B.H. MARTIN CONSULTANTS LTD.
CONSULTING ENGINEERS AND ARCHITECT

834 Mountjoy Street South
P.O. Box 120
Timmins, Ontario P4N 7C5
Tel. (705) 264-9413
Fax. (705) 267-2725

January 7, 2007

Cheryl Wray
Environmental Superintendent
Baffinland Iron Mines Corporation
Suite 1016, 120 Adelaide Street West
Toronto, Ontario
M5H 1T1

Dear Cheryl,

RE:

MARY RIVER PROJECT
TANKS-A-LOT SEWAGE TREATMENT AND DISCHARGE
AS-CONSTRUCTED REPORT
OUR REFERENCE NO. 06-090

B.H. Martin Consultants was retained by Baffinland Iron Mines Inc. to design the sewage works for their Exploration camp at Mary River Mine site in Nunavut and to complete the as-constructed reports.

The site is located approximately 160km south of Pond Inlet, in the north-eastern section of Baffin Island. Approximate distances from the project site to other communities in the region are 270 km to Arctic Bay, and 415 km to Clyde River.

Presently the site consists of a 100-person camp of predominantly Weatherhaven^{TM} tents, two steel Quonset huts as maintenance facilities, and numerous small wooden outbuildings, situated approximately 200 meters from the shore of Camp Lake.

A Rotating Biological Contactor (RBC System) Sewage Treatment is being constructed for the camp for sewage treatment for the duration of the bulk sampling program. In the meantime, temporary measures were needed for sewage treatment while waiting for the RBC system to be constructed and while exploration is being performed on site.

As-Constructed Conditions

The Owner installed and commissioned a wastewater treatment system (Norweco – Singulair Model 960 Treatment System from Tanks-A-Lot) capable of handling sewage of 460 BOD_5/490 TSS for 50 people generating 227 litres of sewage per day on October 7, 2007. No non-domestic waste or stormwater has been directed to the treatment system. The sewage for the population of more than 50 is by-passed to a Polishing/Waste Stabilization Pond (PWSP) approximately 500 meters from the camp. A schematic of the Tanks-A-Lot Treatment system is included in Appendix 1.

BIMC also constructed the Polishing/Waste Stabilization Pond (PWSP) prior to the commissioning of the Tanks-A-Lot system in order to store the system effluents. The Pond was designed to have a capacity of 3,521 Cubic Meters. Based on the recent survey of the pond, as set out on drawings included in Appendix 1, the installed pond has a capacity of 2,510 Cubic Meters. The pond was lined with the specified liner of EL 6040. The installation of the pond underlying material and the liner installation have been certified by Layfield Industries. The Treatment System as-constructed drawings and the QA/QC report from Layfield is attached to Appendix 1. Photos of the Tanks-A-Lot System are included in Appendix 2.

Since the commissioning of the Tanks-A-Lot System and the Polishing/Waste Stabilization Pond (PWSP) on October 7, 2007 up until December 25, 2007 (80 days) the maximum number of personnel at the site has reached 65 persons. This number was maintained during the Christmas 2007 holidays and is expected to ramp up to 120 people by February 1, 2008. Maximum sewage generation has been measured to be approximately 200 litres per capita per day (200 lpcd) with an average estimated loading of 460 BOD_5 and 490 TSS. This volume of 1,040 (65 persons at 200 lpcd for 80 days) represents the volume of effluent currently stored within the PWSP leaving the available capacity within the constructed PWSP to be 1,470 Cubic Meters.

As discussed in our design Waste Water Management Plan submitted to the NWB, an RBC system capable of handling sewage effluent for 150 people is planned to be constructed as soon as it arrives at the Mary River Site. The RBC system arrived at the Mary River site shortly before Christmas Holidays and is currently being installed and is scheduled for commissioning in January of 2008. Assuming that it takes 21 days for the RBC system to become fully operational, The Tanks-A-Lot system and the PWSP are expected to cease operation after that time. Below is a summary of the volumes of effluent within the PWSP prior to and after the RBC start-up:

Total volume of As-Constructed PWSP (C.M)	**2,510**
Max. no. of people at the site from Oct.7 to Dec. 25, 07	65
Max. Volume of sewage generated per day per person	200
Number of days from commisioning day to Dec. 25, 2007	80.00
Maximum Volume of effluents sent to PWSP before holidays	**1,040.00**
No. of People at the camp (from Dec. 25 to Jan. 7, 08)	65
No. of days from Dec. 25, 2007 to Jan. 7, 2008	13
Max. Volume of sewage generated per day per person	200
Volume of effluent sent to PWSP during the holidays	**169**
Avg. No. of people at camp by the time RBC is fully operational	90
***We have assumed that the 65 people will return immediately after the holidays and then will ramp to 120**	
No. of days from January 7 to RBC operation	30
Max. Volume of sewage generated per day per person	200
Maximum Effluents to be sent to PWSP from Jan. 7 to RBC full operation	**540.0**

Total Estimated Maximum Volume of Effluents in the PWSP by RBC full operation	**1,749.00**
Available capacity within PWSP after the expected RBC full operation	**761**
Equivalent no. of days at 200 lpcd at 120 people	31

Effluent in the PWSP will be tested during the summer and, depending on the test results; the effluent will be either discharged to Sheardown Lake in late summer of 2008 or retained for discharge at a later date depending on the quality of the effluent.

It is currently planned to retain the sewage in the PWSP for at least 12 months. Upon confirmation of acceptable BOD_5, TSS and E.Coli levels, the PWSP shall be discharged in the spring/summer of 2008 via a 75mm forcemain into Sheardown Lake or shall be returned to RBC system for re-treatment prior to discharge to Sheardown Lake.

Prior to the PWSP being discharged to Sheardown Lake, phosphorus removal will be performed by batch dosage of alum prior to discharge to the lake. Assuming that raw sewage contains 7 mg/L of phosphorus and that 15 mg of alum is required to treat 1 mg of phosphorus, 105 mg of alum will be required to treat every litre of sewage. The sampling for Phosphorus level within the pond is planned for spring 2008.

Yours truly,

B.H. Martin Consultants Ltd.

F. G. Kord

REGISTERED PROFESSIONAL ENGINEER
F. Kordigharaphorlgo
LICENSEE
Jan. 11/08
NWT/NU

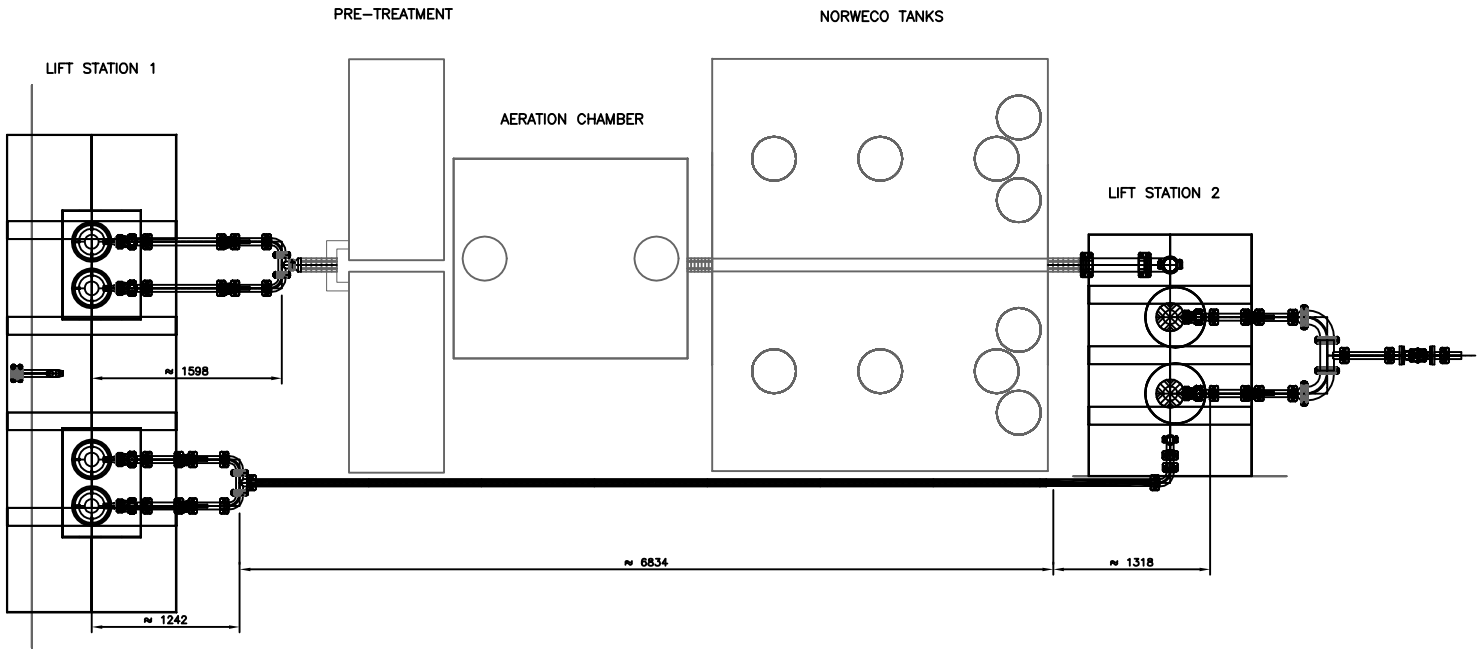
Marz G. Kord, P. Eng., M.Sc., MBA
Manager of Engineering
Mk/

➢ APPENDIX 1

- **AS-CONSTRUCTED SCHEMATICS AND PLAN**
- **PWSP PLAN AND SECTIONS**
- **PWSP LINER QA/QC REPORT FROM LAYFIELD**

TANKS A LOT SEWAGE TREAMENT SYSTEM

SCALE 1:50



Description	Date	No.
Revisions and Issues		

NORTH

Date Printed

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MECHANICAL

ELECTRICAL

Project

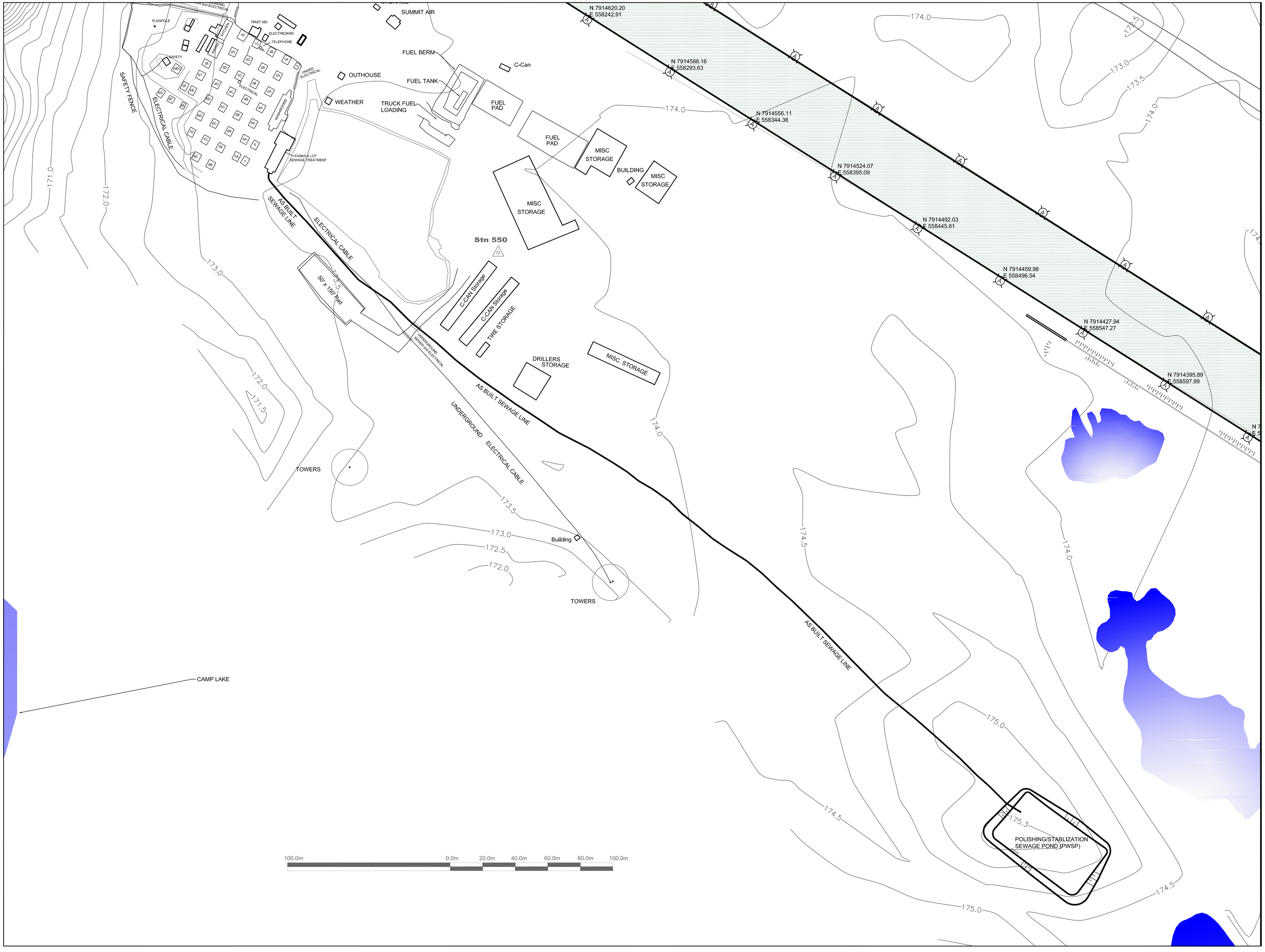
MARY RIVER PROJECT
BAFFINLAND IRON MINES CORP

BAFFIN ISLAND ONTARIO

Drawing

TANKS A LOT
AS BUILT
SCHEMATIC

Date: JAN 2008	CADD File Number: rpt/sewtreataug07/asbuilt
Scale: 1:50	Job Number: **06-090**
Drawn	
Checked	Drawing Number: **SK-1**
Approved	



Description	Date	No.
Revisions and Issues		

NORTH

Date Printed

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MECHANICAL ELECTRICAL

Project

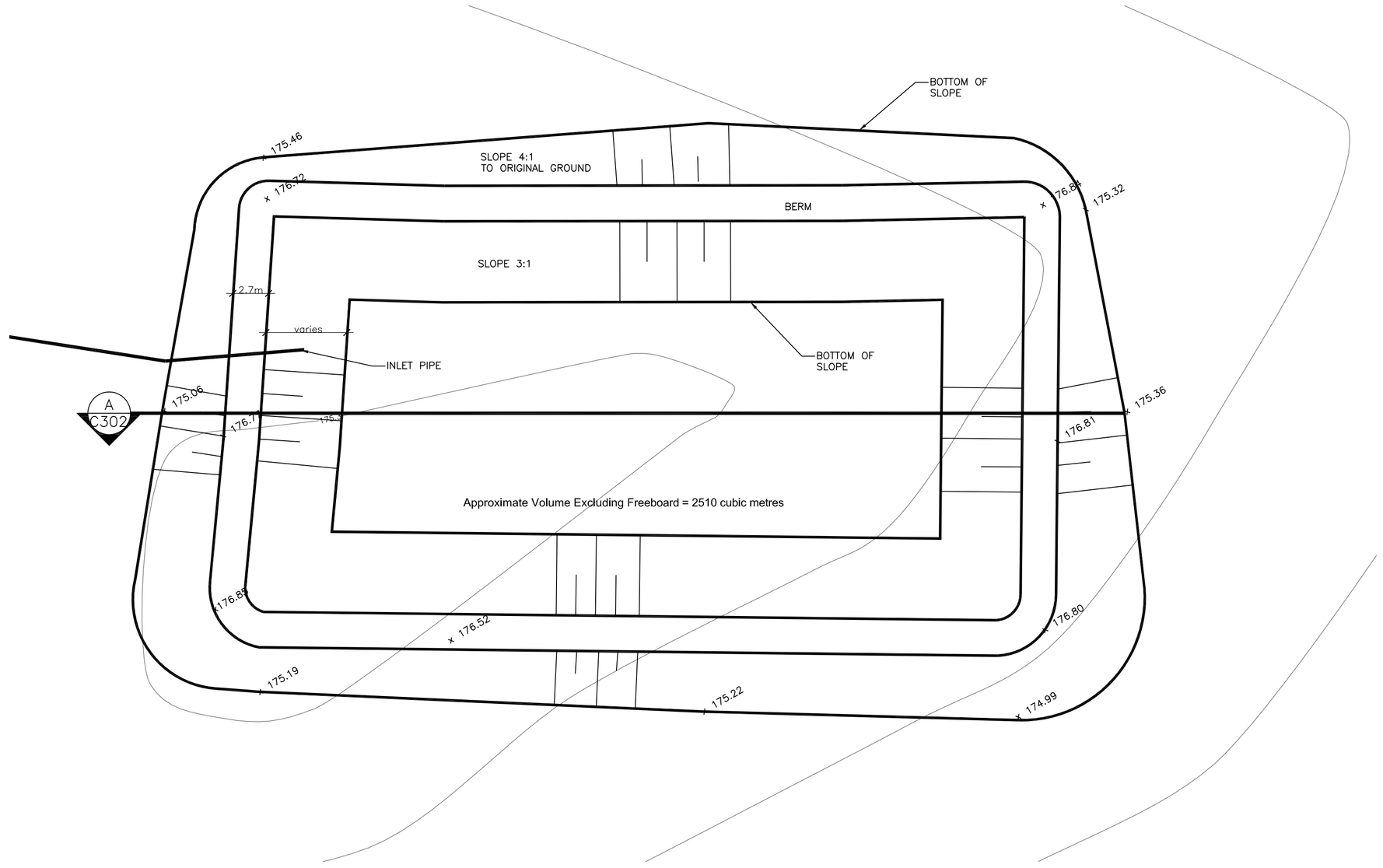
MARY RIVER PROJECT
BAFFINLAND IRON MINES CORP

BAFIIN ISLAND NUNAVUT

Drawing

MARY RIVER CAMP SITE AS CONSTRUCTED LAYOUT

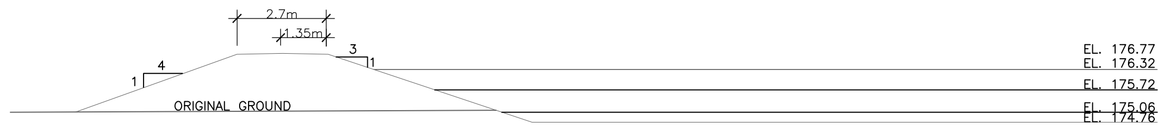
Date	CADD File Number
JAN 2008	survey/sewage as built
Scale 1:1000	Job Number **07-039**
Drawn AB	
Checked	Drawing Number **C301**
Approved	



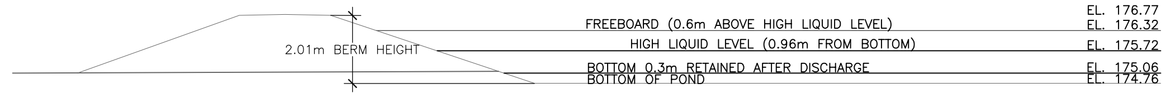
LAGOON PLAN VIEW
SCALE 1:250

SCALE
10m 0 10m

TYPICAL LAGOON BERM
SCALE 1:125



TYPICAL LAGOON BERM ELEVATIONS
SCALE 1:125



SCALE
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Description	Date	No.
Revisions and Issues		

NORTH Date Printed

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MECHANICAL ELECTRICAL

Project
MARY RIVER PROJECT
BAFFINLAND IRON MINES CORPORATION
BAFFIN ISLAND NUNAVUT

Drawing
AS BUILT POLISHING POND PLAN AND SECTIONS

Date	CADD File Number
JAN 2008	survey/maryriver/c302
Scale: AS NOTED	Job Number: **07-039**
Drawn: AB	
Checked	Drawing Number: **C302**
Approved	

LAYFIELD

TRANSMITTAL

LAYFIELD ENVIRONMENTAL SYSTEMS LTD.
11603-180 Street NW, Edmonton, AB T5S 2H6

To : Baffinland Iron Mines Corp.
1016 - 120 Adelaide Street West
Toronto, ON M5H-1T1

Date : October 22/ 2007

Attn. : David Alexander(416)364-8820

Project : Baffinlands Polishing Pond

Re : QA/QC

Please find the following documentation enclosed:

Copies	Pages	Description
3	Booklets	Qa/Qc Baffinlands Polishing Pond

_____ For approval and/or comments

_____ For your information & use

__X__ For your files

_____ Approved or approved as noted

_____ Not approved Re-submit

_____ Revised

Remarks :
Please sign and return the original five year warranty A.S.A.P enclosed in this package.

Copy to :

Signed : _____
Amritpal Hunjan

_____
(Signed as received)

Please sign as received and return a copy via fax (780) 452-9495

LS-03-QF-011

Layfield Environmental Systems Ltd.

Project Completion QA/QC Package
for

Baffinlands

Polishing Pond

Mary River, NWT

Supply and Install of EL 6040

Prepared By: Amritpal Hunjan

Reviewed By: Greg Van Petten

Date Submitted: September 4, 2007

LAYFIELD

Layfield Environmental Systems Ltd.

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Layfield Environmental Systems Ltd.

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New Construction

LAYFIELD

CERTIFICATE OF ACCEPTANCE OF SOIL SUBGRADE SURFACE

PROJECT NAME: Polishing Pond
PROJECT NUMBER: 07C-046
OWNER: Baffinlands
LOCATION: Mary River

I, the undersigned, a duly appointed representative of Layfield Environmental Systems Ltd. (LESL), have visually observed the soil subgrade described below, and found it to be an acceptable surface on which to install geomembrane.

This certification is based on observations of the surface of the subgrade only. No subterranean inspections or tests have been performed by Layfield Environmental Systems, and LESL makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. Layfield Environmental Systems accepts no responsibility for conformance of the subgrade to this project's specifications.

The soil subgrade accepted on this date refers to its present condition. Any changes in the subgrade condition that result from the effects of inclement weather and/or other forces beyond the control of Layfield Environmental Systems and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

Area Being Accepted: Area under Panels 1, 2, 3 & 4. Uncompacted sand with rock, subject to sluffing. Used LP-16 as an underlay

LAYFIELD ENVIRONMENTAL SYSTEMS REPRESENTATIVE:

Date: August 30, 2007
Signature:
Name: Allan McKinnon
Title: Project Supervisor

OWNERS REPRESENTATIVE:

Date: Aug 30 / 2007
Signature:
Name: ROLAND LANDRY
Title: PROJECT MANAGER
Company: BAFFINLAND IRON MINES

LAYFIELD

CERTIFICATE OF FINAL INSPECTION AND ACCEPTANCE

PROJECT NAME: Polishing Pond
PROJECT NUMBER: 07C2046 **DATE:** August 30 2007
OWNER: Baffinlands
LOCATION: Mary River.

Scope of Installation(s): **THE WORK**
Installed approx 2690 sq. metres of LP-16 as an underlay. Installed, welded, repaired/tested approx 3,659 sq metres of E.L. 6040.

Part 1 – LAYFIELD ENVIRONMENTAL SYSTEMS LTD.

I, Allan McKinnon, a duly appointed representative of Layfield Environmental Systems Ltd. (LESL), have visually observed the installations (as outlined above), and have found the Work to be complete and free of defects and declare that the Work was completed in accordance with the project specifications, Layfield Environmental Systems' QC program and the terms and conditions of the contract.

Layfield Environmental Systems Representative:
Name: Allan McKinnon
Title: Project Supervisor
Date: August 30, 2007 **Signature:**

Part 2 – OWNER (or Representative)

I, Roland Landry, a duly appointed representative of BAFFINLAND IRON MINES, do hereby take over and accept the installation(s) described above, and confirm that the work has been completed in accordance with the project specifications and the terms of the conditions of the contract.

I have evaluated and measured the work together with the Layfield Environmental Systems representative, and agree that the measurements shown are both true and correct, and that the installation has met our approval.

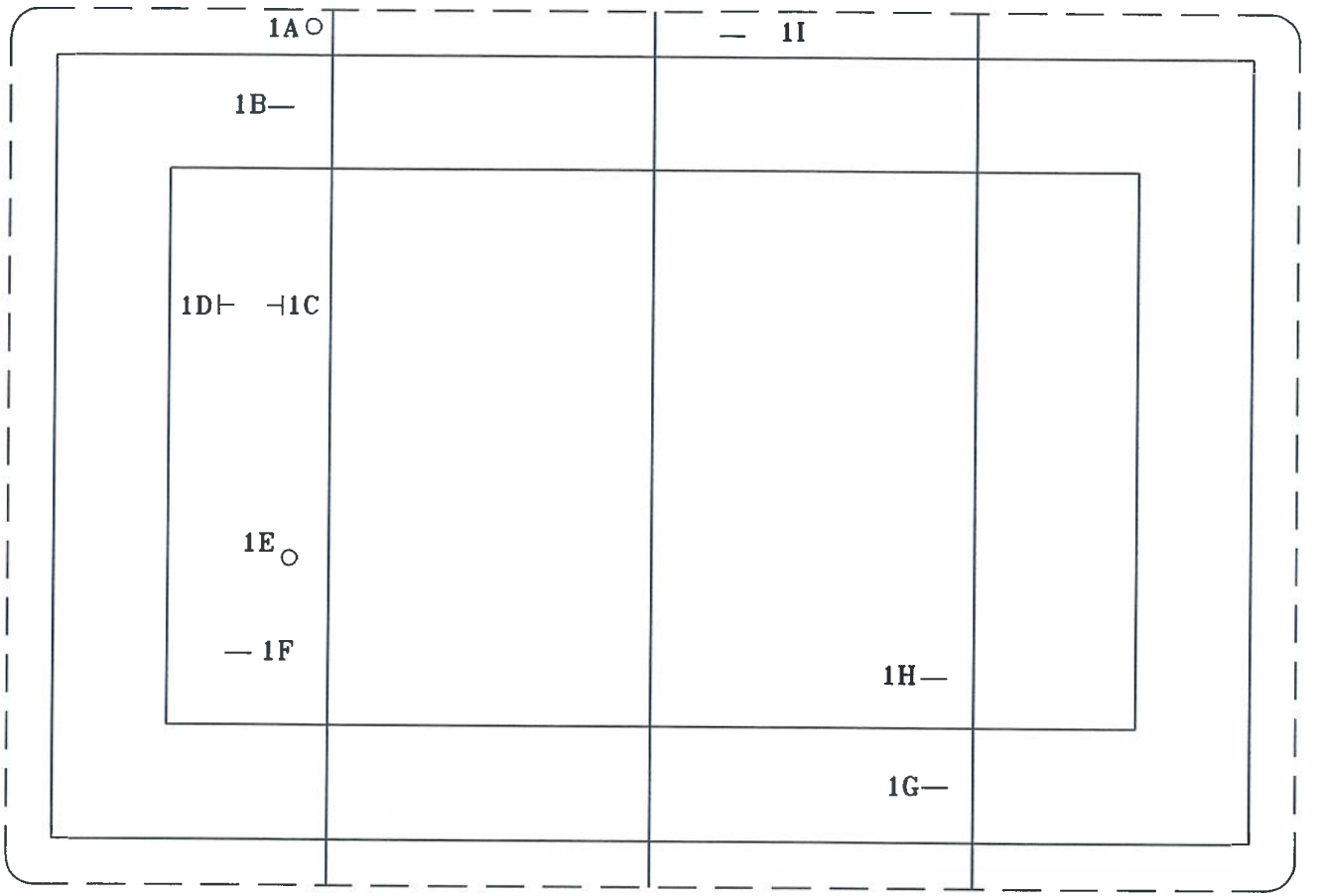
Owners Representative:
Name: ROLAND LANDRY
Title: PROJ. MANAGER
Company: BAFFINLAND IRON MINES
Date: Aug 30/07 **Signature:**

Comments: Informed Baffinlands on how to fill anchor tronch and to leave slack in liner

FILE NAME: 07C-046

LS-04-QF-001

No.	REVISIONS	DATE (MM/DD/YY)	BY
1	AS-BUILT REVISED	09/20/07	AH



⊢ T WELDS

○ MANUFACTURER/DELIVERY DAMAGE

— INSTALLATION DAMAGE

LAYFIELD
ENVIRONMENTAL SYSTEMS LTD.

POLISHING POND
EL 6040
AS-BUILT
BAFFINLAND
MARY RIVER, NWT

Quote No.	PROJECT No.
P8055	07C-046

DWG: 0F 1	SCALE : N.T.S.	
DWN: AH	CHKD:	APP'D:
DATE: 09/20/07	REVISION: 0	

GEOSYNTHETICS INVENTORY LOG

PROJECT NUMBER: 076-046
PROJECT TITLE: Mary River Polishing Pond
OWNER: Baffin land
CONTRACTOR: Raymac
LOCATION: Mary River
SHEET NUMBER: 1

MATERIAL TYPE: (GEOMEMBRANE) GEONET GEOTEXTILE OTHER _____
DATE OF ARRIVAL: Aug 19/07
DATE OF INVENTORY: _____
UNLOADING METHOD: Fork lift
INVENTORY BY: Adam Gandy
PRODUCT TYPE: Enviro liner
CONDITION IN TRUCK: _____
MATERIAL MANUFACTURER: Layfield

Panel / Roll Number	Material Dimensions			QC Certificate Available Y / N	Conf. Sample Removed Y / N	Other _____	Remarks
	Length	Width	Thickness or Weight				
1	53.4m	18.29m	40 mil			203795	
2	53.4m	18.29m	40 mil			203795	
3	53.5m	18.29m	40 mil			"	
4	53.4m	18.29m	40 mil			"	
5	53.4m	18.29m	40 mil			"	

SUBMITTED BY: _____

DATE: _____

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER: 07C-046 PROJECT TITLE: Polishing Pond
OWNER: Baffin land CONTRACTOR: _____
LOCATION: Mary River

GEOMEMBRANE: SECONDARY (PRIMARY) CLOSURE OTHER _____
SUBGRADE CONDITION (SURFACE COMPACTION, (PROTRUSIONS), DESICCATION, EXCESSIVE MOISTURE):

REMARKS: _____ DATE: _____
SHEET NUMBER: 1

DEPLOYMENT EQUIPMENT: _____

DESCRIPTION	PANEL LOCATION REFERENCE NUMBER	PANEL LOCATION REFERENCE NUMBER	PANEL LOCATION REFERENCE NUMBER
PANEL/ROLL NUMBER	1	2	3
DEPLOYED LENGTH			
AMBIENT AIR TEMP.			
VISUAL OBSERVATION			
OBSERVED OVERLAP	4"	4"	4"
CHECKED BY			
ADJACENT PANEL	N = E = S = W = 2	N = E = 1 S = W = 3	N = E = 2 S = W = 4
MEASURED THICKNESS	LEAD / L SIDE / R SIDE / TRAIL	LEAD / L SIDE / R SIDE / TRAIL	LEAD / L SIDE / R SIDE / TRAIL

DESCRIPTION	PANEL LOCATION REFERENCE NUMBER	PANEL LOCATION REFERENCE NUMBER	PANEL LOCATION REFERENCE NUMBER
PANEL/ROLL NUMBER	4		
DEPLOYED LENGTH			
AMBIENT AIR TEMP.			
VISUAL OBSERVATION			
OBSERVED OVERLAP	4"		
CHECKED BY			
ADJACENT PANEL	N = E = 3 S = W =	N = E = S = W =	N = E = S = W =
MEASURED THICKNESS	LEAD / L SIDE / R SIDE / TRAIL	LEAD / L SIDE / R SIDE / TRAIL	LEAD / L SIDE / R SIDE / TRAIL

SUBMITTED BY: _____

DATE: _____

LAYFIELD

GEOMEMBRANE TRIAL SEAM LOG

PROJECT NUMBER: 07C-046 **PROJECT TITLE:** Polishing Pond

OWNER: Baffinland **CONTRACTOR:**

LOCATION: Mary River **SHEET NUMBER:** 3

✓ **TF - # FUSION** _____ **TX - # = EXTRUSION** _____ **TS - # = SOLVENT**

SAMPLE NUMBER	APPROX. TIME & DATE	WELDING MACHINE NUMBER	WELD TECH.	TEMPERATURES				TEST RESULTS			PASS OR RETEST	CHECKED BY	REMARKS
				AMBIENT AIR TEMP.	PREHEAT OR MACHINE SPEED	EXTRUDER	WEDGE TEMP.	INSIDE PEEL MODE / STRENGTH	OUTSIDE PEEL MODE / STRENGTH	SHEAR MODE / STRENGTH			
1	12:30 Aug 30/07	9	AG	10°C	60%		420°C	61/60/62/62/65	63/63/61/61/65	80/77	Pass	AG	
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SUBMITTED BY: [signature]
DATE: Aug 30/07

LAYFIELD

GEOMEMBRANE TRIAL SEAM LOG

PROJECT NUMBER: 07C-046 **PROJECT TITLE:** Polishing Pond

OWNER: Baffinland **CONTRACTOR:**

LOCATION: Mary River **SHEET NUMBER:** 1

✓ **TF - # FUSION** **TX - # = EXTRUSION** **TS - # = SOLVENT**

SAMPLE NUMBER	APPROX. TIME & DATE	WELDING MACHINE NUMBER	WELD TECH.	TEMPERATURES				TEST RESULTS			PASS OR RETEST	CHECKED BY	REMARKS
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1	15:00 Aug 29/07	#9	AG	10°C	60%		420°C	70/64/65/70/68	60/71/66/66/65	74/79	Pass	AG	
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SUBMITTED BY:

DATE: Aug 30/07

LAYFIELD

GEOMEMBRANE TRIAL SEAM LOG

PROJECT NUMBER: 07C-046 **PROJECT TITLE:** Polishing Pond

OWNER: Baffinland **CONTRACTOR:**

LOCATION: Mary River **SHEET NUMBER:** 2

____ **TF - # FUSION** _✓_ **TX - # = EXTRUSION** ____ **TS - # = SOLVENT**

SAMPLE NUMBER	APPROX. TIME & DATE	WELDING MACHINE NUMBER	WELD TECH.	TEMPERATURES				TEST RESULTS			PASS OR RETEST	CHECKED BY	REMARKS
				AMBIENT AIR TEMP.	PREHEAT OR MACHINE SPEED	EXTRUDER	WEDGE TEMP.	INSIDE PEEL MODE ---------- STRENGTH	OUTSIDE PEEL MODE ---------- STRENGTH	SHEAR MODE ---------- STRENGTH			
1	18:45 Aug 29/07	Pem 1	AM	10° C	235° C		235°C	60/58/61/59/66	/ / / /	74 / 81	Pass	AG	
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LS FORM 3

LAYFIELD ENVIRONMENTAL SYSTEMS

SUBMITTED BY:

DATE: Aug 30/07

LAYFIELD

GEOMEMBRANE TRIAL SEAM LOG

PROJECT NUMBER: 07C-046 **PROJECT TITLE:** Polishing Pond

OWNER: Baffinland **CONTRACTOR:**

LOCATION: Mary River **SHEET NUMBER:** 4

____ **TF - # FUSION** _✓_ **TX - # = EXTRUSION** ____ **TS - # = SOLVENT**

SAMPLE NUMBER	APPROX. TIME & DATE	WELDING MACHINE NUMBER	WELD TECH.	TEMPERATURES				TEST RESULTS			PASS OR RETEST	CHECKED BY	REMARKS
				AMBIENT AIR TEMP.	PREHEAT OR MACHINE SPEED	EXTRUDER	WEDGE TEMP.	INSIDE PEEL MODE / STRENGTH	OUTSIDE PEEL MODE / STRENGTH	SHEAR MODE / STRENGTH			
1	15:45 Aug 30/07	Dem 1	AM	10° C	235° C		235° C	66/63/60/60/61	/ / / /	81 / 81			
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LS FORM 3

LAYFIELD ENVIRONMENTAL SYSTEMS

SUBMITTED BY: [signature]
DATE: Aug 30/07

LAYFIELD

GEOMEMBRANE SEAM LOG

PROJECT NUMBER: 07C-046
PROJECT TITLE: Polishing Pond
OWNER: Baffinland
CONTRACTOR:
LOCATION: Mary River

PASSING TRIAL SEAMS

✓ FUSION
_____ EXTRUSION
_____ SOLVENT

NO.	TIME	TECH ID
1	12:30	AG

SHEET NUMBER: 2
DATE: Aug 30/07

SEAM NUMBER	SEAM SECTION * START POINT	SEAM SECTION * FINISH POINT	APPROX. START TIME	AMB. AIR TEMP.	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES: DIGITAL SET WEDGE OR BARREL	MACHINE TEMPERATURES: DIGITAL SET WEDGE OR BARREL	APPROX. LENGTH WELDED	DESTR. NUMBER	CHK'D BY	REMARKS	NON-DESTRUCTIVE: TEST DATE	NON-DESTRUCTIVE: CHECKED BY
2/3	SOES	NOES	12:45PM	10°c	AG	60%	420°C	-	38.72m		AG		Aug 30/07	AG
3/4	SEOS	NEOS	1:30PM	10°c	AG	60%	420°C	-	36.84m		AG		Aug 30/07	AG
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
							DAILY TOTAL							

* *REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR, OR A POINT LOCATION ON THE SEAM.*

SUBMITTED BY: _____
DATE: _____

LAYFIELD

GEOMEMBRANE SEAM LOG

PROJECT NUMBER: 07C-046
PROJECT TITLE: Mary River Polishing Pond
OWNER: Baffinland
CONTRACTOR: Rayinac
LOCATION: Mary River

PASSING TRIAL SEAMS

✓ FUSION
_____ EXTRUSION
_____ SOLVENT

NO.	TIME	TECH ID
1	15:30	AG

SHEET NUMBER: 1
DATE: Aug 29/07

SEAM NUMBER	SEAM SECTION * START POINT	SEAM SECTION * FINISH POINT	APPROX. START TIME	AMB. AIR TEMP.	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES DIGITAL SET WEDGE OR BARREL	MACHINE TEMPERATURES DIGITAL SET WEDGE OR BARREL	APPROX. LENGTH WELDED	DESTR. NUMBER	CHK'D BY	REMARKS	NON-DESTRUCTIVE TEST DATE	NON-DESTRUCTIVE CHECKED BY
1/2	S	N	4:00PM		AG	60%	420°C	-	38.72m		AG		Aug 29/07	AG
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
/	-						-	-						
								DAILY TOTAL						

* *REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR, OR A POINT LOCATION ON THE SEAM.*

SUBMITTED BY: _____
DATE: _____

LAYFIELD

GEOMEMBRANE VACUUM / AIR LANCE TEST LOG

PROJECT NUMBER: 07C-046 **PROJECT TITLE:** Polishing Pond

OWNER: Baffinland **CONTRACTOR:**

LOCATION: Mary River **DATE:** Aug 30/07

VACUUM BOX ✓ **AIR LANCE** _____ **SHEET NUMBER:** 1

SEAMS								REPAIRS					
SEAM NUMBER	SEAM SECTION * FROM TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE NO YES	CHK'D BY	REMARKS **	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	CHK'D BY	REMARKS **
1-2	WEOS - SEOS	Aug 29	AG.		✓	Am		A1	Aug 30/07	AG		AG	
2-3	WEOS - SEOS	Aug 30	A.G.		✓	Am		B1	Aug 30/07	AG		AG	
3-4	SEOS - WEOS	Aug 2	A.G.		✓	Am		C1	Aug 30/07	AG		AG	
	-							D1	Aug 30/07	AG		AG	
	-							E1	Aug 30/07	AG		AG	
	-							F1	Aug 30/07	AG		AG	
	-							G1	Aug 30/07	AG		AG	
	-							H1	Aug 30/07	AG		AG	
	-							I1	Aug 30/07	AG		AG	
	-												
	-												
	-												
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	-												
	-												
	-												
	-												

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM

** RECORD QUANTITY OF LEAKS DETECTED AND REFERENCE NEW DEFECT CODE IN REMARKS

SUBMITTED BY: _____

DATE: _____

LAYFIELD

GEOMEMBRANE DEFECT / REPAIR LOG

PROJECT NUMBER: 07C - 046 **PROJECT TITLE:** Polishing Pond

OWNER: Baffinland **CONTRACTOR:**

LOCATION: Mary River **SHEET NUMBER:** 1

DEFECT CODE	LOG DATE	DEFECT LOCATION		DEFECT TYPE	REPAIR TYPE	WELD TECH.	REPAIR DATE	REMARKS **	TEST DATE	CHECKED BY
		SEAM OR PANEL NO.	DEFECT LOCATION DESCRIPTION							
1A	Aug 30/07	P 1	1.25m fr start .53m E	D	G & W	AM	Aug 29/07		Aug 30/07	AG
1B	Aug 30/07	P 1	2.81m fr start 1.2m E	CR	G & W	AM	Aug 29/07		Aug 30/07	AG
1C	Aug 30/07	P 1	11.24m fr start 4.06m E	T	G & W	AM	Aug 29/07		Aug 30/07	AG
1D	Aug 30/07	P 1	11.24m fr start 7.81m E	T	G & W	AM	Aug 29/07		Aug 30/07	AG
1E	Aug 30/07	P 1	19.67m fr start 1m E	D	G & W	AM	Aug 29/07		Aug 30/07	AG
1F	Aug 30/07	P 1	24.98m fr start 7.81m E	MD	G & W	AM	Aug 29/07	hOle from shop or shiping	Aug 30/07	AG
1G	Aug 30/07	S 3/4	6.56 fr start	IO	G & W	AM	Aug 30/07		Aug 30/07	AG
1H	Aug 30/07	S 3/4	9.37 fr start	CO	G & W	AM	Aug 30/07	welded over a shop seem	Aug 30/07	AG
1I	Aug 30/07	S 2/3	At End 5.62m Long	Ext	G & W	AM	Aug 30/07	Extended the Anchortrench	Aug 30/07	AG

DEFECT TYPE: AD - ANIMAL RELATED DAMAGE; B - UNDISPERSED RESIN BEAD; BO - FUSION WELDER BURN; BS - BOOT/SKIRT FROM FML PENETRATION; CO - CHANGE OF OVERLAP; CR - CREASE; D - INSTALLATION DAMAGE; DS-# - DESTRUCTIVE TEST NUMBER; EE - EARTHWORK EQUIPMENT DAMAGE; EXT - EXTENSION; FM - FISHMOUTH; FS - FAILED SEAM LENGTH; FTS - FIELD TEST STRIP; HT - HEAT TACK BURN; IO - INSUFFICIENT OVERLAP (UNDER SPEC.); MD - MANUFACTURER/DELIVERY DAMAGE; PT - PRESSURE TEST CUT; SI - SOIL SURFACE IRREGULARITY; SL - SLAG ON TEXTURED SHEET; T - THREE PANEL INTERSECTION; VL - VACUUM TEST LEAK; WR - WRINKLE; WS - WELDER RESTART; OTHER:

REPAIR TYPE: P - PATCH, C - CAP, RS - RECONSTRUCTED SEAM, G&W - GRIND/WELD

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID.

** COLUMNS TO BE USED BY THE PROJECT SUPERVISOR OR LEAD TECHNICIAN ONLY.

SUBMITTED BY: Adam Gould

DATE: Aug 30/07

S/O 203795

TRACEABILITY REQUIRED

LAYFIELD

SHOP QC

Job Desc.	Mary River Polishing Pond		
Customer:	Baffinland Iron Mines		
Sales Person:	JL	Date:	8-Jun-07
Material Type:	EL 6040 black 148" wide 40 mil		
Prod Code:	0		
Fab Code:	03LE1040		
Length	175.2	Width	60.0

Special Fabrication Instructions

Description of Operations/Procedures

In-Process Inspection				
#1	#2	#3	Completed	

Roll Tag #	#	Piece #	Liner# / Panels	Quantity	Repairs
35378	E22996	018	1/1 + 185'		
35248	E22947	015	1/58'		
35378	E22996	010	1/3		
35378	E22996	010	2/ 2+ 126'		
35378	E22996	009	2/ 60' + 2		
35378	E22996	009	3/ 3 + 50'		
35378	E22996	015	3/126' + 1		
35378	E22996	015	4/ 4		
35378	E22996	013	4/2 5/5		

Mach: PFS Speed: Temp: Splice:

3

Liner #		Shear (Seam #) 1	4			
P8055	1	75	83			
P8055	2	79	81			
P8055	3	86	76			
P8055	4	79	84			
P8055	5	70	76			
P8055						
P8055						
P8055						
P8055						
P8055						

Peel (Seam #) 1 L	R	4 L	R	L	R	L	R	L	R
72	69	71	72						
68	72	65	69						
64	69	66	68						
65	68	70	66						
70	70	54	55						

Tech/Date (Seam #) 1	4			
NL	NL			
MO	MO			
MO	MO			
MO	BIA			
BIA	BIA			

Inspections #1 Norm June 27/07 #2 MO June 27/07 #3 Final

LAYFIELD ENVIRONMENTAL SYSTEMS LTD.
11603 – 180 Street Edmonton, Alberta T5S 2H6 Canada
Phone: (780) 453-6731
Fax: (780) 452-9495
Toll Free: 1 800 840-2884
Web: www.layfieldgroup.com
E-Mail: edm@layfieldgroup.com

INSTALLATION WARRANTY

Layfield Reference No: (Job#) 07C-046

LAYFIELD ENVIRONMENTAL SYSTEMS LTD. (LAYFIELD) hereby warrants to Baffinlands ; (the Customer) that the work performed by LAYFIELD on the Installation described as Polishing Ponds (EL 6040, LP16) will:

1. Meet the field seam specifications set out in the contract between LAYFIELD and the Customer (as amended by LAYFIELD's quotation), all workmanship to meet the requirements of LAYFIELD's Field Installation Quality Assurance program, and be free of defects at the time of completion of the Installation; and

2. Be free of installation defects from the date of the completion of the Installation (08/20/07) for a period of 1 year so long as the completed Installation is used for the purposes and in the manner for which the Installation was designed.

Should damage or defects within the scope of the aforesaid warranties occur, LAYFIELD shall repair the damage or defects, PROVIDED THAT the area to be repaired must first be made ready by the Customer and be in a clean, dry, unencumbered condition, free from all water, soil, sludge, residuals, and liquids of any kind.

To enable LAYFIELD to investigate and determine the cause of any alleged damage or defect, notice and details of any claim hereunder must be presented in writing to LAYFIELD within thirty (30) days after the alleged damage or defect was first noticed or observed. Failure to provide such notice and details shall invalidate all warranties provided hereunder.

The liability of LAYFIELD under the aforesaid warranties are subject to the following conditions:

a. LAYFIELD's only obligation shall be to repair or replace any defective workmanship and in no event shall LAYFIELD be liable for any amount in excess of the cost of the Installation;

b. No allowance will be made for repairs, replacements or alterations made by the Customer unless with the prior written consent of LAYFIELD;

c. The warranties hereunder extend only to the Customer and are not transferable;

d. The warranties hereunder shall not apply to any damage or defects resulting from misuse, mechanical abuse by machinery, equipment or persons, excessive pressures or stresses, exposure of the completed Installation of harmful chemicals, unusual weather conditions, casualty catastrophe such as (but not limited to) earthquake, flood, hail, tornado, or any other act of God;

e. Under no circumstances shall LAYFIELD be liable for any special, direct, indirect, or consequential damages including the loss of use of the Installation howsoever caused;

f. All liner materials provided for the Installation are covered by a separate warranty provided by the material manufacturer and LAYFIELD shall not be liable for material failure claims hereunder;

g. The warranties hereunder are given in lieu of all other warranties, express, implied, statutory, or otherwise, and the Customer expressly waives all other warranties and claims whatsoever except those specifically given herein, and the Customer acknowledges that the warranties hereunder are accepted in preference to and to the exclusion of any or all other warranties; and

h. An Installation Warranty will <u>not</u> be provided for lining projects unless the installation is completed by LAYFIELD personnel or designated Layfield subcontractors.

LAYFIELD ENVIRONMENTAL SYSTEMS LTD.

James Teppan VP & General Manager

➢ APPENDIX 2

- **PHOTOS**

Photo 1: Sewage Treatment Building (Tanks-A-Lot System)

Photo 2: Storage Tank

Photo 3: Pre-treatment tanks and aeration chamber at the bottom of the photo

Photo 4: Aeration, final process and UV tanks

Photo 5: Final pumping chamber going to the PWSP