

Certificate of Analysis

Nunatta Environmental Services Inc.

P.O. Box 267
Iqaluit, NU X0A 0H0
Attn: Jim Wilson

Phone: (867) 979-1488
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Client PO:
Project: Land Farm Water
Custody: 86988

Report Date: 14-Jun-2013
Order Date: 3-Jun-2013

Order #: 1323092

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
1323092-01	Black Tank
1324079-01	Black Tank

Approved By:



Mark Foto, M.Sc. For Dale Robertson, BSc
Laboratory Director

Certificate of Analysis

Client: **Nunatta Environmental Services Inc.**

Report Date: 14-Jun-2013

Client PO:

Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Alkalinity, total to pH 4.5	EPA 310.1 - Titration to pH 4.5	12-Jun-13	12-Jun-13
Ammonia, as N	EPA 351.2 - Auto Colour	13-Jun-13	13-Jun-13
Anions	EPA 300.1 - IC	12-Jun-13	12-Jun-13
BTEX by P&T GC-MS	EPA 624 - P&T GC-MS	5-Jun-13	6-Jun-13
Conductivity	EPA 9050A- probe @25 °C	12-Jun-13	12-Jun-13
Hardness	Hardness as CaCO ₃	13-Jun-13	14-Jun-13
Mercury	EPA 245.1 - Cold Vapour AA	12-Jun-13	12-Jun-13
Metals, ICP-MS	EPA 200.8 - ICP-MS	13-Jun-13	13-Jun-13
Oil & Grease, total	SM5520B - Gravimetric	13-Jun-13	14-Jun-13
PAHs by GC-MS	EPA 625 - GC-MS, extraction	12-Jun-13	12-Jun-13
pH	EPA 150.1 - pH probe @25 °C	12-Jun-13	6-Jun-13
PHC F1	CWS Tier 1 - P&T GC-FID	5-Jun-13	6-Jun-13
PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	5-Jun-13	6-Jun-13
Phenolics	EPA 420.2 - Auto Colour, 4AAP	14-Jun-13	14-Jun-13
Phosphorus, total	EPA 365.4 - Auto Colour, digestion	12-Jun-13	13-Jun-13
Solids, total suspended	SM 2540D - gravimetric	5-Jun-13	12-Jun-13

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Report Date: 14-Jun-2013

Client PO:

Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Client ID:	Black Tank	Black Tank	-	-
Sample Date:	03-Jun-13	10-Jun-13	-	-
Sample ID:	1323092-01	1324079-01	-	-
MDL/Units	Water	Water	-	-

General Inorganics

Alkalinity, total	5 mg/L	-	40	-	-
Ammonia as N	0.01 mg/L	-	1.12	-	-
Conductivity	5 uS/cm	-	123	-	-
Hardness	1.0 mg/L	-	47.1	-	-
pH	0.1 pH Units	6.3	7.0	-	-
Phenolics	0.001 mg/L	-	0.006	-	-
Phosphorus, total	0.01 mg/L	-	0.05	-	-
Total Suspended Solids	2 mg/L	10	10	-	-

Anions

Chloride	1 mg/L	-	6	-	-
Nitrate as N	0.1 mg/L	-	<0.1	-	-
Nitrite as N	0.05 mg/L	-	<0.05	-	-
Sulphate	1 mg/L	-	7	-	-

Metals

Mercury	0.1 ug/L	-	<0.1	-	-
Aluminum	1 ug/L	-	66	-	-
Antimony	0.5 ug/L	-	1.0	-	-
Arsenic	1 ug/L	-	<1	-	-
Barium	1 ug/L	-	8	-	-
Beryllium	0.5 ug/L	-	<0.5	-	-
Boron	10 ug/L	-	82	-	-
Cadmium	0.1 ug/L	-	<0.1	-	-
Calcium	100 ug/L	-	16700	-	-
Chromium	1 ug/L	-	5	-	-
Cobalt	0.5 ug/L	-	0.7	-	-
Copper	0.5 ug/L	-	3.5	-	-
Iron	100 ug/L	-	3260	-	-
Lead	0.1 ug/L	1.3	0.9	-	-
Magnesium	200 ug/L	-	1290	-	-
Manganese	5 ug/L	-	499	-	-
Molybdenum	0.5 ug/L	-	0.9	-	-
Nickel	1 ug/L	-	2	-	-
Potassium	100 ug/L	-	2810	-	-

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Order Date: 10-Jun-2013

	Client ID: Sample Date: Sample ID:	Black Tank 03-Jun-13 1323092-01 Water	Black Tank 10-Jun-13 1324079-01 Water	-	-
	MDL/Units				
Selenium	1 ug/L	-	3	-	-
Silicon	10 ug/L	-	544	-	-
Silver	0.1 ug/L	-	<0.1	-	-
Sodium	200 ug/L	-	3730	-	-
Strontium	10 ug/L	-	35	-	-
Thallium	0.1 ug/L	-	<0.1	-	-
Tin	5 ug/L	-	<5	-	-
Titanium	5 ug/L	-	<5	-	-
Tungsten	10 ug/L	-	<10	-	-
Uranium	0.1 ug/L	-	<0.1	-	-
Vanadium	0.5 ug/L	-	1.4	-	-
Zinc	5 ug/L	-	11	-	-

Volatiles

Benzene	0.5 ug/L	<0.5	-	-	-
Ethylbenzene	0.5 ug/L	<0.5	-	-	-
Toluene	0.5 ug/L	1.8	-	-	-
m,p-Xylenes	0.5 ug/L	1.2	-	-	-
o-Xylene	0.5 ug/L	1.3	-	-	-
Xylenes, total	0.5 ug/L	2.5	-	-	-
Toluene-d8	Surrogate	116%	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	25 ug/L	<25	-	-	-
F2 PHCs (C10-C16)	100 ug/L	<100	-	-	-
F3 PHCs (C16-C34)	100 ug/L	<100	-	-	-
F4 PHCs (C34-C50)	100 ug/L	<100	-	-	-
F1 + F2 PHCs	125 ug/L	<125	-	-	-
F3 + F4 PHCs	200 ug/L	<200	-	-	-
Oil & Grease, total	0.5 mg/L	-	2.5	-	-

Semi-Volatiles

Acenaphthene	0.05 ug/L	-	<0.05	-	-
Acenaphthylene	0.05 ug/L	-	<0.05	-	-
Anthracene	0.01 ug/L	-	<0.01	-	-
Benzo [a] anthracene	0.01 ug/L	-	<0.01	-	-
Benzo [a] pyrene	0.01 ug/L	-	<0.01	-	-
Benzo [b] fluoranthene	0.05 ug/L	-	<0.05	-	-

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Client: **Nunatta Environmental Services Inc.**

Report Date: 14-Jun-2013

Client PO:

Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

	Client ID: Sample Date: Sample ID:	Black Tank 03-Jun-13 1323092-01 Water	Black Tank 10-Jun-13 1324079-01 Water	-	-
	MDL/Units			-	-
Benzo [g,h,i] perylene	0.05 ug/L	-	<0.05	-	-
Benzo [k] fluoranthene	0.05 ug/L	-	<0.05	-	-
Biphenyl	0.05 ug/L	-	<0.05	-	-
Chrysene	0.05 ug/L	-	<0.05	-	-
Dibenzo [a,h] anthracene	0.05 ug/L	-	<0.05	-	-
Fluoranthene	0.01 ug/L	-	<0.01	-	-
Fluorene	0.05 ug/L	-	<0.05	-	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	-	<0.05	-	-
1-Methylnaphthalene	0.05 ug/L	-	0.68	-	-
2-Methylnaphthalene	0.05 ug/L	-	0.71	-	-
Methylnaphthalene (1&2)	0.10 ug/L	-	1.39	-	-
Naphthalene	0.05 ug/L	-	0.44	-	-
Phenanthrene	0.05 ug/L	-	<0.05	-	-
Pyrene	0.01 ug/L	-	<0.01	-	-
2-Fluorobiphenyl	Surrogate	-	74.6%	-	-
Terphenyl-d14	Surrogate	-	66.2%	-	-

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Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	ND	1	mg/L						
Nitrate as N	ND	0.1	mg/L						
Nitrite as N	ND	0.05	mg/L						
Sulphate	ND	1	mg/L						
General Inorganics									
Alkalinity, total	ND	5	mg/L						
Ammonia as N	ND	0.01	mg/L						
Conductivity	ND	5	uS/cm						
Phenolics	ND	0.001	mg/L						
Phosphorus, total	ND	0.01	mg/L						
Total Suspended Solids	ND	2	mg/L						
Hydrocarbons									
F1 PHCs (C6-C10)	ND	25	ug/L						
F2 PHCs (C10-C16)	ND	100	ug/L						
F3 PHCs (C16-C34)	ND	100	ug/L						
F4 PHCs (C34-C50)	ND	100	ug/L						
Oil & Grease, total	ND	0.5	mg/L						
Metals									
Mercury	ND	0.1	ug/L						
Aluminum	ND	1	ug/L						
Antimony	ND	0.5	ug/L						
Arsenic	ND	1	ug/L						
Barium	ND	1	ug/L						
Beryllium	ND	0.5	ug/L						
Boron	ND	10	ug/L						
Cadmium	ND	0.1	ug/L						
Calcium	ND	100	ug/L						
Chromium	ND	1	ug/L						
Cobalt	ND	0.5	ug/L						
Copper	ND	0.5	ug/L						
Iron	ND	100	ug/L						
Lead	ND	0.1	ug/L						
Magnesium	ND	200	ug/L						
Manganese	ND	5	ug/L						
Molybdenum	ND	0.5	ug/L						
Nickel	ND	1	ug/L						
Potassium	ND	100	ug/L						
Selenium	ND	1	ug/L						
Silicon	ND	10	ug/L						
Silver	ND	0.1	ug/L						
Sodium	ND	200	ug/L						
Strontium	ND	10	ug/L						
Thallium	ND	0.1	ug/L						
Tin	ND	5	ug/L						
Titanium	ND	5	ug/L						
Tungsten	ND	10	ug/L						
Uranium	ND	0.1	ug/L						
Vanadium	ND	0.5	ug/L						
Zinc	ND	5	ug/L						
Semi-Volatiles									
Acenaphthene	ND	0.05	ug/L						
Acenaphthylene	ND	0.05	ug/L						
Anthracene	ND	0.01	ug/L						
Benzo [a] anthracene	ND	0.01	ug/L						
Benzo [a] pyrene	ND	0.01	ug/L						

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Report Date: 14-Jun-2013

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Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzo [b] fluoranthene	ND	0.05	ug/L						
Benzo [g,h,i] perylene	ND	0.05	ug/L						
Benzo [k] fluoranthene	ND	0.05	ug/L						
Biphenyl	ND	0.05	ug/L						
Chrysene	ND	0.05	ug/L						
Dibenzo [a,h] anthracene	ND	0.05	ug/L						
Fluoranthene	ND	0.01	ug/L						
Fluorene	ND	0.05	ug/L						
Indeno [1,2,3-cd] pyrene	ND	0.05	ug/L						
1-Methylnaphthalene	ND	0.05	ug/L						
2-Methylnaphthalene	ND	0.05	ug/L						
Methylnaphthalene (1&2)	ND	0.10	ug/L						
Naphthalene	ND	0.05	ug/L						
Phenanthrene	ND	0.05	ug/L						
Pyrene	ND	0.01	ug/L						
Surrogate: 2-Fluorobiphenyl	15.3		ug/L		76.3	50-140			
Surrogate: Terphenyl-d14	16.2		ug/L		81.1	50-140			
Volatiles									
Benzene	ND	0.5	ug/L						
Ethylbenzene	ND	0.5	ug/L						
Toluene	ND	0.5	ug/L						
m,p-Xylenes	ND	0.5	ug/L						
o-Xylene	ND	0.5	ug/L						
Xylenes, total	ND	0.5	ug/L						
Surrogate: Toluene-d8	27.2		ug/L		85.0	50-140			

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Report Date: 14-Jun-2013

Client PO:

Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	154	1	mg/L	161			4.5	10	
Nitrate as N	ND	0.1	mg/L	ND			0.0	20	
Nitrite as N	ND	0.05	mg/L	ND				20	
Sulphate	61.0	1	mg/L	63.1			3.4	10	
General Inorganics									
Alkalinity, total	39.6	5	mg/L	40.5			2.3	14	
Ammonia as N	0.052	0.01	mg/L	ND			0.0	8	QR-01
Conductivity	120	5	uS/cm	123			2.4	11	
pH	6.3	0.1	pH Units	6.3			0.5	10	
Phenolics	ND	0.001	mg/L	ND				10	
Total Suspended Solids	394	2	mg/L	430			8.9	10	
Hydrocarbons									
F1 PHCs (C6-C10)	93	25	ug/L	101			8.3	30	
Metals									
Mercury	0.15	0.1	ug/L	0.15			2.0	20	
Aluminum	ND	1	ug/L	ND			0.0	20	
Antimony	ND	0.5	ug/L	0.88			0.0	20	
Arsenic	ND	1	ug/L	ND			0.0	20	
Barium	61.0	1	ug/L	60.1			1.4	20	
Beryllium	ND	0.5	ug/L	ND			0.0	20	
Boron	619	10	ug/L	674			8.4	20	
Cadmium	ND	0.1	ug/L	ND			0.0	20	
Calcium	44900	100	ug/L	45200			0.7	20	
Chromium	19.8	1	ug/L	19.7			0.7	20	
Cobalt	ND	0.5	ug/L	ND			0.0	20	
Copper	2.24	0.5	ug/L	2.22			0.9	20	
Iron	ND	100	ug/L	ND			0.0	20	
Lead	ND	0.1	ug/L	ND			0.0	20	
Magnesium	21100	200	ug/L	21400			1.3	20	
Manganese	ND	5	ug/L	ND			0.0	20	
Molybdenum	1.01	0.5	ug/L	1.17			14.7	20	
Nickel	ND	1	ug/L	1.0			0.0	20	
Potassium	10800	100	ug/L	11200			3.1	20	
Selenium	4.5	1	ug/L	7.9			54.6	20	QR-01
Silicon	5020	10	ug/L	4990			0.6	20	
Silver	ND	0.1	ug/L	ND			0.0	20	
Strontium	2600	10	ug/L	2540			2.6	20	
Thallium	0.13	0.1	ug/L	ND			0.0	20	
Tin	ND	5	ug/L	ND			0.0	20	
Titanium	ND	5	ug/L	ND			0.0	20	
Tungsten	ND	10	ug/L	ND			0.0	20	
Uranium	ND	0.1	ug/L	0.1			0.0	20	
Vanadium	5.26	0.5	ug/L	5.23			0.5	20	
Zinc	ND	5	ug/L	ND			0.0	20	
Volatiles									
Benzene	ND	0.5	ug/L	ND				30	
Ethylbenzene	ND	0.5	ug/L	ND				30	
Toluene	ND	0.5	ug/L	ND				30	
m,p-Xylenes	ND	0.5	ug/L	ND				30	
o-Xylene	ND	0.5	ug/L	ND				30	
Surrogate: Toluene-d8	29.3		ug/L	ND	91.6	50-140			

Certificate of Analysis

Client: **Nunatta Environmental Services Inc.**

Report Date: 14-Jun-2013

Client PO:

Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	9.98	1	mg/L	ND	99.8	78-112			
Nitrate as N	0.93	0.1	mg/L	ND	93.2	81-112			
Nitrite as N	0.846	0.05	mg/L	ND	84.6	76-117			
Sulphate	9.64	1	mg/L	ND	96.4	75-111			
General Inorganics									
Ammonia as N	0.271	0.01	mg/L	ND	108	81-124			
Phenolics	0.025	0.001	mg/L	ND	99.9	69-132			
Phosphorus, total	0.460	0.01	mg/L	ND	91.9	80-120			
Total Suspended Solids	21.6	2	mg/L	ND	108	75-125			
Hydrocarbons									
F1 PHCs (C6-C10)	2090	25	ug/L	ND	105	68-117			
F2 PHCs (C10-C16)	1560	100	ug/L	ND	86.8	60-140			
F3 PHCs (C16-C34)	3660	100	ug/L	ND	98.3	60-140			
F4 PHCs (C34-C50)	2330	100	ug/L	ND	93.8	60-140			
Oil & Grease, total	20.0	0.5	mg/L	ND	100	70-108			
Metals									
Mercury	5.34	0.1	ug/L	0.15	86.4	78-137			
Aluminum	47.7		ug/L	ND	96.7	80-120			
Antimony	72.8		ug/L	0.88	144	80-120			QM-07
Arsenic	61.8		ug/L	0.8	122	80-120			QM-07
Barium	102		ug/L	60.1	83.5	80-120			
Beryllium	53.7		ug/L	0.02	107	80-120			
Boron	50		ug/L	ND	100	80-120			
Cadmium	45.1		ug/L	ND	90.4	80-120			
Calcium	1120		ug/L	ND	112	80-120			
Chromium	64.5		ug/L	19.7	89.6	80-120			
Cobalt	45.6		ug/L	0.05	91.2	80-120			
Copper	43.4		ug/L	2.22	82.3	80-120			
Iron	954		ug/L	14	94.1	80-120			
Lead	47.8		ug/L	ND	95.5	80-120			
Magnesium	984		ug/L	ND	98.4	80-120			
Manganese	48.6		ug/L	1.9	93.4	80-120			
Molybdenum	46.2		ug/L	1.17	90.1	80-120			
Nickel	47.2		ug/L	1.0	92.2	80-120			
Potassium	969		ug/L	ND	96.9	80-120			
Selenium	61.6		ug/L	7.9	107	80-120			
Silicon	50.1		ug/L	ND	100	80-120			
Silver	38.8		ug/L	0.008	77.6	80-120			QM-07
Sodium	966		ug/L	ND	96.6	80-120			
Strontium	48		ug/L	ND	95.6	80-120			
Thallium	42.0		ug/L	0.03	84.0	80-120			
Tin	43.5		ug/L	1.2	84.7	80-120			
Titanium	49.6		ug/L	1.1	96.9	80-120			
Tungsten	44.6		ug/L	2.0	85.2	80-120			
Uranium	44.0		ug/L	0.1	87.8	80-120			
Vanadium	53.1		ug/L	5.23	95.8	80-120			
Zinc	46		ug/L	1	89.5	80-120			

Semi-Volatiles

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Certificate of Analysis

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Report Date: 14-Jun-2013

Client PO:

Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthene	4.56	0.05	ug/L	ND	91.2	50-140			
Acenaphthylene	4.43	0.05	ug/L	ND	88.6	50-140			
Anthracene	3.80	0.01	ug/L	ND	75.9	50-140			
Benzo [a] anthracene	5.08	0.01	ug/L	ND	102	50-140			
Benzo [a] pyrene	4.60	0.01	ug/L	ND	92.0	50-140			
Benzo [b] fluoranthene	4.63	0.05	ug/L	ND	92.5	50-140			
Benzo [g,h,i] perylene	5.05	0.05	ug/L	ND	101	50-140			
Benzo [k] fluoranthene	5.40	0.05	ug/L	ND	108	50-140			
Biphenyl	5.15	0.05	ug/L	ND	103	50-140			
Chrysene	4.60	0.05	ug/L	ND	92.0	50-140			
Dibenzo [a,h] anthracene	4.94	0.05	ug/L	ND	98.9	50-140			
Fluoranthene	4.60	0.01	ug/L	ND	92.1	50-140			
Fluorene	4.19	0.05	ug/L	ND	83.9	50-140			
Indeno [1,2,3-cd] pyrene	5.10	0.05	ug/L	ND	102	50-140			
1-Methylnaphthalene	3.85	0.05	ug/L	ND	77.0	50-140			
2-Methylnaphthalene	4.04	0.05	ug/L	ND	80.7	50-140			
Naphthalene	3.97	0.05	ug/L	ND	79.4	50-140			
Phenanthrene	4.51	0.05	ug/L	ND	90.2	50-140			
Pyrene	4.69	0.01	ug/L	ND	93.9	50-140			
Surrogate: 2-Fluorobiphenyl	15.4		ug/L		76.9	50-140			
Volatiles									
Benzene	29.8	0.5	ug/L	ND	74.4	50-140			
Ethylbenzene	39.1	0.5	ug/L	ND	97.8	50-140			
Toluene	33.8	0.5	ug/L	ND	84.6	50-140			
m,p-Xylenes	79.8	0.5	ug/L	ND	99.7	50-140			
o-Xylene	41.2	0.5	ug/L	ND	103	50-140			

Certificate of AnalysisClient: **Nunatta Environmental Services Inc.**

Report Date: 14-Jun-2013

Client PO:

Project Description: Landfarm Black Tank

Order Date: 10-Jun-2013

Qualifier Notes:***Login Qualifiers :***

Sample - Not submitted in the correct container - Sub-sampled for pH, TSS, lead from AG bottle

*Applies to samples: Black Tank****QC Qualifiers :***

QM-07 : The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on other acceptable QC.

QR-01 : Duplicate RPD is high, however, the sample result is less than 10x the MDL.

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

Client Name: <u>Nunatta Environmental Serv.</u>	Project Reference: <u>Land Farm - Water</u>	TAT: ☒ Regular ☐ 2 Day ☐ 1 Day ☐ Same Day Date Required: _____
Contact Name: <u>Nim Wilson</u>	Quote #	
Address: <u>P.O. Box 267 Igloot NU</u>	PO #	
Telephone: <u>867-979-1488 (cell 222-4111)</u>	Email Address: <u>nunatta@northwestel.net</u>	

Samples Submitted Under: ☐ O. Reg. 153/04 Table ☐ O. Reg. 511/09 Table ☐ PWQO ☒ CCME ☐ Sewer Use (Storm) ☐ Sewer Use (Sanitary) ☐ Other: _____

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Required Analyses

Parcel Order Number:

1323092

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		FI-F4	BTEX	(Will email list of metals)									
					Date	Time												
1	Black tank.	SW	0	3	June 3	11:00	/	/										
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Comments:

* Only enough sample to analyze: F₁-F₄ + BTEX, TSS, pH, Lead. Extra sample to be submitted at later date per Jim. - NYC

Method of Delivery:

Pick up

Relinquished By (Print & Sign):

James H Wilson
James H Wilson

Received by Driver/Depot:

M. Brouse

Date/Time: 04/06/13 12:15 PM

Temperature: _____ °C

Received at Lab:

SUNBORN

Date/Time: JUN 04 2013 12:40

Temperature: 9.7 °C

Verified By:

NYC

Date/Time: June 4/13 2:34

pH Verified By: NYC

Date/Time: MAY 3 11:30

pH
Conductivity
Total Suspended Solids
Total Alkalinity
Ammonia Nitrogen
Nitrate – Nitrite
Oil and Grease (visual)
Sulphate
Calcium
Chloride
Magnesium
Sodium
Potassium
Total Phenols
Total Cadmium
Total Hardness
Total Chromium
Total Lead
Total Nickel
Total Copper
Total Phosphorous
Total Manganese
Total Iron
Total Mercury
Total Arsenic
Total Zinc
Total Aluminum
Total Cobalt
Total Petroleum Hydrocarbons (TPH)
Polycyclic Aromatic Hydrocarbons (PAH)
Benzene, Toluene, Ethylbenzene, Xylene (BTEX)

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Client Name: NUNATTA ENVIRONMENTAL	Project Reference: Landfarm black tank	TAT: ☒ Regular ☐ 3 Day ☐ 2 Day ☐ 1 Day
Contact Name: JIM WILSON	Quote #	
Address: P.O. Box 267, Iqaluit, NU X0A0H0	PO #	Date Required: _____
Telephone: 867-979-1488	Email Address: nunatta@northwestel.net	

Criteria: ☐ O. Reg. 153/04 Table ☐ ☐ O. Reg. 153/11 (Current) Table ☐ ☐ RSC Filing ☐ ☐ O. Reg. 558/00 ☐ PWQO ☒ MCCME ☐ SUB (Storm) ☐ SUB (Sanitary) Municipality: _____ ☐ Other: _____

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Required Analyses

Paracel Order Number: 1324079		Matrix	Air Volume	# of Containers	Sample Taken		Metals	TPH	Will email to large to write								
Sample ID/Location Name					Date	Time											
1	Black tank	SW	1	7	June 10	11:30	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Comments: * Parameter list attached. TPH/BTEX not required for this submission.
(on WO: 1323092). - mjc. Reg level (low-level) Cd and Hg per Jim. - mjc.

Method of Delivery:

Pick up

Relinquished By (Print & Sign): Jim Wilson	Received by Driver/Depot: A. Brouse	Received at Lab: SUNEPORN	Verified By: mjc
Date/Time: June 10 12:00	Date/Time: 11/06/13 11:30 AM	Date/Time: JUN 11, 2013 11:57	Date/Time: June 11/13 4:00
Temperature: _____ °C	Temperature: _____ °C	Temperature: 10.6 °C	pH V: _____

1324079

- 
- pH
 - Conductivity
 - Total Suspended Solids
 - Total Alkalinity
 - Ammonia Nitrogen
 - Nitrate – Nitrite
 - Oil and Grease (visual)
 - Sulphate
 - Calcium
 - Chloride
 - Magnesium
 - Sodium
 - Potassium
 - Total Phenols
 - Total Cadmium
 - Total Hardness
 - Total Chromium
 - Total Lead
 - Total Nickel
 - Total Copper
 - Total Phosphorous
 - Total Manganese
 - Total Iron
 - Total Mercury
 - Total Arsenic
 - Total Zinc
 - Total Aluminum
 - Total Cobalt
 - × Total Petroleum Hydrocarbons (TPH)
 - Polycyclic Aromatic Hydrocarbons (PAH)
 - × Benzene, Toluene, Ethylbenzene, Xylene (BTEX)