaktok	170508-003	1525-5	Water	10-Jul-17	11-Jul-17	FC - CFU	Microbiology	Fecal	<	1	L	1	11-Jul-17
Hamlet of							,	Hexane					
Ulukhaktok	170508-003	1525-5	Water	10-Jul-17	11-Jul-17	HEM	Organics	Extractable	<	2.0	mg/L	2.0	28-Jul-17
Hamlet of							Inorganics -	Biochemical					
Ulukhaktok	170508-004	1525-1	Water	10-Jul-17	11-Jul-17	BOD	Nutrients	Oxygen	<	2	mg/L	2	11-Jul-17
Hamlet of Ulukhaktok	170508-004	1525-1	Water	10-Jul-17	11-Jul-17	CROD	Inorganics - Nutrients	CBOD	<	2	mg/L	2	11-Jul-17
Hamlet of	170508-004	1020-1	vvaler	10-Jul-17	11-Jul-17	CBOD	Inorganics -	Solids, Total	<	2	mg/L	2	11-Jul-17
Ulukhaktok	170508-004	1525-1	Water	10-Jul-17	11-Jul-17	TSS	Physicals	Suspended		3	mg/L	3	13-Jul-17
Hamlet of	3000 004			10 001 17	531 17	. 50	Inorganics -	pondod		-	9, =	-	10 00
Ulukhaktok	170508-004	1525-1	Water	10-Jul-17	11-Jul-17	pH	Physicals	pН		8.27	pH units		11-Jul-17
Hamlet of							I .	Coliforms,			CFU/100m		
Ulukhaktok	170508-004	1525-1	Water	10-Jul-17	11-Jul-17	FC - CFU	Microbiology	Fecal	<	1	L	1	11-Jul-17
Hamlet of	470500 00:	4505.4	l	40.1				Hexane					00.1.47
Ulukhaktok	170508-004	1525-1	Water	10-Jul-17	11-Jul-17	HEM	Organics	Extractable	<	2.0	mg/L	2.0	28-Jul-17

Test Method	PORT STAT	DL
SM5210:B	Final	2
SM5210:B	Final	2
SM2540:D	Final	3
SM4500-H:B	Final	
SM9222:D	Final	1
EPA1664A	Final	2
SM2540:D	Final	3
SM4500-H:B	Final	
EPA200.8	Final	0.1
EPA200.8	Final	0.1
EPA200.8	Final	0.1
EPA200.8	Final	0.2
EPA200.8	Final	5
EPA200.8	Final	0.1
EPA200.8	Final	0.1
EPA200.8	Final	0.01
EPA200.8	Final	0.1
EPA200.8	Final	5
SM5210:B	Final	2
SM5210:B	Final	2
SM2540:D	Final	3
SM4500-H:B	Final	
SM9222:D	Final	1
EPA1664A	Final	2
SM5210:B	Final	2
SM5210:B	Final	2
SM2540:D	Final	3
SM4500-H:B	Final	
SM9222:D	Final	1
EPA1664A	Final	2