NWB Annual Report **Year being reported:** 2007

License No: 1BR-SAR0607 **Issued Date:** July 14, 2006
Expiry Date: December 31, 2007

Project Name: CAM-F Sarcpa Lake Remediation Project

Licensee: Indian and Northern Affairs Canada

Mailing Address:
PO Box 2200
Iqaluit NU
X0A 0H0

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

General Background Information on the Project (*optional):

The CAM-F Intermediate Distant Early Warning (DEW) Line Site was constructed in 1957 and subsequently abandoned in 1963. It was converted to a scientific research station in 1977 under the Science Institute of the Northwest Territories and Canada, Department of Indian and Northern Affairs and operated seasonally until 1988. The site is located on the Melville Peninsula, approximately 85 km west of Hall Beach, and 100 km south-west of Igloolik, Nunavut.

Both years of the planned two year remediation phase of the CAM-F Sarcpa Lake Remediation Project have been completed. The only aspect of the project that remains to be completed is the demobilization which is scheduled for March/April 2008.

Licence Requirements: the licensee must provide the following information in accodance with

Part B Item 2

A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):
Water Body Near Airstrip
Water Body North West of Secure Soil Disposal Facility
Sarcpa Lake (See daily water log on pages 14-15)

Water Quantity:	
1,500/year	Quantity Allowable Domestic (cu.m)
1,058.440/year	Actual Quantity Used Domestic (cu.m)
	Quantity Allowable Drilling (cu.m)
	Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

- [x] Solid Waste Disposal
- [x] Sewage
- [ ] Drill Waste
- [x] Greywater
- [x] Hazardous
- [ ] Other:

Additional Details:

Soild waste from the Camp was landfilled in the Non-Hazardous Waste Landfill. Sewage and Greywater was treated with the Biogreen treatment unit and transferred into a temporary sewage lagoon where it was treated with chlorine and alum. Once Discharge Criteria were met the wastewater was discharged, after the final wastewater discharge the lagoon was backfilled and closed. Wastewater from the processing of barrels was directed to storage ponds where it was treated, sampled and discharged upon meeting the Wastewater Discharge Criteria. All Hazardous Wastes were properly packaged and stored; these will be shipped to southern disposal facilities in 2008. The CEPA soils are going to Récupère Sol Inc. in Saint-Ambroise, Quebec, the PCB amended materials are going to Material Resource Recovery in Cornwall, Ontario, and the consolidated waste from the drums is going to Recubec in Montreal, Quebec. Analytical results can be found in Appendix 2.

A list of unauthorized discharges and a summary of follow-up actions taken.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: June 18, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 10 litres of motor oil was spilled near the temporary PCB Storage Area when a dozer struck a barrel. The contaminated snow was collected and containerized.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: June 28, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 30 litres of hydraulic oil was spilled within the Secure Soil Disposal Facility when a hydraulic line on a piece of heavy equipment broke. The spill was contained and cleaned using absorbent pads. The absorbent pads and contaminated soil were containerized for disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 3, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 10 litres of hydraulic oil was spilled near the Garage when one of the excavator's hydraulic lines broke. The spill was contained and cleaned using absorbent pads. The absorbent pads and contaminated soil were containerized for disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 5, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 10 litres of oil was spilled within Borrow Area #6 when a barrel was struck by a piece of heavy equipment. The spill was contained and cleaned using absorbent pads. The absorbent pads and contaminated soil were containerized for disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 6, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 0.5 litres of engine oil was spilled on the Camp Access Road due to a loose hose on an all-terrain-vehicle. Granular absorbent was spread on the spill, absorbent and soil were containerized for disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 8, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 5 litres of hydraulic oil was spilled on the east side of the Secure Soil Disposal Facility when a hydraulic hose on a piece of heavy equipment split. The spill was contained and cleaned using absorbent pads. The absorbent pads and contaminated soil were containerized for disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 9, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 4 litres of diesel fuel was spilled in the Station Area due to the expansion of fuel in the generator over the winter. Absorbent pads were used to collect the liquid and the soil was excavated and containerized for disposal.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 10, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

The sewage line disconnected during leveling and an unquantified volume of sewage spilled. The line was repaied and the impacted area was covered with 300mm of clean fill material.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 12, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

The July 10th repair failed and an unknown quantity of sewage leaked. The line was repaired and the impacted area was covered with 30mm of clean fill material.

Spill No.: N/A (as reported to the Spill Hot-line)
Date of Spill: July 14, 2007
Date of Notification to an Inspector: N/A
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Approximately 10 litres of fuel spilled in the area of the POL Tank line when the line was cut at a low point. The vacuum unit was used to collect the free product and the contaminated soil was excavated and containerized for disposal.

Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed

Additional Details:

Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed

Additional Details:

Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

WORK COMPLETED

- Camp set up
  - Initial levelling
  - Access road improvement
  - Generator set up
  - Camp module installation
  - Waste water lagoon construction
  - Fuel storage facility construction
  - Communication system set up and operation
  - Incinerator set up and operation
  - Closure
- Debris removal and disposal
  - Assessment of debris
  - Collection and disposal of non-hazardous debris
    - Scattered debris (2000 cubic metres)
    - Drums (~10,000)
  - Consolidation of liquids in drums, equipment & tanks
  - Cleaning of contaminated debris
  - Treatment of contaminated water from cleaning
  - Debris removal in and around Sarcpa Lake using a barge and tugboat
    - Drums (~700), wood & steel (See pages 10-13 for more information)
  - All debris was disposed of in the Non-Hazardous Waste Landfill
- Demolition work
  - Asbestos removal
  - PCB contaminated concrete removal & containerization
  - PCB amended painted material removal & containerization
  - Structural demolition (Module Train, Warehouse, Garage, POL Tanks, Quonset House)
  - Renovation of the Inuit House into a Hunting Shelter for use by the Hall Beach HTO
  - Hazardous materials have been packaged for disposal at a southern facility and will be shipped off site in March/April 2008
- Construction of disposal facilities and waste processing area
  - Initial survey & facility location
  - Borrow area development
  - Key trench excavation
  - Granular material production placement and compaction
  - Construction of water lagoon and lined processing area
  - Closure of water lagoon and lined processing area
  - Secure Soil Disposal Facility construction completed
    - Contains 3444 cubic metres of soil
  - Non-Hazardous Waste Landfill completed
    - Contains ~3000 cubic metres of non-hazardous debris

FUTURE WORK PROPOSED

- Demobilization (April 2008)
  - Remove equipment from site
  - Transport hazardous material south for proper disposal
- Long-Term Monitoring (August 2008)
  - Start 25-year long-term monitoring plan

Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details attached

Additional Details:

See GPS Co-ordinates on page 9

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;

Details attached

Additional Details:

See GPS Co-ordinates on page 9

Results of any additional sampling and/or analysis that was requested by an Inspector

No additional sampling requested by an Inspector or the Board

Additional Details: (date of request, analysis of results, data attached, etc)

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

No additional sampling requested by an Inspector or the Board

Additional Details: (Attached or provided below)

Any responses or follow-up actions on inspection/compliance reports

Inspection and Compliance Report received by the Licensee (Date):

Additional Details: (Dates of Report, Follow-up by the Licensee)

Report received December 13, 2007 for inspection completed July 15,2007. The report noted 7 non-compliance items; these, along with INAC's response are detailed below:

1. Location of the treatment facility where hazardous wastes generated or marshalled on site are to be shipped- to be included in annual report.
   - This information was not available at the time of the inspection. We have since determined that the hazardous wastes will be shipped to three facilities as detailed below:
     * CEPA soils - Récupère Sol Inc. in Saint-Ambroise, Quebec
     * PCB amended materials - Material Resource Recovery in Cornwall, Ontario
     * Consolidated waste from drums - Recubec in Montreal, Quebec
2. Submission of a revised Spill Contingency Plans and approval of the Nunavut Water Board as addendum to 2007 annual report.
   - A copy of the submitted Spill Contingency Plan was provided to the inspector.
3. Installation of metering system to accurately record water use.
   - Site operations have concluded.
4. Submission of the GPS coordinates and sample results for all waste water effluent discharged under the current license.
   - This information was provided in the 2006 Annual Report and again in this report
5. Submission of the Post-Closure monitoring Plan for the approval of the Nunavut Water Board
   - This plan was submitted to the Nunavut Water Board on January 23, 2008. The plan was delayed because the facilities to be monitored had to be constructed and the as-built drawings completed.
6. As-Built Drawings as required – Part E Section 8
   - As-built drawings could not be submitted in the 2006 report because the facilities were not complete. These have been included in Appendix 2 of this report.
7. Submission of site for disposal of Sewage Sludge generated during the course of the project.
   - No sewage sludge will be disposed of on-site. It will either be disposed of at the Hall Beach hamlet facility or shipped south.

Any additional comments or information for the Board to consider

No additional contaminated soil or hazardous materials were encountered during the 2007 field season. The additional debris located in and around Sarcpa Lake was collected and placed into the Non-Hazardous Waste Landfill. Further information on the additional debris is provided in Appendix 2. Photographs of the Non-Hazardous Waste Landfill and the Secure Soil Disposal Facility can be found on page 16, the as-built drawings for these facilities are in Appendix 1.

Date Submitted:	March 28, 2008	
Submitted/Prepared by:	Natalie Plato	
Contact Information:	**Tel:**	(867) 975-4730
	Fax:	(867) 975-4736
	email:	platon@inac-ainc.gc.ca

GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	Deg °	Min ?	Sec ?	Deg °	Min ?	Sec ?
Water Body Near Airstrip	68	33	0	83	19	19
Water Body Northwest of Secure Soil Disposal Facility	68	32	53	83	18	37
Sarcpa Lake	68	31	59	83	15	50

GPS Locations of areas of waste disposal

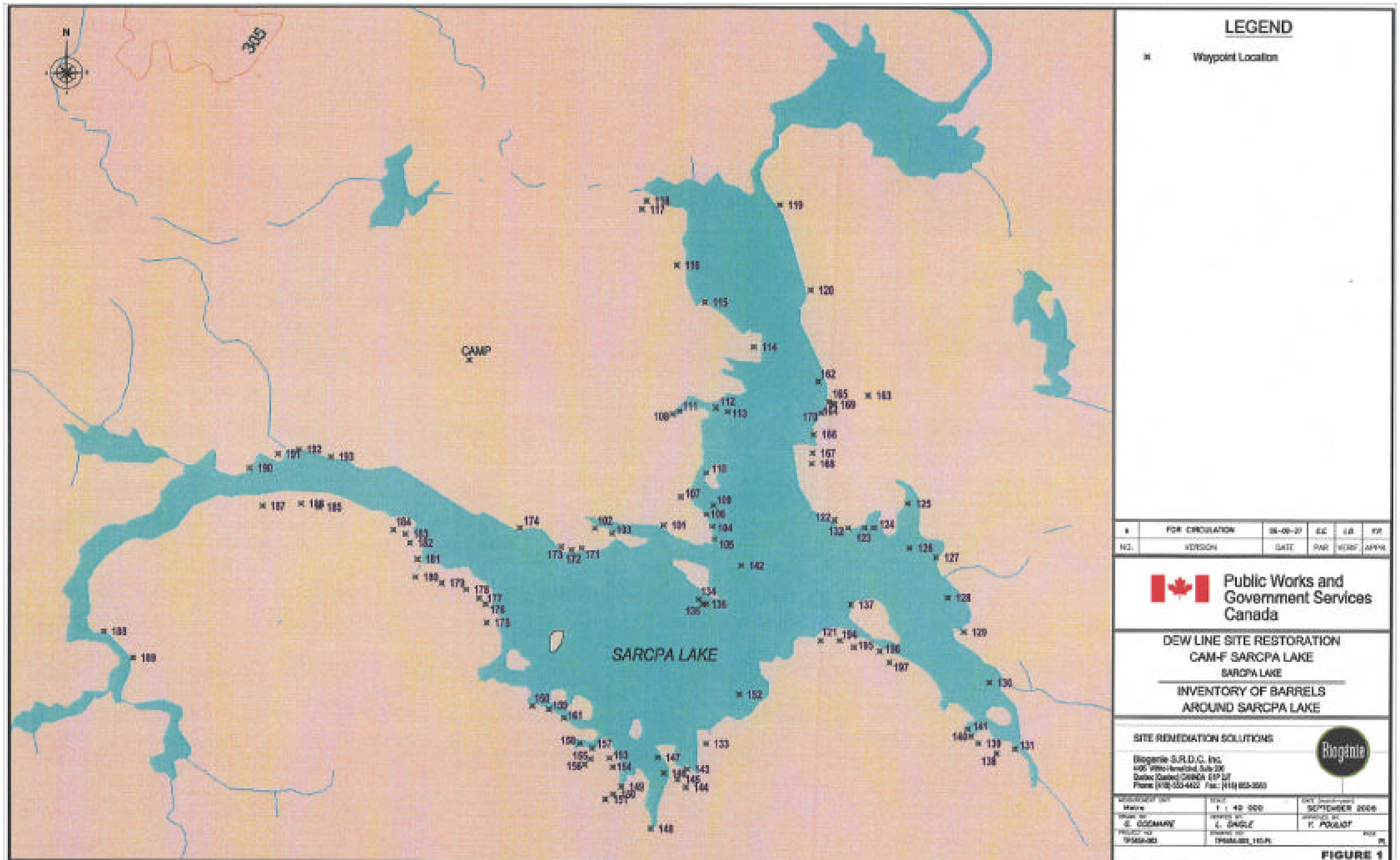
Location Description (type)	Latitude			Longitude		
	Deg °	Min ?	Sec ?	Deg °	Min ?	Sec ?
Non-Hazardous Landfill	68	33	6	83	18	50
Temporary Sewage Lagoon	68	32	57	83	19	0
Waste water discharge point	68	33	5	83	18	52
Secure Soil Disposal Facility	68	32	47	83	18	19

INVENTORY OF DEBRIS AROUND SARCPA

LOCATION WP #	# OF BARRELS ON/IN		COLLECTION COMPLETE	COMMENTS
	SHORE	WATER		
100				Camp
101				Dock
102	5		x	Located on shore of bay
103		1	x	Broken barrel in water 10m from shore
104	3		x	On peninsula
105		2	x	2 to 3 pieces at bottom - rusted and disintegrating
106		1	x	Barrel ends
107		1	x	Barrel ends
108	11	1	x	Barrel ends in water barrels on shore in 3 areas
109		1	x	Barrel ends
110		1	x	Barrel on side
111	4		x	On hillside
112	1		x	Motor and barrel on shore
113	3	1	x	Barrel rim in water + 3 barrels on shore
114	1		x	North of this WP board still to be picked up
115	1		x	
116	1		x	
117	1		x	Before waterfall on rock bluff
118	1		x	Located past waterfall
119	2		x	On shore near rapids 20m East of the point
120	8		x	
121	56		x	Barrels between WP 121 & WP 133 need to be removed
122		1	x	Barrel rim
123	4	1	x	
124	4	1	x	1 rim in water, 2 half barrels and 3 full barrels on shore
125	4		x	1 blue plastic barrel at end of bay and 3 on shoreline
126	1		x	
127	5		x	
128	2		x	
129	5		x	spread out on shoreline
130	18		x	
131	7		x	
Island 1	19		x	Island across from Borrow Area 6
Island 2	2	1	x	Island adjacent to island across from Borrow Area 6
132	1		x	collection to be confirmed
133	20		x	end point of WP 121
End of Lake	14	1	x	At far south end of lake
134		1	x	Half barrel in water
135			x	Pieces of barrel in water 1.5m from shore
136	3		x	
137	20		x	lots of wood pieces along with 20 barrels all over island

138	1		x	
139	2		x	
140	5		x	FULL barrels on shore in bay
141	1		x	
142	1		x	island
143	2		x	
144	1		x	in the small bay
145	1		x	
146	1		x	
147	1		x	
148	2		x	
149	9		x	very rocky and shallow no barge access in this area
150	5		x	very rocky and shallow no barge access in this area
151	8		x	very rocky and shallow no barge access in this area
152	1		x	
153	1		x	
154	1		x	
155	2		x	
156	5		x	
157	1		x	
158	2		x	
159	1		x	
160	5		x	
161	1		x	
162	53		x	Borrow area 7
163	9		x	Borrow area 7
164	8		x	Borrow area 7
165	32		x	Borrow area 7
166	27		x	Borrow area 7
167	13		x	Borrow area 7
168	8		x	Borrow area 7
169	46		x	Borrow area 7
170			x	3 pieces of debris - Borrow Area 7
171			x	2 pieces of debris - Borrow Area 7
172	1		x	
173	15		x	15 on shore+ 1 half barrel
174			x	1 barrel ring on shore
175	1		x	
176	1		x	
177	0.5		x	half barrel on shore
178	2		x	
179	1		x	
180	3		x	
181	2		x	
182	1		x	

183	1		x	
184	1		x	
185	1		x	
186	1		x	
187	4		x	3 large barrels + one small barrel
188	1		x	
189	11		x	
190			x	End of Inventory
191	1		x	
192	5		x	Cab of dozer in water - Borrow Area 3
193	1		x	
194	80		x	
195	8		x	shore line south of WP 121
196	4		x	
197	2		x	
TOTALS	**631.5**	**15**	**646.5**	


LEGEND
Waypoint Location
SARCPA LAKE
CAMP
305
N
FOR CIRCULATION
VERSION
DATE
Public Works and Government Services Canada
DEW LINE SITE RESTORATION
CAM-F SARCPA LAKE
SARCPA LAKE
INVENTORY OF BARRELS
AROUND SARCPA LAKE
SITE REMEDIATION SOLUTIONS
Biogenie S.R.D.C. Inc.
Biogénie
1 : 40 000
SEPTEMBER 2006
FIGURE 1

CAM-F DEW Line Restoration
2007 Work Season
Water Usage for Camp / remediation activities from Sarcpa Lake source
(Latitude: 68d 31' 59" and Longitude: 83d 15' 50")

	Camp Use		Waste processing	Dust suppression	Granular material conditioning	Heavy equipment Cleaning
Day (June 2007)	Volume L		Volume L	Volume L	Volume L	Volume L
11-Jun-07	0	+BW				
12-Jun-07	0	+BW				
13-Jun-07	400	+BW				
14-Jun-07	400	+BW				
15-Jun-07	400	+BW				
16-Jun-07	800	+BW				
17-Jun-07	800	+BW				
18-Jun-07	6,500	+BW				
19-Jun-07	1,900	+BW				
20-Jun-07	5,700	+BW				
21-Jun-07	4,700	+BW				
22-Jun-07	4,700	+BW				
23-Jun-07	5,600	+BW				
24-Jun-07	10,215	+BW				
25-Jun-07	8,000	+BW				
26-Jun-07	11,350	+BW				
27-Jun-07	0	+BW			8,000	
28-Jun-07	13,600	+BW			8,000	
29-Jun-07	0	+BW			8,000	
30-Jun-07	4,500	+BW			8,000	
01-Jul-07	4,500	+BW			8,000	
02-Jul-07	7,875	+BW			8,000	
03-Jul-07	12,375	+BW			15,000	
04-Jul-07	18,000	+BW			4,500	
05-Jul-07	5,063	+BW			500	
06-Jul-07	10,125	+BW			4,000	
07-Jul-07	0	+BW			14,500	
08-Jul-07	19,690	+BW				
09-Jul-07	4,500	+BW				
10-Jul-07	14,063	+BW				
11-Jul-07	3,375	+BW				
12-Jul-07	6,750	+BW			400	
13-Jul-07	12,935	+BW				
14-Jul-07	8,440	+BW		6,500		
15-Jul-07	8,440	+BW		6,000		
16-Jul-07	9,000	+BW		6,000		
17-Jul-07	16,650	+BW		4,000		
18-Jul-07	9,000	+BW		5,000		
19-Jul-07	0	+BW		2,000		
20-Jul-07	17,438	+BW		13,000		
21-Jul-07	7,875	+BW		9,000		
22-Jul-07	5,625	+BW				
23-Jul-07	12,937	+BW				
24-Jul-07	4,500	+BW				
25-Jul-07	10,125	+BW				
26-Jul-07	5,625	+BW				
27-Jul-07	7,875	+BW				
28-Jul-07	11,813	+BW				
29-Jul-07	8,438					
30-Jul-07						
31-Jul-07	14,625					
01-Aug-07	4,500					
02-Aug-07	3,150		1,000			
03-Aug-07	4,500					
04-Aug-07	8,438					
05-Aug-07	6,188					

06-Aug-07	5,625	2,000			
07-Aug-07	0	2,000			
08-Aug-07	12,938	2,000			
09-Aug-07	0	400			
10-Aug-07	10,125				
11-Aug-07	15,187				
12-Aug-07	7,313				
13-Aug-07	14,625				
14-Aug-07	13,500				
15-Aug-07	16,875				
16-Aug-07	11,813				
17-Aug-07	9,000				
18-Aug-07	11,250				
19-Aug-07	1,688				
20-Aug-07	14,625				
21-Aug-07	21,938				
22-Aug-07	10,125				
23-Aug-07	0				
24-Aug-07	12,375				
25-Aug-07	15,188				
26-Aug-07	10,688				
27-Aug-07	0				
28-Aug-07	0				
29-Aug-07	0				
30-Aug-07	7,875				
31-Aug-07	0				
01-Sep-07	7,875				
02-Sep-07	10,125				
03-Sep-07	6,750				
04-Sep-07	2,813				
05-Sep-07	0				
06-Sep-07	9,563				
07-Sep-07	22,500				
08-Sep-07	14,063				
09-Sep-07	14,062				
10-Sep-07	5,625				
11-Sep-07	20,813				
12-Sep-07	14,063				
13-Sep-07	19,688				
14-Sep-07	20,813				
15-Sep-07	19,125				
16-Sep-07	20,700				
17-Sep-07	11,925				
18-Sep-07	13,950				
19-Sep-07	12,375				
20-Sep-07	19,125				
21-Sep-07	18,000				
22-Sep-07	11,250				
23-Sep-07	10,688				
Total: (litre)	**528,644**	**6,400**	**0**	**0**	**0**
Total: (cu.m)	**528.64**	**6.40**	**0.00**	**0.00**	**0.00**
Grand Total (cu.m)	**535.04**				
Daily average (cu.m) :	**5.03**				

BW: Bottled water from Igloolik

PHOTOGRAPHS

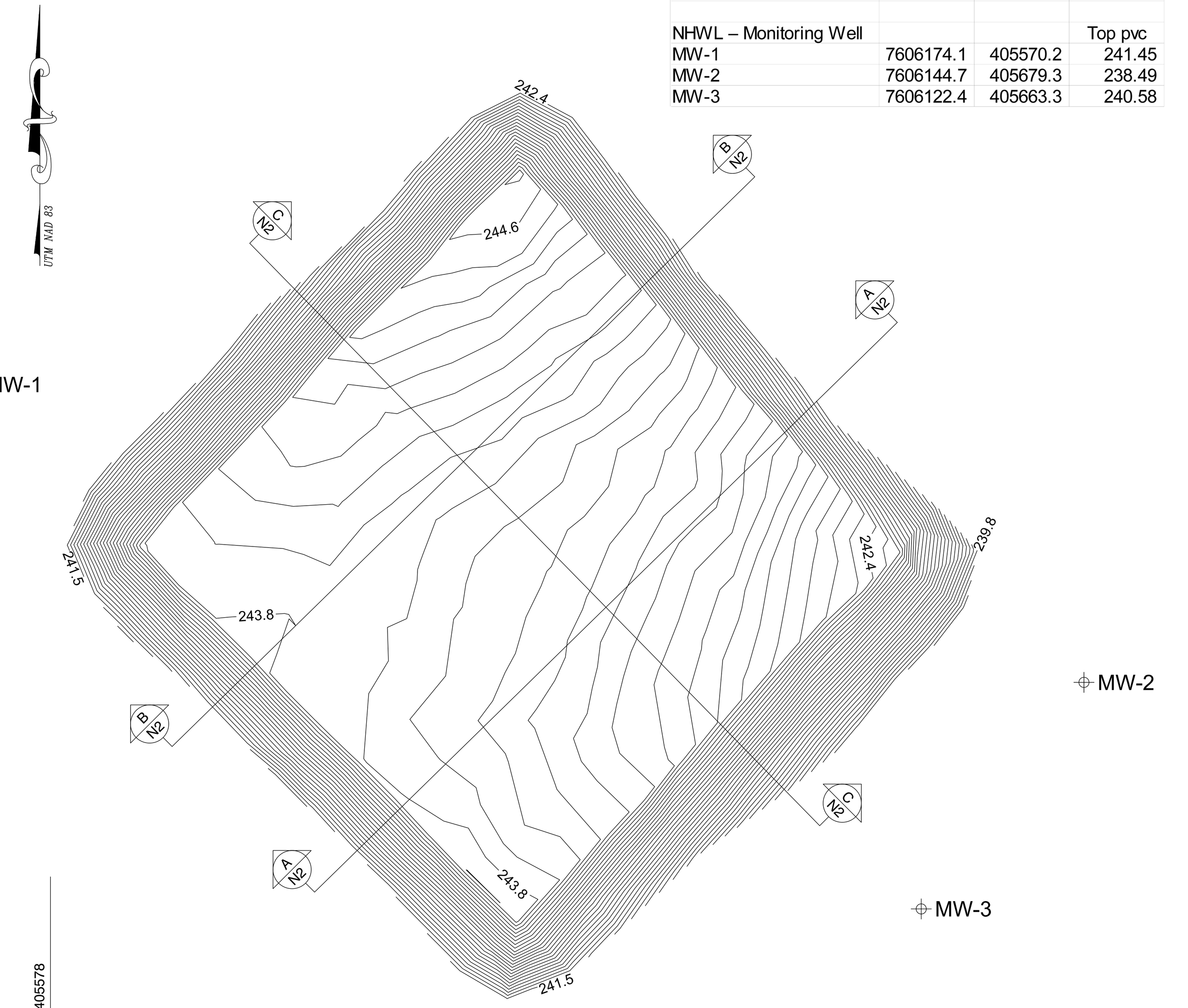
Pictures of the Non-Hazardous Waste Landfill and Secure Soil Disposal Facility are provided below:

Non-Hazardous Waste Landfill

Secure Soil Disposal Facility

APPENDIX 1: AS-BUILT DRAWINGS

	North	East	Elevation
NHWL – Monitoring Well			Top pvc
MW-1	7606174.1	405570.2	241.45
MW-2	7606144.7	405679.3	238.49
MW-3	7606122.4	405663.3	240.58



General notes :

1. All dimension are in meters unless noted otherwise
2. Horizontal control referenced to survey control monuments
3. Construction details provided by UMA Engineering

Legend :

Monitoring well

NO	Date	Revision / Description	By
1	dec 13, 07	detail	PT
0	oct 26, 07	as built	PT

GÉOÏDE
CONSULTANTS
6275, De Normanville, Montréal, (Québec), Canada H2S 2B7
T. 514.495.9758 ; F. 514.276.6029 info@geoide.qc.ca www.geoide.qc.ca

Surveyed by:	Drawn by:	Verified by:
EG	RC, PT	G.R.
Date: summer 2007	Date: october 2007	Date: october 26, 2007

Client:
SITE REMEDIATION SOLUTIONS
Biogenie S.R.D.C. Inc.
1140 Levis Street, Lachenaie, Quebec, CANADA, J6W 5S6
Tel.:(450) 961-3335 Fax:(450) 961-0220

Project:
Site Restoration of Sarcpa Lake
CAM-F Dew Line Site, Nunavut

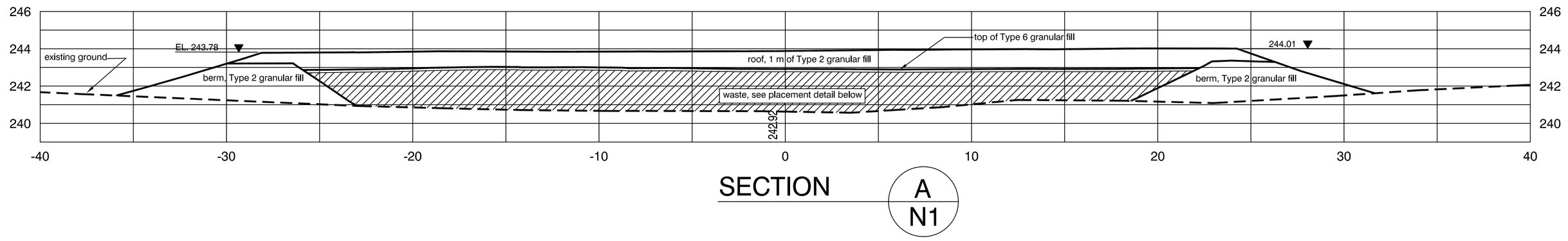
Project number GÉOIDE:	Project number CLIENT:
927	TP5454
Date: 2006	Date: 2005

Title:
NON-HAZARDOUS WASTE LANDFILL
As built

Scale: 1 : 200

File: CAM-F-NHWL-as built-rev1_13dec07.dwg

Drawing number:	Revision:
N1	
Page:	1



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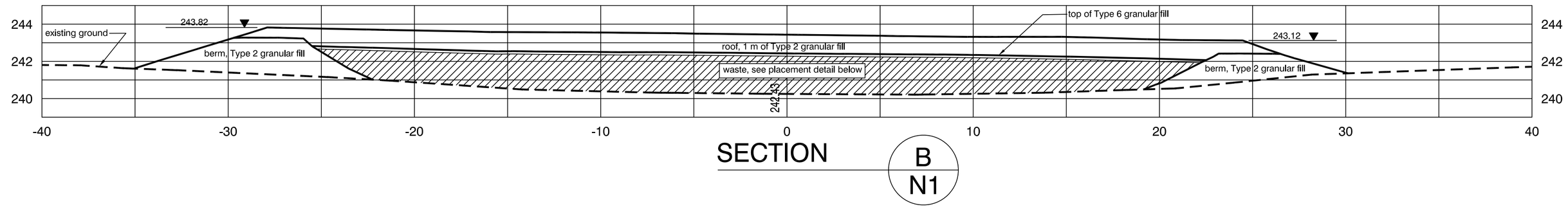
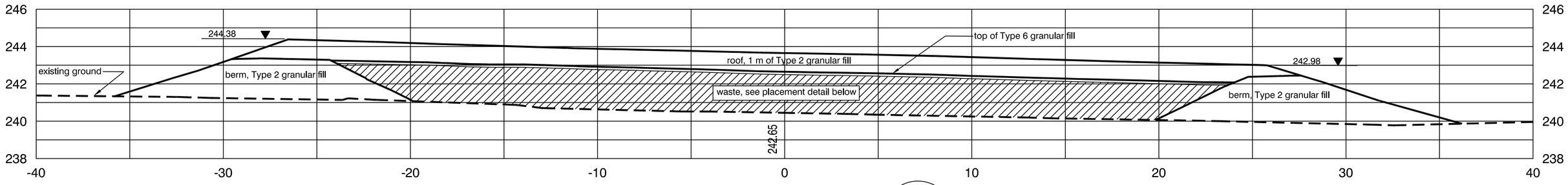
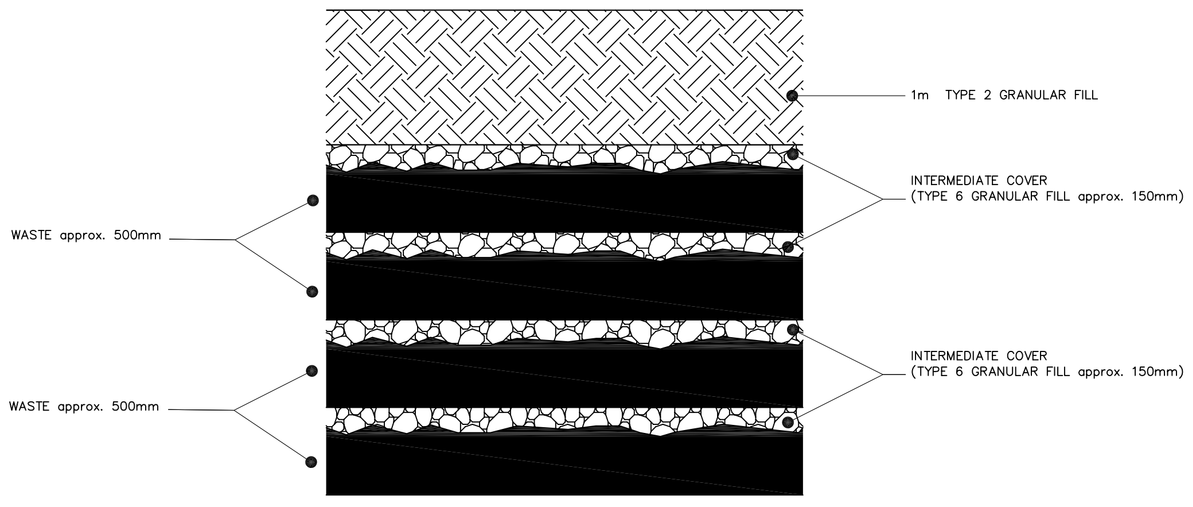


SECTION B N1



SECTION C N1



WASTE PLACEMENT DETAIL
NTS

General notes :

1. All dimension are in meters unless noted otherwise
2. Horizontal control referenced to survey control monuments
3. Construction details provided by UMA Engineering

A
1

A: Detail number

1: Detail on drawing no.

NO	Date	Revision / Description	By
1	dec 13, 07	detail	PT
0	oct 26, 07	as built	PT

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EG	RC, PT	G.R.
Date: summer 2007	Date: october 2007	Date: october 26, 2007

Client:
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Tel.:(450) 961-3335 Fax:(450) 961-0220

Project:
Site Restoration of Sarcpa Lake
CAM-F Dew Line Site, Nunavut

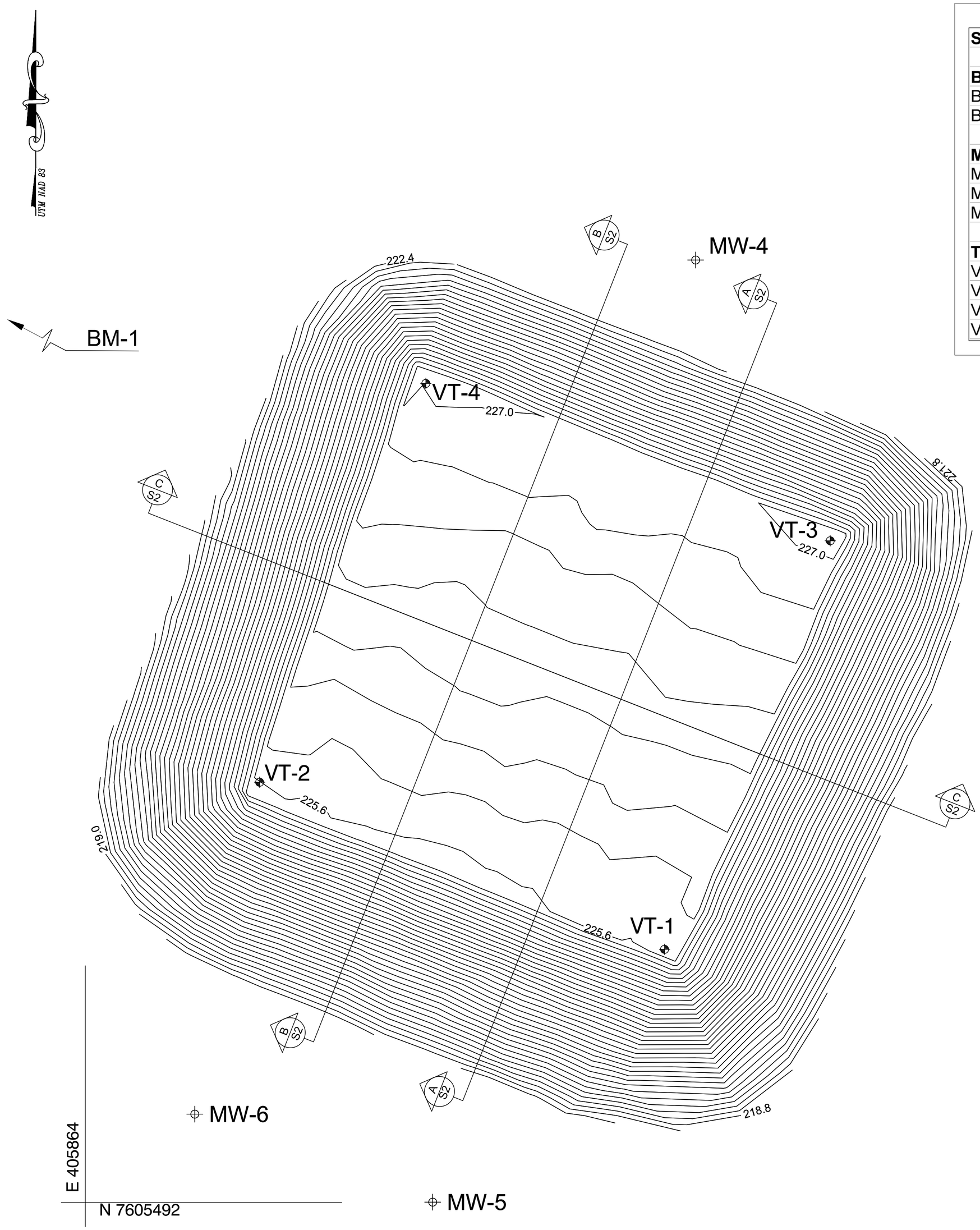
Project number GÉOIDE:	Project number CLIENT:
927	TP5454
Date: 2006	Date: 2005

Title:
NON-HAZARDOUS WASTE LANDFILL
As built — Section and detail

Scale: AS INDICATED

File: CAM-F-NHWL-as built-rev1_13dec07.dwg

Drawing number:	Revision:
N2	
Page:	1



SSDF	North	East	Elevation
Bench Mark			
BM-1	7605617.56	405823.84	221.25
BM-2	7605544.71	406022.68	221.18
Monitoring Well			top pvc
MW-4	7605609.5	405939.9	222.59
MW-5	7605492.1	405907.3	218.06
MW-6	7605503.1	405877.6	218
Thermistor			top pvc
VT-1	7605524	405936	
VT-2	7605544	405886	
VT-3	7605574.5	405956.9	227.86
VT-4	7605594.1	405906.5	227.77

General notes :

1. All dimension are in meters unless noted otherwise
2. Horizontal control referenced to survey control monuments
3. Construction details provided by UMA Engineering

Legend :

- Monitoring well
- Ground temperature control
- Permanent survey control monument

NO	Date	Revision / Description	By
2	dec 13, 07	detail	PT
1	oct 26, 07	as built	PT

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Date: summer 2007	Date: october 2007	Date: october 26, 2007

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Project:
Site Restoration of Sarcpa Lake
CAM-F Dew Line Site, Nunavut

Project number GÉOIDE:	Project number CLIENT:
927	TP5454
Date: 2006	Date: 2005

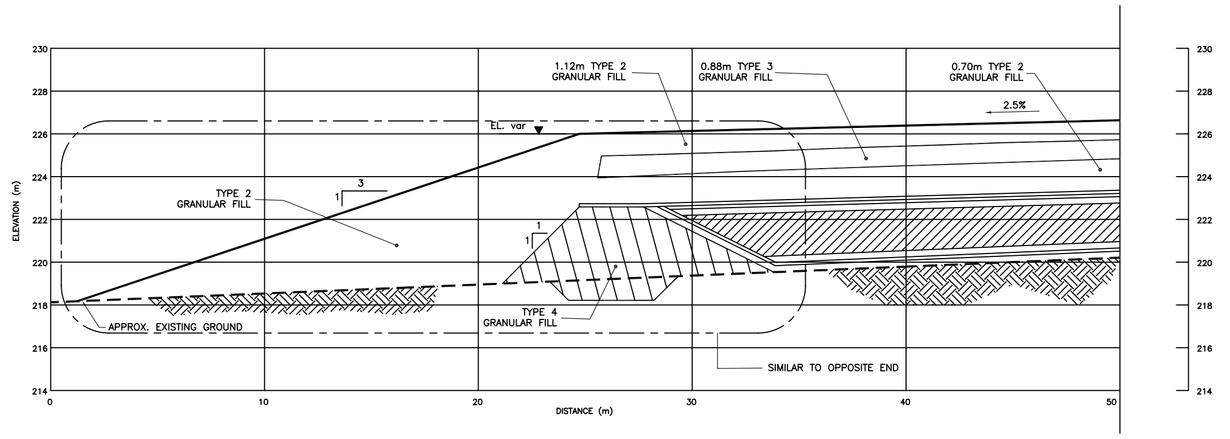
Title:
SECURE SOIL DISPOSAL FACILITY
as built

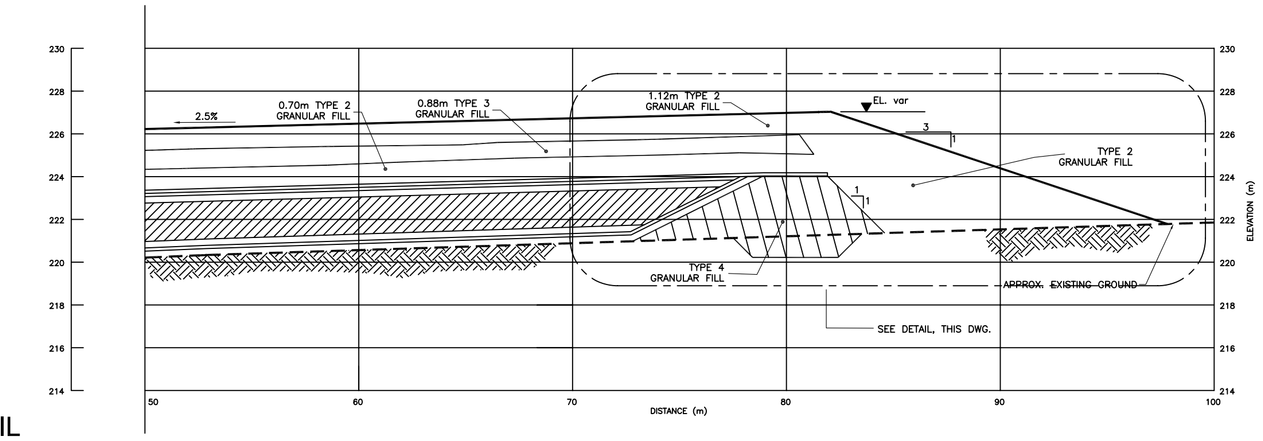
Scale: 1 : 300

File: CAM-F-SSDF-as built_rev1_13dec07.dwg

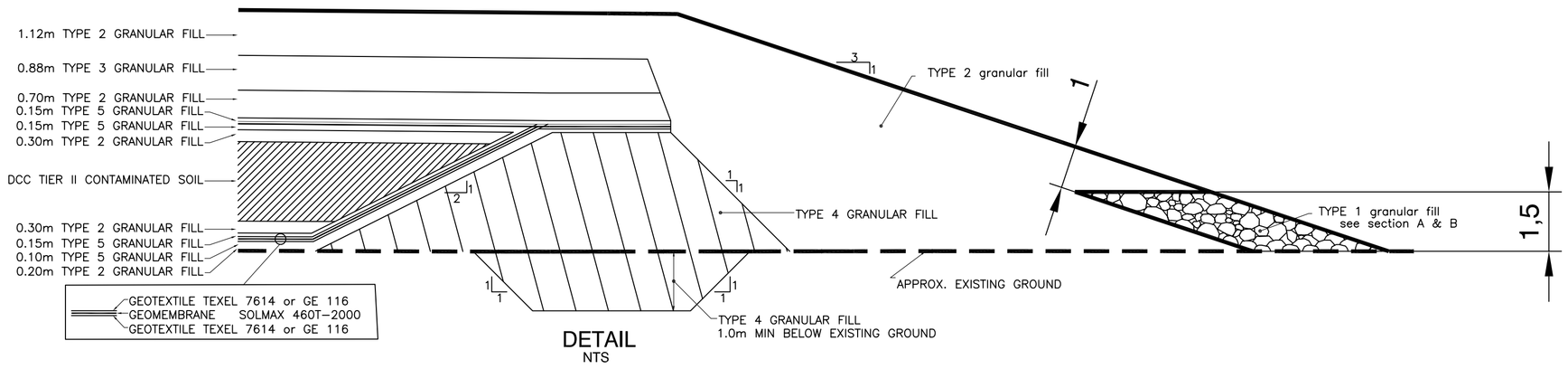
Drawing number:	Revision:
S1	1

Page:

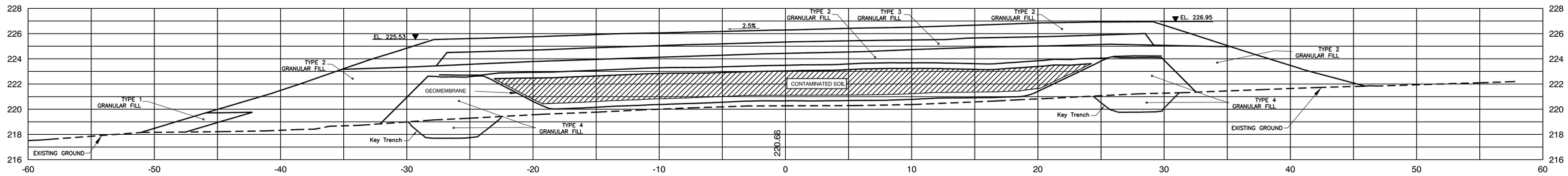




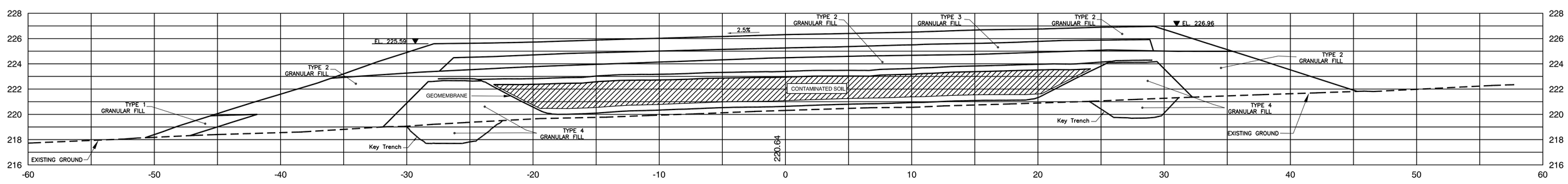
DETAIL
NTS



DETAIL
NTS



SECTION A S1



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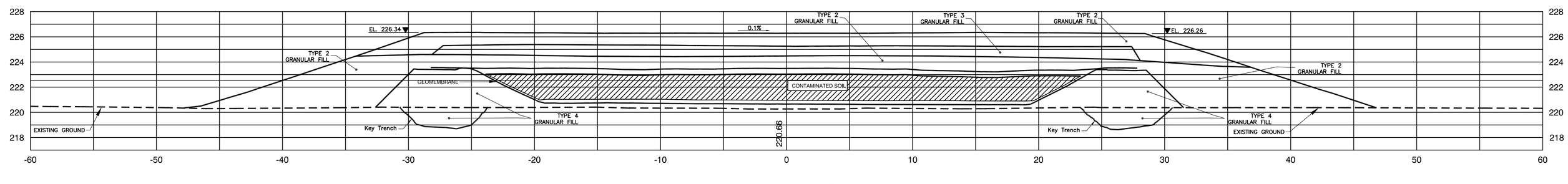

SECTION C S1

General notes :

1. All dimensions are in meters unless noted otherwise
2. Horizontal control referenced to survey control monuments
3. Construction details provided by UMA Engineering

A: Detail number

1: Detail on drawing no.

NO	Date	Revision / Description	By
1	dec 13, 07	detail	PT
0	oct 26, 07	as built	PT

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CAM-F Dew Line Site, Nunavut

Project number GÉOIDE:	Project number CLIENT:
927	TP5454
Date: 2006	Date: 2005

Title: SECURE SOIL DISPOSAL FACILITY
As built — Section and detail

Scale: AS INDICATED

File: CAM-F-SSDF-as built_rev1_13dec07.dwg

Drawing number:	Revision:
S2	
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APPENDIX 2: ANALYTICAL RESULTS

Table 18.0: Analytical Results for Waste Water Samples

Sample #	Area	Sampling Program	Field Dup TN	Date Collected	Metals												
					As	Cd	Cr	Cu	Pb	Ni	Zn	Hg	dissolved Cu	dissolved Ni	dissolved Co	dissolved Cd	dissolved Pb
Units					mg/L												
Water Discharge Criteria					0.1		0.1				1.0	0.0008	0.2	0.2	0.05	0.01	0.05
430	Warehouse Barrel Storage	barrel/water discharge	no dup	Jul-03			<0.001				<0.01		0.001	0.001		<0.001	<0.001
442	Barrel Processing Lagoon 1	barrel/water discharge		Jul-06	0.004		<0.001				0.02	<0.0002	<0.001	<0.001	<0.001	<0.001	<0.001
507	Barrel Processing Lagoon 4	barrel/water discharge		Jul-12	0.004		0.003				<0.01		<0.001	0.001	<0.001	<0.001	<0.001
619	Barrel Processing Lagoon 3	barrel/water discharge		Jul-31	0.008		0.004				0.01	<0.0001	<0.001	0.001	<0.001	<0.001	<0.001
704	Barrel Processing Lagoon 1	barrel/water discharge		Aug-07	0.004		0.001				0.05	<0.0001	0.001	0.004	0.001	<0.001	0,001
912	Barrel Processing Lagoon 3	barrel/water discharge		Aug-14	0.005	<0.001	0.004	<0.001	<0.001	0.002	0.03	<0.0001	<0.001	0.002	<0.001	<0.001	<0.001
930	Barrel Processing Lagoon 4	barrel/water discharge	931	Aug-21	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.0001	<0.001	0.001	<0.001	<0.001	0.001
931	Barrel Processing Lagoon 4	barrel/water discharge	930	Aug-21	0.012	<0.01	<0.01	<0.01	0.01	<0.01	0.03	<0.0001	<0.001	0.001	<0.001	<0.001	0.001
936	Barrel Processing Lagoon 2	barrel/water discharge		Aug-31	0.004							<0.0001	0.001	0.002	<0.001	<0.001	<0.001
937	Barrel Processing Lagoon 2	barrel/water discharge		Sep-04	0.144		0.003				0.02	<0.0001	0.002	<0.001	<0.001	<0.001	<0.001
938	Barrel Processing Lagoon 4	barrel/water discharge		Sep-04	0.067		0.003				<0.01	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001
939	Flower Pot (SSDF)	water discharge		Sep-07	0.064		0.01				0.03	<0.0001	<0.001	0.003	<0.001	<0.001	<0.001
940	Flower Pot (SSDF)	water discharge	no dup	Sep-07	0.076		0.076				0.1	<0.0001	<0.001	0.001	<0.001	<0.001	<0.001

Table 18.0: Analytical Results for Waste Water Samples

Sample #	Area	Sampling Program	Field Dup TN	Date Collected	PCB				BTEX				Glycol						Oil & Grease	pH	Phenol
					Aroclor 1248	Aroclor 1254	Aroclor 1260	PCB Total	Benzene	Toluene	Ethyl-benzene	Xylenes	Ethylene Glycol	Diethylene Glycol	Triethylene Glycol	Tetraethylene Glycol	Propylene Glycol	Total Glycol	Oil and Grease	pH reported	Phenol (ppb)
Units													mg/L								
Water Discharge Criteria						1	1	0.005	370	2	90		192				500	22000	5	6-9	20 ppb
430	Warehouse Barrel Storage	barrel/water discharge	no dup	Jul-03	ND	ND	ND	ND													
442	Barrel Processing Lagoon 1	barrel/water discharge		Jul-06	ND	ND	ND	ND	<0.0001	<0.0001	<0.0001	<0.0001	<1				<1		<1.1	7.5	0.3
507	Barrel Processing Lagoon 4	barrel/water discharge		Jul-12	ND	ND	ND	ND	<0.0001	0.0001	<0.0001	<0.0001	<1				<1		1.3	7.4	19
619	Barrel Processing Lagoon 3	barrel/water discharge		Jul-31	ND	ND	ND	ND	<0.0001	<0.0001	<0.0001	<0.0001	870	<60	<40	<200	<20		6	7.5	<0.3
704	Barrel Processing Lagoon 1	barrel/water discharge		Aug-07	ND	ND	ND	ND	<0.0001	0.0011	0.0009	0.0065	790	8	ND	ND	ND		1.7	7.3	59
912	Barrel Processing Lagoon 3	barrel/water discharge		Aug-14	ND	ND	ND	ND	<0.0001	0.0005	0.0001	0.0004	730	<6.0	<2.0	<10	<1.0	730	1.5	7.4	0.04
930	Barrel Processing Lagoon 4	barrel/water discharge	931	Aug-21	ND	ND	ND	ND	<0.0001	<0.0001	<0.0001	0.0008	110	<12	<12	<40	<12	110	31.6	8.3	40
931	Barrel Processing Lagoon 4	barrel/water discharge	930	Aug-21	ND	ND	ND	ND	<0.0001	<0.0001	<0.0001	<0.0001	100	<12	<12	<40	<12	100	34.4	8.4	<0.10
936	Barrel Processing Lagoon 2	barrel/water discharge		Aug-31					<0.0001	0.0003	0.0001	0.0005	7.4	<2	<2	<10	<5	7.4	3.8	7.9	<10
937	Barrel Processing Lagoon 2	barrel/water discharge		Sep-04	ND	ND	ND	ND	<0.0001	0.0005	<0.0001	0.0001							1.5	9.7	<10
938	Barrel Processing Lagoon 4	barrel/water discharge		Sep-04	ND	ND	ND	ND	<0.0001	0.0005	<0.0001	0.0001							<1.2	9.7	<10
939	Flower Pot (SSDF)	water discharge		Sep-07	ND	ND	ND	ND	<0.0001	<0.0001	<0.0001	<0.0001							<1.1	8.2	<10
940	Flower Pot (SSDF)	water discharge	no dup	Sep-07	ND	ND	ND	ND	<0.0001	<0.0001	<0.0001	<0.0001							<1.1	9.1	<10