

August 10, 2012

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Ms. Beaulieu,

RE: Windy Camp Landfarm Closure Report

Under Part I Item 4 of the Type B Water Licence 2BE-HOP1222 , the Nunavut Water Board (NWB) requests that Hope Bay Mining Ltd. (HBML) provide a written closure report for the landfarm that was removed from Windy Camp in 2008. This letter has been prepared to fulfill this licence requirement.

Part I Item 4 states: *The Licensee shall provide to the Board for review, within ninety (90) days of issuance of this Licence, a final closure report for the Landfarm facility operated at the Windy Camp Regional Exploration Project, that includes, but not limited to:*

- a. the original design of the facility;*
- b. materials deposited for treatment;*
- c. treatment operations;*
- d. monitoring results and summary of effluent discharged, remaining soil quality, monitoring results of soil sampling from under the former facility;*
- e. consideration of options for further treatment and closure;*
- f. final closure and reclamation completed, and*
- g. future monitoring of the site.*

History of the Windy Land Farm Facility

The Hope Bay Project, including the Windy Camp, was owned and operated by Miramar Hope Bay Ltd. (Miramar) until December 2007, at which time HBML acquired the project, and infrastructure.

The landfarm at the Windy Camp was constructed by Miramar for the treatment of hydrocarbon contaminated soils from a spill of approximately 19,000 L of diesel fuel (Spill 04-388) that occurred on June 16, 2004.

HBML removed the landfarm facility in the summer of 2008 when inspection revealed that the structure was becoming unstable. All materials were packaged and shipped off-site for disposal at an approved facility located in High Level, AB. The site has been inspected by Aboriginal Affairs and Northern Development Canada Water Resources Officers at least once per year since the landfarm was removed.

Original Design of the Facility

The landfarm facility was constructed using clean soils borrowed from below the impacted spill area after the contaminated material was stripped from the surface of the area (Figure 1). The 14 m wide by 33 m long facility was constructed approximately 25 m from the shore of Windy Lake at the south end of the camp area (Figure 2). The facility was lined with an HDPE liner.

Additional details of the spill, spill clean-up and landfarm construction are available in the *Windy Camp, Nunavut Diesel Fuel Spill Assessment and Remediation* report (EBA 2004) which is presented in Appendix A.

Materials Deposited for Treatment

According to the 2004 EBA spill assessment report, approximately 100 m³ of diesel contaminated soil was placed in the landfarm. Based on the 2006 and 2007 annual water licence reports prepared by Miramar, it appears that additional materials were added to the facility between 2004 and 2007. HBML does not have detailed information regarding these additional deposits to the landfarm by Miramar.

The sample results from the soils placed in the landfarm from the 2004 spill event are presented in Table 1. The sample locations identified in Table 1 are presented in Figure 3.

Treatment Operations

HBML does not have any records of the activities undertaken by Miramar to treat the soils within the landfarm. In the 2007 Landfarm Operations and Maintenance Manual, Miramar indicates that all soils from the 2004 spill were still being held in the landfarm facility. The 2007 annual water licence report indicates that remediation activities were not undertaken.

HBML did not undertake any landfarm treatment activities upon acquiring the project. Due to the environmentally inappropriate location of the facility and to concerns regarding the geotechnical stability of the facility, HBML began packing the contaminated soils for off-site shipment and dismantled the entire facility in July 2008.

Monitoring Results and Summary of Effluent Discharged, Remaining Soil Quality

HBML does not have a complete set of the monitoring results collected by Miramar from 2004 to 2007 for the landfarm effluent or soil. The results from the effluent samples collected by Miramar in 2006 and 2007 (only the data that HBML has on file from Miramar) and the samples collected by HBML in 2008 are presented in Table 2 and Appendix B. The soil sample results obtained by Miramar in 2006 (only the data that HBML has on file from Miramar) and by HBML in 2008 are presented in Table 3 and Appendix B.

Monitoring Results of Soil Sampling from Under the Former Facility

In 2009 and 2011, HBML completed a Phase 2 hydrocarbon assessment at Patch Laydown, Windy Camp, and Boston Camp, and a Phase 3 assessment at Patch Laydown and Windy Camp. Sampling locations and results of the 2010 assessment of the Windy Camp landfarm are included in Figure 4. Based on the Phase 3 assessment completed by EBA in 2011 (Appendix C), the former landfarm area does not require additional hydrocarbon remediation. Complete results of the Phase 3 assessment were submitted to the NWB on July 25, 2012 as part of the 2012 *Hope Bay Project Windy Camp and Patch Lake Facility Final Closure Plan*.

Consideration of Options for Further Treatment and Closure

Further treatment of the soils that had been contained within the land farm is not required as this material was shipped offsite for disposal at an approved landfill in High Level, AB in 2008. Based on the 2010 Phase 3 assessment of Windy Camp, the soils in the vicinity of the former landfarm are not hydrocarbon contaminated; therefore, additional treatment will not be required.

Final Closure and Reclamation Completed

The contaminated soil from within the landfarm was removed in July 2008 to be shipped south for treatment and the facility taken out of service. The area was covered in coconut mat to prevent erosion. The dismantling and disposal activities were reported to the NWB in two letters in 2008 (Appendix D) and the 2008 Annual Report for 2BE-HOP0712.

In 2012, HBML noted erosion issues in the former landfarm area and has stabilized the area using coconut mat. The area is naturally re-vegetating (Figure 4). Visual monitoring of erosion and re-vegetation is ongoing.

Future Monitoring of the Site

Since the former landfarm area is not hydrocarbon contaminated (based on the Phase 3 assessment), HBML will not be required to complete additional treatment or excavations in the area. Maintaining stability will be an important activity as the Windy Camp is reclaimed. HBML will continue to visually monitor for erosion and re-vegetation of the area.

HBML will include the former land farm area in the post-closure monitoring for the entire Windy Camp facility after the reclamation is completed.

Closure

HBML expects that this information summary meets the requirements of Part I Item 4 requesting a final closure report for the Windy landfarm. If you have questions or concerns regarding this report, please do not hesitate to contact Chris Hanks, VP Environmental Affairs (Chris.Hanks@Newmont.com or 720-917-4489) or Angela Holzapfel, Manager of Environmental Compliance (Angela.Holzapfel@Newmont.com or 604-345-3122).

Sincerely,

Angela Holzapfel
Manager of Environmental Compliance
Environment and Social Responsibility

Figures

Figure 1: Location of spill zone, which was location where landfarm was constructed after the spill, EBA 2004

Figure 2: As-built of landfarm, EBA 2004

Figure 3: Soil sample locations, EBA 2004

Figure 4: Soil sample locations and results for former landfarm area, EBA 2011

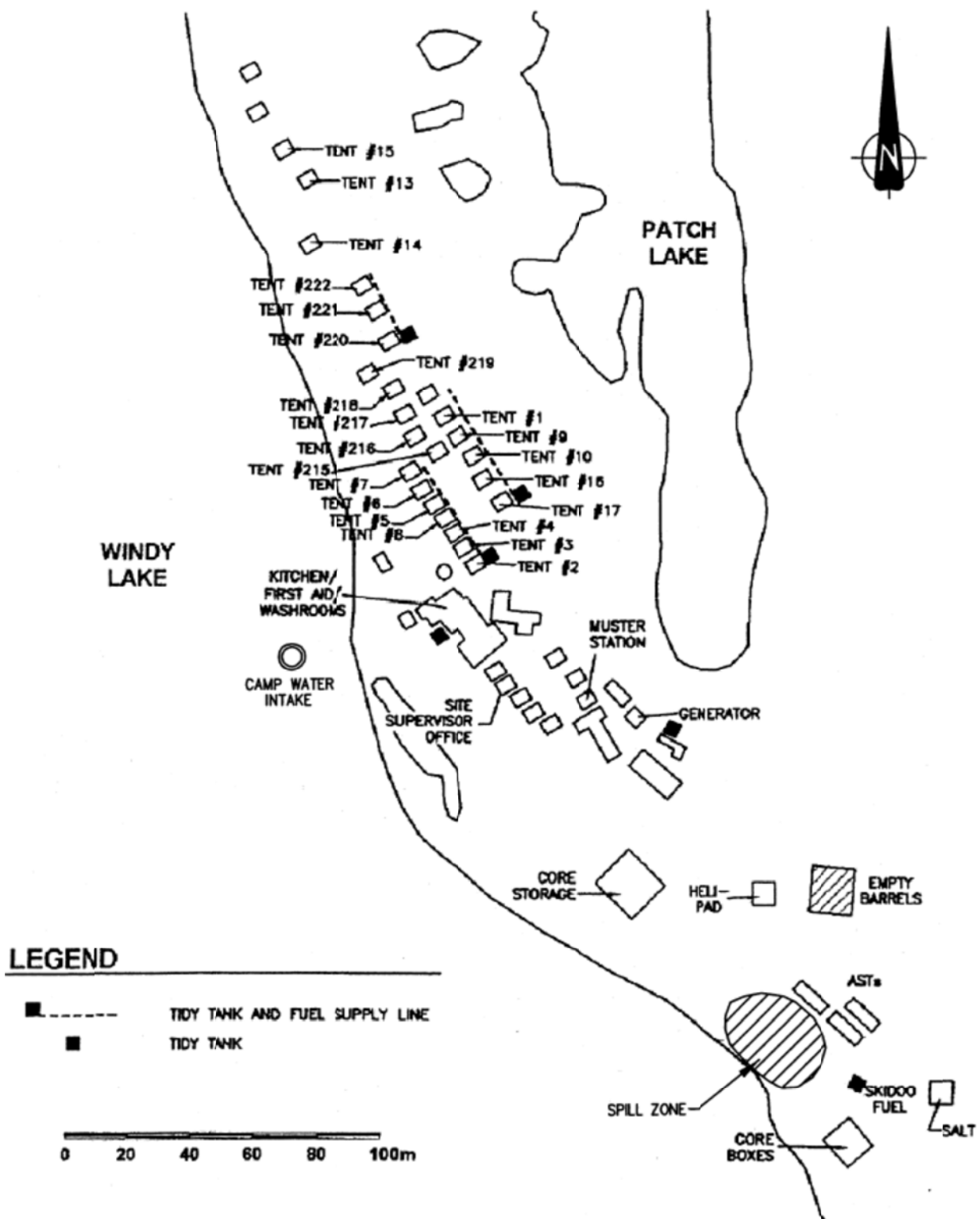


Figure 1: Location of spill zone, which was location where landfarm was constructed after the spill, EBA 2004

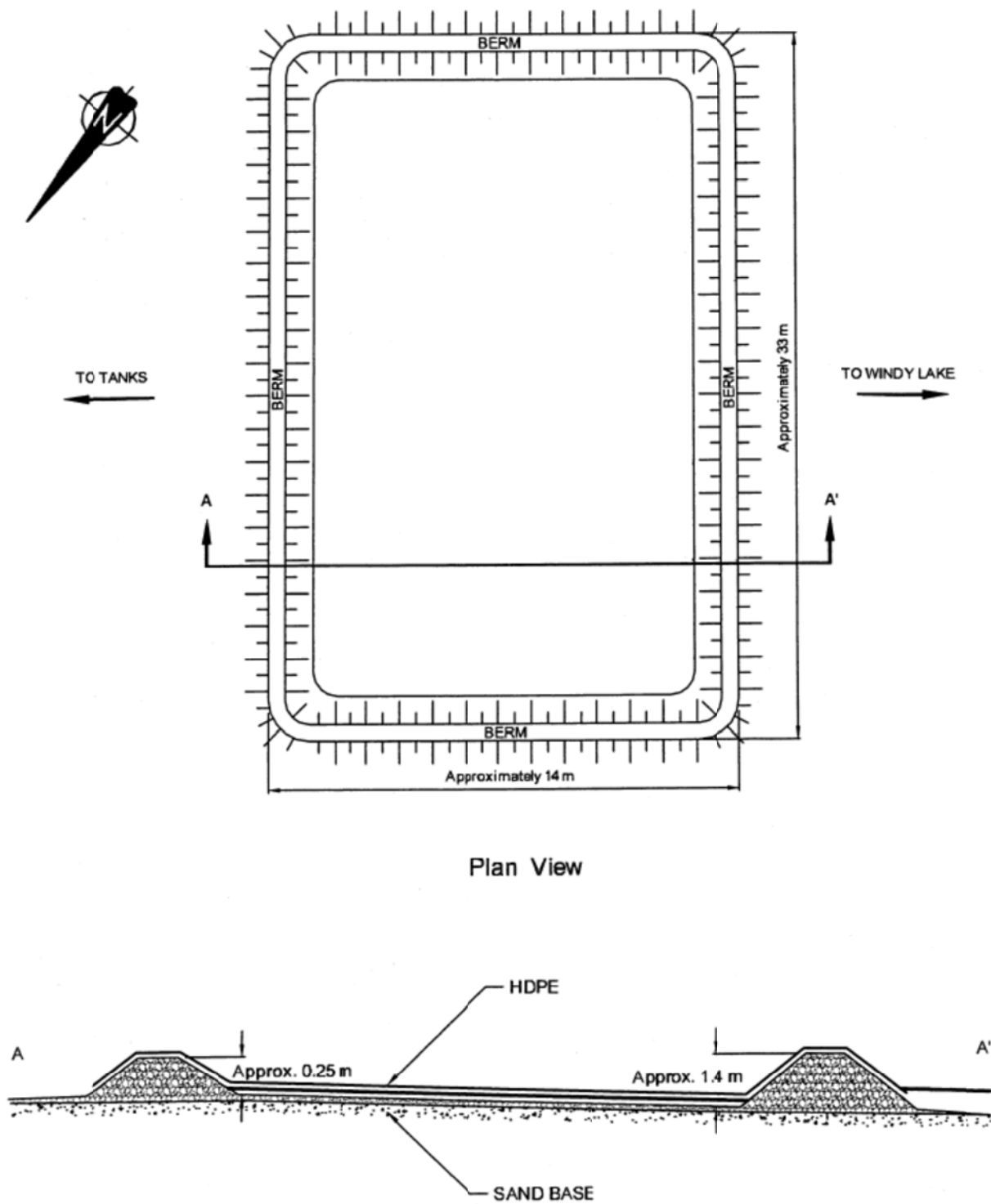


Figure 2: As-built of landfarm, EBA 2004

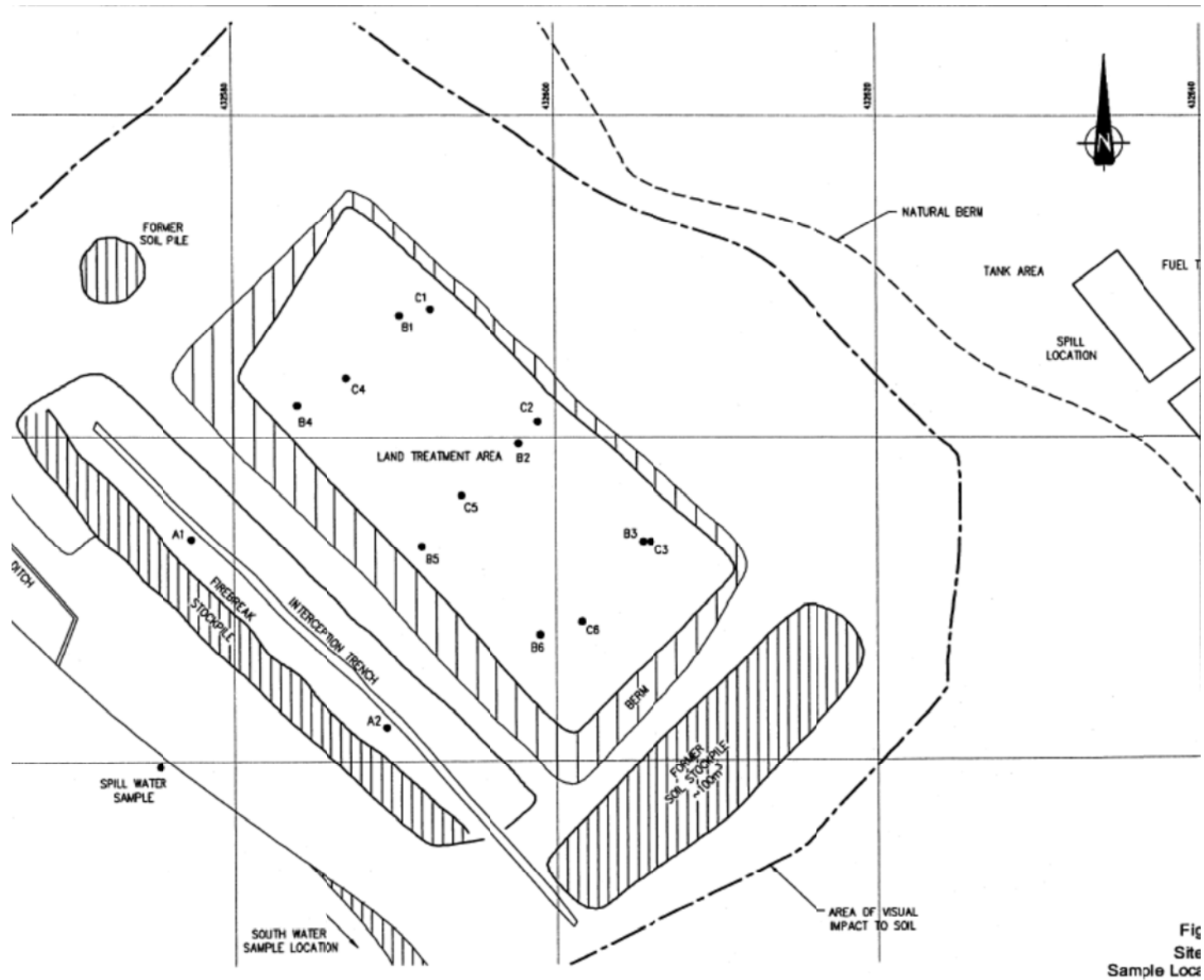


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Figure 3: Soil sample locations, EBA 2004

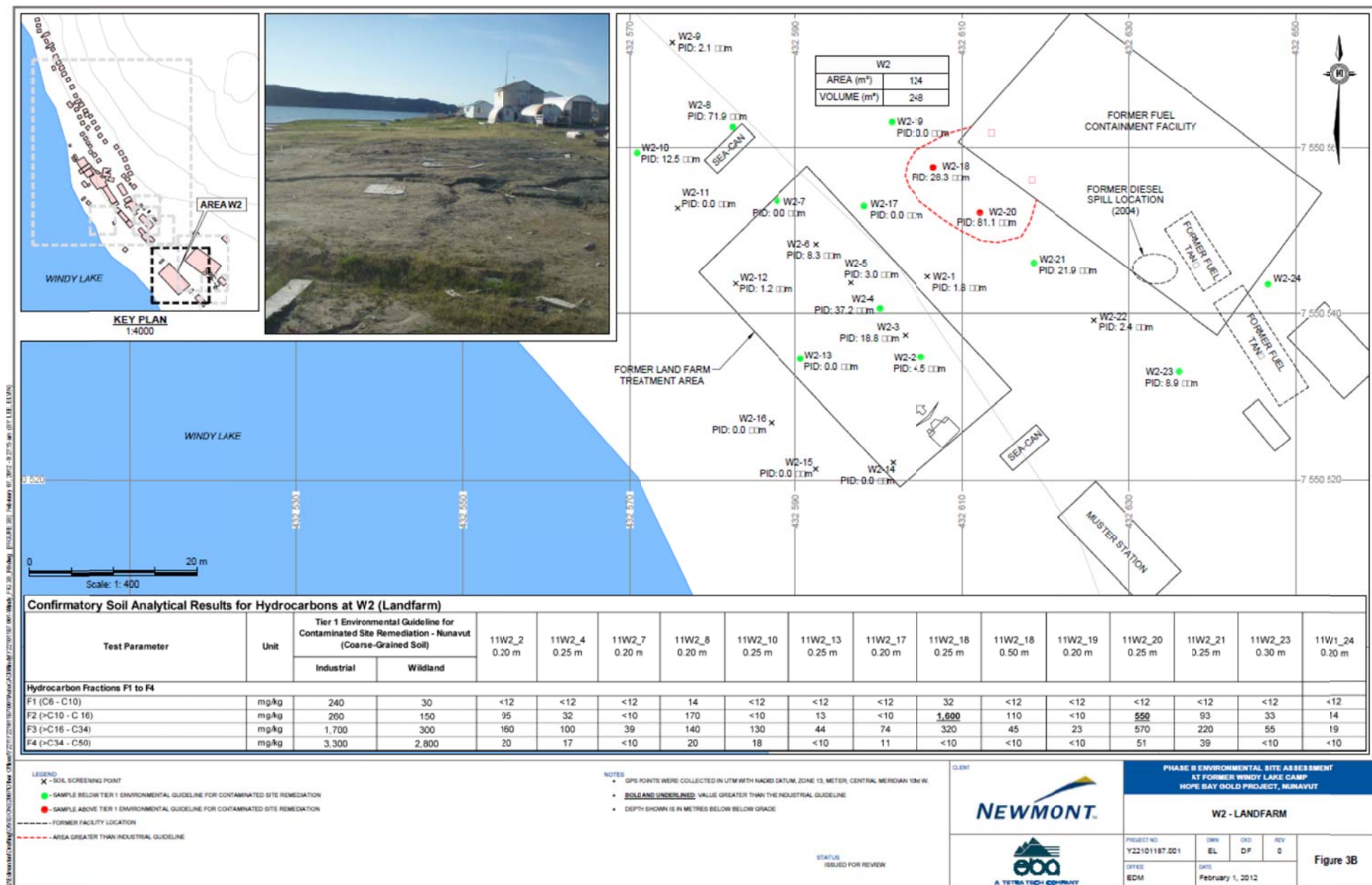


Figure 4: Soil sample locations and results for former land farm area, EBA 2011

Tables

Table 1: 2004 Soil sample results from spill event, EBA 2004

Table 2: Landfarm effluent monitoring results, 2006 to 2008

Table 3: Landfarm soil sampling results, 2006 and 2008

Table 1: 2004 Soil sample results from spill event, EBA 2004

Parameters	Units	June 19, 2004			June 26, 2004						Guideline	
		Worst Case	A1	A2	B1	B2	B3	B4	B5	B6		Value
Benzene	mg/kg	<0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	CCME	0.5
Toluene	mg/kg	<0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	CCME	0.1
Ethylbenzene	mg/kg	<0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	CCME	0.1
Total Xylenes (o,m & p)	mg/kg	<0.06	<0.01	0.03	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	CCME	0.1
Fraction 1 (C ₆ -C ₁₀)(-BTX)	mg/kg	<5	<5	<5	<5	<5	<5	<5	<5	<5	CWS	30
Fraction 2 (C ₁₀ -C ₁₆)	mg/kg	<5	<5	<5	<5	110	49	<5	12	<5	CWS	150
Fraction 3 (C ₁₆ -C ₃₄)	mg/kg	240	<5	13	<5	990	32	19	24	16	CWS	400
Fraction 4 (C ₃₄ +))	mg/kg	220	21	<5	11	430	<5	5	<5	<5	CWS	2800
Soil Moisture Content	%	73	20	20	16	21	19	17	19	18	NC	NC

Parameters	Units	June 30, 2004								Guideline		
		C1	C2	C3	C4	C5	C6	Worst Case2	Tank Area	Composite		Value
Benzene	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	<0.01		CCME	0.5
Toluene	mg/kg	<0.01	<0.01	<0.01	<0.01	0.07	<0.01	0.1	<0.01		CCME	0.1
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	<0.01	0.1	<0.01	0.04	<0.01		CCME	0.1
Total Xylenes (o,m & p)	mg/kg	<0.01	<0.01	0.07	<0.01	1.1	<0.01	0.21	<0.01		CCME	0.1
Fraction 1 (C ₆ -C ₁₀)(-BTX)	mg/kg	<5	<5	<5	<5	25	<5	37	<5		CWS	30
Fraction 2 (C ₁₀ -C ₁₆)	mg/kg	22	<5	<5	170	140	<5	190000	100		CWS	150
Fraction 3 (C ₁₆ -C ₃₄)	mg/kg	13	27	27	26	28	13	46000	160		CWS	400
Fraction 4 (C ₃₄ +))	mg/kg	8	10	10	11	10	5	5300	33		CWS	2800
Soil Moisture Content	%										NC	NC
Particle Size Analysis (hydrometer)												
MUST PSA D50 > 75 um	%									71	NC	NC

Notes:

Canadian Council of Ministers of the Environment (CCME). 2001. Canadian Environmental Quality Guidelines for the protection of Freshwater Aquatic Life (FAL).

NC - No criteria established by Alberta Environment.

Blank - Not analyzed.

Underlined - Greater than established criteria

Table 2: Landfarm effluent monitoring results, 2006 to 2008

Parameters	Samples											
ALS Lab Reference #	L420839-1	L420839-2	L420839-3	L420839-4	L516797-8	L524586-1	L527067-3	L527067-4	L527067-1	L527067-2	L654816-2	L654816-1
Field Sample Details	WINDY CAMP LTA	WINDY CAMP LTA-SOUTH	WINDY CAMP LTA-NORTH	WINDY CAMP LTA-IMPACT AREA	10-LTA	WCLTA-1-2	WCLTA-2-3	WCLTA-2-4	WCLTA-1	WCLTA-2	HOP-4A (pre-treatment)	HOP-4B (post-treatment)
Sample Date/Time	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	09-Jun-07	26-Jun-07	27-Jun-07	28-Jun-07	03-Jul-07	03-Jul-07	09-Jul-08	09-Jul-08
Benzene (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.0063	<0.00050	<0.00050	<0.00050	0.0132	<0.00050	<0.11	<0.020
Toluene (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.033	<0.00050	<0.00050	<0.00050	0.0276	<0.00050	<0.11	<0.020
Ethylbenzene (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005	0.00675	<0.00050	<0.00050	<0.00050	0.00058	<0.00050	<0.11	<0.020
Oil and Grease (mg/L)											813	2
Phenols (mg/L)											0.648	0.101
Sulphate (mg/L)	246	9	8.7	8	33.9	305	290	324	364	30.2	-	-
Total Lead (mg/L)	0.0013	0.0003	0.0003	0.0002	0.0019	-	-	-	-	-	0.0035	0.0015

Note: complete lab results are available in Appendix B

Table 3: Landfarm soil sampling results, 2006 and 2008

Parameters	Samples																
ALS Lab Reference #	L420839-5	L420839-6	L420839-7	L420839-8	L420839-9	L420839-10	L420839-11	L420839-12	L420839-13	L420839-14	L420839-15	L420839-16	L703160-1	L703160-2	L703160-3	L703160-4	L703160-5
Field Sample Details	WINDY CAMP LTA#A	WINDY CAMP LTA #B	WINDY CAMP LTA #C	WINDY CAMP LTA #0	WINDY CAMP LTA#E	WINDY CAMP LTA#F	WINDY CAMP LTA #G	WINDY CAMP LTA #H	WINDY CAMP LTA#I	WINDY CAMP LTA#J	WINDY CAMP LTA#K	WINDY CAMP LTA#L	WLTA-S01	WLTA-S02	WLTA-S03	WLTA-S04	WLTA-S05
Sample Date/Time	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	04-Aug-06	30-Oct-08	30-Oct-08	30-Oct-08	30-Oct-08	30-Oct-08
Benzene (mg/kg)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene (mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Ethylbenzene (mg/kg)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Total Petroleum Hydrocarbons (mg/kg)	900	370	1200	940	640	770	1100	170	1900	510	230	110	80	190	60	80	120
Total Lead (mg/kg)													<5	<5	<5	<5	<5

Note: complete lab results are available in Appendix B. 2008 samples were collected for offsite disposal characterization.