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Certificate of Analysis

Nunatta Environmental Services Inc.
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Client PO:
Project: Land Farm Soil Test #2
Custody: 61097

Report Date: 18-Oct-2011
Order Date: 12-Oct-2011
Order #: 1142097

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

Paracel ID	Client ID
1142097-01	1A South Cell #1
1142097-02	1B North Cell #1
1142097-03	2A Middle Cell #2
1142097-04	3a South Cell #3
1142097-05	3b Not Turned Cell #3
1142097-06	3c North Cell #3
1142097-07	4A South Cell #4
1142097-08	4B North Cell #4

Approved By: Mark Foto

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

Certificate of Analysis

Report Date: 18-Oct-2011

Client: **Nunatta Environmental Services Inc.**

Order Date:12-Oct-2011

Client PO: Project Description: Land Farm Soil Test #2

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Anions	EPA 300.1 - IC, water extraction	18-Oct-11	18-Oct-11
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	18-Oct-11	18-Oct-11
BTEX	EPA 8260 - P&T GC-MS	15-Oct-11	17-Oct-11
CCME PHC F1	CWS Tier 1 - P&T GC-FID	15-Oct-11	17-Oct-11
CCME PHC F2 - F4	CWS Tier 1 - GC-FID, extraction	14-Oct-11	15-Oct-11
Chromium, hexavalent	MOE E3056 - Extraction, colourimetric	13-Oct-11	14-Oct-11
Mercury	EPA 7471A - CVAA, digestion	18-Oct-11	18-Oct-11
Metals	EPA 6020 - Digestion - ICP-MS	17-Oct-11	17-Oct-11
Nitrogen as N, total	Calculation	18-Oct-11	18-Oct-11
PAHs by GC-MS, standard scan	EPA 8270 - GC-MS, extraction	13-Oct-11	13-Oct-11
PCBs, total	SW846 8082A - GC-ECD	13-Oct-11	13-Oct-11
Phosphorus, total	EPA 365.4 - Auto Colour, digestion	18-Oct-11	18-Oct-11
Solids, %	Gravimetric, calculation	17-Oct-11	17-Oct-11
Standard Plate Count - Soil	based on SM 9215C	13-Oct-11	13-Oct-11
Total Kjeldahl Nitrogen	based on EPA351.2 - Auto Colour, digestion	18-Oct-11	18-Oct-11

Certificate of Analysis

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Client PO:

Project Description: Land Farm Soil Test #2

	Client ID:	1A South Cell #1	1B North Cell #1	2A Middle Cell #2	3a South Cell #3
	Sample Date:	10-Oct-11	10-Oct-11	10-Oct-11	10-Oct-11
	Sample ID:	1142097-01	1142097-02	1142097-03	1142097-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	90.6	90.0	84.4	87.2
Microbiological Parameters					
Standard Plate Count	10000 CFU/g	<10000 [1] [2]	<10000 [2]	TNTC [2]	<10000 [2]
General Inorganics					
Nitrogen, Total	11 ug/g	273	335	-	-
Nitrogen, Total	21 ug/g	-	-	-	583
Nitrogen, Total	41 ug/g	-	-	932	-
Phosphorus, total	1.00 ug/g dry	659	502	562	562
Total Kjeldahl Nitrogen	10 ug/g dry	269	335	932	583
Anions					
Nitrate as N	1 ug/g dry	4	<1	<1	<1
Metals					
Antimony	1 ug/g dry	<1	<1	<1	-
Arsenic	1 ug/g dry	<1	<1	<1	-
Barium	1 ug/g dry	49	26	34	-
Beryllium	0.5 ug/g dry	<0.5	<0.5	<0.5	-
Boron, available	0.5 ug/g dry	-	-	<0.5	-
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	-
Chromium	5 ug/g dry	23	22	21	-
Chromium (VI)	0.4 ug/g dry	-	-	<0.4	-
Cobalt	1 ug/g dry	7	6	6	-
Copper	5 ug/g dry	20	12	15	-
Iron	200 ug/g dry	24200	23600	20600	-
Lead	1 ug/g dry	7	8	11	-
Mercury	0.1 ug/g dry	-	-	<0.1	-
Molybdenum	1 ug/g dry	1	<1	<1	-
Nickel	5 ug/g dry	10	8	8	-
Potassium	200 ug/g dry	740	474	569	705
Selenium	1 ug/g dry	<1	<1	<1	-
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	-
Thallium	1 ug/g dry	<1	<1	<1	-
Tin	5 ug/g dry	<5	<5	<5	-
Uranium	1 ug/g dry	<1	<1	<1	-
Vanadium	10 ug/g dry	55	47	44	-

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Project Description: Land Farm Soil Test #2

	Client ID:	1A South Cell #1	1B North Cell #1	2A Middle Cell #2	3a South Cell #3
	Sample Date:	10-Oct-11	10-Oct-11	10-Oct-11	10-Oct-11
	Sample ID:	1142097-01	1142097-02	1142097-03	1142097-04
	MDL/Units	Soil	Soil	Soil	Soil
Zinc	20 ug/g dry	57	23	30	-
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	0.07
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	0.08
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	0.07	<0.05	<0.05	0.13
Toluene-d8	Surrogate	94.5%	92.1%	94.0%	92.7%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	33	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	2230	444	356	279
F3 PHCs (C16-C34)	10 ug/g dry	1410	111	268	399
F4 PHCs (C34-C50)	10 ug/g dry	686	20	18	59
Semi-Volatiles					
Acenaphthene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Acenaphthylene	0.02 ug/g dry	0.06	<0.02	<0.02	-
Anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Benzo [a] anthracene	0.02 ug/g dry	0.02	<0.02	0.03	-
Benzo [a] pyrene	0.02 ug/g dry	<0.02	<0.02	0.02	-
Benzo [b] fluoranthene	0.02 ug/g dry	0.03	<0.02	0.05	-
Benzo [g,h,i] perylene	0.02 ug/g dry	<0.02	<0.02	0.02	-
Benzo [k] fluoranthene	0.02 ug/g dry	<0.02	<0.02	0.03	-
Biphenyl	0.02 ug/g dry	0.05	0.17	0.06	-
Chrysene	0.02 ug/g dry	0.03	<0.02	0.03	-
Dibenzo [a,h] anthracene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
Fluoranthene	0.02 ug/g dry	0.04	<0.02	0.03	-
Fluorene	0.02 ug/g dry	0.41	<0.02	<0.02	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g dry	<0.02	<0.02	<0.02	-
1-Methylnaphthalene	0.02 ug/g dry	2.59	0.04	0.04	-
2-Methylnaphthalene	0.02 ug/g dry	2.18	<0.02	0.03	-
Methylnaphthalene (1&2)	0.04 ug/g dry	4.77	<0.04	0.07	-
Naphthalene	0.02 ug/g dry	0.48	0.03	<0.02	-
Phenanthrene	0.02 ug/g dry	0.27	<0.02	<0.02	-
Pyrene	0.02 ug/g dry	0.05	<0.02	0.08	-

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Order Date:12-Oct-2011

Project Description: Land Farm Soil Test #2

	Client ID:	1A South Cell #1	1B North Cell #1	2A Middle Cell #2	3a South Cell #3
	Sample Date:	10-Oct-11	10-Oct-11	10-Oct-11	10-Oct-11
	Sample ID:	1142097-01	1142097-02	1142097-03	1142097-04
	MDL/Units	Soil	Soil	Soil	Soil
2-Fluorobiphenyl	Surrogate	103%	111%	98.1%	-
Terphenyl-d14	Surrogate	120%	111%	99.3%	-
PCBs					
PCBs, total	0.05 ug/g dry	<0.05	<0.05	<0.05	-
Decachlorobiphenyl	Surrogate	60.4%	88.1%	95.3%	-

	Client ID:	3b Not Turned Cell #3	3c North Cell #3	4A South Cell #4	4B North Cell #4
	Sample Date:	10-Oct-11	10-Oct-11	10-Oct-11	10-Oct-11
	Sample ID:	1142097-05	1142097-06	1142097-07	1142097-08
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	87.9	88.8	88.2	87.3
Microbiological Parameters					
Standard Plate Count	10000 CFU/g	<10000 [2]	<10000 [2]	12000 [2]	TNTC [2]
General Inorganics					
Nitrogen, Total	21 ug/g	572	549	826	-
Nitrogen, Total	41 ug/g	-	-	-	873
Phosphorus, total	1.00 ug/g dry	461	568	515	546
Total Kjeldahl Nitrogen	10 ug/g dry	572	548	826	873
Anions					
Nitrate as N	1 ug/g dry	<1	1	<1	<1
Metals					
Potassium	200 ug/g dry	736	748	604	568
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene-d8	Surrogate	93.1%	95.4%	93.1%	92.0%
Hydrocarbons					
F1 PHCs (C6-C10)	10 ug/g dry	<10	<10	<10	<10
F2 PHCs (C10-C16)	10 ug/g dry	814	413	231	304
F3 PHCs (C16-C34)	10 ug/g dry	949	516	224	264
F4 PHCs (C34-C50)	10 ug/g dry	134	90	48	55

Certificate of Analysis
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Client PO:

Report Date: 18-Oct-2011
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Project Description: Land Farm Soil Test #2

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Nitrate as N	ND	1	ug/g						
General Inorganics									
Phosphorus, total	ND	1.00	ug/g						
Total Kjeldahl Nitrogen	ND	10	ug/g						
Hydrocarbons									
F1 PHCs (C6-C10)	ND	10	ug/g						
F2 PHCs (C10-C16)	ND	10	ug/g						
F3 PHCs (C16-C34)	ND	10	ug/g						
F4 PHCs (C34-C50)	ND	10	ug/g						
Metals									
Antimony	ND	1	ug/g						
Arsenic	ND	1	ug/g						
Barium	ND	1	ug/g						
Beryllium	ND	0.5	ug/g						
Boron, available	ND	0.5	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium (VI)	ND	0.4	ug/g						
Chromium	ND	5	ug/g						
Cobalt	ND	1	ug/g						
Copper	ND	5	ug/g						
Iron	ND	200	ug/g						
Lead	ND	1	ug/g						
Mercury	ND	0.1	ug/g						
Molybdenum	ND	1	ug/g						
Nickel	ND	5	ug/g						
Potassium	ND	200	ug/g						
Selenium	ND	1	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1	ug/g						
Tin	ND	5	ug/g						
Uranium	ND	1	ug/g						
Vanadium	ND	10	ug/g						
Zinc	ND	20	ug/g						
Microbiological Parameters									
Standard Plate Count	ND	10000	CFU/g						
PCBs									
PCBs, total	ND	0.05	ug/g						
Surrogate: Decachlorobiphenyl	*0.100*		*ug/g*		*100*	*60-140*			
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g						
Acenaphthylene	ND	0.02	ug/g						
Anthracene	ND	0.02	ug/g						
Benzo [a] anthracene	ND	0.02	ug/g						
Benzo [a] pyrene	ND	0.02	ug/g						
Benzo [b] fluoranthene	ND	0.02	ug/g						
Benzo [g,h,i] perylene	ND	0.02	ug/g						
Benzo [k] fluoranthene	ND	0.02	ug/g						
Biphenyl	ND	0.02	ug/g						
Chrysene	ND	0.02	ug/g						
Dibenzo [a,h] anthracene	ND	0.02	ug/g						
Fluoranthene	ND	0.02	ug/g						
Fluorene	ND	0.02	ug/g						
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g						
1-Methylnaphthalene	ND	0.02	ug/g						

Certificate of Analysis
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Report Date: 18-Oct-2011
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Project Description: Land Farm Soil Test #2

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
2-Methylnaphthalene	ND	0.02	ug/g						
Methylnaphthalene (1&2)	ND	0.04	ug/g						
Naphthalene	ND	0.02	ug/g						
Phenanthrene	ND	0.02	ug/g						
Pyrene	ND	0.02	ug/g						
Surrogate: 2-Fluorobiphenyl	*0.954*	*0.01*	*ug/g*		*71.6*	*50-140*			
Surrogate: Terphenyl-d14	*1.05*	*0.01*	*ug/g*		*78.8*	*50-140*			
Volatiles									
Benzene	ND	0.02	ug/g						
Ethylbenzene	ND	0.05	ug/g						
Toluene	ND	0.05	ug/g						
m,p-Xylenes	ND	0.05	ug/g						
o-Xylene	ND	0.05	ug/g						
Xylenes, total	ND	0.05	ug/g						
Surrogate: Toluene-d8	*7.28*		*ug/g*		*90.9*	*50-140*			

Certificate of Analysis
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Client PO:

Report Date: 18-Oct-2011
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Project Description: Land Farm Soil Test #2

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Nitrate as N	ND	1	ug/g dry	ND				20	
General Inorganics									
Phosphorus, total	615	10.0	ug/g dry	659			6.9	10	
Total Kjeldahl Nitrogen	264	10	ug/g dry	269			1.9	10	
Hydrocarbons									
F1 PHCs (C6-C10)	1230	10	ug/g dry	963			24.3	40	
F2 PHCs (C10-C16)	2100	10	ug/g dry	2230			5.7	30	
F3 PHCs (C16-C34)	1350	10	ug/g dry	1410			3.7	30	
F4 PHCs (C34-C50)	704	10	ug/g dry	686			2.6	30	
Metals									
Antimony	ND	1	ug/g dry	ND				30	
Arsenic	ND	1	ug/g dry	ND				30	
Barium	37.0	1	ug/g dry	34.0			8.3	30	
Beryllium	ND	0.5	ug/g dry	ND				30	
Boron, available	ND	0.5	ug/g dry	ND				35	
Cadmium	ND	0.5	ug/g dry	ND				30	
Chromium (VI)	ND	0.4	ug/g dry	ND				35	
Chromium	22.7	5	ug/g dry	20.9			8.0	30	
Cobalt	6.1	1	ug/g dry	6.1			0.2	30	
Copper	15.8	5	ug/g dry	15.3			3.1	30	
Iron	22800	200	ug/g dry	20600			10.2	30	
Lead	10.5	1	ug/g dry	10.8			2.4	30	
Mercury	ND	0.1	ug/g dry	ND				35	
Molybdenum	ND	1	ug/g dry	ND				30	
Nickel	9.6	5	ug/g dry	8.4			13.6	30	
Potassium	584	200	ug/g dry	569			2.6	30	
Selenium	ND	1	ug/g dry	ND				30	
Silver	ND	0.3	ug/g dry	ND				30	
Thallium	ND	1	ug/g dry	ND				30	
Tin	ND	5	ug/g dry	ND				30	
Uranium	ND	1	ug/g dry	ND				30	
Vanadium	46.2	10	ug/g dry	44.0			4.8	30	
Zinc	31.0	20	ug/g dry	29.9			3.5	30	
Microbiological Parameters									
Standard Plate Count	ND	10000	CFU/g	ND				200	
PCBs									
PCBs, total	ND	0.05	ug/g dry	ND				40	
Surrogate: Decachlorobiphenyl	*0.107*		*ug/g dry*	*ND*	*96.2*	*60-140*			
Physical Characteristics									
% Solids	90.9	0.1	% by Wt.	89.1			2.0	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g dry	ND				40	
Acenaphthylene	0.061	0.02	ug/g dry	0.063			2.4	40	
Anthracene	0.024	0.02	ug/g dry	ND				40	
Benzo [a] anthracene	ND	0.02	ug/g dry	0.023			0.0	40	
Benzo [a] pyrene	ND	0.02	ug/g dry	ND				40	
Benzo [b] fluoranthene	0.027	0.02	ug/g dry	0.029			7.2	40	
Benzo [g,h,i] perylene	ND	0.02	ug/g dry	ND				40	
Benzo [k] fluoranthene	ND	0.02	ug/g dry	ND				40	
Biphenyl	0.231	0.02	ug/g dry	0.052			126.0	40	QR-04
Chrysene	0.024	0.02	ug/g dry	0.029			21.4	40	
Dibenzo [a,h] anthracene	ND	0.02	ug/g dry	ND				40	

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Project Description: Land Farm Soil Test #2

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Fluoranthene	0.043	0.02	ug/g dry	0.036			15.7	40	
Fluorene	0.432	0.02	ug/g dry	0.406			6.3	40	
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g dry	ND				40	
1-Methylnaphthalene	2.94	0.02	ug/g dry	2.59			12.4	40	
2-Methylnaphthalene	2.34	0.02	ug/g dry	2.18			7.0	40	
Naphthalene	0.543	0.02	ug/g dry	0.477			12.9	40	
Phenanthrene	0.276	0.02	ug/g dry	0.274			0.7	40	
Pyrene	0.044	0.02	ug/g dry	0.046			6.1	40	
Surrogate: 2-Fluorobiphenyl	*1.63*	*0.01*	*ug/g dry*	*ND*	*111*	*50-140*			
Surrogate: Terphenyl-d14	*1.58*	*0.01*	*ug/g dry*	*ND*	*108*	*50-140*			
Volatiles									
Benzene	ND	0.02	ug/g dry	ND				50	
Ethylbenzene	0.195	0.05	ug/g dry	0.195			0.4	50	
Toluene	ND	0.05	ug/g dry	ND				50	
m,p-Xylenes	2.96	0.05	ug/g dry	2.26			26.6	50	
o-Xylene	2.26	0.05	ug/g dry	2.10			7.6	50	
Surrogate: Toluene-d8	*9.57*		*ug/g dry*	*ND*	*91.6*	*50-140*			

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Client: **Nunatta Environmental Services Inc.**
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Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Nitrate as N	10.0	1	ug/g	ND	100	83-109			
General Inorganics									
Phosphorus, total	63.3	1.00	ug/g	ND	101	57-139			
Total Kjeldahl Nitrogen	519	10	ug/g	269	99.8	79-130			
Hydrocarbons									
F1 PHCs (C6-C10)	177	10	ug/g	ND	88.7	80-120			
F2 PHCs (C10-C16)	86	10	ug/g	ND	101	60-140			
F3 PHCs (C16-C34)	517	10	ug/g	249	126	60-140			
F4 PHCs (C34-C50)	205	10	ug/g	88	91.4	60-140			
Metals									
Antimony	40.7		ug/L	0.02	81.4	70-130			
Arsenic	37.9		ug/L	0.3	75.3	70-130			
Barium	62.3		ug/L	13.6	97.3	70-130			
Beryllium	43.0		ug/L	0.09	85.8	70-130			
Boron, available	4.70	0.5	ug/g	ND	94.1	70-122			
Cadmium	38.9		ug/L	0.009	77.8	70-130			
Chromium (VI)	4.7	0.4	ug/g	ND	93.5	89-123			
Chromium	55.8		ug/L	8.4	94.9	70-130			
Cobalt	48.2		ug/L	2.4	91.5	70-130			
Copper	50.4		ug/L	6.1	88.5	70-130			
Iron	9050		ug/L	8220	82.6	70-130			
Lead	51.9		ug/L	4.3	95.1	70-130			
Mercury	1.59	0.1	ug/g	ND	106	72-128			
Molybdenum	40.4		ug/L	0.3	80.3	70-130			
Nickel	48.8		ug/L	3.4	90.8	70-130			
Potassium	1090		ug/L	228	86.4	70-130			
Selenium	37.7		ug/L	0.1	75.2	70-130			
Silver	36.4		ug/L	0.04	72.7	70-130			
Thallium	48.5		ug/L	ND	97.1	70-130			
Tin	38.5		ug/L	0.2	76.7	70-130			
Uranium	46.9		ug/L	0.2	93.5	70-130			
Vanadium	65.6		ug/L	17.6	96.0	70-130			
Zinc	48.4		ug/L	12.0	72.9	70-130			
PCBs									
PCBs, total	0.527	0.05	ug/g	ND	119	60-140			
Surrogate: Decachlorobiphenyl	*0.110*		*ug/g*		*98.7*	*60-140*			
Semi-Volatiles									
Acenaphthene	0.152	0.02	ug/g	ND	91.1	50-140			
Acenaphthylene	0.155	0.02	ug/g	ND	93.2	50-140			
Anthracene	0.147	0.02	ug/g	ND	88.1	50-140			
Benzo [a] anthracene	0.189	0.02	ug/g	ND	114	50-140			
Benzo [a] pyrene	0.225	0.02	ug/g	ND	135	50-140			
Benzo [b] fluoranthene	0.198	0.02	ug/g	ND	119	50-140			
Benzo [g,h,i] perylene	0.221	0.02	ug/g	ND	132	50-140			
Benzo [k] fluoranthene	0.135	0.02	ug/g	ND	80.8	50-140			
Biphenyl	0.164	0.02	ug/g	ND	98.3	50-140			
Chrysene	0.153	0.02	ug/g	ND	91.9	50-140			

Certificate of Analysis
Client: **Nunatta Environmental Services Inc.**
Client PO:

Report Date: 18-Oct-2011
Order Date:12-Oct-2011
Project Description: Land Farm Soil Test #2

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Dibenzo [a,h] anthracene	0.180	0.02	ug/g	ND	108	50-140			
Fluoranthene	0.175	0.02	ug/g	ND	105	50-140			
Fluorene	0.174	0.02	ug/g	ND	104	50-140			
Indeno [1,2,3-cd] pyrene	0.215	0.02	ug/g	ND	129	50-140			
1-Methylnaphthalene	0.146	0.02	ug/g	ND	87.7	50-140			
2-Methylnaphthalene	0.178	0.02	ug/g	ND	107	50-140			
Naphthalene	0.150	0.02	ug/g	ND	90.0	50-140			
Phenanthrene	0.162	0.02	ug/g	ND	97.2	50-140			
Pyrene	0.184	0.02	ug/g	ND	110	50-140			
Volatiles									
Benzene	0.747	0.02	ug/g	ND		50-140			
Ethylbenzene	1.83	0.05	ug/g	ND		50-140			
Toluene	9.94	0.05	ug/g	ND		50-140			
m,p-Xylenes	5.70	0.05	ug/g	ND		50-140			
o-Xylene	2.35	0.05	ug/g	ND		50-140			

Certificate of Analysis

Report Date: 18-Oct-2011

Client: **Nunatta Environmental Services Inc.**

Order Date:12-Oct-2011

Client PO: Project Description: Land Farm Soil Test #2

Sample and QC Qualifiers Notes

1- BAC11 : Duplicate result for this sample analysis was determined to be ND.

2- H-01 : Holding time had been exceeded upon sample receipt.

4- QR-04 : Duplicate results exceeds RPD limits due to non-homogeneous matrix.

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

Soil results are reported on a dry weight basis when the units are denoted with 'dry'.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

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.

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Chain of Custody Record

№ 61097

Pg. 1 of 1

Company Name: Nunatta Environmental S
Contact Name: Jim Wilson
Address: Box 267, Bld 1575 Fred Ld Iqaluit
Tel: 867-979-1488 Cell: 867-222-4111
Email: nunatta@northwestel.net

Project Ref: Land farm Soil test2
PO# #2
Quote # _____ ☐Not Quoted

Preservative to be added by Paracel? ☐Yes ☐No

Date Required: _____

Turn Around Time: [ ] 1-day [ ] 2-day [X] Regular

Regulatory/Guideline Requirements

CCME

Matrix Types: S–Soil/Sed GW–Ground Water SW–Surface Water SS–Storm/Sanitary Sewer A-Air O-Other RDW-Regulated Drinking Water

	Sample Information					Analysis Required													
	Paracel Order # 1142097 / Sample Identification	Matrix	Air Volume	# Containers	Date Sampled dd/mm/yy	F1-F4	BTEX	Total organism	N.P.K. cont & pH	PCB	PAH	METALS							Hazardous? (Y/N)
1	1A South cell #1	S	0	1	Oct 0					X	X	X							/
2	1B North cell #1	S	0	1	5 pm					X	X	X							/
3	2A Middle cell #2	S	0	1						X	X	X							/
4	3a South cell #3	S	0	1															/
5	3b not Turned cell #3	S	0	1															/
6	3c North cell #3	S	0	1															/
7	4A South cell #4	S	0	1															/
8	4B North cell #4	S	0	1															/
9																			
10																			

Comments: This is 2nd set of tests required by Nunavut water board for year 2011. Plant count for ~~[illegible]~~ 'total organism' analysis per * Same analyses as WO# 1127164 Jim Wilson - MJC

Relinquished By:	Received at Depot:	Received at Lab:	Verified By:
James Wilson	T. Bouse	SUNEETA RN	
Date: Oct 13 Time: 10:00 AM	Date: 12/10/11 Time: 10:18 AM	Date: OCT 13 11 Time: 11:30	Date: Oct 13/11 Time: 7:43a

8.8 C

Please refer to the back page for Locations and Sample Preservation, Container and Hold Time Requirements.

WHITE - Lab Copy, PINK - Client Copy