THE COLLECTION OF LANDFILL MONITORING DATA AT THE FORMER CAM-1 DEW LINE SITE

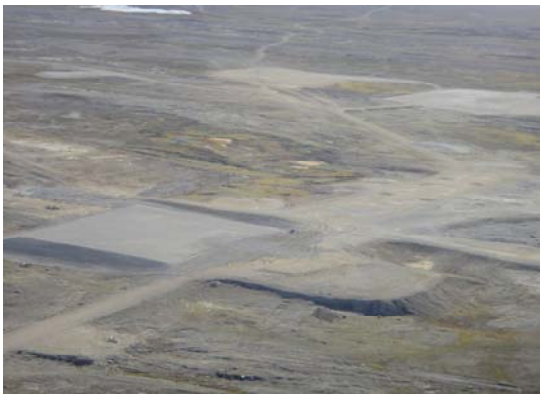
Jenny Lind Island, Nunavut

FINAL REPORT– 2014

(O/Ref.: CD3654) (Y/Ref.: DLC MON (Kitik 13)

DEFENCE CONSTRUCTION CANADA

JUNE 2015



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DEFENCE CONSTRUCTION CANADA

JUNE 2015

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Defence Construction Canada

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1 OUTLINE

1.1 OBJECTIVES AND SCOPE OF WORK

The objective of the Defence Construction Canada (DCC) Landfill Monitoring Program is to collect sufficient information to assess the performance of landfills at former Distant Early Warning (DEW) Line Sites that have been remediated from a geotechnical and environmental perspective. DCC has specified the requirements for the Landfill Monitoring Program in the document: Terms of Reference (TOR) – Consulting Services for the Collection of Landfill Monitoring Data – PIN-2 Cape Young, PIN-4 Byron Bay, CAM-1 Jenny Lind Island, DEW LINE SITES, NUNAVUT, KITIKMEOT REGION, DCC PROJECT #: DLC MON(KITIK13), April 18, 2013. This report contains a summary of the findings from the 2014 inspection of the CAM-1 Jenny Lind Island site.

Table I below summarizes the monitoring requirements of the 2014 season. No deviations from the TOR were experienced while completing the 2014 monitoring.

Table I: **2014 Monitoring Requirements for CAM-1 Landfills**

Landfill	Visual Inspection	Soil Sampling	Groundwater Sampling	Thermal Monitoring
Borrow Area North Landfill	✓	✓		
Northeast Landfill	✓	✓		
Station West Landfill	✓	✓		
Non-Hazardous Waste Landfill	✓	✓	✓	
Tier II Soil Disposal Facility	✓	✓	✓	✓
Southeast Landfill	✓	✓		
Station East Landfill	✓	✓		
Main Landfill	✓	✓		
USAF Landfill	✓	✓		
East Landing Landfill	✓	✓		

1.2 FIELD PROGRAM STAFF

The 2014 on-site field program at CAM-1 Jenny Lind Island took place on August 27-29, 2014. Biogenie sub-contracted Sila Remediation Inc. from Igloolik, Nunavut to perform the field work. The Sila field program was executed by Mr. Andrew Passalis and four local Inuit representatives.
The team was made up of the following individuals:

- Andrew Passalis, Project Engineer (Sila)
- John Henry Etegak, Field Technician (Sila)

- Benjamin Kaniak, Field Technician (Sila)
- Dyson Koaha, Field Technician (Sila)
- Joe Koaha, Wildlife Monitor (Sila)

1.3 2014 WEATHER CONDITIONS

Seasonally weather conditions were observed during the CAM-1 Jenny Lind Island monitoring event with daytime temperatures ranging between 4-7ºC. Skies were generally overcast throughout the monitoring period with moderate to strong winds out of the northwest ranging between 20-60 km/h. Periods of light rain and fog were observed on the mornings of August 28th and 29th.

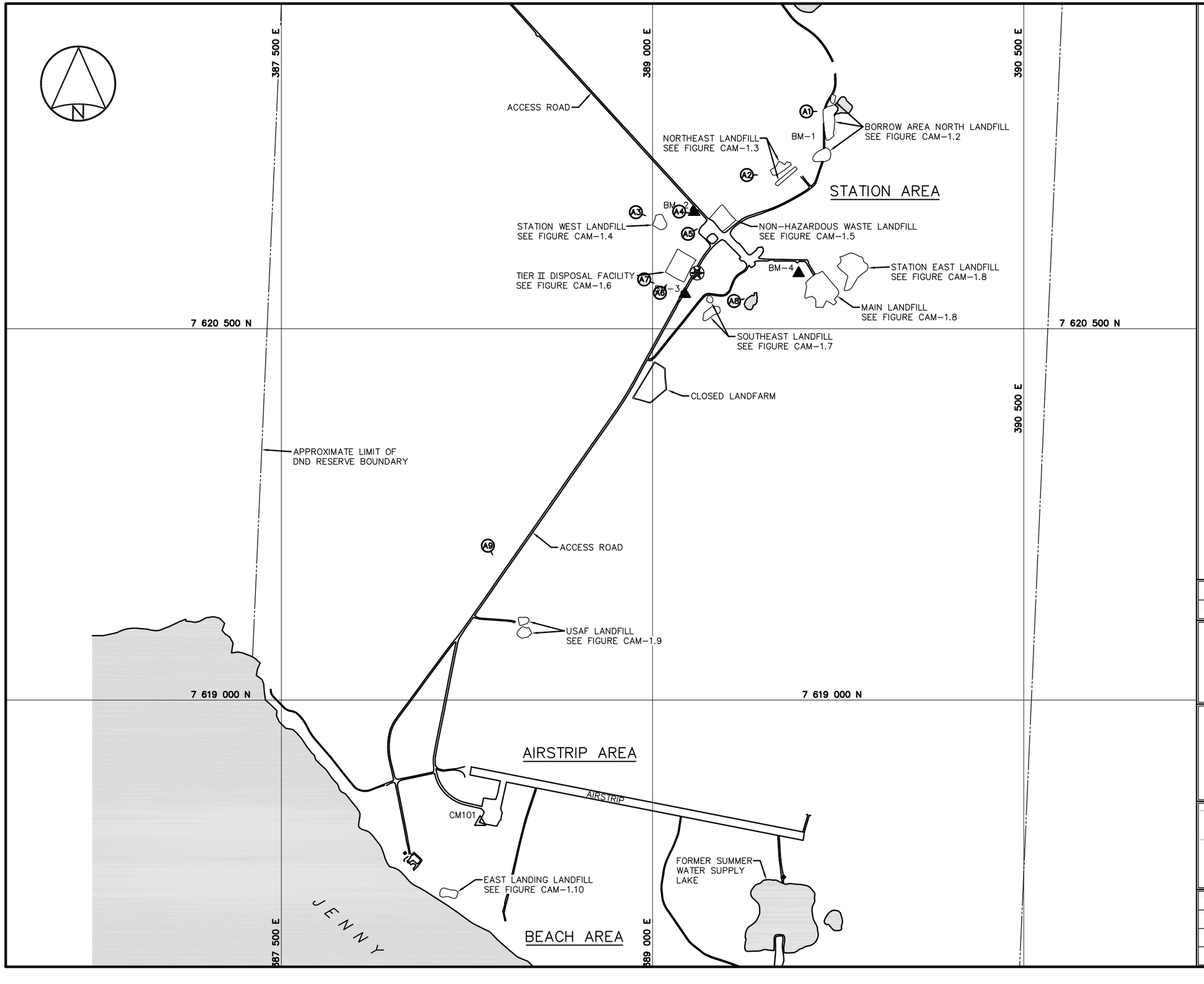
1.4 REPORT FORMAT

This report describes the work carried out in August 2014 at ten landfill sites at CAM-1 Jenny Lind Island. Results from soil and groundwater sampling, thermal monitoring, and visual inspection of the sites are also presented in the formats described in the ToR. An electronic version of the report and its component tables, figures and data files is included in an Addendum DVD-ROM, which is appended to the report.

The report is organized with a separate chapter for each of the landfill areas. Each chapter contains all relevant information gathered for that landfill during the 2014 Landfill Monitoring Program. The following information is provided for each landfill:

- Visual inspection check-list
- Visual inspection drawing mark-up
- A selection of visual inspection photos
- Thermal monitoring summary (where applicable)
- Summary of 2014 soil analytical data (where applicable)
- Summary of 2014 groundwater analytical data (where applicable)
- Monitoring well development/sampling reports (where applicable)

For the photographic record, the printed copy of the report only includes an index of photos for each of the landfill areas. The actual photos are included in electronic format in the Addendum DVD-ROM to the report. Certificates of Analysis, QA/QC analytical results and field notes are attached in Annexes.



LEGEND

- CM101 — SURVEY CONTROL MONUMENT
- BM–1 — PERMANENT BENCHMARK LOCATION (4)
- COMMEMORATIVE PLAQUE LOCATION
- APPROXIMATE LOCATION OF PROPERTY BOUNDARY
- BODY OF WATER
- A1 — AERIAL PHOTOGRAPH

0 150m 300m 450m 600m 750m

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1	FINAL	15–06–26	PAR	VERIF.	APPR.

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COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

LOCATION PLAN

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
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Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 15,000	JUNE 2015
DRAWN BY:	VERIFIED BY:	APPROVED BY:
L. LA PIERRE	A. PASSALIS	M. FLEURY P. ENG
PROJECT NO:	DRAWING NO:	PAGE
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FIGURE CAM-1.1

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2 METHODOLOGY

2.1 VISUAL INSPECTION

Data and information collected during the visual inspection of the CAM-1 landfills are included in the visual inspection datasheets. These data sheets include such inspection data as the location of settlement, erosion, frost action, sloughing and cracking, animal burrows, vegetation cover and stress, staining, seepage points, exposed debris, and any other features of note.

Each feature was identified with an alphabetical tag to be used consistently each year in an effort to track changes in condition for each specific feature. New features are added to the checklist and are noted as new observations. This letter is shown on the figures for each landfill along with the symbol for the particular feature.

Digital photos with a measure of scale were taken to show the actual general state of the landfills as well as features of interest. Annotated sketches/diagrams are included in the present report for each landfill. Some photos are provided for supplemental purposes only and do not warrant placement on the Figures (i.e., they are not specifically referenced in the report or within the tables).

The photos were taken with a Sony DSC-TX5 10.2 megapixel (MP) digital camera. Full resolution digital jpg copies are furnished on a DVD-ROM appended with the final report. The photo log, including the local coordinates from where the photo was taken, orientation (relative to map north), feature of note and picture numbers are included with each landfill report.

2.2 SOIL SAMPLING

The soil sampling methodology conformed to guidance provided in the following Canadian Council of Ministers of the Environment (CCME) documents:

- CCME Guidance Document on the Management of Contaminated Sites in Canada, April 1997, CCME PN 1279. (CCME catalogue - http://www.ccme.ca/pdfs/cat_eng.pdf)
- CCME EPC-NCS62E Guidance Manual on Sampling, Analysis, and Data Management for Contaminated Sites - Volume I: Main Report, Dec 93 (CCME catalogue - http://www.ccme.ca/pdfs/cat_eng.pdf)
- CCME EPC-NCS66E Guidance Manual on Sampling, Analysis, and Data Management for Contaminated Sites - Volume II: Analytical Method Summaries, Dec 93 (CCME catalogue - http://www.ccme.ca/pdfs/cat_eng.pdf)
- Reference method for the Determination of Petroleum Hydrocarbons in Soil – Tier I Method, 2001
- CCME Subsurface Assessment Handbook for Contaminated Sites, March 1994, EPC-NCSRP-48E (http://www.ccme.ca/publications/ceqg_rcqe.html)

Testpits were dug using a hand shovel down to refusal or permafrost. The shovel was cleaned between testpits. Soil samples were placed directly in the laboratory provided jars/bottles and were not mixed. Disposable nitrile glove were worn and disposed of after each sample collection. Jars/bottles were cleaned prior to placement into the cooler. For the 2014 monitoring event, 43 soil-sampling stations were visited. One surface sample (0-15 cm depth below surface) and one subsurface sample (40-50 cm depth below surface) were taken at each sampling station. No frozen ground or frost was encountered at the soil stations during the August 2014 sampling.

As specified in the ToR, the following soil sampling procedures were adhered to:

- Where required, the soil samples were collected from locations between two to four meter radius of the monitoring wells
- Blind field duplicates (10 %) were collected for Quality Assurance and Quality Control purposes
- Duplicate samples (10 %) were also taken and sent to a second laboratory for quality control purposes
- An additional ten percent of soil samples taken were sent to the owner's representative (ESG OPS CENTRE) in Kingston for archiving as specified by DCC

The soil samples were analyzed for requested parameters (TPH (F1-F3), total metals and PCBs) as specified by DCC. Table II below summarizes the soil sampling at CAM-1 during the August, 2014 field program. It should be noted that:

- Exova performed Total PCBs analysis with a method detection limit of 0.1 mg/kg, whereas the contractual requirement is 0.05 mg/kg;
- Exova performed PHC Fractions F2 and F3 with a detection limit of 50 mg/kg, whereas the contractual requirement is 40 mg/kg.

Table II: **Summary of Soil Sampling at CAM-1 – August 2014**

Landfill Site	**Soil Sample Locations**				
Borrow Area North Landfill	C1-1	C1-2	C1-3	C1-4	C1-5
Northeast Landfill	C1-6	C1-7	C1-8	C1-9	
Station West Landfill	C1-10	C1-11	C1-12	C1-13	
Non-Hazardous Waste Landfill	MW-1	MW-2	MW-3	MW-4	
Tier II Disposal Facility	MW-5	MW-6	MW-7	MW-8	
Southeast Landfill	C1-14	C1-15	C1-16	C1-17	C1-18
Station East Landfill	C1-19	C1-20	C1-21	C1-22	
Main Landfill	C1-23	C1-24	C1-25	C1-26	
USAF Landfill	C1-27	C1-28	C1-29	C1-30	C1-31
East Landing Landfill	C1-32	C1-33	C1-34	C1-35	

2.3 GROUNDWATER SAMPLING

The groundwater sampling methodology conformed to guidance provided in the following CCME documents:

- CCME EPC-NCS62E Guidance Manual on *Sampling, Analysis and Data Management for Contaminated Sites* - Volume I: Main Report, Dec 1993 (CCME catalogue - http://www.ccme.ca/pdfs/cat_eng.pdf).
- CCME EPC-NCS66E Guidance Manual on *Sampling, Analysis and Data Management for Contaminated Sites* - Volume II: Analytical Method Summaries, Dec. 1993 (CCME catalogue - http://www.ccme.ca/pdfs/cat_eng.pdf).

Wells were purged as specified and measurements of in situ temperature, conductivity, and pH were taken. Sampling took place when these parameters were stabilized. The samples were not acidified and were not filtered (as directed in the TOR).

The 2014 field program included the monitoring of 8 locations at CAM-1. All four wells at the Tier II Soil Disposal Facility were dry at the time of monitoring and consequently could not be sampled. A summary of the status of the monitoring wells and the attempts made are summarized in Table III.

In sampled wells, no sign of free phase hydrocarbon product was detected. Monitoring Well Development and Sampling Record forms are included in appropriate sections of this report.

All monitoring wells were inspected and found to be in good condition with no significant concerns identified. It should be noted that, although requested in the Chains of Custody, Exova did not perform the mercury analysis on groundwater samples. When available, results from the groundwater QA sample sent to Maxxam are presented.

Table III: **Summary of Groundwater Sampling at CAM-1 – August 2014**

Landfill Site	Groundwater Sample Locations			
Non-Hazardous Waste Landfill	MW-1 (dry)	MW-2(ltd quantities)	MW-3	MW-4
Tier II Soil Disposal Facility	MW-5 (dry)	MW-6 (dry)	MW-7 (dry)	MW-8 (dry)

2.4 THERMAL MONITORING

All thermistors at the Tier II Soil Disposal Facility were inspected and found to be in good condition with no significant concerns identified. Data from all thermistors was successfully retrieved and all analogues/thermocouples were observed to be functioning properly at the time of inspection. Internal memories were reset and clocks were synchronized using the Prolog software. All datalogger batteries were changed at the Tier II Disposal Facility.

Specific detailed information regarding temperature data is contained in the report section on the Tier II Soil Disposal Facility.

Raw data retrieved directly from the dataloggers were provided to DCC with the field progress report on October 1st, 2014. The manual thermal monitoring data is presented in tabular form on the thermistor inspection sheets for the Tier II Soil Disposal Facility.

2.5 FIELD NOTES AND DATA

Field notes from the 2014 landfill monitoring program, including soil and water sampling are included in Annex 3 for reference. Notes were written on waterproof field sheet and in field books and the notes scanned to an Adobe pdf document for future reference and back up. Locations of all observations and features for the visual inspection were recorded using a hand-held Garmin Oregon 300 GPS device, which included a combination of continuous tracks and discrete waypoints. Data packages collected from the individual vertical thermistors were downloaded directly to a field laptop computer.

2.6 QUALITY CONTROL

Sila implemented standard sample collection techniques to decrease the likelihood of compromising collected samples. The methods used for sample collection are summarized in Sections 2.2 and 2.3 of this report. The following measures were taken to minimize sample cross-contamination:

- All samples were placed directly into the appropriate laboratory supplied containers (for the particular analysis)
- Soil samples were collected with the use of decontaminated sampling equipment and/or nitrile gloves that were used only once
- All samples were stored in chilled coolers/refrigerators throughout the field program and chilled coolers during subsequent transfer to the respective laboratory.

Chains of Custody (COC) forms were completed by the Project Engineer after sample collection. The samples were refrigerated prior to off-site shipment by First Air Cargo directly to Maxxam (via Yellowknife) and Exova in Edmonton and ESG, via Ottawa to Kingston, Ontario where they were checked in by laboratory representatives. All analysis was completed as specified on COC forms.

Annex 1 provides a sample integrity report from Exova Laboratories. This report indicates that all samples received were acceptable for analysis.

2.7 QA/QC PROCEDURES

Sila used standard QA/QC procedures as specified in the TOR and CCME Guidance Documents for this project. The following is a summary of the analytical QA/QC samples collected:

- 10% Blind Duplicate Samples of soil were sent to Exova

- 10% Interlab Duplicate Samples were sent to Maxxam. Results for both the blind duplicates and the interlab duplicates can be found in Annex 2, as actual values and relative percent differences
- 10% Archival Samples to ESG (soils)

Exova has QA/QC measures for sample analysis. Exova QC samples will typically be introduced into the analytical stream on a batch basis, normally comprising 20% – 30% of the total sample throughput. A batch size of 15 – 20 typically includes one of each control standard, reference standard, surrogate spike, duplicate sample, and method blank. A control sample is a blank matrix fortified with analyte of interest and carried through all analytical steps to monitor lab performance (recovery & basis) on clean matrix. A reference sample is a sample with predetermined certified characteristics that undergoes the same processing as samples used to evaluate accuracy of procedure. A surrogate spike is an organic compound with similar chemical composition and behaviour in the analytical process used to monitor recovery in each sample. A duplicate sample occurs when client samples are analyzed in duplicate to monitor reproducibility in analysis and preparation. Finally, a method blank is a blank sample matrix carried through the same procedure as the samples, and is used to monitor for process contamination.

Maxxam follows similar in-house QA/QC procedures. Exova and Maxxam QA/QC reports can be found in Annex 1.

2.8 PROJECT REFERENCES

The following references are specifically relevant to the 2014 Landfill Monitoring activities:

- Terms of Reference – Consulting Services for the Collection of Landfill Monitoring Data – PIN-2 Cape Young, PIN-4 Byron Bay, CAM-1 Jenny Lind Island - DEW LINE SITES, NUNAVUT, KITIKMEOT REGION, DCC PROJECT #: DLC MON (KITIK13), April 18, 2013.
- Technical Proposal – The Collection of Landfill Monitoring Data for the DEW Line Sites: PIN-2 Cape Young, PIN-4 Byron Bay, CAM-1 Jenny Lind Island, DEW LINE SITES, Nunavut, Kitikmeot Region. Project Ref 6121-150, June 2013.
- Post-Field Progress Report, CAM-1 Landfill Monitoring 2014, October, 2014.

3 BORROW AREA NORTH LANDFILL

3.1 SUMMARY

The 2014 monitoring of the Borrow Area North Landfill was completed on August 28, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate.

TPH Fraction F3 was detected in one surface soil sample collected upgradient of the landfill (C114-1A) at a concentration of 53 mg/kg. No PCBs or elevated levels of metal parameters were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the Borrow Area North Landfill. There are several observations of minor settlement and erosion on the landfill cover and side slope, including four newly observed areas of settlement and three areas of erosion. Two existing areas of minor staining previously noted on the east side of Lobe 3 and north side of Lobes 4 & 5 remain relatively unchanged from previous assessment periods. There is localized ponding along the east and northeast sides of Lobe 3, which has also remained consistent since the baseline assessment. No exposed debris was observed. A tension crack previously noted on the northeast corner of Lobes 4 & 5 was not observed during the 2014 assessment.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table IV of this report and has been completed as per the TOR. Please refer to Figure CAM-1.2 for a sketch of the Borrow Area North Landfill detailing the location of photographs and erosional features.

Table IV: **Visual Inspection Checklist / Report – Borrow Area North Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION – LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 3

SITE NAME: CAM-1 – Jenny Lind Island
LANDFILL DESIGNATION: Borrow Area North Landfill (Regrade Landfill)
DATE OF INSPECTION: August 28, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE IV: BORROW AREA NORTH LANDFILL VISUAL INSPECTION (Page 2 of 3)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Borrow Area North Landfill
Designation: Existing Regrade Area
Date Inspected: August 28, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature:

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.2 (Lobes 1 & 2 - S side slope)	1 m	1 m	0.1 m	Isolated	Localized depression on side slope	BANLF-6	Acceptable	No substantial change in feature since first noted in Year 3 (2012). Cover and slopes appear stable.
		FEATURE B See Figure CAM-1.2 (Lobe 3 - NW side slope) - 1 New Obs.	0.4 - 4 m	0.2 - 1 m	0.1 m	Isolated	Minor linear depressions - 2 locations	BANLF-15-17	Acceptable	No substantial change in feature since first noted in Year 2 (2011) as Feature A. Changed to Feature B in 2012 - 2014. Cover and slopes appear stable.
		FEATURE G See Figure CAM-1.2 (Lobes 1 & 2 - NW side slope) - New Obs.	0.6 - 1 m	0.4 - 0.6 m	0.1 m	Occassional (<1%)	Minor depressions - 3 locations	BANLF-3, 4	Acceptable	New feature in Year 5. Cover and slopes appear stable.
		FEATURE H See Figure CAM-1.2 (Lobe 3 - N side slope) - New Obs.	1 m	0.25 m	0.1 m	Isolated	Minor linear depression	BANLF-11, 12	Acceptable	New feature in Year 5. Cover and slopes appear stable.
		FEATURE I See Figure CAM-1.2 (Lobes 4 & 5 - E cover) - New Obs.	3 m	1 m	0.05 - 0.15 m	Isolated	Minor linear depression	BANLF-39, 40	Acceptable	New feature Year 5. Cover appears stable.
Erosion	Yes	FEATURE C See Figure CAM-1.2 (Lobes 4 & 5 - SE side)	4 m	0.5 m	0.02 - 0.05 m	Isolated	Minor washing of fines along side slope and toe	BANLF-41, 42	Acceptable	Notable reduction in size since first noted in Year 2 (2011) as Feature B. Changed to Feature C in 2012, - 2014. Cover and slopes appear stable.
		FEATURE J See Figure CAM-1.2 (Lobes 3 - E side) - New Obs.	4 m	0.3 - 0.6 m	0.05 m	Isolated	Minor washing of fines on side slope	BANLF-20, 21	Acceptable	New feature in Year 5. Cover and slopes appear stable.
		FEATURE K See Figure CAM-1.2 (Lobes 3 - SE side) - New Obs.	5 m	0.5 - 1 m	0.02 - 0.05 m	Isolated	Minor washing of fines on side slope	BANLF-28, 29	Acceptable	New feature in Year 5. Cover and slopes appear stable.
		FEATURE L See Figure CAM-1.2 (Lobes 4 & 5 - SW side) - New Obs.	4 m	0.1 m	0.02 - 0.05 m	Isolated	Minor washing of fines on side slope	BANLF-46, 47	Acceptable	New feature in Year 5. Cover and slopes appear stable.

TABLE IV: BORROW AREA NORTH LANDFILL VISUAL INSPECTION (Page 3 of 3)

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	Yes	FEATURE D See Figure CAM-1.2 (Lobe 3 - E side)	10 m	5 m	Unknown	N/A	Rust coloured staining east of Lobe 3	BANLF-24-26	Acceptable	Result of seasonal ponding. Not in contact with landfill. Feature first observed in Year 1 (2010) as Feature A. No significant change noted between 2010-2013. Slight reduction in size from previous 2013 inspection.
		FEATURE E See Figure CAM-1.2 (Lobes 4 & 5 - N side)	5 m	1 - 3 m	Unknown	Isolated (<2%)	Minor staining of cover material on side slope	BANLF-33	Acceptable	Faint discolouration of side slope. No substantial change in feature since first noted in Year 2 (2011) as Feature C. Changed to Feature E in 2012, 2013 and 2014.
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	No	FEATURE F See Figure CAM-1.2 (Lobes 4 & 5- NE corner)	10 m	2- 3 mm	Unknown	Isolated (<1%)	Single continous tension crack	BANLF-36, 37	Acceptable	Completeley infilled. Not noted. Feature first noted in Year 3 (2012).
	Yes	See Figure CAM-1.2 (Lobe 3 - E and NE sides)	Varies	Varies	Unknown	N/A	Water ponding along toe	BANLF-6,14, 17	Acceptable	Ponding consistent with observations prior to landfill regrading and subsequent inspections. Slopes appear stable.
Additional Photos	Yes	See Figure CAM-1.2 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no additional features of note.
Overall Landfill Performance:	**Acceptable**									

3.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for Borrow Area North Landfill has been completed as per the ToR and is included as Table V below.

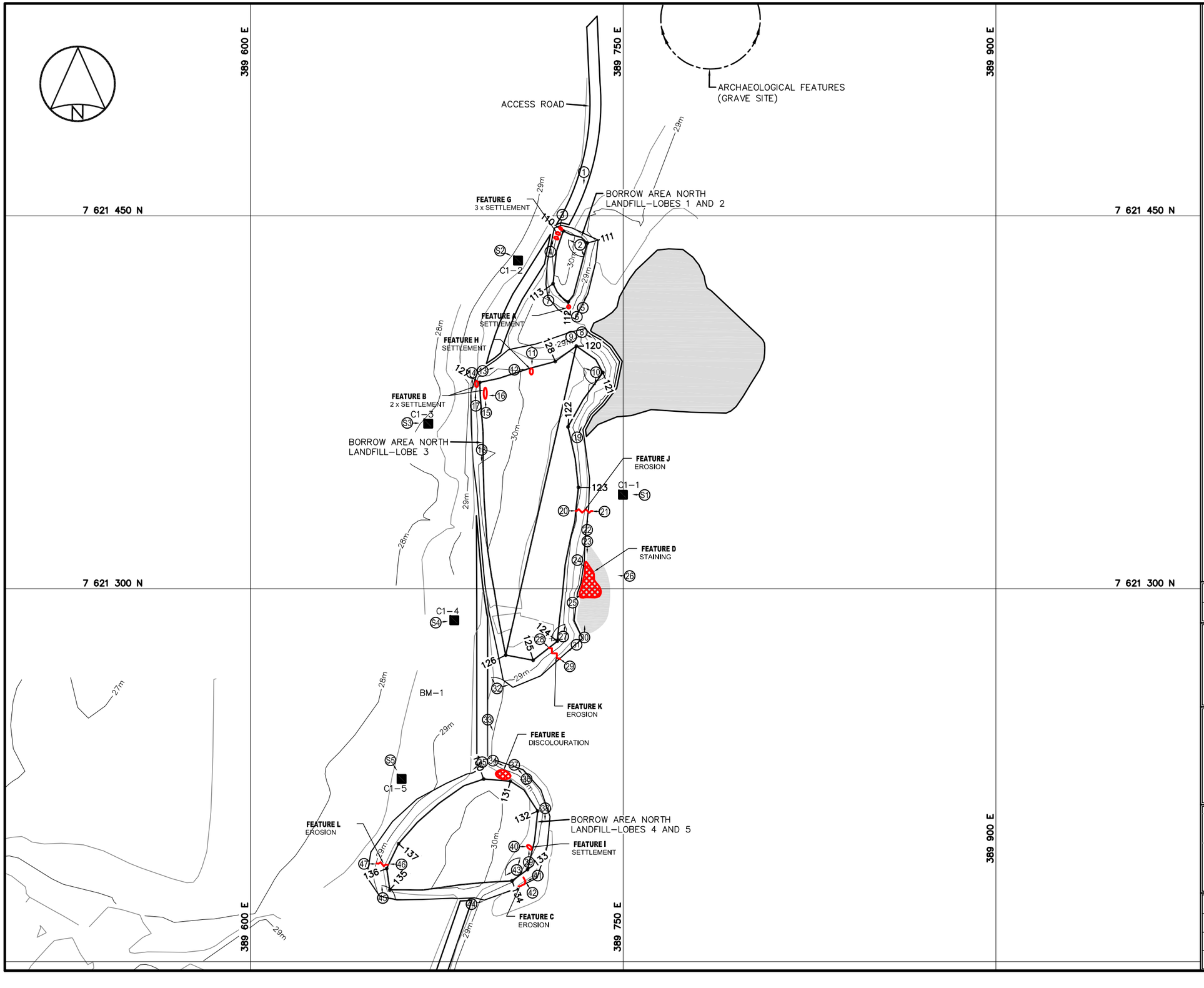
Table V: **Preliminary Stability Assessment – Borrow Area North Landfill**

Feature	Severity Rating	Extent
Settlement	Acceptable	Occasional
Erosion	Acceptable	Isolated
Frost Action	Not observed	None
Staining	Acceptable	Isolated
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

3.3 LOCATION PLAN

The Location Plan for the Borrow Area North Landfill has been completed as per the ToR and is presented in Figure CAM-1.2.



LEGEND

- MONITORING SOIL SAMPLE LOCATION
- BM–1 PERMANENT BENCHMARK LOCATION
- 110 COORDINATE POINT
- 6 APPROX. PHOTOGRAPHIC VIEWPOINT
- BODY OF WATER
- SETTLEMENT (NTS)
- STAINING/DISCOLOURATION (NTS)
- EROSION (NTS)

0 15m 30m 45m 60m 75m

NO.	VERSION	DATE	P.L. PAR	A.P. VERIF.	M.F. APPR.
1	FINAL	15–06–26			

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COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

BORROW AREA NORTH LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
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Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 1,500	JUNE 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.2-PL	PAGE PL

FIGURE CAM-1.2

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3.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Borrow Area North Landfill has been completed as per the ToR and is included as Table VI hereafter. The Photographic Record contains only an index of photographs. Full sized photographs are contained in the Addendum DVD-ROM.

Table VI: **Visual Inspection Photo Log – Borrow Area North Landfill (page 1 of 2)**

Photo (BANLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
Lobes 1 & 2						
1	C114_3885	4,278	14/08/28	389734	7621467	View looking south at BANLF - Lobes 1 & 2
2	C114_3886	1,597	14/08/28	389735	7621439	Panoramic view looking southeast to west-northwest across BANLF - Lobes 1 & 2
3	C114_3887	4,431	14/08/28	389725	7621448	View looking south at three small depressions on northwest corner of BANLF - Lobes 1 & 2 - FEATURE G
4	C114_3888	4,381	14/08/28	389722	7621437	View looking north at three small depressions on northwest corner of BANLF - Lobes 1 & 2 - FEATURE G
5	C114_3889	4,383	14/08/28	389733	7621412	View looking north along east side of BANLF - Lobes 1 & 2
6	C114_3890	4,397	14/08/28	389732	7621411	View looking west at minor depression on southeast corner of Lobes 1 & 2 - FEATURE A
7	C114_3891	4,425	14/08/28	389720	7621416	View looking north along west toe of BANLF - Lobes 1 & 2
Lobe 3						
8	C114_3892	4,370	14/08/28	389732	7621402	View looking southeast at ponded area along northeast toe of BANLF- Lobe 3
9	C114_3893	4,319	14/08/28	389730	7621402	View looking southwest along north toe of BANLF - Lobe 3
10	C114_3895	1,508	14/08/28	389741	7621387	Panoramic view looking south to northwest from the northeast corner across BANLF - Lobe 3
11	C114_3896	4,305	14/08/28	389713	7621393	View looking south at linear depression on north crest of BANLF - Lobe 3 - FEATURE H
12	C114_3897	4,369	14/08/28	389707	7621388	View looking east at linear depression on north crest of BANLF - Lobe 3 - FEATURE H
13	C114_3898	4,430	14/08/28	389692	7621387	View looking east along north toe of BANLF - Lobe 3
14	C114_3899	4,311	14/08/28	389690	7621386	View looking south along west side of BANLF - Lobe 3
15	C114_3900	4,339	14/08/28	389694	7621374	View looking north at linear depression on northwest crest of BANLF - Lobe 3 - FEATURE B
16	C114_3901	4,408	14/08/28	389699	7621378	View looking west at linear depression on northwest crest of BANLF - Lobe 3 - FEATURE B
17	C114_3902	4,396	14/08/28	389691	7621376	View looking north along west side slope of BANLF - Lobe 3.
18	C114_3905	4,294	14/08/28	389693	7621356	View looking south at west side slope of BANLF - Lobe 3
19	C114_3906	4,306	14/08/28	389733	7621361	View looking northeast at seasonal ponded area on northeast corner of BANLF - Lobe 3
20	C114_3907	4,403	14/08/28	389728	7621331	View looking east at minor erosion on east side slope of BANLF - Lobe 3 - FEATURE J (new)
21	C114_3908	4,265	14/08/28	389741	7621331	View looking west at minor erosion on east side slope of BANLF - Lobe 3 - FEATURE J (new)
22	C114_3909	4,361	14/08/28	389735	7621323	View looking north along east toe of BANLF - Lobe 3
23	C114_3910	4,403	14/08/28	389735	7621321	View of minor staining along east toe of BANLF - Lobe 3 - Feature D
24	C114_3912	4,439	14/08/28	389732	7621311	View looking southeast at minor ponding and rust coloured staining in wetted area east of BANLF - Lobe 3 - FEATURE D
25	C114_3914	4,386	14/08/28	389730	7621295	View looking northeast at minor ponding and rust coloured staining in wetted area east of BANLF - Lobe 3 - FEATURE D
26	C114_3917	4,277	14/08/28	389751	7621305	View looking west at minor ponding and rust coloured staining in wetted area east of BANLF - Lobe 3 - FEATURE D

Table VI: Visual Inspection Photo Log – Borrow Area North Landfill (page 2 of 2)

Photo (BANLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
27	C114_3920	1,366	14/08/28	389727	7621281	Panoramic view looking southwest to north from the southeast corner across BANLF - Lobe 3
28	C114_3921	4,326	14/08/28	389718	7621279	View looking southeast at minor erosion on southeast side slope of BANLF - Lobe 3 - FEATURE K (new)
29	C114_3922	4,347	14/08/28	389728	7621269	View looking northwest at minor erosion on southeast side slope of BANLF - Lobe 3 - FEATURE K (new)
30	C114_3923	4,444	14/08/28	389734	7621279	View looking north along east side of BANLF - Lobe 3
31	C114_3924	4,354	14/08/28	389732	7621278	View looking southwest along east side of BANLF - Lobe 3
32	C114_3925	1,262	14/08/28	389701	7621261	Panoramic view looking northwest to northeast at south end of BANLF - Lobe 3
Lobes 4 & 5						
33	C114_3928	4,416	14/08/28	389695.7	7621247	View looking southeast at minor staining on north side of BANLF - Lobes 4 & 5 - FEATURE E
34	C114_3929	4,341	14/08/28	389697.2	7621230.1	View looking southeast at faint staining on north side slope of BANLF - Lobes 4 & 5 - FEATURE E
35	C114_3930	4,263	14/08/28	389694.3	7621230.1	View looking southwest along west toe of BANLF - Lobes 4&5
36	C114_3931	4,374	14/08/28	389710.9	7621223.2	View of infilled tension crack area located on northeast corner of BANLF - Lobes 4 & 5 - FEATURE F
37	C114_3933	4,371	14/08/28	389707.3	7621228.1	View looking southeast at in-filled tension crack on northeast corner of BANLF - Lobes 4 & 5 - FEATURE F
38	C114_3935	4,404	14/08/28	389718.4	7621208.7	View looking south along east side of BANLF - Lobes 4 & 5
39	C114_3937	4,435	14/08/28	389712.6	7621188.9	View looking north at minor depression above crest on east side of BANLF - Lobes 4 & 5 - FEATURE I (new)
40	C114_3938	4,411	14/08/28	389707.6	7621196.1	View looking east at minor depression above crest on east side of BANLF - Lobes 4 & 5 - FEATURE I (new)
41	C114_3939	4,316	14/08/28	389715.1	7621183.7	View looking southwest at minor erosion on southeast side slope and toe of BANLF - Lobes 4 & 5 - FEATURE C
42	C114_3940	4,292	14/08/28	389713.4	7621178.2	View looking northwest at minor erosion on southeast side slope and toe of BANLF - Lobes 4 & 5 - FEATURE C
43	C114_3941	1,285	14/08/28	389707.3	7621186.6	Panoramic view looking southwest to north from southeast corner across BANLF - Lobes 4 & 5
44	C114_3942	4,357	14/08/28	389689.6	7621173.4	View looking east-northeast along south toe of BANLF - Lobes 4&5
45	C114_3943	1,150	14/08/28	389654	7621175.9	Panoramic view looking north to east from southwest corner across BANLF - Lobes 4 & 5
46	C114_3944	4,359	14/08/28	389660	7621189.1	View looking west at minor erosion on southwest side slope of BANLF - Lobes 4 & 5 - FEATURE L (new)
47	C114_3945	4,361	14/08/28	389647.2	7621189	View looking east at minor erosion on southwest side slope of BANLF - Lobes 4 & 5 - FEATURE L (new)
Soil Sampling						
C1-1	C114_3918	4,387	14/08/28	389751	7621338	Sampling location C112-1 located upgradient of BANLF-Lobe 3
S1	C114_3919	4,437	14/08/28	389757	7621338	View west at C112-1 soil sample location
C1-2	C114_3903	4,317	14/08/28	389707	7621432	Sampling location C112-2 located downgradient of BANLF-Lobes 1 & 2
S2	C114_3904	4,317	14/08/28	389701	7621335	View southeast at C112-2 soil sample location
C1-3	C114_3915	4,243	14/08/28	389670	7621366	Sampling location C112-3 located downgradient of BANLF-Lobe 3
S3	C114_3916	4,284	14/08/28	389665	7621366	View east at C112-3 soil sample location
C1-4	C114_3926	4,393	14/08/28	389681	7621287	Sampling location C112-4 located downgradient of BANLF-Lobe 3
S4	C114_3927	4,400	14/08/28	389676	7621286	View east at C112-4 soil sample location
C1-5	C114_3946	4,272	14/08/28	389660	7621224	Sampling location C112-5 located downgradient of BANLF-Lobes 4 & 5
S5	C114_3947	4,302	14/08/28	389658	7621230	View southeast at C112-5 soil sample location

3.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Borrow Area North Landfill samples are presented in Table VII below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table VII: **Soil Chemical Analysis Results – Borrow Area North Landfill**

Sample #	Location	Depth (cm)	Parameters										F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-1A	C1-1	0-15	1.0	0.04	1.0	0.6	3.8	<5	1.5	8	<0.01	<0.1	<10	<50	53
C114-1B		40-50	2.8	0.02	2.4	1.2	4.2	7.1	1.8	3	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-2A	C1-2	0-15	1.5	0.02	1.4	1.0	2.7	<4.9	1.1	4	<0.01	<0.1	<10	<50	<50
C114-2B		40-50	2.1	0.02	2.9	1.8	3.2	<5	2.0	5	<0.01	<0.1	<10	<50	<50
C114-3A	C1-3	0-15	2.5	0.03	2.9	1.8	3.5	<4.9	1.9	7	<0.01	<0.1	<10	<50	<50
C114-3B		40-50	1.8	0.01	2.5	1.5	2.9	<5	1.4	4	<0.01	<0.1	<10	<50	<50
C114-4A	C1-4	0-15	0.8	0.02	1.2	0.8	1.7	<4.9	0.8	10	<0.01	<0.1	<10	<50	<50
C114-4B		40-50	1.6	0.01	2.2	2.0	2.1	<4.9	1.3	5	<0.01	<0.1	<10	<50	<50
C114-5A	C1-5	0-15	1.6	0.02	1.1	0.9	1.6	<4.9	0.7	5	<0.01	<0.1	<10	<50	<50
C114-5B		40-50	1.3	0.01	1.0	0.7	1.6	<5	0.6	3	<0.01	<0.1	<10	<50	<50

4 NORTHEAST LANDFILL

4.1 SUMMARY

The 2014 monitoring of the Northeast Landfill was completed on August 28, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate.

No TPH, PCBs or elevated levels of metal parameters were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the Northeast Landfill. In addition to one existing settlement feature, three new areas of localized minor settlement were observed on the east cover of Lobe 2 and north side slope / northwest cover of Lobes 1 & 3. Similarly, one existing (north side slope) and two new areas of minor erosion were noted on the northeast corner and west side slope of Lobes 1 & 3. Existing features were consistent with observations made during the previous assessment period. One uneven area on the northwest corner of Lobes 1 & 3 was also consistent with previous observations. No exposed debris was observed.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table VIII of this report and has been completed as per the TOR. Please refer to Figure CAM-1.3 for a sketch of the Northeast Landfill detailing the location of photographs and features.

Table VIII: **Visual Inspection Checklist / Report – Northeast Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION – LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 2

SITE NAME: CAM-1 – Jenny Lind Island
LANDFILL DESIGNATION: Northeast Landfill (Regrade Landfill)
DATE OF INSPECTION: August 28, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE VIII: NORTHEAST LANDFILL VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Northeast Landfill
Designation: Existing Regrade Area
Date Inspected: August 28, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.3 (Lobes 1 & 3 - N side slope) - 1 New Obs.	0.03 - 5 m	0.02 - 2 m	0.1 - 0.3 m	Occassional	3 depressions, including 2 on the inside corner slope (existing) and north side slope (new)	NELF-25-27	Acceptable	Linear and pothole type. Some secondary erosion on inside corner. Slopes appear stable.Feature first noted in 2011 with marginal increases in magnitude and/or depth in 2013 and 2014.
		FEATURE D See Figure CAM-1.3 (Lobe 2 - E cover) - New Obs.	11 m	0.1 m	0.02 - 0.04 m	Isolated	Linear depression	NELF-6, 7	Acceptable	New observation in Year 5. Cover appears stable.
		FEATURE E See Figure CAM-1.3 (Lobes 1 & 3 - NW cover) - New Obs.	0.4 m	0.3 m	0.1 m	Isolated	Pothole depression	NELF-24	Acceptable	New observation in Year 5. Cover appears stable.
Erosion	Yes	FEATURE C See Figure CAM-1.3 (N side slope)	3.5 m	0.15 m	0.05 m	Isolated (<1%)	Minor erosion	NELF-30	Acceptable	Washing of fines. Self armouring. No notable changes in feature since first observed in Year 4 (2013).
		FEATURE F See Figure CAM-1.3 (Lobes 1 & 3 - NE corner) - New Obs.	3 m	0.1 m	0.1 m	Isolated	Minor erosion	NELF-32	Acceptable	New observation in Year 5. Cover appears stable.
		FEATURE G See Figure CAM-1.3 (Lobes 1 & 3 - W side slope) - New Obs.	4 m	0.5 - 1.5 m	0.1 m	Isolated	Minor erosion	NELF-18, 19	Acceptable	New observation in Year 5. Fines washing. Slope appears stable.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	Yes	FEATURE B See Figure CAM-1.3 (Lobes 1 & 3 - NW corner side slope)	4 m	4 m	N/A	Isolated (<1%)	Uneven side slope	NELF- 20, 22	N/A	First noted in Year 1 (2010). No notable changes.
Additional Photos	Yes	See Figure CAM-1.3 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no additional features of note.
Overall Landfill Performance:	**Acceptable**									

4.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for the Northeast Landfill has been completed as per the ToR and is included as Table IX below.

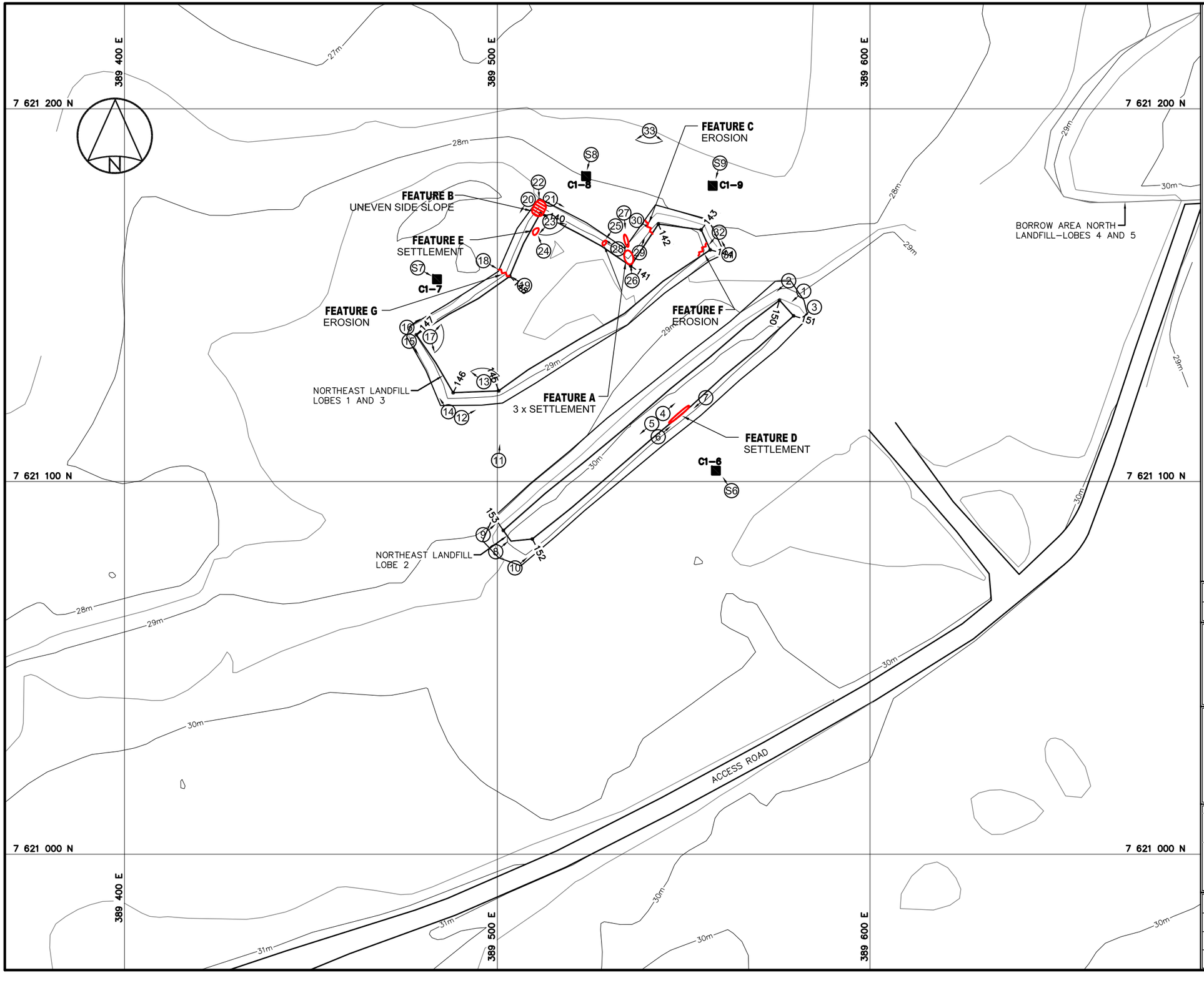
Table IX: **Preliminary Stability Assessment – Northeast Landfill**

Feature	Severity Rating	Extent
Settlement	Acceptable	Occasional
Erosion	Acceptable	Occasional
Frost Action	Not observed	None
Staining	Not observed	None
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

4.3 LOCATION PLAN

The Location Plan for the Northeast Landfill has been completed as per the ToR and is presented in Figure CAM-1.3.



LEGEND

- MONITORING SOIL SAMPLE LOCATION
- 140 COORDINATE POINT
- 6 APPROX. PHOTOGRAPHIC VIEWPOINT
- SETTLEMENT (NTS)
- UNEVEN SIDE SLOPE (NTS)
- EROSION (NTS)

0 10m 20m 30m 40m 50m

NO.	VERSION	DATE	PAR	VERIF.	APPR.
1	FINAL	15–06–26	P.L.	A.P.	M.F.

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

NORTHEAST LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
Quebec, (Quebec) CANADA G1P 2J7
Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 1,000	JUNE 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.3-PL	PAGE PL

FIGURE CAM-1.3

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4.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Northeast Landfill has been completed as per the ToR and is included as Table X hereafter. The Photographic Record contains only an index of photographs. Full sized photographs are contained in the Addendum DVD-ROM.

Table X: **Visual Inspection Photo Log – Northeast Landfill (page 1 of 2)**

Photo (NELF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
Lobes 1 & 3						
11	C114_3961	4,424	14/08/28	389582	7621151	View looking north at southeast side of NE Landfill - Lobes 1 & 3
12	C114_3962	4,449	14/08/28	389579	7621153	View looking northeast along east toe of NE Landfill - Lobes 1 & 3
13	C114_3963	1,352	14/08/28	389585	7621147	Panoramic view looking northwest to northeast from south side of NE Landfill - Lobes 1 & 3
14	C114_3964	4,315	14/08/28	389544	7621117	View looking northwest along south toe of NE Landfill - Lobes 1 & 3
15	C114_3965	4,346	14/08/28	389543	7621117	View looking southeast along south toe of NE Landfill - Lobes 1 & 3
16	C114_3966	4,355	14/08/28	389544	7621113	View looking northeast along west toe of NE Landfill - Lobes 1 & 3
17	C114_3967	1,434	14/08/28	389554	7621122	Panoramic view looking northeast to south from southwest corner across NE Landfill - Lobes 1 & 3
18	C114_3968	4,369	14/08/28	389500	7621081	View looking southeast at minor erosion on west side slope of NE Landfill - Lobes 1 & 3 - FEATURE G (new)
19	C114_3969	4,387	14/08/28	389496	7621085	View looking northwest at minor erosion on west side slope of NE Landfill - Lobes 1 & 3 - FEATURE G (new)
20	C114_3970	4,414	14/08/28	389505	7621077	View looking southeast at uneven side slope on northwest corner of NE Landfill - Lobes 1 & 3 - FEATURE B
21	C114_3971	4,327	14/08/28	389501	7621105	View looking southwest at uneven side slope on northwest corner of NE Landfill - Lobes 1 & 3 - FEATURE B
22	C114_3972	4,285	14/08/28	389489	7621117	View looking south at uneven side slope on northwest corner of NE Landfill - Lobes 1 & 3 - FEATURE B
23	C114_3973	1,444	14/08/28	389495	7621126	Panoramic view looking east to southwest from north side across NE Landfill - Lobes 1 & 3
24	C114_3974	4,388	14/08/28	389488	7621119	View looking north at pothole depression on northwest corner of NE Landfill - Lobes 1 & 3 - FEATURE E
25	C114_3979	4,361	14/08/28	389476	7621139	View looking southwest at pothole depression on north side slope of NE Landfill - Lobes 1 & 3 - FEATURE A (new)
26	C114_3981	4,392	14/08/28	389476	7621140	View looking north at two areas of settlement on inside corner on north side of NE Landfill - Lobes 1 & 3 - FEATURE A
27	C114_3982	4,336	14/08/28	389481	7621139	View looking south at two areas of settlement on inside corner on north side of NE Landfill - Lobes 1 & 3 - FEATURE A
28	C114_3983	4,391	14/08/28	389498	7621158	View looking northwest along north side of NE Landfill - Lobes 1 & 3
29	C114_3984	4,349	14/08/28	389505	7621154	View looking northeast along northeast extension of NE Landfill - Lobes 1 & 3.
30	C114_3985	4,362	14/08/28	389510	7621175	View looking southeast at minor erosion on north side slope of NE Landfill - Lobes 1 & 3 - FEATURE C
31	C114_3987	4,366	14/08/28	389513	7621176	View looking north-northwest along northeast side of NE Landfill - Lobes 1 & 3
32	C114_3989	4,359	14/08/28	389511	7621179	View looking southwest at minor erosion on northeast corner of NE Landfill - Lobes 1 & 3- FEATURE F (new)

Table X: Visual Inspection Photo Log – Northeast Landfill (page 2 of 2)

Photo (NELF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
33	C114_3990	956	14/08/28	389512	7621170	Panoramic view looking southeast to southwest at north side of NE Landfill - Lobes 1 & 3
Lobe 2						
1	C114_3948	4,383	14/08/28	389511	7621163	View looking southwest along centerline of NE Landfill - Lobe 2
2	C114_3949	4,330	14/08/28	389531	7621167	View looking southwest along west toe of NE Landfill - Lobe 2
3	C114_3951	4,326	14/08/28	389536	7621155	View looking southwest along east toe of NE Landfill - Lobe 2
4	C114_3952	4,325	14/08/28	389534	7621169	View looking northeast along centerline of NE Landfill - Lobe 2
5	C114_3953	4,306	14/08/28	389533	7621162	View looking southwest along centerline of NE Landfill - Lobe 2
6	C114_3954	4,374	14/08/28	389537	7621161	View looking northeast at linear depression along east crest of NE Landfill - Lobe 2 - FEATURE D (new)
7	C114_3955	4,320	14/08/28	389538	7621169	View looking southwest at linear depression along east crest of NE Landfill - Lobe 2 - FEATURE D (new)
8	C114_3958	4,414	14/08/28	389562	7621162	View looking northeast along centerline of NE Landfill - Lobe 2
9	C114_3959	4,286	14/08/28	389558	7621166	View looking northeast along west toe of NE Landfill - Lobe 2
10	C114_3960	4,402	14/08/28	389542	7621193	View looking northeast along east toe of NE Landfill - Lobe 2
Soil Sampling						
C1-6	C114_3956	4,307	14/08/28	389559	7621102	Sampling location C112-6 located upgradient of NELF-Lobe 2
S6	C114_3957	4,314	14/08/28	389561	7621100	View northwest at C112-6 soil sample location
C1-7	C114_3975	4,306	14/08/28	389483	7621154	Sampling location C112-7 located downgradient of NELF-Lobes 1 & 3
S7	C114_3976	4,436	14/08/28	389480	7621157	View southeast at C112-7 soil sample location
C1-8	C114_3977	4,392	14/08/28	389524	7621182	Sampling location C112-8 located downgradient of NELF-Lobes 1 & 3
S8	C114_3978	4,460	14/08/28	389525	7621188	View southwest at C112-8 soil sample location
C1-9	C114_3991	4,317	14/08/28	389558	7621179	Sampling location C112-9 located downgradient of NELF-Lobes 1 & 3
S9	C114_3992	4,413	14/08/28	389560	7621183	View southwest at C112-9 soil sample location

4.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Northeast Landfill samples are presented in Table XI below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XI: **Soil Chemical Analysis Results – Northeast Landfill**

Sample #	Location	Depth (cm)	Parameters										F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-6A	C1-6	0-15	5.6	0.04	2.2	1.7	3.6	12.4	1.2	4	<0.01	<0.1	<10	<50	<50
C114-6B		40-50	8.5	0.04	2.4	2.1	4.4	19.4	1.5	4	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-7A	P2-7	0-15	2.1	0.03	1.5	0.7	1.8	<5	0.9	9	<0.01	<0.1	<10	<50	<50
C114-7B		40-50	3.7	0.02	2.7	1.6	2.4	8.0	1.8	6	<0.01	<0.1	<10	<50	<50
C114-8A	P8-8	0-15	1.5	0.02	1.8	0.7	1.5	<4.9	0.9	6	<0.01	<0.1	<10	<50	<50
C114-8B		40-50	5.8	0.02	2.5	2.2	2.6	11.0	1.8	7	<0.01	<0.1	<10	<50	<50
C114-9A	P2-9	0-15	4.0	0.12	4.3	1.5	16.6	7.9	4.6	7	0.02	<0.1	<10	<50	<50
C114-9B		40-50	12.9	0.10	3.6	3.5	12.5	22.4	4.6	15	<0.01	<0.1	<10	<50	<50

5 STATION WEST LANDFILL

5.1 SUMMARY

The 2014 monitoring of the Station West Landfill was completed on August 27, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate.

No TPH, PCBs or elevated levels of metal parameters were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the Station West Landfill. There are several observations of minor settlement on the landfill cover and side slope, including three existing feature areas on the east and northwest side slopes, southwest corner of cover and north cover, and two new feature areas on the southeast and southwest side slopes. The existing settlement areas appear unchanged from the previous inspection. Evidence of minor erosion was observed at two existing locations on the north corner and east side slope. Similarly, these features appear unchanged from the previous assessment period. Five localized areas of discolouration granular cover soils were noted on the south cover of the landfill. With the exception of one newly observed area, this feature appears relatively unchanged from the previous assessment. Two areas containing tension cracks were noted on the south corner (single and parallel) and east side slope (single). The magnitude of cracks on the south corner appears to have decreased, whereas the crack on the east side slope appears to have increased from the previous inspection period. A third area on the northeast side slope was previously noted to contain single and parallel cracks, however were not observed during the 2014. No exposed debris was observed.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XII of this report and has been completed as per the TOR. Please refer to Figure CAM-1.4 for a sketch of the Station West Landfill detailing the location of photographs and features.

Table XII: **Visual Inspection Checklist / Report – Station West Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION – LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 2

SITE NAME: CAM-1 – Jenny Lind Island
LANDFILL DESIGNATION: Station West Landfill (Regrade Landfill)
DATE OF INSPECTION: August 27, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2014
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XII: STATION WEST LANDFILL VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Station West Landfill
Designation: Existing Regrade Area
Date Inspected: August 28, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.4 (E side slope)	0.2 - 2 m	0.1 - 0.2 m	0.05 - 0.1 m	Occasional	Minor depressions - 4 locations	WLF-3, 4, 8-10	Acceptable	No substantial change in feature since first noted in Year 2 (2011). Side slope appears stable.
		FEATURE B See Figure CAM-1.4 (NW side slope & N cover)	0.7 - 1.5 m	0.1 - 0.3 m	0.05 - 0.1 m	Occasional	Minor depressions - 3 locations	WLF-14, 29	Acceptable	No substantial change in feature since first noted in Year 2 (2011). Cover and side slopes appears stable.
		FEATURE C See Figure CAM-1.4 (SW corner of cover)	5 m	5 m	0.05 - 0.15 m	Isolated (<2%)	Uneven surface	WLF-27	Acceptable	No notable changes in feature since noted in Year 1 (2010). Cover appears stable.
		FEATURE J See Figure CAM-1.4 (SE side slope) - New Obs.	0.4 m	0.2 m	0.05 m	Isolated	Minor pothole-type depression	WLF-17	Acceptable	New observation in Year 5. Cover appears stable.
		FEATURE K See Figure CAM-1.4 (SW side slope) - New Obs.	0.2 - 0.3 m	0.2 m	0.05 - 0.1 m	Occasional	Minor pothole-type depressions - 2 locations	WLF-23, 24, 32	Acceptable	New observation in Year 5. Side slope appears stable.
Erosion	Yes	FEATURE D See Figure CAM-1.4 (E side slope)	5 m	0.1 m	0.05 m	Isolated	Minor erosion	WLF-6, 7	Acceptable	Feature first noted in Year 2 (2011). Marginal increase in size between Years 4 and 5 (2013-2014). Washing of fines in cover material.
		FEATURE E See Figure CAM-1.4 (N corner)	6 m	4 m	0.05 - 0.1 m	Isolated (<2%)	Minor erosion	WLF-11, 12	Acceptable	Feature first noted in Year 2 (2011). Marginal increase in size between YearS 2 and 3 (2011-2012). Washing of fines on slope from seasonal ponding.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	Yes	FEATURE F See Figure CAM-1.4 (S cover - 5 areas) - 1 New Obs	2 - 4 m	0.2 - 0.4 m	Unknown	Isolated (<3%)	Discoloured granular areas on cover - 5 locations	WLF-15, 16, 18, 28	Acceptable	Feature first noted in Year 1 (2010). Additional localized staining noted in Year 3, 4 and 5.
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	Yes	FEATURE G See Figure CAM-1.4 (Tension Cracks - S corner)	10 m	2-4 mm	Unknown	Isolated (<1%)	Parallel and single tension cracks on side slope	WLF-19-21	Acceptable	Feature first noted in Year 1 (2010). Notable increase in size in Year 4. Discontinuous crack extending around southeast corner of landfill.
		FEATURE H See Figure CAM-1.4 (Tension Cracks - NE side slope)	Unknown	Unknown	Unknown	N/A	Continuous single and parallel tension cracks on side slope	WLF-11, 12	Acceptable	Feature first noted in Year 3 (2012) and decreased in size in Year 4. Feature assumed to be completely infilled in Year 5. Not visible.
		FEATURE I See Figure CAM-1.4 (Tension Crack - E side slope)	6 m	up to 10 mm	Unknown	Isolated	Single tension crack on side slope	WLF-5	Acceptable	Feature first observed in Year 4 (2013) with a notable increase in size in Year 5. Located on side slope 1 m above toe.
Additional Photos	Yes	See Figure CAM-1.4 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no additional features of note.
Overall Landfill Performance:	**Acceptable**									

5.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for Station West Landfill has been completed as per the ToR and is included as Table XIII below.

Table XIII: **Preliminary Stability Assessment – Station West Landfill**

Feature	Severity Rating	Extent
Settlement	Acceptable	Occasional
Erosion	Acceptable	Occasional
Frost Action	Not observed	None
Staining	Acceptable	Occasional
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

5.3 LOCATION PLAN

The Location Plan for the Station West Landfill has been completed as per the ToR and is presented in Figure CAM-1.4.

7 621 000 N

389 000 E

389 100 E

7 620 900 N

FEATURE B
3 x SETTLEMENT

FEATURE H
CRACKS

FEATURE E
SETTLEMENT/EROSION

FEATURE A
4 x SETTLEMENT

FEATURE D
EROSION

FEATURE I
CRACK

FEATURE F
5 x STAINING

FEATURE J
SETTLEMENT

FEATURE C
UNEVEN SURFACE

FEATURE K
2 x SETTLEMENT

FEATURE G
CRACKS

EQUIPMENT TRACKS/RUTS

STATION WEST LANDFILL

C1–13

C1–12

C1–11

C1–10

S10 S11 S12 S13

201 202 203 204 205 206

24m 26m 27m

LEGEND

- MONITORING SOIL SAMPLE LOCATION
- 201 COORDINATE POINT
- APPROX. PHOTOGRAPHIC VIEWPOINT
- SETTLEMENT (NTS)
- STAINING (NTS)
- EQUIPMENT TRACKS/RUTS (NTS)
- UNEVEN SIDE SLOPE (NTS)
- EROSION (NTS)
- TENSION CRACK(s) (NTS)

0 5m 10m 15m 20m 25m

NO.	VERSION	DATE	PAR	VERIF.	APPR.
1	FINAL	15-06-26	P.L.	A.P.	M.F.

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

STATION WEST LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
Quebec, (Quebec) CANADA G1P 2J7
Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 500	JUNE 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.4-PL	PAGE PL

FIGURE CAM-1.4

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5.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Station West Landfill has been completed as per the ToR and is included as Table XIV hereafter. The Photographic Record contains only an index of photographs. Full sized photographs are contained in the Addendum DVD-ROM.

Table XIV: **Visual Inspection Photo Log – Station West Landfill (page 1 of 2)**

Photo (SWLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
1	C114_3993	1,218	14/08/28	389053	7620925	Panoramic view looking southwest to northwest from east side across Station West Landfill
2	C114_3994	4,304	14/08/28	389057	7620927	View looking northwest along east side of Station West Landfill
3	C114_3995	4,377	14/08/28	389052	7620932	View looking northwest at start of partially infilled crack on east side slope - FEATURE I; and minor erosion - FEATURE D on east side slope of Station West Landfill
4	C114_3996	4,362	14/08/28	389052	7620935	View looking southwest at localized depressions - FEATURE A; and minor erosion - FEATURE D on east side slope of Station West Landfill
5	C114_3997	4,383	14/08/28	389048	7620941	View looking southeast at partially infilled crack on east side slope - FEATURE I; and minor erosion - FEATURE D on east side slope of Station West Landfill
6	C114_3998	4,381	14/08/28	389054	7620940	View looking southwest at minor erosion on east side slope of Station West Landfill - FEATURE D
7	C114_3999	4,368	14/08/28	389044	7620936	View looking northeast at minor erosion on east side slope of Station West Landfill - FEATURE D
8	C114_4000	4,385	14/08/28	389045	7620943	View southeast at minor linear depression on top slope on northeast corner of Station West Landfill - FEATURE A
9	C114_4001	4,353	14/08/28	389041	7620946	View looking northwest at linear depression on northeast side slope of Station West Landfill - FEATURE A
10	C114_4002	4,391	14/08/28	389041	7620953	View looking southwest at linear depression on northeast side slope of Station West Landfill - FEATURE A
11	C114_4003	920	14/08/28	389045	7620961	View looking southeast at erosion from seasonal ponding on northeast side of Station West Landfill with minor settlement - FEATURE E
12	C114_4004	4,374	14/08/28	389033	7620963	View looking southeast at erosion from seasonal ponding on northeast side of Station West Landfill with minor settlement - FEATURE E
13	C114_4005	4,333	14/08/28	389029	7620961	View looking west-southwest along north side slope of Station West Landfill
14	C114_4006	4,329	14/08/28	389027	7620950	View looking north at localized depressions on north side of Station West Landfill - FEATURE B
15	C114_4007	4,432	14/08/28	389036	7620925	View looking south at areas of staining on cover of Station West Landfill - FEATURE F
16	C114_4008	4,290	14/08/28	389031	7620920	View looking east at three areas of staining on cover of Station West Landfill - FEATURE F
17	C114_4011	4,268	14/08/28	389047	7620913	View looking southeast at small depression on southeast crest of Station West Landfill - FEATURE J (new)
18	C114_4014	4,275	14/08/28	389023	7620914	View looking southwest at rust coloured staining on southwest cover of Station West Landfill - FEATURE F
19	C114_4015	4,326	14/08/28	389041	7620902	View looking west at partially infilled tension crack on south side slope of Station West Landfill - FEATURE G
20	C114_4016	4,290	14/08/28	389025	7620904	View looking east at partially infilled tension crack on south side slope of Station West Landfill - FEATURE G
21	C114_4017	4,346	14/08/28	389035	7620901	Partially infilled tension crack on south side slope of Station West Landfill - FEATURE G
22	C114_4018	1,370	14/08/28	389037	7620906	Panoramic view looking northwest to northeast from south side of Station West Landfill
23	C114_4019	4,415	14/08/28	389016	7620911	View looking southeast at pothole depression on south side of Station West Landfill - FEATURE K

Table XIV: Visual Inspection Photo Log – Station West Landfill (page 2 of 2)

Photo (SWLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
24	C114_4020	4,272	14/08/28	389010	7620915	View looking southeast at pothole depression on south side of Station West Landfill - FEATURE K
25	C114_4021	4,375	14/08/28	389001	7620917	View looking southeast along south side of Station West Landfill
26	C114_4022	4,444	14/08/28	388999	7620920	View looking north-northeast along west side slope of Station West Landfill
27	C114_4023	4,303	14/08/28	389009	7620921	View looking west at uneven surface on southwest corner of Station West Landfill - Feature C
28	C114_4024	4,361	14/08/28	389014	7620925	View looking east at linear stain on southwest cover of Station West Landfill - FEATURE F
29	C114_4027	4,296	14/08/28	389008	7620948	View looking east at small depression on west side slope of Station West Landfill - FEATURE B (new)
30	C114_4028	4,425	14/08/28	389014	7620955	View looking south-southwest along west side of Station West Landfill
31	C114_4029	4,407	14/08/28	389015	7620957	View looking east along north side of Station West Landfill
32	C114_4030	4,017	14/08/28	389011	7620952	View looking southwest at heavy equipment tracks west of Station West Landfill
Soil Sampling						
C1-10	C114_4009	4,439	14/08/28	389062	7620898	Sampling location C112-10 located upgradient of Station West LF
S-10	C114_4010	4,386	14/08/28	389066	7620895	View northwest at C112-10 soil sample location
C1-11	C114_4012	4,262	14/08/28	388991	7620922	Sampling location C112-11 located downgradient of Station West LF
S-11	C114_4013	4,216	14/08/28	388987	7620921	View east at C112-11 soil sample location
C1-12	C114_4025	4,357	14/08/28	389001	7620958	Sampling location C112-12 located downgradient of Station West LF
S-12	C114_4026	4,319	14/08/28	388999	7620961	View southeast at C112-12 soil sample location
C1-13\	C114_4031	4,321	14/08/28	389050	7620967	Sampling location C112-13 located downgradient of Station West LF
S-13	C114_4032	4,398	14/08/28	389053	7620970	View south-southwest at C112-13 soil sample location

5.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Station West Landfill samples are presented in Table XV below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XV: **Soil Chemical Analysis Results – Station West Landfill**

Sample #	Location	Depth (cm)	Parameters												
													F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-10A	C1-10	0-15	0.7	0.02	1.4	0.5	1.8	<5	1.1	4	<0.01	<0.1	<10	<50	<50
C114-10B		40-50	7.9	0.03	4.2	2.6	5.9	12.7	2.9	5	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-11A	C1-11	0-15	0.4	<0.01	1.2	0.3	3.0	<5	1.1	2	<0.01	<0.1	<10	<50	<50
C114-11B		40-50	0.9	<0.01	1.9	0.5	1.1	<5	1.1	2	<0.01	<0.1	<10	<50	<50
C114-12A	C1-12	0-15	0.3	<0.01	1.5	0.4	1.5	<5	0.9	2	<0.01	<0.1	<10	<50	<50
C114-12B		40-50	0.6	<0.01	2.2	0.8	1.3	<5	1.4	3	<0.01	<0.1	<10	<50	<50
C114-13A	C1-13	0-15	0.9	<0.01	2.6	0.8	1.4	<5	1.6	3	<0.01	<0.1	<10	<50	<50
C114-13B		40-50	1.1	<0.01	3.6	0.9	1.5	<5	1.6	3	<0.01	<0.1	<10	<50	<50

6 NON-HAZARDOUS WASTE LANDFILL

6.1 SUMMARY

The 2014 monitoring of the NHWLF was completed on August 27, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil and groundwater samples at upgradient and downgradient locations to monitor for the presence of leachate.

TPH, fraction F3, was detected in one surface soil sample collected downgradient of the landfill (C114-4WA) at a concentration of 124 mg/kg. Elevated concentrations of arsenic and lead were detected in two bottom soil samples collected at downgradient locations, C114-2WB (43.8 and 159.0 mg/kg, respectively) and C114-4WB (89.6 and 126.0 mg/kg, respectively). No PCBs were detected in the collected soil samples.

Dry well conditions and/or insufficient sample volumes limited the collection of groundwater samples to two downgradient well locations. No TPH or PCBs were detected in the collected groundwater samples. Slightly elevated chromium concentrations were observed in the sample collected from downgradient well MW-03 (2.04 mg/L).

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the NHWLF. Three areas of minor settlement (linear depressions) were noted on the cover and side slopes of the landfill, including one existing and one new depression on the southwest cover, one new depression on the north corner slope and one depression on the northwest side slope. Five areas of partially exposed geotextile material were noted on the northeast, east and west sides of the landfill surface, including one newly observed location on the west cover area.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XVI of this report and has been completed as per the TOR. Please refer to Figure CAM-1.5 for a sketch of the NHWL detailing the location of photographs and features.

Table XVI: **Visual Inspection Checklist / Report – NHWLF**

DEW LINE CLEANUP: POST-CONSTRUCTION – LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 2

SITE NAME: CAM-1 Jenny Lind Island
LANDFILL DESIGNATION: NHWLF (New Landfill)
DATE OF INSPECTION: August 27, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XVI: NON-HAZARDOUS WASTE LANDFILL VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Non-Hazardous Waste Landfill
Designation: New Landfill
Date Inspected: August 27, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.5 (SW cover) - 1 New Obs	0.4 - 0.6 m	0.15 - 0.2 m	0.05 m	Isolated	Linear depressions - 2 locations	NHWLF-3-5	Acceptable	Feature first noted in Year 3 (2012). Cover appears stable. Existing depression consistent with previous observations.
		FEATURE C See Figure CAM-1.5 (N corner slope) - New Obs.	1 m	0.4 m	0.05 m	Isolate	Linear depression	NHWLF-20, 21	Acceptable	New observation in Year 5. Some secondary erosion. Slope appears stable.
		FEATURE D See Figure CAM-1.5 (NW side slope) - New Obs.	1 m	0.2 m	0.1 m	Isolated	Linear depression	NHWLF-25	Acceptable	New observation in Year 5. Cover appears stable.
Erosion	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	Yes	FEATURE B See Figure CAM-1.5 (NE, E and W cover) - 1 New Obs.	0.1 - 0.3 m	0.1 - 0.2 m	Unknown	Isolated (<1%)	Exposed geotextile material - 5 locations	NHWLF-7, 10-16	Acceptable	Feature first noted in Year 1 (2010) as Feature A. Changed to Feature B in Year 2. No significant changes noted between 2010-2014, with exception of one new location on the west cover area.
Presence/Condition of Monitoring Instruments	Yes	See Figure CAM-1.5 (S, NE, N and NW)	N/A	N/A	N/A	N/A	MW-01 to -04	NHWLF-1W, 2W, 3W, 4W, 24	N/A	All monitoring wells appear in good condition.
Other Features of Note:	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Additional Photos	Yes	See Figure CAM-1.5 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no additional features of note.
Overall Landfill Performance:	**Acceptable**									

6.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for NHWLF has been completed as per the ToR and is included as Table XVII hereafter.

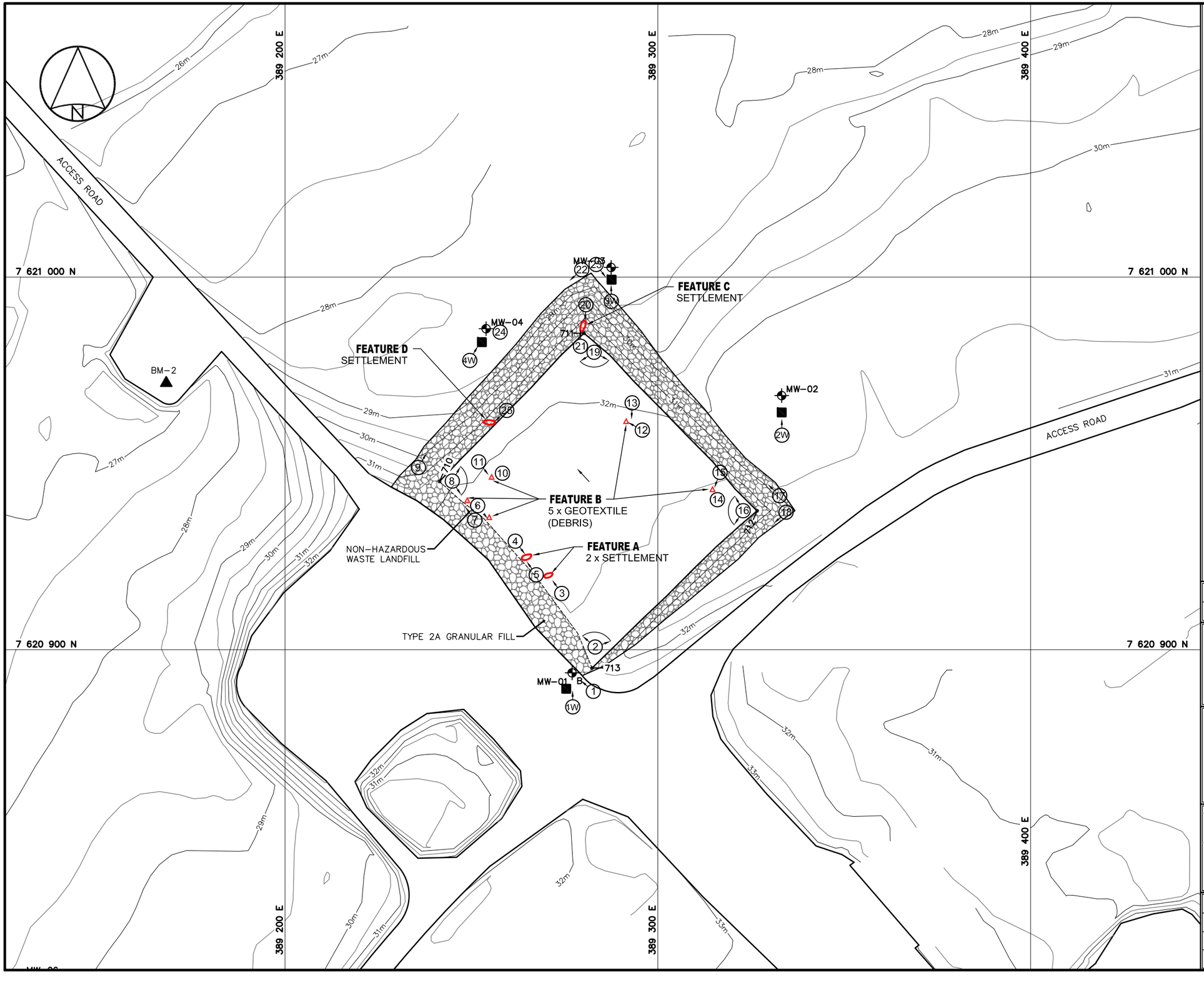
Table XVII: **Preliminary Stability Assessment – NHWLF**

Feature	Severity Rating	Extent
Settlement	Acceptable	Occasional
Erosion	Not observed	None
Frost Action	Not observed	None
Staining	Not observed	None
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Acceptable	Occasional
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

6.3 LOCATION PLAN

The Location Plan for the NHWLF has been completed as per the ToR and is presented in Figure CAM-1.5.



LEGEND

- MONITORING SOIL SAMPLE LOCATION
- BM-2 — PERMANENT BENCHMARK LOCATION
- 710 — COORDINATE POINT
- MONITORING WELL LOCATION
- B — BACKGROUND MONITORING WELL LOCATION
- 6 — APPROX. PHOTOGRAPHIC VIEWPOINT
- SETTLEMENT (NTS)
- EXPOSED GEOTEXTILE (NTS)

0 10m 20m 30m 40m 50m

NO.	VERSION	DATE	PAR	VERIF.	APPR.
1	FINAL	15-06-26	P.L.	A.P.	M.F.

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

NON-HAZARDOUS WASTE LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
Quebec, (Quebec) CANADA G1P 2J7
Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month-year):
Metre	1 : 1,000	JUNE 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.5-PL	PAGE PL

FIGURE CAM-1.5

G:\CD3654\CAM-1\FINAL\CD3654_320_323_101-CAM-1.5-PL.dwg, PL, 2015-06-26 3:30:38 PM

6.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Non-Hazardous Waste Landfill has been completed as per the ToR and is included as Table XVIII hereafter. The Photographic Record contains only an index of photographs. Full sized photographs are contained in the Addendum DVD-ROM.

Table XVIII: **Visual Inspection Photo Log – NHWLF (page 1 of 2)**

Photo (NHWLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
1	C114_3850	4,352	14/08/27	389282	7620890	View looking north at metal debris piled near MW-1
2	C114_3851	1,091	14/08/27	389283	7620900	Panoramic view looking northeast along southeast side of NHWLF
3	C114_3852	4,408	14/08/27	389274	7620915	View looking northwest at linear depression on west cover of NHWLF - FEATURE A
4	C114_3853	4,370	14/08/27	389262	7620928	View looking southeast at linear depression on west cover of NHWLF - FEATURE A (new)
5	C114_3854	4,331	14/08/27	389267	7620921	View looking northwest at linear depression on west cover of NHWLF - FEATURE A (new)
6	C114_3855	4,390	14/08/27	389252	7620938	View looking southeast at exposed geotextile material on northwest cover area of NHWLF - FEATURE B
7	C114_3856	4,403	14/08/27	389250	7620937	View looking northwest at exposed geotextile material on northwest cover area of NHWLF - FEATURE B
8	C114_3857	1,124	14/08/27	389244	7620945	Panoramic view looking northeast to southeast from west corner across NHWLF
9	C114_3858	4,351	14/08/27	389235	7620949	View looking northeast along northwest side of NHWLF
10	C114_3859	4,335	14/08/27	389256	7620947	Exposed geotextile material on northwest cover area of NHWLF - FEATURE B
11	C114_3860	4,285	14/08/27	389253	7620950	View looking southeast at exposed geotextile material on northwest cover area of NHWLF - FEATURE B
12	C114_3861	4,403	14/08/27	389293	7620961	View looking northwest at exposed geotextile material on north cover area of NHWLF - FEATURE B
13	C114_3862	4,319	14/08/27	389293	7620965	View looking south at exposed geotextile material on north cover area of NHWLF - FEATURE B
14	C114_3863	4,383	14/08/27	389316	7620941	Exposed geotextile material on east cover area of NHWLF - FEATURE B
15	C114_3864	4,379	14/08/27	389317	7620946	View looking south-southwest at exposed geotextile material on east cover area of NHWLF - FEATURE B
16	C114_3865	1,231	14/08/27	389323	7620937	Panoramic view looking southwest to northwest from east corner across NHWLF
17	C114_3866	4,336	14/08/27	389334	7620940	View looking northwest along northeast side slope of NHWLF
18	C114_3867	4,335	14/08/27	389334	7620938	View looking southwest along southeast side slope of NHWLF
19	C114_3875	1,442	14/08/27	389282	7620982	Panoramic view looking southeast to southwest from north corner across NHWLF
20	C114_3876	4,364	14/08/27	389280	7620990.9	View looking south at linear depression below north crest of NHWLF-FEATURE C (new)
21	C114_3877	4,418	14/08/27	389280	7620982	View looking north at linear depression below north crest of NHWLF - FEATURE C (new)
22	C114_3878	4,285	14/08/27	389280	7621003	View looking southeast along northeast toe of NHWLF
23	C114_3879	4,332	14/08/27	389282	7621003	View looking southwest along northwest toe of NHWLF
24	C114_3880	4,351	14/08/27	389257	7620986	View of MW-4
25	C114_3883	4,377	14/08/27	389259	7620964	View looking southwest at linear depression below northwest crest of NHWLF - FEATURE D (new)

Table XVIII: Visual Inspection Photo Log – NHWLF (page 2 of 2)

Photo (NHWLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
Soil Sampling						
MW-1	C114_3848	4,275	14/08/27	389276	7620889	Sampling location C112-1W located upgradient of NHWLF
1W	C114_3849	4,403	14/08/27	389277	7620886	View north at C112-1W soil sample location
MW-2	C114_3869	4,309	14/08/27	389334	7620963	Sampling location C112-2W located downgradient of NHWLF
2W	C114_3870	4,284	14/08/27	389333	7620959	View north at C112-2W soil sample location
MW-3	C114_3871	4,361	14/08/27	389287	7621000	Sampling location C112-3W located downgradient of NHWLF
3W	C114_3872	4,351	14/08/27	389287	7620995	View north at C112-3W soil sample location
MW-4	C114_3881	4,353	14/08/27	389252	7620982	Sampling location C112-4W located downgradient of NHWLF
4W	C114_3882	4,280	14/08/27	389251	7620980	View southeast at C112-4W soil sample location

6.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Non-Hazardous Waste Landfill samples are presented in Table XIX below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XIX: **Soil Chemical Analysis Results – Non-Hazardous Waste Landfill**

Sample #	Location	Depth (cm)	Parameters										F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-1WA	MW-01	0-15	0.7	<0.01	3.1	1.0	2.0	<4.9	1.4	3	<0.01	<0.1	<10	<50	<50
C114-1WB		40-50	0.8	<0.01	2.3	0.9	1.8	<5	1.4	3	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-2WA	MW-02	0-15	8.8	0.05	2.4	1.6	3.2	32.6	1.3	3	<0.01	<0.1	<10	<50	<50
C114-2WB		40-50	43.8	0.08	6.3	2.8	6.7	159.0	3.2	3	<0.01	<0.1	<10	<50	<50
C114-3WA	MW-03	0-15	1.3	<0.01	3.2	1.4	2.6	<4.9	1.7	3	<0.01	<0.1	<10	<50	<50
C114-3WB		40-50	6.2	0.03	3.4	1.9	6.2	13.7	1.9	10	<0.01	<0.1	<10	<50	<50
C114-4WA	MW-04	0-15	4.1	0.11	3.4	1.2	10.5	15.3	1.1	23	<0.01	<0.1	<10	<50	124
C114-4WB		40-50	89.6	0.11	4.0	6.6	11.3	126.0	7.1	14	<0.01	<0.1	<10	<50	<50

6.6 GROUNDWATER SAMPLE ANALYTICAL DATA

Although requested in the Chains of Custody, Exova did not perform the mercury analysis on groundwater samples. Results from the groundwater QA sample sent to Maxxam are presented in Table XX. The groundwater chemical analysis results of analytical data for the 2014 Non-Hazardous Waste Landfill samples are presented in the following table. Certificates of analysis and groundwater samples collected as part of the QA/QC program are presented in Annex 2.

Table XX: **Groundwater Chemical Analysis Results – Non-Hazardous Waste Landfill**

Sample #	Location	Parameters												
		As [mg/L]	Cd [mg/L]	Cr [mg/L]	Co [mg/L]	Cu [mg/L]	Pb [mg/L]	Ni [mg/L]	Zn [mg/L]	Hg [ug/L]	PCBs [ug/L]	F1 C_6-C_{10} [mg/L]	F2 C_{10}-C_{16} [mg/L]	F3 C_{10}-C_{34} [mg/L]
Detection Limit		0.0002	0.00001	0.0005	0.0001	0.001	0.0001	0.0005	0.001	0.006*	0.1	0.2	0.2	0.1
Upgradient Groundwater Sample														
C114-1W	MW-01	- Well Dry -												
Downgradient Groundwater Samples														
C114-2W	MW-02	- Well Dry -												
C114-3W	MW-03	0.0637	0.00036	2.0400	0.0209	0.258	0.0197	0.6380	0.064	<0.006*	<0.1	<0.2	<0.2	<0.1
C114-4W	MW-04	0.0194	0.00039	0.4430	0.0058	0.040	0.0115	0.1560	0.056	NA	<0.1	<0.2	<0.2	<0.1

NA: Analysis not performed by Exova

*: RDL and Concentration from Maxxam's analysis of QA Sample

6.7 MONITORING WELL SAMPLING/INSPECTION LOGS (MW-1 TO MW-4)

The monitoring well sampling and inspection logs for MW-1 to MW-4 are presented in this section.

Development of Monitoring Wells

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-27	Time:	17:05
Names of Samplers:	A.Passalis		
Landfill Name:	Non-Hazardous Waste Landfill		
Monitoring Well ID:	MW-1		
Sample Number:	N/A (dry)		
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	51		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	440		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	N/A	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	N/A		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	225	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	N/A		
Static volume of water in well (mL)=	N/A		
Free product thickness (mm)=	N/A	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	N	Purging/Sampling Equipment:	N/A
Volume Purged Water=	N/A		
Decontamination required: (Y/N)	N/A		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	N/A		
Final Conductivity (uS/cm)=	N/A		
Final Temperature (degC)=	N/A		

Development of Monitoring Wells

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-27	Time:	17:27
Names of Samplers:	A.Passalis		
Landfill Name:	Non-Hazardous Waste Landfill		
Monitoring Well ID:	MW-2		
Sample Number:	N/A	Insufficient Sample Volume	
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	36		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	350		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	162	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	126		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	165	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	3		
Static volume of water in well (mL)=	38		
Free product thickness (mm)=	0	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	N	Purging/Sampling Equipment:	N/A
Volume Purged Water=	N/A		
Decontamination required: (Y/N)	N/A		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	N/A		
Final Conductivity (uS/cm)=	N/A		
Final Temperature (degC)=	N/A		

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-28	Time:	14:15
Names of Samplers:	A.Passalis		
Landfill Name:	Non-Hazardous Waste Landfill		
Monitoring Well ID:	MW-3		
Sample Number:	C114-3W	(BDW1)	
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	42		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	480		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	122	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	80		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	191	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	69		
Static volume of water in well (mL)=	867		
Free product thickness (mm)=	0	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	Y	Purging/Sampling Equipment:	Waterra Tubing, Foot Valve
Volume Purged Water=	1000 mL		
Decontamination required: (Y/N)	N, dedicated		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	8.8	Clear, colourless	
Final Conductivity (uS/cm)=	1428		
Final Temperature (degC)=	1.2		

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-28	Time:	14:50
Names of Samplers:	A.Passalis		
Landfill Name:	Non-Hazardous Waste Landfill		
Monitoring Well ID:	MW-4		
Sample Number:	C114-4W		
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	42		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	490		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	138	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	96		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	192	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	54		
Static volume of water in well (mL)=	679		
Free product thickness (mm)=	0	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	Y	Purging/Sampling Equipment:	Waterra Tubing, Foot Valve
Volume Purged Water=	700 mL		
Decontamination required: (Y/N)	N, dedicated		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	12.5	Clear, colourless	
Final Conductivity (uS/cm)=	1361		
Final Temperature (degC)=	1.4		

7 TIER II SOIL DISPOSAL FACILITY

7.1 SUMMARY

The 2014 monitoring of the Tier II Disposal Facility was completed on August 27, 2014, which included a visual inspection as part of a preliminary landfill stability assessment, collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate and retrieval of data from the thermistors. Dry conditions were noted at all monitoring well locations.

No TPH, PCBs or elevated levels of metals were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the Tier II Disposal Facility. Three areas of minor settlement (linear and pothole depressions) were noted on the cover and side slopes of the facility including one existing depression on the west crest, one new linear depression on the northeast crest and three new depressions on the south and east areas of the cover. Indications of minor erosion were noted in two general areas on the side slopes of the facility, including four localized channels (2 new) on the northwest corner and slope and a single new channel on the northwest side slope. One small stained area was also noted on the central cover of the facility. This feature was not noted during the previous 2013 inspection.

All thermistors at the Tier II Soil Disposal Facility were inspected and found to be in good condition with no significant concerns identified. Data from all thermistors was successfully retrieved. Analogues/thermocouples at all locations were observed to be functioning properly at the time of the inspection. Batteries were replaced in all dataloggers.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XXI of this report and has been completed as per the TOR. Please refer to Figure CAM-1.6 for a sketch of the Tier II Disposal Facility detailing the location of photographs and features.

Table XXI: **Visual Inspection Checklist / Report – Tier II Soil Disposal Facility**

DEW LINE CLEANUP: POST-CONSTRUCTION - LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 2

SITE NAME: CAM-1 Jenny Lind Island
LANDFILL DESIGNATION: Tier II Soil Disposal Facility (New Landfill)
DATE OF INSPECTION: August 27, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XXI: TIER II DISPOSAL FACILITY VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Tier II Disposal Facility
Designation: New Landfill
Date Inspected: August 27, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.6 (W crest)	1.2 m	0.25 m	0.1 m	Isolated	Linear depression below crest	Tier II -57	Acceptable	No change in feature since first noted in Year 3 (2012). Side slope appears stable.
		FEATURE C See Figure CAM-1.6 (S and E cover) - New Ob s.	1.2 m	0.25 m	0.1 m	Occasional	Linear and pothole type depressions	Tier II -10, 51-54	Acceptable	New observation in Year 5. Cover appears stable.
		FEATURE D See Figure CAM-1.6 (NE crest) - New Ob s.	1.2 m	0.25 m	0.1 m	Isolated	Linear depression below crest	Tier II -32, 33	Acceptable	New observation in Year 5. Cover appears stable.
Erosion	Yes	FEATURE B See Figure CAM-1.6 (NW corner and side slope) - 2 New Obs.	2 - 12 m	0.1 - 0.3 m	0.02 - 0.05 m	Occasional	Shallow erosion channels - 4 locations (2 new)	Tier II-26, 34-37	Acceptable	Feature first noted in Year 2 (2011). Two additional erosion channels observed in Year 5. No significant changes in existing features. Slope appears stable. Minor washing of fines.
		FEATURE E See Figure CAM-1.6 (NW side slope) - New Obs.	6 m	0.2 m	0.03 - 0.05 m	Isolated	Shallow erosion channel	Tier II-55, 56	Acceptable	New observation in Year 5. Slope appears stable. Minor washing of fines.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	Yes	FEATURE F See Figure CAM-1.6 (Central cover) - New Obs.	0.3 m	0.3 m	Unknown	Isolated	Localized dark stain	Tier II-50	Acceptable	New observation in Year 5.
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	Yes	See Figure CAM-1.6	N/A	N/A	N/A	N/A	VT-1 to -4 MW-05 to -08	Tier II-46, 48, 13, 11 Tier II-1, 5W, 22, 6W, 38, 7W, 8W	N/A	All locations in good condition. Monitored and sampled in 2011.
Other Features of Note:	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Additional Photos	Yes	See Figure CAM-1.6 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no features of note.
Overall Landfill Performance:	**Acceptable**									

7.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for the Tier II Soil Disposal Facility has been completed as per the ToR and is included as Table XXII hereafter.

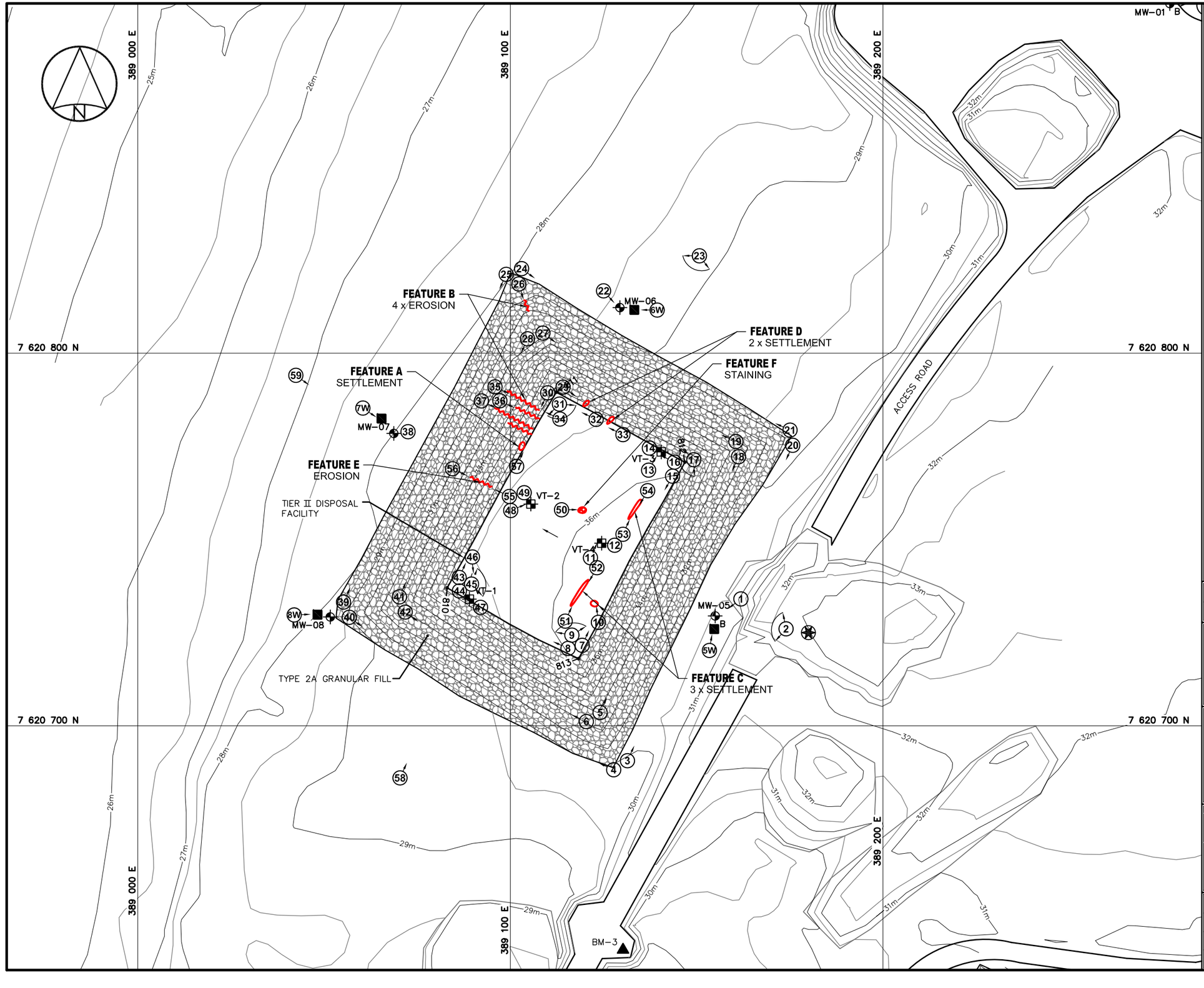
Table XXII: **Preliminary Stability Assessment – Tier II Soil Disposal Facility**

Feature	Severity Rating	Extent
Settlement	Acceptable	Occasional
Erosion	Acceptable	Occasional
Frost Action	Not observed	None
Staining	Acceptable	Isolated
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

7.3 LOCATION PLAN

The Location Plan for the Tier II Soil Disposal Facility has been completed as per the ToR and is included in the following page as Figure CAM-1.6.



LEGEND

- BM-3 — PERMANENT BENCHMARK LOCATION
- 810 — COORDINATE POINT
- COMMEMORATIVE PLAQUE LOCATION
- MONITORING WELL LOCATION
- B — BACKGROUND MONITORING WELL LOCATION
- VERTICAL THERMISTOR LOCATION
- MONITORING SOIL SAMPLE LOCATION
- 6 — APPROX. PHOTOGRAPHIC VIEWPOINT
- SETTLEMENT (NTS)
- STAINING (NTS)
- EROSION (NTS)

0 10m 20m 30m 40m 50m

NO.	VERSION	DATE	PAR	VERIF.	APPR.
1	FINAL	15-06-26	P.L.	A.P.	M.F.

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

TIER II DISPOSAL FACILITY

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
Quebec, (Quebec) CANADA G1P 2J7
Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month-year):
Metre	1 : 1,000	JUNE 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.6-PL	PAGE PL

FIGURE CAM-1.6

G:\CD3654\CAM-1\FINAL\CD3654_320_323_101-CAM-1.6-PL.dwg, PL, 2015-06-26 3:31:53 PM

7.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Tier II Soil Disposal Facility has been completed as per the ToR and is included as Table XXIII hereafter. The Photographic Record contains only an index of photographs. Full-sized photographs are contained in the Addendum DVD-ROM.

Table XXIII: **Visual Inspection Photo Log – Tier II Soil Disposal Facility (page 1 of 2)**

Photo (Tier II-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
1	C114_3781	4,384	14/08/28	389161	7620734	View looking southwest at MW-5
2	C114_3782	862	14/08/28	389173	7620726	View looking southwest-northwest at east side of Tier II DF
3	C114_3783	4,313	14/08/28	389130	7620690	View looking northeast along southeast toe of Tier II DF
4	C114_3784	4,286	14/08/28	389129	7620688	View looking northwest along southwest toe of Tier II DF
5	C114_3785	4,415	14/08/28	389123	7620702	View looking northeast along southeast side slope of Tier II DF
6	C114_3786	4,328	14/08/28	389122	7620701	View looking northwest along southwest side slope of Tier II DF
7	C114_3787	4,308	14/08/28	389118	7620722	View looking northeast along southeast crest of Tier II DF
8	C114_3788	4,420	14/08/28	389116	7620721	View looking northwest along southwest crest of Tier II DF
9	C114_3789	1,273	14/08/28	389117	7620723	Panoramic view looking west to northeast from south corner across Tier II DF
10	C114_3790	4,359	14/08/28	389123	7620727	View looking north at pothole depression on south cover of Tier II DF (0.3m L, 0.3m W, 0.05m D) - FEATURE C (new)
11	C114_3791	4,332	14/08/28	389122	7620746	View north-northeast at VT-4 on east cover of Tier II DF
12	C114_3792	3,792	14/08/28	389125	7620749	View of datalogger at VT-4
13	C114_3793	4,297	14/08/28	389138	7620770	View looking northeast at VT-3
14	C114_3794	3,679	14/08/28	389140	7620773	View of datalogger at VT-3
15	C114_3795	4,448	14/08/28	389145	7620768	View looking southwest along southeast crest of Tier II DF
16	C114_3796	4,323	14/08/28	389145	7620770	View looking northwest along northeast crest of Tier II DF
17	C114_3797	1,430	14/08/28	389148	7620771	Panoramic view looking south to northwest from east corner of Tier II DF
18	C114_3798	4,397	14/08/28	389161	7620773	View looking southwest along southeast side slope of Tier II DF
19	C114_3799	4,355	14/08/28	389161	7620775	View looking northwest along northeast side slope of Tier II DF
20	C114_3800	4,324	14/08/28	389176	7620776	View looking southwest along southeast toe of Tier II DF
21	C114_3801	4,404	14/08/28	389175	7620778	View looking northwest at northeast side of Tier II DF
22	C114_3804	4,393	14/08/28	389128	7620815	View looking southeast a MW-6
23	C114_3807	926	14/08/28	389150	7620826	Panoramic view looking southeast to west at northeast side of Tier II DF
24	C114_3808	4,393	14/08/28	389102	7620822	View looking southeast along northeast toe of Tier II DF
25	C114_3809	4,453	14/08/28	389100	7620822	View looking southwest along northwest toe of Tier II DF
26	C114_3810	4,409	14/08/28	389101	7620820	View looking south at minor erosion on north corner slope (2m L, 0.1m W, 0.05m) - FEATURE B (new)
27	C114_3811	4,349	14/08/28	389107	7620805	View looking southeast along northeast side slope of Tier II DF
28	C114_3812	4,440	14/08/28	389106	7620804	View looking southwest along northwest side slope of Tier II DF
29	C114_3813	4,375	14/08/28	389113	7620790	View looking southeast along northeast crest of Tier II DF
30	C114_3814	4,362	14/08/28	389111	7620790	View looking southwest along northwest crest of Tier II DF
31	C114_3815	1,453	14/08/28	389112	7620788	Panoramic view looking east to southwest from north corner of Tier II DF
32	C114_3816	4,356	14/08/28	389122	7620783	View looking northwest at minor depression on northeast crest of Tier II DF (1m L, 0.3m W, 0.05m D) - FEATURE D (new)

Table XXIII: Visual Inspection Photo Log–Tier II Soil Disposal Facility (page 2 of 2)

Photo (Tier II-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
33	C114_3817	4,432	14/08/28	389129	7620779	View looking northwest at minor depression on northeast crest of Tier II DF - FEATURE D (new)
34	C114_3818	4,391	14/08/28	389111	7620783	View looking northwest at minor erosion on northwest side slope of Tier II DF - FEATURE B
35	C114_3819	4,340	14/08/28	389097	7620790	View looking southeast at minor erosion on northwest side slope of Tier II DF - FEATURE B
36	C114_3820	4,438	14/08/28	389099	7620786	View looking southeast at minor erosion on northwest side slope of Tier II DF - FEATURE B (new)
37	C114_3821	4,398	14/08/28	389093	7620786	View looking southeast at minor erosion on northwest side slope of Tier II DF - FEATURE B
38	C114_3822	4,345	14/08/28	389071	7620779	View at MW-7
39	C114_3827	4,414	14/08/28	389055	7620732	View looking northeast along northwest toe of Tier II DF
40	C114_3828	4,424	14/08/28	389056	7620731	View looking southeast along southwest toe of Tier II DF
41	C114_3829	4,362	14/08/28	389070	7620733	View looking northeast along northwest side slope of Tier II DF
42	C114_3830	4,400	14/08/28	389071	7620732	View looking southeast along southwest side slope of Tier II DF
43	C114_3831	4,417	14/08/28	389085	7620738	View looking northeast along northwest crest of Tier II DF
44	C114_3832	4,338	14/08/28	389085	7620737	View looking southeast along southwest crest of Tier II DF
45	C114_3833	1,414	14/08/28	389087	7620738	Panoramic view looking Northeast to southeast from west corner of Tier II DF
46	C114_3834	4,339	14/08/28	389089	7620739	View looking south at VT-1
47	C114_3835	3,885	14/08/28	389090	7620733	View of datalogger at VT-1
48	C114_3837	4,296	14/08/28	389102	7620759	View looking northeast at VT-2
49	C114_3838	3,831	14/08/28	389105	7620761	View of datalogger at VT-2
50	C114_3839	4,323	14/08/28	389116	7620758	View looking east at small stain on central cover of Tier II DF - FEATURE F (new)
51	C114_3840	4,343	14/08/28	389115	7620730	View looking northeast at linear depression on south cover of Tier II DF - FEATURE C (new)
52	C114_3841	4,426	14/08/28	389122	7620741	View looking southwest linear depression on south cover of Tier II DF - FEATURE C (new)
53	C114_3842	4,301	14/08/28	389131	7620753	View looking northeast at linear depression on east cover of Tier II DF - FEATURE C (new)
54	C114_3843	4,373	14/08/28	389136	7620762	View looking southwest linear depression on east cover of Tier II DF - FEATURE C (new)
55	C114_3844	4,356	14/08/28	389099	7620762	View looking northwest at minor erosion on northwest side slope of Tier II DF - FEATURE E (new)
56	C114_3845	4,354	14/08/28	389085	7620768	View looking southeast at minor erosion on northwest side slope of Tier II DF - FEATURE E (new)
57	C114_3846	4,358	14/08/28	389102	7620772	View looking northeast at linear depression below northwest crest of Tier II DF- FEATURE A
58	C114_4033	4,263	14/08/28	389072	7620687	View looking northeast at southwest side of Tier II DF
59	C114_4034	4,455	14/08/28	389043	7620793	View looking southeast at northwest side of Tier II DF
Soil Sampling						
MW-5	C114_3802	4,276	14/08/28	389154	7620726	Sampling location C113-5W located upgradient of Tier II DF
5W	C114_3803	4,263	14/08/28	389154	7620722	View north-northeast at C113-5W soil sample location
MW-6	C114_3805	4,358	14/08/28	389134	7620812	Sampling location C113-6W located downgradient of Tier II DF
6W	C114_3806	4,349	14/08/28	389138	7620812	View west at C113-6W soil sample location
MW-7	C114_3823	4,310	14/08/28	389065	7620782	Sampling location C113-7W located downgradient of Tier II DF
7W	C114_3824	4,365	14/08/28	389061	7620784	View southeast at C113-7W soil sample location
MW-8	C114_3825	4,249	14/08/28	389047	7620730	Sampling location C113-8W located downgradient of Tier II DF
8W	C114_3826	4,231	14/08/28	389044	7620729	View east at C113-8W soil sample location

7.5 THERMAL MONITORING DATA

All thermistors at the Tier II Soil Disposal Facility were inspected and found to be in good condition with no significant concerns identified. Data from all thermistors was successfully retrieved. Analogues/thermocouples at all locations were observed to be functioning properly at the time of the inspection. All clocks exhibited slight drifts and were synchronized using the Prolog software.

Batteries were replaced in all dataloggers with new manufacturer supplied batteries (ULB-1 and ULB-15) and are expected to be functional until summer 2019.

Manual resistive and temperature data readings were collected from the thermistor strings as per the TOR. A complete datalogger RAW data set for the period between August 16 and 27, 2014 has been forwarded to DCC as per the TOR. Table XXIV contains the Thermistor Annual Maintenance Reports that presents manual readings and inspection results for each thermistor. Further review of the downloaded data identified no significant errors in temperature readings during the recording period.

Table XXIV: **Thermistor Annual Maintenance Reports (VT-1 to VT-4)**

Contractor Name:	**Sila Remediation Inc.**	Inspection Date:	**27/08/2014**
Prepared By:	**A.Passalis**		

Thermistor Information

Site Name:	**CAM-1**	Thermistor Location	**Tier II Disposal Facility**				
Thermistor Number:	**VT-1**	Inclination	**Vertical**				
Install Date:		First Date Event				Last Date Event	**16/08/2013**
Coordinates and Elevation	N **7620734**	E	**389089**	Elev	**35.9**		
Length of Cable (m)	**11.7**	Cable Lead Above Ground (m)	**3.25**	Nodal Points			**16**
Datalogger Serial #	**07060015**			Cable Serial Number			**07060015**

Thermistor Inspection

	Good: Yes	Good: No	Problem/Maintenance
Casing	x		
Cover	x		
Data Logger	x		
Cable	x		
Beads	x		
Battery Installation Date	**27/08/2014 (new)**		
Battery Levels	Main **11.34 V** (11.34 prior to change)		Aux **13.5** (12.50 prior to change)

Manual Ground Temperature Readings

Bead	ohms	Degrees C
1	13.818	3.4343
2	14.886	1.9322
3	16.133	0.3227
4	17.262	-0.983
5	18.134	-1.9643
6	19.412	-3.3083
7	20.19	-4.1755
8	21.01	-4.9719

Bead	ohms	Degrees C
9	21.85	-5.7793
10	22.63	-6.4547
11	23.24	-7.0656
12	23.77	-7.6106
13	24.1	-8.0796
14	24.5	-8.4429
15	24.9	-8.9131
16	25.09	-9.1852

Observations and Proposed Maintenance

Download file: Site_001_07050015_Aug_27_2014

Both batteries (ULB-1 and ULB-15) changed out. Manufacture replacement date: 07/19

Contractor Name:	**Sila Remediation Inc.**	Inspection Date:	**27/08/2014**
Prepared By:	**A.Passalis**		

Thermistor Information

Site Name:	**CAM-1**		Thermistor Location	**Tier II Disposal Facility**			
Thermistor Number:	**VT-2**		Inclination	**Vertical**			
Install Date:			First Date Event			Last Date Event	**16/08/2013**
Coordinates and Elevation		N	**7620759.5**	E	**389105.5**	Elev	**36.5**
Length of Cable (m)	**11.7**		Cable Lead Above Ground (m)	**6.3**	Nodal Points		**16**
Datalogger Serial #	**07050030**				Cable Serial Number		**07050030**

Thermistor Inspection

	Good			
	Yes		No	Problem/Maintenance
Casing	**x**			
Cover	**x**			
Data Logger	**x**			
Cable	**x**			
Beads	**x**			
Battery Installation Date		**27/08/2014 (new)**		
Battery Levels	Main	**11.34 V**	Aux	**13.5**
		(11.34 prior to change)		(12.53 prior to change)

Manual Ground Temperature Readings

Bead	ohms	Degrees C	Bead	ohms	Degrees C
1	14.315	2.7366	9	16.19	0.1836
2	14.316	2.7016	10	17.194	-1.0647
3	14.27	2.7882	11	18.069	-2.0776
4	14.378	2.6365	12	18.88	-3.0427
5	14.007	2.7191	13	20.14	-4.7128
6	14.154	2.8943	14	21.08	-5.3745
7	14.035	3.0769	15	21.37	-6.1216
8	14.861	1.9147	16	22.23	-6.7298

Observations and Proposed Maintenance

Download file: Site_001_07050030_Aug_27_2014
Both batteries (ULB-1 and ULB-15) changed out. Manufacture replacement date: 07/19

Contractor Name:	**Sila Remediation Inc.**	Inspection Date:	**27/08/2014**
Prepared By:	**A.Passalis**		

Thermistor Information

Site Name:	**CAM-1**		Thermistor Location		**Tier II Disposal Facility**		
Thermistor Number:	**VT-3**		Inclination		**Vertical**		
Install Date:			First Date Event			Last Date Event	**16/08/2013**
Coordinates and Elevation	N	**7620735.5**	E	**389140.5**		Elev	**36.4**
Length of Cable (m)	**11.7**	Cable Lead Above Ground (m)	**3.3**	Nodal Points			**16**
Datalogger Serial #	**07050003**			Cable Serial Number			**07050003**

Thermistor Inspection

	Good			
	Yes		No	Problem/Maintenance
Casing	**x**			
Cover	**x**			
Data Logger	**x**			
Cable	**x**			
Beads	**x**			
Battery Installation Date		**27/08/2014 (new)**		
Battery Levels	Main	**11.34 V**	Aux	**13.16**
		(11.34 prior to change)		(11.26 prior to change)

Manual Ground Temperature Readings

Bead	ohms	Degrees C
1	14.004	3.1544
2	14.914	1.8896
3	16.307	0.1177
4	17.205	-0.9345
5	18.156	-2.0081
6	19.511	-3.4335
7	20.31	-4.3881
8	21.34	-5.289

Bead	ohms	Degrees C
9	21.81	-3.1026
10	22.72	-4.7595
11	23.33	-5.7068
12	23.85	-6.3082
13	24.38	-6.9205
14	24.86	-8.5327
15	25.03	-8.9584
16	25.04	-9.0972

Observations and Proposed Maintenance

Download file: Site_001_default_Aug_27_2014

Both batteries (ULB-1 and ULB-15) changed out. Manufacture replacement date: 07/19

Contractor Name:	**Sila Remediation Inc.**	Inspection Date:	**27/08/2014**
Prepared By:	**A.Passalis**		

Thermistor Information

Site Name:	**CAM-1**	Thermistor Location		**Tier II Disposal Facility**	
Thermistor Number:	**VT-4**	Inclination		**Vertical**	
Install Date:		First Date Event		Last Date Event	**16/08/2013**
Coordinates and Elevation	N **7620749**	E	**389124.5**	Elev	**36.7**
Length of Cable (m)	**9.2**	Cable Lead Above Ground (m)	**3.45**	Nodal Points	**13**
Datalogger Serial #	**07050006**			Cable Serial Number	**07050006**

Thermistor Inspection

	Good			
	Yes		No	Problem/Maintenance
Casing	**x**			
Cover	**x**			
Data Logger	**x**			
Cable	**x**			
Beads	**x**			
Battery Installation Date		**27/08/2014 (new)**		
Battery Levels	Main	**11.34 V** (11.34 prior to change)	Aux	**13.26** (12.50 prior to change)

Manual Ground Temperature Readings

Bead	ohms	Degrees C	Bead	ohms	Degrees C
1	14.366	2.6741	9	19.167	-3.1026
2	14.192	2.7967	10	20.78	-4.7595
3	14.073	3.0393	11	21.77	-5.7068
4	14.261	2.7016	12	22.32	-6.3082
5	15.374	1.2587	13	23.07	-6.9205
6	16.439	-0.1586		-	-
7	17.353	-1.1586		-	-
8	18.096	-1.9643		-	-

Observations and Proposed Maintenance

Download file: Site_001_07050006_Aug_27_2014

Both batteries (ULB-1 and ULB-15) changed out. Manufacture replacement date: 07/19

7.6 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Tier II Disposal Facility samples are presented in Table XXV below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XXV: **Soil Chemical Analysis Results – Tier II Disposal Facility**

Sample #	Location	Depth (cm)	Parameters										F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-5WA	MW-05	0-15	1.9	0.03	3.9	1.8	3.4	6.7	1.9	9	<0.01	<0.1	<10	<50	<50
C114-5WB		40-50	1.6	0.01	2.9	1.4	1.7	<5	1.5	5	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-6WA	MW-06	0-15	1.5	0.02	3.1	1.1	3.0	<5	2.7	6	<0.01	<0.1	<10	<50	<50
C114-6WB		40-50	1.7	<0.01	5.2	1.8	2.8	<5	2.5	5	<0.01	<0.1	<10	<50	<50
C114-7WA	MW-07	0-15	0.7	<0.01	1.3	0.6	1.3	<5	0.8	6	<0.01	<0.1	<10	<50	<50
C114-7WB		40-50	1.7	<0.01	4.3	1.5	2.4	<5	2.3	4	<0.01	<0.1	<10	<50	<50
C114-8WA	MW-08	0-15	2.4	0.01	4.0	1.8	3.3	5.5	2.6	7	<0.01	<0.1	<10	<50	<50
C114-8WB		40-50	1.4	<0.01	3.1	1.5	2.0	<5	1.5	4	<0.01	<0.1	<10	<50	<50

7.7 GROUNDWATER SAMPLE ANALYTICAL DATA

As noted above, all monitoring wells at the Tier II Soil Disposal Facility were dry at the time of monitoring and consequently were not sampled during the 2014 field program.

7.8 MONITORING WELL SAMPLING/INSPECTION LOGS (MW-5 TO MW-8)

The monitoring well sampling and inspection logs for MW-5 to MW-8 are presented in this section.

Development of Monitoring Wells

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-27	Time:	16:00
Names of Samplers:	A.Passalis		
Landfill Name:	Tier II Disposal Facility		
Monitoring Well ID:	MW-5		
Sample Number:	N/A (dry)		
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	31		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	460		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	N/A	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	N/A		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	161	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	N/A		
Static volume of water in well (mL)=	N/A		
Free product thickness (mm)=	N/A	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	N	Purging/Sampling Equipment:	N/A
Volume Purged Water=	N/A		
Decontamination required: (Y/N)	N/A		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	N/A		
Final Conductivity (uS/cm)=	N/A		
Final Temperature (degC)=	N/A		

Development of Monitoring Wells

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-27	Time:	16:10
Names of Samplers:	A.Passalis		
Landfill Name:	Tier II Disposal Facility		
Monitoring Well ID:	MW-6		
Sample Number:	N/A (dry)		
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	58		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	465		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	N/A	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	N/A		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	151	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	N/A		
Static volume of water in well (mL)=	N/A		
Free product thickness (mm)=	N/A	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	N	Purging/Sampling Equipment:	N/A
Volume Purged Water=	N/A		
Decontamination required: (Y/N)	N/A		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	N/A		
Final Conductivity (uS/cm)=	N/A		
Final Temperature (degC)=	N/A		

Development of Monitoring Wells

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-27	Time:	16:30
Names of Samplers:	A.Passalis		
Landfill Name:	Tier II Disposal Facility		
Monitoring Well ID:	MW-7		
Sample Number:	N/A (dry)		
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	52		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	470		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	N/A	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	N/A		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	150	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	N/A		
Static volume of water in well (mL)=	N/A		
Free product thickness (mm)=	N/A	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	N	Purging/Sampling Equipment:	N/A
Volume Purged Water=	N/A		
Decontamination required: (Y/N)	N/A		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	N/A		
Final Conductivity (uS/cm)=	N/A		
Final Temperature (degC)=	N/A		

Development of Monitoring Wells

Site Name:	**CAM-1**	**Jenny Lind Island**	**Nunavut**
Date of Sampling Event:	2014-08-27	Time:	16:40
Names of Samplers:	A.Passalis		
Landfill Name:	Tier II Disposal Facility		
Monitoring Well ID:	MW-8		
Sample Number:	N/A (dry)		
Condition of Well:	Good		
Measured Data			
Well pipe height above ground	49		
Diameter of well (cm)=	4	ID	
Depth of well installation (cm)= (from ground surface)	480		
Length screened section (cm)=	300		
Depth to top of screen (cm)= (from ground surface)	50		
Depth to water surface (cm)= (from top of pipe)	N/A	Measurement method: (meter, tape, etc)	Interface Meter
Static water level (cm)= (below ground surface)	N/A		
Measured well refusal depth (cm)= (i.e. depth to frozen ground)	150	Evidence of sludge or siltation:	No
Thickness of water column (cm)=	N/A		
Static volume of water in well (mL)=	N/A		
Free product thickness (mm)=	N/A	Measurement method: (meter, paste, etc)	Interface Meter
Purging: (Y/N)	N	Purging/Sampling Equipment:	N/A
Volume Purged Water=	N/A		
Decontamination required: (Y/N)	N/A		
Number washes:	N/A		
Number rinses:	N/A		
Final pH=	N/A		
Final Conductivity (uS/cm)=	N/A		
Final Temperature (degC)=	N/A		

8 SOUTHEAST LANDFILL

8.1 SUMMARY

The 2014 monitoring of the Southeast Landfill was completed on August 27, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate.

No TPH, PCBs or elevated levels of metals were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the Southeast Landfill. Indications of minor settlement and erosion were noted at two existing locations on the north side slope of Lobe 2 and east cover of Lobe 1, respectively. A second area of settlement previously noted on the southeast crest of Lobe 1, however was not observed during the 2014 inspection. No exposed debris was observed. A pair of shallow vehicle tracks/ruts was observed on the west side slope of Lobe 1, consistent with the previous inspections.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XXVI of this report and has been completed as per the TOR. Please refer to Figure CAM-1.7 for a sketch of the Southeast Landfill detailing the location of photographs and features.

Table XXVI: **Visual Inspection Checklist / Report – Southeast Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION - LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 OF 2

SITE NAME: CAM-1 Jenny Lind Island
LANDFILL DESIGNATION: Southeast Landfill (Regrade Landfill)
DATE OF INSPECTION: August 27, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XXVI: SOUTHEAST LANDFILL VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Southeast Landfill
Designation: Existing Regrade Area
Date Inspected: August 27, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.7 (N side slope - Lobe 2)	2.5 m	0.15 m	0.05 m	Isolated	Linear depression	SELF-16, 17	Acceptable	No changes in feature since first noted in Year 2 (2011). Side slope appears stable.
	No	FEATURE B See Figure CAM-1.7 (SE crest - Lobe 1)	0.5 m	0.15 m	0.03 m	Isolated	Minor depression	N/A	Acceptable	Feature first noted in Year 3 (2012). Feature not observed in 2014.
Erosion	Yes	FEATURE C See Figure CAM-1.7 (E cover - Lobe 1)	10 m	0.1 m	0.02 - 0.03 m	Localized	Minor erosion, washing of fines	SELF-11, 12	Acceptable	No significant changes in feature since first noted in Year 3 (2012). Cover and side slope appears stable.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	Yes	FEATURE D See Figure CAM-1.7 (W side slope - Lobe 1)	1 - 3 m	0.15 m	0.05 m	Isolated	Vehicle ruts	SELF-4, 5	Acceptable	No changes in feature since first noted in Year 2 (2011). Side slope appears stable.
Additional Photos	Yes	See Figure CAM-1.7 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no features of note.
Overall Landfill Performance:	**Acceptable**									

8.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for the Southeast Landfill has been completed as per the ToR and is included as Table XXVII hereafter.

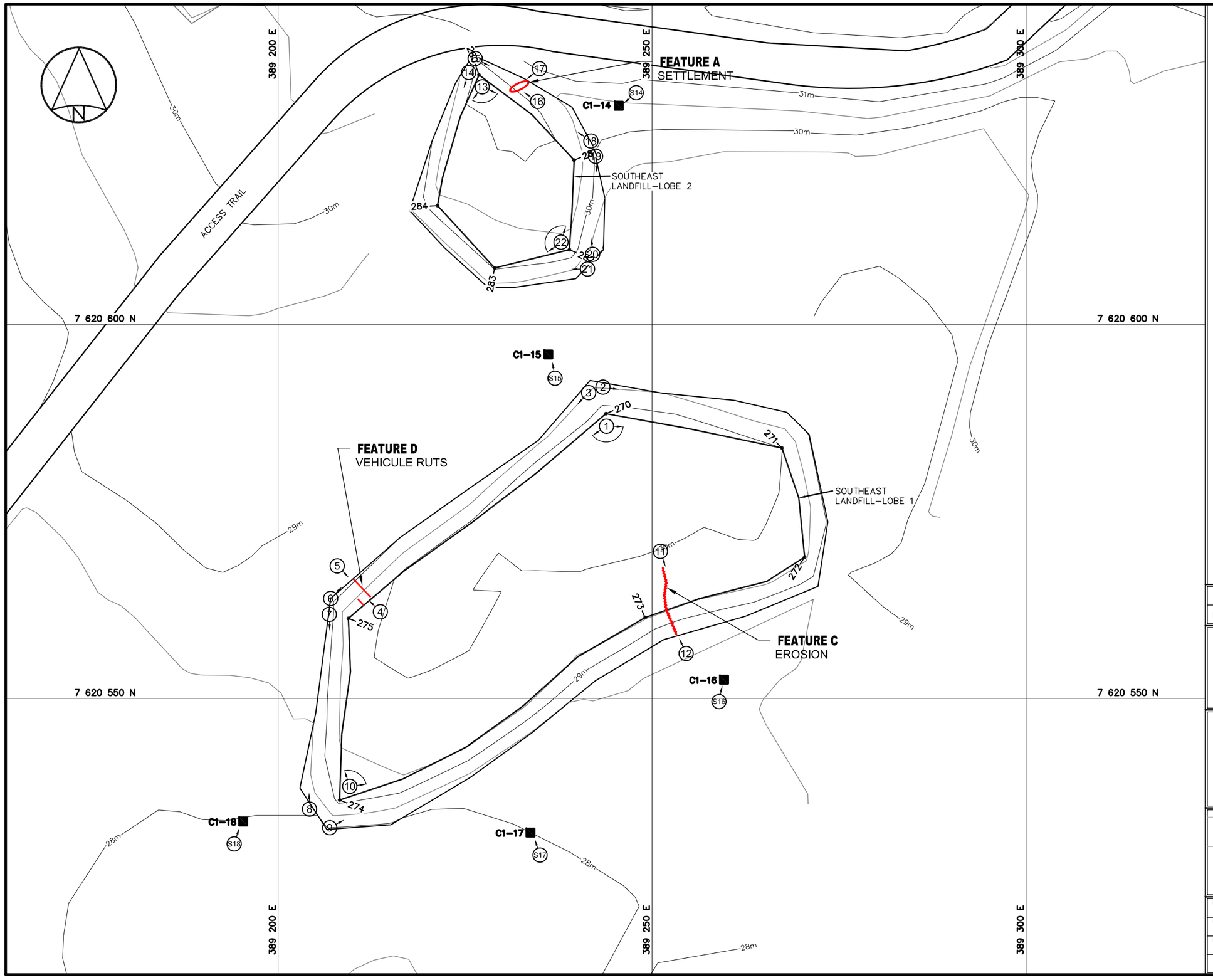
Table XXVII: **Preliminary Stability Assessment – Southeast Landfill**

Feature	Severity Rating	Extent
Settlement	Acceptable	Isolated
Erosion	Acceptable	Isolated
Frost Action	Not observed	None
Staining	Not observed	None
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

8.3 LOCATION PLAN

The Location Plan for the Southeast Landfill has been completed as per the ToR and is presented in Figure CAM-1.7.



LEGEND

- MONITORING SOIL SAMPLE LOCATION
- 270 COORDINATE POINT
- APPROX. PHOTOGRAPHIC VIEWPOINT
- SETTLEMENT (NTS)
- VEHICULE RUTS
- EROSION (NTS)

0 5m 10m 15m 20m 25m

NO.	VERSION	DATE	P.L.	A.P.	M.F.
1	FINAL	15–06–26	PAR	VERIF.	APPR.

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

SOUTHEAST LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
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Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 500	JUNE 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.7-PL	PAGE PL

FIGURE CAM-1.7

G:\CD3654\CAM-1\FINAL\CD3654_320_323_101-CAM-1.7-PL.dwg, PL, 2015-06-26 3:33:23 PM

8.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Southeast Landfill has been completed as per the ToR and is included as Table XXVIII hereafter. The Photographic Record contains only an index of photographs. Full-sized photographs are contained in the Addendum DVD-ROM.

Table XXVIII: **Visual Inspection Photo Log – Southeast Landfill (page 1 of 2)**

Photo (SELF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
Lobe 1						
1	C114_3749	1,388	14/08/27	389244	7620586	Panoramic view looking east to southwest from northwest corner across Lobe 1
2	C114_3750	4,335	14/08/27	389243	7620591	View looking east-southeast along north toe of Lobe 1
3	C114_3751	4,429	14/08/27	389242	7620591	View looking southwest along northwest toe of Lobe 1
4	C114_3752	4,417	14/08/27	389213	7620562	View looking northwest at vehicle ruts on west side slope of Lobe 1
5	C114_3753	4,342	14/08/27	389209	7620567	View looking southeast at vehicle ruts on west side slope of Lobe 1
6	C114_3754	4,406	14/08/27	389207	7620563	View looking northeast along northwest toe of Lobe 1
7	C114_3755	4,423	14/08/27	389207	7620562	View looking south along west toe of Lobe 1
8	C114_3756	4,444	14/08/27	389205	7620535	View looking north along west toe of Lobe 1
9	C114_3757	4,309	14/08/27	389207	7620533	View looking northeast along southeast toe of Lobe 1
10	C114_3758	1,095	14/08/27	389209	7620538	Panoramic view looking north-northwest to east from south corner across Lobe 1
11	C114_3759	4,355	14/08/27	389251	7620568	View looking south at minor erosion on cover of Lobe 1 - FEATURE C
12	C114_3760	4,391	14/08/27	389254	7620556	View looking northwest at minor erosion on cover of Lobe 1 - FEATURE C
Lobe 2						
13	C114_3767	1,301	14/08/27	389227	7620632.2	Panoramic view looking southeast to southwest from north corner across Lobe 2
14	C114_3768	4,455	14/08/27	389226	7620633	View looking south-southwest along west toe of Lobe 2
15	C114_3769	4,334	14/08/27	389227	7620635	View looking southeast along northeast toe of Lobe 2
16	C114_3770	4,334	14/08/27	389234	7620630	View looking northwest at minor depression on north side slope of Lobe 2 - Feature A
17	C114_3771	4,282	14/08/27	389234	7620633	View looking southwest at minor depression on north side slope of Lobe 2 - Feature A
18	C114_3772	4,276	14/08/27	389242	7620624	View looking northwest along northeast toe of Lobe 2
19	C114_3773	4,411	14/08/27	389242	7620623	View looking south along east toe of Lobe 2
20	C114_3774	4,443	14/08/27	389242	7620609	View looking north along east toe of Lobe 2
21	C114_3775	4,336	14/08/27	389242	7620608	View looking west along south toe of Lobe 2
22	C114_3776	1,435	14/08/27	389238	7620611	Panoramic view looking southwest to northeast from south corner across Lobe 2

Table XXVIII: Visual Inspection Photo Log – Southeast Landfill (page 2 of 2)

Photo (SELF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
Soil Sampling						
C1-14	C114_3779	4,313	14/08/27	389246	7620629	Sampling location C112-14 located upgradient of Southeast LF - Lobe 2
S14	C114_3780	4,380	14/08/27	389247	7620630	View southwest at C112-14 soil sample location
C1-15	C114_3777	4,369	14/08/27	389236	7620596	Sampling location C112-15 located downgradient of Southeast LF - Lobe 2
S15	C114_3778	4,125	14/08/27	389237	7620594	View north at C112-15 soil sample location
C1-16	C114_3761	4,304	14/08/27	389260	7620552	Sampling location C112-16 located downgradient of Southeast LF - Lobe 1
S16	C114_3762	4,259	14/08/27	389259	7620551	View north-northeast at C112-16 soil sample location
C1-17	C114_3763	4,402	14/08/27	389235	7620532	Sampling location C112-17 located downgradient of Southeast LF - Lobe 1
S17	C114_3764	4,320	14/08/27	389236	7620530	View north-northwest at C112-17 soil sample location
C1-18	C114_3765	4,338	14/08/27	389195	7620533	Sampling location C112-18 located downgradient of Southeast LF - Lobe 1
S18	C114_3766	4,303	14/08/27	389194	7620531	View north-northeast at C112-18 soil sample location

8.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Southeast Landfill samples are presented in Table XXIX below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XXIX: **Soil Chemical Analysis Results – Southeast Landfill**

Sample #	Location	Depth (cm)	Parameters												
													F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-14A	C1-14	0-15	1.8	<0.01	2.2	0.9	1.7	<5	1.2	3	<0.01	<0.1	<10	<50	<50
C114-14B		40-50	2.2	<0.01	7.6	1.5	1.5	5.5	3.6	4	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-15A	C1-15	0-15	1.9	<0.01	2.5	1.0	2.4	<5	1.3	4	<0.01	<0.1	<10	<50	<50
C114-15B		40-50	1.3	<0.01	2.0	1.1	1.8	<5	1.1	3	<0.01	<0.1	<10	<50	<50
C114-16A	C1-16	0-15	0.7	0.02	1.4	0.4	<1.0	<4.9	<0.5	2	<0.01	<0.1	<10	<50	<50
C114-16B		40-50	1.2	0.02	1.8	0.6	1.7	<4.9	1.2	2	<0.01	<0.1	<10	<50	<50
C114-17A	C1-17	0-15	0.7	0.01	1.7	0.6	1.4	<4.9	0.8	3	<0.01	<0.1	<10	<50	<50
C114-17B		40-50	2.7	0.04	2.9	0.9	2.4	8.7	1.9	3	<0.01	<0.1	<10	<50	<50
C114-18A	C1-18	0-15	0.6	0.02	1.5	0.5	1.2	<5	1.0	3	<0.01	<0.1	<10	<50	<50
C114-18B		40-50	0.5	<0.01	1.6	0.4	<1.0	<4.9	0.5	2	<0.01	<0.1	<10	<50	<50

9 STATION EAST LANDFILL

9.1 SUMMARY

The 2014 monitoring of the Station East Landfill was completed on August 28, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate.

No TPH, PCBs or elevated levels of metals were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the Station East Landfill. There are several observations of minor settlement and erosion on the landfill cover and side slopes. In addition to the existing areas of settlement on the southwest and northeast cover and erosion along the west toe, there are two newly observed areas of settlement on the northeast cover and west cover and side slope and three areas of erosion on the north, northwest and southwest side slopes. All existing and newly observed areas appear stable with a notable increase in size in one erosion feature located on the west toe of the landfill from the previous inspection period. No exposed debris was observed.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XXX of this report and has been completed as per the TOR. Please refer to Figure CAM-1.8 for a sketch of the Station East Landfill detailing the location of photographs and features.

Table XXX: **Visual Inspection Checklist / Report – Station East Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION – LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 2

SITE NAME: CAM-1 – Jenny Lind Island
LANDFILL DESIGNATION: Station East Landfill (Regrade Landfill)
DATE OF INSPECTION: August 28, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XXX: STATION EAST LANDFILL VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Station East Landfill
Designation: Existing Regrade Area
Date Inspected: August 28, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature:

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.8 (SW cover)	0.5 - 2 m	0.1 - 0.3 m	0.05 - 0.1 m	Occasional (<1%)	Linear and pothole type depressions	ELF-36-39	Acceptable	No significant changes in feature since first noted in Year 3 (2012). Cover appears stable.
		FEATURE C See Figure CAM-1.8 (W cover and side slope) - New Obs.	1 - 3 m	0.4 - 1 m	0.05 - 0.1 m	Occasional (<2%)	Linear depressions - 7 locations	ELF-3, 5-11	Acceptable	New observation in Year 5. Cover and side slopes appears stable.
		FEATURE D See Figure CAM-1.8 (NE cover) - 1 New Obs.	0.4 - 10 m	0.15 - 0.4 m	0.05 - 0.1 m	Occasional (<2%)	Linear and pothole type depressions - 4 locations	ELF-15-17, 20	Acceptable	Feature first observed in Year 1 (2010). Cover and side slopes appears stable. Formerly part of Feature A in Years 3 and 4. Notable increase in length of existing linear feature in Year 5.
Erosion	Yes	FEATURE B See Figure CAM-1.8 (W toe)	9 m	0.3 - 0.5 m	0.02 - 0.05 m	Isolated	Minor erosion	ELF-4	Acceptable	Feature first observed in Year 2 (2011). Minor washing of fines along toe resulting from seasonal ponding. Increased in size between Years 4 and 5.
		FEATURE E See Figure CAM-1.8 (NW side slope) - New Obs.	4 m	0.2 m	0.01 - 0.02 m	Isolated	Minor erosion	ELF-5, 6	Acceptable	New observation in Year 5. Minor washing of fines. Slope appears stable.
		FEATURE F See Figure CAM-1.8 (N side slope) - New Obs.	6 m	0.15 m	0.02 - 0.05 m	Isolated	Minor erosion - 3 areas	ELF-24, 25	Acceptable	New observation in Year 5. Minor washing of fines. Slope appears stable.
		FEATURE G See Figure CAM-1.8 (SW side slope) - New Obs.	5 m	0.1 m	0.02 m	Isolated	Minor erosion	ELF-37, 38	Acceptable	New observation in Year 5. Minor washing of fines. Slope appears stable.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Additional Photos	Yes	See Figure CAM-1.8 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no features of note.
Overall Landfill Performance:	**Acceptable**									

9.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for Station East Landfill has been completed as per the ToR and is included as Table XXXII below.

Table XXXI: **Preliminary Stability Assessment – Station East Landfill**

Feature	Severity Rating	Extent
Settlement	Acceptable	Occasional
Erosion	Acceptable	Occasional
Frost Action	Not observed	None
Staining	Not observed	None
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.

Extent	Description
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

9.3 LOCATION PLAN

The Location Plan for the Station East Landfill has been completed as per the ToR and is presented in Figure CAM-1.8.

389 600 E

389 750 E

389 900 E

7 620 700 N

7 620 550 N

ACCESS ROAD

MODULE TRAIN DEBRIS AREA LOBE 2

MAIN LANDFILL LOBES 1 AND 2

STATION EAST LANDFILL LOBES 1 AND 2

BM–4

C1–19

C1–20

C1–21

C1–22

C1–23

C1–24

C1–25

C1–26

FEATURE A
3 x SETTLEMENT

FEATURE B
2 x SETTLEMENT

FEATURE C
7 x SETTLEMENT

FEATURE D
4 x SETTLEMENT

FEATURE E
EROSION

FEATURE F
3 x EROSION

FEATURE G
DISCOLOURATION

LEGEND

- MONITORING SOIL SAMPLE LOCATION
- BM–4 PERMANENT BENCHMARK LOCATION
- 310 COORDINATE POINT
- 6 APPROX. PHOTOGRAPHIC VIEWPOINT
- SETTLEMENT (NTS)
- EROSION (NTS)
- DISCOLOURATION (NTS)

0 15m 30m 45m 60m 75m

NO.	VERSION	DATE	P.L.	A.P.	M.F.
1	FINAL	15–06–26	PAR	VERIF.	APPR.

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COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

STATION EAST LANDFILL AND MAIN LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
Quebec, (Quebec) CANADA G1P 2J7
Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 1,500	JUNE 2015
DRAWN BY:	VERIFIED BY:	APPROVED BY:
L. LA PIERRE	A. PASSALIS	M. FLEURY P. ENG
PROJECT NO:	DRAWING NO:	PAGE
CD3654_320_323	CD3654_320_323_101-CAM-1.8-PL	PL

FIGURE CAM-1.8a

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9.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Station East Landfill has been completed as per the ToR and is included as Table XXXII hereafter. The Photographic Record contains only an index of photographs. Full sized photographs are containe in the Addendum DVD-ROM.

Table XXXII: **Visual Inspection Photo Log – Station East Landfill (page 1 of 2)**

Photo (ELF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
1	C114_4036	4,375	14/08/28	389750	7620755	Looking northeast along northwest toe of Station E LF
2	C114_4037	4,364	14/08/28	389750	7620753	View looking southeast along southwest toe of Station E LF
3	C114_4038	4,449	14/08/28	389756	7620743	View looking northwest at depression near west toe of Station E LF - FEATURE C (new)
4	C114_4039	4,439	14/08/28	389761	7620773	View looking south-southwest at minor erosion of fines along west toe of Station E LF - FEATURE B
5	C114_4040	4,333	14/08/28	389767	7620783	View looking southwest at minor erosion on west side slope of Station E LF - FEATURE E (new)
6	C114_4041	4,319	14/08/28	389759	7620781	View looking northeast at minor erosion on west side slope of Station E LF - FEATURE E (new)
7	C114_4042	4,283	14/08/28	389767	7620780	View looking southwest at linear depression on west side slope of Station E LF - FEATURE C (new)
8	C114_4043	4,408	14/08/28	389767	7620775	View looking southeast at linear depression on west cover of Station E LF - FEATURE C (new)
9	C114_4044	4,372	14/08/28	389766	7620760	View looking southeast at linear depressions on west cover of Station E LF - FEATURE C (new)
10	C114_4045	4,429	14/08/28	389761	7620757	View looking south at linear depression on west cover of Station E LF - FEATURE C (new)
11	C114_4046	4,297	14/08/28	389767	7620766	View looking east at pothole depressions on west cover of Station E LF - FEATURE C (new)
12	C114_4047	1,195	14/08/28	389765	7620786	Panoramic view looking northeast to south from west side across Station E LF
13	C114_4048	4,421	14/08/28	389802	7620803	View looking southwest along northwest toe of Station E LF
14	C114_4049	4,412	14/08/28	389804	7620803	View looking east-southeast along north toe of Station E LF
15	C114_4050	4,319	14/08/28	389811	7620795	View looking southeast along north toe of Station E LF. Note linear depressions on right - Feature D
16	C114_4051	4,394	14/08/28	389826	7620789	View looking northwest at linear depressions on northeast cover of Station E LF - Feature D
17	C114_4052	4,346	14/08/28	389819	7620786	View looking northeast at linear depression on northeast cover of Station E LF - FEATURE D (new)
18	C114_4055	4,431	14/08/28	389848	7620788	View looking northwest along north toe of Station E LF
19	C114_4056	4,403	14/08/28	389850	7620786	View looking southeast along northeast toe of Station E LF
20	C114_4057	4,326	14/08/28	389840	7620780	View looking southeast at minor depression on northeast cover of Station E LF - Feature D
21	C114_4058	4,313	14/08/28	389869	7620760	View looking northwest along northeast toe of Station E LF
22	C114_4059	4,325	14/08/28	389870	7620757	View looking south along east toe of Station E LF
23	C114_4060	1,256	14/08/28	389862	7620758	Panoramic view looking southwest to northwest from east side across Station E LF
24	C114_4061	4,271	14/08/28	389849	7620762	View looking northeast at 3 areas of minor erosion on inside corner on northeast side of Station E LF - FEATURE F (new)
25	C114_4062	4,414	14/08/28	389858	7620768	View looking southwest at 3 areas of minor erosion on inside corner on northeast side of Station E LF - FEATURE F (new)
26	C114_4063	4,375	14/08/28	389869	7620739	View looking southwest along southeast side slope of Station E LF
27	C114_4066	4,339	14/08/28	389854	7620734	View looking southwest at uneven surface on southeast crest of Station E LF
28	C114_4067	1,124	14/08/28	389836	7620722	Panoramic view looking west to northeast from southeast side across Station E LF

Table XXXIII: Visual Inspection Photo Log – Station East Landfill (page 2 of 2)

Photo (ELF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
29	C114_4068	4,441	14/08/28	389840	7620717	View looking southwest along southeast side slope of Station E LF
30	C114_4072	4,447	14/08/28	389800	7620662	View looking northeast along southeast side of Station E LF
31	C114_4073	4,287	14/08/28	389799	7620660	View looking west along south side of Station E LF
32	C114_4076	1,078	14/08/28	389796	7620664	Panoramic view looking west to northeast from south side across Station E LF
33	C114_4077	4,385	14/08/28	389774	7620661	View looking northwest along southwest side slope of Station E LF
34	C114_4078	4,394	14/08/28	389790	7620713	View looking south along southwest side slope of Station E LF
35	C114_4079	4,393	14/08/28	389789	7620715	View looking northwest along west side slope of Station E LF
36	C114_4080	4,386	14/08/28	389798	7620731	View looking south at linear depression on cover southwest side of Station E LF - FEATURE A
37	C114_4081	4,309	14/08/28	389781	7620735	View looking southwest at pothole depression on west crest of Station E LF - FEATURE A and minor erosion on side slope) - FEATURE G (new)
38	C114_4082	4,349	14/08/28	389770	7620725	View looking northeast minor erosion on west side slope of Station E LF - FEATURE G (new)
39	C114_4083	4,343	14/08/28	389766	7620735	View looking northeast at linear depression on side slope on southwest side of Station E - FEATURE A
Soil Sampling						
C1-19	C114_4053	4,321	14/08/28	389772	7620806	Sampling location C112-19 located upgradient of Station East LF
S19	C114_4054	4,293	14/08/28	389769	7620810	View southeast at C112-19 soil sample location
C1-20	C114_4064	4,314	14/08/28	389879	7620723	Sampling location C112-20 located downgradient of Station East LF
S20	C114_4065	4,333	14/08/28	389884	7620719	View northwest at C112-20 soil sample location
C1-21	C114_4070	4,377	14/08/28	389840	7620691	Sampling location C112-21 located downgradient of Station East LF
S21	C114_4071	4,345	14/08/28	389844	7620689	View northwest at C112-21 soil sample location
C1-22	C114_4074	4,383	14/08/28	389796	7620646	Sampling location C112-22 located downgradient of Station East LF
S22	C114_4075	4,409	14/08/28	389797	7620641	View north at C112-22 soil sample location

9.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Station East Landfill samples are presented in Table XXXIII below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XXXIII: **Soil Chemical Analysis Results – Station East Landfill**

Sample #	Location	Depth (cm)	Parameters										F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-19A	C1-19	0-15	2.6	0.03	5.7	2.2	14.1	14.7	3.7	18	<0.01	<0.1	<10	<50	<50
C114-19B		40-50	1.9	<0.01	2.6	0.8	1.2	<5.0	0.7	3	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-20A	C1-20	0-15	7.9	0.05	2.8	0.9	4.3	11.0	1.6	7	<0.01	<0.1	<10	<50	<50
C114-20B		40-50	7.0	0.03	2.9	0.8	2.8	11.4	1.2	5	<0.01	<0.1	<10	<50	<50
C114-21A	C1-21	0-15	8.8	0.03	4.2	1.2	2.6	13.9	1.5	5	<0.01	<0.1	<10	<50	<50
C114-21B		40-50	10.2	0.03	3.6	1.2	2.9	16.0	1.8	5	<0.01	<0.1	<10	<50	<50
C114-22A	C1-22	0-15	4.6	0.04	2.9	0.9	2.2	8.8	0.9	6	<0.01	<0.1	<10	<50	<50
C114-22B		40-50	4.1	0.01	3.1	0.8	1.4	9.4	0.7	3	<0.01	<0.1	<10	<50	<50

10 STATION MAIN LANDFILL

10.1 SUMMARY

The 2014 monitoring of the Station Main Landfill was completed on August 28, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate. Soil sample locations are identified on Figure CAM-1.8b.

Elevated concentrations of arsenic and lead were detected in the surface soil samples collected at upgradient location C114-23A (39.4 and 67.0 mg/kg, respectively). The bottom sample collected at the same upgradient location also contained less elevated levels of arsenic and lead (25.9 and 45.4 mg/kg, respectively). No TPH or PCBs were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the Station Main Landfill. There are several observations of minor settlement and erosion on the landfill cover and side slopes. In addition to the existing areas of settlement on the north and northwest cover, there are newly observed areas on the north cover and on the south and southwest cover and side slopes. Two new localized areas of erosion were noted on the northwest side slope and northeast corner in addition to existing features also observed on the northwest, northeast and southwest side slopes of the landfill. In addition, one relatively large existing discoloured area was observed in the granular cover in the central cover area of the landfill. All observed features appear stable with no significant changes observed from the previous inspection period at existing features. No exposed debris was observed.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XXXIV of this report and has been completed as per the TOR. Please refer to Figure CAM-1.8 for a sketch of the Station Main Landfill detailing the location of photographs and features.

Table XXXIV: **Visual Inspection Checklist / Report – Main Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION – LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 2

SITE NAME: CAM-1 – Jenny Lind Island
LANDFILL DESIGNATION: Station Main Landfill (Regrade Landfill)
DATE OF INSPECTION: August 28, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XXXIV: MAIN LANDFILL VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: Main Landfill
Designation: Existing Regrade Area
Date Inspected: August 28, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.8 (NW and N cover) - 1 New Obs.	0.4 - 1 m	0.2 m	0.05 - 0.1 m	Occasional	Minor depressions - 3 areas	MLF-3, 4, 44, 45	Acceptable	Feature first noted in Year 3 (2012). Formerly identified as Feature C in Years 3 and 4. No significant changes observed between 2012-2014. Cover and side slopes appear stable.
		FEATURE B See Figure CAM-1.8 (SW cover and side slope) - 1 New Obs.	0.5 - 1.2 m	0.3 - 0.4 m	0.05 - 0.1 m	Occasional	Minor depressions - 2 areas	MLF-10, 11, 20	Acceptable	Feature first noted in Year 3 (2012). Formerly identified as part of Feature C in Years 3 and 4. One new depression noted in Year 5. Cover and side slopes appear stable.
		FEATURE C See Figure CAM-1.8 (S cover and side slope) - New Obs.	0.4 - 2 m	0.15 - 0.3 m	0.05 - 0.1 m	Occasional	Minor depressions - 3 areas	MLF-22, 31, 32	Acceptable	New observation in Year 5. Cover and side slopes appear stable.
Erosion	Yes	FEATURE D See Figure CAM-1.8 (NW side slope and corner) - 1 New Obs.	2 - 25 m	0.4 - 0.5 m	0.03 - 0.1 m	Occasional	Minor erosion along toe and side slopes - 3 areas	MLF-3, 5-8	Acceptable	No significant changes since first noted on NW side and corner in Year 2 (2011) as Feature A. Subsequently changed to Feature D in Years 3 - 5 (2012-2014). One new area on northwest side slope noted in Year 5. Washing of fines from seasonal ponding. Slope appears stable.
		FEATURE E See Figure CAM-1.8 (SW toe/side slope and corner)	1.5 - 30 m	0.05 - 0.5m	0.05 - 0.15 m	Occasional	Minor erosion along toe and side slope - 3 areas	MLF-15-17, 19	Acceptable	No significant changes since first noted on SW toe in Year 2 (2011) as Feature B. Subsequently changed to Feature E in Years 3 - 5 (2012-2014). Two areas on southwest side slope noted in Year 3. Marginal increase in depth of feature in Year 5. Washing of fines from seasonal ponding. Slope appears stable.
		FEATURE F See Figure CAM-1.8 (NE corner, side slope and toe) - 1 New Obs.	3 - 18 m	0.2 - 2 m	0.02 - 0.15 m	Occasional	Minor erosion on corner, side slope and along toe - 3 areas	MLF- 38-42	Acceptable	No significant changes since first noted on NE side in Year 2 (2011) as Feature C. Subsequently changed to Feature F in Years 3 - 5 (2012-2014). One new area on northeast corner noted in Year 5. Marginal increase in size of feature in Year 5. Washing of fines from seasonal ponding. Slope appears stable.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	Yes	FEATURE G See Figure CAM-1.8 (Central cover)	30 m	20 m	Unknown	Isolated (<10%)	Slight discoloration of granular cover material	MLF-28, 29	Acceptable	No significant changes since first noted in Year 3 (2012).
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Additional Photos	Yes	See Figure CAM-1.8 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no additional features of note.
Overall Landfill Performance:	**Acceptable**									

10.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for Main Landfill has been completed as per the ToR and is included as Table XXXV below.

Table XXXV: **Preliminary Stability Assessment – Main Landfill**

Feature	Severity Rating	Extent
Settlement	Acceptable	Occasional
Erosion	Acceptable	Occasional
Frost Action	Not observed	None
Staining	Acceptable	Isolated
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

10.3 LOCATION PLAN

The Location Plan for the Main Landfill has been completed as per the ToR and is presented in Figure CAM-1.8.

389 600 E

389 750 E

389 900 E

7 620 700 N

7 620 550 N

ACCESS ROAD

MODULE TRAIN DEBRIS AREA LOBE 2

MAIN LANDFILL LOBES 1 AND 2

STATION EAST LANDFILL LOBES 1 AND 2

BM–4

C1–19

C1–20

C1–21

C1–22

C1–23

C1–24

C1–25

C1–26

FEATURE A
3 x SETTLEMENT

FEATURE B
2 x SETTLEMENT

FEATURE C
7 x SETTLEMENT

FEATURE D
4 x SETTLEMENT

FEATURE D
3 x EROSION

FEATURE E
EROSION

FEATURE E
3 x EROSION

FEATURE F
3 x EROSION

FEATURE G
EROSION

FEATURE G
DISCOLOURATION

FEATURE C
3 x SETTLEMENT

LEGEND

- MONITORING SOIL SAMPLE LOCATION
- BM–4 PERMANENT BENCHMARK LOCATION
- 310 COORDINATE POINT
- 6 APPROX. PHOTOGRAPHIC VIEWPOINT
- SETTLEMENT (NTS)
- EROSION (NTS)
- DISCOLOURATION (NTS)

0 15m 30m 45m 60m 75m

NO.	VERSION	DATE	P.L.	A.P.	M.F.
1	FINAL	15–06–26	PAR	VERIF.	APPR.

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

STATION EAST LANDFILL AND MAIN LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
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MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 1,500	JUNE 2015
DRAWN BY:	VERIFIED BY:	APPROVED BY:
L. LA PIERRE	A. PASSALIS	M. FLEURY P. ENG
PROJECT NO:	DRAWING NO:	PAGE
CD3654_320_323	CD3654_320_323_101-CAM-1.8-PL	PL

FIGURE CAM-1.8b

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10.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the Station Main Landfill has been completed as per the ToR and is included as Table XXXVI hereafter. The Photographic Record contains only an index of photographs. Full sized photographs are contained in the Addendum DVD-ROM.

Table XXXVI: **Visual Inspection Photo Log – Station Main Landfill (page 1 of 2)**

Photo (MLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
1	C114_4084	4,266	14/08/28	389655	7620724	View looking east along north side slope of Main LF
2	C114_4085	4,308	14/08/28	389649	7620722	View looking southwest along northwest side slope of Main LF
3	C114_4086	4,407	14/08/28	389644	7620716	View looking southeast at minor erosion on northwest side slope of Main LF - FEATURE D (new)
4	C114_4087	4,374	14/08/28	389650	7620715	View looking southeast at minor depression on northwest side slope of Main LF - FEATURE A
5	C114_4088	4,293	14/08/28	389640	7620708	View looking southwest along northwest side slope of Main LF. Note minor erosion (fines washing) along toe from seasonal ponding - FEATURE D
6	C114_4091	4,337	14/08/28	389615	7620683	View looking northeast along northwest side slope of Main LF. Note minor erosion (fines washing) along toe from seasonal ponding - FEATURE D
7	C114_4092	4,373	14/08/28	389620	7620688	View looking south along west side of Main LF. Note erosion in foreground - FEATURE D
8	C114_4093	4,293	14/08/28	389619	7620680	View north at erosion on northwest corner of Main LF - FEATURE D
9	C114_4094	1,270	14/08/28	389623	7620684	Panoramic view looking northeast to south from west corner across Main LF
10	C114_4095	4,382	14/08/28	389621	7620640	View looking south at linear depression below crest on southwest corner of Main LF - FEATURE B (new)
11	C114_4096	4,390	14/08/28	389624	7620635	View looking west at linear depression below crest on southwest corner of Main LF - FEATURE B (new)
12	C114_4097	4,276	14/08/28	389618	7620627	View looking north along west toe of Main LF
13	C114_4098	4,365	14/08/28	389619	7620625	View looking east-northeast along southwest toe of Main LF. Note minor erosion (fines washing) along toe from seasonal ponding - FEATURE E
14	C114_4099	1,294	14/08/28	389622	7620630	Panoramic view looking north to southeast from west side across Main LF
15	C114_4100	4,414	14/08/28	389634	7620629	View looking east at minor erosion on southwest side slope of Main LF - FEATURE E
16	C114_4101	4,312	14/08/28	389643	7620627	View looking northeast at minor erosion on southwest side slope of Main LF - FEATURE E
17	C114_4102	4,298	14/08/28	389662	7620620	View looking northwest at minor erosion along southwest toe of Main LF - FEATURE E
18	C114_4103	4,419	14/08/28	389659	7620618	View looking south along west side of Main LF
19	C114_4104	4,448	14/08/28	389653	7620620	View looking northeast at minor erosion in on southwest side slope of main LF - FEATURE E
20	C114_4105	4,309	14/08/28	389659	7620633	View looking southwest at minor depression on west cover of Main LF - FEATURE B
21	C114_4108	1,129	14/08/28	389666	7620593	Panoramic view looking northwest to east from south side across Main LF
22	C114_4109	4,292	14/08/28	389677	7620592	View looking east at linear depression along crest on south side of Main LF - FEATURE C (new)
23	C114_4110	4,320	14/08/28	389688	7620587	View looking west along south side slope of Main LF
24	C114_4111	4,327	14/08/28	389689	7620588	View looking northeast along south side slope of Main LF
25	C114_4112	4,420	14/08/28	389703	7620613	View looking southwest along south toe of Main LF
26	C114_4113	4,378	14/08/28	389705	7620612	View looking southeast along south toe of Main LF
27	C114_4114	1,446	14/08/28	389701	7620617	Panoramic view looking northwest to northeast from south side of Main LF

Table XXXVII: Visual Inspection Photo Log – Station Main Landfill (page 2 of 2)

Photo (MLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
28	C114_4115	4,314	14/08/28	389695	7620632	View looking northwest at discolouration in central cover area of Main LF - FEATURE G
29	C114_4116	4,382	14/08/28	389664	7620669	View looking southeast at discoloration in central cover area of Main LF - FEATURE G
30	C114_4119	4,398	14/08/28	389748	7620594	View looking northwest at southeast side of Main LF
31	C114_4120	4,326	14/08/28	389741	7620609	View looking northwest at pothole depression on side slope on southeast side of Main LF- FEATURE C (new)
32	C114_4121	4,352	14/08/28	389739	7620617	View looking west at minor depression on inside corner on east side of Main LF - FEATURE C
33	C114_4122	4,251	14/08/28	389735	7620621	View looking northeast along southeast side of Main LF
34	C114_4125	4,423	14/08/28	389747	7620657	View looking northwest along east side of Main LF
35	C114_4126	1,354	14/08/28	389745	7620655	Panoramic view looking south to northwest from east side across Main LF
36	C114_4128	4,387	14/08/28	389719	7620691	View looking southeast along east side slope of Main LF
37	C114_4129	4,357	14/08/28	389717	7620693	View looking northwest along east side slope of Main LF
38	C114_4130	4,320	14/08/28	389706	7620706	View looking northwest at minor erosion along northeast toe resulting from season ponding - FEATURE F
39	C114_4131	4,390	14/08/28	389688	7620714	View looking northeast at minor erosion on northeast side slope of Main LF - FEATURE F
40	C114_4132	4,322	14/08/28	389700	7620721	View looking southwest at minor erosion on northeast side slope of Main LF - FEATURE F
41	C114_4133	4,405	14/08/28	389689	7620725	View looking southeast at minor erosion along northeast toe resulting from season ponding – FEATURE F
42	C114_4134	4,390	14/08/28	389686	7620734	View looking south at minor erosion on northeast corner of Main LF - FEATURE F (new)
43	C114_4135	4,365	14/08/28	389690	7620731	View looking northeast at exposed bedrock located northeast of Main LF
44	C114_4136	4,392	14/08/28	389642	7620701	View looking northeast at linear depression on north cover of Main LF - FEATURE A (new)
45	C114_4137	4,307	14/08/28	389635	7620679	View looking northwest at linear depression on northwest cover of Main LF - FEATURE A (new)
Soil Sampling						
C1-23	C114_4089	4,267	14/08/28	389629	7620716	Sampling location C112-23 located downgradient of Main LF
S23	C114_4090	4,370	14/08/28	389625	7620720	View southeast at C112-23 soil sample location
C1-24	C114_4123	4,348	14/08/28	389755	7620612	Sampling location C112-24 located upgradient of Main LF
S24	C114_4124	4,377	14/08/28	389761	7620612	View west at C112-24 soil sample location
C1-25	C114_4117	4,272	14/08/28	389700	7620575	Sampling location C112-25 located downgradient of Main LF
S25	C114_4118	4,402	14/08/28	389703	7620571	View northwest at C112-25 soil sample location
C1-26	C114_4106	4,363	14/08/28	389646	7620600	Sampling location C112-26 located downgradient of Main LF
S26	C114_4107	4,329	14/08/28	389641	7620600	View northwest at C112-26 soil sample location

10.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 Station Main Landfill samples are presented in Table XXXVII below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XXXVII: **Soil Chemical Analysis Results – Station Main Landfill**

Sample #	Location	Depth (cm)	Parameters												
													F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-23A	C1-23	0-15	39.4	0.05	1.7	1.9	5.2	67.0	2.5	1	<0.01	<0.1	<10	<50	<50
C114-23B		40-50	25.9	0.03	1.6	1.3	4.1	45.4	1.8	1	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-24A	C1-24	0-15	5.0	0.07	3.5	0.9	3.5	9.0	1.7	7	<0.01	<0.1	<10	<50	<50
C114-24B		20-30	7.4	0.05	3.8	1.3	2.6	14.0	1.7	7	<0.01	<0.1	<10	<50	<50
C114-25A	C1-25	0-15	1.5	0.03	2.4	0.7	2.3	<4.9	1.4	6	<0.01	<0.1	<10	<50	<50
C114-25B		40-50	2.8	0.01	3.2	1.1	2.2	<4.9	1.5	3	<0.01	<0.1	<10	<50	<50
C114-26A	C1-26	0-15	1.7	0.03	4.2	1.2	1.4	5.6	0.7	7	<0.01	<0.1	<10	<50	<50
C114-26B		40-50	9.4	0.03	2.8	1.3	4.0	18.3	2.5	3	<0.01	<0.1	<10	<50	<50

11 USAF LANDFILL

11.1 SUMMARY

The 2014 monitoring of the USAF Landfill was completed on August 27, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate.

TPH, specifically PHC Fraction F3 was detected in one surface soil sample collected upgradient of the landfill (C114-27A) at a concentration of 61 mg/kg. No PCBs or elevated levels of metal parameters were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the USAF Landfill. There is one new feature consisting of localized minor erosion on the west side slope of Lobe 1. There are no other features at this landfill.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XXXVIII of this report and has been completed as per the TOR. Please refer to Figure CAM-1.9 for a sketch of the USAF Landfill detailing the location of photographs and features.

Table XXXVIII: **Visual Inspection Checklist / Report – USAF Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION - LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 OF 2

SITE NAME: CAM-1 Jenny Lind Island
LANDFILL DESIGNATION: USAF Landfill (Regrade Landfill)
DATE OF INSPECTION: August 27, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XXXVIII: USAF LANDFILL VISUAL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: USAF Landfill
Designation: Existing Regrade Area
Date Inspected: August 27, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Erosion	Yes	FEATURE A See Figure CAM-1.9 (W side slope - Lobe 1) - New Obs.	6 m	0.1 - 0.2 m	0.01 - 0.02 m	Isolated	Minor erosion	USAF-4, 5	Acceptable	New observation in Year 5. Cover and side slope appear stable. Minor washing of fines.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Additional Photos	Yes	See Figure CAM-1.9 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no additional features of note.
Overall Landfill Performance:	**Acceptable**									

11.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for USAF Landfill has been completed as per the ToR and is included as Table XXXIX hereafter.

Table XXXIX: **Preliminary Stability Assessment – USAF Landfill**

Feature	Severity Rating	Extent
Settlement	Not observed	None
Erosion	Acceptable	Isolated
Frost Action	Not observed	None
Staining	Not observed	None
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.
Extent	**Description**
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

11.3 LOCATION PLAN

The Location Plan for the USAF Landfill has been completed as per the ToR and is presented in Figure CAM-1.9.

388 300 E

388 400 E

388 500 E

7 619 400 N

7 619 300 N

7 619 200 N

ACCESS ROAD

ACCESS TRAIL

C1-30

C1-31

C1-28

C1-29

C1-27

USAF LANDFILL–LOBE 2

USAF LANDFILL–LOBE 1

FEATURE A
EROSION

21m

601 602 603 604 605 606

610 611 612 613 614 615 616 617

225°

LEGEND

- MONITORING SOIL SAMPLE LOCATION
- 601 COORDINATE POINT
- 6 APPROX. PHOTOGRAPHIC VIEWPOINT
- EROSION (NTS)

0 10m 20m 30m 40m 50m

NO.	VERSION	DATE	P.L.	A.P.	M.F.
1	FINAL	15-06-26	PAR	VERIF.	APPR.

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

USAF LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
Quebec, (Quebec) CANADA G1P 2J7
Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 1,000	JUNE 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.9-PL	PAGE PL

FIGURE CAM-1.9

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11.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the USAF Landfill has been completed as per the ToR and is included as Table XL hereafter. The Photographic Record only contains an index of photographs. Full-sized photographs are contained in the Addendum DVD-ROM.

Table XL: **Landfill Visual Inspection Photo Log – USAF Landfill**

Photo (USAF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
Lobe 1						
1	C114_3710	1,009	14/08/27	388446	7619297	Panoramic view looking northeast to south from west of USAF LF - Lobe 1
2	C114_3711	4,282	14/08/27	388457	7619279	View looking north-northeast along west side slope of USAF LF - Lobe 1
3	C114_3712	4,397	14/08/27	388457	7619279	View looking south along west side slope of USAF LF - Lobe 1
4	C114_3713	4,379	14/08/27	388451	7619273	View looking east at minor erosion on west side slope of USAF LF - Lobe 1 - FEATURE A (new)
5	C114_3714	4,394	14/08/27	388462	7619273	View looking west at minor erosion on west side slope of USAF LF - Lobe 1 - FEATURE A (new)
6	C114_3715	4,335	14/08/27	388456	7619263	View looking southeast along southwest side slope of USAF LF - Lobe 1
7	C114_3716	4,395	14/08/27	388473	7619250	View looking northwest along southwest toe of USAF LF - Lobe 1
8	C114_3717	4,288	14/08/27	388474	7619250	View looking east-northeast along south toe of USAF LF - Lobe 1
9	C114_3718	4,415	14/08/27	388483	7619252	Corner marker post for USAF landfill located south of USAF LF - Lobe 1
10	C114_3719	4,373	14/08/27	388507	7619269	View looking southwest along southeast side slope of USAF LF - Lobe 1
11	C114_3720	4,297	14/08/27	388508	7619270	View looking northwest along east side slope of USAF LF - Lobe 1. Note landfill marker post on right of photo
12	C114_3721	1,216	14/08/27	388504	7619271	Panoramic view looking southwest to northwest from east side of USAF LF - Lobe 1
13	C114_3722	4,448	14/08/27	388511	7619281	Corner marker post for USAF landfill located east of USAF LF - Lobe 1
14	C114_3725	4,457	14/08/27	388502	7619286	View looking south-southeast along east side slope of USAF LF - Lobe 1
15	C114_3726	4,448	14/08/27	388499	7619288	View looking west-northwest along north toe of USAF LF - Lobe 1
16	C114_3727	1,238	14/08/27	388475	7619294	Panoramic view looking east to southwest from north side of USAF LF - Lobe 1
Lobe 2						
17	C114_3734	1,472	14/08/27	388470	7619310	Panoramic view looking northwest to east from southwest corner of USAF LF - Lobe 2
18	C114_3735	4,382	14/08/27	388467	7619303	View looking east-northeast along south side slope of USAF LF - Lobe 2
19	C114_3736	4,285	14/08/27	388465	7619304	View looking north along west side slope of USAF LF- Lobe 2
20	C114_3737	4,416	14/08/27	388496	7619313	View looking southwest along south side slope of USAF LF - Lobe 2
21	C114_3738	4,270	14/08/27	388497	7619314	View looking north along east side slope of USAF LF - Lobe 2
22	C114_3739	4,311	14/08/27	388499	7619330	View looking south along east side slope of USAF LF - Lobe 2
23	C114_3740	4,293	14/08/27	388498	7619331	View looking west along north side slope of USAF LF - Lobe 2
24	C114_3741	1,234	14/08/27	388491	7619326	Panoramic view looking south to west from northeast corner of USAF LF - Lobe 2
25	C114_3742	4,343	14/08/27	388460	7619334	View looking east along north side slope of USAF LF - Lobe 2
26	C114_3743	4,338	14/08/27	388458	7619334	View looking south along west toe of USAF LF - Lobe 2

Table XLI: Landfill Visual Inspection Photo Log – USAF Landfill

Photo (USAF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
Soil Sampling						
C1-27	C114_3723	4,423	14/08/27	388529	7619258	Sampling location C112-27 located upgradient of USAF LF-Lobe 1
S27	C114_3724	4,303	14/08/27	388533	7619257	View northwest at C112-27 soil sample location
C1-28	C114_3732	4,259	14/08/27	388467	7619297	Sampling location C112-28 located downgradient of USAF LF-Lobe 1
S28	C114_3733	4,281	14/08/27	388470	7619298	View southwest at C112-28 soil sample location
C1-29	C114_3730	4,443	14/08/27	388519	7619298	Sampling location C112-29 located downgradient of USAF LF-Lobe 1
S29	C114_3729	4,323	14/08/27	388522	7619296	View northwest at C112-29 soil sample location
C1-30	C114_3744	4,349	14/08/27	388459	7619340	Sampling location C112-30 located downgradient of USAF LF-Lobe 2
S30	C114_3745	4,383	14/08/27	388457	7619344	View southeast at C112-30 soil sample location
C1-31	C114_3746	4,332	14/08/27	388503	7619338	Sampling location C112-31 located downgradient of USAF LF-Lobe 2
S31	C114_3747	4,396	14/08/27	388505	7619341	View southwest at C112-31 soil sample location

11.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 USAF Landfill samples are presented in Table XLI below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XLI: **Soil Chemical Analysis Results – USAF Landfill**

Sample #	Location	Depth (cm)	Parameters												
													F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-27A	C1-27	0-15	1.5	0.22	3.6	1.0	9.6	<5	5.7	4	0.04	<0.1	<10	<50	61
C114-27B		40-50	1.1	0.01	2.3	0.9	2.3	<4.9	1.9	2	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-28A	C1-28	0-15	1.4	0.02	7.1	2.4	4.8	<5	4.9	7	<0.01	<0.1	<10	<50	<50
C114-28B		40-50	0.8	<0.01	3.6	1.2	1.9	<5	1.9	4	<0.01	<0.1	<10	<50	<50
C114-29A	C1-29	0-15	0.7	<0.01	2.5	0.9	1.7	<4.9	1.5	3	<0.01	<0.1	<10	<50	<50
C114-29B		40-50	1.0	<0.01	4.0	1.3	2.8	<5	3.4	3	<0.01	<0.1	<10	<50	<50
C114-30A	C1-30	0-15	1.0	0.10	4.0	1.4	5.7	<4.9	3.8	9	<0.01	<0.1	<10	<50	<50
C114-30B		40-50	0.6	0.01	3.0	0.9	3.8	<5	2.1	2	<0.01	<0.1	<10	<50	<50
C114-31A	C1-31	0-15	0.7	<0.01	2.8	1.1	1.5	<5	1.5	3	<0.01	<0.1	<10	<50	<50
C114-31B		40-50	0.8	<0.01	4.0	0.9	2.0	<5	2.0	3	<0.01	<0.1	<10	<50	<50

12 EAST LANDING LANDFILL

12.1 SUMMARY

The 2014 monitoring of the East Landing Landfill was completed on August 27, 2014, which included a visual inspection as part of a preliminary landfill stability assessment and collection of soil samples at upgradient and downgradient locations to monitor for the presence of leachate.

No TPH, PCBs or elevated levels of metal parameters were detected in the collected soil samples.

As of 2014, no stability features with “significant” or “unacceptable” severity ratings were identified during the Preliminary Stability Assessment of the East Landing Landfill. Observations of minor settlement and erosion were noted on the southwest and northwest side slopes of the landfill, including two newly observed depressions on the southwest side slope and two new erosion channels on the northwest and southwest side slope areas. One existing settlement feature was also observed on southwest side slope that was consistent with previous observations. One new and one existing tension crack were noted on the northwest corner and southeast cover of the landfill, respectively. The magnitude of the existing tension crack on the southeast cover appear relatively unchanged from the previous inspection period. No exposed debris was observed.

At this time, the overall performance of the landfill is rated as acceptable.

The Visual Inspection Checklist is included in Table XLII of this report and has been completed as per the TOR. Please refer to Figure CAM-1.10 for a sketch of the East Landing Landfill detailing the location of photographs and features.

Table XLII: **Visual Inspection Checklist / Report – East Landing Landfill**

DEW LINE CLEANUP: POST-CONSTRUCTION - LANDFILL MONITORING
VISUAL INSPECTION CHECKLIST
INSPECTION REPORT – PAGE 1 of 2

SITE NAME: CAM-1 Jenny Lind Island
LANDFILL DESIGNATION: East Landing Landfill (Regrade Landfill)
DATE OF INSPECTION: August 27, 2014
DATE OF PREVIOUS INSPECTION: August 16, 2013
INSPECTED BY: A. Passalis
REPORT PREPARED BY: A. Passalis
The inspector/reporter represents to the best of his/her knowledge that the following statements and observations are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

TABLE XLII: EAST LANDING LANDFILL VISAUL INSPECTION (PAGE 2 OF 2)

Site Name: CAM-1 JENNY LIND ISLAND
Landfill: East Landing Landfill
Designation: Existing Regrade Area
Date Inspected: August 27, 2014
Inspected by: Andrew Passalis, P.Eng.

Signature: 

Checklist Item	Present (Yes/No)	Location	Length	Width	Depth	Extent	Description	Photographic Record	Severity Rating	Additional Comments
Settlement	Yes	FEATURE A See Figure CAM-1.10 (SW side slope) - 2 New Obs.	0.2 - 1.5 m	0.2 - 0.6 m	0.05 - 0.1 m	Occasional	Pothole and linear type depressions - 3 locations	ELLF-23, 24, 27	Acceptable	Single depression first noted in Year 3 (2012). Two additional depressions noted in Year 5. Existing depression appears unchanged. Cover appears stable.
Erosion	Yes	FEATURE C See Figure CAM-1.10 (NW side slope) - New Obs.	4 m	0.2 - 1 m	0.02 - 0.03 m	Isolated	Minor erosion	ELLF-18, 19	Acceptable	New observation in Year 5. Side slope appears stable. New observation.
		FEATURE D See Figure CAM-1.10 (SW side slope) - New Obs.	5 m	0.3 - 0.6 m	0.05 - 0.1 m	Isolated	Minor erosion	ELLF-25, 26	Acceptable	New observation in Year 5. Side slope appears stable. New observation.
Frost Action	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Animal Burrows	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Staining	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Vegetation Stress	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Seepage Points	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Debris Exposed	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Presence/Condition of Monitoring Instruments	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Observable	N/A
Other Features of Note:	Yes	FEATURE B See Figure CAM-1.10 (SE cover)	28 m	up to 30 mm	Unknown	Isolated (<2%)	Continuous tension crack - mostly infilled	ELLF-28-31	Acceptable	Feature first noted in Year 3 (2012). Notable increase in length and width between Years 3 and 4 (2012-2013). Feature has continued to infill from previous 2013 inspection.
		FEATURE E See Figure CAM-1.10 (NW corner slope) - New Obs.	3 m	2 - 3 mm	Unknown	Isolated	Continuous tension crack - partially infilled	ELLF-20, 21	Acceptable	New observation in Year 5. Located near erosion on northwest side slope.
Additional Photos	Yes	See Figure CAM-1.10 and Photographic Record	N/A	N/A	N/A	N/A	General Photographic Record	N/A	Not Observable	General photos for documentation, no additional features of note.
Overall Landfill Performance:	**Acceptable**									

12.2 PRELIMINARY STABILITY ASSESSMENT

The Preliminary Stability Assessment for East Landing Landfill has been completed as per the ToR and is included as Table XLIII hereafter.

Table XLIII: **Preliminary Stability Assessment – East Landing Landfill**

Feature	Severity Rating	Extent
Settlement	Acceptable	Isolated
Erosion	Not observed	None
Frost Action	Not observed	None
Staining	Not observed	None
Vegetation Stress	Not observed	None
Seepage/Ponded Water	Not observed	None
Debris exposure	Not observed	None
Overall Landfill Performance	**Acceptable**	

Performance/ Severity Rating	Description
Acceptable	Noted features are of little consequence. The landfill is performing as designed. Minor deviations in environmental or physical performance may be observed, such as isolated areas of erosion, settlement.
Marginal	Physical/environmental performance appears to be deteriorating with time. Observations may include an increase in size or number of features of note, such as differential settlement, erosion or cracking. No significant impact on landfill stability to date, but potential for failure is assessed as low or moderate.
Significant	Significant or potentially significant changes affecting landfill stability, such as significant changes in slope geometry, significant erosion or differential settlement; scarp development. The potential for failure is assessed as imminent.
Unacceptable	Stability of landfill is compromised to the extent that ability to contain waste materials is compromised. Examples may include: • Debris exposed in erosion channels or areas of differential settlement. • Liner exposed. • Slope failure.

Extent	Description
Isolated	Singular feature
Occasional	Features of note occurring at irregular intervals/locations
Numerous	Many features of note, impacted less than 50% of the surface area of the landfill
Extensive	Impacting greater than 50% of the surface area of the landfill

12.3 LOCATION PLAN

The Location Plan for the East Landing Landfill has been completed as per the ToR and is presented in Figure CAM-1.10.

388 150 E

388 200 E

388 250 E

7 618 250 N

7 618 200 N

FEATURE E
CRACK

FEATURE C
EROSION

FEATURE B
CRACK

FEATURE A
3 x SETTLEMENT

FEATURE D
EROSION

C1–35

C1–32

C1–34

C1–33

EAST LANDING LANDFILL
LOBES 4 AND 5

JENNY LIND BAY

5m

6m

4m

3m

2m

1m

LEGEND

- MONITORING SOIL SAMPLE LOCATION
- COORDINATE POINT
- APPROX. PHOTOGRAPHIC VIEWPOINT
- BODY OF WATER
- SETTLEMENT (NTS)
- TENSION CRACK(s) (NTS)
- EROSION (NTS)

0 5m 10m 15m 20m 25m

NO.	VERSION	DATE	P.L. PAR	A.P. VERIF.	M.F. APPR.
1	FINAL	15–03–05			

Construction de Défense Canada
Defence Construction Canada

COLLECTION OF LANDFILL MONITORING DATA

CAM-1, JENNY LIND ISLAND, NUNAVUT

EAST LANDING LANDFILL

SITE REMEDIATION SOLUTIONS

Biogenie, a division of EnGlobe Corp.
4495 Wilfrid-Hamel blvd, Suite 200
Quebec, (Quebec) CANADA G1P 2J7
Phone : 418-653-4422 www.biogenie-env.com

MEASUREMENT UNIT	SCALE:	DATE (month–year):
Metre	1 : 500	MARCH 2015
DRAWN BY: L. LA PIERRE	VERIFIED BY: A. PASSALIS	APPROVED BY: M. FLEURY P. ENG
PROJECT NO: CD3654_320_323	DRAWING NO: CD3654_320_323_101-CAM-1.10-PL	PAGE PL

FIGURE CAM-1.10

G:\CD3654\CAM-1\FINAL\CD3654_320_323_101-CAM-1.10-PL.dwg, PL, 2015-03-05 12:52:44 PM

12.4 PHOTOGRAPHIC RECORDS

The Photographic Record for the East Landing Landfill has been completed as per the ToR and is included as Table XLIV hereafter. The Photographic Record contains only an index of photographs. Full-sized photographs are contained in the Addendum DVD-ROM.

Table XLIV: **Landfill Visual Inspection Photo Log – East Landing Landfill**

Photo (ELLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
1	C114_3671	4,105	14/08/27	388144	7618258	View looking southeast from northwest of East Landing LF
2	C114_3672	4,182	14/08/27	388150	7618242	View looking east along north toe of East Landing LF
3	C114_3673	4,255	14/08/27	388149	7618241	View looking south along west toe of East Landing LF
4	C114_3674	4,321	14/08/27	388156	7618233	View looking east along north crest of East Landing LF
5	C114_3675	4,280	14/08/27	388155	7618233	View looking south along west crest of East Landing LF
6	C114_3676	4,379	14/08/27	388151	7618218	View looking east along south crest of East Landing LF
7	C114_3677	4,252	14/08/27	388151	7618219	View looking north along west crest of East Landing LF
8	C114_3678	4,325	14/08/27	388140	7618212	View looking east-southeast along toe of rip rap bordering south side of East Landing LF
9	C114_3679	4,311	14/08/27	388126	7618213	View looking northeast from southwest of East Landing LF
10	C114_3680	4,406	14/08/27	388155	7618203	View looking east along south toe of East Landing LF
11	C114_3681	4,441	14/08/27	388178	7618198	View looking east-southeast at rip rap erosion protection on south slope of East Landing LF
12	C114_3682	4,351	14/08/27	388203	7618198	View northwest along south toe of East Landing LF
13	C114_3683	4,253	14/08/27	388204	7618198	View north along east toe of East Landing LF
14	C114_3684	4,458	14/08/27	388202	7618205	View looking west-northwest at east end along south crest of East Landing LF
15	C114_3685	4,338	14/08/27	388211	7618227	View west-northwest along north toe of East Landing LF
16	C114_3686	1,336	14/08/27	388204	7618222	Panoramic view looking south to northwest from northeast corner of East Landing LF
17	C114_3687	4,391	14/08/27	388203	7618214	View looking west-northwest along centreline of East Landing LF
18	C114_3688	4,400	14/08/27	388156	7618233	View looking north at minor erosion on northwest side slope of East Landing LF - FEATURE C (new)
19	C114_3689	4,295	14/08/27	388156	7618239	View looking south at minor erosion on northwest side slope of East Landing LF - FEATURE C (new)
20	C114_3690	4,270	14/08/27	388158	7618235	View looking west at partially infilled crack on northwest crest of East Landfing LF- FEATURE E (new)
21	C114_3691	4,312	14/08/27	388154	7618236	View of partially infilled crack on northwest crest of East Landfing LF - FEATURE E (new)
22	C114_3692	4,382	14/08/27	388146	7618225	View south at uneven surface on west side slope of East Landfing LF
23	C114_3693	4,418	14/08/27	388152	7618213	View looking east at minor depressions on southwest side slope of East Landing LF - FEATURE A (new)
24	C114_3694	4,400	14/08/27	388156	7618214	View looking south-southwest at minor depressions on southwest side slope of East Landing LF - FEATURE A (new)
25	C114_3695	4,372	14/08/27	388159	7618213	View looking southwest at minor erosion on southwest side slope of East Landing LF - FEATURE D (new)
26	C114_3696	4,288	14/08/27	388154	7618207	View looking northeast at minor erosion on southwest side slope of East Landing LF - FEATURE D (new)
27	C114_3697	4,363	14/08/27	388154	7618209	View looking southeast at minor depression on southwest side slope of East Landing LF- FEATURE A

Table XLV: Landfill Visual Inspection Photo Log – East Landing Landfill

Photo (ELLF-)	Filename	Size (KB)	Date	Vantage Point		Caption
				Easting	Northing	
28	C114_3698	4,415	14/08/27	388178	7618213	View looking east-southeast at partially infilled tension crack on southeast cover of East LF - FEATURE B
29	C114_3699	4,316	14/08/27	388190	7618210	View of partially infilled tension crack on southeast cover of East LF - FEATURE B
30	C114_3700	4,320	14/08/27	388204	7618206	View looking west-northwest at partially infilled tension crack on southeast cover of East LF - FEATURE B
31	C114_3701	4,357	14/08/27	388202	7618207	View of partially infilled tension crack on southeast cover of East LF - FEATURE B
Soil Sampling						
C1-32	C114_3669	4,426	14/08/27	388196	7618243	Sampling location C112-32 located upgradient of East Landing LF
S32	C114_3670	4,335	14/08/27	388197	7618245	View southwest at C112-32 soil sample location
C1-33	C114_3702	4,317	14/08/27	388181	7618190	Sampling location C112-33 located downgradient of East Landing LF
S33	C114_3703	4,328	14/08/27	388180	7618189	View northeast at C112-33 soil sample location
C1-34	C114_3704	4,366	14/08/27	388141	7618204	Sampling location C112-34 located downgradient of East Landing LF
S34	C114_3705	4,302	14/08/27	388140	7618203	View northeast at C112-34 soil sample location
C1-35	C114_3706	4,328	14/08/27	388139	7618239	Sampling location C112-35 located downgradient of East Landing LF
S35	C114_3707	4,365	14/08/27	388138	7618240	View east at C112-35 soil sample location

12.5 SOIL SAMPLE ANALYTICAL DATA

The soil chemical analysis results for the 2014 East Landing Landfill samples are presented in Table XLV below. Field and inter-laboratory duplicates collected as part of the QA/QC program are presented in Annex 2 at the end of this report.

Table XLV: **Soil Chemical Analysis Results – East Landing Landfill**

Sample #	Location	Depth (cm)	Parameters												
													F1	F2	F3
			As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
Detection Limit			0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
Upgradient Soil Samples															
C114-32A	C1-32	0-15	0.4	<0.01	3.7	0.9	1.2	<4.9	1.6	4	<0.01	<0.1	<10	<50	<50
C114-32B		40-50	0.7	0.01	3.9	0.9	2.3	<4.9	2.2	3	<0.01	<0.1	<10	<50	<50
Downgradient Soil Samples															
C114-33A	C1-33	0-15	9.3	0.02	8.8	5.1	7.6	26.9	10.0	9	<0.01	<0.1	<10	<50	<50
C114-33B		40-50	7.7	0.02	9.5	4.7	7.6	21.6	9.3	7	<0.01	<0.1	<10	<50	<50
C114-34A	C1-34	0-15	5.6	0.04	7.5	3.3	5.7	47.1	5.2	13	<0.01	<0.1	<10	<50	<50
C114-34B		40-50	5.1	0.03	6.7	3.0	4.9	40.8	5.1	7	<0.01	<0.1	<10	<50	<50
C114-35A	C1-35	0-15	4.0	<0.01	7.4	2.2	3.5	12.7	4.4	7	<0.01	<0.1	<10	<50	<50
C114-35B		40-50	2.9	<0.01	7.4	2.7	4.3	7.5	5.9	8	<0.01	<0.1	<10	<50	<50

ANNEX 1

Laboratory Results

Exova
7217 Roper Road NW
Edmonton, Alberta
Canada, T6B 3J4

T: (780) 438-5522
F: (780) 434-8586
E: Edmonton@exova.com
W www.exova.com

Sample Integrity Scorecard

Lots received between 'Aug 01, 2014' and 'Dec 05, 2014'

Client: sila

Sample Integrity Summary

	Total Lots	Total	Total Failed	% Passed
Process	5	3	2	60
Data Quality	5	4	1	80

Agreement: 105540 (Special Project - Cambridge Bay)

Lot ID: 1022226 PIN-3

Process

Was the waybill clearly filled in? Yes

Were the sample containers packaged well? Yes If No, please explain:

Was the COC received? Yes

Was the COC filled in adequately and legibly? Yes If No, please explain:

Was the COC received without damage? Yes If No, please explain:

Were Exova supplies used? No * If No, please explain: Maxxam containers

Were the sample containers clearly labelled? Yes If No, please explain:

Data Quality

Were the samples received within recommended holding times? Yes

Were samples received in containers appropriate to the matrix and analysis required? Yes

Were the expected number of samples received? No * If No, please explain: See note.

Was the sample received in the prescribed temperature range? Yes Please provide temperature ℃:

Were all samples received intact (not damaged/broken)? No * If No, please explain: See note.

Were all samples received without adhesive tape sealing the lids? Yes If No, please explain:

For water samples only, were they received without a noticeable layer of sediment? Yes If No, please explain:

Was sufficient sample volume received? Yes If No, please explain:

Were non-conformance/verification notes entered into Sample Login for any of the above items that did not meet Exova's sample or COC requirements? Yes

Non-Conformances

Process: 1 Data Quality: 2 *Total: 3*

Lot ID: 1022352 PIN-2

Process

Was the waybill clearly filled in? Yes

Were the sample containers packaged well? Yes If No, please explain:

Was the COC received? Yes

Was the COC filled in adequately and legibly? Yes If No, please explain:

Was the COC received without damage? Yes If No, please explain:

Were Exova supplies used? Yes If No, please explain:

Were the sample containers clearly labelled? Yes If No, please explain:

Exova
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E: Edmonton@exova.com
W www.exova.com

Sample Integrity Scorecard

Lots received between 'Aug 01, 2014' and 'Dec 05, 2014'

Lot ID: 1022352 PIN-2

Data Quality

Were the samples received within recommended holding times? Yes

Were samples received in containers appropriate to the matrix and analysis required? Yes

Were the expected number of samples received? Yes If No, please explain:

Was the sample received in the prescribed temperature range? Yes Please provide temperature ℃: 4.0

Were all samples received intact (not damaged/broken)? Yes If No, please explain:

Were all samples received without adhesive tape sealing the lids? Yes If No, please explain:

For water samples only, were they received without a noticeable layer of sediment? Yes If No, please explain:

Was sufficient sample volume received? Yes If No, please explain:

Were non-conformance/verification notes entered into Sample Login for any of the above items that did not meet Exova's sample or COC requirements? Yes

Non-Conformances

Process: 0 Data Quality: 0 *Total: 0*

Lot ID: 1023068 CAM-3

Process

Was the waybill clearly filled in? Yes

Were the sample containers packaged well? Yes If No, please explain:

Was the COC received? Yes

Was the COC filled in adequately and legibly? Yes If No, please explain:

Was the COC received without damage? Yes If No, please explain:

Were Exova supplies used? Yes If No, please explain:

Were the sample containers clearly labelled? Yes If No, please explain:

Data Quality

Were the samples received within recommended holding times? Yes

Were samples received in containers appropriate to the matrix and analysis required? Yes

Were the expected number of samples received? Yes If No, please explain:

Was the sample received in the prescribed temperature range? Yes Please provide temperature ℃:

Were all samples received intact (not damaged/broken)? Yes If No, please explain:

Were all samples received without adhesive tape sealing the lids? Yes If No, please explain:

For water samples only, were they received without a noticeable layer of sediment? Yes If No, please explain:

Was sufficient sample volume received? Yes If No, please explain:

Were non-conformance/verification notes entered into Sample Login for any of the above items that did not meet Exova's sample or COC requirements? Yes

Non-Conformances

Process: 0 Data Quality: 0 *Total: 0*

Lot ID: 1023106 PIN-4

Process

Was the waybill clearly filled in? Yes

Were the sample containers packaged well? Yes If No, please explain:

Was the COC received? Yes

Was the COC filled in adequately and legibly? Yes If No, please explain:

Was the COC received without damage? Yes If No, please explain:

Exova
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Sample Integrity Scorecard

Lots received between 'Aug 01, 2014' and 'Dec 05, 2014'

Lot ID: 1023106 PIN-4

Process

Were Exova supplies used? Yes If No, please explain:

Were the sample containers clearly labelled? Yes If No, please explain:

Data Quality

Were the samples received within recommended holding times? Yes

Were samples received in containers appropriate to the matrix and analysis required? Yes

Were the expected number of samples received? Yes If No, please explain:

Was the sample received in the prescribed temperature range? Yes Please provide temperature ℃:

Were all samples received intact (not damaged/broken)? Yes If No, please explain:

Were all samples received without adhesive tape sealing the lids? Yes If No, please explain:

For water samples only, were they received without a noticeable layer of sediment? Yes If No, please explain:

Was sufficient sample volume received? Yes If No, please explain:

Were non-conformance/verification notes entered into Sample Login for any of the above items that did not meet Exova's sample or COC requirements? Yes

Non-Conformances

Process: 0 Data Quality: 0 *Total: 0*

Lot ID: 1023703 CAM-1

Process

Was the waybill clearly filled in? Yes

Were the sample containers packaged well? Yes If No, please explain:

Was the COC received? Yes

Was the COC filled in adequately and legibly? No * If No, please explain: see nots

Was the COC received without damage? Yes If No, please explain:

Were Exova supplies used? Yes If No, please explain:

Were the sample containers clearly labelled? Yes If No, please explain:

Data Quality

Were the samples received within recommended holding times? Yes

Were samples received in containers appropriate to the matrix and analysis required? Yes

Were the expected number of samples received? Yes If No, please explain:

Was the sample received in the prescribed temperature range? Yes Please provide temperature ℃:

Were all samples received intact (not damaged/broken)? Yes If No, please explain:

Were all samples received without adhesive tape sealing the lids? Yes If No, please explain:

For water samples only, were they received without a noticeable layer of sediment? Yes If No, please explain:

Was sufficient sample volume received? Yes If No, please explain:

Were non-conformance/verification notes entered into Sample Login for any of the above items that did not meet Exova's sample or COC requirements? Yes

Non-Conformances

Process: 1 Data Quality: 0 *Total: 1*

* is a non-conformance

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Report Transmission Cover Page

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Contact & Affiliation	Address	Delivery Commitments	
Accounts Payable SILA Remediation	350, rue Franquet Sainte-Foy, Quebec G1P 4P3 Phone: (418) 653-4422 Fax: (418) 653-3583 Email: n/a	On [Lot Approval and Final Test Report Approval] send (Invoice) by Post On [Lot Approval and Final Test Report Approval] send (Invoice) by Post	 M M
Andrew Passalis SILA Remediation	350, rue Franquet Sainte-Foy, Quebec G1P 4P3 Phone: (204) 791-4938 Fax: (418) 653-3583 Email: andrew.passalis@gmail.com	On [Report Approval] send (COC, Test Report) by Email - Single Report On [Report Approval] send (Test Report, COC) by Email - Single Report	
Jean-Pierre Pelletier SILA Remediation	250-1260 Boul Lebourgneuf Quebec, Quebec G2K 2G2 Phone: (581) 984-2585 Fax: Email: jean-peirre.pelletier@lvm.ca	On [Report Approval] send (COC, Test Report) by Email - Single Report On [Report Approval] send (COC, Test Report) by Email - Single Report On [Report Approval] send (COC, Test Report) by Email - Single Report On [Lot Approval and Final Test Report Approval] send (Invoice) by Email - Single Report On [Lot Approval and Final Test Report Approval] send (Invoice) by Email - Single Report On [Lot Approval and Final Test Report Approval] send (Invoice) by Email - Single Report	

Notes To Clients:

- Report was issued to correct for missing Mercury analysis on samples 1023703 (81-84). Previous report 1944790
- Report was issued to include QC data as requested by Jean-Pierre Pelletier on March 17, 2015. Previous report 1954487.

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-1	1023703-2	1023703-3
Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-1A	C114-1B	C114-2A
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	1	2.8	1.5	0.2
Barium	Strong Acid Extractable	mg/kg	6	7	5	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.04	0.02	0.02	0.01
Chromium	Strong Acid Extractable	mg/kg	1.0	2.4	1.4	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.6	1.2	1.0	0.1
Copper	Strong Acid Extractable	mg/kg	3.8	4.2	2.7	1
Lead	Strong Acid Extractable	mg/kg	<5.0	7.1	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.5	1.8	1.1	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	3.1	2.6	2.7	1
Uranium	Strong Acid Extractable	mg/kg	0.8	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	2.2	7.2	4.0	0.1
Zinc	Strong Acid Extractable	mg/kg	8	3	4	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	53	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-1	1023703-2	1023703-3	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-1A	C114-1B	C114-2A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	65.40	12.80	5.73	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	110	130	120	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-4	1023703-5	1023703-6
Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-2B	C114-3A	C114-3B
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	2.1	2.5	1.8	0.2
Barium	Strong Acid Extractable	mg/kg	7	7	6	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	0.03	0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	2.9	2.9	2.5	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.8	1.8	1.5	0.1
Copper	Strong Acid Extractable	mg/kg	3.2	3.5	2.9	1
Lead	Strong Acid Extractable	mg/kg	<5.0	<4.9	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	1.3	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	2.0	1.9	1.4	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.09	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.8	2.7	2.9	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	7.2	6.9	6.3	0.1
Zinc	Strong Acid Extractable	mg/kg	5	7	4	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-4	1023703-5	1023703-6	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-2B	C114-3A	C114-3B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	3.78	5.40	2.67	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	120	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-7	1023703-8	1023703-9
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-4A	C114-4B	C114-5A
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.8	1.6	1.6	0.2
Barium	Strong Acid Extractable	mg/kg	6	6	3	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	0.01	0.02	0.01
Chromium	Strong Acid Extractable	mg/kg	1.2	2.2	1.1	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.8	2.0	0.9	0.1
Copper	Strong Acid Extractable	mg/kg	1.7	2.1	1.6	1
Lead	Strong Acid Extractable	mg/kg	<4.9	<4.9	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	0.8	1.3	0.7	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.8	2.7	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	3.0	6.1	3.5	0.1
Zinc	Strong Acid Extractable	mg/kg	10	5	5	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	14.0	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-7	1023703-8	1023703-9	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-4A	C114-4B	C114-5A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	12.70	4.77	4.33	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	130	140	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-10	1023703-11	1023703-12
Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-5B	C114-6A	C114-6B
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	1.3	5.6	8.5	0.2
Barium	Strong Acid Extractable	mg/kg	2	6	8	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.01	0.04	0.04	0.01
Chromium	Strong Acid Extractable	mg/kg	1.0	2.2	2.4	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.7	1.7	2.1	0.1
Copper	Strong Acid Extractable	mg/kg	1.6	3.6	4.4	1
Lead	Strong Acid Extractable	mg/kg	<5.0	12.4	19.4	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	3.9	5.3	1
Nickel	Strong Acid Extractable	mg/kg	0.6	1.2	1.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	3.0	2.7	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	0.6	0.5
Vanadium	Strong Acid Extractable	mg/kg	2.8	8.3	10.1	0.1
Zinc	Strong Acid Extractable	mg/kg	3	4	4	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		4-Sep-14	4-Sep-14	4-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-10	1023703-11	1023703-12	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-5B	C114-6A	C114-6B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	2.35	7.88	6.88	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	110	120	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-13	1023703-14	1023703-15
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-7A	C114-7B	C114-8A
Matrix		Soil	Soil	Soil

Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	2.1	3.7	1.5	0.2
Barium	Strong Acid Extractable	mg/kg	5	6	5	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.03	0.02	0.02	0.01
Chromium	Strong Acid Extractable	mg/kg	1.5	2.7	1.8	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.7	1.6	0.7	0.1
Copper	Strong Acid Extractable	mg/kg	1.8	2.4	1.5	1
Lead	Strong Acid Extractable	mg/kg	<5.0	8.0	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	0.9	1.8	0.9	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.6	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	3.6	7.2	4.8	0.1
Zinc	Strong Acid Extractable	mg/kg	9	6	6	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		4-Sep-14	4-Sep-14	4-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-13	1023703-14	1023703-15	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-7A	C114-7B	C114-8A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	10.30	6.93	7.36	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-16	1023703-17	1023703-18
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
		Sample Time	NA	NA	NA
		Sample Location			
		Sample Description	C114-8B	C114-9A	C114-9B
		Matrix	Soil	Soil	Soil
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	0.02	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	0.3	0.2
Arsenic	Strong Acid Extractable	mg/kg	5.8	4.0	12.9	0.2
Barium	Strong Acid Extractable	mg/kg	5	11	9	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	0.12	0.10	0.01
Chromium	Strong Acid Extractable	mg/kg	2.5	4.3	3.6	0.5
Cobalt	Strong Acid Extractable	mg/kg	2.2	1.5	3.5	0.1
Copper	Strong Acid Extractable	mg/kg	2.6	16.6	12.5	1
Lead	Strong Acid Extractable	mg/kg	11.0	7.9	22.4	0.1
Molybdenum	Strong Acid Extractable	mg/kg	1.1	<1.0	3.8	1
Nickel	Strong Acid Extractable	mg/kg	1.8	4.6	4.6	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	0.2	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	0.11	0.09	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.5	2.8	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	2.3	0.7	0.5
Vanadium	Strong Acid Extractable	mg/kg	9.3	5.7	10.0	0.1
Zinc	Strong Acid Extractable	mg/kg	7	7	15	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		4-Sep-14	4-Sep-14	4-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-16	1023703-17	1023703-18	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-8B	C114-9A	C114-9B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	4.08	34.40	13.70	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	130	120	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-19	1023703-20	1023703-21
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-10A	C114-10B	C114-11A
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.7	7.9	0.4	0.2
Barium	Strong Acid Extractable	mg/kg	6	7	4	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	0.03	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	1.4	4.2	1.2	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.5	2.6	0.3	0.1
Copper	Strong Acid Extractable	mg/kg	1.8	5.9	3.0	1
Lead	Strong Acid Extractable	mg/kg	<4.9	12.7	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	1.8	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.1	2.9	1.1	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	0.09	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.8	2.8	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	2.7	10.7	2.3	0.1
Zinc	Strong Acid Extractable	mg/kg	4	5	2	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		4-Sep-14	4-Sep-14	4-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-19	1023703-20	1023703-21	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-10A	C114-10B	C114-11A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	15.00	6.54	9.18	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-22	1023703-23	1023703-24
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-11B	C114-12A	C114-12B
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.9	0.3	0.6	0.2
Barium	Strong Acid Extractable	mg/kg	5	4	5	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	1.9	1.5	2.2	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.5	0.4	0.8	0.1
Copper	Strong Acid Extractable	mg/kg	1.1	1.5	1.3	1
Lead	Strong Acid Extractable	mg/kg	<4.9	<4.9	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.1	0.9	1.4	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.8	2.9	2.8	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	3.3	2.7	4.4	0.1
Zinc	Strong Acid Extractable	mg/kg	2	2	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		4-Sep-14	4-Sep-14	4-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-22	1023703-23	1023703-24	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-11B	C114-12A	C114-12B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	2.93	4.24	2.80	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-25	1023703-26	1023703-27
Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-13A	C114-13B	C114-14A
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.9	1.1	1.8	0.2
Barium	Strong Acid Extractable	mg/kg	7	5	4	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	2.6	3.6	2.2	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.8	0.9	0.9	0.1
Copper	Strong Acid Extractable	mg/kg	1.4	1.5	1.7	1
Lead	Strong Acid Extractable	mg/kg	<4.9	<4.9	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.6	1.6	1.2	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.8	2.8	2.9	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	4.3	4.8	5.6	0.1
Zinc	Strong Acid Extractable	mg/kg	3	3	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	4-Sep-14	4-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		4-Sep-14	4-Sep-14	4-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-25	1023703-26	1023703-27	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-13A	C114-13B	C114-14A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	2.00	4.52	1.40	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	140	130	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-28	1023703-29	1023703-30
Sample Date	Aug 28, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-14B	C114-15A	C114-15B
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	2.2	1.9	1.3	0.2
Barium	Strong Acid Extractable	mg/kg	5	6	18	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	7.6	2.5	2.0	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.5	1.0	1.1	0.1
Copper	Strong Acid Extractable	mg/kg	1.5	2.4	1.8	1
Lead	Strong Acid Extractable	mg/kg	5.5	<5.0	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	3.6	1.3	1.1	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.8	2.9	2.9	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	6.3	5.7	6.2	0.1
Zinc	Strong Acid Extractable	mg/kg	4	4	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		4-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		4-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-28	1023703-29	1023703-30	
		Sample Date	Aug 28, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-14B	C114-15A	C114-15B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	1.50	1.79	1.84	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-31	1023703-32	1023703-33
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-16A	C114-16B	C114-17A
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	0.4	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.7	1.2	0.7	0.2
Barium	Strong Acid Extractable	mg/kg	5	3	5	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	0.02	0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	1.4	1.8	1.7	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.4	0.6	0.6	0.1
Copper	Strong Acid Extractable	mg/kg	<1.0	1.7	1.4	1
Lead	Strong Acid Extractable	mg/kg	<4.9	<4.9	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	<0.5	1.2	0.8	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	0.2	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	0.06	0.05
Tin	Strong Acid Extractable	mg/kg	2.9	2.8	2.8	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	3.3	4.0	3.9	0.1
Zinc	Strong Acid Extractable	mg/kg	2	2	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-31	1023703-32	1023703-33	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-16A	C114-16B	C114-17A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	2.59	3.38	3.78	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-34	1023703-35	1023703-36
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-17B	C114-18A	C114-18B
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	2.7	0.6	0.5	0.2
Barium	Strong Acid Extractable	mg/kg	6	4	4	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.04	0.02	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	2.9	1.5	1.6	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.9	0.5	0.4	0.1
Copper	Strong Acid Extractable	mg/kg	2.4	1.2	<1.0	1
Lead	Strong Acid Extractable	mg/kg	8.7	<5.0	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.9	1	0.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.07	0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.9	2.7	2.8	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	5.6	3.3	3.3	0.1
Zinc	Strong Acid Extractable	mg/kg	3	3	2	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-34	1023703-35	1023703-36	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-17B	C114-18A	C114-18B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	2.19	16.70	3.15	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	140	130	130	50-150

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Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-37	1023703-38	1023703-39
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-19A	C114-19B	C114-20A
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	0.6	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	2.6	1.9	7.9	0.2
Barium	Strong Acid Extractable	mg/kg	16	5	5	1
Beryllium	Strong Acid Extractable	mg/kg	0.2	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.03	<0.01	0.05	0.01
Chromium	Strong Acid Extractable	mg/kg	5.7	2.6	2.8	0.5
Cobalt	Strong Acid Extractable	mg/kg	2.2	0.8	0.9	0.1
Copper	Strong Acid Extractable	mg/kg	14.1	1.2	4.3	1
Lead	Strong Acid Extractable	mg/kg	14.7	<5.0	11.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	2.0	1
Nickel	Strong Acid Extractable	mg/kg	3.7	0.7	1.6	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.10	0.06	0.16	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.8	2.6	1
Uranium	Strong Acid Extractable	mg/kg	0.5	<0.5	0.8	0.5
Vanadium	Strong Acid Extractable	mg/kg	9.7	6.6	7.0	0.1
Zinc	Strong Acid Extractable	mg/kg	18	3	7	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	21.9	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-37	1023703-38	1023703-39	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-19A	C114-19B	C114-20A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	11.80	3.05	32.00	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	130	120	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-40	1023703-41	1023703-42
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-20B	C114-21A	C114-21B
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	7.0	8.8	10.2	0.2
Barium	Strong Acid Extractable	mg/kg	4	4	4	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	0.1	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.03	0.03	0.03	0.01
Chromium	Strong Acid Extractable	mg/kg	2.9	4.2	3.6	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.8	1.2	1.2	0.1
Copper	Strong Acid Extractable	mg/kg	2.8	2.6	2.9	1
Lead	Strong Acid Extractable	mg/kg	11.4	13.9	16.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	1.7	2.5	2.9	1
Nickel	Strong Acid Extractable	mg/kg	1.2	1.5	1.8	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.14	0.14	0.17	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.7	2.6	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	7.2	9.1	8.4	0.1
Zinc	Strong Acid Extractable	mg/kg	5	5	5	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-40	1023703-41	1023703-42	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-20B	C114-21A	C114-21B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	9.87	10.30	9.78	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	130	120	50-150

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Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-43	1023703-44	1023703-45
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-22A	C114-22B	C114-23A
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	4.6	4.1	39.4	0.2
Barium	Strong Acid Extractable	mg/kg	9	5	2	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.04	0.01	0.05	0.01
Chromium	Strong Acid Extractable	mg/kg	2.9	3.1	1.7	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.9	0.8	1.9	0.1
Copper	Strong Acid Extractable	mg/kg	2.2	1.4	5.2	1
Lead	Strong Acid Extractable	mg/kg	8.8	9.4	67.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	15.5	1
Nickel	Strong Acid Extractable	mg/kg	0.9	0.7	2.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.09	0.08	0.21	0.05
Tin	Strong Acid Extractable	mg/kg	2.6	2.7	2.9	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	8.9	8.5	3.6	0.1
Zinc	Strong Acid Extractable	mg/kg	6	3	1	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-43	1023703-44	1023703-45	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-22A	C114-22B	C114-23A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	20.20	8.55	6.03	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	130	140	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-46	1023703-47	1023703-48
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-23B	C114-24A	C114-24B
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	25.9	5.0	7.4	0.2
Barium	Strong Acid Extractable	mg/kg	2	8	6	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	0.1	0.2	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.03	0.07	0.05	0.01
Chromium	Strong Acid Extractable	mg/kg	1.6	3.5	3.8	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.3	0.9	1.3	0.1
Copper	Strong Acid Extractable	mg/kg	4.1	3.5	2.6	1
Lead	Strong Acid Extractable	mg/kg	45.4	9.0	14.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	10.8	1.0	1.3	1
Nickel	Strong Acid Extractable	mg/kg	1.8	1.7	1.7	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.15	0.12	0.14	0.05
Tin	Strong Acid Extractable	mg/kg	3.1	2.7	2.6	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	0.6	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	2.9	8.7	9.7	0.1
Zinc	Strong Acid Extractable	mg/kg	1	7	7	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-46	1023703-47	1023703-48	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-23B	C114-24A	C114-24B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	5.58	28.90	15.30	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-49	1023703-50	1023703-51
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-25A	C114-25B	C114-26A
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	1.5	2.8	1.7	0.2
Barium	Strong Acid Extractable	mg/kg	6	6	5	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	0.1	0.2	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.03	0.01	0.03	0.01
Chromium	Strong Acid Extractable	mg/kg	2.4	3.2	4.2	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.7	1.1	1.2	0.1
Copper	Strong Acid Extractable	mg/kg	2.3	2.2	1.4	1
Lead	Strong Acid Extractable	mg/kg	<4.9	<4.9	5.6	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.4	1.5	0.7	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	0.3	0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.05	0.06	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.6	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	6.3	7.6	10.5	0.1
Zinc	Strong Acid Extractable	mg/kg	6	3	7	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-49	1023703-50	1023703-51	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-25A	C114-25B	C114-26A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	20.30	4.86	18.90	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	120	130	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-52	1023703-53	1023703-54
Sample Date	Aug 28, 2014	Aug 27, 2014	Aug 28, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-26B	C114-27A	C114-27B
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	0.04	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	9.4	1.5	1.1	0.2
Barium	Strong Acid Extractable	mg/kg	4	14	5	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.03	0.22	0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	2.8	3.6	2.3	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.3	1.0	0.9	0.1
Copper	Strong Acid Extractable	mg/kg	4.0	9.6	2.3	1
Lead	Strong Acid Extractable	mg/kg	18.3	<5.0	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	1.7	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	2.5	5.7	1.9	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	0.3	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.07	0.06	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.6	2.4	2.5	1
Uranium	Strong Acid Extractable	mg/kg	0.7	2.1	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	6.5	7.6	4.3	0.1
Zinc	Strong Acid Extractable	mg/kg	3	4	2	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	61	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-52	1023703-53	1023703-54	
		Sample Date	Aug 28, 2014	Aug 27, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-26B	C114-27A	C114-27B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	8.16	61.50	5.88	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	120	110	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-55	1023703-56	1023703-57
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-28A	C114-28B	C114-29A
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	1.4	0.8	0.7	0.2
Barium	Strong Acid Extractable	mg/kg	20	9	5	1
Beryllium	Strong Acid Extractable	mg/kg	0.2	0.1	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	<0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	7.1	3.6	2.5	0.5
Cobalt	Strong Acid Extractable	mg/kg	2.4	1.2	0.9	0.1
Copper	Strong Acid Extractable	mg/kg	4.8	1.9	1.7	1
Lead	Strong Acid Extractable	mg/kg	<5.0	<5.0	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	4.9	1.9	1.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.06	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.4	2.6	2.6	1
Uranium	Strong Acid Extractable	mg/kg	0.7	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	10.8	6.5	5.8	0.1
Zinc	Strong Acid Extractable	mg/kg	7	4	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-55	1023703-56	1023703-57	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-28A	C114-28B	C114-29A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	3.37	2.19	4.59	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	100	120	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-58	1023703-59	1023703-60
Sample Date		Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-29B	C114-30A	C114-30B
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	0.03	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	1.0	1.0	0.6	0.2
Barium	Strong Acid Extractable	mg/kg	179	15	8	1
Beryllium	Strong Acid Extractable	mg/kg	0.2	0.2	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	0.10	0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	4.0	4.0	3.0	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.3	1.4	0.9	0.1
Copper	Strong Acid Extractable	mg/kg	2.8	5.7	3.8	1
Lead	Strong Acid Extractable	mg/kg	<5.0	<4.9	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	3.4	3.8	2.1	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	0.08	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.5	2.6	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	0.8	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	7.7	6.8	5.2	0.1
Zinc	Strong Acid Extractable	mg/kg	3	9	2	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-58	1023703-59	1023703-60	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-29B	C114-30A	C114-30B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	5.58	42.00	6.83	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	130	120	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-61	1023703-62	1023703-63
Sample Date		Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-31A	C114-31B	C114-32A
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.7	0.8	0.4	0.2
Barium	Strong Acid Extractable	mg/kg	7	7	8	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	2.8	4.0	3.7	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.1	0.9	0.9	0.1
Copper	Strong Acid Extractable	mg/kg	1.5	2.0	1.2	1
Lead	Strong Acid Extractable	mg/kg	<5.0	<5.0	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.5	2.0	1.6	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.7	2.5	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	5.1	6.7	6.3	0.1
Zinc	Strong Acid Extractable	mg/kg	3	3	4	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-61	1023703-62	1023703-63	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-31A	C114-31B	C114-32A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	3.79	3.98	19.10	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	110	120	120	50-150

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

	Reference Number	1023703-64	1023703-65	1023703-66	
	Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
	Sample Time	NA	NA	NA	
	Sample Location				
	Sample Description	C114-32B	C114-33A	C114-33B	
	Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.7	9.3	7.7	0.2
Barium	Strong Acid Extractable	mg/kg	8	9	10	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	0.3	0.3	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.01	0.02	0.02	0.01
Chromium	Strong Acid Extractable	mg/kg	3.9	8.8	9.5	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.9	5.1	4.7	0.1
Copper	Strong Acid Extractable	mg/kg	2.3	7.6	7.6	1
Lead	Strong Acid Extractable	mg/kg	<4.9	26.9	21.6	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	2.2	10.0	9.3	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	0.12	0.1	0.05
Tin	Strong Acid Extractable	mg/kg	2.5	2.4	2.4	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	0.7	0.7	0.5
Vanadium	Strong Acid Extractable	mg/kg	7.6	15.8	16.5	0.1
Zinc	Strong Acid Extractable	mg/kg	3	9	7	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-64	1023703-65	1023703-66	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-32B	C114-33A	C114-33B	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	17.00	6.73	4.61	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	120	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-67	1023703-68	1023703-69
Sample Date		Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-34A	C114-34B	C114-35A
Matrix		Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	5.6	5.1	4.0	0.2
Barium	Strong Acid Extractable	mg/kg	8	6	13	1
Beryllium	Strong Acid Extractable	mg/kg	0.3	0.3	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.04	0.03	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	7.5	6.7	7.4	0.5
Cobalt	Strong Acid Extractable	mg/kg	3.3	3.0	2.2	0.1
Copper	Strong Acid Extractable	mg/kg	5.7	4.9	3.5	1
Lead	Strong Acid Extractable	mg/kg	47.1	40.8	12.7	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	5.2	5.1	4.4	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.10	0.09	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.6	2.6	1
Uranium	Strong Acid Extractable	mg/kg	0.9	0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	15.6	12.8	10.4	0.1
Zinc	Strong Acid Extractable	mg/kg	13	7	7	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-67	1023703-68	1023703-69	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-34A	C114-34B	C114-35A	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	1.81	2.58	5.70	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	120	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-70	1023703-71	1023703-72
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-35B	C114-BD1	C114-BD2
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	2.9	0.5	0.7	0.2
Barium	Strong Acid Extractable	mg/kg	20	12	7	1
Beryllium	Strong Acid Extractable	mg/kg	0.2	<0.1	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	0.02	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	7.4	4.6	3.0	0.5
Cobalt	Strong Acid Extractable	mg/kg	2.7	0.9	0.8	0.1
Copper	Strong Acid Extractable	mg/kg	4.3	2.4	1.5	1
Lead	Strong Acid Extractable	mg/kg	7.5	<5.0	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	5.9	3.2	1.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.06	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.4	2.4	2.7	1
Uranium	Strong Acid Extractable	mg/kg	0.7	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	11.2	6.2	5.9	0.1
Zinc	Strong Acid Extractable	mg/kg	8	4	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-70	1023703-71	1023703-72	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-35B	C114-BD1	C114-BD2	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	5.11	20.00	5.17	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	120	120	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-73	1023703-74	1023703-75
Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-BD3	C114-BD4	C114-BD5
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.7	1.2	0.6	0.2
Barium	Strong Acid Extractable	mg/kg	6	5	4	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	1.3	2.0	2.3	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.7	0.7	0.7	0.1
Copper	Strong Acid Extractable	mg/kg	1.6	1.5	1.3	1
Lead	Strong Acid Extractable	mg/kg	<4.9	<5.0	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	0.7	0.9	1	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.7	2.8	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	2.7	4.3	3.9	0.1
Zinc	Strong Acid Extractable	mg/kg	9	5	2	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-73	1023703-74	1023703-75	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-BD3	C114-BD4	C114-BD5	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	10.80	11.40	3.23	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	120	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-76	1023703-77	1023703-78
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-BD6	C114-BD7	C114-BD8
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	0.02	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	3.9	2.2	2.3	0.2
Barium	Strong Acid Extractable	mg/kg	10	7	4	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	0.2	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.10	0.01	0.03	0.01
Chromium	Strong Acid Extractable	mg/kg	3.7	5.0	1.6	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.2	2.4	0.6	0.1
Copper	Strong Acid Extractable	mg/kg	10.8	3.9	1.4	1
Lead	Strong Acid Extractable	mg/kg	14.8	<5.0	7.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	1.2	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	1.1	2.4	<0.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	0.5	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	3.8	2.5	2.9	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	8.1	10.3	4.6	0.1
Zinc	Strong Acid Extractable	mg/kg	23	6	1	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	153	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	147	<100	<100	100
% C50+		%	26.6	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-76	1023703-77	1023703-78	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-BD6	C114-BD7	C114-BD8	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	15.30	3.31	2.35	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	140	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-79	1023703-80	1023703-85
Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-BD9	C114-BD10	C114-1WA
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	4.0	2.8	0.7	0.2
Barium	Strong Acid Extractable	mg/kg	5	4	5	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	<0.1	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	0.02	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	3.2	2.7	3.1	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.8	0.7	1.0	0.1
Copper	Strong Acid Extractable	mg/kg	1.4	1.3	2.0	1
Lead	Strong Acid Extractable	mg/kg	9.0	5.2	<4.9	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	0.7	0.8	1.4	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	<0.05	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.5	2.6	2.5	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	8.2	7.0	5.3	0.1
Zinc	Strong Acid Extractable	mg/kg	3	5	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-79	1023703-80	1023703-85	
		Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-BD9	C114-BD10	C114-1WA	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	8.74	10.20	2.13	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

	Reference Number	1023703-81	1023703-82	1023703-83	
	Sample Date	Aug 28, 2014	Aug 28, 2014	Aug 28, 2014	
	Sample Time	NA	NA	NA	
	Sample Location				
	Sample Description	C114-3W	C114-4W	C114-BDW1	
	Matrix	Water	Water	Water	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Metals Total						
Aluminum	Total	mg/L	226	112	258	0.02
Calcium	Total	mg/L	681	201	779	0.2
Iron	Total	mg/L	81.2	30.2	94.0	0.05
Magnesium	Total	mg/L	197	17.4	215	0.2
Manganese	Total	mg/L	0.277	0.130	0.342	0.005
Potassium	Total	mg/L	10.2	11.6	9.9	0.4
Silicon	Total	mg/L	25.9	7.80	28.8	0.05
Sodium	Total	mg/L	76.6	69.3	73.9	0.4
Sulfur	Total	mg/L	93.2	3.1	94.4	0.3
Mercury	Total	mg/L	<0.000005	<0.000005	<0.000005	0.000005
Antimony	Total	mg/L	0.0127	0.0031	0.0143	0.0002
Arsenic	Total	mg/L	0.0637	0.0194	0.0734	0.0002
Barium	Total	mg/L	0.199	0.058	0.230	0.001
Beryllium	Total	mg/L	0.0024	0.0010	0.0024	0.0001
Bismuth	Total	mg/L	0.0008	0.0009	0.0006	0.0005
Boron	Total	mg/L	0.538	0.344	0.498	0.002
Cadmium	Total	mg/L	0.00036	0.00039	0.00051	0.00001
Chromium	Total	mg/L	2.04	0.443	2.51	0.0005
Cobalt	Total	mg/L	0.0209	0.0058	0.0262	0.0001
Copper	Total	mg/L	0.258	0.040	0.308	0.001
Lead	Total	mg/L	0.0197	0.0115	0.0214	0.0001
Lithium	Total	mg/L	0.064	0.022	0.070	0.001
Molybdenum	Total	mg/L	0.039	0.020	0.048	0.001
Nickel	Total	mg/L	0.638	0.156	0.906	0.0005
Selenium	Total	mg/L	0.0039	0.0015	0.0046	0.0002
Silver	Total	mg/L	0.00013	0.00008	0.00015	0.00001
Strontium	Total	mg/L	1.35	0.781	1.47	0.001
Thallium	Total	mg/L	0.00044	<0.00005	0.00046	0.00005
Tin	Total	mg/L	0.009	0.003	0.010	0.001
Titanium	Total	mg/L	9.56	3.94	11.6	0.0005
Uranium	Total	mg/L	0.0053	0.0023	0.0057	0.0005
Vanadium	Total	mg/L	0.332	0.11	0.391	0.0001
Zinc	Total	mg/L	0.064	0.056	0.076	0.001
Zirconium	Total	mg/L	0.257	0.098	0.332	0.001
Mono-Aromatic Hydrocarbons - Water						
Benzene		mg/L	<0.001	<0.001	<0.001	0.001

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number		1023703-81	1023703-82	1023703-83
Sample Date		Aug 28, 2014	Aug 28, 2014	Aug 28, 2014
Sample Time		NA	NA	NA
Sample Location				
Sample Description		C114-3W	C114-4W	C114-BDW1
Matrix		Water	Water	Water

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Mono-Aromatic Hydrocarbons - Water - Continued						
Toluene		mg/L	<0.001	<0.001	<0.001	0.0004
Ethylbenzene		mg/L	<0.001	<0.001	<0.001	0.001
Total Xylenes (m,p,o)		mg/L	<0.001	<0.001	<0.001	0.001
Volatile Petroleum Hydrocarbons - Water						
F1 -BTEX		mg/L	<0.2	<0.2	<0.2	0.1
F1 C6-C10		mg/L	<0.2	<0.2	<0.2	0.1
F2 C10-C16		mg/L	<0.2	<0.2	<0.2	0.1
Extractable Petroleum Hydrocarbons - Water						
F3 C16-C34		mg/L	<0.1	<0.1	<0.1	0.1
F3+ C34+		mg/L	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Water						
Aroclor 1016		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1221		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1232		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1242		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1248		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1254		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1260		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1262		ug/L	<0.1	<0.1	<0.1	0.1
Aroclor 1268		ug/L	<0.1	<0.1	<0.1	0.1
Total PCBs		ug/L	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Water - Surrogate						
Decachlorobiphenyl	Surrogate	%	87	93	91	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-84
Sample Date	Aug 28, 2014
Sample Time	NA
Sample Location	
Sample Description	C114-FB
Matrix	Water

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Total						
Aluminum	Total	mg/L	<0.02			0.02
Calcium	Total	mg/L	<0.2			0.2
Iron	Total	mg/L	0.05			0.05
Magnesium	Total	mg/L	<0.20			0.2
Manganese	Total	mg/L	<0.005			0.005
Potassium	Total	mg/L	<0.4			0.4
Silicon	Total	mg/L	0.17			0.05
Sodium	Total	mg/L	<0.4			0.4
Sulfur	Total	mg/L	<0.3			0.3
Mercury	Total	mg/L	<0.000005			0.000005
Antimony	Total	mg/L	<0.0002			0.0002
Arsenic	Total	mg/L	<0.0002			0.0002
Barium	Total	mg/L	<0.001			0.001
Beryllium	Total	mg/L	<0.0001			0.0001
Bismuth	Total	mg/L	<0.0005			0.0005
Boron	Total	mg/L	0.004			0.002
Cadmium	Total	mg/L	<0.00001			0.00001
Chromium	Total	mg/L	0.0009			0.0005
Cobalt	Total	mg/L	<0.0001			0.0001
Copper	Total	mg/L	<0.001			0.001
Lead	Total	mg/L	<0.0001			0.0001
Lithium	Total	mg/L	<0.001			0.001
Molybdenum	Total	mg/L	<0.001			0.001
Nickel	Total	mg/L	<0.0005			0.0005
Selenium	Total	mg/L	<0.0002			0.0002
Silver	Total	mg/L	0.00001			0.00001
Strontium	Total	mg/L	<0.001			0.001
Thallium	Total	mg/L	<0.00005			0.00005
Tin	Total	mg/L	<0.001			0.001
Titanium	Total	mg/L	0.0043			0.0005
Uranium	Total	mg/L	<0.0005			0.0005
Vanadium	Total	mg/L	0.0002			0.0001
Zinc	Total	mg/L	<0.001			0.001
Zirconium	Total	mg/L	0.011			0.001
Mono-Aromatic Hydrocarbons - Water						
Benzene		mg/L	<0.001			0.001

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-84
Sample Date	Aug 28, 2014
Sample Time	NA
Sample Location	
Sample Description	C114-FB
Matrix	Water

Analyte	Units	Results	Results	Results	Nominal Detection Limit
Mono-Aromatic Hydrocarbons - Water - Continued					
Toluene	mg/L	<0.001			0.0004
Ethylbenzene	mg/L	<0.001			0.001
Total Xylenes (m,p,o)	mg/L	<0.001			0.001
Volatile Petroleum Hydrocarbons - Water					
F1 -BTEX	mg/L	<0.2			0.1
F1 C6-C10	mg/L	<0.2			0.1
F2 C10-C16	mg/L	<0.2			0.1
Extractable Petroleum Hydrocarbons - Water					
F3 C16-C34	mg/L	<0.1			0.1
F3+ C34+	mg/L	<0.1			0.1
Polychlorinated Biphenyls - Water					
Aroclor 1016	ug/L	<0.1			0.1
Aroclor 1221	ug/L	<0.1			0.1
Aroclor 1232	ug/L	<0.1			0.1
Aroclor 1242	ug/L	<0.1			0.1
Aroclor 1248	ug/L	<0.1			0.1
Aroclor 1254	ug/L	<0.1			0.1
Aroclor 1260	ug/L	<0.1			0.1
Aroclor 1262	ug/L	<0.1			0.1
Aroclor 1268	ug/L	<0.1			0.1
Total PCBs	ug/L	<0.1			0.1
Polychlorinated Biphenyls - Water - Surrogate					
Decachlorobiphenyl Surrogate	%	98			50-150

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-86	1023703-87	1023703-88
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-1WB	C114-2WA	C114-2WB
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	0.3	<0.2	0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	0.8	8.8	43.8	0.2
Barium	Strong Acid Extractable	mg/kg	6	5	7	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	<0.1	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	0.05	0.08	0.01
Chromium	Strong Acid Extractable	mg/kg	2.3	2.4	6.3	0.5
Cobalt	Strong Acid Extractable	mg/kg	0.9	1.6	2.8	0.1
Copper	Strong Acid Extractable	mg/kg	1.8	3.2	6.7	1
Lead	Strong Acid Extractable	mg/kg	<5.0	32.6	159	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	2.6	10.3	1
Nickel	Strong Acid Extractable	mg/kg	1.4	1.3	3.2	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	<0.05	0.09	0.15	0.05
Tin	Strong Acid Extractable	mg/kg	2.8	2.7	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	0.8	0.5
Vanadium	Strong Acid Extractable	mg/kg	4.4	8.1	13.1	0.1
Zinc	Strong Acid Extractable	mg/kg	3	3	3	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-86	1023703-87	1023703-88	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-1WB	C114-2WA	C114-2WB	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	3.46	3.76	7.96	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	120	130	120	50-150

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-89	1023703-90	1023703-91
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-3WA	C114-3WB	C114-4WA
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	0.01	0.02	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	0.3	0.2
Arsenic	Strong Acid Extractable	mg/kg	1.3	6.2	4.1	0.2
Barium	Strong Acid Extractable	mg/kg	6	7	10	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	0.03	0.11	0.01
Chromium	Strong Acid Extractable	mg/kg	3.2	3.4	3.4	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.4	1.9	1.2	0.1
Copper	Strong Acid Extractable	mg/kg	2.6	6.2	10.5	1
Lead	Strong Acid Extractable	mg/kg	<4.9	13.7	15.3	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	2.7	1.3	1
Nickel	Strong Acid Extractable	mg/kg	1.7	1.9	1.1	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	0.3	0.6	0.1
Thallium	Strong Acid Extractable	mg/kg	0.06	0.09	0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.6	3.3	3.6	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	6.4	9.0	7.4	0.1
Zinc	Strong Acid Extractable	mg/kg	3	10	23	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	124	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	7.1	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-89	1023703-90	1023703-91	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-3WA	C114-3WB	C114-4WA	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	2.64	8.32	14.90	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	120	120	50-150

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	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-92	1023703-93	1023703-94
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-4WB	C114-5WA	C114-5WB
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	0.3	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	89.6	1.9	1.6	0.2
Barium	Strong Acid Extractable	mg/kg	10	10	7	1
Beryllium	Strong Acid Extractable	mg/kg	<0.1	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.11	0.03	0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	4.0	3.9	2.9	0.5
Cobalt	Strong Acid Extractable	mg/kg	6.6	1.8	1.4	0.1
Copper	Strong Acid Extractable	mg/kg	11.3	3.4	1.7	1
Lead	Strong Acid Extractable	mg/kg	126	6.7	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	31.5	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	7.1	1.9	1.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.38	0.06	0.07	0.05
Tin	Strong Acid Extractable	mg/kg	2.6	2.6	2.8	1
Uranium	Strong Acid Extractable	mg/kg	0.7	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	6.5	8.1	6.8	0.1
Zinc	Strong Acid Extractable	mg/kg	14	9	5	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-92	1023703-93	1023703-94	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-4WB	C114-5WA	C114-5WB	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	8.92	6.21	5.59	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-95	1023703-96	1023703-97
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-6WA	C114-6WB	C114-7WA
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	1.5	1.7	0.7	0.2
Barium	Strong Acid Extractable	mg/kg	8	10	6	1
Beryllium	Strong Acid Extractable	mg/kg	0.1	0.1	<0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	0.02	<0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	3.1	5.2	1.3	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.1	1.8	0.6	0.1
Copper	Strong Acid Extractable	mg/kg	3.0	2.8	1.3	1
Lead	Strong Acid Extractable	mg/kg	<5.0	<4.9	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	2.7	2.5	0.8	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.07	0.08	<0.05	0.05
Tin	Strong Acid Extractable	mg/kg	2.6	2.7	2.7	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	5.7	8.7	2.9	0.1
Zinc	Strong Acid Extractable	mg/kg	6	5	6	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-95	1023703-96	1023703-97	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-6WA	C114-6WB	C114-7WA	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	6.67	3.04	6.79	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	130	130	50-150

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Reference Number	1023703-98	1023703-99	1023703-100
Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014
Sample Time	NA	NA	NA
Sample Location			
Sample Description	C114-7WB	C114-8WA	C114-8WB
Matrix	Soil	Soil	Soil

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Metals Strong Acid Digestion						
Mercury	Strong Acid Extractable	mg/kg	<0.01	<0.01	<0.01	0.01
Antimony	Strong Acid Extractable	mg/kg	<0.2	<0.2	<0.2	0.2
Arsenic	Strong Acid Extractable	mg/kg	1.7	2.4	1.4	0.2
Barium	Strong Acid Extractable	mg/kg	7	9	6	1
Beryllium	Strong Acid Extractable	mg/kg	0.2	0.2	0.1	0.1
Cadmium	Strong Acid Extractable	mg/kg	<0.01	0.01	<0.01	0.01
Chromium	Strong Acid Extractable	mg/kg	4.3	4.0	3.1	0.5
Cobalt	Strong Acid Extractable	mg/kg	1.5	1.8	1.5	0.1
Copper	Strong Acid Extractable	mg/kg	2.4	3.3	2.0	1
Lead	Strong Acid Extractable	mg/kg	<5.0	5.5	<5.0	0.1
Molybdenum	Strong Acid Extractable	mg/kg	<1.0	<1.0	<1.0	1
Nickel	Strong Acid Extractable	mg/kg	2.3	2.6	1.5	0.5
Selenium	Strong Acid Extractable	mg/kg	<0.3	<0.3	<0.3	0.3
Silver	Strong Acid Extractable	mg/kg	<0.1	<0.1	<0.1	0.1
Thallium	Strong Acid Extractable	mg/kg	0.07	0.08	0.07	0.05
Tin	Strong Acid Extractable	mg/kg	2.6	2.4	2.6	1
Uranium	Strong Acid Extractable	mg/kg	<0.5	<0.5	<0.5	0.5
Vanadium	Strong Acid Extractable	mg/kg	7.6	8.1	7.0	0.1
Zinc	Strong Acid Extractable	mg/kg	4	7	4	1
Mono-Aromatic Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
Benzene	Dry Weight	mg/kg	<0.005	<0.005	<0.005	0.005
Toluene	Dry Weight	mg/kg	<0.02	<0.02	<0.02	0.02
Ethylbenzene	Dry Weight	mg/kg	<0.010	<0.010	<0.010	0.01
Total Xylenes (m,p,o)	Dry Weight	mg/kg	<0.03	<0.03	<0.03	0.03
Volatile Petroleum Hydrocarbons - Soil						
Extraction Date	Volatiles		3-Sep-14	3-Sep-14	3-Sep-14	
F1 C6-C10	Dry Weight	mg/kg	<10	<10	<10	10
F1 -BTEX	Dry Weight	mg/kg	<10	<10	<10	10
Extractable Petroleum Hydrocarbons - Soil						
Extraction Date	Total Extractables		3-Sep-14	3-Sep-14	3-Sep-14	
F2c C10-C16	Dry Weight	mg/kg	<50	<50	<50	50
F3c C16-C34	Dry Weight	mg/kg	<50	<50	<50	50
F4c C34-C50	Dry Weight	mg/kg	<100	<100	<100	100
F4HTGCc C34-C50+	Dry Weight	mg/kg	<100	<100	<100	100
% C50+		%	<5	<5	<5	

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Analytical Report

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

		Reference Number	1023703-98	1023703-99	1023703-100	
		Sample Date	Aug 27, 2014	Aug 27, 2014	Aug 27, 2014	
		Sample Time	NA	NA	NA	
		Sample Location				
		Sample Description	C114-7WB	C114-8WA	C114-8WB	
		Matrix	Soil	Soil	Soil	
Analyte		**Units**	**Results**	**Results**	**Results**	Nominal Detection Limit
Silica Gel Cleanup						
Silica Gel Cleanup			Done	Done	Done	
Soil % Moisture						
Moisture	Soil % Moisture	% by weight	3.32	6.11	3.24	
Polychlorinated Biphenyls - Soil						
Aroclor 1016	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1221	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1232	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1242	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1248	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1254	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1260	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1262	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Aroclor 1268	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Total PCBs	Dry Weight	mg/kg	<0.1	<0.1	<0.1	0.1
Polychlorinated Biphenyls - Soil - Surrogate						
Decachlorobiphenyl	Surrogate	%	130	120	130	50-150

Approved by:

Randy Neumann, BSc
Vice President

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).
Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

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Quality Control

Bill To:	SILA Remediation	Project:		Lot ID:	**1023703**
Report To:	SILA Remediation	ID:	CAM-1 2014	Control Number:	C0042506
	250-1260 Boul Lebourgneuf	Name:	2014 LFM	Date Received:	Sep 2, 2014
	Quebec, QC, Canada	Location:	Jennylind Island	Date Reported:	Mar 17, 2015
	G2K 2G2	LSD:		Report Number:	1995998
Attn:	Jean-Pierre Pelletier	P.O.:			
Sampled By:	A. Passalis	Acct code:	014-071-309663		
Company:	Sila				

Metals Strong Acid Digestion

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Mercury	ug/L	0.12	-0.07	0.13	yes
Antimony	ug/L	0.105	-0.1	0.2	yes
Arsenic	ug/L	-0.015	-0.2	0.2	yes
Barium	ug/L	0.074	-1	1	yes
Beryllium	ug/L	-0.001	-0.1	0.1	yes
Cadmium	ug/L	-0.005	-0.01	0.01	yes
Chromium	ug/L	0.296	-0.5	0.5	yes
Cobalt	ug/L	0.003	-0.1	0.1	yes
Copper	ug/L	0.063	-0.6	1.2	yes
Lead	ug/L	0.021	-5.0	5.0	yes
Molybdenum	ug/L	0.054	-1.0	1.0	yes
Nickel	ug/L	0.102	-0.4	0.7	yes
Selenium	ug/L	-0.065	-0.3	0.3	yes
Silver	ug/L	0.072	-0.09	0.14	yes
Thallium	ug/L	-0.019	-0.04	0.04	yes
Tin	ug/L	3.908	0.0	7.2	yes
Uranium	ug/L	0.01	-0.5	0.5	yes
Vanadium	ug/L	-0.005	-0.1	0.1	yes
Zinc	ug/L	0.373	-1	1	yes
Date Acquired:	September 03, 2014				

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Mercury	mg/kg	<0.01	0.01	10	0.03	yes
Antimony	mg/kg	<0.2	<0.2	20	0.4	yes
Arsenic	mg/kg	1	1.2	20	0.4	yes
Barium	mg/kg	6	7	20	2	yes
Beryllium	mg/kg	<0.1	<0.1	20	0.2	yes
Cadmium	mg/kg	0.04	0.05	20	0.02	yes
Chromium	mg/kg	1.0	1.2	20	1.1	yes
Cobalt	mg/kg	0.6	0.7	20	0.2	yes
Copper	mg/kg	3.8	4.3	20	2.2	yes
Lead	mg/kg	<5.0	<5.0	20	0.2	yes
Molybdenum	mg/kg	<1.0	<1.0	20	2.2	yes
Nickel	mg/kg	1.5	1.6	20	1.1	yes
Selenium	mg/kg	<0.3	<0.3	20	0.7	yes
Silver	mg/kg	<0.1	0.3	20	0.22	yes
Thallium	mg/kg	<0.05	<0.05	20	0.11	yes
Tin	mg/kg	3.1	2.9	20	2.2	yes
Uranium	mg/kg	0.8	0.8	20	1.1	yes
Vanadium	mg/kg	2.2	2.5	20	0.2	yes
Zinc	mg/kg	8	9	20	2	yes
Date Acquired:	September 03, 2014					

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC

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Quality Control

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Metals Strong Acid Digestion - Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Mercury	mg/kg	0.31	0.28	0.34	yes
Antimony	mg/kg	37.4	36.1	43.9	yes
Arsenic	mg/kg	39.6	36.7	44.3	yes
Barium	mg/kg	189	185	215	yes
Beryllium	mg/kg	19.2	17.4	22.2	yes
Cadmium	mg/kg	2.05	1.80	2.20	yes
Chromium	mg/kg	97.6	92.2	105.8	yes
Cobalt	mg/kg	20.7	18.5	22.5	yes
Copper	mg/kg	194	176.3	207.3	yes
Lead	mg/kg	21.2	18.6	21.8	yes
Molybdenum	mg/kg	188	172.6	215.4	yes
Nickel	mg/kg	97.8	90.6	107.4	yes
Selenium	mg/kg	37.1	36.1	42.9	yes
Silver	mg/kg	19.8	16.69	21.97	yes
Thallium	mg/kg	10.4	9.57	11.23	yes
Tin	mg/kg	188	171.9	201.9	yes
Uranium	mg/kg	104	90.3	108.0	yes
Vanadium	mg/kg	19.0	16.3	20.3	yes
Zinc	mg/kg	199	180	220	yes
Date Acquired:	September 03, 2014				
Mercury	mg/kg	0.08	0.05	0.11	yes
Date Acquired:	September 03, 2014				
Mercury	mg/kg	0.34	0.15	0.42	yes
Antimony	mg/kg	0.7	0.3	1.1	yes
Arsenic	mg/kg	83.3	65.9	97.9	yes
Barium	mg/kg	249	213	270	yes
Beryllium	mg/kg	0.8	0.5	0.9	yes
Cadmium	mg/kg	2.00	1.50	2.64	yes
Chromium	mg/kg	36.4	27.4	39.2	yes
Cobalt	mg/kg	14.5	11.3	16.0	yes
Copper	mg/kg	210	162.7	222.9	yes
Lead	mg/kg	124	99.6	135.6	yes
Molybdenum	mg/kg	2.9	2.0	3.8	yes
Nickel	mg/kg	63.8	47.1	73.5	yes
Selenium	mg/kg	0.6	0.3	1.3	yes
Silver	mg/kg	0.7	0.25	1.15	yes
Thallium	mg/kg	0.35	0.26	0.40	yes
Tin	mg/kg	3.5	1.0	5.4	yes
Uranium	mg/kg	1.4	0.9	1.5	yes
Vanadium	mg/kg	43.8	31.5	56.1	yes
Zinc	mg/kg	520	355	550	yes
Date Acquired:	September 03, 2014				

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Quality Control

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Metals Strong Acid Digestion - Continued

Metals Total

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	mg/L	0	-0.01	0.02	yes
Calcium	mg/L	-0.0737	-0.1	0.1	yes
Iron	mg/L	0.0125	-0.01	0.02	yes
Magnesium	mg/L	-0.0043	-0.04	0.04	yes
Manganese	mg/L	0	-0.003	0.003	yes
Potassium	mg/L	0.0094	-0.1	0.2	yes
Silicon	mg/L	0.0044	-0.03	0.04	yes
Sodium	mg/L	0.0114	-0.1	0.2	yes
Sulfur	mg/L	0.001	-0.1	0.2	yes
Mercury	ug/L	-0.0023	-0.038000	0.070000	yes
Antimony	ug/L	-0.000760163	-0.2	0.2	yes
Arsenic	ug/L	0.00900169	-0.2	0.2	yes
Barium	ug/L	0.00948226	-1	1	yes
Beryllium	ug/L	0.00487248	-0.1	0.1	yes
Bismuth	ug/L	0.0383488	-0.5	0.5	yes
Boron	ug/L	0.921795	-1	3	yes
Cadmium	ug/L	0.012	-0.007	0.012	yes
Chromium	ug/L	0.0464674	-0.7	0.3	yes
Cobalt	ug/L	0.00631004	-0.1	0.1	yes
Copper	ug/L	0.0264196	-1	1	yes
Lead	ug/L	0.00903032	-0.1	0.1	yes
Lithium	ug/L	0.000300037	-1	1	yes
Molybdenum	ug/L	0.0605962	-1	1	yes
Nickel	ug/L	-0.0677614	-0.5	0.5	yes
Selenium	ug/L	-0.11228	-0.2	0.2	yes
Silver	ug/L	0.0236533	-0.02	0.10	yes
Strontium	ug/L	0.0895059	-1	1	yes
Thallium	ug/L	0.0161276	-0.05	0.05	yes
Tin	ug/L	-0.104163	-1	1	yes
Titanium	ug/L	0.0845176	-0.5	0.5	yes
Uranium	ug/L	0.00805182	-0.5	0.5	yes
Vanadium	ug/L	0.109337	-0.1	0.1	yes
Zinc	ug/L	0.00175093	-0	1	yes
Zirconium	ug/L	0.0223632	-1	1	yes

Date Acquired: September 03, 2014

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Aluminum	mg/L	112	113	15	0.03	yes
Calcium	mg/L	201	201	15	0.6	yes
Iron	mg/L	30.2	29.9	15	0.20	yes
Magnesium	mg/L	17.4	17.3	15	0.40	yes

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Quality Control

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Metals Total - Continued

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Manganese	mg/L	0.130	0.126	15	0.010	yes
Potassium	mg/L	11.6	11.8	15	1.2	yes
Silicon	mg/L	7.80	7.88	15	0.10	yes
Sodium	mg/L	69.3	69.4	15	1.2	yes
Sulfur	mg/L	3.1	3.1	15	0.1	yes
Mercury	mg/L	<0.000005	<0.000005	10	0.000300	yes
Date Acquired:	October 07, 2014					

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aluminum	mg/L	4.07	3.46	4.30	yes
Calcium	mg/L	52.4	45.5	52.7	yes
Iron	mg/L	2.14	1.83	2.19	yes
Magnesium	mg/L	20.3	18.14	22.14	yes
Manganese	mg/L	0.532	0.442	0.538	yes
Potassium	mg/L	51.3	45.8	55.8	yes
Silicon	mg/L	2.10	1.81	2.21	yes
Sodium	mg/L	51.6	45.9	56.0	yes
Sulfur	mg/L	10.5	8.9	10.9	yes
Antimony	ug/L	13.0	10.8	13.2	yes
Arsenic	ug/L	12.4	10.4	12.5	yes
Barium	ug/L	65	54	68	yes
Beryllium	ug/L	6.5	4.9	6.8	yes
Bismuth	ug/L	32.4	24.8	34.4	yes
Boron	ug/L	126	102	139	yes
Cadmium	ug/L	0.670	0.473	0.781	yes
Chromium	ug/L	31.5	26.5	33.7	yes
Cobalt	ug/L	6.1	5.2	6.7	yes
Copper	ug/L	65	53	67	yes
Lead	ug/L	6.7	5.2	7.1	yes
Lithium	ug/L	67	53	77	yes
Molybdenum	ug/L	65	56	66	yes
Nickel	ug/L	31.3	25.6	33.4	yes
Selenium	ug/L	11.7	9.9	12.3	yes
Silver	ug/L	6.54	5.39	7.13	yes
Strontium	ug/L	63	54	69	yes
Thallium	ug/L	3.52	2.81	3.89	yes
Tin	ug/L	65	56	66	yes
Titanium	ug/L	31.4	26.6	35.7	yes
Uranium	ug/L	34.0	25.7	36.3	yes
Vanadium	ug/L	6.4	5.1	7.2	yes
Zinc	ug/L	61	53	67	yes
Zirconium	ug/L	66	53	67	yes
Date Acquired:	September 03, 2014				

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Metals Total - Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Mercury	mg/L	0.00297	0.002600	0.003200	yes
Antimony	ug/L	42.2	37.5	43.1	yes
Arsenic	ug/L	39.4	37.7	44.7	yes
Barium	ug/L	205	190	214	yes
Beryllium	ug/L	19.4	17.4	22.2	yes
Bismuth	ug/L	99.2	91.3	106.3	yes
Boron	ug/L	393	343	436	yes
Cadmium	ug/L	2.12	1.915	2.205	yes
Chromium	ug/L	97.9	90.0	110.0	yes
Cobalt	ug/L	19.0	18.1	21.4	yes
Copper	ug/L	194	185	208	yes
Lead	ug/L	20.2	18.6	21.8	yes
Lithium	ug/L	202	173	222	yes
Molybdenum	ug/L	211	189	225	yes
Nickel	ug/L	96.3	90.0	110.0	yes
Selenium	ug/L	38.9	36.1	42.9	yes
Silver	ug/L	20.7	18.00	22.00	yes
Strontium	ug/L	190	182	212	yes
Thallium	ug/L	10.0	9.16	10.96	yes
Tin	ug/L	208	191	213	yes
Titanium	ug/L	102	91.5	106.3	yes
Uranium	ug/L	104	90.2	109.0	yes
Vanadium	ug/L	19.8	16.9	22.1	yes
Zinc	ug/L	193	183	218	yes
Date Acquired:	September 03, 2014				
Mercury	mg/L	0.000811	0.000700	0.000880	yes
Antimony	ug/L	12.2	10.8	13.2	yes
Arsenic	ug/L	11.8	11.2	13.6	yes
Barium	ug/L	60	54	66	yes
Beryllium	ug/L	5.8	5.2	6.5	yes
Bismuth	ug/L	30.1	27.0	33.0	yes
Boron	ug/L	118	108	132	yes
Cadmium	ug/L	0.628	0.560	0.692	yes
Chromium	ug/L	29.6	27.0	33.0	yes
Cobalt	ug/L	5.7	5.4	6.6	yes
Copper	ug/L	61	54	66	yes
Lead	ug/L	6.2	5.4	6.6	yes
Lithium	ug/L	62	53	66	yes
Molybdenum	ug/L	59	54	66	yes
Nickel	ug/L	29.2	27.0	33.0	yes
Selenium	ug/L	11.3	10.3	13.4	yes
Silver	ug/L	6.10	5.40	6.60	yes

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Metals Total - Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Strontium	ug/L	58	54	66	yes
Thallium	ug/L	2.98	0.00	6.00	yes
Tin	ug/L	61	54	66	yes
Titanium	ug/L	29.2	27.0	33.0	yes
Uranium	ug/L	31.5	27.0	33.0	yes
Vanadium	ug/L	6.2	5.4	6.6	yes
Zinc	ug/L	58	57	69	yes
Zirconium	ug/L	60	54	66	yes
Date Acquired:	September 03, 2014				
Mercury	mg/L	0.000071	0.000065	0.000089	yes
Antimony	ug/L	2.0	1.8	2.2	yes
Arsenic	ug/L	2.0	1.8	2.3	yes
Barium	ug/L	10	9	11	yes
Beryllium	ug/L	1.0	0.8	1.1	yes
Bismuth	ug/L	5.0	4.5	5.4	yes
Boron	ug/L	21	17	23	yes
Cadmium	ug/L	0.114	0.092	0.116	yes
Chromium	ug/L	5.0	4.6	5.4	yes
Cobalt	ug/L	1	0.9	1.1	yes
Copper	ug/L	10	9	11	yes
Lead	ug/L	1.0	0.9	1.1	yes
Lithium	ug/L	10	9	11	yes
Molybdenum	ug/L	10	9	11	yes
Nickel	ug/L	5.0	4.5	5.5	yes
Selenium	ug/L	1.9	1.6	2.2	yes
Silver	ug/L	0.99	0.87	1.07	yes
Strontium	ug/L	10	9	11	yes
Thallium	ug/L	0.48	0.48	0.57	yes
Tin	ug/L	10	10	11	yes
Titanium	ug/L	5.1	4.5	5.4	yes
Uranium	ug/L	5.1	4.5	5.5	yes
Vanadium	ug/L	1.0	0.8	1.1	yes
Zinc	ug/L	10	9	11	yes
Zirconium	ug/L	10	9	11	yes
Date Acquired:	September 03, 2014				
Aluminum	mg/L	19.3	18.80	20.60	yes
Calcium	mg/L	241	230.0	257.6	yes
Iron	mg/L	9.58	9.07	10.15	yes
Magnesium	mg/L	96.5	92.78	104.72	yes
Manganese	mg/L	2.41	2.260	2.560	yes
Potassium	mg/L	240	232.2	259.9	yes
Silicon	mg/L	9.93	9.48	10.74	yes

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	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Metals Total - Continued

Control Sample	Units	Measured	Lower Limit	Upper Limit	Passed QC
Sodium	mg/L	238	226.8	267.4	yes
Sulfur	mg/L	148	136.5	166.3	yes
Date Acquired:	September 03, 2014				
Aluminum	mg/L	3.98	3.46	4.44	yes
Calcium	mg/L	51.4	45.0	55.0	yes
Iron	mg/L	2.10	1.80	2.20	yes
Magnesium	mg/L	19.9	17.99	22.01	yes
Manganese	mg/L	0.531	0.449	0.551	yes
Potassium	mg/L	50.0	45.0	55.0	yes
Silicon	mg/L	2.06	1.92	2.22	yes
Sodium	mg/L	50.2	45.0	55.0	yes
Sulfur	mg/L	10.5	9.0	11.0	yes
Date Acquired:	September 03, 2014				
Aluminum	mg/L	0.36	0.36	0.44	yes
Calcium	mg/L	5.0	4.6	5.6	yes
Iron	mg/L	0.21	0.18	0.22	yes
Magnesium	mg/L	1.99	1.84	2.18	yes
Manganese	mg/L	0.053	0.046	0.056	yes
Potassium	mg/L	5.0	4.5	5.5	yes
Silicon	mg/L	0.21	0.18	0.22	yes
Sodium	mg/L	5.1	4.7	5.5	yes
Sulfur	mg/L	3.0	2.8	3.2	yes
Date Acquired:	September 03, 2014				

Mono-Aromatic Hydrocarbons - Soil

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Benzene	ng	0	-0.005	0.005	yes
Toluene	ng	0	-0.06	0.06	yes
Ethylbenzene	ng	0	-0.030	0.030	yes
Total Xylenes (m,p,o)	ng	0	-0.09	0.09	yes
Styrene	ng	0	-0.030	0.030	yes
Date Acquired:	September 03, 2014				

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Benzene	ng	112.00	85	115	yes
Toluene	ng	110.60	85	115	yes
Ethylbenzene	ng	103.80	85	115	yes
Total Xylenes (m,p,o)	ng	97.33	85	115	yes
Styrene	ng	91.60	85	115	yes
Date Acquired:	September 03, 2014				

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Benzene	mg/kg	<0.005	<0.005	50	0.010	yes

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Quality Control

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Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Mono-Aromatic Hydrocarbons - Soil - Continued

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Toluene	mg/kg	<0.02	<0.02	50	0.04	yes
Ethylbenzene	mg/kg	<0.010	<0.010	50	0.020	yes
m,p-Xylene	mg/kg	<0.02	<0.02	50	0.04	yes
o-Xylene	mg/kg	<0.02	<0.02	50	0.04	yes
Total Xylenes (m,p,o)	mg/kg	<0.03	<0.03	50	0.06	yes
Styrene	mg/kg	<0.010	<0.010	50	0.020	yes
Date Acquired:	September 03, 2014					

Matrix Spike	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Benzene	mg/kg	108	80	120	yes
Toluene	mg/kg	101	80	120	yes
Ethylbenzene	mg/kg	103	80	120	yes
Total Xylenes (m,p,o)	mg/kg	94	80	120	yes
Date Acquired:	September 03, 2014				

Mono-Aromatic Hydrocarbons - Water

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Benzene	ng	0	-0.002	0.002	yes
Toluene	ng	0	-0.0015	0.0015	yes
Ethylbenzene	ng	0	-0.002	0.002	yes
Total Xylenes (m,p,o)	ng	0	-0.002	0.002	yes
Styrene	ng	0	-0.002	0.002	yes
Date Acquired:	September 06, 2014				

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Benzene	ng	114.20	85	115	yes
Toluene	ng	113.00	85	115	yes
Ethylbenzene	ng	97.40	85	115	yes
Total Xylenes (m,p,o)	ng	94.67	85	115	yes
Styrene	ng	92.00	85	115	yes
Date Acquired:	September 06, 2014				

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Benzene	mg/L	<0.001	<0.001	15	0.002	yes
Toluene	mg/L	<0.001	<0.001	15	0.0020	yes
Ethylbenzene	mg/L	<0.001	<0.001	15	0.002	yes
Total Xylenes (m,p,o)	mg/L	<0.001	<0.001	15	0.002	yes
Styrene	mg/L	<0.001	<0.001	15	0.002	yes
Date Acquired:	September 06, 2014					

Matrix Spike	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Benzene	mg/L	114	85	115	yes
Toluene	mg/L	113	85	115	yes
Ethylbenzene	mg/L	97	85	115	yes

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Report To:	SILA Remediation	ID:	CAM-1 2014	Control Number:	C0042506
	250-1260 Boul Lebourgneuf	Name:	2014 LFM	Date Received:	Sep 2, 2014
	Quebec, QC, Canada	Location:	Jennylind Island	Date Reported:	Mar 17, 2015
	G2K 2G2	LSD:		Report Number:	1995998
Attn:	Jean-Pierre Pelletier	P.O.:			
Sampled By:	A. Passalis	Acct code:	014-071-309663		
Company:	Sila				

Mono-Aromatic Hydrocarbons - Water - Continued

Matrix Spike	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Total Xylenes (m,p,o)	mg/L	95	85	115	yes
Styrene	mg/L	92	85	115	yes

Date Acquired: September 06, 2014

Volatile Petroleum Hydrocarbons - Soil

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
F1 C6-C10	ng	0	-10	10	yes

Date Acquired: September 03, 2014

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
F1 C6-C10	mg/kg	<10	<10	50	0	yes
F1 -BTEX	mg/kg	<10	<10	50	0	yes

Date Acquired: September 03, 2014

Matrix Spike	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
F1 C6-C10	mg/kg	108	80	120	yes

Date Acquired: September 03, 2014

Volatile Petroleum Hydrocarbons - Water

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
F1 -BTEX	ng	0	-0.3	0.3	yes
F1 C6-C10	ng	0	-0.3	0.3	yes
F2 C10-C16	ng	0	-0.3	0.3	yes

Date Acquired: September 06, 2014

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
F2 C10-C16	ng	102.00	80	120	yes

Date Acquired: September 06, 2014

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
F1 C6-C10	mg/L	<0.2	<0.2	50		yes
F2 C10-C16	mg/L	<0.2	<0.2	50		yes

Date Acquired: September 06, 2014

Extractable Petroleum Hydrocarbons - Soil

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
F2c C10-C16	ug/mL	0	-10	10	yes
F3c C16-C34	ug/mL	0	-30	30	yes
F4c C34-C50	ug/mL	0	-20	20	yes
F4HTGCc C34-C50+	ug/mL	0	-20	20	yes

Date Acquired: September 03, 2014

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
F2c C10-C16	ug/mL	99.62	85	115	yes

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	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Extractable Petroleum Hydrocarbons - Soil - Continued

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
F3c C16-C34	ug/mL	100.47	85	115	yes
F4c C34-C50	ug/mL	99.36	85	115	yes
F4HTGCc C34-C50+	ug/mL	97.42	85	115	yes
Date Acquired:	September 03, 2014				

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
F2c C10-C16	mg/kg	<50	<50	50	10	yes
F3c C16-C34	mg/kg	<50	<50	50	10	yes
F4c C34-C50	mg/kg	<100	<100	50	10	yes
F4HTGCc C34-C50+	mg/kg	<100	<100	50	10	yes
Date Acquired:	September 03, 2014					

Matrix Spike	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
F2c C10-C16	mg/kg	98	65	135	yes
F3c C16-C34	mg/kg	103	65	135	yes
F4c C34-C50	mg/kg	101	65	135	yes
F4HTGCc C34-C50+	mg/kg	93	65	135	yes
Date Acquired:	September 03, 2014				

Extractable Petroleum Hydrocarbons - Water

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
F2 C10-C16	ug/mL	0	-0.2	0.2	yes
F3 C16-C34	ug/mL	0	-0.2	0.2	yes
F3+ C34+	ug/mL	0	-0.2	0.2	yes
Date Acquired:	September 03, 2014				

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
F2 C10-C16	ug/mL	96.19	85	115	yes
F3 C16-C34	ug/mL	100.44	85	115	yes
F3+ C34+	ug/mL	94.86	85	115	yes
Date Acquired:	September 03, 2014				

Polychlorinated Biphenyls - Soil

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aroclor 1016	ug/mL	0	-0.3	0.3	yes
Aroclor 1221	ug/mL	0	-0.3	0.3	yes
Aroclor 1232	ug/mL	0	-0.3	0.3	yes
Aroclor 1242	ug/mL	0	-0.3	0.3	yes
Aroclor 1248	ug/mL	0	-0.3	0.3	yes
Aroclor 1254	ug/mL	0	-0.3	0.3	yes
Aroclor 1260	ug/mL	0	-0.3	0.3	yes
Aroclor 1262	ug/mL	0	-0.3	0.3	yes

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	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Polychlorinated Biphenyls - Soil - Continued

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aroclor 1268	ug/mL	0	-0.3	0.3	yes
Date Acquired:	September 03, 2014				

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aroclor 1254	ug/mL	90.00	80	120	yes
Date Acquired:	September 03, 2014				

Client Sample Replicates	Units	Replicate 1	Replicate 2	% RSD Criteria	Absolute Criteria	Passed QC
Aroclor 1016	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1221	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1232	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1242	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1248	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1254	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1260	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1262	mg/kg	<0.1	<0.1	50	0.2	yes
Aroclor 1268	mg/kg	<0.1	<0.1	50	0.2	yes
Total PCBs	mg/kg	<0.1	<0.1	50	0.2	yes
Date Acquired:	September 03, 2014					

Matrix Spike	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aroclor 1254	mg/kg	117	50	150	yes
Date Acquired:	September 03, 2014				

Polychlorinated Biphenyls - Soil - Surrogate

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Decachlorobiphenyl	%	117.259	50	150	yes
Date Acquired:	September 03, 2014				

Polychlorinated Biphenyls - Water

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Aroclor 1016	ug/mL	0	-0.3	0.3	yes
Aroclor 1221	ug/mL	0	-0.3	0.3	yes
Aroclor 1232	ug/mL	0	-0.3	0.3	yes
Aroclor 1242	ug/mL	0	-0.3	0.3	yes
Aroclor 1248	ug/mL	0	-0.3	0.3	yes
Aroclor 1254	ug/mL	0	-0.3	0.3	yes
Aroclor 1260	ug/mL	0	-0.3	0.3	yes
Aroclor 1262	ug/mL	0	-0.3	0.3	yes
Aroclor 1268	ug/mL	0	-0.3	0.3	yes
Date Acquired:	September 05, 2014				

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC

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Quality Control

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Polychlorinated Biphenyls - Water - Continued

Calibration Check	Units	% Recovery	Lower Limit	Upper Limit	Passed QC
Aroclor 1254	ug/mL	100.00	80	120	yes
Date Acquired:	September 05, 2014				

Polychlorinated Biphenyls - Water - Surrogate

Blanks	Units	Measured	Lower Limit	Upper Limit	Passed QC
Decachlorobiphenyl	%	92.8278	50	150	yes
Date Acquired:	September 05, 2014				

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Methodology and Notes

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Method of Analysis

Method Name	Reference		Method	Date Analysis Started	Location
BTEX-CCME - Soil	CCME	*	Reference Method for Canada-Wide Standard for PHC in Soil, CWS PHCS TIER 1	03-Sep-14	Exova Calgary
BTEX-CCME - Soil	US EPA	*	Volatile Organic Compounds in Various Sample Matrices Using Equilibrium Headspace Analysis/Gas Chromatography Mass Spectrometry, 5021/8260	03-Sep-14	Exova Calgary
BTEX-CCME - Water	US EPA	*	Volatile Organic Compounds in Various Sample Matrices Using Equilibrium Headspace Analysis/Gas Chromatography Mass Spectrometry, 5021/8260	06-Sep-14	Exova Calgary
Mercury (Hot Block) in Soil	US EPA	*	Determination of Hg in Sediment by Cold Vapor Atomic Absorption Spec, 245.5	03-Sep-14	Exova Edmonton
Mercury (Total) in water	EPA	*	Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, 245.7	07-Oct-14	Exova Edmonton
Metals ICP-MS (Hot Block) in soil	SW-846	*	Acid Digestion of Sediments, Sludges, and Soils, EPA 3050B	03-Sep-14	Exova Edmonton
Metals ICP-MS (Total) in water	APHA/USEPA	*	Metals By Inductively Coupled Plasma/Mass Spectrometry, APHA 3125 B / USEPA 200.2, 200.8	03-Sep-14	Exova Edmonton
Metals Trace (Total) in water	APHA	*	Inductively Coupled Plasma (ICP) Method, 3120 B	03-Sep-14	Exova Edmonton
PCB - Soil	US EPA	*	Polychlorinated Biphenyls (PCBs) by Gas Chromatography, 8082A	03-Sep-14	Exova Calgary
PCB - Water	US EPA	*	Polychlorinated Biphenyls (PCBs) by Gas Chromatography, 8082A	05-Sep-14	Exova Calgary
TEH-CCME - Water	EPA/CCME	*	Separatory Funnel Liquid-liquid Extraction/CCME, EPA 3510/CCME	03-Sep-14	Exova Calgary
TEH-CCME-Soil (Shake)	CCME	*	Reference Method for Canada-Wide Standard for PHC in Soil, CWS PHCS TIER 1	03-Sep-14	Exova Calgary

** Reference Method Modified*

References

EPA/CCME	Environmental Protection Agency Test Methods - US/CCME
SW-846	Test Methods for Evaluating Solid Waste
CCME	Canadian Council of Ministers of the Environment
US EPA	US Environmental Protection Agency Test Methods
APHA	Standard Methods for the Examination of Water and Wastewater

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Methodology and Notes

Bill To:	SILA Remediation	Project:	
Report To:	SILA Remediation	ID:	CAM-1 2014
	250-1260 Boul Lebourgneuf	Name:	2014 LFM
	Quebec, QC, Canada	Location:	Jennylind Island
	G2K 2G2	LSD:	
Attn:	Jean-Pierre Pelletier	P.O.:	
Sampled By:	A. Passalis	Acct code:	014-071-309663
Company:	Sila		

Lot ID:	**1023703**
Control Number:	C0042506
Date Received:	Sep 2, 2014
Date Reported:	Mar 17, 2015
Report Number:	1995998

Comments:

- Report was issued to correct for missing Mercury analysis on samples 1023703 (81-84). Previous report 1944790
- Report was issued to include QC data as requested by Jean-Pierre Pelletier on March 17, 2015. Previous report 1954487.

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Exova

Analytical Report

Bill To:	SILA Remediation	Project:		Lot ID:	**1023703**
Report To:	SILA Remediation	ID:	CAM-1 2014	Control Number:	C0042506
	250-1260 Boul Lebourgneuf	Name:	2014 LFM	Date Received:	Sep 2, 2014
	Quebec, QC, Canada	Location:	Jennylind Island	Date Reported:	Mar 17, 2015
	G2K 2G2	LSD:		Report Number:	1995998
Attn:	Jean-Pierre Pelletier	P.O.:			
Sampled By:	A. Passalis	Acct code:	014-071-309663		
Company:	Sila				

Petroleum Hydrocarbons in Soil

Batch Notes

1. The method used complies with the Reference Method for the Canada Wide Standards for Petroleum Hydrocarbons in Soil - Tier 1, April 2001, including Addendum 1, and is accredited for use in Exova.
2. Modifications of the method: See Notes and Methodology for nonconformances (if applicable).
3. Qualifications on results: See Notes and Methodology for nonconformances (if applicable).
4. Silica gel treatment is performed for fractions F2, F3, F4.
5. F1-BTEX: BTEX has been subtracted from the F1 fraction.
6. If analyzed, naphthalene has been subtracted from fraction F2 and selected PAHs have been subtracted from fraction F3.
7. F4HTGC is reported when more than 5% of the total carbon envelope elutes past C_{50}.
8. Exova does not routinely report Gravimetric Heavy Hydrocarbons (F4G or F4G-sg), F4HTGC through extended range high temperature GC is reported instead.
9. When both F4(C_{34}-C_{50}) and F4HTGC are reported, F4HTGC is the final F4 that is to be used for interpreting the CWS.
10. Quality criteria met for the batch: Data is reported in Quality Control Section of report (if requested).
    -nC_6 and nC_{10} response factors (RF) are within 30% of RF for toluene
    -nC_{10}, nC_{16} and nC_{34} RFs are within 10% of each other
    -nC_{50} RF is within 30% of the average RF for nC_{10}+nC_{16}+nC_{34}
    -linearity is within 15% for each of the calibrated carbon ranges
11. Batch data for analytical quality control are available on request.
12. Extraction and analysis holding times were met: See Notes and Methodology for nonconformances (if applicable).

Approved by:

Randy Neumann, BSc
Vice President

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).
Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Your Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Your C.O.C. #: A159156

Attention:JEAN-PIERRE PELLETIER

SILA REMEDIATION
4495 BL. WILFRID- HAMEL, BUR 1
QUEBEC, PQ
CANADA G1P 2T7

Report Date: 2014/09/22
Report #: R1646812
Version: 2R

CERTIFICATE OF ANALYSIS – REVISED REPORT

MAXXAM JOB #: B478342
Received: 2014/09/04, 10:40

Sample Matrix: Soil
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 by HS GC/MS (MeOH extract)	2	2014/09/05	2014/09/07	AB SOP-00039	CCME CWS/EPA 8260C m
BTEX/F1 by HS GC/MS (MeOH extract)	7	2014/09/05	2014/09/10	AB SOP-00039	CCME CWS/EPA 8260C m
BTEX/F1 by HS GC/MS (MeOH extract)	1	2014/09/06	2014/09/10	AB SOP-00039	CCME CWS/EPA 8260C m
CCME Hydrocarbons (F2-F4 in soil)	10	2014/09/05	2014/09/08	AB SOP-00036 / AB SOP-00040	CCME PHC-CWS
Elements by ICPMS - Soils	9	2014/09/12	2014/09/12	AB SOP-00001 / AB SOP-00043	EPA 200.8 R5.4 m
Elements by ICPMS - Soils	1	2014/09/13	2014/09/13	AB SOP-00001 / AB SOP-00043	EPA 200.8 R5.4 m
Moisture	10	N/A	2014/09/06	AB SOP-00002	CCME PHC-CWS
Polychlorinated Biphenyls (1)	10	2014/09/08	2014/09/09	CAL SOP-00149	EPA 8082A R1 m

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/F1 in Water by HS GC/MS	1	N/A	2014/09/05	AB SOP-00039	CCME CWS/EPA 8260C m
CCME Hydrocarbons (F2-F4 in water)	1	2014/09/06	2014/09/07	AB SOP-00037 / AB SOP-00040	CCME PHC-CWS m
Mercury - Low Level (Total) (1)	1	2014/09/10	2014/09/11	CAL SOP-00007	EPA 1631 RE 20460 m
Elements by ICPMS - Total	1	2014/09/12	2014/09/13	AB SOP-00014 / AB SOP-00043	EPA 200.8 R5.4 m
Polychlorinated Biphenyls (1)	1	2014/09/06	2014/09/08	CAL SOP-00149	EPA 8082A R1 m

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Maxxam Calgary Environmental

Your Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Your C.O.C. #: A159156

Attention:JEAN-PIERRE PELLETIER

SILA REMEDIATION
4495 BL. WILFRID- HAMEL, BUR 1
QUEBEC, PQ
CANADA G1P 2T7

Report Date: 2014/09/22
Report #: R1646812
Version: 2R

CERTIFICATE OF ANALYSIS – REVISED REPORT

MAXXAM JOB #: B478342
Received: 2014/09/04, 10:40

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Tanya Eugine, M.Sc., Project Manager
Email: TEugine@maxxam.ca
Phone# (780)577-7144

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B478342
Report Date: 2014/09/22

SILA REMEDIATION
Client Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Sampler Initials: AP

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		KN2651	KN2652	KN2653	KN2654	KN2655	KN2656	KN2657		
Sampling Date		2014/08/27	2014/08/27	2014/08/28	2014/08/28	2014/08/28	2014/08/27	2014/08/27		
COC Number		A159156	A159156	A159156	A159156	A159156	A159156	A159156		
	Units	C114-32A	C114-29A	C114-4A	C114-8A	C114-11B	C114-4WA	C114-8WB	RDL	QC Batch
Physical Properties										
Moisture	%	18	4.5	11	7.4	3.2	14	2.8	0.30	7627546
RDL = Reportable Detection Limit										

Maxxam ID		KN2658	KN2659	KN2660		
Sampling Date		2014/08/27	2014/08/28	2014/08/28		
COC Number		A159156	A159156	A159156		
	Units	C114-17B	C114-22B	C114-24A	RDL	QC Batch
Physical Properties						
Moisture	%	2.2	9.0	9.8	0.30	7627546
RDL = Reportable Detection Limit						

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Maxxam Job #: B478342
Report Date: 2014/09/22

SILA REMEDIATION
Client Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Sampler Initials: AP

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		KN2651		KN2652	KN2653		KN2654	KN2655		
Sampling Date		2014/08/27		2014/08/27	2014/08/28		2014/08/28	2014/08/28		
COC Number		A159156		A159156	A159156		A159156	A159156		
	Units	C114-32A	QC Batch	C114-29A	C114-4A	QC Batch	C114-8A	C114-11B	RDL	QC Batch
Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	7627755	<10	<10	7627758	<10	<10	10	7627755
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	7627755	<50	<50	7627758	<50	<50	50	7627755
Reached Baseline at C50	mg/kg	Yes	7627755	Yes	Yes	7627758	Yes	Yes		7627755
Surrogate Recovery (%)										
O-TERPHENYL (sur.)	%	93	7627755	86	97	7627758	104	104		7627755
RDL = Reportable Detection Limit										

Maxxam ID		KN2656	KN2657	KN2658	KN2659		KN2660		
Sampling Date		2014/08/27	2014/08/27	2014/08/27	2014/08/28		2014/08/28		
COC Number		A159156	A159156	A159156	A159156		A159156		
	Units	C114-4WA	C114-8WB	C114-17B	C114-22B	QC Batch	C114-24A	RDL	QC Batch
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	7627758	<10	10	7627755
F3 (C16-C34 Hydrocarbons)	mg/kg	160	<50	<50	<50	7627758	<50	50	7627755
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	7627758	Yes		7627755
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	124	98	102	96	7627758	89		7627755
RDL = Reportable Detection Limit									

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Maxxam Job #: B478342
Report Date: 2014/09/22

SILA REMEDIATION
Client Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Sampler Initials: AP

POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		KN2651	KN2652	KN2653	KN2654	KN2655	KN2656	KN2657		
Sampling Date		2014/08/27	2014/08/27	2014/08/28	2014/08/28	2014/08/28	2014/08/27	2014/08/27		
COC Number		A159156	A159156	A159156	A159156	A159156	A159156	A159156		
	Units	C114-32A	C114-29A	C114-4A	C114-8A	C114-11B	C114-4WA	C114-8WB	RDL	QC Batch
Polychlorinated Biphenyls										
Aroclor 1016	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1221	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1232	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1242	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1248	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1254	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.091	<0.010	0.010	7628742
Aroclor 1260	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1262	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1268	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7628742
Total Aroclors	mg/kg	<0.010	<0.010	<0.010	<0.010	<0.010	0.091	<0.010	0.010	7628742
Surrogate Recovery (%)										
NONACHLOROBIPHENYL (sur.)	%	64	77	73	77	72	74	78		7628742
RDL = Reportable Detection Limit										

Maxxam ID		KN2658	KN2659	KN2660		
Sampling Date		2014/08/27	2014/08/28	2014/08/28		
COC Number		A159156	A159156	A159156		
	Units	C114-17B	C114-22B	C114-24A	RDL	QC Batch
Polychlorinated Biphenyls						
Aroclor 1016	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1221	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1232	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1242	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1248	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1254	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1260	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1262	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Aroclor 1268	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Total Aroclors	mg/kg	<0.010	<0.010	<0.010	0.010	7628742
Surrogate Recovery (%)						
NONACHLOROBIPHENYL (sur.)	%	77	66	74		7628742
RDL = Reportable Detection Limit						

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Maxxam Job #: B478342
Report Date: 2014/09/22

SILA REMEDIATION
Client Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Sampler Initials: AP

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Maxxam ID		KN2651	KN2652	KN2653	KN2654	KN2655	KN2656	KN2657		
Sampling Date		2014/08/27	2014/08/27	2014/08/28	2014/08/28	2014/08/28	2014/08/27	2014/08/27		
COC Number		A159156	A159156	A159156	A159156	A159156	A159156	A159156		
	Units	C114-32A	C114-29A	C114-4A	C114-8A	C114-11B	C114-4WA	C114-8WB	RDL	QC Batch
Elements										
Total Arsenic (As)	mg/kg	<1.0	<1.0	<1.0	1.9	<1.0	6.4	2.5	1.0	7636183
Total Cadmium (Cd)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7636183
Total Chromium (Cr)	mg/kg	3.1	10	2.6	1.7	4.1	13	24	1.0	7636183
Total Cobalt (Co)	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	1.5	1.0	7636183
Total Copper (Cu)	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0	9.0	<5.0	5.0	7636183
Total Lead (Pb)	mg/kg	11	1.9	1.8	3.2	1.5	15	4.4	1.0	7636183
Total Mercury (Hg)	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7636183
Total Nickel (Ni)	mg/kg	1.6	4.7	1.8	1.0	2.3	6.2	11	1.0	7636183
Total Zinc (Zn)	mg/kg	<10	<10	<10	<10	<10	19	<10	10	7636183
RDL = Reportable Detection Limit										

Maxxam ID		KN2658	KN2659		KN2660		
Sampling Date		2014/08/27	2014/08/28		2014/08/28		
COC Number		A159156	A159156		A159156		
	Units	C114-17B	C114-22B	QC Batch	C114-24A	RDL	QC Batch
Elements							
Total Arsenic (As)	mg/kg	2.1	5.8	7636183	4.0	1.0	7636477
Total Cadmium (Cd)	mg/kg	<0.10	<0.10	7636183	<0.10	0.10	7636477
Total Chromium (Cr)	mg/kg	4.2	23	7636183	11	1.0	7636477
Total Cobalt (Co)	mg/kg	<1.0	<1.0	7636183	<1.0	1.0	7636477
Total Copper (Cu)	mg/kg	<5.0	<5.0	7636183	<5.0	5.0	7636477
Total Lead (Pb)	mg/kg	6.8	8.9	7636183	4.8	1.0	7636477
Total Mercury (Hg)	mg/kg	<0.050	<0.050	7636183	<0.050	0.050	7636477
Total Nickel (Ni)	mg/kg	2.0	10	7636183	4.8	1.0	7636477
Total Zinc (Zn)	mg/kg	<10	<10	7636183	<10	10	7636477
RDL = Reportable Detection Limit							

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SILA REMEDIATION
Client Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Sampler Initials: AP

VOLATILE ORGANICS BY GC-MS (SOIL)

Maxxam ID		KN2651	KN2652	KN2653	KN2654	KN2655	KN2656		
Sampling Date		2014/08/27	2014/08/27	2014/08/28	2014/08/28	2014/08/28	2014/08/27		
COC Number		A159156	A159156	A159156	A159156	A159156	A159156		
	Units	C114-32A	C114-29A	C114-4A	C114-8A	C114-11B	C114-4WA	RDL	QC Batch
Volatiles									
Benzene	mg/kg						<0.0050	0.0050	7627731
Toluene	mg/kg						<0.020	0.020	7627731
Ethylbenzene	mg/kg						<0.010	0.010	7627731
Xylenes (Total)	mg/kg						<0.040	0.040	7627731
m & p-Xylene	mg/kg						<0.040	0.040	7627731
o-Xylene	mg/kg						<0.020	0.020	7627731
F1 (C6-C10) - BTEX	mg/kg	<12	<12	<12	<12	<12	<12	12	7627731
(C6-C10)	mg/kg	<12	<12	<12	<12	<12	<12	12	7627731
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	111	103	107	107	104	110		7627731
4-Bromofluorobenzene (sur.)	%	102	101	100	100	99	101		7627731
D10-ETHYLBENZENE (sur.)	%	104	100	102	103	101	102		7627731
D4-1,2-Dichloroethane (sur.)	%	100	100	98	98	97	97		7627731
RDL = Reportable Detection Limit									

Maxxam ID		KN2657	KN2658		KN2659	KN2660		
Sampling Date		2014/08/27	2014/08/27		2014/08/28	2014/08/28		
COC Number		A159156	A159156		A159156	A159156		
	Units	C114-8WB	C114-17B	QC Batch	C114-22B	C114-24A	RDL	QC Batch
Volatiles								
F1 (C6-C10) - BTEX	mg/kg	<12	<12	7627733	<12	<12	12	7627731
(C6-C10)	mg/kg	<12	<12	7627733	<12	<12	12	7627731
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	102	97	7627733	108	109		7627731
4-Bromofluorobenzene (sur.)	%	91	100	7627733	100	100		7627731
D10-ETHYLBENZENE (sur.)	%	102	103	7627733	102	106		7627731
D4-1,2-Dichloroethane (sur.)	%	116	90	7627733	100	97		7627731
RDL = Reportable Detection Limit								

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PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		KN2661		
Sampling Date		2014/08/28		
COC Number		A159156		
	Units	**C114-3W**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon				
F2 (C10-C16 Hydrocarbons)	mg/L	<0.10	0.10	7623510
F3 (C16-C34 Hydrocarbons)	mg/L	<0.20	0.20	7623510
Reached Baseline at C50	mg/L	Yes		7623510
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	84		7623510
RDL = Reportable Detection Limit				

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POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Maxxam ID		KN2661		
Sampling Date		2014/08/28		
COC Number		A159156		
	Units	**C114-3W**	**RDL**	**QC Batch**
Polychlorinated Biphenyls				
Aroclor 1016	mg/L	<0.000050	0.000050	7627921
Aroclor 1221	mg/L	<0.000050	0.000050	7627921
Aroclor 1232	mg/L	<0.000050	0.000050	7627921
Aroclor 1242	mg/L	<0.000050	0.000050	7627921
Aroclor 1248	mg/L	<0.000050	0.000050	7627921
Aroclor 1254	mg/L	<0.000050	0.000050	7627921
Aroclor 1260	mg/L	<0.000050	0.000050	7627921
Aroclor 1262	mg/L	<0.000050	0.000050	7627921
Aroclor 1268	mg/L	<0.000050	0.000050	7627921
Total Aroclors	mg/L	<0.000050	0.000050	7627921
Surrogate Recovery (%)				
NONACHLOROBIPHENYL (sur.)	%	82		7627921
RDL = Reportable Detection Limit				

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		KN2661		
Sampling Date		2014/08/28		
COC Number		A159156		
	Units	C114-3W	RDL	QC Batch
Elements				
Total Arsenic (As)	mg/L	0.0024	0.00020	7636306
Total Cadmium (Cd)	mg/L	0.000022	0.000020	7636306
Total Chromium (Cr)	mg/L	0.094	0.0010	7636306
Total Cobalt (Co)	mg/L	0.00079	0.00030	7636306
Total Copper (Cu)	mg/L	0.011	0.00020	7636306
Total Lead (Pb)	mg/L	0.0012	0.00020	7636306
Total Nickel (Ni)	mg/L	0.022	0.00050	7636306
Total Zinc (Zn)	mg/L	<0.0030	0.0030	7636306
Low Level Elements				
Total Mercury (Hg)	ug/L	<0.0060 (1)	0.0060	7632590

RDL = Reportable Detection Limit
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly

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VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		KN2661		
Sampling Date		2014/08/28		
COC Number		A159156		
	Units	**C114-3W**	**RDL**	**QC Batch**
Volatiles				
F1 (C6-C10) - BTEX	ug/L	<100	100	7627246
(C6-C10)	ug/L	<100	100	7627246
Surrogate Recovery (%)				
1,4-Difluorobenzene (sur.)	%	101		7627246
4-Bromofluorobenzene (sur.)	%	96		7627246
D4-1,2-Dichloroethane (sur.)	%	96		7627246
RDL = Reportable Detection Limit				

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GENERAL COMMENTS

Sample KN2651-01 : Headspace was noted in sample container at the time of volatiles extraction.

Sample KN2655-01 : Headspace was noted in sample container at the time of volatiles extraction.

Sample KN2660-01 : Headspace was noted in sample container at the time of volatiles extraction.

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER) Comments

Sample KN2661-01 Polychlorinated Biphenyls: Sample extracted past method-specified hold time.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

SILA REMEDIATION
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			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
7623510	O-TERPHENYL (sur.)	2014/09/07	82	50 - 130	86	50 - 130	85	%				
7627246	1,4-Difluorobenzene (sur.)	2014/09/05	96	70 - 130	97	70 - 130	99	%				
7627246	4-Bromofluorobenzene (sur.)	2014/09/05	99	70 - 130	97	70 - 130	98	%				
7627246	D4-1,2-Dichloroethane (sur.)	2014/09/05	101	70 - 130	96	70 - 130	99	%				
7627731	1,4-Difluorobenzene (sur.)	2014/09/10	110	60 - 140	101	60 - 140	103	%				
7627731	4-Bromofluorobenzene (sur.)	2014/09/10	100	60 - 140	101	60 - 140	100	%				
7627731	D10-ETHYLBENZENE (sur.)	2014/09/10	106	60 - 130	99	60 - 130	104	%				
7627731	D4-1,2-Dichloroethane (sur.)	2014/09/10	96	60 - 140	96	60 - 140	98	%				
7627733	1,4-Difluorobenzene (sur.)	2014/09/07	106	60 - 140	99	60 - 140	100	%				
7627733	4-Bromofluorobenzene (sur.)	2014/09/07	98	60 - 140	96	60 - 140	95	%				
7627733	D10-ETHYLBENZENE (sur.)	2014/09/07	106	60 - 130	101	60 - 130	104	%				
7627733	D4-1,2-Dichloroethane (sur.)	2014/09/07	106	60 - 140	104	60 - 140	109	%				
7627755	O-TERPHENYL (sur.)	2014/09/08	91	50 - 130	87	50 - 130	92	%				
7627758	O-TERPHENYL (sur.)	2014/09/08	94	50 - 130	98	50 - 130	70	%				
7627921	NONACHLOROBIPHENYL (sur.)	2014/09/08	89	30 - 130	90	30 - 130	91	%				
7628742	NONACHLOROBIPHENYL (sur.)	2014/09/09	79	30 - 130	83	30 - 130	73	%				
7623510	F2 (C10-C16 Hydrocarbons)	2014/09/07	NC	50 - 130	94	70 - 130	<0.10	mg/L	NC	40		
7623510	F3 (C16-C34 Hydrocarbons)	2014/09/07	89	50 - 130	91	70 - 130	<0.20	mg/L	NC	40		
7627246	(C6-C10)	2014/09/05	92	70 - 130	117	70 - 130	<100	ug/L	NC	40		
7627246	F1 (C6-C10) - BTEX	2014/09/05					<100	ug/L	NC	40		
7627546	Moisture	2014/09/06					<0.30	%	3.5	20		
7627731	(C6-C10)	2014/09/10	108	60 - 140	127	60 - 140	<12	mg/kg	NC	50		
7627731	Benzene	2014/09/10	104	60 - 140	93	60 - 140	<0.0050	mg/kg	NC	50		
7627731	Ethylbenzene	2014/09/10	100	60 - 140	92	60 - 140	<0.010	mg/kg	NC	50		
7627731	F1 (C6-C10) - BTEX	2014/09/10					<12	mg/kg	NC	50		
7627731	m & p-Xylene	2014/09/10	104	60 - 140	93	60 - 140	<0.040	mg/kg	NC	50		
7627731	o-Xylene	2014/09/10	102	60 - 140	92	60 - 140	<0.020	mg/kg	NC	50		
7627731	Toluene	2014/09/10	101	60 - 140	91	60 - 140	<0.020	mg/kg	NC	50		
7627731	Xylenes (Total)	2014/09/10					<0.040	mg/kg	NC	50		
7627733	(C6-C10)	2014/09/07	113	60 - 140	106	60 - 140	<12	mg/kg	NC	50		
7627733	F1 (C6-C10) - BTEX	2014/09/07					<12	mg/kg	NC	50		
7627755	F2 (C10-C16 Hydrocarbons)	2014/09/08	86	50 - 130	96	70 - 130	<10	mg/kg	NC	50		

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QUALITY ASSURANCE REPORT(CONT'D)

SILA REMEDIATION
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			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
7627755	F3 (C16-C34 Hydrocarbons)	2014/09/08	89	50 - 130	100	70 - 130	<50	mg/kg	NC	50		
7627758	F2 (C10-C16 Hydrocarbons)	2014/09/08	86	50 - 130	109	70 - 130	<10	mg/kg	NC	50		
7627758	F3 (C16-C34 Hydrocarbons)	2014/09/08	94	50 - 130	112	70 - 130	<50	mg/kg	NC	50		
7627921	Aroclor 1016	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Aroclor 1221	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Aroclor 1232	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Aroclor 1242	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Aroclor 1248	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Aroclor 1254	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Aroclor 1260	2014/09/09	90	30 - 130	96	30 - 130	<0.000050	mg/L	NC	40		
7627921	Aroclor 1262	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Aroclor 1268	2014/09/09					<0.000050	mg/L	NC	40		
7627921	Total Aroclors	2014/09/09					<0.000050	mg/L	NC	40		
7628742	Aroclor 1016	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Aroclor 1221	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Aroclor 1232	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Aroclor 1242	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Aroclor 1248	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Aroclor 1254	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Aroclor 1260	2014/09/09	82	30 - 130	78	30 - 130	<0.010	mg/kg	NC	50		
7628742	Aroclor 1262	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Aroclor 1268	2014/09/09					<0.010	mg/kg	NC	50		
7628742	Total Aroclors	2014/09/09					<0.010	mg/kg	NC	50		
7632590	Total Mercury (Hg)	2014/09/10	110	80 - 120	106	80 - 120	<0.0020	ug/L	NC	20		
7636183	Total Arsenic (As)	2014/09/15	89	75 - 125	97	75 - 125	<1.0	mg/kg	NC	35	116	50 - 150
7636183	Total Cadmium (Cd)	2014/09/15	89	75 - 125	96	75 - 125	<0.10	mg/kg	NC	35		
7636183	Total Chromium (Cr)	2014/09/15	90	75 - 125	97	75 - 125	<1.0	mg/kg	5.1	35	96	41 - 159
7636183	Total Cobalt (Co)	2014/09/15	88	75 - 125	96	75 - 125	<1.0	mg/kg	6.3	35	99	75 - 125
7636183	Total Copper (Cu)	2014/09/15	89	75 - 125	98	75 - 125	<5.0	mg/kg	NC	35	103	73 - 127
7636183	Total Lead (Pb)	2014/09/15	NC	75 - 125	94	75 - 125	<1.0	mg/kg	11	35	104	54 - 146
7636183	Total Mercury (Hg)	2014/09/12	91	75 - 125	99	75 - 125	<0.050	mg/kg				
7636183	Total Nickel (Ni)	2014/09/15	90	75 - 125	98	75 - 125	<1.0	mg/kg	6.1	35	112	61 - 139

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QUALITY ASSURANCE REPORT(CONT'D)

SILA REMEDIATION
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			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
7636183	Total Zinc (Zn)	2014/09/15	NC	75 - 125	100	75 - 125	<10	mg/kg	15	35	109	72 - 128
7636306	Total Arsenic (As)	2014/09/13	101	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20		
7636306	Total Cadmium (Cd)	2014/09/13	103	80 - 120	100	80 - 120	<0.000020	mg/L				
7636306	Total Chromium (Cr)	2014/09/13	98	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
7636306	Total Cobalt (Co)	2014/09/13	102	80 - 120	101	80 - 120	<0.00030	mg/L	NC	20		
7636306	Total Copper (Cu)	2014/09/13	103	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20		
7636306	Total Lead (Pb)	2014/09/13	103	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20		
7636306	Total Nickel (Ni)	2014/09/13	102	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
7636306	Total Zinc (Zn)	2014/09/13	101	80 - 120	103	80 - 120	<0.0030	mg/L	6.2	20		
7636477	Total Arsenic (As)	2014/09/15	93	75 - 125	91	75 - 125	<1.0	mg/kg	0.42	35	117	50 - 150
7636477	Total Cadmium (Cd)	2014/09/15	88	75 - 125	90	75 - 125	<0.10	mg/kg	NC	35		
7636477	Total Chromium (Cr)	2014/09/15	79	75 - 125	91	75 - 125	<1.0	mg/kg	47 (2)	35	97	41 - 159
7636477	Total Cobalt (Co)	2014/09/15	91	75 - 125	91	75 - 125	<1.0	mg/kg	NC	35	105	75 - 125
7636477	Total Copper (Cu)	2014/09/15	93	75 - 125	91	75 - 125	<5.0	mg/kg	NC	35	105	73 - 127
7636477	Total Lead (Pb)	2014/09/15	64 (1)	75 - 125	88	75 - 125	<1.0	mg/kg	80 (2)	35	104	54 - 146
7636477	Total Mercury (Hg)	2014/09/15	88	75 - 125	92	75 - 125	<0.050	mg/kg	NC	35		
7636477	Total Nickel (Ni)	2014/09/15	99	75 - 125	91	75 - 125	<1.0	mg/kg	6.1	35	114	61 - 139
7636477	Total Zinc (Zn)	2014/09/15	NC	75 - 125	92	75 - 125	<10	mg/kg	NC	35	109	72 - 128

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Matrix Spike exceeds acceptance limits due to matrix interference. Reanalysis yields similar results.

(2) Duplicate exceeds acceptance criteria due to sample non homogeneity. Reanalysis yields similar results.

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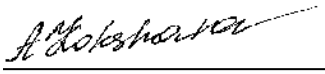
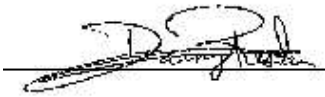
VALIDATION SIGNATURE PAGE

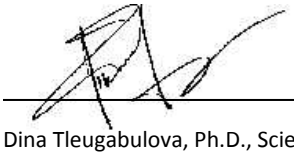
The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Anna Koksharova, M.Sc., Senior Analyst



Daniel Reslan, Chem. Tech., Volatiles Supervisor



Dina Tleugabulova, Ph.D., Scientific Specialist, Inorganics Department

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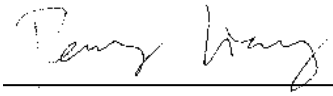

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Maxxam Job #: B478342
Report Date: 2014/09/22

SILA REMEDIATION
Client Project #: CAM-1 2014
Site Location: JENNY LIND ISLAND
Sampler Initials: AP

VALIDATION SIGNATURE PAGE(CONT'D)

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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ANNEX 2

QA/QC Discussion

QUALITY ASSURANCE / QUALITY CONTROL

Quality Assurance/Quality Control (QA/QC) program was implemented to monitor the quality of the analytical results. The main objective of this QA/QC program is to insure that sampling data and analysis results are complete, precise, exact, representative and comparable. The review consisted of evaluating sample collection/handling methodology, general laboratory comments, field (blind) duplicate samples, and inter-laboratory duplicate samples.

1. LABORATORIES

Samples collected during the monitoring program were submitted to laboratories accredited by the Canadian Association for Laboratory Accreditation (CALA):

- **Main Laboratory**
  EXOVA
  7217 Roper Road NW
  Edmonton, Alberta
  T6B 3J4, Canada
  CALA Registration number: 2602

- **Quality Assurance Laboratory**
  Maxxam Analytics International Corporation
  o/a Maxxam Analytics Edmonton
  9331 - 48th Street T6B 2R4
  CALA Registration number: 2996

2. FIELD QA/QC

Standard sample collection techniques were implemented to decrease the likelihood of compromising collected samples, such as:

- Pre-cleaned sample containers were provided by the laboratory.
- Monitoring equipment was decontaminated between sampling stations and dedicated sampling systems were utilized.
- Soil samples were placed directly in the laboratory provided jars/bottles and were not mixed.
- Disposable nitrile glove were worn and disposed of after each sample collection.
- Jars/bottles were cleaned prior to placement into the cooler.
- Water samples were collected through the use of dedicated Waterra foot valves and tubing.

- Ice Packs or bagged ice (Ziplock bags) were used to ensure that sample temperature would be kept below 10°C during transportation.
- Samples were kept at the laboratory at temperatures below 4°C.

A sample integrity report from Exova is provided in Annex 1. This report indicates that all samples received were acceptable for analysis.

The following is a summary of the analytical QA/QC procedure implemented in the field:

- 10% field Blind Duplicate Samples of soil and water were sent to Exova: 10 blind duplicate soil samples (C114-BD1 through C114-BD10) and one blind duplicate groundwater sample (C114-BDW1) were submitted, as an independent check on data reproducibility, and to assess the field QA/QC protocols. One field blank (C114-FB) was submitted for analysis.
- 10% Inter-laboratory Duplicate Samples were sent to Maxxam: Six blind duplicate soil samples (C114-32A, 29A, 4A, 8A, 11B, 4WA, 8WB, 17B, 22B and 24B) and one blind duplicate groundwater sample (C114-3W) were submitted (to determine if variation in procedures may cause significant difference in analytical results).
- 10% Archival Samples of soil were sent to ESG.

3. LABORATORIES QA/QC

Quality assurance documents from Exova only provide a summary of the QA/QC results. The quantity of samples per batch per analysis is not provided.

Quality assurance documents from Maxxam indicate that the soil samples were in the following batches:

- Metals:
  - Batch 7636183
  - Batch 7636477
- PCBs
  - Batch 7628742
- PHC Fraction F1:
  - Batch 7627731
  - Batch 7627733
- PHC fraction F2-F3
  - Batch 7627755
  - Batch 7627758

The water samples were analyzed was analyzed the following batches:

- Batch 7636306 for most metals
  - Batch 7632590 for mercury
- Batch 7627921 for PCBs
- Batch 7627246 for PHC fraction F1
- Batch 7623510 for PHC fraction F2-F3

4. DATA MANAGEMENT AND INTERPRETATION

4.1. FIELD WORK

The relative percent difference (RPD) is used to evaluate the sample result variability. Average RPD values of 30% for each parameter analyzed from the same laboratory are considered an indication of acceptable duplicate sample variability. For groundwater samples, an RPD of greater than 30% may reflect difference in sample turbidity or variance in the sample procedures. These performance criteria are applicable when the concentrations of the original and duplicate sample are five times or greater than the laboratory method detection limit, since the uncertainty increases dramatically as the concentration approaches the detection limit. Table I provides the detection limit for each parameter and the associated minimum concentration to be reached in order to be eligible for RPD calculation.

Table I: Minimum Concentration for QA/QC RPD Calculation

		Soil			Water		
Parameter	**Laboratory**	**Units**	**MDL**	**RPD Minimum***	**Units**	**MDL**	**RPD Minimum***
As	Exova	mg/kg	0.2	1.0	mg/L	0.0002	0.0010
	Maxxam	mg/kg	1.0	5.0	mg/L	0.0002	0.0010
Cd	Exova	mg/kg	0.01	0.05	mg/L	0.00001	0.00005
	Maxxam	mg/kg	0.10	0.50	mg/L	0.00002	0.00010
Cr	Exova	mg/kg	0.5	2.5	mg/L	0.0005	0.0025
	Maxxam	mg/kg	1.0	5.0	mg/L	0.0010	0.0050
Co	Exova	mg/kg	0.1	0.5	mg/L	0.0001	0.0005
	Maxxam	mg/kg	1.0	5.0	mg/L	0.0003	0.0015
Cu	Exova	mg/kg	1.0	5.0	mg/L	0.0010	0.0050
	Maxxam	mg/kg	5.0	25.0	mg/L	0.0002	0.0010
Pb	Exova	mg/kg	5.0	25.0	mg/L	0.0001	0.0005
	Maxxam	mg/kg	1.0	5.0	mg/L	0.0002	0.0010
Ni	Exova	mg/kg	0.5	2.5	mg/L	0.0005	0.0025
	Maxxam	mg/kg	1.0	5.0	mg/L	0.0005	0.0025
Zn	Exova	mg/kg	1	5	mg/L	0.001	0.005
	Maxxam	mg/kg	10	50	mg/L	0.003	0.015
Hg	Exova	mg/kg	0.01	0.05	mg/L	0.000050	0.00025
	Maxxam	mg/kg	0.05	0.25	mg/L	0.000006	0.00003
Total PCBs	Exova	mg/kg	0.10	0.50	ug/L	0.10	0.50
	Maxxam	mg/kg	0.01	0.05	ug/L	0.05	0.25
PHC F1	Exova	mg/kg	10	50	mg/L	0.2	1.0
	Maxxam	mg/kg	12	60	mg/L	0.1	0.5
PHC F2	Exova	mg/kg	50	250	mg/L	0.1	0.5
	Maxxam	mg/kg	10	50	mg/L	0.1	0.5
PHC F3	Exova	mg/kg	50	250	mg/L	0.1	0.5
	Maxxam	mg/kg	50	250	mg/L	0.2	1.0

* : The RPD Minimum is the minimum concentration to be reached for QA/QC Relative Percent Difference Calculation

4.1.1. SOIL SAMPLES

10 blind duplicate soil samples were submitted for intra- and inter-laboratory comparisons. The original and duplicate intra- and inter-laboratory metal, PCB and PHC soil sample results are summarized in Tables II and III, respectively, along with the calculated RPD for each parameter. As noted in the tables, several of the results from the original and/or duplicate samples were below or within five times the laboratory method detection limits, and therefore RPD values were not calculated for these parameters.

Review of results indicated relatively minor differences in metal concentrations within the intra-laboratory duplicate samples. The concentration variation from cobalt in 4 of the 10 samples leads to RPD values greater than 30% (from 33 to 47.6%). Concentration variation from arsenic, chromium and cobalt from samples C114-8WB and BD5 lead to RPD values around 45%. It should be noted that most metal concentrations from these samples are still very low and fairly

close to the detection limit. No corrective measures associated with these samples are necessary.

Results from the inter-laboratory duplicate samples indicated significantly higher RPD values for chromium (5 out of 10 samples). The RPDs varied from 85.7 to 154.2%. Inter-laboratory results for samples do raise concern as the actual chromium concentrations are more than doubled and sometimes almost 10 times greater in results from Maxxam. As the intra-laboratory QC results from Exova did not raise any serious concern, other influential factors could be raised, such as:

- Sample uniformity:
    - There may have been small bits of metal in the sample. If there are, then this would make the sample heterogeneous and therefore a lot of variability for these two elements (the metals would be present as flecks and would not be a part of the soil matrix – this creates a high level of variability in the sample). As the results are very low and well below any guideline limit, these flecks may not even be visible or may just be a part of the soil material.

- Sample preparation methods
    - Samples are often ground with a stainless steel flail grinder or in a stainless steel housing. It is possible that the metal came off at this point. As can be seen, if this is the case, very little material was transferred to the soil because the levels are well below any guideline limits.
    - It is possible that there are slight variations to the acid digestion which could lead to a higher extraction of certain recalcitrant elements. Chromium does tend to be one of those recalcitrant elements. Nickel generally does not fall in this category but if the chromium and nickel are together in a compound, this may be possible.

4.1.2. WATER SAMPLES

One blind duplicate groundwater sample (C114-8W / C114-BDW1) was submitted for intra- and inter-laboratory comparisons. The original and duplicate intra- and inter-laboratory metal, PCB and PHC sample results are summarized in Table IV, along with the calculated RPD for each parameter and average RPD for each sample. As noted in the table, all organic parameters from the original and/or duplicate samples were below or within five times the laboratory method detection limits, and therefore RPD values were not calculated for these parameters.

Review of the results indicated minor differences in metal concentrations between the original and intra-laboratory duplicate sample with only cadmium and nickel slightly exceeding the acceptable performance criteria (34.5 and 34.7%). It should be noted that the duplicate (which was collected after the main sample) constantly show metal concentration lower than the main sample.

Review of the inter-laboratory duplicate results indicated much higher concentration variation, with ranges from 177.0 to 186.7%. Exova shows consistently more elevated metal concentrations than Maxxam.

Trends and conclusions cannot be derived from only 1 sample.

The results from field blank sample (C114-FB) that was submitted for metals, PCB and PHC analyses are also summarized in Tables IV. Except for chromium which was detected (0.0009 mg/L), all parameters are below the detection limit. No explanation can be provided at this time to explain the detection of chromium in the field blank.

4.2. LABORATORIES

QA/QC results from Exova do not raise any concern or provide any explanation concerning the concentration difference noticed in the inter-laboratory duplicate samples. QA/QC results from Maxxam have results exceeding the acceptance criteria for soil analyses (Matrix Spike and Duplicates RPD).

It should be noted that inter-laboratory variations are common. QA/QC results from both laboratories are appended.

4.2.1. BLANKS

All blanks from both laboratories, for both matrices and for all parameters were below the detection limits.

4.2.2. ANALYTICAL DUPLICATES

All analytical duplicates from Exova, for both matrices and for all parameters had RSD's at or below 20%. RPD for chromium (47%) and lead (80%) exceed the acceptance criteria in the Maxxam QA/QC report. The sample non-homogeneity is the explanation provided by the lab and could potentially explain the inter-laboratory concentration variation.

4.2.3. CONTROL SAMPLES

All control samples from Exova, for both matrices and for all parameters had concentrations between the upper and lower concentration established for each parameter. The matrix spike for lead from Maxxam is lower than the acceptance criteria lower limit of 75% recovery (64%). The laboratory explains this exceedance by a matrix interference.

Table II: Soil Chemical Analysis Results - Intra-Laboratory Quality Assurance Samples

Sample #	Location	Parameters												
		As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	F1 C_6-C_{10} [mg/kg]	F2 C_{10}-C_{16} [mg/kg]	F3 C_{16}-C_{34} [mg/kg]
Detection Limit		0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.1	10	50	50
RPD Minimum		1.0	0.05	2.5	0.5	5.0	25.0	2.5	5	0.05	0.5	50	250	250
C114-32A	C1-32	0.4	<0.01	3.7	0.9	1.2	<5,0	1.6	4	<0.01	<0.1	<10	<50	<50
C114-BD1		0.5	0.02	4.6	0.9	2.4	<5.0	3.2	4	<0.01	<0.1	<10	<50	<50
Relative % Difference		N/A	N/A	21.7	0.0	N/A	N/A	N/A	0.0	N/A	N/A	N/A	N/A	N/A
C114-29A	C1-29	1.0	<0.01	4.0	1.3	2.8	<5,0	3.4	3	<0.01	<0.1	<10	<50	<50
C114-BD2		0.7	<0.01	3.0	0.8	1.5	<5.0	1.5	3	<0.01	<0.1	<10	<50	<50
Relative % Difference		N/A	N/A	28.6	47.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-4A	C1-4	0.8	0.02	1.2	0.8	1.7	<4.9	0.8	10	<0.01	<0.1	<10	<50	<50
C114-BD3		0.7	0.02	1.3	0.7	1.6	<4.9	0.7	9	0.01	<0.1	<10	<50	<50
Relative % Difference		N/A	N/A	N/A	13.3	N/A	N/A	N/A	10.5	N/A	N/A	N/A	N/A	N/A
C114-8A	C1-8	1.5	0.02	1.8	0.7	1.5	<4.9	0.9	6	<0.01	<0.1	<10	<50	<50
C114-BD4		1.2	0.01	2.0	0.7	1.5	<5.0	0.9	5	<0.01	<0.1	<10	<50	<50
Relative % Difference		22.2	N/A	N/A	0.0	N/A	N/A	N/A	18.2	N/A	N/A	N/A	N/A	N/A
C114-11B	C1-11	0.9	<0.01	1.9	0.5	1.1	<5.0	1.1	2	<0.01	<0.1	<10	<50	<50
C114-BD5		0.6	<0.01	2.3	0.7	1.3	<4.9	1.0	2	<0.01	<0.1	<10	<50	<50
Relative % Difference		N/A	N/A	19.0	33.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-4WA	MW-04	4.1	0.11	3.4	1.2	10.5	15.3	1.1	23	<0.01	<0.1	<10	<50	124
C114-BD6		3.9	0.10	3.7	1.2	10.8	14.8	1.1	23	0.02	<0.1	<10	<50	153
Relative % Difference		5.0	9.5	8.5	0.0	2.8	N/A	N/A	0.0	N/A	N/A	N/A	N/A	N/A
C114-8WB	MW-08	1.4	<0.01	3.1	1.5	2.0	<5.0	1.5	4	<0.01	<0.1	<10	<50	<50
C114-BD7		2.2	0.01	5.0	2.4	3.9	<5.0	2.4	6	<0.01	<0.1	<10	<50	<50
Relative % Difference		44.4	N/A	46.9	46.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-17B	C1-17	2.7	0.04	2.9	0.9	2.4	8.7	1.9	3	<0.01	<0.1	<10	<50	<50
C114-BD8		2.3	0.03	1.6	0.6	1.4	7.9	<0.5	1	<0.01	<0.1	<10	<50	<50
Relative % Difference		16.0	N/A	N/A	40.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-22B	C1-22	4.1	0.01	3.1	0.8	1.4	9.4	0.7	3	<0.01	<0.1	<10	<50	<50
C114-BD9		4.0	0.02	3.2	0.8	1.4	9.0	0.7	3	<0.01	<0.1	<10	<50	<50
Relative % Difference		2.5	N/A	3.2	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-24A	C1-24	5.0	0.07	3.5	0.9	3.5	9.0	1.7	7	<0.01	<0.1	<10	<50	<50
C114-BD10		2.8	0.02	2.7	0.7	1.3	5.2	0.8	5	<0.01	<0.1	<10	<50	<50
Relative % Difference		56.4	N/A	25.8	25.0	N/A	N/A	N/A	33.3	N/A	N/A	N/A	N/A	N/A

Table III: Soil Chemical Analysis Results - Inter-Laboratory Quality Assurance Samples

Sample #	Laboratory	Parameters												
												F1	F2	F3
		As [mg/kg]	Cd [mg/kg]	Cr [mg/kg]	Co [mg/kg]	Cu [mg/kg]	Pb [mg/kg]	Ni [mg/kg]	Zn [mg/kg]	Hg [mg/kg]	PCBs [mg/kg]	C_6-C_{10} [mg/kg]	C_{10}-C_{16} [mg/kg]	C_{16}-C_{34} [mg/kg]
RDL - Exova		0.2	0.01	0.5	0.1	1.0	5.0	0.5	1	0.01	0.10	10	50	50
RPD Minimum (Exova)		1.0	0.05	2.5	0.5	5.0	25.0	2.5	5	0.05	0.50	50	250	250
RDL - Maxxam		1.0	0.10	1.0	1.0	5.0	1.0	1.0	10	0.05	0.01	12	10	50
RPD Minimum (Maxxam)		5.0	0.50	5.0	5.0	25.0	5.0	5.0	50	0.25	0.05	60	50	250
C114-32A	Exova	0.4	<0.01	3.7	0.9	1.2	<5.0	1.6	4	<0.01	<0.1	<10	<50	<50
	Maxxam	<1.0	<0.10	3.1	<1.0	<5.0	11.0	1.6	<10	<0.050	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-29A	Exova	1	<0.01	4.0	1.3	2.8	<5.0	3.4	3	<0.01	<0.1	<10	<50	<50
	Maxxam	<1.0	<0.10	10.0	<1.0	<5.0	1.9	4.7	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	85.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-4A	Exova	0.8	0.02	1.2	0.8	1.7	<4.9	0.8	10	<0.01	<0.1	<10	<50	<50
	Maxxam	<1.0	<0.10	2.6	<1.0	<5.0	1.8	1.8	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-8A	Exova	1.5	0.02	1.8	0.7	1.5	<4.9	0.9	6	<0.01	<0.1	<10	<50	<50
	Maxxam	1.9	<0.10	1.7	<1.0	<5.0	3.2	1.0	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-11B	Exova	0.9	<0.01	1.9	0.5	1.1	<5.0	1.1	2	<0.01	<0.1	<10	<50	<50
	Maxxam	<1.0	<0.10	4.1	<1.0	<5.0	1.5	2.3	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-4WA	Exova	4.1	0.11	3.4	1.2	10.5	15.3	1.1	23	<0.01	<0.1	<10	<50	124
	Maxxam	6.4	<0.10	13.0	1.2	9.0	15.0	6.2	19	<0.05	<0.01	<12	<10	160
Relative % Difference		43.8	N/A	117.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-8WB	Exova	1.4	<0.01	3.1	1.5	2.0	<5.0	1.5	4	<0.01	<0.1	<10	<50	<50
	Maxxam	2.5	<0.10	24.0	1.5	<5.0	4.4	11	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	154.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-17B	Exova	2.7	0.04	2.9	0.9	2.4	8.7	1.9	3	<0.01	<0.1	<10	<50	<50
	Maxxam	2.1	<0.10	4.2	<1.0	<5.0	6.8	2.0	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-22B	Exova	4.1	0.01	3.1	0.8	1.4	9.4	0.7	3	<0.01	<0.1	<10	<50	<50
	Maxxam	5.8	<0.10	23.0	<1.0	<5.0	8.9	10.0	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		34.3	N/A	152.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C114-24A	Exova	5.0	0.07	3.5	0.9	3.5	9.0	1.7	7	<0.01	<0.1	<10	<50	<50
	Maxxam	4.0	<0.10	11.0	<1.0	<5.0	4.8	4.8	<10	<0.05	<0.01	<12	<10	<50
Relative % Difference		N/A	N/A	103.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table IV: Groundwater Chemical Analysis Results - Quality Assurance Samples

Sample #	Laboratory	Parameters												
		As [mg/L]	Cd [mg/L]	Cr [mg/L]	Co [mg/L]	Cu [mg/L]	Pb [mg/L]	Ni [mg/L]	Zn [mg/L]	Hg [ug/L]	PCBs [ug/L]	F1 C_6-C_{10} [mg/L]	F2 C_{10}-C_{16} [mg/L]	F3 C_{10}-C_{34} [mg/L]
MDL (Exova)		0.0002	0.00001	0.0005	0.0001	0.0010	0.0001	0.0005	0.001	NA	0.10	0.2	0.2	0.1
RPD Minimum (Exova)		0.0010	0.00005	0.0025	0.0005	0.0050	0.0005	0.0025	0.005	NA	0.50	1.0	1.0	0.5
MDL (Maxxam)		0.0002	0.00002	0.0010	0.0003	0.0002	0.0002	0.0005	0.003	0.006	0.05	0.1	0.1	0.2
RPD Minimum (Maxxam)		0.0010	0.00010	0.0050	0.0015	0.0010	0.0010	0.0025	0.015	0.030	0.25	0.5	0.5	1.0
Intra-Lab Duplicate Samples (Exova)														
C114-3W	Exova	0.0637	0.00036	2.0400	0.0209	0.2580	0.0197	0.6380	0.064		<0.1	<0.2	<0.2	<0.1
C114-BDW1		0.0734	0.00051	2.5100	0.0262	0.3080	0.0214	0.9060	0.076	-	<0.1	<0.2	<0.2	<0.1
Relative % Difference		14.2	34.5	20.7	22.5	17.7	8.3	34.7	17.1	N/A	N/A	N/A	N/A	N/A
Inter-Lab Duplicate Samples (Exova-Maxxam)														
C114-3W	Exova	0.0637	0.00036	2.0400	0.0209	0.258	0.0197	0.6380	0.064	-	<0.1	<0.2	<0.2	<0.1
	Maxxam	0.0024	0.00002	0.0940	0.0008	0.011	0.0012	0.0220	<0.003	<0.006	<0.05	<0.1	<0.1	<0.2
Relative % Difference		185.5	N/A	182.4	N/A	183.6	177.0	186.7	N/A	N/A	N/A	N/A	N/A	N/A
C114-FB	Field Blank	<0.0002	<0.00001	0.0009	<0.0001	<0.001	<0.0001	<0.0005	<0.001	-	<0.1	<0.2	<0.2	<0.1

ANNEX 3

Field Notes and Chain-of Custody Documents

AUGUST 26/14

CAM-1 JENNY LIND ISLAND

HOLDING FOR WEATHER IN CB BAY - N-

CAM-1/1A -

AUG 27/14 DEPART 8:15, FOG ON E SIDE OF ISLAND; 930 LAND AT STUART PT HOLD TO 8:45, RETRY, LAND AT CAM 1 1115. SETUP CAM. 7C, OVERCAST 25-30 NW

EAST LANDING LANDFILL

430 C114-32 (A)/B (B1) 0-10 40-50
0 BLK ORG DAMP, FINE, SOME SAND
10- GREY F-C SAND OCCCBL V-N

431 V-WSWC NW CRNR

432 V-E/S C TOE 433 - V-E/S C CRNR

434 V-E/NESW CRNR 435 - V-E C TOE

436 V-NEC SW CRNR 437 V-ENE C TYPE 1

438 V-ENE C TYPE 1 AND TOE

439 V-WNW C SE CRNR 440 - V-W C CREST

441 V-W E N TOE 442 PAN SE-N

443 V-W E C 444 MINOR ON NW CRNR
4mL - 20x1m-W, 2-3d V-NNW/SE
ALSO P. INFILLED CRACK E CREST (NE-SW)
V-WSW, 3mL, 2-3m W, EXT W/FROM EROSION.

445 Rough grade E NSW CRNR V-S
Ridge 10-20↑

446 V-E/S, C 5M DEP BELOW CREST,
20x20, 40x20 x 10↑

447 MIN EROSION ON S SLOPE (L-SHAPE)
30-60 W, 5-10↓ V-S/N E-C SETTLEM
SAME C 448

449 START OF CRACK, V-E, MOSTLY INFILL

451 - CLOSE UP 35mL, V-W 452

453 CLOSE UP - UP TO 3Cm W. W/EROS OF FINES

454 C114-33A/B - BRN SAND/GRAV.

V-N DRY, SOME CBLES 0-10 40-50

455 C114-34A/B. LT BRN GRAVEL, TR

V-N. SAND (IN BEACH RIDGE)

456 C114-35 A/B. LT BRN SAND
SOME GRAVEL, DRY V-E 0-10 40-50

USAF LANDFILL - LUBE-1

457 PAN S-NW. 458 V-SE/C

459 MIN EROSION W SIDE 6mL x 10 x 12 fines

V-E/W 460 - V-SE

461 V-NW/E 462 MARKER POST

463 V-SW/NNW/PAN 464 MARKER POST

465 C114-27 A/B, dk brn org/fr-sm
Sand/Cbls 0-10 40-50 V-NW

466 V-SE/W 467 PAN SW-E

468 C114-29 (A)/B (B2) LT BRN
Med-Cs Sand/dbrj 0-10 40-50

LEVEL

469 CL14-28 A/B LT BRN SAND+ GRAVEL, DRY 0-10, 40-50 V-SE

LOBE 2

470 PAN E-NW. 471 V-E/N @ SW TOE

472 V-W/N @ SE TOE 473 V-S/W

474 PAN W/SE @ NE CRNR

475 V-E/NE NW CRNR

476 CL14-30 A/B 0-10 BLK ORG/SAND LT BRN/GREY SAND, SM GRAV. V-SE 0-10 40-50

477 CL14-31 A/B LT BRN SAND, SM GRAV, DRY 0-10 40-50 V-SW

SOUTHEAST LANDFILL - LOBE 1

478 PAN SW/EE NW CRNR

479 V-E/SW @ TOE

480 TIRE RUTS - SAME V-NW/SE

481 V-NE/S @ TOE V-N/NE @ SW CRNR

482 PAN E-N. 483 - NW EROS ON SLOPE/ON LOW BENCH 10 W, 2-3' V-S/N.

484 CL14-16 A/B LT BRN F.G. SAND, OXID 0-10 30-50 V-N. TROXID

485 CL14-17 A/B V-N. LT BRN SAND, SM GRAV, OXID, DRY Blue 40 0-10 30-40

486 CL14-18 A/B V-NE 0-10 U-GREY SAND, TROXID 40-50 20 - LT BRN/GREY SAND, F-C, DRY

LOBE 2

487 PAN SW/SE, V-SW/SE @ CRNR

488 V-NW/S @ DEPR. + LIN. - SAME X 5

489 - V-NW/S. 490 - V-NW/SE @ S CRNR TOE

491 PAN NE/SW - ON COVER

492 CL14-15 A/B LT BRN SAND GRAVEL, DRY 0-10 40-50 V-N

493 CL14-14 A/B LT BRN GRAVEL. V-SW. W/SAND, DRY, 0-10 40-50.

TIRE TOE - 42mm dia SS.

494 MW-5 V-W/SW UP 45-14 Y day butt 1/61

495 PAN N-SW FROM ROAD

496 V-NE/NW @ S TOE - 497 @ MID SLOPE

498 V-NE/NW @ S CRNR, PAN E-W

499 SM DEPR. 30x30x5, V-N

500 VT-2, V-NE SER #7066

501 VT-3 V-N. SER #7050

502 V-NW/SW, PAN N-SW TOP CRNR

503 - MID SLOPE / NW/SW

504 TOE NW/SW

LEVEL

Cl14 5W A/B 4m S V-N
0- BRN SAND + GRAVEL, RSLT DRY
0-10 - 40-50
505 MW-6 SLUP 68-10
V dry bott 1505
Cl14-6W A/B 3m E V-W
506 PAN SW-SE @ N-SIDE
507 V- SE/SE @ N. CRNR TOE
508 V-SE min EROSION ON CRN CREST
OF SLOPE 2m x 10W x 5↓
509 V-SW/SE MID SLOPE
510 V-SW-SE @ N. CRNR./PAN W-SE
511 MID @ SE CREST, V-SW.
DEPR. 1x30x5↓
512 " " " V-NW → 516 MID.
513 EROS COV/SLOPE TOP - V-NW/SE
514 " " V-SE/NW 20-30
515 " " → 517 " 2-5↓
518 MW-7 SLUP = 59-7
V dry 0- bott 1495
Cl14-7W A/B GRAY SAND 0-10
10- BRN stn. dry 40-50
3m NW; V-SE
519 MW-8 SLUP 56-7
V dry bott 1495
Cl14-8W A/B (BD7) BRN GRAVEL
SOME SAND, DRY 0-10 V-E
3x MUCK 40-50

520 V- NE/SE @ W TOE
521 " " MID SLOPE
522 V- NE/SE, PAN S-N @ CRNR
523 VT-1 V-S SER 07060615
523 VT-2 V-NE SER 07050030
524 STAIN/COVER, V-NE 30x30
525 V-NE/SW @ MIN LIN. DEPR. ON S COVER
526 15W, 2↓ LL, TO 20x20 depr EN
527 V-NE/SW " " "
528 7mL x 10-15W x 2-3↓, 1M LCS END
SEVERAL LINER DEP OF FINES E-W/N-S
ON COVER.
529 MIN EROS @ CREST TO 6M↓ V-NW SE
20W, 3-5↓
644 DEPR BELOW CREST, V-N
60 x 20 x 5-7.

NON-HAZARDOUS WASTE LANDFILL

646 MW-1 3m N. BRN SAND W/ GRAVEL,
Cl14-1W DRY 0-10 40-50
A/B SLUP = 50-60 V dry bott 225
Metal debris stockpiled on face MW-1
647 PAN NE/NW @ S CRNR
648 LIN DEPR/NE-SW 40x15x5↓ V-NW
649 " " 60x20x5 V-SE/NW
650 GEOTEXTILE V-SE

LEVEL

651 " FABRIC EXPOSED V-SE

652 V-SE/NE @ NW CRNR PAN S-NW

~~653~~ V-NE ALONG TOE

653 EXP. FABRIC + TENT @ COVER V-SE

654 " " WOVEN V-S

655 WOVEN FABRIC ON E CRNR V-S 20x10

656 PAN NW-S

657 V-NW/SW @ TOE

658 MW-3 SLUP 45-9 INSUFF.
I 1.62 bott. 1655

CH4-2A/B 2m SW
BRN-RUST BRN SAND W/ BRN ROCK
0-10 40-50

659 MW3 SLUP 54-16
I 1.215 bott 1905

CH4-3A/B 2.3~SE V-NW
BRN SAND + GRAVEL, DRY

660 V-SW/SE PAN-W-SE @ N CRNR
V-SE MAIN DEPR BELOW N CRNR
(SW/NE) 60x15x5↓ V-S

661 DEPR (EROS) @ CREST (N-S) 40x1mx5↓

662 V-SW/SE SECTOR N. V-NE

663 MW-4 SLUP 54-16 0-10
I 1375 bott. 1.92 40-50

CH4-4A/B BRN 0-10 SAND + GRAVEL
10-ORANGE W/

664 LIN DEPR BELOW CREST V-NE
1mx20x.10↓

RETRIEVE DATALOGGERS/BATT. CH/
DOWNLOAD.

WORKERS - 930.

AUGUST 28, 2014 9°C, UP TO 60 K-/h NW, FOG + MIST

BORROW AREA NORTH - LOBES 1+2

001 V-S @ N END

2 PAN W-SE @ NE CRNR

3 V-S/NE DEPR ON W SLOPE 60-1m↓, 40-60m↓
5-10↓ (3)

4 V-N/W @ SE CRNR, ALSO 70x70x10↓
DEPR ON CRNR SLOPE

5 V-N ALONG W SIDE TOE

LOBE 3

7 V-SE/SW @ NE CRNR

8 PAN NW-S

9 LIN. DEPR ON COVER (N-S) 1m x 25m S↓ V-S/E

10 V-E/SE @ NW CRNR

11 LIN DEPR (N-S) 4m x 80 x 10↓ V-N/W

12 V-N @ DEP. BELOW CREST 40x20x10↓

13 CH4-2A/B LT BRN STG. ARY. V-E
0-10 40-50

14 - V-S ALONG W SIDE

LEVEL

(46)

15 V-NE @ PONDED AREA @ TOE

16 V-E/W @ MIN EROS OF PINES ON E SIDE SLOPE 30-60 W, 5↓

17 V-N/S ON E SIDE - MUD

18 V-SE @ IRON STAINING IN & AREA AT TOE

19 (SEND OF STAINING) V-NE EXTENDS 5+M AWAY FROM TOE

20 C114-3 A/B V-E, BRN SAND + GRAVEL W/LTS GY 0-10, 40-50

21 V-SW @ STAINED * & AREA @ TOE

22 C114-1 A/B 0 BRN ROCK, SOME ST GRC, 40 ROCK

V-W DAMP 0-10 ~~20-40~~ 30-LT BRN SILT

23 PAN N-SW & SE CRNR

24 EROS @ SE CRNR/PINES 0.5-1M W, UP TO 5↓ V-E/W, 10ML.

25 V-N/SW @ TOE 26 PAN NE-W

27 C114-4 (A) B (BD3) grey SAND

V-E tr. org SM gravel 0-10 40-50. 15 BRN LT S + G, dry

LOBES 4 + 5

28 V-SE @ SL STAINING ON SLOPE (DISCOL, COARSE)

29 V-E/SW CRD 30 V-SE

31 V-ESE @ TENSION CRACK - CONCENTRATED BARREL NOT CABLE

32 V-S @ E SIDE

(47)

33 DEPR UP FROM CREST 3M (NW/SE) x 1M W 5- V 15↓ V-NE

34 V-SW/NW @ EROS ON TOE + SIDE SLOPE SAME @ TOE, 4M x 50 x 2-5↓ ON SLOPE

35 PAN NNE-W 36 V-NE FROM RD

37 PAN E-N 38 MIN EROS ON CREST / SLOPE V-W/E 4M x 10 x 2-5↓

39 C114-5 A/B LT BRN SAND, F G, V-E 0-10, 40-50

NORTH EAST LANDFILL LOBE 2

40 V-SE @ CL 41 V-SE ON TOE 42 SEEPS

43 V-NE/SW @ CL 44 V-NE 45 V-SW @ LIN DEPR 11M L, 1M W x 2-4↓

46 C114-6 A/B BRN GRAVEL, SM SAND - DRY, 0-10 ~~20-50~~ V-W

47-49 V-NE @ CL, N SIDE, S SIDE

LOBE 1

50 V-NE @ S SLOPE 51 V-NE

52 PAN NE-S 53 V-NW @ TOE

54 V-SE/NE @ TOE 55 PAN S-NW

56 EROSION @ INSIDE CRNR, V-SE/NW 4M, 30↓ SW 5-10↓, SEE ARM

57 V-SW/SE, S @ CRNR, SAME, POSS. EROSI PAN SW-E

58 MIN-DUTHOLE ABOVE CREST 40 x 50 x 10↓ V-NW

LEVEL

59 C114-7 A/B GRAY SAND MED gr
V.E W/GRAVEL + CBBLS 0-10 40-50

60 C114-8 (A)/B (BD4) 0.001 1 JAR FOR EA
0 - GREY SAND + ROCK
20 BRN SAND, W/GRAVEL

60 POTHOLE ON SIDE SLOPE 30x20x10 V-SW

62 EROS + SETTLEMENT ON INS. OF CRNR (TOP)
5'mx1x10-15 L2.5x2x30+ V-N/S.
ALSO V-NW/NE TOE/SLOPE

63 DEPR ON SLOPE 1m x 50 x 10+ V-SE/SW

64 EROS ACROSS SLOPE 5mx10-30x 2-10

65 V-SW. (SLOPE)

EROS ON CRNR/RIDGES ((3m x 10 x 10+ V-W

66 C114-9 A/B DK BRN/BLK
CR GRAVELLY SM SAND, DRY 0-10 40-50

67 PAN. SW-E

STATION WEST LANDFILL

68 PAN - N-SE: 69 V-NW @ TOE

70 START OF T. CRACK 45 TO SLOPE (V-N)/S
32 TO TOE (0mL, PINFILLED, UP TO 1cm

71 MIN EROS CREST-TOE 5mx10x5 V-
CROSSES CRACK V-SW/NE

73 MIN DEPR // TO SLOPE V-SE 3x 10 20 15-50 5+

74 DEPR ON SLOPE 1.0mx40x1.5+ V-NW
ALSO + 40x10x7+ V-SW

75 V-SW @ SEASONAL IMPOUNDM'T / EROS ALONG SLOPE (PAN) SE

76 V-SE/W @ CRNR, TENSION CRACKS TO SE ALONG SLOPE - ALMOST COMP. FILLED IN (NOT VIS.)

77 4N DEPR ON COVER 50x15x10+ + 30x20x5

78 STAIN (ORANGE) ON COVER 3x, V-N V-S.
30) 1 SW. 79 - V-E

80 C114-10 A/B. GREY SAND/W GRAVEL
0-10 40-50 V-N 30-BRN

81 DEPR ON CREST 40x20x5 V-SE

82 C114-11 A/(B) (BD5) BRN SAND F-C 0-10 40-50

83 CRATER 2x1 V-SW.

84 START OF T. CRACKS BELOW CREST. V-W 10mL
PINFILLED. ACROSS CRNR → 40S TOE
ONLY 2 CRACKS V/S. //.

86 PAN - E-NW- 87. POTHOLE CREST 30x20x5 V-SE

88 POTHOLE " 20x20x5+ V-SE

89 V-SE/NE @ W CRNR, V-W @ MIN SETTLM (SAME)

90 V-E @ CRNR STAIN 4x30.

91 C114-12 A/B. GREY SAND, FG 0-10 40-50
V-SE

92 POTHOLE ON SLOPE 40x20x10+ V-E.

93 V-SW/E @ TOE. V-SW @ RUTS

94 C114-13 A/B LT GREY FG SAND, DRY
V-SW (IN DISTRESS)

96 - V-NW OF TIER II 97 - V-SW // LEVEL

AUGUST 28, 2014

CAM-1 (CON'T) -5°C, FOG, 40km/h NW

98 V-NE/SE @ CRNR 99 V-NW @ DEPR @ TOE 3m x 50 x 10↓ V-NW

100 V-SW @ MIN EROS AT TOE 9mL x 30-50 x 2-5

101 V-NW/SE @ EROS ON SLOPE - FINES 1-2↓ 20↓, 4mL TO toe

102 LIN DEPR (SW/SE) 1x40x10↓ V-SW

103 " " 2x40x10↓ V-SE

104 " 1.5x40x5 V-SE

105 " 3x30x5-10 V-S

106 1x1x10 @ toe mid V-E

107 PAN S-NE 108 V-SW/SE

109 V-SE/SE 110 V-NW @ RUTTED 15-15

ARCH / LIN DEPR UP TO 10↓ POTHOLE 10↓ Up to 10m L.

111 LIN. EROS / DEPR 3m x 10 x 5 V-NE

112 C11↓-19 A/B; GRAV/S↑G, W-G DAMP; V-S/ W/CBLES 0-10 40-50.

113 V-NW/S @ TOE

114 V-S @ POTHOLE 40x40x10↓

115 V-N/SW @ TOE 116 PAN N-SW

117 V-E/W @ EROSION INSIDE CRNR 6m, 15, 25↓

118 V-SW @ TOE

119 C11↓-20 A/B O-40cm/blk gravel, frozt SAND, 20 BRN GRAVEL/SM Sand. @ 0-10 40-50

120 V-SW @ ROUGH GRADING W/TYPE I ABOVE CREST

121 PAN NW-SE; V-SW @ TOE

122 V-NW @ BEG OF FINES ON SLOPE/TOE TYPE ALONG ~40m; 1-3m W.

123 C11↓-23 A/B LT BRN GRAVEL/SM SAND V-NW DRY/ROCK/CBLS B/ROCKES 0-10 25-35 BLDR

124 V-NE/W @ CRNR TOE

125 C11↓-22 A/(B) (BD9) LT BRN SAND V-N - W/GRVL, DAMP 0-10 40-50

126 PAN NW-E

127 V-NNE @ TOE 128 V-S-NW @ INSIDE CRNR

129 DEPR 2x50x10↓ V-S

130 DEPR @ CREST 20m x 30 x 10↓ V-S w/ MIN EROS TO TOE 10W x 2-1. V-N

131 POTHOLE @ CREST 50x30x5↓ V-NE

MAIN LANDFILL

132 V-E FROM RD / SW

133 V-SE/SW @ DEPR / EROS ON SLOPE 2m x 20 x 5↓

134 V-SW ALONG TOE; EROS ALONG MID SLOPE FROM SPRING POND 1½ M DT TO LF.

136 @114-23 A/B ORANGE/BRN SAND w/ V-SW GRAVEL, CBLS, DRY. 0-10 BIRDS 25-35

137 V-N/E @ CRNR, V-NW @ EROSION ON CRNR - 4m x 50-1m W, 5-15↓ PAN E-NW

138 DEPR BELOW CREST 12mL, 30m, 5-10↓ V-S/W + 50x30x10↓

139 V-N/ENE @ TOE, PAN SE-NW

140 START OF EROSION AROUND TOE FROM SEASONAL PONDING W/ DEP. OF FINES BELOW V- ESE

142 END OF EROS. V-W/S

143 MIN OF EROS ON SLOPE TOP-TOE V-NE 4m x 20 x 2↓ FINES, SELF ARM

144 DEPR. 50x40x5↓ V-SW. 2m UP FROM CREST

145 @114-26 A/B LT BRN/GRY SAND V-E SOME GRAVEL, BIRDS 0-10/35-45

146 PAN E-NW,

147 LIN DEPR (E/W) 2m x 15 x 5↓ V-E

148 V-W/NE @ TOE 149 - V-SW/SE PAN E-NW

150 V-N/SW @ DISCOLORATION - MIDDLE

151-155 - Perimeter

156 @114-25 A/B BRN SAND, W/ GRAVEL BIRDS 0-10, 35-45 V-N

157 V-NW @ END, ON EXP BIR. - LARGE AREA

158 POTHOLE ON SLOPE 40x30x10↓ V-NW

159 @114-24 A/B BDID: V-W DK BRN/GRY SAND + GRAVEL, DAMP, TR. ORG.

160 INSIDE CRNR V-W - MIN DEPR. 5↓ 3x2m UNEVEN. W/ DEP. OF FINES

V-NW @ TOE

161 V-NW, PAN NW-S (ALSO PAN E-NW @ EAST STATION LT)

162 V-SE/NW ALONG TOE

163 V-NW @ MIN ERO. ON SIDE SLOPE FROM SEASONAL ↑ UP TO 3m↑ 20-30m W. ↓

164 EROS ON SLOPE / CREST 6m x 20 x 2-3↓ V-NE/SW

165 V-SE AT TOE, V-SE @ EROS @ CRNR. 2-3 x 15↓ SLOUGHING

166 BIR EXP ON SIDE.

167 4IN DEPR 1.2L, 15W x 5↓ V-W

168 " " 40x20x5 V-NW

MW-3. NHWLF (BDW-1)

T 1.2/1.1/1.2 COND 1323/1419/1428

pH 8.8/8.6/8.8 µS Turb-72 NTU.

COLLECT 4x1L, 2x500 mL, 9x40, 3x250

10A

MW-4 T 1.3/1.4/1.4 ✓ COND 1459/1379/1361
pH 12.9/12.7/12.5 ms TURB-116
COLLECT 2x1L, 1x250mL, 3x40mL, 1x40.

AUGUST 29, 2014 - Periods of fog overcast 30 km/h NW.
CALL IN @ WEATHER @ 8/9/930
PLANE ARRIVES @ 1040 - BACK IN CBE
12:15 - UNLOAD.

Bottle Inventory (WILF'S)
11x5 sets EXOVA = 55
6x sets MAXAM
3 cobbler ice packs
5x3 boxes @ $0.77 = 15 boxes

Kitikmeot Air
HOLD @ CAM-1A (WEATHER DELAY)
LAYOVER @ CAM4 (KUGAARUK)

Exova Testing, calibrating, advising

www.exova.com ED 120-02

Project Information

Project ID: CAM-1 2014
Project Name: 2014 LFM
Project Location: JENNY LIND ISLAND
Legal Location:
PO/AFE#:
Proj. Acct. Code:
Quote # OI-071-309663

Invoice to:

Company: SILA REMEDIATION
Address: 1260 BOUL LEBOURGNEUF SUITE 250 QUEBEC QC
Attention: J.P. PELLETIER
Phone: 418-626-1635 EXT 5892
Cell: 581-984-2585
Fax:
E-mail: jean-pierre.pelletier@lvm.ca
Agreement ID:
Copy of report: 1

Report To:

Company:
Address:
Attention: ANDREW PASSALIS
Phone:
Cell: 204-791-4938
Fax:
E-mail 1: andrew.passalis@gmail.com
E-mail 2:
Copy of invoice:

Report Results		Regulatory Requirement	
E-Mail	X	HCDWQG	
Mail		Ab Tier 1	
Online		SPIGEC	
Fax		BCCSR	
PDF	X	Other (list below)	
Excel	X		
QA/QC	X		

Sample Custody (please print)

Sampled by: A. PASSALIS
Company: SILA

This section for Lab use only

Date/Time stamp: SEP 2 FRI 1:43

RUSH Priority

Emergency (contact lab for turnaround and pricing)
Priority 1-2 working days (100% surcharge)
Urgent 2-3 working days (50% surcharge)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required: Signature:

Special Instructions/Comments (please include contact information including ph. # if different from above).

	Site I.D.	Sample Description	Depth start in	Depth start cm	Depth end m	Date/Time Sampled	Matrix	Sampling Method	Number of Containers	TAH (F1-F3)	PCBs	Metals (see grade)														Indicate in the space allotted any deficiencies by the corresponding number.
1		CLA-1A				14/08/28	SOIL		2	X	X	X														
2		-1B																								
3		-2A																								
4		-2B																								
5		-3A																								
6		-3B																								
7		-4A																								
8		-4B																								
9		-5A																								
10		-5B																								
11		-6A																								
12		-6B																								
13		-7A																								
14		-7B																								
15		-8A								X	X	X														

Enter tests above (√ relevant samples below)

1. Indicate any samples that were not packaged well
2. Indicate any samples not received in Exova supplies
3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

Submission of this form acknowledges acceptance of Exova's Standard Terms and Conditions (http://www.exova.com/about/terms-and-conditions/)

Please indicate any potentially hazardous samples

Indicate lot # or affix barcode here: 1023703

Shipping: COD Y/ N
and size of coolers: 5
Temp. received: 5.3
Delivery Method:
Waybill: 1A200
Received by: JUAREZ

Page 1 of 6 Control # C0042506

ED 120-02

Exova — Testing, calibrating, advising

www.exova.com

ED 120-02

Project Information

Project ID: CAM-1 2014

Project Name:

Project Location:

Legal Location:

PO/AFE#:

Proj. Acct. Code:

Quote #

Invoice to:

Company:

Address:

Attention:

Phone:

Cell:

Fax:

E-mail:

Agreement ID:

Copy of report:

Report To:

Company:

Address:

Attention:

Phone:

Cell:

Fax:

E-mail 1:

E-mail 2:

Copy of invoice:

Report Results		Regulatory Requirement	
E-Mail		HCDWQG	
Mail		Ab Tier 1	
Online		SPIGEC	
Fax		BCCSR	
PDF		Other (list below)	
Excel			
QA/QC			

Sample Custody (please print)

Sampled by:

Company:

This section for Lab use only

Date/Time stamp:

RUSH Priority

- Emergency (contact lab for turnaround and pricing)
- Priority 1-2 working days (100% surcharge)
- Urgent 2-3 working days (50% surcharge)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required: _____ Signature: _____

Special Instructions/Comments (please include contact information including ph. # if different from above).

	Site I.D.	Sample Description	Depth start in	Depth start cm	Depth start m	Depth end in	Depth end cm	Depth end m	Date/Time Sampled	Matrix	Sampling Method	Number of Containers	TPH (F1-F3)	PCBs	Metals
1		CII4-8B							14/08/28	SOIL		2	X	X	X
2		-9A													
3		-9B													
4		-10A													
5		-10B													
6		-11A													
7		-11B													
8		-12A													
9		-12B													
10		-13A													
11		-13B													
12		-14A													
13		-14B													
14		-15A							14/08/27						
15		-15B											X	X	X

Enter tests above (√ relevant samples below)

Indicate in the space allotted any deficiencies by the corresponding number.

1. Indicate any samples that were not packaged well
2. Indicate any samples not received in Exova supplies
3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

Submission of this form acknowledges acceptance of Exova's Standard Terms and Conditions (http://www.exova.com/about/terms-and-conditions/)

Indicate lot # or affix barcode here

Shipping: COD Y/ N

and size of coolers

Temp. received:

Delivery Method:

Waybill:

Received by:

Please indicate any potentially hazardous samples

Page 2 of 6

Control # C 0042507

ED 120-02

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ED 120-02

Invoice to:

Company:
Address:
Attention:
Phone:
Cell:
Fax:
E-mail:
Agreement ID:
Copy of report:

Report To:

Company:
Address:
Attention:
Phone:
Cell:
Fax:
E-mail 1:
E-mail 2:
Copy of invoice:

Report Results		Regulatory Requirement	
E-Mail		HCDWQG	
Mail		Ab Tier 1	
Online		SPIGEC	
Fax		BCCSR	
PDF		Other (list below)	
Excel			
QA/QC			

Project Information

Project ID: CAM-1 2014
Project Name:
Project Location:
Legal Location:
PO/AFE#:
Proj. Acct. Code:
Quote #

Sample Custody (please print)

Sampled by:
Company:

RUSH Priority

- Emergency (contact lab for turnaround and pricing)
- Priority 1-2 working days (100% surcharge)
- Urgent 2-3 working days (50% surcharge)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required: Signature:

Special Instructions/Comments (please include contact information including ph. # if different from above).

This section for Lab use only

Date/Time stamp:

	Site I.D.	Sample Description	Depth start in	Depth start cm	Depth end m	Date/Time Sampled	Matrix	Sampling Method	Number of Containers	TPH(F1-F3)	PCBs	Metals
1		CM4-16A				14/8/27	Soil		2	x	x	x
2		-16B										
3		-17A										
4		-17B										
5		-18A										
6		-18B										
7		-19A				14/8/28						
8		-19B										
9		-20A										
10		-20B										
11		-21A										
12		-21B										
13		-22A										
14		-22B										
15		-23A									x	x

Enter tests above (√ relevant samples below)

Indicate in the space allotted any deficiencies by the corresponding number.

1. Indicate any samples that were not packaged well
2. Indicate any samples not received in Exova supplies
3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

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Indicate lot # or affix barcode here

Shipping: COD Y/ N

and size of coolers

Temp. received:

Delivery Method:

Waybill:

Received by:

Please indicate any potentially hazardous samples

Control # C0042508

ED 120-02

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ED 120-02

Invoice to:

Company:
Address:
Attention:
Phone:
Cell:
Fax:
E-mail:
Agreement ID:
Copy of report:

Report To:

Company:
Address:
Attention:
Phone:
Cell:
Fax:
E-mail 1:
E-mail 2:
Copy of invoice:

Report Results		Regulatory Requirement	
E-Mail		HCDWQG	
Mail		Ab Tier 1	
Online		SPIGEC	
Fax		BCCSR	
PDF		Other (list below)	
Excel			
QA/QC			

Project Information

Project ID: Chm-1 2014
Project Name:
Project Location:
Legal Location:
PO/AFE#:
Proj. Acct. Code:
Quote #

Sample Custody (please print)

Sampled by:
Company:

RUSH Priority

- Emergency (contact lab for turnaround and pricing)
- Priority 1-2 working days (100% surcharge)
- Urgent 2-3 working days (50% surcharge)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required: Signature:

This section for Lab use only

Date/Time stamp:

Special Instructions/Comments (please include contact information including ph. # if different from above).

	Site I.D.	Sample Description	Depth start	Depth end	Depth in/cm/m	Date/Time Sampled	Matrix	Sampling Method	Number of Containers	TPH(F1-F3)	PCBs	Metals	Indicate in the space allotted any deficiencies by the corresponding number.
1		CH4-23B				14/8/23	SOIL		2	x	x	x	
2		-24A											
3		-24B											
4		-25A											
5		-25B											
6		-26A											
7		-26B											
8		-27A				14/08/27							
9		-27B											
10		-28A											
11		-28B											
12		-29A											
13		-29B											
14		-30A											
15		-30B								x	x	x	

Enter tests above (√ relevant samples below)

1. Indicate any samples that were not packaged well
2. Indicate any samples not received in Exova supplies
3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

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Indicate lot # or affix barcode here

Shipping: COD Y/ N

and size of coolers

Temp. received:

Delivery Method:

Waybill:

Received by:

Please indicate any potentially hazardous samples

Page 4 of 4 Control # C 0042509

ED 120-02

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ED 120-02

Project Information

Project ID: CAM-1 2014

Project Name:

Project Location:

Legal Location:

PO/AFE#:

Proj. Acct. Code:

Quote #

Invoice to:

Company:

Address:

Attention:

Phone:

Cell:

Fax:

E-mail:

Agreement ID:

Copy of report:

Report To:

Company:

Address:

Attention:

Phone:

Cell:

Fax:

E-mail 1:

E-mail 2:

Copy of invoice:

Report Results		Regulatory Requirement	
E-Mail		HCDWQG	
Mail		Ab Tier 1	
Online		SPIGEC	
Fax		BCCSR	
PDF		Other (list below)	
Excel			
QA/QC			

Sample Custody (please print)

Sampled by:

Company:

This section for Lab use only

Date/Time stamp:

RUSH Priority

Emergency (contact lab for turnaround and pricing)

Priority 1-2 working days (100% surcharge)

Urgent 2-3 working days (50% surcharge)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required:

Signature:

Special Instructions/Comments (please include contact information including ph. # if different from above).

	Site I.D.	Sample Description	Depth start in	Depth start cm	Depth end m	Date/Time Sampled	Matrix	Sampling Method	Number of Containers	TPH(F1-F3)	PCBs	Metals
1		~~CCC~~ C114-31A				14/08/27	SOIL		2	x	x	x
2		-31B										
3		-32A										
4		-32B										
5		-33A										
6		-33B										
7		-34A										
8		-34B										
9		-35A										
10		-35B										
11		C114-BD1				14/08/27						
12		-BD2				"						
13		-BD3				14/08/28						
14		-BD4										
15		-BD5								x	x	x

Enter tests above (√ relevant samples below)

Indicate in the space allotted any deficiencies by the corresponding number.

1. Indicate any samples that were not packaged well
2. Indicate any samples not received in Exova supplies
3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

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Indicate lot # or affix barcode here

Shipping: COD Y/ N

and size of coolers

Temp. received:

Delivery Method:

Waybill:

Received by:

Please indicate any potentially hazardous samples

Page 5 of 6

Control # C0042510

ED 120-02

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Invoice to:

Company:
Address:
Attention:
Phone:
Cell:
Fax:
E-mail:
Agreement ID:
Copy of report:

Report To:

Company:
Address:
Attention:
Phone:
Cell:
Fax:
E-mail 1:
E-mail 2:
Copy of invoice:

Report Results		Regulatory Requirement	
E-Mail		HCDWQG	
Mail		Ab Tier 1	
Online		SPIGEC	
Fax		BCCSR	
PDF		Other (list below)	
Excel			
QA/QC			

Project Information

Project ID: Am-1 · 2014
Project Name:
Project Location:
Legal Location:
PO/AFE#:
Proj. Acct. Code:
Quote #

Sample Custody (please print)

Sampled by:
Company:

This section for Lab use only

Date/Time stamp:

RUSH Priority

Emergency (contact lab for turnaround and pricing)
Priority 1-2 working days (100% surcharge)
Urgent 2-3 working days (50% surcharge)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

Date Required: Signature:

Special Instructions/Comments (please include contact information including ph. # if different from above).

	Site I.D.	Sample Description	Depth start (in cm m)	Depth end (in cm m)	Date/Time Sampled	Matrix	Sampling Method	Number of Containers ↓	TPH (F1-F3)	PHCs	Metals (see guide)	T. Metals (see guide) (As, Cr, Co, Ni, Hg, Pb, Zn)									
								Enter tests above (√ relevant samples below)													
1		C114-BD6			14/08/27	SOIL		2	x	x	x										
2		-BD7						1	x	x	x										
3		-BD8						1	x	x	x										
4		-BD9			14/08/28			1	x	x	x										
5		-BD10						1	x	x	x										
6																					
7		C114-3W				WATER		3	x	x			x								
8		-4W						3	x	x			x								
9		-BDW1						3	x	x			x								
10		-FB						3	x	x			x								
11																					
12																					
13																					
14																					
15																					

Indicate in the space allotted any deficiencies by the corresponding number.

1. Indicate any samples that were not packaged well
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3. Indicate any samples that were not clearly labeled
4. Indicate any samples not received within the required hold time or temp.
5. Indicate any missing or extra samples
6. Indicate any samples that were received broken
7. Indicate any samples where sufficient volume was not received
8. Indicate any samples received in an inappropriate container

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Indicate lot # or affix barcode here

Shipping: COD Y/ N

and size of coolers

Temp. received: Delivery Method:

Waybill:

Received by:

Please indicate any potentially hazardous samples

Page 1 of 1 Control # C 0042511

ED 120-02

Maxxam

Calgary: 4000 19st St. NE, T2E 6P8. Ph: (403) 291-3077, Fax: (403) 735-2240, Toll free: (800) 386-7247
Edmonton: 9331 - 48 Street, T6B 2R4. Ph: (780) 577-7100, Fax: (780) 450-4187, Toll free: (877) 465-8889
www.maxxamanalytics.com

09/187(1) mpc

Chain of Custody A159156

Page: 1 of 1

	Invoice To: C/O Report Address ☐	Report To: Same as Invoice ☑
Company:	SILA REMEDIATION	
Contact:	J.P. Pelletier	
Address:	1260 BOUL LEBOURGNEUF	
	Prov: QUEBEC / QC PC:	Prov: PC:
Contact #s:	Ph: 418-622-1688 Ext: 5892	Ph: Cell:

Report Distribution (E-Mail): andrewpassalis@gmail.com.

REGULATORY GUIDELINES:
☐ AT1
☐ CCME
☐ Regulated Drinking Water
☐ Other:

All samples are held for 60 calendar days after sample receipt, unless specified otherwise.

PO #:	
Project # / Name:	CAM-1 2014
Site Location:	JENNY LIND ISLAND
Quote #:	B30371
Sampled By:	A. PASSALIS

SERVICE REQUESTED: ☐ **RUSH** (Contact lab to reserve) **Date Required:** ☑ REGULAR (5 to 7 Days)

See reverse for package specifics

	Sample ID	Depth (unit)	Matrix GW / SW Soil	Date/Time Sampled YY/MM/DD 24:00	SOIL: ~~BTEX F1-F4~~ F1-F3	Sieve (75 micron)	Regulated Metals (CCME / AT1)	Salinity 4	Assessment ICP Metals	Basic Class II Landfill	PCBs	Metals (As, Co, Cr, Cu, Ni, Hg, Pb, Zn)	WATER: ☐VOCs	☐BTEX F1	☐BTEX F1-F2	☐BTEX F1-F4	☐ Routine Water ☐ Turb ☐ F	☐ TOC ☐ DOC	Regulated Metals (CCME / AT1): Total	Dissolved	Mercury	☐ Total ☐ Dissolved	Other Analysis: TPH (F1-F3)	PCBs	HOLD - Do not Analyze	# of Containers Submitted
1	C114-32A		Soil	14/8/27	X						X	X														2
2	-29A			"	X						X	X														2
3	-4A			14/8/28	X						X	X														2
4	-8A			"	X						X	X														2
5	-11B			"	X						X	X														2
6	-4WA			14/8/27	X						X	X														2
7	-8WB			"	X						X	X														2
8	-17B			"	X						X	X														2
9	-22B			14/8/28	X						X	X														2
10	-24A			"	X						X	X														2
11																										
12	C114-3W		GW	14/8/28															X		X	X	X			9 F/P

RECEIVED IN YELLOWKNIFE
By: Michelle Gould
2014 -09- 04

Temp: 6 / 6 / 6

Please indicate Filtered, Preserved or Both (F, P, F/P)

AD7/3C

Relinquished By (Signature/Print):	Date (YY/MM/DD):	Time (24:00):
Relinquished By (Signature/Print):	Date (YY/MM/DD):	Time (24:00):
Special Instructions: T. METALS (As, Co, Cr, Cu, Hg, Ni, Pb, Zn)		# of Jars Used & Not Submitted

LAB USE ONLY

Received By:	Date:	Time:	Maxxam Job #: B478342		
			Custody Seal	Temperature	Ice
Lab Comments: 1040			Intact	3.1.0	Present