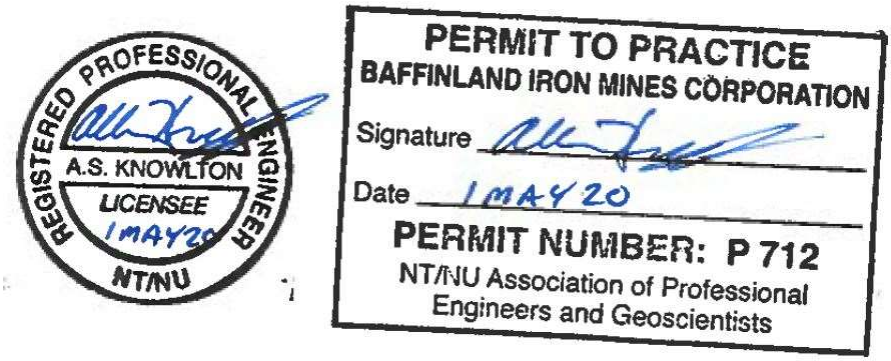
BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

Construction Summary Report
Mine Site Waste Rock Facility Pond Expansion and Drainage System



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Date	**Rev.**	**Prepared By**

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APPENDIX B	CONCORDANCE TABLES
APPENDIX C	AS-BUILT DOCUMENTATION
APPENDIX D	GOLDER CONSTRUCTION QUALITY CONTROL REPORT & LAYFIELD QA/QC
APPENDIX E	DAILY CONSTRUCTION REPORTS
APPENDIX F	DESIGN SPECIFICATIONS

Name and Operator of the Mine:	**Baffinland Iron Mines - Mary River Project** **Baffinland Iron Mines Corporation**
Contact information of the Operator of the Mine:	In its capacity as General Partner of Baffinland Iron Mines Corporation 2275 Upper Middle Road East, Suite 300. Oakville, Ontario. contact@baffinland.com T: +1-647-253-0596

1. FACILITY DESCRIPTION

1.1 PURPOSE

Baffinland Iron Mines Corporation (Baffinland) operates an iron mine at the Mary River Project (the Project) in the North Baffin Region of Nunavut. Ore is mined from Deposit 1, crushed on site, and hauled to Milne Port (approximately 100 km from site) where it is stockpiled and shipped off-site for processing. Waste rock from the open pit is disposed of at the Waste Rock Facility (WRF) which is located to the north of the open pit. The location of the facility is provided in Appendix A.

Waste rock produced from the open pit mining operation is managed at the WRF, which consists of a waste rock stockpile, a sedimentation pond (WRF Pond), and perimeter ditches. Surface runoff and seepage from the WRF is collected in the ditches and directed to the WRF Pond. Containment for the WRF Pond is provided by a berm in conjunction with natural topography, utilizing an HDPE geomembrane as the low permeability element. The existing WRF Pond was constructed between September 2015 to May 2016.

The WRF Pond was originally designed as a sedimentation pond with an as-built capacity of 9,200 m^3 (noted in Hatch CSR dated January 24, 2017), however, Baffinland has identified that the WRF is potentially generating acid rock drainage (ARD) and must be treated prior to discharge. A Water Treatment Facility, which treats the water, was previously constructed in June 2018 to address this concern. It has been identified that seepage out of the existing WRF Pond berm is occurring. Hatch carried out an inspection in August 2017 to identify the source of the seepage, but was not able to conclusively determine the source. Golder carried out an inspection on August 17-19, 2018 to identify the source of the seepage with inconclusive results. An inspection by Layfield Canada Inc. (Layfield) in 2018 further evaluated the integrity of the HDPE geomembrane liner and could not identify visible failures in the exposed liner, however voids under the liner were identified. To address the question of liner integrity, Baffinland determined that the prudent course of action was to replace the existing pond liner. It was determined through the course of the liner replacement that the bedding material under the existing Pond likely resulted in the integrity of the liner becoming compromised over time and inadequately anchored liner edges allowing water infiltration under the liner. This is further discussed in Section 8.0

In addition, it was determined that an expansion of the WRF Pond was required to collect and manage the runoff generated over the proposed expanded WRF footprint for waste rock production through the year 2022, with a new maximum design capacity of 65,000 m^3 (operating capacity of 50,000 m^3). This expansion of the WRF Pond was carried out concurrently with the replacement of the existing pond HDPE geomembrane. As-built information has calculated the maximum capacity of the pond to be 74,140 m^3 (operating capacity of 52,198 m^3).

1.2 DESIGN BASIS

In general, the WRF Pond and the WRF Expansion Drainage System has been designed in accordance with:

- the recommendations provided by the Canadian Dam Association (CDA) per Golder Associates Ltd. (Golder) WRF Pond Expansion Drainage System report (Appendix F).
- Canadian Dam Association Technical Bulletin: Application of Dam Safety Guidelines to Mining Dams (CDA 2014);
- Canadian Dam Association's Dam Safety Guidelines (CDA 2007); and
- the provisions of Water License No. 2AM-MRY1325-Amendment No. 1.

The design of the WRF Pond and the WRF Expansion Drainage System is provided on the Golder Issued for Construction (IFC) drawings (Appendix F).

1.3 GENERAL SCOPE OF WORK

The WRF Pond Expansion involved the following scope of work:

- Remove and replace existing HDPE geomembrane;
- Raise the WRF Pond berm to crest elevation 579.7 meters above sea level (masl);
- Construct ring road around WRF to allow for year round access, maintenance, and construction of the ditches during summer months, additionally acts as diversion berm;
- Excavate the East Ditch;
- Excavate the West Ditch;
- Excavate WRF Pond expansion to design elevations;
- Install non-woven geotextile fabric in ditches and riprap;
- Strip organic and deleterious materials over expanded footprint;
- Place fill materials in berm and footprint area, compacting layer by layer;
- Construction of the emergency spillway;
- Placing of the geomembrane bedding materials; and,
- Installation of the HDPE geomembrane

The East and West Ditches were excavated to an approximate depth of 1.0 m and side slope of approximately 2H:1V through the existing ground. Riprap was placed, as necessary, to reduce observed erosion and stabilize side slope of banks. See Figure 1.

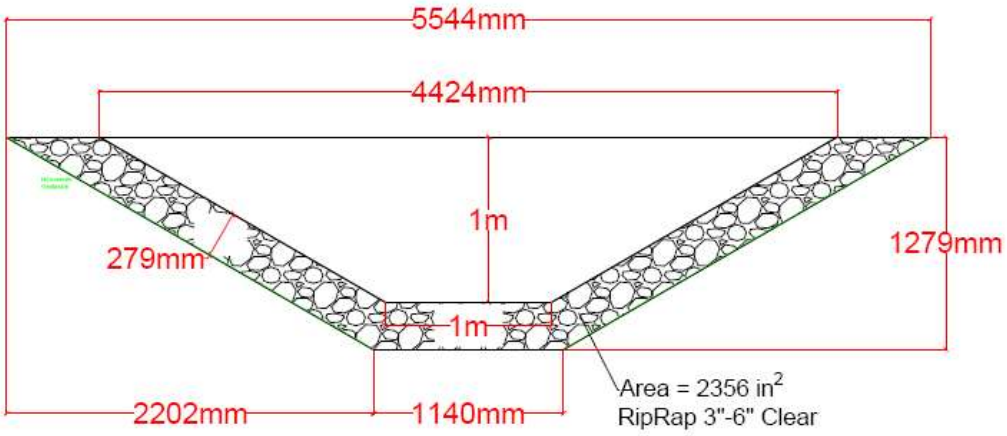


Figure 1 - Modified Ditch Cross Section Profile

1.4 LOCATION AND BASE ELEVATIONS

The crest of the new pond berm is elevation 579.7 m north side and 579.3 m south side. The bottom of pond elevation varies from 573.37 m (lowest) to 580.298 m east and 578.08 west.

Location	Northing	Easting	Elev. (m)
East Pond Inlet	7916747.036	563147.29	580.298
West Pond Inlet	7916546.74	562875.2	578.08
East Ditch Upstream (excavated)	7916275.215	563351.169	596.002
East Ditch Upstream (top riprap)	7916275.215	563351.169	596.332
East Ditch @ culvert (excavated)	7916711.127	563175.002	581.307
East Ditch @ culvert (top riprap)	7916711.127	563175.002	581.638
West Ditch Upstream (excavated)	7916104.645	562898.876	585.25
West Ditch Upstream (top riprap)	7916104.645	562898.876	585.587
Pond Berm Northside Crest	Varies	Varies	579.7
Pond Berm Southside Crest	Varies	Varies	579.3
Pond Bottom (lowest area)	Varies	Varies	573.37
Pond Bottom (west side)	Varies	Varies	578.08
Pond Bottom (east side)	Varies	Varies	580.298

2. CONSTRUCTION MATERIALS

Materials specifications for constructing the facility were derived from the Golder specifications shown in Appendix F, and included:

- 500 mm minus rockfill
- intermediate bedding material per golder specification (Appendix F)
- 75-150 mm clear riprap
- non-woven geotextile
- Layfield Enviroliner 6060 geomembrane liner (Appendix F)

All construction aggregate was obtained from the former D1Q1 quarry area of Deposit 1.

A perimeter ring road was constructed around the facility to allow for all season maintenance and construction during summer months. The ring road was constructed with 500 mm minus rockfill placed directly on the existing ground. The ring road also acts as a diversion berm for surface water outside the facility.

Existing material within the bottom of the WRF Pond expansion footprint was removed down to permafrost and backfilled with 500 mm minus rockfill and 300 mm of intermediate bedding material. The pond bottom and inward berm slopes were lined with 1.5 mm (60 mil) Layfield Enviroliner 6060 (technical data sheet included in Appendix F) as the low permeability element for the WRF Pond as per the Golder specifications in Appendix F.

All ditches were lined with non-woven geotextile and the fine bedding material at the pond bottom was substituted with the non-woven geotextile per Golder specification 6.0 GEOTEXTILE in Appendix F. All ditches were lined with 75-150 mm clear riprap to stabilize the side slopes and provide erosion control.

3. CONSTRUCTION ACTIVITY SUMMARY

The following sequence of construction occurred at the WRF:

1) Perimeter Ring Road Construction – Started April 12, 2019, Completed June 7, 2019
   a) Survey toe of perimeter ring road
   b) Clear snow, strip organic and deleterious materials at perimeter ring road
   c) Install 500mm minus rockfill and compact East & West side of WRF
   d) Install 500mm minus rockfill and compact North side of WRF
2) Expand WRF Pond berm and raise to elevation 579.7 m in 1 m compacted lifts
   Started June 13, 2019, Completed December 18, 2019
3) Construct West diversion ditches – Started June 23, 2019, Completed July 3, 2019
   a) Survey ditch control points and offset lines
   b) Excavate west ditch per Appendix F
   c) Install non-woven geotextile
   d) Install 75-150 mm clear riprap
4) Construct East diversion ditches – Started July 14, 2019, Completed August 12, 2019
   a) Survey ditch control points and offset lines
   b) Excavate east ditch per Appendix F
   c) Install non-woven geotextile
   d) Install 75-150 mm clear riprap
5) Excavate East Pond Expansion – Started July 27, 2019, Completed September 27, 2019
   a) Survey ditch control points and offset lines.
   b) Excavate existing material to permafrost.
   c) Install sump pits to control and manage water. Pump water to pond as required.
   d) Place 500 mm minus rockfill on pond bottom from permafrost elevation to intermediate bedding elevation ensuring minimum of 1 m cover over permafrost and maximum 1 m lifts
   e) Compact rockfill lifts upon placement using D6 dozer with minimum 6 passes
   f) Excavate WRF Pond inward berm slopes and place 500mm minus rockfill where required to achieve design elevations. Compact rockfill upon placement using D6 dozer with minimum 6 passes.
   g) Place 300 mm of intermediate bedding material and compact upon placement using D6 dozer with minimum 6 passes.
6) Pump water from north side of existing pond liner area. Install sumps at inlets to WRF Pond to control and manage water inflow via pumping. Remove existing liner at North side and install temporary dissecting berm to split the pond in half using intermediate bedding material.
7) Excavate existing subgrade to permafrost at north side of WRF Pond – Started July 29, 2019, Completed September 14, 2019
   a) Place backfill on pond bottom from permafrost elevation to intermediate bedding elevation with 500 mm minus rockfill ensuring minimum of 1 m cover over permafrost and maximum 1 m lifts

   b) Compact rockfill lifts upon placement using D6 dozer with minimum 6 passes
   c) Place 300 mm of intermediate bedding and compact upon placement using D6 dozer with minimum 6 passes
8) Install geotextile and geomembrane at existing north side of WRF Pond and lap over the temporary dissecting berm to the opposite side crest of the dissecting berm and weighted. Backfill anchor trenches with intermediate bedding material.
   Started September 14, 2019, Completed September 20, 2019
9) Install geotextile and liner at new east side WRF Pond expansion. Backfill anchor trenches with intermediate bedding –Started September 21, 2019, Completed November 7, 2019
10) Excavate anchor trench on WRF Pond south side per Golder revised anchor trench detail shown in Figure 47.
11) Divert WRF Pond inlet water to north side of WRF Pond and remove existing south side of WRF Pond liner
12) Excavate existing subgrade to permafrost at south side of WRF Pond.
    Started September 15, 2019, Completed October 26, 2019
    a) Place 500mm minus rockfill on pond bottom from permafrost elevation to intermediate bedding elevation ensuring minimum of 1 m cover over permafrost and maximum 1 m lifts
    b) Compact rockfill lifts upon placement using D6 dozer with minimum 6 passes
    c) Place 300mm of intermediate bedding material and compact upon placement using D6 dozer with minimum 6 passes
13) Excavate existing subgrade to permafrost at west side of WRF Pond.
    Started October 27, 2019, Completed December 16, 2019
    a) Place 500mm minus rockfill on pond bottom from permafrost elevation to intermediate bedding elevation ensuring minimum of 1 m cover over permafrost and maximum 1 m lifts
    b) Compact rockfill lifts upon placement using D6 dozer with minimum 6 passes
    c) Place 300mm of intermediate bedding material and compact upon placement using D6 dozer with minimum 6 passes
14) Install geotextile and geomembrane at new and existing south side, new west side and north berm raise of the WRF Pond. Backfill anchor trenches with intermediate bedding material.
    Started November 7, 2019, Completed January 19, 2020

In summary, construction activities for the earthworks began April 12, 2019 and were completed December 16, 2019. The construction activities for the geomembrane installation began September 5, 2019 and were completed January 19, 2020.

4. CONSTRUCTION QUALITY CONTROL

4.1 SCOPE

Construction Quality Control (CQC) refers to measures implemented by Baffinland and its Contractors to verify that materials used in construction and their workmanship meet the requirements of the Issued for Construction (IFC) drawings, design criteria, and specifications. The CQC actions included, but were not limited to: verifying the suitability of construction material properties with field testing and/or visual inspection, documenting testing procedures and results, and documenting construction activities including verification of design geometry through survey and maintaining photographic records.
The CQC activities carried out by Baffinland are described below.

4.2 VISUAL INSPECTIONS AND DOCUMENTATION OF CONSTRUCTION ACTIVITIES

Allan Knowlton, P.Eng. and Roger Doyle of Baffinland provided daily visual inspections throughout the entire construction period to verify compliance with the IFC drawings and design criteria.

Sana (Earthworks Contractor) & Layfield (Liner Installer) provided daily construction reports to Baffinland (see Appendix E), and daily photos were taken of the construction progress (Section 5). Prior to the use or change of use of materials, Allan Knowlton, P.Eng., visually verified its suitability for construction use and the onsite Geologist verified its suitability as a construction material. If the product did not meet the design criteria it was rejected (i.e. excessive moisture content, maximum aggregate size exceeded, excessive fines content). A fulltime surveyor was utilized to ensure maximum lift height was not exceeded and to provide layout/placement controls. Each berm lift was documented and recorded by the surveyor. See as-built documentation for final construction contours based on the survey data (Appendix C).

Golder was present to provide quality control and assurance for the liner installation and documentation of the installation. Layfield provided daily construction reports (Appendix E) and photos were taken on a daily basis to record progress and installation.

4.3 GOLDER SITE INSPECTION FOR LINER INSTALLATION

Golder provided Construction Quality Assurance (CQA) services for the WRF Pond geomembrane installation from 5 September 2019 – 27 November 2019. See Appendix D for a detailed discussion on the inspection of the liner installation. See Appendix D.1 for Layfield QA/QC documentation.

5. PHOTOGRAPHIC RECORDS

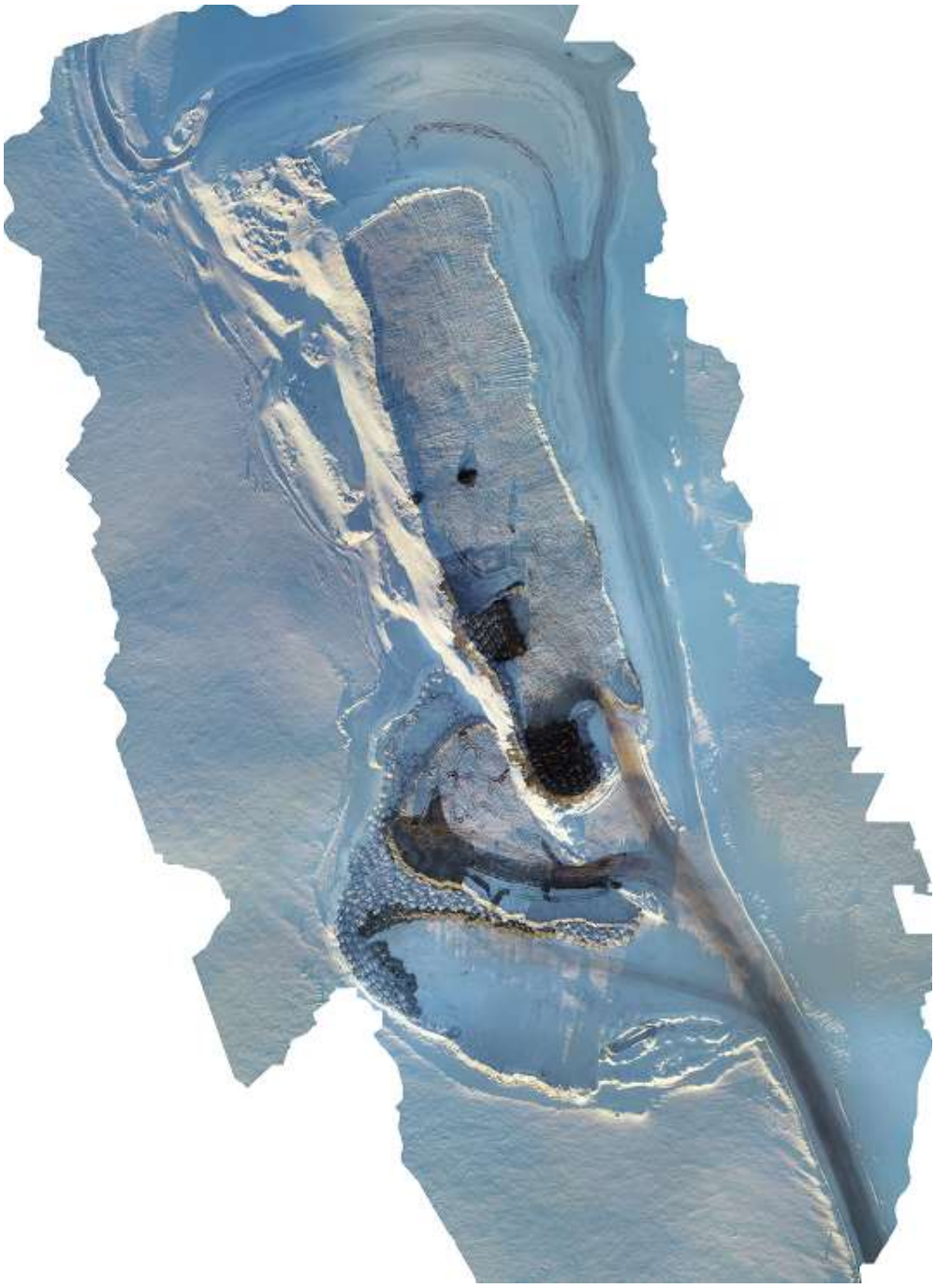


Figure 2 - Pre-Construction Aerial Photo – March 21, 2019



Figure 3 - Construction Progress Aerial Photo – June 16, 2019



Figure 4 - Construction Progress Aerial Photo – September 13, 2019



Figure 5 - Perimeter Ring Road (Snow removal & Subgrade Preparation) May 21, 2019



Figure 6 - Berm Rise Subgrade Preparation, June 14, 2019



Figure 7 - WRF Pond Berm Rise Subgrade Preparation, June 14, 2019



Figure 8 - WRF Pond Berm Rise 500mm minus Placement and Compaction, 18 June 2019



Figure 9 - WRF Pond Berm Rise Placement of 500mm Minus, 15 June, 2019



Figure 10 - West Ditch Excavation, 23 June 2019



Figure 11 - West Ditch Excavation, placement of Geotextile and Riprap, June 24, 2019



Figure 12 - West Ditch Completion, July 16, 2019



Figure 13 - East Ditch Construction, July 22, 2019



Figure 14 - East Ditch Construction, July 24, 2019



Figure 15 - East Ditch Completed, August 2, 2019



Figure 16 - Excavation of WRF Pond East Expansion, Ice Lens Removal, 20 August, 2019



Figure 17 - Placement of 500mm Minus Rockfill at WRF Pond East Expansion, August 20, 2019



Figure 18 - Placement of 500mm Minus Rockfill at WRF Pond East Expansion, August 20, 2019



Figure 19 - Placement of 500mm Minus Rockfill at WRF Pond East Expansion, August 20, 2019



Figure 20 - WRF Pond East Side Intermediate Bedding & Compaction, August 24, 2019



Figure 21 - Intermediate Bedding Southwest & Excavation WRF Pond North, September 7, 2019



Figure 22 - South WRF Pond Intermediate Bedding & Compaction, September 7, 2019



Figure 23 - WRF Pond East Intermediate Bedding and Compaction, September 7, 2019



Figure 24 - Temporary Dissecting Berm to allow water management, September 7, 2019



Figure 25 - Removal of Existing North Liner and fill, September 9, 2019



Figure 26 – Removal of existing fill material subgrade under the HDPE geomembrane under the existing pond area (note non-uniformity of depth and proximity of rocks to surface), September 9, 2019



Figure 27 - Rocks protruding through existing bedding, September 9, 2019



Figure 28 - Slope Washout and rocks protruding through existing bedding, September 9, 2019



Figure 29 - New North WRF Pond Intermediate Bedding placement, September 13, 2019



Figure 30 - New North Intermediate Bedding Compaction, September 15, 2019



Figure 31 - New North Anchor Trench Excavation, September 15, 2019



Figure 32 - New North WRF Pond Geotextile, September 21, 2019



Figure 33 - New North WRF Pond Liner, September 21, 2019



Figure 34 - WRF Pond East Expansion, September 21, 2019



Figure 35 - WRF Pond East Expansion Compaction, September 22, 2019



Figure 36 - WRF Pond South Anchor Trench Excavation, September 22, 2019



Figure 37 - North WRF Pond Geomembrane Installed in Anchor Trench, September 22, 2019



Figure 38 - WRF Pond Compaction of Intermediate Bedding, September 23, 2019



Figure 39 - WRF Pond East Expansion Geomembrane Installation, 11 October, 2019



Figure 40 - WRF Pond South Anchor Trench Snow Removal, November 8, 2019



Figure 41 - WRF Pond South Liner Installed into Anchor Trench, November 15, 2019



Figure 42 - Installation of Intermediate Bedding on West WRF Pond Slope, November 9, 2019



Figure 43 - Excavated WRF Pond West Side Anchor Trench, November 28, 2019



Figure 44 - Liner Installation West WRF Pond, November 30, 2019



Figure 45 - West WRF Pond Inlet Liner Installation into Anchor Trench, December 10, 2019



Figure 46 - Liner Installed at West WRF Pond Inlet, December 10, 2019

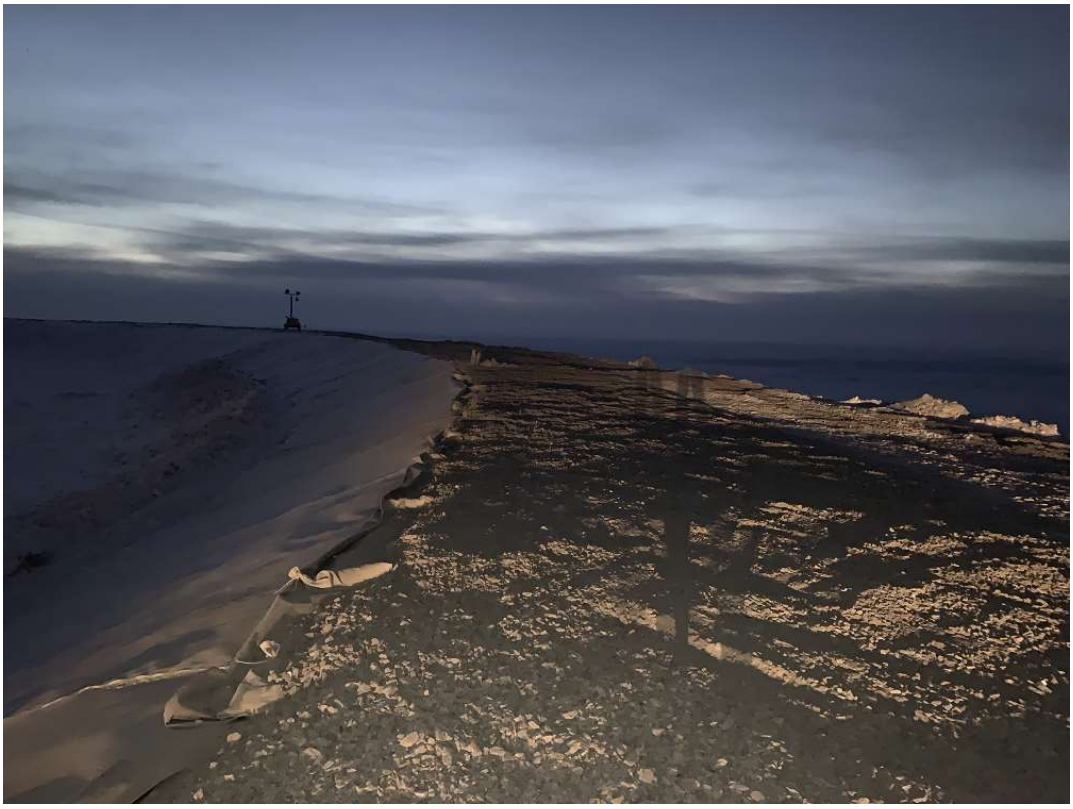


Figure 47 - Completed North WRF Pond Liner and Anchor Trench Backfilled, January 19, 2020

6. AS-BUILT DRAWINGS

See the following Appendices and Figures for the As-Built information. As Built drawings are provided in Appendix C, as follows:

- Waste Rock Facility Sedimentation Pond Plan
- Waste Rock Facility Sedimentation Pond Cross Sections
- West Perimeter Ditch Elevation Plan
- East Perimeter Ditch Elevation Plan
- South Berm Anchor Detail
- North Berm Cross Section
- Spillway
- WRF Pond Expansion As-built Sections
- Perimeter Ditch Survey Elevations

7. FIELD DECISIONS & DEVIATIONS

The diversion berm noted in the Golder IFC drawings was modified to a perimeter ring road to act as the diversion berm, allow for construction of the ditches during summer months, and allow year round maintenance access. Per the Golder IFC drawings included in Appendix F, "…The geometry of the clean water diversion berm shown on drawing C-130 may be modified in the field, at the time of construction, based on material conditions."

Due to actual field survey data of the existing topography at the start of the ditch layout and construction phase being different than the elevations shown in the IFC drawings G-200, the design elevation for ditch bottom and crest had to be modified and re-designed to match the field conditions. If the design elevations were used, sections of the ditch bottom would have been at surface and the free-board requirement could not be met. See Appendix C – West Ditch As-built and East Ditch As-built.

The Golder IFC drawing C-120 section B, showed the requirement of the anchor trench bottom to be excavated 1 m into the native ground. Upon field investigation and excavation of a test pit, the native ground was found to be 4.3 meters below surface. The permafrost had moved upwards into the previously backfilled area, and the active zone which could be excavated was to a depth of 1.5 meters from surface. It was neither practical nor feasible to excavate to 1 m into native ground. Golder provided a revised design for the WRF Pond South Anchor Trench noted as Figure 47 in this document, which the anchor trench was constructed to ensuring the required 2m overburden on top of the anchor trench was installed.

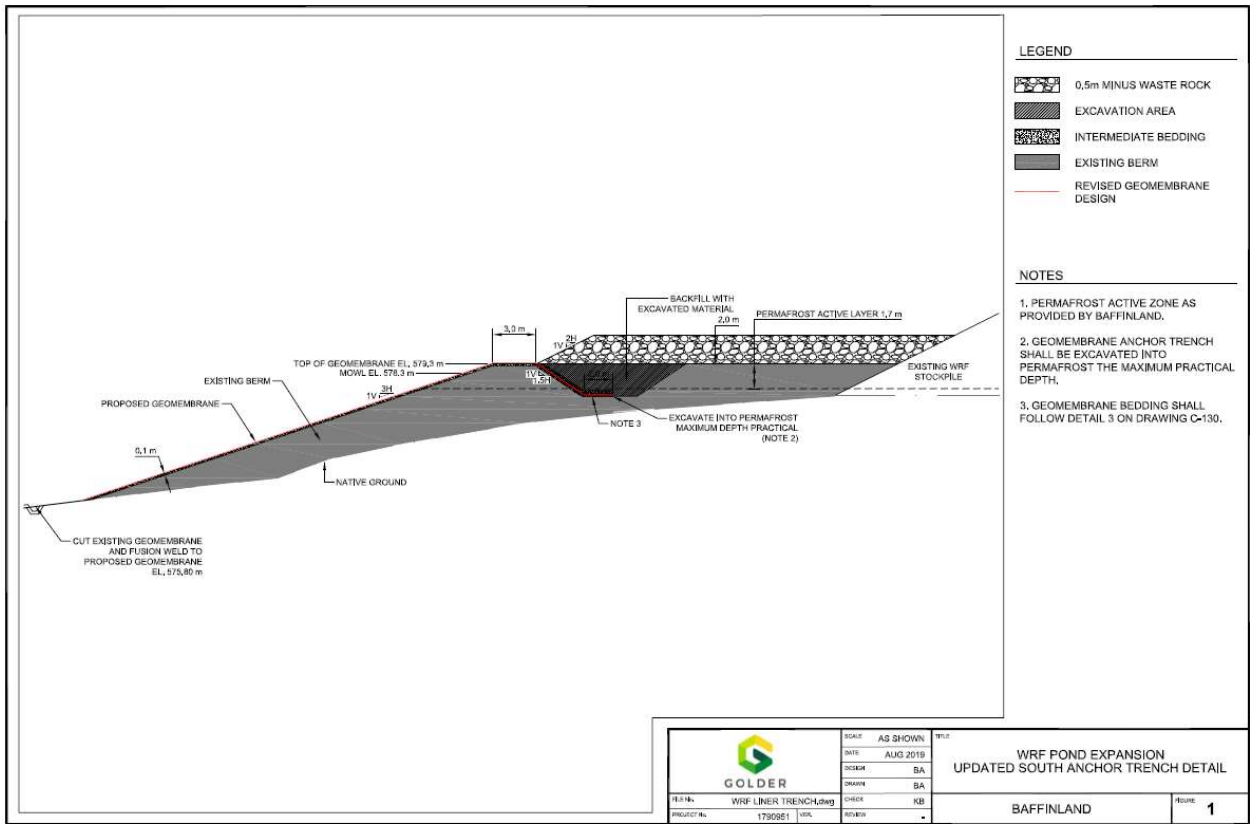


Figure 48 – Revised WRF Pond South Berm Anchor Trench Detail

8. PERFORMANCE EVALUATION

Since the construction was completed in January 2020, performance of the new WRF Pond expansion and remedial work cannot be evaluated until after freshet has occurred. The following remedies to the existing system were achieved:

1) Existing liner anchor trench on south side was only 0.5m in depth and anchored into the active layer. All south side anchor trenches in the new design are 1.7m in depth which will be keyed into the permafrost as the typical active layer is only 1.5m depth. This should alleviate the previous problem of water migrating under the liner.
2) The existing pond bottom which acted as the foundation for the WRF Pond had only 100 mm of bedding placed directly over the tundra. Over time rocks were protruding through the bedding and in areas the bedding was eroded due to water migrating under the liner (See Figures 26 through 28). Placing the thin layer of bedding material directly on the existing active tundra layer with a heavy water body above it allowed greater subsidence of the active layer during summer months and during the winter months a greater amount of expansion due to freezing. With the active layer melting much deeper under the pond in the summer months, a greater amount of soil compressibility would occur and more than likely caused micro-fissures in the geomembrane. Additionally, the rocks at or near surface were pushed up during the freeze thaw cycles and potentially caused localized stress and damage to the geomembrane. This situation was alleviated by removing the existing material to permafrost, installing 1.5m of 500mm minus rockfill, and installing 300mm of intermediate bedding as opposed to 100 mm to eliminate the amount of compressibility of the soil under the pond, reduce the amount of freeze/ thaw movement as the rockfill is not as susceptible to moisture, rocks at or near surface, and potential future issues.
3) The existing liner was previously installed with the black side up which would have acted as a heat sink. Typically, liner is installed with the white side up to reflect sunlight and avoid this issue. More than likely this contributed to the active layer being deeper under the pond bottom leading to increased thaw settlement and increased compressibility of the soil under load. This was alleviated by installing all the geomembrane with white side up.
4) The existing north anchor trench was installed to a depth of 203 mm, not the expected 1000 mm depth and in one area was only at a depth of 100 mm. This allowed water to migrate under the liner. All existing anchor trenching was removed and re-excavated per the Golder IFC drawings and new liner installed in these proper anchor trenches which will eliminate this issue.

9. VIBRATION MONITORING AND QUARRY ACTIVITY

No vibration monitoring was conducted during the construction of the Mine Site Waste Rock Pond Expansion and Drainage System as it was not deemed necessary based on the scope of activities required for construction.

Control for quarrying activity was conducted as per the project's specific management plans:

- BAF-PH1-830-P16-0004 (H349000-1000-07-126-0011): Borrow Pit and Quarry Management Plan

10. ENVIRONMENTAL MONITORING

Environmental monitoring during the construction of the Mine Site Waste Rock Sedimentation Pond and Drainage Ditch was conducted as per the Environmental Protection Plan (EPP), (BAF-PH1-830-P16-0008). In addition to the EPP, all construction follows the requirements of the Environmental Health and Safety Management Framework (BAF-PH1-830-STD-0001).

The Baffinland on-site Environmental Management Team was responsible for environmental monitoring at all sites during construction and following-up with the construction team(s) if there were any reported environmental incidents or non-conformances.

Mine Site Waste Rock Pond Expansion and Drainage System construction was also required to follow the requirements of the Surface Water and Aquatic Ecosystems Management Plan, BAF-PH1-830-P16-0026. This management plan outlines the best management practices implemented to limit the potential for adverse impacts to receiving waters, aquatic ecosystems, fish and fish habitat during construction. In addition, this plan details the systems in place to mitigate and manage drainage and runoff at the building sites, address point and non-point discharges to surface waters and assess those discharges on water quality and quantity relative to their receiving water systems. The Spill Contingency Plan (BAF-PH1-830-P16-0036) in conjunction with the Emergency Response Plan (BAF-PH1-830-P16-0007) provides guidance and instructions for first responders and Baffinland Management in the event of a spill event or other emergency such as fire or accident.

The risks to the water quality in the respective rivers and streams as a result of construction of the Mine Site Waste Rock Pond Expansion and Drainage System would originate from the following sources based on construction methodology:

- Spills from equipment
- Increase in sediment load in the water

There were no recorded spills from equipment used at the construction site. During the period of construction, water quality monitoring conducted at downstream stations under Part D, Section 16 and Part I, of the Type “A” Water License 2AM-MRY1325 indicated total suspended solids (TSS) and other parameter at levels below the applicable Water License criteria. The results for water quality monitoring were provided in monthly reports submitted to the Nunavut Water Board and other stakeholders. In consideration of the above, the environmental mitigation strategies were effective in maintaining runoff water quality.

11. UNANTICIPATED OBSERVATIONS

The pre-construction field survey identified that the Golder IFC ditch points set out table (G-200 in Appendix F) would not work for the elevations with the actual field conditions due to bottom of ditch in some areas being set at grade and not maintaining the required free-board. All ditch elevation points were re-designed by Allan Knowlton, P.Eng. (See Appendix F). During the heavy rain event which occurred between September 28, 2019 and October 2, 2019, the ditches performed as designed with no ponding water at their bottom and no erosion noted.

12. SURFACE MONITORING

Not conducted.

13. REQUIRED MAINTENANCE

During construction of the ditches, the southern most section of the east ditch Baffinland exhausted its supply of available riprap material for a length of 50 m. The riprap will be installed during 2020 after freshet. The ditch has successfully controlled a previous heavy rain event (5 day event) without erosion. Annual inspection of the ditches is recommended to ensure the riprap has not moved or filled with fine materials.

Operation of the pond will require regular maintenance. Removal of sediment shall occur prior to reaching the ultimate capacity of the basin. The periodic removal of sediment is required to maintain temporary water storage requirements. The maximum operating water level (MOWL) is designed by Golder per Appendix F to be 578.3 masl and is expected to be maintained by the operators by treating and discharging the water to the environment on a continual basis.

14. ADAPTIVE MANAGEMENT

For discussion of adaptive management principles and practices applied during the Construction Phase of the Project and their overall effectiveness please refer to the 2019 Annual Report to the Nunavut Impact Review Board. An example of adaptive management utilized on this project would be when it was discovered that the IFC ditch construction elevations differed from actual site conditions and the elevations were redesigned to accommodate actual field elevations to ensure the final constructed ditch would perform as required.

APPENDIX A

LOCATION OF CONSTRUCTION RELATIVE TO LEASE BOUNDARIES



LEGEND

- Borrow Area
- Quarry Area
- Project Development Area
- Commercial Lease Boundary
- Current Infrastructure
- Waste Rock Facility Pond

MARY RIVER PROJECT

Waste Rock Facility

Projection: NAD 1983 UTM ZONE 17N.
Base Map: © 2019 Digital Global, Inc.
Imagery and Infrastructure are representative as of August 2019.

0 100 200 400 600 800 Meters
Scale 1:30,000

N

Baffinland

FIGURE 1

SAVED: C:\Users\katie.mcguire\Documents\4 - Maps\Reporting\Mine Site\Waste Pond\BIM_Fig 1 MineSite WRF Pond.mxd; 29-Mar-20

APPENDIX B

CONCORDANCE TABLES

Type 'A' Water License 2AM-MRY1325 Requirements and Concordance Table:

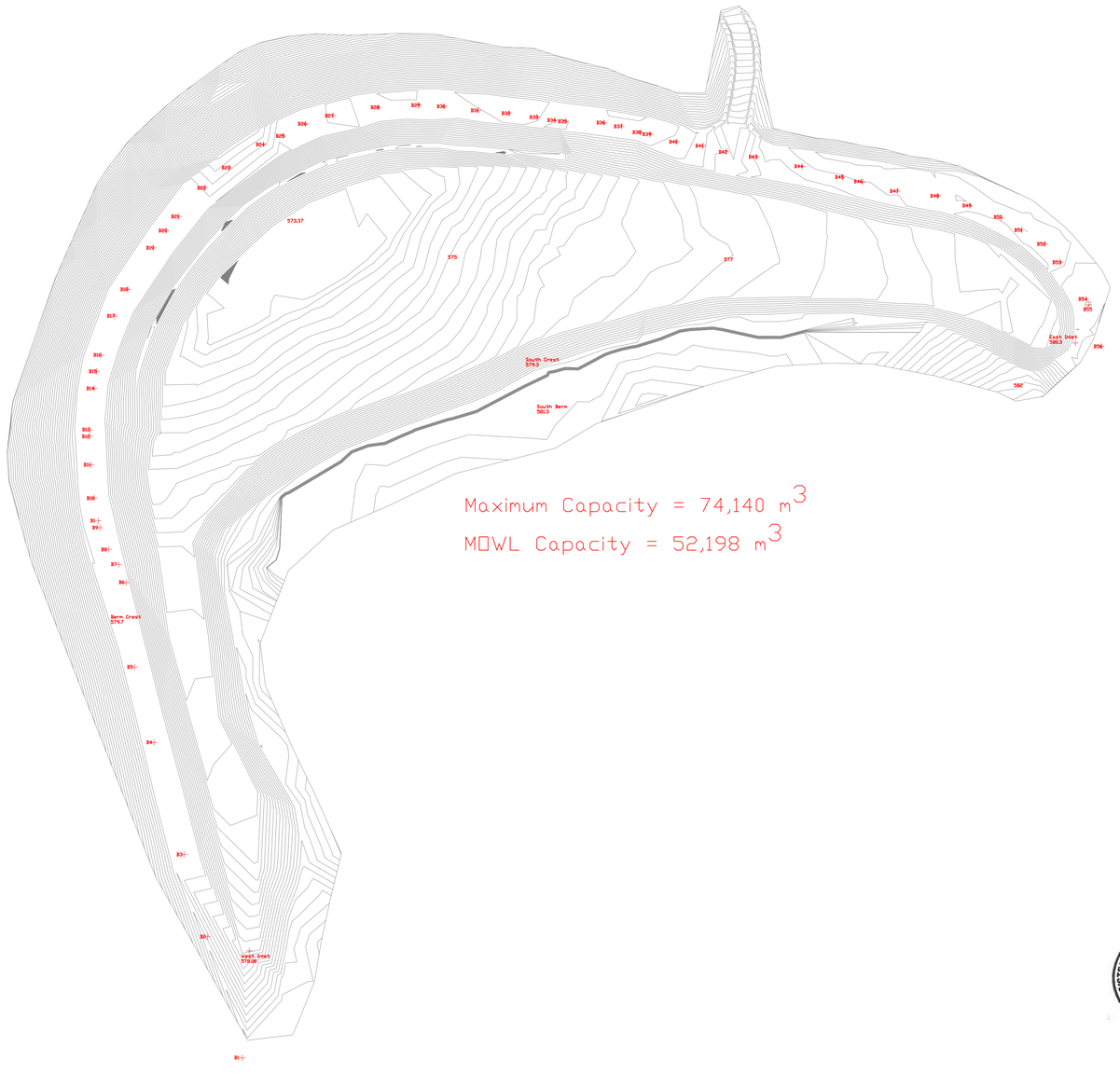
Schedule D Item No.	Minimal Information Requirements	Corresponding Section of this Report
a	Description of all infrastructure and facilities designed to contain, withhold, divert or retain Water and/or Waste	Section 1
b	A summary of construction activities including photographic records, before, during and after construction of the facilities and infrastructure designed to contain, withhold, divert or retain Water and /or Waste	Section 3 Section 5
c	As-built drawings and design for facilities and infrastructure, in item (a) of this schedule, designed and constructed to contain, withhold, divert or retain Water and/or Waste	Appendix C
d	Documentation of field decisions that deviate from the original plans and any data used to support or develop facilities and infrastructure to withhold, divert or retain Water and /or Waste	Section 7
e	A comparison of measured versus predicted performance of infrastructure and facilities	Section 8
f	Any blast vibration monitoring and control for quarrying activity carried out in close proximity to fish bearing waters	Section 9
g	Monitoring conducted for sediment and explosives residue release from construction areas	Section 10
h	Monitoring undertaken in accordance with Part D of the License during construction phase of the project	Section 10
i	Details confirming that the requirements of the CCME guidance document entitled "Aboveground Storage Tank Systems for Petroleum and Allied Petroleum Products (2003)" have been met by the Licensee	N/A
j	Data collected from instrumentation used to monitor earthworks and the interpretation of that data	N/A
k	A discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk during construction	Section 11
l	An overview of any method including frequency used to monitor deformations, seepage and geothermal responses	N/A

Commercial Lease Q13C301 Lease Operations Guide Concordance Table:

Schedule D Item No.	Minimal Information Requirements	Corresponding Section of this Report
1	The name and contact information of the person and company responsible for completing the construction, construction monitoring and preparing the As-Built Report.	Page 1
2	The name and contact information of the Baffinland representative(s) that QIA can contact should it have any questions or comments regarding the As-Built Report.	Page 1,4
3	An introduction to the infrastructure or facilities including but not limited to the construction background, concept and construction history.	Section 1
4	Construction records including As-Built drawings signed and stamped by a professional engineer detailing surveys, planar and cross sections that illustrate all designed components. This should be provided in PDF format, and if requested in native file (e,g. CAD, .dxf, etc.).	Appendix C
5	Detailed description of any deviations from the For-Construction Design. Deviations that should be noted include, but are not limited to; changes in design and construction materials, construction methodology or monitoring.	Section 7
6	Observed performance of the construction including a comparison to predicted performance. Recommendations for performance monitoring based on observations during construction if applicable.	Section 8
7	A description and list of instrumentation installed, if applicable, and results of construction monitoring and post construction monitoring, including all environmental data. Recommendations for additional performance or environmental monitoring based on observations and monitoring results, if applicable.	N/A
8	A summary of quality assurance testing results, if applicable, and comparison of these results to construction/design requirements to ensure performance of the infrastructure or facilities.	Section 4 Appendix C
9	A summary of adaptive management principles and practices related to environmental management and monitoring applied during the relevant phases of the Project and their overall effectiveness.	Section 14
10	Photographic records before, during and after construction of the facilities or infrastructure	Section 5
11	Map(s) to illustrate the completed construction in relation to Lease boundaries, and water bodies. The minimum distance from completed or modified facilities and infrastructure to the surveyed boundary of the Property, surveyed boundary of the Impact Area, and the ordinary high water mark should be provided.	Appendix A

APPENDIX C

AS-BUILT DOCUMENTATION



REGISTERED PROFESSIONAL ENGINEER
A.S. KNOWLTON
LICENSEE
1MAY20
NTNU

PERMIT TO PRACTICE
BAFFINLAND IRON MINES CORPORATION
Signature
Date 1MAY20
PERMIT NUMBER: P 712
NT/NU Association of Professional Engineers and Geoscientists

DRAWING NO.	DRAWING TITLE
C-120	Golder – WRF Pond Expansion – SECTIONS AND DETAILS
C-100	Golder – WRF Pond Expansion – PLAN & PROFILE

REFERENCE DRAWINGS

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
	As-Built	AK	1Feb20

ISSUE AUTHORIZATION

Baffinland

DESIGNED BY Golder Associates	DRAWN BY Allan Knowlton
DATE 15Jun18	DATE 1Feb20
CHECKED BY Allan Knowlton	DISCIP. ENGR. Allan Knowlton
DATE 1Feb20	DATE 1Feb20
PROJ. SURVEYOR SANA	PROJ. ENGR. Allan Knowlton
DATE 18Dec19	DATE 1Feb20
PROJ. MGR. Allan Knowlton	
DATE 1Feb20	

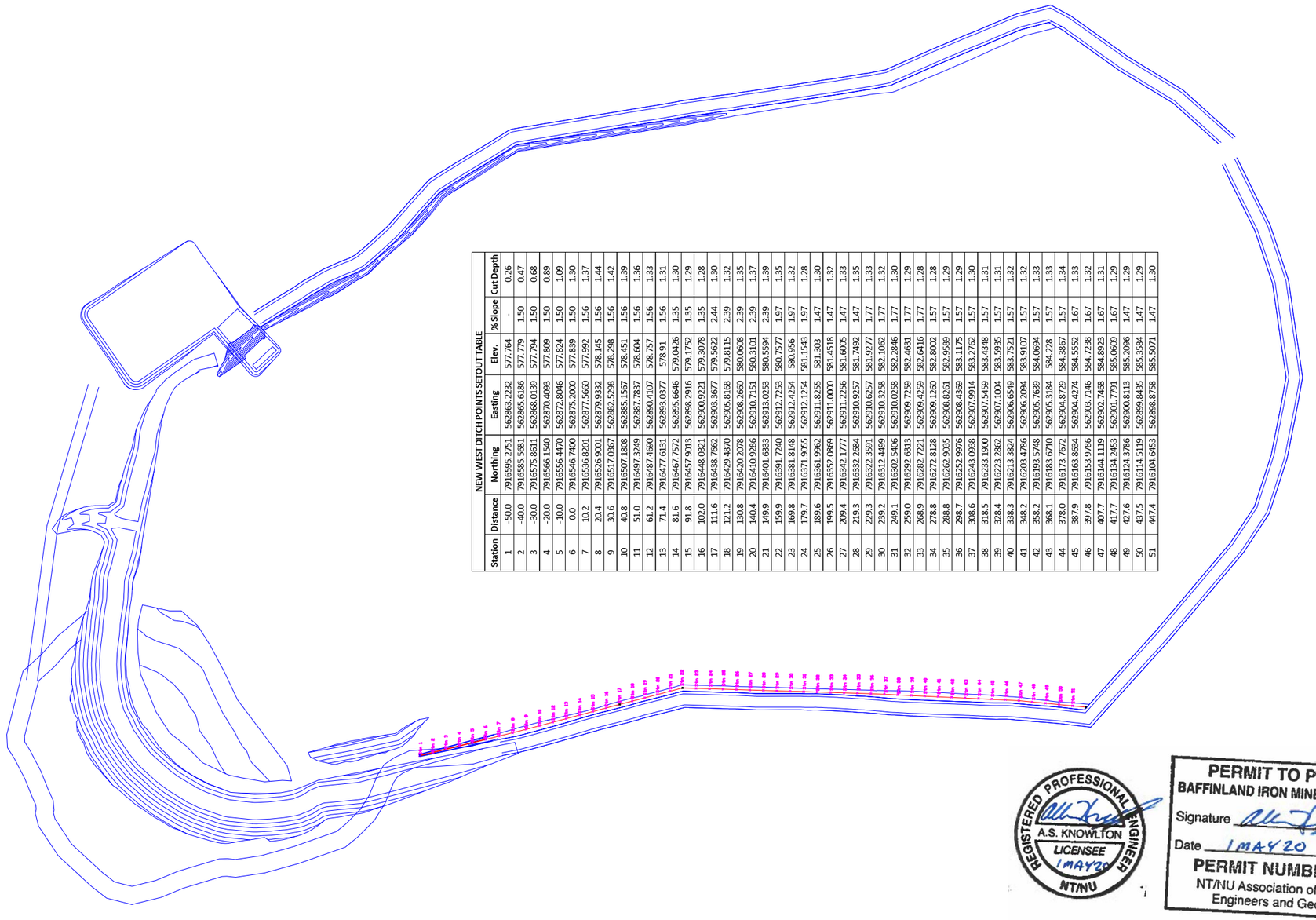
Baffinland

MARY RIVER Waste Rock Pond

As-built Drawing

SCALE	DWG. NO.	REV.
NTS OR AS NOTED	Golder – C-100 As-Built	

ORIGINAL SHEET SIZE: ISO ANSI B



NEW WEST DITCH POINTS SETOUT TABLE

Station	Distance	Northing	Easting	Elev.	%Slope	Cut Depth
1	-50.0	7916595.2751	562863.2232	577.764	-	0.26
2	-40.0	7916585.5681	562865.6186	577.779	1.50	0.47
3	-30.0	7916575.8611	562868.0139	577.794	1.50	0.68
4	-20.0	7916566.1540	562870.4093	577.809	1.50	0.89
5	-10.0	7916556.4470	562872.8046	577.824	1.50	1.09
6	0.0	7916546.7400	562875.2000	577.839	1.50	1.30
7	10.2	7916536.8201	562877.5660	577.992	1.56	1.37
8	20.4	7916526.9001	562879.9332	578.145	1.56	1.44
9	30.6	7916517.0367	562882.5298	578.298	1.56	1.42
10	40.8	7916507.1808	562885.1567	578.451	1.56	1.39
11	51.0	7916497.3249	562887.7837	578.604	1.56	1.36
12	61.2	7916487.4690	562890.4107	578.757	1.56	1.33
13	71.4	7916477.6131	562893.0377	578.91	1.56	1.31
14	81.6	7916467.7572	562895.6646	579.0426	1.35	1.30
15	91.8	7916457.9013	562898.2916	579.1752	1.35	1.29
16	102.0	7916448.0321	562900.9221	579.3078	1.35	1.28
17	111.6	7916438.7662	562903.3677	579.5622	2.44	1.30
18	121.2	7916429.4870	562905.8168	579.8115	2.39	1.32
19	130.8	7916420.2078	562908.2660	580.0608	2.39	1.35
20	140.4	7916410.9286	562910.7151	580.3101	2.39	1.37
21	149.9	7916401.6333	562913.0253	580.5594	2.39	1.39
22	159.9	7916391.7240	562912.7253	580.7577	1.97	1.35
23	169.8	7916381.8148	562912.4254	580.956	1.97	1.32
24	179.7	7916371.9055	562912.1254	581.1543	1.97	1.28
25	189.6	7916361.9962	562911.8255	581.303	1.47	1.30
26	199.5	7916352.0869	562911.0000	581.4518	1.47	1.32
27	209.4	7916342.1777	562911.2256	581.6005	1.47	1.33
28	219.3	7916332.2684	562910.9257	581.7492	1.47	1.35
29	229.3	7916322.3591	562910.6257	581.9277	1.77	1.33
30	239.2	7916312.4499	562910.3258	582.1062	1.77	1.32
31	249.1	7916302.5406	562910.0258	582.2846	1.77	1.30
32	259.0	7916292.6313	562909.7259	582.4631	1.77	1.29
33	268.9	7916282.7221	562909.4259	582.6416	1.77	1.28
34	278.8	7916272.8128	562909.1260	582.8002	1.57	1.28
35	288.8	7916262.9035	562908.8261	582.9589	1.57	1.29
36	298.7	7916252.9976	562908.4369	583.1175	1.57	1.29
37	308.6	7916243.0938	562907.9914	583.2762	1.57	1.30
38	318.5	7916233.1900	562907.5459	583.4348	1.57	1.31
39	328.4	7916223.2862	562907.1004	583.5935	1.57	1.31
40	338.3	7916213.3824	562906.6549	583.7521	1.57	1.32
41	348.2	7916203.4786	562906.2094	583.9107	1.57	1.32
42	358.2	7916193.5748	562905.7639	584.0694	1.57	1.33
43	368.1	7916183.6710	562905.3184	584.228	1.57	1.33
44	378.0	7916173.7672	562904.8729	584.3867	1.57	1.34
45	387.9	7916163.8634	562904.4274	584.5552	1.67	1.33
46	397.8	7916153.9786	562903.7146	584.7238	1.67	1.32
47	407.7	7916144.1119	562902.7468	584.8923	1.67	1.31
48	417.7	7916134.2453	562901.7791	585.0609	1.67	1.29
49	427.6	7916124.3786	562900.8113	585.2096	1.47	1.29
50	437.5	7916114.5119	562899.8435	585.3584	1.47	1.29
51	447.4	7916104.6453	562898.8758	585.5071	1.47	1.30

REGISTERED PROFESSIONAL ENGINEER
A.S. KNOWLTON
LICENSEE
1MAY20
NT/NU

PERMIT TO PRACTICE
BAFFINLAND IRON MINES CORPORATION
Signature
Date 1MAY20
PERMIT NUMBER: P 712
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DRAWING NO.	DRAWING TITLE
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REFERENCE DRAWINGS

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PROJ. MGR. Allan Knowlton DATE 1Feb20	

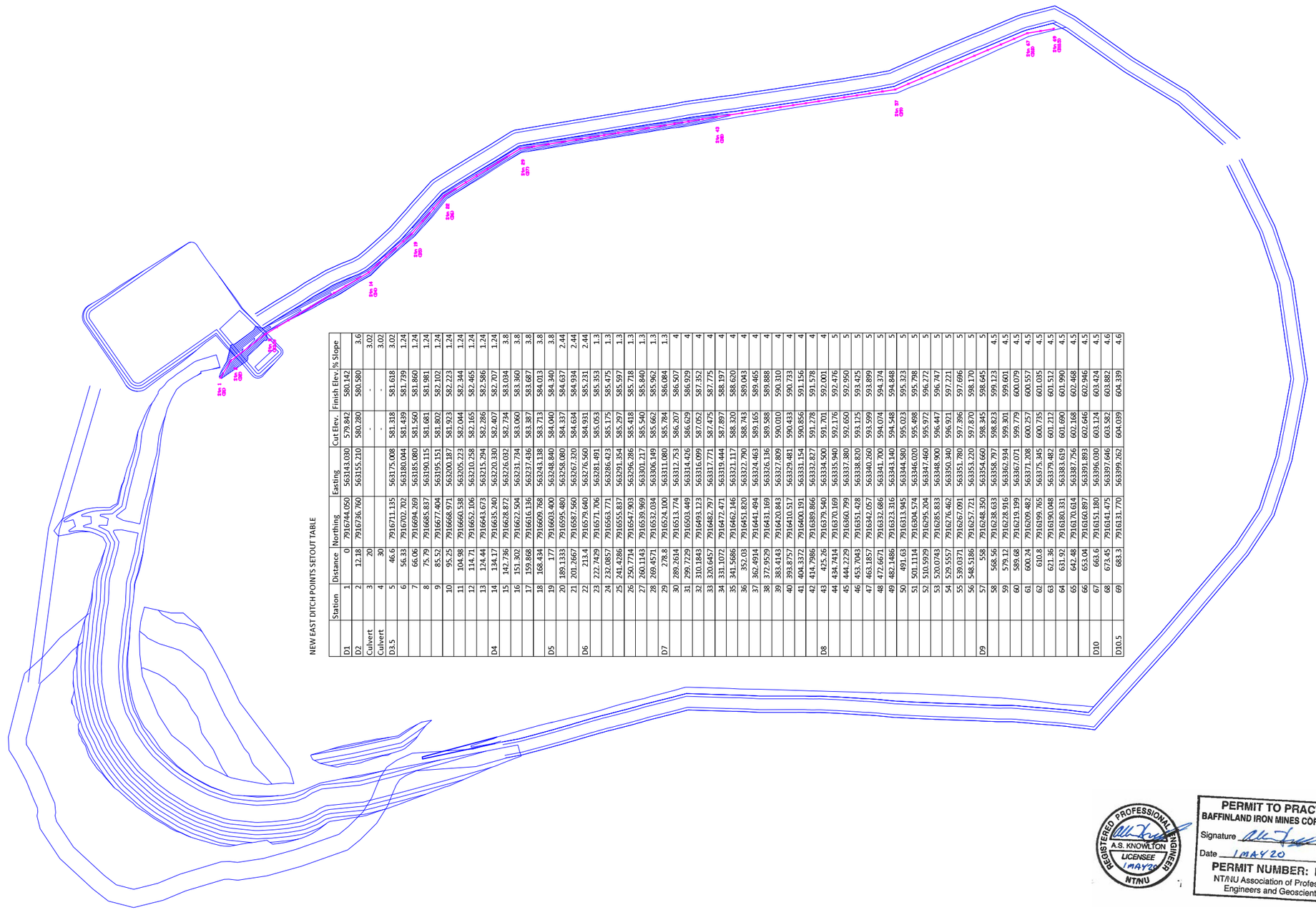
Baffinland

MARY RIVER Waste Rock Pond

As-built
West Ditch Stations

SCALE	DWG. NO.	REV.
NTS OR AS NOTED	Appendix C.2 – West Ditch Stations	

ORIGINAL SHEET SIZE: ISO ANSI B



NEW EAST DITCH POINTS SETOUT TABLE

	Station	Distance	Northing	Easting	Cut Elev.	Finish Elev.	% Slope
D1		0	7916744.050	563143.030	579.842	580.142	
							3.6
D2		12.18	7916736.760	563155.210	580.280	580.580	
Culvert		20			-	-	
							3.02
Culvert		30			-	-	
							3.02
D3.5		46.6	7916711.135	563175.008	581.318	581.618	
							1.24
		56.33	7916702.702	563180.044	581.439	581.739	
							1.24
		66.06	7916694.269	563185.080	581.560	581.860	
							1.24
		75.79	7916685.837	563190.115	581.681	581.981	
							1.24
		85.52	7916677.404	563195.151	581.802	582.102	
							1.24
		95.25	7916668.971	563200.187	581.923	582.223	
							1.24
		104.98	7916660.538	563205.223	582.044	582.344	
							1.24
		114.71	7916652.106	563210.258	582.165	582.465	
							1.24
		124.44	7916643.673	563215.294	582.286	582.586	
							1.24
D4		134.17	7916635.240	563220.330	582.407	582.707	
							3.8
		142.736	7916628.872	563226.032	582.734	583.034	
							3.8
		151.302	7916622.504	563231.734	583.060	583.360	
							3.8
		159.868	7916616.136	563237.436	583.387	583.687	
							3.8
		168.434	7916609.768	563243.138	583.713	584.013	
							3.8
D5		177	7916603.400	563248.840	584.040	584.340	
							3.8
		189.1333	7916595.480	563258.080	584.337	584.637	
							2.44
		201.2667	7916587.560	563267.320	584.634	584.934	
							2.44
D6		213.4	7916579.640	563276.560	584.931	585.231	
							2.44
		222.7429	7916571.706	563281.491	585.053	585.353	
							1.3
		232.0857	7916563.771	563286.423	585.175	585.475	
							1.3
		241.4286	7916555.837	563291.354	585.297	585.597	
							1.3
		250.7714	7916547.903	563296.286	585.418	585.718	
							1.3
		260.1143	7916539.969	563301.217	585.540	585.840	
							1.3
		269.4571	7916532.034	563306.149	585.662	585.962	
							1.3
D7		278.8	7916524.100	563311.080	585.784	586.084	
							4
		289.3614	7916513.774	563312.753	586.207	586.507	
							4
		299.7229	7916503.449	563314.426	586.629	586.929	
							4
		310.1843	7916493.123	563316.099	587.052	587.352	
							4
		320.6457	7916482.797	563317.771	587.475	587.775	
							4
		331.1072	7916472.471	563319.444	587.897	588.197	
							4
		341.5686	7916462.146	563321.117	588.320	588.620	
							4
		352.03	7916451.820	563322.790	588.743	589.043	
							4
		362.4914	7916441.494	563324.463	589.165	589.465	
							4
		372.9529	7916431.169	563326.136	589.588	589.888	
							4
		383.4143	7916420.843	563327.809	590.010	590.310	
							4
		393.8757	7916410.517	563329.481	590.433	590.733	
							4
		404.3372	7916400.191	563331.154	590.856	591.156	
							4
		414.7986	7916389.866	563332.827	591.278	591.578	
							4
D8		425.26	7916379.540	563334.500	591.701	592.001	
							5
		434.7414	7916370.169	563335.940	592.176	592.476	
							5
		444.2229	7916360.799	563337.380	592.650	592.950	
							5
		453.7043	7916351.428	563338.820	593.125	593.425	
							5
		463.1857	7916342.057	563340.260	593.599	593.899	
							5
		472.6671	7916332.686	563341.700	594.074	594.374	
							5
		482.1486	7916323.316	563343.140	594.548	594.848	
							5
		491.63	7916313.945	563344.580	595.023	595.323	
							5
		501.1114	7916304.574	563346.020	595.498	595.798	
							5
		510.5929	7916295.204	563347.460	595.972	596.272	
							5
		520.0743	7916285.833	563348.900	596.447	596.747	
							5
		529.5557	7916276.462	563350.340	596.921	597.221	
							5
		539.0371	7916267.091	563351.780	597.396	597.696	
							5
		548.5186	7916257.721	563353.220	597.870	598.170	
D9		558	7916248.350	563354.660	598.345	598.645	
							4.5
		568.56	7916238.633	563358.797	598.823	599.123	
							4.5
		579.12	7916228.916	563362.934	599.301	599.601	
							4.5
		589.68	7916219.199	563367.071	599.779	600.079	
							4.5
		600.24	7916209.482	563371.208	600.257	600.557	
							4.5
		610.8	7916199.765	563375.345	600.735	601.035	
							4.5
		621.36	7916190.048	563379.482	601.212	601.512	
							4.5
		631.92	7916180.331	563383.619	601.690	601.990	
							4.5
		642.48	7916170.614	563387.756	602.168	602.468	
							4.5
		653.04	7916160.897	563391.893	602.646	602.946	
							4.5
D10		663.6	7916151.180	563396.030	603.124	603.424	
							4.5
		673.45	7916141.475	563397.646	603.582	603.882	
							4.6
D10.5		683.3	7916131.770	563399.262	604.039	604.339	
							4.6

REGISTERED PROFESSIONAL ENGINEER
A.S. KNOWLTON
LICENSEE
1MAY20
NT/NU

PERMIT TO PRACTICE
BAFFINLAND IRON MINES CORPORATION
Signature
Date 1MAY20
PERMIT NUMBER: P 712
NT/NU Association of Professional Engineers and Geoscientists

DRAWING NO.	DRAWING TITLE
C-120	Golder – WRF Pond Expansion – SECTIONS AND DETAILS
C-100	Golder – WRF Pond Expansion – PLAN & PROFILE

REFERENCE DRAWINGS

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
	As-Built	AK	1Feb20

ISSUE AUTHORIZATION

Baffinland

DESIGNED BY Golder Associates	DRAWN BY Allan Knowlton
DATE 15Jun18	DATE 1Feb20
CHECKED BY Allan Knowlton	DISCIP. ENGR. Allan Knowlton
DATE 1Feb20	DATE 1Feb20
PROJ. SURVEYOR SANA	PROJ. ENGR. Allan Knowlton
DATE 18Dec19	DATE 1Feb20
PROJ. MGR. Allan Knowlton	
DATE 1Feb20	

Baffinland

MARY RIVER Waste Rock Pond

As-Built
East Ditch Stations

SCALE	DWG. NO.	REV.
NTS OR AS NOTED	Appendix C.2 – East Ditch Stations	

ORIGINAL SHEET SIZE: ISO ANSI B

Appendix 6.4: Actual As-built Ditch Elevations

East Ditch
Actual Elev.

Station	Ditch Btm	Top Riprap
1	580.298	580.298
2	580.808	580.808
3	culvert	culvert
4	culvert	culvert
5	581.318	581.618
6	581.438	581.735
7	581.575	582.034
8	581.7	582.955
9	581.822	583.741
10	581.895	582.192
11	582.085	582.385
12	582.216	582.513
13	582.328	582.631
14	582.411	582.706
15	582.705	583.001
16	583.042	583.34
17	583.363	583.655
18	583.721	584.015
19	584.027	584.318
20	584.359	584.659
21	584.677	584.981
22	584.968	585.265
23	585.053	585.344
24	585.206	585.499
25	585.32	585.625
26	585.426	585.718
27	585.542	585.844
28	585.671	585.966
29	585.806	586.106
30	586.2	586.499
31	586.598	586.893
32	587.013	587.317
33	587.442	587.736
34	587.876	588.178
35	588.363	588.664
36	588.764	589.068
37	589.17	589.469
38	589.585	589.882
39	590.039	590.334
40	590.451	590.75
41	590.898	591.198
42	591.372	591.668
43	591.716	592.008
44	592.18	592.482
45	592.616	592.908
46	593.099	593.4
47	593.572	593.862
48	594.053	594.355
49	594.54	594.83
50	594.98	595.285
51	595.458	595.749
52	595.959	596.257
53	596.436	596.729
54	596.915	597.216
55	597.391	597.692
56	597.78	598.084
57	598.248	598.544
58	598.821	599.115
59	599.285	599.576
60	599.773	600.067
61	600.268	600.565
62	600.753	601.054
63	601.229	601.534
64	601.646	601.948
65	602.216	Missing riprap
66	602.663	Missing riprap
67	603.163	Missing riprap
68	603.626	Missing riprap
69	604.07	Missing riprap

West Ditch
Actuals Elev.

Station	Ditch Btm	Top Riprap
3	577.4	577.4
4	577.585	577.585
5	577.812	577.812
6	578.08	578.391
7	578.235	578.546
8	578.39	578.666
9	578.5	578.753
10	578.604	578.89
11	578.752	579.049
12	578.843	579.173
13	579.102	579.321
14	579.206	579.545
15	579.325	579.669
16	579.55	579.878
17	579.67	580.012
18	579.942	580.24
19	580.281	580.559
20	580.568	580.873
21	580.732	581.044
22	580.896	581.206
23	580.98	581.322
24	581.252	581.557
25	581.411	581.771
26	581.498	581.951
27	581.672	582.032
28	581.803	582.168
29	581.945	582.356
30	582.222	582.448
31	582.271	582.59
32	582.441	582.782
33	582.667	583.08
34	582.84	583.272
35	583.022	583.457
36	583.261	583.537
37	583.3	583.84
38	583.38	583.98
39	583.46	584.13
40	583.62	584.22
41	583.78	584.45
42	583.94	584.59
43	584.1	584.66
44	584.26	584.82
45	584.42	584.84
46	584.59	584.89
47	584.68	584.91
48	584.76	585.15
49	584.93	585.264
50	585.1	585.426
51	585.25	585.587

REGISTERED PROFESSIONAL ENGINEER
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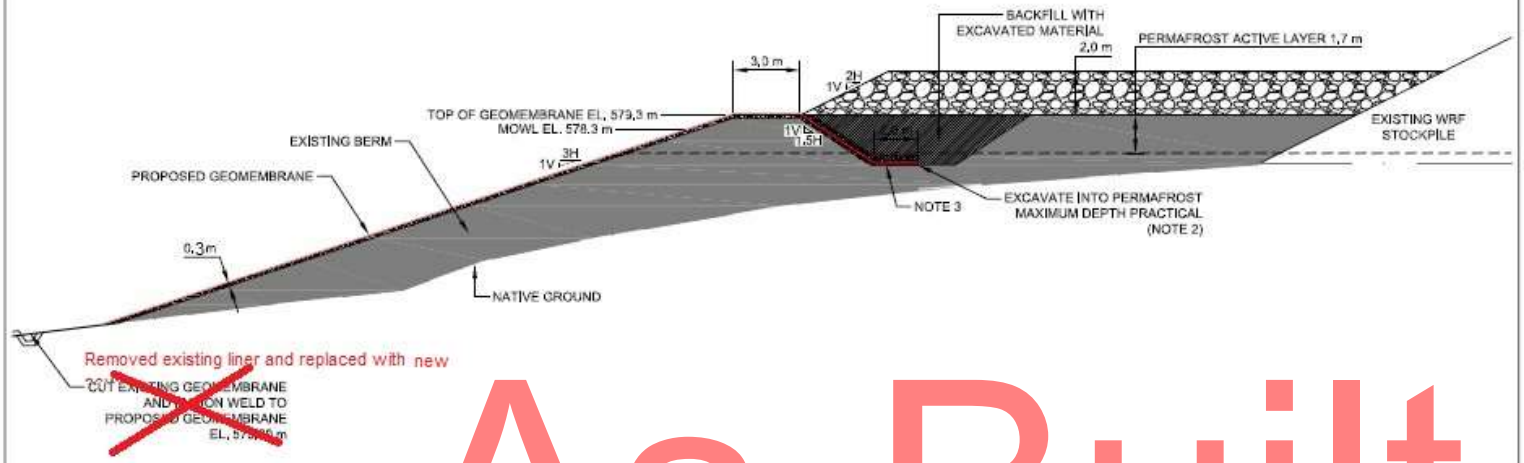
1MAY20
NT/NU

PERMIT TO PRACTICE
BAFFINLAND IRON MINES CORPORATION
Signature
Date 1MAY20
PERMIT NUMBER: P 712
NT/NU Association of Professional Engineers and Geoscientists



Removed existing liner and replaced with new

~~CUT EXISTING GEOMEMBRANE AND FUSION WELD TO PROPOSED GEOMEMBRANE EL. 579,96 m~~

As-Built

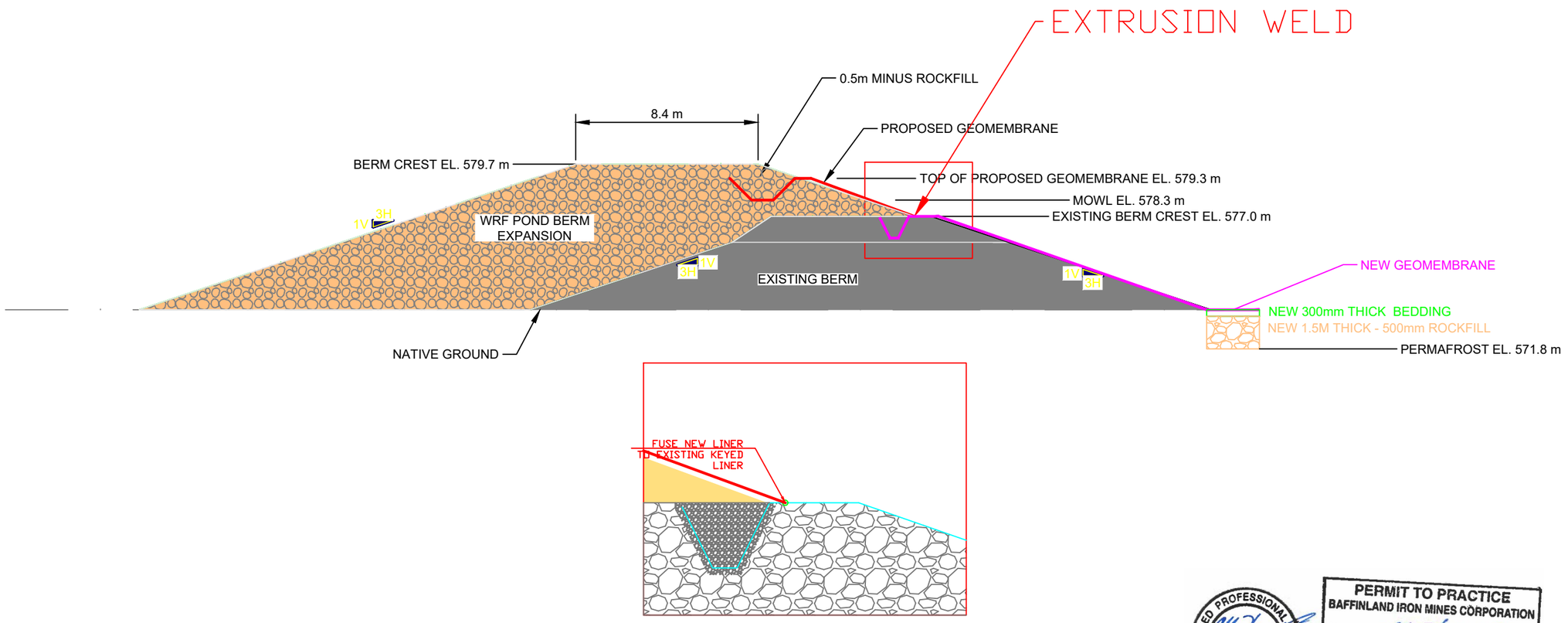
LEGEND

- 0,5m MINUS WASTE ROCK
- EXCAVATION AREA
- INTERMEDIATE BEDDING
- EXISTING BERM
- REVISED GEOMEMBRANE DESIGN

NOTES

1. PERMAFROST ACTIVE ZONE AS PROVIDED BY BAFFINLAND.
2. GEOMEMBRANE ANCHOR TRENCH SHALL BE EXCAVATED INTO PERMAFROST THE MAXIMUM PRACTICAL DEPTH.
3. GEOMEMBRANE BEDDING SHALL FOLLOW DETAIL 3 ON DRAWING C-130.

GOLDER	SCALE	AS SHOWN	WRF POND EXPANSION UPDATED SOUTH ANCHOR TRENCH DETAIL
	DATE	AUG 2019	
	DESIGN	BA	
	DRAWN	BA	
FILE No. WRF LINER TRENCH.dwg	CHECK	KB	BAFFINLAND
PROJECT No. 1790951 VER.	REVIEW	-	FIGURE 1



REGISTERED PROFESSIONAL ENGINEER
A.S. KNOWLTON
LICENSEE
1MAY20
NT/NU

PERMIT TO PRACTICE
BAFFINLAND IRON MINES CORPORATION
Signature
Date 1MAY20
PERMIT NUMBER: P 712
NT/NU Association of Professional Engineers and Geoscientists

DRAWING NO.	DRAWING TITLE
C-120	Golder – WRF Pond Expansion – SECTIONS AND DETAILS
C-100	Golder – WRF Pond Expansion – PLAN & PROFILE

REFERENCE DRAWINGS

NO.	DESCRIPTION	BY	CHK'D	APP'D	DATE

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
As-Built		AK	1Feb20

ISSUE AUTHORIZATION

Baffinland

DESIGNED BY Golder Associates	DRAWN BY Allan Knowlton
DATE 15Jun18	DATE 1Feb20
CHECKED BY Allan Knowlton	DISCIP. ENGR. Allan Knowlton
DATE 1Feb20	DATE 1Feb20
PROJ. SURVEYOR SANA	PROJ. ENGR. Allan Knowlton
DATE 18Dec19	DATE 1Feb20
PROJ. MGR. Allan Knowlton	
DATE 1Feb20	

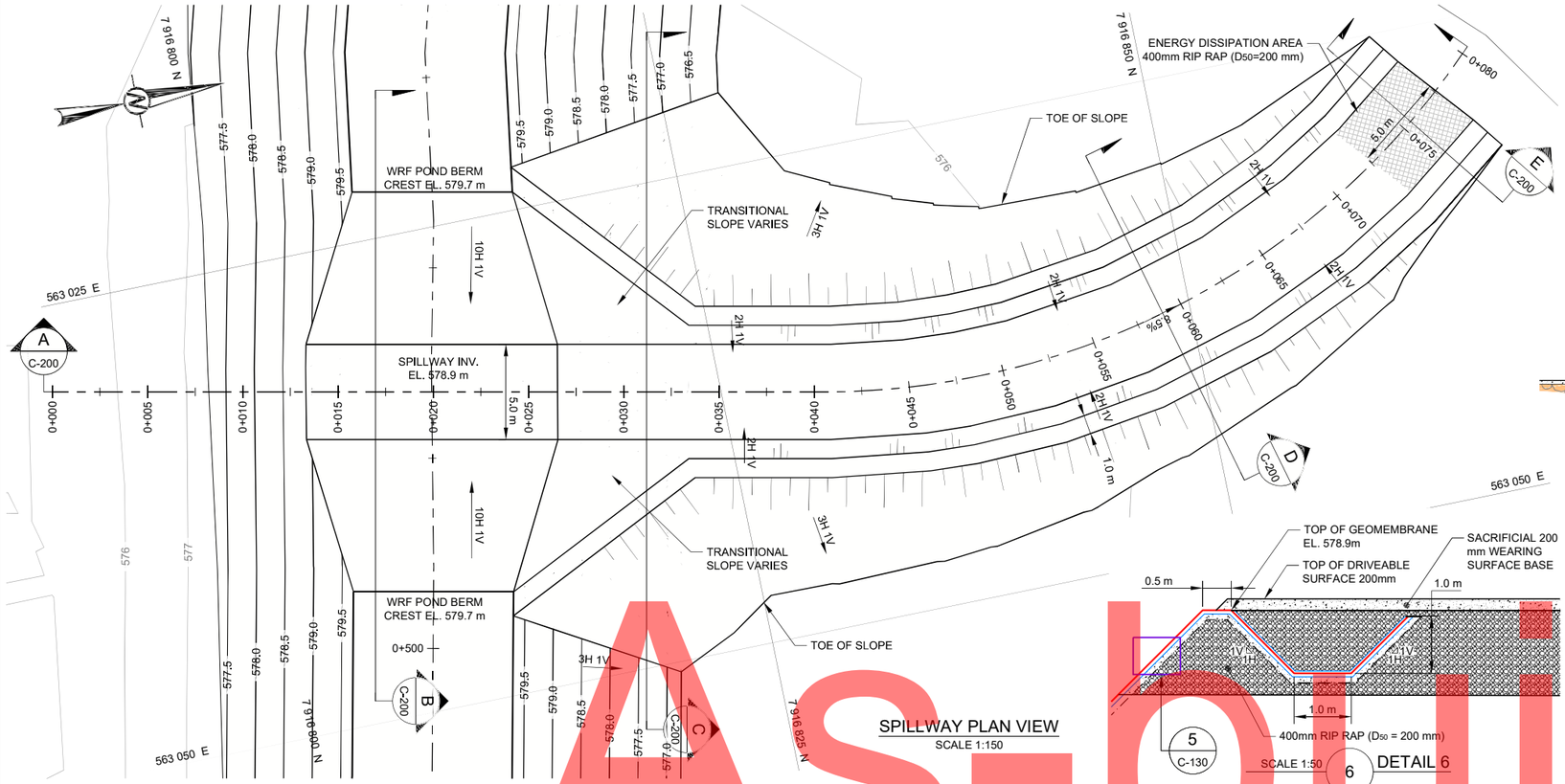
Baffinland

MARY RIVER Waste Rock Pond

As-built North Berm Cross Section

SCALE	DWG. NO.	REV.
NTS OR AS NOTED	As-Built orth Berm Cross Section	

ORIGINAL SHEET SIZE: ISO ANSI B



SPILLWAY PLAN VIEW
SCALE 1:150

SCALE 1:50 DETAIL 6

HORIZONTAL SCALE 1:150
VERTICAL SCALE 1:50
A C-200 SPILLWAY LONGITUDINAL SECTION

LEGEND

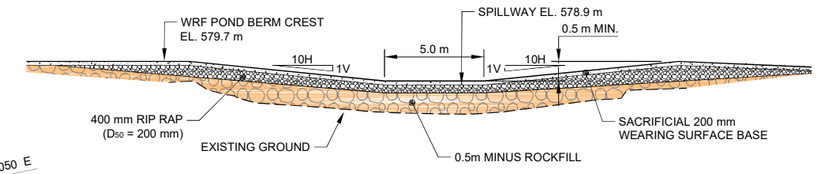
- 0.5m MINUS ROCKFILL
- INTERMEDIATE BEDDING
- PROPOSED
- RIPRAP
- 576 EXISTING CONTOURS
- 579.0 PROPOSED CONTOURS
- GEOMEMBRANE
- NON-WOVEN GEOTEXTILE

NOTE(S)

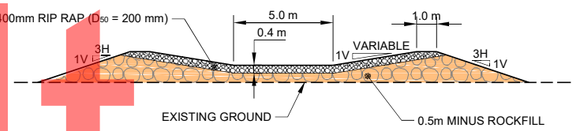
1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. COORDINATE SYSTEM IS UTM (NAD83) ZONE 17.
3. THE GROUND SURFACE IS APPROXIMATE AND MAY VARY FROM THAT SHOWN.
4. THE CONTRACTOR SHALL CARRY OUT AN AS-BUILT SURVEY OF THE EXISTING CONDITION AND ALL NEW CONSTRUCTION
5. GEOMEMBRANE TO BE LAYFIELD ENVIROLINER 6060 OR APPROVED EQUIVALENT. GEOTEXTILE TO BE LAYFIELD LP7 OR APPROVED EQUIVALENT.
6. NON-WOVEN GEOTEXTILE MAY BE REPLACED BY 0.1 m THICKNESS OF FINE BEDDING MATERIAL.

REFERENCE(S)

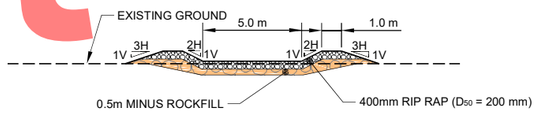
1. TOPOGRAPHY PROVIDED BY BAFFINLAND.
2. AS-BUILT CONTOURS PROVIDED BY BAFFINLAND ON MAY 17,2018.



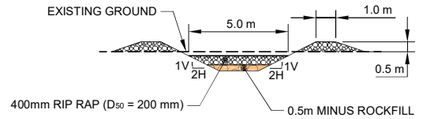
SCALE 1:150 B C-200 SPILLWAY CREST SECTION



SCALE 1:150 C C-200 SPILLWAY CHUTE SECTION IN FILL



SCALE 1:150 D C-200 SPILLWAY CHUTE SECTION IN CUT



SCALE 1:150 E C-200 ENERGY DISSIPATOR

0 2 4
1:50 METRES

0 5 10
1:150 METRES

As-built

ISSUED FOR CONSTRUCTION

PERMIT TO PRACTICE
GOLDER ASSOCIATES LTD.
Signature
Date 15 JUNE 2018
PERMIT NUMBER: P 049
NT/NU Association of Professional Engineers and Geoscientists

SEAL

CLIENT
Baffinland

CONSULTANT
GOLDER
MISSISSAUGA OFFICE
6925 CENTERY AVENUE, SUITE 100
MISSISSAUGA, ON
CANADA
905-567-444
www.golder.com

PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION
DRAINAGE SYSTEM

TITLE
WRF POND EXPANSION - SPILLWAY - PLAN, PROFILE & SECTIONS

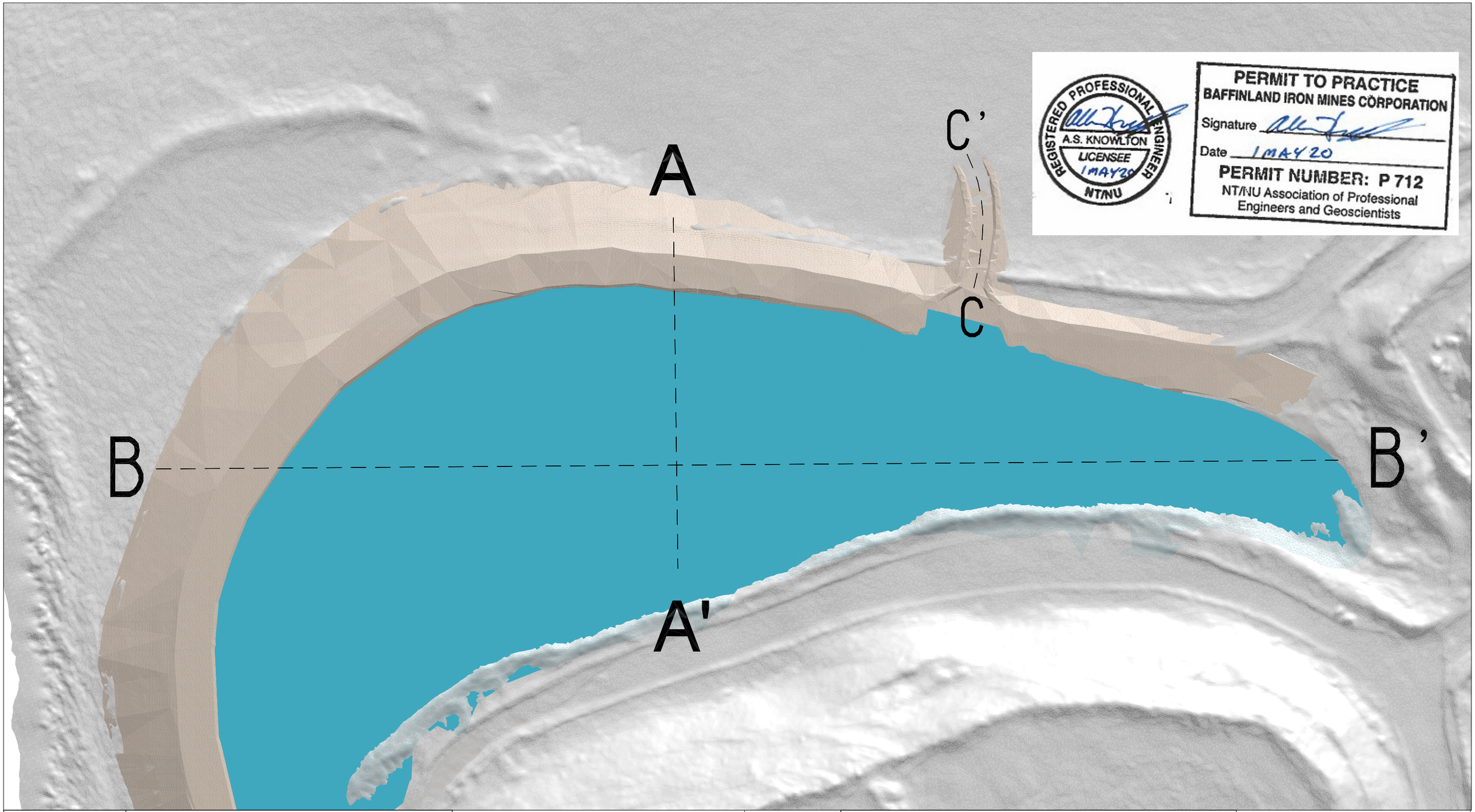
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2018-06-15	ISSUED FOR CONSTRUCTION	SEC	BA	MT	KAB

PROJECT NO.	PHASE	REV.	of	DRAWING
1790951	2003	A		C-200

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 25 mm

Path: \\10.41.90.35\sim$\sim\Clients\Baffinland_Iron_Mines_Corp\Baffin_Island\99_PROJ\1790951_WasteRock_Planning\40_PROD\0001_WasteRock_Mgmt_Planning\ | File Name: 1790951-0001-CM-0006.dwg | Last Edited By: scarlson Date: 2018-06-15 Time:3:11:45 PM | Printed By: SCarlson Date: 2018-06-15 Time:3:14:23 PM



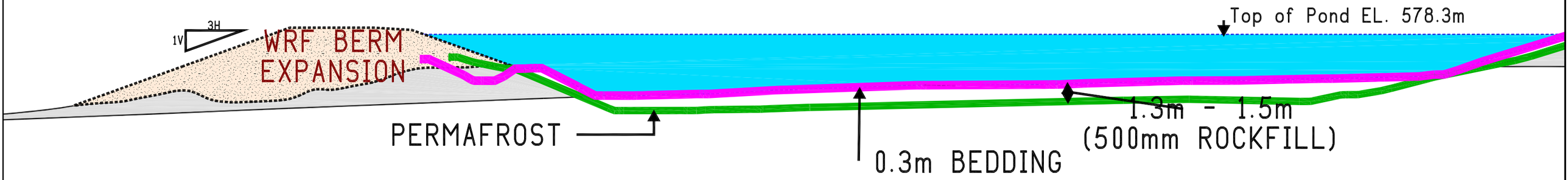
REGISTERED PROFESSIONAL ENGINEER
A.S. KNOWLTON
LICENSEE
1MAY20
NT/NU

PERMIT TO PRACTICE
BAFFINLAND IRON MINES CORPORATION
Signature
Date 1MAY20
PERMIT NUMBER: P 712
NT/NU Association of Professional Engineers and Geoscientists

PROJECT:	WRF POND EXPANSION SECTIONS	Baffinland	N E	NOTES:	LEGEND
DATE:	APRIL 2020	1 : 986 (0 10 20 30 40 50 60 70)			Pond Spillway

A

A'



LEGEND

- Native Ground
- Expansion Berm
- Existing WRF
- Excavation
- Bedding
- Pond

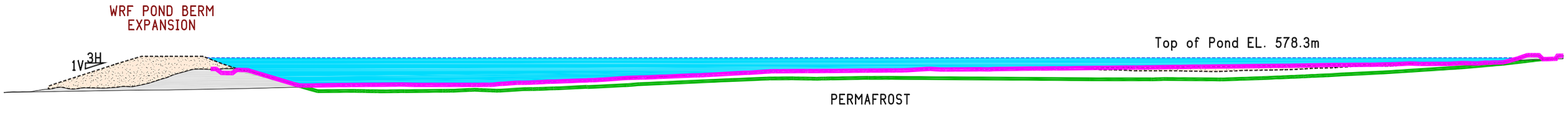
PROJECT:	WRF POND EXPANSION A-A'
DATE:	APRIL 2020

Baffinland

1 : 285

N Z

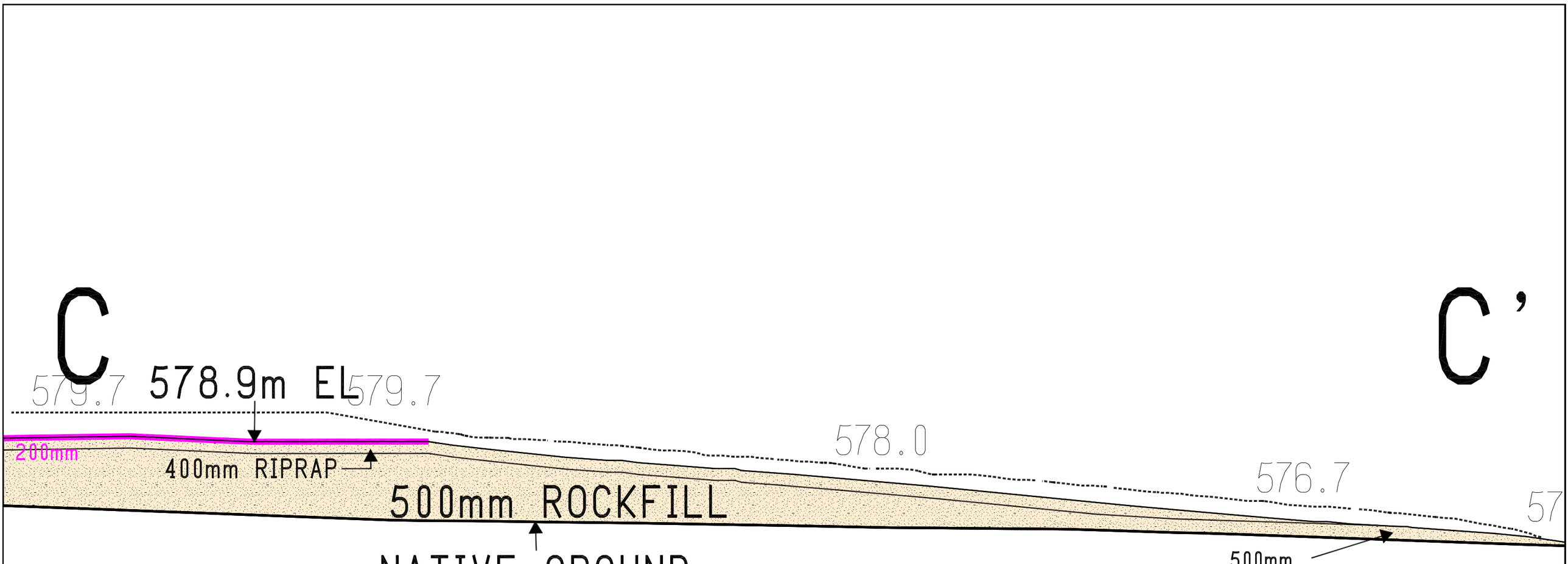
NOTES:



PROJECT:	WRF POND EXPANSION B-B'	Baffinland	Z E	NOTES:
DATE:	APRIL 2020	1 : 861 (0, 10, 20, 30, 40, 50, 60)		

LEGEND

- Native Ground
- Expansion Berm
- Existing WRF
- Excavation
- Bedding
- Pond



PROJECT:	WRF POND EXPANSION C-C'
DATE:	APRIL 2020

Baffinland

1 : 134

E Z

NOTES:

LEGEND

Spillway Berm

Spillway

APPENDIX D

GOLDER CONSTRUCTION QUALITY CONTROL REPORT

TECHNICAL MEMORANDUM

DATE May 4, 2020 **Project No.** 1790951

TO Allan Knowlton
Baffinland Iron Mines

CC

FROM Brian Andruchow, Ray Kennedy, Ken Bocking **EMAIL** Brian_Andruchow@Golder.com

WASTE ROCK FACILITY POND GEOMEMBRANE CONSTRUCTION QUALITY ASSURANCE MEMORANDUM

1.0 INTRODUCTION

Golder Associates (Golder) has been retained by Baffinland Iron Mines Corporation (Baffinland) to carry out the detailed design for the Waste Rock Facility (WRF) Pond expansion, as well as to provide construction support and the as-built reporting for the associated geomembrane installation, at the Mary River Iron Mine located on Baffin Island, Nunavut. Expansion of the WRF Pond (Golder, 2018) was required in support of future expansion of the WRF to support operational requirements.

Golder provided Construction Quality Assurance (CQA) services for the WRF Pond geomembrane installation from 5 September 2019 – 27 November 2019. This report documents the CQA activities and results carried out by Golder.

2.0 SCOPE OF WORK

The WRF Pond expansion drawings (Golder, 2018) were issued for construction on June 15, 2018 and the Project Specifications on August 17, 2018. The WRF Pond raise scope of work included the following:

- Dewatering of the existing WRF Pond;
- Removal of the existing and damaged geomembrane;
- Raising of the WRF Pond containment berms to crest elevation 579.3 meters above sea level (masl);
- Construction of the emergency spillway with invert elevation 578.9 masl;
- Preparation of the geomembrane subgrade; and
- Installation of the geomembrane.

Golder's on-site scope of work was limited to providing CQA services for the geomembrane installation.

The geomembrane installation was carried out by Layfield Canada Ltd. (Layfield) from 7 September 2019 – 19 January 2020. Golder provided full-time CQA services, as requested by Baffinland, from 5 September 2019 through 27 November 2019, excluding 26 September to 3 October and 17 October to 24 October 2019. Layfield

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continued with geomembrane installation for the periods that Golder was offsite and following Golder's demobilization from site on 27 November 2019.

3.0 DESIGN MODIFICATIONS – SOUTH ANCHOR TRENCH

The original design (Golder, 2018) specified that the south anchor trench was to be excavated through the WRF north toe berm and 1.0 m into the native overburden. The design intent was to anchor the geomembrane below the WRF north toe berm and in the finer grained native overburden. Once frozen, this detail would provide a low permeability connection between the geomembrane and native overburden and reduce potential for seepage from the WRF to bypass under the geomembrane.

As a result of the construction schedule, the presence of permafrost limited the depth to which Baffinland was able to excavate the south anchor trench. A revised design was issued (Figure 1) that specified a shallower 1.7 m deep anchor trench (depth of thawed active zone at time of construction, as provided by Baffinland). The revised design specified that 2.0 m of rock fill was to be placed over the backfilled anchor trench, which was required to maintain the geomembrane leading edge below the permafrost active zone. It is critical that the geomembrane leading edge be maintained below the permafrost active zone to reduce potential for seepage from the WRF to bypass under the geomembrane.

4.0 CONSTRUCTION QUALITY ASSURANCE

CQA refers to measures implemented by Golder to assure conformity of the Contractor's work to the Issued for Construction (IFC) Drawings and the Project Specifications. CQA includes reviewing the CQC documentation (if available), monitoring construction activities, verifying the suitability of construction material properties, documenting on-site and off-site testing procedures and results, documenting construction including maintaining photographic records, maintaining a record of pertinent discussions with site staff, and inspecting the quality workmanship.

The following sections describe the geomembrane CQA activities carried out by Golder and the results. Golder's scope of work was limited to CQA related to the geomembrane installation. All earthworks activities, including excavation and backfilling of the geomembrane anchor trenches, was carried out by Baffinland without involvement from Golder. Construction photographs are provided in Appendix A.

4.1 Surface Subgrade Condition

Subgrade preparation was carried out by Baffinland. Refer to the *Mine Site Waste Rock Facility Pond Expansion and Drainage System Construction Summary Report* prepared by Baffinland for a discussion on the subgrade improvements. Golder's scope with respect to the subgrade was limited to inspection of the final subgrade surface to assess suitability for interfacing with the geomembrane. Both Golder and Layfield prepared subgrade acceptance documents to describe the condition of the subgrade at the time of geomembrane deployment. The subgrade conditions were accepted by a Baffinland representative prior to geomembrane deployment. The subgrade acceptance documentation is provided in Appendix B.

Prior to 28 September 2019, subgrade conformance with the Project Specifications was generally achieved with a combination of heavy equipment grading and smooth drum roller compaction. The areas noted with acceptable subgrade conditions in the subgrade acceptance documents (Appendix B) corresponded to the deepest areas of the WRF Pond where hydraulic pressures on the geomembrane would be greatest. After 28 September 2019, the onset of winter conditions resulted in deficient surface subgrade conditions for both new and previously prepared

and inspected subgrade. Surface subgrade deficiencies resulted from the presence of snow, ice and frozen soils, or resulted from frozen conditions and snow/ice limiting Golder and Layfield's ability to inspect the subgrade surface for soil irregularities, particle size, and the general suitability and condition. The unapproved condition of the subgrade surface does not imply acceptance or rejection of the underlying subgrade condition. Prior to geomembrane deployment the subgrade subsurface condition was accepted by Baffinland as discussed under the Baffinland *Mine Site Waste Rock Facility Pond Expansion and Drainage System Construction Summary Report.*

Refer to Drawing 1 for the locations of approved and unapproved subgrade (based on surface condition). The subgrade conditions and associated potential impacts to the geomembrane performance were accepted by Baffinland (based on their knowledge of the subgrade improvement activities carried out previously), who instructed Layfield to continue with geomembrane deployment.

4.2 Geomembrane

The geomembrane consisted of 1.5 mm (60 mil) thick, smooth, Enviro Liner 6060x (see Appendix K for geomembrane specifications). The geomembrane was black surfaced on one side and white on the other side. The white side was installed upwards to lower the geomembrane surface temperature, reduce thermal expansion, and reduce heat transfer to the underlying permafrost. The geomembrane was manufactured by Layfield Environmental Containment (Layfield) and installed by Layfield technicians. Copies of the quality control certificates for the Enviro Liner 6060x geomembrane were not provided to Golder by Layfield/Baffinland.

The onsite stockpile of geomembrane rolls was inspected by Golder personnel on 9 September 2019. Each geomembrane roll was 6.8 m wide and 158.5 m long. The rolls were stacked three high and were not covered from exposure to the elements or debris. Crushed roll cores were noted, as was visible damage such as punctures, tears, and/or creases. Damage to the geomembrane was inspected for and repaired, or cut-out and discarded, to the extent practical (see Section 4.8). The geomembrane inventory logs are provided in Appendix C.

4.3 Deployment

The WRF Pond Geomembrane deployment commenced on 18 September 2019 along the WRF Berm (see Drawing 1). Deployment operations were performed when wind speeds allowed for safe working conditions and when weather conditions were deemed adequate for fusion welding, as decided by Layfield. Non-woven geotextile (Layfield LP7) was deployed as a cushion layer underneath the geomembrane as a replacement for the fine bedding material, in accordance with the IFC drawings.

Golder carried out the following CQA activities related to geomembrane deployment while onsite:

- Visual observation of the overall geotextile panel quality and heat bonding;
- Visual observations of overall geomembrane sheet quality;
- Assignment of a unique panel identification number to each deployed panel (geomembrane only); and,
- Confirmation of suitable panel overlap (geomembrane and geotextile) for seaming operations.

Geotextile seams were inspected by Golder, with attention to the completeness of the heat bond and overlap between panels. Areas identified as having insufficient overlap, tears, or inadequate bonding were identified to Layfield for repair.

The geomembrane panel layout for the portion of the WRF Pond installation that was observed by Golder is shown on Drawing 1. Panel numbers were typically assigned based on the order in which they were deployed. Refer to Appendix D for the geomembrane deployment logs.

4.4 Trial Seams

Trial seams were carried out by Layfield to demonstrate the working condition of the welding equipment prior to use. No production welding was carried out without a prior passing trial seam.

The geomembrane welding equipment used by Layfield included:

- Double Track Hot Wedge Fusion Welders – Machines PW-064 and PW-069 for production fusion welding along panel seams.
- Hand-Held Extrusion Fillet Welders – Machines PX-029, PX-037, and PX-038 for detailing work, liner repairs, and reconstruction of failed fusion and/or extrusion seam lengths.

Trial seam samples were produced prior to the start of the daily welding operations for a shift and again at mid-shift. As the ambient temperature approached 0° Celsius Layfield carried out trial seams every four hours. At least 10 sample coupons were cut from each trial seam; at least five of the sample coupons were tested in the peel failure mode and five of the sample coupons were tested in the shear mode using a field tensiometer with calibrated load cells. Samples were given time to equilibrate to the temperature of the testing location, and a sample coupon of virgin liner was tested for a reference strength with each trial seam. In accordance with ASTM D6392, for a trial seam to pass, the test results for the coupons were required to meet or exceed the manufacturer's guidelines:

- Shear Strength: 15.7 kN/m (90 lb/in).
- Peel Strength (Fusion Welds): 13.1 kN/m (75 lb/in).
- Peel Strength (Extrusion Welds): 11.6 kN/m (66 lb/in)
- Sample coupons must exhibit peel separation of less than 25% (Geosynthetic Research Institute GM19).

A summary of the geomembrane trial seam testing results as recorded by Golder is presented in Table 1. Peel separation exceeding 25% was the most common reason for a failed trial seam. This was often attributed to the presence of moisture on the geomembrane due to precipitation or frost, or wind reducing the effectiveness of the welder preheat blower during seaming operations. No welding was carried out without a prior passing trial seam. The results of the geomembrane trial seam testing for the equipment used while Golder was onsite are provided in Appendix E.

4.5 Production Seams

The geomembrane seaming process typically proceeded concurrently with the panel deployment. A minimum geomembrane material overlap of 125 mm was maintained for fusion welds between panels and a minimum overlap of 75 mm was maintained for extrusion welding repairs. Seams between adjacent panels were constructed using the fusion welding machines with seam repair work carried out using extrusion weld. As required, a portable shelter was used to shield welding equipment from moisture and wind. Golder inspected all seaming operations when onsite, including documenting the welding equipment, panels joined, seam length, and

other relevant parameters related to the seaming process. The seam logs used to record fusion and extrusion welding operations are provided in Appendix F.

4.6 Non-Destructive Testing

Non-destructive testing was carried out by Layfield to verify the quality of all fusion and extrusion welds. Golder observed (when on-site and to the extent practical, noting that non-destructive tests not observed in person were confirmed complete by Layfield), inspected, and documented this testing. Layfield carried out three types of non-destructive tests:

1) Air pressure testing was carried out on fusion seams. This testing generally consisted of sealing off the air channel between the inside and outside fusion weld tracks, inserting a needle attached to a pressure gauge into the air channel, and pressurizing the air channel to at least 241 KPa (35 psi). The test was considered a pass if the pressure lost over a five minute time period was less than 20.7 kPa (3 psi) and if an incision made at the opposite end of the test channel resulted in complete pressure loss (to demonstrate that the air pressure extended for the length of the tested section). Both the needle hole and incision were subsequently repaired by extrusion weld.

2) Vacuum box testing was carried out on extrusion weld seams and repairs. This testing generally consisted of applying soapy water or soapy antifreeze fluid to the area to be tested, placing a rigid-walled vacuum box over the area, ensuring a good seal, and applying a negative pressure of not less than 20.7 kPa (3 psi) to the inside of the box for a minimum of 10 seconds. The tested area was observed for air bubbles originating from the sides or within a geomembrane weld, which would be indicative of incoming air from a weld/repair discontinuity. Layfield decided to discontinue vacuum box testing on November 15, 2019 in favour of pick testing, as the foam surrounding the vacuum box was proving to be too stiff in the freezing conditions to create a seal with the geomembrane.

3) Pick testing was carried out on extrusion weld seams and repairs that were deemed to be unable to be vacuum tested, as decided by Layfield and for reasons noted above. This testing involved using a thin, blunt instrument, such as a screwdriver or non-cutting edge of a knife, to inspect an extrusion weld seam or repair for discontinuities.

A summary of the non-destructive testing carried out on the seams and repairs for the geomembrane installation witnessed by Golder is presented in Table 2. A leak or discontinuity observed or detected by a non-destructive testing method was considered a failure. Failures were either re-tested if the equipment was suspect or labelled as a defect once the source of the issue was identified (and subsequently repaired and tested). Results of the non-destructive testing as recorded by Golder are provided in Appendix G1 for the air pressure testing, Appendix G2 for the vacuum box testing, and in Appendix G3 for the pick testing. It is noted that Layfield had not completed all non-destructive testing at the time of Golder demobilizing from site on November 27, 2019.

4.7 Destructive Testing

Seams between adjacent panels were constructed with fusion welding equipment. Destructive test samples (0.3 m wide by 1.2 m long) from panel fusion weld seams were taken at an average frequency of one sample per 150 m of seam in compliance with the Project Specifications. All test locations were selected by Golder for the observed seaming operations. A total of 27 destructive test samples were taken on fusion welds for the portion of geomembrane installation inspected by Golder. In addition, one destructive test sample was taken from an

extrusion weld. The locations of the destructive test samples are shown on Drawing 1, and may be referenced to defect IDs from the destructive sample logs in Appendix H.

Destructive test samples were cut into three sections. One test sample was provided to Layfield, another to Baffinland for archival purposes, and the remaining sample was tested by Golder using the onsite tensiometer. At least ten coupons were cut from each destructive sample. At least five coupons were tested for peel adhesion strength of the inside and outside fusion weld tracks, and at least five coupons were tested for shear strength at yield (or maximum elongation with the testing apparatus), as per ASTM D6392. Strength and peel separation requirements were per the manufacturer guidelines noted for trial seam operations. The acceptance criteria for the destructive test samples, as outlined in the Project Specifications for fusion and extrusion seams in shear and peel mode, was that the strength of 4 out of the 5 replicate coupons must pass for each mode of testing. The fifth specimen must meet or exceed 80% of the specified strength values.

A summary of the destructive testing results is provided in Table 3, with the destructive testing sample logs located in Appendix H. Two of the destructive test samples were designated as failed tests due to excessive peel separation. The affected seam section was bound by passing destructive samples and subsequently repaired by extrusion welding in accordance with the Project Specifications.

4.8 Repairs

Observed geomembrane defects were assigned a unique identification number and the suspected cause of the defect recorded. The identification number was marked on the liner by Golder. Defects were typically labelled for visible punctures in the geomembrane, inadequate overlap during fusion welding, and at T-Intersections of three panels. Nearby defects of a similar type may be logged under the same defect code. In many cases, the geomembrane appeared to be damaged prior to deployment, potentially due to improper storage conditions or to improper transportation with the earthworks equipment. Locations of existing visible damage were labelled as earthworks equipment defects.

Defects were repaired either by fusion welding (such as for a large wrinkle cut) or extrusion welding operations and were non-destructively tested by Layfield. The repair date and status of non-destructive testing was recorded for each defect. Refer to Appendix I for the defect logs and Appendix J for the repair logs. It is noted that several minor extrusion repairs for geomembrane creases, scratches, etc. that did not puncture the liner were repaired and non-destructively tested but not recorded as defects. It is also noted that Golder is not able to confirm the final status of defects that had not yet been repaired by Layfield prior to Golder demobilizing from site on November 27, 2019.

5.0 CLOSURE

The results of the CQA program indicate that the portion of the WRF Pond geomembrane installation observed by Golder was generally in accordance with the Project Specifications, with the exception of the subgrade surface condition. The subgrade surface conditions after 28 September 2019 were frozen and covered by a thin layer of ice/snow, and therefore, the suitability of the subgrade surface for geomembrane installation could not be visually assessed. The impact of the frozen subgrade surface on the overall geomembrane performance is unknown, however, it is noted the geomembrane over the deepest areas of the WRF Pond were installed over acceptable subgrade prior to 28 September 2019. It is recommended that the geomembrane condition be inspected in Summer 2020 when the WRF Pond water level is low.

Should you have comments or questions, please contact the undersigned.

REGISTERED PROFESSIONAL ENGINEER
K. A. BOCKING
LICENSEE

Brian Andruchow
Civil Engineer, P.Eng.

Ken Bocking
Principal, P.Eng.

Ray Kennedy
Geotechnical Specialist, M.A.Sc.

PERMIT TO PRACTICE
GOLDER ASSOCIATES LTD.
Signature
Date 04 May 2020
PERMIT NUMBER: P 049
NT/NU Association of Professional Engineers and Geoscientists

BA/RK/KB/ba

c:\users\kbocking\documents\to 2017 active\1790951 - bim - waste and water\pond repair\as-built report\rev 0\1790951 - wrf pond liner as-built_rev0.docx

References

Golder Associated Ltd. [Golder] 2018, “WRF Pond Expansion Detailed Design”, DOC028 Rev.0, June 15, 2018.

TABLES

TABLE 1
SUMMARY OF GEOMEMBRANE TRIAL SEAMING

Welder Type	Total Number of Trial Seams	Number of Passing Trial Seams[1]	Number of Failed Trial Seams[1]
Double Track Hot-Wedge Fusion (Machines PW-064, PW-069)	62	55	7
Hand-Held Extrusion Fillet (Machines PX-029, PX-037, PX-038)	64	53	11

Note:

1. Samples were allowed to equilibrate to the ambient temperature of the tensiometer location and a virgin liner sample was tested for a strength reference. See the trial seam logs (Appendix E) for testing temperatures & measured strength values.

Compiled by: RK
Reviewed by: BA

TABLE 2
SUMMARY OF NON-DESTRUCTIVE TESTS
ON GEOMEMBRANE SEAMS AND REPAIRS

Test Type	Total Number of Tests	Number of Passing Tests	Number of Failed Tests
Air Pressure Tests (Fusion Seams, Partial or Full Sections)	189	164	25
Vacuum Box Tests (Repairs, T-joints, etc. by extrusion welding)	64	57	7
Pick Tests (Repairs, T-joints, etc. by extrusion welding)	146	145	1

Note:

The number of Air Pressure Test failures may have been heightened due to frozen testing equipment. Tests were recorded as failures if the source of the leak was not determined with certainty during testing.

Failed extrusion welds were repaired and non-destructively tested until a passing vacuum box or pick test result was demonstrated.

These non-destructive tests were accompanied by a visual inspection. Areas of exposed grinding, bubbles, etc. were recommended to be repaired & this may have contributed to the 'Failures' category. The recommended areas were repaired and non-destructively tested by Layfield.

Compiled by: RK
Reviewed by: BA

TABLE 3
SUMMARY OF DESTRUCTIVE TESTS ON GEOMEMBRANE SEAMS

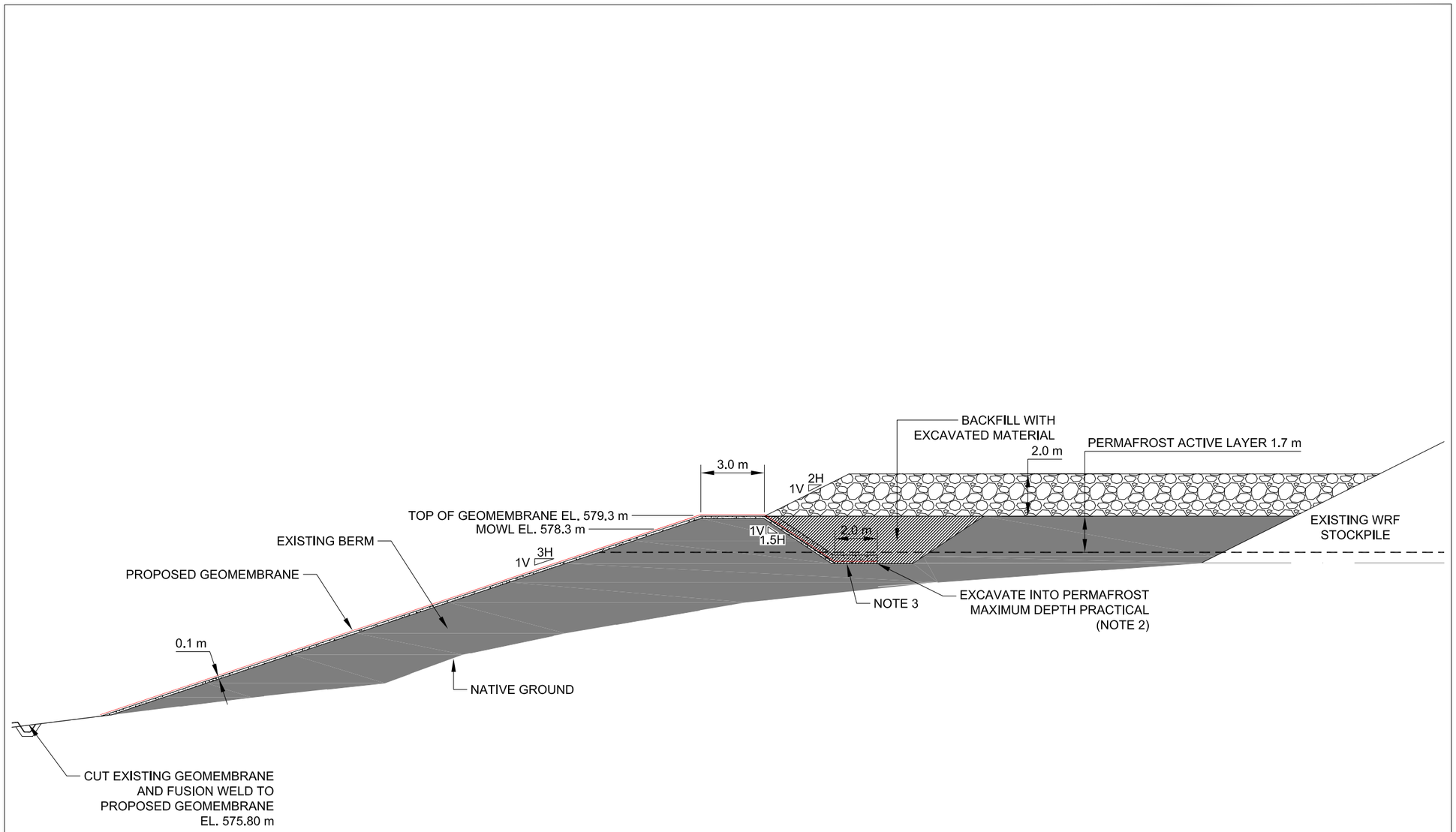
Welder Type	SHEAR MODE				PEEL MODE				Range of Measured Virgin Liner Strength at Time of Destructive Test (lb/in) [1]
	Specified Shear Strength (lb/in)	No. of Coupons Tested	Range of Measured Shear Strength* (lb/in)	No. of Failed Coupons	Specified Peel Strength (lb/in)	No. of Coupons Tested	Range of Measured Peel Strength[1] (lb/in)	No. of Failed Coupons	
Double Track Hot-Wedge Fusion	90	135	88 – 137	0	75	270	87 – 118	5	97 - 125
Extrusion Fillet	90	5	109 – 117	0	66	5	68 – 88	0	116

Note:

1. Only strength values from passing tests were included in the range, tested at 2" per minute. The strength ranges may have been affected by the large variation in ambient air temperatures at the testing location. Samples were allowed to equilibrate to the ambient temperature of the tensiometer location and a virgin liner sample was tested for a strength reference. See the destructive test logs (Appendix H) for testing temperatures & measured strength values

Compiled by: RK
Reviewed by: BA

FIGURES



LEGEND

- 0.5m MINUS WASTE ROCK
- EXCAVATION AREA
- INTERMEDIATE BEDDING
- EXISTING BERM
- REVISED GEOMEMBRANE DESIGN

NOTES

1. PERMAFROST ACTIVE ZONE AS PROVIDED BY BAFFINLAND.

2. GEOMEMBRANE ANCHOR TRENCH SHALL BE EXCAVATED INTO PERMAFROST THE MAXIMUM PRACTICAL DEPTH.

3. GEOMEMBRANE BEDDING SHALL FOLLOW DETAIL 3 ON DRAWING C-130.

GOLDER

FILE No.	WRF LINER TRENCH.dwg
PROJECT No.	1790951
VER.	
SCALE	AS SHOWN
DATE	AUG 2019
DESIGN	BA
DRAWN	BA
CHECK	KB
REVIEW	-

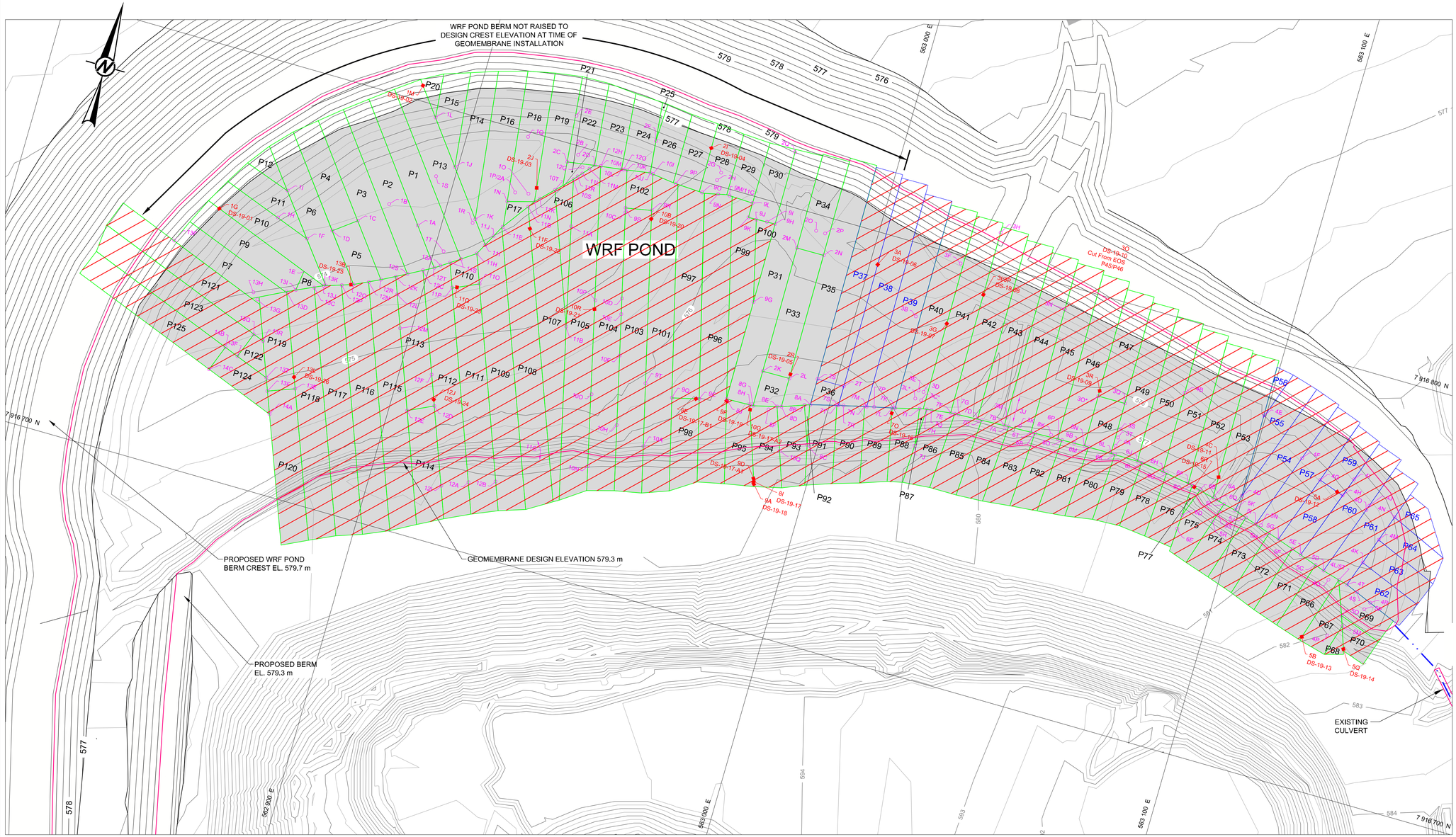
TITLE

WRF POND EXPANSION
UPDATED SOUTH ANCHOR TRENCH DETAIL

BAFFINLAND

FIGURE 1

DRAWINGS



LEGEND

- PROPOSED DESIGN CONTOURS (0.5 m INTERVAL)
- EXISTING GROUND CONTOURS (0.5 m INTERVAL)
- GEOMEMBRANE WITH PANEL ID - GOLDER ON SITE
- GEOMEMBRANE WITH PANEL ID - GOLDER OFF SITE
- DEFECTS
- DESTRUCTS
- UNAPPROVED SUBGRADE (SEE NOTE 5)
- DESIGN GEOMEMBRANE CREST AT ELEV. 579.3m

NOTE(S)

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. COORDINATE SYSTEM IS UTM (NAD83) ZONE 17.
3. THE GROUND SURFACE IS APPROXIMATE AND MAY VARY FROM THAT SHOWN.
4. WRF POND EXPANSION DESIGN CONTOURS SHOWN. AS-BUILT CONTOURS NOT AVAILABLE AT TIME OF REPORTING.
5. SUBGRADE NOT APPROVED BASED ON VISUAL OBSERVATION OF SURFACE CONDITIONS.
6. GEOMEMBRANE RUNOUT BEYOND THE ELEV. 579.3m CONTOUR REPRESENTS THE GEOMEMBRANE ANCHOR TRENCH.

REFERENCE(S)

1. ASBUILT CONTOURS PROVIDED BY BAFFINLAND ON MAY 17, 2018.

0 20 40
1:500 METRES

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2020-04-23	AS-BUILT	RK	TDR	BA	KAB

SEAL

CLIENT
Baffinland

CONSULTANT
GOLDER
MISSISSAUGA OFFICE
6925 CENTERY AVENUE, SUITE 100
MISSISSAUGA, ON
CANADA
905-567-444
www.golder.com

PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION

TITLE
GEOMEMBRANE AS-BUILT PANEL LAYOUT AND DEFECT LOCATIONS

PROJECT NO.	PHASE	REV.		DRAWING
1790951	3000	1	1 of 1	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 25 mm

Path: \\golder.gds\gal\Mississauga\SIM\Clients\Baffinland_Iron_Mines_Corp\Baffin_Island\99_PROJ\1790951_WasteRock_Planning\40_PROD\0003_Liner_As\b | File Name: 1790951-0003-CM-0001.dwg | Last Edited By: tosse Date: 2020-04-23 Time:3:04:18 PM | Printed By: tosse Date: 2020-04-23 Time:4:10:44 PM

APPENDIX A

SITE PHOTOS

APPENDIX A

WRF POND CQA PROGRAM PHOTOGRAPHS

COLLECTED BY GOLDER

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-1	
The geomembrane storage conditions when Golder arrived onsite. Date Taken: 2019-09-09	

`Photo A-2	
North portion of the previous WRF Pond anchor trench, following removal of the existing geomembrane. The new anchor trench for the expanded pond was increased in depth in compliance with the design drawings. Date Taken: 2019-09-14	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-3	
View of geomembrane subgrade at outset of installation. The subgrade was dry, smooth drum rolled, and suitable for geomembrane installation. Date Taken: 2019-09-15	

Photo A-4	
A spreader bar was used by Layfield to support the geomembrane rolls during deployment. Damage from earthworks equipment is apparent on the first few wraps in this photo, as this was the start of a roll. Date Taken: 2019-09-18	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-5	
Typical deployment operation, with the spreader bar supported at the top of the slope and Layfield pulling the panels into place. Date Taken: 2019-09-18	

Photo A-6	
Two fusion weld samples being tested in the shear failure mode orientation. Date Taken: 2019-09-18	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-7

View of the north edge of the WRF Pond, where a temporary anchor trench was constructed to anchor the geomembrane until raising of the north WRF Pond berm was complete.

Date Taken: 2019-09-19



Photo A-8

View of subgrade preparation during freezing conditions. The smooth drum roller was not as effective, compared to thawed conditions, at smoothing over loose surface gravel.

Date Taken: 2019-09-23



WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

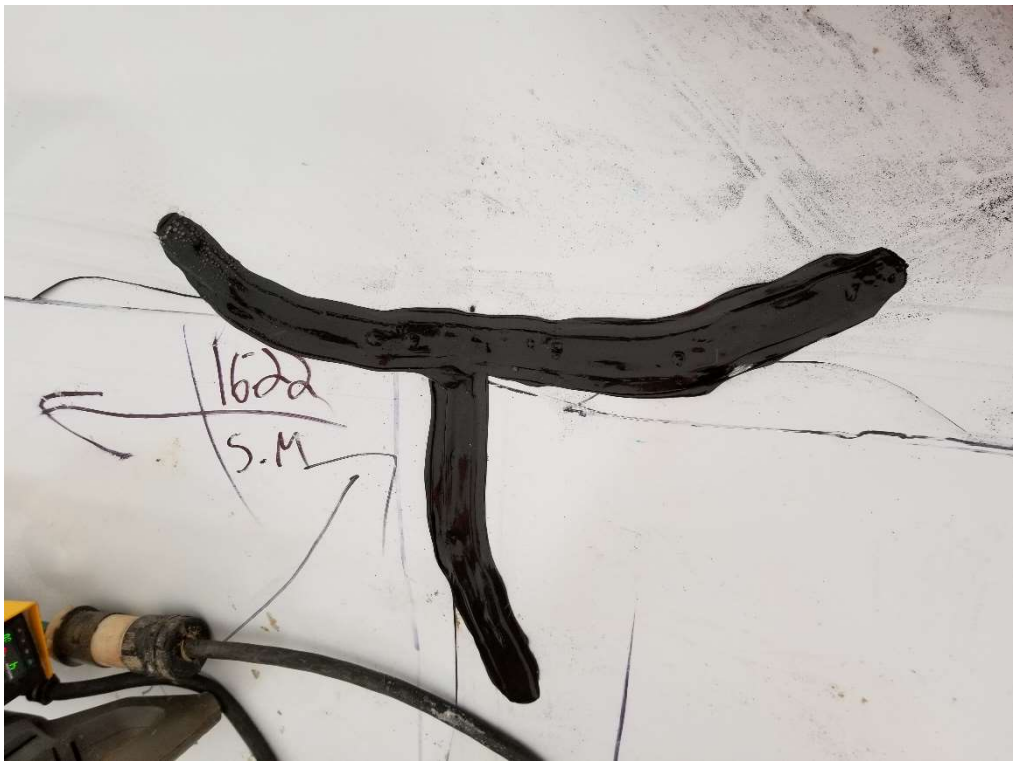
Photo A-9	
An extrusion repair that may have had moisture introduced to the weld – forming air bubbles in the extrudate weld. Bubbled welds were identified to Layfield for repair. Date Taken: 2019-09-25	

Photo A-10	
West facing photo of the WRF Pond, highlighting foggy conditions onsite. Date Taken: 2019-10-05	

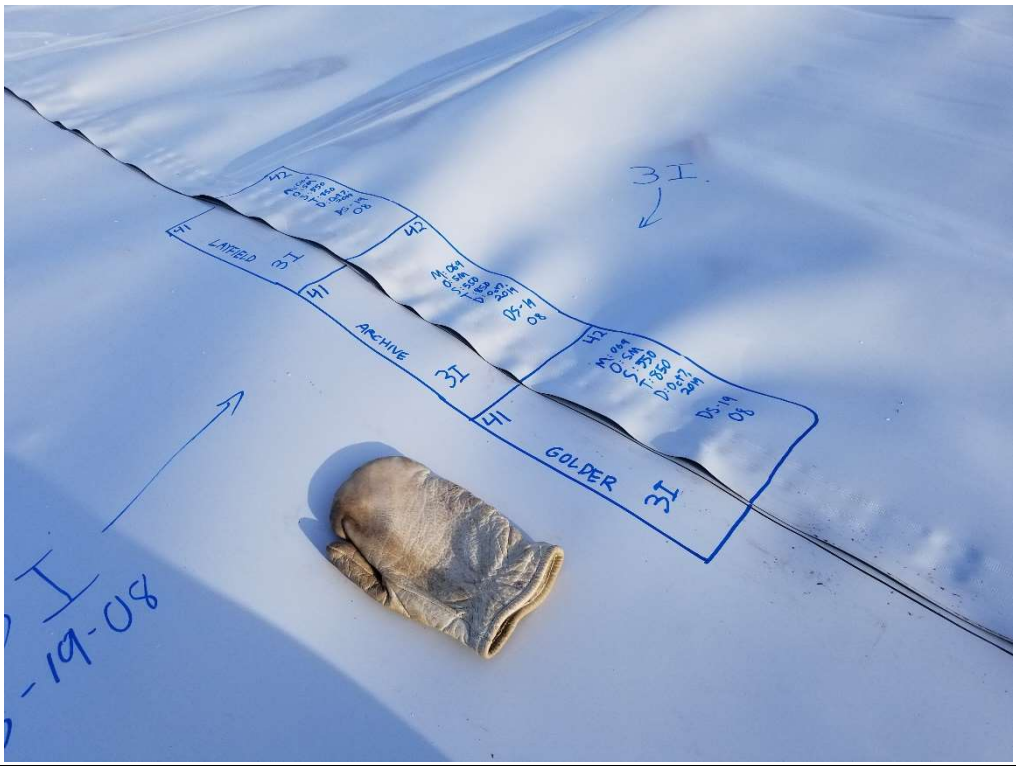
WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-11	
West facing photo of the WRF Pond, highlighting blowing snow and snowstorm conditions onsite. Geomembrane installation could not proceed during periods of heavy precipitation. Date Taken: 2019-10-06	

Photo A-12	
Northeastern portion of the WRF Pond north anchor trench. View of snow clearing from the geomembrane subgrade. Date Taken: 2019-10-06	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-13	
Layfield works to clear off the leading edge of previously deployed geomembrane to then deploy geotextile and Panel 40 moving west. Date Taken: 2019-10-06	

Photo A-14	
A destructive sample laid out by the onsite Golder representative as part of the 150 m frequency in the project specifications. Date Taken: 2019-10-07	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-15

An example of rutting and subgrade irregularities filled in with snow and ice. Repair of the subgrade was not possible due to frozen conditions.

Date Taken: 2019-10-07



Photo A-16

An example of the frozen subgrade after a brief warm period of heavy rain. The presence of ice and snow prohibited inspection of the underlying subgrade.

Date Taken: 2019-10-07



WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-17	
A Layfield technician performs the air pressure test, with a needle entering the middle channel between the inside and outside track welds and the pressure gauge isolated from the compressor. Date Taken: 2019-10-08	

Photo A-18	
The onsite tensiometer that was used for all strength testing. Shown are two extrusion weld samples in the peel failure mode orientation. Date Taken: 2019-10-08	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-19

A Layfield technician performs the vacuum box test on an extrusion repair, inspecting for bubbles originating on the edges of the weld.

Date Taken: 2019-10-11



Photo A-20

A previous edge of geomembrane deployment, along the tie-in between Panel 31 and not-yet-deployed Panel 99. Layfield had to break up the ice and free up the edge of the geomembrane prior to fusion seaming.

Date Taken: 2019-10-12



WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

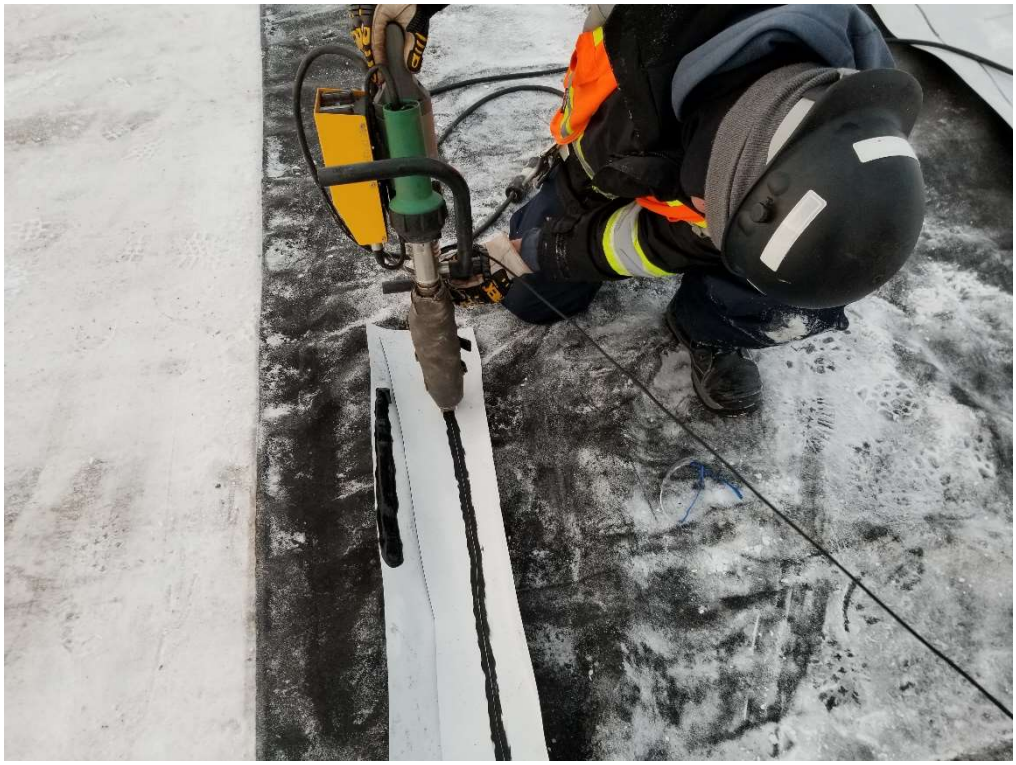
Photo A-21	
A Layfield technician produces an extrusion weld trial seam Date Taken: 2019-10-13	

Photo A-22	
Production seam operations with a fusion welder machine between two panels. Layfield personnel work to clean ahead of the machine, removing moisture and dirt for a clean welding surface. Date Taken: 2019-10-13	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-23

Repair operations with the extrusion welder. The Layfield technician has already leister tacked the patch down, grinded around the edges, and now applies the molten extrudate to the grinded area.

Date Taken: 2019-10-16



Photo A-24

A Layfield technician produces a fusion weld trial seam.

Date Taken: 2019-10-16



WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-25	
A photo of a Layfield technician shovelling back the snow to expose the free edge of the geomembrane in the east corner. Date Taken: 2019-10-25	

Photo A-26	
Eastern portion of the WRF Pond, showing the drifted over shovel paths from Layfield inspecting past fusion seams. Date Taken: 2019-10-25	

WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-27

View of the south anchor trench at the southeast corner of the WRF Pond.

Date Taken: 2019-10-25



Photo A-28

A Layfield technician performs the pick test on an extrusion repair, using the blunt side of a knife to inspect the seal around the edges of the extrusion weld.

Date Taken: 2019-10-27



WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-29

The tie-in seam conditions along the south slope, necessitating snow removal and headlamps to work for most of the day as darkness sets in.

Date Taken: 2019-11-05



Photo A-30

An example of an extrusion weld sample coupon that failed due to full peel separation, indicating that the weld adhesion was weaker than the geomembrane liner.

Date Taken: 2019-11-08



WRF POND GEOMEMBRANE LINER INSTALLATION	
Client: Baffinland Iron Mines	**Project Number:** 1790951
Site Location: WRF Pond	

Photo A-31

Examples of passing extrusion weld sample coupons, where the sample failed adjacent to the weld but not extending into the weld area.

Date Taken: 2019-11-08

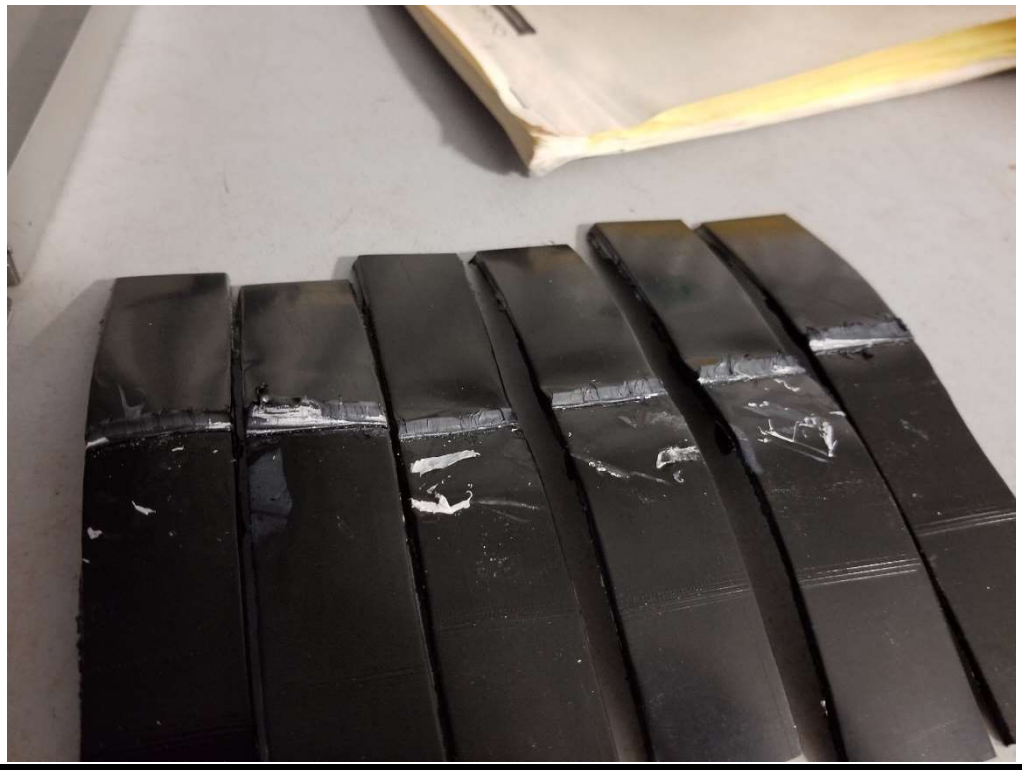


Photo A-32

One of the portable shelter options used by Layfield to shield repair operations from wind and precipitation.

Date Taken: 2019-11-10



APPENDIX B

SUBGRADE ACCEPTANCE

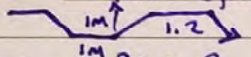
LAYFIELD

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Waste Rock Pond Liner Repairs and Relining
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☒ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☐ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☒ Partial or ☐ Complete): See Reference Points
Dimensions of Subgrade Inspection: Approx. 3,200 m²
Anchor Trench Dimensions: 

Comments: Layfield Supervisor and BIM Representative Allan Knowlton Agreed that the termination of liner will be at the toe of slope on the temporary Berm to Allow ease of Removal of temporary Berm and Reduce waste & wrinkles for future tie-in

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

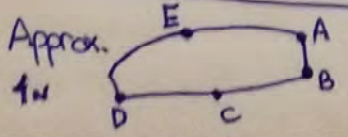
Date: September 15, 2019
Signature: [signature]
Name: Mike Cornwell
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 15 SEP 19
Signature: [signature]
Name: Allan Knowlton
Title: Project Manager
Company: BIM

Reference Points



A - N 7916811.6 E 562937.6
B - N 7916747.4 E 562937.4
C - N 7916767.9 E 562903.8
D - N 7916741.1 E 562854.5
E - N 7916784.3 E 562866.2

LS-10-QF-009
UTM Coordinates

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield	DATE: September 15/19	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected		WEATHER: Overcast

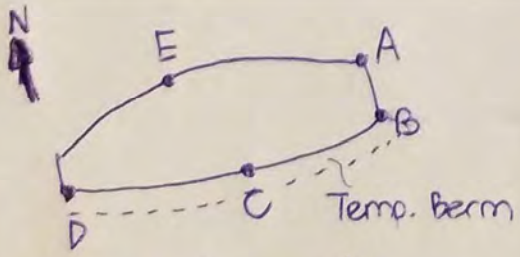
No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size).		AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.	MC	AK
4	Dewatering measures provided, if required.	MC	AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials	MC	AK
6	Fill materials contain no frozen lumps or Unsuitable Material.		AK
7	Required visual inspection of placed materials performed and photographed.		AK
8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.	MC	AK
9	Weather conditions meet requirements during fill placement and compaction.		AK

REMARKS: * Subgrade below the surface was managed by the client (Alton Knowlton)

DEVIATIONS: (Attach list if necessary)

DATE OF RECTIFICATION:

ACCEPTED BY QA REPRESENTATIVE	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Roy Kennedy	NAME: Mike Cantwell	NAME: ALTON KNOWLTON
SIGNATURE:	SIGNATURE:	SIGNATURE:
DATE: Sept. 15/19	DATE: 15 Sept 19	DATE: 15 SEP 19



A - N 7916811.6 E 562937.6
B - N 7916797.4 E 562937.4
C - N 7916767.9 E 562903.8
D - N 7916741.1 E 562854.5
E - N 7916784.3 E 562866.2

*Layfield agreed to Client's (Alton K.) request to terminate liner at the toe of the temp. berm.

* The approval is for current weather conditions.

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: WASTE ROCK PAD LINER REPAIRS AND RE-LINING
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: B.I.M
LOCATION: W.R.P

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☒ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☐ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☒ Partial or ☐ Complete): _____
Dimensions of Subgrade Inspection: SEE REFERENCE POINTS
Anchor Trench Dimensions: ~ - Geomembrane -SUB-GRADE TEMPORARY ANCHOR ON ROCK MIXED WITH FINES
Comments: GNEISS / CRUSH TYPE STONE MIXED WITH FINE MATERIAL 19MM MINUS ROLLED/SOME LARGER PRESENT AND PACKED SMOOTH. LAYFIELD SUPERVISOR AND BIM REP AGREED TO TERMINATION POINT OF LINER MINOR DEVIATIONS IN SUBGRADE EQUAL TO OR LESS THAN AN INCH, LOOSE BEDDING MATERIAL/SURFACE ROCK PRESENT

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

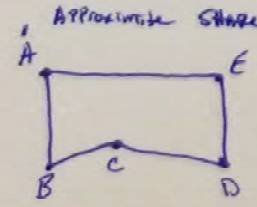
LAYFIELD REPRESENTATIVE:

Date: Sept 22, 2019
Signature: _____
Name: Mike Cantwell
Title: SUPERVISOR

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: SEPT 22/19
Signature: _____
Name: ALLAN KNOWLTON
Title: PROJECT MANAGER
Company: BIM



A - N 7916811.7 E 562930.3
B - N 7916793.8 E 562931.9
C - N 7916799.5 E 562942.7
D - N 7916794.9 E 562977.3
E - N 7916807.7 E 562978.4

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield	DATE: Sept 22, 2019	SHIFT: (DAY) / NIGHT
LOCATION: See reference points of area inspected		WEATHER: Sunny, Clear

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size)		AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement		AK
4	Dewatering measures provided, if required.		AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials		AK
6	Fill materials contain no frozen lumps or Unsuitable Material.		AK
7	Required visual inspection of placed materials performed and photographed.		AK
8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.		
9	Weather conditions meet requirements during fill placement and compaction.		AK

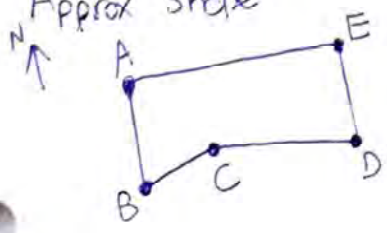
REMARKS: * Subgrade below the surface was managed by the client (Allan Knowlton)

DEVIATIONS: (Attach list if necessary) * Minor deviations in subgrade (≤ 25mm); angular particles at surface, larger particles present in intermediate bedding → Frozen Conditions making for less ideal conditions

DATE OF RECTIFICATION:

ACCEPTED BY QA REPRESENTATIVE	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: Mike Cantwell	NAME: ALLAN KNOWLTON
SIGNATURE: Ray Kennedy	SIGNATURE:	SIGNATURE:
DATE: 22 Sept 19	DATE: 22 Sep 2019	DATE: 22 SEP 19

Approx Shape



A - N 7916811.7 E 562930.3
B - N 7916793.8 E 562931.9
C - N 7916799.5 E 562942.7
D - N 7916794.9 E 562977.3
E - N 7916807.7 E 562978.4

* Layfield agreed to Clients request to terminate liner at the toe of slope of temp berm.

* The approx is for current weather condition

* Blue Pen Ran Out of Ink Ray Kennedy
Allan Signed Prior

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: WRP Relining + Repairs
PROJECT NUMBER: CTO01289
OWNER/CONTRACTOR: BIM
LOCATION: Mary River, NU.

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☒ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☐ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☒Partial or ☐Complete): SEE reference Points to be added in the map
Dimensions of Subgrade Inspection: Locations to be added in the morning
Anchor Trench Dimensions: 1.4m 1m x 1.4
Comments: Minor Deviations within Area with loose crush mixed with fine material that was Rolled and vibrated Prior to Placement of Geotextile

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: SEPT, 23, 2019
Signature:
Name: Mike Cantrell
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 23 SEP 19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MANAGER
Company: BIM

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield	DATE: Sept 23, 2019	SHIFT: (DAY) NIGHT
LOCATION: See reference points of area inspected, to be added in morning of next day by survey		WEATHER: Cloudy -6°C

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size).		AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		AK
4	Dewatering measures provided, if required.		AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials	ML	See Below AK
6	Fill materials contain no frozen lumps or Unsuitable Material		AK
7	Required visual inspection of placed materials performed and photographed.	ML	AK
8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.	ML	
9	Weather conditions meet requirements during fill placement and compaction.		

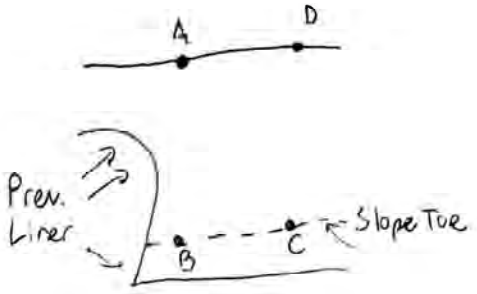
REMARKS: * Subgrade below surface was managed by the client ML AK
This approval is for current weather conditions

DEVIATIONS: (Attach list if necessary) • Client is willing to accept some potentially damaging rocks/material on surface, given the amount of preparation and winter conditions

DATE OF RECTIFICATION:

ACCEPTED BY QA REPRESENTATIVE	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: Mike Layfield	NAME: ALLAN [illegible]
SIGNATURE: Ray Kennedy	SIGNATURE: ML	SIGNATURE: AK
DATE: Sept. 23/19	DATE: Sept 23, 2019	DATE: 23SEP19

*See Layfield Form



A - N 7916811.6 Elev ↳ 578.8
E 562986.4

B - N 7916753.4 Elev ↳ 576.7
E 562979.2

C - N 7916764.4 Elev ↳ 577.1
E 563036.2

D - N 7916801.6
E 563042.7
Elev ↳ 579.3

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Waste Rock Pond Liner Repairs And Relining
PROJECT NUMBER: Ct001289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): Approx 38m wide x 44m long
Dimensions of Subgrade Inspection: Approx 1,672m² East of P.35
Anchor Trench Dimensions:
Comments: 3/4 in. crush material. Area unacceptable due to standing water, Ice/slush, Surface irregularities, Saturated granular subgrade, and ~~no smooth Drum used prior to Install.~~
Approx Reference Points below

LESS THAN 1" PER SPECS

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

AK

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

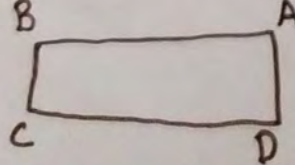
LAYFIELD REPRESENTATIVE:

Date: September/28/2019
Signature: Mathew Bourne.
Name: Mathew Bourne
Title: Supervisor.

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 28SEP19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MNGR.
Company: BIM



A- N7916800.8 E563001.7
B- N7916758.5 E562999.4
C- N7916763.9 E563036.4
D- N7916795.4 E563040.7

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland waste rock pond liner
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: BIM
LOCATION: Waste Rock Pond, BIM near Mary River

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

☐ *found it to be an acceptable surface on which to install geomembrane; OR*
☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): As per survey. N 7916758.2 E 563106.4 EL 577.9 | N 7916740.3 E 563107.9 EL 579.8 | N 7916779.4 E 563124.9 EL 1579.8
Dimensions of Subgrade Inspection: N 7916701.5, E563122.8, 577.1
Anchor Trench Dimensions: 1.6 x 1.4 x 1.6 M approx
Comments: surface snow removed as much as possible, but not to bare soil. frozen with snow in irregularities, No real visual possible

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 17 2019
Signature: Will B
Name: Will Brydon
Title: installation technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/17
Signature: Kyle Doyle for A. Knowlton
Name: KYLE DOYLE FOR A. KNOWLTON
Title: Project Manager
Company: BLM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond, B.I.M near Mary River N.V

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): prior survey points to East end of pond
Dimensions of Subgrade Inspection: See survey points.
Anchor Trench Dimensions: 6M x 1M x 6M
Comments: Some surface snow removed, area not to bare soil. Frozen snow in irregularities visual inspection not possible, WATER Seepage on South Slope AND IN EAST AT. NOTIFIED Roger Doyle AND SENT PICTURES to MAYFIELD PM

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct-19-2019
Signature: [signature]
Name: Mike Cantwell
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: Oct-19-2019
Signature: [signature]
Name: Roger Doyle
Title: Project Man.
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond Liner
PROJECT NUMBER: CT1289
OWNER/CONTRACTOR: B.I.M
LOCATION: waste Rock pond Mary River.

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): Approx 32w x 38L East of P41
Dimensions of Subgrade Inspection: See Reference Points below
Anchor Trench Dimensions: 1.4/1.6m
Comments: Subgrade Sufface is a frozen mixture of Snow/ice & 19mm crush material was Saturated prior to freezing. Spots of Soil irregularities (lowspots/Ridges) unable to see since area filled with Snow & ice allowing for a smooth looking subgrade

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct/07/2019
Signature: Matthew Bourne
Name: Mathew Bourne
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/07
Signature: [signature]
Name: Roger Boyle
Title: PROJECT MANAGER
Company: BIM

[redacted]
C- N 7916763.9 E 563036.4
D- N 7916795.4 E 563040.7
A- N 7916795.8 E 563076.4
B- N 7916761.4 E 563071.0

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield (Installer)	DATE:	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected (At WRF Pond)		WEATHER:

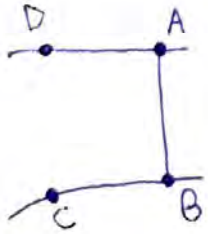
	No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
	1	Survey lines and layout conform to the Drawings.		RD FOR AK
	2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size).[1]		RD FOR AK
*	3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		RD FOR AK
	4	Dewatering measures provided, if required.		RD FOR AK
	5	Liner bedding surface is acceptable and contains no potentially damaging materials		RD FOR AK
*	6	Fill materials contain no frozen lumps or Unsuitable Material.[1]		RD FOR AK
	7	Required visual inspection of placed materials performed and photographed.		RD FOR AK
*	8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation	MB as per Layfield surveyor	RD FOR AK
	9	Weather conditions meet requirements during fill placement and compaction[1]		RD FOR AK

REMARKS: [1] Subgrade below the surface was not able to be inspected, was managed by the client (A. Knowlton / Roger D.) & is now frozen RD FOR AK

DEVIATIONS: (Attach list if necessary) Subgrade at surface is a frozen mixture of snow, ice, and 19mm crush material, was saturated prior to freezing. Soil irregularities (ridges, ~~DATE OF RECTIFICATION~~ low spots, etc.) filled in with snow & ice, unable to inspect material below surface for particle size, etc.

* ACCEPTED BY QA REPRESENTATIVE	* ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Roy Kennedy	NAME: Mathew Bourne	NAME: ROGER DOYLE FOR ALLAN KNOWLTON
SIGNATURE:	SIGNATURE:	SIGNATURE:
DATE: Oct 7, 2019	DATE: 2019/10/07	DATE: 2019/10/07

* Subgrade is unacceptable as per project specifications (also see Layfield form)



A - N 7916795.8
E 563076.4

B - N 7916761.4
E 563071.0

D - N 7916795.4
E 563040.7

C - N 7916763.9 *
E 563036.4

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond Liner
PROJECT NUMBER: CT-001289
OWNER/CONTRACTOR: B.I.M.
LOCATION: Waste Rock Pond, B.I.M. near Mary River, N.U.

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑ Partial or ☐ Complete): According to Referance points by survey
Dimensions of Subgrade Inspection: 35m. x 25m East of panel 47 (approx.)
Anchor Trench Dimensions: 1.6 x 1.4 x 1.6m. approximately
Comments: Surface snow removed as much as possible but still not to bare soil, Frozen with snow in areas of irregularity. No real visual possible.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: October 11, 2019
Signature:
Name: Jonathan Hitchcock
Title: Installation Technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 11 OCT 19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MANAGER
Company: BIM

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield (Installer)	DATE: Oct 11, 2019	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected (At WRF Pond) ↳ To Be Added To From on Oct 12		WEATHER: Clear to Overcast

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size).[1]		AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		AK
4	Dewatering measures provided, if required.		AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials		AK
6	Fill materials contain no frozen lumps or Unsuitable Material.[1]		AK
7	Required visual inspection of placed materials performed and photographed.		AK
* 8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.	[illegible]	AK
9	Weather conditions meet requirements during fill placement and compaction.[1]		AK

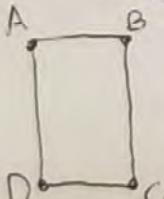
REMARKS: [1] Subgrade below the surface was not able to be inspected, was ~~[illegible]~~ managed by the client (A. Knowlton/Roger D.) & is now frozen [illegible]

DEVIATIONS: (Attach list if necessary) Subgrade at surface is a frozen mixture of snow, ice and Amm crush material, was saturated prior to freezing. Soil irregularities (ridges, low spots, etc.) filled in with snow & ice, unable to inspect material below surface.

~~DATE OF RECTIFICATION:~~

~~NOT ACCEPTED BY~~ QA REPRESENTATIVE *	~~ACCEPTED BY~~ CONTRACTOR *	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: Jonathon Hitchcock	NAME: ALLAN
SIGNATURE: [signature]	SIGNATURE: [signature]	SIGNATURE: [signature]
DATE: Oct 19, 2019	DATE: Oct 11, 2019	DATE: 11 OCT 19

* Subgrade is unacceptable as per project specifications (also see Layfield) & inability for representatives to inspect the surface, as form it is frozen & covered in snow + ice.



A - N 7916795.2 E 563074.8 Elev 579.3

B - N 7916791.2 E 563100.1 Elev 579.7

C - N 7916761.4 E 563096.1 Elev 577.7

D - N 7916763.4 E 563073.3 Elev 577.5

(UTM Coordinates)

Baffinland

GOLDER

SPECIFICATION

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield (Installer)	DATE: Oct. 25, 2019	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected At The WRF Pond (when Survey is Available → Will Be Added)		WEATHER: Clear / Sunny

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		RD for AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size). 1		RD for AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		RD for AK
4	Dewatering measures provided, if required.		RD for AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials		RD for AK
6	Fill materials contain no frozen lumps or Unsuitable Material. 1		RD for AK
7	Required visual inspection of placed materials performed and photographed.		RD for AK
* 8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.	MC * See Note stating UNACCEPTABLE SUBGRADE	RD for AK
9	Weather conditions meet requirements during fill placement and compaction. 1		RD for AK

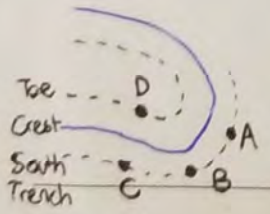
REMARKS: 1 Subgrade below the surface was not able to be inspected, was managed by the client (A. Krawlton / R. Doyle) & is now frozen RD for AK

DEVIATIONS: (Attach list if necessary) Subgrade at surface is a frozen mixture of snow, ice and 19mm crush material. Soil irregularities (ridges, low spots, angular material, etc.) have been filled in with snow and ice, unable to inspect material below the surface.

QA REPRESENTATIVE	CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: Mike C	NAME: Robert Doyle FOR AK
SIGNATURE: Ray Kennedy	SIGNATURE:	SIGNATURE: RD for AK
DATE: Oct 25, 2019	DATE: Oct 25, 2019	DATE: 2019/10/25

*Subgrade is unacceptable as per the project specifications (also see Layfield form) and inability for representatives to inspect the surface, as it is frozen & covered in snow and ice.

- Anchor trench was excavated to permafrost, as confirmed by the client. RD for AK



A - N 7916736.6 Elev 578.7m
E 563143.7

B - N 7916730.4 Elev 580.2m
E 563131.9

C - N 7916742.0
E 563108.5 Elev 578.6

D - N 7916755.3
E 563113.4
Elev 578.0m

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT00 1289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond, BIM, near Mary River Nunavut

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

☐ *found it to be an acceptable surface on which to install geomembrane; OR*

☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): as per survey. A N 7916738.6 E 563143.7 B N 7916730.4 E 56313.9

Dimensions of Subgrade Inspection: C N 7916742 E 563108.5 D N 7916755.3 E 563113.4

Anchor Trench Dimensions:

Comments: frozen snow covered subgrade consisting of ice, 19mm crush, and snow. Large deviations found, compacted snow and ice makes visual inspection of underlying material impossible.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 25 2019
Signature: [signature]
Name: 10:28
Title: Installation Technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/25
Signature: [signature] for A. Knowlton
Name: Roger Doyle for A.K.
Title: Project Manager
Company: BIM

Baffinland

GOLDER

SPECIFICATION

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield (Installer)	DATE: Oct 26. 2019	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected At The WRF Pond (When Survey is Available → Will Be Added)		WEATHER: Overcast

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		RD for AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size). 1		RD for AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		RD for AK
4	Dewatering measures provided, if required.		RD for AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials		RD for AK
6	Fill materials contain no frozen lumps or Unsuitable Material. 1		RD For AK
7	Required visual inspection of placed materials performed and photographed.		RD For AK
* 8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.	* see note WE	RD For AK
9	Weather conditions meet requirements during fill placement and compaction. 1		RD For AK

REMARKS: 1 Subgrade below the surface was not able to be inspected, was managed by the client (A. Krawlton/R. Doyle) & is now frozen R. Doyle For AK

DEVIATIONS: (Attach list if necessary) Subgrade at surface is a frozen mixture of snow, ice and 19mm crush material. Soil irregularities (ridges, low spots, angular material, etc.) have been filled in with snow and ice, unable to inspect material below the surface

QA REPRESENTATIVE	CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: Will Brydon	NAME: Roger Doyle For AK
SIGNATURE: Ray Kennedy	SIGNATURE: Will B	SIGNATURE: Roger Doyle
DATE: Oct 26, 2019	DATE: Oct 26 2019	DATE: 2019/10/27

*Subgrade is unacceptable as per the project specifications (also see Layfield form) and inability for representatives to inspect the surface, as it is frozen & covered in snow and ice.

- Anchor trench was excavated to permafrost, this was confirmed by the client.

R. Doyle For AK



D - N 7916755.3 E 563113.4 Elev 578.0m

C - N 7916742.0 E 563086.5 Elev 578.6m

F - N 7916747.5 E 563090.6 Elev 577.2

E - N 7916760.6 E 563089.9 Elev 577.6

Reference No. 1790951-S

GOLDER

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: B I M
LOCATION: Mary River, Waste Rock Pond, B. I. M., N U

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑ Partial or ☐ Complete): as per survey
Dimensions of Subgrade Inspection:
Anchor Trench Dimensions:
Comments: frozen snow covered subgrade consisting of ice, snow, and 19mm crush. Large deviations found, compacted snow makes visual inspection impossible. Anchor trench floor varies from 1.0-2.0 M and transition from north AT detail to south AT detail approved by Golder.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 26 2019
Signature: Will B
Name: Will Brydon
Title: Installation Technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/27
Signature: Roger Doyle for A. Knowlton
Name: Roger Doyle for A. K
Title: Project Manager
Company: BIM

Baffinland

GOLDER

SPECIFICATION

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield (Installer)	DATE: Oct 28, 2019	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected At The WRF Pond (When Survey is Available → Will Be Added)		WEATHER:

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		RD for AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size).1		RD for AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		RD for AK
4	Dewatering measures provided, if required.		RD for AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials		RD for AK
6	Fill materials contain no frozen lumps or Unsuitable Material.1		RD for AK
7	Required visual inspection of placed materials performed and photographed.		RD for AK
* 8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.	see note WB	RD for AK
9	Weather conditions meet requirements during fill placement and compaction.1		RD for AK

REMARKS: 1 Subgrade below the surface was not able to be inspected, was managed by the client (A. Knowlton / R. Doyle) & is now frozen RD for A. Knowlton

DEVIATIONS: (Attach list if necessary) Subgrade at surface is a frozen mixture of snow, ice and 19mm crush material. Soil irregularities (ridges, low spots, angular material, etc.) have been filled in with snow and ice, unable to inspect material below the surface.

QA REPRESENTATIVE	CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: Will Brydon	NAME: Roger Doyle for A Knowlton
SIGNATURE: Ray Kennedy	SIGNATURE: WillB	SIGNATURE: RDoyle
DATE: Oct 28, 2019	DATE: Oct 28 2019	DATE: 2019/10/28

*Subgrade is unacceptable as per the project specifications (also see Layfield form) and inability for representatives to inspect the surface, as it is frozen & covered in snow and ice.

- South Anchor Trench was excavated to permafrost, this was confirmed by the client. RD for A. Knowlton

H – E: H-N 7916762.3 Elev. 577.1m, E 563030.8

E-N 7916760.6 Elev. 577.6m, E 563089.9

F-N 7916747.5, E 563090.6 Elev 577.2 m

G – F: G-N 7916747.2 Elev. 577.9m, E 563032.0

GOLDER

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT00 1289
OWNER/CONTRACTOR: B.I.M
LOCATION: Mary River, waste rock pond, B.I.M, NV

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): As per survey
Dimensions of Subgrade Inspection:
Anchor Trench Dimensions:
Comments: frozen snow covered subgrade consisting of ice, snow, 19mm crush, Large deviations found Compacted snow makes visual inspection impossible, Loose crush spilled on to slope 5. Anchor trench floor varies in size. 1-2 M. Loose Material on top of Crown.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 28 2019
Signature:
Name: Will Brydon
Title: installation technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/28
Signature:
Name: Roger Doyle
Title: Project Manage
Company: BIM

Baffinland

GOLDER

SPECIFICATION

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield (Installer)	DATE: November 9/19	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected At The WRF Pond (when Survey is Available → Will Be Added)		WEATHER: Clear, -22°C

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		AK
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size). 1		AK
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		SEE 1
4	Dewatering measures provided, if required.		AK
5	Liner bedding surface is acceptable and contains no potentially damaging materials		AK
6	Fill materials contain no frozen lumps or Unsuitable Material. 1		SEE 1
7	Required visual inspection of placed materials performed and photographed.		AK
* 8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.	WB	AK
9	Weather conditions meet requirements during fill placement and compaction. 1		AK

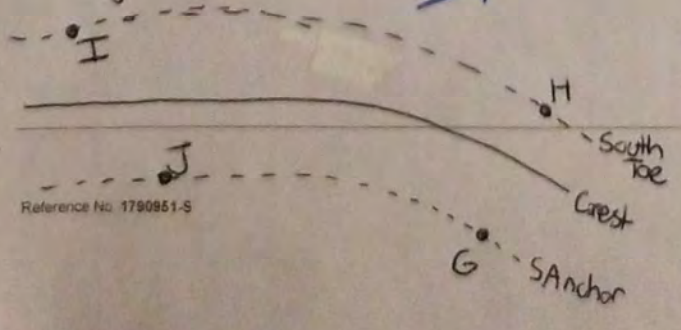
REMARKS: 1 Subgrade below the surface was not able to be inspected, was scraped by the client (A. Krawiton/R. Doyle) & is now frozen

DEVIATIONS: (Attach list if necessary) Subgrade at surface is a frozen mixture of snow, ice and 19mm crush material. Soil irregularities (ridges, low spots, angular material, etc.) have been filled in with snow and ice, unable to inspect material below the surface

QA REPRESENTATIVE	CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: Will Bryden	NAME: ALLAN KNOWLTON
SIGNATURE: Ray Kennedy	SIGNATURE: WB	SIGNATURE:
DATE: November 9/2019	DATE: Nov 9 2019	DATE: 9NOV19

*Subgrade is unacceptable as per the project specifications (also see Layfield form) and inability for representatives to inspect the surface, as it is frozen & covered in snow and ice.

- South Anchor Trench was excavated to permafrost, as confirmed by the client.



H - N 7916762.3m Elev. 577.1m
E 563030.8m

G - N 7916747.2m Elev. 577.9m
E 563032.0m

J - N 7916737.9m Elev 578.2
E 562991.4m

GOLDER

I - N 7916753.3m Elev 576.7m
E 562979.3m

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: BafFinland Waste Rock Pond
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: BIM
LOCATION: Mary River, Waste Rock Pond, B.I.M. NV

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

☐ *found it to be an acceptable surface on which to install geomembrane; OR*

☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): as per survey
H N 7916762.3 E 563038
J N 7916737.9 E 562991.4
G N 7916747.2 E 563032.8
I N 7916753.3 E 562979.3
Dimensions of Subgrade Inspection:
Anchor Trench Dimensions: 3-4m x 2m
Comments: Subgrade consists of ice, snow, and 19mm crush. Large deviations found, Compacted ice/snow makes visual inspection impossible.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Nov 9, 2019
Signature:
Name: Will Brydon
Title: Installation Technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 9NOV19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MNGR
Company: BIM

Baffinland

GOLDER

SPECIFICATION

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR: Layfield (Installer)	DATE: November 13/19	SHIFT: (DAY) - NIGHT
LOCATION: See Reference Points of Area Inspected At The WRF Pond (when Survey is Available → Will Be Added)		WEATHER: Overcast, Light Snow

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		JP
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size) 1		JP
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement		see 1
4	Dewatering measures provided, if required.		JP
5	Liner bedding surface is acceptable and contains no potentially damaging materials		JP
6	Fill materials contain no frozen lumps or Unsuitable Material. 1		see 1
7	Required visual inspection of placed materials performed and photographed.		JP
8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.		JP
9	Weather conditions meet requirements during fill placement and compaction. 1		JP

REMARKS: 1 Subgrade below the surface was not able to be inspected, was managed by the client (A. Krawitor / R Doyle) & is now frozen.

DEVIATIONS (Attach list if necessary): Subgrade at surface is a frozen mixture of snow, ice and 19mm crush material. Soil irregularities (ridges, low spots, angular material etc.) have been filled in with snow and ice, unable to inspect material below the surface.

QA REPRESENTATIVE	CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: Ray Kennedy	NAME: I. DuPlessis	NAME: JAAN PEDJASE
SIGNATURE:	SIGNATURE:	SIGNATURE:
DATE: Nov 13, 2019	DATE: 11/13/2019	DATE: NOV 13, 2019

*Subgrade is unacceptable as per the project specifications (also see Layfield form) and not ability for representatives to inspect the surface, as it is frozen & covered in snow and ice
- South Anchor Trench was excavated to permafrost, as confirmed by the client



A - N 7916795.4m
E 562980.8m
Elev 576.0m

B - N 7916796.5m
E 562937.7m
Elev 571.3m

C - N 7916754.0m
E 562886.4m
Elev 574.0m

D - N 7916704.9m
E 562904.2m
Elev 577.8m

E - N 7916735.5m
E 562982.5
Elev 579.0m

GOLDER

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF SUBGRADE SURFACE INSPECTION

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT 001289
OWNER/CONTRACTOR: BIM
LOCATION: Mary River Waste Rock Pond, BIM NV

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the subgrade surface described below, and:

- ☐ *found it to be an Acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): _____
Dimensions of Subgrade Inspection: A 7916795.4 562980.8 574.0 B 7916795.5 562937.7 574.3
TD **~~Anchor Trench Dimensions:~~** C 7916754.0 562886.4 574.0 D 7916704.9 562904.2 572.8 E 7916735.5 562982.5 578.0
Comments: Subgrade is unacceptable as per the project specifications and inability for representatives to inspect the surface as it is frozen and covered by snow.

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

The subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: 11/13/2019
Signature: _____
Name: J.M DU PLESSIS
Title: PROJECT SUPERVISOR

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: NOV 13, 2019
Signature: _____
Name: JEAN PEDJASE
Title: PROJECT MANAGER
Company: BIM

APPENDIX C

INVENTORY LOGS

GEOMEMBRANE PANEL LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

SHEET #:	1 of 2

	ROLL NUMBER	LENGTH	WIDTH	MON.	VISUAL PANEL CONDITION
1	E000-7404-024	520' (158.5 m)	270" (6.858 m)	RK	Visible damage on one end through multiple layers
2	E000-7404-004	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
3	E000-7404-028	520' (158.5 m)	270" (6.858 m)	RK	Partially crushed roll core
4	E000-7404-019	520' (158.5 m)	270" (6.858 m)	RK	Visible damage around the roll
5	E000-7404-012	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
6	E000-7404-036	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll, crushed core
7	E000-7404-020	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
8	E000-7404-034	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
9	E000-7404-002	520' (158.5 m)	270" (6.858 m)	RK	Visible damage in middle of outer sheet
10	E000-7404-029	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, small tears/punctures around the roll
11	E000-7404-033	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll, crushed core
12	E000-7404-008	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
13	E000-7404-018	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
14	E000-7404-005	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
15	E000-7404-030	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
16	E000-7404-027	520' (158.5 m)	270" (6.858 m)	RK	
17	E000-7404-031	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
18	E000-7404-014	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
19	E000-7404-017	520' (158.5 m)	270" (6.858 m)	RK	
20	E000-7404-007	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
21	E000-7404-025	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll, large rock on top of the liner roll
22	E000-7404-011	520' (158.5 m)	270" (6.858 m)	RK	Partially crushed roll core
23	E000-7404-022	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
24	E000-7404-009	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
25	E000-7404-023	520' (158.5 m)	270" (6.858 m)	RK	Partially crushed roll core

** Could not see the roll surface on stacked rolls

GEOMEMBRANE PANEL LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

SHEET #:	2 of 2

	ROLL NUMBER	LENGTH	WIDTH	MON.	VISUAL PANEL CONDITION
26	E000-7404-010	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
27	E000-7404-001	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
28	E000-7404-015	520' (158.5 m)	270" (6.858 m)	RK	Partially crushed roll core
29	E000-7404-035	520' (158.5 m)	270" (6.858 m)	RK	Crushed core
30	E000-7404-032	520' (158.5 m)	270" (6.858 m)	RK	Visible damage, tears/punctures around the roll
31	E000-7404-003	520' (158.5 m)	270" (6.858 m)	RK	Partially crushed roll core, tears/punctures around the roll
32	E000-7404-016	520' (158.5 m)	270" (6.858 m)	RK	Crushed core, tears/punctures around the roll
33	E000-7404-006	520' (158.5 m)	270" (6.858 m)	RK	Partially crushed roll core, tears/punctures around the roll
34	**No Tag				Partial roll at front of stockpile. By process of elimination, could be Roll 013, 021, 026, or another number but the label has been removed.
35					
36					
37					
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43					
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48					
49					
50					

** Could not see the roll surface on stacked rolls

APPENDIX D

DEPLOYMENT LOGS

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

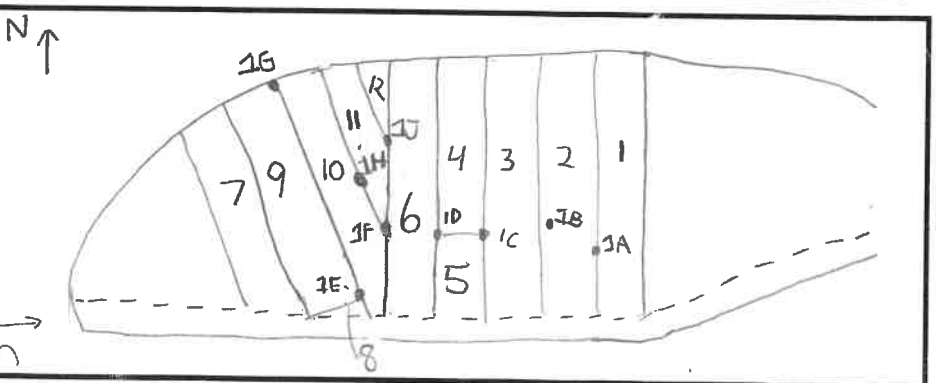
GEOMEMBRANE:	Enviro 6060X
SUBGRADE COND:	Smooth Rolled Ground w LPT Geotextile (keep w small amount of snow)
REMARKS:	Overcast

DATE:	Sept 18/19
SHEET #	1 of 2

DESCRIPTION	PANEL NUM P-1	PANEL NUM P-2	PANEL NUM P-3	PANEL NUM P-4
ROLL NUMBER	E0007404-004	-004	-004	-004
DEPLOYED LENGTH	43m	42m	42m	25m
AMBIENT AIR TEMP.	2°	2°	2°	2°
VISUAL OBSERVATION	Good*	Good	Good	Good
OBSERVED OVERLAP	N/A	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	* Cut ~2m off due to surface damage			End of Roll

DESCRIPTION	PANEL NUM 5	PANEL NUM 6	PANEL NUM 7	PANEL NUM 9
ROLL NUMBER	024	024	024	024
DEPLOYED LENGTH	14m	39m	27m	30m
AMBIENT AIR TEMP.	2°	2°	2°	2°
VISUAL OBSERVATION	Good*	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	* Roll 024 had ~7m cut off. also had pressed marks from damage.		* Used end as Panel 8	

SKETCH



*Length inc. Anchor Trench

REVIEWED BY: RK

DATE: Sept 19

* Contractor to reuse ▷ off 10 w toe of slope seam, Used them to reconsider → use it at top

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

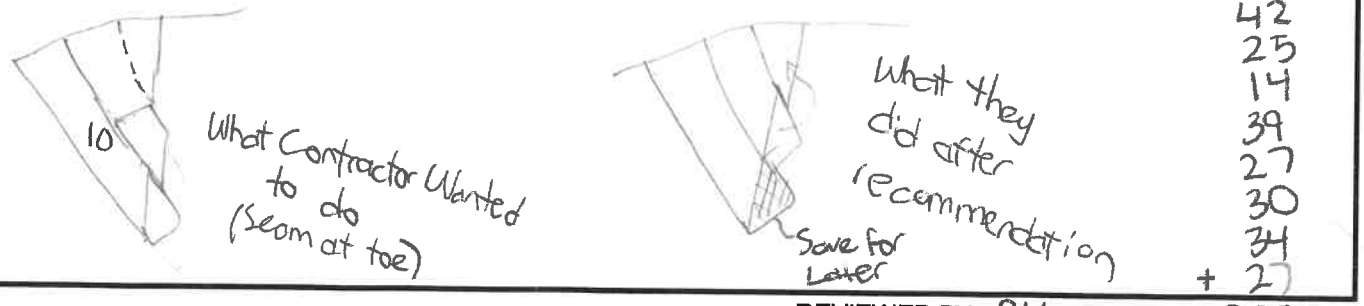
GEOMEMBRANE:	Enviroliner 6060X
SUBGRADE COND:	Smooth Rolled Ground w LPT Geotextile
REMARKS:	

DATE:	Sept 18/19
SHEET #	2 of 2

DESCRIPTION	PANEL NUM 8	PANEL NUM 10	PANEL NUM 11	PANEL NUM 12
ROLL NUMBER	024	024	028	028
DEPLOYED LENGTH		34m	22m (27m) (Pulled)	
AMBIENT AIR TEMP.	2°	2°	2°	2°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	▷ 4m from P-7		Cut off 3m of Roll Bottom Due to Damage	12m ▷ from Panel 11

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



43
42
42
25
14
39
27
30
34
+ 27
323
x
6.86
= 2215.8m²
Deployed

REVIEWED BY: RK
DATE: Sept 19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

GEOMEMBRANE:	Envioliner 6060X
SUBGRADE COND:	Geotextile on Smooth Rolled or Track Packed 19 mm minus intermediate bedding
REMARKS:	

DATE:	Sept 21/19
SHEET #	1 of 1

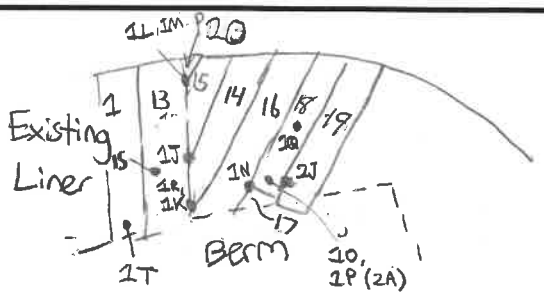
DESCRIPTION	PANEL NUM 13	PANEL NUM 14	PANEL NUM 15	PANEL NUM 16
ROLL NUMBER	028	028	028	028
DEPLOYED LENGTH	43m	33m		39m
AMBIENT AIR TEMP.	-2°	-2°	-1.°	-.1°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	Panel from previous roll		▷ 18m from Panel 14	

DESCRIPTION	PANEL NUM 17	PANEL NUM 18	PANEL NUM 19	PANEL NUM 20
ROLL NUMBER	028	012	012	028
DEPLOYED LENGTH	5m	32m	33m	
AMBIENT AIR TEMP.	0	0	0	0
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	▷ from End of Roll			▷ from end of 16 (5m)

SKETCH

16b → Almost entirely in North Anchor Trench

43
33
39
5
32
+ 33
185m
↳ 126.9m



REVIEWED BY: RK

DATE: Sept 21/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

GEOMEMBRANE:	Enviroliner 6060X
SUBGRADE COND:	LP7 over 19mm minus intermediate bedding
REMARKS:	*Subgrade acceptance from client after Layfield & Golder rep voiced issues.

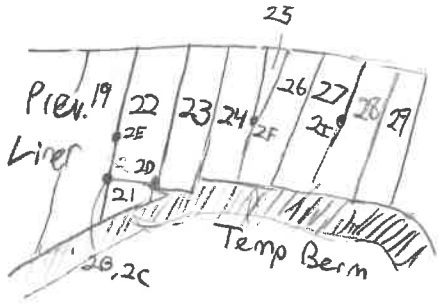
DATE:	Sept 22/19
SHEET #	1 of 2

DESCRIPTION	PANEL NUM 21	PANEL NUM 22	PANEL NUM 23	PANEL NUM 24
ROLL NUMBER	012	012	012	012
DEPLOYED LENGTH		20m	20.5m	17m
AMBIENT AIR TEMP.	-40	-40	-40	-40
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	▷ 5m from End of Panel 19			

DESCRIPTION	PANEL NUM 25	PANEL NUM 26	PANEL NUM 27	PANEL NUM 28
ROLL NUMBER	012	012	012	036
DEPLOYED LENGTH		17m	17.5m	17.5m
AMBIENT AIR TEMP.	-40	-40	-40	-40
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	Δ 8m from side of Panel 26			3m cut off rol (Damaged)

SKETCH

20
20.5
17
17
17.5
17.5
+ 17.5
127 → 871 m²



REVIEWED BY: RK

DATE: Sept 22/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

GEOMEMBRANE:	
SUBGRADE COND:	
REMARKS:	

DATE:	Sept 22/19
SHEET #	2 of 2

DESCRIPTION	PANEL NUM 29	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	036			
DEPLOYED LENGTH	17.5m			
AMBIENT AIR TEMP.	-4°			
VISUAL OBSERVATION	Good			
OBSERVED OVERLAP	Good			
MONITOR	RK			
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH

REVIEWED BY: RK

DATE: Sept 22/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

GEOMEMBRANE:	Enviroliner 6060X
SUBGRADE COND:	19mm Mine w LP7 Geotextile
REMARKS:	

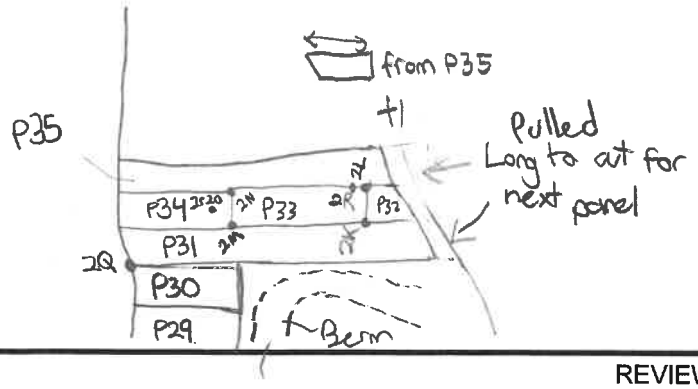
DATE:	Sept 24/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 30	PANEL NUM 31	PANEL NUM 32	PANEL NUM 33
ROLL NUMBER	036	036	036	036
DEPLOYED LENGTH	19m (✓)	60m	8.5m	30m
AMBIENT AIR TEMP.	-5°	-5°	-5°	-5°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS		Extra 8.0m pulled (Time ~ 11:15)		End of Roll

22.5

DESCRIPTION	PANEL NUM 34	PANEL NUM 35	PANEL NUM	PANEL NUM
ROLL NUMBER	019	019		
DEPLOYED LENGTH	23m	61m		
AMBIENT AIR TEMP.	-5°	-5°		
VISUAL OBSERVATION	Good	Good		
OBSERVED OVERLAP	Good	Good		
MONITOR	RK	RK		
REMARKS	~3m cut off of roll			

SKETCH



REVIEWED BY: RK

DATE: Sept 27/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

GEOMEMBRANE:	60 Enviroliner 6060
SUBGRADE COND:	Frozen, saturated ground. Ice & snow worked in, ridges of frozen material.
REMARKS:	*Unacceptable subgrade form for this deployment signed by client (to proceed).

DATE:	Oct 6, 2019
SHEET #	1 of 1

DESCRIPTION	PANEL NUM P40	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	029			
DEPLOYED LENGTH	51m			
AMBIENT AIR TEMP.	-8°			
VISUAL OBSERVATION	Roll Damage At End			
OBSERVED OVERLAP	5-6"			
MONITOR	RK			
REMARKS	End cut off due to damage			

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH

REVIEWED BY: RK
DATE: Oct 9/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

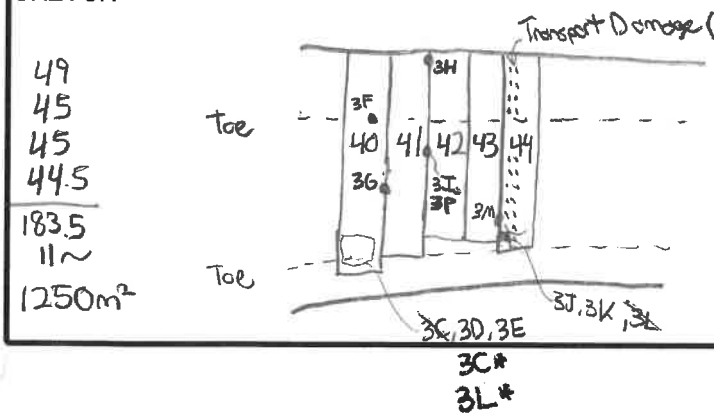
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Ice, Snow, Soil (Unsuitable by specs)
REMARKS:	Anchor trench ~50-100mm of snow in areas, recommended to remove

DATE:	Oct 7, 2019
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 41	PANEL NUM 42	PANEL NUM 43	PANEL NUM 44
ROLL NUMBER	029	029	008	027
DEPLOYED LENGTH	49m	45m	45m	44.5m
AMBIENT AIR TEMP.	-11°C	-10°	-10°	-13°
VISUAL OBSERVATION	Good	Good	Good	Poor - Roll Damage
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS				Roll Damage Likely Due to Improper Transport Onsite

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



- 3L, 3C cut off w trimming, 3D & 3E split to include . 3L* & 3C* (Layfield wanted to re-use codes)

REVIEWED BY: RK

DATE: Oct 8/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

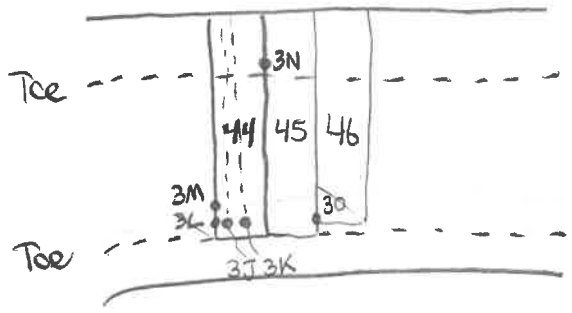
GEOMEMBRANE:	Enviroliner 6060X
SUBGRADE COND:	Frozen, saturated ground. Mix of snow, ice, Amm minus material.
REMARKS:	Subgrade is unsuitable

DATE:	Oct 8, 2019
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 45	PANEL NUM 46	PANEL NUM	PANEL NUM
ROLL NUMBER	027	027		
DEPLOYED LENGTH	45m	42m		
AMBIENT AIR TEMP.	-6°	-6°		
VISUAL OBSERVATION	Good	Good		
OBSERVED OVERLAP	Good	Good		
MONITOR	RK	RK		
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



3O & 3L cut out during trimming
↳ Some of 3J, 3K remain

REVIEWED BY: RK
DATE: Oct 8/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

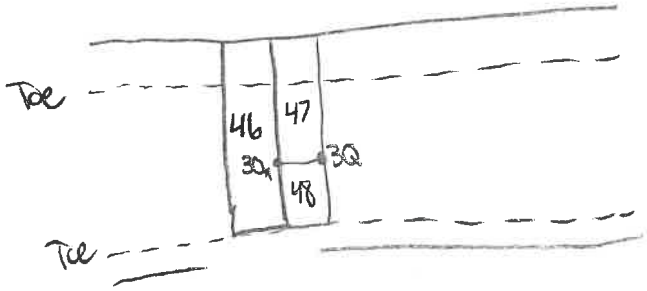
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Mixture of Snow, Ice, 19mm crush material, unacceptable subgrade
REMARKS:	Unacceptable subgrade approved by client

DATE:	Oct 11/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 47	PANEL NUM 48	PANEL NUM	PANEL NUM
ROLL NUMBER	R 027	R 019		
DEPLOYED LENGTH	26m 25m	12.5m 11m		
AMBIENT AIR TEMP.	-6°	-6°C		
VISUAL OBSERVATION	Good	Good		
OBSERVED OVERLAP	Good	Good		
MONITOR	RK	RK		
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RK

DATE: Oct 14/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

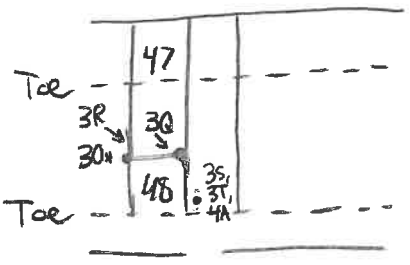
GEOMEMBRANE:	6060 EL
SUBGRADE COND:	Frozen Mix of Snow, Ice & 19mm Crush Unaccepted Subgrade
REMARKS:	

DATE:	Oct 12/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 49	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	020			
DEPLOYED LENGTH	37.5m 36			
AMBIENT AIR TEMP.	-8°			
VISUAL OBSERVATION	West Side Dam*			
OBSERVED OVERLAP	Good			
MONITOR	RK			
REMARKS	*Tear + Crease roll damage			

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RK
DATE: Oct 19/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

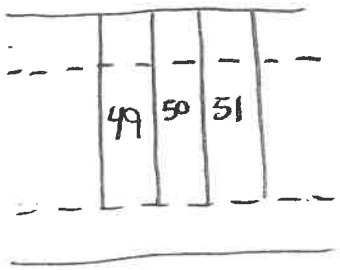
GEOMEMBRANE:	
SUBGRADE COND:	Frozen Mixture of Snow, Ice, 19mm Crush, Unaccepted Subgrade → Client
REMARKS:	Directed to Proceed

DATE:	Oct 13/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 50	PANEL NUM 51	PANEL NUM	PANEL NUM
ROLL NUMBER	R020	020		
DEPLOYED LENGTH	36.5m	37.5m 37		
AMBIENT AIR TEMP.	-12°	-12°		
VISUAL OBSERVATION	Good	Good		
OBSERVED OVERLAP	Good	Good		
MONITOR	RK	RK		
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RK
DATE: Oct 19/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

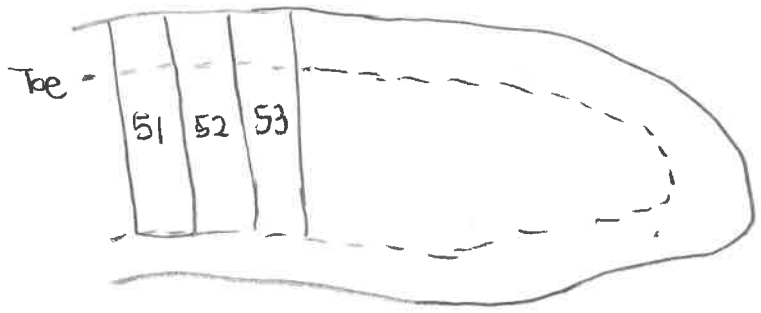
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Mix of Ice, Snow, & 19mm Crush Material (Unacceptable Subgrade)
REMARKS:	

DATE:	Oct 16/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 52	PANEL NUM 53	PANEL NUM	PANEL NUM
ROLL NUMBER	R020	R002		
DEPLOYED LENGTH	37m	38m		
AMBIENT AIR TEMP.	-13°	-13°		
VISUAL OBSERVATION	Good	Good		
OBSERVED OVERLAP	Good	Good		
MONITOR	RK	RK		
REMARKS		Roll Damage Cut Off ~3m		

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RK

DATE: Oct 19/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

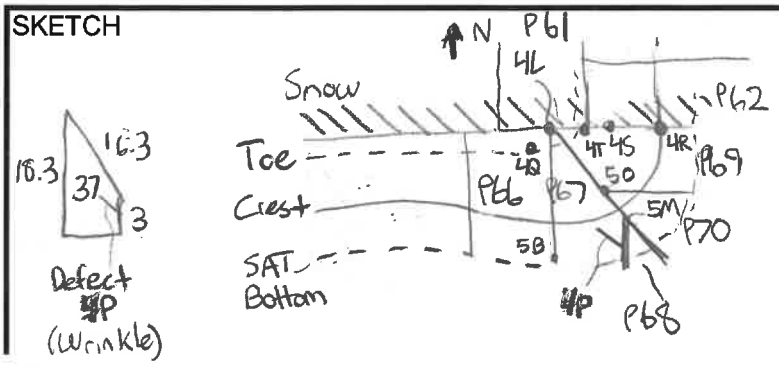
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Ice, Snow & 19mm crush material
REMARKS:	*Client signed off on unsuitable subgrade

DATE:	Oct 25
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 66	PANEL NUM 67	PANEL NUM 68	PANEL NUM 69
ROLL NUMBER	R018	R 018	R 018	R 018
DEPLOYED LENGTH	18.8m	18.3m	7m	12.4m
AMBIENT AIR TEMP.	-11°	-11°	-11°	-11°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS	~2.0 m Cutoff due to Damage		*Cut from P67 triangle	

DESCRIPTION	PANEL NUM 70	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	R018			
DEPLOYED LENGTH	8.5m			
AMBIENT AIR TEMP.	-11°			
VISUAL OBSERVATION	Good			
OBSERVED OVERLAP	Good			
MONITOR	RK			
REMARKS				

SKETCH



REVIEWED BY: RK
DATE: Oct 29/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

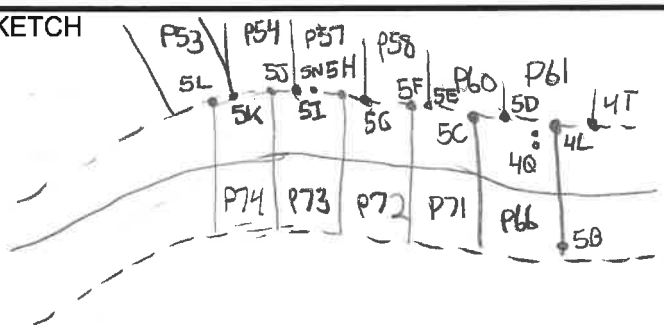
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Ice, Snow, & 19mm Crush Material
REMARKS:	Unacceptable Subgrade

DATE:	Oct 26
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 71	PANEL NUM 72	PANEL NUM 73	PANEL NUM 74
ROLL NUMBER	R 018	R 018	R 018	R 018
DEPLOYED LENGTH	18m	17m	17m	17m
AMBIENT AIR TEMP.	-10°	-10°	-10°	-10°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



53-54-57-58-60 (5S)

REVIEWED BY: RK

DATE: Oct 29/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

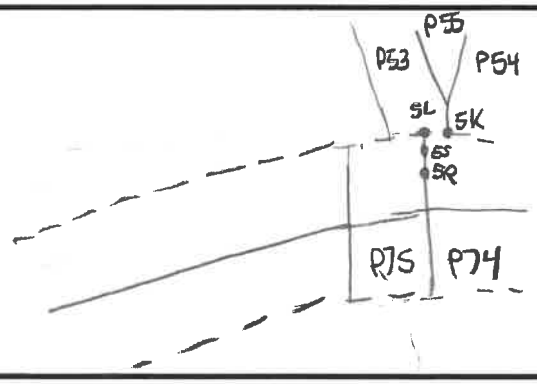
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Snow, Ice, 19mm Crush Material
REMARKS:	

DATE:	Oct 28/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 75	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	R007			
DEPLOYED LENGTH	16m			
AMBIENT AIR TEMP.	-10°C			
VISUAL OBSERVATION	Good			
OBSERVED OVERLAP	Good			
MONITOR	RK			
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RK

DATE: Oct 29/19

45-46-2018-49-50-51-52-53

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

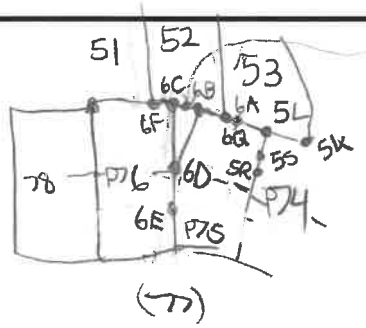
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen mix of snow, ice, & crush Material
REMARKS:	

DATE:	Nov 5/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 76	PANEL NUM 77	PANEL NUM 78	PANEL NUM
ROLL NUMBER	007	007	077	
DEPLOYED LENGTH	15.5	7.5m & ~7.5m	15m	
AMBIENT AIR TEMP.	-18°	-18°	-20°	
VISUAL OBSERVATION	Good	Good	Good	
OBSERVED OVERLAP	Good	Good	Good	
MONITOR	RK	RK	RK	
REMARKS		* Cut off of Panel 75		

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



6R (New Defect) P77/P52 on tie-in

REVIEWED BY: RK

DATE: Nov 7/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

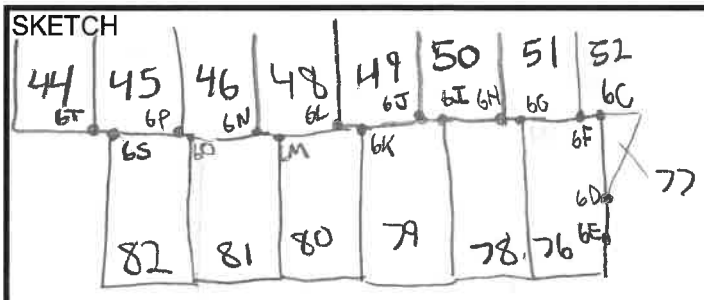
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen mix of ice, soil (19mm crush) & snow
REMARKS:	Unacceptable subgrade

DATE:	Nov 6/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 79	PANEL NUM 80	PANEL NUM 81	PANEL NUM 82
ROLL NUMBER	007	007	007	007
DEPLOYED LENGTH	16.5m	17.5m	18.0m	18.0m
AMBIENT AIR TEMP.	-23°	-22°	-22°	-23°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RK

DATE: Nov 7/19

45-46-48-49-50-51

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Snow, Ice, & Frozen Solid 19mm Crush
REMARKS:	

DATE:	Nov 7 / 19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 83	PANEL NUM 84	PANEL NUM 85	PANEL NUM
ROLL NUMBER	007	018	034	
DEPLOYED LENGTH	18.5	19.0	18.0m	
AMBIENT AIR TEMP.	-16°C	-16°C	-16°C	
VISUAL OBSERVATION	Good	Good	Good	
OBSERVED OVERLAP	Good	Good	Good	
MONITOR	RK	RK	RK	
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



36 - 35 - 34 - 40 - 41 - 42 - 43 - 44

REVIEWED BY: RK

DATE: Nov 8

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

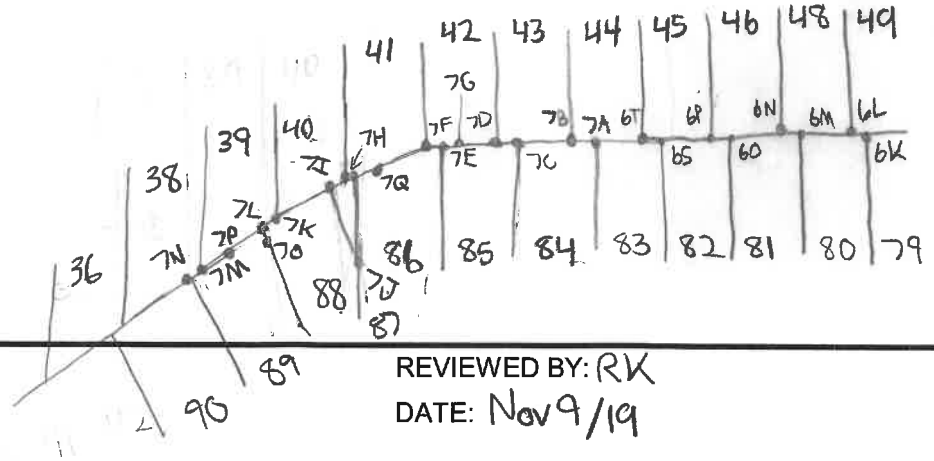
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Snow, Ice, & 19mm Crush Material
REMARKS:	

DATE:	Nov 9/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 86	PANEL NUM 87	PANEL NUM 88	PANEL NUM 89
ROLL NUMBER	034	034	034	034
DEPLOYED LENGTH	18.5m	9.5m	18.5m	18.5m
AMBIENT AIR TEMP.	-22°C	-22°C	-22°C	-20°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS		9.5m triangle from P88		

DESCRIPTION	PANEL NUM 90	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	034			
DEPLOYED LENGTH	19.0			
AMBIENT AIR TEMP.	-20°			
VISUAL OBSERVATION	Good			
OBSERVED OVERLAP	Good			
MONITOR	RK			
REMARKS	(18.5m seam)			

SKETCH



REVIEWED BY: RK

DATE: Nov 9/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

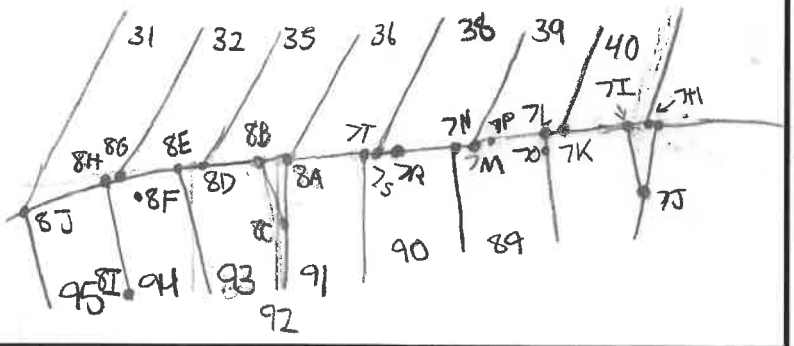
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Snow, Ice & 19mm Crush Material
REMARKS:	

DATE:	Nov 11 /19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 91	PANEL NUM 92	PANEL NUM 93	PANEL NUM 94
ROLL NUMBER	R034	R034	R034	R005
DEPLOYED LENGTH	19.0m		19.5m	19.5m
AMBIENT AIR TEMP.	-24°	-24°	-24°	-24°
VISUAL OBSERVATION	Good	Good	Good	Good
OBSERVED OVERLAP	Good	Good	Good	Good
MONITOR	RK	RK	RK	RK
REMARKS		1 from Panel 93		

DESCRIPTION	PANEL NUM 95	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	R005			
DEPLOYED LENGTH	20m			
AMBIENT AIR TEMP.	-24°C			
VISUAL OBSERVATION	Good			
OBSERVED OVERLAP	Good			
MONITOR	RK			
REMARKS				

SKETCH



REVIEWED BY: RK

DATE: Nov 12/19

31 - 32 - 35 - 36 - 38

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

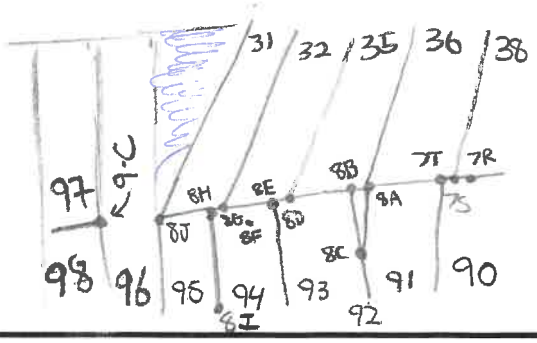
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen 19mm Material + Snow & Ice, All Mixed Together
REMARKS:	

DATE:	Nov 15/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 96	PANEL NUM 97	PANEL NUM 98	PANEL NUM
ROLL NUMBER	5	5	23	
DEPLOYED LENGTH	67 M	46 M	20 M	
AMBIENT AIR TEMP.	-30°	-30°	-30°	
VISUAL OBSERVATION	GOOD	GOOD	GOOD	
OBSERVED OVERLAP	GOOD	GOOD	GOOD	
MONITOR	RM	RM	RM	
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Nov. 22

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

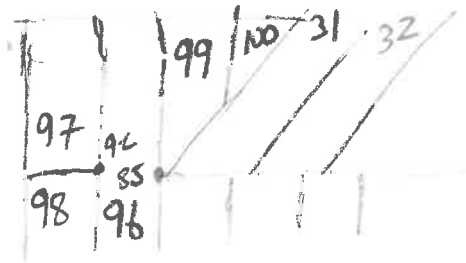
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen 19 mm Material + Snow/Ice, all mixed together
REMARKS:	Unacceptable Subgrade

DATE:	Nov. 16
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 99	PANEL NUM 100	PANEL NUM	PANEL NUM
ROLL NUMBER	023	023		
DEPLOYED LENGTH	50m	18m		
AMBIENT AIR TEMP.	-32°	-32°		
VISUAL OBSERVATION	GOOD	GOOD		
OBSERVED OVERLAP	GOOD	GOOD		
MONITOR	RM	RM		
REMARKS	Triangle	Triangle		

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Nov-22

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

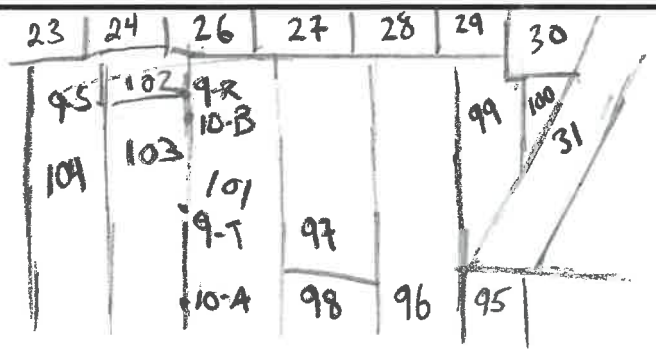
GEOMEMBRANE:	6060 ENVIROLINER
SUBGRADE COND:	FROZEN MIX OF SNOW, ICE and Crush (19mm)
REMARKS:	Unacceptable Subgrade

DATE:	Nov 17, 2019
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 101	PANEL NUM 102	PANEL NUM 103	PANEL NUM 104
ROLL NUMBER	023	23	014	014
DEPLOYED LENGTH	76m	9m	64m	76m
AMBIENT AIR TEMP.	-32°C	-32°	-32°	-32°
VISUAL OBSERVATION	GOOD	GOOD	GOOD	GOOD
OBSERVED OVERLAP	GOOD	GOOD	GOOD	GOOD
MONITOR	RM	RM	RM	RM
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Nov. 22

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

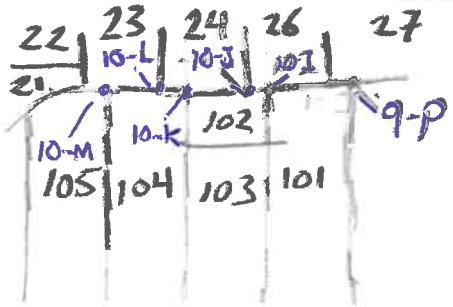
GEOMEMBRANE:	6060 ENVIRO LINER
SUBGRADE COND:	FROZEN MIX OF SNOW, ICE AND CRUSH (19mm)
REMARKS:	Unacceptable Subgrade

DATE:	Nov. 18
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 105	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	003			
DEPLOYED LENGTH	77m			
AMBIENT AIR TEMP.	-28°			
VISUAL OBSERVATION	GOOD			
OBSERVED OVERLAP	GOOD			
MONITOR	RM			
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Nov. 22

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

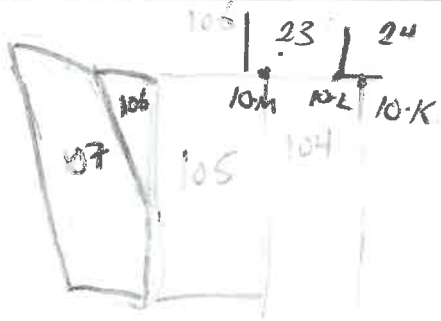
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Frozen Mix of Snow, Ice, and 19 mm Crush. Material
REMARKS:	Unacceptable Subgrade

DATE:	Nov. 19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 106	PANEL NUM 107	PANEL NUM	PANEL NUM
ROLL NUMBER	31	31		
DEPLOYED LENGTH	26	71 m		
AMBIENT AIR TEMP.	-26°	-26°		
VISUAL OBSERVATION	GOOD	GOOD		
OBSERVED OVERLAP	GOOD	GOOD		
MONITOR	RM	RM		
REMARKS	TRIANGLE	TRAPEZOID		

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Nov. 22

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

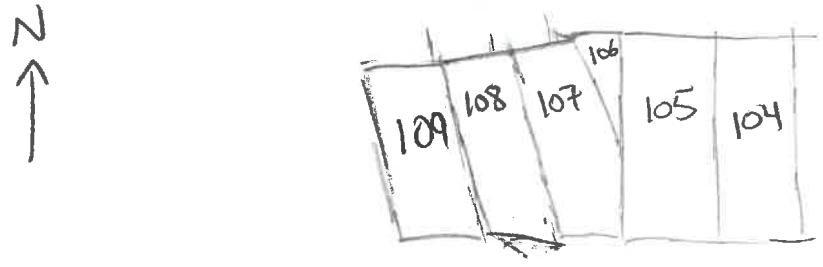
GEOMEMBRANE:	6060 Enviroliner
SUBGRADE COND:	Mix of snow, ice and 19 mm crush material (Frozen)
REMARKS:	Unacceptable Subgrade

DATE:	Nov. 20, 2019
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 108	PANEL NUM 109	PANEL NUM	PANEL NUM
ROLL NUMBER	31	003		
DEPLOYED LENGTH	70 M	68 M		
AMBIENT AIR TEMP.	-29°	-29°C		
VISUAL OBSERVATION	GOOD	GOOD		
OBSERVED OVERLAP	GOOD	GOOD		
MONITOR	RM	RM		
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM
DATE: Nov. 22

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

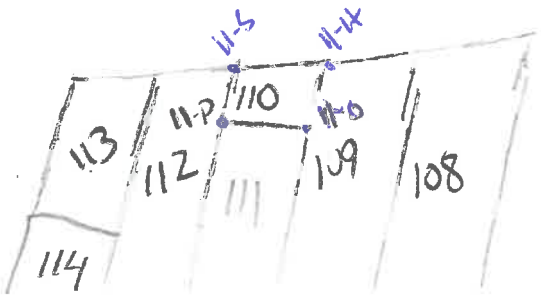
GEOMEMBRANE:	Enviroliner 6060
SUBGRADE COND:	Frozen 19mm Material + Snow/Ice all mixed together
REMARKS:	

DATE:	Nov. 24/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 110	PANEL NUM 111	PANEL NUM 112	PANEL NUM 113
ROLL NUMBER	003	017 ~~[illegible]~~ ?	017 ~~[illegible]~~ ?	017 ~~[illegible]~~ ?
DEPLOYED LENGTH	6.5m	54m	59 ~~[illegible]~~ m	~~[illegible]~~ ~~[illegible]~~ m 32
AMBIENT AIR TEMP.	-24°C	-24°C	-25°	-25°C
VISUAL OBSERVATION	GOOD	GOOD	GOOD	GOOD
OBSERVED OVERLAP	GOOD	GOOD	GOOD	GOOD
MONITOR	RM	RM	RM	RM
REMARKS				

DESCRIPTION	PANEL NUM 114	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER	011			
DEPLOYED LENGTH	27m			
AMBIENT AIR TEMP.	-25°C			
VISUAL OBSERVATION	GOOD			
OBSERVED OVERLAP	GOOD			
MONITOR	RM			
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Dec 6/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

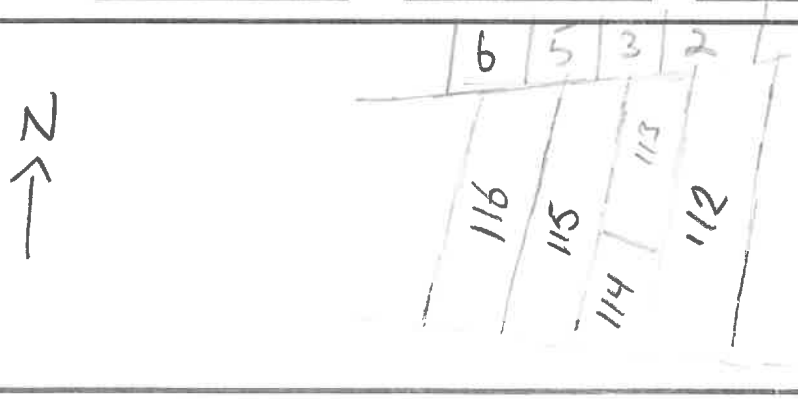
GEOMEMBRANE:	60Mil ENVIROLINER
SUBGRADE COND:	Mix of Snow, ice and 19 mm crush material.
REMARKS:	Unacceptable Subgrade

DATE:	Nov. 25/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 115	PANEL NUM 116	PANEL NUM	PANEL NUM
ROLL NUMBER	011	011		
DEPLOYED LENGTH	59 m	59 m		
AMBIENT AIR TEMP.	-33°	-32°		
VISUAL OBSERVATION	GOOD	GOOD		
OBSERVED OVERLAP	GOOD	GOOD		
MONITOR	RM	RM		
REMARKS				

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Dec 6/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	**1790951**	PROJECT TITLE:	**WRF Pond Repair**
OWNER:	**Baffinland**	CONTRACTOR:	**Baffinland**
LOCATION:	**Mary River**	GEOSYNTHETICS:	**Layfield**

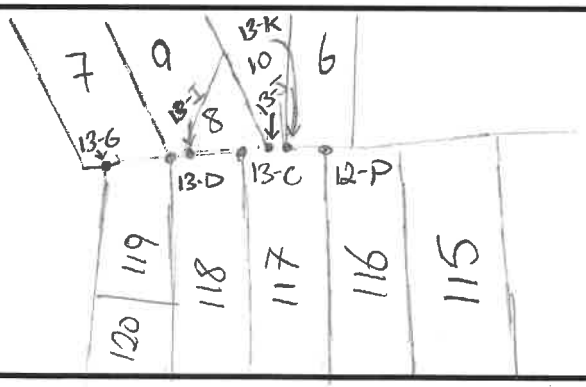
GEOMEMBRANE:	6060 ENVIROLINER
SUBGRADE COND:	Frozen 19 mm Material + Snow/Ice, all mixed together
REMARKS:	

DATE:	Nov. 26, 2019
SHEET #	of

DESCRIPTION	PANEL NUM 117	PANEL NUM 118	PANEL NUM 119	PANEL NUM 120
ROLL NUMBER	006	006	006	025
DEPLOYED LENGTH	60m	59m	23 m	37m
AMBIENT AIR TEMP.	-26°C	-23°	-22°	-22c
VISUAL OBSERVATION	FAIR*	FAIR*	FAIR*	GOOD
OBSERVED OVERLAP	GOOD	GOOD	GOOD	GOOD
MONITOR	RM	RM	RM	RM
REMARKS	*Roll Damage trimmed off	" "		

DESCRIPTION	PANEL NUM	PANEL NUM	PANEL NUM	PANEL NUM
ROLL NUMBER				
DEPLOYED LENGTH				
AMBIENT AIR TEMP.				
VISUAL OBSERVATION				
OBSERVED OVERLAP				
MONITOR				
REMARKS				

SKETCH



REVIEWED BY: RM

DATE: Dec 6/19

GEOMEMBRANE PANEL DEPLOYMENT LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

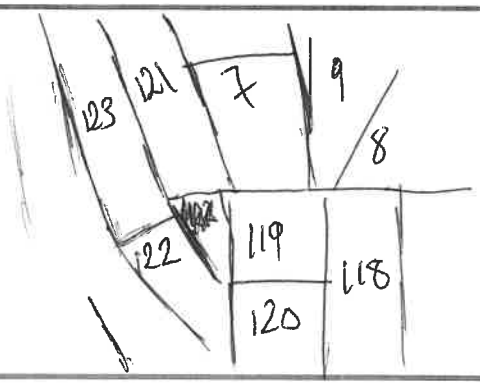
GEOMEMBRANE:	ENVIROLINER 6060
SUBGRADE COND:	Mix of snow/ice and frozen 19 mm crush material
REMARKS:	

DATE:	Nov. 27/19
SHEET #	1 of 1

DESCRIPTION	PANEL NUM 121	PANEL NUM 122	PANEL NUM 123	PANEL NUM 124
ROLL NUMBER	25	25	25	25
DEPLOYED LENGTH	46m	9m	44m	20m
AMBIENT AIR TEMP.	-28°	-28°	-28°	-28°
VISUAL OBSERVATION	GOOD	GOOD	GOOD	GOOD
OBSERVED OVERLAP	GOOD	GOOD	GOOD	GOOD
MONITOR				
REMARKS				

DESCRIPTION	PANEL NUM 125	PANEL NUM 126	PANEL NUM 127	PANEL NUM
ROLL NUMBER	35	35	35	
DEPLOYED LENGTH	38m			
AMBIENT AIR TEMP.	-28°	-26°	-28°	
VISUAL OBSERVATION	GOOD			
OBSERVED OVERLAP	GOOD			
MONITOR				
REMARKS		*Staged, but deployed after QC left site	*Staged, but deployed after QC left site	

SKETCH



REVIEWED BY: RM

DATE: Dec 6/19

APPENDIX E

TRIAL SEAM LOGS

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-___ TF - # = FUSION
TX - # = EXTRUSION

DATE: Sept 18, 2019
SHEET NUMBER 1 of 1

*Shears taken to >>50% to see break mode after elongation

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-1	0745	PW064	WB	2°	600	x	850	STR	107 / 111 / 109	103 / 110 / 110	113 / 122	P	RK	Smo / Smo
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
								STR	108 / 112 /	108 / 100 /	114 / 122	114		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	SE1		
TF-2	0800	PW069	GD	2°	600	x	850	STR	99*/107 /	110 / /	/	F	RK	*>25% PEEL
								MODE	SE1 / SE1 /	SE1 / /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
TF-3	0835	PW069	GD	2°	600	x	850	STR	103 / 107 / 102	104 / 104 / 106	106 / 109	P	RK	
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	~~NB~~ NB / NB			
								STR	102 / 106 /	104 / 102 /	111 / 116			
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB			
								STR	/ /	/ /	113 /			
								MODE	/ /	/ /	NB /			
TF-4	12:00	PW064	WB	2°	600	x	850	STR	106 / 104 / 106	106 / 102 / 100	111 / 113	P	RK	
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
								STR	100 / 106 /	104 / 99 /	111 / 114			
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB			
								STR	/ /	/ /	112 /			
								MODE	/ /	/ /	NB /			
								STR	/ /	/ /	/			
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								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Sept 19/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-4 — TF - # = FUSION
TX-__ — TX - # = EXTRUSION

DATE: Sept 19/19
SHEET NUMBER 1 of 1

*Tested 20 i/min

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-1	10:00 Weld	PX 37	MC	1°	550	✓	510	STR	97 / 100 / 98	88 / 116 /	128 / 125	P	RK	High Winds
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / SE1			
								STR	/ /	/ / 129	128 / 129			
								MODE	/ /	/ / NB	NB / NB			
TX-2	15:00	PX 37	MC	1°	550	✓	510	STR	108 / 104 / 113	124 / 109 /	126 / 121	P	RK	High Winds
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
								STR	/ /	/ / 130	133 / 129			
								MODE	/ /	/ / BRK	NB / NB			
								STR	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Sept 19/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-4 TF - # = FUSION
TX-2 TX - # = EXTRUSION

DATE: Sept 20/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-3	12:30	Ex037	FC	1°	550	✓	510	STR	124 / 107 / 113	114 / 116 /	131 / 136	P	RK	Tested at 16°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	BRK / NB			
								STR	/ /	/ / 138	133 / 129			
								MODE	/ /	/ / NB	NB / NB			
								STR	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Sept 21/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF - 4 TF - # = FUSION
TX - 3 TX - # = EXTRUSION

DATE: Sept 21, 2019
SHEET NUMBER 1 of

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-5	8:15	PW069	GD	-2°	600	N/A	850	STR	115 / 118 / 116	101 / 103* / 106	128 / 132	P	RK	* ~20% Peel Tested at
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / SE1			
								STR	113 / 122 /	97* / 98 /	131 / 138			14°C, sample still cool
								MODE	SE1 / SE1 /	SE1 / SE1 /	SE1 / SE1			
								STR	/ /	/ /	135 /	Virgin	liner →	128 ppi
								MODE	/ /	/ /	SE1 /			
TX-4	10:15	PX037	FC	-1°	500	✓	490	STR	91 / 91 / 104	74* / 92 / 90	133 / 135	P	RK	* Grinded little too much,
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
	Layfield tech did 3 extra peels							STR	95 / 76 /	/ /	136 / 133			still over Layfield spec
								MODE	SE3 / SE3 /	/ /	NB / NB			
								STR	/ /	/ /	131 /			No peel seperation
								MODE	/ /	/ /	NB /			
TX-5	15:20	PX037	FC	-1°	500	✓	490	STR	98 / 98 / 100	114 / 90 /	121 / 121	P	RK	
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
								STR	/ /	/ /	121 / 122			
								MODE	/ /	/ /	NB / NB			
								STR	/ /	/ /	119 /			
								MODE	/ /	/ /	NB /			
								STR	/ /	/ /	/			
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								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Sept 21/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-5 TF - # = FUSION
TX-5 TX - # = EXTRUSION

DATE: Sept 22/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-6	12:30	069	SM	-4°	600	x	850	STR	113 / 115 / 112	103 / 104 / 114	127 / 131	P	RK	Tested at 19°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
								STR	109 / 106 /	100 / 113 /	132 / 131	131		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-6	14:35	PX 037	MC	-4°	500	✓	490	STR	114 / 117 / 113	122 / 110 /	125 / 124	P	RK	Tested at 21°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
								STR	/ /	/ / 128	120 / 123			
								MODE	/ /	/ / NB	NB / NB			
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REVIEWED BY: Ray K.
DATE: Sept 22/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-6 TF - # = FUSION
TX-6 TX - # = EXTRUSION

DATE: Sept 24/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-7	8:50	069	SM	-5°C	600	x	850	STR	113*/115 /109	108 / 109 / 112	/	F	RK	*~20% Peel
								MODE	SEI /SEI /SEI	SEI /SEI /SEI	/			
								STR	114 /113 /101	104/110 /102	/			F = Full Peel
								MODE	SEI /SEI /SEI	SEI /SEI / F	/			
TF-8	9:45	069	SM	-5°C	550	x	850	STR	108 /115 /111	111 /105 /107	113 /117	P	RK	
								MODE	SEI /SEI /SEI	SEI /SEI /SEI	NB / NB			
								STR	115 /112 /	109 /104 /	119 /120	122 NB		
								MODE	SEI /SEI /	SEI /SEI /	NB / NB			
TF-9	14:05	069	SM	-5°C	550	x	850	STR	110 /107 /114	102/103 /103	124 /116	P	RK	
								MODE	SEI /SEI /SEI	SEI /SEI /SEI	NB / NB			
								STR	104/ 110 /	101 /106 /	118 /121	117 NB		
								MODE	SEI /SEI /	SEI /SEI /	NB /NB			
								STR	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Sept 27/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

	TF - # = FUSION
TX-6	TX - # = EXTRUSION

DATE: Sept 25.2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-7	8:40	037	FC	-6°	515	✓	500	STR	78 / 97 / 105	89 / 109 / 92	123 / 129	P	RK	Tested at 12°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
* Contractor chose to do 2 additional peels								STR	96 / /	/ /	124 / 124	1-P NB		Tear Peel (~10%)
								MODE	SE3 / /	/ /	SE1 / NB			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Sept 27/19

GEOMEMBRANE TRIAL SEAM LOG

* Machine is not registering position or strain so/g not reading upper grip, and only testing at 12"/min speed, unadjustable

PROJECT #: 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

* TF-9 — TF - # = FUSION
TF-7 — TX - # = EXTRUSION

DATE: Oct 6, 2019
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-10	14:40	069	SM	-8°	550	\	850	STR	104 / 101 / 104	102 / 104 /	/		RK	
								MODE	SEI / SEI / SEI	SEI / SEI /	/			
TF-10	14:40	069	SM					STR	105 / 114 / 115	104 / 106 / 100	131 / 126	P*	RK	*See Notes
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	SEI / NB			
		Virgin Liner → 126 ppi						STR	108 / 106 /	98 / 101 /	125 / 129			
								MODE	SEI / SEI /	SEI / SEI /	NB / SEI			
								STR	/ /	/ /	129 /			
								MODE	/ /	/ /	SEI /			
								STR	/ /	/ /	/			
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Redo at new speed same bores

REVIEWED BY: RK
DATE: Oct 8/19

GEOMEMBRANE TRIAL SEAM LOG

* Machine was pulling at 2"/min & reading strain levels → gave 'Watchdog' error & had to be restarted, but seemed okay after

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-10 / TF-7 — TF - # = FUSION; TX - # = EXTRUSION

DATE: Oct 7, 2019
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-11	9:22	069	SM	-11°	550	x	850	STR	108 / 113 / 106	96 / 106 / 109	115 / 109	P	RK	* Tested at 2"/min &
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
Sample of		Virgin Liner		114ppi				STR	100 / 109 /	105 / 108 /	113 / 111	112		19°C in tent
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
TF-12	13:06	069	SM	-9°	550	x	850	STR	105 / 112 / 104	107 / 104 / 103	116 / 112	P	RK	* Tested at 2"/min &
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
Sample of		Virgin Liner		115ppi				STR	110 / 104 /	104 / 106 /	116 / 106	110		20°C in tent
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
								STR	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Oct 8/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-12 TF - # = FUSION
TX-7 TX - # = EXTRUSION

DATE: Oct-8, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-13	8:28	069	SM	-6°	550	x	850	STR	103 / 107 / 118	107 / 103 / 100	117 / 117	P	RK	• 2"/min speed • 18°C Tested
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	Virgin	Liner sample		was	115ppi			STR	108 / 104 /	104 / 101 /	114 / 108	112	1	in tent x Watchdog error
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-8	11:25	Ext 38	JH	-6°	500	✓	490	STR	98 / 98 / 102	98 / 98 /	104 / 104	P	RK	2"/min • 20°C Tested
								MODE	SE3 / NB / NB	NB / SE3 /	NB / NB			
	Virgin	Liner Sample		Was	109 ppi			STR	/ /	/ /	107 / 107	107	1	In tent x Watchdog error
								MODE	/ /	/ /	NB / NB	BRK		
TX-9	15:30	Ext 37	JH	-6°	495	✓	490	STR	106 / 97 / 102	101 / 99 /	108 / 106	93	RK	2°/min • 22°C Tested
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB	NB		
	Virgin	Liner Sample		Was	105 ppi			STR	/ /	/ /	104 / 103	102	Extra	1 x Watchdog
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Oct 8/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-13 TF - # = FUSION
TX-9 TX - # = EXTRUSION

DATE: Oct 11, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-14	1045	069	SM	-6°	550	x	850	STR	97 / 92 / 100	99 / 95 / 92	/	F	RK	Tested 16°C, 2"/min
								MODE	BRK / NB / SEI	SEI / SEI / SEI	/			
								STR	95 / /	101 / /	/			~60% Peel on sample
								MODE	SEI / /	F / /	/			
TF-15	1130	069	SM	-6°	550	x	850	STR	103 / 102 / 109	96 / 92 / 103	113 / 105	P	RK	Tested at 17°C, 2"/min
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
Sample of	Virgin	Liner		was	111 ppi (NB)			STR	97 / 104 /	93 / 100 /	113 / 104	116		
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
TF-16	1545	069	SM	-6°	550	x	850	STR	100 / 98 / 103	109 / 100 / 98	114 / 108	P	RK	Tested at 19°C 2"/min
								MODE	SEI / SEI / NB	SEI / SEI / SEI	NB / NB			
Sample of Virgin Liner was 112 ppi (NB)								STR	106 / 105 /	102 / 101 /	113 / 109	118		
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Oct 14/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-16 TF - # = FUSION
TX-9 TX - # = EXTRUSION

DATE: Oct 12, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-17	14:10	069	SM	-8°	550	\	850	STR	106 / 95 / 106	97 / 99 / 97	112 / 108	P	RK	Tested at 18°C in WRF Tent
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
	Virgin Liner	Sample	was	111	ppi			STR	103 / 106 /	98 / 103 /	113 / 111	115		2"/min
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Oct. 19/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-17 TF - # = FUSION
TX-9 TX - # = EXTRUSION

DATE: Oct 13, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-10	9:00	037	JH	-12°C	500	✓	490	STR	67 / 80 / 77	58 / 75 /	/	F	RK	Tested at 2"/min in tent (20°C)
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	/			
	Virgin Liner		Sample was 113			ppi		STR	/ /	/ /	/			Low Str, Bubbles in weld
								MODE	/ /	/ /	/			
TX-11	9:45	037	JH	"	490	✓	480	STR	F / /	/ /	/	F	RK	Tested 2"/min 18°C in Tent
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			Full peel on first sample
								MODE	/ /	/ /	/			
TF-18	10:02	069	SM	"	550	x	850	STR	100 / 102 / 108	111 / 102 / 107	116 / 116	P	RK	Tested at 2"/min
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	Virgin Liner		Sample was 113			ppi		STR	101 / 99 /	96 / 104 /	114 / 112	114		18°C in tent
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Oct 19/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-18 — TF - # = FUSION
TX-11 — TX - # = EXTRUSION

DATE: Oct 16/19
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-19	9:40	069	SM	-13°	550	x	850	STR	106 / 106 / 108	111 / 101 / 107	114 / 119	P	RK	Tested at 2"/min, 17° in tent
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	Virgin Liner Sample was 118ppi							STR	96 / 107 /	101 / 102 /	115 / 112	113		Watchdog Error x1
								MODE	SE1 / NB /	SE1 / SE1 /	NB / NB	NB		
TX-12	11:30	037	JH	"	495	x	485	STR	78 / 94 / 95	75 / 67 / 72	108 / 103		RK	Tested at 2"/min 18° in tent
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
Virgin Liner Sample was 112								STR	/ /	/ /	112 / 105			Watchdog Error
								MODE	/ /	/ /	NB / NB			
L> No peel, numbers met Layfield Spec, did extra bonded peel. (LF Min. was 66ppi)								STR	/ /	/ /	115 /			
								MODE	/ /	/ /	NB /			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
TF-20	15:15	069	WB	-13°	550	x	850	STR	104 / 106 / 102	108 / 105 / 101	117 / 112	P	RK	Tested at 2"/min 17° in tent
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
Virgin Liner Sample was 114ppi								STR	105 / 106 /	100 / 105 /	114 / 116	111		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Oct 19/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF -20 TF - # = FUSION
TX - 12 TX - # = EXTRUSION

DATE: Oct 25/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-21	13:25	064	SM	-11°	550°	x	850°	STR	112 / 98 / 122	114 / 104 / 102	123 / 126	P	RK	Tested at 2"/min,
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
		Virgin	Liner	used	127 ppi			STR	107 / 109 /	113 / 114 /	122 / 123	127		14° in test
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Oct 29/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

TF-21 TF - # = FUSION
TX-12 TX - # = EXTRUSION

DATE: Oct 26/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-13	0934	037	DW	-10°	495	✓	485	STR	76x/83*/94	109 / /	/	F	RK	Tested at 2"/min & 12°C in
								MODE	SE3 / SE3 / SE3	SE3 / /	/			
								STR	/ /	/ /	/		*Off	tent Center, Same Reel
								MODE	/ /	/ /	/			
TX-14	1015	037	DW	-10°	495	✓	485	STR	85 / 80 / 91	88 / 95 / 87	117 / 116	P	RK	Tested at 2"/min & 12°C in tent
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
	Virgin Liner was 118 ppi							STR	81 / /	/ /	126 / 123	124		Layfield chose to do extra peels
								MODE	SE3 / /	/ /	SE1 / NB	NB		
TF-22	1039	064	SM	-10°	550	x	850	STR	115 / 109 / 114	98 / 100 / 108	127 / 121	P	RK	Tested at 2"/min & 12°C in tent
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	Virgin Liner was 127 ppi							STR	112 / 112 /	94 / 109 /	124 / 115	124		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TF-23	15:15	064	SM	-10°	550	x	850	STR	109 / 104 / 106	104 / 100 / 102	121 / 118	P	RK	Tested at 2"/min & 13° in tent
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	Virgin Liner was 121 ppi							STR	104 / 102 /	107 / 109 /	129 / 115	133		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-15	1540	038	DW	-10°	495	✓	485	STR	107 / 104 / 112	108 / 107 /	116 / 107	P	RK	Tested at 2"/min & 13° in tent
								MODE	NB / NB / NB	NB / NB /	NB / NB			
	Virgin Liner was 114 ppi							STR	/ /	/ /	117 / 126	109		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Oct 29/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-23 TF - # = FUSION
TX-15 TX - # = EXTRUSION

DATE: Oct 27/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-16	0808	038	DW	-15°	495	✓	485	STR	107 / 115 / 114	105 / 108 /	123 / 120	P	RK	Tested at 2"/min & 8° in tent
								MODE	SE3 / NB / SE3	SE3 / SE3 /	BRK / NB			
	Virgin Liner used 125ppi							STR	/ /	/ /	126 / 135	126		
								MODE	/ /	/ /	NB / NB	NB		
TX-17	13:00	038	DW	-15°	495	✓	485	STR	103 / 113 / 105	110 / 116 /	120 / 119	P	RK	Tested at 2"/min & 9° in tent
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	SE1 / NB			
	Virgin Liner used			105ppi (seems low?)				STR	/ /	/ /	125 / 116	109		
								MODE	/ /	/ /	SE1 / NB	SE1		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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REVIEWED BY: RK
DATE: Oct 29/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-23 TF - # = FUSION
TX-17 TX - # = EXTRUSION

DATE: Oct 28/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-18	7:50	029	WB	-13°	495	✓	485	STR	87 / 101 / F	F / /	/	F	RK	Tested at 2"/min in tent by heater, this area 10°C
								MODE	SE3 / SE3 /	↑ / /	/			
	* Sample was hand pulled cleanly apart by technician							STR	/ / Hand pulled by LF tech/					
								MODE	/ /	/ /	/			
TX-19	8:40	038	WB	-13°	495	✓	485	STR	104 / 102 / 112	97 / 112 /	123 / 122	P	RK	Tested at 2"/min in tent by heater, this area was 10°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
	* Sample of virgin liner was 127 ppi							STR	/ /	/ /	123 / 113	116		
								MODE	/ /	/ /	NB / NB	NB		
TF-24	13:07	069	SM	-10°	550	x	850	STR	106 / 106 / 102	108 / 105 / 106	120 / 108	P	RK	Tested at 2"/min in tent at 14°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 /	NB / NB			
	* Sample of virgin liner was 122 ppi							STR	95 / 106 /	101 / 108 /	113 / 114	118		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-20	1510	038	MC	-8°	495	✓	485	STR	101 / 100 / 104	88 / 107 /	117 / 107	P	N. Ob.	Golder Rep. was offsite
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
								STR	/ /	/ /	117 / 106	113		↳ Crusher Pond
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Oct 29/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT #	1790951	PROJECT TITLE:	WRF Pond Repair
OWNER:	Baffinland	CONTRACTOR:	Baffinland
LOCATION:	Mary River	GEOSYNTHETICS:	Layfield

TF -24 — TF - # = FUSION
TX-20 — TX - # = EXTRUSION

DATE: Oct 29/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-21	8:20	038	DW	-5°	495	✓	485	STR	90/96/91	85/103/99	102/108	P		Tested At 2"/min 18°C in WRF
								MODE	SE3/SE3/SE3	SE3/SE3/SE3	SE2/NB			
		Virgin Liner		Ubs	120ppi			STR	/ /	/ /	108/102	103		Tent, did extra bone
								MODE	/ /	/ /	NB/NB	NB		
TX-22	12:55	038	MC	-5°	480	✓	460	STR	96/86/98	92/105/	106/105	P		Tested in tent @ 2"/min, 16°C
								MODE	NB/SE1/SE3	SE3/NB/	NB/NB			
		Virgin Liner		was	110ppi			STR	/ /	/ /	107/101	103		welded in ex. tent
								MODE	/ /	/ /	NB/NB	BRK		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	✓			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Oct 29/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-24 TF - # = FUSION
TX-22 TX - # = EXTRUSION

DATE: Nov 5/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-25	14:30	064	WB	-18°	550	x	850	STR	105 / 105 / 126	111 / 106 / 113	130 / 128	P	RK	Tested at 2"/min at 7° in Seacon
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
	Virgin Liner was 124ppi							STR	98 / 117 /	99 / 116 /	128 / 128	130		*Sample piece was not ideal, not straight
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	SET		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 7/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-25	TF - # = FUSION
TX-22	TX - # = EXTRUSION

DATE: Nov 6/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-26	11:20	064	WB	-22°	550	x	850	STR	97 / 90 / 96	88 / 92 / 99	94 / 97	P	RK	Tested at 2"/min 20°C in seacan
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
		Virgin Liner Sample was 92 ppi						STR	91 / 100 /	88 / 96 /	98 / 93	104		
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
TX-23	13:28	038	FC	-22°	480	✓	480	STR	53 / 111 /	/ /	/	F	RK	Tested at 2"/min, Full peel
								MODE	F / F /	/ /	/			
								STR	/ /	/ /	/			in bubble tent
								MODE	/ /	/ /	/			
TF-27	15.08	064	WB	-23°	550	x	850	STR	118 / 117 / 115	121 / 110 / 116	109 / 122	P	RK	Tested at 2"/min in tent 5°C
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / SEI			
		Virgin Liner Sample was 119 ppi						STR	113 / 115 /	109 / 107 /	115 / 123	110		by heater
								MODE	SEI / SEI /	SEI / SEI /	SEI / SEI	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 7/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT #: 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

TF-27 — TF - # = FUSION
TX-23 — TX - # = EXTRUSION

DATE: Nov 7/19
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-28	0800	064	WB	-14°	550	x	850	STR	103 / 84 / 101	105 / 91 / 102	113 / 108	P	RK	Tested in tent at 5°C, 2"/min
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	Virgin Liner	was	110 ppi					STR	97 / 96 /	90 / 98 /	109 / 111	110		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	SE1		
TX-24	0830	038	FC	-14°	480	✓	480	STR	93 / 84 / 77*	81 / 87 / 98	106 / 112	P	RK	Tested at 5°C, 2"/min
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
	Virgin Liner	was	113 ppi	* =>		Very small bubbles at break zone, did		STR	105 / /	/ /	104 / 106	118		No bubbles visible on surface
								MODE	SE3 / /	/ /	NB / NB	NB		
					if visible extra samples today will repeat in tent			STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
TF-29	1230	064	SM	-16°	550	x	850	STR	119 / 110 / 106	116 / 110 / 108	120 / 120	P	RK	Tested at 5°C in tent, 2"/min
								MODE	SE1 / SE1 / SE1	SE1 / SE1 /	NB / NB			
	Virgin Liner	was	122	ppi				STR	117 / 108 /	113 / 110 /	120 / 121	119		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-25	12:45	038	FC	-16°	480	✓	480	STR	99 / 99 / 62	103 / /	/	F	RK	Tested at 5°C in tent, 2"/min
								MODE	SE3 / SE3 / F	SE3 / /	/			
								STR	/ /	/ /	/			Full peel on sample
								MODE	/ /	/ /	/			
TX-26	13:40	038	FC	-16°	520	✓	490	STR	89 / 107 / 97*	110 / 94 /	119 / 117	P	RK	Tested at 5°C in tent, 2"/min
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / SE1			
		Virgin	Liner	was	119 ppi			STR	/ /	/ /	111 / 115	117		*Hint of peel
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 7/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-29 TF - # = FUSION
TX-26 TX - # = EXTRUSION

DATE: Nov 8/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF30	850	064	SM	-20°	550	x	850	STR	100 / 101 / 106	102 / 108 / 105	114 / 123	P	RK	Tested at 2"/min in sea con 20°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		Virgin	Liner	was	123 ppi			STR	98 / 101 /	106 / 108 /	114 / 176	122		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-27	11:24	038	WB	-22°	500	✓	490	STR	78 / 94 / 91	92 / 31 /	/	F	RK	Tested at 2"/min, sea con at 20°C
								MODE	SE3 / SE3 / SE3	SE3 / F / F	/			
								STR	/ /	/ /	/			F-Full Peel
								MODE	/ /	/ /	/			
TX-28	1315	038	WB	-25°	500	✓	490	STR	80 / 102 / 85	95 / 87 / 92	91 / 93	P	RK	Tested at 2"/min, Sea con 20°C,
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
		Virgin	Liner	was	100 ppi			STR	/ /	/ /	93 / 93	96		welded in tent
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 9/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF -30 — TF - # = FUSION
TX - 28 — TX - # = EXTRUSION

DATE: Nov 9 / 19
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-31	0920	064	WB	-22°	575	x	850	STR	100 / 113 / 103	95 / 106 / 97	108 / 105	P	RK	Tested at 2"/min at 16°C
								MODE	SEI / SEI / SEI	SEI / SEI / SEI	NB / NB			
		Virgin	Liner	was	101 ppi			STR	103 / 92 /	95 / 91 /	107 / 97	98		in season
								MODE	SEI / SEI /	SEI / SEI /	NB / NB	NB		
TF-32	12:40	064	WB	-22°	575	x	850	STR	91 / 88 / 88	86 / 82 / 83	93 / 91	P	RK	Tested at 2"/min at 23°C
								MODE	NB / SEI / SEI	SEI / NB / SEI	NB / NB			
		Virgin	Liner	was	95 ppi			STR	85 / 88 /	86 / 82 /	93 / 91	91		in sea can
								MODE	SEI / SEI /	SEI / NB /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 9/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-32 — TF - # = FUSION
TX-28 — TX - # = EXTRUSION

DATE: Nov 10/19
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF33	0800	064	SM	-22°C	575	x	850	STR	96 / 91 /	/ /	/	F	RK	Tested at 2"/min, the
								MODE	SE1 / SE1 /	/ /	/			
		* Generator		turned off → wedge tensi.			off + off	STR	/ /	/ /	/			sea can was 15°C
								MODE	/ /	/ /	/			
TF34	0855	064	SM	-22°C	575	x	850	STR	107 / 107 / 108	105 / 106 / 104	115 / 115	P	RK	Tested at 2"/min in sea can at
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		• Virgin liner sample		was	106 ppi			STR	105 / 107 /	99 / 103 /	116 / 115	113		~11°C
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-29	12:45	038	WB	-22°C	500	✓	490	STR	37 / 70 /	/ /	/	F	RK	Tested at 2"/min in sea can at
								MODE	F / F /	/ /	/			
				Full Peel on First Two Samples				STR	/ /	/ /	/			18°C
								MODE	/ /	/ /	/			
TX-30	13:40	037	WB	-22°C	505	✓	490	STR	86 / 96 /	/ /	/	F	RK	Tested at 2"/min in sea can at 17°C
								MODE	SE3 / F /	/ /	/			
				* Full Peel on 2nd Sample				STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
TX-31	1425	037	WB	-22°C	515	✓	510	STR	97 / 96 / 86	92 / 88 /	105 / 97	P	RK	Tested at 2"/min in sea can at
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		• Virgin liner sample		was	100 ppi			STR	/ /	/ /	102 / 96	105		20°C <20% Peel on 2 Samples
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 11/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF -34 TF - # = FUSION
TX -31 TX - # = EXTRUSION

DATE: Nov 11/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-35	11:15	069	SM	-24°	550	x	850	STR	107 / 103 /	/ /	/	F	RK	Tested at 2"/min, 10°C
								MODE	SE1 / SE1*/	/ /	/			
		* > 25% Peel						STR	/ /	/ /	/			in Sea Can
								MODE	/ /	/ /	/			
TX-32	11:40	037	WB	-24°	515	✓	510	STR	101 / 107 / 98	107 / 101 /	110 / 111	P	RK	Tested in the sea can at
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	SE1 / SE1			
		Virgin Liner was 106 ppi						STR	/ /	/ /	114 / 112	108		2"/min, 12°C
								MODE	/ /	/ /	SE1 / SE1	SE1		
TF-36	12:15	069	SM	-24°	550	x	850	STR	101 / 106 / 98	107 / 98 / 99	105 / 104	P	RK	Tested at 2"/min, 15°C in Sea can
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		Virgin Liner was 99 ppi						STR	100 / 97 /	96 / 100 /	112 / 105	110		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-33	15:40	037	WB	-24°	515	✓	510	STR	86 / 86 / 84	81 / 85 /	95 / 92	P	RK	Tested at 2"/min 22°C in Sea Can
								MODE	NB / NB / NB	NB / NB /	NB / BRK			
		Virgin Liner was 99 ppi						STR	/ /	/ /	100 / 94	104		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 11/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-36 — TF - # = FUSION
TX-33 — TX - # = EXTRUSION

DATE: Nov 12/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-37	0744	069	SM	-23°	550	x	850	STR	97 / 94 / 97	83 / 84 / 95	103 / 107	P	RK	2"/min in Sea Con at 22°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / NB	NB / NB			
	*Virgin Liner was 93 ppi							STR	88 / 95 /	100 / 106 /	105 / 103	101		Samples warming as we tested
								MODE	SE1 / SE1 /	NB / NB /	NB / NB	NB		
TX-34	0810	37	WB	-23°	515	✓	510	STR	99 / 93 / 97	95 / 98 /	106 / 99	P	RK	2"/min in SC, 20°C
								MODE	SE3 / NB / NB	NB / NB /	NB / NB			
	*Virgin Liner was 103 ppi							STR	/ /	/ /	106 / 95	96		
								MODE	/ /	/ /	NB / NB	NB		
TX-35	1215	37	WB	-23°	515	✓	510	STR	93 / 100 / 96	92 / 82 /	103 / 97	P	RK	2"/min in Sea Con, 22°C
								MODE	SE3 / SE3 / SE3	NB / SE3 /	NB / NB			
	*Virgin Liner was 94 ppi							STR	/ /	/ /	104 / 98	98		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RK
DATE: Nov 12/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-37 TF - # = FUSION
TX-35 TX - # = EXTRUSION

DATE: Nov 13/19
SHEET NUMBER 1 of 1

TX-36 ~> Recommended the technician watch his grinding, may have gone down a bit more on TQs samples.

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TX-36	0830	037	FC	-17°	505	✓	505	STR	78*/103/83	91/86/72	110/103	P	RK	Tested at 2"/min in Sea Con
								MODE	SE3/SE3/SE3	SE3/SE3/SE3	NB/NB			
		Virgin Liner was			98 ppi			STR	/ /	/ /	111/113	104		at 10°C
								MODE	/ /	/ /	NB/NB	NB		* < 20% Peel
TX-37	12:50	037	FC	-17°	505	✓	505	STR	97/101/84	91/93/	106/101	P	RK	Tested at 2"/min in Sea Con
								MODE	SE3/SE3/SE3	SE3/SE3/	NB/NB			
		Virgin Liner was			96 ppi			STR	/ /	/ /	101/99	95		at 17°C
								MODE	/ /	/ /	NB/NB	NB		Centered, well done
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

*Virgin liner

REVIEWED BY: RK
DATE: Nov 13/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-37 TF - # = FUSION
Tx-37 TX - # = EXTRUSION

DATE: Nov. 14, 2019
SHEET NUMBER 1 of

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
Tx-38	8:35	037	FC	-25°	505	505		STR	92 / 81 / 91	81 / 93 /	84 / 100	P	RM	Tested @ 20°C in SeaCon
								MODE	NB / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER		Tested at 95 PPI				STR	/ /	/ /	94 / 99	102		
								MODE	/ /	/ /	NB / NB	NB		
Tx-39	12:50	037	FC	-24	500	495		STR	102 / 99 / 102	84 / 105 /	106 / 113		RM	Tested @ 15°, in SeaCon
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	SE2 / NB			
		VIRGIN	LINER	TESTED @ 104 PPI				STR	/ /	/ /	105 / 114	118		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov. 22

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-37 TF - # = FUSION
TX-39 TX - # = EXTRUSION

DATE: Nov. 15, 2019
SHEET NUMBER 1 of

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-38	7:30	69	DW	-30°	55%	/	850	STR	104 / 107 / 100	98 / 97 / 95	109 / 107	P	RM	Tested In SoCon @ 15°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		Virgin Liner tested @ 99 PPI						STR	107 / 103 /	103 / 96 /	113 / 115	111		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-40	9:40	037	JH	-30°	505	495	449	STR	70 / 70 / 69	72 / 76 /	97 / 95	P	RM	Tested @ 15°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	SE2 / ~~SE2~~ NB			
		VIRGIN LINER TESTED @ 102 PPI						STR	/ /	/ /	106 / 110	104		
								MODE	/ /	/ /	NB / SE2	SE2		
TF-39	12:15	69	DW	-30°	55%	/	850	STR	109 / 112 / 115	104 / 93 / 102	/	F	RM	40% Peel
								MODE	/	/	/			
								STR	102 / /	/ /	/			
								MODE	F / ~~F~~ /	/ /	/			
TF-40	13:00	64	DW	-30°	55%	/	850	STR	113 / ~~113~~ / 120	110 / 115 / 119	122 / 122	P	RM	Tested @ 10°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER TESTED @ 122 PPI						STR	117 / 106 /	111 / 103 /	120 / 120	109		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-41	14:00	037	JH	-30°	510	505	/	STR	95 / 85 / 85	76 / 95 /	100 / 106	P	RM	Tested @ 14°
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER TESTED @ 101						STR	/ /	/ /	106 / 104	123		
								MODE	/ /	/ /	SE2 / SE2	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov. 22

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-40 TF - # = FUSION
TX-41 TX - # = EXTRUSION

DATE: Nov. 16, 2021
SHEET NUMBER 1 of

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-41	9:00	64	DW	-32°	55%	/	850	STR	112 / 94 / 97	99 / 93 / 96	108 / 111	P	RM	Tested @ 10°C
								MODE	NB / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	VIRGIN LINER TESTED @ 106 PPI							STR	98 / 96 /	97 / 96 /	118 / 113	114		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TF-42	13:00	64	DW	-32°	55%	/	850	STR	102 / 106 / 102	98 / 100 / 98	123 / 118	P	RM	Tested @ 14°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
	VIRGIN TESTED @ 108 PPI							STR	109 / 104 /	104 / 101 /	124 / 113	110		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
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								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov. 22

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

TF-42 TF - # = FUSION
TX-41 TX - # = EXTRUSION

DATE: Nov. 17, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES: AIR TEMP.	TEMPERATURES: PREHEAT OR MACH SPEED	TEMPERATURES: EXTRU-DER	TEMPERATURES: NOZZLE OR WEDGE	TEST RESULTS: STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR	PASS OR FAIL	MON.	REMARKS
TF-43	8:00	64	DW	-32°	550	/	850	STR	88 / 95 / 97	91 / 85 / 94	104 / 109	P	RM	Tested @ 20°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER TESTED @ 93 PPI						STR	96 / 95 /	92 / 93 /	102 / 99	99		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-42	9:00	37	JH	-32°	505	495		STR	76 / 85 / 83	97 / 75 / 67	104 / 98	P	RM	Tested @ 22°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
		VIRGIN LINER TESTED @ 101 PPI						STR	/ /	/ /	100 / 100	94		
								MODE	/ /	/ /	NB / NB	NB		
TF-44	12:30	64	DW	-32°	550	/	850	STR	103 / 98 / 95	102 / 93 / 100	110 / 110	P	RM	Tested @ 20°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / [illegible]			
		VIRGIN LINER TESTED @ 98 PPI						STR	108 / 101 /	92 / 93 /	102 / 108	102		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-43	13:20	37	JH	-32°	505	495	/	STR	61 / 67 / 51	43 / /	/	F	RM	Tested @ 20°C
								MODE	SE3 / SE3 / SE3	SE3 / /	/			
		VIRGIN LINER TESTED @ 106 PPI						STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
TX-44	14:10	37	JH	-32°	500	490	/	STR	90 / 90 / 91	82 / 86 / 76	114 / 104	P	RM	Tested @ 19°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
		VIRGIN LINER TESTED @ 105 PPI						STR	/ /	/ /	111 / 105	113		
								MODE	/ /	/ /	NB / NB	NB		
TF-45	15:20	64	DW	-32°	550	/	850	STR	100 / 100 / 95	83 / 94 / 83	114 / 105		RM	Tested @ 19°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER TESTED @ 107 PPI						STR	111 / 102 /	100 / 97 /	115 / 110	107		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov. 22

GEOMEMBRANE I RIAL SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

45 TF - # = FUSION
44 TX - # = EXTRUSION

DATE: Nov. 18, 2019
SHEET NUMBER: of

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-46	7:45	69	DW	-28°	550	/	850	STR	90 / 96 /	88 / 87 /	/	F	RM	60% Peel
								MODE	SE3 / SE3 /	Soiled / /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
TF-47	8:35	64	DW	-28°	550	/	850	STR	94 / 100 / 103	80 / 96 / 96	105 / 97	P	RM	Tested in SeaCan @ 21°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN	TESTED @	95 PPI				STR	95 / 94 /	92 / 93 /	105 / 108	104		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-45	8:10	37	JH	-28°	510	500	[illegible]	STR	93 / 83 / 67	75 / 74 /	98 / 94	P	RM	Tested in SeaCan @ 21°C
								MODE	SE3 / SE3 / SE3	SE3 SE3 /	NB / NB	P		
		VIRGIN	Tested @	100 PPI				STR	/ /	/ /	97 / 100	97		
								MODE	/ /	/ /	NB / NB	NB		
TX-46	12:00	37	JH	-28°	505	495	/	STR	103 / 81 / 78	93 / 89 /	113 / 109	P	RM	Tested in SeaCan @ 18°C
								MODE	SE3 / SE3 / SE3	SE3 SE3 /	NB / NB	P		
		VIRGIN	TESTED @	100 PPI				STR	/ /	/ /	100 / 101	99		
								MODE	/ /	/ /	NB / NB	SE2		
TF-48	12:10	64	DW	-28°	550	/	850	STR	104 / 103 / 103	108 / 98 / 92	105 / [illegible]	P	RM	Tested in SeaCan @ 19°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN	TESTED @	100 PPI				STR	102 / 99 /	104 / 94 /	110 / 107	100		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-47	4:30	37	JH	-24°	505	495	/	STR	102 / 97 / 96	96 / 100 /	110 / 112	P	RM	Tested in SeaCan @ 21°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB	P		
		VIRGIN	LINER: 119 PPI					STR	/ /	/ /	112 / 110	112		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov 22

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

TF-48 / Tx-47 — TF - # = FUSION; TX - # = EXTRUSION

DATE: Nov. 19, 2019
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES: AIR TEMP.	PREHEAT OR MACH SPEED	EXTRUDER	NOZZLE OR WEDGE	TEST RESULTS: STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR	PASS OR FAIL	MON.	REMARKS
Tx-48	8:30	37	JH	-24°	500	490	/	STR	88 / 95 / 96	103 / 105 /	[illegible] / 106	P	RM	TGSTED @ 27°
								MODE	SE3 / NB / [illegible]	SE3 / NB /	NB / NB			
		VIRGIN LINER: 94 PPI						STR	/ /	/ /	108 / 100	106		
								MODE	/ /	/ /	NB / NB	NB		
TF-49	10:00	64	DW	-24°	400	/	850	STR	99 / 101 / 107	92 / 99 / 107	104 / 109	P	RM	Tested @ 24°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER: 101 PPI						STR	106 / 105 / 102	102 / 96 / 98	105 / 103	102		
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB	NB		
Tx-49	12:45	37	JH	-24°	500	490	/	STR	87 / 95 / 93	99 / 92 /	119 / 117	P	RM	Tested @ 20°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER: 126 PPI						STR	/ /	/ /	119 / 120	118		
								MODE	/ /	/ /	NB / NB	NB		
TF-50	2:30	64	DW	-24°	420	/	850	STR	115 / 114 / 108	111 / 102 / 98	114 / 110	P	RM	Tested @ 22°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER: 122 PPI						STR	112 / 109 /	99 / 102 /	112 / 93	114		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-50	15:45	37	J	-25°	500	490	/	STR	96 / [illegible] / 86	103 / 93 /	112 / 118	P	RM	Tested @ 19°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER: 112 PPI						STR	/ /	/ /	114 / 115	109		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov 22

GEOMEMBRANE MATERIAL SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

TF-50 TF - # = FUSION
Tx-50 TX - # = EXTRUSION

DATE: Nov 20/19
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
Tx-51	8:50	37	JH	-27°	500	490	/	STR	92 / 92 / 95	90 / 94 /	125 / 116	P	RM	Tested in SeaCan @ 15°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
			VIRGIN LINER: 115 PPI					STR	/ /	/ /	120 / 122	122		
								MODE	/ /	/ /	NB / NB	NB		
TF-51	9:45	64	DW	-27°	400	/	850	STR	109 / 111 / 107	98 / 113 / 107	115 / 114	P	RM	Tested @ 13°C
								MODE	SE1 / SE1 / SE3	SE1 SE1 / SE1	NB / NB			
			VIRGIN LINER 105 PPI					STR	110 / 109 /	107 / 110 /	111 / 113	112		
								MODE	SE1 / SE1 /	NB NB	NB / NB	NB		
Tx-52	12:45	37	JH	-28°	500	490	/	STR	73 / 96 / 85	86 / 100 /	113 / 117	P	RM	Tested @ 10°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
			VIRGIN LINER: 118 PPI					STR	/ /	/ /	123 / 126	125		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov 22

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

TF-51 TF - # = FUSION
Tx-52 TX - # = EXTRUSION

DATE: Nov. 21, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
Tx-53	8:25	037	JH	-32°	500	490	/	STR	99 / 98 / 86	88 / 80 /	110 / 108	P	RM	Tested @ 20°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER: 111 PPI						STR	/ /	/ /	107 / 107	109 NB		
								MODE	/ /	/ /	NB / NB			
Tx-54	12:45	037	JH	-32°	500	490	/	STR	94 / 90 / 66	95 / 93 /	107 / 109	P	RM	Tested @ 22°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER: 101 PPI					/	STR	/ /	/ /	102 / 106	108 NB		
								MODE	/ /	/ /	NB / NB			
TF-52	1:45	64	DW	-32°	400	/	850	STR	109 / 103 / 102	107 94 / 96	117 / 112	P	RM	Tested @ 21°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER: 110 PPI						STR	107 / 107 /	98 / 100 /	114 / 108	107 NB		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
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								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Nov 22

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

TF-52 TF - # = FUSION
TX-54 TX - # = EXTRUSION

DATE: Nov. 24, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
TF-53	7:00	064	DG	-22°C	400	/	850	STR	96 / 110 / 102	107 / 106 / 99	108 / 105	P	RM	Tested @ 19°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER: 96 PPI						STR	100 / 99 /	93 / 89 /	106 / 99	100		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-55	7:50	037	JH	-20°C	495	490	✓	STR	[illegible] / 95 / 79	87 / 92 / 83	114 / 102	P	RM	Tested @ 20°C
								MODE	/ SE3 / SE3	SE3 / SE3 / SE3	NB / NB			
		VIRGIN LINER: 106 PPI						STR	[illegible] / /	/ /	110 / 106	102		
								MODE	/ /	/ /	NB / NB	NB		
TF-54	9:00	064	DG	-23°	450	/	850	STR	99 / 104 / 106	94 / 95 / 98	111 / 99	P	RM	Tested @ 17°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
		VIRGIN LINER: 98 PPI						STR	96 / 94 /	[illegible] 90 /	105 / 101	103		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
TX-56	12:00	037	JH	-26°	495	490	/	STR	94 / 84 / 78	81 / 86 /	104 / 104	P	RM	Tested @ 17°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER: 103 PPI						STR	/ /	/ /	96 / 92	105		
								MODE	/ /	/ /	NB / NB	NB		
TF-55	13:36	064	DG	25°	450	/	850	STR	108 / 113 /	83 / 98 /	95 / 115	P	RM	Tested @ 15°C
								MODE	NB / NB	SE1 / SE1 /	NB / NB			
		VIRGIN LINER: 113 PPI						STR	106 / 108 / 112	104 / 104 / 95	111 / 102	113		
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB	NB		
TF-57	15:45	037	JH	-25°	495	490	/	STR	90 / 78 / 70	82 / 84 /	105 / 105	P	RM	Tested @ 18°C
								MODE	SE3 / SE3 / SE3	SE3 / SE3 /	NB / NB			
		VIRGIN LINER: 102 PPI						STR	/ /	/ /	101 / [illegible]	[illegible]		
								MODE	/ /	/ /	NB / NB	NB		
								STR	/ /	/ /	108 103			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Dec 6/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

55 TF - # = FUSION
57 TX - # = EXTRUSION

DATE: Nov. 25, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS							REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR	PASS OR FAIL	MON.		
TF-56	7:00	64	DG	-33°	450	/	850	STR	109 / 99 / 99	104 / 100 / 99	108 / 109	P	RM		Tested @ 19°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB				
		VIRGIN		LINER: 104 PPI				STR	103 / 99 /	104 / 97 /	106 / 112	105			
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB			
TX-58	8:20	037	JH	-33°	500	490	/	STR	93 / 105 / 99	95 / 80 /	107 / 104	P	RM		Tested @ 21°C
								MODE	SE3 / SE3 / SE3	NB / SE3 /	NB / NB				
		VIRGIN		LINER: 106 PPI				STR	/ /	/ /	105 / 107	99			
								MODE	/ /	/ /	NB / NB	NB			
TF-57	10:30	64	DG	33°	450	/	850	STR	95 / 89 / 94	93 / 90 / 90	97 / 108	P	RM		Tested @ 20°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB				
		VIRGIN		LINER: 97 PPI				STR	90 / 91 /	103 / 99 /	96 / 107	102			
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB			
TF-58	12:30	64	DG	-31°	400	/	850	STR	93 / 109 / 99	88 / 101 / 97	98 / 97	P	RM		Tested @ 23°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB				
		VIRGIN		LINER: 106 PPI				STR	104 / 101 / 103	94 / 96 / 85	101 / 98	98			
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB	NB			
TX-59	12:40	037	JH	-31°	500	490	/	STR	96 / 98 / 93	90 / 90 /	105 / 96	P	RM		Tested @ 24°C
								MODE	SE3 / NB / SE3	SE3 / SE3 /	NB / NB				
		VIRGIN		LINER: 108 PPI				STR	/ /	/ /	103 / 104	99			
								MODE	/ /	/ /	NB / NB	NB			
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				

REVIEWED BY: RM
DATE: Dec 6/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT #: 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

58 TF - # = FUSION
59 TX - # = EXTRUSION

DATE: Nov 26/19
SHEET NUMBER: 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS					PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR				
Tx-60	8:15	037	JH	-22°	500	490	/	STR	108/105/98	104/101/	118/115		P	RM	TESTED @ 23°C
								MODE	SE3/SE3/SE3	SE3/SE3/	NB/NB				
		VIRGIN		LINER: 117		PPI		STR	/ /	/ /	110/111	112			
								MODE	/ /	/ /	NB/NB	NB			
TF-59	9:00	64	DG	-22°	400	/	850	STR	112/103/109	108/105/99	116/97		P	RM	Tested@ 25°C
								MODE	SE1/SE1/SE1	SE1/SE1/SE1	NB/SE1				
		VIRGIN		LINER: 105		PPI		STR	100/103/	100/93/	101/109	117			
								MODE	SE1/SE1/	SE1/SE1/	NB/NB	NB			
TF-60	12:20	64	DG	-22°	400	/	850	STR	101/105/91	99/104/84	112/115		P	RM	Tested @ 23°C
								MODE	SE1/NB/SE1	SE1/SE1/SE1	NB/NB				
		VIRGIN		LINER: 110		PPI		STR	106/103/	97/96/	108/108	108			
								MODE	SE1/SE1/	SE1/SE1/	NB/NB	NB			
Tx-61	12:30	037	JH	-22°	500	490	/	STR	100/90/87	64/ /	109/		F	RM	Tested @ 21°C
								MODE	SE3/SE3/SE3	100% Peel/	NB/				
		VIRGIN		LINER: 103		PPI		STR	/ /	/ /	/				
								MODE	/ /	/ /	/				
Tx-62	13:50	037	JH	-22°	500	490	/	STR	91/97/103	93/89/	113/107		P	RM	Tested @ 24°C
								MODE	SE3/SE3/SE3	SE3/SE3/	NB/NB				
		VIRGIN		LINER: 104		PPI		STR	/ /	/ /	105/100	97			
								MODE	/ /	/ /	NB/NB	NB			
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				
								STR	/ /	/ /	/				
								MODE	/ /	/ /	/				

REVIEWED BY: RM
DATE: Dec 6/19

GEOMEMBRANE TRIAL SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

60 TF - # = FUSION
62 TX - # = EXTRUSION

DATE: Nov. 27, 2019
SHEET NUMBER 1 of 1

SAMPLE NUMBER	APROX. TIME	WELDING MACHINE NUMBER	WELD TECH	TEMPERATURES				TEST RESULTS				PASS OR FAIL	MON.	REMARKS
				AIR TEMP.	PREHEAT OR MACH SPEED	EXTRU-DER	NOZZLE OR WEDGE	STRENGTH & FAILURE MODE	INSIDE PEEL	OUTSIDE PEEL	SHEAR			
Tx-63	8:15	037	JH	-28°	500	490	/	STR	95 / 97 / 97	94 / 98 /	102 / 102	P	RM	Tested @ 24°C
								MODE	NB / SE3 / NB	SE3 / NB /	NB / NB			
			VIRGIN	LINER		:102	PPI	STR	103 / /	/ /	101 / 99	95		
								MODE	/ /	/ /	NB / NB	NB		
TF-61	8:50	64	DG	-28°	400	/	850	STR	103 / 104 / 103	102 / 94 / 90	110 / 109	P	RM	TESTED @ 20°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
			VIRGIN	LINER:		113	PPI	STR	109 / 104 /	98 / 96 /	110 / 110	108		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
Tx-64	12:20	037	JH	-28°	500	490	/	STR	101 / 108 / 106	94 / 104 /	113 / 112	P	RM	Tested @ 20°C
								MODE	NB / SE3 / SE3	SE3 / SE3 /	NB / NB			
			VIRGIN	LINER		109	PPI	STR	98 / 102 /	/ /	107 / 113	115		
								MODE	SE3 / NB /	/ /	NB / NB	NB		
TF-62	12:00	64	DG	28°	400	/	850	STR	101 / 100 / 108	91 / 94 / 101	109 / 109	P	RM	Tested @ 20°C
								MODE	SE1 / SE1 / SE1	SE1 / SE1 / SE1	NB / NB			
			VIRGIN	LINER		:108	PPI	STR	97 / 91 /	100 / 87 /	104 / 95	108		
								MODE	SE1 / SE1 /	SE1 / SE1 /	NB / NB	NB		
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			
								STR	/ /	/ /	/			
								MODE	/ /	/ /	/			

REVIEWED BY: RM
DATE: Dec 6/19

APPENDIX F

PRODUCTION SEAM LOGS

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION [X]
EXTRUSION [ ]
MACHINE # : 064, 069

064
069
064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-1	7:45	WB
TF-3	8:35	GD
TF-4	12:00	WB

DATE	Sept 18/19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	1/2	NEOS (NAT)	SEOS (Berm)	0842	2°	WB	600	850 -	-	43m	0		RK	#064	Sept 19	RK
2	2/3	"	"	0919	"	WB	600	850 -	847 - 849	42m	43m		RK		Sept 19	RK
3	4/5	WEOS (1D)	EEOS (1C)	1000	"	WB	"	" -	-	6.8m	85m		RK		Sept 19	RK
4	7/9	SEOS (Berm)	NEOS (NAT)	1304	"	WB	"	" -	- 851	30m	92m		RK		Sept 20	RK
5	10/8	SEOS (Berm)	NEOS (1E)	1329	"	WB	"	" -	-	4m	96m		RK		Sept 20	RK
6	9/10	SEOS (1E)	NEOS (NAT)	1330	"	WB	"	" -	-	29m	125m	DS-19-1	RK		Sept 20	RK
7	10/11	SEOS (1F)	NEOS (NAT)	1410	"	WB	"	" -	-	22m	0m		RK		Sept 19	RK
8	11/12	SEOS (1J)	NEOS (NAT)	1438	"	WB	"	" -	-	12m	22m		RK		Sept 20	RK
9	/							-	-		34m					
10	/							-	-							
11	3/4	NEOS (NAT)	SEOS (1C)	0950	2°	GD	600	850 -	850 - 851	25m	0		RK	#069	Sept 19	RK
12	3/5	NEOS (1C)	SEOS (Berm)	1010	"	GD	"	" -	-	14m	25m		RK		Sept 19	RK
13	5/6	SEOS (Berm)	NEOS (1D)	1050	"	GD	"	" -	-	14m	39m		RK	Wrinkled Weld Along Seam At Times	Sept 19	RK
14	4/6	SEOS (1D)	NEOS (NAT)	1055	"	GD	"	"		25m	53m		RK		Sept 19	RK
15	9/8	EEOS (Berm)	WEOS (1E)	1235	"	GD	"	"		6.8m	78m		RK		Sept 20	RK
16	/										85m					
17	/							-	-							
18	12/6	NEOS (NAT)	SEOS (1J)	1522	2°	WB	600	850 -	-	13m	34m		RK		Sept 20	RK
19	11/6	NEOS (1J)	SEOS (1F)	1517	"	WB	"	" -	-	12m	57m		RK		Sept 19	RK
20	10/6	NEOS (1F)	SEOS (Berm)	1511	"	WB	"	" -	-	13m	69m		RK		Sept 20	RK

DAILY TOTAL 299m

DESTRUCTIVE LENGTH CARRY - OVER 82,85

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: 21/09/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X No Wind
EXTRUSION
MACHINE # : PW 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF5	8:15	GD

DATE	Sept 21, 2019
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	14/15	NEOS (NAT)	SEOS (1J)	8:50	-2°	GD	600	850 -	-	18m	85m		RK		Sept21	RK
2	14/16	NEOS (NAT)	SEOS (1K)	9:07	-2°	GD	"	" -	-	33m	103m		RK		Sept21	RK
3	15/20	NEOS (NAT)	SEOS (1L)	9:25	-1°	"	"	" -	-	4m	136m	DS-19-02	RK		Sept21	RK
4	18/17	EEOS (Berm)	WEOS (1N)	9:50	-1°	"	"	" -	-	6.8	0m		RK		sept21	RK
5	16/17	SEOS (Berm)	NEOS (1N)	10:36	-0	"	"	" -	-	5m	7m		RK		Sept21	RK
6	16/18	SEOS (1N)	NEOS (NAT)	10:40	0	"	"	" -	-	31m	12m		RK		Sept21	RK
7	13/16	SEOS (Berm)	NEOS (1K)	10:10	-1°	"	"	" -	-	7m	43m		RK		Sept21	RK
8	13/14	SEOS (1K)	NEOS (1J)	10:13	-1°	"	"	" -	-	15.5m	50m		RK		Sept21	RK
9	13/15	SEOS (1J)	NEOS (1L)	10:19	-1°	"	"	" -	-	16m	655m		RK		Sept21	RK
10	13/20	SEOS (1L)	NEOS (NAT)	10:32	-1°	"	"	" -	-	4m	82m		RK		Sept21	RK
11	18/19	SEOS (Berm)	NEOS (NAT)	11:00	0	"	"	" -	-	31m	86m	DS-19-03	RK		Sept21	RK
12	1/13	NEOS (NAT)	SEOS (Berm)	11:45	0	"	"	" -	-	43m	10m		RK		Sept21	RK
13	/							-	-		43m					
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 214m

DESTRUCTIVE LENGTH CARRY - OVER 43m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Sept21/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-6	12:30	SM

DATE	Sept 22/19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	19/22	NEOS(NAT)	SEOS(2C)	13:10	-4°	SM	600	850 -	-	20m	43m		RK		Sept 22	RK
2	19/21	NEOS (2C)	SEOS(Berm)	13:18		SM	600	850 -	-	5m	63m		RK		Sept 22	RK
3	21/22	EEOS(Berm)	WEOS(2C)	13:05		SM	600	850 -	-	6.8m	68m		RK		Sept 22	RK
4	21/23	SEOS(Berm)	NEOS(2D)	13:37		"	"	" -	-	1m	75m		RK		Sept 22	RK
5	22/23	SEOS(2D)	NEOS(NAT)	13:38		"	"	" -	-	19.5	76m		RK		Sept 22	RK
6	23/24	SEOS(Berm)	NEOS(NAT)	13:50		"	"	" -	-	17m	96m		RK		Sept 22	RK
7	25/26	NEOS (NAT)	SEOS (2F)	14:12		"	"	" -	-	8.5m	114m		RK		Sept 22	RK
8	24/26	SEOS(Berm)	NEOS(2F)	14:20		"	"	" -	-	9m	125m		RK		Sept 22	RK
9	24/25	SEOS(2F)	NEOS(Berm)	14:23		"	"	" -	-	8m	134m		RK		Sept 22	RK
10	26/27	SEOS(Berm)	NEOS (NAT)	14:30		"	"	" -	-	17.5	142m		RK		Sept 22	RK
11	27/28	SEOS(Berm)	NEOS(NAT)	14:40		"	"	" -	-	17.5	159m	DS-04	RK		Sept 22	RK
12	28/29	SEOS(Berm)	NEOS(NAT)	15:20	↓	"	"	" -	-	17.5	175m		RK		Sept 22	RK
13	/							-	-		35m					
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

DAILY TOTAL 147

DESTRUCTIVE LENGTH CARRY - OVER 17.5

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Sept 22/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-8	9:45	SM
TF-9	14:05	SM

DATE	Sept 24 / 19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	29/30	SEOS (Berm)	NEOS (NAT)	10:40	-5°	SM	550	850 -	847 - 850	19m	35m		RK		Sept 25	RK
2	30/31	SEOS (Berm)	NEOS (NAT)	12:07	"	"	"	" -	-	18m	54m		RK		Sept 25	RK
3	32/33	EEOS (2L)	WEOS (2K)	13:58	"	"	"	" -	-	6.8m	72m		RK		N. Ob	*
4	33/34	EEOS (2M)	WEOS (2M)	15:02	"	"	"	" -	-	6.8	81m		RK			
5	31/32	SEOS (South Slope)	NEOS (2K)	15:13	"	"	"	" -	-	8.5	88m		RK			
6	31/33	SEOS (2K)	NEOS (2M)	15:18	"	"	"	" -	-	30m	96.5		RK			
7	31/34	SEOS (2M)	NEOS (NAT)	15:31	"	"	"	" -	-	23m	126.5		RK			
8	32/35	SEOS (S. Slope)	NEOS (2L)	16:07	"	"	"	" -	-	6.5	149.5	DS19-05	RK		↓	
9	33/35	SEOS (2R)	NEOS (2N)	16:10	"	"	"	" -	-	30	0		RK		Sept 25	RK
10	34/35	SEOS (2N)	NEOS (NAT)	16:22	"	"	"	" -	-	23.	30		RK		Sept 25	RK
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 172m

DESTRUCTIVE LENGTH CARRY - OVER 53m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Sept 27/19

Not observed non-destructive tests were verbally confirmed to have been completed by Layfield

* Golder rep. not onsite

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-10	14:40	SM

DATE	Oct 6, 2019
SHEET NUMBER	1 of 1

	SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
		START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	39/40	NEOS (NAT)	SEOS (Top of Slope)	17:30		SM	550	850 -	-	50.3	73m		RK	5-6" overlap	Oct 7	RK
2	/							-	-							
3	/							-	-							
4	/							-	-							
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
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16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 50m

DESTRUCTIVE LENGTH CARRY - OVER 123 m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Oct 8/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-11	9:22	SM
TF-12	13:06	SM

DATE	Oct 7, 2019
SHEET NUMBER	1 of 1

	SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
		START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	40/41	SEOS (South Slope)	NEOS (NAT)	10:01	-11°	SM	550	850	850 - 851	49m	123m	DS-07	RK		Oct 7	RK
2	41/42	SEOS "	"	11:27	-10°	"	"	" -	-	45m	21m	DS-08	RK	DS on wrinkled weld	Oct 7	RK
3	42/43	"	"	13:32	-10°	"	"	" -	-	45m	18m		RK		Oct 7	RK
4	43/44	"	"	16:31	-13	"	"	" -	-	44.5m	63m		RK		Oct 7	RK
5	/							-	-		108m					
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-					?		
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 183.5

DESTRUCTIVE LENGTH CARRY - OVER 108m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Oct 8/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-13	8:28	SM

DATE	Oct 8, 2019
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	44/45	SEOS (S. Slope Toe)	Defect 3N	9:11	-6°	SM	550	850 -	836 - 851	32.5	108m		RK	Burnout after WELDING	Oct 8	RK
2	44/45	Defect 3N	NEOS (NAT)	9:35	"	"	"	" -	-	12.5	140m		RK		Oct 8	RK
3	45/46	SEOS (S. Slope)	NEOS (NAT)	10:09	"	"	"	" -	-	42m	152m	DS-09	RK	DS at start	Oct 8	RK
4	/							-	-		40m					
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
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16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 87m

DESTRUCTIVE LENGTH CARRY - OVER 40m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Oct 8/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-15	11:30	SM
TF-16	15:45	SM

DATE	Oct 11/19
SHEET NUMBER	1 of 1

*Golder rep. not onsite

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	47/48	WEOS (30+)	EEOS (30)	17:22	-6°	SM	550	850 -	-	7m	40m		RK		N. 06	*
2	46/47	NEOS (NAT)	SEOS (30+)	17:35	"	"	"	" -	802 - 851	26m	47m		RK		↓	↓
3	/							-	-		73m					
4	/							-	-							
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
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16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 33m

DESTRUCTIVE LENGTH CARRY - OVER 73m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK

DATE: Oct 19/19

Not observed non-destructive tests were verbally confirmed to have been completed by Layfield

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-17	15:22	SM

DATE	Oct 12, 2019
SHEET NUMBER	1 of 1

* Golder Rep Not Onsite

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	46/48	NEOS (30*)	SEOS (S. Berm)	15:05	-8°	SM	550	850	-	12.5m	0		RK		N. 06	*
2	49/48	SEOS (S. Slope Toe)	NEOS (30)	16:39	"	"	"	" -	-	12.5m	12.5m		RK		↓	↓
3	49/47	SEOS (30)	NEOS (NAT)	16:44	"	"	"	" -	-	25m	25m		RK		↓	↓
4	/							-	-		50m					
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
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17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

DAILY TOTAL 50m
DESTRUCTIVE LENGTH CARRY - OVER 50m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK

DATE: Oct 19/19

Not observed non-destructive tests were verbally confirmed to have been completed by Layfield

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-18	10:02	SM

DATE	Oct 13/19
SHEET NUMBER	1 of 1

*Golder Rep Not Onsite

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	49/50	SEOS (Slope)	NEOS (NAT)	10:40	-12°	SM	550	850 -	-	36.5m	50m		RK		N.Ob	*
2	/							-	-		87m				↓	↓
3	/							-	-							
4	/							-	-							
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
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13	/							-	-							
14	/															
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16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

DAILY TOTAL 36.5m

DESTRUCTIVE LENGTH CARRY - OVER 87m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK

DATE: Oct 19/19

Not observed non-destructive tests were verbally confirmed to have been completed by Layfield

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-19	9:40	SM

DATE	Oct 16/19
SHEET NUMBER	1 of 1

*Golder rep not onsite

SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	50/51	SEOS (S.Slope)	Defect 4B	10:43	-13°	SM	850 -	840 - 852	18.3m	87m		RK		N. Ob.	*
2	50/51	Defect 4B	NEOS (NAT)	10:57	"	"	" -	-	18m	105m		RK			
3	/						-	-		123m		RK			
4	51/52	SEOS (S.Slope)	NEOS (NAT)	15:58	-13°	WB	550	850 -	-	37m	160m		RK		
5	52/53	"	"	16:36	"	"	"	" -	-	37m	0	DS-11	RK		
6	/							-	-						
7	/							-	-						
8	/							-	-						
9	/							-	-						
10	/							-	-						
11	/							-	-						
12	/							-	-						
13	/							-	-						
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17	/							-	-						
18	/							-	-						
19	/							-	-						
20	/							-	-						

DAILY TOTAL 110m

DESTRUCTIVE LENGTH CARRY - OVER 0m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK

DATE: Oct 19/19

Not observed non-destructive tests were verbally confirmed to have been completed by Layfield

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : * 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-21	13:25	SM

DATE	Oct 25/19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	66/67	SEOS (SAT)	NEOS (4L*)	14:32	-11°	SM	650	850 -	849 - 850	18.3m	N/A	DS-13	RK	Layfield planned to have DS	Oct27	RK
2	67/68	SWEOS (SAT)	NEEOS (5M)	15:05	"	"	"	" -	-	7m	18m		RK		Oct28	RK
3	68/69	WEOS (4L)	EEOS (4T)	15:53	"	"	"	" -	-	1.1m	25m		RK		Oct29	RK
4	69/62	WEOS (4T)	EEOS (SAT)	15:54	"	SM	"	" -	-	11.5m	26m		RK		Oct28	RK
5	69/70	WEOS (5O)	EEOS (SAT)	16:56	"	DW	"	" -	849 -	8.5m	37m		RK	* Layfield used other tech (lightest on crew) for steep slope	Oct28	RK
6	/							-	-		45m					
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

DAILY TOTAL 45m
DESTRUCTIVE LENGTH CARRY - OVER 45m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK

DATE: Oct 29/19

67/67 Wrinkle 14:48 WB
* Lightest guy on crew, no new trial

GEOMEMBRANE SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

FUSION X
EXTRUSION
MACHINE # : 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-22	10 39	SM
TF-23	15:15	SM

DATE	Oct 26/19
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	66/71	NEOS (5C)	SEOS (SAT)	11:19	-10°	SM	550	850 -	-	18m	35m		RK		Oct27	RK
2	71/72	NEOS (5F)	SEOS (SAT)	11:55	"	"	"	" -	-	17m	53m		RK		Oct27	RK
3	72/73	NEOS (5H)	SEOS (SAT)	12:31	"	"	"	" -	-	17m	70m		RK		Oct27	RK
4	73/74	NEOS (5J)	SEOS (SAT)	13:13	"	"	"	" -	-	17m	87m		RK		Oct27	RK
5	53/74	WEOS (5L)	EEOS (5K)	16:20	"	"	"	" -	-	3m	104m		RK		Nov7	RK
6	54/74	WEOS (5K)	EEOS (5J)	16:21	"	"	"	" -	-	4m	107m		RK		Oct29	RK
7	54/73	WEOS (5J)	EEOS (5I)	16:23	"	"	"	" -	-	2m	111m		RK		Oct27	RK
8	57/73	WEOS (5I)	EEOS (5H)	16:24	"	"	"	" -	-	5m	113m		RK		Oct27	RK
9	57/72	WEOS (5H)	EEOS (5G)	16:26	"	"	"	" -	-	2m	118m		RK		Oct27	RK
10	58/72	WEOS (5G)	EEOS (5F)	16:27	"	"	"	" -	-	5m	120m		RK		Oct27	RK
11	58/71	WEOS (5F)	EEOS (5E)	16:29	"	"	"	" -	-	2m	125m		RK		Oct27	RK
12	60/71	WEOS (5E)	EEOS (5C)	16:30	"	"	"	" -	-	5m	127m		RK		Oct27	RK
13	60/66	WEOS (5C)	EEOS (5D)	16:32	"	"	"	" -	-	2m	132m		RK		Oct29	RK
14	61/66	WEOS (5D)	EEOS (4L)	16:33	"	"	"	"		5m	134m		RK	Wedge Pull Out ↓ Restart	Oct29	RK
15	69/67	NEOS (4L)	SEOS (5O)	16:46	"	"	"	"		8m	139m		RK		Oct29	RK
16	70/67	NEOS (5O)	SEOS (5M)	16:49	"	"	"	"		8m	147m		RK		Oct28	RK
17	68/70	NEOS (5M)	SEOS (SAT)	16:52	"	"	"	" -	-	4m	155m	D5-14	RK		Oct28	RK
18	/							-	-		0m					
19	/							-	-							
20	/							-	-							

5M ↓ 4m SAT

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

DAILY TOTAL 124m

DESTRUCTIVE LENGTH CARRY - OVER 0m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Nov 7/19

GEOMEMBRANE SEAM LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

FUSION: X
EXTRUSION:
MACHINE # : 069

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-24	13:07	SM

DATE	Oct 28/19
SHEET NUMBER	1 of 1

	SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
		START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	74/75	SEOS (SAT)	NEOS (SL)	13.52	-10°	SM	550	850	-	16m	0m		RK	Two IO def.	Nov.B/16	RM
2	/							-	-		16m					
3	/							-	-							
4	/							-	-							
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL: 16m
DESTRUCTIVE LENGTH CARRY - OVER: 16m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov.22

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION TF-25 X
EXTRUSION
MACHINE # : 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-25	14:30	WB

DATE	Nov 5/19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	77/75	NEOS (6B)	SEOS (6D)	15:20	-17°	WB	550	850	-	7.5	16m		RK		Nov7	RK
2	75/76	SEOS (SAT)	NEOS (6D)	15:40	"	"	"	"	-	8.0	24m		RK		Nov13	RK
3	77/76	SEOS (6D)	NEOS (6C)	15:43	"	"	"	"	-	7.5	32m		RK		Nov.16	RM
4	76/78	NEOS (6G)	SEOS (SAT)	16:16	"	"	"	-	844/850	15.5	40m		RK		Nov10	RK
5	/							-	-		56m					
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 39

DESTRUCTIVE LENGTH CARRY - OVER 56m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov 22

GEOMEMBRANE SEAM LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

FUSION X
EXTRUSION
MACHINE # : 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-26	11:20	WB
TF-27	15:06	WB

DATE	Nov 6/19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	78/79	NEOS (6I)	SEOS (SAT)	12:13	-22°	WB	550	850 -	840 - 851	16.5	56m		RK		Nov13	RK
2	79/80	SEOS (SAT)	NEOS (6K)	12:33	"	"	"	" -	-	16.5	73m		RK		Nov13	RK
3	80/81	SEOS (SAT)	NEOS (6M)	13:10	"	"	"	" -	-	17.5	90m		RK		Nov13	RK
4	81/82	SEOS (SAT)	NEOS (6O)	16:13	-23°	"	"	" -	-	18.0	108m		RK		Nov13	RK
5	/							-	-		126m					
6	82/45	WEOS (6S)	EEOS (6P)	16:51	-23	WB	550	850 -	-	6m	126m		RK		Nov13	RK
7	8246	(6P)	(6O)	16:54	"	"	"	" -	-	0.3m	132m		RK	Extruded Nov12		
8	81/46	(6O)	(6N)	16:55	"	"	"	" -	-	6m	132m		RK	WS btwn N&M	Nov13	RK
9	80/48	(6M)	(6L)	17:08	"	"	"	" -	-	6m	138m		RK	"	Nov13	RK
10	80/49	(6L)	(6K)	17:11	"	"	"	" -	-	0.3m	144m		RK	Extruded Nov12		
11	79/49	↓ (6K)	↓ (6J)	17:11	"	"	"	" -	-	6m	144m		RK		Nov13	RK
12	/							-	-		150m					
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

Tie In ↓

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

DAILY TOTAL 93m ~DS Tomorrow on Tie In

DESTRUCTIVE LENGTH CARRY - OVER 150m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Nov 13

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION [X]
EXTRUSION [ ]
MACHINE # : 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-28	0700	WB
TF-29	1230	SM

DATE	Nov 7/19
SHEET NUMBER	1 of 1

SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON-DESTRUCTIVE TESTING TEST DATE	NON-DESTRUCTIVE TESTING MON.
1	50/76	WEOS (6I)	EEOS (6H)	0855	-14°	WB	550	850 -	-	6.5	150m		RK	WB between 6I & 6J	Nov 13	RK
2	51/76	6H	6G	0858				-	-	0.3	157m		RK	Patched	X	X
3	51/76	6G	6F	0858				-	-	6.5	157m		RK		Nov. 15	RM
4	52/76	6F	6C	0901				-	-	0.3	164m		RK	Patched	X	X
5	52/77	6C	6B	0901				-	-	2.5	164m	DS15	RK	DS 19 15	Nov 8	RK
6	52/75	6B	6A	0902				-	-	3.5	0		RK		Nov 7	RK
7	53/75	6A	5L	0904				-	-	3.5	3.5m		RK		Nov 7	RK
8	/							-	-		7m					
9	82/83	NEOS (6S)	SEOS (SAT)	13 32	-16°	SM	550	850 -	-	18m	25m		RK		Nov 8	RK
10	83/84	NEOS (7A)	SEOS (SAT)	14:01	-16°	SM	550	850 -	-	18.5	43m		RK		Nov 12	RK
11	84/85	NEOS (7C)	SEOS (SAT)	16:28	-16°	SM	550	850 -	-	18.0	62m		RK		Nov 12	RK
12	/							-	-		80m					
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 78m

DESTRUCTIVE LENGTH CARRY - OVER 80m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov. 22

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-30	08:50	SM

DATE	Nov 8/19
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	85/42	WEOS (7G)	EEOS (7D)	10:04	-20°	SM	550	850	-	5.5	~80		RK		Nov 15	RM
2	85/43	7D	7C	10:07	"	"	"	"	-	0.3	86m		RK	Ext. Nov 12	X	X
3	84/43	7C	7B	10:07	"	"	"	"	-	6m	86m		RK		Nov 13	RK
4	83/44	7A	6T	10:12	"	"	"	"	-	6m	92m		RK		Nov 13	RK
5	/							-	-		98m					
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
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15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 18m

DESTRUCTIVE LENGTH CARRY - OVER 98m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov. 22

GEOMEMBRANE SEAM LOG

PROJECT #: 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION: X
EXTRUSION:
MACHINE #: 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-31	09:20	WB
TF-32	1240	WB

DATE	Nov 9/19
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	85/86	NEOS(7E)	SEOS(SAT)	10:12	-22°	WB	575	850	-	18m	98m		RK	Rough piece of liner	Nov 12	RK
2	87/88	NEOS(7I)	SEOS(7J)	11:53	"	"	"	" -	830-850	9.5	116m		RK		Nov.15	RM
3	86/87	NEOS(7H)	SEOS(7J)	12:18	"	"	"	" -	-	9.5	126m		RK		Nov.15	RM
4	86/88	NEOS(7J)	SEOS(SAT)	12:22	"	"	"	" -	-	9m	135m		RK		Nov.15	RM
5	89/88	NEOS(7L)	SEOS(SAT)	15:45	20°	"	"	" -	825-850	18.5m	144m		RK	DS-19-16	Nov.16	RM
6	89/90	NEOS(7N)	SEOS(SAT)	16:10	"	"	"	" -	-	18.5m	16m		RK		Nov.16	RM
7	/							-	-		35m					
8	/							-	-							
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL: 83m

DESTRUCTIVE LENGTH CARRY - OVER: 35m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov.22

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION [X]
EXTRUSION [X]
MACHINE # : 064 Ext 038

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-34	0855	SM
TX-31	1425	WB

DATE	Nov 10/19
SHEET NUMBER	1 of 1

SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON-DESTRUCTIVE TESTING TEST DATE	NON-DESTRUCTIVE TESTING MON.
1	38/90	WEOS (7R)	EEOS (7N)	10:39	-22°	SM	575	850 -	-	5m	35m		RK		Nov.16	RM
2	38/89	7N	7M	10:42	"	"	"	" -	-	0.3	40m		RK	Extruded Nov10		
3	39/89	7M	7P	10:42	"	"	"	" -	-	2.5	40m		RK	Extrude*		
4	39/89	7P	7L	10:46	"	"	"	" -	-	4.0	43m		RK		Nov.16	RM
5	39/88	7L	7K	10:48	"	"	"	" -	-	0.3	47m		RK	Extruded Nov 11		
6	40/88	7K	7I	10:51	"	"	"	" -	-	6.5	47m		RK		Nov.16	RM
7	40/87	7I	7H	10:52	"	"	"	" -	-	0.3	54m		RK	Extruded Nov 11		
8	41/86	7H	7Q	10:52	"	"	"	" -	-	1m	54m		RK	Extruded Nov 11		
9	41/86	7Q	7F	10:58	"	"	"	" -	-	5.5	55m		RK		Nov.16	RM
10	/							-	-		61m					
Ext 038 11	39/89	WEOS (7M)	EEOS (7P)	16:46	-22	WB	515	510 -	-	2.5m			RK		Nov.15	RM
12	38/89	WEOS (7M	EEOS (7N)	15:50	"	"	"	" -	-	0.3m			RK		Nov.15	RM
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 25m

DESTRUCTIVE LENGTH CARRY - OVER 61m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov.22

2018

GOLDER ASSOCIATES LTD.

Extrusion 2.8m

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION [X]
EXTRUSION [X]
MACHINE # : 069 Ext 037

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-36	12:15	SM
TX 32	11:40	WB
TX 33	15:40	WB

DATE	Nov 11/19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	90/91	NEOS (7T)	SEOS (SAT)	13:17	-24°	SM	550	850 -	851 - 851	18.5m	61m		RK		Nov.16	RM
2	92/93	NEOS (8B)	SEOS (8C)	13:50	"	"	"	" -	-	9m	80m		RK		Nov.15	RM
3	91/92	NEOS (8A)	SEOS (8C)	14:05	"	"	"	" -	844 - 851	9m	89m		RK		Nov.15	RM
4	91/93	NEOS (8C)	SEOS (SAT)	14:09	"	"	"	" -	-	9.5m	98m		RK		Nov.17	RM
5	93/94	NEOS (8E)	SEOS (SAT)	15:40	"	"	"	" -	-	19.5m	108m		RK		Nov.16	RM
6	94/95	NEOS (8H)	SEOS (SAT)	16:05	"	"	"	" -	-	19.5m	128m	DS-19-17	RK		Nov.16	RM
7	/							-	-		0					
8	/							-	-							
9	/							-	-							
10	/							-	-							
Ext 037 11	34/88	EEOS (7K)	WEOS (7L)	13:48	-24°	WB	515	510 -	-	0.5m			RK		Nov.15	RM
Ext 037 12	40/87	EEOS (7H)	(WEOS (7I)	14:40	"	"	515	510 -	-	0.5m			RK		Nov.15	RM
Ext 037 13	41/86	EEOS (7Q)	WEOS (7H)	17:00	"	"	"	" -	-	1.0m			RK		Nov.15	RM
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

DAILY TOTAL 85m

DESTRUCTIVE LENGTH CARRY - OVER 0m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov. 22

Extrusion 2m

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION X
MACHINE # : 069 Ext 037

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-37	0744	SM
TX-34	0810	WB
TX-35	1215	WB

DATE	Nov 12 / 19
SHEET NUMBER	1 of 1

SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON-DESTRUCTIVE TESTING TEST DATE	NON-DESTRUCTIVE TESTING MON.
1	31/95	WEOS (8J)	EEOS (8H)	0846	-23°	SM	550	850 -	-	6.8m	0m		RK		Nov.18	RM
2	31/94	(8H)	(8G)	0848	"		"	" -	-	0.3m	6.8m		RK	Extruded		
3	32/94	8G	8E	0850	"		"	" -	-	6.5m	7m		RK	over	Nov.16	RM
4	32/93	8E	8D	0850	"	"	"	" -	-	0.5m	13m		RK	Extruded over		
5	35/93	8D	8B	0853	"	"	"	" -	-	6.5m	14m		RK		Nov.16	RM
6	35/92	8B	8A	0853	"	"	"	" -	-	1.0m	20m		RK	Extruded		
7	36/91	8A	TT	0856	"	"	"	" -	-	6.5m	21m		RK	over	Nov.16	RM
8	36/90	TT	7S	0856	"	"	"	" -	-	0.3m	28m		RK	7S & 7R open		
9	/							-	-		28m			Extruded over		
10	/							-	-							
Ext 037 11	82/46	WEOS (6P)	EEOS (6O)	13:55	-23°	WB	515	510 -	-	0.3m	\		RK		Nov.16	RM
12	80/49	WEOS (6L)	EEOS (6K)	15:35	-23°	WB	"	" -	-	0.3m	\		RK		Nov.16	RM
13	85/43	WEOS (7D)	EEOS (7C)	11:06	"	"	"	" -	-	0.3m	\		RK		Nov.16	RM
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 28m

DESTRUCTIVE LENGTH CARRY - OVER 28m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov. 22

2018

GOLDER ASSOCIATES LTD.

Extrusion 0.9m

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION
EXTRUSION X
MACHINE # : 037

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
Tx-36	0830	FC
Tx-37	1250	FC

DATE	Nov 13/19
SHEET NUMBER	1 of 1

	SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
		START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	75/76	Ref. 6E	SEOS (SAT)	12:00	-17°	FC	505	505 -	-	3m	\		RK		Nov13	RK
2	/							-	-							
3	/							-	-							
4	/							-	-							
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
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16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL \

DESTRUCTIVE LENGTH CARRY - OVER \

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RK DATE: Nov 13/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION
EXTRUSION Tx-38
MACHINE # : 037

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
Tx-38	8:35	FC
Tx-39	12:50	FC

DATE	Nov.14
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1 3194	8-H	8-G	11:00	-24°	FC	505	505 -	-	0.4	0m		RM		Nov.15	RM
2 3293	8-D	8-E	14:10	-24°	FC	500	495 -	-	1.2m	1.4m		RM		Nov.15	RM
3 3592	8-A	8-B	15:20	-24°	FC	500	495 -	-	1.3m	1.6m		RM		Nov.15	RM
4 3690	7-T	7-S	15:10	-25	FC	500	495 -	-	0.5	2.9		RM		Nov.15	RM
5 3890	7-S	7-R	15:30	-25	FC	500	495 -	-	0.5	3.4		RM		Nov.15	RM
6 /							-	-		3.9					
7 /							-	-							
8 /							-	-							
9 /							-	-							
10 /							-	-							
11 /							-	-							
12 /							-	-							
13 /							-	-							
14 /															
15 /															
16 /															
17 /							-	-							
18 /							-	-							
19 /							-	-							
20 /							-	-							

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

DAILY TOTAL \ Extrusion
DESTRUCTIVE LENGTH CARRY - OVER \

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov22

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION TF-40
EXTRUSION
MACHINE # : 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-40	13:00	DW

DATE	Nov. 15
SHEET NUMBER	1 of 1

	SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
		START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	97/98	WEOS (9-C)	EOS (9-C)	15:00	-30°	DW	55%	850 -	850 -	68m	0		RM		Nov 21	RM
2	96/97	NEOS (9-C)	SEOS (9-C)	15:20	-30°	DW	55%	850 -	850 -	45m	68m		RM		Nov. 24	RM
3	96/98	NEOS 9-C	SEOS	15:50	-30°	DW	55%	850 -	850 -	20m	52m		RM		NOV. 20	RM
4	/							-	-		72m					
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	/							-	-							
9	/							-	-							
10	/							-	-							
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12	/							-	-							
13	/							-	-							
14	/															
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17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

DAILY TOTAL 72m

DESTRUCTIVE LENGTH CARRY - OVER 72m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov. 24, 2019

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-41	9:00	DW
TF-42	13:00	DW

DATE	Nov.16, 209
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1	96/99	9-M (TIE-IN)	8-J	11:30	-32°	DW	550	850	850	50m	72m		RM	Nov.19	RM
2	99/100	9-J (TIE-IN)	9-G	12:41	-32°	DW	550	850	850	18m	122m		RM	Nov.18	RM
3	95/96	8-J	SAT	3:15	-32°	DW	550	850	850	27m	140m	DS-19-17	RM	Nov.18	RM
4	100/31	9-H (TIE-IN)	9-G	14:10	"			-	-	15	0			Nov.18	RM
5	99/30	9-K	9-L	15:32	"			-	-	30	27m			Nov.18	RM
6	99/29	9-L	9-M	15:35	"			-	-	6m	30			Nov.19	RM
7	100/30	9-H	9-J	15:20	"			-	-	6m	30			Nov.18	RM
8	99/30	9-J	9-K	15:30	"			-	-	1m	4		Extruded	Nov.18	Nov.18
9	96/28	9-M	9-O	15:40	"			-	-	6m	4			Nov.24	RM
10	97/27	9-O	9-P	15:45	"	↓	↓	-	↓ -	6m	49		↓	Nov.19	RM
11	/							-	-		55				
12	/							-	-						
13	99/31	9-G	8-J	14:30	"	DW	550	850	850	/	/		RM	Nov.18	RM
14	/														
15	/														
16	/														
17	/							-	-						
18	/							-	-						
19	/							-	-						
20	/							-	-						

DAILY TOTAL 141m
DESTRUCTIVE LENGTH CARRY - OVER 55m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov.24, 2019

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-43	8:00	DW
TF-44	12:30	DW
TF-45	15:26	DW

DATE	Nov. 17 / 2019
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1 101/97	9-P (NEOS)	9-Q	11:30	-32°	DW	550	850 -	850 -	51m	55		RM		Nov.21	RM
2 101/98	9-Q	SAT	11:50	-32	DW	550	850 -	850 -	25m	105m		RM		Nov.20	RM
3 102/103	9-S	9-R	13:30	-32°	DW	550	850 -	850 -	7m	131m		RM		Nov.24	RM
4 102/101	10-I (Tie-in)	9-R	13:45	-32°	DW	550	850 -	850 -	9m	138m		RM		Nov.24	RM
5 103/101	9-R	SAT	13:48	-32	DW	550	850 -	850 -	64m	147	DS-19-20	RM		Nov.24	RM
6 102/104	10-L (Tie-in)	9-S	16:30	-32°	DW	550	850 -	850 -	9m	60m		RM		Nov.24	RM
7 103/104	9-S	SAT	16:35	-32°	DW	550	850 -	850 -	69m	69m		RM		Nov.25	RM
8 /							-	-		136m					
9 /							-	-							
10 /							-	-							
11 /							-	-							
12 /							-	-							
13 /							-	-							
14 /															
15 /															
16 /															
17 /							-	-							
18 /							-	-							
19 /							-	-							
20 /							-	-							

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

DAILY TOTAL 232m

DESTRUCTIVE LENGTH CARRY - OVER 136m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Dec 6/19

GEOMEMBRANE SEAM LOG

PROJECT #: 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION ✓
EXTRUSION
MACHINE #: 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
~~TF-46~~		
TF-47	8:35	DW
TF-48	12:10	DW

DATE	Nov. 18, 2019
SHEET NUMBER	1 of 1

SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1 26/101	9-P	10-I	11:30	-28°	DW	560	850	850	6m	136m		RM		Nov. 19	RM
2 ~~26/102~~	~~10-I~~ 10-I	~~10-J~~ 10-J	11:35	↓	↓	↓	-	-	1m	142		↓		Nov. 18	RM
3 24/102	10-J	10-K	11:38				-	-	6m	143				Nov. 19	RM
4 24/104	10-K	10-L	11:43				-	-	1m	149				N. Observed	
5 23/104	10-L	10-M	11:48				-	-	6m	160				N. Observed	
6 104/105	10-M	SAT	13:45	↓	↓	↓	-	-	78m	156 48	DS-21	↓		N. Observed	
7 /							-	-							
8 /							-	-							
9 /							-	-							
10 /							-	-							
11 /							-	-							
12 /							-	-							
13 /							-	-							
14 /															
15 /															
16 /															
17 /							-	-							
18 /							-	-							
19 /							-	-							
20 /							-	-							

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

DAILY TOTAL 98m

DESTRUCTIVE LENGTH CARRY - OVER 48m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Dec 6/19

N. Ob. seams had not been repaired/tested prior to Golder demobilizing from site.

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION X
MACHINE #: 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
T1=50	14:30	DW
TX 50	15:45	JH

DATE	Nov. 19, 2019
SHEET NUMBER	1 of 1

*Golder Demobilized Prior

SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1 105/106	10-S	11-R	16:15	-26°	DW	400	850	850	26	48m		RM		N. Observed	*
2 106/107	10-T	11-B	15:05	-26°	DW	400	850	850	26	74		RM		N. Observed	*
3 107/105	11-B	SAT	16:50	-25°	DW	400	850	850	45	100 145		RM		Nov 20	RM
4 /							-	-							
5 /							-	-							
6 /							-	-							
7 /							-	-							
8 /							-	-							
9 102/26	10-I	10-J	16:10	-24°	JH	500	490	490	1m			RM		N. Observed	
10 /							-	-							
11 /							-	-							
12 /							-	-							
13 /							-	-							
14 /															
15 /															
16 /															
17 /							-	-							
18 /							-	-							
19 /							-	-							
20 /							-	-							

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

DAILY TOTAL 97m

DESTRUCTIVE LENGTH CARRY - OVER 145m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM

DATE: Dec 6/19

N. Ob. seams had not been repaired/tested prior to Golder demobilizing from site.

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION
MACHINE # : 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TT-51	9:45	DW

DATE	Nov. 20, 2019
SHEET NUMBER	1 of 1

SEAM #	SEAM SECTION *		APPROX START TIME	AMB. AIR TEMP	WELD TECH.	PREHEAT OR MACH. SPEED	MACHINE TEMPERATURES		APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING	
	START POINT	FINISH POINT					DIGITAL SET WEDGE OR BARREL NOZZLE	INDICATOR WEDGE OR BARREL NOZZLE						TEST DATE	MON.
1 107/108	11-D (Tie-in)	SEOS/SAT	10:55	-29°	DW	400	850	850	70m	145m	DS-22	RM		Nov 21	RM
2 108/109	11-E (Repair)	SEOS/SAT	13:30	-28°	DW	400	850	850	68m	65m		RM		Nov 26	RM
3 /							-	-		133					
4 /							-	-							
5 /							-	-							
6 /							-	-							
7 /							-	-							
8 /							-	-							
9 /							-	-							
10 /							-	-							
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13 /							-	-							
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16 /															
17 /							-	-							
18 /							-	-							
19 /							-	-							
20 /							-	-							

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

DAILY TOTAL 138m

DESTRUCTIVE LENGTH CARRY - OVER 133m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Dec 6/19

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION
EXTRUSION ✓
MACHINE # : 037

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
Tx-53	8:25	JH
Tx-54	12:45	JH

DATE	Nov. 21/19
SHEET NUMBER	1 of 1

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	/							-	-		135					
2	/							-	-							
3	/							-	-							
4	/							-	-							
5	/							-	-							
6	/							-	-							
7	/							-	-							
8	94/95	9-D	10-G	12:00	-35°	JH	500	490 -	490 -	14m	/	/	RM	Extruded	Nov. 21	RM
9	/							-	-							
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL \ Extrusion

DESTRUCTIVE LENGTH CARRY - OVER \

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Nov. 22

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION ✓
EXTRUSION
MACHINE # 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF 53	7:00	DG
TF 54	9:00	DG
TF 55	13:36	DG

DATE	Nov 24, 2019
SHEET NUMBER	1 of 1

*Golder demobilized prior

SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	109/113	11-H	11-I	8:35	-25°	DG	400	850	850	2m	133		RM		Not Observed*
2	109/116	*11-I	11-E	8:38	"	DG	400	"	"	5m	135		RM		
3	108/117	11-E	11-D	8:40	"	DG	400	"	"	7m	140		RM		
4	107/117	11-D	11-N	8:42	"	DG	400	"	"	2m	147		RM		
5	107/119	11-N	[illegible] 10-T	8:47	"	DG	400	"	"	5m	149		RM		
6	106/119	10-T [illegible]	[illegible] 10-S	8:50	"	DG	400	"	" 350	[illegible]	154		RM	Insufficient Flap for Destruct	
7	105/121	10-S	11-M	8:55	"	DG	400	"	"	5m	157.5		RM	"	
8	105/121	11-M	10-M	9:00	"	DG	450	"	"	2m	162.5		RM	"	
9	110/111	11-O	11-P	11:25	"	DG	450	"	"	7m	169.5	DS-23	RM		
10	[illegible]/110	11-[illegible]H	11-[illegible]O	11:45	"	DG	450	"	"	6.5m	0m		RM		
11	[illegible]/111	11-[illegible]O	SAT	11:52	"	DG	450	"	"	54m	6.5		RM		
12	112/110	11-S	11-P	15:00	"	DG	450	"	"	6m	60.5		RM		
13	112/111	11-P	SAT	15:09	"	DG	450	"	"	53m	66.5		RM		
14	113/114	12-[illegible]E	12-D	16:[illegible]	"	DG	450	"	"	[illegible]7	119.5		RM		
15	112/113	12-C	12-D	16:24	"	DG	450	"	"	53m	126.5	DS-24	RM		
16	114/112	12-D	SAT	16:55	"	DG	450	"	"	27m	0m		RM		
17	/							-	-		27m				
18	/							-	-						
19	/	[illegible]	[illegible]					-	-						
20	/	[illegible]	[illegible]					-	-						

109/109

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

DAILY TOTAL 225m

DESTRUCTIVE LENGTH CARRY - OVER 27m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Dec 6/19

N. Ob. seams had not been repaired/tested prior to Golder demobilizing from site.

GEOMEMBRANE SEAM LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION X
EXTRUSION X
MACHINE # : 64 Ext 037

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-56	7:00	DG
TF-57	10:30	DG
TF-58	12:30	DG
TX-58	8:20	JH

DATE	Nov 25, 2019
SHEET NUMBER	1 of 1

Golder Demobilized Prior

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	115/114	SAT	12-E	10:00	-33°	DG	450	850	850	27m	27m		RM		Not Observed *	
2	115/113	12-E	12-K	11:17	-33°	DG	450	850	850	32m	54m		RM			
3	115/116	SAT	12-N	13:52	-32°	DG	400	850	850	59m	86m		RM			
4	116/6	12-P	12-Q	16:12	-32°	DG	400	850	850	3m	145m	DS-19-25	RM			
5	116/5	12-Q	12-N	16:14	-32°	DG	400	850	850	4m	0m		RM			
6	115/5	12-N	12-R	16:17	-32°	DG	400	850	850	3m	4		RM			
7	115/3	12-R	12-K	16:19	-32°	DG	400	850	850	4m	7		RM			
8	113/3	12-K	12-S	16:22	-32°	DG	400	850	850	3m	11		RM			
9	113/2	12-S	12-C	16:25	-32°	DG	400	850	850	4m	14		RM			
10	112/2	12-C	12-T	16:27	-32°	DG	400	850	850	3m	18		RM			
11	112/1	12-T	11-S	16:30	-32°	DG	400	850	850	3m	21		RM			
12	110/1	11-S	[illegible]-I	16:32	-32°	DG	400	850	850	3m	24		RM			
13	110/3	[illegible]-I	11-H	16:35	-32°	DG	400	850	850	4m	27		RM		↓	↓
14	/										31m					
15	/															
16	/															
17	104/105	10-R	10-P	12:19	-32	JH	500	490	490	1m	/		RM		Not Observed	
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL 152m

DESTRUCTIVE LENGTH CARRY - OVER 31m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

N. Ob. seams had not been repaired/tested prior to Golder demobilizing from site.

REVIEWED BY: RM DATE: Dec 6/19

GEOMEMBRANE SEAM LOG

PROJECT #: 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION: X
EXTRUSION:
MACHINE #: 64

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-59	9:30	DG
TF-60	12:20	DG

DATE	Nov. 26/19
SHEET NUMBER	1 of 1

*Golder Demobilized Prior

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	116/117	12-P	SAT	11:12	-25°	DG	400	850	850	60m	31m		RM		Not Observed *	
2	117/118	13-C	SAT	12:17	-22°	DG		-	-	6m	91m		RM			
3	119/120	13-F	13-E	13:30	-22°	DG		-	-	7m	152m	[illegible]-26	RM	No flap for DS		
4	118/119	13-D	13-E	14:40	-22°	DG		-	-	37m	189m	DS-19-26	RM			
5	118/120	13-E	SAT	15:10	-24°	DG		-	-	7m	0m		RM			
6	119/7	13-G	13-D	16:12	-24°	DG		-	-	6m	47m		RM			
7	118/9	13-D	13-I	16:20	-24°	DG		-	-	4m	13m		RM			
8	118/8	13-I	13-C	16:22	-24°	DG		-	-	3m	16m		RM			
9	117/8	13-C	13-J	16:24	-25°	DG		-	-	2m	18m		RM			
10	117/10	13-J	13-K	16:25	-25°	DG		-	-	1m	20m		RM			
11	117/6	13-K	12-P	16:26	-25°	DG	↓	-	-	3m	21m		RM		↓	↓
12	/							-	-		24m					
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

DAILY TOTAL: 191m
DESTRUCTIVE LENGTH CARRY - OVER: 24m

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

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

N. Ob. seams had not been repaired/tested prior to Golder demobilizing from site.

REVIEWED BY: RM DATE: Dec 6/19

GEOMEMBRANE SEAM LOG

PROJECT #: 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

FUSION: X
EXTRUSION:
MACHINE #: 064

PASSING TRIAL SEAMS		
NO.	TIME	TECH ID
TF-61	8:50	DG
TF-62	12:00	DG

DATE	Nov. 27, 2019
SHEET NUMBER	1 of 1

* Golder Demobilized Prior

	SEAM #	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 NOZZLE	MACHINE TEMPERATURES INDICATOR WEDGE OR BARREL NOZZLE	APPROX. LENGTH WELDED	LENGTH FROM PREVIOUS DESTR.	DESTR. NUMBER	MON.	REMARKS	NON - DESTRUCTIVE TESTING TEST DATE	NON - DESTRUCTIVE TESTING MON.
1	7/121	13-G	13-D	9:38	-28°	DG	400	850	850	22m	24m		2M		Not Observed	*
2	123/122	13-Q	13-S	11:00	"	DG	"	"	"	7M	46m					
3	123/121	NAT	13-Q	11:11	"	DG	"	"	"	44m	53m					
4	121/122	13-Q	13-R	11:37	"	DG	"	"	"	2m	97m					
5	123/124	14-B	13-S	12:39	"	DG	"	"	"	3.5m	99m					
6	123/125	NAT	14-B	12:15	"	DG	"	"	"	38m	103m					
7	122/124	13-S	13-T	12:42	"	DG	"	"	"	8.5m	141m					
8	124/125	14-B	14-C	11:56	"	DG	"	"	"	7m	149m		✓		✓	✓
9	/							-	-		156m					
10	/							-	-							
11	/							-	-							
12	/							-	-							
13	/							-	-							
14	/															
15	/															
16	/															
17	/							-	-							
18	/							-	-							
19	/							-	-							
20	/							-	-							

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

DAILY TOTAL: 132m
DESTRUCTIVE LENGTH CARRY - OVER: 156m

** COLUMNS TO BE USED BY THE DATA REVIEWER ONLY

REVIEWED BY: RM DATE: Dec 6/19

N. Ob. seams had not been repaired/tested prior to Golder demobilizing from site.

APPENDIX G

NON-DESTRUCTIVE TEST RECORDS

APPENDIX G1

AIR PRESSURE TEST RESULTS

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Sept 19/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	1 / 2	SEOS (Berm)	1A	1	GD	1543	1548	40	39	✓	P	✓		RK	
2	1 / 2	NEOS (NAT)	1A	1	"	1605	1610	40	40	✓	P		✓	RK	
3	2 / 3	NEOS (NAT)	SEOS (Berm)	1	"	1613	1618	40	39	x	P		✓	RK	
4	3 / 4	NEOS (NAT)	SEOS (1C)	1	"	1630	1635	40	38	✓	P		✓	RK	
5	3 / 5	NEOS (1C)	SEOS (Berm)	1	"	1645	1650	40	38	✓	P		✓	RK	
6	5 / 6	SEOS (Berm)	NEOS (1D)	1	"	1700	1705	39	37	✓	P		✓	RK	
7	5 / 4	WEOS (1D)	EEOS (1C)	1	"	1710	1715	40	39	✓	P		✓	RK	
8	6 / 4	SEOS (1D)	NEOS (NAT)	1	"	1717	1722	38	36	x	P		✓	RK	
9	6 / 11	SEOS (1F)	NEOS (1I)	1	"	1733	1738	40	38	✓	P		✓	RK	
10	10 / 11	SEOS (1F)	NEOS (NAT)	1	"	1743	1748	39	39	✓	P		✓	RK	
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Sept 19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Sept 20/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	9 / 8	EEOS (1E)	WEOS (Berm)	\	GD	8:27	8:32	40	40	✓	P		✓	RK	
2	8 / 10	NEOS (1E)	SEOS (Berm)	\	GD	8:32	8:37	40	F	✓	F		✓	RK	
3	9 / 10	SEOS (1E)	NEOS (NAT)	\	GD	8:27	8:32	38	38	✓	P		✓	RK	
4	7 / 9	SEOS (Berm)	NEOS (NAT)	\	GD	8:54	8:59	40	38	✓	P		✓	RK	
5	8 / 10	NEOS (1E)	SEOS (Berm)	\	GD	8:50	8:55	39	38	✓	P		✓	RK	
6	12 / 6	NEOS (NAT)	SEOS (1J)	\	GD	9:08	9:13	39	38	✓	P		✓	RK	
7	12 / 11	NEOS (NAT)	SEOS (1J)	\	GD	9:15	9:20	40	40	✓	P		✓	RK	
8	10 / 6	NEOS (1F)	SEOS (Berm)	\	GD	11:40	11:45	40	40	✓	P		✓	RK	
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Sept 21/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Sept 21
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	1 / 13	SEOS (Berm)	NEOS (NAT)	\	GD	1336	1341	40	38	✓	P		✓	RK	
2	14 / 16	SEOS (1K)	NEOS (NAT)	\	GD	1405	1410	40	40	✓	P		✓	RK	
3	13 / 15	SEOS (1J)	NEOS (1L)	\	GD	1325	1330	40	40	x	P		✓	RK	
4	13 / 14	SEOS (1K)	NEOS (1J)	\	GD	1345	1350	40	40	x	P		✓	RK	
5	16 / 17	NEOS (IN)	SEOS (Berm)	\	GD	1428	1433	42	F	✓	F		✓	RK	New Block Off
6	16 / 17	NEOS (IN)	SEOS (Berm)	\	GD	1445	1450	40	40	✓	P		✓	RK	
7	16 / 18	SEOS (IN)	NEOS (NAT)	\	"	1414	1419	40	38	x	P		✓	RK	
8	17 / 18	EEOS (IN)	WEOS (Berm)	\	"	1437	1442	40	40	✓	P		✓	RK	
9	13 / 1L	NEOS (1K)	SEOS (Berm)	\	"	1355	1400	40	39	x	P		✓	RK	
10	18 / 19	SEOS (Berm)	NEOS (NAT)	\	"	1450	1455	40	38	✓	P		✓	RK	
11	13 / 20	NEOS (NAT)	SEOS (1M)	\	"	15:00	15:05	40	40	✓	P	x		RK	In NAT
12	13 / 20	NEOS (1M)	SEOS (1L)	\	"	15:00	15:05	40	40	✓	P		✓	RK	In NAT
13	15 / 20	NEOS (NAT)	SEOS (1K)	\	"	15:10	15:15	40	39	✓	P		✓	RK	
14	14 / 15	SEOS (1J)	NEOS (NAT)	\	"	13:45	13:50	40	40	x	P		✓	RK	
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Sept 21/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Sept 22
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	19 / 22	SEOS (2C)	NEOS (NAT)	\	GP	16:33	16:38	40	39	✓	P		✓	RK	
2	19 / 21	NEOS (2C)	SEOS (Berm)	\	"	16:32	16:37	40	39	✓	P		✓	RK	
3	21 / 22	WEOS (2C)	EEOS (2D)	\	"	16:40	16:45	40	40	✓	P		✓	RK	
4	21 / 23	NEOS (2D)	SEOS (Berm)	\	"	16:49	16:54	44	44	✓	P		✓	RK	
5	22 / 23	SEOS (2D)	NEOS (NAT)	\	"	16:52	16:57	40	39	✓	P		✓	RK	
6	23 / 24	SEOS (Berm)	NEOS (NAT)	\	"	17:03	17:08	40	39	✓	P		✓	RK	
7	24 / 26	SEOS (Berm)	NEOS (2F)	\	"	17:08	17:13	40	40	✓	P		✓	RK	
8	24 / 25	NEOS (NAT)	SEOS (2F)	\	"	17:25	17:30	40	40	✓	P		✓	RK	
9	25 / 26	NEOS (NAT)	SEOS (2F)	\	"	17:18	17:23	41	40	✓	P		✓	RK	
10	26 / 27	SEOS (Berm)	NEOS (NAT)	\	"	17:41	17:46	40	40	✓	P		✓	RK	
11	27 / 28	SEOS (Berm)	IO (DS-04)	\	"	17:46	17:51	40	40	✓	P	✓		RK	
12	28 / 29	SEOS (Berm)	NEOS (NAT)	\	"	17:55	18:00	40	38	✓	P		✓	RK	
13	27 / 28	NEOS (Berm)	IO (DS-04)	\	"	18:02	18:07	40	40	✓	P		✓	RK	
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: Ray K **DATE:** Sept 22

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Sept 25/19
SHEET #	1 of

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
✓1	29 / 30	SEOS (Berm)	NEOS (NAT)	\	GD	8:16	8:21	40	38	✓	P		✓	RK	
✓2	30 / 31	SEOS (Berm)	NEOS (NAT)	\	GD	8:18	8:23	40	40	✓	P		✓	RK	
✓3	34 / 35	SEOS (2N)	NEOS (NAT)	\	GD	9:38	9:43	40	40	✓	P		✓	RK	
✓4	33 / 35	NEOS (2N)	SEOS (2R)	\	GD	9:43	9:48	40		✓	P		✓	RK	
5	/														
6	/														
7	/														
8	/														
9	/														
10	/														
11	/														
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17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Sept 27/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Oct 7, 2019
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	40 / 41	SEOS (S. Slope)	NEOS (NAT)	1	JH	12:10	12:15	45	44	✓	P		✓	RK	
2	39 / 40	"	"	1	"	12:08	12:13	45	45	✓	P		✓	RK	
3	41 / 42	"	"	1	"	12:17	12:22	43	42	✓	P		✓	RK	
4	42 / 43	"	"	1	"	17:15	17:20	44	44	✓	P		✓	RK	
5	43 / 44	"	"	1	"	17:16	17:21	44	43	✓	P		✓	RK	
6	/														
7	/														
8	/														
9	/														
10	/														
11	/														
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17	/														
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19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Oct 8/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Oct 8/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	45 / 46	SEOS (S. Slope Toe)	NEOS (NAT)	1	SM	12:25	12:30	42	41	✓	P		✓	RK	
2	44 / 45	SEOS (S. Slope)	Defect 3N	1	"	1261	1256	45	45	✓	P	X		RK	
3	44 / 45	Defect 3N	NEOS (NAT)	1	"	1300	1305	45	45	✓	P		✓	RK	
4	/														
5	/														
6	/														
7	/														
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Oct 8/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Oct 27/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	74 / 73	SEOS (SAT)	NEOS (5J)	\	WB	11:08	11:13	45	44	✓	P		✓	RK	
2	73 / 72	"	NEOS (5H)	\	"	11:11	11:16	41	41	✓	P		✓	RK	
3	72 / 71	"	NEOS (5F)	\	"	11:27	11:32	45	44	✓	P		✓	RK	
4	71 / 66	"	NEOS (5C)	\	"	11:36	11:41	44	42	✓	P		✓	RK	
5	67 / 66	"	NEOS (4L)	\	"	11:55	12:00	42	40	✓	P		✓	RK	
F 6	54 / 74	EEOS (5J)	WEOS (5K)	\	"	F				✓	F	/		RK	Needle Hole
F 7	54 / 73	WEOS (5J)	EEOS (5I)	\	"	F				✓	F	/		RK	Leaks
F 8	57 / 73	Def 5N	WEOS (5I)	\	"	F				✓	F	/		RK	↓
F 9	57 / 73	Def 5N	EEOS (5H)	\	"	F				✓	F	/		RK	" "
10	57 / 72	WEOS (5H)	EEOS (5G)	\	"	15:54	15:59	47	44	✓	P		✓	RK	
11	54 / 73	EEOS (5I)	WEOS (5J)	\	"	16:03	16:08	42	41	✓	P		✓	RK	
F 12	54 / 74	WEOS (5K)	EEOS (5J)	\	"	16:12	16:17	42	F	✓	F	/		RK	
13	58 / 72	EEOS (5F)	WEOS (5G)	\	"	16:49	16:54	38	37	✓	P		✓	RK	
14	58 / 71	WEOS (5F)	EEOS (5E)	\	"	16:58	17:03	40	38	✓	P		✓	RK	
15	60 / 71	EEOS (5C)	WEOS (5E)	\	"	17:07	17:12	40	39	✓	P		✓	RK	
16	57 / 73	WEOS (5I)	Def. 5N	\	"	17:31	17:36	40	38	✓	P	✓		RK	
17	57 / 73	Def 5N	EEOS (5H)	\	"	17:41	17:46	40	40	✓	P		✓	RK	
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK DATE: Oct 29/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Oct 29/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	69 / 70	EEOS (SAT)	WEOS (50)	\	WB	16:36	16:41	42	42	x	P		✓	RK	
2	68 / 70	SEOS (SAT)	NEOS (5M)	\	WB	17:11	17:16	40	40	x	P		✓	RK	
3	68 / 67	SEOS (SAT)	NEOS (5M)	\	WB	16:19	16:24	34	38	x	P		✓	RK	
4	67 / 70	SEOS (5M)	NEOS (50)	\	WB	17:17	17:22	40	40	x	P		✓	RK	
5	68 / 68	4P Wrinkle		\	WB	17:19	17:24	40	40	x	P		N/A	RK	Wedged Wrinkle
6	/														*Golder rep was
7	/														at crusher pond
8	/														
9	/														
10	/														
11	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Oct 29/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Oct 29/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	67 / 69	NEOS (4L)	SEOS (5O)	\	WB	8:16	8:21	42	42	N	P		✓	RK	
2	60 / 66	WEOS (5C)	EEOS (5D)	\	WB	9:51	9:56	39	39	✓	P		✓	RK	
3	74 / 54	WEOS (5K)	EEOS (5J)	\	WB	16:12	16:17	40	37	✓	P		✓	RK	
4	61 / 69	WEOS (4L)	EEOS (4T)	\	WB	8:24	8:29	42	42	x	P		✓	RK	
5	62 / 69	WEOS (4T)	EEOS (4R)	\	WB	16:45	16:50	38	38	x	P	✓		RK	* Oct 28
6	62 / 69	EEOS (SAT)	WEOS (4R)	\	WB	16:56	17:01	38	38	x	P		✓	RK	* Oct 28
7	61 / 66	NEOS (4L)	SEOS (SAT)	\	WB	8:43	8:48	40	40	x	P		✓	RK	* Done Into Trench
8	/														
9	/														
10	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Oct 29/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 6/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	76, 76	NEOS (6G)	SEOS (SAT)	1	MC	1500	1505	40	37	✓	F		F	RK	Cut End, Did Not Drop
2	/														
3	/														
4	/														
5	/														
6	/														
7	/														
8	/														
9	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Nov 7/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 7/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
√1	53,74	WEOS (5L)	EEOS (5K)	✓	WB	1601	1606	51	49	✓	P		✓	RK	
F2	74,75	NEOS (5L)	SEOS (5AT)	✓	"	F		F		✓	F	F		RK	Defect 5R
√3	53,75	WEOS (6Q)	EEOS (5L)	✓	"	1633	1638	41	40	✓	P		✓	RK	
√4	52,75	WEOS (6B)	EEOS (6A)	✓	"	1643	1648	40	38	✓	P		✓	RK	
√5	77,75	NEOS (6B)	SEOS (6D)	✓	"	1651	1656	40	40	✓	P		✓	RK	
√6	76,75	NE (6D)	SE (6E)	✓	"	1502	1507	37	35	×	P	✓		RK	
7	/														
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Nov 7/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 8/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
✓1	77 / 52	EEOS (6B)	WEOS (6C)	\	WB	8:29	8:34	40	37	✓	P		✓	RK	
2	84 / 83	NEOS (7A)	SEOS (SAT)	\	WB	F	Needle Hole?			✓	F	F		RK	Slow Leak trial
✓3	83 / 82	NEOS (6S)	SEOS (SAT)	\	WB	0925	0930	40	37	x	P		✓	RK	*Inside for Trial
4	74 / 75	Defect 5R	SEOS (SAT)	\	"	1436	1441	40	39	✓	P	✓		RK	
5	74 / 75	NEOS (5L)	Defect 5R	\	"	1446	1451	38	F	✓	F	F		RK	Needle Hole Leak
6	75 / 76	NEOS (5D)	Def. 5E	\	"	1502	1507	37	35	✓	P	✓		RK	
7	76 / 78	NEOS (6G)	Block in SAT	\	"	1515	1520	40	38	✓	P	✓		RK	
8	75 / 76	SEOS (SAT)	Def. 6E	\	"	F	F	F	F	✓	F	F		RK	Needle Hole
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
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19	/														
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REVIEWED BY: RK **DATE:** Nov 8/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 10/19
SHEET #	(of)

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	76 / 78	N (Block in seam)	SEOS (SAT)	\	FC	12:14	12:19	45	F	✓	F	F		RK	Needle Hole
2	75 / 76	N (6E)	SEOS (SAT)	\	"	F				✓	F	F		RK	Black looking?
3	75 / 76	N (6E)	SEOS (SAT)	\	"	F	Slow Leak at 1528			✓	F	F		RK	
4	76 / 78	N (Block in Seam)	SEOS (SAT)	\	"	1527	1532	40	39	✓	P		✓	RK	
5	99 / 78	NEOS (6I)	SEOS (SAT)	\	"	F	Slow Leak?			✓	F	F		RK	
6	80 / 79	NEOS (6K)	SEOS (SAT)	\	"	F	Slow Leak At Needle			✓	F	F		RK	
7	/														
8	/														
9	/														
10	/														
11	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Nov 11/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 11/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	39 / 89	EEOS (7L)	WEOS (7P)	\	WB	Frozen	Pump	\	\	✓	\	\		RK	
2	/														
3	/														
4	/														
5	/														
6	/														
7	/														
8	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Nov 11/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 12/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	85 / 86	NEOS (7E)	SEOS (SAT)	\	WB	10:02	10:07	40	39	✓	P		✓	RK	
F 2	84 / 85	NEOS (7C)	SEOS (SAT)	\	WB	11:10	Slow Leak →		Block?	✓	F	F		RK	
3	84 / 85	NEOS (7C)	SEOS (SAT)	\	WB	11:16	11:21	40	39	✓	P		✓	RK	
4	83 / 84	NEOS (7A)	SEOS (SAT)	\	WB	12:59	13:04	40	38	✓	P		✓	RK	
F 5	78 / 79	NEOS (6I)	SEOS (SAT)	\	WB	17:23	17:28	40	F	✓	F	F		RK	slow Leak
F 6	78 / 79	NEOS (6I)	SEOS (SAT)	\	WB	17:31	17:36	35	F	✓	F	F		RK	" "
7	/														
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK **DATE:** Nov 12/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # 1790951
OWNER: Baffinland
LOCATION: Mary River

PROJECT TITLE: WRF Pond Repair
CONTRACTOR: Baffinland
GEOSYNTHETICS: Layfield

DATE	Nov 13/19
SHEET #	1 of 3

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	78 / 79	NEOS (6I)	SEOS (SAT)	/	WB	8:13	8:18	35	33	✓	P		✓	RK	
2	79 / 80	NEOS (6K)	SEOS (SAT)	/	WB	0823	0828	35	34	✓	P		✓	RK	
T 3	75 / 76	SEOS (SAT)	6E	/	WB	\	\	42	F	✓	F	F		RK	Leak-To Extrude
4	80 / 81	NEOS (6M)	SEOS (SAT)	/	"	8:34	8:39	34	34	N	P		✓	RK	*Told tech 35 i)
5	81 / 82	NEOS (6O)	SEOS (SAT)	/	"	8:43	8:48	35	34	N	P		✓	RK	minimum,
6	50 / 78	WEOS (6I)	FEOS (6H)	/	"	12:31	12:36	38	37	✓	P		✓	RK	(was at trial seam)
T 7	44 / 79	EEOS (6J)	WEOS (6K)	/	"	12:46	12:51	37	F	✓	F	F		RK	Slow Leak
8	44 / 79	EEOS (6J)	WEOS (6K)	\	"	13:42	13:47	44	44	✓	P		✓	RK	
9	48 / 80	EEOS (6L)	WEOS (6M)	\	"	13:01	13:06	40	40	N	P		✓	RK	At trial seam
10	46 / 81	EEOS (6N)	WEOS (6O)	\	"	13:08	13:13	40	38	N	P		✓	RK	
11	45 / 82	EEOS (6P)	WEOS (6S)	\	"	13:14	13:19	40	39	N	P		✓	RK	
T 12	74 / 75	NEOS (5L)	SEOS (5R)	\	"	16:10	16:15	46	F	✓	F	F		RK	Slow Leak
T 13	44 / 83	WEOS (7A)	EEOS (6T)	\	"	16:23	16:28	F	Needle	✓	F	F		RK	
14	44 / 83	"	"	\	"	16:43	16:48	59	57	✓	P		✓	RK	
15	43 / 84	EEOS (7B)	WEOS (7C)	\	"	16:55	17:00	56	53	✓	P		✓	RK	
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RK DATE: Nov 13

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 15/19
SHEET #	1 of

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	51 / 76	6-F	6-G		FC	11:30	11:35	41	40	✓	P	X		RM	
2	86 / 87	7-H	7-J		JH	13:18	13:23	42	42	X	P	✓	✓	RM	
3	88 / 87	7-I	7-J		JH	13:22	13:27	42	41	✓	P	✓		RM	
4	88 / 86	7-J	SAT		JH	13:25	13:30	40	40	X	P		✓	RM	
5	42 / 85	7-D	7-G		JH	16:50	16:55	40	39	✓	P	✓		RM	
6	93 / 92	8-B	8-C		FC	17:01	17:06	48	46	✓	P		✓	RM	
7	91 / 92	8-A	8-C		FC	17:09	17:04	45	45	✓	P		✓	RM	
8	/														
9	/														
10	/														
11	/														
12	/														
13	74 / 75	5-R	SAT		WB	14:31	14:36	40	39	X	P	X		RK	Done Nov. 13.
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Nov. 22

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 16/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	74 / 75	5-S	5-R		JH	11:53	11:58	43	43	✓	P	*	✓	RM	
2	77 / 76	6-C	6-D		"	12:38	12:43	40	39	✓	P	*	✓	RM	
3	41 / 86	7-F	7-Q		"	12:50	12:55	46	46	✓	P	*	✓	RM	
4	40 / 88	7-I	7-K		"	13:53	13:58	45	45	✓	P		✓	RM	
5	39 / 89	7-L	7-P		"	14:05	14:10	48	48	✓	P		✓	RM	
6	88 / 89	7-O	SAT		"	14:13	14:18	46	45	✓	P		✓	RM	
7	90 / 89	7-N	SAT		"	14:35	14:40	44	43	✓	P		✓	RM	
8	90 / 38	7-R	7-N		"	14:47	14:53	44	44	✓	P		✓	RM	
9	36 / 91	7-T	8-A		"	14:58	15:03	45	45	✓	P		✓	RM	
10	35 / 93	8-B	8-D		"	15:07	15:12	43	43	✓	P		✓	RM	
11	32 / 94	8-E	8-G		"	15:14	15:19	42	42	✓	P		✓	RM	
12	91 / 90	7-T	SAT		"	15:22	15:27	44	44	✓	P		✓	RM	
13	94 / 93	8-E	SAT		"	15:32	15:37	42	42	✓	P		✓	RM	
14	95 / 94	8-H	SAT		"	15:43	15:48	44	44	✓	P		✓	RM	
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Nov. 22

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 17/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	91 / 93	8-C	SAT		JH	11:35	11:40	41	40	X	P		✓	RM	
2	/														
3	/														
4	/														
5	/														
6	/														
7	/														
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
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17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Nov 22

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 18/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	95/31	8-H	8-J	/	FC	15:34	15:39	40	40	✓	P		✓	RM	
2	95/96	8-J	SAT	/	FC	15:28	15:33	40	40	✓	P		✓	RM	
3	31/99	8-J	9-G	/	FC	15:30	15:35	40	40	✓	P		✓	RM	
4	100/99	9-G	9-J	/	FC	15:45	15:50	40	39	✓	P		✓	RM	
5	100/31	9-H	9-G	/	FC	15:45	15:50	40	39	✓	P		✓	RM	
6	100/30	9-J	9-I	/	FC	16:07	16:12	40	38	✓	F		✓	RM	
7	99/30	9-K	9-L	/	FC	16:17	16:22	40	39	✓	P		✓	RM	
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Nov. 22

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 19/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	96 / 99	8-J	9-M		FC	16:50	16:55	44	44	✓	P		✓	RM	
2	99 / 29	9-L	9-M		"	16:57	17:02	42	41	x	P		✓	RM	
3	28 / 96	9-N	9-O		"	17:08	17:13	46	46	x	P		✓	RM	
4	27 / 97	9-O	9-P		"	17:15	17:20	42	42	x	P		✓	RM	
5	26 / 101	9-P	10-I		"	17:20	17:25	41	40	x	P		✓	RM	
6	34 / 102	10-J	10-K		↓	17:27	17:32	48	48	x	P		✓	RM	
7	/														
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Nov. 24/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 20
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	PRESS GAUGE No.	TECH ID	TIME INITIAL	TIME FINAL	PRESSURE INITIAL	PRESSURE FINAL	OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE? NO	SEAM COMPLETE? YES	MON	REMARKS
1	96 / 98	SAT	9-C		FC	16:05	16:10	39	39	✓	P	✗		RM	
2	98 / 101	SAT	9-Q		FC	16:14	16:19	40	40	✓	P	✗		RM	
3	101 / 103	SAT	10-A		FC	1700	17:05	46	46	✓	P	✗		RM	
4	103, 104	SAT	10-H		FC	16:34	16:39	36	35	✓	P	✗		RM	
5	104, 105	SAT	10-O		FC	16:50	16:55	41	41	✓	P	✗		RM	
6	101 / 103	10-A	9-T		FC	17:07	17:12	39	39	✓	P	✗	✓	RM	
7	105 / 107	SAT	11-B		FC	17:20	17:25	41	41	✓	P	✗	✓	RM	
8	/														
9	/														
10	/														
11	/														
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15	/														
16	/														
17	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Dec 6/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 21, 2019
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	107/108	SAT/SEOS	11-D/NEOS	[illegible]	DW	8:14	8:21	45	45	✓	P		✓	RM	
2	97/101	9-Q	9-P		DW	16:02	16:07	48	45	✓	P		✓	RM	
3	97/98	9-Q	9-E		DW	16:05	16:10	34	34	✓	P		✓	RM	
4	~~96/97~~	~~9-C~~	~~9-O~~		~~DW~~	~~16:12~~	~~16:17~~	~~46~~	~~39~~	✓	F	X		~~RM~~	
5	/														
6	/														
7	/														
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* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Nov. 22

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 24
SHEET #	1 of

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	102 / 103	9-R	9-S		DW	9:30	9:35	45	45	x	P		✓	RM	
2	102 / 101	9-R	10-I/10-J		DW	8:48	8:53	45	44	x	P		✓	RM	
3	103 / 104	10-C	10-F		DW	11:40	11:45	45	45	x	P		✓	RM	
4	102 / 104	9-S	10-L		DW	9:35	9:40	52	52	x	P		✓	RM	
5	96 / 97	9-C	9-O		DW	15:20	15:25	46	46	+	P		✓	RM	
6	96 / 28	11-C	9-N		DW	13:31	13:36	48	46	+	P		✓	RM	
7	/														
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
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19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Dec 6/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov 25/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	104 / 105	10-P/R	10-O		DW	15:30	15:35	45	45	✓	P		✓	RM	
2	105 / 106	11-A	11-B		DW	16:30	16:35	46	46	✓	P		✓	RM	
3	103 / 104	10-F	10-H		DW	16:47	16:62	44	44	✓	P		✓	RM	
4	/														
5	/														
6	/														
7	/														
8	/														
9	/														
10	/														
11	/														
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16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Dec 6/19

GEOMEMBRANE SEAM PRESSURE TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DATE	Nov. 26/19
SHEET #	1 of 1

	SEAM, NUMBER	SEAM SECTION *		PRESS GAUGE No.	TECH ID	TIME		PRESSURE		OBS. TEST ?	RESULT PASS/ FAIL?	SEAM COMPLETE?		MON	REMARKS
		FROM	TO			INITIAL	FINAL	INITIAL	FINAL			NO	YES		
1	111 / 109	SAT	12-B		DW	12:27	12:32	40	40	x	P	x		RM	
2	111 / 112	SAT	12-A		DW	12:28	12:33	40	40	x	P	x		RM	
3	114 / 112	SAT	12-I		DW	12:29	12:34	44	44	x	P	x		RM	
4	108 / 109	SAT	11-E		DW	15:35	15:40	54	53	✓	P		✓	RM	
5	/														
6	/														
7	/														
8	/														
9	/														
10	/														
11	/														
12	/														
13	/														
14	/														
15	/														
16	/														
17	/														
18	/														
19	/														
20	/														

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

REVIEWED BY: RM **DATE:** Dec 6/19

APPENDIX G2

VACUUM BOX TEST RESULTS

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	1D	Sept 19	SM	0	✓	RK	
22	1F	"	SM	0	✓	RK	
23	1I	"	SM	0	x	RK	
24	1H	"	SM	0	✓	RK	
25	1E	"	SM	0	x	RK	
26	1C	"	SM	0	✓		
27	1B	"	SM	0	✓		
28	1A	"	SM	0	✓	↓	
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Sept 19

2A → VL on 1P P18

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	1K	Sept 21	SM	0	✓	RK	
22	1R	"	"	0	✓	RK	
23	1S	"	"	0	✓	RK	
24	1N	"	"	0	✓	RK	
25	1P	"	"	1	✓	RK	2A
26	1O	"	"	0	✓	RK	
27	1Q	"	"	0	✓	RK	
28	1J	"	"	0	✓	RK	
29	1T	"	"	0	✓	RK	
30	2A	"	"	0	✓	RK	
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Sept 21/19

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	2C	Sept 22	SM	0	✓	RK	
22	2E	"	SM	0	✓	RK	
23	2D	"	SM	0	✓	RK	
24	2F	"	SM	0	✓	RK	
25	2B	"	SM	0	✓	RK	Doubled Back
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: Sept 22 RK

DATE:

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION *		TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE?		OBS. TEST ?	MON.	REMARKS
		FROM	TO				NO	YES			
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
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12	/										
13	/										
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15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	21	Sept 23	SM	0	✓	RK	
22	26	↓	↓	0	✓	RK	
23	24	↓	↓	0	✓	RK	
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Sept 23 19

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	3I	Oct 8	SM	1	✓	RK	3P
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

✓

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Oct 8/19

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	3C*	Oct 11	SM	0	✓	RK	
22	3E			0	✓	RK	
23	3D			0	✓	RK	
24	3L*			0	✓	RK	
25	3G			0	✓	RK	
26	3N			0	✓	RK	
27	3F			0	✓	RK	
28	3B			0	✓	RK	
29	3P			0	✓	RK	
30	3M			0	✓	RK	
31	3K	↓	↓	0	✓	RK	
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Oct 14

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	4R	Oct 27	SM	Pick Test	✓	RK	VT Fluid
22	5K	"	"	"	✓	RK	Freezing
23	5J	"	"	"	✓	RK	No Seal
24	5I	"	"	"	✓	RK	↓
25	5N	"	"	F *	✓	RK	
26	5H	"	"	F *	✓	RK	
27	5G	"	"	F *	✓	RK	
28	4Q	"	"	0	✓	RK	New VBox Fluid
29	5D	"	"		N	RK	Technician
30	5C	"	"		N	RK	Did While
31	5E	"	"		N	RK	Golder Was
32	5F	"	"		N	RK	On Trial Seam
33	5G	"	"		N	RK	(With new
34	5H	"	"		N	RK	Fluid, not
35	5I	"	"		N	RK	Freezing)
36	5J	"	"		N	RK	
37	5K	"	"		N	RK	↓
38	5N	"	"	↓	N	RK	
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Oct 29

* Grind Marks, peeled up extrusion, to be fixed

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	4R	Oct29	SM	0	✓	RK	
22	5P		SM	0	✓	RK	
23	4S		SM	Overgrind	✓	RK	To Fix Repair
24	4T		SM	0	✓	RK	
25	4L		SM	1	✓	RK	5T *
26	4P		MC	0	✓	RK	* Only Pick
27	5E		SM	0	✓	RK	
28	5A		SM	0	✓	RK	
29	5O		SM	0	✓	RK	
30	5P		SM	0	✓	RK	
31	4N		SM	0	✓	RK	
32	5T	↓	SM	0	✓	RK	
33	4S	Oct29	SM	0	✓	RK	Post-Repair
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Oct29

* → Part of repair was only pick tested, not able to V. Box

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	75/76	Def. 6E	SEOS (SAT)	Nov13	WB	0		✓	✓	RK	
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	6E	Nov13	WB	0	✓	RK	
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RK

DATE: Nov 13

APPENDIX G3

PICK TEST RESULTS

8-H, 7-S
A60-bP

PICK TEST

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 3

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	31/195	8-H	8-G	Nov15	KA	0	x		x	RM	
2	32/193	8-E	8-D	"		0	x		x		
3	35/192	8-B	8-A	"		0	x		x		
4	36/190	7-T	7-S	"		0	x		x		
5	38/190	7-S	7-R	"		0	x		x		
6	38/189	7-N	7-M	"		0	x		x		
7	39/189	7-M	7-P	"		0	x		x		
8	39/188	7-L	7-K	"		0	x		x		
9	40/187	7-H	7-I	"		0	x		x		
10	41/188	7-I	7-Q	"	↓	0	x		x	↓	
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	8-H	Nov15	KA	0	x	RM	
22	8-G	"		0	x		
23	8-F	"		0	x		
24	8-E	"		0	x		
25	8-D	"		0	x		
26	8-B	"		0	x		
27	8-A	"		0	x		
28	7-T	"		0	x		
29	7-S	"		0	x		
30	7-R	"		0	x		
31	7-N	"		0	x		
32	7-M	"		0	x		
33	7-P	"		0	x		
34	7-L	"		0	x		
35	7-Q	"		0	x		
36	7-K	"		0	x		
37	7-I	"		0	x		
38	7-Q	"		0	x		
39	7-H	"		0	x		
40	7-F	"	↓	0	↓	↓	

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

REVIEWED BY: RM

DATE: Nov/22

GEOMEMBRANE SEAM ~~VACUUM~~ PICK TEST LOG

PROJECT #: **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 2 of 2

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	42/86	7-F	7-E	Nov15	KA	0	X		X	RM	
2	42/85	7-E	7-G	"		0	X		X		
3	43/84	7-D	7-C	"		0	X		X		
4	44/83	7-B	7-A	"		0	X		X		
5	45/83	6-T	6-S	"		0	X		X		
6	82/46	6-P	6-O	"		0	X		✓		Retest OK
7	81/48	6-N	6-M	"		0	X		X		
8	80/49	6-L	6-K	"		0	X		X		
9	50/79	6-J	6-I	"		0	X		X		
10	51/78	6-H	6-G	"	↓	0	X		X	↓	
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	7-F	Nov15	KA	0	X	RM	
22	7-G	"		0	X		
23	7-D	"		0	X		
24	7-C	"		0	X		
25	7-B	"		0	X		
26	7-A	"		0	X		
27	6-T	"		0	X		
28	6-S	"		0	X		
29	8-K	"		0	X		
30	6-P	"		0	X		
31	6-O	"		0	X		
32	9-B	"		0	X		
33	6-N	"		0	X		
34	6-M	"		0	X		
35	6-L	"		0	X		
36	6-K	"		0	X		
37	6-J	"		0	X		
38	6-I	"		0	X		
39	6-H	"		0	X		
40	6-G	"	↓	0	X	↓	

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

REVIEWED BY: RM

DATE: Nov22

GEOMEMBRANE SEAM ~~VACUUM~~ PICK TEST LOG

PROJECT #: **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 3 of 3

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	52/76	6-F	6-C	Nov15	KA	0	x		x	RM	
2	52/77	6-C	6-R	"	|	0	x		x	|	
3	52/77	6-R	6-B	"	|	0	x		x	|	
4	53/75	6-A	6-Q	"	↓	0		✓	x	↓	
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	6-F	Nov15	KA	0	x	RM	
22	6-C	"	|	0	x	|	
23	6-R	"	|	0	x	|	
24	6-B	"	|	0	x	|	
25	6-D	"	|	0	x	|	
26	6-E	"	|	0	x	|	
27	6-A	"	|	0	x	|	
28	6-Q	"	|	0	x	|	
29	5-L	"	|	0	x	|	
30	5-S	"	|	0	x	|	
31	5-R	"	✓	6	x	↓	
32							
33							
34							
35	8-C	Nov15	FC	0	✓	RM	
36	7-J	Nov16	FC	0	✓	RM	
37							
38							
39							
40							

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

REVIEWED BY: RM

DATE: Nov22

GEOMEMBRANE SEAM ~~VACUUM~~ PICK TEST LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	100 / 30	9-H	9-I	Nov.18	FC	0		✓	x	RM	
2	99 / 30	9-J	9-K	Nov.18	FC	0		✓	x	RM	
3	102 / D6	10-I	10-J	Nov.18	FC	0		✓	x	RM	
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	8-J	Nov.18	FC	0	x	RM	
22	9-F	"		0	x		
23	9-G	"		0	x		
24	9-H	"		0	x		
25	9-I	"		0	x		
26	9-N	Nov.20		1	x		1 C
27	9-J	"		0	x		
28	9-P	"		0	x		
29	9-K	"		0	x		
30	10-I	Nov.20		0	x		
31	9-L	"		0	x		
32	10-J	Nov.20		0	x		
33	9-M	Nov.20		0	x		
34	10-K	Nov.20		0	x		
35	9-O	Nov.20	NK	0	x	✓	
36							
37	10-A	Nov.20	FC	0	✓	RM	
38							
39							
40							

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

REVIEWED BY: RM

DATE: Nov.22

PICK

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 2

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	94/95	10-G/9-A/8-I	9-D	Nov21	DW	0		✓	✓	RM	
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	8-I	Nov21	KA	0	✓	RM	
22	9-A	"	KA	0	✓	RM	
23	9-D	"	KA	0	✓	RM	
24	9-C	"	KA	0	✓	RM	
25	9-E	"	KA	0	✓	RM	
26	9-Q	"	KA	0	✓	RM	
27	9-T	"	KA	0	✓	RM	
28	10-H	"	KA	0	✓	RM	
29	10-O	"	KA	0	✓	RM	
30	9-H	"	KA	0	✓	RM	
31	10-NF	"	DW	0	✓	RM	
32	10-E	"	DW	0	X	RM	
33	10-D	"	DW	0	X	RM	
34	9-P	"	DW	0	X	RM	
35	10-I	"	DW	0	X	RM	
36	10-J	"	DW	0	X	RM	
37	10-K	"	DW	0	X	RM	
38	10-L	"	DW	0	X	RM	
39	10-N	"	DW	0	X	RM	
40	10-Q	"	DW	0	X	RM	

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RM

DATE: Nov22

PICK

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT # **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 2 of 2

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	10-G	Nov 9	DW	0	✓	RM	
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RM DATE: Nov.22

Pick

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT #: **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/	10-B	9-R	Nov 24	DW	0		/	x	RM	
2	103/104	10-C	9-S	"	DW	0		/	x	RM	
3	/	9-M	11-C	"	DW	0		/	x	RM	
4	/										
5	/										
6	/										
7	104/105	10-R	10-P	Nov 25	DW	0				RM	
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	108	Nov 25	DW	0	x	RM	
22	9-R	"	"	0	x	"	
23	9-S	"	"	0	x	"	
24	10-C	"	"	0	x	"	
25	11-C	"	"	0	x	"	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RM

DATE: Dec 6/19

PICK

GEOMEMBRANE SEAM ~~VACUUM~~ TEST LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	~~104~~ / 105	10-R	10-P	Nov.25	DW	0		✓	✓	RM	
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
~~21~~	12-O	Nov.25	DW	0	✓	RM	
~~22~~	10-R	"	DW	0	✓	RM	
~~23~~	10-P	"	DW	0	✓	RM	
~~24~~	11-A	"	DW	0	✓	RM	
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RM

DATE: Dec6/19

GEOMEMBRANE SEAM VACUUM TEST LOG

PICK

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	12-B	Nov 26	DW	0	✓	RM	
22	12-A	Nov. 26	DW	0	✓	RM	
23	12-I	Nov. 26	DW	0	✓	RM	
24	12-E	Nov. 26	DW	0	✓	RM	
25	11-T	Nov. 26	DW	0	✓	RM	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RM

DATE: Dec 6/19

PICK

GEOMEMBRANE SEAM VACUUM TEST LOG

PROJECT #: **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

VACUUM BOX NUMBER:

SHEET # 1 of 1

SEAMS

	SEAM, NUMBER	SEAM SECTION * FROM	SEAM SECTION * TO	TEST DATE	TECH ID	DEFECTS **	SEAM COMPLETE? NO	SEAM COMPLETE? YES	OBS. TEST ?	MON.	REMARKS
1	/										
2	/										
3	/										
4	/										
5	/										
6	/										
7	/										
8	/										
9	/										
10	/										
11	/										
12	/										
13	/										
14	/										
15	/										
16	/										
17	/										
18	/										
19	/										
20	/										

REPAIRS

	DEFECT CODE	TEST DATE	TECH ID	DEFECTS **	OBS. TEST ?	MON.	REMARKS
21	D-F	Nov27	DW	0	✓	RM	
22	D-M	"	DW	0	✓	RM	
23	L2-H	"	DW	0	✓	RM	
24	L1-R	"	DW	0	✓	RM	
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

* REFERENCE SEAM ENDPOINTS FROM AN END OF SEAM (EOS), A REPAIR NUMBER, OR A POINT LOCATION ON THE SEAM (I.E. REFERENCE POINT, DISTANCE, DIRECTION FROM REF.PT.)

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

REVIEWED BY: RM

DATE: Dec6/19

APPENDIX H

DESTRUCTIVE TEST RECORDS

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-01	P10/P11 Seam at NEOS (NAT)

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE ~~RECEIVED BY LAB~~ Test	DATE RESULTS REPORTED
P10/P11	16	Sept 18	Sept 19	\	Ray K.	Sept 20	Sept 20
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
PW 064	WB	✓	600	850	x	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	111	SEI	Pass	P1	109	SEI	Pass
P2	115	SEI	Pass	P2	113	SEI	Pass
P3	110	SEI	Pass	P3	106	SEI	Pass
P4	111	SEI	Pass	P4	106	SEI	Pass
P5	116	SEI	Pass	P5	116	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	132	NB	Pass	6.25	12.5	(25)	
S2	132	SEI	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	135	SEI	Pass	1.0	(1.5)	2.0	2.5
S4	131	SEI	Pass	REMARKS: Smooth/Smooth White/Black Tested at 20inch as instructed min at 17°C			
S5	134	SEI	Pass				

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-02	In North Anchor Trench on Seam

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
15/20	1M	Sept 21	Sept 21	\	RK	Sept 21	Sept 23
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
PW069	GD	✓	600	850	X	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	112	SEI	Pass	P1	117	SEI	Pass
P2	110	SEI	Pass	P2	119	SEI	Pass
P3	113	SEI	Pass	P3	120	SEI	Pass
P4	108	SEI	Pass	P4	120	SEI	Pass
P5	108	SEI	Pass	P5	119	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	138	NB	Pass	6.25	12.5	(25)	
S2	132	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	136	NB	Pass	1.0	(1.5)	2.0	2.5
S4	130	NB	Pass	REMARKS: Smooth/Smooth Tested at 15°C Tested at 20"/min as instructed for this material			
S5	131	NB	Pass				

* Virgin Liner → 138 ppi

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-03	27m South of North Anchor Trench

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
P18/P19	2J	Sept22	Sept23	\	RK	Sept23	Sept23
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	GD	✓	600	850	X	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?
P1	122	SEI	Pass	P1	112	SEI	Pass
P2	117	SEI	Pass	P2	119	SEI	Pass
P3	117	SEI	Pass	P3	118	SEI	Pass
P4	115	SEI	Pass	P4	105	SEI	Pass
P5	119	SEI	Pass	P5	107	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	140	NB	Pass	6.25	12.5	(25)	
S2	142	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	145	NB	Pass	1.0	(1.5)	2.0	2.5
S4	144	SEI	Pass	REMARKS: Smooth/Smooth Tested at 15°C, 20"/min			
S5	139	SEI	Pass				

#Virgin Liner → 128 ppi

LAB TECH: RK

as instructed for this material

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-04	5m South of North Anchor Trench

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
27/28	2I	Sept22	Sept22	\	RK	Sept22	Sept24
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
PW 069	SM	✓	600	850	x	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?
P1	108	SEI	Pass	P1	98	SEI	Pass
P2	107	SEI	Pass	P2	106	SEI	Pass
P3	106	SEI	Pass	P3	109	SEI	Pass
P4	105	SEI	Pass	P4	106	SEI	Pass
P5	108	SEI	Pass	P5	108	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	124	SEI	Pass	6.25	12.5	(25)	
S2	122	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	120	NB	Pass	1.0	(1.5)	2.0	2.5
S4	122	NB	Pass	REMARKS: Smooth/Smooth Tested at 14°C, 2"/min as			
S5	122						

Virgin Liner → 120 ppi

LAB TECH: RK

specifications

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-05	Panel 33/35, SEOS, 47m S NAT

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
33/35	2R	Sept 24	Sept 24	\	RK	Sept 24	Sept 24
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	SM	✓	550	850	\	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?
P1	112	SEI	Pass	P1	107	SEI	Pass
P2	113	SEI	Pass	P2	103	SEI	Pass
P3	115	SEI	Pass	P3	108	SEI	Pass
P4	112	SEI	Pass	P4	110	SEI	Pass
P5	112	SEI	Pass	P5	111	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	116	NB	Pass	6.25	12.5	(25)	
S2	121	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	118	NB	Pass	1.0	(1.5)	2.0	2.5
S4	120	NB	Pass	REMARKS: Smooth / Smooth			
S5	119	NB	Pass	Tested at 15°C at 2 inches/min			

*Virgin Liner → 117 ppi

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-06	P38/37 21m S of NAT (29m N of Defect 21)

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY [redacted]Golder	DATE RESULTS REPORTED
38/37	3A	Oct 2/19	Oct 2/19	\	N/A - Layfield	Oct 5/19	Oct 5/19
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	SM	✓	550	850	x	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	108	SEI	Pass	P1	112	SEI	Pass
P2	106	SEI	Pass	P2	114	SEI	Pass
P3	111	SEI	Pass	P3	113	SEI	Pass
P4	108	SEI	Pass	P4	114	SEI	Pass
P5	109	SEI	Pass	P5	111	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	111	NB	Pass	6.25	12.5	(25)	
S2	112	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	118	NB	Pass	1.0	(1.5)	2.0	2.5
S4	120	NB	Pass	REMARKS: Smooth/Smooth Tested at 2"/min Tested at 14°C			
S5	123	NB	Pass				

* Virgin Liner → 114 ppi (Jogged at the end)

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-07	Panel 40/41 ~22m S of NAT Edge

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
40/41	36	Oct 7/19	Oct 8/19	\	RK	Oct 8/19	Oct 9/19
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	SM	✓	550	850	X	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	109	SEI	Pass	P1	114	SEI	Pass
P2	113	SEI	Pass	P2	112	SEI	Pass
P3	111	SEI	Pass	P3	111	SEI	Pass
P4	110	SEI	Pass	P4	111	SEI	Pass
P5	109	SEI	Pass	P5	114	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	119	NB	Pass	6.25	12.5	(25)	
S2	121	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	118	NB	Pass	1.0	(1.5)	2.0	2.5
S4	114	NB	Pass	REMARKS: Tested at 2"/min at 16°C in tent		Virgin Liner Sample was 125 ppi	
S5	118	NB	Pass				

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-08	12m S of Edge of NAT

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
41/42	3I	Oct 7, 2019	Oct 8/19	✓	RK	Oct 8/19	Oct 9/19
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	SM	✓	550	850	✓	✓	✓

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	111	SEI	Pass	P1	115	SEI	Pass
P2	111	SEI	Pass	P2	109	SEI	Pass
P3	101	SEI	Pass	P3	106	SEI	Pass
P4	103	SEI	Pass	P4	103	SEI	Pass
P5	109	SEI	Pass *	P5	114	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	111	NB	Pass	6.25	12.5	(25)	
S2	114	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	116	NB	Pass	1.0	(1.5)	2.0	2.5
S4	117	NB	Pass	REMARKS: Tested in Test at 17°C, 2"/min		Virgin Liner Sample Was 121ppi	
S5	115	SEI	Pass				

* About 10% Peel or less

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-09	P45/P46 36m S of NAT Edge → Cut Out

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
45/46	30	Oct8/19	Oct8/19	\	RK	Oct8/19	Oct9/19
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	SM	✓	550	850	~	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	106	SEI	Pass	P1	110	SEI	Pass
P2	106	SEI	Pass	P2	112	SEI	Pass
P3	106	SEI	Pass	P3	106	SEI	Pass
P4	107	SEI	Pass	P4	107	SEI	Pass
P5	103	SEI	Pass	P5	106	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	116	NB	Pass	6.25	12.5	(25)	
S2	117	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	115	NB	Pass	1.0	(1.5)	2.0	2.5
S4	115	NB	Pass	REMARKS: Tested at 2"/min at 17°C in tent		Virgin Liner used 119 ppi	
S5	116	NB	Pass				

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-10	21m S of NAT Edge, P46/P47 Seam

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
46/47	3R	Oct 11	Oct 12		RK	Oct 12	Oct 12
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	SM	✓	550	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	97	SEI	Pass	P1	110	SEI	Pass
P2	110	SEI	Pass	P2	103	SEI	Pass
P3	102	SEI	Pass	P3	108	SEI	Pass
P4	98	SEI	Pass	P4	100	SEI	Pass
P5	101	SEI	Pass	P5	104	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	114	NB	Pass	6.25	12.5	(25)	
S2	110	BRK	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	111	NB	Pass	1.0	(1.5)	2.0	2.5
S4	107	NB	Pass	REMARKS: Tested at 20°C, 2"/min Actual Seam Temp. was 80.4° Virgin Liner Sample was 108 ppi			
S5	112		Pass				

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-11	P52/P53 Cross Seam, 30m S of NAT

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
52/53	4C	Oct 16	Oct 26	\	RK	Oct 26	Oct 28
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	GB	✓	550	850	\	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	106	SEI	Pass	P1	110	SEI	Pass
P2	115	SEI	Pass	P2	114	SEI	Pass
P3	116	SEI	Pass	P3	115	SEI	Pass
P4	106	SEI	Pass	P4	112	SEI	Pass
P5	109	SEI	Pass	P5	116	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	134	NB	Pass	6.25	12.5	(25)	
S2	126	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	126	NB	Pass	1.0	(1.5)	2.0	2.5
S4	131	NB	Pass	REMARKS: Tested at 2"/min at 11°C in WRF Tent			
S5	130	NB	Pass	Virgin Liner Sample was 129 ppi			

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-12	Cross Seam of 58/59

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
58/59	5A	Oct 19	Oct 26	\	RK	Oct 26	Nov 6/19
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
064	WB	✓	550	850	x	x	x

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	102	SEI	Pass	P1	99	SEI	Pass
P2	112	SEI	Pass	P2	109	SEI	Pass
P3	111	SEI	Pass	P3	103	SEI	Pass
P4	118	SEI	Pass	P4	108	SEI	Pass
P5	103	SEI	Pass	P5	103	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	116	SEI	Pass	6.25	12.5	(25)	
S2	124	SEI	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	123	NB	Pass	1.0	(1.5)	2.0	2.5
S4	125	NB	Pass	REMARKS: Tested at 2"/min at 0C in Bubble Tent			
S5	117	NB	Pass				

*Virgin Liner Sample was 124 ppi

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-13	Bottom of South Anchor Trench, SEOS

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
67/66	5B	Oct 25	Oct 25	\	RK	Oct 25	Nov 7
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
064	SM	✓	550	850	x	x	x

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	106	SEI	Pass	P1	104	SEI	Pass
P2	110	SEI	Pass	P2	111	SEI	Pass
P3	111	SEI	Pass	P3	112	BRK	Pass
P4	108	SEI	Pass	P4	109	SEI	Pass
P5	116	SEI	Pass	P5	114	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	125	SEI	Pass	6.25	12.5	(25)	
S2	124	SEI	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	124	SEI	Pass	1.0	(1.5)	2.0	2.5
S4	121	NB	Pass	REMARKS: Tested at 2"/min in bubble tent at 5°C			
S5	125	NB	Pass				

Virgin Liner Sample was 118 ppi LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-14	Bottom of South Anchor Trench, SEOS

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
68/70	SQ	Oct26	Oct26	\	RK	Oct26	Nov 7
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
064	SM	✓	550	850	x	x	x

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?
P1	118	SEI	Pass	P1	111	SEI	Pass
P2	105	SEI	Pass	P2	111	SEI	Pass
P3	113	SEI	Pass	P3	118	SEI	Pass
P4	116	SEI	Pass	P4	109	SEI	Pass
P5	107	SEI	Pass	P5	110	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi or kN/m)	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	121	NB	Pass	6.25	12.5	(25)	
S2	116	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	118	NB	Pass	1.0	(1.5)	2.0	2.5
S4	117	NB	Pass	REMARKS: Tested at 2"/min in Bubble test at			
S5	125						

Virgin Liner sample was 117ppi LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-15	South Berm, Toe of Slope Along Tie-In

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
52/77	6R	Nov 7	Nov 7	\	RK	Nov 7	Nov
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
064	WB	✓	550	850	x	x	x

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	95	SEI	Pass	P1	95	SEI	Pass
P2	89	SEI	Pass	P2	88	SEI	Pass
P3	101	SEI	Pass	P3	97	SEI	Pass
P4	92	SEI	Pass	P4	91	SEI	Pass
P5	97	SEI	Pass	P5	93	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	106	NB	Pass	6.25	12.5	(25)	
S2	94	NB	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	97	NB	Pass	1.0	(1.5)	2.0	2.5
S4	100	NB	Pass	REMARKS: Tested at 2"/min, 24°C in tea can Virgin Liner was 104 ppi			
S5	97	NB	Pass				

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-16	South Slope Toe, Adjacent to 7L (1m S)

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
88/89	70	Nov9	Nov9	\	RK	Nov9	Nov 12
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
064	WB	✓	575	850	x	x	x

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	98	SEI	Pass	P1	98	SEI	Pass
P2	90	SEI	Pass	P2	93	SEI	Pass
P3	100	SEI	Pass	P3	99	SEI	Pass
P4	93	SEI	Pass	P4	91	SEI	Pass
P5	101	SEI	Pass	P5	103	SEI	Pass

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	116	NB	Pass	6.25	12.5	(25)	
S2	114	SEI	Pass	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	106	NB	Pass	1.0	(1.5)	2.0	2.5
S4	109	NB	Pass	REMARKS: Tested in Sea Can at 22°C, 2"/min Virgin Liner was 104 ppi			
S5	112	NB	Pass				

LAB TECH: RK

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-17	South Anchor Trench Base

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
95/94	8I	Nov 11	Nov 12	Nov 12	RK	Nov 12	Nov 14
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
069	SM	✓	550	650	\	\	\

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	101	SE1	P	P1	102	SE1	P
P2	101	SE1	P	P2	98	SE1	P
P3	104	SE1	P	P3	98	SE1	P
P4	98	25%	F	P4	95	SE1	P
P5	104	SE1	P	P5	100	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD (ppi) or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	107	NB	P	6.25	12.5	(25)	
S2	115	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	106	NB	P	1.0	(1.5)	2.0	2.5
S4	115	NB	P	REMARKS: Tested at 2"/min, 20° in sea con			
S5	104	NB	P	Virgin Liner Sample was 116 PPI			

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-17-B1	@ EEOS

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
97/98	9-E	Nov.15	Nov.18	Nov.18	RM	Nov. 18	Nov.19
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DW	✓	550	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	98	SE1	P	P1	95	SE1	P
P2	89	SE1	P	P2	92	SE1	P
P3	105	SE1	P	P3	100	SE1	P
P4	96	SE1	P	P4	100	SE1	P
P5	97	SE1	P	P5	97	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	111	NB	P	6.25	12.5	(25)	
S2	109	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	103	NB	P	1.0	(1.5)	2.0	2.5
S4	104	NB	P	REMARKS:			
S5	100	NB	P				

VIRGIN LINER: 99 PPI
Tested in Sea Can @ 21°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-17-A1	SOUTH ANCHOR TRENCH

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
94/95	9-D	Nov.15	Nov.15	Nov.15	RM	Nov.18	Nov.18
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
69	SM	✓	550	650	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	80	35% Peel	F	P1	91	SEI	P
P2	82	35% Peel	F	P2	87	SEI	P
P3	91	40% Peel	F	P3	98	SEI	P
P4	94	NB	P	P4	91	SEI	P
P5	77	100% Peel	F	P5	92	SEI	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	99	NB	P	6.25	12.5	(25)	
S2	94	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	102	NB	P	1.0	(1.5)	2.0	2.5
S4	99	NB	P	REMARKS: Lack of weld observable on inside tracks on bottom of liner			
S5	99	NB	P				

VIRGIN LINER: 97 PPI
Tested Destruct @ 22°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
05-19-17-A2	@NEOS

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
94/95	10-G	Nov.18	Nov.18	Nov.18	RM	Nov.18	Nov.18
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
69	SM	✓	550	650	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	96	SE1	P	P1	102	SE1	P
P2	105	SE1	P	P2	105	SE1	P
P3	103	SE1	P	P3	99	SE1	P
P4	103	SE1	P	P4	99	SE1	P
P5	99	SE1	P	P5	97	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	104	NB	P	6.25	12.5	(25)	
S2	107	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	108	NB	P	1.0	(1.5)	2.0	2.5
S4	105	NB	P	REMARKS:			
S5	111	NB	P				

VIRGIN LINER: 100 ppi
Tested in Sealon @ 21°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-18	South Anchor Trench Base

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
95/94	9-A	Nov.14	Nov.14	Nov.14	RM	Nov.14	Nov.14
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
037	FC	/	/	/	✓	505	505

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	84	SE3	P	P1			
P2	86	SE3	P	P2			
P3	88	SE3	P	P3			
P4	68	SE3	P	P4			
P5	87	SE3	P	P5			

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	115	NB	P	6.25	12.5	(25)	
S2	113	SE2	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	117	NB	P	1.0	(1.5)	2.0	2.5
S4	110	SE2	P	REMARKS: Located on DS-19-17 Tested @ 2"/min. 15° in Sea Can Virgin Liner Sample was 116 Mil			
S5	109	NB	P				

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-19	Near 8-J

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
95/96	9-F	Nov.16	Nov17	Nov.17	RM	Nov.17	Nov.18
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DW	✓	550	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	112	NB	P	P1	103	SE1	P
P2	106	SE1	P	P2	100	SE1	P
P3	~~109~~	SE1	P	P3	100	SE1	P
P4	108	SE1	P	P4	102	SE1	P
P5	103	SE1	P	P5	94	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	109	NB	P	6.25	12.5	(25)	
S2	104	~~NB~~ NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	108	~~NB~~ NB	P	1.0	(1.5)	2.0	2.5
S4	107	NB	P	REMARKS:			
S5	101	NB	P				

VIRGIN LINER: 98 PPI
Test @ 22°C in SeaCon

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-20	NEAR NEOS

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
103/101	10-B	Nov.17	Nov.18	Nov.18	RM	Nov.18	Nov.19
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DW	✓	550	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	98	SE1	P	P1	100	SE1	P
P2	106	SE1	P	P2	100	SE1	P
P3	107	SE1	P	P3	104	SE1	P
P4	101	SE1	P	P4	96	SE1	P
P5	98	SE1	P	P5	91	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	110	NB	P	6.25	12.5	(25)	
S2	103	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	105	NB	P	1.0	(1.5)	2.0	2.5
S4	116	NB	P	REMARKS: Re-pulled a shear to check Break. Break okay.			
S5	110	NB	P				

VIRGIN LINER: 106 PPI
Tested in Sedan @ 28°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-21	Middle of Seam to check Frost Effect

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
104/105	10-R	Nov.18	Nov.20	Nov.20	RM	Nov 20	Nov.20
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DW	✓	550	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	106	SE1	P	P1	101	SE1	P
P2	106	SE1	P	P2	103	SE1	P
P3	108	SE1	P	P3	105	SE1	P
P4	107	SE1	P	P4	107	SE1	P
P5	113	SE1	P	P5	106	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	119	NB	P	6.25	12.5	25	
S2	120	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	116	NB	P	1.0	1.5	2.0	2.5
S4	118	NB	P	REMARKS: Nurals on Bottom of liner were not very distinct.			
S5	125	NB	P				

VIRGIN LINER: 118 PPI
TESTED @ 14°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-22	5m S of NEOS (Defect 11-D)

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
107/108	11-F	Nov.20	Nov.21	Nov.21	RM	Nov.21	Nov.21
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DW	V	400	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	103	NB	P	P1	101	NB	P
P2	102	SEI	P	P2	101	SEI	P
P3	98	SEI	P	P3	101	SEI	P
P4	100	SEI	P	P4	102	SEI	P
P5	101	SEI	P	P5	91	SEI	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	109	NB	P	6.25	12.5	(25)	
S2	97	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	104	NB	P	1.0	(1.5)	2.0	2.5
S4	103	NB	P	REMARKS: Re-Pulled 97 shear to break. Break OK.			
S5	99	NB	P				

VIRGIN LINER: 106 PPI
Tested @ 25°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-23	@ WEOS

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
110/111	11-Q	Nov.24	Nov.24	Nov.24	RM	Nov.24	Nov.24
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DG	✓	450	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	96	SEI	P	P1	87	SEI	P
P2	97	SEI	P	P2	92	SEI	P
P3	103	SEI	P	P3	99	SEI	P
P4	95	SEI	P	P4	99	SEI	P
P5	102	SEI	P	P5	100	SEI	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	106	NB	P	6.25	12.5	(25)	
S2	106	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	105	NB	P	1.0	(1.5)	2.0	2.5
S4	110	NB	P	REMARKS:			
S5	106	NB	P				

VIRGIN LINER: 106 PPI
TESTED @ 19°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-24	Near SEOS

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
112/113	12-5	Nov.24	Nov25	Nov.25	RM	Nov.25	Nov25
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DG	✓	450	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	108	SE1	P	P1	106	SE1	P
P2	102	SE1	P	P2	100	SE1	P
P3	110	SE1	P	P3	100	SE1	P
P4	102	SE1	P	P4	100	SE1	P
P5	99	SE1	P	P5	101	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	108	NB	P	6.25	12.5	(25)	
S2	88	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	106	NB	P	1.0	(1.5)	2.0	2.5
S4	103	NB	P	REMARKS: Small scratch under inside flap. Only affects white portion. No effect on results.			
S5	109	NB	P				

VIRGIN LINER: 105 PPI
TESTED @ 25°C

LAB TECH: RM

GEOMEMBRANE DESTRUCTIVE TEST RECORD

PROJECT # **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

DESTRUCTIVE TEST NUMBER:	DESTRUCTIVE SAMPLE LOCATION
DS-19-25	@ 12-Q

SAMPLE CONTROL

SEAM ID	REPAIR ID	DATE LOCATED	DATE TAKEN	DATE SHIPPED TO LAB	INSPECTOR ID	DATE RECEIVED BY LAB	DATE RESULTS REPORTED
116/6	13-B	Nov.25	Nov.26	Nov.26	RM	Nov.26	Nov.26
MACHINE	**OPERATOR**	**WEDGE?**	**SPEED**	**MACH TEMP**	**EXTRUDER?**	**PREHEAT**	**MACH TEMP**
64	DG	✓	400	850	/	/	/

LAB TEST RESULTS

PEEL (INSIDE TRACK)				PEEL (OUTSIDE TRACK)			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?
P1	95	SE1	P	P1	92	SE1	P
P2	100	SE1	P	P2	95	SE1	P
P3	105	SE1	P	P3	101	SE1	P
P4	95	SE1	P	P4	90	SE1	P
P5	103	SE1	P	P5	96	SE1	P

SHEAR				SAMPLE MEASUREMENTS			
SPECIMEN #	LOAD ppi or kN/m	FAILURE MODE	RESULT PASS/ FAIL?	SPECIMEN WIDTH (mm) -- Circle Measured Value			
S1	103	NB	P	6.25	12.5	(25)	
S2	104	NB	P	SHEET THICKNESS (mm) -- Circle Measured Value			
S3	104	NB	P	1.0	(1.5)	2.0	2.5
S4	137	NB	P	REMARKS: Taken from North Tie-in			
S5	118	NB	P				

VIRGIN LINER: 104 PPI
TESTED @: 25°C

LAB TECH: RM

APPENDIX I

DEFECT LOGS

GEOMEMBRANE DEFECT LOG

PROJECT # **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

NAT - North Anchor (Not Part of Detail Drawings, To Be Overlaid By Another NAT SHEET # 1 of 14

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
1A	P1/P2	29m S of NAT	IO	RK	Weld Off Edge of Overlap	Sept 19	Sept 19
1B	P2/P3	22m S of NAT	D	RK	Dropped Tool By Contractor	Sept 19	Sept 19
1C	P3/P4/P5	T-Int	T	RK		Sept 19	Sept 19
1D	P4/P5/P6	T-Int	T	RK		Sept 19	Sept 19
1E	P8/P9/10	T-Int	T	RK		Sept 19	Sept 19
1F	10/11/6	T-Int	T	RK		Sept 19	Sept 19
1G	9/10	In NAT	DS	RK	DS-19-01 in NAT, repaired, no VT	Sept 19	X
1H	10/11	12m S of NAT	IO	RK		Sept 19	Sept 19
1I	11/12/6	T-Int	T	RK		Sept 19	Sept 19
1J	13/14/15	T-Int	T	RK		Sept 21	Sept 21
1K	13/14/16	T-Int	T	RK		Sept 21	Sept 21
1L	20/15/13	T-Int	T	RK	In NAT, no VT	Sept 21	X
1M	20/15	In NAT	DS	RK	DS-19-02 in NAT, NO VT	Sept 21	X
1N	17/16/18	T-Int	T	RK		Sept 21	Sept 21
1O	P18	S End of Panel (28m S)	EE	RK	Likely transport damage w/ equipment or during storage onsite	Sept 21	Sept 21
1P	P18	"	EE	RK		Sept 21	Sept 21
1Q	P18	16m S of NAT	SI	RK		Sept 21	Sept 21
1R	P13	35m S of NAT	SI	RK	0.5m from 1K	Sept 21	Sept 21
1S	P13	19m S of NAT	SI	RK		Sept 21	Sept 21
1T	P1	40m S NAT	EE	RK	Likely transport damage by equipment	Sept 21	Sept 21

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RK **DATE:** Sept 21/19

GEOMEMBRANE DEFECT LOG

PROJECT # **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

NAT → North Anchor Treach, To Be Overlaid by another NAT SHEET # 2 of 14

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
2A	P18	28m S NAT	VL	RK	VL on 1P	Sept 21	Sept 21
2B	P22	18m S NAT	EE	RK	Likely transport damage	Sept 22	Sept 22
2C	22/21/19	T-Int	T	RK		Sept 22	Sept 22
2D	23/22/21	T-Int	T	RK		Sept 22	Sept 22
2E	19/22	9m S of NAT	EE	RK	Likely transport damage	Sept 22	Sept 22
2F	24/25/26	T-Int	T	RK		Sept 22	Sept 22
2G	P28	12m S NAT	EE	RK	Likely transport damage	Sept 22	Sept 23
2H	P28	14m S NAT	EE	RK	↓	Sept 22	Sept 23
2I	P27/P28	5m S of NAT	DS	RK	DS-19-04	Sept 22	Sept 23
2J	P18/19	27m S of NAT	DS	RK	DS-19-03	N.OB	N.OB
2K	P31/32/33	T-Int	T	RK			
2L	P32/33/	T-Int	T	RK			
2M	P31/33/34	T-Int	T	RK			
2N	P33/34/	T-Int	T	RK			
2O	P34	18m S of NAT	EE	RK	Center of Panel } Likely transport damage		
2P	P34	18m S of NAT	EE	RK	East 1/3 of panel }		
2Q	P31	West Side, In NAT	WR	RK	To fit (Cut) transition contour		
2R	P33/35	47m S of NAT	DS	RK	DS-19-05 Seos		
2S	P35/37/36	T-Int	T	N.Ob.	Not Observed		
2T	P38/37/36	T-Int	T	N.Ob.	↓	↓	↓

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RK **DATE:** Oct 19/19

N. Ob. defects were verbally confirmed to have been repaired/tested by Layfield, and visually inspected by Golder upon return to site.

GEOMEMBRANE DEFECT LOG

*Defects referenced from edge of NAT after backfill

PROJECT #: **1790951** | PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** | CONTRACTOR: **Baffinland**
LOCATION: **Mary River** | GEOSYNTHETICS: **Layfield**

SHEET # 3 of 14

DEFECT CODE	DEFECT LOCATION*		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
3A	P37/P38	29m N of 2T	DS-06	N.Ob	Layfield Taken, Repaired	N/A	N/A
3B	P39 ~	28m S of NAT	EE	RK	Tire track from ladder backing onto liner	Oct 8	Oct 11
3C*	P40	43m S of NAT, 1m W of 40/41 Seam	EE	RK	Roll Damage	Oct 8	Oct 11
3D	P40	41m (South) of NAT, 1m W of 40/41 Seam	EE	RK	Roll Damage,	Oct 8	Oct 11
3E	P40	41-39m South of NAT, 2m W of 40/41 Seam	EE	RK	Roll Damage, 2 Clusters	Oct 8	Oct 11
3F	P40	~7m S of NAT, by P40/P41 Seam	D	RK	0.1m crease	Oct 8	Oct 11
3G	P40/P41	~22m S of NAT	DS	RK	DS-19-07	Oct 8	Oct 11
3H	P41/42	In NAT	IO	RK	Wheel off Track	Oct 8	In NAT
3I	P41/42	12m S of NAT	DS	RK	DS-19-08 due to wrinkled weld (see photos)	Oct 8	Oct 8
3J	P44	36-38m S 1.583m E of 43/44 Seam	EE	RK	* Also extends along whole panel	Nov 12.	N.Ob
3K	P44	36-38m S 3.7m E of 43/44 Seam	EE	RK		Oct 8	Oct 11
3L*	P40	43m S of NAT, 2m W of 40/41 Seam	EE	RK		Oct 8	Oct 11
3M	P43/P44	36m S of NAT	EE	RK	" "	Oct 8	Oct 11
3N	P44/P45	7.5m S of NAT	BO + WR	RK	Carried some of toe wrinkle & burn out after it, Cut Wrinkle Out	Oct 8	Oct 11
3O*	46/47/48	T-Int	T	RK		Oct 16	N.Ob.
3P	P41/P42	12m S of NAT, or 3I	VL	RK		Oct 8	Oct 11
3Q	47/48/49	T-Int	T	RK		Oct 16	N.Ob.
3R	P46/47	21m S of NAT	DS	RK	DS-19-10	N.Ob.	N.Ob.
3S	P49	27.5m S of NAT	EE	RK	0.5m E of 48/49 Seam	Oct 16	N.Ob.
3T	P49	29.5m S of NAT	EE	RK	" "	Oct 16	N.Ob.

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER

REVIEWED BY:

DATE:

2018 N.Ob. → Golder Rep. Not Onsite

GOLDER ASSOCIATES LTD.

Cut Out Defects (Originals)
3C - P40 EE Damage
3L - P43/P44 EE Damage on Seam
3O - P45/P46 36m S of NAT - DS-19-09

GEOMEMBRANE DEFECT LOG

PROJECT # **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

*Defects measured from edge of NAT after backfill

SHEET # 4 of 14

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
4A	P49	31.5m S of NAT	EE	RK	0.5m E of 48/49 Seam	Oct 16	N. Ob
4B	P50/51	13m S of NAT	BO	RK		N. Ob →	
4C	P52/53	30m S of NAT	DS	RK	DS-19-11	N. Ob →	
4D	53/54/55		T	N. Ob			
4E	53/55/56		T	N. Ob			
4F	54/57	~Toe of Slope	FM	N. Ob			
4G	56/59/57		T	N. Ob			
4H	56/59/60		T	N. Ob			
4I	59/60	5m N of 4H	IO	N. Ob			
4J	60/61	Toe of N Slope	IO	N. Ob			
4K	62/63/61		T	N. Ob			
4L	P66/67/69	T-Int	T	RK	SE corner, toe of slope	Oct 27	Oct 29
4M	63/64/61		T	N. Ob	→ Roll Dam. W 0.5m		
4N	P64/65/61	T-Int	T	RK		Oct 26	Oct 29
4O	60/61	1m S of 4J	FM	N. Ob			
4P	P67	On SAT Slope	WR	RK	Wedge + Patch At End	Oct 28 / Oct 29	Oct 29
4Q	P66	12m N of SAT	EE	RK	2 Locations ~1.5m Apart	Oct 27	Oct 27
4R	P62/69	At SAT - Slope Crest	BO	RK		Oct 26	Oct 27
4S	62/69	3m W of SAT	EE + IO	RK	Two Locations ~0.5m Apart	Oct 28 / Oct 29	Oct 29
4T	62/69/61	T-Int	T	RK		Oct 29	Oct 29

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
I - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RK **DATE:** Oct 29/19

N. Ob. defects were verbally confirmed to have been repaired/tested by Layfield. Golder could not inspect due to snow covered conditions.

GEOMEMBRANE DEFECT LOG

PROJECT #: **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

SHEET # 5 of 14

DEFECT CODE	DEFECT LOCATION: SEAM, PANEL OR REPAIR #	DEFECT LOCATION: DEFECT LOCATION DESCRIPTION	DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
5A	P59/58	2m from EEOS (4H)	DS	RK	DS-19-12. Roll Dim. 03m N of 12	Oct 26	Oct 29
5B	P66/67	Bottom of SAT	DS	RK	DS-19-13	Oct 28	N.Ob
5C	P66/71/60	Toe of S. Berm	T	RK		Oct 27	Oct 27
5D	P60/61/66	Toe of S. Berm	T	RK	Scratches to block on liner 30m to the N	Oct 27	Oct 27
5E	P71/60/58	"	T	RK		Oct 27	Oct 29
5F	P71/72/58	"	T	RK		Oct 27	Oct 27
5G	72/57/58	"	T	RK		Oct 27	Oct 27
5H	72/73/57	"	T	RK		Oct 27	Oct 27
5I	73/57/54	"	T	RK		Oct 27	Oct 27
5J	73/74/54	"	T	RK		Oct 27	Oct 27
5K	74/54/53	"	T	RK		Oct 27	Oct 27
5L	74/53/75	"	T	RK		Nov 7	Nov. 15
5M	68/67/70	N Slope of SAT	T	RK		Oct 28	N.Ob
5N	P57	11m N of SAT	D	RK	Adjacent to 57/73 Seam	Oct 27	Oct 27
5O	69/70/67	4m S of SAT	T	RK		Oct 28	Oct 29
5P	P69	Crest of SAT	D	RK	Damage (Scratches) From sliding	Oct 28 / Oct 29	Oct 29
5Q	P68/70	Base of SAT	DS	RK	DS-19-14	Oct 28	N.Ob.
5R	P74/75	Halfway Down S Berm	IO	RK		Nov 13	Nov. 15
5S	P74/75	Toe of S Berm	IO	RK		Nov 7	Nov. 15
5T	On 4L	SE corner, toe of slope	VL	RK	VL on 4L	Oct 29	Oct 29

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER

REVIEWED BY: RK **DATE:** Dec 6/19

N. Ob. defects were verbally confirmed to have been tested by Layfield prior to trench backfill operations, when Golder was not present.

GEOMEMBRANE DEFECT LOG

PROJECT #: **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

SHEET # 6 of 14

DEFECT CODE	DEFECT LOCATION: SEAM, PANEL OR REPAIR #	DEFECT LOCATION: DEFECT LOCATION DESCRIPTION	DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
6A	52/53/75	T-Int, At toe of	T	RK		Nov 7	Nov. 15
6B	52/75/77	Slope	T	RK		Nov 7	Nov. 15
6C	52/76/77	↓	T	RK		Nov 13	Nov. 15
6D	75/76/77	T-Int, at crest	T	RK		Nov 7	Nov. 15
6E	75/76	On SAT, North Slope	WS*	RK		Nov 7	Nov 13
6F	51/52/76	T-Int. at toe of Slope	T	RK		Nov 13	Nov. 15
6G	76/78/51		T+WS	RK	*WS Defect, 4" gap	Nov 13	Nov. 15
6H	50/51/78		T+BO	RK	*Weld visibly WS compromised here	Nov 13	Nov. 15
6I	78/79/50		T+WS	RK	} WS Defect Between,	Nov 12	Nov. 15
6J	49/50/79		T+WS	RK	) Open Hole	Nov 12	Nov. 15
6K	49/79/80		T	RK		Nov 12	Nov. 15
6L	48/49/80		T	RK		Nov 12	Nov. 15
6M	48/80/81		T	RK	} Additional damage at	Nov 12	Nov. 15
6N	46/48/81		T	RK	) these from slowed welder & pulling out	Nov 12	Nov. 15
6O	46/81/82		T	RK		Nov 12	Nov. 15
6P	45/46/82	↓	T	RK		Nov 12	Nov. 15
6Q	75/53	Toe of Slope, Adj. to 6A	WS	RK	Compromised weld/BO	Nov 7	Nov. 15
6R	77/52	Adj to 6C	DS-15	RK	150m Destruct	Nov 13	Nov. 15
6S	45/82/83	Toe of Slope, T	T	RK		Nov 12	Nov. 15
6T	44/45/83	" "	T	RK		Nov 12	Nov. 15

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
I - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER

EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RK **DATE:** Dec 6/19

GEOMEMBRANE DEFECT LOG

PROJECT # **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

SHEET # 7 of 14

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
7A	83/84/44	South Slope Toe	T	RK	)	Nov 12	Nov. 15
7B	84/44/43	" "	T	RK	} WS Between	Nov 12	Nov. 15
7C	85/84/43	" "	T	RK		Nov 12	Nov. 15
7D	85/43/42	" "	T	RK		Nov 12	Nov. 15
7E	42/85/86	" "	T	RK		Nov 12	Nov. 15
7F	42/41/86	" "	T	RK		Nov 12	Nov. 15
7G	42/85	Toe of South Slope, 1m East of 7E	WS	RK	Start of tie-in weld (Not at T-int)	Nov 15	Nov. 15
7H	41/86/40/87	Toe of Sath of Slope	T	RK	Two Very Close Together T's	Nov 11	Nov. 15
7I	40/87/88	"	T	RK		Nov 10	Nov. 15
7J	86/87/88	"	T	RK		Nov. 15	Nov. 16
7K	39/40/88	"	T/BO	RK		Nov 10	Nov. 15
7L	39/88/89	"	T	RK		Nov 11	Nov. 15
7M	38/39/89	"	T	RK	* East of this to 7P welder pushed by tech	Nov 10	Nov. 15
7N	38/89/90	"	T	RK		Nov 10	Nov. 15
7O	88/89	" South of 7L 1m	DS	RK	DS-19-16	Nov 11	Nov. 15
7P	39/89	Toe of Sath Slope 2.5m E of 7M	BO/WS	RK		Nov 10	Nov. 16
7Q	41/86	" " 1.5m E of 7H	BO/WS	RK		Nov 11	Nov. 15
7R	90/38	" " 1.5m E of T-int	WS	RK	Start of welding, 1.5m E of	Nov 14	Nov. 15
7S	90/36/38	South Slope Toe	T	RK		Nov 14	Nov. 15
7T	91/90/36	"	T	RK		Nov 14	Nov. 15

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
) - INSTALLATION DAMAGE
3 - # - DESTRUCTIVE TEST NUMBER

EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RK **DATE:** Dec 6/19

GEOMEMBRANE DEFECT LOG

PROJECT #: **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

SHEET # 8 of 14

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
8A	35/36/92	South Slope Toe	T	RK	+ Two adjacent T's	Nov 14	Nov. 15
8B	35/92/93	"	T	RK		Nov 14	Nov. 15
8C	91/92/93	2m S of South Slope Crest	T	RK		Nov. 15	Nov. 16
8D	32/35/93	South Slope Toe	T	RK		Nov. 14	Nov. 15
8E	93/94/32	"	T	RK		Nov 14	Nov. 15
8F	Panel 94	South Slope Toe, 0.5m S of Tie-in	EE	RK	Bead 1.5m S	Nov 14	Nov. 15
8G	94/31/32	South Slope Toe	T	RK		Nov 14	Nov. 15
8H	94/95/31	"	T	RK		Nov 14	Nov. 15
8I	94/95	Bottom of SAT	DS-17	RK	DS-19-17 (~150m)	Nov. 14	Nov. 21
8J	31/95/96	South Slope Toe	T	RK		Nov. 17	Nov. 18
8K	P45	"2m W of 6P(T)	D	RK	Shovel Penetrations	Nov 12	Nov. 15

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RK **DATE:** Dec 6/19

GEOMEMBRANE DEFECT LOG

PROJECT # **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

SHEET # 9 of 14

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
9-A	95	South A.T. Base	DS-19-18	RM	Attached to DS-19-17	Nov.14	Nov.21
9-B	46/81	MID WAY	D	RM		Nov.15	Nov.15
9-C	96/97/98	20m N of SAT	T	RM		Nov.20	Nov.21
9-D	95/94	@ DS-19-17/81	DS	RM	DS-19-17-A1	Nov.17	Nov.21
9-E	97/98	@EEOS	DS	RM	DS-19-17-B1	Nov.20	Nov.21
9-F	95/96	@ S-J	DS	RM	DS-19-19	Nov.17	Nov.18
9-G	99/102/31		T	RM		Nov.18	Nov.18
9-H	100/31/30		T	RM		Nov.18	Nov.21
9-I	100/30	3m W of EEOS	BO	RM		Nov.18	Nov.18
9-J	99/100/30		T	RM		Nov.18	Nov.18
9-K	99/30	1m W of 9-J	WS	RM	90° Turn for wedge	Nov.18	Nov.18
9-L	99/29/30		T	RM		Nov.18	Nov.18
9-M	29/28/99/96		T	RM	4 Panel intersection	Nov.20	Nov.20
9-O	27/28/97/96		T	RM	4 Panel intersection	Nov.20	Nov.20
9-P	97/27/101		T	RM		Nov.20	Nov.21
9-Q	97/98/101		T	RM		Nov.20	Nov.21
9-R	102/103/101		T	RM		Nov.24	Nov.24
9-S	102/103/104		T	RM		Nov.24	Nov.24
9-T	101/103	4m S of NEOS	WS	RM		Nov.20	Nov.21
9-N	96/28	3m W of EEOS	WS	RM		Nov.20	Nov.20

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RM **DATE:** Dec 6/19

GEOMEMBRANE DEFECT LOG

PROJECT #: **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

SHEET # 10 of 14

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
10-A	101/103	55m S of NCOS	WS	RM		Nov.20	Nov.20
10-B	103/101	2m S of NCOS/9R	DS	RM	DS-19-20	Nov.24	Nov.24
10-C	103/104	1m S of 9-S	WS	RM		Nov.24	Nov.24
10-D	103/104	21m S of 9-S	IO	RM		Nov.20	Nov.21
10-E	103/104	24m S of 9-S	IO	RM		Nov.20	Nov.21
10-F	103/104	34m S of 9-S	WS	RM	Frost Build up	Nov.20	Nov.21
10-G	94/95	1m N of 8-H	DS	RM	DS-19-17-A2	Nov.21	Nov.21
10-H	103/104	51m S. of 9-S	WS	RM		Nov.20	Nov.21
10-I	101/102/26	North Tie-in	T	RM		Nov.20	Nov.21
10-J	24/26/102	North Tie-in	T	RM		Nov.20	Nov.21
10-K	104/102/24	North Tie-in	T	RM		Nov.20	Nov.21
10-L	23/24/104	North Tie-in	T	RM		Nov.20	Nov.21
10-M	23/105/104/24	North Tie-in	T	RM		Nov.27	Nov.27
10-N	104/105	@ Top of SAT cost	CR	RM		Nov.20	Nov.21
10-O	104/105	23m N of SAT/SEOS	WS	RM		Nov.20	Nov.21
10-P	104/105	46m N of SAT/SEOS	WS	RM		Nov.25	Nov.25
10-Q	93/94	1m N of SAT	FTS	RM		Nov.21	Nov.21
10-R	104/105	30m S of NCOS/10m	DS	RM	DS-19-21	Nov.25	Nov.25
10-S	105/21		T	RM		N.Ob.	N.Ob.
10-T	106/107/19		T	RM		N.Ob.	N.Ob.

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RM **DATE:** Dec 6/19

N. Ob. defects had not been repaired/tested prior to Golder demobilizing from site.

GEOMEMBRANE DEFECT LOG

PROJECT #: 1790951 | PROJECT TITLE: WRF Pond Repair
OWNER: Baffinland | CONTRACTOR: Baffinland
LOCATION: Mary River | GEOSYNTHETICS: Layfield

SHEET # 11 of 14

DEFECT CODE	DEFECT LOCATION: SEAM, PANEL OR REPAIR #	DEFECT LOCATION: DEFECT LOCATION DESCRIPTION	DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
11-A	105/106	~12m S of NEOS	BO	RM		Nov 25	Nov 25
11-B	105/106/107		T	RM		Nov 20	N. Ob
11-C	96/28	[illegible] EEOS	VL/PT	RM	[illegible]	Nov 24	Nov 24
11-D	107/108/17		T	RM		N. Ob.	N. Ob.
11-E	108/109/17		T	RM		N. Ob.	N. Ob.
11-F	107/108	5m S of NEOS/WD	DS	RM	DS-19-22	N. Ob.	N. Ob.
11-G	108	@Crest 24m N of FS's	D	RM	Scratches	N. Ob.	N. Ob.
11-H	109/110/13		T	RM		N. Ob.	N. Ob.
11-I	109/13/16		T	RM		N. Ob.	N. Ob.
11-J	109/16	3m From WEOS	D	RM	Knife cut From Pull Back	N. Ob.	N. Ob.
11-K	107/19	3m E of 11-D	IO	RM		N. Ob.	N. Ob.
11-L	105/21	2m E of 10-S	SI/D	RM		N. Ob.	N. Ob.
11-M	105/21	1m W of 10-M	CO/EXT	RM		N. Ob.	N. Ob.
11-N	107/19/17	[illegible] 1.5m	T	RM		N. Ob.	N. Ob.
11-O	109/110/111		T	RM		N. Ob.	N. Ob.
11-P	110/111/12		T	RM		N. Ob.	N. Ob.
11-Q	110/111	1m E of WEOS	DS	RM	DS-19-23	N. Ob.	N. Ob.
11-R	105/21	@WEOS	FTS	RM	Speed change tests	Nov. 27	Nov. 27
11-S	112/110/1		T	RM		N. Ob.	N. Ob.
11-T	111/112	South Slope of Pond *	FM	RM		Nov. 26	Nov. 26

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
DS - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER

REVIEWED BY: RM **DATE:** Dec 6/2019

2018 * Exact Location Not Measured, No Ladder Access

GOLDER ASSOCIATES LTD.

N. Ob. defects had not been repaired/tested prior to Golder demobilizing from site.

GEOMEMBRANE DEFECT LOG

PROJECT # 1790951 | PROJECT TITLE: WRF Pond Repair
OWNER: Baffinland | CONTRACTOR: Baffinland
LOCATION: Mary River | GEOSYNTHETICS: Layfield

SHEET # 12 of 14

DEFECT CODE	DEFECT LOCATION: SEAM, PANEL OR REPAIR #	DEFECT LOCATION: DEFECT LOCATION DESCRIPTION	DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
12-A	111/112	@ Crest of SAT	BO	RM		Nov.26	Nov.26
12-B	111/109	@ Crest of SAT	BO	RM		Nov.26	Nov.26
12-C	112/113/		T	RM		N.Ob.	N.Ob.
12-D	113/114/112		T	RM		N.Ob.	N.Ob.
12-E	113/114/115		T	RM		Nov26	Nov26
12-F	112/113	25m S of NEOS	FM	RM		N. Ob.	N. Ob.
12-G	P105	1m W of 11-M	D	RM	Shovel	N. ob.	N. Ob.
12-H	P23	@ 10-M	D	RM	Survey Marker	Nov27	Nov27
12-I	114/112	@ Crest of SAT	BO	RM		Nov.26	Nov.26
12-J	112/113	1m N of 12-D	DS-24	RM	DS-19-24	N.Ob.	N.Ob.
12-K	113/115/3		T	RM		N.Ob.	N.Ob.
12-L	112/115	4m S of NEOS	WS	RM		N.Ob.	N.Ob.
12-M	113/115	12m S of NEOS	FTS	RM	Frost Buildup	N.Ob.	N.Ob.
12-N	115/116/5		T	RM		N.Ob.	N.Ob.
12-O	124/24	between 10-K and 10L	PT	RM		Nov.25	Nov.25
12-P	116/117/6		T	RM		N.Ob.	N.Ob.
12-Q	116/5/6		T	RM		N.Ob.	N.Ob.
12-R	115/5/3		T	RM		N.Ob.	N.Ob.
12-S	113/3/2		T	RM		N.Ob.	N.Ob.
12-T	112/1/2	South Slope of Pond *	BO/T	RM		N.Ob.	N.Ob.

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
INSTALLATION DAMAGE
S - # - DESTRUCTIVE TEST NUMBER

EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER

REVIEWED BY: RM

DATE: Dec 6/19

*Exact location not measured due to demob. constraints.

N. Ob. defects had not been repaired/tested prior to Golder demobilizing from site.

GEOMEMBRANE DEFECT LOG

PROJECT #: 1790951 | PROJECT TITLE: WRF Pond Repair
OWNER: Baffinland | CONTRACTOR: Baffinland
LOCATION: Mary River | GEOSYNTHETICS: Layfield

SHEET # 13 of 14

DEFECT CODE	DEFECT LOCATION: SEAM, PANEL OR REPAIR #	DEFECT LOCATION: DEFECT LOCATION DESCRIPTION	DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
13-A	112/1	2m W. of 11-S	WS	RM	Pulled out due to patch on trim	N.Ob.	N.Ob.
13-B	116/6	@ 12-Q	DS	RM	DS-19-25	N.Ob.	N.Ob.
13-C	117/118/8		T	RM		N.Ob.	N.Ob.
13-D	118/119/mm		T	RM		N.Ob.	N.Ob.
13-E	119/120/18		T	RM		N.Ob.	N.Ob.
13-F	119/120/mm		T	RM		N.Ob.	N.Ob.
13-G	119/121/7		T	RM		N.Ob.	N.Ob.
13-H	7	@ 13-G/S.E. of Panel	D	RM	Shovel Damage	N.Ob.	N.Ob.
13-I	118/8/9		T	RM		N.Ob.	N.Ob.
13-J	117/9/10		T	RM		N.Ob.	N.Ob.
13-K	117/10/6		T	RM		N.Ob.	N.Ob.
13-L	118/119	~3m N of 13E	DS	RM	DS-19-26	N.Ob.	N.Ob.
13-M	121/7	*	WS/BO	RM	"No Power"	N.Ob.	N.Ob.
13-N	121/7	*	CR	RM		N.Ob.	N.Ob.
13-O	112 121/7	*	WR	RM		N.Ob.	N.Ob.
13-P	121/7		T	RM	Tie-in to North Ext.	N.Ob.	N.Ob.
13-Q	121/122/123		T	RM		N.Ob.	N.Ob.
13-R	121/123/119		T	RM		N.Ob.	N.Ob.
13-S	122/123/H		T	RM		N.Ob.	N.Ob.
13-T	122/119/124		T	RM		N.Ob.	N.Ob.

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
D - INSTALLATION DAMAGE
S - # - DESTRUCTIVE TEST NUMBER
EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER

REVIEWED BY: RM

DATE: Dec 6/19

* Exact Location Not Measured Due to Demob. Constraints 2018

GOLDER ASSOCIATES LTD.

N. Ob. defects had not been repaired/tested prior to Golder demobilizing from site.

GEOMEMBRANE DEFECT LOG

PROJECT # **1790951** PROJECT TITLE: **WRF Pond Repair**
OWNER: **Baffinland** CONTRACTOR: **Baffinland**
LOCATION: **Mary River** GEOSYNTHETICS: **Layfield**

SHEET # 14 of 94

DEFECT CODE	DEFECT LOCATION		DEFECT TYPE	MON.	REMARKS	** REPAIR DATE	** TEST DATE
	SEAM, PANEL OR REPAIR #	DEFECT LOCATION DESCRIPTION					
14-A	120/126/124		T	RM		N.Ob	N.Ob
14-B	124/125/123		T	RM		N.Ob	N.Ob
14-C	127/124/125		T	RM		N.Ob	N.Ob

AD - ANIMAL RELATED DAMAGE
B - UNDISPERSED RESIN BEAD
BO - FUSION WELDER BURN
BS - BOOT/SKIRT FOR FML PENETRATION
CO - CHANGE OF OVERLAP
CR - CREASE
) - INSTALLATION DAMAGE
)S - # - DESTRUCTIVE TEST NUMBER

EE - EARTHWORK EQUIPMENT DAMAGE
EXT - EXTENSION
FM - FISHMOUNT
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 IRREGLARITY
SL - SLAG ON TEXTURED SHEET
T - THREE PANEL INTERSECTION
VL - VACUUM TEST LEAK
WR - WRINKLE
WS - WELDER RESTART
OTHER _____

REVIEWED BY: RM **DATE:** Dec 6/2019

N. Ob. defects had not been repaired/tested prior to Golder demobilizing from site.

APPENDIX J

REPAIR LOGS

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-1	10:00	MC
TX-2	15:00	MC

MACHINE NUMBER	037
DATE	Sept 19/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	1A	Sept 17	13:30	P	4m x 0.75	MC	RK	*Redid patch → Bubbles weld
2	1B	"	13:35	GW	0.1m	MC	RK	
3	1C	"	13:55	GW	0.5m	MC	RK	
4	1D	"	15:35	GW	0.3m	MC	RK	
5	1F	"	15:45	GW	0.3m	MC	RK	
6	1I	"	16:05	GW	0.3m	MC	RK	
7	1H	"	16:00	GW	0.1m	MC	RK	
8	1E	"	16:29	GW	0.3m	MC	RK	
9	1G	"	17:05	P	1m x 0,5	MC	RK	In NAT
10								
11								
12								
13								
14								
15								
16								
17								
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REVIEWED BY: RK DATE: Sept 19/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-4	10:15	FC
TX-5	1520	FC

MACHINE NUMBER	PX037
DATE	Sept 21/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	1J	Sept 21/19	11:35	GW	0.5m	FC	RK	T-Int
2	1K	"	11:50	GW	0.5m	FC	RK	T-Int
3	1R	"	11:52	GW	0.1m	FC	RK	
4	1N	"	11:55	GW	0.3m	FC	RK	
5	1P	"	12:20	P+GW	0.5×0.5	FC	RK	
6	1Q	"	12:35	GW	0.1m	FC	RK	
7	1O	"	12:19	GW	0.1m	FC	RK	×2
8	1S	"	12:40	GW	0.1m	FC	RK	
9	1L	"	12:50	GW	0.3m	FC	RK	
10	1T	"	13:45	P+GW	$0.3m^2+0.1$	FC	RK	
11	2A	"	14:41	GW	0.1m	FC	RK	VL Repair
12	1M	"	15:45	P	1.5m×0.5	FC	RK	
13								
14								
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16								
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25								

REVIEWED BY: RK DATE: Sept 21/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-6	14:38	MC

MACHINE NUMBER	PX 037
DATE	Sept 22/19
SHEET NUMBER	1 of

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	2B	Sept 22	15:16	GW	0.1m	MC	RK	
2	2C	"	15:15	GW	0.3m	"	"	
3	2D	"	15:25	GW	0.3m	"	"	
4	2E	"	15:26	GW	0.1m	"	"	
5	2F	"	16:09	P	1.5m x 0.5	"	"	
6	2H	"	16:18	GW	3, 0.1m	"	"	3 beads
7	2G	"	16:20	GW	2, 0.1m	"	"	2 beads
8	2I	"	17:20	P	1.5x0.5m	"	"	
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REVIEWED BY: Ray K. DATE: Sept 22/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-7	8:40	FC

MACHINE NUMBER	037
DATE	Sept 25/19
SHEET NUMBER	1 of

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	IN	Sept 25	F	T	0.3m	FC	RK	Failed repair, Contractor
2								to patch
3								
4								
5								
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25								

REVIEWED BY: RK DATE: Sept 27/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-8	11:25	JH
TX-9	15:30	JH

MACHINE NUMBER	038
DATE	Oct 8/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	3H	Oct 9/12	13:12	GW	1.5m	JH	RK	Contractor chose to Extend to NEOS
2	3F	"	13:21	GW	0.1m	"	RK	
3	3B	"	13:23	GW	0.1m	"	RK	
4	3I	"	14:00	P	1.5×0.5m	"	RK	DS-19-08, Bubbles in weld, Fixed
5	3G	"	16:26	P	1.5×0.3m	"	RK	DS-19-07
6	3N	"	16:53	P	2×0.5m	"	RK	
7	3E	"	17:20	P+GW	0.1 & 0.3²m	"	RK	
8	3D	"	17:26	GW	0.1m	"	RK	
9	3M	"	17:30	GW	0.1m	"	RK	
10	3K	"	17:31	GW	0.1m	"	RK	
11	3L *	"	17:22	P	0.3m	"	RK	
12	3C *	"	17:25	P	0.3m	"	RK	
13	3P	"	1525	GW	0.1m	"	RK	VL
14								
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REVIEWED BY: RK DATE: Oct 8/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-12	11:30	JH

MACHINE NUMBER	037
DATE	Oct 16/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	3T	Oct 16	12:40	P	0.5m²	JH	RK	
2	4A	"	12:53	P	0.5m²	"	RK	
3	35	"	13:18	P	0.5m²	"	RK	
4	3Q	"	13:35	GW	0.5m	"	RK	
5	30	"	13:50	GW	0.5m	"	RK	
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REVIEWED BY: RK DATE: Oct 19/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-14	1015	DW
TX-15	1540	DW

MACHINE NUMBER	037
DATE	Oct 26/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
✓ 1	5A	Oct 26	11:32	P	1.5m x 0.5m	DW	RK	DS-19-12 + Roll Dam. Bead
✓ 2	4N	"	12:10	GW	0.3m	"	RK	
✓ 3	4R	"	12:55	P+GW	0.3m² + 0.1m	"	RK	Beads on nearby scratches
* 4	4P	"	17:40	P+GW	0.3x0.5	"	RK	PARTIAL → Repaired part
5	↑ Fixed On	Oct 29	(Re-Patched)					at EOD w underground restarts
6								"Just to seal it"
7								*To Be Re-Patched*
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REVIEWED BY: RK DATE: Oct 29/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-16	08:08	DW
TX-17	13:06	DW

MACHINE NUMBER	038
DATE	Oct 27/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	5J	Oct 27	9:07	GW	0.3m	DW	RK	
2	5I	"	9:17	GW	0.3m	"	RK	*Had to repair two bubbles
3	5H	"	9:40	GW	0.3m	"	RK	↓
4	5K	"	9:50	GW	0.3m	"	RK	
5	5N (lot)	"	11:00	P	0.3m	"	RK	*Overgrind + bubbles
6	5G	"	11:05	GW	0.3m	"	RK	
7	5F	"	11:10	GW	0.3m	"	RK	
8	5E	"	11:15	GW	0.3m	"	RK	
9	5C	"	11:20	GW	0.3m	"	RK	
10	5D	"	11:27	GW	0.3m	"	RK	
11	4Q	"	11:30/	P	0.3m; 0.2m	"	RK	
12	5N	"	15:20	P	0.5m	"	RK	Fixed (Re-Patched)
13	5H, 5G	"	15:30	GW	2 x 0.1m	"	RK	Fixed overgrind spots
14	HL	"	16:30 to 17:15	P	1.5m x 1.5m	"	RK	
15								
16								
17								
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24								
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REVIEWED BY: RK DATE: Oct 29/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX 19	8:40	WB
TX-20	1510	MC

MACHINE NUMBER	038
DATE	Oct 28
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	5P (*)	Oct 28	930	GW	2 x 0.1m	WB	RK	1/2 of dam. repaired, rest on alone
2	4T	"	10:00	GW+P	0.15m² + 0.3m	WB	RK	• Technican accidentally separated pieces → patch
3	4S	"	11:25 e 11:45	GW x 2	0.2m, 0.2m	WB	RK	• IO & EE dam. on seam
4	4P(S)	"	12:46	GW	0.5m	WB	RK	• South end of wrinke (T-int)
5	5O	"	12:10	GW	0.3m	WB	RK	
6	5Q	"	16:00	P	1m x 1m	MC	N.Ob	DS-14 VT N. Ob.
7	5B	"	16:18	P	1m x 1m	MC	N.Ob	DS-13 ↓
8	5M	"	17:00	GW	0.3m	MC	N.Ob	
9								* Golder rep was down
10								at crusher pond
11								
12								
13								
14								
15								
16								
17								
18								
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REVIEWED BY: RK DATE: Oct 29/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-21	8:20	DW
TX-22	12:55	MC

MACHINE NUMBER	038
DATE	Oct 29/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	4P	Oct 29	9:30 11:30	P	0.75×5, 0.5²	DW	RK	*Two repair stages, inside
2	↓	"	~13:10	P	"	MC	RK	fishing tent.
3	5P	"	14:13	GW	2.5m	MC	RK	
4	4S	"	15:12	GW	0.1m	MC	RK	Fix on repair → overgrind
5	5T	"	15:20	GW	0.1m	MC	RK	
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REVIEWED BY: RK DATE: Oct 29/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-24	0830	FC
TX-26	1340	FC

MACHINE NUMBER	038
DATE	Nov 7/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
✓1	6D	Nov 7/19	09:10	GW	0.5m	FC	RK	Small Bubble
✓2	6E	"	10:20	P	0.5m	FC	RK	Re-Patched the Original
✓3	IO South of 5R	"	11:25	GW	0.1m	FC	RK	(Not Defect Coded, Found Today)
✓4	5S	"	11:30	GW	0.1m	FC	RK	
✓5	5L	"	14:14	P+GW	1m x 0.5m	FC	RK	Blocks re-Grew due to visible bubbles
✓6	6Q	"	15:15	P	0.3m x 0.3m	FC	RK	
✓7	6A	"	15:20	GW	0.1m	FC	RK	Couple of Bubbles re-grind+weld
✓8	6B	"	15:30	GW	0.3m	FC	RK	
F9	6F	"	15:45	GW	0.3m	FC	RK	Failed → Too Much Bubbling (See Photos)
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REVIEWED BY: RK DATE: Nov 7/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-31	14:25	WB

MACHINE NUMBER	036
DATE	Nov 10/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	7N	Nov 10	1549	GW	0.5m	WB	RK	
2	7M	"	1554	GW	0.5m	WB	RK	
3	7P	"	1626	P	0.3m	WB	RK	1648 seam in btwn 7M
4	7K	"	1710	P	0.3m	WB	RK	
5	7I	"	1720	GW	0.5m	WB	RK	
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REVIEWED BY: RK DATE: Nov 11/18

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-32	11:40	WB
TX-33	15:40	WB

MACHINE NUMBER	037
DATE	Nov 11
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	70	Nov 11/19	1348	P	2 × 0.5m	WB	RK	DS-19-16
2	7L	"	1348	GW	"	"	"	Same Repair ↑
3	7H	"	1436	P	1 × 0.5m	"	"	+ seam btwn 7H, 7I
4	7Q	"	16:55	P	0.3m	"	"	
5								
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REVIEWED BY: RK DATE: Nov 11/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX 34	0810	WB
TX-35	1215	WB

MACHINE NUMBER	037
DATE	Nov 12/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	7F	Nov 12	9:29	GW	0.3	WB	RK	
2	7E	"	9:30	GW	0.3m	WB	RK	
* 3	7G	"	9:50	GW	1.5m	WB	RK	Needs a patch, ridge developed
4	7D	"	11:06	GW	0.5m	WB	RK	
5	7C	"	11:07	GW	0.5m	WB	RK	
6	7B	"	11:59	P	2 x 0.75m	WB	RK	Same Patch
7	7A	"	↓	↓	↓	↓	↓	↓
8	3J	"	↓	↓	↓	↓	↓	↓
9	6S	"	13:25	P	2 x 0.75m	WB	RK	Same Patch
10	6T	"	↓	↓	↓	↓	↓	↓
11	8K	"	13:40	GW	0.1m (2)	WB	RK	
12	6P	"	13:51	GW	0.5m	WB	RK	
13	6O	"	13:56	GW	0.5m	WB	RK	
14	6N	"	1521	P	1.5 x 0.75m	WB	RK	Same Patch, Bubbles to
15	6M	"	↓	↓	↓	↓	↓	Fix
16	6L	"	1534	GW	0.3m	WB	RK	
17	6K	"	1539	GW	0.3m	WB	RK	
18	6J	"	1607	P	1.5 x 0.5m	WB	RK	Same Patch, to bead
19	6I	"	↓	↓	↓	↓	↓	western block again
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REVIEWED BY: RK DATE: Nov 12/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-36	0830	FC
TX-37	1250	FC

MACHINE NUMBER	037
DATE	Nov 13/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	6G	Nov 13	10:00	P	1.5x0.75m	FC	RK	Same Patch + 6G/6H seam
2	6H	"	↓	↓	↓	↓	↓	
3	5R	"	1400	P	0.5m	FC	RK	
4	6R	"	1648	P	3x0.75m	FC	RK	Same Patch
5	6C	"						
6	6F	"	↓	↓	↓	↓	↓	
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REVIEWED BY: RK DATE: Nov 13

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
Tx-38	8:35	FC
Tx-39	12:50	FC

MACHINE NUMBER	037
DATE	Nov. 14, 2019
SHEET NUMBER	of

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	8-H	Nov. 14	11:00	GW	0.5m	FC	RM	
2	8-G	"	11:05	GW	0.6m	FC	RM	
3	8-F	"	12:20	P	0.4x0.4	FC	RM	
4	8-E	"	14:10	GW	0.6m	FC	RM	
5	8-D	"	14:15	GW	0.6m	FC	RM	
6	8-A	"	15:20	P	0.3x0.3	FC	RM	
7	8-B	"	15:25	GW	0.5m	FC	RM	
8	7-T	"	16:10	GW	0.5m	FC	RM	
9	7-R	"	16:40	P	2mx0.8	FC	RM	
10	7-S	"	16:30	GW	0.5m	FC	RM	
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REVIEWED BY: RM DATE: Nov 22

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX 40	940	JH
TX 41	1400	JH

MACHINE NUMBER	037
DATE	Nov. 15/19
SHEET NUMBER	1 of

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	7-G	Nov 16	11:55	P	1.8x0.5	J-H	RM	
2	9-B	Nov. 15	12:15	P	0.3x0.4	J-H	RM	
3	7-J	"	11:00	GW	1.5 m	JH	RM	
4	8-C	"	16:33	GW	1 m	JH	RM	
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REVIEWED BY: RM DATE: Nov. 22

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
Tx 42	9:00	JH
		JH
Tx 44	14:10	JH

MACHINE NUMBER	64
DATE	Nov. 17/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	9-D	Nov.17	12:30	P	1.8x0.8	JH	RM	
2	9-F	Nov.17	15:18	P	1.8x0.6	JH	RM	DS-19-19
3	8-J	Nov.17	17:50	GW	1m	JH	RM	
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11	8-I	Nov.14	/	P	1.5x0.5	FC	RM	
12	9-A	Nov.14	/	P	1.5x0.5	FC	RM	
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REVIEWED BY: RM DATE: Nov.22

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
Tx-45	8:10	J-H
Tx-46	12:00	J-H
Tx-47	4:30	J-H

MACHINE NUMBER	37
DATE	Nov. 18/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	9-G	Nov. 18	9:52	GW	2m	JH	RM	
2	~~9-H~~							
3	9-H	Nov. 18	11:28	P	1m x 0.5m	JH	RM	
4	9-I	"	13:11	P	0.5 x 0.4	JH	RM	
5	9-J	"	13:30	GW	1m	JH	RM	
6	9-K	"	14:04	P	0.4 x 0.4	JH	RM	
7	9-L	"	15:59	P	0.4 x 0.5	JH	RM	
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REVIEWED BY: RM DATE: Nov. 22

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
Tx-48	8:30	JH
Tx-49	12:45	JH
Tx-50	15:45	JH

MACHINE NUMBER	37
DATE	Nov. 19/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	9-O	Nov. 19	9:45	GW	1.3 m	JH	RM	
2	9-N	Nov. 19	9:20	GW	1 m	JH	RM	
3	9-M	Nov. 18	17:25	GW	1.2 m	JH	RM	
4	9-P	Nov. 19	12:00	GW	2 m	JH	RM	
5	10-I	Nov. 19	15:10	GW	1 m	JH	RM	
6	10-J	Nov. 19	16:12	GW	1 m	JH	RM	
7	10-K	Nov. 19	16:40	GW	0.8 m	JH	RM	
8	10-L	Nov. 19	15:47	GW	0.8 m	JH	RM	
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REVIEWED BY: RM DATE: NOV. 22

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX-51	8:30	JH
TX-52	12:45	JH

MACHINE NUMBER	37
DATE	Nov. 20/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	10-F	Nov.20	12:15	GW	1.3m	JH	RM	
2	9-T	"	11:50	GW	1.2m	JH	RM	
3	9-Q	"	11:10	GW	3m	JH	RM	
4	9-C	"	9:38	GW	1.5m	JH	RM	
5	9-E	"	9:20	P	2x0.7m	JH	RM	
6	10-D	"	13:37	GW	0.8m	JH	RM	
7	10-E	"	13:29	GW	0.3m	JH	RM	
8	10-O	"	13:48	GW	0.5m	JH	RM	
9	11-B	"	14:36	P	0.8x0.8m	JH	RM	
10	10-N	"	16:23	GW	0.2m	JH	RM	
11	10-H	"	16:14	GW	0.3m	JH	RM	
12	10-A	"	16:44	GW	0.3m	JH	RM	
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REVIEWED BY: RM DATE: Nov.22

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
Tx-53	8:25	JH
Tx-54	12:45	JH

MACHINE NUMBER	037
DATE	Nov.21/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	10-G	Nov.21	14:14	P	2.2x0.5	JH	RM	
2	10-Q	Nov.21	15:50	P	0.8x0.5	JH	RM	
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REVIEWED BY: RM DATE: Nov.22

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX 55	7:50	JH

MACHINE NUMBER	037
DATE	Nov. 24/19
SHEET NUMBER	1 of

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	10-B	Nov 24	8:45	P	2 x 0.5 m	JH	RM	
2	9-R	" "	8:45	GW	1m	JH	RM	
3	9-S	" "	9:20	GW	1.5m	JH	RM	
4	10-C	" "	11:39	P	0.6 x 0.5 m	JH	RM	
5	11-C	" "	11:55	P	1 m x 0.5m	JH	RM	
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REVIEWED BY: RM DATE: Nov. 25/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX 58	16:30	JH
TX 59	12:40	JH

MACHINE NUMBER	037
DATE	Nov. 25/19
SHEET NUMBER	1 of

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	12-O	Nov25	9:58	P	0.8 x 0.4	JH	RM	
2	10-R	"	12:19	P	1.5 x 0.5	JH	RM	
3	10-P	"	12:15	GW	1m	JH	RM	
4	11-A	"	16:00	P	0.3 x 0.3m	JH	RM	
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REVIEWED BY: RM DATE: Dec 6/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**
PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX 60	8:15	JH
TX 62	13:50	JH

MACHINE NUMBER	037
DATE	Nov. 26/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	12-B	Nov. 26	9:55	P	1.5 x 0.15	JH	RM	
2	12-A	Nov. 26	11:27	P	0.3 x 0.3	JH	RM	
3	12-I	Nov. 26	12:10	P	0.3 x 0.3	JH	RM	
4	12-E	Nov. 26	17:04	GW	0.8 m	JH	RM	
5	11-T	Nov. 26	11:45	GW	0.2 m	JH	RM	
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REVIEWED BY: RM DATE: Dec 6/19

GEOMEMBRANE REPAIR LOG

PROJECT # **1790951**
OWNER: **Baffinland**
LOCATION: **Mary River**

PROJECT TITLE: **WRF Pond Repair**
CONTRACTOR: **Baffinland**
GEOSYNTHETICS: **Layfield**

PASSING TRIAL SEAMS		
NO.	TIME	TECH. ID
TX 63	8:15	JH
TX 64	12:20	JH

MACHINE NUMBER	037
DATE	Nov. 27/19
SHEET NUMBER	1 of 1

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

	DEFECT CODE	REPAIR DATE	APPROX. TIME	REPAIR TYPE	APPROX. DIMENSION	WELD TECH.	MON.	REMARKS
1	~~10-F~~	~~Nov 27~~	~~9:40~~	~~P~~	~~2x0.5m~~	~~JH~~	~~RM~~	*Already Repaired*
2	~~10-M~~	~~"~~	~~11:00~~	~~GW~~	~~2m~~	~~JH~~	~~RM~~	* *
3	12-H	"	"	P	0.4x0.4	JH	RM	
4	11-R	"	"	P	0.3x0.3	JH	RM	
5	10-M	"	11:00	GW	2m	JH	RM	
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REVIEWED BY: RM DATE: Dec 6/2019

APPENDIX K

GEOMEMBRANE CUT SHEET

US 800-277-8298
CAN 866-567-7112

Enviro Liner 6000x - Geomembrane

1. Product Description

Enviro Liner® 6000x is a specialized fortified polyolefin alloy designed for extended life in most geomembrane applications. It is manufactured with a special prime grade resin with advanced UV stabilizers and antioxidant additives. Enviro Liner® 6000x provides superior physical, mechanical, and endurance properties.

Enviro Liner® 6000x is fortified with the latest in Ultra Violet/Anti Oxidant (UV/AO) stabilization packages that provide exceptional UV resistance. Its design is for long term exposure applications and excellent chemical resistance. It is a great product choice for applications such as landfill caps, secondary containment of hydrocarbons, frac produced water, tailing dams, and wastewater containment. Enviro Liner® 6000x series is manufactured by Layfield in North America and is available in thicknesses of 20, 30, 40, 50, 60 and 80 mils (0.5, 0.75, 1.0, 1.25, 1.5, 2.0 mm). Enviro Liner® 6000 is also available in one or two-side textured, and a conductive version is available by special order.

Every step in producing an Enviro Liner® 6000x geomembrane is completed to our ISO 9000 quality management system. The Enviro Liner® 6000x series is tested for various key performance properties, and the results of these tests are recorded in this booklet. Both standard and extended warranties are available on approved applications for our Enviro Liner® 6000x series in thicknesses of 30, 40, 50, 60 and 80 mil (0.75, 1.0, 1.25, 1.5, 2.0 mm).**2.**

Technical Data

Materials information is on page 2.

3. Installation

Layfield's Enviro Liner® 6000x geomembrane is supplied in prefabricated panels with a thickness of 50 mil (1.25 mm) or less. These fabricated panels are deployed on-site, often covering a small project in a single piece. Custom rectangular panels, round tank liners, and other prefabricated shapes are available. On larger projects or with the use of thicker materials, skilled Layfield welding technicians can provide full installation services. Enviro Liner® uses wedge and



4. Availability and Cost

Available from Layfield or distributors. Call
425-254-1075 Pacific time
780-453-6731 Mountain time, or
905-761-9123 Eastern time

5. Manufactured By

Layfield USA Corp.
Layfield Canada Ltd.

6. Warranty

Products sold will meet Layfield's published specifications. Any extended warranty required by the buyer must be negotiated at the time of order. Extended warranties may be available on this product and may be at extra cost. Full warranty details are available from Layfield.

7. Maintenance

Geomembranes should be inspected at least once per year for damage, stress, or any other detrimental condition. The entire containment area should be visually inspected annually. Layfield provides geomembrane maintenance services on request.

8. Filing Systems

extrusion welding equipment to join panels in the field. On substantial projects, Enviro Liner® panels can be economically prefabricated up to 85 ft wide on our GeoFab5x welding unit. Installation guide specifications are available on our web site. After installation, if small welds or repairs are needed, there is a special Enviro Liner® welding gun available. This an inexpensive tool that can be used to make minor repairs until a crew is available.

9.

October 2017	Enviro Liner 6000x Material Properties					
Style	**ASTM**	**Enviro Liner® 6030x**	**Enviro Liner® 6040x**	**Enviro Liner® 6050x**	**Enviro Liner® 6060x**	**Enviro Liner® 6080x**
Thickness	D5199	30 mil 0.75 mm	40 mil 1.0 mm	50 mil 1.25 mm	60 mil 1.5 mm	80 mil 2.0 mm
Strength at Break[1]	D638	141 ppi 25 N/mm	180 ppi 31 N/mm	220 ppi 38 N/mm	255 ppi 44 N/mm	304 ppi 53 N/mm
Elongation at Break [2]	D638	1000%	1000%	1000%	1000%	800%
Trapezoidal Tear Resistance	D751	63 lbs 280 N	90 lbs 400 N	108 lbs 480 N	132 lbs 590 N	176 lbs 780 N
Puncture Resistance	D4833	53 lbs 236 N	67 lbs 298 N	75 lbs 333 N	90 lbs 400 N	112 lbs 500 N
Critical Cone Height[3]	D5514	2" 50 mm	2" 50 mm	2" 50 mm	2" 50 mm	-
Axi-Symmetric Break Strain[3]	D5617	50%	50%	80%	80%	50%
High Pressure Oxidative Induction Time (HPOIT)	D5885	>2000 minutes minimum for all products				
Oxidative Induction Time (OIT)	D3895	200 mins				
UV Resistance, 40,000 hrs Strength Retained (Black)[3,4]	D4329	90%				
Brine Resistance[3] HPOIT after 4,800 hrs at 90C	D1693 D5885	1,000 to 1,500 mins				
Oven Aging at 85C % retained after 90 days	D5721 D3895	35%				
Water Vapor Transmission[3,4]	D1249	$3x10^{-13}$ cm/sec				
Solvent Vapor Permeability[3,5]	D814	Fuel C (Toluene/Octane) < 4 g/m^2 •hr Diesel Fuel < 0.4 g/m^2 •hr				
Methane Permeability[3,4]	D1434	2.11×10^{-4} m^3/m^2 •day				
Coefficient of Expansion[3]	D696	$1.4x10^{-4}$ m/m/deg C				

Notes: [1] Tested with a machine speed of 20"/min, [2] Calculated from a gauge length of 38 mm(1.5"), [3] Performance Properties tested during formulation,[4] Tested on EL 6030, [5] Tested on EL 6040.

10.

Oct 2017	Enviro Liner® 6000x Minimum Shop Seam Strengths					
Style	**ASTM D6392**	**Enviro Liner® 6030x**	**Enviro Liner® 6040x**	**Enviro Liner® 6050x**	**Enviro Liner® 6060x**	**Enviro Liner® 6080x**
Heat Bonded Seam Strength	25.4 mm (1") Strip	45 ppi 7.8 N/mm	60 ppi 10.5 N/mm	75 ppi 13.1 N/mm	Not Shop Fabricated	Not Shop Fabricated
Peel Adhesion Strength (Wedge Welded)	25.4 mm (1") Strip	38 ppi 6.7 N/mm	50 ppi 8.8 N/mm	63 ppi 11.0 N/mm	Not Shop Fabricated	Not Shop Fabricated

11.

12 Oct 2016	Enviro Liner® 6000x Minimum Field Seam Strengths					
Style	**ASTM D6392**	**Enviro Liner® 6030x**	**Enviro Liner® 6040x**	**Enviro Liner® 6050x**	**Enviro Liner® 6060x**	**Enviro Liner® 6080x**
Heat Bonded Seam Strength Test Temp 23°C, 73°F	25.4 mm (1") Strip	45 ppi 7.8 N/mm	60 ppi 10.5 N/mm	75 ppi 13.1 N/mm	90 ppi 15.7 N/mm	120 ppi 21.0 N/mm
Peel Adhesion Strength (Extrusion Weld)	25.4 mm (1") Strip	34 ppi 6.0 N/mm	44 ppi 7.7 N/mm	57 ppi 10.0 N/mm	66 ppi 11.5 N/mm	88 ppi 15.4 N/mm

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LAYFIELD Canada

Project Completion QA/QC Package
for

Baffinland Iron Mines Corporation

Waste Rock Pond

Installation of LP7 Geotextile and EL6060 Geomembrane

Mary River, Nunavut

Prepared By: Mark Tymecki

Reviewed By: Mark Tymecki

Date Submitted: May 5th, 2020

Layfield Canada Ltd.

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for

Baffinland Iron Mines Corporation

Waste Rock Pond

Installation of LP7 Geotextile and EL6060 Geomembrane

Mary River, Nunavut

New Construction

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2)	Geomembrane Deployment Log	48 pgs.
3)	Geomembrane Seam & Test Log	54 pgs.
4)	Geomembrane Detail & Test Log	16 pgs.
5)	Geomembrane Destruct Log	6 pgs.
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Other Documents

1)	Inventory Log	4 pgs.
2)	Mill Certificates	15 pgs.

New Construction

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland crusher pond spillway installation
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: BIM
LOCATION: Baffinland Mary River crusher sediment pond

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☑ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☐ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☐Partial or ☑Complete): West end of pond, spillway
Dimensions of Subgrade Inspection: 9m x 7m
Anchor Trench Dimensions: N/A
Comments: Layfield adjusted subgrade as per Golder representatives instruction prior to liner installation

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Sept 13 2019
Signature: [signature]
Name: Will Brydon
Title: Liner Tech

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: Sept 17/19
Signature: [signature]
Name: Itamboose Meher
Title: Superintendent
Company: Baffinland

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Waste Rock Pond Liner Repairs and Relining
PROJECT NUMBER: CTOD1289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☒ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☐ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☒Partial or ☐Complete): See Reference Points
Dimensions of Subgrade Inspection: Approx. 3,200 m²
Anchor Trench Dimensions: 

Comments: Layfield Supervisor and BIM Representative Allan Knowlton Agreed that the termination of liner will be at the toe of slope on the temperary Berm to Allow ease of Removal of temperary Berm and Reduce waste & wrinkles for future tie-ins

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

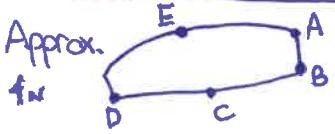
Date: September 15, 2019
Signature: [signature]
Name: Mike Cornwell
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 15 SEP 19
Signature: [signature]
Name: Allan Knowlton
Title: Project Manager
Company: BIM

Reference Points



A - N 7916811.6 E 562937.6
B - N 7916797.4 E 562937.4
C - N 7916767.9 E 562903.8
D - N 7916741.1 E 562854.5
E - N 7916784.3 E 562866.2

LS-10-QF-009
UTM Coordinates

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: WASTE ROCK POND LINER REPAIRS AND RE-LINING
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: B.I.M
LOCATION: W.R.P

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☒ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☐ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☒Partial or ☐Complete): APPROX 420 m²
Dimensions of Subgrade Inspection: SEE REFERENCE POINTS
Anchor Trench Dimensions: ~ -GEOMEMBRANE -SUB-GRADE TEMPORARY ANCHOR ON ROCK MIXED WITH FINES
Comments: GRANITE TYPE STONE MIXED WITH FINE MATERIAL (GNEISS / CRUSH 5) 19MM MINUS ROLLED/SOME LARGER PRESENT AND PACKED SMOOTH. LAYFIELD SUPERVISOR AND BIM REP AGREED TO TERMINATION POINT OF LINER MINOR DEVIATIONS IN SUBGRADE EQUAL TO OR LESS THAN AN INCH, LOOSE BEDDING MATERIAL/SURFACE ROCK PRESENT

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

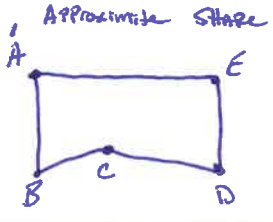
LAYFIELD REPRESENTATIVE:

Date: Sept 22. 2019
Signature:
Name: Mike Cantwell
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: SEPT 22/19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MANAGER
Company: B/M



A - N 7916811.7 E 562930.3
B - N 7916793.8 E 562931.9
C - N 7916799.5 E 562942.7
D - N 7916794.9 E 562977.3
E - N 7916807.7 E 562978.4

LS-10-QF-009

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: WRP Relining + Repairs
PROJECT NUMBER: CTOG 12789
OWNER/CONTRACTOR: BLM
LOCATION: Mary River, NU.

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☒ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☐ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☒Partial or ☐Complete): SEE reference Points to be added in the am
Dimensions of Subgrade Inspection: Locations to be added in the morning
Anchor Trench Dimensions: 1.4m lon x 1.4
Comments: Minor Deviations within Area with loose crush mixed with fine material Area was Rolled and vibrated Prior to Placement of Geotextile

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

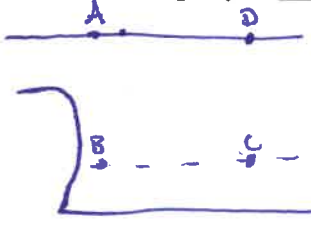
LAYFIELD REPRESENTATIVE:

Date: SEPt. 23, 2019
Signature:
Name: Mike Cantrell
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 23 SEP 19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MANAGER
Company: BLM



A - N 7916811.6 E 562986.4 ELEV 578.8
D - N 7916801.6 E 563042.7 ELEV 579.3
B - N 7916753.4 E 562979.2 ELEV 576.7
C - N 7916764.4 E 563036.2 ELEV - 577.1

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Waste Rock Pond Liner Repairs And Relining
PROJECT NUMBER: Ct001289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): Approx 38m wide x 44m long
Dimensions of Subgrade Inspection: Approx 1,672m² East of P.35
Anchor Trench Dimensions:
Comments: 3/4 in. crush material. Area unacceptable due to standing water, Ice/slush, Surface irregularities, Saturated granular subgrade, and ~~no smooth Drum used prior to Install.~~
Approx Reference Points below

LESS THAN 1" PER SPECS

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

AK

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

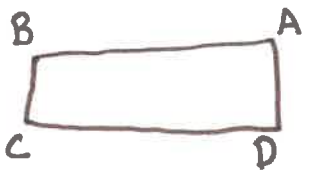
LAYFIELD REPRESENTATIVE:

Date: September/28/2019
Signature: Mathew Bourne.
Name: Mathew Bourne
Title: Supervisor.

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 28SEP19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MNGR.
Company: BIM



A- N7916800.8 E563001.7
B- N7916758.5 E562999.4
C- N7916763.9 E563036.4
D- N7916795.4 E563040.7

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond Liner
PROJECT NUMBER: CT 1289
OWNER/CONTRACTOR: B.I.M
LOCATION: waste Rock pond Mary River.

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): Approx 32 w x 38L East of P41
Dimensions of Subgrade Inspection: See Reference Points below
Anchor Trench Dimensions: 1.4 / 1.6m
Comments: Subgrade Suface is a frozen Mixture of Snow/ice & 19mm crush material / was Saturated prior to freezing. Spots of Soil irregularities (low spots/Ridges) unable to see since area filled with Snow & ice allowing for a smooth looking subgrade

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct/07/2019
Signature: Matthew Bourne
Name: Mathew Bourne
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/07
Signature: Roger Doyle
Name: Roger Doyle
Title: Project Manager
Company: BIM

[redacted]
C - N 7916763.9 E 563036.4
D - N 7916795.4 E 563040.7
A - N 7916795.8 E 563076.4
B - N 7916761.4 E 563071.0

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond Liner
PROJECT NUMBER: CT-001289
OWNER/CONTRACTOR: B.I.M.
LOCATION: Waste Rock Pond, B.I.M. near Mary River, N.U.

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑ Partial or ☐ Complete): According to Reference points by survey
Dimensions of Subgrade Inspection: 35m. x 25m East of panel 47 (approx.)
Anchor Trench Dimensions: 1.6 x 1.4 x 1.6m. approximately
Comments: Surface snow removed as much as possible but still not to bare soil, Frozen with snow in areas of irregularity. No real visual possible.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: October 11, 2019
Signature:
Name: Jonathan Hitchcock
Title: Installation Technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 11 OCT 19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MANAGER
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland waste rock pond liner
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: BIM
LOCATION: Waste Rock Pond, BIM near Mary River

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): As per survey. N 7916758.2 E 563106.4 EL 577.9 N 7916740.3 E 563107.9 EL 579.8 N 7916774.4 E 563124.9 EL 1579.8
Dimensions of Subgrade Inspection: N 7916701.5, E563122.8, 577.9
Anchor Trench Dimensions: 1.6 x 1.4 x 1.6 M approx
Comments: surface snow removed as much as possible, but not to bare soil. frozen with snow in irregularities, No real visual possible

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 17 2019
Signature: Will B
Name: Will Brydon
Title: installation technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/17
Signature: Roger Doyle for A Knowlton
Name: ROGER DOYLE FOR A. KNOWLTON
Title: Project MANAGER
Company: BLM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond, B.I.M near Mary River. N.V

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): prior survey points to East end of pond
Dimensions of Subgrade Inspection: See survey points.
Anchor Trench Dimensions: 6M x 1M x 6M
Comments: Some surface snow removed, area not to bare soil. Frozen snow in irregularities visual inspection not possible, WATER Seepage on South Slope AND IN EAST AT. NOTIFIED Roger Doyle AND SENT Pictures to MAYFIELD PM

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct-19-2019
Signature: [signature]
Name: Mike Cantwell
Title: Supervisor

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: Oct-19-2019
Signature: Roger Doyle
Name: Roger Doyle
Title: Project Man.
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT00 1289
OWNER/CONTRACTOR: B.I.M
LOCATION: Waste Rock Pond, B.I.M, near Mary River Nunavut

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

☐ *found it to be an acceptable surface on which to install geomembrane; OR*

☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): as per survey. A N 7916738.6 E 563143.7 B N 7916730.4 E 56313.9

Dimensions of Subgrade Inspection: C N 7916742 E 563108.5 D N 7916755.3 E 563113.4

Anchor Trench Dimensions:

Comments: frozen snow covered subgrade consisting of ice, 19mm crush, and snow. Large deviations found, compacted snow and ice makes visual inspection of underlying material impossible.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 25 2019
Signature: Will Brydon
Name: 10:28
Title: Installation Technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/25
Signature: Roger Doyle for A. Knowlton
Name: Roger Doyle for A.K.
Title: Project Manager
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: BIM
LOCATION: Mary River, Waste Rock Pond, B.I.M., NU

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

☐ *found it to be an acceptable surface on which to install geomembrane; OR*

☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑ Partial or ☐ Complete): as per survey C N 7916742 E563108.5 D N7916755.3 E563113.4
Dimensions of Subgrade Inspection: E N 7916760.6 E563089.9 F N7916747.5 E563090.6
Anchor Trench Dimensions:
Comments: Frozen snow covered subgrade consisting of ice, snow, and lamm crush. Large deviations found, compacted snow makes visual inspection impossible. Anchor trench floor varies from 1.0-2.0 m and transition from north AT detail to south AT detail approved by Golder.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 26 2019
Signature:
Name: Will Brydon
Title: Installation Technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/27
Signature: Roger Doyle for A. Knowlton
Name: Roger Doyle for A. K
Title: Project Manager
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION
OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT00 1289
OWNER/CONTRACTOR: B.I.M
LOCATION: Mary River, Waste Rock Pond, B.I.M, NV

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): As per survey H- N 7916762.3 E 563030.8 E- N 7916760.6 E 563089.9
Dimensions of Subgrade Inspection: G- N 7916747.2 E 563032 F- N 7916747.5 E 563090.6
Anchor Trench Dimensions:
Comments: frozen snow covered subgrade consisting of ice, snow, 19mm crush, Large deviations found, compacted snow makes visual inspection impossible, Loose crush spilled on to slope 5. Anchor trench floor varies in size. 1-2 M. Loose Material on top of Crown)

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: Oct 28 2019
Signature: Will B
Name: Will Brydon
Title: installation technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 2019/10/28
Signature: Roger Doyle
Name: Roger Doyle
Title: Project Manage
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF INSPECTION OF SOIL SUBGRADE SURFACE

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT001289
OWNER/CONTRACTOR: BIM
LOCATION: Mary River, Waste Rock Pond, B.I.M. NV

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the soil subgrade surface described below, and:

- ☐ *found it to be an acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐ Complete): as per survey
H N 7916762.3 E 563030
J N 7916737.9 E 562991.4
Dimensions of Subgrade Inspection:
G N 7916747.2 E 563032.8
I N 7916753.3 E 562979.3
Anchor Trench Dimensions: 3-4m x 2m
Comments: Subgrade consists of ice, snow, and 19mm crush. Large deviations found, Compacted ice/snow makes visual inspection impossible.

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

The soil subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: NOV 9 2019
Signature: Will B
Name: Will Brydon
Title: installation technician

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the soil subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 9NOV19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MNGR
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF SUBGRADE SURFACE INSPECTION

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT 001289
OWNER/CONTRACTOR: BIM
LOCATION: Mary River Waste Rock Pond, BIM NV

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the subgrade surface described below, and:

- ☐ *found it to be an Acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete):
Dimensions of Subgrade Inspection: A 7916795.4 562930.8 576.0 B 7916795.5 562[illegible] 574.[illegible]
TD ~~**Anchor Trench Dimensions:**~~ [illegible]16754.0 562886.4 574.0 D7916704.9 562904.2 572.8 E 79[illegible] 5 [illegible]
Comments: Subgrade is unacceptable as per the project specifications and inability for representatives to inspect the surface as it is frozen and covered by snow.

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

The subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: 11/13/2019
Signature: [signature]
Name: JM DU PLESSIS
Title: PROJECT SUPERVISOR

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: NOV 13, 20[illegible]
Signature: [signature]
Name: JAAN PEDJASE
Title: PROJECT MANAGER
Company: BIM

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF SUBGRADE SURFACE INSPECTION

PROJECT NAME: Baffinland Waste Rock Pond
PROJECT NUMBER: CT 001289
OWNER/CONTRACTOR: BIM
LOCATION: Mary River Waste Rock Pond. BIM NV

I, the undersigned, a duly appointed representative of Layfield Canada Ltd. (Layfield), have visually observed the subgrade surface described below, and:

- ☐ *found it to be an Acceptable surface on which to install geomembrane; OR*
- ☑ *found it to be an Unacceptable surface on which to install geomembrane*

Area Inspected (☑Partial or ☐Complete): A562821.278.7916713.788.579.471
Dimensions of Subgrade Inspection: B562833.274.7916763.316.579.390
Anchor Trench Dimensions: C562863.020,7916747.858,573.583, D562862.526,7916686.230,5
Comments: Subgrade is unacceptable as per the project specifications and inability for representatives to inspect the surface as it is frozen and covered by snow.
E.562895.862,7916591.901 F562888.540,7916529,286 G562871.890,7916524.776

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

The subgrade inspected 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 and remedial work to correct the resulting deficiencies, will be the direct responsibility of the General Contractor.

LAYFIELD REPRESENTATIVE:

Date: 11/27/2019
Signature:
Name: J M DU PLESSIS
Title: PROJECT SUPERVISOR

OWNERS REPRESENTATIVE:

I, the undersigned, a duly appointed representative of the Owner, hereby understand the subgrade surface inspection described above and authorize Layfield to proceed with deployment of geosynthetics on the subgrade provided.

Date: 30 NOV 19
Signature:
Name: ALLAN KNOWLTON
Title: PROJECT MANAGER
Company: BIM

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/09/18

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
1	E007404-004	43	6.8	2	good	WB	Frozen ground compacted crush
2	E007404-004	42	6.8	2	good	WB	Frozen ground compacted crush
3	E007404-004	42	6.8	2	good	WB	Frozen ground compacted crush
4	E007404-004	25	6.8	2	good	WB	Frozen ground compacted crush
5	E007404-024	14	6.8	2	good	WB	Frozen ground compacted crush
6	E007404-024	39	6.8	2	good	WB	Frozen ground compacted crush
7	E007404-024	30	6.8	2	good	WB	Frozen ground compacted crush
8	E007404-024	4	6.8	2	good	WB	Frozen ground compacted crush
9	E007404-024	29	6.8	2	good	WB	Frozen ground compacted crush
10	E007404-024	29	6.8	2	good	WB	Frozen ground compacted crush
11	E007404-028	22	6.8	2	good	WB	Frozen ground compacted crush
12	E007404-028	12	13	2	good	WB	Frozen ground compacted crush

TOTAL PAGE AREA 2325.2 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 1 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/09/21

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
13	E007404-028	43	6.8	7	good	MC	Frozen ground compacted crush
14	E007404-028	33	6.8	7	good	MC	Frozen ground compacted crush
15	E007404-028	18	6.8	7	good	MC	Frozen ground compacted crush
16	E007404-028	38	6.8	7	good	MC	Frozen ground compacted crush
17	E007404-028	5	6.8	7	good	MC	Frozen ground compacted crush
18	E007404-012	33	6.8	7	good	MC	Frozen ground compacted crush
19	E007404-012	30	6.8	7	good	MC	Frozen ground compacted crush
20	E007404-028	4	2	7	good	MC	Frozen ground compacted crush

TOTAL PAGE AREA 1368 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 2 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/09/22

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
21	E007404-012	5.5	6.8	6	good	MC	Frozen ground compacted crush
22	E007404-012	20	6.8	6	good	MC	Frozen ground compacted crush
23	E007404-012	20.5	6.8	6	good	MC	Frozen ground compacted crush
24	E007404-012	17	6.8	6	good	MC	Frozen ground compacted crush
25	E007404-012	7	1.5	6	good	MC	Frozen ground compacted crush
26	E007404-012	17	6.8	6	good	MC	Frozen ground compacted crush
27	E007404-012	17.5	6.8	6	good	MC	Frozen ground compacted crush
28	E007404-036	17.5	6.8	6	good	MC	Frozen ground compacted crush
29	E007404-036	17.5	6.8	6	good	MC	Frozen ground compacted crush

TOTAL PAGE AREA 911.5 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 3 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/09/24

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
30	E007404-036	18	6.8	1	good	MC	Frozen ground compacted crush
31	E007404-036	64.5	6.8	1	good	MC	Frozen ground compacted crush
32	E007404-036	8.5	6.8	1	good	MC	Frozen ground compacted crush
33	E007404-036	31	6.8	1	good	MC	Frozen ground compacted crush
34	E007404-019	23	6.8	1	good	MC	Frozen ground compacted crush
35	E007404-019	59.5	6.8	1	good	MC	Frozen ground compacted crush

TOTAL PAGE AREA 1390.6 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 4 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/02

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
36	E007404-019	6.2	6.8	0	good	MB	Saturated 3/4 Crush
37	E007404-019	50.8	6.8	0	good	MB	Saturated 3/4 Crush
38	E007404-008	54.9	6.8	0	good	MB	Saturated 3/4 Crush
39	E007404-008	52.4	6.8	-6	good	MB	Frozen snow/ice

TOTAL PAGE AREA 1117.24 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 5 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/06

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
40	E007404-029	49	6.8	-8	good	MB	Frozen snow/ice

TOTAL PAGE AREA 333.2 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 6 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/07

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
41	E007404-029	47.4	6.8	-12	good	MB	Frozen snow/ice
42	E007404-029	43.9	6.8	-12	good	MB	Frozen snow/ice
43	E007404-008	43.5	6.8	-9	good	MB	Frozen snow/ice
44	E007404-027	43	6.8	-9	good	MB	Frozen snow/ice

TOTAL PAGE AREA 1209.04 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 7 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/08

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
45	E007404-027	41.7	6.8	-6	good	MB	Frozen snow/ice
46	E007404-027	40	6.8	-6	good	MB	Frozen snow/ice

TOTAL PAGE AREA 555.56 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 8 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/11

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
47	E007404-027	24.8	6.8	-6	good	WB	Frozen snow/ice
48	E007404-020	11.2	6.8	-6	good	WB	Frozen snow/ice

TOTAL PAGE AREA 244.8 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 9 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/12

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
49	E007404-020	36	6.8	-8	good	WB	Frozen snow/ice

TOTAL PAGE AREA 244.8 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 10 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/13

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
50	E007404-020	36.4	6.8	-12	good	WB	Frozen snow/ice
51	E007404-020	36.9	6.8	-12	good	WB	Frozen snow/ice

TOTAL PAGE AREA 498.44 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 11 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/16

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
52	E007404-020	37	6.8	-12	good	WB	Frozen snow/ice
53	E007404-002	38	6.8	-12	good	WB	Frozen snow/ice

TOTAL PAGE AREA 510 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 12 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/17

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
54	E007404-002	33	6.8	-12	good	WB	Frozen snow/ice
55	E007404-002	32	6.8	-12	good	WB	Frozen snow/ice
56	E007404-002	17.4	6.8	-12	good	WB	Frozen snow/ice
57	E007404-002	33	6.8	-12	good	WB	Frozen snow/ice

TOTAL PAGE AREA 784.72 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 13 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/19

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
58	E007404-002	14.2	6.8	-6	good	WB	Frozen snow/ice
59	E007404-030	18	6.8	-6	good	WB	Frozen snow/ice
60	E007404-030	28	6.8	-6	good	WB	Frozen snow/ice
61	E007404-030	29	6.8	-6	good	WB	Frozen snow/ice
62	E007404-030	18.5	6.8	-6	good	WB	Frozen snow/ice
63	E007404-030	17.4	6.8	-6	good	WB	Frozen snow/ice
64	E007404-030	15.8	6.8	-6	good	WB	Frozen snow/ice
65	E007404-030	16	6.8	-6	good	WB	Frozen snow/ice

TOTAL PAGE AREA 1066.92 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 14 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/25

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
66	E007404-018	18.3	6.8	-9	good	WB	Frozen snow/ice
67	E007404-018	18.3	6.8	-9	good	WB	Frozen snow/ice
68	E007404-018	7	6.8	-9	good	WB	Frozen snow/ice
69	E007404-018	12.5	6.8	-9	good	WB	Frozen snow/ice
70	E007404-018	12	6.8	-9	good	WB	Frozen snow/ice

TOTAL PAGE AREA 463.08 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 15 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/26

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
71	E007404-018	18.5	6.8	-10	good	WB	Frozen snow/ice
72	E007404-018	18	6.8	-10	good	WB	Frozen snow/ice
73	E007404-018	17.8	6.8	-10	good	WB	Frozen snow/ice
74	E007404-007	17	6.8	-10	good	WB	Frozen snow/ice

TOTAL PAGE AREA 484.84 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 16 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/10/28

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
75	E007404-007	16	6.8	-5	good	WB	Frozen snow/ice

TOTAL PAGE AREA 108.8 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 17 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/05

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
76	E007404-007	15	6.8	-23	good	WB	Frozen snow/ice
77	E007404-007	8	6.8	-23	good	WB	Frozen snow/ice
78	E007404-007	15	6.8	-23	good	WB	Frozen snow/ice

TOTAL PAGE AREA 258.4 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 18 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/06

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
79	E007404-007	15.5	6.8	-23	good	WB	Frozen snow/ice
80	E007404-007	17.5	6.8	-23	good	WB	Frozen snow/ice
81	E007404-007	17.5	6.8	-23	good	WB	Frozen snow/ice

TOTAL PAGE AREA 343.4 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 19 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/07

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
82	E007404-007	18	6.8	-14	good	WB	Frozen snow/ice
83	E007404-007	18.5	6.8	-14	good	WB	Frozen snow/ice

TOTAL PAGE AREA 248.2 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 20 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/08

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
84	E007404-018	19	6.8	-20	good	WB	Frozen snow/ice
85	E007404-018	18	6.8	-20	good	WB	Frozen snow/ice

TOTAL PAGE AREA 251.6 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 21 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/09

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
86	E007404-034	18.5	6.8	-28	good	WB	Frozen snow/ice
87	E007404-034	9.5	6.8	-28	good	WB	Frozen snow/ice
88	E007404-034	18.5	6.8	-28	good	WB	Frozen snow/ice
89	E007404-034	18.5	6.8	-28	good	WB	Frozen snow/ice
90	E007404-034	19.4	6.8	-28	good	WB	Frozen snow/ice

TOTAL PAGE AREA 573.92 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 22 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/11

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
91	E007404-034	19.5	6.8	-20	good	TD	Frozen snow/ice
92	E007404-034	9	1	-20	good	TD	Frozen snow/ice
93	E007404-034	19.5	6.8	-20	good	TD	Frozen snow/ice
94	E007404-005	19.5	6.8	-20	good	TD	Frozen snow/ice
95	E007404-005	19.5	6.8	-20	good	TD	Frozen snow/ice

TOTAL PAGE AREA 539.4 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 23 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/15

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
96	E007404-005	72	6.8	-28	good	TD	Frozen snow/ice
97	E007404-005	45	6.8	-28	good	TD	Frozen snow/ice
98	E007404-005	27	6.8	-28	good	TD	Frozen snow/ice

TOTAL PAGE AREA 979.2 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 24 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/16

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
99	E007404-023	45	6.8	-34	good	TD	Frozen snow/ice
100	E007404-023	19	5	-34	good	TD	Frozen snow/ice

TOTAL PAGE AREA 401 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 25 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/17

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
101	E007404-023	74	6.8	-33	good	TD	Frozen snow/ice
102	E007404-023	9	6.8	-33	good	TD	Frozen snow/ice
103	E007404-014	64	6.8	-33	good	TD	Frozen snow/ice
104	E007404-014	74	6.8	-33	good	TD	Frozen snow/ice

TOTAL PAGE AREA 1502.8 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 26 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/18

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
105	E007404-003	78	6.8	-27	good	TD	Frozen snow/ice

TOTAL PAGE AREA 530.4 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 27 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/19

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
106	E007404-031	26	4.8	-24	good	TD	Frozen snow/ice
107	E007404-031	71	6.8	-24	good	TD	Frozen snow/ice

TOTAL PAGE AREA 607.6 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 28 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/20

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
108	E007404-031	70	6.8	-32	good	TD	Frozen snow/ice
109	E007404-003	68	6.8	-32	good	TD	Frozen snow/ice

TOTAL PAGE AREA 938.4 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 29 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/24

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
110	E007404-003	6.5	6.8	-22	good	TD	Frozen snow/ice
111	E007404-017	54	6.8	-22	good	TD	Frozen snow/ice
112	E007404-017	58	6.8	-22	good	TD	Frozen snow/ice
113	E007404-017	32	6.8	-22	good	TD	Frozen snow/ice
114	E007404-011	27	6.8	-22	good	TD	Frozen snow/ice

TOTAL PAGE AREA 1207 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 30 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/25

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
115	E007404-011	59	6.8	-28	good	TD	Frozen snow/ice
116	E007404-011	59	6.8	-28	good	TD	Frozen snow/ice

TOTAL PAGE AREA 802.4 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 31 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/26

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
117	E007404-006	60	6.8	-20	good	TD	Frozen snow/ice
118	E007404-006	60	6.8	-20	good	TD	Frozen snow/ice
119	E007404-006	23	6.8	-20	good	TD	Frozen snow/ice
120	E007404-025	37	6.8	-20	good	TD	Frozen snow/ice

TOTAL PAGE AREA 1224 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 32 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/27

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
121	E007404-025	44	6.8	-28	good	TD	Frozen snow/ice
122	E007404-025	8.5	6.8	-28	good	TD	Frozen snow/ice
123	E007404-025	44	6.8	-28	good	TD	Frozen snow/ice
124	E007404-025	19.5	6.8	-28	good	TD	Frozen snow/ice
125	E007404-035	38	6.8	-28	good	TD	Frozen snow/ice
126	E007404-025	8.5	6.8	-28	good	TD	Frozen snow/ice
127	E007404-035	54	6.8	-28	good	TD	Frozen snow/ice
128	E007404-035	21.5	6.8	-28	good	MC	Frozen snow/ice

TOTAL PAGE AREA 1618.4 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 33 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/28

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
129	E007404-035	36	6.8	-25	good	MC	Frozen snow/ice
130	E007404-035	5	2	-25	good	MC	Frozen snow/ice
131	E007404-032	40	6.8	-25	Fork holes	MC	Frozen snow/ice
132	E007404-035	18.3	1.5	-25	good	MC	Frozen snow/ice

TOTAL PAGE AREA 554.25 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 34 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/11/30

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
133	E007404-032	58	6.8	-18	Good	MC	Frozen snow/ice
134	E007404-032	56	6.8	-18	Good	MC	Frozen snow/ice
135	E007404-022	19	6.8	-18	Good	MC	Frozen snow/ice
136	E007404-022	37	6.8	-18	Good	MC	Frozen snow/ice
137	E007404-022	41	6.8	-18	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 1434.8 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 35 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/01

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
138	E007404-022	41	6.8	-30	Good	MC	Frozen snow/ice
139	E007404-022	7.1	6.8	-30	Good	MC	Frozen snow/ice
140	E007404-001	35.5	6.8	-30	Good	MC	Frozen snow/ice
141	E007404-001	27.5	6.8	-30	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 755.48 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 36 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/02

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
142	E007404-001	18	6.8	-36	Good	MC	Frozen snow/ice
143	E007404-001	13	6.8	-36	Good	MC	Frozen snow/ice
144	E007404-001	18	6.8	-36	Good	MC	Frozen snow/ice
145	E007404-001	20	6.8	-36	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 469.2 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 37 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/03

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
146	E007404-001	23	6.8	-44	Good	MC	Frozen snow/ice
147	E007404-001	14	6.7	-44	Good	MC	Frozen snow/ice
148	E007404-009	13	5.5	-44	Good	MC	Frozen snow/ice
149	E007404-009	46	6.8	-44	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 634.5 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 38 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/04

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
150	E007404-009	45	6.8	-45	Good	MC	Frozen snow/ice
151	E007404-009	44	6.8	-45	Good	MC	Frozen snow/ice
152	E007404-010	43	6.8	-45	Good	MC	Frozen snow/ice
153	E007404-010	43	6.8	-45	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 1190 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 39 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/05

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
154	E007404-010	42	6.8	-38	Good	MC	Frozen snow/ice
155	E007404-010	25	6.8	-38	Good	MC	Frozen snow/ice
156	E007404-033	17	6.8	-38	Good	MC	Frozen snow/ice
157	E007404-033	38	6.8	-38	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 829.6 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 40 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/07

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
158	E007404-033	41	6.8	-38	Good	MC	Frozen snow/ice
159	E007404-033	41.5	6.8	-38	Good	MC	Frozen snow/ice
160	E007404-033	21.7	6.8	-38	Good	MC	Frozen snow/ice
161	E0008982-007	21	6.8	-38	Good	MC	Frozen snow/ice
162	E0008982-007	43	6.8	-38	Good	MC	Frozen snow/ice
163	E0008982-007	43	6.8	-38	Good	MC	Frozen snow/ice
164	E0008982-007	42	6.8	-38	Good	MC	Frozen snow/ice
165	E007404-NN1	41	6.8	-38	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 2000.56 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 41 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/08

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
166	E007404-NN1	41	6.8	-33	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 278.8 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 42 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/10

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
167	E007404-NN1	35.5	6.8	-25	Good	MC	Frozen snow/ice
168	E007404-NN1	31.2	6.8	-25	Good	MC	Frozen snow/ice
169	E007404-015	29.1	6.8	-25	Good	MC	Frozen snow/ice
170	E007404-015	26	6.8	-25	Good	MC	Frozen snow/ice
171	E007404-015	23	6.8	-25	Good	MC	Frozen snow/ice
172	E007404-015	20.5	6.8	-25	Good	MC	Frozen snow/ice
173	E007404-015	20	6.8	-25	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 1260.04 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 43 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/12

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
174	E0008982-072	14.5	6.8	-28	Good	MC	Frozen snow/ice
175	E0008982-072	14.5	6.8	-28	Good	MC	Frozen snow/ice
176	E0008982-072	14.5	6.8	-28	Good	MC	Frozen snow/ice
177	E0008982-072	14.5	6.8	-28	Good	MC	Frozen snow/ice
178	E0008982-072	14.5	6.8	-28	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 493 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 44 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/16

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
179	E0008982-072	14.5	6.8	-25	Good	MC	Frozen snow/ice
180	E0008982-072	14.5	6.8	-25	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 197.2 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 45 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2019/12/17

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
181	E0008982-072	14.5	6.8	-25	Good	MC	Frozen snow/ice
182	E0008982-072	14.5	6.8	-25	Good	MC	Frozen snow/ice
183	E0008982-072	14.5	6.8	-25	Good	MC	Frozen snow/ice
184	E0008982-071	14.5	6.8	-25	Good	MC	Frozen snow/ice
185	E0008982-071	14.5	6.8	-25	Good	MC	Frozen snow/ice
186	E0008982-071	14.5	6.8	-25	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 591.6 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 46 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2020/01/16

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
187	E0008982-071	14.5	6.8	-30	Good	MC	Frozen snow/ice
188	E0008982-071	14.5	6.8	-30	Good	MC	Frozen snow/ice
189	E0008982-071	14.5	6.8	-30	Good	MC	Frozen snow/ice
190	E0008982-071	14.5	6.8	-30	Good	MC	Frozen snow/ice
191	E0008982-071	14.5	6.8	-30	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 493 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 47 of 48

GEOMEMBRANE DEPLOYMENT LOG

PROJECT NUMBER CT001289
PROJECT TITLE WRP Liner
AREA / LAYER LP7, EL6060
DEPLOYMENT DATE 2020/01/17

PANEL NUMBER	ROLL NUMBER	LENGTH (m)	WIDTH (m)	AIR TEMP °C	PANEL CONDITION	CHECKED BY	SUBGRADE CONDITION
192	E0008982-071	14	6.8	-32	Good	MC	Frozen snow/ice
193	E0008982-059	14	6.8	-32	Good	MC	Frozen snow/ice
194	E0008982-059	14	6.8	-32	Good	MC	Frozen snow/ice
195	E0008982-059	14	6.8	-32	Good	MC	Frozen snow/ice
196	E0008982-059	14	6.8	-32	Good	MC	Frozen snow/ice
197	E0008982-059	14	6.8	-32	Good	MC	Frozen snow/ice
198	E0008982-059	14	6.8	-32	Good	MC	Frozen snow/ice
199	E0008982-059	14	3.4	-32	Good	MC	Frozen snow/ice

TOTAL PAGE AREA 714 m²

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 48 of 48

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/09/18

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	745	WB	2	60.0%	454	107	111	109	108	112	103	110	110	108	100	113	122	114	122	122	MC	
2	PW069	800	GD	2	60.0%	454	103	107	102	102	106	104	104	106	104	102	106	109	111	116	113	MC	
3	PW064	1200	WB	2	60.0%	454	106	104	106	100	106	106	102	100	104	99	111	113	111	114	112	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
1 / 2	SEOS	1A	842	2	WB	PW064	29.0		AP+PS	19/9/19	1543	1548	40	39	P	GD
1 / 2	1A	NEOS	849	2	WB	PW064	14.0		AP+PS	19/9/19	1605	1610	40	40	P	GD
2 / 3	NEOS	SEOS	919	2	WB	PW064	42.0		AP+PS	19/9/19	1613	1618	40	39	P	GD
3 / 4	NEOS	SEOS	950	2	GD	PW064	25.0		AP+PS	19/9/19	1630	1635	40	38	P	GD
4 / 5	WEOS	EEOS	1000	2	WB	PW064	6.8		AP+PS	19/9/19	1700	1715	40	39	P	GD
3 / 5	NEOS	SEOS	1010	2	GD	PW069	14.0		AP+PS	19/9/19	1645	1650	40	38	P	GD
5 / 6	SEOS	NEOS	1050	2	GD	PW069	14.0		AP+PS	19/9/19	1700	1705	40	37	P	GD
4 / 6	SEOS	NEOS	1055	2	GD	PW069	25.0		AP+PS	19/9/19	1717	1722	40	39	P	GD
9 / 8	SEOS	WEOS	1235	2	GD	PW069	6.8		AP+PS	20/9/19	827	832	38	36	P	GD
7 / 9	SEOS	NEOS	1304	2	WB	PW064	30.0		AP+PS	20/9/19	832	837	40	38	P	GD
8 / 7	NEOS	SEOS	1329	2	WB	PW064	4.0		AP+PS	20/9/19	850	855	40	38	P	GD
9 / 8	SEOS	NEOS	1329	2	WB	PW064	4.0		AP+PS	20/9/19	827	832	40	38	P	GD
9 / 10	SEOS	NEOS	1330	2	WB	PW064	29.0	DS-1	AP+PS	20/9/19	827	832	40	38	P	GD
10 / 11	SEOS	NEOS	1410	2	WB	PW064	22.0		AP+PS	20/9/19	850	855	40	39	P	GD
11 / 12	SEOS	NEOS	1438	2	WB	PW064	12.0		AP+PS	20/9/19	908	913	40	40	P	GD
6 / 11	NEOS	SEOS	1517	2	WB	PW064	12.0		AP+PS	20/9/19	915	920	40	40	P	GD
6 / 12	NEOS	SEOS	1522	2	WB	PW064	13.0		AP+PS	20/9/19	1140	1145	40	40	P	GD
6 / 10	NEOS	SEOS	1611	2	WB	PW064	13.0		AP+PS	20/9/19	1345	1350	40	40	P	GD
6 / 8	NEOS	SEOS	1615	2	WB	PW064	7.2		AP+PS	20/9/19	1345	1350	40	40	P	GD
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						PAGE TOTAL	322.8									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 1 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/09/21

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	815	GD	2	60.0%	454	115	118	116	113	122	101	113	106	97	98	128	132	131	138	135	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
14 / 15	NEOS	SEOS	851	4	GD	PW069	18.0		AP+PS	21/9/19	1345	1350	40	40	P	GD
14 / 16	NEOS	SEOS	907	4	GD	PW069	33.0		AP+PS	21/9/19	1405	1410	40	38	P	GD
15 / 20	NEOS	SEOS	925	4	GD	PW069	4.0	DS-2	AP+PS	21/9/19	1500	1505	40	39	P	GD
17 / 18	EEOS	WEOS	950	4	GD	PW069	6.8		AP+PS	21/9/19	1437	1442	40	40	P	GD
13 / 16	SEOS	NEOS	1010	4	GD	PW069	11.4		AP+PS	21/9/19	1355	1400	40	40	P	GD
13 / 14	SEOS	NEOS	1013	4	GD	PW069	10.9		AP+PS	21/9/19	1325	1330	40	40	P	GD
13 / 15	SEOS	NEOS	1019	4	GD	PW069	10.4		AP+PS	21/9/19	1325	1330	40	40	P	GD
13 / 20	SEOS	NEOS	1032	4	GD	PW069	9.9		AP+PS	21/9/19	1510	1515	40	40	P	GD
16 / 17	SEOS	NEOS	1036	4	GD	PW069	5.0		AP+PS	21/9/19	1445	1450	40	40	P	GD
16 / 18	SEOS	NEOS	1039	4	GD	PW069	33.0		AP+PS	21/9/19	1414	1419	40	40	P	GD
17 / 19	SEOS	NEOS	1059	4	GD	PW069	1.0		AP+PS	21/9/19	1450	1455	40	40	P	GD
18 / 19	SEOS	NEOS	1100	4	GD	PW069	30.0	DS-3	AP+PS	21/9/19	1450	1455	40	40	P	GD
1 / 13	NEOS	SEOS	1145	4	GD	PW069	43.0		AP+PS	21/9/19	1336	1341	40	40	P	GD
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PAGE TOTAL							216.4									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 2 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/09/22

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1230	MC	6	60.0%	454	115	115	112	109	108	103	104	114	100	113	127	131	132	131	131	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
21 / 22	EEOS	WEOS	1305	6	SM	PW069	6.8		AP+PS	22/9/19	1640	1645	40	40	P	GD
19 / 22	NEOS	SEOS	1310	6	SM	PW069	20.0		AP+PS	22/9/19	1633	1638	40	39	p	GD
19 / 21	NEOS	SEOS	1318	6	SM	PW069	5.5		AP+PS	22/9/19	1632	1637	40	39	p	GD
21 / 23	SEOS	NEOS	1337	6	SM	PW069	1.0		AP+PS	22/9/19	1649	1654	44	44	p	GD
22 / 23	SEOS	NEOS	1338	6	SM	PW069	19.5		AP+PS	22/9/19	1652	1657	40	39	p	GD
23 / 24	SEOS	NEOS	1350	6	SM	PW069	17.0		AP+PS	22/9/19	1703	1708	40	39	p	GD
25 / 26	NEOS	SEOS	1414	6	SM	PW069	7.0		AP+PS	22/9/19	1718	1723	41	40	p	GD
24 / 26	SEOS	NEOS	1420	6	SM	PW069	8.0		AP+PS	22/9/19	1708	1713	40	40	p	GD
24 / 25	NEOS	SEOS	1425	6	SM	PW069	7.0		AP+PS	22/9/19	1725	1730	40	40	p	GD
26 / 27	SEOS	NEOS	1430	6	SM	PW069	17.0		AP+PS	22/9/19	1741	1746	40	40	p	GD
27 / 28	SEOS	NEOS	1440	6	SM	PW069	17.5	DS-4	AP+PS	22/9/19	1746	1751	40	40	p	GD
28 / 29	SOES	WEOS	1520	6	SM	PW069	17.5		AP+PS	22/9/19	1755	1800	40	38	p	GD
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PAGE TOTAL							143.8									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 3 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/09/24

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	945	SM	-5	55.0%	454	108	115	115	111	112	111	105	107	109	104	111	113	119	120	122	MC	
2	PW069	1405	SM	-5	55.0%	454	110	107	114	104	110	102	103	103	104	106	124	116	118	121	117	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
29 / 30	SEOS	NEOS	1040	-5	SM	PW069	18.0		AP+PS	25/9/19	816	821	40	39	P	GD
30 / 31	SEOS	NEOS	1207	-5	SM	PW069	18.0		AP+PS	25/9/19	818	823	40	40	p	GD
32 / 33	EEOS	WEOS	1355	-5	SM	PW069	6.8		AP+PS	28/9/19	856	901	40	39	P	JH
33 / 34	WEOS	EEOS	1502	-5	SM	PW069	6.8		AP+PS	28/9/19	915	920	40	40	P	JH
31 / 32	SEOS	NEOS	1513	-5	SM	PW069	8.5		AP+PS	28/9/19	901	906	40	40	P	JH
31 / 33	SEOS	NEOS	1518	-5	SM	PW069	31.0		AP+PS	28/9/19	915	920	40	40	P	JH
31 / 34	SEOS	NEOS	1531	-5	SM	PW069	23.0		AP+PS	28/9/19	915	920	40	40	P	JH
32 / 35	SEOS	NEOS	1607	-5	SM	PW069	6.5		AP+PS	28/9/19	855	900	40	39	P	JH
33 / 35	SEOS	NEOS	1610	-5	SM	PW069	30.0	DS-5	AP+PS	25/9/19	943	948	40	39	P	GD
34 / 35	SEOS	NEOS	1622	-5	SM	PW069	23.0		AP+PS	25/9/19	935	943	40	40	P	GD
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PAGE TOTAL							171.6									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 4 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/02

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	910	SM	1	55.0%	454	112	108	99	107	107	104	107	100	96	110	120	119	126	120	122	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
36 / 37	WEOS	EEOS	935	0	SM	PW069	6.8		AP+PS	4/10/19	1508	1513	43	43	P	SM
35 / 37	NEOS	SEOS	951	0	SM	PW069	50.8		AP+PS	4/10/19	1419	1425	45	43	P	SM
35 / 36	NEOS	SEOS	951	0	SM	PW069	6.2		AP+PS	4/10/19	1419	1425	45	43	P	SM
36 / 38	SEOS	NEOS	1024	0	SM	PW069	4.5		AP+PS	4/10/19	1547	1552	45	45	P	SM
37 / 38	SEOS	3A	1024	0	SM	PW069	50.4	DS-6	AP+PS	4/10/19	1452	1457	46	46	P	SM
37 / 38	3A	NEOS	1024	0	SM	PW069	50.4		AP+PS	4/10/19	1453	1458	45	45	P	SM
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PAGE TOTAL							169.1									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 5 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/04

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1100	SM	-6	55.0%	454	123	127	133	123	129	132	132	112	111	113	144	143	138	149	153	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
38 / 39	SEOS	NEOS	1246	-6	SM	PW069	52.4		AP+PS	4/10/19	1524	1529	45	45	P	SM
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PAGE TOTAL							52.4									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020
SHEET NUMBER: 6 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/06

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1440	SM	-8	55.0%	454	105	114	115	108	106	104	106	100	98	101	131	126	125	128	129	MB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
39 / 40	NEOS	SEOS	1730	-8	SM	PW069	49.0		AP+PS	7/10/19	1208	1213	45	45	P	JH
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PAGE TOTAL							49.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020
SHEET NUMBER: 7 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/07

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	922	SM	-12	55.0%	454	108	113	106	100	109	96	106	109	105	108	115	109	113	111	112	Mb	
2	PW069	1306	SM	-9	55.0%	454	105	112	110	104	104	107	104	104	103	106	116	112	116	106	110	MB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
40 / 41	SEOS	NEOS	1001	-12	SM	PW069	47.4	DS-7	AP+PS	7/10/19	1210	1215	44	44	P	JH
41 / 42	SEOS	NEOS	1127	-12	SM	PW069	44.0	DS-8	AP+PS	7/10/19	1217	1222	43	42	P	JH
42 / 43	SEOS	NEOS	1332	-9	SM	PW069	43.5		AP+PS	7/10/19	1715	1720	44	44	P	JH
43 / 44	SEOS	NEOS	1631	-9	SM	PW069	43.0		AP+PS	7/10/19	1716	1721	44	43	P	JH
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PAGE TOTAL							177.9									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 8 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/08

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	825	JH	-6	55.0%	454	103	107	118	108	104	107	103	100	104	101	117	117	114	108	112	MB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER
44 / 45	SEOS	3N	911	-6	SM	PW069	29.5	
44 / 45	3N	NEOS	935	-6	SM	PW069	12.2	
45 / 46	SEOS	NEOS	1009	-6	SM	PW069	40.0	DS-9
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PAGE TOTAL							81.7	

QC

TEST METH.	TEST DATE Y-M-D
AP+PS	7/10/19
AP+PS	8/10/19
AP+PS	8/10/19

AIR PRESSURE TEST (PSI)

TIME START	TIME END	PRESSURE START	PRESSURE END
1251	1256	45	45
1300	1305	45	44
1225	1230	41	40

VERIFY

PASS	QC TECH
P	SM
P	SM
P	SM

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020
SHEET NUMBER: 9 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/10/11

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1130	WB	-6	55.0%	454	103	102	109	99	104	96	92	103	93	100	113	105	113	104	116	SM	
2	PW069	1543	SM	-6	55.0%	454	101	98	103	106	105	109	100	98	102	101	114	108	113	109	118	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
47 / 48	WEOS	EEOS	1722	-6	SM	PW069	6.8		AP+PS	17/10/19	1623	1628	45	45	p	JH
46 / 47	NEOS	SEOS	1735	-6	SM	PW069	24.8	DS-10	AP+PS	17/10/19	1603	1608	45	45	P	JH
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GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/12

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1410	SM	-8	55.0%	454	106	95	106	103	106	97	99	98	97	103	112	108	113	111	115	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
46 / 48	NEOS	SEOS	1505	-8	SM	PW069	11.2		AP+PS	17/10/19	1626	1631	45	45	P	JH
47 / 49	NEOS	SEOS	1639	-8	SM	PW069	24.8		AP+PS	17/10/19	1558	1603	45	45	P	JH
48 / 49	NEOS	SEOS	1645	-8	SM	PW069	11.2		AP+PS	17/10/19	1623	1628	45	45	P	JH
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PAGE TOTAL							47.2									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 11 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/10/13

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1012	SM	-12	55.0%	454	100	102	108	101	99	111	100	107	96	104	116	116	114	112	114	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
49 / 50	SEOS	NEOS	1040	-12	SM	PW069	36.0		AP+PS	17/10/19	1553	1558	45	45	P	JH
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PAGE TOTAL							36.0									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/10/16

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	940	SM	-12	55.0%	454	106	106	108	96	109	111	101	107	101	102	119	114	115	112	113	SM	
2	PW069	1515	WB	-13	55.0%	454	104	106	105	102	106	108	105	100	101	105	117	112	114	116	111	WB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
50 / 51	SEOS	NEOS	1045	-12	SM	PW069	36.4		AP+PS	17/10/19	1609	1614	45	45	P	JH
51 / 52	SOES	NEOS	1558	-12	WB	PW069	36.9		AP+PS	17/10/19	1542	1547	45	45	P	JH
52 / 53	SOES	NEOS	1636	-12	WB	PW069	37.0	DS-11	AP+PS	17/10/19	1545	1550	45	45	P	JH
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PAGE TOTAL							110.3									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/10/17

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1215	WB	-12	55.0%	454	106	112	110	110	111	109	108	107	110	107	112	116	115	115	116	WB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
55 / 56	NEOS	SEOS	1315	-12	WB	PW064	17.0		AP+PS	18/10/19	1635	1640	45	45	P	IH
54 / 57	SEOS	NEOS	1335	-12	WB	PW064	33.0		AP+PS	18/10/19	1643	1648	45	45	P	JH
54 / 55	NEOS	SEOS	1346	-12	WB	PW064	32.0		AP+PS	18/10/19	1623	1628	45	45	P	JH
53 / 54	SEOS	NEOS	1530	12	WB	PW064	2.5		AP+PS	18/10/19	1630	1635	45	45	P	JH
53 / 55	SEOS	NEOS	1530	-12	WB	PW064	17.0		AP+PS	18/10/19	1628	1633	45	45	P	JH
53 / 56	SEOS	NEOS	1530	-12	WB	PW064	17.4		AP+PS	18/10/19	1638	1648	45	45	P	JH
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PAGE TOTAL							118.9									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 14 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/10/19

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	945	WB	-8	55.0%	454	100	105	107	108	115	106	103	105	107	98	121	120	116	115	114	WB	
2	PW064	1330	WB	-8	55.0%	454	98	102	107	107	106	97	101	104	108	109	106	111	112	116	117	WB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
58 / 59	WEOS	EEOS	1124	-8	WB	PW064	6.8	DS-12	AP+PS	23/10/19	1314	1319	44	43	P	WB
57 / 58	SEOS	NEOS	1144	-8	WB	PW064	17.0		AP+PS	20/10/19	1244	1249	44	44	P	WB
59 / 57	SEOS	NEOS	1149	-8	WB	PW064	17.0		AP+PS	20/10/19	1236	1241	45	45	P	WB
59 / 60	NEOS	4I	1210	-8	WB	PW064	5.0		AP+PS	23/10/19	1503	1508	44	43	P	WB
59 / 60	4I	SEOS	1212	-8	WB	PW064	12.0		AP+PS	23/10/19	1325	1330	45	45	P	WB
58 / 60	NEOS	SEOS	1215	-8	WB	PW064	17.0		AP+PS	23/10/19	1322	1327	45	44	P	WB
60 / 61	SEOS	4J	1325	-8	WB	PW064	5.0		AP+PS	23/10/19	1510	1515	46	46	P	WB
60 / 61	4J	NEOS	1335	-8	WB	PW064	12.0		AP+PS	23/10/19	1557	1602	44	44	P	WB
62 / 63	EEOS	WEOS	1445	-8	WB	PW064	17.0		AP+PS	23/10/19	1700	1705	40	40	P	WB
63 / 64	EEOS	WEOS	1520	-8	WB	PW064	15.0		AP+PS	23/10/19	1705	1710	40	40	P	WB
64 / 65	EEOS	WEOS	1545	-8	WB	PW064	15.0		AP+PS	29/10/19	1012	1017	40	40	P	WB
61 / 62	SEOS	NEOS	1615	-8	WB	PW064	6.8		AP+PS	23/10/19	1700	1705	45	45	P	DW
61 / 63	SEOS	NEOS	1620	-8	WB	PW064	6.8		AP+PS	23/10/19	1655	1700	45	45	P	DW
61 / 64	SEOS	NEOS	1625	-8	WB	PW064	6.8		AP+PS	29/10/19	1131	1136	40	40	P	WB
61 / 65	SEOS	NEOS	1630	-8	WB	PW064	6.8		AP+PS	29/10/19	1005	1010	40	40	P	WB
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PAGE TOTAL 166.0

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH MC

SUPERVISOR Mike Cantwell

SUBMISSION DATE January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/25

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1325	SM	-9	55.0%	454	112	98	122	107	109	114	104	113	102	114	123	126	122	123	127	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER
66 / 67	SEOS	NEOS	1432	-8	SM	PW064	18.3	DS-13
67 / 68	NEOS	SEOS	1505	-8	SM	PW064	7.0	
69 / 61	WEOS	EEOS	1553	-8	SM	PW064	1.0	
62 / 69	WEOS	4R	1554	-8	SM	PW064	7.0	
62 / 69	4R	EEOS	1557	-8	SM	PW064	4.0	
69 / 70	WEOS	EEOS	1656	-8	SM	PW064	8.5	
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PAGE TOTAL							45.8	

QC

TEST METH.	TEST DATE Y-M-D
AP+PS	27/10/19
AP+PS	28/10/19
AP+PS	29/10/19
AP+PS	28/10/19
AP+PS	28/10/19
AP+PS	28/10/19

AIR PRESSURE TEST (PSI)

TIME START	TIME END	PRESSURE START	PRESSURE END
1155	1200	42	40
1619	1624	39	38
824	829	42	42
1645	1650	38	38
1656	1701	38	38
1636	1641	42	42

VERIFY

PASS	QC TECH
P	WB
P	WB
P	WB
P	WB
P	WB
P	WB

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 16 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/26

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1038	SM	-11	55.0%	454	115	109	114	112	112	98	100	108	94	109	127	127	115	124	124	SM	
2	PW064	1515	SM	-11	55.0%	454	109	104	106	104	102	104	100	102	107	109	121	118	129	115	133	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
66 / 71	NEOS	SEOS	1119	-11	SM	PW064	18.2		AP+PS	27/10/19	1136	1141	44	42	P	WB
71 / 72	NEOS	SEOS	1155	-11	SM	PW064	18.0		AP+PS	27/10/19	1127	1132	45	44	P	WB
72 / 73	NEOS	SEOS	1231	-11	SM	PW064	17.8		AP+PS	27/10/19	1111	1116	41	41	P	WB
73 / 74	WEOS	EEOS	1420	-11	SM	PW064	17.0		AP+PS	27/10/19	1108	1113	45	44	P	WB
74 / 53	WEOS	EEOS	1620	-11	SM	PW064	5.0		AP+PS	7/11/19	1601	1606	51	49	P	WB
74 / 54	WEOS	EEOS	1622	-11	SM	PW064	2.0		AP+PS	29/10/19	1612	1617	40	37	P	WB
73 / 54	WEOS	EEOS	1623	-11	SM	PW064	5.0		AP+PS	27/10/19	1600	1605	42	41	P	WB
73 / 57	WEOS	EEOS	1625	-11	SM	PW064	2.0		AP+PS	27/10/19	1741	1746	40	40	P	WB
72 / 57	WEOS	EEOS	1626	-11	SM	PW064	5.0		AP+PS	27/10/19	1544	1549	47	44	P	WB
72 / 58	WEOS	EEOS	1627	-11	SM	PW064	2.0		AP+PS	27/10/19	1649	1654	38	37	P	WB
71 / 58	WEOS	EEOS	1629	-11	SM	PW064	5.0		AP+PS	27/10/19	1658	1703	40	38	P	WB
71 / 60	WEOS	EEOS	1630	-11	SM	PW064	2.0		AP+PS	27/10/19	1707	1712	40	39	P	WB
66 / 60	WEOS	EEOS	1632	-11	SM	PW064	5.0		AP+PS	29/10/19	952	957	40	40	P	WB
66 / 61	WEOS	EEOS	1633	-11	SM	PW064	2.0		AP+PS	29/10/19	843	848	40	40	P	WB
67 / 69	NEOS	SEOS	1646	-11	SM	PW064	8.0		AP+PS	29/10/19	816	821	42	42	P	WB
68 / 70	NEOS	SEOS	1659	-11	SM	PW064	3.0	DS-14	AP+PS	28/10/19	1711	1716	40	40	P	WB
67 / 70	NEOS	SEOS	1700	-11	SM	PW064	8.0		AP+PS	28/10/19	1717	1722	40	40	P	WB
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TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 17 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/10/28

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1307	SM	-10	55.0%	454	106	106	102	93	106	108	105	106	101	108	120	108	119	113	118	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
74 / 75	SEOS	5R	1352	-10	SM	PW069	8.0		AP+PS	8/11/19	1436	1441	40	39	P	WB
74 / 75	5R	NEOS	1352	-10	SM	PW069	8.0		AP+PS	16/11/19	1153	1158	43	43	P	JH
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PAGE TOTAL							16.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 18 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/05

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1430	WB	-23	55.0%	454	105	105	26	98	117	111	106	113	99	116	130	128	128	128	133	WB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
75 / 77	NEOS	SEOS	1520	-23	WB	PW064	8.0		AP+PS	7/11/19	1651	1656	40	40	P	WB
75 / 76	SEOS	6E	1540	-23	WB	PW064	3.0		AP+PS	8/11/19	1502	1507	37	35	P	WB
75 / 76	6E	SEOS	1542	-23	WB	PW064	5.0		AP+PS	19/11/19	1502	1507	37	35	P	WB
76 / 77	SEOS	NEOS	1544	-23	WB	PW064	8.0		AP+PS	16/11/19	1238	1243	40	39	P	JH
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PAGE TOTAL							24.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 19 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/06

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1120	WB	-23	55.0%	454	97	90	96	91	100	88	92	99	88	96	94	97	98	93	104	WB	
2	PW064	1508	WB	-23	55.0%	454	118	117	115	113	115	121	110	116	109	107	109	122	115	123	110	WB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
78 / 79	NEOS	SEOS	1213	-23	WB	PW064	15.0		AP+PS	13/11/19	813	818	35	33	P	WB
79 / 80	SEOS	NEOS	1233	-23	WB	PW064	16.5		AP+PS	13/11/19	823	828	35	34	P	WB
80 / 81	SEOS	NEOS	1310	-23	WB	PW064	17.5		AP+PS	13/11/19	834	839	34	34	P	WB
76 / 78	SEOS	NEOS	1616	-23	WB	PW064	15.0		AP+PS	8/11/19	1515	1520	40	38	P	WB
82 / 45	WEOS	EEOS	1651	-23	WB	PW064	6.0		AP+PS	13/11/19	1314	1319	40	39	P	WB
82 / 46	WEOS	EEOS	1655	-23	WB	PW064	0.3		VB+PS	15/11/19	0	0	0	0	0	FC
81 / 46	WEOS	EEOS	1656	-23	WB	PW064	6.0		AP+PS	13/11/19	1308	1313	40	38	P	WB
80 / 48	WEOS	EEOS	1701	-23	WB	PW064	6.0		AP+PS	13/11/19	1301	1306	40	40	P	WB
80 / 49	WEOS	EEOS	1707	-23	WB	PW064	0.3		VB+PS	15/11/19	0	0	0	0	0	FC
79 / 49	WEOS	EEOS	1711	-23	WB	PW064	6.0		AP+PS	13/11/19	1342	1347	44	44	P	WB
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PAGE TOTAL							88.7									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS: Seam 46/82 Wedge Welded and Extruded (6O to 6P), Seam 49/80 Wedge Welded and Extruded (6L to 6K).

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 20 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/07

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	800	WB	-14	55.0%	454	103	84	102	90	96	105	91	101	97	98	113	108	107	107	109	WB	
2	PW064	1230	SM	-16	55.0%	454	119	110	117	106	108	116	110	113	108	110	120	120	121	120	119	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
78 / 50	WEOS	EEOS	855	-14	WB	PW064	6.5		AP+PS	19/11/19	1231	1236	38	37	P	WB
78 / 51	WEOS	EEOS	856	-14	WB	PW064	0.8		VB+PS	15/11/19	0	0	0	0	0	FC
77 / 52	WEOS	EEOS	858	-14	WB	PW064	2.5	DS-15	AP+PS	8/11/19	829	934	40	37	P	WB
76 / 51	WEOS	EEOS	859	-14	WB	PW064	6.5		AP+PS	15/11/19	1130	1135	41	40	P	FC
76 / 52	WEOS	EEOS	902	-14	WB	PW064	0.3		VB+PS	15/11/19	0	0	0	0	0	FC
75 / 52	WEOS	EEOS	903	-14	WB	PW064	3.5		AP+PS	7/11/19	1643	1648	40	38	P	WB
75 / 53	WEOS	EEOS	904	-14	WB	PW064	3.5		AP+PS	7/11/19	1633	1638	41	40	P	WB
82 / 83	NEOS	SEOS	1332	-14	SM	PW064	18.0		AP+PS	8/11/19	925	930	40	37	P	WB
83 / 84	NEOS	SEOS	1401	-14	SM	PW064	18.5		AP+PS	12/11/19	1259	1304	40	38	P	WB
81 / 82	SEOS	NEOS	1613	-14	SM	PW064	17.0		AP+PS	13/11/19	843	848	35	34	P	WB
84 / 85	NEOS	SEOS	1628	-14	SM	PW064	18.0		AP+PS	12/11/19	1116	1121	40	39	P	WB
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PAGE TOTAL							95.1									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS: 51 to 78 Wedge Welded and Extruded (6G to 6H), 52 to 76 Wedge welded and Extruded (6C to 6F)

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 21 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/08

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	850	SM	-20	55.0%	454	100	101	105	98	108	102	108	105	106	101	114	123	116	114	122	SM	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
85 / 42	WEOS	EEOS	1004	-23	SM	PW064	5.5		AP+PS	15/11/19	1650	1655	40	39	P	JH
84 / 43	WEOS	EEOS	1007	-23	SM	PW064	6.0		AP+PS	13/11/19	1655	1700	50	50	P	WB
84 / 44	WEOS	EEOS	1008	-23	SM	PW064	6.0		AP+PS	13/11/19	1655	1700	45	45	P	WB
83 / 45	WEOS	EEOS	1010	-23	SM	PW064	0.3		VB+PS	15/11/19	0	0	0	0	P	FC
83 / 44	WEOS	EEOS	1012	-23	SM	PW064	6.0		AP+PS	13/11/19	1643	1648	59	57	P	WB
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PAGE TOTAL							23.8									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS: 83 to 85 Wedge Welded and Extruded (6S to 6T)

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 22 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/09

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	920	WB	-28	57.5%	454	113	100	103	103	92	95	106	95	97	91	108	105	107	97	98	WB	
2	PW064	1240	WB	-23	57.5%	454	91	88	88	85	88	82	86	83	86	82	93	93	91	91	91	WB	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
85 / 86	NEOS	SEOS	1012	-25	WB	PW064	18.0		AP+PS	12/11/19	1002	1007	40	39	P	WB
87 / 88	NEOS	SEOS	1163	-25	WB	PW064	9.5		AP+PS	15/11/19	1322	1327	42	41	P	JH
86 / 87	NEOS	SEOS	1215	-25	WB	PW064	9.5		AP+PS	15/11/19	1318	1323	42	42	P	JH
86 / 88	NEOS	SEOS	1223	-25	WB	PW064	9.0		AP+PS	15/11/19	1325	1330	42	40	P	JH
88 / 89	NEOS	SEOS	1545	-25	WB	PW064	18.5	DS-16	AP+PS	16/11/19	1413	1418	46	45	P	JH
89 / 90	NEOS	SEOS	1610	-25	WB	PW064	18.5		AP+PS	16/11/19	1435	1440	44	43	P	JH
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PAGE TOTAL							83.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 23 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/10

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	855	SM	-20	55.0%	454	107	107	108	105	107	105	106	104	99	103	115	115	116	115	113	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER
90 / 38	WEOS	EEOS	1039	-20	SM	PW064	5	
89 / 38	WEOS	EEOS	1041	-20	SM	PW064	0.3	
89 / 39	WEOS	7P	1042	-20	SM	PW064	2.5	
89 / 39	7P	EEOS	1043	-20	SM	PW064	4.0	
88 / 39	WEOS	EEOS	1048	-20	SM	PW064	0.3	
88 / 40	WEOS	EEOS	1050	-20	SM	PW064	6.5	
87 / 40	WEOS	EEOS	1055	-20	SM	PW064	0.3	
86 / 41	WEOS	7Q	1057	-20	SM	PW064	1.0	
86 / 41	7Q	EEOS	1058	-20	SM	PW064	5.5	
86 / 41	WEOS	EEOS	1100	-20	SM	PW064	5.5	
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PAGE TOTAL							30.9	

QC

TEST METH.	TEST DATE Y-M-D
AP+PS	16/11/19
VB+PS	14/11/19
VB+PS	16/11/19
AP+PS	16/11/19
VB+PS	16/11/19
AP+PS	16/11/19
VB+PS	15/11/19
VB+PS	15/11/19
AP+PS	16/11/19
AP+PS	16/11/19

AIR PRESSURE TEST (PSI)

TIME START	TIME END	PRESSURE START	PRESSURE END
1447	1453	44	44
0	0	0	0
0	0	0	0
1405	1410	48	48
0	0	0	0
1353	1358	45	45
0	0	0	0
0	0	0	0
1250	1255	46	46
1252	1257	40	40

VERIFY

PASS	QC TECH
P	JH
0	WB
0	FC
P	JH
0	FC
P	JH
0	FC
0	FC
P	JH
P	FC

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS: Panel Seams 38/89, 39/89, 39/88, 40/87, 41/86 Wedge Welded and Extruded. Ref detail codes (7N to 7M), (7M to 7P), (7L to 7K), (7I to 7H), (7H to 7Q to 7F) with corresponding panel seams

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 24 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/11

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1300	SM	-20	55.0%	454	98	96	96	99	101	94	90	92	90	94	104	110	111	102	106	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER
90 / 91	NEOS	SEOS	1317	-20	SM	PW069	19.5	
93 / 92	NEOS	SEOS	1350	-20	SM	PW069	9.0	
91 / 92	NEOS	SEOS	1405	-20	SM	PW069	9.0	
91 / 93	NEOS	SEOS	1413	-20	SM	PW069	10.5	
93 / 94	NEOS	SEOS	1540	-20	SM	PW069	19.5	
94 / 95	NEOS	SEOS	1605	-20	SM	PW069	19.5	#'s in remarks
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PAGE TOTAL							87.0	

QC

TEST METH.	TEST DATE Y-M-D
AP+PS	16/11/19
AP+PS	15/11/19
AP+PS	15/11/19
AP+PS	16/11/19
AP+PS	16/11/19
AP+PS	16/11/19

AIR PRESSURE TEST (PSI)

TIME START	TIME END	PRESSURE START	PRESSURE END
1522	1527	44	44
1701	1706	48	46
1709	1714	45	45
1135	1140	41	40
1332	1337	42	42
1543	1548	44	44

VERIFY

PASS	QC TECH
P	JH
P	FC
P	FC
P	FC
P	JH
P	JH

TEST METHOD
AL - AIR LANCE | ST - SPARK TEST
AP - AIR PRESSURE | VB - EXTRUDED & VAC BOX
PS - POINT STRESS

REMARKS: Seam of Panels 94/95 was welded with the wedge welder and then Extruded. DS #'s 17, 17A1, 17A2 and 18 on the seam

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020
SHEET NUMBER: 25 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/12

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	744	SM	-23	55.0%	454	97	96	97	88	95	83	84	95	100	106	193	107	105	103	101	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
95 / 31	WEOS	EEOS	825	-23	SM	PW069	6.0		AP+PS	16/11/19	1635	1640	40	40	P	FC
94 / 32	WEOS	EEOS	828	-23	SM	PW069	6.0		AP+PS	16/11/19	1635	1640	40	38	P	FC
93 / 32	WEOS	EEOS	831	-23	SM	PW069	0.5		AP+PS	16/11/19	1623	1628	40	40	P	FC
93 / 35	WEOS	EEOS	833	-23	SM	PW069	5.0		AP+PS	16/11/19	1607	1612	40	39	P	FC
92 / 35	WEOS	EEOS	836	-23	SM	PW069	1.0		AP+PS	16/11/19	1607	1612	40	40	P	FC
91 / 35	WEOS	EEOS	838	-23	SM	PW069	6.0		AP+PS	16/11/19	1558	1603	40	40	P	FC
91 / 36	WEOS	EEOS	840	-23	SM	PW069	6.0		AP+PS	16/11/19	1555	1600	40	40	P	FC
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PAGE TOTAL							30.5									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 26 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/15

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	730	DW	-32	55.0%	454	104	107	100	107	103	98	97	95	103	96	109	107	113	115	111	TD	
2	PW064	1300	DW	-28	55.0%	454	113	120	120	117	106	110	115	119	111	103	122	122	120	120	115	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
98 / 97	WEOS	EEOS	1500	-28	DW	PW064	6.9	DS-17-B1	AP+PS	24/11/19	845	850	45	45	P	DW
96 / 97	NEOS	SEOS	1520	-28	DW	PW064	45.0		AP+PS	24/11/19	1520	1525	46	46	P	DW
96 / 98	NEOS	SEOS	1550	-28	DW	PW064	27.0		AP+PS	20/11/19	1605	1610	39	39	P	DW
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GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/16

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	900	DW	-32	55.0%	454	112	94	97	98	96	99	93	96	97	96	108	111	118	113	114	TD	
2	PW064	1300	DW	-32	55.0%	454	102	106	109	109	104	98	100	104	104	101	123	118	124	113	110	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
96 / 99	NEOS	SEOS	1120	-32	DW	PW064	45.0		AP+PS	17/11/19	1650	1655	44	44	P	FC
99 / 100	NEOS	SEOS	1241	-32	DW	PW064	18.0		AP+PS	17/11/19	1545	1550	40	39	P	FC
100 / 31	NEOS	SEOS	1410	-32	DW	PW064	18.0		AP+PS	17/11/19	1530	1535	40	40	P	FC
99 / 31	NEOS	SEOS	1427	-32	DW	PW064	18.0		AP+PS	17/11/19	1545	1550	40	39	P	FC
96 / 95	NEOS	SEOS	1515	-32	DW	PW064	19.5	DS-19	AP+PS	8/11/19	1533	1538	40	39	P	FC
100 / 30	EEOS	9I	1520	-32	DW	PW064	3.0		AP+PS	18/11/19	1607	1612	40	38	P	DW
100 / 30	9I	WEOS	1520	-32	DW	PW064	3.0		AP+PS	18/11/19	1607	1612	40	38	P	DW
99 / 30	EEOS	WEOS	1530	-32	DW	PW064	1.0		VB+PS	24/11/19	0	0	0	0	P	DW
99 / 30	SEOS	NEOS	1532	-32	DW	PW064	3.0		AP+PS	24/11/19	1450	1455	40	39	P	DW
99 / 29	EEOS	WEOS	1535	-32	DW	PW064	6.0		AP+PS	19/11/19	1657	1702	42	41	P	DW
96 / 28	EEOS	9N	1540	-32	DW	PW064	3.0		AP+PS	19/11/19	1708	1713	46	46	P	DW
96 / 28	9N	WEOS	1540	-32	DW	PW064	3.0		AP+PS	19/11/19	1708	1713	46	45	P	DW
97 / 27	EEOS	WEOS	1545	-32	DW	PW064	6.0		AP+PS	19/11/19	1715	1720	42	42	P	DW
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PAGE TOTAL							146.5									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH MC

SUPERVISOR Mike Cantwell

SUBMISSION DATE January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/17

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	800	DW	-33	55.0%	454	88	95	97	96	95	85	91	94	92	93	104	109	102	99	99	TD	
2	PW064	1230	DW	-33	55.0%	454	103	98	108	95	101	102	93	92	100	93	110	110	102	108	102	TD	
3	PW064	1520	DW	-33	55.0%	454	111	100	100	102	95	100	83	94	83	97	114	105	115	110	102	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
97 / 101	NEOS	SEOS	1130	-33	DW	PW064	51.0		AP+PS	20/11/19	1618	1623	41	41	P	DW
98 / 101	NEOS	SEOS	1150	-33	DW	PW064	25.0		AP+PS	20/11/19	1614	1619	40	40	P	DW
102 / 103	EEOS	WEOS	1330	-33	DW	PW064	7.0		AP+PS	24/11/19	930	935	45	45	P	DW
101 / 102	NEOS	SEOS	1345	-33	DW	PW064	9.0		AP+PS	24/11/19	848	853	45	44	P	DW
101 / 103	NEOS	9T	1348	-33	DW	PW064	41.0	DS-20	AP+PS	20/11/19	1700	1705	46	46	P	DW
101 / 103	9T	10A	1348	-33	DW	PW064	14.0		AP+PS	20/11/19	1707	1712	39	39	P	DW
101 / 103	10A	SEOS	1348	-33	DW	PW064	9.0		AP+PS	20/11/19	1700	1705	46	46	P	DW
104 / 102	NEOS	SEOS	1630	-33	DW	PW064	9.0		AP+PS	24/11/19	1140	1145	45	45	P	DW
104 / 103	NEOS	10D	1635	-33	DW	PW064	21.0		AP+PS	20/11/19	1634	1639	36	35	P	DW
104 / 103	10D	10E	1635	-33	DW	PW064	3.0		AP+PS	20/11/19	1634	1639	36	35	P	DW
104 / 103	10E	10F	1635	-33	DW	PW064	10.0		AP+PS	25/11/19	1647	1652	44	44	P	DW
104 / 103	10F	10H	1635	-33	DW	PW064	17.0		AP+PS	20/11/19	1640	1645	40	39	P	DW
104 / 103	10H	SEOS	1635	-33	DW	PW064	16.0		AP+PS	20/11/19	1634	1639	36	35	P	DW
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PAGE TOTAL							232.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 29 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/18

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	835	DW	-27	55.0%	454	100	94	95	103	94	96	80	92	96	93	105	97	105	108	104	TD	
2	PW064	1210	DW	-27	55.0%	454	104	103	102	99	103	108	93	104	94	92	105	105	110	107	102	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
26 / 101	EEOS	WEOS	1130	-27	DW	PW064	6.0		AP+PS	19/11/19	1720	1725	41	40	P	DW
26 / 102	EEOS	WEOS	1135	-27	DW	PW064	1.0		VB+PS	24/11/19	0	0	0	0	P	DW
24 / 102	EEOS	WEOS	1138	-27	DW	PW064	6.0		AP+PS	19/11/19	1727	1732	48	48	P	DW
24 / 104	EEOS	WEOS	1143	-27	DW	PW064	1.0		VB+PS	24/11/19	0	0	0	0	P	DW
23 / 104	EEOS	WEOS	1148	-27	DW	PW064	6.0		AP+PS	19/11/19	1600	1605	40	39	P	DW
104 / 105	NEOS	10R	1345	-27	DW	PW064	15.0	DS-21	AP+PS	20/11/19	1650	1655	41	41	P	DW
104 / 105	10R	10P	1345	-27	DW	PW064	14.0		AP+PS	24/11/19	955	1000	40	39	P	DW
104 / 105	10P	10O	1345	-27	DW	PW064	23.0		AP+PS	25/11/19	1530	1535	45	45	P	DW
104 / 105	10O	10N	1345	-27	DW	PW064	13.0		AP+PS	24/11/19	958	1003	40	40	P	DW
104 / 105	10N	SEOS	1345	-27	DW	PW064	10.0		AP+PS	20/11/19	1650	1655	41	41	P	DW
104 / 105	10R	10P	1345	-27	DW	PW064	16.0		AP+PS	24/11/19	955	1000	40	39	P	DW
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PAGE TOTAL							112.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS: Panel seam 26 to 102 Wedge welded and Extruded. Ref detail codes (10I to 10J). Panel seam 24 to 104 Wedge Welded and extruded. Referance Detail codes (10K, 10L, 12O)

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020
SHEET NUMBER: 30 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/19

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1440	DW	-24	40.0%	454	106	105	107	102	92	99	102	96	107	98	104	109	105	103	102	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
106 / 107	NEOS	SEOS	1508	-24	DW	PW064	26.0		AP+PS	20/11/19	1720	1725	41	41	P	DW
105 / 106	NEOS	11A	1615	-24	DW	PW064	12.0		AP+PS	25/11/19	1630	1635	46	46	P	DW
105 / 106	11A	SEOS	1615	-24	DW	PW064	14.0		AP+PS	25/11/19	1635	1640	40	40	P	DW
107 / 105	NEOS	SEOS	1650	-24	DW	PW064	45.0		AP+PS	21/11/19	1725	1730	41	41	P	DW
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PAGE TOTAL							97.0									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/20

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	945	DW	-32	40.0%	454	109	111	107	110	109	98	113	107	107	110	111	115	114	113	112	TD	

WELD SEAMS

PANEL NUMBERS		SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
107	108	NEOS	11F	1055	-32	DW	PW064	5.0		AP+PS	21/11/19	1715	1720	41	40	P	DW
107	108	11F	SEOS	1057	-32	DW	PW064	65.0	DS-22	AP+PS	21/11/19	1715	1720	41	41	P	DW
108	109	NEOS	SEOS	1330	-32	DW	PW064	68.0		AP+PS	26/11/19	1535	1540	54	53	P	DW

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/24

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	700	DG	-17	40.0%	454	110	96	102	100	99	106	107	99	93	89	108	105	106	99	100	TD	
2	PW064	900	DG	-17	45.0%	454	104	99	106	96	94	98	94	98	99	90	111	99	103	108	103	TD	
3	PW064	1336	DG	-22	45.0%	454	112	108	105	108	112	83	98	104	94	95	93	102	111	115	113	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
109 / 13	WEOS	EEOS	835	-22	DG	PW064	2.0		AP+PS	25/11/19	1620	1625	40	40	P	DW
109 / 16	WEOS	EEOS	838	-22	DG	PW064	5.0		AP+PS	25/11/19	1620	1625	40	40	P	DW
108 / 17	WEOS	EEOS	840	-22	DG	PW064	7.0		AP+PS	28/11/19	1610	1615	40	40	P	LC
107 / 17	WEOS	EEOS	842	-22	DG	PW064	2.0		AP+PS	28/11/19	1610	1615	40	40	P	LC
107 / 19	WEOS	EEOS	847	-22	DG	PW064	5.0		AP+PS	28/11/19	1610	1615	40	40	P	LC
106 / 19	WEOS	EEOS	850	-22	DG	PW064	3.5		AP+PS	28/11/19	1610	1615	40	40	P	LC
105 / 21	WEOS	EEOS	855	-22	DG	PW064	5.0		AP+PS	28/11/19	1605	1610	40	40	P	LC
106 / 21	WEOS	EEOS	900	-22	DG	PW064	2.0		AP+PS	28/11/19	1605	1610	40	40	P	LC
110 / 111	WEOS	EEOS	1128	-22	DG	PW064	7.0	DS-23	AP+PS	29/11/19	1110	1115	40	40	P	LC
109 / 110	NEOS	SEOS	1145	-22	DG	PW064	6.8		AP+PS	28/11/19	1630	1635	40	40	P	LC
109 / 111	NEOS	SEOS	1152	-22	DG	PW064	54.0		AP+PS	26/11/19	1227	1232	40	40	P	DW
112 / 110	NEOS	SEOS	1500	-22	DG	PW064	6.0		AP+PS	28/11/19	1105	1110	40	40	P	LC
112 / 111	NEOS	SEOS	1509	-22	DG	PW064	53.0		AP+PS	29/11/19	1105	1110	40	40	P	DW
113 / 114	WEOS	EEOS	1611	-22	DG	PW064	7.0		AP+PS	2/12/19	825	830	40	39	P	LC
112 / 113	NEOS	SEOS	1624	-22	DG	PW064	33.0	DS-24	AP+PS	2/12/19	820	825	40	38	P	LC
114 / 112	NEOS	SEOS	1655	-22	DG	PW064	27.0		AP+PS	2/12/19	830	835	40	40	P	LC
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PAGE TOTAL							225.3									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH MC

SUPERVISOR Mike Cantwell

SUBMISSION DATE January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/25

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	700	DG	-32	45.0%	454	109	99	103	99	99	104	100	104	99	97	108	109	106	112	105	TD	
2	PW064	1030	DG	-32	45.0%	454	95	89	90	91	94	93	90	103	99	90	97	108	96	107	102	TD	
3	PW064	1235	DG	-32	40.0%	454	109	93	99	105	101	101	88	97	85	96	98	98	97	101	98	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
114 / 115	NEOS	SEOS	1000	-32	DG	PW064	27.0		AP+PS	30/11/19	1635	1640	40	40	P	LC
113 / 115	NEOS	12L	1117	-32	DG	PW064	4.0		AP+PS	30/11/19	1630	1635	40	40	P	LC
113 / 115	12L	12M	1121	-32	DG	PW064	12.0		AP+PS	30/11/19	1635	1640	40	40	P	LC
113 / 115	12M	SEOS	1128	-32	DG	PW064	20.0		AP+PS	30/11/19	1647	1652	40	40	P	LC
115 / 116	NEOS	SEOS	1352	-32	DG	PW064	59.0		AP+PS	2/12/19	935	940	40	40	P	LC
116 / 6	WEOS	EEOS	1612	-32	DG	PW064	3.0	DS-25	AP+PS	2/12/19	840	845	40	39	P	LC
116 / 5	WEOS	EEOS	1614	-32	DG	PW064	4.0		AP+PS	2/12/19	840	845	40	40	P	LC
115 / 5	WEOS	EEOS	1617	-32	DG	PW064	3.0		AP+PS	2/12/19	1620	1625	40	39	P	LC
115 / 3	WEOS	EEOS	1619	-32	DG	PW064	4.0		AP+PS	2/12/19	1605	1610	40	40	P	LC
113 / 3	WEOS	EEOS	1622	-32	DG	PW064	3.0		AP+PS	2/12/19	1555	1600	40	40	P	LC
113 / 2	WEOS	EEOS	1625	-32	DG	PW064	4.0		AP+PS	2/12/19	1550	1555	40	40	P	LC
112 / 2	WEOS	EEOS	1627	-32	DG	PW064	3.0		AP+PS	29/11/19	1645	1650	40	40	P	LC
112 / 1	WEOS	EEOS	1630	-32	DG	PW064	3.0		AP+PS	29/11/19	1645	1650	40	40	P	LC
110 / 1	WEOS	EEOS	1632	-32	DG	PW064	3.0		AP+PS	29/11/19	1640	1645	40	40	P	LC
110 / 13	WEOS	EEOS	1634	-32	DG	PW064	4.0		AP+PS	29/11/19	1630	1635	40	39	P	LC
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						PAGE TOTAL	156.0									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 34 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/26

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	900	DG	-20	40.0%	454	112	103	100	103	109	108	105	100	93	99	116	101	97	109	117	TD	
2	PW064	1320	DG	-20	40.0%	454	105	101	106	103	91	104	99	97	96	84	112	115	108	108	108	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
116 / 117	NEOS	SEOS	1112	-28	DG	PW064	60.0		AP+PS	2/12/19	845	850	40	39	P	LC
117 / 118	NEOS	SEOS	1217	-28	DG	PW064	61.0		AP+PS	2/12/19	925	930	40	40	P	LC
119 / 120	WEOS	EEOS	1330	-28	DG	PW064	7.0		AP+PS	4/12/19	1710	1715	40	39	P	LC
118 / 119	NEOS	SEOS	1440	-28	DG	PW064	27.0	DS-26	AP+PS	2/12/19	940	945	40	40	P	LC
118 / 120	NEOS	SEOS	1510	-28	DG	PW064	37.0		AP+PS	4/12/19	1705	1710	40	39	P	LC
119 / 7	WEOS	EEOS	1612	-28	DG	PW064	6.0		AP+PS	2/12/19	1630	1635	40	39	P	LC
118 / 9	WEOS	EEOS	1620	-28	DG	PW064	4.0		AP+PS	2/12/19	932	937	40	40	P	DW
118 / 8	WEOS	EEOS	1622	-28	DG	PW064	3.0		AP+PS	2/12/19	920	925	40	39	P	LC
117 / 8	WEOS	EEOS	1624	-28	DG	PW064	2.0		AP+PS	2/12/19	915	920	40	39	P	LC
117 / 10	WEOS	EEOS	1625	-28	DG	PW064	1.0		AP+PS	2/12/19	910	915	40	40	P	LC
117 / 6	WEOS	EEOS	1626	-28	DG	PW064	3.0		AP+PS	2/12/19	900	905	40	40	P	LC
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PAGE TOTAL							211.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/11/27

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	850	DG	-28	40.0%	454	103	102	109	104	103	102	94	98	96	90	110	109	110	110	105	TD	
2	PW064	1215	DG	-28	40.0%	454	101	100	97	91	108	91	94	100	87	101	109	109	104	95	108	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
121 / 7	SEOS	13M	938	-28	DG	PW064	3.0		AP+PS	11/12/19	1645	1650	40	39	P	DG
121 / 7	13M	13N	940	-28	DG	PW064	2.0		AP+PS	11/12/19	1645	1650	40	40	P	DG
121 / 7	13N	13O	943	-28	DG	PW064	3.0		AP+PS	12/12/19	955	1000	40	40	P	DG
121 / 7	13O	NEOS	944	-28	DG	PW064	3.5		AP+PS	12/12/19	958	1003	40	40	P	DG
122 / 123	NEOS	SEOS	1100	-28	DG	PW064	6.8		AP+PS	4/12/19	1650	1655	40	40	P	LC
121 / 123	WEOS	EEOS	1111	-28	DG	PW064	44.0		AP+PS	4/12/19	1650	1655	40	40	P	LC
121 / 122	WEOS	EEOS	1126	-28	DG	PW064	2.0		AP+PS	4/12/19	1645	1650	40	40	P	LC
124 / 125	SEOS	NEOS	1156	-28	DG	PW064	6.8		AP+PS	10/12/19	830	835	40	39	P	DG
123 / 125	WEOS	EEOS	1215	-28	DG	PW064	38.0	DS-27	AP+PS	10/12/19	900	905	40	39	P	DG
123 / 124	WEOS	EEOS	1239	-28	DG	PW064	3.5		AP+PS	7/12/19	1515	1520	40	40	P	DG
122 / 124	WEOS	EEOS	1242	-28	DG	PW064	8.5		AP+PS	7/12/19	1640	1645	35	35	P	DG
127 / 126	SEOS	NEOS	1433	-28	DG	PW064	6.8		AP+PS	8/12/19	825	830	35	35	P	DG
124 / 126	EEOS	WEOS	1445	-28	DG	PW064	2.0		AP+PS	10/12/19	938	943	40	39	P	DG
124 / 127	EEOS	WEOS	1446	-28	DG	PW064	17.5		AP+PS	8/12/19	815	820	35	35	P	DG
125 / 127	EEOS	WEOS	1500	-28	DG	PW064	36.0		AP+PS	10/12/19	905	910	38	38	P	DG
120 / 126	SEOS	NEOS	1549	-28	DG	PW064	6.8		AP+PS	8/12/19	815	820	35	35	P	DG
120 / 124	SEOS	NEOS	1552	-28	DG	PW064	6.8		AP+PS	7/12/19	1551	1556	40	40	P	DG
119 / 124	SEOS	NEOS	1601	-28	DG	PW064	6.8		AP+PS	8/12/19	1517	1522	40	40	P	DG
119 / 122	SEOS	NEOS	1602	-28	DG	PW064	6.8		AP+PS	4/12/19	1640	1645	40	39	P	LC
119 / 121	SEOS	NEOS	1607	-28	DG	PW064	6.8		AP+PS	11/12/19	810	815	40	40	P	DG
						PAGE TOTAL	217.4									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 36 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/28

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1200	DG	-21	40.0%	454	111	111	111	98	107	104	94	99	98	106	110	114	125	116	115	MC	
2	PW064	1600	DG	-21	40.0%	454	115	111	109	107	122	106	108	103	105	101	123	119	124	116	120	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
128 / 129	NWEOS	SEEOS	1255	-25	DG	PW064	22.5		AP+PS	12/12/19	1017	1022	40	40	P	DG
131 / 132	NEEOS	SWEOS	1300	-25	DG	PW064	6.8	DS-28	AP+PS	10/12/19	1025	1030	40	40	P	DG
129 / 130	NWEOS	SEEOS	1310	-25	DG	PW064	2.0		AP+PS	10/12/19	922	927	40	40	P	DG
129 / 131	NWEOS	SEEOS	1350	-25	DG	PW064	36.0		AP+PS	11/12/19	817	822	40	39	P	DG
130 / 131	NWEOS	SEEOS	1445	-25	DG	PW064	5.0		AP+PS	10/12/19	935	940	40	40	P	DG
130 / 132	NWEOS	SEEOS	1448	-25	DG	PW064	1.0		AP+PS	8/12/19	830	835	35	35	P	DG
127 / 128	NEOS	WEOS	1515	-25	DG	PW064	21.5		AP+PS	12/12/19	1005	1010	40	40	P	DG
127 / 129	NEOS	WEOS	1524	-25	DG	PW064	15.5		AP+PS	10/12/19	938	943	40	40	P	DG
127 / 130	NEOS	WEOS	1530	-25	DG	PW064	6.0		AP+PS	10/12/19	924	929	40	40	P	DG
127 / 132	NEOS	WEOS	1534	-25	DG	PW064	9.0		AP+PS	8/12/19	825	830	35	35	P	DG
126 / 132	NEOS	WEOS	1540	-25	DG	PW064	8.0		AP+PS	10/12/19	850	855	38	38	P	DG
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PAGE TOTAL							133.3									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/11/30

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	930	DG	-21	40.0%	454	132	133	131	126	133	124	110	123	119	115	134	135	135	132	133	MC	
2	PW064	1325	DG	-21	40.0%	454	101	103	113	98	109	102	92	106	102	105	108	109	115	111	120	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
131 / 133	NWEOS	SEEOS	940	-18	DG	PW064	39.0		AP+PS	7/12/19	1035	1040	40	40	P	DG
132 / 133	NWEOS	SEEOS	1010	-18	DG	PW064	19.0		AP+PS	30/11/19	1037	1042	40	40	P	LC
133 / 134	NWEOS	SEEOS	1130	-18	DG	PW064	39.0	DS-29	AP+PS	11/12/19	913	918	40	40	P	DG
135 / 136	WEOS	EEOS	1320	-18	DG	PW064	19.5		AP+PS	30/11/19	1605	1610	40	40	p	LC
136 / 137	EEOS	WEOS	1548	-18	DG	PW064	37.0		AP+PS	11/12/19	945	950	40	40	P	DG
120 / 132	SEOS	NEOS	1549	-18	DG	PW064	9.0		AP+PS	8/12/19	830	835	35	35	P	DG
120 / 133	SEOS	NEOS	1550	-18	DG	PW064	0.5		VB+PS	7/12/19	0	0	0	0	P	LC
134 / 137	NWEOS	SEEOS	1705	-18	DG	PW064	10.6		AP+PS	10/12/19	1102	1107	40	40	P	DG
134 / 136	NWEOS	SEEOS	1717	-18	DG	PW064	18.0		AP+PS	10/12/19	1100	1105	40	40	P	DG
134 / 135	NWEOS	SEEOS	1724	-18	DG	PW064	18.0		AP+PS	12/12/19	955	1000	40	40	P	DG
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PAGE TOTAL							209.6									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS: Seam 120 to 133 Wedge welded and Extruded. Ref Detail Codes (8L to 14P)

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 38 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/12/01

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1120	DG	-30	40.0%	454	107	109	110	107	116	104	102	112	105	105	120	112	120	119	115	MC	
2	PW064	1120	DG	-30	40.0%	454	102	105	104	100	98	103	105	104	100	99	118	114	120	118	113	MC	
3	PW064	1524	DW	-30	40.0%	454	112	114	118	112	115	99	98	106	108	102	122	119	123	113	121	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
137 / 138	WEOS	EEOS	1215	-36	DG	PW064	41.0		AP+PS	11/12/19	1035	1040	40	40	P	DG
139 / 140	NEOS	SEOS	1300	-36	DG	PW064	6.8	DS-30	AP+PS	11/12/19	1035	1040	40	39	P	DG
138 / 140	WEOS	EEOS	1330	-36	DG	PW064	35.5		AP+PS	10/12/19	1510	1515	40	40	P	DG
138 / 139	WEOS	EEOS	1345	-36	DG	PW064	7.1		AP+PS	10/12/19	1500	1505	45	44	P	DG
140 / 141	WEOS	EEOS	1605	-36	DG	PW064	26.5		AP+PS	11/12/19	800	805	40	40	P	DG
139 / 141	WEOS	EEOS	1615	-36	DG	PW064	1.0		AP+PS	11/12/19	802	807	40	40	P	DG
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PAGE TOTAL							117.9									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 39 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/12/02

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1030	DG	-36	40.0%	454	102	103	96	106	120						107	108	102	106	107	MC	
2	PW064	1500	DG	-36	40.0%	454	113	106	116	106	110	119	107	116	113	104	130	124	113	118	120	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
142 / 143	SEEOS	NWEOS	1245	-36	DG	PW064	13.0		AP+PS	10/12/19	810	815	40	40	P	DG
120 / 143	NEOS	SEOS	1320	-36	DG	PW064	14.5		AP+PS	10/12/19	815	820	40	40	P	DG
120 / 142	NEOS	SEOS	1330	-36	DG	PW064	8.0		AP+PS	10/12/19	1237	1242	40	40	P	DG
142 / 144	NWEOS	SEEOS	1345	-36	DG	PW064	18.0		AP+PS	10/12/19	1405	1410	40	40	P	DG
144 / 145	NWEOS	SEEOS	1515	-36	DG	PW064	18.0		AP+PS	10/12/19	1420	1425	40	39	P	DG
138 / 145	SWEOS	NEEOS	1645	-36	DG	PW064	7.0	DS-31	AP+PS	10/12/19	1420	1425	40	40	P	DG
138 / 146	SWEOS	NEEOS	1648	-36	DG	PW064	1.0		AP+PS	10/12/19	1445	1450	40	40	P	DG
137 / 144	SWEOS	NEEOS	1648	-36	DG	PW064	4.0		AP+PS	10/12/19	1405	1410	40	40	P	DG
134 / 144	SWEOS	NEEOS	1649	-36	DG	PW064	5.5		AP+PS	10/12/19	1400	1405	40	40	P	DG
134 / 142	SWEOS	NEEOS	1650	-36	DG	PW064	6.8		AP+PS	10/12/19	805	810	40	40	P	DG
133 / 143	SWEOS	NEEOS	1655	-36	DG	PW064	8.0		AP+PS	10/12/19	800	805	40	40	P	DG
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PAGE TOTAL							103.8									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/12/03

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	945	DG	-40	40.0%	454	119	113	122	115	121	110	112	109	105	109	121	130	132	137	130	MC	
2	PW064	1340	DG	-40	40.0%	454	117	111	111	110	111	119	120	125	114	109	132	124	120	118	118	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
145 / 146	SEOS	NEOS	1015	-40	DG	PW064	20.0		AP+PS	10/12/19	1505	1510	40	40	P	DG
146 / 147	SEOS	NEOS	1200	-40	DG	PW064	23.0		AP+PS	10/12/19	1530	1535	40	40	P	DG
147 / 148	SEEOS	NEEOS	1215	-40	DG	PW064	14.0		AP+PS	11/12/19	1000	1005	40	40	P	DG
141 / 148	SEOS	NEOS	1255	-40	DG	PW064	5.5		AP+PS	11/12/19	1002	1007	40	40	P	DG
141 / 147	SWEOS	NEEOS	1258	-40	DG	PW064	2.0		AP+PS	11/12/19	1002	1007	40	40	P	DG
139 / 147	SWEOS	NEEOS	1259	-40	DG	PW064	5.0		AP+PS	10/12/19	1520	1525	40	40	P	DG
139 / 146	SWEOS	NEEOS	1303	-40	DG	PW064	4.0		AP+PS	10/12/19	1500	1505	40	40	P	DG
138 / 146	SWEOS	NEEOS	1307	-40	DG	PW064	3.0		AP+PS	10/12/19	1516	1521	40	40	P	DG
138 / 145	SWEOS	NEEOS	1309	-40	DG	PW064	6.8	DS-31	AP+PS	10/12/19	1410	1415	40	40	P	WP
141 / 149	WEOS	EEOS	1335	-40	DG	PW064	25.5		AP+PS	11/12/19	1235	1240	40	40	P	WP
148 / 149	WEOS	EEOS	1347	-40	DG	PW064	13.0		AP+PS	11/12/19	1320	1325	40	40	P	WP
146 / 149	WEOS	EEOS	1354	-40	DG	PW064	8.0		AP+PS	11/12/19	1322	1327	40	40	P	WP
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PAGE TOTAL							129.8									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 41 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/12/04

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1000	WP	-40	40.0%	454	118	108	112	116	114	111	115	111	108	115	125	132	135	127	139	MC	
2	PW064	1245	WP	-40	40.0%	454	106	128	107	125	121	107	123	104	118	107	116	128	117	131	118	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
149 / 150	WEOS	EEOS	1430	-40	WP	PW064	46.0	DS-32	AP+PS	11/12/19	1320	1325	40	40	P	WP
150 / 151	WEOS	EEOS	1455	-40	WP	PW064	44.0		AP+PS	11/12/19	1345	1350	40	40	P	WP
151 / 152	WEOS	EEOS	1538	-40	WP	PW064	43.0		AP+PS	11/12/19	1410	1415	40	39	P	WP
152 / 153	WEOS	EEOS	1615	-40	WP	PW064	43.0	DS-33	AP+PS	11/12/19	1432	1437	40	40	P	WP
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PAGE TOTAL							176.0									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/12/05

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1115	DG	-36	40.0%	454	121	122	106	106	115	119	128	115	120	119	135	128	133	133	135	MC	
2	PW064	1505	DG	-36	40.0%	454	117	117	117	107	121	112	112	109	113	113	135	130	127	119	126	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER
153 / 154	WEOS	EEOS	1123	-36	DG	PW064	43.0	
155 / 156	SEOS	NEOS	1235	-36	DG	PW064	6.8	
154 / 156	WEOS	EEOS	1315	-36	DG	PW064	25.0	
154 / 155	WEOS	EEOS	1321	-36	DG	PW064	17.0	
156 / 157	WEOS	EEOS	1552	-36	DG	PW064	25.0	DS-34
155 / 157	WEOS	EEOS	1609	-36	DG	PW064	17.0	
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PAGE TOTAL							133.8	

QC		AIR PRESSURE TEST (PSI)				VERIFY	
TEST METH.	TEST DATE Y-M-D	TIME START	TIME END	PRESSURE START	PRESSURE END	PASS	QC TECH
AP+PS	11/12/19	1330	1335	40	40	P	DG
AP+PS	11/12/19	1420	1425	40	40	P	DG
AP+PS	11/12/19	1408	1413	40	40	P	DG
AP+PS	11/12/19	1400	1405	40	40	P	DG
AP+PS	11/12/19	1430	1435	40	40	P	DG
AP+PS	11/12/19	1432	1437	40	40	P	DG

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/12/07

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	800	WP	-38	40.0%	454	134	129	124	128	123	120	127	131	112	110	134	144	140	139	144	TD	
2	PW064	1200	WP	-38	40.0%	454	122	121	122	117	116	118	117	122	112	113	132	125	135	124	120	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
157 / 158	WEOS	EEOS	810	-48	WP	PW064	39.0		AP+PS	11/12/19	850	855	40	40	P	DG
158 / 159	WEOS	EEOS	850	-48	WP	PW064	41.0		AP+PS	11/12/19	1440	1445	40	40	P	DG
160 / 161	SEOS	NEOS	1007	-48	WP	PW064	6.8		AP+PS	11/12/19	1442	1447	40	40	P	DG
159 / 161	WEOS	EEOS	1155	-48	WP	PW064	20.0	DS-35	AP+PS	11/12/19	1500	1505	40	38	P	DG
159 / 160	WEOS	EEOS	1213	-48	WP	PW064	21.0		AP+PS	11/12/19	1450	1455	40	40	P	DG
161 / 162	WEOS	EEOS	1242	-48	WP	PW064	21.0		AP+PS	11/12/19	1658	1703	40	39	P	DG
160 / 162	WEOS	8Q	1256	-48	WP	PW064	2.0		AP+PS	11/12/19	1645	1650	40	40	P	DG
160 / 162	8Q	EEOS	1256	-48	WP	PW064	19.0		AP+PS	11/12/19	1645	1650	40	40	P	DG
162 / 163	WEOS	EEOS	1328	-48	WP	PW064	43.0	DS-36	AP+PS	11/12/19	900	905	40	40	P	DG
163 / 164	WEOS	EEOS	1520	-48	WP	PW064	44.0		AP+PS	11/12/19	910	915	40	40	P	DG
164 / 165	WEOS	EEOS	1557	-48	WP	PW064	42.0		AP+PS	11/12/19	920	925	40	40	P	DG
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PAGE TOTAL							298.8									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 44 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/12/08

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	830	WP	-30	40.0%	454	122	116	120	120	115	121	108	111	118	104	125	123	128	125	124	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
165 / 166	WEOS	EEOS	850	-30	WP	PW064	42.0		AP+PS	11/12/19	1000	1005	40	40	P	DG
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PAGE TOTAL							42.0									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/12/10

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	810	WP	-25	40.0%	454	123	120	111	117	112	120	117	112	107	111	124	125	123	119	122	TD	
2	PW064	1210	WP	-25	40.0%	454	103	110	113	114	121	113	105	106	108	103	124	127	124	128	121	TD	
3	PW064	1600	WP	-25	40.0%	454	105	109	110	111	112	110	106	104	106	102	120	126	120	124	128	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
166 / 167	WEOS	EEOS	815	-25	WP	PW064	35.5	DS-37	AP+PS	11/12/19	1010	1015	40	40	P	DG
167 / 168	WEOS	EEOS	850	-25	WP	PW064	31.2		AP+PS	11/12/19	1015	1020	40	40	P	DG
168 / 169	WEOS	EEOS	1045	-25	WP	PW064	29.1		AP+PS	11/12/19	1020	1025	40	40	P	DG
169 / 170	WEOS	EEOS	1106	-25	WP	PW064	26.0		AP+PS	11/12/19	1025	1030	40	40	P	DG
170 / 171	WEOS	EEOS	1447	-25	WP	PW064	26.0	DS-38	AP+PS	11/12/19	1030	1035	40	39	P	DG
172 / 173	WEOS	EEOS	1549	-25	WP	PW064	20.5		AP+PS	11/12/19	1100	1105	40	40	P	DG
171 / 172	WEOS	EEOS	1615	-25	WP	PW064	23.0		AP+PS	11/12/19	1102	1107	40	40	P	DG
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PAGE TOTAL							191.3									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS:

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2019/12/12

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1315	WP	-28	40.0%	454	108	111	112	105	104	101	101	108	97	100	116	110	111	105	112	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER
174 / 175	SEOS	NEOS	1405	-28	WP	PW064	14.5	
175 / 176	NEOS	SEOS	1430	-28	WP	PW064	14.5	
176 / 177	NEOS	SEOS	1500	-28	WP	PW064	14.5	
177 / 178	NEOS	SEOS	1540	-28	WP	PW064	14.5	
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PAGE TOTAL							58.0	

QC

TEST METH.	TEST DATE Y-M-D
AP+PS	13/12/19
AP+PS	13/12/19
AP+PS	13/12/19
AP+PS	13/12/19

AIR PRESSURE TEST (PSI)

TIME START	TIME END	PRESSURE START	PRESSURE END
835	840	40	40
835	840	40	40
845	850	40	40
845	850	40	40

VERIFY

PASS	QC TECH
P	DG
P	DG
P	DG
P	DG

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS:

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/12/13

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
6	PX029	2019/12/13	800	LC	-30	257	254	105	115	108	109	110	137	129	130	131	126	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
174 / 31	EEOS	WEOS	815	-30	LC	PX029	6.0		VB+PS	13/12/19	0	0	0	0	P	DG
174 / 30	EEOS	WEOS	835	-30	LC	PX029	1.0		VB+PS	13/12/19	0	0	0	0	P	DG
175 / 30	EEOS	WEOS	850	-30	LC	PX029	6.0		VB+PS	13/12/19	0	0	0	0	P	DG
175 / 29	EEOS	WEOS	905	-30	LC	PX029	1.0		VB+PS	13/12/19	0	0	0	0	P	DG
176 / 29	EEOS	WEOS	915	-30	LC	PX029	6.0		VB+PS	13/12/19	0	0	0	0	P	DG
176 / 28	EEOS	WEOS	925	-30	LC	PX029	1.0		VB+PS	13/12/19	0	0	0	0	P	DG
177 / 28	EEOS	WEOS	936	-30	LC	PX029	6.0		VB+PS	13/12/19	0	0	0	0	P	DG
177 / 27	EEOS	WEOS	948	-30	LC	PX029	1.0		VB+PS	13/12/19	0	0	0	0	P	DG
178 / 27	EEOS	WEOS	1000	-30	LC	PX029	6.0		VB+PS	13/12/19	0	0	0	0	P	DG
178 / 25	EEOS	WEOS	1014	-30	LC	PX029	1.0		VB+PS	13/12/19	0	0	0	0	P	DG
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PAGE TOTAL							35.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS: Tie in Seams Extruded; 31/174, 30/174, 30/175, 29/175, 29/176, 28/176, 28/177, 27/177, 27/178, and 25/178. Refer to detail code 15P.

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 48 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/12/16

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	1520	WP	-25	40.0%	454	120	108	129	120	118	115	111	111	112	107	148	151	153	154	150	TD	

TRIAL SEAMS EXTRUDER

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2019/12/16	1535	LC	-25	257	254	102	98	104	98	98	139	132	133	147	130	TD	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
179 / 178	NEOS	SEOS	1550	-25	WP	PW064	14.5		AP+PS	16/12/19	1635	1640	40	39	P	DG
179 / 25	EEOS	WEOS	1600	-25	LC	PX029	6.0		VB+PS	16/12/19	0	0	0	0	P	DG
179 / 180	NEOS	SEOS	1610	-25	WP	PW064	14.5		AP+PS	16/12/19	1635	1640	40	40	P	DG
179 / 24	EEOS	WEOS	1625	-25	LC	PX029	1.0		VB+PS	16/12/19	0	0	0	0	P	DG
180 / 24	EEOS	WEOS	1645	-25	LC	PX029	6.0		VB+PS	16/12/19	0	0	0	0	P	DG
180 / 23	EEOS	WEOS	1705	-25	LC	PX029	1.0		VB+PS	16/12/19	0	0	0	0	P	DG
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PAGE TOTAL							43.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS: Tie in Seams Extruded; 25/179, 24/179, 24/180 and 23/180. Referance Detail code 15Q

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 49 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2019/12/17

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW064	900	WP	-25	40.0%	454	123	110	114	108	119	113	106	118	108	110	133	128	134	128	129	TD	
2	PW064	1300	WP	-25	40.0%	454	120	111	121	118	119	118	110	119	116	116	126	113	126	126	132	TD	

TRIAL SEAMS EXTRUDER

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2019/12/17	1030	LC	-25	257	254	110	108	111	118	95	133	126	130	122	127	TD	
2	PX029	2019/12/17	1400	LC	-25	257	254	112	107	98	109	108	127	126	127	128	127	TD	

WELD SEAMS / QC / AIR PRESSURE TEST (PSI) / VERIFY

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
180 / 181	NEOS	SEOS	1035	-25	WP	PW064	14.5		AP+PS	17/12/19	1505	1510	40	40	P	MC
181 / 182	NEOS	SEOS	1100	-25	WP	PW064	14.5	DS-39	AP+PS	17/12/19	1512	1517	40	40	P	MC
182 / 183	NEOS	SEOS	1135	-25	WP	PW064	14.5		AP+PS	17/12/19	1523	1528	40	40	P	MC
183 / 184	NEOS	SEOS	1215	-25	WP	PW064	14.5		AP+PS	17/12/19	1530	1535	40	39	P	MC
184 / 185	NEOS	SEOS	1243	-25	WP	PW064	14.5		AP+PS	17/12/19	1540	1545	40	40	P	MC
181 / 23	EEOS	WEOS	1250	-25	LC	PX029	6.0		VB+PS	17/12/19	0	0	0	0	P	DG
181 / 22	EEOS	WEOS	1300	-25	LC	PX029	1.0		VB+PS	17/12/19	0	0	0	0	P	DG
182 / 22	EEOS	WEOS	1324	-25	LC	PX029	6.0		VB+PS	17/12/19	0	0	0	0	P	DG
185 / 186	NEOS	SEOS	1328	-25	WP	PW064	14.5		AP+PS	17/12/19	1555	1600	40	40	P	MC
182 / 19	EEOS	WEOS	1358	-25	LC	PX029	1.0		VB+PS	17/12/19	0	0	0	0	P	DG
183 / 19	EEOS	WEOS	1427	-25	LC	PX029	6.0		VB+PS	17/12/19	0	0	0	0	P	DG
183 / 18	EEOS	WEOS	1500	-25	LC	PX029	1.0		VB+PS	17/12/19	0	0	0	0	P	DG
184 / 18	EEOS	WEOS	1536	-25	LC	PX029	6.0		VB+PS	17/12/19	0	0	0	0	P	DG
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PAGE TOTAL 114.0

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS: Tie in Seams Extruded; 23/181, 22/181, 182/22, 19/182, 183/18, 184/18. Reference Detail Code 15R

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 50 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2020/01/16

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	1130	DG	-30	45.0%	454	133	130	124	128	117	141	143	133	140	141	128	130	116	132	125	MC	
2	PW069	1505	DG	-30	45.0%	454	123	115	132	124	123	118	115	119	124	118	151	150	142	140	146	MC	

TRIAL SEAMS Extruder

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2020/01/16	1415	LC	-30	257	254	107	111	109	98	96	141	144	155	159	148	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
186 / 187	NEOS	SEOS	1230	-30	DG	PW069	14.5		AP+PS	17/1/20	1000	1005	40	40	P	MC
187 / 188	NEOS	SEOS	1300	-30	DG	PW069	14.5		AP+PS	17/1/20	1010	1015	40	39	P	MC
188 / 189	NEOS	SEOS	1330	-30	DG	PW069	14.5		AP+PS	17/1/20	1030	1035	40	39	P	MC
189 / 190	NEOS	SEOS	1425	-30	DG	PW069	14.5		AP+PS	17/1/20	1210	1215	40	39	P	MC
14 / 186	EEOS	WEOS	1530	-30	LC	PX029	6.0		VB+PS	17/1/20	0	0	0	0	P	MC
15 / 186	EEOS	WEOS	1538	-30	LC	PX029	1.0		VB+PS	17/1/20	0	0	0	0	P	MC
15 / 187	EEOS	WEOS	1539	-30	LC	PX029	6.0		VB+PS	17/1/20	0	0	0	0	P	MC
190 / 191	NEOS	SEOS	1600	-30	DG	PW069	14.5		AP+PS	17/1/20	1225	1230	40	39	P	MC
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PAGE TOTAL							85.5									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS: Tie in Seams Extruded; 14/186, 15/186, 15/187. Referance Detail Code 15T

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020
SHEET NUMBER: 51 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | SEAM DATE 2020/01/17

TRIAL SEAMS

#	MACHINE NUMBER	TIME	WELD TECH	AIR TEMP °C	SPEED	WEDGE TEMP °C	INSIDE PEEL (PPI)					OUTSIDE PEEL (PPI)					SHEAR (PPI)					CHK'D BY	LINER TO LINER TYPE
1	PW069	800	DG	-30	45.0%	454	119	127	123	108	108	107	100	113	105	110	127	126	112	126	124	MC	
2	PW069	1150	DG	-32	45.0%	454	130	132	126	130	128	133	117	117	113	118	141	131	139	133	139	MC	

TRIAL SEAMS Extruder

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2020/01/17	825	LC	-30	257	254	91	105	112	101	95	130	125	126	121	126	MC	
2	PX029	2020/01/17	825	LC	-32	257	254	109	114	108	111	121	130	131	125	126	131	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
191 / 192	NEOS	SEOS	830	-32	DG	PW069	14.0		AP+PS	18/1/20	845	850	40	40	P	MC
192 / 193	NEOS	SEOS	850	-32	DG	PW069	14.0	DS-40	AP+PS	18/1/20	950	955	40	40	P	MC
20 / 187	EEOS	WEOS	900	-32	LC	PX029	1.0		VB+PS	17/1/20	0	0	0	0	P	MC
20 / 188	EEOS	WEOS	901	-32	LC	PX029	6.0		VB+PS	17/1/20	0	0	0	0	P	MC
193 / 194	NEOS	SEOS	920	-32	DG	PW069	14.0		AP+PS	18/1/20	1000	1005	40	39	P	MC
13 / 188	EEOS	WEOS	930	-32	LC	PX029	1.0		VB+PS	17/1/20	0	0	0	0	P	MC
13 / 189	EEOS	WEOS	932	-32	LC	PX029	6.0		VB+PS	17/1/20	0	0	0	0	P	MC
1 / 189	EEOS	WEOS	945	-32	LC	PX029	1.0		VB+PS	17/1/20	0	0	0	0	P	MC
194 / 195	NEOS	SEOS	1000	-32	DG	PW069	14.0		AP+PS	18/1/20	1120	1125	40	40	P	MC
1 / 190	EEOS	WEOS	1010	-32	LC	PX029	6.0		VB+PS	17/1/20	0	0	0	0	P	MC
2 / 190	EEOS	WEOS	1015	-32	LC	PX029	1.0		VB+PS	17/1/20	0	0	0	0	P	MC
2 / 191	EEOS	WEOS	1020	-32	LC	PX029	6.0		VB+PS	17/1/20	0	0	0	0	P	MC
195 / 196	NEOS	SEOS	1057	-32	DG	PW069	14.0		AP+PS	18/1/20	1240	1245	40	39	P	MC
196 / 197	NEOS	SEOS	1140	-32	DG	PW069	14.0		AP+PS	18/1/20	1300	1305	40	38	P	MC
197 / 198	NEOS	SEOS	1210	-32	DG	PW069	14.0		AP+PS	18/1/20	1420	1425	40	40	P	MC
198 / 199	NEOS	SEOS	1400	-32	DG	PW069	14.0		AP+PS	18/1/20	1430	1435	40	39	P	MC
199 / 121	NEOS	SEOS	1450	-32	DG	PW069	14.0		AP+PS	18/1/20	1450	1455	40	40	P	MC
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PAGE TOTAL							154.0									

TEST METHOD
AL - AIR LANCE
AP - AIR PRESSURE
PS - POINT STRESS
ST - SPARK TEST
VB - EXTRUDED & VAC BOX

REMARKS: Tie in Seams Extruded; 20/187, 20/188, 13/188, 13/189, 1/189, 1/190, 2/190, 2/191. Referance Detail Code 16A

QC TECH MC
SUPERVISOR Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 52 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2020/01/18

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2020/01/18	825	LC	-32	257	254	87	110	95	114	111	128	123	127	123	126	MC	
2	PX029	2020/01/18	1215	LC	-32	257	254	90	101	110	99	104	120	117	115	119	114	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
3 / 191	EEOS	WEOS	1000	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
3 / 192	EEOS	WEOS	1025	-32	LC	PX029	6.0		VB+PS	18/1/20	0	0	0	0	P	MC
4 / 192	EEOS	WEOS	1040	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
4 / 193	EEOS	WEOS	1055	-32	LC	PX029	6.0		VB+PS	18/1/20	0	0	0	0	P	MC
6 / 193	EEOS	WEOS	1110	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
6 / 194	EEOS	WEOS	1130	-32	LC	PX029	6.0		VB+PS	18/1/20	0	0	0	0	P	MC
12 / 194	EEOS	WEOS	1145	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
12 / 195	EEOS	WEOS	1200	-32	LC	PX029	6.0		VB+PS	18/1/20	0	0	0	0	P	MC
11 / 195	EEOS	WEOS	1245	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
11 / 196	EEOS	WEOS	1250	-32	LC	PX029	6.0		VB+PS	18/1/20	0	0	0	0	P	MC
10 / 196	EEOS	WEOS	1255	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
10 / 197	EEOS	WEOS	1255	-32	LC	PX029	6.0		VB+PS	18/1/20	0	0	0	0	P	MC
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PAGE TOTAL							42.0									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS: Tie in Seams Extruded; 3/191, 3/192, 4/192, 4/193, 6/193, 6/194, 12/194, 12/195, 11/195, 11/196, 10/196 10/197. Referance Detail Code 16B

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 53 of 54

GEOMEMBRANE SEAM & TEST LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner | SEAM DATE 2020/01/19

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2020/01/19	800	LC	-32	257	254	101	119	107	102	101	127	121	137	128	121	MC	

WELD SEAMS

PANEL NUMBERS	SEAM SECTION FROM	SEAM SECTION TO	START TIME	AIR TEMP °C	WELD TECH	MACHINE NUMBER	WELD LENGTH	DESTRUCT NUMBER	QC TEST METH.	QC TEST DATE Y-M-D	AIR PRESSURE TEST (PSI) TIME START	TIME END	PRESSURE START	PRESSURE END	VERIFY PASS	VERIFY QC TECH
9 / 197	EEOS	WEOS	900	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
9 / 198	EEOS	WEOS	920	-32	LC	PX029	6.0		VB+PS	18/1/20	0	0	0	0	P	MC
7 / 198	EEOS	WEOS	945	-32	LC	PX029	1.0		VB+PS	18/1/20	0	0	0	0	P	MC
7 / 199	EEOS	WEOS	1000	-32	LC	PX029	3.5		VB+PS	18/1/20	0	0	0	0	P	MC
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PAGE TOTAL							11.5									

TEST METHOD

AL - AIR LANCE	ST - SPARK TEST
AP - AIR PRESSURE	VB - EXTRUDED & VAC BOX
PS - POINT STRESS	

REMARKS: Tie in Seams Extruded; 9/197, 9/198, 7/198, 7/199. Refereance Detail Code 16C.

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 54 of 54

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/09/19	1015	MC	2	287	265	97	100	88	98	116	128	125	129	128	129	MC	
2	PX037	2019/09/19	1500	MC	2	287	265	108	114	115	124	109	126	123	133	129	130	MC	
3	PX037	2019/09/21	1020	FC	2	260	254	91	91	104	74	92	133	135	136	133	131	MC	
4	PX037	2019/09/21	1520	FC	10	260	254	98	98	100	114	90	121	121	121	122	119	MC	
5																			
6																			

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
1A	1 / 2	29 M South of NEOS	IO	P	PX037	2019/09/19	1330	MC	-1	2019/09/19	VB+PS	SM
1B	2 / 3	22m South of NEOS	D	P	PX037	2019/09/19	1335	MC	-1	2019/09/19	VB+PS	SM
1C	3 / 4	Connected to 5	T	GW	PX037	2019/09/19	1355	MC	-1	2019/09/19	VB+PS	SM
1D	4 / 5	Connected to 6	T	GW	PX037	2019/09/19	1535	MC	-1	2019/09/19	VB+PS	SM
1E	8 / 9	Connected to 10	T	GW	PX037	2019/09/19	1545	MC	-1	2019/09/19	VB+PS	SM
1F	10 / 11	Connected to 6	T	GW	PX037	2019/09/19	1605	MC	-1	2019/09/19	VB+PS	SM
1G	9 / 10	North AT	DS-01	P	PX037	2019/09/19	1705	MC	-1	2019/09/19	VB+PS	SM
1H	10 / 11	12 m S of NEOS	IO	GW	PX037	2019/09/19	1600	MC	-1	2019/09/19	VB+PS	SM
1I	11 / 12	Connected to 6	T	GW	PX037	2019/09/19	1605	MC	-1	2019/09/19	VB+PS	SM
1J	13 / 14	Connected to 15	T	GW	PX037	2019/09/21	1135	FC	2	2019/09/21	VB+PS	SM
1K	13 / 14	Connected to 16	T	GW	PX037	2019/09/21	1150	FC	2	2019/09/21	VB+PS	SM
1L	13 / 15	Connected to 20	T	GW	PX037	2019/09/21	1250	FC	2	2019/09/21	VB+PS	SM
1M	15 / 20	NEOS	DS-02	P	PX037	2019/09/21	1545	FC	2	2019/09/21	VB+PS	SM
1N	17 / 18	Connected to 16	T	GW	PX037	2019/09/21	1155	FC	2	2019/09/21	VB+PS	SM
1O	18 / 0	Cluster of 2 beads 1 m E of 1P	EE	GW	PX037	2019/09/21	1223	FC	2	2019/09/21	VB+PS	SM
1P	18 / 0	2.5 m E of 1N 1m N	EE	P	PX037	2019/09/21	1225	FC	2	2019/09/21	VB+PS	SM
1Q	13 / 0	19m S of NAT	SI	GW	PX037	2019/09/21	1235	FC	2	2019/09/21	VB+PS	SM
1R	13 / 0	0.2 m S of 1K 0.2 m W	EE	GW	PX037	2019/09/21	1152	FC	2	2019/09/21	VB+PS	SM
1S	13 / 0	3 M S of 1J 0.5 m W	T	GW	PX037	2019/09/21	1240	FC	2	2019/09/21	VB+PS	SM
1T	1 / 0	2m N of 1/2 seos 4 m E	EE	P	PX037	2019/09/21	1345	FC	2	2019/09/21	VB+PS	SM

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 1 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/09/21	1020	FC	2	260	254	91	91	104	74	92	133	135	136	133	131	MC	
2	PX037	2019/09/21	1520	FC	10	260	254	98	98	100	114	90	121	121	121	122	119	MC	
3	PX037	2019/09/22	1438	MC	6	260	254	114	117	113	122	110	125	124	120	123	128	MC	
4	PX037	2019/09/27	1000	FC	-5	271	260	100	93	100	82	95	122	126	129	122	120	FC	
5	PX037	2019/09/27	1500	MB	3	271	260	96	92	99	95	90	121	117	124	120	119	MB	
6	PX038	2019/10/04	1407	JH	-6	257	254	92	91	88	93	91	115	121	119	120	127	JH	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
2A	18 / 0	VT leak on 1P	VL	GW	PX037	2019/09/21	1438	FC	2	2019/09/21	VB+PS	SM
2B	22 / 0	0.3m E of 2C	EE	GW	PX037	2019/09/22	1515	MC	6	2019/09/22	VB+PS	SM
2C	21 / 22	Connected to 19	T	GW	PX037	2019/09/22	1515	MC	6	2019/09/22	VB+PS	SM
2D	21 / 22	Connected to 23	T	GW	PX037	2019/09/22	1523	MC	6	2019/09/22	VB+PS	SM
2E	19 / 22	9m S of north AT	EE	GW	PX037	2019/09/22	1525	MC	6	2019/09/22	VB+PS	SM
2F	24 / 25	Connected to 26	T	P	PX037	2019/09/22	1609	MC	6	2019/09/22	VB+PS	SM
2G	28 / 0	4.8m S, 2.4m West Of 2I	EE	GW	PX037	2019/09/22	1620	MC	6	2019/09/22	VB+PS	SM
2H	28 / 0	6.4m S, 2.4m West Of 2I	EE	GW	PX037	2019/09/22	1618	MC	6	2019/09/22	VB+PS	SM
2I	27 / 28	5m S of N AT	DS-04	GW	PX037	2019/09/22	1720	MC	6	2019/09/22	VB+PS	SM
2J	18 / 19	27m S of NAT	DS-03	P	PX038	2019/10/04	1720	JH	-6	2019/04/10	VB+PS	SM
2K	32 / 33	Connected To 31	T	GW	PX037	2019/09/27	1116	FC	3	2019/09/28	VB+PS	SM
2L	32 / 33	Connected To 35	T	GW	PX037	2019/09/27	1110	FC	3	2019/09/28	VB+PS	SM
2M	33 / 34	Connected To 31	T	GW	PX037	2019/09/27	1140	FC	3	2019/09/28	VB+PS	SM
2N	33 / 34	Connected To 35	T	P	PX038	2019/10/04	1428	JH	-6	2019/10/04	VB+PS	SM
2O	34 / 0	1.7m West,1.5m North OF 2N	EE	GW	PX037	2019/09/27	1142	FC	3	2019/09/28	VB+PS	SM
2P	34 / 0	2.7m West,1.6m North OF 2N	EE	GW	PX037	2019/09/27	1110	FC	3	2019/09/28	VB+PS	SM
2Q	30 / 31	1.5M From NEOS To Back Of Crest	WR	GW+P	PX037	2019/09/27	1600	MB	3	2019/09/27	VB+PS	SM
2R	33 / 35	Connected To 2L	DS-05	P	PX037	2019/09/27	1110	FC	3	2019/09/28	VB+PS	SM
2S	36 / 37	Connected To 35	T	GW	PX038	2019/10/04	1435	JH	-6	2019/10/04	VB+PS	SM
2T	36 / 37	Connected To 38	T	GW	PX038	2019/10/04	1440	JH	-6	2019/10/04	VB+PS	SM

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 2 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX038	2019/10/04	1407	JH	-6	257	254	92	91	88	93	91	115	121	119	120	127	JH	
2	PX038	2019/10/08	1125	JH	-6	260	254	98	98	98	102	98	104	104	107	107	107	JH	
3	PX037	2019/10/08	1530	JH	-6	257	254	106	102	97	101	99	108	106	104	103	93	MB	
4	PX037	2019/10/16	1130	JH	-13	257	251	78	94	95	75	69	108	103	112	105	115	JH	
5	PX037	2019/10/18	915	JH	-10	257	251	94	83	78	69	77	105	113	114	113	115	WB	
6	PX037	2019/11/12	810	WB	-23	268	265	99	93	97	95	98	106	99	106	95	106	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
3A	37 / 38	29m North Of 2T	DS-06	P	PX038	2019/10/04	1538	JH	-6	2019/10/04	VB+PS	SM
3B	39 / 0	21m S of NAT, 0.5m W of 40	EE	GW	PX038	2019/10/08	1323	JH	-6	2019/10/09	VB+PS	SM
3C	39 / 0	46.5m S of NAT,0.9m W of 40	EE	P	PX037	2019/10/08	1722	JH	-6	2019/10/09	VB+PS	SM
3D	39 / 0	44.7m S of NAT,0.9m W of 40	EE	GW	PX037	2019/10/08	1726	JH	-6	2019/10/09	VB+PS	SM
3E	39 / 0	44.7m S of NAT,2.4m W of 40	EE	P	PX037	2019/10/08	1720	JH	-6	2019/10/09	VB+PS	SM
3F	40 / 0	7m S of NAT,0.1m W of 41	D	GW	PX038	2019/10/08	1321	JH	-6	2019/10/09	VB+PS	SM
3G	40 / 41	28.7m S of NAT	DS-7	P	PX037	2019/10/08	1626	JH	-6	2019/10/09	VB+PS	SM
3H	41 / 42	NEOS	IO	GW	PX038	2019/10/08	1312	JH	-6	2019/10/09	VB+PS	SM
3I	41 / 42	16.3m S of NAT	DS-8	P	PX038	2019/10/08	1400	JH	-6	2019/10/08	VB+PS	SM
3J	40 / 0	Covered by repair 7A	EE	P	PX037	2019/11/12	1607	WB	-20	2019/11/15	VB+PS	KA
3K	43 / 0	41.2m S of NAT,3.7m E of 3M	EE	GW	PX037	2019/10/08	1731	JH	-6	2019/10/10	VB+PS	SM
3L	39 / 0	46.5m S of NAT,2.4m W of 40	EE	P	PX037	2019/10/08	1725	JH	-6	2019/10/10	VB+PS	SM
3M	42 / 43	41.2m S of NAT	EE	GW	PX037	2019/10/08	1730	JH	-6	2019/10/10	VB+PS	SM
3N	44 / 45	12.2m S of NAT	BO	P	PX037	2019/10/08	1653	JH	-6	2019/10/10	VB+PS	SM
3O	47 / 48	connected to 46	T	GW	PX037	2019/10/16	1343	JH	-6	2019/10/18	VB+PS	WB
3P	41 / 0	VT leak on 3I	VL	GW	PX038	2019/10/08	1524	JH	-6	2019/10/08	VB+PS	SM
3Q	47 / 48	Connected to 49	T	GW	PX037	2019/10/16	1335	JH	-11	2019/10/18	VB+PS	WB
3R	48 / 0	1M from panel 48	DS-10	P	PX037	2019/10/18	1038	JH	-10	2019/10/18	VB+PS	WB
3S	49 / 0	4.8M from SEOS	EE	P	PX037	2019/10/16	1318	JH	-13	2019/10/17	VB+PS	WB
3T	49 / 0	3M from SEOS	EE	P	PX037	2019/10/16	1240	JH	-13	2019/10/17	VB+PS	WB

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 3 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/10/16	1130	JH	-13	257	251	78	94	95	75	69	108	103	112	105	115	JH	
2	PX037	2019/10/18	915	JH	-10	257	251	94	83	78	69	77	105	113	114	113	115	WB	
3	PX037	2019/10/23	1200	JH	-5	257	251	94	68	108	96	107	125	130	120	121	115	JH	
4	PX037	2019/10/27	813	DW	-11	257	251	107	115	114	103	108	123	120	12	135	126	DW	
5	PX038	2019/10/27	1200	DW	-11	257	251	103	113	105	110	116	120	119	125	116	109	DW	
6	PX038	2019/10/27	1555	DW	-11	257	251	101	107	99	105	111	115	117	123	120	121	DW	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
4A	49 / 0	1M from SEOS	EE	P	PX037	2019/10/16	1253	JH	-13	2019/10/17	VB+PS	WB
4B	50 / 51	18.3M from SEOS	WS	P	PX037	2019/10/18	1038	JH	-10	2019/10/18	VB+PS	WB
4C	52 / 53	3m from SEOS	DS-11	P	PX037	2019/10/18	1130	JH	-10	2019/10/18	VB+PS	WB
4D	53 / 54	connected to P55	T	GW	PX037	2019/10/18	950	JH	-10	2019/10/18	VB+PS	WB
4E	53 / 55	connected to P56	T	GW	PX037	2019/10/18	940	JH	-10	2019/10/18	VB+PS	WB
4F	54 / 57	21.4m from SEOS	FM	GW	PX037	2019/10/18	935	JH	-10	2019/10/18	VB+PS	WB
4G	58 / 59	connected to p57	T	GW	PX037	2019/10/23	1530	JH	-2	2019/10/23	VB+PS	WB
4H	58 / 59	connected to p60	T	GW	PX037	2019/10/23	1544	JH	-2	2019/10/23	VB+PS	WB
4I	59 / 60	5m north of 4H	IO	P	PX037	2019/10/23	1235	JH	-2	2019/10/23	VB+PS	MC
4J	60 / 61	north toe of berm	IO	P	PX037	2019/10/23	1350	JH	-2	2019/10/23	VB+PS	WB
4K	62 / 63	connected to p61	T	GW	PX037	2019/10/23	1555	JH	-2	2019/10/23	VB+PS	DW
4L	67 / 69	connected to 61	T	P	PX038	2019/10/27	1715	DW	-11	2019/10/28	VB+PS	SM
4M	63 / 64	connected to p61	T	P	PX037	2019/10/23	1550	JH	-2	2019/10/23	VB+PS	DW
4N	64 / 65	connected to p61	T	GW	PX037	2019/10/27	1210	DW	-11	2019/10/28	VB+PS	SM
4O	60 / 61	1M south of 4J	FM	GW	PX037	2019/10/23	1520	JH	-2	2019/10/23	VB+PS	DW
4P	67 / 67	south anchor trench, extending in to the	WR	P+RS	PX038	2019/10/29	1130	DW	-5	2019/10/29	VB+PS	MC
4Q	66 / .	ter of panel, 1m from toe and 2m from t	EE	P	PX038	2019/10/27	1213	DW	-11	2019/10/28	VB+PS	SM
4R	62 / 69	top of berm	BO	P	PX038	2019/10/27	1255	DW	-11	2019/10/28	VB+PS	SM
4S	62 / 69	2 and 4M from toe	D	GW	PX038	2019/10/28	1125	WB	-10	2019/10/28	VB+PS	SM
4T	61 / 62	Connected to 69	T	GW	PX038	2019/10/28	1000	WB	-10	2019/10/28	VB+PS	SM

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 4 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/10/26	1015	DW	-11	257	251	85	80	91	88	95	117	116	123	126	129	DW	
2	PX037	2019/10/27	813	DW	-11	257	251	107	115	114	103	108	123	120	12	135	126	DW	
3	PX038	2019/10/27	1200	DW	-11	257	251	103	113	105	110	116	120	119	125	116	109	DW	
4	PX038	2019/10/27	1555	DW	-11	257	251	101	107	99	105	111	115	117	123	120	121	DW	
5	PX038	2019/10/28	840	WB	-15	257	251	104	102	97	112	117	123	122	123	113	116	WB	
6	PX038	2019/10/28	1510	MC	-5	257	251	101	100	104	88	107	117	107	117	106	113	MC	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
5A	58 / 59	2m from WEOS	DS-12	P	PX037	2019/10/26	1132	DW	-11	2019/10/28	VB+PS	SM
5B	66 / 67	SEOS	DS13	P	PX038	2019/10/28	1618	MC	-10	2019/10/28	VB+PS	SM
5C	66 / 71	Connected to 60	T	GW	PX037	2019/10/27	1120	DW	-11	2019/10/28	VB+PS	SM
5D	60 / 61	Connected to 66	T	GW	PX037	2019/10/27	1127	DW	-11	2019/10/28	VB+PS	SM
5E	58 / 60	Connected to 71	T	GW	PX037	2019/10/27	1115	DW	-11	2019/10/28	VB+PS	SM
5F	71 / 72	Connected to 58	T	GW	PX037	2019/10/27	1110	DW	-11	2019/10/28	VB+PS	SM
5G	57 / 58	Connected to 72	T	GW	PX037	2019/10/27	1105	DW	-11	2019/10/28	VB+PS	SM
5H	73 / 72	Connected to 57	T	GW	PX037	2019/10/27	940	DW	-11	2019/10/28	VB+PS	SM
5I	54 / 57	Connected to 73	T	GW	PX037	2019/10/27	917	DW	-11	2019/10/28	VB+PS	SM
5J	73 / 74	Connected to 54	T	GW	PX037	2019/10/27	907	DW	-11	2019/10/28	VB+PS	SM
5K	53 / 54	Connected to 74	T	GW	PX037	2019/10/27	950	DW	-11	2019/10/28	VB+PS	SM
5L	74 / 75	Connected to 53	T	P	PX038	2019/11/07	1414	FC	-14	2019/11/15	VB+PS	FC
5M	67 / 68	Connected to 70	T	GW	PX038	2019/10/28	1700	MC	-10	2019/10/28	VB+PS	SM
5N	73 / 57	1M from WEOS	D	P	PX038	2019/10/27	1520	DW	-11	2019/10/28	VB+PS	SM
5O	69 / 70	Connected to 67	T	GW	PX038	2019/10/28	1210	WB	-10	2019/10/28	VB+PS	SM
5P	69 / .	top of berm, scattered along panel width	D	GW	PX038	2019/10/29	1406	MC	-5	2019/10/29	VB+PS	DW
5Q	68 / 70	End of seam, in anchor trench	DS-14	P	PX038	2019/10/28	1600	MC	-10	2019/10/28	VB+PS	DW
5R	74 / 75	4M from neos	D	P	PX037	2019/11/13	1400	FC	-28	2019/11/15	VB+PS	KA
5S	74 / 75	2m from SEOS	IO	GW	PX038	2019/11/07	1130	FC	-14	2019/11/15	VB+PS	KA
5T	. / .	4L	VTL	GW	PX038	2019/10/29	1300	MC	-14	2019/11/14	VB+PS	KA

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 5 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX038	2019/11/07	830	FC	-14	248	248	93	84	81	77	84	106	112	104	106	107	FC	
2	PX038	2019/11/07	1245	FC	-16	248	248	89	97	107	110	94	114	117	111	115	117	FC	
3	PX037	2019/11/11	1140	WB	-20	268	265	101	107	98	107	101	110	111	114	112	108	TD	
4	PX037	2019/11/11	1540	WB	-20	268	265	86	86	84	81	85	95	92	100	94	104	TD	
5	PX037	2019/11/12	810	WB	-23	268	265	99	93	97	95	98	106	99	106	95	106	TD	
6	PX037	2019/11/12	1215	WB	-21	268	265	93	100	96	92	82	103	97	104	98	98	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
6A	52 / 53	Connected to 75	T	P	PX037	2019/11/11	1155	WB	-20	2019/11/15	VB+PS	KA
6B	75 / 77	Connected to 52	T	P	PX037	2019/11/11	1234	WB	-20	2019/11/15	VB+PS	KA
6C	76 / 77	Connected to 52	T	P	PX037	2019/11/13	1648	FC	-28	2019/11/15	VB+PS	KA
6D	75 / 76	Connected to 77	T	P	PX037	2019/11/14	915	FC	-25	2019/11/15	VB+PS	KA
6E	75 / 76	2.5m South of trench crest	BO	p	PX037	2019/11/14	1005	FC	-25	2019/11/13	VB+PS	WB
6F	51 / 52	Connected to 76	T	P	PX037	2019/11/13	1648	FC	-14	2019/11/15	VB+PS	KA
6G	76 / 78	Connected to 51	T	P	PX037	2019/11/13	1319	FC	-14	2019/11/15	VB+PS	KA
6H	50 / 51	Connected to 78	T	P	PX037	2019/11/13	1319	FC	-14	2019/11/15	VB+PS	KA
6I	78 / 79	Connected to 50	T	P	PX037	2019/11/12	1607	WB	-23	2019/11/15	VB+PS	KA
6J	49 / 50	Connected to 79	T	P	PX037	2019/11/12	1607	WB	-23	2019/11/15	VB+PS	KA
6K	79 / 80	Connected to 49	T	GW	PX037	2019/11/12	1539	WB	-23	2019/11/15	VB+PS	KA
6L	48 / 49	Connected to 80	T	GW	PX037	2019/11/12	1539	WB	-23	2019/11/15	VB+PS	KA
6M	80 / 81	Connected to 48	T	P	PX037	2019/11/12	1521	WB	-23	2019/11/15	VB+PS	KA
6N	46 / 48	Connected to 81	T	P	PX037	2019/11/12	1521	WB	-23	2019/11/15	VB+PS	KA
6O	81 / 82	Connected to 48	T	GW	PX037	2019/11/12	1356	WB	-23	2019/11/15	VB+PS	KA
6P	45 / 46	Connected to 82	T	GW	PX037	2019/11/12	1356	WB	-23	2019/11/15	VB+PS	KA
6Q	53 / 75	.5M East of WEOS	BO	P	PX038	2019/11/07	1520	FC	-14	2019/11/15	VB+PS	KA
6R	52 / 77	WEOS	DS-15	P	PX037	2019/11/13	1648	FC	-14	2019/11/15	VB+PS	KA
6S	82 / 83	Connected to 45	T	P	PX037	2019/11/12	1325	WB	-23	2019/11/15	VB+PS	KA
6T	44 / 45	Connected to 83	T	P	PX037	2019/11/12	1325	WB	-23	2019/11/15	VB+PS	KA

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS 6C and 6F covered with a patch (6R) because of Destructive test in between two patch.

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 6 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/10	1425	WB	-20	268	265	97	96	86	92	88	105	97	102	96	105	TD	
2	PX037	2019/11/11	1140	WB	-20	268	265	101	107	98	107	101	110	111	114	112	108	TD	
3	PX037	2019/11/11	1540	WB	-20	268	265	86	86	84	81	85	95	92	100	94	104	TD	
4	PX037	2019/11/12	810	WB	-23	268	265	99	93	97	95	98	106	99	106	95	106	TD	
5	PX037	2019/11/12	1215	WB	-21	268	265	93	100	96	92	82	103	97	104	98	98	TD	
6	PX037	2019/11/14	835	FC	-25	262	262	92	81	81	81	83	84	100	94	99	102	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
7A	83 / 84	Connected to 44	T	P	PX037	2019/11/12	1159	WB	-23	2019/11/15	VB+PS	KA
7B	43 / 44	Connected to 84	T	P	PX037	2019/11/12	1159	WB	-23	2019/11/15	VB+PS	KA
7C	84 / 85	Connected to 43	T	GW	PX037	2019/11/12	1107	WB	-23	2019/11/15	VB+PS	KA
7D	42 / 43	Connected to 85	T	GW	PX037	2019/11/12	1107	WB	-23	2019/11/15	VB+PS	KA
7E	85 / 86	Connected to 42	T	GW	PX037	2019/11/12	930	WB	-23	2019/11/15	VB+PS	KA
7F	41 / 42	Connected to 86	T	GW	PX037	2019/11/12	930	WB	-23	2019/11/15	VB+PS	KA
7G	42 / 85	2MmEast of WEOS	D	P	PX037	2019/11/15	1548	JH	-23	2019/11/16	VB+PS	KA
7H	86 / 87	Connected to 41	T	P	PX037	2019/11/11	1436	WB	-20	2019/11/16	VB+PS	KA
7I	87 / 88	Connected to 40	T	GW	PX037	2019/11/10	1720	WB	-20	2019/11/16	VB+PS	KA
7J	88 / 86	Intersecting 87	T	GW	PX037	2019/11/15	1632	JH	-28	2019/11/16	VB+PS	KA
7K	39 / 40	Connected to 88	T	P	PX037	2019/11/10	1710	WB	-20	2019/11/16	VB+PS	KA
7L	88 / 89	NEOS DS-16	DS-16	P	PX037	2019/11/11	1348	WB	-20	2019/11/16	VB+PS	KA
7M	38 / 39	Connected to 89	T	GW	PX037	2019/11/10	1554	WB	-20	2019/11/16	VB+PS	KA
7N	89 / 90	Connected to 90	T	GW	PX037	2019/11/10	1554	WB	-20	2019/11/16	VB+PS	KA
7O	88 / 89	2m S of NEOS	BO	P	PX037	2019/11/11	1348	WB	-20	2019/11/16	VB+PS	KA
7P	89 / 39	3M from WEOS	BO	P	PX037	2019/11/10	1626	WB	-20	2019/11/16	VB+PS	KA
7Q	86 / 41	2.5m East of WEOS	BO	P	PX037	2019/11/11	1655	WB	-20	2019/11/16	VB+PS	KA
7R	38 / 90	1m East of WEOS	BO	P	PX037	2019/11/14	1216	FC	-17	2019/11/16	VB+PS	KA
7S	36 / 38	Connected to 90	T	GW	PX037	2019/11/14	1238	FC	-17	2019/11/16	VB+PS	KA
7T	90 / 91	Connected to 36	T	GW	PX037	2019/11/14	1310	FC	-17	2019/11/16	VB+PS	KA

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 7 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/12	810	WB	-23	268	265	99	93	97	95	98	106	99	106	95	106	TD	
2	PX037	2019/11/12	1215	WB	-21	268	265	93	100	96	92	82	103	97	104	98	98	TD	
3	PX037	2019/11/14	835	FC	-25	262	262	92	81	81	81	83	84	100	94	99	102	TD	
4	PX037	2019/11/14	1150	FC	-17	260	257	100	99	102	84	105	106	113	105	114	118	TD	
5	PW037	2019/11/15	940	JH	-32	262	257	70	70	69	72	70	97	95	106	110	104	TD	
6	PX037	2019/11/15	1400	JH	-28	265	262	95	85	85	76	95	100	106	106	104	103	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
8A	91 / 92	Intersecting 35-36	T	P	PX037	2019/11/14	1534	FC	-17	2019/11/16	VB+PS	KA
8B	92 / 93	Intersecting 35	T	P	PX037	2019/11/15	1458	JH	-28	2019/11/16	VB+PS	KA
8C	91 / 93	Intersecting 92	T	P	PX037	2019/11/15	1425	JH	-28	2019/11/16	VB+PS	KA
8D	32 / 35	Intersecting 93	T	GW	PX037	2019/11/14	920	FC	-28	2019/11/16	VB+PS	KA
8E	93 / 94	Intersecting 32	T	P	PX037	2019/11/14	1534	FC	-28	2019/11/16	VB+PS	KA
8F	94 / .	1m North of SEOP	D	P	PX037	2019/11/14	1548	FC	-28	2019/11/16	VB+PS	KA
8G	31 / 32	Intersecting 94	T	GW	PX037	2019/11/14	1435	FC	-28	2019/11/16	VB+PS	KA
8H	94 / 95	Intersecting 31	T	GW	PX037	2019/11/14	1458	FC	-28	2019/11/16	VB+PS	KA
8I	94 / 95	SEOS	DS-17	P	PX037	2019/11/14	1538	FC	-28	2019/11/16	VB+PS	KA
8J	31 / 95	Intersecting 100-96	T	GW	PX037	2019/11/17	1323	FC	-21	2019/11/16	VB+PS	FC
8K	45 / .	1m from SEOP	D	P	PX037	2019/11/12	943	WB	-23	2019/11/16	VB+PS	FC
8L	133 / 143	Intersecting 120	T	P	PX029	2019/12/07	1133	LC	-38	2019/12/07	VB+PS	LC
8M	160 / 161	Intersecting 159	T	GW	PX029	2019/12/11	1342	JH	-25	2019/12/11	VB+PS	LC
8N	160 / 161	Intersecting 162	T	GW	PX029	2019/12/11	1347	JH	-25	2019/12/11	VB+PS	LC
8O	147 / 148	Intersecting 146	T	GW	PX029	2019/12/10	1045	LC	-25	2019/12/10	VB+PS	LC
8P	148 / 149	Intersecting 146	T	GW	PX029	2019/12/10	950	LC	-25	2019/12/10	VB+PS	LC
8Q	160 / 162	2m East of WEOS	WR	GW	PX029	2019/12/11	1339	JH	-25	2019/12/11	VB+PS	LC
8R	160 / 162	2m East of 8Q	WS	GW	PX029	2019/12/11	1329	JH	-25	2019/12/11	VB+PS	LC
8S	160 / 152	Last 2m in trench	IO	P GW	PX029	2019/12/11	1319	JH	-25	2019/12/11	VB+PS	LC
8T	110 / 1	Intersecting 13	T	GW	PX037	2019/11/29	1148	DW	-25	2019/11/29	VB+PS	DW

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX	
PS - POINT STRESS	ST - SPARK TEST	

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 8 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/14	835	FC	-25	262	262	92	81	81	81	83	84	100	94	99	102	TD	
2	PX037	2019/11/14	1150	FC	-17	260	257	100	99	102	84	105	106	113	105	114	118	TD	
3	PW037	2019/11/15	940	JH	-32	262	257	70	70	69	72	70	97	95	106	110	104	TD	
4	PX037	2019/11/15	1400	JH	-28	265	262	95	85	85	76	95	100	106	106	104	103	TD	
5	PX037	2019/11/17	900	JH	-33	262	257	76	85	83	97	75	104	98	100	100	94	TD	
6	PX037	2019/11/17	1320	JH	-33	260	254	90	90	82	86	76	114	104	111	105	113	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
9A	94 / 95	SEOS	DS-18	P	PX037	2019/11/14	1337	FC	-28	2019/11/21	VB+PS	TD
9B	46 / 81	3m from EEOS	D	P	PX037	2019/11/15	1600	JH	-28	2019/11/21	VB+PS	TD
9C	97 / 98	Intersecting 96	T	GW	PX037	2019/11/20	938	JH	-32	2019/11/21	VB+PS	TD
9D	94 / 95	SEOS	DS-17A1	P	PX037	2019/11/17	1230	JH	-21	2019/11/21	VB+PS	TD
9E	97 / 98	EEOS	DS17B1	P	PX037	2019/11/20	920	JH	-32	2019/11/21	VB+PS	TD
9F	95 / 96	Intersecting 31-99	DS#19	P	PX037	2019/11/17	1518	JH	-21	2019/11/21	VB+PS	TD
9G	99 / 100	Intersecting 31	T	GW	PX037	2019/11/18	952	JH	-27	2019/11/21	VB+PS	TD
9H	30 / 31	Intersecting 100	T	P	PX037	2019/11/18	1128	JH	-27	2019/11/21	VB+PS	TD
9I	100 / 30	2m east of WEOS	WS	P	PX037	2019/11/18	1311	JH	-27	2019/11/21	VB+PS	TD
9J	99 / 100	Intersecting 30	T	P	PX037	2019/11/17	1650	JH	-27	2019/11/21	VB+PS	TD
9K	99 / 30	1m West of 9J	WS	GW	PX037	2019/11/18	1404	JH	-27	2019/11/21	VB+PS	TD
9L	99 / 29	intersecting 30	T	GW	PX037	2019/11/18	1555	JH	-27	2019/11/21	VB+PS	TD
9M	96 / 99	Intersecting 28-29	T	P	PX037	2019/11/20	1625	JH	-32	2019/11/21	VB+PS	TD
9N	96 / 28	3m East of WEOS	D	GW	PX037	2019/11/20	920	JH	-32	2019/11/21	VB+PS	TD
9O	97 / 96	Intersecting 28-27	T	GW	PX037	2019/11/20	945	JH	-32	2019/11/21	VB+PS	TD
9P	101 / 97	Intersecting 27-26	T	GW	PX037	2019/11/20	1200	JH	-32	2019/11/21	VB+PS	TD
9Q	97 / 98	Intersecting 101	T	GW	PX037	2019/11/20	1350	JH	-32	2019/11/21	VB+PS	TD
9R	102 / 103	Intersecting 101	T	GW	PX037	2019/11/24	845	JH	-17	2019/11/24	VB+PS	DW
9S	102 / 103	Intersecting 104	T	GW	PX037	2019/11/24	1110	JH	-17	2019/11/24	VB+PS	DW
9T	101 / 103	41m S of NEOS	WS	p	PX037	2019/11/20	1150	JH	-32	2019/11/21	VB+PS	DW

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 9 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/19	830	JH	-24	260	254	105	88	95	96	94	107	106	108	100	106	TD	
2	PX037	2019/11/19	1245	JH	-24	260	254	87	93	95	99	97	119	117	119	120	118	TD	
3	PW064	2019/11/19	1445	JH	-24	260	254	96	82	86	103	93	112	118	114	115	109	TD	
4	PX037	2019/11/20	850	JH	-32	260	254	92	92	95	90	94	128	116	120	122	122	TD	
5	PX037	2019/11/20	1245	JH	-32	260	254	73	96	85	100	86	113	117	123	126	120	TD	
6	PX037	2019/11/21	825	JH	-30	260	254	99	98	86	88	88	110	108	107	107	109	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
10A	101 / 103	55m South of NEOS	WS	GW	PX037	2019/11/20	1644	JH	-32	2019/11/20	VB+PS	TD
10B	101 / 103	2m South of 9R	DS#20	P	PX037	2019/11/24	845	JH	-17	2019/11/24	VB+PS	DW
10C	103 / 104	1m South of 9S	WS	GW	PX037	2019/11/24	1139	JH	-17	2019/11/24	VB+PS	DW
10D	104 / 103	21m South of 9S	IO	GW	PX037	2019/11/20	1337	JH	-32	2019/11/21	VB+PS	DW
10E	104 / 103	24 m South of 9S	IO	GW	PX037	2019/11/20	1329	JH	-32	2019/11/21	VB+PS	DW
10F	103 / 104	34m South of 9S	WS	GW	PX037	2019/11/20	1215	JH	-32	2019/11/21	VB+PS	DW
10G	94 / 95	1m North of 8H	DS#17A2	P	PX037	2019/11/21	1414	JH	-32	2019/11/21	VB+PS	DW
10H	103 / 104	51m South of 9S	WS	P	PX037	2019/11/19	1614	JH	-32	2019/11/21	VB+PS	DW
10I	101 / 102	Intersecting 26	T	GW	PX037	2019/11/19	1512	JH	-32	2019/11/21	VB+PS	DW
10J	24 / 26	Intersecting 102	T	GW	PX037	2019/11/19	1510	JH	-32	2019/11/21	VB+PS	DW
10K	102 / 104	Intersecting 24	T	GW	PX037	2019/11/19	1540	JH	-32	2019/11/21	VB+PS	DW
10L	23 / 24	Intersecting 104	T	GW	PX037	2019/11/19	1547	JH	-32	2019/11/21	VB+PS	DW
10M	104 / 105	Intersecting 23-21	T	GW	PX037	2019/11/25	947	JH	-32	2019/11/25	VB+PS	DW
10N	104 / 105	South anchor trench crest	CR	GW	PX037	2019/11/20	1623	JH	-32	2019/11/21	VB+PS	DW
10O	104 / 105	23m North of SEOS	WS	P	PX037	2019/11/20	1348	JH	-32	2019/11/21	VB+PS	DW
10P	104 / 105	46m North of SEOS	WS	P	PX037	2019/11/25	1215	JH	-32	2019/11/25	VB+PS	DW
10Q	93 / 94	1m North of SEOS	D	P	PX037	2019/11/21	1550	JH	-32	2019/11/21	VB+PS	DW
10R	104 / 105	30m South of 10M	DS#21	P	PX037	2019/11/25	1219	JH	-32	2019/11/25	VB+PS	DW
10S	105 / 106	Intersecting 21	T	GW	PX037	2019/11/28	938	DW	-21	2019/11/28	VB+PS	DW
10T	106 / 107	Intersecting 19	T	GW	PX037	2019/11/28	957	DW	-21	2019/11/28	VB+PS	DW

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS: Seam 94/95 Wedge Welded and then Extruded the entire length of the seam. Bad weather during Wedge weld of seam 94/95, and destructs pulled required seam to be extruded. Extrusion of seam from 8H to 10G, 10G to 9D. 9D to 9A.

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 10 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/20	850	JH	-32	260	254	92	92	95	90	94	128	116	120	122	122	TD	
2	PX037	2019/11/20	1245	JH	-32	260	254	73	96	85	100	86	113	117	123	126	120	TD	
3	PX037	2019/11/24	840	JH	-17	257	254	95	79	87	92	83	114	102	110	106	102	TD	
4	PX037	2019/11/24	1200	JH	-22	257	254	94	84	81	78	86	104	106	96	92	105	TD	
5	PX037	2019/11/24	1545	JH	-22	257	254	90	78	70	82	84	105	105	101	108	103	TD	
6	PX037	2019/11/25	820	JH	-32	260	254	93	105	99	95	98	107	104	105	107	99	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
11A	105 / 106	12m South of NEOS	BO	P	PX037	2019/11/25	1600	JH	-32	2019/11/25	VB+PS	DW
11B	105 / 106	Intersecting 107	T	GW	PX037	2019/11/20	1436	JH	-17	2019/11/20	VB+PS	DW
11C	96 / 28	EEOS	ATL	GW	PX037	2019/11/24	1155	JH	-17	2019/11/24	VB+PS	DW
11D	107 / 108	Intersecting 17	T	GW	PX037	2019/11/28	1209	DW	-21	2019/11/28	VB+PS	DW
11E	108 / 109	Intersecting 17	T	GW	PX037	2019/11/28	1330	DW	-21	2019/11/28	VB+PS	DW
11F	107 / 108	5m South of NEOS	DS#22	P	PX037	2019/11/27	940	DW	-28	2019/11/27	VB+PS	DW
11G	108 / .	24m North of SEOP	D	GW	PX037	2019/11/27	940	DW	-28	2019/11/27	VB+PS	DW
11H	109 / 110	Intersecting 13	T	GW	PX037	2019/11/28	1526	DW	-21	2019/11/28	VB+PS	DW
11I	109 / 13	Intersecting 16	T	GW	PX037	2019/11/28	1615	DW	-21	2019/11/28	VB+PS	DW
11J	109 / 16	3m West of EEOS	D	P	PX037	2019/11/28	1400	DW	-21	2019/11/28	VB+PS	DW
11K	107 / 19	3m East of WEOS	IO	GW	PX037	2019/11/28	1055	DW	-21	2019/11/28	VB+PS	DW
11L	105 / 21	2m East of 10S	D	GW	PX037	2019/11/27	1545	DW	-28	2019/11/27	VB+PS	DW
11M	105 / 21	1m West of 10M	D	P	PX037	2019/11/27	1450	DW	-28	2019/11/27	VB+PS	DW
11N	107 / 19	Intersecting 17	T	GW	PX037	2019/11/28	1114	DW	-21	2019/11/28	VB+PS	DW
11O	109 / 110	Intersecting 111	T	GW	PX037	2019/11/28	1558	DW	-21	2019/11/28	VB+PS	DW
11P	110 / 111	Intersecting 112	T	GW	PX037	2019/11/29	949	DW	-25	2019/11/29	VB+PS	DW
11Q	110 / 111	1m East of WEOS	DS#23	P	PX037	2019/11/29	925	DW	-25	2019/11/29	VB+PS	DW
11R	105 / 21	WEOS	FTS	P	PX037	2019/11/27	1450	DW	-28	2019/11/27	VB+PS	DW
11S	110 / 112	Intersecting 1	T	GW	PX037	2019/11/29	1136	DW	-25	2019/11/29	VB+PS	DW
11T	16 / 109	2 m west of 11E	D	GW	PX037	2019/11/26	1145	JH	-28	2019/11/26	VB+PS	DW

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 11 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/19	830	JH	-24	260	254	105	88	95	96	94	107	106	108	100	106	TD	
2	PX037	2019/11/19	1245	JH	-24	260	254	87	93	95	99	97	119	117	119	120	118	TD	
3	PW064	2019/11/19	1445	JH	-24	260	254	96	82	86	103	93	112	118	114	115	109	TD	
4	PX037	2019/11/25	820	JH	-32	260	254	93	105	99	95	98	107	104	105	107	99	TD	
5	PX037	2019/11/25	1240	JH	-32	260	254	96	98	93	90	90	105	97	104	103	99	TD	
6	PX037	2019/11/26	815	JH	-20	260	254	108	105	98	104	101	118	115	110	111	112	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
12A	111 / 112	Crest of South trench	BO	P	PX037	2019/11/26	1127	JH	-28	2019/11/26	VB+PS	DW
12B	111 / 109	Crest of South trench	BO	P	PX037	2019/11/26	955	JH	-28	2019/11/26	VB+PS	DW
12C	112 / 113	Intersecting 2	T	GW	PX037	2019/11/29	1534	DW	-25	2019/11/29	VB+PS	DW
12D	113 / 114	Intersecting 112	T	P	PX037	2019/12/01	1006	DW	-30	2019/12/01	VB+PS	DW
12E	113 / 114	Intersecting 115	T	GW	PX037	2019/11/26	1704	JH	-28	2019/11/26	VB+PS	DW
12F	112 / 113	25m South of NEOS	FM	P	PX037	2019/11/30	945	DW	-25	2019/11/29	VB+PS	DW
12G	105 / .	1m West of 11M	D	P	PX037	2019/11/19	1508	JH	-24	2019/11/19	VB+PS	DW
12H	23 / .	SEOP	D	P	PX037	2019/11/30	915	DW	-21	2019/11/30	VB+PS	DW
12I	114 / 112	Crest of South trench	BO	p	PX037	2019/11/26	1210	JH	-28	2019/11/26	VB+PS	DW
12J	112 / 113	NEOS	DS#24	P	PX037	2019/11/30	915	DW	-21	2019/11/30	VB+PS	DW
12K	113 / 115	Intersecting 3	T	GW	PX037	2019/11/30	1335	DW	-21	2019/11/30	VB+PS	DW
12L	113 / 115	4m South of NEOS	WS	P	PX037	2019/11/30	1300	DW	-21	2019/11/30	VB+PS	DW
12M	113 / 115	12m South of NEOS	D	P	PX037	2019/11/30	1040	DW	-21	2019/11/30	VB+PS	DW
12N	115 / 116	Intersecting 5	T	GW	PX037	2019/11/30	1537	DW	-21	2019/11/30	VB+PS	DW
12O	104 / 24	Between 10K-10L	PT	GW	PX037	2019/11/25	958	JH	-32	2019/11/25	VB+PS	DW
12P	116 / 117	Intersecting 6	T	P	PX037	2019/12/01	1200	DW	-30	2019/12/01	VB+PS	DW
12Q	5 / 6	Intersecting 116	T	GW	PX037	2019/12/01	850	DW	-30	2019/12/01	VB+PS	DW
12R	3 / 5	Intersecting 115	T	GW	PX037	2019/12/02	946	DW	-30	2019/12/02	VB+PS	DW
12S	2 / 3	Intersecting 113	T	gW	PX037	2019/12/02	1130	DW	-30	2019/12/02	VB+PS	DW
12T	1 / 2	Intersecting 112	T	p	PX037	2019/11/29	1424	DW	-25	2019/11/29	VB+PS	DW

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 12 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/29	900	DW	-25	260	254	117	109	104	127	111	156	147	140	138	133	MC	
2	PX037	2019/11/29	1245	DW	-25	260	254	122	115	122	115	125	88	95	80	85	90	MC	
3	PX037	2019/12/01	810	DW	-30	260	254	102	109	110	118	102	123	120	113	132	113	MC	
4	PX037	2019/12/01	1200	DW	-30	260	254	94	86	100	113	106	122	126	121	124	121	MC	
5	PX037	2019/12/02	800	DW	-36	260	254	102	80	99	118	111	131	122	127	133	128	MC	
6	PX037	2019/12/02	1145	DW	-36	260	254	96	99	87	108	96	124	129	118	124	122	MC	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
13A	110 / 1	Between 11s-12T	WS	P	PX037	2019/11/29	1158	DW	-25	2019/11/29	VB+PS	DW
13B	6 / 116	WEOS	DS#25	P	PX037	2019/12/01	846	DW	-30	2019/12/01	VB+PS	DW
13C	117 / 118	Intersecting 8	T	GW	PX037	2019/12/01	1340	DW	-30	2019/12/01	VB+PS	DW
13D	118 / 119	Intersecting 7/9	T	P	PX037	2019/12/02	910	DW	-30	2019/12/02	VB+PS	DW
13E	118 / 119	Intersecting 120	T	P	PX037	2019/12/04	1010	DW	-40	2019/12/04	VB+PS	DW
13F	119 / 120	Intersecting 124	T	GW	PX037	2019/12/03	1549	DW	-40	2019/12/03	VB+PS	DW
13G	7 / 121	Intersecting 119	IO	P	PX037	2019/12/02	1515	DW	-30	2019/12/02	VB+PS	DW
13H	7 / .	1 M NE of 13G	EE	P	PX037	2019/12/02	1247	DW	-30	2019/12/02	VB+PS	DW
13I	8 / 9	Intersecting 118	T	GW	PX037	2019/12/01	1522	DW	-30	2019/12/01	VB+PS	DW
13J	8 / 10	intersecting117	T	GW	PX037	2019/12/01	1325	DW	-30	2019/12/01	VB+PS	DW
13K	6 / 10	intersecting 117	T	GW	PX037	2019/12/01	1316	DW	-30	2019/12/01	VB+PS	DW
13L	118 / 119	Intersecting 120	DS#26	P	PX037	2019/12/04	1005	DW	-40	2019/12/04	VB+PS	DW
13M	7 / 121	4M NW of 13G	EE	P	PX037	2019/12/02	1539	DW	-30	2019/12/02	VB+PS	DW
13N	7 / 121	3 M NW of 13M	WR	P	PX029	2019/12/11	1343	JH	-25	2019/12/11	VB+PS	LC
13O	7 / 121	2 M NW of 13M	IO	GW	PX029	2019/12/11	1358	JH	-25	2019/12/11	VB+PS	LC
13P	121 / 7	Intersecting 7-199	T	P	PX029	2020/01/19	1015	LC	-35	2020/12/19	VB+PS	LC
13Q	122 / 123	Intersecting 121	T	GW	PX037	2019/12/03	955	DW	-40	2019/12/03	VB+PS	DW
13R	121 / 122	Intersecting 119	T	GW	PX037	2019/12/03	1010	DW	-40	2019/12/03	VB+PS	DW
13S	122 / 123	Intersecting 124	T	GW	PX037	2019/12/03	1448	DW	-40	2019/12/03	VB+PS	DW
13T	122 / 124	Intersecting 119	T	GW	PX037	2019/12/03	1514	DW	-40	2019/12/03	VB+PS	DW

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE		VB - VAC BOX
PS - POINT STRESS		ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 13 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX037	2019/11/29	900	DW	-25	260	254	117	109	104	127	111	156	147	140	138	133	MC	
2	PX037	2019/11/29	1245	DW	-25	260	254	122	115	122	115	125	88	95	80	85	90	MC	
3	PX037	2019/12/02	800	DW	-36	260	254	102	80	99	118	111	131	122	127	133	128	MC	
4	PX037	2019/12/02	1145	DW	-36	260	254	96	99	87	108	96	124	129	118	124	122	MC	
5	PX037	2019/12/03	830	DW	-40	260	254	109	110	105	93	98	128	129	137	132	125	MC	
6	PX037	2019/12/03	1230	DW	-40	260	254	128	116	120	104	126	137	120	133	139	135	MC	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
14A	126 / 127	Intersecting 124	T	GW	PX037	2019/12/06	1645	LC	-36	2019/12/06	VB+PS	LC
14B	124 / 125	Intersecting 123	T	GW	PX037	2019/12/03	1335	DW	-40	2019/12/03	VB+PS	DW
14C	124 / 125	Intersecting 127	T	GW	PX037	2019/12/04	1247	DW	-40	2019/12/04	VB+PS	DW
14D	1 / 13	Intersecting 110	T	GW	PX037	2019/11/29	1115	DW	-25	2019/11/29	VB+PS	DW
14E	127 / 128	Intersecting 129	T	GW	PX029	2019/12/12	900	LC	-25	2019/12/12	VB+PS	LC
14F	129 / 130	Intersecting 127	T	GW	PX029	2019/12/10	1143	LC	-25	2019/12/10	VB+PS	LC
14G	131 / 132	Intersecting 130-127	DS#28	P	PX029	2019/12/10	1215	LC	-25	2019/12/10	VB+PS	LC
14H	129 / 130	Intersecting 131	T	GW	PX037	2019/12/02	910	DW	-30	2019/12/02	VB+PS	DW
14I	131 / .	17m West of EEOP	D	GW	PX037	2019/12/05	1450	LC	-36	2019/12/05	VB+PS	LC
14J	131 / .	18m West of EEOP	D	GW	PX037	2019/12/05	1440	LC	-36	2019/12/05	VB+PS	LC
14K	131 / .	19.3m West of EEOP	D	P	PX037	2019/12/05	1430	LC	-36	2019/12/05	VB+PS	LC
14L	131 / .	20.6m West of EEOP	D	P	PX037	2019/12/05	1300	LC	-36	2019/12/05	VB+PS	LC
14M	131 / .	21m West of EEOP	D	P	PX037	2019/12/05	1220	LC	-36	2019/12/05	VB+PS	LC
14N	131 / 132	Intersecting 133	T	GW	PX037	2019/12/05	1055	LC	-36	2019/12/05	VB+PS	LC
14O	132 / 126	Intersecting 120	T	GW	PX029	2019/12/07	911	LC	-38	2019/12/07	VB+PS	LC
14P	133 / 132	Intersecting 120	T	P	PX029	2019/12/07	1015	LC	-38	2019/12/07	VB+PS	LC
14Q	135 / 136	Intersecting 134	T	P GW	PX029	2019/12/12	925	LC	-25	2019/12/12	VB+PS	LC
14R	136 / 137	Intersecting 134	T	GW	PX029	2019/12/10	930	LC	-25	2019/12/10	VB+PS	LC
14S	139 / 140	Intersecting 138	T	GW	PX029	2019/12/10	1115	LC	-25	2019/12/10	VB+PS	LC
14T	139 / 140	Intersecting 141	T	GW	PX029	2019/12/11	902	JH	-25	2019/12/11	VB+PS	LC

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 14 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2019/12/07	810	LC	-38	260	254	104	90	94	110	104	129	129	130	130	123	TD	
2	PX029	2019/12/07	1215	LC	-38	260	254	108	111	107	97	98	121	118	119	113	125	TD	
3	PX029	2019/12/07	1610	LC	-38	260	254	106	102	107	88	93	106	113	114	111	111	TD	
4	PX029	2019/12/10	800	LC	-25	260	254	95	99	95	95	91	111	109	111	109	110	TD	
5	PX029	2019/12/10	1158	LC	-25	260	254	115	104	113	111	100	114	112	104	102	111	TD	
6	PX029	2019/12/10	1545	LC	-25	260	254	101	99	97	103	98	106	108	110	106	106	TD	

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
15A	148 / 149	Intersecting 141	T	GW	PX029	2019/12/10	1630	LC	-25	2019/12/10	VB+PS	LC
15B	147 / 148	Intersecting 141	T	GW	PX029	2019/12/10	1610	LC	-25	2019/12/10	VB+PS	LC
15C	139 / 141	Intersecting 147	T	GW	PX029	2019/12/10	1530	LC	-25	2019/12/10	VB+PS	LC
15D	146 / 147	Intersecting 139	T	GW	PX029	2019/12/10	1300	LC	-25	2019/12/10	VB+PS	LC
15E	138 / 139	Intersecting 146	T	GW	PX029	2019/12/10	1245	LC	-25	2019/12/10	VB+PS	LC
15F	145 / 146	Intersecting 138	T	GW	PX029	2019/12/10	1230	LC	-25	2019/12/10	VB+PS	LC
15G	144 / 145	Intersecting 137-138	T	GW	PX029	2019/12/10	1058	LC	-25	2019/12/10	VB+PS	LC
15H	134 / 137	Intersecting 144	T	GW	PX029	2019/12/11	945	JH	-25	2019/12/11	VB+PS	LC
15I	142 / 144	Intersecting 134	T	GW	PX029	2019/12/11	1011	JH	-25	2019/12/11	VB+PS	LC
15J	142 / 143	Intersecting 133-134	DS#29	P	PX029	2019/12/07	1415	LC	-38	2019/12/07	VB+PS	LC
15K	126 / 132	Intersecting 127	T	GW	PX029	2019/12/11	1548	JH	-25	2019/12/11	VB+PS	LC
15L	155 / 156	Intersecting 154	T	GW	PX029	2019/12/11	1353	JH	-25	2019/12/11	VB+PS	LC
15M	155 / 156	Intersecting 157	T	GW	PX029	2019/12/11	1407	JH	-25	2019/12/11	VB+PS	LC
15N	7 / .	10m North of SEOP	D	P	PX029	2019/12/12	1120	LC	-28	2019/12/12	VB+PS	LC
15O	6 / .	11.5m North of SEOP	D	P	PX029	2019/12/12	1245	LC	-28	2019/12/12	VB+PS	LC
15P	31 / 174	Tie in to West up to P178-25	EXT	GW	PX029	2019/12/13	815	LC	-30	2019/12/13	VB+PS	DG
15Q	179 / 25	TIe in to West up to P180-24	EXT	GW	PX029	2019/12/16	1555	LC	-25	2019/12/16	VB+PS	DG
15R	180 / 23	TIe in to West up to P185-14	EXT	GW	PX029	2019/12/17	1315	LC	-25	2019/12/17	VB+PS	DG
15S	142 / 143	Intersecting 120	T	GW	PX029	2019/12/10	1027	JH	-25	2019/12/10	VB+PS	LC
15T	185 / 14	Tie in west up to 15-187	EXT	GW	PX029	2020/01/16	1430	LC	-30	2019/01/16	VB+PS	LC

DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS: 15N Water Pump Hole, 15O Water Pump Hole. Tie in extrusion seams; 15P, 15Q, 15R, 15T, (Berm Extension) 15P begins @ 34/174 and up to 27/178. 15Q 179/26 to 180/24. 15T 186/14 to 187/20 15R181/23 to 185/14

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 15 of 16

GEOMEMBRANE DETAIL & TEST LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner

TRIAL SEAMS

#	MACHINE NUMBER	DATE YYYY-MM-DD	TIME	WELD TECH	AIR TEMP °C	PREHEAT TEMP °C	EXTRUDER TEMP °C	PEEL (PPI)					SHEAR (PPI)					CHK'D BY	REMARKS
1	PX029	2020/01/17	825	LC	-30	257	254	91	105	112	101	95	130	125	126	121	126	MC	
2	PX029	2020/01/17	825	LC	-32	257	254	109	114	108	111	121	130	131	125	126	131	MC	
3	PX029	2020/01/18	825	LC	-32	257	254	87	110	95	114	111	128	123	127	123	126	MC	
4	PX029	2020/01/18	1215	LC	-32	257	254	90	101	110	99	104	120	117	115	119	114	MC	
5	PX029	2020/01/19	800	LC	-32	257	254	101	119	107	102	101	127	121	137	128	121	MC	
6																			

DETAIL CODE	PANEL NUMBER(S)	LOCATION DESCRIPTION	DETAIL TYPE	REPAIR TYPE	MACHINE NUMBER	REPAIR DATE YYYY-MM-DD	START TIME	WELD TECH	AIR TEMP °C	TEST DATE YYYY-MM-DD	TEST METH.	QC TECH
16A	20 / 187	Tie in west up to 2-191	EXT	GW	PX029	2020/01/17	1100	LC	-32	2020/01/17	VB+PS	LC
16B	3 / 191	Tie in west up to 10-197	EXT	GW	PX029	2020/01/18	845	LC	-32	2020/01/18	VB+PS	LC
16C	9 / 197	Tie in west up to 13P	EXT	GW	PX029	2020/01/19	845	LC	-32	2020/01/18	VB+PS	LC
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DETAIL TYPE:

AD - ANIMAL DAMAGE	DS-# - DESTRUCT SAMPLE NUMBER	IO - INSUFFICIENT OVERLAP	T - THREE PANEL INTERSECTION
ATL - AIR TEST LEAK	EE - EARTHWORK EQUIPMENT DAMAGE	MD - MANUFACTURER/DELIVERY DAMAGE	VL - VACUUM TEST LEAK
BO - FUSION WELDER BURN	EXT - EXTENSION	P - PENETRATION	WR - WRINKLE
CR - CREASE	FM - FISHMOUTH	PT - PRESSURE TEST CUT	WS - WELDER RESTART
D - INSTALLATION DAMAGE	FS - FAILED SEAM LENGTH	SI - SOIL SURFACE IRREGULARITY	OTHER:

TEST METHOD:

AL - AIR LANCE	VB - VAC BOX
PS - POINT STRESS	ST - SPARK TEST

REPAIR TYPE:

G&W - GRIND & WELD	B - BOOT	P - PATCH
RS - RECONSTRUCTED SEAM	C - CAP	S - SKIRT
HAW - HOT AIR WELD		

REMARKS: Tie in extrusion seams; 16A, 16B, and 16C (berm extension). 16A 188/20 to 191/3/ 16B 192/3 to 197/7. 16C 198/9 to 16C

QC TECH: MC

SUPERVISOR: Mike Cantwell

SUBMISSION DATE: January 31st, 2020

SHEET NUMBER: 16 of 16

GEOMEMBRANE DESTRUCT LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | 3RD PARTY Golder
ARCHIVE LAYFIELD ☐ OWNER ☑ ENGINEER ☐

DESTRUCT SAMPLE NUMBER	TYPE OF SEAM	PANEL NUMBERS	TEST DATE YYYY-MM-DD	TEST TEMP °C	INITIALS 3RD PARTY PRESENT	INITIALS LAYFIELD PASS	INITIALS 3RD PARTY LAR PASS	INSIDE PEEL STRENGTH (PPI)					OUTSIDE PEEL STRENGTH (PPI)					SHEAR STRENGTH (PPI)				
SAMPLE LOCATION								LOCUS OF BREAK					LOCUS OF BREAK					LOCUS OF BREAK				
DS-1	SPF	9/10	2019/09/20	16	RK	P		106	109	111	106	117	104	105	114	110	116	139	134	140	135	137
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-2	SPF	15/20	2019/09/22	12	RK	P		123	120	125	122	121	127	119	120	118	123	140	142	147	146	146
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-3	SPF	18/19	2019/09/23	16	RK	P		128	120	115	128	117	115	125	113	120	116	132	135	133	136	135
30m S of N AT								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-4	SPF	27/28	2019/09/23	16	RK	P		102	104	107	105	110	101	98	112	112	108	132	135	133	136	135
5m S of N AT								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-5	SPF	33/35	2019/09/24	15	RK	P		106	109	103	104	107	110	107	104	103	102	121	118	120	121	121
Connected To 2L								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-6	SPF	37/38	2019/10/02	13	RK	P		127	113	111	122	125	119	117	117	115	115	133	136	134	137	131
29m N of 2T								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-7	SPF	40/41	2019/10/08	22	RK	P		104	107	102	103	111	111	111	99	102	102	113	112	112	110	106
21m S of N AT								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-8	SPF	41/42	2019/10/08	20	RK	P		96	98	104	101	102	99	101	99	99	100	111	110	109	109	101
16.3m From N AT								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1

TYPE OF SEAM: SPF - SPLIT FUSION SOF - SOLID FUSION SLV - SOLVENT
EXT - EXTRUSION HAF - HOT AIR FUSION

QC TECH MC
SUBMITTED BY Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 1 of 6

GEOMEMBRANE DESTRUCT LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | 3RD PARTY Golder
ARCHIVE LAYFIELD ☐ OWNER ☑ ENGINEER ☐

DESTRUCT SAMPLE NUMBER	TYPE OF SEAM	PANEL NUMBERS	TEST DATE YYYY-MM-DD	TEST TEMP °C	INITIALS 3RD PARTY PRESENT	INITIALS LAYFIELD PASS	INITIALS 3RD PARTY LAB PASS	INSIDE PEEL STRENGTH (PPI)					OUTSIDE PEEL STRENGTH (PPI)					SHEAR STRENGTH (PPI)				
SAMPLE LOCATION								LOCUS OF BREAK					LOCUS OF BREAK					LOCUS OF BREAK				
DS-9	SPF	45/46	2019/10/09	16	RK	P		107	107	109	108	103	106	107	106	105	102	122	118	120	116	123
SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-10	SPF	46/47	2019/10/12	20	RK	P		111	109	112	105	110	107	110	109	106	103	113	113	114	112	114
Connected to 3O								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-11	SPF	52/53	2019/10/18	18	RK	P		104	101	104	104	101	107	97	98	101	106	113	116	110	114	110
3m from SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-12	SPF	58/59	2019/10/29	19	RK	P		109	107	99	115	112	108	108	105	105	114	112	107	110	115	111
2m from WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-13	SPF	66/67	2019/10/27	10	RK	P		103	103	111	102	105	101	114	108	105	107	122	119	120	120	117
SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-14	SPF	68/70	2019/10/27	19	RK	P		115	112	102	105	98	109	108	101	108	99	118	110	115	116	119
SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-15	SPF	52/77	2019/11/10	16	RK	P		94	106	99	98	95	101	100	92	96	102	110	107	106	105	101
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-16	SPF	88/89	2019/11/10	16	RK	P		95	103	109	102	113	104	104	106	103	107	111	109	117	111	105
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1

TYPE OF SEAM: SPF - SPLIT FUSION SOF - SOLID FUSION SLV - SOLVENT
EXT - EXTRUSION HAF - HOT AIR FUSION

QC TECH MC
SUBMITTED BY Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 2 of 6

GEOMEMBRANE DESTRUCT LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | 3RD PARTY Golder
ARCHIVE LAYFIELD ☐ OWNER ☑ ENGINEER ☐

DESTRUCT SAMPLE NUMBER	TYPE OF SEAM	PANEL NUMBERS	TEST DATE YYYY-MM-DD	TEST TEMP °C	INITIALS 3RD PARTY PRESENT	INITIALS LAYFIELD PASS	INITIALS 3RD PARTY LAB PASS	INSIDE PEEL STRENGTH (PPI)					OUTSIDE PEEL STRENGTH (PPI)					SHEAR STRENGTH (PPI)				
SAMPLE LOCATION								LOCUS OF BREAK					LOCUS OF BREAK					LOCUS OF BREAK				
DS-17	SPF	94/95	2019/11/12	21	RK	P		107	102	109	96	92	100	102	98	99	98	109	106	110	108	116
SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-18	EXT	94/95	2019/11/14	17	RM	p		96	96	97	88	93						101	99	138	111	115
SEOS								SE1	SE1	SE1	SE1	SE1						SE1	SE1	SE1	SE1	SE1
DS-19	SPF	95/96	2019/11/17	19	RM	P		115	111	107	102	107	107	101	108	104	105	119	106	102	108	109
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-20	SPF	103/101	2019/11/18	20	RM	P		108	104	116	109	107	103	105	103	100	101	113	122	114	112	119
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-21	SPF	104/105	2019/11/20	18	RM	P		108	107	109	112	109	105	107	108	103	104	119	116	115	117	117
10m South of NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-22	SPF	107/108	2019/11/21	20	RM	P		113	109	117	114	107	103	107	111	111	105	107	113	110	112	109
5m South of NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-23	SPF	110/111	2019/11/24	20	RM	P		101	101	105	102	102	102	99	101	107	101	112	113	114	110	110
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-24	SPF	112/113	2019/11/25	18	RM	P		112	105	101	95	95	105	104	94	95	90	108	107	97	113	117
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1

TYPE OF SEAM:
SPF - SPLIT FUSION SOF - SOLID FUSION SLV - SOLVENT
EXT - EXTRUSION HAF - HOT AIR FUSION

QC TECH MC
SUBMITTED BY Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 3 of 6

GEOMEMBRANE DESTRUCT LOG

PROJECT NUMBER CT001289 AREA / LAYER LP7, EL6060

PROJECT TITLE WRP Liner 3RD PARTY N/A

ARCHIVE LAYFIELD ☐ OWNER ☑ ENGINEER ☐

DESTRUCT SAMPLE NUMBER	TYPE OF SEAM	PANEL NUMBERS	TEST DATE YYYY-MM-DD	TEST TEMP °C	INITIALS			INSIDE PEEL STRENGTH (PPI)					OUTSIDE PEEL STRENGTH (PPI)					SHEAR STRENGTH (PPI)				
SAMPLE LOCATION					3RD PARTY PRESENT	LAYFIELD PASS	3RD PARTY LAR PASS	LOCUS OF BREAK					LOCUS OF BREAK					LOCUS OF BREAK				
DS-25	SPF	116/6	2019/11/26	20	RM	P		113	110	108	110	104	109	99	105	104	103	115	124	114	114	106
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-26	SPF	118/119	2019/11/29	18	N/A	P		112	105	110	106	109	111	112	109	109	109	124	125	123	131	128
SWEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-27	SPF	123/125	2019/12/01	18	N/A	P		122	104	110	123	119	118	103	110	120	117	125	124	133	129	130
SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-28	SPF	131/132	2019/12/01	18	N/A	P		111	117	109	117	115	113	109	107	112	111	126	122	121	125	119
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-29	SPF	133/134	2019/12/05	10	N/A	P		119	115	121	120	127	123	124	121	125	113	138	139	132	138	132
SEEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-30	SPF	139/140	2019/12/05	10	N/A	P		116	127	123	122	114	117	115	117	107	117	136	138	132	132	138
SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-31	SPF	138/145	2019/12/05	10	N/A	P		107	105	109	108	105	119	105	108	111	104	124	131	124	122	127
EEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-32	SPF	149/150	2019/12/06	10	N/A	P		129	119	114	114	108	107	110	119	111	110	123	125	121	125	127
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1

TYPE OF SEAM: SPF - SPLIT FUSION SOF - SOLID FUSION SLV - SOLVENT
EXT - EXTRUSION HAF - HOT AIR FUSION

QC TECH MC
SUBMITTED BY Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 4 of 6

GEOMEMBRANE DESTRUCT LOG

PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | 3RD PARTY N/A
ARCHIVE LAYFIELD ☐ OWNER ☑ ENGINEER ☐

DESTRUCT SAMPLE NUMBER	TYPE OF SEAM	PANEL NUMBERS	TEST DATE YYYY-MM-DD	TEST TEMP °C	INITIALS 3RD PARTY PRESENT	INITIALS LAYFIELD PASS	INITIALS 3RD PARTY LAR PASS	INSIDE PEEL STRENGTH (PPI)					OUTSIDE PEEL STRENGTH (PPI)					SHEAR STRENGTH (PPI)				
SAMPLE LOCATION								LOCUS OF BREAK					LOCUS OF BREAK					LOCUS OF BREAK				
DS-33	SPF	152/153	2019/12/06	10	N/A	P		122	118	115	114	121	114	109	119	113	108	135	133	136	131	131
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-34	SPF	156/157	2019/12/07	15	N/A	P		113	109	116	108	110	110	103	110	105	104	117	115	117	117	114
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-35	SPF	161/159	2019/12/07	15	N/A	P		110	105	112	108	108	100	105	110	98	103	115	113	114	115	112
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-36	SPF	162/163	2019/12/10	21	N/A	P		100	102	102	109	98	103	98	102	101	98	115	112	109	110	111
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-37	SPF	166/167	2019/12/10	21	N/A	P		103	105	107	103	107	101	95	104	100	97	110	118	115	116	116
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-38	SPF	170/171	2019/12/10	18	N/A	P		98	107	107	108	108	98	99	99	94	98	112	119	118	116	118
WEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-39	SPF	181/182	2019/12/18	11	N/A	P		112	103	119	114	125	114	105	126	111	111	143	132	137	125	132
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-40	SPF	192/193	2020/01/17	10	N/A	P		110	111	115	102	119	109	98	111	106	111	134	128	141	137	139
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1

TYPE OF SEAM: SPF - SPLIT FUSION SOF - SOLID FUSION SLV - SOLVENT
EXT - EXTRUSION HAF - HOT AIR FUSION

QC TECH MC
SUBMITTED BY Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 5 of 6

GEOMEMBRANE DESTRUCT LOG

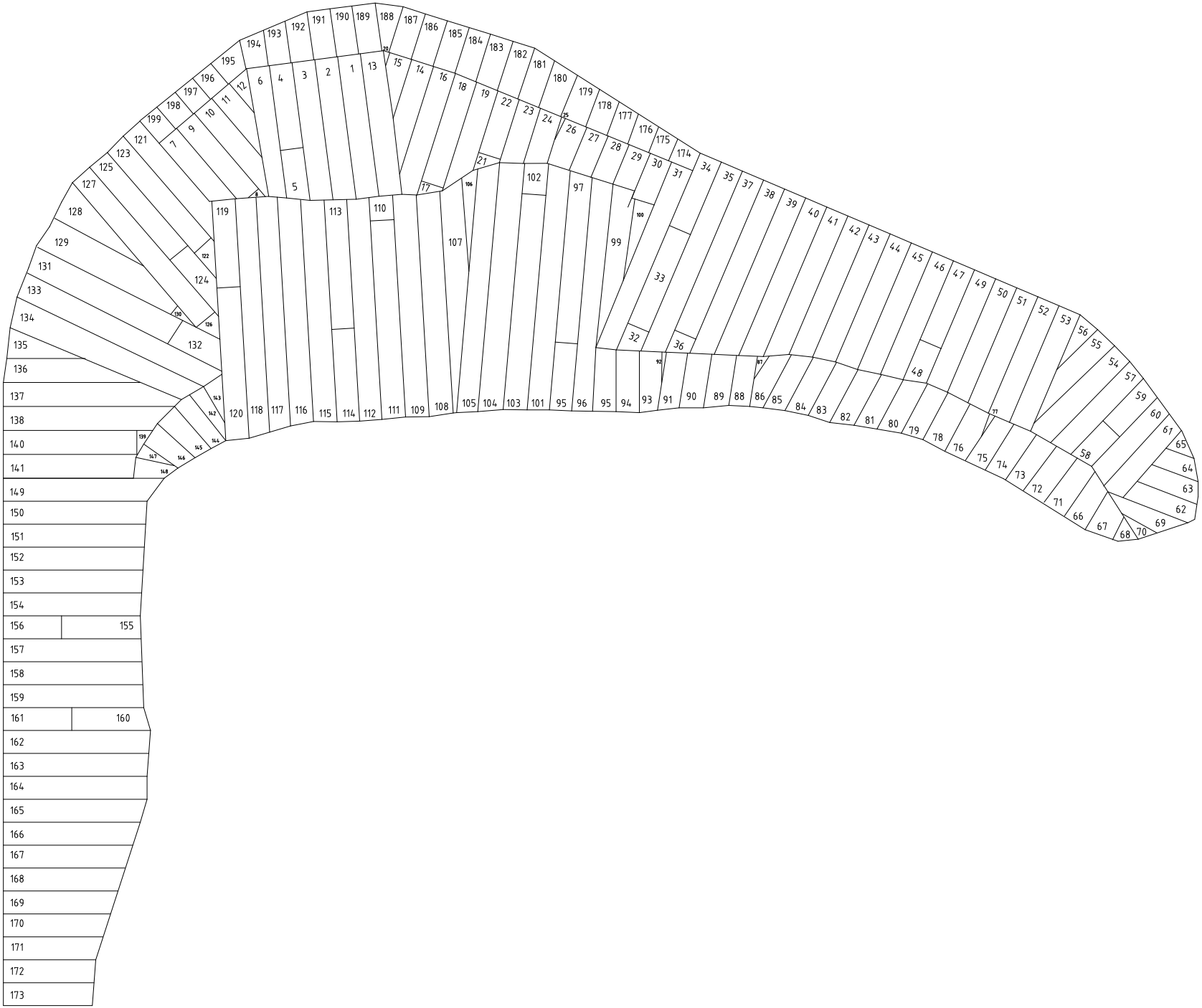
PROJECT NUMBER CT001289 | AREA / LAYER LP7, EL6060
PROJECT TITLE WRP Liner | 3RD PARTY Golder
ARCHIVE LAYFIELD ☐ OWNER ☑ ENGINEER ☐

DESTRUCT SAMPLE NUMBER	TYPE OF SEAM	PANEL NUMBERS	TEST DATE YYYY-MM-DD	TEST TEMP °C	INITIALS 3RD PARTY PRESENT	INITIALS LAYFIELD PASS	INITIALS 3RD PARTY LAB PASS	INSIDE PEEL STRENGTH (PPI)					OUTSIDE PEEL STRENGTH (PPI)					SHEAR STRENGTH (PPI)				
SAMPLE LOCATION								LOCUS OF BREAK					LOCUS OF BREAK					LOCUS OF BREAK				
DS-17-A1	SPF	94/95	2019/11/17	19	RM	P		101	99	104	102	98	93	92	97	93	92	99	99	99	96	99
SEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-17-A2	SPF	94/95	2019/11/18	19	RM	P		96	94	95	93	93	101	92	98	90	92	104	101	106	102	107
NEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-17-B1	SPF	97/98	2019/11/18	20	RM	P		92	99	97	98	93	99	92	96	90	88	108	99	97	98	96
EEOS								SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1	SE1
DS-																						
DS-																						
DS-																						
DS-																						
DS-																						

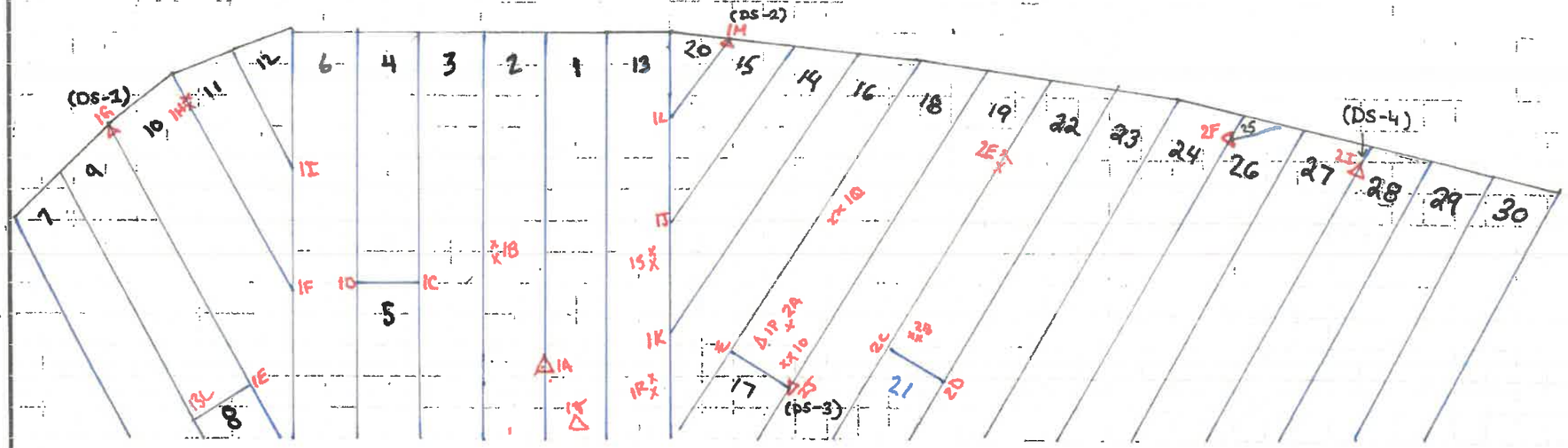
TYPE OF SEAM: SPF - SPLIT FUSION SOF - SOLID FUSION SLV - SOLVENT
EXT - EXTRUSION HAF - HOT AIR FUSION

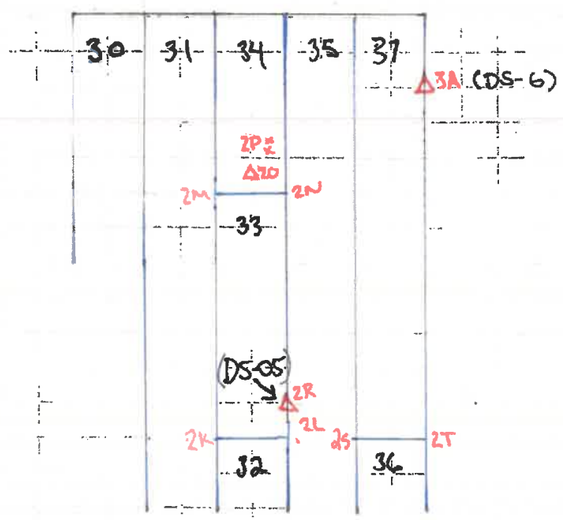
QC TECH MC
SUBMITTED BY Mike Cantwell
SUBMISSION DATE January 31st, 2020
SHEET NUMBER 6 of 6

BAFFINLAND WASTE ROCK POND PANEL LAYOUT



No.	Revisions	Date (MM/DD/YY)	By
1		01/15/2020	MC





PROJECT NAME
WRP LINER
B.I.M.

MATERIAL TYPE
EL 6060
LP 7

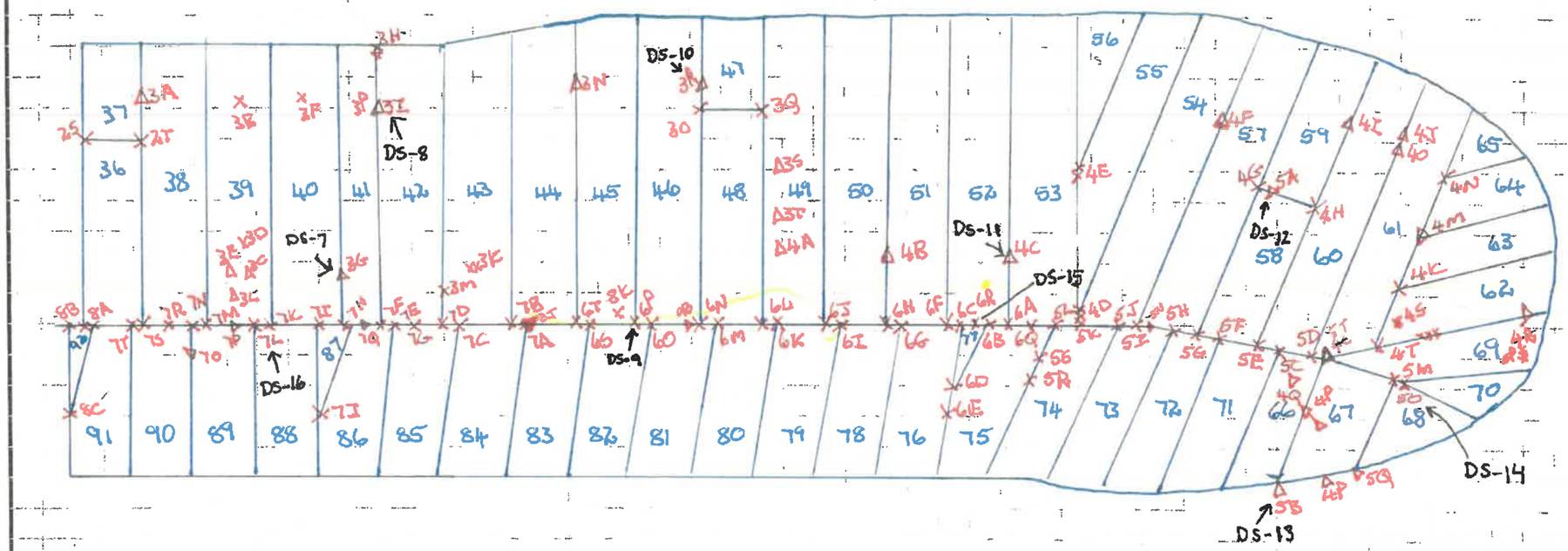
LAYFIELD

LEGEND

- Extent of Liner
- Toe of Slope
- Liner Field Seam
- xxx Extrusion Welding
- △ Patch
- P2 Panel Number
- 1A Repair Number

Quote No.	PROJECT No.
DWG: OF .	SCALE:
DWN:	CHKD: APPD:
DATE	REVISION:

No.	Revisions	Date (MM/DD/YY)	By
2		01/15/20	T.D



PROJECT NAME

MATERIAL TYPE
EL 6060
LP 7

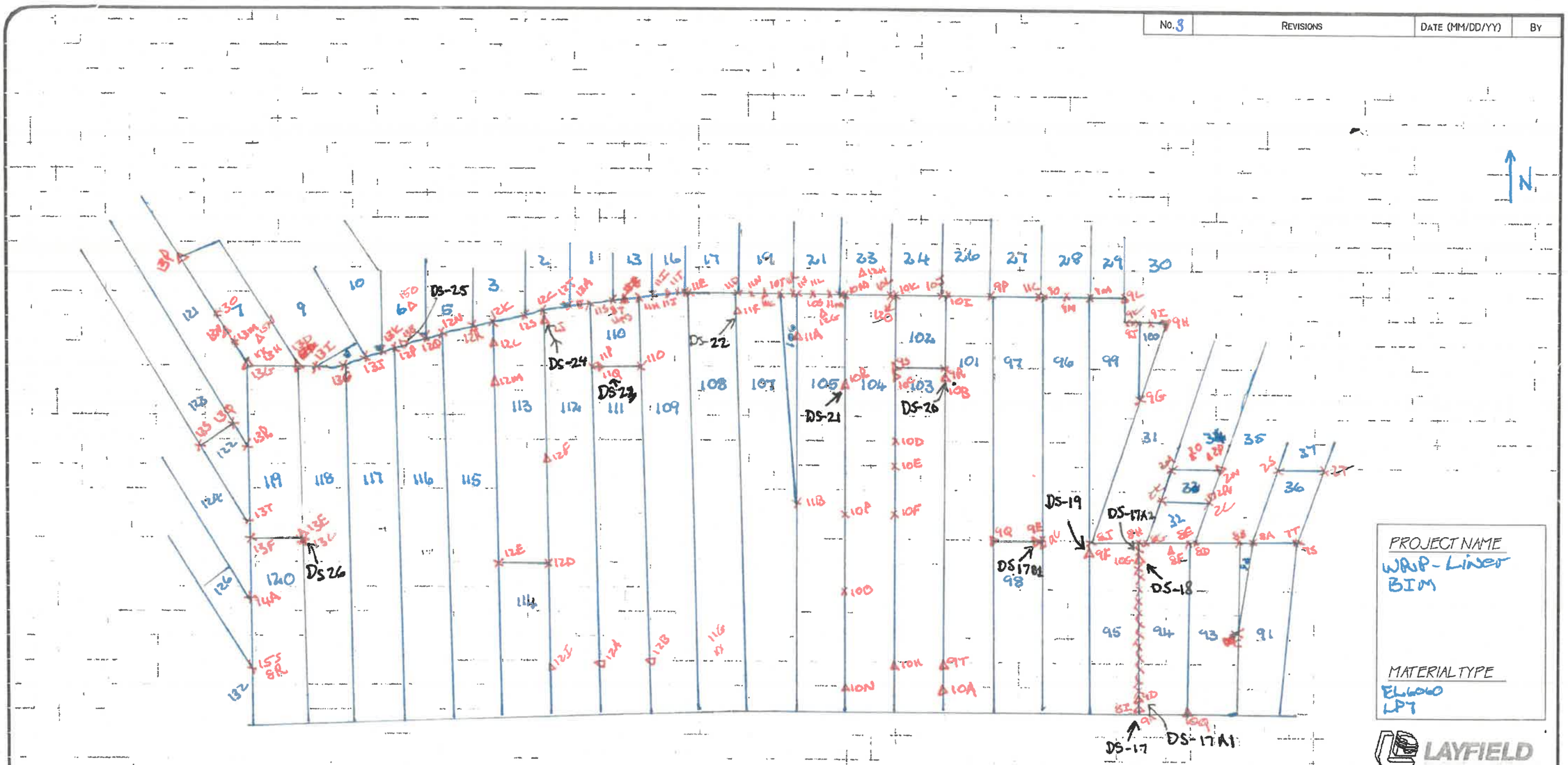
LAYFIELD

LEGEND

- EXTENT OF LINER
- TOE OF SLOPE
- LINER FIELD SEAM
- xxx EXTRUSION WELDING
- △ PATCH
- P2 PANEL NUMBER
- 1A REPAIR NUMBER

Quote No.	PROJECT No. CT0012089
DWG: OF	SCALE: NTS
DWN:	CHKD: / APP'D:
DATE	REVISION:

No. 3	Revisions	Date (MM/DD/YY)	By



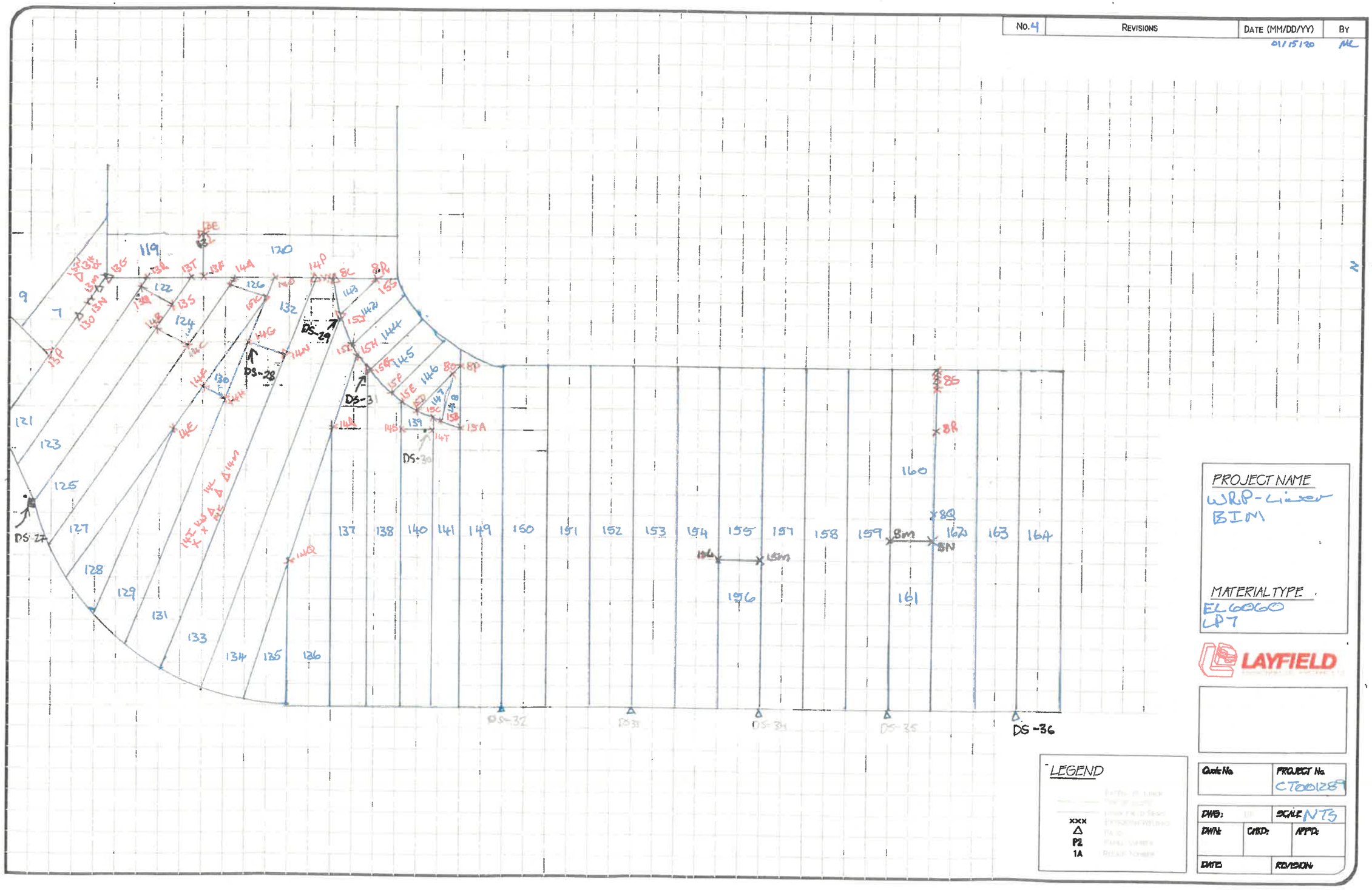
PROJECT NAME
WRIP - LINER BIM

MATERIAL TYPE
ELGOLD LP7

LAYFIELD

Quote No.	PROJECT No. CT001289
DWG: OF	SCALE: NTS
DWN:	CHKD: / APP'D:
DATE:	REVISION:

No.	Revisions	Date (MM/DD/YY)	By
4		01/15/20	ML



PROJECT NAME
WRP-Liner
BIM

MATERIAL TYPE
EL6060
LP7

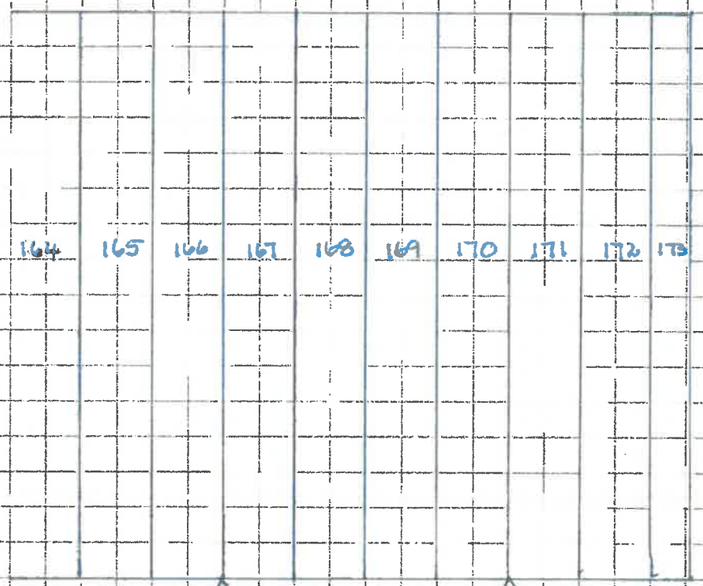
LAYFIELD

LEGEND
XXX
△
P2
1A

Quote No.	PROJECT No.
	CT00128

DWG:	SCALE NTS	
DWN:	CHKD:	APPD:
DATE	REVISION:	

No.	Revisions	Date (MM/DD/YY)	By
5			



PROJECT NAME
WRF - Liner
BIM

MATERIAL TYPE
EL 6060
LP 7

LAYFIELD

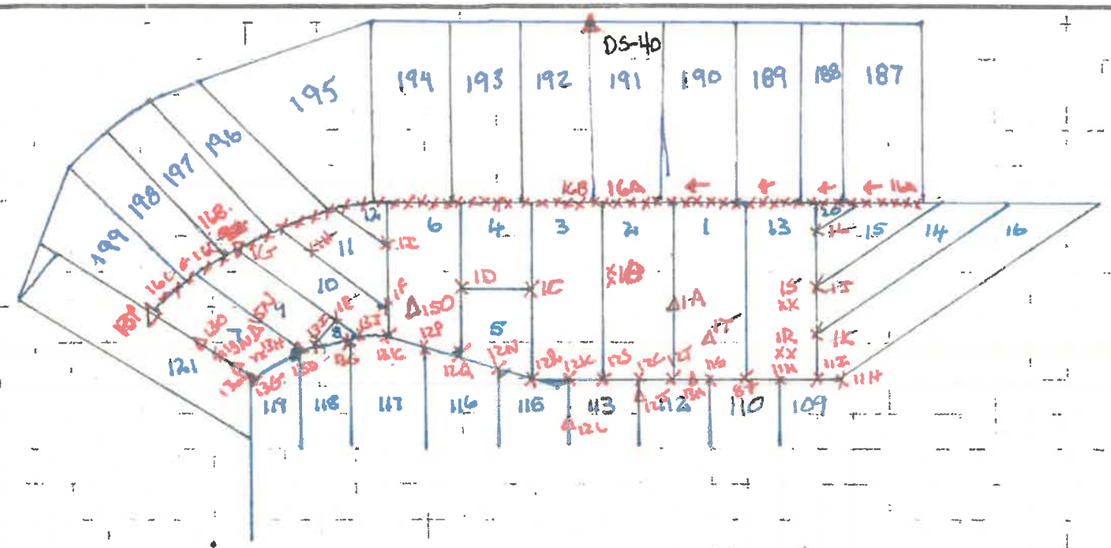
LEGEND

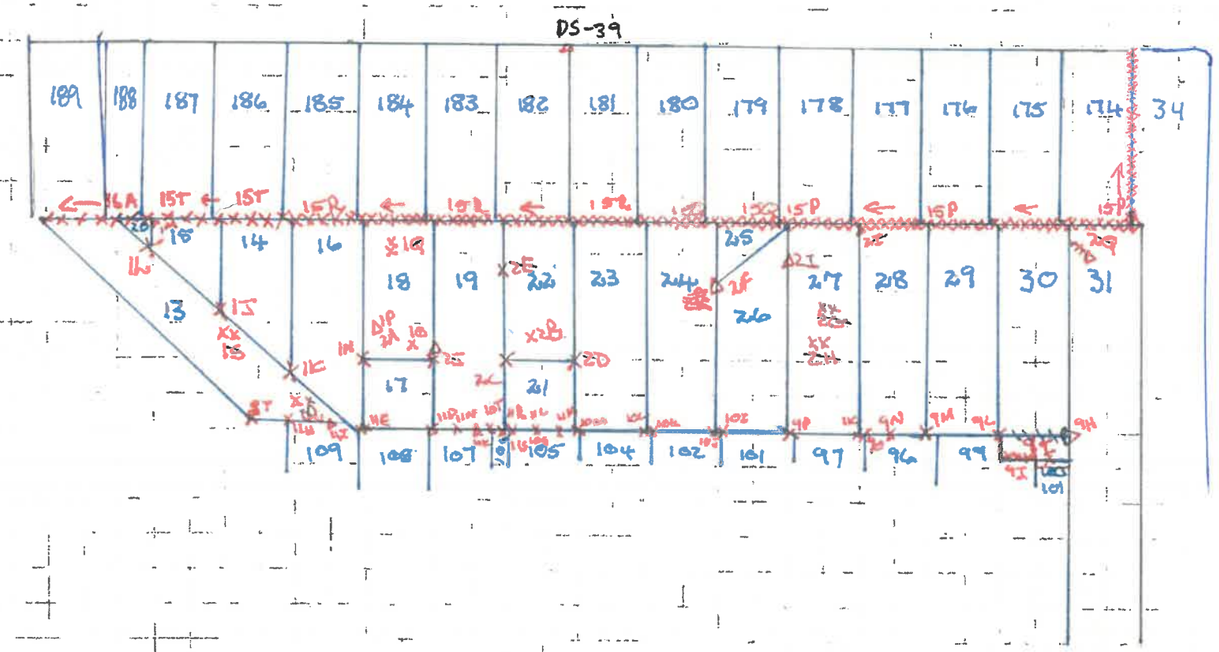
- Extent of Liner
- Toe of Slope
- Liner Field Seam
- XXX Extrusion Welding
- △ Patch
- P2 Panel Number
- 1A Repair Number

Quote No.	Project No.
	CT001289

DWG: OF	Scale: NTS	
DWN:	CHKD:	APP'D:
DATE:		REVISION:

No.	Revisions	Date (MM/DD/YY)	By
6		01/15/20	ME







PROJECT NAME
WRP - Liner
BIM
& North Berm Extension

MATERIAL TYPE
EL6060
LP7

LAYFIELD
ENVIRONMENTAL SYSTEMS LTD

LEGEND

- Extent of Liner
- Toe of Slope
- Liner Field Seam
- xxx Extrusion Welding
- △ Patch
- P2 Panel Number
- 1A Repair Number

Quote No.	Project No.
	CT001289

DWG:	OF	SCALE: NTS
DWN:	CHKD:	APPD:
DATE	REVISION:	

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF FINAL INSPECTION AND ACCEPTANCE

PROJECT NAME: Baffinland Crusher pond spillway installation
PROJECT NUMBER: CT001289 **DATE:** Sept 13 2014
OWNER: BIM
LOCATION: Baffinland Mary River Crusher Sediment Pond

Scope of Installation(s): **THE WORK**
Area/Layer: spillway / 60 mil Exposed Area Inspected: ☐ Partial or ☑ Complete
Dimensions: 9m x 7m, consisting of two panels

Part 1 – LAYFIELD CANADA LTD.

I, Will Brydon, a duly appointed representative of Layfield Canada Ltd. (Layfield), 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's QC program and the terms and conditions of the contract.

Layfield Representative:

Name: Will Brydon
Title: Liner Tech
Date: Sept 13 2014 **Signature:** [signature]

Part 2 – OWNER (or Representative)

I, _____, a duly appointed representative of _____ _____, 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 representative, and agree that the measurements shown are both true and correct, and that the installation has met our approval.

Owners Representative:

Name: Ambrose Fisher
Title: Superintendent
Company: Baffinland
Date: Sept 13/14 **Signature:** [signature]

Comments: _____

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF FINAL INSPECTION AND ACCEPTANCE

PROJECT NAME: Baffinland Crusher pond spillway installation
PROJECT NUMBER: CT001289 **DATE:** ~~Ct~~ Sept 13 2019
OWNER: BIM
LOCATION: Baffinland Mary River Crusher Sediment Pond

Scope of Installation(s): **THE WORK**
Area/Layer: spillway / 60 mil Enuro Liner Area Inspected: ☐ Partial or ☑ Complete
Dimensions: 9m x 7m, Consisting of two panels.

Part 1 – LAYFIELD CANADA LTD.

I, Will Brydon, a duly appointed representative of Layfield Canada Ltd. (Layfield), 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's QC program and the terms and conditions of the contract.

Layfield Representative:

Name: Will Brydon
Title: Liner Tech
Date: Sept 13 2019 **Signature:** [signature]

Part 2 – OWNER (or Representative)

I, ~~[illegible]~~, a duly appointed representative of _____ ~~[illegible]~~, 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 representative, and agree that the measurements shown are both true and correct, and that the installation has met our approval.

Owners Representative:

Name: Ambrose Maher
Title: Superintendent
Company: Baffinland
Date: Sept. 17/19 **Signature:** [signature]

Comments:

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF FINAL INSPECTION AND ACCEPTANCE

PROJECT NAME: Mary River, Baffinland, Waste Rock Pond Liner
PROJECT NUMBER: CT001289 **DATE:** 12/13/2019
OWNER: BIM
LOCATION: Mary River BIM Waste Rock Pond Baffinland

Scope of Installation(s): **THE WORK**
Area/Layer: EL6060 Liner ; LP7 Geotextile Area Inspected: ☑ Partial or ☐ Complete
Dimensions: Pond area in total as per drawing excluding the North side extension from slope trench to the North road. 33 938sqm

Part 1 – LAYFIELD CANADA LTD.

I, J M DU PLESSIS, a duly appointed representative of Layfield Canada Ltd. (Layfield), 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's QC program and the terms and conditions of the contract.

Layfield Representative:

Name: J M DU PLESSIS
Title: PROJECT SUPERVISOR
Date: 12/16/2019 **Signature:** J M Du Plessis

Part 2 – OWNER (or Representative)

I, _____, a duly appointed representative of _____, do hereby accept and receive the installation(s) described above, and confirm that the work has been completed in accordance with the project specifications and the terms and conditions of the contract.

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

Owners Representative:

Name: _____
Title: _____
Company: _____
Date: _____ **Signature:** _____

Comments: _____

LAYFIELD
ENVIRONMENTAL CONTAINMENT

CERTIFICATE OF FINAL INSPECTION AND ACCEPTANCE

PROJECT NAME: BAFFINLAND WRP Relining
PROJECT NUMBER: CT001289 **DATE:** Jan, 19, 2020
OWNER: B.I.M
LOCATION: Mary River, NU

Scope of Installation(s): **THE WORK**
Area/Layer: WRP Berm Extension North Slope Area Inspected: ☒ Partial or ☐ Complete
Dimensions: 2,489 M^2 on North Berm Extension EL 6060x with LP2 underlay.

Part 1 – LAYFIELD CANADA LTD.

I, Mike Cantwell, a duly appointed representative of Layfield Canada Ltd. (Layfield), 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's QC program and the terms and conditions of the contract.

Layfield Representative:
Name: Mike Cantwell
Title: Supervisor
Date: Jan. 19. 2020 **Signature:** [signature]

Part 2 – OWNER (or Representative)

I, Allan Knowlton, 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 representative, and agree that the measurements shown are both true and correct, and that the installation has met our approval.

Owners Representative:
Name: Allan Knowlton
Title: Project Manager
Company: Baffinland Iron Mines
Date: 19 Jan 20 **Signature:** [signature]

Comments:

Other Documents

INVENTORY LOG

PROJECT NUMBER: CT001289
PROJECT TITLE: WRP Liner
DATE OF INVENTORY: 2019/09/09
PRODUCT TYPE: 60 mil
MATERIAL MANUFACTURER: Layfield

#	ROLL NUMBER	MATERIAL DIMENSIONS			REMARKS
		THICKNESS	LENGTH (m)	WIDTH (m)	
1	E0007404-001	60 mil	158	6.8	
2	E0007404-002	60 mil	158	6.8	
3	E0007404-003	60 mil	158	6.8	
4	E0007404-004	60 mil	158	6.8	
5	E0007404-005	60 mil	158	6.8	
6	E0007404-006	60 mil	158	6.8	
7	E0007404-007	60 mil	158	6.8	
8	E0007404-008	60 mil	158	6.8	
9	E0007404-009	60 mil	158	6.8	
10	E0007404-010	60 mil	158	6.8	
11	E0007404-011	60 mil	158	6.8	
12	E0007404-012	60 mil	158	6.8	
13	E0007404-014	60 mil	158	6.8	
14	E0007404-015	60 mil	158	6.8	
15	E0007404-016	60 mil	158	6.8	
16	E0007404-017	60 mil	158	6.8	
17	E0007404-018	60 mil	158	6.8	
18	E0007404-019	60 mil	158	6.8	
19	E0007404-020	60 mil	158	6.8	
20	E0007404-022	60 mil	158	6.8	
21	E0007404-023	60 mil	158	6.8	
22	E0007404-024	60 mil	158	6.8	
23	E0007404-025	60 mil	158	6.8	
24	E0007404-027	60 mil	158	6.8	
25	E0007404-028	60 mil	158	6.8	
26	E0007404-029	60 mil	158	6.8	
27	E0007404-030	60 mil	158	6.8	
28	E0007404-031	60 mil	158	6.8	
29	E0007404-032	60 mil	158	6.8	
30	E0007404-033	60 mil	158	6.8	

TOTAL PAGE AREA: 32232 m^2

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020

INVENTORY LOG

PROJECT NUMBER: CT001289
PROJECT TITLE: WRP Liner
DATE OF INVENTORY: 2019/09/09
PRODUCT TYPE: 60 mil
MATERIAL MANUFACTURER: Layfield

#	ROLL NUMBER	MATERIAL DIMENSIONS			REMARKS
		THICKNESS	LENGTH (m)	WIDTH (m)	
1	E0007404-034	60 mil	158	6.8	
2	E0007404-035	60 mil	158	6.8	
3	E0007404-036	60 mil	158	6.8	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
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15					
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18					
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25					
26					
27					
28					
29					
30					

TOTAL PAGE AREA: 3223.2 m^2

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020

INVENTORY LOG

PROJECT NUMBER: CT001289
PROJECT TITLE: WRP Liner
DATE OF INVENTORY: 2019/12/07
PRODUCT TYPE: 60 mil
MATERIAL MANUFACTURER: Layfield

#	ROLL NUMBER	MATERIAL DIMENSIONS			REMARKS
		THICKNESS	LENGTH (m)	WIDTH (m)	
1	E0008982-007	60 mil	158	6.8	
2	E0007404- NN1	60 mil	158	6.8	Roll Tag # Damaged
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

TOTAL PAGE AREA: 2148.8 m^2

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020

INVENTORY LOG

PROJECT NUMBER: CT001289
PROJECT TITLE: WRP Liner
DATE OF INVENTORY: 2019/12/12
PRODUCT TYPE: 60 mil
MATERIAL MANUFACTURER: Layfield

#	ROLL NUMBER	MATERIAL DIMENSIONS			REMARKS
		THICKNESS	LENGTH (m)	WIDTH (m)	
1	E0008982-071	60 mil	158	6.8	
2	E0008982-072	60 mil	158	6.8	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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21					
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23					
24					
25					
26					
27					
28					
29					
30					

TOTAL PAGE AREA: 2148.8 m^2

QC TECH: MC
SUPERVISOR: Mike Cantwell
SUBMISSION DATE: January 31st, 2020

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0007404		
Start Date	5/7/2018	**Customer Name**	BAFFINLAND IRON MINES P.O. #4500043731
Req Delivery Date	5/9/2018	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	18747 FT

Inspection #	30423	**Job**	E0007404	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	5/7/2018	**Completion Date**	5/10/2018
Notes	Date: 08/05/2018, Shift B: Re: E0007404, This roll #10 is moved to Job # E0007405.						

Serial	Result	Roll Length (ft)	Roll Weight - Net (3448 lbs +/- 345 lbs)	Sheet Width (270 in +/- 2 in)	Roll Area m2	Thickness - Average ASTM D5199 (60 mil min.)	Thickness - Minimum ASTM D5199 (54 mil min.)
33027006WB-E0007404-001	Pass	520	3541.18	271.00	1090.98228663446	60.35	59.5
33027006WB-E0007404-002	Pass	520	3556.18	271.00	1090.98228663446	60.35	59.5
33027006WB-E0007404-003	Pass	520	3546.18	271.00	1090.98228663446	61.5	59
33027006WB-E0007404-004	Pass	520	3536.18	271.00	1090.98228663446	60.7	59.5
33027006WB-E0007404-005	Pass	520	3556.18	271.00	1090.98228663446	60.65	60
33027006WB-E0007404-006	Pass	520	3531.18	271.25	1091.98872785829	60.85	60
33027006WB-E0007404-007	Pass	520	3526.18	271.00	1090.98228663446	60.6	59.5
33027006WB-E0007404-008	Pass	520	3506.18	271.25	1091.98872785829	60.91	60
33027006WB-E0007404-009	Pass	520	3531.18	271.00	1090.98228663446	60.9	60
33027006WB-E0007404-010	Pass	520	3541.18	270.00	1086.95652173913	60.85	58.5
33027006WB-E0007404-011	Pass	520	3531.18	270.75	1089.97584541063	61.3	60
33027006WB-E0007404-012	Pass	520	3526.18	270.25	1087.96296296296	60.75	60
33027006WB-E0007404-013	Pass	472	3206.18	270.00	986.622073578595	60.7	59.5
33027006WB-E0007404-014	Pass	520	3536.18	270.75	1089.97584541063	60.75	59
33027006WB-E0007404-015	Pass	520	3541.18	270.75	1089.97584541063	60.81	60
33027006WB-E0007404-016	Pass	520	3531.18	270.75	1089.97584541063	60.65	60
33027006WB-E0007404-017	Pass	520	3536.18	271.50	1092.99516908213	60.35	59
33027006WB-E0007404-018	Pass	520	3536.18	271.50	1092.99516908213	60.75	59
33027006WB-E0007404-019	Pass	520	3536.18	271.00	1090.98228663446	60.65	58.5
33027006WB-E0007404-020	Pass	520	3531.18	271.25	1091.98872785829	60.9	60
33027006WB-E0007404-021	Pass	520	3526.18	271.00	1090.98228663446	61.1	59
33027006WB-E0007404-022	Pass	520	3546.18	271.00	1090.98228663446	60.5	58
33027006WB-E0007404-023	Pass	520	3556.18	271.00	1090.98228663446	60.2	59
33027006WB-E0007404-024	Pass	520	3541.18	271.00	1090.98228663446	60.75	56.5
33027006WB-E0007404-025	Pass	520	3536.18	271.25	1091.98872785829	60.4	59

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0007404		
Start Date	5/7/2018	**Customer Name**	BAFFINLAND IRON MINES P.O. #4500043731
Req Delivery Date	5/9/2018	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	18747 FT

Inspection #	30423	**Job**	E0007404	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	5/7/2018	**Completion Date**	5/10/2018
Notes	Date: 08/05/2018, Shift B: Re: E0007404, This roll #10 is moved to Job # E0007405.						

Serial	Break Strength - MD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - MD Average ASTM D638 IV (1000 % to 1600 %)	Break Strength - TD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - TD Average ASTM D638 IV (1000 % to 1600 %)	Tear Strength - MD Average ASTM D1004 (33 lbs min.)	Tear Strength - TD Average ASTM D1004 (33 lbs min.)	Puncture Strength - Average ASTM D4833 (90 lbs min.)
33027006WB-E0007404-001	328.08	1486.36284	310.94	1405.56486	40.8	40.2	97.4
33027006WB-E0007404-002	328.08	1486.36284	310.94	1405.56486	40.8	40.2	97.4
33027006WB-E0007404-003	328.08	1486.36284	310.94	1405.56486	40.8	40.2	97.4
33027006WB-E0007404-004	328.08	1486.36284	310.94	1405.56486	40.8	40.2	97.4
33027006WB-E0007404-005	328.08	1486.36284	310.94	1405.56486	40.8	40.2	97.4
33027006WB-E0007404-006	340.24	1422.36444	326.72	1192.23686	40.8	40.2	97.4
33027006WB-E0007404-007	340.24	1422.36444	326.72	1192.23686	40.8	40.2	97.4
33027006WB-E0007404-008	340.24	1422.36444	326.72	1192.23686	40.8	40.2	97.4
33027006WB-E0007404-009	340.24	1422.36444	326.72	1192.23686	40.8	40.2	97.4
33027006WB-E0007404-010	340.24	1422.36444	326.72	1192.23686	40.8	40.2	97.4
33027006WB-E0007404-011	334.86	1433.56416	317.7	1112.50552	40.2	40.2	97.8
33027006WB-E0007404-012	334.86	1433.56416	317.7	1112.50552	40.2	40.2	97.8
33027006WB-E0007404-013	334.86	1433.56416	317.7	1112.50552	40.2	40.2	97.8
33027006WB-E0007404-014	334.86	1433.56416	317.7	1112.50552	40.2	40.2	97.8
33027006WB-E0007404-015	334.86	1433.56416	317.7	1112.50552	40.2	40.2	97.8
33027006WB-E0007404-016	328.04	1305.56736	301.38	1271.9682	40.2	40.2	97.8
33027006WB-E0007404-017	328.04	1305.56736	301.38	1271.9682	40.2	40.2	97.8
33027006WB-E0007404-018	328.04	1305.56736	301.38	1271.9682	40.2	40.2	97.8
33027006WB-E0007404-019	328.04	1305.56736	301.38	1271.9682	40.2	40.2	97.8
33027006WB-E0007404-020	328.04	1305.56736	301.38	1271.9682	40.2	40.2	97.8
33027006WB-E0007404-021	324.86	1301.83412	331.2	1391.16522	42	42.2	97.8
33027006WB-E0007404-022	324.86	1301.83412	331.2	1391.16522	42	42.2	97.8
33027006WB-E0007404-023	324.86	1301.83412	331.2	1391.16522	42	42.2	97.8
33027006WB-E0007404-024	324.86	1301.83412	331.2	1391.16522	42	42.2	97.8
33027006WB-E0007404-025	324.86	1301.83412	331.2	1391.16522	42	42.2	97.8

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0007404		
Start Date	5/7/2018	**Customer Name**	BAFFINLAND IRON MINES P.O. #4500043731
Req Delivery Date	5/9/2018	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	18747 FT

Inspection #	30423	**Job**	E0007404	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	5/7/2018	**Completion Date**	5/10/2018
Notes	Date: 08/05/2018, Shift B: Re: E0007404, This roll #10 is moved to Job # E0007405.						

Serial	Carbon Black Content - Black layers only ASTM D4218 (2 % to 3 %)	Density ASTM D1505 (0.925 g/cc to 0.939 g/cc)	Carbon Black Dispersion ASTM D5596	OIT - High Pressure ASTM D5885
33027006WB-E0007404-001	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-002	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-003	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-004	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-005	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-006	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-007	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-008	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-009	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-010	2.21111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-011	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-012	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-013	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-014	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-015	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-016	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-017	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-018	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-019	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-020	2.42222222222222	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-021	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-022	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-023	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-024	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-025	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0007404		
Start Date	5/7/2018	**Customer Name**	BAFFINLAND IRON MINES P.O. #4500043731
Req Delivery Date	5/9/2018	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	18747 FT

Inspection #	30423	**Job**	E0007404	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	5/7/2018	**Completion Date**	5/10/2018
Notes	Date: 08/05/2018, Shift B: Re: E0007404, This roll #10 is moved to Job # E0007405.						

Serial	Result	Roll Length (ft)	Roll Weight - Net (3448 lbs +/- 345 lbs)	Sheet Width (270 in +/- 2 in)	Roll Area m2	Thickness - Average ASTM D5199 (60 mil min.)	Thickness - Minimum ASTM D5199 (54 mil min.)
33027006WB-E0007404-026	Pass	520	3431.18	271.25	1091.98872785829	60.05	58.5
33027006wb-e0007404-027	Pass	520	3526.18	270.50	1088.9694041868	60.35	57
33027006wb-e0007404-028	Pass	520	3536.18	269.50	1084.94363929147	61.15	58.5
33027006wb-e0007404-029	Pass	520	3541.18	269.50	1084.94363929147	61.4	60.5
33027006wb-e0007404-030	Pass	520	3531.18	269.50	1084.94363929147	61.3	59.5
33027006WB-E0007404-031	Pass	520	3526.18	269.25	1083.93719806763	61.25	59.5
33027006wb-e0007404-032	Pass	520	3531.18	269.00	1082.9307568438	60.9	59.5
33027006WB-E0007404-033	Pass	520	3531.18	269.00	1082.9307568438	60.5	59
33027006WB-E0007404-034	Pass	520	3551.18	270.00	1086.95652173913	60.6	58
33027006WB-E0007404-035	Pass	520	3536.18	270.00	1086.95652173913	60.45	58.5
33027006WB-E0007404-036	Pass	520	3536.18	270.00	1086.95652173913	60.75	58.5

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0007404		
Start Date	5/7/2018	**Customer Name**	BAFFINLAND IRON MINES P.O. #4500043731
Req Delivery Date	5/9/2018	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	18747 FT

Inspection #	30423	**Job**	E0007404	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	5/7/2018	**Completion Date**	5/10/2018
Notes	Date: 08/05/2018, Shift B: Re: E0007404, This roll #10 is moved to Job # E0007405.						

Serial	Break Strength - MD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - MD Average ASTM D638 IV (1000 % to 1600 %)	Break Strength - TD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - TD Average ASTM D638 IV (1000 % to 1600 %)	Tear Strength - MD Average ASTM D1004 (33 lbs min.)	Tear Strength - TD Average ASTM D1004 (33 lbs min.)	Puncture Strength - Average ASTM D4833 (90 lbs min.)
33027006WB-E0007404-026	332.18	1391.9652	328.04	1429.03094	42	42.2	97.8
33027006wb-e0007404-027	332.18	1391.9652	328.04	1429.03094	42	42.2	97.8
33027006wb-e0007404-028	332.18	1391.9652	328.04	1429.03094	42	42.2	97.8
33027006wb-e0007404-029	332.18	1391.9652	328.04	1429.03094	42	42.2	97.8
33027006wb-e0007404-030	332.18	1391.9652	328.04	1429.03094	42	42.2	97.8
33027006WB-E0007404-031	337.02	1364.49922	330.98	1388.23196	41.6	41.2	110.2
33027006wb-e0007404-032	337.02	1364.49922	330.98	1388.23196	41.6	41.2	110.2
33027006WB-E0007404-033	337.02	1364.49922	330.98	1388.23196	41.6	41.2	110.2
33027006WB-E0007404-034	337.02	1364.49922	330.98	1388.23196	41.6	41.2	110.2
33027006WB-E0007404-035	337.02	1364.49922	330.98	1388.23196	41.6	41.2	110.2
33027006WB-E0007404-036	322.64	1403.16492	328.82	1476.76308	41.6	41.2	110.2

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0007404		
Start Date	5/7/2018	**Customer Name**	BAFFINLAND IRON MINES P.O. #4500043731
Req Delivery Date	5/9/2018	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	18747 FT

Inspection #	30423	**Job**	E0007404	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	5/7/2018	**Completion Date**	5/10/2018
Notes	Date: 08/05/2018, Shift B: Re: E0007404, This roll #10 is moved to Job # E0007405.						

Serial	Carbon Black Content - Black layers only ASTM D4218 (2 % to 3 %)	Density ASTM D1505 (0.925 g/cc to 0.939 g/cc)	Carbon Black Dispersion ASTM D5596	OIT - High Pressure ASTM D5885
33027006WB-E0007404-026	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0007404-027	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0007404-028	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0007404-029	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0007404-030	2.51111111111111	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-031	2.16666666666667	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0007404-032	2.16666666666667	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-033	2.16666666666667	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-034	2.16666666666667	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-035	2.16666666666667	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006WB-E0007404-036	2.16666666666667	0.935	>= 9 in Category 1 or 2	Pass > 2000 mins

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES – P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Result	Roll Length (ft)	Roll Weight - Net (3448 lbs +/- 345 lbs)	Sheet Width (270 in +/- 2 in)	Roll Area m2	Thickness - Average ASTM D5199 (60 mil min.)	Thickness - Minimum ASTM D5199 (54 mil min.)
33027006wb-e0008982-001	Pass	520	3596.18	270.00	1086.95652173913	61.25	57.5
33027006wb-e0008982-002	Pass	520	3606.18	269.75	1085.9500805153	61.85	58.5
33027006wb-e0008982-003	Pass	520	3591.18	270.25	1087.96296296296	60.7	59
33027006wb-e0008982-004	Pass	520	3531.18	270.00	1086.95652173913	60.05	56.5
33027006wb-e0008982-005	Pass	520	3521.18	270.00	1086.95652173913	60.95	57
33027006wb-e0008982-006	Pass	520	3521.18	270.00	1086.95652173913	60.95	58
33027006wb-e0008982-007	Pass	520	3531.18	270.00	1086.95652173913	60.55	57.5
33027006wb-e0008982-008	Pass	520	3536.18	270.00	1086.95652173913	61	58
33027006wb-e0008982-009	Pass	520	3536.18	269.50	1084.94363929147	60.25	57
33027006wb-e0008982-010	Pass	520	3531.18	269.50	1084.94363929147	60.6	58.5
33027006wb-e0008982-011	Pass	520	3531.18	270.75	1089.97584541063	60.7	58.5
33027006wb-e0008982-012	Pass	520	3541.18	271.00	1090.98228663446	60.9	59
33027006wb-e0008982-013	Pass	520	3541.18	270.50	1088.9694041868	60.4	59
33027006wb-e0008982-014	Pass	520	3511.18	270.50	1088.9694041868	60.05	56.5
33027006wb-e0008982-015	Pass	520	3526.18	271.75	1094.00161030596	60.15	57
33027006wb-e0008982-016	Pass	520	3516.18	271.25	1091.98872785829	60.2	58.5
33027006wb-e0008982-017	Pass	520	3526.18	271.00	1090.98228663446	60.4	58
33027006wb-e0008982-018	Pass	520	3526.18	271.50	1092.99516908213	60.1	57
33027006wb-e0008982-019	Pass	520	3526.18	271.75	1094.00161030596	60.15	56.5
33027006wb-e0008982-020	Pass	520	3521.18	271.50	1092.99516908213	60.15	58.5
33027006wb-e0008982-021	Pass	520	3526.18	271.50	1092.99516908213	60.3	58.5
33027006wb-e0008982-022	Pass	520	3496.18	271.25	1091.98872785829	60.5	57
33027006wb-e0008982-023	Pass	520	3516.18	271.50	1092.99516908213	61.2	60.5
33027006wb-e0008982-024	Pass	520	3521.18	270.25	1087.96296296296	60.45	58.5
33027006wb-e0008982-025	Pass	520	3531.18	270.00	1086.95652173913	60.5	58

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Break Strength - MD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - MD Average ASTM D638 IV (1000 % to 1600 %)	Break Strength - TD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - TD Average ASTM D638 IV (1000 % to 1600 %)	Tear Strength - MD Average ASTM D1004 (33 lbs min.)	Tear Strength - TD Average ASTM D1004 (33 lbs min.)	Puncture Strength - Average ASTM D4833 (90 lbs min.)
33027006wb-e0008982-001	317.4	1367.16582	314.6	1330.36674	40.8	43.2	104.8
33027006wb-e0008982-002	317.4	1367.16582	314.6	1330.36674	40.8	43.2	104.8
33027006wb-e0008982-003	317.4	1367.16582	314.6	1330.36674	40.8	43.2	104.8
33027006wb-e0008982-004	317.4	1367.16582	314.6	1330.36674	40.8	43.2	104.8
33027006wb-e0008982-005	317.4	1367.16582	314.6	1330.36674	40.8	43.2	104.8
33027006wb-e0008982-006	317.24	1393.83182	297.44	1291.43438	40.8	43.2	104.8
33027006wb-e0008982-007	317.24	1393.83182	297.44	1291.43438	40.8	43.2	104.8
33027006wb-e0008982-008	317.24	1393.83182	297.44	1291.43438	40.8	43.2	104.8
33027006wb-e0008982-009	317.24	1393.83182	297.44	1291.43438	40.8	43.2	104.8
33027006wb-e0008982-010	317.24	1393.83182	297.44	1291.43438	40.8	43.2	104.8
33027006wb-e0008982-011	313.5	1349.03294	309.98	1421.56446	37	39.4	104.8
33027006wb-e0008982-012	313.5	1349.03294	309.98	1421.56446	37	39.4	104.8
33027006wb-e0008982-013	313.5	1349.03294	309.98	1421.56446	37	39.4	104.8
33027006wb-e0008982-014	313.5	1349.03294	309.98	1421.56446	37	39.4	104.8
33027006wb-e0008982-015	313.5	1349.03294	309.98	1421.56446	37	39.4	104.8
33027006wb-e0008982-016	315.44	1404.76488	308.42	1453.83032	37	39.4	104.8
33027006wb-e0008982-017	315.44	1404.76488	308.42	1453.83032	37	39.4	104.8
33027006wb-e0008982-018	315.44	1404.76488	308.42	1453.83032	37	39.4	104.8
33027006wb-e0008982-019	315.44	1404.76488	308.42	1453.83032	37	39.4	104.8
33027006wb-e0008982-020	315.44	1404.76488	308.42	1453.83032	37	39.4	104.8
33027006wb-e0008982-021	305.08	1401.2983	315.64	1434.36414	37.8	38.8	106.2
33027006wb-e0008982-022	305.08	1401.2983	315.64	1434.36414	37.8	38.8	106.2
33027006wb-e0008982-023	305.08	1401.2983	315.64	1434.36414	37.8	38.8	106.2
33027006wb-e0008982-024	305.08	1401.2983	315.64	1434.36414	37.8	38.8	106.2
33027006wb-e0008982-025	305.08	1401.2983	315.64	1434.36414	37.8	38.8	106.2

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Carbon Black Content - Black layers only ASTM D4218 (2 % to 3 %)	Density ASTM D1505 (0.925 g/cc to 0.939 g/cc)	Carbon Black Dispersion ASTM D5596	OIT - High Pressure ASTM D5885
33027006wb-e0008982-001	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-002	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-003	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-004	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-005	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-006	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-007	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-008	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-009	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-010	2.28888888888889	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-011	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-012	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-013	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-014	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-015	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-016	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-017	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-018	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-019	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-020	2.53333333333333	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-021	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-022	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-023	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-024	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-025	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Result	Roll Length (ft)	Roll Weight - Net (3448 lbs +/- 345 lbs)	Sheet Width (270 in +/- 2 in)	Roll Area m2	Thickness - Average ASTM D5199 (60 mil min.)	Thickness - Minimum ASTM D5199 (54 mil min.)
33027006wb-e0008982-026	Pass	520	3521.18	269.50	1084.94363929147	60.9	58.5
33027006wb-e0008982-027	Pass	520	3531.18	269.50	1084.94363929147	61.5	59.5
33027006wb-e0008982-028	Pass	520	3526.18	270.00	1086.95652173913	60.6	58.5
33027006wb-e0008982-029	Pass	520	3521.18	269.50	1084.94363929147	60.65	58.5
33027006wb-e0008982-030	Pass	520	3531.18	269.75	1085.9500805153	61.55	60
33027006wb-e0008982-031	Pass	500	3374.18	270.25	1046.11823361823	59.95	58
33027006wb-e0008982-032	Pass	520	3526.18	270.50	1088.9694041868	61.1	59
33027006wb-e0008982-033	Pass	520	3541.18	270.50	1088.9694041868	60.9	58.5
33027006wb-e0008982-034	Pass	520	3536.18	270.25	1087.96296296296	60.65	57
33027006wb-e0008982-035	Pass	520	3536.18	270.50	1088.9694041868	60.55	58.5
33027006wb-e0008982-036	Pass	520	3541.18	271.00	1090.98228663446	59.95	57
33027006wb-e0008982-037	Pass	520	3536.18	270.50	1088.9694041868	60.75	57.5
33027006wb-e0008982-038	Pass	520	3531.18	270.50	1088.9694041868	60.9	59.5
33027006wb-e0008982-039	Pass	520	3541.18	270.50	1088.9694041868	61.05	59.5
33027006wb-e0008982-040	Pass	520	3536.18	269.50	1084.94363929147	61.25	59.5
33027006wb-e0008982-041	Pass	520	3531.18	269.50	1084.94363929147	61.05	59.5
33027006wb-e0008982-042	Pass	520	3531.18	269.50	1084.94363929147	60.6	59
33027006wb-e0008982-043	Pass	520	3541.18	269.50	1084.94363929147	60.75	58
33027006wb-e0008982-044	Pass	520	3541.18	270.00	1086.95652173913	61.7	58.5
33027006wb-e0008982-045	Pass	520	3526.18	270.00	1086.95652173913	61.45	59.5
33027006wb-e0008982-046	Pass	520	3531.18	269.25	1083.93719806763	61.05	60
33027006wb-e0008982-047	Pass	520	3546.18	270.25	1087.96296296296	60.8	59
33027006wb-e0008982-048	Pass	520	3546.18	270.75	1089.97584541063	61.2	60
33027006wb-e0008982-049	Pass	520	3551.18	271.25	1091.98872785829	60.75	59.5
33027006wb-e0008982-050	Pass	520	3526.18	271.50	1092.99516908213	60.5	58

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Break Strength - MD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - MD Average ASTM D638 IV (1000 % to 1600 %)	Break Strength - TD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - TD Average ASTM D638 IV (1000 % to 1600 %)	Tear Strength - MD Average ASTM D1004 (33 lbs min.)	Tear Strength - TD Average ASTM D1004 (33 lbs min.)	Puncture Strength - Average ASTM D4833 (90 lbs min.)
33027006wb-e0008982-026	312.62	1302.10078	334.38	1383.9654	37.8	38.8	106.2
33027006wb-e0008982-027	312.62	1302.10078	334.38	1383.9654	37.8	38.8	106.2
33027006wb-e0008982-028	312.62	1302.10078	334.38	1383.9654	37.8	38.8	106.2
33027006wb-e0008982-029	312.62	1302.10078	334.38	1383.9654	37.8	38.8	106.2
33027006wb-e0008982-030	312.62	1302.10078	334.38	1383.9654	37.8	38.8	106.2
33027006wb-e0008982-031	304.32	1387.16532	306.48	1431.9642	35.8	39.6	103
33027006wb-e0008982-032	304.32	1387.16532	306.48	1431.9642	35.8	39.6	103
33027006wb-e0008982-033	304.32	1387.16532	306.48	1431.9642	35.8	39.6	103
33027006wb-e0008982-034	304.32	1387.16532	306.48	1431.9642	35.8	39.6	103
33027006wb-e0008982-035	304.32	1387.16532	306.48	1431.9642	35.8	39.6	103
33027006wb-e0008982-036	304.32	1387.16532	306.48	1431.9642	35.8	39.6	103
33027006wb-e0008982-037	325.56	1411.16472	312.86	1353.03284	35.8	39.6	103
33027006wb-e0008982-038	325.56	1411.16472	312.86	1353.03284	35.8	39.6	103
33027006wb-e0008982-039	325.56	1411.16472	312.86	1353.03284	35.8	39.6	103
33027006wb-e0008982-040	325.56	1411.16472	312.86	1353.03284	35.8	39.6	103
33027006wb-e0008982-041	315.54	1374.89896	325.46	1469.56326	37.8	39.6	101.8
33027006wb-e0008982-042	315.54	1374.89896	325.46	1469.56326	37.8	39.6	101.8
33027006wb-e0008982-043	315.54	1374.89896	325.46	1469.56326	37.8	39.6	101.8
33027006wb-e0008982-044	315.54	1374.89896	325.46	1469.56326	37.8	39.6	101.8
33027006wb-e0008982-045	315.54	1374.89896	325.46	1469.56326	37.8	39.6	101.8
33027006wb-e0008982-046	304.18	1232.23586	335.04	1500.49582	37.8	39.6	101.8
33027006wb-e0008982-047	304.18	1232.23586	335.04	1500.49582	37.8	39.6	101.8
33027006wb-e0008982-048	304.18	1232.23586	335.04	1500.49582	37.8	39.6	101.8
33027006wb-e0008982-049	304.18	1232.23586	335.04	1500.49582	37.8	39.6	101.8
33027006wb-e0008982-050	304.18	1232.23586	335.04	1500.49582	37.8	39.6	101.8

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Carbon Black Content - Black layers only ASTM D4218 (2 % to 3 %)	Density ASTM D1505 (0.925 g/cc to 0.939 g/cc)	Carbon Black Dispersion ASTM D5596	OIT - High Pressure ASTM D5885
33027006wb-e0008982-026	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-027	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-028	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-029	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-030	2.41111111111111	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-031	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-032	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-033	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-034	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-035	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-036	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-037	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-038	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-039	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-040	2.54444444444444	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-041	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-042	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-043	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-044	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-045	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-046	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-047	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-048	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-049	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-050	2.52222222222222	0.937	>= 9 in Category 1 or 2	Pass > 2000 mins

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Result	Roll Length (ft)	Roll Weight - Net (3448 lbs +/- 345 lbs)	Sheet Width (270 in +/- 2 in)	Roll Area m2	Thickness - Average ASTM D5199 (60 mil min.)	Thickness - Minimum ASTM D5199 (54 mil min.)
33027006wb-e0008982-051	Pass	520	3541.18	271.50	1092.99516908213	61	58.5
33027006wb-e0008982-052	Pass	520	3546.18	271.00	1090.98228663446	60.6	57.5
33027006wb-e0008982-053	Pass	520	3541.18	271.25	1091.98872785829	60.65	58.5
33027006wb-e0008982-054	Pass	520	3541.18	270.50	1088.9694041868	60.8	58.5
33027006wb-e0008982-055	Pass	520	3541.18	271.00	1090.98228663446	60.85	58.5
33027006wb-e0008982-056	Pass	520	3546.18	271.25	1091.98872785829	60.2	58.5
33027006wb-e0008982-057	Pass	520	3546.18	271.50	1092.99516908213	61.05	59.5
33027006wb-e0008982-058	Pass	520	3556.18	271.00	1090.98228663446	60.4	58.5
33027006wb-e0008982-059	Pass	520	3541.18	271.00	1090.98228663446	60.55	58.5
33027006wb-e0008982-060	Pass	520	3541.18	270.50	1088.9694041868	60.05	57.5
33027006wb-e0008982-061	Pass	520	3551.18	270.50	1088.9694041868	60.1	58
33027006wb-e0008982-062	Pass	520	3541.18	270.50	1088.9694041868	60.4	58.5
33027006wb-e0008982-063	Pass	520	3541.18	270.75	1089.97584541063	60.8	60
33027006wb-e0008982-064	Pass	520	3546.18	270.75	1089.97584541063	60.25	58.5
33027006wb-e0008982-065	Pass	520	3541.18	270.50	1088.9694041868	61.15	59
33027006wb-e0008982-066	Pass	520	3536.18	270.00	1086.95652173913	60.55	57.5
33027006wb-e0008982-067	Pass	520	3531.18	270.00	1086.95652173913	61.2	60
33027006wb-e0008982-068	Pass	520	3531.18	270.50	1088.9694041868	60.1	56.5
33027006wb-e0008982-069	Pass	520	3536.18	270.50	1088.9694041868	60.35	58.5
33027006wb-e0008982-070	Pass	520	3546.18	270.50	1088.9694041868	60.45	58
33027006wb-e0008982-071	Pass	520	3541.18	270.50	1088.9694041868	60.25	58.5
33027006wb-e0008982-072	Pass	520	3531.18	270.25	1087.96296296296	60.15	57.5
33027006wb-e0008982-073	Pass	520	3526.18	269.50	1084.94363929147	60	58.5
33027006wb-e0008982-074	Pass	520	3536.18	269.75	1085.9500805153	60.15	57.5

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Break Strength - MD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - MD Average ASTM D638 IV (1000 % to 1600 %)	Break Strength - TD Average ASTM D638 IV (255 lbs/in to 400 lbs/in)	Break Elongation - TD Average ASTM D638 IV (1000 % to 1600 %)	Tear Strength - MD Average ASTM D1004 (33 lbs min.)	Tear Strength - TD Average ASTM D1004 (33 lbs min.)	Puncture Strength - Average ASTM D4833 (90 lbs min.)
33027006wb-e0008982-051	313.74	1404.49822	321.76	1443.69724	39.6	40.6	105
33027006wb-e0008982-052	313.74	1404.49822	321.76	1443.69724	39.6	40.6	105
33027006wb-e0008982-053	313.74	1404.49822	321.76	1443.69724	39.6	40.6	105
33027006wb-e0008982-054	313.74	1404.49822	321.76	1443.69724	39.6	40.6	105
33027006wb-e0008982-055	313.74	1404.49822	321.76	1443.69724	39.6	40.6	105
33027006wb-e0008982-056	321.84	1374.09898	322.76	1425.2977	39.6	40.6	105
33027006wb-e0008982-057	321.84	1374.09898	322.76	1425.2977	39.6	40.6	105
33027006wb-e0008982-058	321.84	1374.09898	322.76	1425.2977	39.6	40.6	105
33027006wb-e0008982-059	321.84	1374.09898	322.76	1425.2977	39.6	40.6	105
33027006wb-e0008982-060	321.84	1374.09898	322.76	1425.2977	39.6	40.6	105
33027006wb-e0008982-061	321.22	1363.69924	346.02	1450.89706	40	41.4	106.2
33027006wb-e0008982-062	321.22	1363.69924	346.02	1450.89706	40	41.4	106.2
33027006wb-e0008982-063	321.22	1363.69924	346.02	1450.89706	40	41.4	106.2
33027006wb-e0008982-064	321.22	1363.69924	346.02	1450.89706	40	41.4	106.2
33027006wb-e0008982-065	321.22	1363.69924	346.02	1450.89706	40	41.4	106.2
33027006wb-e0008982-066	336.46	1368.49912	340.12	1458.36354	40	41.4	106.2
33027006wb-e0008982-067	336.46	1368.49912	340.12	1458.36354	40	41.4	106.2
33027006wb-e0008982-068	336.46	1368.49912	340.12	1458.36354	40	41.4	106.2
33027006wb-e0008982-069	336.46	1368.49912	340.12	1458.36354	40	41.4	106.2
33027006wb-e0008982-070	336.46	1368.49912	340.12	1458.36354	40	41.4	106.2
33027006wb-e0008982-071	320.72	1243.70224	336.06	1442.09728	42.6	43.6	107
33027006wb-e0008982-072	320.72	1243.70224	336.06	1442.09728	42.6	43.6	107
33027006wb-e0008982-073	320.72	1243.70224	336.06	1442.09728	42.6	43.6	107
33027006wb-e0008982-074	320.72	1243.70224	336.06	1442.09728	42.6	43.6	107

LAYFIELD Leaders in Film & Geosynthetic Technology

Mill Certification Report

Job #	E0008982		
Start Date	4/23/2019	**Customer Name**	BAFFINLAND IRON MINES - P.O. #4500059123
Req Delivery Date	4/23/2019	**Job Description**	EL6060X 270" 60MIL WB
Close Date		**Warehouse**	42
		Qty Manufactured	38460 FT

Inspection #	34640	**Job**	E0008982	**Status**	Active	**Result**	Pass
Stock Code	33027006WB	EL6060X 270" 60MIL WB		**Inspection Date**	4/18/2019	**Completion Date**	4/23/2019
Notes							

Serial	Carbon Black Content - Black layers only ASTM D4218 (2 % to 3 %)	Density ASTM D1505 (0.925 g/cc to 0.939 g/cc)	Carbon Black Dispersion ASTM D5596	OIT - High Pressure ASTM D5885
33027006wb-e0008982-051	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-052	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-053	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-054	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-055	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-056	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-057	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-058	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-059	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-060	2.47777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-061	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-062	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-063	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-064	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-065	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-066	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-067	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-068	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-069	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-070	2.17777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-071	2.27777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-072	2.27777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-073	2.27777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins
33027006wb-e0008982-074	2.27777777777778	0.938	>= 9 in Category 1 or 2	Pass > 2000 mins

APPENDIX E

DAILY CONSTRUCTION REPORTS

PROJECT 11-837 - BAFFINLAND **DATE : 2019-04-12**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	800	74%	800	74%	274	26%
EAST	788	0	0%	0	0%	788	100%

ROAD BUILDING

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	0	0	0%	1074	100%
EAST	788	0	0	0%	0	0	0%	788	100%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-04-13**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	274	26%	1074	100%	0	0%
EAST	788	600	76%	600	76%	188	24%

ROAD BUILDING

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	0	0	0%	1074	100%
EAST	788	0	0	0%	0	0	0%	788	100%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-04-14**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	188	24%	788	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	61	130	12%	61	130	12%	944	88%
EAST	788	0	0	0%	0	0	0%	788	100%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-04-15**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	82	130	12%	143	260	24%	814	76%
EAST	788	0	0	0%	0	0	0%	788	100%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-04-16**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	70	100	9%	213	360	34%	714	66%
EAST	788	10	10	1%	0	10	1%	778	99%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-04-17**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	213	360	34%	714	66%
EAST	788	91	70	9%	0	70	9%	718	91%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-04-28**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	50	40	4%	263	400	37%	674	63%
EAST	788	0	0	0%	0	70	9%	718	91%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-04**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	600	76%	600	76%	188	24%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	60	6%	263	460	43%	614	57%
EAST	788	0	0	0%	0	70	9%	718	91%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-04**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	60	6%	263	460	43%	614	57%
EAST	788	0	0	0%	0	70	9%	718	91%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-07**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	600	76%	600	76%	188	24%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	30	20	2%	293	480	45%	594	55%
EAST	788	0	0	0%	0	70	9%	718	91%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-07**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	600	76%	600	76%	188	24%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074		40	4%	293	520	48%	554	52%
EAST	788	0	0	0%	0	70	9%	718	91%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-08**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	600	76%	600	76%	188	24%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	22	20	2%	315	540	50%	534	50%
EAST	788	0	0	0%	0	70	9%	718	91%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-09**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	600	76%	600	76%	188	24%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	293	540	50%	534	50%
EAST	788	63	40	5%	0	110	14%	678	86%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-10**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road % 60%

Ditch snow removal % 0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	1074	0	0%	0	0%	1074	100%
EAST DITCH	788	0	0%	0	0%	788	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	600	76%	600	76%	188	24%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	293	725	68%	349	32%
EAST	788	81	90	11%	172	390	49%	398	51%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-11**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road % 60%

Ditch snow removal % 0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	1074	0	0%	0	0%	1074	100%
EAST DITCH	788	0	0%	0	0%	788	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	600	76%	600	76%	188	24%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	293	725	68%	349	32%
EAST	788	10	0	0%	182	390	49%	398	51%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-12**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	54%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	600	76%	188	24%
WEAST	349	0	0%	0	0%	349	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	293	725	68%	349	32%
EAST	788	135	140	18%	317	530	67%	258	33%
POND	464	0	0	0%	0	0	0%	464	100%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-13**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	57%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	600	76%	188	24%
WEAST	349	0	0%	0	0%	349	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	293	725	68%	349	32%
EAST	788	73	80	10%	390	610	77%	178	23%
POND	464	0	0	0%	0	0	0%	464	100%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-14**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	60%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	600	76%	188	24%
WEAST	349	0	0%	0	0%	349	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	293	725	68%	349	32%
EAST	788	65	50	6%	455	660	84%	128	16%
POND	464	0	0	0%	0	0	0%	464	100%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-15**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	63%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	600	76%	188	24%
WEAST	349	0	0%	0	0%	349	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	293	725	68%	349	32%
EAST	788	50	90	11%	505	750	95%	38	5%
POND	464	0	0	0%	0	0	0%	464	100%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-16**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	69%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	600	76%	188	24%
WEAST	349	0	0%	0	0%	349	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	64	125	12%	357	850	79%	224	21%
EAST	788	0	0	0%	505	750	95%	38	5%
POND	464	0	0	0%	0	0	0%	464	100%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-17**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	73%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	600	76%	188	24%
WEAST	349	0	0%	0	0%	349	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	60	100	9%	417	950	88%	124	12%
EAST	788	0	0	0%	505	750	95%	38	5%
POND	464	0	0	0%	0	0	0%	464	100%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-18**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	76%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	600	76%	188	24%
WEAST	349	0	0%	0	0%	349	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	48	75	7%	465	1025	95%	49	5%
EAST	788	0	0	0%	505	750	95%	38	5%
POND	464	0	0	0%	0	0	0%	464	100%

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-30**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	91%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	788	100%	0	0%
WEAST	349	0	0%	349	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	39	35	4%	225	250	54%	214	46%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-05-31**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	92%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	788	100%	0	0%
WEAST	349	0	0%	349	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	21	30	4%	246	280	60%	184	40%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-06-02**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	89%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	788	100%	0	0%
WEAST	349	0	0%	349	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	572	0	0	0%	264	302	60%	270	47%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-06-03**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	92%
Ditch snow removal :	0%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	0	0%	700	100%
EAST DITCH	698	0	0%	0	0%	698	100%

NEW SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST	788	0	0%	788	100%	0	0%
WEAST	349	0	0%	349	100%	0	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	572	60	68	9%	324	370	69%	202	31%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-06-08**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	50%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	700	100%	700	100%	0	0%
EAST DITCH	698	0	0%	0	0%	698	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
WASTE DUMP	NA	0	NA	39	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-06-08**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	50%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	0	0%	698	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
WASTE DUMP	NA	0	NA	39	NA	NA	NA
DRILL PATERN	NA	39	NA	39	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-06-10**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	50%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	0	0%	698	100%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
WASTE DUMP	NA	46	NA	85	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-06-11**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	50%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	0	0%	698	100%
BERM	NA	NA	75%	NA	75%	NA	25%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	85	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-06-12**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	25%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	64	NA	149	NA	NA	NA

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-16 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2429	Crushing material Type 8 - 150 mm minus	Work stop around 1.00 pm. Project came to get the laoder 988.
3205	Loading and hauling material to designated stockpile area.	
3204	WRF Pond Berm - Snow removal	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
2429	Loss of production for the dayshift (6h) and for the night shift (12h)

QUALITY

After inspection, we have to remove snow from the floor before starting the backfill.

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-16 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
2019-06-16	Loss of production for the dayshift (6h) and for the night shift (12h)	18h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''			24000	24000	0,00%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus	1078	2544	5000	2456	50,88%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-16 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry	160	Bench 660	WRP Pond	160				
Type 8 - 150 mm minus	1620	Bench 660	Laydown 110	1620				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-16 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-17 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2429	Crushing material Type 8 - 150 mm minus	
3204	Backfill work - WRF Pond Berm	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
2429	Loss of production for the dayshift (12h) and for the night shift (12h). No loader available.

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-17 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
2019-06-19	Loss of production for the dayshift (12h) and for the night shift (12h)	24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''			24000	24000	0,00%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		2544	5000	2456	50,88%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-17 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry	760	Bench 660	WRP Pond	920				
Type 8 - 150 mm minus		Bench 660	Laydown 110	1620				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-17 | Weather conditions: Sunny 11 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-18 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2429	Crushing material Type 8 - 150 mm minus	
2427	Crushing material 0-3'' + 3''-6''	
3204	Backfill work - WRF Pond Berm	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-18 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''	163	163	24000	23837	0,68%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus	2993	5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-18 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry	900	Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus		Bench 660	Laydown 110	1620				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-18 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-19 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2427	Crushing material 0-3'' + 3''-6''	
3205	Loading and hauling material to designated stock-pile area	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-19 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''	3201	3364	24000	20636	14,02%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-19 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry		Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus	1400	Bench 660	Laydown 110	3020				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-19 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9		X	
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-20 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2427	Crushing material 0-3'' + 3''-6''	fuel truck down on the crusher pad, no activities on both shift
3205	Loading and hauling material to designated stock-pile area	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-20 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''		3364	24000	20636	14,02%	Fuel truck down
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-20 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry		Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus		Bench 660	Laydown 110	3020				
RipRap - 0-3''	760	Bench 660	Waste Dump	760				
RipRap - 3''-6''	840	Bench 660	Waste Dump	840				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-20 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-21 | Weather conditions: Sunny 6 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2427	Crushing material 0-3'' + 3''-6''	
3205	Loading and hauling material to designated stock-pile area	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-21 | Weather conditions: Sunny 6 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''	2692	6056	24000	17944	25,23%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-21 | Weather conditions: Sunny 6 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry		Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus		Bench 660	Laydown 110	3020				
RipRap - 0-3''	2620	Bench 660	Waste Dump	3380				
RipRap - 3''-6''		Bench 660	Waste Dump	840				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-21 | Weather conditions: Sunny 6 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-22 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2427	Crushing material 0-3'' + 3''-6''	
3205	Loading and hauling material to designated stock-pile area	no hauling work dur to weather conditions
3204	WRF Pond Berm (excavate trench in the waste dump with 374)	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-22 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''	2656	8712	24000	15288	36,30%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-22 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry		Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus		Bench 660	Laydown 110	3020				
RipRap - 0-3''		Bench 660	Waste Dump	3380				
RipRap - 3''-6''		Bench 660	Waste Dump	840				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-22 | Weather conditions: Snow 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-23 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2427	Crushing material 0-3'' + 3''-6''	
3205	Loading and hauling material to designated stock-pile area	
3207	Excavate Ditches - West Side (+- 50 meters)	frozen ground slowed excavation

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-23 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''	2003	10715	24000	13285	44,65%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-23 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES

PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry		Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus		Bench 660	Laydown 110	3020				
RipRap - 0-3''		Bench 660	Waste Dump	3380				
RipRap - 3''-6''	860	Bench 660	Waste Dump	1700				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-23 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-24 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
2427	Crushing material 0-3'' + 3''-6''	No rock available for the crusher - The crusher will be relocated at the port
3205	Loading and hauling material to designated stock-pile area	
3207	Excavate Ditches - West Side (+- 20 meters) and install Geotextile and RipRap	frozen ground slowed excavation

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-24 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	1
Crushing	10
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**17**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''		10715	24000	13285	44,65%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-24 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry		Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus		Bench 660	Laydown 110	3020				
RipRap - 0-3''		Bench 660	Waste Dump	3380				
RipRap - 3''-6''	780	Bench 660	Waste Dump	2480				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-24 | Weather conditions: Fog 0 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-26 | Weather conditions: Sun 8 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

PROJECT SAFETY

CC004A	LOST TIME INJURY	RECORDABLE EVENT	FIRST AID	EQUIPEMENT DAMAGE	MINOR SPILLS	MAJOR SPILLS	SIGNIFIANT NEAR MISS	YEARLY TOTAL				
2019 YTD	0	0	0	0	0	0	0	0				
Project to date	0	0	0	0	0	0	0	0				

DAILY INCIDENTS DESCRIPTION	

DAILY ACTIVITIES

CODE	ACTIVITIES	OBSTACLES TO THE SMOOTH RUNNING OF ACTIVITIES
3207	Excavate Ditches - West Side (+- 20 meters) and install Geotextile and RipRap	frozen ground slowed excavation, rock in the bottom of the excavation
3205	Loading and hauling material to designated stock-pile area	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

QUALITY

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-26 | Weather conditions: Sun 8 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DELAYS

DATE	DELAY DESCRIPTION	SCHEDULE HOUR/SHIFT LOST
		24h

MANPOWER

POSITION	PERSONNAL ON SITE
PORT SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	0
Management / Admistration	0
TOTAL PORT SITE	**0**
MARY RIVER SITE	
Drill & Blast	0
Crushing	0
Civil (Excavation team)	5
Management / Admistration	1
TOTAL MARY RIVER	**6**

DAILY PRODUCTION

CRUSHING ACTIVITIES						
PRODUCT	DAILY TOTAL (T.M.)	TOTAL PRODUCED TO DATE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	QUANTITY STILL TO PRODUCE (M.T.)	PERCENT COMPLETE	COMMENTS
Phase 7H - 0-3/4			15000	15000	0,00%	
Phase 8H - 0-3'' + 3''-6''		10715	24000	13285	44,65%	
Phase 9H - 19 mm minus			10000	10000	0,00%	
Phase 10H - Type 8 - 150 mm minus		5537	5000	-537	110,74%	
Phase 11H - Type 5 - 32 mm minus			10000	10000	0,00%	
Phase 12H - 0-2''			55000	55000	0,00%	

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-26 | Weather conditions: Sun 8 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DRILLING ACTIVITIES			
BENCH ELEVATION	TOTAL HOLES	LINEAR METERS	COMMENTS

BLASTING ACTIVITIES			
PATTERN NUMBER BLASTED	ESTIMATED QUANTITY (m^3)	TOTAL QUANTITY (m^3)	COMMENTS
-	-		

LOADING AND HAULING ACTIVITIES								
PRODUCT	DAILY TOTAL (m^3)	FROM	DESTINATION	TOTAL TRANSPORT TO DATE (m^3)	ESTIMATED TOTAL QUANTITY (m^3)	QUANTITY STILL TO PRODUCE (m^3)	PERCENT COMPETE (%)	COMMENTS
Snow								
Scrap								
ROQ - Run of quarry		Bench 660	WRP Pond	1820				
Type 8 - 150 mm minus		Bench 660	Laydown 110	3020				
RipRap - 0-3''		Bench 660	Waste Dump	3380				
RipRap - 3''-6''	340	Bench 660	Waste Dump	2900				

Baffinland Expansion project
Site crushing services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-06-26 | Weather conditions: Sun 8 degres Celcius | Working Hours: 6:00am-6:00pm ; 6:00pm-6:00am

DAILY EQUIPEMENT

UNIT NUMERO	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-12	Dozer CAT D9	X		
326506	Excavator CAT 374	X		
326511	Excavator CAT 349	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		
326801	Loader CAT 988		X	
Q-SANA EQUIPMENT				
17-0018	Pick-Up truck Dodge Ram 2500	X		
17-0017	Pick-Up truck Dodge Ram 2500	X		
12-0201	Loader CAT 980H	X		
15-0202	Loader Komatsu WA-600	X		
10-0701	JAW Crusher	X		
10-0702	Cone Crusher		X	
15-0701	Screener	X		

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-04**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	NA	25	25
TOTAL HAULING	25	NA	NA

DUMP HAULING	TOTAL QUANTITY	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	NA	25	25

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY			
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND
MINE SITE - WRP EXPANSION
DAILY ADVANCEMENT

DATE : 2019-07-03

Global road progresion :	100%
Ditch snow removal :	100%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	25%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY			
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

SIDE	TOTAL QUANTITY	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
DAM	NA	50	50

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-04**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	NA	60	85
TOTAL HAULING	25	NA	NA

DUMP HAULING	TOTAL QUANTITY	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	NA	18	43

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-04**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	25%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY			
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

SIDE	TOTAL QUANTITY	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
DAM	NA	78	128

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-05**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	NA	91	176
TOTAL HAULING	176	NA	NA

DUMP HAULING	TOTAL QUANTITY	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	NA	6	49

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY			
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Good Date : 5/7/19 Shift : D

Management Code	Activity Description
3205.	Start the shift with 4 Truck - 2 shovel and 1 Dozer
	Built a safety Berm around the probe (Thermo)
	load 2 loads of reprap for the crusher below (80km) (Mr Jeff McNicol).
	The Surveyor put new grade shot for another 7M lift and indicated the Top of crest for the slope. Later.

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-06**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	74	74
DAM - LIFT 4	18	18
TOTAL HAULING		240

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	12	61

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-07**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	78	96
DAM - LIFT 5	0	0
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		240

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	17	78

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-08**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	86	182
DAM - LIFT 5	0	0
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		422

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	16	94

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-09**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	82	264
DAM - LIFT 5	0	0
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		504

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	10	104

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-10**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	57	321
DAM - LIFT 5	0	0
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		561

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	15	119

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-11**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	55	55
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		616

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	14	133

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-12**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	36	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	24	157

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-13**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4"	107	107

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-14**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4"	19	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-15**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	85	12%	85	12%	598	88%

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4"	19	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-16**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	145	21%	230	34%	538	79%

West Ditch	Daily quantity (loads)	Cumulative quantity (loads)
Riprap (3-6")	16	16
0 - 3/4"	5	5

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4" (Stock pile)	19	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-17**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	140	20%	370	54%	313	46%

West Ditch	Daily quantity (loads)	Cumulative quantity (loads)
Riprap (3-6'')	17	33
0 - 3/4''	9	14

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4'' (Stock pile)	0	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY			
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-18**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	50	7%	420	61%	263	39%

West Ditch	Daily quantity (loads)	Cumulative quantity (loads)
JAW Run 0-6''	2	2
Riprap (3-6'')	6	39
0 - 3/4''	10	24

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4'' (Stock pile)	0	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-19**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	50	7%	470	69%	213	31%

West Ditch	Daily quantity (loads)	Cumulative quantity (loads)
JAW Run 0-6''	1	3
Riprap (3-6'')	18	57
0 - 3/4''	1	24

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4'' (Stock pile)	0	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-20**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	80	12%	550	81%	133	19%

West Ditch	Daily quantity (loads)	Cumulative quantity (loads)
JAW Run 0-6''	3	6
Riprap (3-6'')	16	73
0 - 3/4''	1	25

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4'' (Stock pile)	0	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-21**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	80	12%	630	92%	53	8%

West Ditch	Daily quantity (loads)	Cumulative quantity (loads)
JAW Run 0-6''	0	6
Riprap (3-6'')	14	87
0 - 3/4''	0	25

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4'' (Stock pile)	0	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND **DATE : 2019-07-22**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

Global road progresion :	100%
Ditch snow removal :	100%

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
EAST DITCH	683	53	8%	683	100%	0	0%

West Ditch	Daily quantity (loads)	Cumulative quantity (loads)
JAW Run 0-6''	1	6
Riprap (3-6'')	5	92
0 - 3/4''	0	25

SIDE	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

DUMP HAULING	DAILY QUANTITY # OF LOAD	CUMULATIVE QUANTITY # OF LOAD
	0	157
0 - 3/4'' (Stock pile)	0	116

SNOW REMOVAL

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY		CUMULATIVE QUANTITY		REMAINING QUANTITY	
		LIN.M.	%	LIN.M.	%	LIN.M.	%
WEST	1074	0	0%	1074	100%	0	0%
EAST	788	0	0%	788	100%	0	0%
WEST DITCH	700	0	0%	700	100%	0	0%
EAST DITCH	698	0	0%	698	100%	0	0%
BERM	NA	NA	0%	NA	100%	NA	0%

ACCESS ROAD

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY			REMAINING QUANTITY	
		# OF LOAD	LIN.M.	%	# OF LOAD	LIN.M.	%	LIN.M.	%
WEST	1074	0	0	0%	417	1074	100%	0	0%
EAST	788	0	0	0%	534	788	100%	0	0%
POND	464	0	0	0%	457	464	100%	0	0%

HAULING MATERIAL FOR MINE OPS

SIDE	TOTAL QUANTITY (LIN.M.)	DAILY QUANTITY			CUMULATIVE QUANTITY		
		# OF LOAD	%	# OF LOAD	%	# OF LOAD	%
ROAD	NA	0	NA	28	NA	NA	NA
DRILL PATERN	NA	0	NA	39	NA	NA	NA
QUARRY CLEANING	NA	0	NA	149	NA	NA	NA

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

DATE : 2019-07-29

ACTIVITY:

Pond extra excavation
Pond extra backfill
South burm
North burm

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	0%	0%	95%
Pond extra backfill with ROQ	0%	0%	0%
SOUTH BURM PROFILLING	0%	0%	95%
SOUTH CREST EXCAVATION TO ÉLÉVATION	10%	10%	90%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

DATE : 2019-07-29

ACTIVITY:

Pond extra excavation
Pond extra backfill
South burm
North burm

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	0%	0%	95%
Pond extra backfill with ROQ	0%	0%	0%
SOUTH BURM PROFILLING	0%	0%	95%
SOUTH CREST EXCAVATION TO ÉLÉVATION	10%	20%	80%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

DATE : 2019-07-29

ACTIVITY:

Pond extra excavation
Pond extra backfill
South burm
North burm

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	5%	5%	95%
Pond extra backfill with ROQ	0%	0%	0%
SOUTH BURM PROFILLING	5%	5%	95%
SOUTH CREST EXCAVATION TO ÉLÉVATION	10%	20%	80%

PROJECT 11-837 - BAFFINLAND

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

DATE : 2019-07-30

ACTIVITY:

Pond extra excavation
Pond extra backfill
South burm
North burm

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	5%	10%	90%
Pond extra backfill with ROQ	0%	0%	100%
SOUTH BURM PROFILLING	5%	5%	95%
SOUTH CREST EXCAVATION TO ÉLÉVATION	25%	25%	75%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

DATE : 2019-07-31

ACTIVITY:

Pond extra excavation
Pond extra backfill
South burm
North burm

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	8%	18%	82%
Pond extra backfill with ROQ	0%	0%	100%
SOUTH BURM PROFILLING	5%	5%	95%
SOUTH CREST EXCAVATION TO ÉLÉVATION	25%	25%	75%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

DATE : 2019-08-01

ACTIVITY:

Pond extra excavation
Pond extra backfill
South burm
North burm

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	8%	18%	82%
Pond extra backfill with ROQ	0%	0%	100%
SOUTH BURM PROFILLING	5%	5%	95%
SOUTH CREST EXCAVATION TO ÉLÉVATION	25%	25%	75%

Qikiqtaaluk SANA

PROJECT 11-837 - BAFFINLAND

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

DATE : 2019-08-02

ACTIVITY:

Pond extra excavation
Pond extra backfill
South burm
North burm

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	0	91
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		652

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	7%	25%	75%
Pond extra backfill with ROQ	6%	6%	94%
SOUTH BURM PROFILLING	5%	5%	95%
SOUTH CREST EXCAVATION TO ÉLÉVATION	25%	25%	75%

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date : 2-08-19 Shift : D

Management Code	Activity Description
WRP South Berm	Start shift with (3) Trucks (2) excavator and (1) Dozer
	We Remove melted material at the bottom of The pond and doing That for all day
	The surveyor was There To checked for The grade.
QMR #2	We sended Roch Bernier on The 345 To built some access at The drill patern for The emulsion Trucks and help blasters with The steaming.
FGH Float	Simon havoie was on it for The day doing some move at The port.

Qikiqtaaluk
SANA

Foreman Report

11-837 Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date : 2/08/19 Shift : D

WRP Road M.J

Management Code					QMR2													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	18-0029	Pickup	12	13														
Timothy Tobin	326504	374		12														
Jason Fortier	326511	349		12														
Michael Brassard	DZR-07	D-6T		12														
Dansie Brouillette	ART 13	740		12														
Claude Savoie	ART 14	740		12														
Michel Leduc	ART 08	740		12														
Rock Bernier		345				12												
Simon Lavoie	FGL	Float						12										

PROJECT 11-837 - BAFFINLAND **DATE : 2019-08-03**

MINE SITE - WRP EXPANSION

ACCES ROAD CONSTRUCTION - DAILY ADVANCEMENT

NORTH BURM	DAILY QUANTITY	CUMULATIVE LIFT QUANTITY
DAM - LIFT 1	0	74
DAM - LIFT 2	0	92
DAM - LIFT 3	0	74
DAM - LIFT 4	0	321
DAM - LIFT 5	35	126
DAM - LIFT 6	0	0
DAM - LIFT 7	0	0
TOTAL HAULING		687

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Fine bedding (0-3/4")	4%	4%	96%

Activity	DAILY PROGRESSION	CUMULATIVE PROGRESISON	REMAINNING
Pond extra excavation	0%	25%	75%
Pond extra backfill with ROQ	4%	10%	90%
SOUTH BURM PROFILLING	2%	7%	93%
SOUTH CREST EXCAVATION TO ELEVATION	0%	30%	70%

Orkigtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date : 3-08-19 Shift : D

Management Code	Activity Description
Berm Pond 3204	Equipment at start of shift (2) excavators (5) Trucks (1) Dozer.
	Continue to fill the pond expansion with muck and O-314.
	Before lunch we let The 374 placing muck and O-314 at the bottom and sended The D-6 to continue The north side of the berm. The 349 was loading Truck all day at The waste dump (muck and O-314)
FGH Float	Simon Lavoie been on it during the shift.

Qikiqtaaluk SANA

Foreman Report

11 837 - Expansion Project

Foreman: André Desmeules

Weather: Sunny

Date: 3-8-19

Shift: D

Management Code			Berm 3205		Float													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13														
Timothy Tobin	326504	374		12														
Jason Fortier	326511	374		12														
Michael Brassard	D2R-01	D-6T		12														
Daisye Brouillette	ATR-09	740		12														
Claude Savoie	ATR-14	740		12														
Michel Leduc	ATR-08	740		12														
Rock Bernier	ATR-15	740		12														
Simon Lavoie	FGL	Float				12												

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-04 | **Weather conditions: Sunny and cloudy 13 degree** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST	0	1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST	0	788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH	0	464	0	464	LIN.M.	100%	
DITCH - WEST	0	610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST	0	698	0	698	LIN.M.	100%	
POND AND SPILLWAY							
BERM RISING	1184	32 384	72 616	105 000	M.T.	31%	
FINE BEDDING (0-3/4")	480	672	15 496	16 168	M.T.	4%	
SOUTH BERM PROFILING	3	10	90	100	%	10%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION	0	30	70	100	%	30%	
EXTRA - EXCAVATION OF SOUTH SECTION OF POUND	0	25	75	100	%	25%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR
EXTRA - ROQ FILL OF SOUTH SECTION OF POUND	5	15	85	100	%	15%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	DEPARTEMENT / PROJECTS	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	Sunstainable projects - WRP	
6" minus (0-150mm)		5 537	-537	5 000	111%	660 QUARRY	Sunstainable projects - WRP	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	Sunstainable projects - WRP	
			0					

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-015	Haul Truck CAT 740	X		WORKING IN QMR2 (ROCH-DAVID BERNIER)			
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3951**	**3962**	**11**	
326511	Excavator CAT 349	X		**2898**	**2908**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO BE INSTALLED TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
EQUIPMENT	AS MINE OPS BRING NPAG ROQ TO THE WASTE DUMP, WE ARE HAULING FROM THERE. 4 TRUCKS WAS TOO MUCH SO WE SEND ROCH-DAVID AT QMR2.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-05	Weather conditions: Rain 10˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST	0	1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST	0	788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH	0	464	0	464	LIN.M.	100%	
DITCH - WEST	0	610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST	0	655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	864	33 248	71 752	105 000	M.T.	32%	
FINE BEDDING (0-3/4")	160	832	15 336	16 168	M.T.	5%	
SOUTH BERM PROFILING	4	14	86	100	%	14%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION	0	30	70	100	%	30%	
EXTRA - EXCAVATION OF SOUTH SECTION OF POUND	3	28	72	100	%	28%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR
EXTRA - ROQ FILL OF SOUTH SECTION OF POUND	5	20	80	100	%	20%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	DEPARTEMENT / PROJECTS	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	Sunstainable projects - WRP	
6" minus (0-150mm)		5 537	-537	5 000	111%	660 QUARRY	Sunstainable projects - WRP	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	Sunstainable projects - WRP	
			0					

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X		STANDBY			
ART-013	Haul Truck CAT 740	X		WORKING IN QMR2 (CLAUDE SAVOIE)			
ART-015	Haul Truck CAT 740	X		WORKING IN QMR2 (ROCH-DAVID BERNIER)			
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2908**	**2914**	**6**	
326511	Excavator CAT 349	X		**3963**	**3969**	**6**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO BE INSTALLED TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
EQUIPMENT	AS MINE OPS BRING NPAG ROQ TO THE WASTE DUMP, WE ARE HAULING FROM THERE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-08-05	START THE DAY LATE BECAUSE OF THE BAD WEATHER ON TOP OF THE MOUNTAIN.	5,5 HR

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-06 | **Weather conditions: Sunny 18°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

Continue north burm rising
Install pump into pound extenssion to drain water out
Continue to dig out the mud and backfill with rock and 0-3/4" at the west side of pound expenssion

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST	0	1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST	0	788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH	0	464	0	464	LIN.M.	100%	
DITCH - WEST	0	610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST	0	655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	1440	34 688	70 312	105 000	M.T.	33%	
FINE BEDDING (0-3/4")	224	1 056	15 112	16 168	M.T.	7%	
INTERNAL BERM PROFILING	4	14	86	100	%	14%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION	0	30	70	100	%	30%	
EXTRA - EXCAVATION OF SOUTH SECTION OF POUND	3	31	69	100	%	31%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR
EXTRA - ROQ FILL OF SOUTH SECTION OF POUND	5	25	75	100	%	25%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	DEPARTEMENT / PROJECTS	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	Sunstainable projects - WRP	
6" minus (0-150mm)		5 537	-537	5 000	111%	660 QUARRY	Sunstainable projects - WRP	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	Sunstainable projects - WRP	
			0					

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X		WORKING IN QMR2 8h and at WRP 4h (CLAUDE SAVOIE)			
ART-014	Haul Truck CAT 740	X					
ART-015	Haul Truck CAT 740	X		WORKING IN QMR2 (ROCH-DAVID BERNIER)			
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2915**	**2925**	**10**	
326511	Excavator CAT 349	X		**3969**	**3980**	**11**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-07 | **Weather conditions: Sunny 18°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

Continue north burm rising
Build a temporary berm to stop water intrance on the east ditch. A Pump has been install as well.
Continue to dig out the mud and backfill with rock and 0-3/4'' at the internal pound expansion.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST	0	1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST	0	788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH	0	464	0	464	LIN.M.	100%	
DITCH - WEST	0	610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST	0	655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	1536	36 224	68 776	105 000	M.T.	34%	LIFT #6
FINE BEDDING (0-3/4")	192	1 248	14 920	16 168	M.T.	8%	
INTERNAL BERM PROFILING	3	17	83	100	%	17%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION	10	40	60	100	%	40%	
EXTRA - EXCAVATION OF SOUTH SECTION OF POUND	2	33	67	100	%	33%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR
EXTRA - ROQ FILL OF SOUTH SECTION OF POUND	2	27	73	100	%	27%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
ART-015	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2915**	**2925**	**10**	
326511	Excavator CAT 349	X		**3969**	**3980**	**11**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-08-07	NO MORE ROQ IN THE QUARRY UNTIL THE BLAST. DELAY ON THE NORTH BERM RISING.	6

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-08 | **Weather conditions: Sunny 17°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

Continue to dig out the mud and backfill with rock and 0-3/4'' at the internal pound expansion.
Profiling of the internal berm.
Hauling over burden material to the waste dump.
First day with the night shift, training on BIM equipment has been done.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	512	36 736	68 264	105 000	M.T.	35%	
FINE BEDDING (0-3/4")		1 248	14 920	16 168	M.T.	8%	
INTERNAL BERM PROFILING	25	42	58	100	%	42%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION	20	60	40	100	%	60%	
EXTRA - EXCAVATION OF SOUTH SECTION OF POUND		33	67	100	%	33%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR
EXTRA - ROQ FILL OF SOUTH SECTION OF POUND		27	73	100	%	27%	APROXIMATIVE % - SOON TO BE FOLLOW IN M2 WITH SURVEYOR

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
ART-015	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2934**	**2950**	**16**	
326511	Excavator CAT 349	X		**3990**	**4002**	**12**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-08-07	NO MORE ROQ IN THE QUARRY UNTIL THE BLAST. DELAY ON THE NORTH BERM RISING.	6
2019-08-08	NO MORE ROQ IN THE QUARRY UNTIL THE BLAST. DELAY ON THE NORTH BERM RISING.	12

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-09	Weather conditions: Sunny 20°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

Profiling slope and fine bedding on the internal berm.
Fine bedding on the top of internal berm, from the crest to the key trench.
Nightshift work on the lift #6 of the north berm.
Rising of the internal berm top with 0-6".

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	2208	38 944	66 056	105 000	M.T.	37%	
FINE BEDDING (0-3/4")	240	2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS		
BIM EQUIPMENT						
DZR-001	Dozer CAT D6	X				
ART-008	Haul Truck CAT 740	X				
ART-009	Haul Truck CAT 740	X				
ART-012	Haul Truck CAT 740	X				
ART-013	Haul Truck CAT 740	X				
ART-014	Haul Truck CAT 740	X				
ART-015	Haul Truck CAT 740	X				
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED
326504	Excavator CAT 374	X		**2952**	**2973**	**21**
326511	Excavator CAT 349	X		**4002**	**4009**	**7**

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
SAFETY	Articulated rock truck(Valère Cloutier) was bringing material to the 374 excavator which was constructing the final lift on the rock dump. Articulated truck was being spotted by 374 excavator operator, backed into the location to dump the load, once the load dumped the operator moved forward a few meters to be able to put the box down. As he started to pull away operator ran over the barrel that contained the communication portion of the thermistor. The operator knew the barrel was there, lost sight of it while being spotted by the excavator and did not see the barrel while pulling forward.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-10 **Day Shift** **Weather conditions:** Sunny 20°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WORKING ON LIFT #6 OF THE NORTH BERM.
MEETING WITH BEN EMERY, JUDE ORGI, ANDRÉ, NICOLAS AND ENVIRONNEMENT TO DISCUSS ABOUT WATER LEVEL ON THE POUND AND TO LOOK ON WHEN WE CAN START THE CONSTRUCTION OF THE TEMPORARY BURM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	2528	41 472	63 528	105 000	M.T.	39%	LIFT #6
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
DZR-004	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740		X	BROKEN WINDOW. MAINTENANCE SHOULD FIX IT SOON			
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
ART-015	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2973**	**2983**	**10**	
326511	Excavator CAT 349	X		**4009**	**4019**	**10**	WORKING ON MINE OPS HILLSIDE ROAD PROJECT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-10 | Night Shift | Weather conditions: Sunny 17°c | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #6
COUPLE LOADS OVER SIZE FROM LOADING AREA TO WASTE DUMP TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	3104	44 576	60 424	105 000	M.T.	42%	LIFT #6
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	BROKEN WINDOW. MAINTENANCE SHOULD FIX IT SOON
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2983**	**2993**	**10**	
326511	Excavator CAT 349	X				**0**	NOT WORKING DURING THE NIGHT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date : 10-8-19 Shift : D

Management Code			3204		3802													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13														
Jason Fortier	B26504	374	10	12														
Gabriel Paré	326511	349	10	12														
Michael Brassard	02R-04	D6T	10	12														
Valère Cloutier	ATR 14	740	9	12														
Nicholas Michaud	ATR 8	740	10	12														
Manuel Arsenault	ATR 13	740	10	12														
Samuel Beaupré	Survey					12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 10-8-19 Shift: D

Management Code	Activity Description
3204	Started shift with (2) excavator (2) trucks and (1) Doze at 8 o'clock haul truck 14 was up at the shop we brought it on Top. To haul.
	We continued the Rising of the north Berm. The 374 was loading Trucks at the waste dump The 349 worked all day at the new road.
	ATR 09 is up at the 104 laydown.

Qikiqtaaluk SANA

Foreman Report

11 837 - Expansion Project

Foreman: Bruno Côté Weather: 17°C SUNNY Date : 10-08-19 Shift : NIGHT

Management Code			FG-02		3204													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
BRUNO CÔTÉ	18-0029	Pick-up	12	13h														
ERIC HEBERT	326504	EXC 374			10.5	12h												
BOBBY BALDWIN	DOZ 004	D6			10.5	12h												
MARCO TREMBLAY	ART 014	740			10.5	12h												
CHRISTIAN MASSEAU	ART 013	740			10.5	12h												
KEVEN MALLAS	ART 008	740			10.5	12h												

Qikiqtaaluk SANA

Foreman Report

11 837 Expansion Project

Foreman: Bruno Côté

Weather: 17°C sunny Date : 10-08-19 Shift : NIGHT

Management Code	Activity Description
3204	LOAD AT THE WASTE DUMP EXC 374 (326504) GO TO DOZER (DOZ004) AT THE POND FOR _ DIKE (Lift #6)
	Load over size to make room around excavator at waste dump.
LOAD	OVER-SIZE - MUK ROCK -

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-11	Day Shift	Weather conditions: Sunny 20°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #6
COUPLE LOADS OVER SIZE FROM LOADING AREA TO WASTE DUMP TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	2304	43 776	61 224	105 000	M.T.	42%	LIFT #6
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
DZR-004	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740		X	BROKEN WINDOW. MAINTENANCE SHOULD FIX IT SOON			
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
ART-015	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2993**	**3003**	**10**	
326511	Excavator CAT 349	X		**4019**	**4028**	**9**	WORKING ON MINE OPS HILLSIDE ROAD PROJECT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-08-11	BLAST IN THE PIT - RADIO SILENCE REQUIRED SO NO HAULING	0,5

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-11 **Night Shift** **Weather conditions:** Sunny 21°C **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #6
COUPLE LOADS OVER SIZE FROM LOADING AREA TO WASTE DUMP TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	3072	46 848	58 152	105 000	M.T.	45%	LIFT #6
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	BROKEN WINDOW. MAINTENANCE SHOULD FIX IT SOON
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**2993**	**3003**	**10**	
326511	Excavator CAT 349	X				**0**	NOT WORKING DURING THE NIGHT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date: 11-8-19 Shift: D

Management Code			3204		Mine OP 3802													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	1B-0019	Pick-up	12	13														
Jason Fortier	326504	374	10	12														
Gabriel Paré	326511	349			10	12												
Michael Brassard	D2R04	D6T	10	12														
	ATR09																	
Valère Cloutier	~~740~~	740	10	12														
Manuel Arsenault	ATR13	740	10	12														
Nicholas Michaud	ATR14	740	10	12														
Samuel Beaupré	Survey							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date : 11-8-19 Shift : D

Management Code	Activity Description
3204	Start of shift (2) Excavator (3) Trucks (1) Dozer Continue To Raise The north Berm.
	374 Stop @ 11:30 because of a missing Tooth all been fixed in a hour by Toromont.
	We Stop 1/2 an hour for The shoot of The blast in The Pit.
	The 349 worked for Mine OP on the new Road

Qikiqtaaluk
SANA

Foreman Report

11-837 - Expansion Project

Foreman: Brad Cote

Weather: 17° Sunny

Date : 11-08-19

Shift : NIGHT

Management Code			FG-02		3204													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Brad Coté	18-0029	Pick-up																
ERIC HEBERT	326504	EXC 374																
BOBBY BALDWIN	D02004	D6																
MARCO TREMBLAY	ART 014	740																
CHRISTIAN MASSEAU	ART 013	740																
KEVEN MALLAIS	ART 008	740																

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: BRUNO Côté Weather: 17°C SUNNY Date : 11-08-19 Shift : NIGHT

Management Code	Activity Description
3204	LOAD AT WASTE DUMP PAD EXC 374 (326504) GO TO DIGUE FOR THE ROAD DOZER (D02004) D6 PUSH THE STOCK Lift #6

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-12 **Day Shift** **Weather conditions:** Sunny 20°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #6
COUPLE LOADS OVER SIZE FROM LOADING AREA TO WASTE DUMP TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	2720	52 672	52 328	105 000	M.T.	50%	LIFT #6
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
DZR-004	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3013**	**3024**	**11**	
326511	Excavator CAT 349	X		**4028**	**4039**	**11**	WORKING ON MINE OPS HILLSIDE ROAD PROJECT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-08-11	BLAST IN THE PIT - RADIO SILENCE REQUIRED SO NO HAULING	0,5

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-12 | Night Shift | Weather conditions: Sunny 21°C | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #6
COUPLE LOADS OVER SIZE FROM LOADING AREA TO WASTE DUMP TO MAKE ROOM.
5 LIN.M TO FINISH LIFT #6 AND THEN START LIFT #7

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	3424	56 096	48 904	105 000	M.T.	53%	END OF LIFT #6 AND START LIFT #7
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	COOLANT LEAK
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3024**	**3034**	**10**	
326511	Excavator CAT 349	X				**0**	NOT WORKING DURING THE NIGHT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date : 12-8-19 Shift : D

Pond new ROAD survey

Management Code			3204		Mine Off		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	18-00[redacted]	Pick-up	12	13														
Jason Fortier	326504	374	10	12														
Gabriel Paré	326511	349	[redacted]		9	12	[redacted]											
Michael Brassard	D2804	D-6T	10	12														
Valerie Cloutier	ATR-09	740	10	12														
Manuel Arsenault	ATR-13	740	10	12														
Nicholas Michaud	ATR-14	740	10	12														
Samuel Beaupré	Survey					E		12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date : 12-8-19 Shift : D

Management Code	Activity Description
3204	Start shift (2) Excavator (3) Trucks (1) Dozer Continued The rising of The Berm northside 6th Lift
	We were still loading at The waste dump We Started The 7th Lift of The rising arounel 2:30 pm.
Mine OP new Road	349 worked There all shift Started a bit late because Toromont have To fixe on one track (missing bolts.)

Qikiqtaaluk
SANA

Foreman Report

11 837 Expansion Project

Foreman: Bruno Côté

Weather: 17°C sunny

Date : 12-08-19

Shift : NIGHT

Management Code			F6-02		3204													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Bruno Côté	18-0029	Pick-up		12h														
ERIC HÉBERT	326504	exc 374			11h	12h												
BOBBY BALDWIN	002004	06			11h	12h												
MARCO TREMBLAY	ART 014	740			11h	12h												
KEVEN MALLAIS	ART 008	740			3h	4h												
CHRISTIAN MASSEAU	ART 013	740			11h	12h												
KEVEN MALLAIS	ART 009	740			8h	8h												

Qikiqtaaluk SANA

Foreman Report

11-837 Expansion Project

Foreman: Bruno Côté Weather: 17°C SUNNY Date: 12-08-19 Shift: NIGHT

Management Code	Activity Description
3204	LOAD AT WASTE DUMP EXC 374 (326504) GO TO POND FOR DOZER (DOZ004)
	D6 - ±75M +5M
	Finish lift #6
	Start Lift #7

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-13	Day Shift	Weather conditions: Sunny 20°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #7
COUPLE LOADS OVER SIZE FROM LOADING AREA TO WASTE DUMP TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	3392	59 488	45 512	105 000	M.T.	57%	LIFT #7
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
DZR-004	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3034**	**3044**	**10**	
326511	Excavator CAT 349	X		**4037**	**4047**	**10**	WORKING ON MINE OPS HILLSIDE ROAD PROJECT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
NORTH BERM	LIFT #7 IS BUILT ONLY HALF WIDE (ON THE EXTENSION PART OF THE DIKE) AS THE KEY TRENCH OF THE OLD LINER WILL HAVE TO BE REMOVE FROM THE ACTUAL KEY TRENCH

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-13 **Night Shift** **Weather conditions:** Sunny 21°C **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #7
COUPLE LOADS OVER SIZE FROM LOADING AREA TO WASTE DUMP TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	2560	62 048	42 952	105 000	M.T.	59%	LIFT #7
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3044**	**3054**	**10**	
326511	Excavator CAT 349	X				**0**	NOT WORKING DURING THE NIGHT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
NORTH BERM	LIFT #7 IS BUILT ONLY HALF WIDE (ON THE EXTENSION PART OF THE DIKE) AS THE KEY TRENCH OF THE OLD LINER WILL HAVE TO BE REMOVE FROM THE ACTUAL KEY TRENCH

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 13-8-19 Shift: Day

Pond MineOP Survey

Management Code			3204		Road		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13														
Jason Fortier	326504	374	10	12														
Michael Brassard	DZR-04	D6T	10	12														
Gabriel Paré	326511	349			10	12												
Valère Cloutier	ATR 09	940	10	12														
Manuel Arsenault	ATR 13	740	10	12														
Nicholas Michaud	ATR-14	740	10	12														
Samuel Beaupré	Surveyor							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 13-8-19 Shift: D

Management Code	Activity Description
3204 Pond	Start shift with ① Excavator ③ Trucks ① Dozer
	Continued The 7th lift on the north Berm.
	We put more survey pickets for night shift.
	ATR 08 is now ready & the coolant leak is repaired
Mine OPS 349 Road.	349 continued To dig the side of The foundation of the new road and casting The material on the opposite side.

Oikiqtaaluk SANA

Foreman Report

11-837 Expansion Project

Foreman: Bruno Côté

Weather: 18°C sunny

Date: 13-08-19

Shift: NIGHT

Management Code			F6-02		3204													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Bruno Côté	18-0029	Pick-up		13h														
Eric Hebert	326504	EXC 374				12h												
Bobby Baldwin	D02 004	D6				12h												
Marco Tremblay	ART 014	740				12h												
Christian Masseau	ART 013	740				12h												
Keven Mallais	ART 008	740				12h												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: BRUNO CÔTÉ Weather: 18°C SUNNY Date : 13-08-19 Shift : NIGHT

Management Code	Activity Description
3204	LOAD AT DUMP (WASTE) EXC 374 (396504) GO TO DOZER (06) (002004) FOR LIFT THE POND

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-08-14 **Day Shift** **Weather conditions: Sunny 20°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING ROQ FROM WASTE DUMP TO NORTH BERM. LIFT #7 IS HALF FINISH, ALL THE NORT END SIDE IS DONE, WE CAN'T CONTINUE BECAUSE OF THE PUMP PIPES AND TARP KEY THAT NEED TO BE REMOVE.
AFTER 7HT LIFT'S DONE HALF, WE DID SOME HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	736	62 784	42 216	105 000	M.T.	60%	LIFT #7
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
DZR-004	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3044**	**3055**	**11**	
326511	Excavator CAT 349	X		**4047**	**4055**	**8**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
NORTH BERM	LIFT #7 IS BUILT ONLY HALF WIDE (ON THE EXTENSION PART OF THE DIKE) AS THE KEY TRENCH OF THE OLD LINER WILL HAVE TO BE REMOVE FROM THE ACTUAL KEY TRENCH

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-14 **Night Shift** **Weather conditions: Sunny 21°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

No activity on night shift for WRP.
Hauling matériel from 660 to waste dump for mine ops
Operator working on hill side project

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING	0	62 684	42 316	105 000	M.T.	60%	LIFT #7
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3055**	**3063**	**8**	
326511	Excavator CAT 349	X		**4055**	**4065**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
NORTH BERM	LIFT #7 IS BUILT ONLY HALF WIDE (ON THE EXTENSION PART OF THE DIKE) AS THE KEY TRENCH OF THE OLD LINER WILL HAVE TO BE REMOVE FROM THE ACTUAL KEY TRENCH

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Bruno Côté Weather: 15°C Sunny Date: 15-08-19 Shift: NIGHT

Management Code	Activity Description
3205	LOAD AT 660 EXC 374 (326504) TRUCK GO TO STOCK-PILE AND WASTE DUMP FOR PAG OR OVER-SIZE
NEW ROAD	EXC 349 (326511) AND DOZER D6 (DOZ001) WORK AT THE NEW ROAD EXCAVATION AT THE PERMA-FROST AND PUSH ± 1.5 THE MUK FOR THE PERMA-FROST (EXCAVATION ± 12 m x ± 18 m ± x 2 m)
	ROAD - 29
LOAD PAG	OVER SIZE - 3 + 1 WASTE DUMP - 4 + 8 STOCK-PILE - 15 + 14 + 20

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: BRUNO Côté Weather: 15°C SUNNY Date : 14-08-19 Shift : NIGHT

Management Code			F6-02		3205		NEW ROAD											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
BRUNO Côté	18-0029	Pick-up		13h														
ERIC HEBERT	326504	EXC 374				12h												
JASON FORTIER	326511	EXC 349						12h										
BOBBY BALDWIN	D02 001	D6						12h										
MARCO TREMBLAY	ART 014	740				8½		3½										
CHRISTIAN MASSEAU	ART 013	740				12h												
KEVEN MALLAS	ART 008	740				12h												

Qikiqtaaluk
SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date: 4-8-2019 Shift : Day

Management Code	Activity Description
3204	Start shift (1) Excavator (4) Trucks and (1) Dozer Finished The 7th lift at 9:30.
Mine OPS 660	We Started hauling NPAG at The waste dump from The 660. Started at 9:30am
Mine OPS New Road	349 worked There all day long. We brought The D-6 wide Pads To help D62-01

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date : 14-8-2019 Shift : Day

Management Code			3204		660		Road											
					Mine OP		Mine OP											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pickup	12	13														
Manuel Bussiere	326504	374	3	4	7	8												
Michael Brassard	DZR-04	D-6	3	4	7	8												
Gabriel Paré							10	12										
Valère Cloutier	ART-09	740	3	4	7	8												
Manuel Arsenault	ART-13	740	3	4	7	8												
Patricia Belanger	ART-08	740	3	4	7	8												
Nicholas Michaud	ART-14	740	3	4	7	8												

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-15 **Day Shift** **Weather conditions: Sunny 20°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

Compaction inside pond extenssion with dozer
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS			
BIM EQUIPMENT							
DZR-001	Dozer CAT D6	X					
DZR-004	Dozer CAT D6	X					
ART-008	Haul Truck CAT 740	X					
ART-009	Haul Truck CAT 740	X					
ART-012	Haul Truck CAT 740	X					
ART-013	Haul Truck CAT 740	X					
ART-014	Haul Truck CAT 740	X					
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X					
326511	Excavator CAT 349	X		**4065**	**4073**	**8**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-15 **Night Shift** **Weather conditions: Sunny 21°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT
Mine ops don't need all operator, one dozer operator and one truck driver on standby

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3081**	**3091**	**10**	
326511	Excavator CAT 349	X		**4073**	**4083**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 15-8-19 Shift: Day

Management Code	Activity Description
3204 Pond	E Do some Testing with the dozer for compaction Compacted the slope we did on the south side
Mine OPS 600	Continued to haul NAG and PAG at the waste dump.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date: 15-8-19 Shift: Day

Mine OP

Management Code			3204		6660													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	18-0029	Pick-up	12	13														
Manuel Bussiere	326504	374			10	12												
Gabriel Paré	326511	349			10	12												
David Lanoix	D2R-01	D6	5	6	5	6												
Valer Chartier	ART-09	740			10	12												
Patricia Bélanger	ART-08	740			10	12												
Nicholas Michaud	ART-14	740			10	12												
Manuel Arsenault	ART-13	740			10	12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: BRUNO GOTÉ Weather: 15°C SUNNY Date : 15-08-19 Shift : NIGHT

Management Code	Activity Description
3205	LOAD AT 660 EXC 374 (326504) GO TO STOCKPILE AT WASTE DUMP OR PAG TO WASTE SITE
SEPARATE STOCK	349 (326511) REMOVE THE STOCK AT SMALL AN 300 SIZE
	SMALL JOB WITH 349 FOR THE SMALL PUMP 2"

Qikiqtaaluk SANA

Foreman Report

11 837 Expansion Project

Foreman: Bruno Côté Weather: 15°C SUNNY Date : 15-08-19 Shift : NIGHT

SEPARATE

Management Code			F602		3205		STOCK		STAND BY									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Bruno Côté	18-0029	PICK-UP		13h														
ERIC HEBERT	326504	EXC 374				12h												
JASON FORTIER	326511	EXC 349						12h										
BOBBY BALDWIN	002 004	DG				2h				10h								
MARCO TREMBLAY	ART-019	740				10h				2h								
CHRISTIAN MASSEAU	ART-013	740				12h												
KEVEN MALLAIS	ART-008	740				12h												
							3204											

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-16 **Day Shift** **Weather conditions: Sunny 20°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

STARTING TO REBUILD THE BOTTOM OF NEW POND EXPENSSION. REMOVE GRAVEL AND MUD TO REACH THE FROZEN GROUND, THEN BACKFILL WITH ROQ AS SOON AS THE FROZEN GROUND IS EXPOSED.
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	250	250	1 008	1 258	M^2	20%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	turn down at 11h30
ART-009	Haul Truck CAT 740		X	down all shift
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		mine ops use it

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X					Toromont took it at 10h00
326511	Excavator CAT 349	X		**4082**	**4088**	**6**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-16 **Night Shift** **Weather conditions: Sunny 21°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO REBUILD THE BOTTOM OF NEW POND EXPENSSION. REMOVE GRAVEL AND MUD TO REACH THE FROZEN GROUND, THEN BACKFILL WITH ROQ AS SOON AS THE FROZEN GROUND IS EXPOSED.
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	250	500	758	1 258	M^2	40%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		BACK ON SERVICE
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X				**0**	
326511	Excavator CAT 349	X		**4088**	**4096**	**8**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 16-08-19 Shift: Day

Management Code	Activity Description
3204 Pond.	Start shift (2) Excavator (2) Trucks and (1) Dozer We started by removing the 0-314 at the bottom of the section of the expansion (Internal)
	374 been Tag out by Toromont at 10'clock pm ATR 09 Been down all shift long ATR 08 Been down at 11:30 for a leak.
	We pushed good ROC with the Dozer and do the packing as we were pushing the meterial
Mine OPS Road	Three of our employee worked for Rémi Pelletier on the new road They used 390 + one ATR-14 and D02-07

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules

Weather: Sunny

Date : 16-8-19

Shift : Day

Management Code			3204 Pond Mine		Road		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13.5														
Manuel Bussiere	326504	374	5	6														
Manuel Bussiere	326501	349	5	6														
Gabriel Paré	BAC01	390	~~10~~	~~5~~	10	12												
Dave Lanoix	DZR01	D-6			10	12												
Nicholas Michaud	ATR 14	740			10	12												
Valère Cloutier				12														
Patricia Bélanger	ATR-08	740	10	12														
Manuel Arsenault	ATR-13	740	5	12														
Anthony DeCoven	Survey								12									

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Bruno Côté

Weather: 15°C SUNNY Date : 16-08-19 Shift : NIGHT

Management Code	Activity Description
3204	EXCAVATION THE POND AT 349 (326511) LOAD TRUCK GO TO WASTE DUMP AND BACK FILL THE SAME SPOT EXCAVATE.
NEW ROAD	EXC 390 (EXC 001) LOAD ART-014 AND DUMP AT THE GOOD SPOT AND DOZER PUSH THE STOCK AT OVER THE TOE (DOZER D6 DOZ001)

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Brad Cote

Weather: 15°C SUNNY

Date : 16-08-19

Shift : NIGHT

Management Code			FL-07		3204		NEW ROAD									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Brad Cote	18-0029	Pick-up		13h												
ERIC HEBERT	326511	EXC 349				12h										
JASON FORTIER	EXC 001	EXC 390						12h								
MARCO THIMBLAY	ART-014	740						12h								
BOBBY BALDWIN	DOZ 001	D6						12h								
CHRISTIAN MASSEAU	ART-016	740				12h										
KEVEN MALLAIS	ART-008	740				12h										

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-17 **Day Shift** **Weather conditions: Sunny 20°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO REBUILD THE BOTTOM OF NEW POND EXPENSSION. REMOVE GRAVEL AND MUD TO REACH THE FROZEN GROUND, THEN BACKFILL WITH ROQ AS SOON AS THE FROZEN GROUND IS EXPOSED.
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
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INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	250	750	508	1 258	M^2	60%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		mine ops use it

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X					Toromont has it
326511	Excavator CAT 349	X		**4097**	**4107**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-17 **Night Shift** **Weather conditions: Sunny 21°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO REBUILD THE BOTTOM OF NEW POND EXPENSSION. REMOVE GRAVEL AND MUD TO REACH THE FROZEN GROUND, THEN BACKFILL WITH ROQ AS SOON AS THE FROZEN GROUND IS EXPOSED.
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	100	850	408	1 258	M^2	68%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X				**0**	Toromont has it
326511	Excavator CAT 349	X		**40107**	**40116**	**9**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
17-08-2019	On night shift, the mine supervisor ask our forman to get more staff on Hillside project for an emrgency work. We lost apart of the night on WRP	6h

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 17-08-19 Shift: Day

Management Code	Activity Description
3204 Pond	① Excavator ③ Trucks ① Dozer. Continued to remove bad material and backfill with good "BOQ".
	Sended ATR-016 To help at The new road project after lunch Time
Mine OP new Road	① Excavator (001 390) ① Dozer and ① Truck at The beginning after lunch Time we put one more Truck.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date: 17-8-19 Shift: Day

Mine OP Survey

Management Code			3204		Road		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	18-0029	Pick-up	12	13														
Manuel Bussiere	326511	349	10	12														
Gabriel Paré	BAC 001	390			10	12												
Dave Lanoix	D02-01	D-6			10	12												
Nicholas Michaud	ATR-14	740			10	12												
Manuel Arsenault	ATR-16	740	5	6	5	6												
Valere Cloutier	ATR-09	740	10	12														
Patricia Belanger	ATR-08	740	10	12														
Anthony DeCouch	Surveyor							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: BRUNO CÔTÉ

Weather: 13°C SUNNY Date : 17-08-19 Shift : NIGHT

Management Code	Activity Description
3204	EXC 349 (326511) LOAD THE TRUCK ART-008 GO TO WASTE DUMP AND RELOAD THE MUK FOR THE POND DOZOR (DOZ 004)
NEW ROAD (1)	EXC 390 (EXC 004) LOAD THE TRUCK ART-016 GO DUMP TO THE DOZOR (DOZ 001) PUSH THE OVERBURDEN
NEW ROAD (2)	EXC 349 FIXED THE CALVETTE AN STABILISED AT 0/3/4 FOR THE TEMPORARY SMALL ROAD 1 LOAD 0/3/4 A 777 (MIC MAC KEVIEN)

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Bruno Côté

Weather: 13°C Sunny

Date: 11-08-19

Shift: NIGHT

Management Code			F6-02		3204		NEW ROAD(1)		NEW ROAD(2)		STANDBY							
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Bruno Côté	18-0029	Pick-up		13h														
Eric Hebert	326511	EXC 349				6h				6h								
Jason Fortier	EXC004	EXC 390						12h										
Bobby Baldwin	POZ001	D6						12h										
Christian Masseau	ART-016	740						12h										
Kevin Mallais	ART-008	740				6h				6h								
Marco Tremblay	ART-014	740						2½				9½						

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-18 **Night Shift** **Weather conditions: Sunny 21°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO REBUILD THE BOTTOM OF NEW POND EXPENSSION. REMOVE GRAVEL AND MUD TO REACH THE FROZEN GROUND, THEN BACKFILL WITH ROQ AS SOON AS THE FROZEN GROUND IS EXPOSED.
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	200	1 250	8	1 258	M^2	99%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3099**	**3101**	**2**	
326511	Excavator CAT 349	X		**4122**	**4129**	**7**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
17-08-2019	On night shift, the mine supervisor ask our forman to get more staff on Hillside project for an emrgency work. We lost apart of the night on WRP	6h

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date : 18-08-19 Shift : Day

Management Code	Activity Description
3204 Pond	① Excavator ② Trucks ① Dozer Continued To backfill The expansion pond south side Did a diTch at The end close To The existing key for drainage of The water coming from The slope 374 up before lunch Time Packed iT To 6660
Mine OPS Road	① Excavator ② trucks ① Dozer Remi Pelletier supervise The job The ground is soFT buT They made a good progression during The shifT

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules

Weather: Sunny

Date : 18-8-19

Shift : Day

Management Code			3204 Pond		OP Road Mine		3802 Survey											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13														
Manuel Bussiere	326511	349	10	12														
Gabriel Paré	BAC001	390	~~10~~		10	12												
Dave Lanoix	DZR-01	D6T			10	12												
Nicholas Michaud	ART-14	740			10	12												
Manuel Arsenault	ART 16	740			10	12												
Valere Cloutier	ART-09	740	10	12														
Patricia Bélanger	ART-08	740	10	12														
Anthony LeGuen	Survey							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: BRUNO Cote

Weather: 10°C SUNNY Date: 18-08-19 Shift: NIGHT

Management Code	Activity Description
3204	EXCAVATE POND EXC 349 (326511) LOAD TRUCK ART-008 GO TO WASTE DUMP AFTER THAT LOAD AT 660 EXC 374 (326504) GO TO POND
MINE OF ROAD	EXC 390 LOAD ART-016 GO TO DOZER FOR BACK-FILL THE ROAD

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: BRUNO Gotz

Weather: 10°C SUNNY

Date : 18-08-19

Shift : NIGHT

Management Code			FC-02		3204		MINE OP ROAD		STAND BY									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
BRUNO Gotz	08-0029	Pickup		13h														
ERIC HOBART	326511	EXC 349				10h												
	326504	EXC 374				2h												
JASON FORTIER	EXC 004	EXC 390						12h										
BOBBY BALDWIN	002 001	D6						12h										
CHRISTIAN MASSEAU	ART-016	740						12h										
KEVIN MALLAIS	ART-008	740				12h												
MARCO IRONBAY										12h								

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-19 **Day Shift** **Weather conditions: Sunny 12°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FINISH TO REBUILD THE BOTTOM OF NEW POND EXPENSSION. REMOVE GRAVEL AND MUD TO REACH THE FROZEN GROUND, THEN BACKFILL WITH ROQ AS SOON AS THE FROZEN GROUND IS EXPOSED.
REBUILT A SECTION OF THE SOUTH BURM THAT HAS ALREADY BEEN DONE BUT THAT TURNED INTO MUD FOR THE SAME REASO OF THE REST OF THE POND (100%)
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	8	1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE	190	190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		mine ops use it

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3101**	**3106**	**5**	
326511	Excavator CAT 349	X		**4128**	**4132**	**4**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-19 **Night Shift** **Weather conditions: Sunny 6°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVE THE NONE COMPETANT SOIL AT THE TOE OF THE SOUTH BURM OF THE ACTUAL POND.
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	200	1 250	8	1 258	M^2	99%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3106**	**3115**	**9**	
326511	Excavator CAT 349	X		**4132**	**4142**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
		6h

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules

Weather: Sunny Date: 19-8-2019 Shift: Day

Management Code	Activity Description
3204 Pond	(2) shovel (2) Trucks (1) Dozer Continued to work at the south berm Fixed the slope on the side (ROQ) Put a layer of ROQ for the floor to be on grade Bring the tower light to pump the bottom of the slope
Mine OPS Road	The crew continued to work under the supervision of Remi Pelletier. They did good progress.
	Remi Pelletier kept Dave Lanoix for overtime until 7 o'clock

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: MARCO TREMBLAY Weather: GOOD Date : 19-08-19 Shift : NIGHT

Management Code	Activity Description
3204	EXC. 349 LOAD ART 008 TO REMOVE WASTE AT THE BOTTOM OF THE POND DUMP TO WASTE DUMP
MINE OP. ROAD	EXC 374 AND DOZER 006 REMOVE TOP OF THE ROAD AND LOAD ART 16 DUMP ON SIDE OF THE ROAD

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules

Weather: Sunny

Date : 19-08-19

Shift : Day

Management Code			3204		OP Road		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13														
Manuel Bussière	326511	349	10	12														
Gabriel Paré	BAC001	390			10	12												
Dave Lanoix	D2R-01	D-6			10	12												
Nicholas Michaud	ATR-14	740			10	12												
Manuel Arsenault	ATR-16	740			10	12												
Valère Cloutier	ATR-09	740	10	12														
Patricia Bélanger	ATR-08	740	10	12														
Anthony Le Guen	Survey							12										

Mine Survey

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: MARCO TREMBLAY

Weather: GOOD

Date : 19-08-19

Shift : NIGHT

Management Code			FG-02		3204				MINE OP ROAD									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
MARCO TREMBLAY	18-0029	PICK-UP	~~8~~	13														
ERIC HEBERT	326511	349 EXC				12												
JASON	326504	374 EXC				~~12~~				12								
BOBBY BALDWIN	DOZ 006	D9 DOZ								12								
CHRISTIAN MASSEAU	ART 016	TRUCK								12								
KEVEN MALLAIS	ART 008	TRUCK				12												

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-19	Day Shift	Weather conditions: Sunny 12°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CONTINUE TO DIG AND BACKFILL THE TOE OF THE SOUTH BURM OF THE EXISTING POND
FIX SOME SOFT SPOT ON THE SOUTH BURM OF EXISTING POUND AS WELL
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS		
BIM EQUIPMENT						
DZR-001	Dozer CAT D6	X				
DZR-004	Dozer CAT D6	X				
ART-008	Haul Truck CAT 740	X				
ART-009	Haul Truck CAT 740	X				
ART-012	Haul Truck CAT 740	X				
ART-013	Haul Truck CAT 740		X			
ART-014	Haul Truck CAT 740	X		mine ops use it		
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED
326504	Excavator CAT 374	X		**3101**	**3106**	**5**
326511	Excavator CAT 349	X		**4128**	**4132**	**4**

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-20 **Night Shift** **Weather conditions: Sunny 6°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO DIG AND BACKFILL THE TOE OF THE SOUTH BURM OF THE EXISTING POND
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE	200	1 250	8	1 258	M^2	99%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)			10 000	10 000	0%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3106**	**3115**	**9**	
326511	Excavator CAT 349	X		**4132**	**4142**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
		6h

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 20/8/19 Shift: Day

Management Code	Activity Description
3204 Pond	① Excavator ① Dozer ② Truck Continued To fix the bottom of The slope close To the existing key.
	We also fixed some soft spot in The slope. We had To Haul material from 660 To The pond..
Mine OPS Road	② Truck ① Dozer ① excavator. Under The supervision of Rémi Pelletier The did again good progress.
	Remi Pelletier kept Dave Lanoix for over Time

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 20-8-19 Shift: Day

Management Code			3204		Road		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13.5														
Gabriel Paré	326504	374			10	12												
Dave Lanoix	D2R-01	D-6			10	~~12~~ 14	14											
Nicholas Michaud	ATR-14	740			10	12												
Manuel Arsenault	ATR-16	740			10	12												
Manuel Bussiere	B26511	349	10	12														
Valere Cloutier	ATR-09	740	10	12														
Patricia Bélanger	ATR-08	740	10	12														
Anthony LeGuen	Survey							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: MARCO TREMBLAY Weather: GOOD Date: 20-08-19 Shift: NIGHT

Management Code	Activity Description
3204	EXC. 349 LOAD ART 008 WITH POND WASTE TO DUMP AT THE WASTE DUMP
MINE OP. ROAD	DOZ 006 AND EXC 374 REMOVE WASTE ON NEW ROAD AND LOAD ART 016 TO DUMP ON THE SIDE
3205	EXC. 349 LOAD MUCK IN ART 008 FROM 660 TO POND

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: MARCO TREMBLAY

Weather: GOOD

Date : 20-08-19

Shift : NIGHT

Management Code					3204		MINE ROAD		3205									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
MARCO TREMBLAY	18-0029	PICK-UP		13														
ERIC HEBERT	326511	EXC. 349				11				1								
BOBBY BALDWIN	D02 006	D9 DOZER						12										
JASON FORTIER	326504	EXC. 374						12										
CHRISTIAN MASSEAU	ART D16	TRUCK						12										
KEVEN MALLAIS	ART 008	TRUCK				11				1								

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-21 | **Night Shift** | **Weather conditions: Sunny 6°C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO CLEAN THE TRANSITION BETWEEN EXISTING POUND AND POUND EXTENSSION
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 581	15 149	17 730	M^2	15%	
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		704	9 296	10 000	7%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4" INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X				**0**	
326511	Excavator CAT 349	X		**4159**	**4169**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
		6h

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date: 21-8-19 Shift: Day

Management Code	Activity Description
3204 Pond	① Excavator ② Trucks ① Dozer Continued To excavate and fill with RDG at the bottom of slope. Started to put 0-314 in the slope and blend in with the liner.
OPS Road	① Dozer ② Trucks ① Excavator ↳ ATR 16 ↳ 326504 #374. ↳ ATR 14 They punched Through To blendin with The existing road.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 21-08-19 Shift: Day

Management Code			3204		Road		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	18-0029	Pick-up	12	13														
Gabriel Paré	326504	374			10	12												
Dave Lanoix	DZR-01	D-6			10	12												
Nicholas Michaud	ATR-14	740			10	12												
Manuel Arsenault	ATR-16	740			10	12												
Manuel Bussiere	326504	740	10	12														
Patricia Belanger	ATR-08	740	10	12														
Valere Chartier	ATR-09	740	10	12														
Anthony Le Guen								12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: MARCO TREMBLAY Weather: GOOD Date : 21-08-19 Shift : NIGHT

Management Code	Activity Description
3204	EXC 344 DO THE SLOPE, ADD 0-3/4 RE-DO THE RAMP ACCESS, LOAD ART 009 TO CLEAN POND DUMP AT WASTE DUMP
MINE OR ROAD	DOZER 006 RIPPING PERMA-FROST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: MARCO TREMBLAY Weather: GOOD Date : 21-08-19 Shift : NIGHT

Management Code					MINE OF ROUTE		3304		STAND BY									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
MARCO TREMBLAY	18-0029	PICK-UP		13														
BOBBY BALDWIN	D02006	DOZER				12												
ERIC HEBERT	326511	EXC. 349						12										
CHRISTIAN MASSEAU										12								
KEVEN MALLAIS	ART 009	TRUCK						2		10								

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-21	Day Shift	Weather conditions: Sunny 8°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

FINISH TO CLEAN THE TRANSITION BETWEEN EXISTING POUND AND POUND EXTENSSION
SPREAD 0-3/4'' OVER ROQ IN POUND EXTENSSION
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)	1248	1 952	15 779	17 731	M^3	11%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)	1 248	1 952	8 048	10 000	20%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		mine ops use it

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X		**3144**	**3154**	**10**	
326511	Excavator CAT 349	X		**4178**	**4188**	**10**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-22 **Night Shift** **Weather conditions: Sunny 6°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

NO NIGHT SHIFT
NEW CREW FOR NIGHT SHIFT, THE TEAM IS ON TRAINNING AND ASSESMENT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)	1248	1 952	15 779	17 731	M^3	11%	ALLAN ASK FOR 300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		1 952	8 048	10 000	20%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4" INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	
326504	Excavator CAT 374	X				0	
326511	Excavator CAT 349	X				0	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
22-08-2019	NO NIGHT SHIFT, GUYS ON TRAINNING	12H

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Guen Anthony Weather: Sunny Date: 2019-08-23 Shift: Day

Management Code	Activity Description
3204 Pond	• Finish to excavate and fill with ROC • Spread O-314 on ROC after -> not finishing (thing mark and grade is not good.).
OPS Road	① Dozer ② Trucks ① Excavator
	They try to remove permafrost to reach good elevation to connect on existing road.
	* Incident appeared with Mine OPS Road Daisy flipped the box of the wiggle on side.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Sunny Date: 2019-08-22 Shift: Day

Management Code			3204		Road		Assessment											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	18-0029	Pick	1	13														
Rock David Bernier	32-65-11	349	10	12														
Patricia Belanger	Ant-08	740	10	12														
Simon Laverie	Ant-09	740	10	12														
Dave Lamoix	Dog-01	D6	10	12														
Tim Tobin	32-65-04	374			10,5	12,5												
Daisy Brouillette	Ant-16	740			10	12												
Claude Savoie	Ant-14	740			10	12												
Manuel Bussière	Dog 06	D9			6	8		4										

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-23 | **Day Shift** | **Weather conditions:** Sunny 8°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SPREAD 0-3/4'' OVER ROQ IN POUND EXTENSSION, FINISH THE SECTION THAT NEEDED TO BE REBUILT
HAULING FOR MINE OPS AND WORK ON THE NEW ROAD PROJECT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)	928	2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)	928	2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3154**	**3164**	**10**	**200**	**61**	mine ops
326511	Excavator CAT 349	X		**4188**	**4197**	**9**	**190**	**60**	wrp

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M^2) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-23 | **Night Shift** | **Weather conditions: Sunny 6°C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

NO NIGHT SHIFT
NEW CREW FOR NIGHT SHIFT, THE TEAM IS ON TRAINNING AND ASSESMENT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 258	7 867	9 125	M^2	14%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3164**	**3168**	**4**	**200**	**65**	mine ops
326511	Excavator CAT 349	X		**4197**	**4201**	**4**	**190**	**60**	mine ops

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
23-08-2019	NO NIGHT SHIFT, GUYS ON TRAINNING, WORKERS WORK FOR MINE OPS A PART OF THE NIGHT UNDER BIM SUPERVISION.	12H

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Guen Anthony Weather: Windy Date : 2019-08-23 Shift : Day

Management Code	Activity Description
3204	• Spread 0-314 and grade it at the final elevation. • Fix the slope with 0-314 to get the final grade • Compacted 0-314 with the dozer. • Work is finish for this section, begin a new one tomorrow.
Road	① dozer ① Exc 374 ① wiggle all time. Continue as yesterday and placed some muck.
5201	Emergency at the WTP Tent. => go out with the wind Call us to move our 349 and 2-740

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Sunny Date: 2019-08-23 Shift: Day

Management Code			3204		Road		Mine OPS											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	18-0025	Pick	1	13														
Tim Tolin	32-65-11	349	9	11			1	1										
Patricia Belanger	Ant 8	~~740~~	9	9	1	2	0	1										
Daisy Brouillette	Ant-16	~~740~~	7	8	3	4												
Simon Lavoie	Ant 9	~~740~~	9	9	1	2	0	1										
Dave Lanoix	Dog 01	D6	10	12														
Roch David Bernier	32-65-04	374			10	12												
Claude Sauvé	Ant 14	~~740~~			10	12												
Manuel Bussiere	Dog 06	D9			10	12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean Francois Caron Weather: Foggy Date: 23-08-2019 Shift: Night

Management Code	Activity Description
5102 Hill side	349 → Hills side project 374 → " Art 14 → " Dozer D9 → " 17h30 to 22h30 (5h)
3204 WRP	Supervisor and Truck Driver on training for Mine site Driving → No work on WRP project

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: J-F Caron Weather: Foggy Date: 23-08-2019 Shift: Night

Management Code			3204		5102													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean Francois Caron	190037	Picup		13														
Sébastien Arsenault	326504	374	-	7	4	5												
Mark Sheans	326511	349	-	7	4	5												
Patrick Simard	DZR 004	D6	-	7	4	5												
Michel Leduc	Art 14	740	-	7	4	5												
Sebastien Lafontaine	— Training —		-	12														
clarance Breau	— Training —		-	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-24 | **Day Shift** | **Weather conditions:** Sunny 8°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CONTINUE TO EXACAVTE MUD AND PUMP WATER OUT INSIDE POUND EXTENSSION AREA
HAUL 0-3/4'' GRAVEL AND STOCKPILE IT ON SOUTH BURM (66 LOADS)
HAULING AND WORK ON THE NEW ROAD PROJECT FOR MINE OPS

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)	928	2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	250	1 508	7 617	9 125	M^2	17%	
EXTRA - ROQ FILL OF INTERNAL POUND	250	1 508	7 617	9 125	M^2	17%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)	928	2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3168**	**3178**	**10**	**210**	**61**	wrp
326511	Excavator CAT 349	X		**4201**	**4211**	**10**	**200**	**60**	wrp

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4'' STOCKPILE	66 LOADS ARE STOPILED ON OSUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-24 | **Night Shift** | **Weather conditions:** Sunny 6°C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAUL 0-3/4'' GRAVEL AND STOCKPILE IT ON SOUTH BURM (50 LOADS)
NEW CREW FOR NIGHT SHIFT, THE TEAM IS ON TRAINNING AND ASSESMENT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		1 508	7 617	9 125	M^2	17%	
EXTRA - ROQ FILL OF INTERNAL POUND		1 508	7 617	9 125	M^2	17%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3178**	**3183**	**9**	**210**	**70**	mine ops
326511	Excavator CAT 349	X		**4211**	**4221**	**10**	**210**	**60**	WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4" STOCKPILE	116 LOADS ARE STOPILED ON OSUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
24-08-2019	Night shift crew trainning are done 100%	0h
24-08-2019	ART 14 down for light issue	5h
24-08-2019	ART 16 down for light issue	5h

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Rain Date : 2019-08-24 Shift : Day

Management Code	Activity Description
3204	• Stockpiling 0-3/4 next to the pound (from the waste dump) to do the berm. • Continue the excavation of the overburden until permafrost and backfill with ROC.
Road.	① Dozer ① Excavator

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Rain Date: 2019-08-24 Shift: Day

Management Code			3204		Road													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	18-0029	Pick	1	13														
Rock David Bernier	32-65-04	374	10	12														
Simon Lavoie	Ant 09	740	10	12														
Patricia Bélanger	Ant 08	740	10	12														
Daisy Breuffette	Ant 16	740	10	12														
Claude Savoie	Ant 14	740	10	12														
Manuel Bussière	32-65-11	349	10	12														
Dave Lamoir	Dog 006				10	12												
Tim Tobin	Exc 001	390			10	12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Franjois Caron Weather: cloudy Date: 24-8-19 Shift: Night.

Management Code	Activity Description
	374 make a disch for new road.
	349 Loading 0 3/4 at the Dump for make stock pile WRP.
	740 Hauling 0 3/4 at Dump going to stock pile WRB.
	D6 pushing the stock pile for mak room and new Ramp.
	Art 014 Down for no backup light - 5h.
	Art 016 Down for no backup light 5h.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: cloudy Date: 24-8-19 Shift: Night

Management Code																				
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Sebastien Auseroau	326504	374	9	[illegible]	8.5															
marcel shean	326511	349.	12	11.5																
Patrick Simard	DZR004	DCe	12	11.5																
SebastienLafontaine	Art014	740	5	5																
michel leduc	Art0[illegible]	740	5	5																
Clarence Breau.		740	6	6.																
SebastienLafontaine	Art013	740	3	3.																
Jean-FrancoisCaron	19-0037	Pickup	13	13.																

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-25 | **Day Shift** | **Weather conditions:** RAINY 8°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CONTINUE TO EXACAVTE MUD AND PUMP WATER OUT INSIDE POUND EXTENSSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED
HAUL 0-3/4'' GRAVEL AND STOCKPILE IT ON SOUTH BURM (28 LOADS)
HAULING AND WORK ON THE NEW ROAD PROJECT FOR MINE OPS

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)	928	2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	250	1 758	7 367	9 125	M^2	19%	
EXTRA - ROQ FILL OF INTERNAL POUND	250	1 758	7 367	9 125	M^2	19%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)	928	2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 738	X		
ART-015	Haul Truck CAT 739	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3183**	**3193**	**10**	**220**	**61**	wrp
326511	Excavator CAT 349	X		**4221**	**4231**	**10**	**220**	**60**	wrp

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4'' STOCKPILE	144 LOADS ARE STOPILED ON OSUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-25 | **Night Shift** | **Weather conditions:** RAINY 6°C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CONTINUE TO EXACAVTE MUD AND PUMP WATER OUT INSIDE POUND EXTENSSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	250	2 008	7 117	9 125	M^2	22%	
EXTRA - ROQ FILL OF INTERNAL POUND	250	2 008	7 117	9 125	M^2	22%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740	X		
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		at maintennace shop all night
ART-015	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		backup light not fixed

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3193**	**3202**	**9**	**229**	**70**	WRP
326511	Excavator CAT 349	X		**4231**	**4242**	**11**	**231**	**60**	WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4" STOCKPILE	144 LOADS ARE STOPILED ON OSUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
24-08-2019	Night shift crew trainning are done 100%	0h
		12
		12

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Anthony Le Guen Weather: Sunny Date : 2019-08-25 Shift : Day

Management Code	Activity Description until permafrost
3204	• Continue mass excavation in the extension of the pound and backfill after with ROC. (approximatively half of the pound for the mass excavation is done).
	• Dig a sump just after the end of the East Ditch to avoid that this water go under the liner when we will cut it tomorrow. Install a pump too in the hole.
Road	① Dozer ① Exc 390 Continue as yesterday, excavation and place rockfill.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuan Anthony Weather: Sunny 0°C Date: 2019-08-25 Shift: Day

Management Code			3204		Road													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Anthony Le Yuan	18-0029	Rck	1	13														
Manuel Bussière	32-65-11	349	10	12														
Rock Beaulieu	32-65-04	374	10	12														
Daisy Brouillette	Ant 16	740	10	12														
Patricia Bélanger	Ant 8	740	10	12														
Simon Lavoie	Ant 9	740	10	12														
Claude Savoie	Ant 14	740	10	12														
Tim Tolin	Exc 001	390			10	12												
Dave Lamoix	Dog 006	D9			10	12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: Cloudy Date : 25-8-19 Shift : N

Management Code	Activity Description
WRP	349. Loading the bad stuff at the pound. 324 Loading muck at the Dump for make lift in the pound. 740 Hauling. muck and Bad stuff. for the Dump and pound
	Ant 009. Down Braket for Exault Fan. 6h Ant 016 Down for Back light and. Brake test faild 12h Ant 014 Down at the shop. for Backup light. 12h
	clarence gssement on the Ant 013.
	Sébastien Lafontaine " " " " michel Leduc " " " " All the guys is ready.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: cloudy Date : 25-8-19. Shift : N.

Management Code			WRP.		Mine ops															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-FrançoisCaron	19-0032	Pickup	13	13																
Sébastien Arsenault	326504	374	12	12																
mark shea	326511	349	12	11.5																
[illegible]	326 MT013	740	10	12	assement		clarence		michel		+ sébastien									
Clarence Breau	AT009	740	4	4																
Patrick Simard	DZR004	D6	2	2																

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-26 | **Day Shift** | **Weather conditions:** RAINY 8°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CONTINUE TO EXACAVTE MUD AND PUMP WATER OUT INSIDE POUND EXTENSSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED
HAULING AND WORK ON THE NEW ROAD PROJECT FOR MINE OPS

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
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ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
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INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	250	2 008	7 117	9 125	M^2	22%	
EXTRA - ROQ FILL OF INTERNAL POUND	250	2 008	7 117	9 125	M^2	22%	
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INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)	928	2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740			
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 738		X	
ART-015	Haul Truck CAT 739			
ART-016	Haul Truck CAT 740		X	

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3202**	**3212**	**10**	**239**	**70**	wrp
326511	Excavator CAT 349	X		**4242**	**4252**	**10**	**241**	**60**	wrp

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4'' STOCKPILE	144 LOADS ARE STOPILED ON SOUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	WAITING FOR DETAILS ABOUT THE LINE OF WHERE WE NEED TO CUT DE LINE IN EXISTING POUND, WATER CANNOT DRAIN AS MUSH AS NEEDED ON FIRST DRAWING.
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-26 | **Night Shift** | **Weather conditions:** RAINY 6°C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

No work on night shift
One operator for mine ops on D9

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		2 008	7 117	9 125	M^2	22%	
EXTRA - ROQ FILL OF INTERNAL POUND		2 008	7 117	9 125	M^2	22%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	**see foreman report for comments
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740			
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-015	Haul Truck CAT 740			
ART-016	Haul Truck CAT 740		X	

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X					**239**	**70**	WRP
326511	Excavator CAT 349	X					**241**	**60**	WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4'' STOCKPILE	144 LOADS ARE STOPILED ON SOUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	WAITING FOR DETAILS ABOUT THE LINE OF WHERE WE NEED TO CUT DE LINE IN EXISTING POUND, WATER CANNOT DRAIN AS MUSH AS NEEDED ON FIRST DRAWING.
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
26-08-2019	All truck down for the night. So no work done for the shift	0h
		12
		12

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Rain 4°C Date: 2019-08-26 Shift: Day

Management Code	Activity Description
3204	• Continue the mass excavation until permafrost [redacted] Not ready to cut the liner because there is too much water in the pound again and the rain is an another factor. ↳ Normally, we cut the liner tomorrow.
Road.	① Dozer ① Exc 390 ② Wiggles.
	Send Ant 14 and Ant 16 at the shop maintenance To install back-up light at the end of the shift. * It was not done on ART 14 yesterday night.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Rain Date : 2019-08-26 Shift : Day

Management Code			3204		Road													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	18-0029	PCK	1	13														
Manuel Bussière	32-65-11	349	10	12														
Daisy Brouillette	Ant 13	740	10	12														
Patricia Belanger	Ant 09	740	10	12														
Rock Bernier	32-65-04	374	10	12														
Tim Tolin	Exc 001	390			10	12												
Dave Lanoix	Dog 006	D9			10	12												
Claude Savoie	Ant 16	740			10	12												
Simon Lavoie	Ant 14	740			10	12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: cloudy Date: 26-8-19. Shift: N

Management Code	Activity Description
WRP.	maintnance on the 349 326511 when I am starting my shift. 2h down
mines op.	D9 workin on the new road. I am talking whit John coldBerg and Rémi Pelletier for place the 324 and 349 in the mine but no JoB for this equipement.
	DZR006 Broken fuel pédale at 4h this morning
WRP	Art009 Down for strut broken. clarence Art013 Fail test Break Down.
WRP	not working in night shift because no truck.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: cloudy Date: 26-8-19 Shift: N

Management Code			WRP.		mine op.													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-FrançoisCaron	19-0032	Pickup																
Mark Shea	326511	349																
SébastienArsenault	326504	374																
[illegible]																		
SébastienLafontaine.	Ant013	740																
Patrick Simard	DZR006	D9			7	7												

Aut 009 Down stut Broken. Left Side a think.
- no spill kit and Fint aid kit
- litle door under ~~sete~~ seat. Key Broken inside the swith

Aut 013.
- Juste one wheel shock - no grease - air Filter ca
- is full dust is not working good.
- Break test Fail parking Break not working go
- no spill kit.

32 65 04 : no spill kit
32 65 11 : (no spill kit
need new cabine air Filter.

-4 spill K.t.
4 Fints aid K.t.
stuff cleaning.
Far cabine.
paper towel.
vanille.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-27 **Day Shift** **Weather conditions:** RAINY 8°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CONTINUE TO EXACAVTE MUD AND PUMP WATER OUT INSIDE POUND EXTENSSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED
TWO OPERATOR WORK ON THE NEW ROAD PROJECT FOR MINE OPS - 12H

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)	928	2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	250	2 258	6 867	9 125	M^2	25%	
EXTRA - ROQ FILL OF INTERNAL POUND	250	2 258	6 867	9 125	M^2	25%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)	928	2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740	X		
ART-012	Haul Truck CAT 740			
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 738		X	
ART-015	Haul Truck CAT 739			
ART-016	Haul Truck CAT 740		X	

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3212**	**3220**	**8**	**247**	**70**	wrp
326511	Excavator CAT 349	X		**4253**	**4263**	**10**	**251**	**60**	wrp

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4'' STOCKPILE	144 LOADS ARE STOPILED ON SOUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	WAITING FOR DETAILS ABOUT THE LINE OF WHERE WE NEED TO CUT DE LINE IN EXISTING POUND, WATER CANNOT DRAIN AS MUSH AS NEEDED ON FIRST DRAWING.
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-27 **Night Shift** **Weather conditions: RAINY 6°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO EXACAVTE MUD AND PUMP WATER OUT INSIDE POUND EXTENSSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED
Two operator for mine ops on D9 and 374 - 6h

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	250	2 508	6 617	9 125	M^2	27%	
EXTRA - ROQ FILL OF INTERNAL POUND	250	2 508	6 617	9 125	M^2	27%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740			
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-015	Haul Truck CAT 740			
ART-016	Haul Truck CAT 740		X	

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3220**	**3228**	**8**	**251**	**74**	HALF OF THE SHIFT FOR MINE OPS AND HALF OF THE HSIFT FOR WRP
326511	Excavator CAT 349	X		**4263**	**4271**	**8**	**259**	**60**	WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND - SOUTH SIDE	WATER COMING IN THE FILL UP ZONE OF FINE BEDDING, PUMP TO KEEP RUNNING TO TRY TO DRY OUT THE STUFF IN THIS ZONE.
0-3/4'' STOCKPILE	144 LOADS ARE STOPILED ON SOUTH SIDE BURM
WRP	AFTER DISCUSSION WITH ALLAN, WE START BACK TO WORK IN THE INTERNAL OF POUND EXTENSSION AND WE HAVE TO REBUILT ALL THE PART THAT WAS ALREADY DONE (1258M²) BECAUSE IT TURN INTO MUD
	DUE TO AN UNDERGROUND WATER VEINE THAT WE FOUND BY DIGING IT BACK. (ALLAN HAS SOME PHOTO OF IT)
WRP	WAITING FOR DETAILS ABOUT THE LINE OF WHERE WE NEED TO CUT DE LINE IN EXISTING POUND, WATER CANNOT DRAIN AS MUSH AS NEEDED ON FIRST DRAWING.
WRP	MINE OPS NEED A PART OF THE STAAF FOR HILLSIDE ROAD PROJECT, STAFF IS DIVISED TO GET BOTH PROJECT RUNING GOOD

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
26-08-2019	All truck down for the night. So no work done for the shift	0h
		12
		12

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Gresley Anthony Weather: Cloudy Date: 2019-08-27 Shift: Day

Management Code	Activity Description
3204	• In the morning, we did a stop to make site and machine on the BTM "Ironland Health and Safety". No wiggle was operationnal on S.
	• Just Before lunch, 2 wiggles were ready
	• Continues the mass excavation in direction of East Ditch until permafrost
	• Manage water • Backfill with rocks.
Road	(1) Dozer (1) Excavator They reach finally, the existing road.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Cloudy Date : 2019-08-27 Shift : Day

Management Code			3204		Road													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	18-0029	Pick	1	14														
Manuel Bussière	32-65-11	349	10	12														
Simon Lavoie	—	—	0	12														
Claude Savoie	—	—	0	12														
Patricia Bélanger	Ant 9	740	10	12														
Daisy Brouillette	Ant 16	740	10	12														
Rock David Ramier	32-65-04	374	10	12		1												
Dave Lamont	Dozer 001	D6			10	12												
Tim Tobin	Exc 001	390			10	12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron

Weather: Cloudy Date: 22-8-19 Shift: N.

Management Code	Activity Description
WRP.	349 is bilding new dish for controling water after digging the mud and after lift the pound whit the much 740 hauling mud and muck for pound.
mines opps.	324 is doing dish on the new road Am. D6 pusching de mud ont the mew road
mine opps.	D2R006 Down for decéterator
WRP	324 Loading at the waste Dump.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: cloudy Date : 27-8-19 Shift : N

Management Code			WRP		mine offs													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Francois Caron	19:0037	Pickup	13	13														
mark shea	326511	349	12	11.5														
Sébastien Lusenault	326504	374	4	4	6	6												
michel leduc	Au016	740	12	11.5														
Patrick simard	PERO01	PC.			5	5												
Clarence Bream	Au009	740	12	11.5														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-28 **Day Shift** **Weather conditions: Foggy 8°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO EXCAVATE MUD AND PUMP WATER OUT INSIDE POUND EXTENSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
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DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)		2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
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INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	200	2 708	6 417	9 125	M^2	30%	40 LOADS OF MUD
EXTRA - ROQ FILL OF INTERNAL POUND	100	2 608	6 517	9 125	M^2	29%	13 LOAD OF ROQ
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		1 952	8 048	10 000	20%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740			
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	
ART-015	Haul Truck CAT 740			
ART-016	Haul Truck CAT 740		X	

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3226**	**3236**	**10**	**258**	**77**	7 hr on WRP and 3hr on MINE OPS
326511	Excavator CAT 349	X		**4272**	**4279**	**7**	**266**	**60**	WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	INCIDENT OF DAISY BROUILLETTE. FEEL PAIN IN THE BACK AFTER DRIVING IN MUDDY SOFT ROAD - REPORT SENT.
0-3/4'' STOCKPILE	144 LOADS ARE STOPILED ON SOUTH SIDE BURM
MANPOWER	MINE OPS NEED A PART OF THE STAFF FOR HILLSIDE ROAD PROJECT - DAVE LANOIX (12HR) ON DOZER + ROCH-DAVID BERNIER (4HR) ON EXCAVATOR 349

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-28 **Night Shift** **Weather conditions: Clear 5°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO EXCAVATE MUD AND PUMP WATER OUT INSIDE POUND EXTENSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)	X	2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	0	2 708	6 417	9 125	M^2	30%	
EXTRA - ROQ FILL OF INTERNAL POUND	150	2 758	6 367	9 125	M^2	30%	46 LOAD OF ROQ
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		x	
ART-009	Haul Truck CAT 740		x	
ART-012	Haul Truck CAT 740		x	
ART-013	Haul Truck CAT 740		x	
ART-014	Haul Truck CAT 740	x		
ART-015	Haul Truck CAT 740		x	
ART-016	Haul Truck CAT 740	x		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3230**	**3238**	**8**	**266**	**77**	WRP
326511	Excavator CAT 349	X		**4279**	**4288**	**9**	**266**	**69**	WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
0-3/4'' STOCKPILE	144 LOADS ARE STOPILED ON SOUTH SIDE BURM
MANPOWER	MINE OPS NEED A PART OF THE STAFF FOR HILLSIDE ROAD PROJECT - PATRICK SIMARD (12HR) ON DOZER

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Oikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Foggy Date : 2019-08-28 Shift : Day

Management Code			3204		Road													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	18-0029	PC5	1	13														
Tim Tobin	32-65-11	349	10	12														
Rock David Bernier	32-65-04	374	7	8	3	4												
Daisy Beaudette	Ant 9	740	~~10~~	12														
Claude Savoie	Ant 13	740	10	12														
Dave Lavoie	Dozo06	DC			10	12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Guen Anthony Weather: Foggy Date: 2019-08-28 Shift: Day

Management Code	Activity Description
3204	• Continue mass excavation untill pemefrost and backfill wit much after • Preparing stuff to be ready to cut lines tomorrow ↳ pump 4" inch was broken.
	Incident with Daisy Brouillette => back pain due to ART009 and condition of the road.
Road	① Dozer all day ① Exc 4 (R)

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: Sunny Date: 28-8-19. Shift: N

Management Code			WRP.		mine gts													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	19-0032	Pickup	13	13														
Mark Shea	321651	349	12	11.5														
Sébastien Arsenault	321504	374	12	11.5														
Sébastien Lafontaine	[illegible]		12	11.5														
Clarence Breau	AST014	760	12															
michel leduc	AST016	740	12	11.5														
Patrick Simard	[illegible] D6.				12	11.5												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: Sunny Date: 28-8-19 Shift: N

Management Code	Activity Description
WRP	374 Loading muck at Dump for lifting pond 349 make Lift in the Pond two 740 hauling muck for pond and hauling mud at Dump
mine ops	D6 pushing mud on the new road.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-29 **Day Shift** **Weather conditions: Sunny 8°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO EXCAVATE MUD AND PUMP WATER OUT INSIDE POUND EXTENSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)		2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^2	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	150	2 858	6 267	9 125	M^2	31%	29 LOADS OF MUD
EXTRA - ROQ FILL OF INTERNAL POUND	100	2 858	6 267	9 125	M^2	31%	11 LOADS OF ROQ
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		1 952	8 048	10 000	20%	660 QUARRY	0	

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3236**	**3241**	**5**	**271**	**77**	WORK ON WRP
326511	Excavator CAT 349	X		**4288**	**4299**	**11**	**277**	**69**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	JHA HAS BEEN UPDATED WITH THE ADDITION OF THE LINER CUT PROCEDURE.
0-3/4'' STOCKPILE	144 LOADS ARE STOCKPILED ON SOUTH SIDE BURM

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-29 **Night Shift** **Weather conditions: Rain 5ºC** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

NO WORK - ALL CREW WORKING ON HILLSIDE ROAD PROJECT AND IN QMR2 FOR SITE SERVICES

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)		2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		2 858	6 267	9 125	M^2	31%	
EXTRA - ROQ FILL OF INTERNAL POUND		2 858	6 267	9 125	M^2	31%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3241**	**3250**	**9**	**271**	**86**	MINE OPS
326511	Excavator CAT 349	X		**4299**	**4308**	**9**	**277**	**78**	MINE OPS

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	JHA HAS BEEN UPDATED WITH THE ADDITION OF THE LINER CUT PROCEDURE.
0-3/4'' STOCKPILE	144 LOADS ARE STOCKPILED ON SOUTH SIDE BURM

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Overcast Date: 29/8/19 Shift: Day

Pond Mine Survey

Management Code			3204		OP Road		3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0019	Pick-up	12	13														
Rock Bernier	326504	374	5	12														
Thimothy Tobin	326511	349	10	12														
Claude Savoie	ART-16	740	10	12														
Daysie Brouillette				12														
Michael Brassard	DZR 6	D-9			10	12												
Alain Girard	Survey							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Overcast Date: 29-8-19 Shift: Day

Management Code	Activity Description
3204 Pond	Continue digging The expansion, removed dirt down to the permafrost and backfilled with good ROC.
Mine OP Road	Michael Brassard spended The day on The D-9 for Rémi PelleTier.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-30 **Day Shift** **Weather conditions: Rain 5°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO EXCAVATE MUD AND PUMP WATER OUT INSIDE POUND EXTENSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)		2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^2	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	215	3 073	6 052	9 125	M^2	34%	
EXTRA - ROQ FILL OF INTERNAL POUND	215	3 073	6 052	9 125	M^2	34%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
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EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3250**	**3260**	**10**	**281**	**77**	WORK ON WRP
326511	Excavator CAT 349	X		**4308**	**4318**	**10**	**287**	**69**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	JHA HAS BEEN REVISED WITH THE ADDITION OF THE PERPENDICULAR CUT AND HANDLE CUT.
0-3/4'' STOCKPILE	144 LOADS ARE STOCKPILED ON SOUTH SIDE BURM
LINER	ROGER HAD DISCUSSION WITH LAYFIELD TO CONFIRM WE CAN MAKE COME PERPENDICULAR CUT TO HELP REMOVE THE LINER. LAYFIELD CONFIRM THEY CAN DO A FUSION PATCH TO REPAIR THE OLD LINER ON THE BERM.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-08-30 **Night Shift** **Weather conditions: Rain and cloud 3°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO EXCAVATE MUD AND PUMP WATER OUT INSIDE POUND EXTENSION AREA AND BACKFILL AS SOON AS FROZEN GROUND IS EXPOSED.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY QUANTITY	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
ROAD AND DITCH							
ACCESS ROAD - WEST		1 074	0	1 074	LIN.M.	100%	
ACCESS ROAD - EAST		788	0	788	LIN.M.	100%	
ACCESS ROAD - NORTH		464	0	464	LIN.M.	100%	
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4") (PART 1)		2 581	15 149	17 730	M^2	15%	*THIS SECTION HAS BEEN REBUILT
FINE BEDDING (0-3/4") (PART 2)		2 880	14 851	17 731	M^3	16%	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		190	233	423	LIN.M.	45%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	190	3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND	190	3 263	5 862	9 125	M^2	36%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

CRUSHING REQUIREMENT - WRP

PRODUCTS	DAILY TOTAL (M.T.)	CUMULATIVE TOTAL (M.T.)	QTY TO BE PRODUCE (M.T.)	ESTIMATED TOTAL QUANTITY (M.T.)	% COMPLETED	LOCALISATION	QTY IN STOCK	COMMENTS
6" clear (150mm)		5 890	3 110	9 000	65%	660 QUARRY	0	
0-3/4" (0-19mm)		2 880	7 120	10 000	29%	660 QUARRY	0	ALLAN ASK FOR 300MM OF 0-3/4'' INSTEAD OF 100MM

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		ORE CRUSHER USE IT.
ART-014	Haul Truck CAT 740	X		
ART-015	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3241**	**3250**	**9**	**271**	**86**	MINE OPS
326511	Excavator CAT 349	X		**4299**	**4308**	**9**	**277**	**78**	MINE OPS

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
MANPOWER	PATRICK SIMARD WORK 2 HOURS FOR MINE OPS ON THE DOZER
0-3/4'' STOCKPILE	144 LOADS ARE STOCKPILED ON SOUTH SIDE BURM

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Rain Date: 30/8/19 Shift: Day

Management Code			3204				Survey 3802											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bernier	326504	374	6	6														
Rock Bernier	3 labor		~~6~~	6														
Michael Brassard	ART-14	740	10	12														
Claude Savoie	ART-16	740	10	12														
Daisy Brouillette				12														
Alain Girard								12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Rain Date: 30-8-19 Shift: Day

Management Code	Activity Description
3204 Bond	Continued To work on expansion digging To permafrost and backfill after with good ROC
	Pumping water at The west side and installing

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: cloudy Date: 30-8-19 Shift: N.

Management Code			WRP	mine op														
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	190037	Pickup	13	13														
Sébastien Lefontaine	AHT-014	740	12	11.5														
marck shean	3216501	349	12	11.5														
Sébastien Aseneault	3216504	374	12	11.5														
Clarence Bream	AHT-016	740	12	11.5														
Patrick Simard	DZRoke	D9	10		2	2												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: cloudy Date: 30-8-19 Shift: N.

Management Code	Activity Description
WRP.	374 Loading muck for Lifting pound 349 Loading mud in the pound and lift the pound whit muck. 240 Hauling muck and mud at Dump and Pound.
	~~[illegible]~~ Patrick simard nothin for him but ist
	cheking pompe whit me.
mines ops	Da pusching mud on the main road

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-08-31 **Day Shift** **Weather conditions: Rain 5°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PROFILING SLOPE OF ROQ ON THE INTERNAL BERM
FIRST TRY OF CUTING AND ROLLING THE OLD LINER
WATER PUMPING

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 880	14 850	17 730	M^2	16%	ALLAN ASK FOR 300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING	30	220	203	423	LIN.M.	52%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		WORKING AT BIM PORE CRUSHER
ART-014	Haul Truck CAT 740		X	FLAT TIRE
ART-015	Haul Truck CAT 740	X		WORKING FOR SITE SERVICES
ART-016	Haul Truck CAT 740		X	FLAT TIRE

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3267**	**3277**	**10**	**283**	**94**	2 HR WRP // 8 HR MINE OPS
326511	Excavator CAT 349	X		**4327**	**4335**	**8**	**295**	**78**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	JHA HAS BEEN REVISED WITH THE ADDITION OF THE PERPENDICULAR CUT AND HANDLE CUT.
MANPOWER	ROCH-DAVID, MICHAEL BRASSARD AND CLAUDE SAVOIE WENT TO HELP REMI ON THE HILLSIDE ROAD WHILE NO TRUCK WAS AVAILABLE AT WRP AND BEFORE THE LINER CUT.
LINER	ROGER HAD DISCUSSION WITH LAYFIELD TO CONFIRM WE CAN MAKE COME PERPENDICULAR CUT TO HELP REMOVE THE LINER. LAYFIELD CONFIRM THEY CAN DO A FUSION PATCH TO REPAIR THE OLD LINER ON THE BERM.
LINER	FIRST TRY TO REMOCE THE OLD LINER BUT THE LINER HAS TOO MUCH DIRT ON IT. TRY TO REMNOVE THE DIRT WITH HAND SHOVEL BUT TOO SLIPERY AND DANGEROUS FOR INJURY. CHANGING THE PROCEDURE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-08-31	NO TRUCK UP AND RUNNING FROM 10h30 AM TO 16HR PM. NO WORK POSSIBLE ON THE INTERNAL SLOPE WITHOUT ROQ.	4

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-08-31 **Night Shift** **Weather conditions:** Rain and cloud 3°C **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

NO WORK ON WRP - ALL TEAM ON HILL SIDE ROAD

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 880	14 850	17 730	M^2	16%	ALLAN ASK FOR 300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		220	203	423	LIN.M.	52%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		WORKING AT BIM PORE CRUSHER
ART-014	Haul Truck CAT 740	X		STEERING PROBLEMS
ART-015	Haul Truck CAT 740	X		WORKING FOR SITE SERVICES
ART-016	Haul Truck CAT 740		X	

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3277**	**3283**	**6**	**283**	**100**	MINE OPS
326511	Excavator CAT 349	X		**4335**	**4343**	**8**	**295**	**86**	MINE OPS

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaalnk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Rain - wind Date: 31-8-19 Shift: Day

Road Survey

Management Code			3204		Mine OP		3302											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick up	12	13														
Timothy Tobins	326511	349	10	12														
Rock Bernier	326504	374	8	6	6	6												
Michael Brassard	D2R-06	D9T		2	10	10												
Claude Savoie	ART-14	740	6	12														
Daysie Brouillette				12														
Alain Girard	Survey							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Rain Date: 31-8-19 Shift: Day

Management Code	Activity Description
3204 Pond	Continue The expansion diggin, The bedding and working also on The Slope.
	After lunch time we cut The liner and Tried To fold it on a ~~width~~ with of 4M with no success So tomorow we will figure a way To clean The surface to make it easier To fold
Mine OPS Road	Micheal Brassard spend The hole day working with The dozer.
	In the morning Till lunch time Rock Bernier worked with The 374.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-01	Day Shift	Weather conditions: Sunny 9°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WHASHING, CUTING AND ROLLING LINER FOR TEMPORARY BERM.
BUILD RAMP UNE THE SLOPE TO ACCES THE TEMPORARY BERM.
EXCAVATE MUD WHERE THE LINER HAS BEEN REMOVE. THE FOUNDATION UNDER THE EXISTING POND IS NOT GOOD SO WE HAVE TO EXCAVATE TO THE PERMAFROST AND PUT NEW ROQ.
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	120	120	9 705	9 825	M^2	1%	11 LOADS OF MUD
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	80	80	9 745	9 825	M^2	1%	9 LOAD OF ROQ + 8 LOAD OF 0-3/4" FOR THE ACCES RAMP.

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740		X	FLAT TIRE

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3283**	**3289**	**6**	**289**	**100**	WORK ON WRP
326511	Excavator CAT 349	X		**4343**	**4353**	**10**	**305**	**86**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.
SAFETY	DAISY'S BACK WAS HURTING AFTER THE SHIFT SO SHE WENT BACK TO THE MEDIC AND CAN NOT DRIVE A TRUCK UNTIL THE END OF HER ROATION.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-01 **Night Shift** **Weather conditions:** Clear 4°C **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

EXCAVATE MUD WHERE THE LINER HAS BEEN REMOVE. THE FOUNDATION UNDER THE EXISTING POND IS NOT GOOD SO WE HAVE TO EXCAVATE TO THE PERMAFROST AND PUT NEW ROQ.
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	180	300	9 705	9 825	M^2	3%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	180	260	9 745	9 825	M^2	3%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740		X	STEERING PROBLEMS

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3289**	**3298**	**9**	**298**	**100**	WORK ON WRP
326511	Excavator CAT 349	X		**4353**	**4363**	**10**	**315**	**86**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules

Weather: Sunny Pond Survey

Date: 7/9/19

Shift: Day

Management Code			3204		3802													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock-Bernier	326504	374	8	12														
Michael Brassard				12														
Claude Savoie	ART 13	740	3	12														
Daysie Brouillette	ART 16	740	10	12														
Simon Savoie				12														
Alain Girard	Survey			~~12~~		12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 1-9-19 Shift: Day

Management Code	Activity Description
3204 Pond.	With The crew we cleanned The liner with The water pump. Then we builded a ramp and Them we saw That The floor of The pond was not able To hold The wait of a loaded Truck.
	We started digging down To The permafrost and backfill with ROQ
	ATR-14 Down (secondary steering) DOZ-04 Tagout for engine problem

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: Sonny Date: 1-9-19 Shift: N.

Management Code			WRP.		mineral													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Francois Caron	FT-0037	Pickup.	13	13														
Sébastien Asseneault	326504	374	12	11.5														
mark shea	326511	349	12	11.5														
Clarence Breau	Ayt 0/6	740	12	11.5														
Sébastien Lafontaine	Ant 0/3	740	12	11.5														
Patrick Simard	DZR 006	D9			12	11.5												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: Sonny Date: 7-9-19 Shift: N

Management Code	Activity Description
WRP	374 Loading Truck Whit muck 349 Loading muc in the pond and place muck in the pond 740 Hauling mud and muck
Mines ops.	D9 pushing mud on the new road.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-02 **Day Shift** **Weather conditions: Sunny 9°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WHASHING, CUTING AND ROLLING LINER FOR TEMPORARY BERM.
EXCAVATE MUD WHERE THE LINER HAS BEEN REMOVE. THE FOUNDATION UNDER THE EXISTING POND IS NOT GOOD SO WE HAVE TO EXCAVATE TO THE PERMAFROST AND PUT NEW ROQ.
INSTALL A TEMPORARY CULVERT TO PUT THE PUMPING HOSE ON THE BERM.
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	700	1 000	8 825	9 825	M^2	10%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	700	960	8 865	9 825	M^2	10%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS					
BIM EQUIPMENT									
DZR-001	Dozer CAT D6	X							
DZR-004	Dozer CAT D6	X							
ART-008	Haul Truck CAT 740		X						
ART-009	Haul Truck CAT 740		X						
ART-012	Haul Truck CAT 740		X						
ART-013	Haul Truck CAT 740		X						
ART-014	Haul Truck CAT 740	X							
ART-016	Haul Truck CAT 740	X							
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3298**	**3307**	**9**	**307**	**100**	WORK ON WRP
326511	Excavator CAT 349	X		**4363**	**4372**	**9**	**324**	**86**	WORK ON WRP
325817	Haul Truck CAT 745	X				**0**		**0**	
325824	Haul Truck CAT 745		X			**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.
SAFETY	One driver still in light duty work - no ART driving.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-02 **Night Shift** **Weather conditions: Clear 4°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATE MUD WHERE THE LINER HAS BEEN REMOVE. THE FOUNDATION UNDER THE EXISTING POND IS NOT GOOD SO WE HAVE TO EXCAVATE TO THE PERMAFROST AND PUT NEW ROQ.
PUMPING WATER
BUILD THE SMALL BERM OF 0-3/4" ON NORTH SIDE TO KEEP THE MEMBRANE IN PLACE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	600	1 600	9 705	9 825	M^2	16%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	640	1 600	9 745	9 825	M^2	16%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3307**	**3316**	**9**	**316**	**100**	WORK ON WRP
326511	Excavator CAT 349	X		**4372**	**4381**	**9**	**333**	**86**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3044**	**3052**	**8**	**8**	**0**	
325824	Haul Truck CAT 745		X			**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-09-02	WAITING FOR EQUIPMENT TO BE FUEL, THIS WAS DONE ONLY AT 19h30	1,5 HR

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Pond Survey Date: 2 sept 2019 Shift: Day

Management Code			3204		3302													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bernier	326504	374	10	12.5														
Michael Brassard	ATR-13	740	10	12														
Claude Savoie	ATR-14	740	10	13.5														
Daysie Brouillette				12														
Alain Girard	Survey					12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 2 sept 2019 Shift: Day

Management Code	Activity Description
3204 Pond	Continued To remove The liner where The berm will be built.
	With The 349 continued To excavate bad material and backfill iT wiTh good BOQ and Packing down wiTh The excavator.
3802 Survey	Alain Girard followed The excavator and Take grade shots of The expose section down To permafrost

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: Sunny Date: 2-9-18 Shift: N.

Management Code			WRP															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Francois Caron	19-0032	Pickup.	13	13														
Sébastien Arseneault	326504	374	12	11.5														
mark shea	326611	349.	12	11.5														
Patrick Simard	Artol4	740	12	11.5														
Clarence Brean	Artol6	740	12	11.5														
Sebastien Lafontaine	325817	745.	12	11.5														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: Sonny Date: 2-9-19 Shift: N

Management Code	Activity Description
WRP	374 Loading truck whit muck and 0 3/4 349 Loading truck whit mud. and place muck and 10 3/4 in the Pond 740 Hauling mud at Dump and Hauling muck at Dump to Pond3 and 0 3/4 stock pile to pound.
	I am starting my at 19:15 because no fuel in the 349 waiting for fuel truck.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-03 **Day Shift** **Weather conditions: Sunny 4°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BUILDING TEMPORARY BERM.
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 880	14 850	17 730	M^2	16%	ALLAN ASK FOR 300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		220	203	423	LIN.M.	52%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		1 600	8 225	9 825	M^2	16%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		1 600	8 225	9 825	M^2	16%	
TEMPORARY BERM	150	150	50	200	LIN.M.	75%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		WORKING AT BIM ORE CRUSHER
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3316**	**3322**	**6**	**322**	**100**	WORK ON WRP
326511	Excavator CAT 349	X		**4381**	**4391**	**10**	**343**	**86**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3052**	**3052**	**0**	**8**	**0**	NOT WORKING
325824	Haul Truck CAT 745		X			**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.
ENVIRONNEMENT	NEAR MISS ON AN ENVIRONNEMENT SPILL WHEN MINE OPS START THEIR 6 INCH PUMP IN THE PIT WITOUTH ADVISING OUR SUPERVISOR. OUR 3 INCH PUMP HAD MECANICAL ISSUES AT THIS TIME WITH NO SPAIR PUMP READY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-03 | Night Shift | Weather conditions: Clear 4°C | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

NO WORK AT WRP, ALL TEAM AT THE HILLSIDE ROAD
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 880	14 850	17 730	M^2	16%	ALLAN ASK FOR 300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		220	203	423	LIN.M.	52%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		1 600	9 705	9 825	M^2	16%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		1 600	9 745	9 825	M^2	16%	
TEMPORARY BERM		150	50	200	LIN.M.	75%	
NORTH BERM OLD KEY TRENCH EXCAVATION		0	620	620	LIN.M.	0%	
INTERNAL BERM OLD KEY TRENCH EXCAVATION		0	423	423	LIN.M.	0%	
*REBUILT INTERNAL FONDATION ALLREADY DONE		1 258	0	1 258	M^2	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER
*REBUILT A SECTION OF SOUTH BURM ALLREADY DONE		190	0	190	LIN.M.	100%	FOUNDATION THAT WAS DONE AND THAT HAVE TURN INTO MUD AFTER

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3322**	**3330**	**8**	**322**	**108**	WORK ON MINE OPS
326511	Excavator CAT 349	X		**4391**	**4401**	**10**	**343**	**96**	WORK ON MINE OPS
325817	Haul Truck CAT 745	X		**3052**	**3052**	**0**	**8**	**0**	NOT WORKING
325824	Haul Truck CAT 745		X			**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 3/9/19 Shift: Day

MineOP Survey

Management Code			3204		Road		3302											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pickup	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bessiex	326504	374	10	12														
Michael Brassard	DZR-06	D-9			10	12												
Claude Savoie	ART	740	10	12														
Simon Lavoie	ART	740	10	12														
Dargie Brouillette				12														
Alain Girard	Survey							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: Sunny Date: 3-9-2019 Shift: Day

Management Code	Activity Description
3204 Pond	Started Building The ~~pond~~ Berm in The middle of The pond. We used Two shovel and Two Trucks To load and shaped The berm.
Sump at Pond	We had an issue with The pond. At 12:20 I called for stopping The pump in the pit. Than at 1:15 way to mush water was still coming our way. And at The same Time The pump ran off gas so water flowed over The sump and drain down the bottom of The pond in The section We openned for The Berm.
	Later The pump crew helped us restarting and other pump to empty The sump and in The meantime We plug The flow of water with The 349.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-04 **Day Shift** **Weather conditions: Sunny 6°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BUILDING TEMPORARY BERM.
PUMPING WATER.
WASH, CLEAN, CUT AND ROLL THE EXISTING LINER TO FINALISE THE BERM
EXCAVATE MUD ON THE EXISTING POUND FOUNDATION, FILL UP WITH ROQ.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	80	1 680	8 145	9 825	M^2	17%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	72	1 670	8 155	9 825	M^2	17%	
TEMPORARY BERM	20	170	30	200	LIN.M.	85%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS					
BIM EQUIPMENT									
DZR-001	Dozer CAT D6	X							
DZR-004	Dozer CAT D6	X							
ART-008	Haul Truck CAT 740		X						
ART-009	Haul Truck CAT 740		X						
ART-012	Haul Truck CAT 740		X						
ART-013	Haul Truck CAT 740	X		WORKING AT BIM ORE CRUSHER					
ART-014	Haul Truck CAT 740	X							
ART-016	Haul Truck CAT 740	X							
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3330**	**3340**	**10**	**332**	**108**	WORK ON WRP
326511	Excavator CAT 349	X		**4401**	**4409**	**8**	**351**	**96**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3052**	**3054**	**2**	**10**	**0**	NOT WORKING
325824	Haul Truck CAT 745		X			**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-04 **Night Shift** **Weather conditions: Clear 2°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BUILDING TEMPORARY BERM.
PUMPING WATER
EXCAVATE MUD ON THE EXISTING POUND FOUNDATION, FILL UP WITH ROQ.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	100	1 780	9 705	9 825	M^2	18%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	110	1 780	9 745	9 825	M^2	18%	
TEMPORARY BERM	30	200	0	200	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		WORKING AT BIM ORE CRUSHER
ART-014	Haul Truck CAT 740	X		NOT ON TOP OF THE HILL
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3340**	**3346**	**6**	**338**	**108**	WORK ON WRP
326511	Excavator CAT 349	X		**4409**	**4416**	**7**	**358**	**96**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3054**	**3060**	**6**	**16**	**0**	WORK ON WRP
325824	Haul Truck CAT 745		X	**0**		**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 4-9-19 Shift: D

Mine Old Survey

Management Code			3204		Road		3302											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bernier	326504	374	10	12														
Michael Brassard	DZR-06	D-9T			10	12												
Claude Savoie	ART 14	740	10	12														
Daisy Brouillette				12														
Simon Lavoie	ART-16	740	5	6	5	6												
Alain Girard	Survey							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny Date: 4-9-19 Shift: D

Management Code	Activity Description
3204 Pond.	We continued To built The berm inside the pond.
	Toromont came To fix The side panel and changed The Teeth on The bucket. He also fixed some grease line broken on The stick
	At To lunch we start cleaning The liner and cut it To finish The berm close To The expansion
Mine OPS Road	Sended Michael and one Truck To help Rémi hauling some bad material. We brought back The haul Truck after lunch.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: Sunny Date: 4-9-19 Shift: N

Management Code			WRP		minesoft													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	19-0037	Pickup	13	13														
Sebastien Asselin	3d65014	374	12	11.5														
mark shean	3765411	349	12	11.5														
clarence Bisaillon	Int016	740	12	11.5														
Sebastien Lafontaine	3d5817	745	12	11.5														
Patrick Simard	DZR006	D9			12	11.5												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: Sunny Date : 4-9-19 Shift : N

Management Code	Activity Description
WRP	374 Loading muck and O3/4 349 Loading Truck whit muck and place muck in the pond and make berm for pond.
	740 et 745 Hauling muck at Dump and Hauling muck to pond and Hauling O3/4 at Stockpile to pond
mines ops	Patrick Simard whit D9. working for mines.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-05 **Day Shift** **Weather conditions: Sunny 6°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

NO WORK AT WRP, ALL TEAM AT HILLSIDE ROAD.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		2 880	14 850	17 730	M^2	16%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		220	203	423	LIN.M.	52%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		WORKING AT BIM ORE CRUSHER
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3346**	**3355**	**9**	**338**	**117**	WORK ON MINE OPS
326511	Excavator CAT 349	X		**4416**	**4427**	**11**	**358**	**107**	WORK ON MINE OPS
325817	Haul Truck CAT 745	X		**3060**	**3060**	**0**	**16**	**0**	NOT WORKING
325824	Haul Truck CAT 745		X			**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-05 **Night Shift** **Weather conditions: Clear 1°C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FINE BEDDING (0-3/4'') ON THE POUND EXPANSION (EAST PART + INTERNAL BERM SLOPE)
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")	2569	5 449	12 281	17 730	M^2	31%	300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		220	203	423	LIN.M.	52%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		WORKING AT BIM ORE CRUSHER
ART-014	Haul Truck CAT 740	X		NOT ON TOP OF THE HILL
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3355**	**3364**	**9**	**347**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4427**	**4430**	**3**	**361**	**107**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3060**	**3069**	**9**	**25**	**0**	WORK ON WRP
325824	Haul Truck CAT 745		X	**0**		**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-06 | Day Shift | Weather conditions: Sunny 4°c | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

PUMPING WATER
PUTING BACK LINER ON THE TEMPORARY BERM
INTERNAL BERM PROFILING
FINE BEDDING ON THE INTERNAL BERM SLOPE
EXCAVATION OF THE WATER CREEK COMING CLOSE TO THE CULVERT AT WATER TREATMEN PLAN. TRYING TO FIND WHERE THIS WATER COME FROM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")	45	5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING	50	270	153	423	LIN.M.	64%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
EXTRA - ROQ FILL OF INTERNAL POUND		3 263	5 862	9 125	M^2	36%	
TEMPORARY BERM		200	0	200	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3364**	**3375**	**11**	**358**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4430**	**4438**	**8**	**369**	**107**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3069**	**3076**	**7**	**32**	**0**	WORK ON WRP
325824	Haul Truck CAT 745		X			**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-09-06 | **Night Shift** | **Weather conditions:** Clear 0°C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

EXCAVATION OF THE EXPANSION POUND FOUNDATION ON THE WEST SIDE. FROM THE EXISTING ROAD CULVERT TO THE NEW WEST DITCH.
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		270	153	423	LIN.M.	64%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POUND	225	3 488	5 637	9 125	M^2	38%	
EXTRA - ROQ FILL OF INTERNAL POUND	225	3 488	5 637	9 125	M^2	38%	
TEMPORARY BERM		200	0	200	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6	X		
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		WORKING AT BIM ORE CRUSHER
ART-014	Haul Truck CAT 740	X		NOT ON TOP OF THE HILL
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3375**	**3384**	**9**	**367**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4438**	**4449**	**11**	**380**	**107**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3076**	**3085**	**9**	**41**	**0**	WORK ON WRP
325824	Haul Truck CAT 745		X	**0**		**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POND	THE FOUNDATION UNDER THE EXISTING LINER IS REALLY BAD AND FULL OF MUD. EXCAVATION TO BE DONE UNTIL WE REACH THE PERMAFROST, THEN WE FILL UP WITH ROQ.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: sunny 2° Date: 06/09/19 Shift: Day

Management Code			Pond		training													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières	19-0037		13	13														
Patricia F. Bélanger	325817	Rock truck	8	12														
Manuel Arseneault	Art013	Rock truck	8	12														
Valère Cloutier	Art016	Rock truck	9	12														
Jason Fortier	356204	excа.	10	12														
Gabriel Paré	356211	excа.	8	12														
Mickael Brassard				12														
Alain Girard				12		[redacted]												
Yan Natile Larouche						12												

Hour of equipment are an aproximate

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: 2 sunny Date: 06/09/19 Shift: Day

Management Code	Activity Description
pond	- Reinstall the liner on the temporary berm with 349 exc. little bit of sloping work on the south side of the berm with 374 and 740
	- Dig up a ground source of water to try to seal it with 374 and 740 X 2 and 745. 349 was stock piling or loading material
	- operate the water pump on the west side of the pond
	Load waste from pond to waste dump 31 ROQ 13 load From waste dump to pond
	~~0~~ 0 3/4 6 load

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 6-09-19 Shift : Night

Management Code			WRP floor															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pickup		13														
ERIC HEBERT	326504	CAT 374		12														
Bobby Joseph Baldwin	326511	CAT 349		12														
CHRISTIAN MASSCAM	325817	CAT 745		12														
KEVIN MALLAIS	ART 16	CAT 740		12														
MARCO TREMBLAY	ART 13	CAT 740		12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSIMUTE Weather: _____ Date : 6-9-19 Shift : Night

Management Code	Activity Description
	STIPPING 0+150 and HAULING OB To The Dump
	Loading Mock from Dump and HAULING TO 0+150

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-07 **Day Shift** **Weather conditions: Sunny 2°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PUMPING WATER
EXCAVATION OF THE EXPANSION POND FOUNDATION ON THE WEST SIDE. FROM THE EXISTING ROAD CULVERT TO THE NEW WEST DITCH.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		270	153	423	LIN.M.	64%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POND	350	3 838	5 287	9 125	M^2	42%	
EXTRA - ROQ FILL OF INTERNAL POND	350	3 838	5 287	9 125	M^2	42%	
TEMPORARY BERM		200	0	200	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS					
BIM EQUIPMENT									
DZR-001	Dozer CAT D6		X						
DZR-004	Dozer CAT D6		X	LOCK ON IT					
ART-008	Haul Truck CAT 740		X						
ART-009	Haul Truck CAT 740		X						
ART-012	Haul Truck CAT 740		X						
ART-013	Haul Truck CAT 740	X							
ART-014	Haul Truck CAT 740	X							
ART-016	Haul Truck CAT 740	X							
TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3385**	**3394**	**9**	**376**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4449**	**4458**	**9**	**389**	**107**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3085**	**3094**	**9**	**50**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-07 **Night Shift** **Weather conditions: Clear -1 °C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION OF THE EXPANSION POND FOUNDATION ON THE WEST SIDE. FROM THE EXISTING ROAD CULVERT TO THE NEW WEST DITCH.
PUMPING WATER
BUILT OF A DIVERSION DITCH ON WEST SIDE POND EXPANSION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		270	153	423	LIN.M.	64%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		195	228	423	LIN.M.	46%	
EXTRA - EXCAVATION OF INTERNAL POND	150	3 988	5 137	9 125	M^2	44%	
EXTRA - ROQ FILL OF INTERNAL POND	150	3 988	5 137	9 125	M^2	44%	
TEMPORARY BERM		200	0	200	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740	X		
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3394**	**3403**	**9**	**385**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4458**	**4468**	**10**	**393**	**113**	WORK 4 HR ON WRP / 6 HR ON MINE OPS
325817	Haul Truck CAT 745	X		**3094**	**3085**	**-9**	**50**	**0**	WORK ON WRP
325824	Haul Truck CAT 745		X	**0**		**0**		**0**	SAFETY STEARING ASSIST NOT WORKING

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: Sunny 1° Date : 7/09/19 Shift : Day

Management Code			Pond																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13																
Patricia F. Belanger	325817	Rock truck	10	12																
Valère Cloutier	Art 016	Rock truck	10	12																
Manuel Arseneault	Art 013	Rock truck	10	12																
Jason Fortier	326504	Excavator	10	12																
Gabriel Paré	326511	Excavator	10	12																
Mickaël Brassard	Art 014		1	12																
Alain Girard				12																
Yan Martel Larouche				12																

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussieres Weather: sunny 1° Date : 07/09/19 Shift : Day

Management Code	Activity Description
Pond	- Remove over burden and Replace with ROA 374 digging 349 loading truck 2x 740 1x 745 Toromont change teeth and side cutter on the 374
	stand-by of about 45 minute to an hour
	- Working the 4inch pump as needed on the south west side of pond
	- Use sand bag to stabilise the liner on the temporary berm
	- No dozer to work still waiting on d6 to be Fix
	- Haul few load of 0 3/4 on south slope during 374 was down
	- Art 014 have been back working around 3:30pm

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 7-9-19 Shift : Night

Management Code			Pond		Mine Ops													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13														
ERIC HEBERT	326504	CAT 374	10	12														
Bobby Joseph Baldwin	326511	CAT 349	4	12	6													
Christian Maysem	325817	CAT 745	10	12														
MARCO TREMBLAY	ART 13	CAT 740	10	12														
KEVIN MAILLOUX	ART 16	CAT 740	10	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTE Weather: _____ Date : 7-9-19 Shift : Night

Management Code	Activity Description
	FROM 18:00 TO 1:00 MAKE NEW DITCH FOR WATER CONTROL
	FROM 1:00 TO 4:30 STRIPING and HAULING 0+150 – TO THE WASTE DUMP and HAULING MUCK FROM DUMP TO 0+150 –

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-08	Day Shift	Weather conditions: Sunny 2°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

MOVING PUMP
EXCAVATION OF THE EXPANSION POND FOUNDATION ON THE WEST SIDE. FROM THE EXISTING ROAD CULVERT TO THE NEW WEST DITCH.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	CUMULATIVE QTY ADJUSTED WITH AS BUILT DRAWING
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	CUMULATIVE QTY ADJUSTED WITH AS BUILT DRAWING
EXTRA - EXCAVATION OF INTERNAL POND ENPANSION	330	4 318	4 757	9 075	M^2	48%	APPROXIMATIVE CUMULATIVE QUANTITY, TO BE CONFIRMED TODAY
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	330	4 318	4 757	9 075	M^2	48%	APPROXIMATIVE CUMULATIVE QUANTITY, TO BE CONFIRMED TODAY
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		1 780	8 045	9 825	M^2	18%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		1 780	8 045	9 825	M^2	18%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740	X		
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3403**	**3413**	**10**	**395**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4468**	**4478**	**10**	**403**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3104**	**3111**	**7**	**66**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	CONTRACTOR WILL NOT HELP LAYFIELD UNTIL THE WORKERS HAS READ AND SIGN THE JHA ABOUT LINER INSTALLATION AND REPAIR.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-09-08 | **Night Shift** | **Weather conditions:** Clear -1 °C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

EXCAVATION OF THE EXPANSION POND FOUNDATION ON THE WEST SIDE. FROM THE EXISTING ROAD CULVERT TO THE NEW WEST DITCH.
BUILT OF THE SUMP PUMP ON THE OLD NORTH EAST DITCH.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND ENPANSION	286	4 318	4 807	9 125	M^2	47%	APPROXIMATIVE CUMULATIVE QUANTITY, TO BE CONFIRMED TODAY
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	286	4 318	4 807	9 125	M^2	47%	APPROXIMATIVE CUMULATIVE QUANTITY, TO BE CONFIRMED TODAY
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		1 780	9 705	9 825	M^2	18%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		1 780	9 745	9 825	M^2	18%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	DRIVING SHAFT IS BROKEN
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3413**	**3422**	**9**	**404**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4478**	**4487**	**9**	**412**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3111**	**3121**	**10**	**76**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	CONTRACTOR WILL NOT HELP LAYFIELD UNTIL THE WORKERS HAS READ AND SIGN THE JHA ABOUT LINER INSTALLATION AND REPAIR.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: 1° sunny Date: 08/09/19 Shift: Day

Management Code																			
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger	325817		7	12														
Manuel Arseneault	Art013		9	12														
Valère Clautier	Art016		9	12														
Yan Martel Larouche				12														
Jason Fortier	326504		10	12														
Gabriel Paré	326511		10	12														
Michaël Brassard				12														
Alain Girard				12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: 1° sunny Date: 08/09/19 Shift: Day

Management Code	Activity Description
pond	- Finish to divert the west ditch by the pond - Dig over-burden and replace by ROQ using: 374, 2x 740 1x 745 [redacted] 349
	[redacted] on the south west Pond
	- help the liner crew as needed
	- keep working the pump on the pond
	- Art 014 is park due to worn tire
	- still out of dozer

Forman Report

11-837 - Expansion Project

Forman: Patrick Massicotte **weather:** Clear 0' **Date:** 2019-09-08 **Shift:** Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	19-0037	Pick up		13													0	13
																	0	0
Eric Hébert	326504	Cat 374	10	12													10	12
Bobby Joseph Baldwin	326511	Cat 349	10	12													10	12
																	0	0
Christian Masseau	325817	Cat 745	10	12													10	12
																	0	0
Kévin Mallais	ART016	Cat 740	10	12													10	12
																	0	0
Marco Tremblay				12													0	12
																	0	0
																	0	0
																	0	0
																	0	0
																	0	0
																	0	0
																	0	0
																	0	0
																	0	0
																	0	0

Management Code	Activity Description
	Make a new sump pump to pump water out of north berm ditch
	Striping on 0+150 and bring ROQ on 1+150
	truck ART013 broke down at the begining of the shift

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-09 **Day Shift** **Weather conditions: Sunny and cloudy 2°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVING OLD LINER.
EXCAVATION OF THE FONDATION OF THE OLD POND. REMOVE MUD UNTIL WE REACH THE PERMAFROST AND THEN FILL UP WITH ROQ.
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	CUMULATIVE QTY HAS BEEN ADJUST TO AS BUILT DRAWING.
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	CUMULATIVE QTY HAS BEEN ADJUST TO AS BUILT DRAWING.
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	315	2 095	7 730	9 825	M^2	21%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	315	2 095	7 730	9 825	M^2	21%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3422**	**3432**	**10**	**414**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4487**	**4497**	**10**	**422**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3121**	**3130**	**9**	**85**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3266**	**3273**	**7**	**7**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-09 **Night Shift** **Weather conditions: Foggy -1 °C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVING OLD LINER.
EXCAVATION OF THE FONDATION OF THE OLD POND. REMOVE MUD UNTIL WE REACH THE PERMAFROST AND THEN FILL UP WITH ROQ.
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	CUMULATIVE QTY HAS BEEN ADJUST TO AS BUILT DRAWING.
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	CUMULATIVE QTY HAS BEEN ADJUST TO AS BUILT DRAWING.
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	276	2 371	9 705	9 825	M^2	24%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	276	2 371	9 745	9 825	M^2	24%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3432**	**3442**	**10**	**424**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4497**	**4506**	**9**	**431**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3130**	**3140**	**10**	**95**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3273**	**3283**	**10**	**17**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-09-09	AS PER MINE OPS SUPERVISOR DIRECTIVE, WORK HAS BEEN SHUT DOWN FROM 12:30 TO 2:20 AM DUE TO HEAVY FOG.	2 HR

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Marcel M. Russiès Weather: 1° sunny Date: 9/9/19 Shift: Day

Management Code																			
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Marcel M Russiès				13														
Patricia F. Belanger	325824		6.5	12														
Valérie Chartier				12														
Marcel Arseneault	325817		9	12														
Yan Martel Larouche	Unit 16		9	12														
Jason Fortier	326504		10	12														
Gabriel Paré			10	12														
Mickael Brassard				12														
Alain Girard				12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Rossiter Weather: 1° sunny Date: 9/9/19 Shift: Day

Management Code	Activity Description
3204	- Start with North Berm lift on the south west side of it
	- Finally start diging in the internal pond, riping the liner and back filling with ROC
	- Labor cutting liner and working the pump - Start with 2 truck 740 and 745
	- We bring the 3258 24 at about 8:30 am and work with it
	- We bring the Art 04 at 4:00 pm for night shift

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: foggy 0°C Date : 9-09-19 Shift : Night

Management Code			3204																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13																
ERIC Hebert	326504	CAT374	10	12																
Bobby Joseph Baldwin	326511	CAT349	10	12																
MARCO TRembley	325824	CAT745	10	12																
Christian Masseau	325817	CAT745	10	12																
Kevin MAilloux	ART16	CAT740	9	12																

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 9-09-19 Shift : NIGHT

Management Code	Activity Description
3204	STRIPING POND AND DRY MUCK BACK
	STOP HAULING FROM 00:45 TO 2:30 BY HEAVY FOG

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-10 **Day Shift** **Weather conditions: Cloudy 2°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVING OLD LINER.
EXCAVATION OF THE FONDATION OF THE OLD POND. REMOVE MUD UNTIL WE REACH THE PERMAFROST AND THEN FILL UP WITH ROQ.
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	580	2 951	6 874	9 825	M^2	30%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	580	2 951	6 874	9 825	M^2	30%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3442**	**3452**	**10**	**434**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4506**	**4516**	**10**	**441**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3140**	**3149**	**9**	**104**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3283**	**3292**	**9**	**26**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-10	Night Shift	Weather conditions: Clear -1°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

REMOVING OLD LINER.
EXCAVATION OF THE FONDATION OF THE OLD POND. REMOVE MUD UNTIL WE REACH THE PERMAFROST AND THEN FILL UP WITH ROQ.
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	350	3 301	9 705	9 825	M^2	34%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	350	3 301	9 745	9 825	M^2	34%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3452**	**3461**	**9**	**443**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4517**	**4527**	**10**	**451**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3149**	**3159**	**10**	**114**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3292**	**3292**	**0**	**26**	**0**	BACK UP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières

Weather: O cloudy some snow Flake

Date : 10/9/19

Shift : Day

Management Code																			
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13																
Patricia L. Belanger	32 58 24		9	12																
Valère Cloutier	~~32 58~~ Art 16		9	12																
Manuel Arseneault	325817		9	12																
Yan Martel Larouche	Art 04		9	12																
Jason Fortier	326504		10	12																
Gabriel Paré	326511		9	12																
Michaël Brassard				12																
Alain Girard				12																

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: _____ Date : 10/9/19 Shift : Day

Management Code	Activity Description
3204	- Working on Internal pond middle north - Remove overburden and fill with ROC - 374, 349, 2x 745 2x 740
	- cut liner and geotextile - pump water
	dozer still down

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 10-9-19 Shift : Night

Management Code			3204																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13																
ERIC Hebert	326504	CAT374	9.5	12																
Bobby Joseph Baldwin	326511	CAT349	10	12																
MARCO TRemblay	ART004	CAT740	9	12																
Christian Masseau	325817	CAT745	9.5	12																
Kevin Mallais	ART016	CAT740	9.5	12																

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 10-9-14 Shift : Night

Management Code	Activity Description
3204	STRIPING POND AND BRING MUCK BACK FOR REFIL
	MAKE A SMALL POND FOR KEEP CONTROL OF WATER

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-11 **Day Shift** **Weather conditions:** Cloudy 2°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

REMOVING OLD LINER.
EXCAVATION OF THE FONDATION OF THE OLD POND. REMOVE MUD UNTIL WE REACH THE PERMAFROST AND THEN FILL UP WITH ROQ.
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	550	3 851	5 974	9 825	M^2	39%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	550	3 851	5 974	9 825	M^2	39%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3462**	**3472**	**10**	**453**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4527**	**4537**	**10**	**461**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3159**	**3168**	**9**	**123**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3292**	**3302**	**10**	**36**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-11 | **Night Shift** | **Weather conditions:** Clear -1°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

REMOVING OLD LINER.
EXCAVATION OF THE FONDATION OF THE OLD POND. REMOVE MUD UNTIL WE REACH THE PERMAFROST AND THEN FILL UP WITH ROQ.
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		292	131	423	LIN.M.	69%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	400	4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	400	4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3472**	**3481**	**9**	**462**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4537**	**4547**	**10**	**471**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3168**	**3176**	**8**	**131**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3302**	**3302**	**0**	**36**	**0**	BACK UP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: -1 cloudy with snow on and off Date : 11/09/19 Shift : Day

Management Code	Activity Description
3204	- Cut overburden - Fill with rog - operate the pond - cut liner ~~and~~ geotextile -
	- No dozer yet
	- Ask for one again

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: -1 cloudy little bit of snow Date: 11/09/19 Shift: Day

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger	325817		9	12														
Manuel Arsenault	325824		9	12														
Valère Cloutier	Art 016		9	12														
Yan Martel Larouche	Art 04		9	12														
Jason Cloutier	326504		10	12														
Gabriel Paré	326511		10	12														
Michaël Brassard				12														
Alain Girard				12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 11-9-14 Shift : Night

Management Code	Activity Description
3204	MAKE FINAL LIFT OF MUCK ON POND
	WE LOST A TEET AT THE BEGINING OF THE SHIFT SO WE DO EVERY THING IS POSSIBLE TO DO WITHOUT THAT ONE AND I STOP THE OPERATION AT 2:40 BECAUSE THE REST OF OPERATION NEED DIGGING AND I DON'T WANT DAMAGE THE TEET ADAPTOT, OF CORSE I CALL MECANIC TO BE FIX AS SOON WE LOST THE TEET.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 11-9-19 Shift : Night

Management Code			3204																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pickup		13																
ERIC Hebert	326504	CAT374	9	12																
Bobby Joseph Baldwin	326511	CAT344	10	12																
MARIO Tremblay	ART004	CAT740	7.5	12																
KEVIN MAILOUX	ART016	CAT740	7.5	12																
CHRISTIAN MASSEAU	325817	CAT745	8	12																

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-12 **Day Shift** **Weather conditions:** Sunny 2°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

EXCAVATION OF THE FONDATION OF THE EXISTING POUND NORTH BURM. REMOVE MUD UNTIL WE REACH THE SOLID AND THEN FILL UP WITH ROQ.
PROFILING EXISTING POUND NORTH SIDE BURM WITH O-3/4
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		5 494	12 236	17 730	M^2	31%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING	50	342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 199	9 075	M^2	65%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3481**	**3482**	**1**	**463**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4547**	**4556**	**9**	**480**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3176**	**3181**	**5**	**136**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3302**	**3307**	**5**	**41**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-12 | **Night Shift** | **Weather conditions:** Clear -1°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

PROFILING INTERNAL EXISTING POUND WITH 0-3/4
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")	1000	6 494	11 236	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3482**	**3484**	**2**	**465**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4556**	**4566**	**10**	**490**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3181**	**3190**	**9**	**145**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3307**	**3307**	**0**	**41**	**0**	BACK UP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussieres Weather: -2 cloudy Date: 12/09/19 Shift: Day

Management Code	Activity Description
3204	-remove overburden on pond and fill with ~~rock~~ RCA -spread 0 3/4 on north berm slope - clean up entrance of WTP
	-Work on a detour road from WTP to North Berm -work the pump -had to park to articulated truck at 1:30 to place
	and pack gravel -Driver help moving mine ops hose and leftover 2 labor 1.5 hour 349 excavator 1.5 hour
	-clean waste dump pad for dumping room
	374 down work with
	349, 2x 740 2x 745 D6

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: -1 mix sun and cloud Date: 12/09/19 Shift: Day

Management Code																		
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger		326517	5	12														
Valère Cloutier		Art 16	7	12														
Yan Martel Larouche		Art 04	4	12														
Manuel Arseneault		325824	5	12														
Jason Fortier		326511	10	12														
Gabriel Paré		326504	1	12														
Dave Lanoix		327309	10	12														
Anthony Leguer																		

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick Massette Weather: _____ Date : 12-09-19 Shift : Night

Management Code	Activity Description
3204	Leveling slope, BRINY and spread 0 3/4 ON The POND Remove Ramp From POND

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date: 12-09-19 Shift: Night

Management Code			3204																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13																
ERIC Hebert	326511	CAT 349	9	10																
" "	326504	CAT 374	1	2																
Bobby BALDWIN	327309	D6	8	10																
" "	326511	CAT 349	1	2																
MARIO TREMBLAY	ART004	CAT 740	9	12																
Christian MASSEAU	325817	CAT 745	9	12																
Kevin MALLAIS	ART016	CAT 740	9	12																

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-13 **Day Shift** **Weather conditions:** Sunny 2°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

FINISHING THE LEVELING BY HAND OF THE GRAVEL FOR THE LINER PREPARATION
WORK ON THE NORTH BURM ROAD LIFT TO ACCESS FOR THE LINER GUYS
PUMPING WATER. MOVE PUMP TO PREPARE NIGHT SHIFT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		6 494	11 236	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		5 876	3 249	9 125	M^2	64%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3484**	**3495**	**11**	**476**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4566**	**4576**	**10**	**500**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3190**	**3197**	**7**	**152**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3307**	**3315**	**8**	**49**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-13 | **Night Shift** | **Weather conditions:** Clear -1°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CONTINUE THE POUND EXTENSSION BOTTOM DIG AND BACKFILL. DIG TO REACH THE SOLID PERMAFROST AND BACKFILL WITH ROQ.
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		6 494	11 236	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	300	6 176	2 949	9 125	M^2	68%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	300	6 176	2 949	9 125	M^2	68%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3495**	**3504**	**9**	**485**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4576**	**4583**	**7**	**507**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3197**	**3206**	**9**	**161**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3315**	**3315**	**0**	**49**	**0**	BACK UP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussieres Weather: O sunny Date : 13/09/19 Shift : Day

Management Code	Activity Description
3204	-Finish 90% of that ~~pond~~ section of pond - Rake by hand - Move the sump and pump on the East side of
	the north berm - finish de tour Road on north berm - on lift on the north berm on the south west side
	394 349 2x 745 2x 750 D6

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: ☼ sunny Date: 13/09/19 Shift: Day

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières	19-0036		1	13														
Patricia F. Belanger	325817	740	7	12														
Valère Voutier	Art 016	740	7	12														
Manuel Arseneau Jr	#325824	740	7	12														
Yan Martel Larouche	Art 04	740	7	12														
Jason Fortier	326504	374	10	12														
Gabriel Paré	326511	349	10	12														
Anthony Le Gwen	19-0037	PCR	1	12														
Dave Lanoix	327301	Doger DD.	9	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSETTE Weather: _____ Date : 13-9-19 Shift : Night

Management Code	Activity Description
3204	Striping and Hauling From pond To Dump Loading and Hauling muck From Dump To Pond
	MAKE Final Touch up on pond

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 13-09-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	14-0037	Pickup		13														
ERIC HEBERT	326504	CAT374	9.5	12														
Bobby BALDWIN	326511	CAT349	6	10														
	327309	D6	2	2														
MARC HEMBLEY	ART004	CAT740	9	12														
CHRISTIAN MASSE	325817	CAT745	9	12														
KEVIN MALLAIS	ART016	CAT740	9	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-14 **Day Shift** **Weather conditions:** Sunny 2°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

DIG TO REACH PERMAFROST AND BACKFILL WITH SOLID MATERIAL IN THE POUND EXTENSSION,
HELP LINER CREW
PUMPING WATER. MOVE PUMP TO PREPARE NIGHT SHIFT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		6 494	11 236	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	400	6 516	2 609	9 125	M^2	71%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	400	6 516	2 609	9 125	M^2	71%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3504**	**3514**	**10**	**495**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4583**	**4588**	**5**	**512**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3206**	**3213**	**7**	**168**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3315**	**3321**	**6**	**55**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-14 | **Night Shift** | **Weather conditions:** Clear -1°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

DIG TO REACH PERMAFROST AND BACKFILL WITH SOLID MATERIAL IN THE POUND EXTENSSION,
BEGIN TO DO THE KEY TRENCH FOR THE LINER CREW
PUMPING WATER.
0-3/4" ON THE NORTH SIDE BURM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")	100	6 594	11 136	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	400	6 916	2 209	9 125	M^2	76%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	400	6 916	2 209	9 125	M^2	76%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3514**	**3523**	**9**	**504**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4588**	**4592**	**4**	**516**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3213**	**3222**	**9**	**177**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3321**	**3331**	**10**	**65**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussieres Weather: O sunny and foggy afternoon Date : 14/09/19 Shift : Day

Management Code	Activity Description
3204	- Work on the Internal pond east north of northberm - Work on the existing ~~ofes~~ pond over flow to replace the keyway
	-
	Art 016 broken Left suspension At 10:00
	349 shut down for maintenance at 10:30

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bessieres Weather: O sunny and foggy afternoon Date: 14/09/19 Shift: Day

Management Code			3204				QMR2		New Road									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
~~Manuel M. Bessieres~~				13														
Patricia F. Belanger	325817			12														
Valere Cloutier	~~325824~~	Art016	4	5														
Yan Martel Larouche	~~325~~ Art04		8	12														
Manuel Arseneault	325824		6	12														
Jason Fortier	326504		10	12														
Gabriel Paré	326511		4	12														
Anthony Legaen				12														
Dave Lanoix	327309		6	~~8~~ 9														
Valère Cloutier	Art005						4	7										
Dave Lanoix	D2R006								2	3								

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick MASSICOTTE Weather: _____ Date : 14-9-19 Shift : Night

Management Code	Activity Description
3204	MAKE CORRECTION ON POND SLOPE STRIPING AND HAULING OB TO DUMP LOADING AND HAULING MUCK TO POND

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 14-9-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13														
ERIC Hebert	326504	CAT 374	10	12														
Bobby BALDWIN	326511	CAT 349	4	6														
" "	190306	CAT 352	5	6														
christian MASSEY	325817	CAT 745	9.5	12														
MARIO TREMBLAY	ART 004	CAT 740	10	12														
KEVIN MALLAIS	325824	CAT 745	10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-15 **Day Shift** **Weather conditions:** Sunny -1°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

BACKFILL WITH ROQ INT POUND EXTENSSION TO BUILT THE LAST LIFT ON NORTH SIDE
CONTINUE TO DO THE KEY FOR THE LINER ON NORTH SIDE BURM
PUMPING WATER. MOVE PUMP TO PREPARE NIGHT SHIFT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		6 594	11 136	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		6 916	2 209	9 125	M^2	76%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	500	7 416	1 709	9 125	M^2	81%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3523**	**3533**	**10**	**514**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4592**	**4599**	**7**	**523**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3222**	**3231**	**9**	**186**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3331**	**3342**	**11**	**76**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-15 | **Night Shift** | **Weather conditions:** Clear -4°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

DIG TO REACH PERMAFROST IN THE POUND EXTENSSION,
CONTINUE TO DO THE KEY TRENCH FOR THE LINER ON NORTH SIDE BURM
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		6 594	11 136	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	600	7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		7 416	1 709	9 125	M^2	81%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3533**	**3543**	**10**	**524**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4599**	**4602**	**3**	**526**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3231**	**3240**	**9**	**195**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3342**	**3350**	**8**	**84**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: -4 cloudy Date : 15/09/19 Shift : Day

Management Code	Activity Description
3204	dig keyway on North Berm where existing
	-Yan went at Qmrz at 10:00 am

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: -4 cloudy Date: 15/09/19 Shift: Day

Management Code			3204		QMR2													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia T. Belanger	~~Art~~ 325817		8.5	12														
Valère Cloutier	Art 004		9	12														
Manuel Arseneault	325824		8	12														
Jason Fortier	326504		9	12														
Gabriel Paré	190306	cat 352	10	12														
Anthony Leguen				12														
Dave Lanoix	327309		10	12														
Yan Martel Larouche				5														
Yan Martel Larouche	Art 002			7	6	7												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSAUTE Weather: _____ Date : 15-09-19 Shift : Night

Management Code	Activity Description
3204	MAKE a key For LiNiNg STRIPiNG and HAULiNG OB FROM Pond TO Dump Loading and HAULiNG MUCK FROM Dump TO Pond

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date: 15-09-19 Shift: Night

Management Code			3204																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13																
ERIC Hebert	326504	CAT 324	9	12																
Bobby Baldwin	326511	CAT 349	3	3																
" "	190306	CAT 352	5	9																
Kevin Mailoux	325824	CAT 745	8	12																
Christian Masseau	325817	CAT 745	9	12																
MARIO Tremblay	ART004	CAT 740																		

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-16 **Day Shift** **Weather conditions:** SNOWING -1°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

BACKFILL WITH ROQ INSIDE POUND EXTENSSION
PUMPING WATER. MOVE PUMP TO PREPARE NIGHT SHIFT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		6 594	11 136	17 730	M^2	37%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	800	8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3543**	**3549**	**6**	**530**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4602**	**4609**	**7**	**533**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3240**	**3249**	**9**	**204**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3350**	**3362**	**12**	**96**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-16 | **Night Shift** | **Weather conditions:** SNOWING -4°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

PUT 0-3/4" INSIDE POUND ECTENSSION
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")	250	6 844	10 886	17 730	M^2	39%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3549**	**3555**	**6**	**536**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4609**	**4609**	**0**	**533**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3249**	**3249**	**0**	**204**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3362**	**3366**	**4**	**100**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
16-09-2019	stop working at 12h because of the bad weather (snowing and icy road)	6

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: -2 windy snow Date : _____ Shift : _____

Management Code	Activity Description
3204	- clean up hose, pump, pick up ... - work on internal pond ROG -

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: -2 windy and snow Date : 16/09/19 Shift : Day

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger	32 5817	745	9	12														
Valère Cloutier				12														
Manuel Arseneault	32 5824	745	10	12														
Yan Martel Larouche				12														
Jason Fortier	32 6504	374	6	12														
Gabriel Paré	190306	352	6	12														
Anthony Leguen				12														
Dave Lanoix	32 7301	D6	10	12														
Gabriel Paré	3265	349	6															

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 16-09-19 Shift : Night

Management Code	Activity Description
3204	Bring D3/4 ON the Pond and Level it
	STOP operation at 00:00 by bad weather To slippery For Hauling

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 16-09-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13														
ERIC Hebert	326504	CAT 374	5	12														
Bobby Baldwin	327309	D6	5	12														
christian Masseau	325817	CAT 745	5	12														
Kevin Mallais	325824	CAT 745	5	12														
MARco Tremblay				12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-17 **Day Shift** **Weather conditions:** SNOWING -1°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HELP THE LINER GUYS, SHOVELING SNOW BY HAND.
FILL INSIDE OF TH EPOUND WITH 0-3/4''
PUMPING WATER. MOVE PUMP TO PREPARE NIGHT SHIFT
MOVE OVERSIZE ON THE WASTE DUMP AND CLEAN THE PILE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")	500	7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3555**	**3565**	**10**	**546**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4609**	**4619**	**10**	**543**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3255**	**3263**	**8**	**212**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3366**	**3376**	**10**	**110**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-17 | **Night Shift** | **Weather conditions:** SNOWING -4°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

REMOVE SNOW IN THE KEY FOR THE LINER
LOADING AND HAULING ROQ FROM WASTE DUMP TO POUND
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3565**	**3574**	**9**	**555**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4619**	**4627**	**8**	**551**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3263**	**3271**	**8**	**220**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3376**	**3383**	**7**	**117**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
17-09-2019	CAT 349 AND CAT 374 DOWN BOTH DOWN FOR A THEET MISSING ON THE BUCKET 19H30 TO 3H30	8

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussieres Weather: O' windy and snowy Date: 17/09/19 Shift: Day

Management Code	Activity Description
3204	- 0 3/4 from existing pond to about 35 meter from existing east culvert is to grade and finish
	- clean up pile of rock unneven so it is not a trap for equipment or vehicule
	- Move oversize rock on waste dump
	- Work on north side slope
	- shovel snow for Layfield

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussieles Weather: O windy and snowy Date : 17/09/19 Shift : Day

Management Code																			
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussieles				13														
Patricia F. Belanger				12														
Valère Cloutier				12														
Manuel Arseneault	325824		10	12														
Yan Martel Larouche	325817		8.5	12														
Jason Fortier	326504		10	12														
Gabriel Paré	326511		10	12														
Dave Ianoix	327308		8.5	12														
Anthony Leguen				12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 17-09-19 Shift : Night

Management Code	Activity Description
3204	Loading and Hauling Muck FROM DUMP TO POND Remove SNOW ON KEY
	CAT 349 and CAT 374 DOWN FROM 19:30 TO 3:30 FOR 1 Teet missing ON each

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 17-09-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pickup		13														
ERIC Hebert	326504	CAT 374	7	12														
Bobby Baldwin	326511	CAT 349	8	12														
christian MASSeau	325817	CAT 745	7	12														
Kevin MAllais	325824	CAT 745	6	12														
MARCO TRemblay				12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-18 **Day Shift** **Weather conditions:** SUNNY -1°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HELP THE LINER GUYS, SHOVELING SNOW BY HAND, PULLING THE LINER, MOVE THE SANDBAG, MOVE THEIR TOOL.
NO CIVIL WORK ON DAY SHIFT, ONLY LINER WORK
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		62 784	42 216	105 000	M.T.	60%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-009	Haul Truck CAT 740		X	
ART-012	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	WORN TIRE
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3574**	**3584**	**10**	**656**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4627**	**4627**	**0**	**551**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3271**	**3271**	**0**	**220**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3383**	**3383**	**0**	**117**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: 0° sunny and fogy afternoon Date: 18/9/19 Shift: Day

Management Code	Activity Description
3204	-Help Layfield pulling liner, moving sandbag around, driyng ~~[illegible]~~ and cleaning welding area, shoveling snow by hand
	-We had to clean all their left over garbage like pallets, 2X4, strap,
	-haul them to the 110 for their break and this since they are on s
	-haul their tool to the bouncy castle
training	-Valere did is 745 owner manual reading
	He is now ready for is on site Hassessment

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel M. Bussières Weather: O sunny part foggy Date: 18/09/19 Shift: Day

Management Code			3204				training											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger				12														
Valere Cloutier				8				4										
Manuel Arseneault				12														
Yan Martel Larouche				12														
Dave Lanoix				12														
Anthony Leguen				12														
Jason Fortier				12														
Gabriel Pare				12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 18-9-19 Shift : NIGHT

Management Code	Activity Description
3204	Load and Hauling Muck FROM Dump To pond Road side
	WAGON 325824 Hight Fuel smell IN The cab Driver Fill bad after 2 hour OF operation

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 18-9-19 Shift : NIGHT

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0032	Pick up		13														
ERIC HEBERT	326511	CAT 349	9	12														
Bobby Baldwin	327308	D6	9.5	12														
CHRISTIAN MASSEAU	325817	CAT 745	9	12														
KEVIN MAILAIS	325824	CAT 745	3	12														
MARC TREMBLAY				12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-19 | **Day Shift** | **Weather conditions:** SUNNY -1°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HELP THE LINER GUYS, SHOVELING SNOW BY HAND, PULLING THE LINER, MOVE THE SANDBAG, MOVE THEIR TOOL.
BACKFILL WITH ROQ NORTH SIDE BURM TO REACH THE KEY ELEVAITON ON POUND EXTENSSION SIDE
PUMPING WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	768	63 552	41 448	105 000	M.T.	61%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3584**	**3594**	**10**	**666**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4637**	**4643**	**6**	**567**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3281**	**3288**	**7**	**237**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3392**	**3392**	**0**	**126**	**0**	WORK ON WRP
327308	Dozer D8	X		**3678**	**3686**	**8**	**86**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-19 | **Night Shift** | **Weather conditions: WINDY -4°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CONTINUE TO BACKFILL WITH ROQ NORTH SIDE BURM TO REACH THE KEY ELEVATION ON POUND EXTENSSION SIDE
LOADING AND HAULING ROQ FROM WASTE DUMP TO POUND ON THE NORTH SIDE FOR THE NORTH BURM
PUMPING WATER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING	1728	65 280	39 720	105 000	M.T.	62%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3594**	**3594**	**0**	**666**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4643**	**4651**	**8**	**575**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3288**	**3297**	**9**	**246**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3392**	**3398**	**6**	**132**	**0**	WORK ON WRP
327308	Dozer D8	X		**3686**	**3693**	**7**	**93**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
17-09-2019	CAT 349 AND CAT 374 DOWN BOTH DOWN FOR A THEET MISSING ON THE BUCKET 19H30 TO 3H30	8

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Anthony Le Guen Weather: Windy 0°C Date: 2019-09-19 Shift: Day

Management Code	Activity Description
3204	(1) Dozer (1) Truck 745 (2) Exc
	Backfill with muck on North Side to reach
	the elevation to dig the key (1, 3 meter more)
	1 excavator was sloping 3:1 the slope.
	and sometimes help liner crew with
	geotextil, sand bags, snow removal.
Liner	(2) Labors => help with sand bags and
	all of their stuff
	Too much wind to install liner and
	geotextil -

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Windy 0°C Date: 2019-03-19 Shift: Day

Management Code			3204		Liner		Formation											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Anthony Le Yuen	19-0036	Pick	1	14														
Rock Bernier	320465	374	10	12														
Claude Savoie	325817	745	10	12														
Dave Lamoix	327308	D6	10	12														
Daisy Brouillette	/				/	12												
Simon Lavoie	19-0037	Pick			1	12												
Tim Tobin	32-6504	349	7	8	3	4												
Roger Le Blanc	/							12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: cloudy Date : 19-9-19 Shift : N.

Management Code	Activity Description
WR P.	374 Loading at The Dump. For make Lift at The Pad. IDC Pushing muck at the Pad. 745 Hauling muck at the Dump to pond.
	374 Down 9h Lost one tools I Am call foreman is suppose come Fiss That

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: cloudy Date: 19-9-19 Shift: N

Management Code			WRR.															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	Pickup	19-0036	13	13														
Sébastien Arsenault	326504	374	3	3														
Patrick Simard	327308	D6	12	11.5														
Clarence Breau	325924	745	12	11.5														
Sébastien Lafontaine	325917	745	12	11.5														
Mark Shea	326511	349	12	11.5														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-20 | **Day Shift** | **Weather conditions:** SUNNY -1°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

FINISH TO LEVELUP DE 0-3/4" FOR THE LINER IN THE EXISTING POUND, WAITING FOR THE ROLLER COMPACTOR
BEGIN TO BACKFILL THE KEY WITH 0-3/4"
INSTALL GEOMEMBRANE WITH THE LINER CREW AND REMOVE SOME SNOW FOR THE LINER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		65 280	39 720	105 000	M.T.	62%	LIFT #7 Done half of it because of the piping in place
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3594**	**3605**	**11**	**677**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4651**	**4661**	**10**	**585**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3297**	**3306**	**9**	**255**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3398**	**3398**	**0**	**132**	**0**	WORK ON WRP
327308	Dozer D8	X		**3693**	**3704**	**11**	**104**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-20 | **Night Shift** | **Weather conditions: WINDY -4°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

LOADING AND HAULING ROQ FOR POUND NORTH BERM
PROFILING ON NORTH BURM WITH ROQ
BEGIN TO DO BEDDING ON NORTH BURM POUND EXTENSSION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING	700	65 980	39 020	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3605**	**3613**	**8**	**685**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4661**	**4671**	**10**	**595**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3306**	**3312**	**6**	**261**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3398**	**3404**	**6**	**138**	**0**	WORK ON WRP
327308	Dozer D8	X		**3704**	**3705**	**1**	**105**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
17-09-2019	CAT 349 AND CAT 374 DOWN BOTH DOWN FOR A THEET MISSING ON THE BUCKET 19H30 TO 3H30	8

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Windy Date: 2019-09-20 Shift: Day

Management Code	Activity Description
3204	• Finish to ajust 0-3/4 to have another section ready for liner crew. => waiting for roller to compact (it go down 2 days ago and I asked to have it here yesterday).
	• After the approbation of Allen Knowlton, we beggin to backfill the key with "only" muck (< 0,5 m). (75 % was done -> 25% will be for night shift.)
	• Continue to reach the elevation 579,0 m on north side to be ready for 0-3/4.
	* only have one truck 745 working, another 745 is available, but no driver' asses on it and 740 work for mine ops to prepare the crusher arival.
Liner	(D) Labor They install some geotextil this morning and we remove some snow for Payfield.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Guen Anthony Weather: Windy -1°C Date: 2019-09-20 Shift: Day

Management Code			3204		Liner		Formation		Project		Mine							
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Guen Anthony	19-0036	PCK	1	13														
Roch Bernier	32 6504	374	10	12														
Claude Savoie		745	10	12														
Dave Lamoix		D6	10	12														
Tim Tobin	32 6511	349	10	12														
Daisy Bruneau	Ant 14	740	2	7							4	5						
Simon Lavoie	19-0037	Pck			/	12												
Roger Le Blanc	/	/					/	12										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Franjois Caron Weather: cloudy Date: 20-9-19 Shift: N.

Management Code	Activity Description
WRP.	374 Loading muck at Dump for pound. 349 make slope at the poud and place muck on the Key and 0 3/4 on the slope
	D6 pushing muck on the Final lift 745 hauling muck and 0 3/4 for Pound.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Franjois Caron Weather: cloudy Date: 20-9-19 Shift: N

Management Code			WRP															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Franjois Caron	19-0036	Pickup.	13	13														
Sébastien Arsenault	326504	324	12	11.5														
mark shear	326511	349.	12	11.5														
Patrick simard	327308	D6.	12	11.5														
Sébastien Lafontaine	325917	745	12	11.5														
Clarence Brean	325824	745	12	11.5														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-21 **Day Shift** **Weather conditions:** SUNNY -1°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

DIG THE KEY ON NORTH SIDE ON POUND EXTENSSION
BEGIN TO BACKFILL THE KEY
CONTINUE TO BACKFILL NORTHSIDE BURM WITH ROQ
INSTALL LINER WITH LAYFIELD

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	416	66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3613**	**3619**	**6**	**691**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4671**	**4680**	**9**	**604**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3312**	**3318**	**6**	**267**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3404**	**3404**	**0**	**138**	**0**	WORK ON WRP
327308	Dozer D8	X		**3705**	**3705**	**0**	**105**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-21 | **Night Shift** | **Weather conditions:** WINDY -4°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

LOADING AND HAULING 0-3/4" TO THE POUND FOR SOUTH KEY
CONTINUE KEY EXCAVATION
CLEANING ON THE WASTE DUMP WITH DOZER FOR THE TRUCKS

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3619**	**3626**	**7**	**698**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4680**	**4690**	**10**	**614**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3318**	**3327**	**9**	**276**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3404**	**3408**	**4**	**142**	**0**	WORK ON WRP
327308	Dozer D8	X		**3705**	**3712**	**7**	**112**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
17-09-2019	CAT 349 AND CAT 374 DOWN BOTH DOWN FOR A THEET MISSING ON THE BUCKET 19H30 TO 3H30	8

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Sunny -4°C Date: 2019-09-21 Shift: Day

Management Code	Activity Description
3204	• Dig the key on North side in the expansion of the pound at 573.3m. • After that, backfill the key with 0,3m of 0-314. • Continue to backfill North side with muck closed to the divert.
Liner	• (1) Excavator 5k and (2) Labors. They installed some liner. Ls packer arrive at 3pm. Finally so we focus to give them a section ready.
	* Weekly security meeting at 4h45pm. with crusher and Project manager.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Sunny -4°C Date: 2019-09-21 Shift: Day

Management Code			3204		Linen		Formation											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	19-0037	PCK	1	13														
Tim Tobin	326511	349	8	12														
Dave Lanoix	19-0306	352	8	12														
Daisy Brouillette	Ant 14	740	6	9			/	3										
Claude Savoie	325817	745	8	12														
Rock Bernier	326504	374	5	7	3	5												
Roger Le Blanc		Pachon			2	12												
Simon Lavoie	19-0036	PCK			1	12												
Keith Arnold	/	/	/	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: Sonny Date: 21-3-12 Shift: N

Management Code	Activity Description
WR	324 loading 0 3/4 at stockpile and digging the key at the pond 349 motor Lift whit 3/4 and digging Key D6 pushing at the dump for motor good. Floor for Dumping the truck.
	745 hauling 0 3/4 at stockpile to pond.
	For digging the key need 324 because is very frozen by this time don't need truck is standby.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: Sunny Date: 21-9-19 Shift: N

Management Code			WRP.															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	19-0036	Pickup	13	13														
Sebastien Fiserault	32 6504	374	12	11.5														
Patrick Shean	32 6511	349	12	11.5														
Patrick Simard	32 7308	D6	12	11.5														
Clarence Bleau	32 5824	745	12	11.5														
Sebastien Lafontaine	32 5817	745	12	11.5														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-22 **Day Shift** **Weather conditions:** SUNNY -1°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

DIG THE KEY ON SOUTH SIDE ON POUND EXTENSSION
LEVEL UP WELL THE 0-3/4 INSIDE THE POUND TO MAKE IT PERFECLY FOR THE LINER CREW
FINISH TO BACKFILL THE KEY ON NORTH SIDE EXISTING POUND SECTION
INSTALL LINER WITH LAYFIELD

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	416	66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 344	10 386	17 730	M^2	41%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3626**	**3636**	**10**	**708**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4690**	**4699**	**9**	**623**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3327**	**3332**	**5**	**281**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3408**	**3408**	**0**	**142**	**0**	WORK ON WRP
327308	Dozer D8	X		**3712**	**3712**	**0**	**112**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-22 | **Night Shift** | **Weather conditions: WINDY -4°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

LOADING AND HAULING 0-3/4" TO THE POUND FOR SOUTH KEY
0-3/4 BEDDING ON NORTH SIDE BURM POUND EXTENSSION SECTION
CONTINUE TO DIG THE KEY ON SOUTH SIDE BURM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")	200	7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

UNIT NUMBER	EQUIPEMENT	UP	DOWN	COMMENTS
BIM EQUIPMENT				
DZR-001	Dozer CAT D6		X	
DZR-004	Dozer CAT D6		X	LOCK ON IT
ART-004	Haul Truck CAT 740	X		
ART-008	Haul Truck CAT 740		X	
ART-009	Haul Truck CAT 740		X	
ART-013	Haul Truck CAT 740		X	
ART-014	Haul Truck CAT 740		X	
ART-016	Haul Truck CAT 740	X		

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3636**	**3637**	**1**	**709**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4699**	**4708**	**9**	**632**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3332**	**3339**	**7**	**288**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3408**	**3418**	**10**	**152**	**0**	WORK ON WRP
327308	Dozer D8	X		**3712**	**3722**	**10**	**122**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
17-09-2019	CAT 349 AND CAT 374 DOWN BOTH DOWN FOR A THEET MISSING ON THE BUCKET 19H30 TO 3H30	8

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Sunny -4°C Date: 2019-09-21 Shift: Day

Management Code	Activity Description
3204	• Dig the key on North side in the expansion of the pound at 573.3m. • After that, backfill the key with 0,3m of 0-314. • Continue to backfill North side with muck closed to the divert.
Liner	• (1) Excavator 5k and (2) Labors. They installed some liner. Ls packer arrive at 3pm. Finally so we focus to give them a section ready.
	* Weekly security meeting at 4h45pm. with crusher and Project manager.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Sunny -4°C Date: 2019-09-21 Shift: Day

Management Code			3204		Linen		Formation											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	19-0037	PCK	1	13														
Tim Tobin	326511	349	8	12														
Dave Lanoix	19-0306	352	8	12														
Daisy Brouillette	Ant 14	740	6	9			/	3										
Claude Savoie	325817	745	8	12														
Rock Bernier	326504	374	5	7	3	5												
Roger Le Blanc		Pachon			2	12												
Simon Lavoie	19-0036	PCK			1	12												
Keith Arnold	/	/	/	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-Francois Caron Weather: Sonny Date: 21-3-12 Shift: N

Management Code	Activity Description
WR	324 loading 0 3/4 at stockpile and digging the key at the pond 349 motor Lift whit 3/4 and digging Key D6 pushing at the dump for motor good. Floor for Dumping the truck.
	745 hauling 0 3/4 at stockpile to pond.
	For digging the key need 324 because is very frozen by this time don't need truck is standby.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Jean-François Caron Weather: Sunny Date: 21-9-19 Shift: N

Management Code			WRP.															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	19-0036	Pickup	13	13														
Sebastien Fiserault	32 6504	374	12	11.5														
Patrick Shean	32 6511	349	12	11.5														
Patrick Simard	32 7308	D6	12	11.5														
Clarence Bleau	32 5824	745	12	11.5														
Sebastien Lafontaine	32 5817	745	12	11.5														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-24 | **Day Shift** | **Weather conditions:** SUNNY -1°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

DIG THE KEY ON SOUTH SIDE ON POUND EXTENSSION AND MAKE THE KEY BEDING WITH 0-3/4''
FINISH THE SLOPE ON NORTH SIDE BURM POUND EXTENSSION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3653**	**3663**	**10**	**735**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4719**	**4729**	**10**	**653**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3358**	**3365**	**7**	**314**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3433**	**3442**	**9**	**176**	**0**	WORK ON WRP
327308	Dozer D8	X		**3742**	**3742**	**0**	**142**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
LINER WORK AND POUND WORK	NEED THE ROLLER COMPACTOR TO FINALISE THE INSIDE POUND BEDDING FOR THE LINER TO BE INSTALL
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-24 | Night Shift | Weather conditions: WINDY -4°c | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

DIG THE KEY ON SOUTH SIDE AND DO THE SLOPE WITH 0-3/4"
DIG THE KEY ON NORTH SIDE AND DO THE SLOPE WITH 0-3/4"
HAULING MUD OUT OF THE KEY TO WASTE DUMP

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		7 516	1 609	9 125	M^2	82%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 316	809	9 125	M^2	91%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3663**	**3674**	**11**	**746**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4729**	**4729**	**0**	**653**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3365**	**3365**	**0**	**314**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3442**	**3451**	**9**	**185**	**0**	WORK ON WRP
327308	Dozer D8	X		**3742**	**3750**	**8**	**150**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
LINER WORK AND POUND WORK	NEED A AIR COMPRESSOR TO BE PREPARED FOR SNOW REMOVAL ON THE LINER
EXCAVATION	NEED A HAMMER TO DIG THE KEY, GROUND IS FREEZING HARD
LINER WORK	WE HELP THE LINER CREW FOR THEIR JOB, THEY DO NOT COLABORATE MUSH ON SNOW SHOVELING, WE HAD TO CLEAN THEIR LEFTOVER GARBAGE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE
LINER WORK	TOO MUCH WIND TO INSTALL THE LINER, ONLY A LITLE BIT OF GEO MEMBRANE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuan Anthony Weather: Cloudy -42 Date: 2019-09-24 Shift: Day

Management Code	Activity Description
3204	• Dig the Bey on South Side with 374. But the ground is to frozen, very hard to dig. => ask for a ripper on a hammer.
	• Finish slope on North Side 0+570 @ 0+625 with 0-314. • Backfill the South Bey with 0-314.
	• Finish to backfill the Bey on North Side where the liner was done.
Liner	① Excavation during GR.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Le Yuen Anthony Weather: Cloudy -4°C Date: 2019-09-24 Shift: Day

Management Code			3204		Liner													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	19-0036	PCK	1	13														
Keith Arnold	19-0037	PCK	1	13														
Dave Lamoix	19-0306	352	5	6														
11 11	11	352			5	6												
Tim Tobin	326511	349	10	12														
Rex R Bernier	326504	374	10	12														
Daisy Brouillette	325824	745	9	12														
Benjamin Dupuis	325817	745	7,5	12														
Claude Savoie	325817	745	7,5	12														
Simon Lavoie	/	/	/	12														
Roger Le Blanc	/	/	/	12														

Management Code	Activity Description
WRP	→D324 Dig the Key on The south Side pound is not going Fast Because is Frozen but is cant Digging Sloly.
	→D352 is Dig the Key on the north Side
	→D6 Pusching The muck From the Key on the pad for make lift at the end Domp.
	→745 Hauling muck From the Key south side to Dozer.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-Francois Caron weather: Cloudy Dark Date: 24-3-18 Shift: N

Management Code			3204		WRP.												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-FrancoisCaron	19-0036	Pickup			13	13												
SebastienTrsenault	326504	374			12	11.5												
mark shear	19-0306	352.F			12	11.5												
Patrick Simard	322308	D6			12	11.5												
Clarence Bleau.	325824	745			12	11.5												

Qikiqtaaluk SANA

Baffinland Iron Mine
WRP EXPANSION PROJECT
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-09-25 **Day Shift** **Weather conditions: SNOW AND WIND -1°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

DIG THE KEY ON SOUTH SIDE ON POUND EXTENSSION AND MAKE THE KEY BEDING WITH 0-3/4''
EXCAVATION OF POUND EXPANSION ON NORTH-EAST SIDE AROUND THE 0+635 AREA
EXCAVATOR 352 MOVING LINER ROLL FOR LAYFIELD

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	250	8 232	893	9 125	M^2	90%	CUMULATIVE QUANTITY UPDATED WITH SURVEYOR
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	250	8 232	893	9 125	M^2	90%	CUMULATIVE QUANTITY UPDATED WITH SURVEYOR
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3674**	**3682**	**8**	**754**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4729**	**4736**	**7**	**660**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3365**	**3374**	**9**	**323**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3451**	**3461**	**10**	**195**	**0**	WORK ON WRP
327308	Dozer D6	X		**3750**	**3750**	**0**	**150**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-09-25 **Night Shift** **Weather conditions: RAIN,SNOW AND WIND -1°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

CLEANING ROAD CONDITIONS - ICE AND SNOW
DIG THE KEY ON NORTH SIDE AND DO THE SLOPE WITH 0-3/4''
WORK HAS STOP AT 10H30 PM DUE TO BAD WEATHER CONDITION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT FOLLOW UP

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3682**	**3685**	**3**	**757**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4736**	**4739**	**3**	**663**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3374**	**3378**	**4**	**327**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3461**	**3461**	**0**	**195**	**0**	WORK ON WRP
327308	Dozer D6	X		**3750**	**3753**	**3**	**153**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	WORK HAS BEEN SHUTDOWN AT 10H30 PM AS PER MINE OPS SUPERVISOR DIRECTIVE

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-09-25	DELAY DUE TO BAD WHEATER	7

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: Blowing Snow Date: Sept 25/19 Shift: Day

Management Code			3204		liner													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0036	pick up	1	13														
Anthony Leguen	19-0037	pick up	1	13														
Dave Lamoix	19-0306	(352) Excavator	3	3	7	9												
Tim Tobin	326511	(349) Excavator	4	6														
" "	326504	(374) Excavator	6	6														
Roch Bernier	326504	(374) Excavator	3	12														
Simon Lavoie	12-02-01	(980) loader	6	12														
Robert Leblanc	RLK-007	packer	3	12														
Claude Savoie	33 5817	745 wiggle	10	12														
Daisy Brouillette	325824	745 wiggle	10	12														
Benjamen Dupuis	Training 745		/	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: Blowing Snow Date: Sept 25/19 Shift: Day

Management Code	Activity Description
3204	Excavate waste material around 0+635 area, Place rock fill 0+635 area, maintain roads Snow/ice control
liner	352 Excavator move rolls of liner from inside pond to Staging area's.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-Francois Caron weather: Fog. Windy snow Date: 25-9-19 Shift: N

Management Code			3204		WRP												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Francois Caron	19-0036	Pickup.			[illegible]		13	13										
Sebastien Lafontaine	326517	745			12	11.5												
Sebastien Arsenault	326504	324			12	11.5												
mark shea	326511	349.			12	11.5												
Patricia Simard.	327309	D6			12	11.5												
Benjamin Dupuis	325824	745			12	11												

Management Code	Activity Description
WRP	→ 324 Dig the Key sooht side. → 349 Shape slope in the Key after 324 is Digging roff. → D6 Pusching the muck from the Key at Pad for makelift 1m
	→ 745 Hauling muck at the to pad, behind the Dump.
	Before starting working need cleaning road and scrach whit Shoffel and put 3/4 for the road Because is Sleppery
	the weather is bas. Snow and rain and wendy stop working at 10:30 end going at Salivick take lunch and after Lunch.
	going up again up top and the visibility is very very bad to much. Fog. and is very slippery.

Qikiqtaaluk SANA

Baffinland Iron Mine
WRP EXPANSION PROJECT
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-09-26 **Day Shift** **Weather conditions: SNOW AND WIND -1°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

NO WORK DUE TO BAD WEATHER CONDITIONS.
DIG SUMP PUMP AND MOVING PUMP AND HOSE FROM 1H30 TO 4H30

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3685**	**3689**	**4**	**761**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4739**	**4739**	**0**	**663**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3378**	**3378**	**0**	**327**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3461**	**3461**	**0**	**195**	**0**	WORK ON WRP
327308	Dozer D6	X		**3753**	**3753**	**0**	**153**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-09-26	DELAY DUE TO BAD WHEATER	12

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-26 | Night Shift | Weather conditions: RAIN,SNOW AND WIND -1°c | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

NO WORK DUE TO BAD WEATHER CONDITIONS.
DIG SUMP PUMP AND MOVING PUMP AND HOSE FROM 8 TO 10 PM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT FOLLOW UP

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3689**	**3691**	**2**	**763**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4739**	**4739**	**0**	**663**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3378**	**3378**	**0**	**327**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3461**	**3461**	**0**	**195**	**0**	WORK ON WRP
327308	Dozer D6	X		**3753**	**3753**	**0**	**153**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-09-25	DELAY DUE TO BAD WHEATER	7
2019-09-26	DELAY DUE TO BAD WHEATER	12

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: wind/Rain Date : Sept 26/19 Shift : Day

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pickup	1	13														
Simon Lavoie	19-0036	pick up	1	12														
Roger LeBlanc				12														
Rock Bernier				12														
Tim Tobin	19-03-06		3	12														
Daisy Brouillette				12														
Claude Savoie				12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman:_____ Weather: _____ Date : _____ Shift : _____

Management Code	Activity Description
3204	No work due to bad weather.
	1h30 to 4h30 :- digging sump for water manggement - Moving pump and hose.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-François Caron weather: cloudy Date: 26-9-19. Shift: N

Management Code			3204		WKP		Standby										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	19-0036	Pickup			13	13												
Sébastien Lusenault	326504	374			1.0	1.0		10,5										
Mark Shears								12										
Sebastien Laforntaine								12										
Patrick Simard								12										
Benjamin Dupuis								12										

Management Code	Activity Description
WRP	All the crew install the pompe and Hosse at the pound and the 374 moving and place the pompe at the right place
	and After that close the shift Because the Road Dump is closed again and I Am talking whit Supervisor mines ops For know
	the is passe grader and put some crush on the road and is told me is not my priority i. But For my job I need is road For
	hauling 03/4 for put in the key at the pound.

Baffinland Iron Mine
WRP EXPANSION PROJECT
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-27 **Day Shift** **Weather conditions: Cloudy 2°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

MAKING ACCES FOR PUMP AND HOSES, PUMPING WATER, ASSISTING MINE OPS PUMP TEAM.
CLEANING SNOW ON THE POUND WITH EXCAVATOR FOR LAYFIELD.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3691**	**3699**	**8**	**771**	**117**	WORK ON WRP
326511	Excavator CAT 349	X		**4744**	**4752**	**8**	**676**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3378**	**3386**	**8**	**335**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3461**	**3470**	**9**	**204**	**0**	WORK ON WRP
327308	Dozer D6	X		**3753**	**3753**	**0**	**153**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-09-26	DELAY DUE TO BAD WHEATER	12

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-27 | Night Shift | Weather conditions: Cloudy and foggy 1°c | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

CLEANING SNOW ON THE POUND WITH EXCAVATOR FOR LAYFIELD.
CLEANING SNOW IN THE KEY TRENCH.
CLEANING SNOW ON THE RING ROAD EAST FOR TRUCK ACCESS.
1 TRUCK HAULING 0-6'' FROM CRUSHER TO 110 LAYDOWN.
ALL WORK SHUTDOWN AT 10HPM DUE TO FOG.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4'' INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT FOLLOW UP

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3699**	**3702**	**3**	**774**	**117**	WORK ON WRP
326511	Excavator CAT 349		X	**4752**	**4754**	**2**	**678**	**113**	DOWN FOR IDLER PIN BROKEN
325817	Haul Truck CAT 745	X		**3386**	**3389**	**3**	**338**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3470**	**3471**	**1**	**205**	**0**	WORK ON WRP
327308	Dozer D6	X		**3753**	**3754**	**1**	**154**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	WORK SHUTDOWN AT 10PM DUE TO FOG.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-09-25	DELAY DUE TO BAD WHEATER	7
2019-09-26	DELAY DUE TO BAD WHEATER	12
2019-09-27	DELAY DUE TO BAD WHEATER	7

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: windy Date: Sept 27/09 Shift: Day

Management Code			3204		3802													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1day	13														
Simon Lavoie	19-0036	pick up	1day	12														
Roger LeBlanc				12														
Rich Bernier	32 65 04	374 Ex	1	12														
Tim Tobin	32 65 11	349 Ex	7	10														
	19 0306	352 Ex	2	2														
Claude Savoie	32 50 17	wiggle	10	12														
Daisy Brouillette	32 50 24	wiggle	9	12														
Jeremy Ball						12												

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: Wind Date: Sept 27/19 Shift: Day

Management Code	Activity Description
3204	Move pumps and hoses to Control water. Clean up Snow + Ice From Pond. Assist mine ops
3802	Survey work around Pond

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-Francois Caron weather: Foggy Date: 27-9-19 Shift: N

Management Code			3204		WKP						Standby						total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Francois Caron	19-0036	Pickup			13	13												
Sebastien Asselmault	326504	374					2	2.5			NA	NA	8.5	8.5				
mark shean	326511	349			3	3					8	8						
mark shean	19-0306	352			1	1												
Sebastien Lafontaine	325817	745			2	2					10	10						
Benjamin Dupuis	325824	745			3	3					9	9						
Patrick Simard	327308	D6			1	1					11	11						
Clarence Blean											12	12						

Management Code	Activity Description
WRP.	→ 349 start in the shift cleaning all the ground in the pond but need stop that Because shovel Down For pin Hidler Broke
	→ 352 clearing the snow in the key north side. → D6 cleaning snow by the ring road because truck need pass there
	Because to much hosse underground at the pound. → 745 start hauling 6" at the crusher to stock pile 110 Lea down. need stop hauling Because to much fog
	stop working at 10:00 and shot Down the mines complete at 1:30
	→ 374 is catch the intersection the 650 aut the 110. and after that need wait Because to much fog For Lard in the 745 whit 0 3/4 to put on the key at the Pond.

Baffinland Iron Mine
WRP EXPANSION PROJECT
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-28 **Day Shift** **Weather conditions: Cloudy and foggy 2°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PROFILING 0-3/4 IN THE KEYTRENCH - NORTH BERM
1 TRUCK HAULING 0-6" FROM CRUSHER TO 110 LAYDOWN.
PROFILING OF INTERNAL BERM CLOSE TO THE CULVERT.
2 GUYS HELPING MINEOPS AND LAYFIELD FOR LABOR WORK

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3702**	**3711**	**9**	**783**	**117**	WORK ON WRP
326511	Excavator CAT 349		X	**4754**	**4757**	**3**	**681**	**113**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3389**	**3397**	**8**	**346**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3471**	**3480**	**9**	**214**	**0**	WORK ON WRP
327308	Dozer D6	X		**3754**	**3754**	**0**	**154**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-28 **Night Shift** **Weather conditions: Rain 1°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PROFILING 0-3/4 IN THE KEYTRENCH - NORTH BERM
1 TRUCK HAULING 0-6" FROM CRUSHER TO 110 LAYDOWN.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	LIFT #7 Done half of it because of the piping in place and key for first liner lift
FINE BEDDING (0-3/4")		7 544	10 186	17 730	M^2	43%	300MM OF 0-3/4" INSTEAD OF 100MM
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT FOLLOW UP

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3711**	**3719**	**8**	**791**	**117**	WORK ON WRP
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	DOWN FOR IDLER PIN BROKEN
325817	Haul Truck CAT 745	X		**3397**	**3406**	**9**	**355**	**0**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3480**	**3489**	**9**	**223**	**0**	WORK ON WRP
327308	Dozer D6	X		**3754**	**3754**	**0**	**154**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: fog Date: Sept 28/19 Shift: Day

Management Code			3204		3802													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1day	13														
Roger LeBlanc	19-0036	pick up	1day	12														
Simon Lavoie	12-02-01	980 loader	9	12														
Roch Bernier	32-65-04	374 EX	9	12														
Jeremy Ball						12												
Tim Tobin	19-03-06	352 EX	6	8														
" "	32-65-11	349 EX	3	4														
Claude Savoie	32-58-24	745 wiggle	7	12														
Daisy Brouillette	32-58-17	745 wiggle	8	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: Fog Date: Sept 28/19 Shift: Day

Management Code	Activity Description
3204	Place Rockfill in pond at 0+630 - 0+670 area. Maintain Pumps, Keep water from entering work area. Track 6" minus from Crusher to 110 laydown
	Excavate Key trench on North Berm. Started Shift at 8:00, delay due to Fog visability was an issue.
3802	Survey for Pond.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-Francois Caron weather: cloudy Date: 28-9-19 Shift: N

Management Code			3204		WRP				Standby								total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Francois Caron	19-0036	Pickup			13	13												
Sébastien Arsenault	B26504	374			12	11.5												
mark shea	14-0300	352			12	11.5												
SebastienLaFontaine	326517	745			12	11.5												
Benjamin Dupuis	326524	745			12	11.5												
Clarence Bleau									12									
Patrick Simard									12									

Management Code	Activity Description
WRP	D324 Loading 03/4 and pile up 0-6" at the 110 Leadow. D352 Dig the key north side and put 03/4 in the key and the pond. D745 hauling 03/4 at 110 Leadown to pound.
	D745 hauling 0-6" at crusher to 110 Leadown and approch muck stock pile to Crusher because the Loader is to far for moving the muck.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-29 | Day Shift | Weather conditions: Rain 2°c | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

PROFILING 0-3/4 IN THE KEYTRENCH - NORTH BERM
2 TRUCK HAULING 0-6" FROM CRUSHER TO 110 LAYDOWN.
PROFILING 0-3/4" ON INTERNAL BERM CLOSE TO THE CULVERT.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		66 396	38 604	105 000	M.T.	63%	
FINE BEDDING (0-3/4")	200	12 587	5 143	17 730	M^2	71%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3719**	**3727**	**8**	**799**	**117**	WORK ON WRP
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	DOWN FOR HIDLER PIN BROKEN
325817	Haul Truck CAT 745	X		**3406**	**3415**	**9**	**362**	**2**	7HR ON WRP // 2 HOURS MINE OPS
325824	Haul Truck CAT 745	X		**3489**	**3499**	**10**	**233**	**0**	WORK ON WRP
327308	Dozer D6	X		**3754**	**3754**	**0**	**154**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-09-29 **Night Shift** **Weather conditions: Rain 1°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WORKING ON LIFT #8 ON THE NORTH BERM
EXCAVATOR WITH BUSTER WORKING IN THE KEYTRENCH TO REMOVE ICE AND PERMAFROST.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	
POND AND SPILLWAY							
BERM RISING	736	67 132	37 868	105 000	M.T.	64%	
FINE BEDDING (0-3/4")		12 587	5 143	17 730	M^2	71%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT FOLLOW UP

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3727**	**3729**	**2**	**801**	**117**	WORK ON WRP
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	DOWN FOR HIDLER PIN BROKEN
325817	Haul Truck CAT 745	X		**3415**	**3423**	**8**	**370**	**2**	WORK ON WRP
325824	Haul Truck CAT 745		X	**3499**	**3501**	**2**	**235**	**0**	WORK ON WRP
327308	Dozer D6	X		**3754**	**3762**	**8**	**162**	**0**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Rain/Fog Date: Sept 29/19 Shift: Day

Management Code			3204		3802		Mine Ops		3301								total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Roger LeBlanc	19-0038	pick up	1	12														
Jeremy Ball						12												
Simon Lavoie	12-02-01	980 loader					9	12										
Roch Bernier	32-65-04	374 Ex							8	12								
Tim Tobin	19-03-06	352 Ex	10	12														
Daisy Brouillette	32-58-24	745 wiggle							10	12								
claude Savoie	32-58-17	745 wiggle							7	10								
11 11							2	2										

Management Code	Activity Description
3204	Excavate / Shape Key trench maintaining pumps
3802	Survey around WRP
?	loader and wiggle build Berm/pad at 106 powder Mag
3301	374 excavator maintain 6" Stockpile at 110 laydown. 745 wiggles haul 6" material from crusher to 110 laydown

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-Francois Caron weather: Foggy Date: 29-8-19 Shift: N

Management Code			3204		WRP.						Standby						total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-Francois Caron	19-0036	Pickup			13	13												
Sebastien Arsenault	326504	374			2	2.												
Sebastien Arsenault	EXT 005	Hammer.			10	10												
Mark Shea.	19-0306	350.			12	10.5												
Patrick Simard	327308	DC			12	11.5												
Benjamin Dufour	325917	745			12	11.5												
Clarence Bleau.	325824	745			2	2					10	10						
Sebastien La Fontaine											12	12						

Management Code	Activity Description
WRP.	→ 324 Loading 1 Load at the Begining the shift and put Sebastion Arsenault on the Hammer for broke the materiel on the Big Key
	→ D6 push muck on the pad west Side.
	→ 745 Hauling Few load At the crusher to stockpile 110 leadow After
	that park this truck because no heat and no fan is working on that
	→ 745 Houling muck at the Key to pad west side.
	325824 Down no heat and No Fan.
	326511 Down. Hidler

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-30 **Day Shift** **Weather conditions: Rain 2°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING 0-6'' FROM CRUSHER PAD TO THE STOCKPILE AT 110 LAYDOWN.
EXCAVATOR WITH BUSTER WORKING IN THE KEYTRENCH TO REMOVE ICE AND PERMAFROST.
DIG OUT THE MATERIAL OUT OF THE KEYTRENCH.
ASSISTING MINE OPS WITH PUMP.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		67 132	37 868	105 000	M.T.	64%	
FINE BEDDING (0-3/4")		12 587	5 143	17 730	M^2	71%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3729**	**3729**	**0**	**788**	**117**	**13**	WORK ON WRP
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	**0**	DOWN FOR HIDLER PIN BROKEN
325817	Haul Truck CAT 745	X		**3423**	**3432**	**9**	**354**	**2**	**25**	WORK ON KM106 (0-6'' stockpile)
325824	Haul Truck CAT 745		X	**3501**	**3501**	**0**	**235**	**0**	**0**	
327308	Dozer D6	X		**3762**	**3762**	**0**	**162**	**0**	**5**	WORK ON KM106 (0-6'' stockpile)

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-09-30 | **Night Shift** | **Weather conditions: Rain 1°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING 0-6'' FROM CRUSHER PAD TO THE STOCKPILE AT 110 LAYDOWN. DOZER PUSH THE STOCKPILE.
EXCAVATOR WITH BUSTER WORKING IN THE KEYTRENCH TO REMOVE ICE AND PERMAFROST.
DIG OUT THE MATERIAL OUT OF THE KEYTRENCH
ASSISTING MINE OPS WITH PUMP.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		67 132	37 868	105 000	M.T.	64%	
FINE BEDDING (0-3/4")		12 587	5 143	17 730	M^2	71%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3729**	**3730**	**1**	**789**	**117**	**13**	WORK ON WRP
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	**0**	
325817	Haul Truck CAT 745	X		**3432**	**3442**	**10**	**379**	**2**	**35**	WORK ON KM106 (0-6'' stockpile)
325824	Haul Truck CAT 745		X	**3501**	**3501**	**0**	**235**	**0**	**0**	
327308	Dozer D6	X		**3762**	**3767**	**5**	**162**	**0**	**5**	WORK ON KM106 (0-6'' stockpile)

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Rain/fog Date: Sept 30/19 Shift: Day

Management Code			3204		3502		3301										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pickup	1	13														
Simon Lavoie	19-0036	pack up	1	12														
Jeremy Ball						12												
Tim Tobin	19-03-06	352 Ex	8	12														
Roch Bernier	exc 5	Hammer	7	12														
Daisy Broullette	009	740 wiggle					7	12										
Claude Savoie	32-58-17	745 wiggle					8	12										
Roger LeBlanc	282	906 loader	4	12														

Management Code	Activity Description
3204	Excavate Key trench maintain pumps and hoses
3802	Survey WRP pond
3301	Haul 6" material from crusher to Stockpile at 110 laydown

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-François Caron weather: cloudy foggy Date: 30-9-19 Shift: N

Management Code			3204		WRP				Stanby								total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-François Caron	19-0036	Pickup			13	13												
Sébastien Arsenault	EXT 005	Hammer			6	6			5	5								
Mark Shear	19-0306	352			12	11.5												
Benjamin Dupuis	325817	745			12	11.5												
Clarence Breau									12	12								
Patrick Simard	327308	D6			5	5			7	7								
Sébastien Lafontaine									12	12								
Sébastien Arsenault	326504	374			1	1												

Management Code	Activity Description
WRP.	-D Hammer dig Rex. -D 350 Dig Rex -D 745 Hauling 0-6" ~~At~~ Crusher 650 to 110 Leadown stockpile.
	-D D6 Pushing 0-6 at Stockpile 110 Leadown. -D 324 Dig Rex 1h
	EXT 005 Down no fan no heat in that.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-01 **Day Shift** **Weather conditions: Foggy and Rainy 1°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING 0-6'' FROM CRUSHER PAD TO THE STOCKPILE AT 110 LAYDOWN.
EXCAVATOR WITH BUSTER WORKING IN THE KEYTRENCH TO REMOVE ICE AND PERMAFROST.
DIG OUT THE MATERIAL OUT OF THE KEYTRENCH AND PUT FINE BEDDING(0-3/4'') IN THE TRENCH.
ASSISTING MINE OPS WITH PUMP.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		67 132	37 868	105 000	M.T.	64%	
FINE BEDDING (0-3/4")	262	12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**3730**	**3730**	**0**	**789**	**117**	**13**	WORK ON WRP
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	**0**	DOWN FOR HIDLER PIN BROKEN
325817	Haul Truck CAT 745	X		**3442**	**3450**	**8**	**379**	**2**	**43**	WORK ON KM106 (0-6'' stockpile)
325824	Haul Truck CAT 745	X		**3501**	**3505**	**4**	**239**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3767**	**3767**	**0**	**162**	**0**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-10-01	PUMP HOSES BLOCKING ALL ACCES FOR TRUCKS. HAD TO SHUTDOWN WORK WHEN PUMPING IS NEEDED	3

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-01	Night Shift	Weather conditions: Cloudy and Rainy 0°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WORKING ON LIFT #8 ON NORTH BERM.
EXCAVATOR 352 (SANA) LOADING TRUCKS, 2 TRUCKS HAULING AND DOZER D6 PUSHING ROQ ON THE BERM.
ASSISTING MINE OPS WITH PUMP.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	928	68 060	36 940	105 000	M.T.	65%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	3730	3730	0	789	117	13	
326511	Excavator CAT 349		X	4757	4757	0	681	113	0	
325817	Haul Truck CAT 745	X		3450	3457	7	386	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3505	3512	7	246	0	0	WORK ON WRP
327308	Dozer D6	X		3767	3777	10	172	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-10-01	PUMP HOSES BLOCKING ALL ACCES FOR TRUCKS. HAD TO SHUTDOWN WORK WHEN PUMPING IS NEEDED	5

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: fog/rain Date: OCT 1/19 Shift: Day

Management Code			3204		3301		3802										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Simon Lavoie	19-0036	pick up	1	12														
Claude Savoie	32-58-17	745 wiggle	17	12														
Jeremy Ball								12										
Tim Tobin	19-03-06	352 EX	9	12														
Roger leBlanc				12														
Roch Bernier	32-65-04		5	12														
Daisy Broullette	32-58-17	745 wiggle			4	6												
	ART-008	740 wiggle			3	6												

Management Code	Activity Description
3204	Excavate Key trench, place 0-¾ material maintain pumps and hoses.
3301	Haul 6" material from Crusher to 110 laydown stockpile.
3802	Survey WRP pond.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-Francois Caron weather: Foggy Date: 1-10-19 Shift: N

Management Code			3204		WRP				Standby								total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-FrancoisCaron	19-0037	Pickup			13	13												
Mark Sheaa	19-0306	352			12	11.5												
Patrick Simard	325809	D6			12	11.5												
Sébastien [illegible]	325817	745			12	11.5												
Clarence Bleau	325824	745			12	11.5												
Benjamin Dyas									12									
SébastienArsenault									12									

Management Code	Activity Description
WRP.	→ 352 Loading at Dump. → D6 puschin muck at Bumper west side for make lift. → 745 Hauling muck at the Dump to pad west side need pass by the ring road.
	324 Down - Ext 005 Down - 349 Down.

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-02 | **Day Shift** | **Weather conditions: Foggy and Rainy 0°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PLACE LINER
EXCAVATOR WITH BUSTER WORKING IN THE KEYTRENCH TO REMOVE ICE AND PERMAFROST.
DIG OUT THE MATERIAL OUT OF THE KEYTRENCH AND PUT FINE BEDDING(0-3/4'') IN THE TRENCH.
ASSISTING MINE OPS WITH PUMP AND HOSES

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		68 060	36 940	105 000	M.T.	65%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**3730**	**3730**	**0**	**789**	**117**	**13**	
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	**0**	
325817	Haul Truck CAT 745	X		**3457**	**3460**	**3**	**389**	**2**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3512**	**3517**	**5**	**251**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3777**	**3777**	**0**	**172**	**0**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-02	Night Shift	Weather conditions: Cloudy and Rainy 0°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WORKING ON LIFT #8 ON NORTH BERM.
EXCAVATOR 352 (SANA) LOADING TRUCKS, 2 TRUCKS HAULING AND DOZER D6 PUSHING ROQ ON THE BERM.
ASSISTING MINE OPS WITH PUMP AND HOSES.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	896	68 956	36 044	105 000	M.T.	66%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	3730	3730	0	789	117	13	
326511	Excavator CAT 349		X	4757	4757	0	681	113	0	
325817	Haul Truck CAT 745	X		3460	3467	7	396	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3517	3524	7	255	0	0	WORK ON WRP
327308	Dozer D6	X		3777	3777	0	172	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-10-02	WORK SHUTDOWN A 3AM DUE TO FOG AND LOW VISIBILITY. SAFETY ISSUE.	2

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Fog/rain Date: OCT 2/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pickup	1	13														
Simon Lavoie	19-0036	pick up	1	12														
Tim Tobin	19-03-06	352 excavator	9	12														
Roch Bernier				12														
Claude Savoie	32-58-17	745 wiggle	10	12														
Roger LeBlanc				12														
Daisy Broullette	32-58-24	745 wiggle	1	12														

Management Code	Activity Description
3204	Excavate Key trench Place liner maintain Pumps/hoses.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Jean-Francois Caron weather: Foggy cloudy Date: 2-10-19 Shift: N

Management Code			3204		WRP				Standby								total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Jean-FrancoisCaron	19-0032	Pickup			13	13												
SébastienAsselin	19-0306	350			12	11.5												
Patrick Simard	327308	D6			12	11.5												
Sébastien Lafontaine	325817	745			12	11.5												
Benjamin Dupuis	325824	745			12	11.5												
mark Shear									12									
clarence Brear.							/		12									

Management Code	Activity Description
WRP	D352 Loading at the waste Dump. D D6 Pusching muck at the pad west side. D 745 Hauling muck at waste Dump to pad west side.
	close shift at 3h00 Because to much fog I am Stay
	Stanby and the fog is living. 3h30 but I am stop at 3h30 for (
	the last shif need time for gogs put the PPE in the seacan.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-04 | Day Shift | Weather conditions: SNOW -8°c | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

PLACE LINER
MOVING PUMP TO CLEAN THE POND.
MOVING ROLL OF LINER TO CLEAN THE POND.
HAULING 0-3/4'' FROM CRUSHER TO THE POND. (12 LOAD / 384 TONS)
HAULING 6'' (RIP RAP) FROM CRUSHER TO THE 110 LAYDOWN. (6 LOAD / 192 TONS)
WORKING ON LIFT #8 OF THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	358	69 314	35 686	105 000	M.T.	66%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**3730**	**3730**	**0**	**789**	**117**	**13**	
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	**0**	
325817	Haul Truck CAT 745	X		**3467**	**3473**	**6**	**395**	**2**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3524**	**3533**	**9**	**260**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3777**	**3777**	**0**	**172**	**0**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-04	Night Shift	Weather conditions: SNOW -10°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WORKING ON LIFT #8 OF THE NORTH BERM. EXCAVATOR 352 LOADING TRUCK / 3 TRUCKS HAULING / DOZER D6 PUSHING THE ROQ ON THE LIFT.
CLEANING UP BOLDER AT THE WASTE DUMP, AT THE THE ROQ PILE TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	1152	70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	3730	3730	0	789	117	13	
326511	Excavator CAT 349		X	4757	4757	0	681	113	0	
325817	Haul Truck CAT 745	X		3473	3483	10	405	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3533	3543	10	270	0	0	WORK ON WRP
327308	Dozer D6	X		3785	3794	9	181	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BLASTED ROCK	RUN OUT OF ROQ AT THE WASTE DUMP AT 2AM, SUPERVISOR CALL MINE OPS TO GET MORE BUT THEY HAVE NO TIME.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -7 snow Date: october 4, 2019 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M Bussières	19-0037	Pick Up		13														
Patricia F. Belanger	385817	CAT 745	6	12														
Valerie Cloutier	Act 008	Act 008	4	12														
Yan Martel Larouche	325824	CAT 745	9	12														
Jason Fortier				12														
Gabriel Paré	19 03 06	CAT 352	8	12														
Jeremy Ball	19-0036	Pick Up		12														

Management Code	Activity Description
3204	-Hauling Rog on north berm Northwest side of it -move water pump out of pond and ditch
	- move roll of liner from bottom of pond to south berm -move oversize rock on waste dump (clean up) 745 740 352 745 for 3½ hr
	-haul 0¾ From 650 to wt road > 745 6 hr
	- haul 6" clear From 650 to 110 laydown >

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick Massicotte Weather: _____ Date : 4-10-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	19-0037	Pick up																
Eric Hebert	190306	CAT 352	9	12														
Bobby Joseph Baldwin	327308	D6	9	12														
Christian Massecar	325817	CAT 745	10	12														
Marco Tremblay	325824	CAT 745	9	12														
Kevin Mailhot	ART008	CAT 740	9	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick MASSETTE Weather: _____ Date : 4-10-19 Shift : Night

Management Code	Activity Description
3204	Loading and Hauling Muck From Dump TO Pond

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-05 | **Day Shift** | **Weather conditions: SNOW -5°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

MOVING PUMP TO CLEAN THE POND.
MOVING ROLL OF LINER TO CLEAN THE POND.
HAULING 0-3/4'' FROM CRUSHER TO THE POND. (12 LOAD / 384 TONS)
HAULING 6'' (RIP RAP) FROM CRUSHER TO THE 110 LAYDOWN. (6 LOAD / 192 TONS)

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**3730**	**3730**	**0**	**789**	**117**	**13**	
326511	Excavator CAT 349		X	**4757**	**4757**	**0**	**681**	**113**	**0**	
325817	Haul Truck CAT 745	X		**3483**	**3488**	**5**	**400**	**2**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3543**	**3552**	**9**	**269**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3794**	**3803**	**9**	**281**	**0**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BLASTED ROCK	NO MORE ROQ AT THE WASTE DUMP. MINE OPS CAN'T HAUL BECAUSE THE WEATHER AND ROAD CONDITION ARE TOO BAD.
SAFETY	WE NEED TO PLAN SOMETHING FOR THE MAINTENANCE OF THE ROAD CONDITION. ROADS ARE REALLY SLIPERY AND SNOWY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-05	Night Shift	Weather conditions: SNOW -6°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING 0-3/4'' FROM CRUSHER TO WASTE DUMP / HAULING 6'' CLEAR FROM CRUSHER TO 110 LAYDOWN.
CLEANING UP BOLDER AT THE WASTE DUMP, AT THE THE ROQ PILE TO MAKE ROOM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	1152	70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT				HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	3730	3730	0	789	117	13	
326511	Excavator CAT 349		X	4757	4757	0	681	113	0	
325817	Haul Truck CAT 745	X		3488	3494	6	406	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3552	3559	7	276	0	0	WORK ON WRP
327308	Dozer D6	X		3803	3808	5	286	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BLASTED ROCK	NO MORE ROQ AT THE WASTE DUMP. MINE OPS CAN'T HAUL BECAUSE THE WEATHER AND ROAD CONDITION ARE TOO BAD.
SAFETY	WE NEED TO PLAN SOMETHING FOR THE MAINTENANCE OF THE ROAD CONDITION. ROADS ARE REALLY SLIPERY AND SNOWY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -7 snow wind Date: 05/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia J. Belanger				12														
Valère Cloutier	Art 008	CAT 740	5	12														
Yan Martel Larouche	325824	CAT 745	10	12														
Manuel Arseneault	325817	CAT 745	6	12														
Jason Fortier	190306	CAT 352	10	12														
Gabriel Paré	~~[illegible]~~			12														
Mickaël Brassard	32-73-08		10	12														
Jeremy Ball				12														

couteau du d6
wiper du 740

Management Code	Activity Description
3204	- Remove Pump from emergencie ditch - try to move roller out of pond but to slipery
	and dangerous for labor cause of snow and wind - build berm on 660 pad to get ready to haul
	some Roa - haul 0 3/4 and 6" clear from crusher
	0 3/4 to wt road 6" clear to 110 lay-down
	-use the loader 906 for snow removal in the pond from 2:30 pm to 4:00 pm
Crusher	325824 10 hr hauling crush materiel
	325817 2 hr " " "

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 5-10-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13														
ERIC Hebert	190306	CAT 352	4	12														
Bobby Joseph Baldwin	327308	D6	5	12														
christian Massam	325817	CAT 745	6	12														
Kevin Mailois	ART 008	CAT 740	5	12														
MARCO Tremblay	325824	CAT 745	6	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASLOFF Weather: _____ Date : 5-10-14 Shift : Night

Management Code	Activity Description
3205	HAULING 6" clear FROM crusher TO 110 LAYDOWN
	HAULING 0 3/4 FROM CRUSHER TO POND
	clear DUMP OF Builder

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-06 | **Day Shift** | **Weather conditions: SNOW -7°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVING SNOW ON THE POUND WITH THE 906 LOADER AND BOTH EXCAVATOR 349 AND 352.
HELPING LAYFIELD WITH LINER INSTALLATION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3730**	**3730**	**0**	**789**	**117**	**13**	
326511	Excavator CAT 349	X		**4766**	**4769**	**3**	**684**	**113**	**0**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3494**	**3497**	**3**	**409**	**2**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3559**	**3562**	**3**	**279**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3808**	**3816**	**8**	**294**	**0**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BLASTED ROCK	NO MORE ROQ AT THE WASTE DUMP. MINE OPS CAN'T HAUL BECAUSE THE WEATHER AND ROAD CONDITION ARE TOO BAD.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-06	Night Shift	Weather conditions: SNOW -9°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

LOADING AND HAULING ROQ FROM 660 BENCH TO THE CRUSHER.
CLEANING SNOW IN THE POUND WITH 906 LOADER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3740	3749	9	798	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4769	4769	0	684	113	0	
325817	Haul Truck CAT 745	X		3497	3506	9	418	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3562	3564	2	281	0	0	WORK ON WRP
327308	Dozer D6	X		3816	3816	0	294	0	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BLASTED ROCK	NO MORE ROQ AT THE WASTE DUMP. MINE OPS CAN'T HAUL BECAUSE THE WEATHER AND ROAD CONDITION ARE TOO BAD.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -8 snow Frozing rain Fog Date: 06/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				14														
Patricia F. Bélanger	325817			13														
Valere Cloutier	Art 008		2	13														
Manuel Arseneault				13														
Yan Martel Larouche				13														
Jason Fortier		352 cat	10	13														
Gabriel Paré	326511		3	13														
Mickaël Brassard	327308		3	13														
Jeremy Ball				13														

Management Code	Activity Description
3204	906 loader remove snow on pond 5hrs
	-snow removal on pond 349 352
	-try to get ready to haul ROQ from 660 to waste dump Avoid project cause of bad weather
	-work on installing textil and liner inside pond
	-

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 6-10-19 Shift : NIGHT

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13														
ERIC HEBERT	326504	CAT 374	9	12														
Bobby Joseph Baldwin	282	CAT 906	8	12														
Christian Masseau	325817	CAT 745	8	12														
MARCO TREMBLAY	ART 13	CAT 740	8	12														
KEVIN MALLAIS	ART 008	CAT 740	8.5	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 6-10-19 Shift : Night

Management Code	Activity Description
3204	Loading and Hauling MUCK FROM 660 Bench TO DUMP clean SNOW ON POND
	ARTICULATE TRUCK 325824 WARNING code "Low Fuel Pressure"

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-07	Day Shift	Weather conditions: Sunny -9°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

REMOVING SNOW ON THE POUND AND IN THE KEYTRENCH.
HELPING LAYFIELD WITH LINER INSTALLATION.
PUMPING WATER IN THE KEYTRENCH.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 251	5 574	9 825	M^2	43%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3749**	**3758**	**9**	**807**	**117**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**4769**	**4778**	**9**	**693**	**113**	**0**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3506**	**3506**	**0**	**418**	**2**	**43**	
325824	Haul Truck CAT 745	X		**3564**	**3564**	**0**	**281**	**0**	**0**	
327308	Dozer D6	X		**3816**	**3817**	**1**	**295**	**0**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	SAFETY STAND DOWN HAS HAPPEN TO EXPLAIN THE SITUATION AT PORT SITE AND HOW WE CAN DO BETTER EVERYDAY ON SAFETY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-07	Night Shift	Weather conditions: Clear -6°c	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

EXCAVATION OF THE POND EXPANSION. EXCAVATE MUD AND BAD FOUNDATION AND FILL UP WITH ROQ.
HAULING MUD FROM POND TO WASTE DUMP AND ROQ FROM DUMP STOCKPILE TO POND.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	715	4 966	4 859	9 825	M^2	51%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	715	4 966	4 859	9 825	M^2	51%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3758	3768	10	817	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4778	4788	10	703	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3506	3516	10	428	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3564	3564	0	281	0	0	
327308	Dozer D6	X		3817	3817	0	295	0	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	SAFETY STAND DOWN HAS HAPPEN TO EXPLAIN THE SITUATION AT PORT SITE AND HOW WE CAN DO BETTER EVERYDAY ON SAFETY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -12 nice day Date: 07/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Belanger				12														
Valère Cloutier	Art013		7	12														
Manuel Arseneault				12														
Yan Martel Laroche				12														
Jason Fortier	326504		10	12														
Gabriel Paré	326511		9	12														
Mickael Brasard	327308		1	12														
Jeremy Ball				12														

Management Code	Activity Description
3204	-Snow removal 349 + 740 -Install Liner 394 + everybody else
	-Dozer move snow - Pumping water.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 7-10-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0037	Pick up		13														
ERIC Hebert	326504	CAT 374	11	12														
Bobby Baldwin	326511	CAT 349	10	12														
Kevin Mailais	ART008	CAT 740	10	12														
Christian Masseau	~~325817~~	CAT 745	10	12														
MARIO Tremblay	ART013	CAT 740	10	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 7-10-19 Shift : Night

Management Code	Activity Description
3204	Loading and Hauling OB from Pond To Dump Loading and Hauling Muck FROM Dump To Pond Remove water from Key

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-08 | **Day Shift** | **Weather conditions: Cloudy -5°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVING SNOW ON THE POUND AND IN THE KEYTRENCH.
HELPING LAYFIELD WITH LINER INSTALLATION.
HAULING ROQ FROM 660 BENCH TO THE WASTE DUMP STOCKPILE WITH 1 EXCAVATOR AND 2 TRUCKS.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		4 966	4 859	9 825	M^2	51%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		4 966	4 859	9 825	M^2	51%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3768**	**3779**	**11**	**828**	**117**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**4788**	**4797**	**9**	**712**	**113**	**0**	WORK ON WRP
325817	Haul Truck CAT 745	X		**3516**	**3520**	**4**	**432**	**2**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3564**	**3575**	**11**	**292**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3817**	**3819**	**2**	**297**	**0**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	SAFETY STAND DOWN HAS HAPPEN TO EXPLAIN THE SITUATION AT PORT SITE AND HOW WE CAN DO BETTER EVERYDAY ON SAFETY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-08 **Night Shift** **Weather conditions: Clear -7°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION OF THE POND EXPANSION. EXCAVATE MUD AND BAD FOUNDATION AND FILL UP WITH ROQ.
HAULING MUD FROM POND TO WASTE DUMP AND ROQ FROM DUMP STOCKPILE TO POND.
REMOVING SNOW IN THE KEYTRENCH

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	512	5 478	4 347	9 825	M^2	56%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	512	5 478	4 347	9 825	M^2	56%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3779	3789	10	838	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4797	4807	10	722	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3520	3530	10	442	2	43	WORK ON WRP
325824	Haul Truck CAT 745		X	3575	3575	0	292	0	0	
327308	Dozer D6	X		3819	3819	0	297	0	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	SMALL FIRE UN THE ENGINE CAB ON ART #325824. FIRE HAS BEEN CONTROLLED RIGHT AWAY AND MINE OPS SUPERVISER HAS BEEN CALLED RIGHT AFTER. AN INCIDENT REPORT HAS BEEN DONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -8 sunny Beautiful day Date: 08/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Belanger	325817		2	12														
Valère Cloutier	~~320~~ Art013		9	12														
Yan Larouche martel	325824		8	12														
Manuel Arseneault				12														
Jason Fortier	326504		10	12														
Gabriel Paré	326511		9	12														
Mickaël Brassard	327308		3	5														
Jeremy Ball																		
Mickaël Brassard	284		7	7														

Management Code	Activity Description
3204	-374 and Rock truck hauling from 667 to waste dump to stock pile ourself some ROQ
	- install liner - Labor for Layfield
	-snow removal

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 8-10-19 Shift : Night

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	19-0637	Pick-up		12														
	190306	CAT 352	1	1														
ERIC Hebert	326504	CAT 374	10	12														
Bobby Baldwin	326511	CAT 349	4.5	12														
Kevin Mallais	ART 013	CAT 740	10	12														
christian Massem	325817	CAT 745	~~0~~	12														
MARIO TRemblay	325817	CAT 745	4	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick Massicotte Weather: _____ Date: 8-10-19 Shift: Night

Management Code	Activity Description
3204	Loading and Hauling OB from pond to Dump Loading and Hauling Muck from Dump to Pond Clear the Key with CAT 352
	Truck 325824 Fire under the hood, wait for inspection Begin Toromount

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-09 **Day Shift** **Weather conditions: Cloudy -5°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVING SNOW ON THE POUND AND IN THE KEYTRENCH.
BACKFILL THE KEYTRENCH
HAULING ROQ FROM 660 BENCH TO THE WASTE DUMP STOCKPILE WITH 1 EXCAVATOR AND 2 TRUCKS.
HAULLING 0-3/4 TO NORTH KEY WAY AND STOCKPILE IT

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		5 478	4 347	9 825	M^2	56%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		5 478	4 347	9 825	M^2	56%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3789	3799	10	848	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4807	4817	10	732	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3530	3540	10	452	2	43	WORK ON WRP
325824	Haul Truck CAT 745		X	3575	3581	6	298	0	0	WORK ON WRP
327308	Dozer D6	X		3819	3820	1	298	0	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	SAFETY STAND DOWN HAS HAPPEN TO EXPLAIN THE SITUATION AT PORT SITE AND HOW WE CAN DO BETTER EVERYDAY ON SAFETY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-09 **Night Shift** **Weather conditions: Clear -7°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION OF THE POND EXPANSION. EXCAVATE MUD AND BAD FOUNDATION AND FILL UP WITH ROQ.
HAULING MUD FROM POND TO WASTE DUMP AND ROQ FROM DUMP STOCKPILE TO POND.
FINISH TO FILL UP THE EMERGENCY SPILLWAY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	450	5 928	3 897	9 825	M^2	60%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	450	5 928	3 897	9 825	M^2	60%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3799	3807	8	856	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4817	4825	8	740	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3540	3548	8	460	2	43	WORK ON WRP
325824	Haul Truck CAT 745		X	3581	3585	4	302	0	0	
327308	Dozer D6	X		3820	3820	0	298	0	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	SMALL FIRE UN THE ENGINE CAB ON ART #325824. FIRE HAS BEEN CONTROLLED RIGHT AWAY AND MINE OPS SUPERVISER HAS BEEN CALLED RIGHT AFTER. AN INCIDENT REPORT HAS BEEN DONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-349 remove snow from keyway and backfill it - Haul ~~gravel and~~ 3-6" clear to 110 From 650 crusher pad
	- Haul gravel to North key way and stockpile on WT Road - Haul ROQ From 667 to waste dump stockpile
	- work on C can

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -8 wind and fog Date: 09/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia T. Belanger	325817		10	12														
Valère Cloutier				12														
Manuel Arseneault	Art013		10	12														
Mikaël Brassard	327308		2	12														
Yan Martel Laroche	325824		5	12														
Jason Cartier	326504		10	12														
Gabriel Paré	326511		11	12														
Jeremy Ball				12														

Need a truck pre ops

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 9-10-19 Shift : NIGHT

Management Code	Activity Description
3204	Loading and Hauling OB FROM Pond To Dump Loading and Hauling Muck FROM DUMP To Pond
	Finish To Fill UP The emergency spillway
	TRuck 325824 Have A WARNING code ON, TOTOMONT come and say NOT USE iT before They FIX iT

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick Massicotte Weather: _____ Date : 9-10-19 Shift : Night

Management Code			3204																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	19-0037	Pick up		13																
Eric Hebert	326504	CAT 374	8	12																
Bobby Baldwin	326511	CAT 349	8	12																
Christian Masseau	325817	CAT 745	8	12																
Kevin Mallais	ART013	CAT 740	8	12																
Marco Tremblay	325824	CAT 745	4	12																

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-10 | **Day Shift** | **Weather conditions:** BLIZARD -5°c | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOWSTORM, MINE ROAD IS CLOSE
BEGIN SNOW REMOVAL AT END OF SHIFT WHEN THEY OPEN THE ROAD
HAUL 0-6'' OUT OF 650 BENCH

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		5 928	3 897	9 825	M^2	60%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		5 928	3 897	9 825	M^2	60%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3807	3807	0	856	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4825	4825	0	740	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3548	3549	1	461	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3585	3587	2	304	0	0	WORK ON WRP
327308	Dozer D6	X		3820	3820	0	298	0	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	SAFETY STAND DOWN HAS HAPPEN TO EXPLAIN THE SITUATION AT PORT SITE AND HOW WE CAN DO BETTER EVERYDAY ON SAFETY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-10 **Night Shift** **Weather conditions: Clear -7°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION OF THE POND EXPANSION. EXCAVATE MUD AND BAD FOUNDATION AND FILL UP WITH ROQ.
SNOW REMOVAL INSIDE AND AROUND THE POUND

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	525	6 453	3 372	9 825	M^2	66%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	525	6 453	3 372	9 825	M^2	66%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3807	3817	10	866	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4825	4835	10	750	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3549	3559	10	471	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3587	3597	10	314	0	0	
327308	Dozer D6	X		3820	3820	0	298	0	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	SMALL FIRE UN THE ENGINE CAB ON ART #325824. FIRE HAS BEEN CONTROLLED RIGHT AWAY AND MINE OPS SUPERVISER HAS BEEN CALLED RIGHT AFTER. AN INCIDENT REPORT HAS BEEN DONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Stand by at the base. Went up at 1:30pm -Remove snow
	- Haul crush from crusher pad to 110 laydown
	-snow and wind was steady

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -3 storm in the morning Date: 10/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia f. Belanger				12														
Manuel Arseneault	325817		1	12														
Yan Martel Larouche	Art013		2	12														
Valère Cloutier				12														
Jason Cloutier				12														
Gabriel Cloutier	284		2	12														
Dave Lanoix	327308		±2	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick MASSICOTTE Weather: _____ Date : 10-10-19 Shift : Night

Management Code	Activity Description
3204	Loading and Hauling Material OB From POND TO Dump Loading and Hauling Muck FROM Dump To POND
	Remove SNOW and SPRAY Material ON POND Road Remove SNOW ON slop and POND
	* TRUCK 325817 when switch gear From 3 TO 4 KNOCK HARD

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: PATRICK MASSICOTTE Weather: _____ Date : 10-10-19 Shift : Night

Management Code																			
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		8														
" "	120201	CAT 980	2	2														
" "	239	CAT 908	3	3														
ERIC HEBERT	326504	CAT 374	10	12														
BOBBY BALDWIN	326511	CAT 349	10	12														
CHRISTIAN MASSEAU	325817	CAT 745	10	12														
MARIO TREMBLAY	325824	CAT 745	10	12														
KEVIN MALLAIS	ART 013	CAT 740	9.5	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-11 **Day Shift** **Weather conditions: Cloudy -5°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL
WATER REMOVAL ON SOUTH KEYWAY AND TRIM IT WITH ROQ
LINER INSTALLAITON AND HELP
HAUL AGREGATE 0-6'' FORM CRUSHER TO 110 LAYDOWN

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		6 453	3 372	9 825	M^2	66%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		6 453	3 372	9 825	M^2	66%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3817	3822	5	871	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4835	4842	7	757	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3559	3559	0	471	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3597	3603	6	320	0	0	WORK ON WRP
327308	Dozer D6	X		3820	3825	5	303	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	SAFETY STAND DOWN HAS HAPPEN TO EXPLAIN THE SITUATION AT PORT SITE AND HOW WE CAN DO BETTER EVERYDAY ON SAFETY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-11 **Night Shift** **Weather conditions: Clear -7°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	500	6 953	2 872	9 825	M^2	71%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	500	6 953	2 872	9 825	M^2	71%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3822	3822	0	871	117	13	Down for DEF pump (TOROMONT is advise and work on it)
326511	Excavator CAT 349	X		4842	4852	10	767	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3559	3570	11	482	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3603	3613	10	330	0	0	WORK ON WRP
327308	Dozer D6	X		3825	3825	0	303	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	SMALL FIRE UN THE ENGINE CAB ON ART #325824. FIRE HAS BEEN CONTROLLED RIGHT AWAY AND MINE OPS SUPERVISER HAS BEEN CALLED RIGHT AFTER. AN INCIDENT REPORT HAS BEEN DONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	- Snow removal - water removal on south key way, and trim it with ROC
	- Install liner
	- Haul crush from crusher to 110 laydown and waste dump

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -3 cloudy Date: 11/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussieres				13														
Patricia F. Belanger				12														
Valère Cloutier	Art 013		8	12														
Manuel Arseneault	284		1	12														
Yan Martel Larouche	325824		6	12														
Jason Fortier	326504		5	12														
Gabriel Paré	326511		7	12														
Dave Lanoix	327308		2	12														
Dave Lanoix	12-0201		5															

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Patrick Massicotte Weather: _____ Date : 11-10-19 Shift : Night

Management Code	Activity Description
3204	Loading and Hauling OB From Pond To Dump
	Loading and Hauling Muck From Dump To Pond
	we use Loader CAT980 For load Muck at the Dump because we Have only one excavator # 326SH working
	excavator # 326504 down For the night

Management Code	Activity Description
3204	- Snow removal - water removal on south key way, and trim it with ROC
	- Install liner
	- Haul crush from crusher to 110 laydown and waste dump

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -3 cloudy Date: 11/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussieres				13														
Patricia f. Belanger				12														
Valère Cloutier	Art 013		8	12														
Manuel Arseneault	284		1	12														
Yan Martel Larouche	325824		6	12														
Jason Fortier	326504		5	12														
Gabriel Paré	326511		7	12														
Dave Lanoix	327308		2	12														
Dave Lanoix	12-0201		5															

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-12 **Day Shift** **Weather conditions: Cloudy -5°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	350	7 303	2 522	9 825	M^2	74%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	350	7 303	2 522	9 825	M^2	74%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	**X**		**3822**	**3826**	**4**	**875**	**117**	**13**	WORK ON WRP
326511	Excavator CAT 349	**X**		**4852**	**4862**	**10**	**777**	**113**	**0**	WORK ON WRP
325817	Haul Truck CAT 745	**X**		**3570**	**3579**	**9**	**491**	**2**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	**X**		**3613**	**3623**	**10**	**340**	**0**	**0**	WORK ON WRP
327308	Dozer D6	**X**		**3825**	**3825**	**0**	**303**	**0**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
SAFETY	SAFETY STAND DOWN HAS HAPPEN TO EXPLAIN THE SITUATION AT PORT SITE AND HOW WE CAN DO BETTER EVERYDAY ON SAFETY.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-12 **Night Shift** **Weather conditions: Clear -7°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	375	7 678	2 147	9 825	M^2	78%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	375	7 678	2 147	9 825	M^2	78%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3826	3836	10	885	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4862	4872	10	787	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3579	3589	10	501	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3623	3633	10	350	0	0	WORK ON WRP
327308	Dozer D6	X		3825	3825	0	303	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	SMALL FIRE UN THE ENGINE CAB ON ART #325824. FIRE HAS BEEN CONTROLLED RIGHT AWAY AND MINE OPS SUPERVISER HAS BEEN CALLED RIGHT AFTER. AN INCIDENT REPORT HAS BEEN DONE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Remove snow -spread gravel on road
	-dig on existing pond and place ROQ -Install liner
	-Toromont work on 374 about all day -~~[illegible]~~ He work on 745 325824 about 1hrs
	Allan tell me not to follow drawing for final grade
	key way. Instead of using 3/4 crush all the way we have to go at least 100mm of 3/4 on liner and then ROQ

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -9 fog sun cloud Date: 12/10/14 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia f. Bélanger	325817	CAT 745	10	12														
Valère Cloutier	326511	CAT 349		12														
Yan Martel Laroche				12														
Manuel Arseneault	325824	CAT 745		12														
Jason Cartier			7	12														
Gabriel Paré	120201		9	12														
Dave Lanoix	327308	D6	10	12														

1- Loading and Hauling OB from Pond to Dump

2- Loading and Hauling Muck from Dump to Pond

3- Sand Road and Ramp on Pond

4- Remove snow on slope and Pond for Liner

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 12-10-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	19 0037	Pick up		11														
" "	239	CAT 908	2	2														
Eric Hebert	326504	CAT 374	10	12														
Bobby Baldwin	326511	CAT 349	10	12														
Marco Tremblay	325824	CAT 745	10	12														
Kevin Mallais	325817	CAT 745	10	12														
Christian Masseau	120201	CAT 980	9	12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-13 **Day Shift** **Weather conditions: Cloudy -5°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY
HELP LINER CREW

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	350	8 028	1 797	9 825	M^2	82%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	350	8 028	1 797	9 825	M^2	82%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3836	3846	10	895	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4872	4882	10	797	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3589	3599	10	511	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3633	3643	10	360	0	0	WORK ON WRP
327308	Dozer D6	X		3835	3842	7	320	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Liner -Remove snow
	-dig existing south pond and backfill -expose liner by hand for a small fix
	-Loader from mine came and move liner out of our way and we help
	-had to keep a loader sanding road all day -was supose to have Moe haul to us but nothing happened of almost out

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussieres weather: -8 snow start around 11:00 Date: 13/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Belanger	325817		10	12														
Valère Cloutier	Art 014		3	12														
Manuel Arseneault	12-0201		9	12														
Jason Fortier	326504		10	12														
Gabriel Paré	32-65-11		10	12														
Dave Lanoix	327308		7	12														
Anthony Leguen				12														
Yan Martel Carouche	325824		10	12														
~~X~~ Forget Anthony since is first day Friday																		

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 13-10-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	19-0037	Pick up		13														
Eric Hebert				12														
Bobby Baldwin				12														
christian Masseau				12														
Marco Tremblay				12														
Kevin Mallais				12														

* No work Bad weather Mountain is close

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-15 **Day Shift** **Weather conditions:** Cloudy -5°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

#

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	200	8 128	1 697	9 825	M^2	83%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	200	8 128	1 697	9 825	M^2	83%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3866	3877	11	926	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4901	4909	8	824	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3603	3603	0	515	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3659	3669	10	386	0	0	WORK ON WRP
327308	Dozer D6	X		3845	3845	0	323	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-15 | **Night Shift** | **Weather conditions: Cloudy -7°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	100	8 228	1 597	9 825	M^2	84%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	100	8 228	1 597	9 825	M^2	84%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3877	3887	10	936	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4909	4913	4	828	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3603	3603	0	515	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3669	3679	10	396	0	0	WORK ON WRP
327308	Dozer D6	X		3845	3845	0	323	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
13-10-2019	MOUNTAIN CLOSE FOR THE NIGHT	12

Management Code	Activity Description
3204	- Pick up ART 005 from maintenance at 8:30 - Haul ROQ from Waste dump to south existing pond
	- ~~remove~~ Park Art 005 At 10:40 - Have a flat tire around 7:00 am, have been fix around 11:30
	- run out of ROQ at around 12:00 -switch to 0 3/4, finish the pad at around 3:30
	- ~~Ask~~ Ask the mine supervisor this morning for ROQ and he told me as soon as I need some to send my truck to
	660 to get load by their loader. - I try that at 3:30 and be told that it is not their
	priority at that time at 110 -so I ~~start~~ move an excavator ~~there~~ and remove snow to be ready to load 0 to 6" at the 110 like allan ask
	- Load 2 load OF 0 to 6" at the end of shift - 349 Blow Quick attach hose at 5:15pm

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -10 snow little bit of fog Date: 15/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger	Art 005		1	12														
Valère Cloutier	Art 014	CAT 740	10	12														
Yan Martel Larouche	32-58-24	CAT 745	10	12														
Manuel Arseneault	12-0201	CAT 980	11	12														
Jason Fortier	32 65 04	CAT 374	10	12														
Gabriel Paré	32 65 11	CAT 349	8	12														
Anthony LeGuen				12														
Dave Lanoix				12														

Management Code	Activity Description
3204	Hauling and Loading OB FROM POND TO DUMP Loading and Hauling 0-6" FROM ILO TO POND Autorized by Allen
	Loading and Hauling MUCK FROM DUMP TO POND
	EXCAVATOR 326GH CAT 349 DOWN FOR All Night Toromont suppose Fix iT
	For the Day SHIFT

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: _____ Date: 15-10-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		13														
ERIC Hebert	326504	CAT 374	10	12														
Bobby Baldwin	3265 11	CAT 349	2.5	3														
	190306	CAT 352	2	9														
MARC Tremblay	325824	CAT 745	10	12														
Kevin Malais	A2T014	CAT 740	10	12														
christian Masseau	120201	CAT 980	9	12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-16 **Day Shift** **Weather conditions:** Cloudy -15°c **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

#

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY
INSTALL LINER
PUMP WATER
HAUL 0-6'' FROM CRUSHER PAD TO 110 LAYDOWN

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	200	8 428	1 397	9 825	M^2	86%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	200	8 428	1 397	9 825	M^2	86%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3887	3896	9	945	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4913	4918	5	833	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3603	3613	10	525	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3679	3688	9	405	0	0	WORK ON WRP
327308	Dozer D6	X		3845	3856	11	333	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-16 **Night Shift** **Weather conditions: Cloudy -16°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE AND AROUND THE POUND
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	200	8 628	1 197	9 825	M^2	88%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	200	8 628	1 197	9 825	M^2	88%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3896	3905	9	954	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4918	4921	3	836	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3613	3622	9	534	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3688	3696	8	413	0	0	WORK ON WRP
327308	Dozer D6	X		3856	3856	0	333	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
13-10-2019	MOUNTAIN CLOSE FOR THE NIGHT	12

Management Code	Activity Description
3204	-Backfill bottom of pond 374, D6, 2x 745, D40 start around 9:30 -Remove snow from 7am to 9:30
	-Install liner -Install, operate and remove pump from pond to remove water underneath new liner -Ask DEF Tub to Alan
	-toromont work on 349, 325817, and D6 -move tower light around and carry sand bag for Layfield

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -15 nice day Date: 16/10/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Bebanger		325817	9	12														
Valère Cloutier		Art 014	9	12														
Yan Martel Larouche		325824	9	12														
Manuel Arseneault		120201	1	12														
Jason Fortier		326504	10	12														
Gabriel Paré		190306	10	12														
Anthony Le Guen				12														
Dave Lanoix		32-73-08		12														
Gabriel Paré		284	2															

Management Code	Activity Description
3204	Loading and Hauling OB FROM POND TO DUMP Loading and Hauling MUCK FROM DUMP TO POND
	Site service come take 349 For a Job on the Pit So I use 352

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 16-10-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	190037	Pickup		13														
Eric Hebert	326504	CAT 374	9	12														
Bobby Baldwin	326511	CAT 349	2	3														
" "	190306	CAT 352	8	9														
Kevin Mailais	ART014	CAT 740	8	12														
Christian Masseau	325817	CAT 745	8	12														
Mario Tremblay	325824	CAT 745	8	12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-17 **Day Shift** **Weather conditions: SUNNY -15°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

#

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE KEY
SPREAD GRAVEL ON THE ROAD BECAUSE IT IS SLIPERY
INSTALL LINER
PUMP WATER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		12 849	4 881	17 730	M^2	72%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	200	8 828	997	9 825	M^2	90%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	200	8 828	997	9 825	M^2	90%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3905	3913	8	962	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4926	4934	8	849	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3622	3631	9	542	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3696	3704	8	421	0	0	WORK ON WRP
327308	Dozer D6	X		3856	3857	1	334	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-17 **Night Shift** **Weather conditions: CLEAR -16°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE KEY
FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	100	12 949	4 781	17 730	M^2	73%	
INTERNAL BERM PROFILING		342	81	423	LIN.M.	81%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		305	118	423	LIN.M.	72%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 232	893	9 125	M^2	90%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	100	8 928	897	9 825	M^2	91%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	100	8 928	897	9 825	M^2	91%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3913	3924	11	973	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4934	4944	10	859	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3631	3633	2	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3704	3713	9	430	0	0	WORK ON WRP
327308	Dozer D6	X		3857	3857	0	334	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
13-10-2019	MOUNTAIN CLOSE FOR THE NIGHT	12

Management Code	Activity Description
3204	Continued fixing bedding with ROQ
Liner.	Used The 352 for cleaning The key and installing geotextile and liner.
Liner	The crew stop hauling materiel inside The pound To help pulling geotextile and liner.
	ART-014 down Leak. Brought The Truck down To The shop.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: Sunny -10 Labor Survey Date: 17/10/2019 Shift: D

Management Code			3204		Liner												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Dave Landry	327308	D-6T	10	9		3												
Timothy Tobin	326511	349	10	12														
Rock Bernier	326504	374	10	12														
Roger Leblanc	284	908	10	9		3												
Dalfie Brouillette	ART 14	740		9		3												
Claude Savoie	32-5817	745	10	9		3												
Yan Martel	325824	745	10	9		3												
Michael Brassard	19-03-06	350			10	12												
Anthony LeGuen	19-0036	Pick-up	12					12										

Management Code	Activity Description
3204	load, haul, Place ROQ in pond load, haul, Place 0-3" in pond Remove snow from south anchor Rey

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: wind Date: OCT 17/2019 Shift: night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Clarence Breau	19-0036	Pick up	1	13														
Patrick Simard	DZR-01	D6 Dozer	11	13														
Benjamin Dupuis	32-58-24	745 wiggle	8	13														
Sabastien Lafontaine	32-58-17	745 wiggle	2	13														
Mark Shears	32-65-11	349 Ex	9	13														
Sabastien Arsenault	32-65-04	374 EX	9	13														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-18 **Day Shift** **Weather conditions: SUNNY -15°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

#

DAILY ACTIVITIES

EXCAVATION AND BACKFILL OF THE POUND EXTENSSION BUTTOM
SNOW REMOVAL INSIDE KEY AND POUND
FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND
INSTALL LINER
BACKFILL OF THE NORTHSIDE KEY WHERE LINER IS DONE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	200	13 149	4 581	17 730	M^2	74%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION	300	9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION	300	9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3924	3934	10	983	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4944	4953	9	868	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3713	3723	10	440	0	0	WORK ON WRP
327308	Dozer D6	X		3857	3867	10	343	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-18 **Night Shift** **Weather conditions: CLEAR -16°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND
SNOW REMOVAL INSIDE pound

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	500	13 649	4 081	17 730	M^2	77%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3934	3941	7	990	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4953	4961	8	876	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3723	3731	8	448	0	0	WORK ON WRP
327308	Dozer D6	X		3867	3877	10	353	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
13-10-2019	MOUNTAIN CLOSE FOR THE NIGHT	12

Management Code	Activity Description
3204	Continue pushing for the bedding at the bottom of the ponds. Also cleanning snow on the side of the
	slope. We packed also the section with 0-3/4..
Liner	We backfill the key where the liner had been installed. we also remove the small section of Ramp left and also
	~~the~~ reshaped the key close To That ramp.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: Sunny -11 Date: 18-10-19 Shift: D

Management Code			3204		Liner		Survey										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Michael Brassard	19-0306	352				12												
Dave Lanoix	327308	D-6T	10	12														
Timothy Tobin	326511	349	10	12														
Rock Bernier	326504	374	10	12														
Roger Leblanc	RLB002	Packer		12														
Yan Martel	325817	745	10	12														
Daysie Brouillette	ART 14	740	6	12														
Claude Savoie				6		6												
Anthony LeCouen	19-0036	Pick-up					12	12										

Management Code	Activity Description
3204	load, haul, place 0-¾ Stone in pond Remove Snow from pond.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: clear Date: OCT 18/19 Shift: night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Clarence Breau	19-0036	pick up	1	12														
Sabastian Lafontaine	ART-014	740 wiggle	7	12														
Patrick Simard	32-73-08	D6 Dozer	6	12														
Sabastian Arseneault	32-65-04	374 Ex	7	12														
Benjamen Dupuis	32-58-24	745 wiggle	7	12														
Mark Shears	32-65-11	349 EX	8	10														
" "	19-03-06	352 EX	2	2														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-18 **Day Shift** **Weather conditions: SUNNY -15°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

#

DAILY ACTIVITIES

FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND
SPREAD THE BURM INSIDE THE POUND
HELP LINER CREW FOR LINER
BACKFILL THE KEY AS THE LINER GOES
CLEAN THE WASTE DUMP WITH DOZER TO MAKE ROOM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	200	13 849	3 881	17 730	M^2	78%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3941	3949	8	998	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4961	4972	11	887	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3731	3741	10	458	0	0	WORK ON WRP
327308	Dozer D6	X		3877	3887	10	363	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-18 **Night Shift** **Weather conditions: CLEAR -16°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND
SPREAD THE BURM INSIDE THE POUND
CLEAN THE WASTE DUMP WITH DOZER TO MAKE ROOM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	200	14 049	3 681	17 730	M^2	79%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3949	3949	0	998	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4972	4982	10	897	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3741	3751	10	468	0	0	WORK ON WRP
327308	Dozer D6	X		3887	3896	9	372	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
13-10-2019	MOUNTAIN CLOSE FOR THE NIGHT	12

Management Code	Activity Description
3204 Pond	Continued removing the berm in the middle of pond. Continued pushing 0-314 on the bedding.
	Sended the doger cleanning the dump To make some room
liner.	Help The liner crew and brought some geotextile. start back filling The key with 0-314
	Checked The key south side with Roger Doyle To show him a section where The angle of slope is not as steep
	as it should be. He said that is ok and Took some picture.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Andre Desmeules weather: Cloudy -10 Date: 19-10-19 Shift: D

Management Code			3204		Liner		Survey										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Dave Landry	327303	D-6T	10	12														
Rock Bernier	326504	374	8	12														
Roger Leblanc	12-0201	980	9	12														
Daisy Brouillette	ART-14	740	10	12														
Yan Martel	32-58-24	745	10	12														
Michael Brassard	19-0306	352			9	12												
Claude Savoie				4		8												
Anthony LeGuen	19-0036	Pick-up					12	12										

Management Code	Activity Description
3204	-Remove Berm and Snow from ~~[illegible]~~ pond. - place 0-¾ in pond - Build Safety Berm around dump site from pond.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Blowing Snow Date: OCT 19/2019 Shift: night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Clarence Breau	19-0036	pick up	1	12														
Mark Shears	32-65-11	349 Ex	10	12														
Sebastian Arseneault	12-02-01	980 loader	4	8														
" "	19-03-06	352 EX	3	4														
Patrick Simard	32-73-08	D6 Dozer	9	12														
Benjamen Dupuis	32-58-24	745 wiggle	10	12														
Sebastien Lafontaine	ART-014	740 wiggle	9	12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-18 **Day Shift** **Weather conditions: SUNNY -15°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

#

DAILY ACTIVITIES

FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND
SPREAD THE BURM INSIDE THE POUND
HELP LINER CREW FOR LINER
BACKFILL THE KEY AS THE LINER GOES
CLEAN THE WASTE DUMP WITH DOZER TO MAKE ROOM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	200	13 849	3 881	17 730	M^2	78%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3941	3949	8	998	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4961	4972	11	887	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3731	3741	10	458	0	0	WORK ON WRP
327308	Dozer D6	X		3877	3887	10	363	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-18 **Night Shift** **Weather conditions: CLEAR -16°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND
SPREAD THE BURM INSIDE THE POUND
CLEAN THE WASTE DUMP WITH DOZER TO MAKE ROOM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	200	14 049	3 681	17 730	M^2	79%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3949	3949	0	998	117	13	WORK ON WRP
326511	Excavator CAT 349	X		4972	4982	10	897	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3741	3751	10	468	0	0	WORK ON WRP
327308	Dozer D6	X		3887	3896	9	372	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
13-10-2019	MOUNTAIN CLOSE FOR THE NIGHT	12

Management Code	Activity Description
3204 Pond	Continued removing the berm in the middle of pond. Continued pushing 0-314 on the bedding.
	Sended the doger cleanning the dump To make some room
liner.	Help The liner crew and brought some geotextile. start back filling The key with 0-314
	Checked The key south side with Roger Doyle To show him a section where The angle of slope is not as steep
	as it should be. He said that is ok and Took some picture.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Andre Desmeules weather: Cloudy -10 Date: 19-10-19 Shift: D

Management Code			3204		Liner		Survey										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Dave Landry	327303	D-6T	10	12														
Rock Bernier	326504	374	8	12														
Roger Leblanc	12-0201	980	9	12														
Daisy Brouillette	ART-14	740	10	12														
Yan Martel	32-58-24	745	10	12														
Michael Brassard	19-0306	352			9	12												
Claude Savoie				4		8												
Anthony LeGuen	19-0036	Pick-up					12	12										

Management Code	Activity Description
3204	-Remove Berm and Snow from ~~[illegible]~~ pond. - place 0-¾ in pond - Build Safety Berm around dump site from pond.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Blowing Snow Date: OCT 19/2019 Shift: night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Clarence Breau	19-0036	pick up	1	12														
Mark Shears	32-65-11	349 Ex	10	12														
Sebastian Arseneault	12-02-01	980 loader	4	8														
" "	19-03-06	352 EX	3	4														
Patrick Simard	32-73-08	D6 Dozer	9	12														
Benjamen Dupuis	32-58-24	745 wiggle	10	12														
Sebastien Lafontaine	ART-014	740 wiggle	9	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-20 **Day Shift** **Weather conditions: SUNNY -15°c** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

#

DAILY ACTIVITIES

FINAL BEDDING WITH 0-3/4'' INSIDE EXISTING POND
SPREAD THE BURM INSIDE THE POUND
SNOW REMOVAL, SNOWSTORM DAY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	200	14 049	3 681	17 730	M^2	79%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3949	3959	10	998	127	13	WORK ON MINE OPS
326511	Excavator CAT 349	X		4982	4982	0	897	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3751	3755	4	472	0	0	WORK ON WRP
327308	Dozer D6	X		3896	3898	2	374	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
20-10-2019	STOP WORKIN AT 12H for BLIZARD	6H

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-20 | **Night Shift** | **Weather conditions: CLEAR -16°c** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BLIZARD NO WORK DONE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 049	3 681	17 730	M^2	79%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3959	3959	0	998	127	13	WORK ON WRP
326511	Excavator CAT 349	X		4982	4982	0	897	113	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3755	3755	0	472	0	0	WORK ON WRP
327308	Dozer D6	X		3898	3898	0	374	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
20-10-2019	MOUNTAIN CLOSE FOR THE NIGHT BLIZARD	12

20-10-19

Management Code	Activity Description
3204	We hauled O-314 from 650 To WTRoad 2Trucks + 1 WA - 600 we pushed snow with D-6 and loader 908 around The WTP
	and pond.
Weather Delay	Some of The workers stayed at 110 laydown because of the bad weather.
Mine OPS	Sended The 374 and Timothy Tobin To work for Mine OPS in The Pit.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: Snow + wind Date: 20/10/19 Shift: D

Management Code			3204		Weather Delay		Mine ops		Survey								total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Michael Brassard	327308	D-6T	6	6		6												
Daisy Brouillette	ART-04	740	4	6		6												
Yan Martel	325824	745	4	6		6												
Roger Leblanc	#284	#908	6	6		6	—											
Dave Lanoix	15-0202	WA 600	4	4		8												
Rock Bernier						12												
Claude Savoie						12												
Timothy Tobin	326504	374					10	12										
Anthony LeCouen	19-0036	Pick-up					[redacted]	[redacted]	12	12								
[redacted] Savoie	[redacted]	[redacted]																

Weather Delay

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-22	Day Shift	Weather conditions: BLIZARD	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

#

DAILY ACTIVITIES

BLIZARD, NO WORK DONE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 049	3 681	17 730	M^2	79%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3959	3959	0	998	127	13	WORK ON WRP
326511	Excavator CAT 349	X		4988	4988	0	897	903	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3755	3755	0	472	0	0	WORK ON WRP
327308	Dozer D6	X		3898	3898	0	374	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
POUND EXTRA BACKFILL	WE RAN OUT OF ROQ TO BACKFILL POUND TOOTOM AND ALLAN ASK US TO TAKE 6'' MINUS TO DO IT

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
21-10-2019	BLIZARD ALL DAY	12H

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-22 **Night Shift** **Weather conditions: BLIZARD** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

MOUNTAIN CLOSE' NO WORK DONE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 049	3 681	17 730	M^2	79%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3959	3959	0	998	127	13	WORK ON WRP
326511	Excavator CAT 349	X		4988	4988	0	897	903	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3633	3633	0	544	2	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3755	3755	0	472	0	0	WORK ON WRP
327308	Dozer D6	X		3898	3898	0	374	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	BLIZARD 18H to 23H	HOURS LOST
21-10-2019	BLIZARD ALL NIGHT	12H

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-23 **Day Shift** **Weather conditions: Cloudy -2** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVE SNOW IN THE POND AND KEYTRENCH.
REMOVE THE REST OF THE TEMPORARY BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 049	3 681	17 730	M^2	79%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3968**	**3974**	**6**	**998**	**133**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**4989**	**5000**	**11**	**908**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745	X		**4463**	**4470**	**7**	**7**	**0**	**0**	WORK ON WRP
325817	Haul Truck CAT 745		X	**3633**	**3633**	**0**	**544**	**2**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3757**	**3766**	**9**	**481**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3898**	**3898**	**0**	**374**	**0**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-23 | **Night Shift** | **Weather conditions: Snow and wind -2** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVE SNOW IN THE POND AND KEYTRENCH.
LOAD, HAUL AND PLACE FINE BEDDING IN THE POND.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	287	14 336	3 394	17 730	M^2	81%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3974**	**3974**	**0**	**998**	**127**	**13**	WORK ON MINE OPS
326511	Excavator CAT 349	X		**5000**	**5010**	**10**	**918**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745	X		**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745		X	**3633**	**3633**	**0**	**544**	**2**	**43**	
325824	Haul Truck CAT 745	X		**3766**	**3775**	**9**	**490**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3898**	**3898**	**0**	**374**	**0**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	HAD TO USE OUR 352 EXCAVATOR BECAUSE MINE OPS WAS USING THE 374 IN THE PIT.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: Cloudy Date: 23/10/19 Shift: D

Management Code			3204		Liner		MineOps Survey										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Dave Lavoix	327308	D-6T	10	12														
Michael Brassard	D0701	D6	6	6														
Michael Brassard	19-0306	352																
Roger Leblanc	H284	908	10	12														
Rock Bernier	326504	374					10	12										
Yan Martel	325824	745	6	12														
Claude Savoie	325809	745	5	12														
Daysie Boivillette	ART14	740	5	12														
Anthony LeGuen	19-0036	Pick-up							12	12								
Philipe Mcgraw	15-0202	WA600					6	6										

Management Code	Activity Description
#3204	Cleaned The bottom of The pond and also removed The berm until we ~~re~~ hit The edge of The Liner
	We also cleaned The key from snow.
Mine OPS	394 with Rock Bernier worked in The Pit. WA 600 cleaned snow arourndM10 Laydown and also
	worked on the dump road.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Blowing Snow Date: OCT 23/19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Clarence Bizeau	19-0036	pick up	1	12														
Sabastien Lafontaine	ART-19	wiggle	5	12														
Sabastien Arseneault	19-03-06	352 Ex	11	12														
Mark Shears	32-65-01	349 EX	10	12														
Patrick Simard	DZR-01	D6 Dozer	9	12														
Benjamin Dupuis	32-58-24	wiggle	11	12														

Management Code	Activity Description
3204	- load, haul, place 0-¾ stone in pond. - Remove snow, expose liner.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-24 | **Day Shift** | **Weather conditions: Cloudy -2** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVE SNOW IN THE POND AND KEYTRENCH.
REMOVE THE REST OF THE TEMPORARY BERM.
ASSISTING LINER CREW IN SHOVELING SNOW.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 336	3 394	17 730	M^2	81%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3980**	**3990**	**10**	**1008**	**139**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5010**	**5020**	**10**	**928**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745	X		**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745		X	**3633**	**3633**	**0**	**544**	**2**	**43**	
325824	Haul Truck CAT 745	X		**3775**	**3784**	**9**	**490**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3898**	**3908**	**10**	**384**	**0**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-24 | **Night Shift** | **Weather conditions: Cloudy -8** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVE SNOW IN THE POND AND KEYTRENCH.
LOAD, HAUL AND PLACE FINE BEDDING IN THE POND.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")	355	14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3990	3998	8	1016	139	13	WORK ON WRP
326511	Excavator CAT 349	X		5020	5030	10	938	903	0	WORK ON WRP
325809	Haul Truck CAT 745	X		4470	4470	0	7	0	0	
325817	Haul Truck CAT 745		X	3633	3633	0	544	2	43	
325824	Haul Truck CAT 745	X		3784	3791	7	497	0	0	WORK ON WRP
327308	Dozer D6	X		3908	3916	8	392	0	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: Cloudy Date: 24/10/19 Shift: Day

Management Code			3204		Mine OPS												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Roger Leblanc	284	508	10	12														
Michael Brassard	DZR01	D-6.	6	12														
Claude Savoie	325824	~~325824~~	10	12														
Daisy Brouillette	ART 14	740	10	12														
Rock Bernier	326504	374			10	12												

Management Code	Activity Description
3204 Pond	With The liner crew and because The weather was not good for fusionning we exposed the liner and removed The leftover
	of The berm at The bottom of pond.
	The 349 Loaded Truck with ice - snow and liner and we send everything at The dump.
Mine OPS	The 394 and Rock Bernier ~~spended~~ worked all day for The mine in The pit.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Clear Date: Oct 24/19 Shift: Night

Management Code			3204		3201												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	7		6											1	13
Clarence Breau	19-0036	pick up	1														1	
" "	284	mini loader			10	12											10	12
Benjamen Dupuis	32-58-24	745 wiggle	5	10	2	2											7	12
Sabestian Arseneault	32-65-04	374 EX	7	12													7	12
Patrick Simard	32-73-08	D6 Dozer	6	10	2	2											8	12
Mark Shears	32-65-11	349 EX			10	12											10	12
Sabestian Lafontaine	ART-014	740 wiggle	5	10	5	2											10	12

Management Code	Activity Description
3204	load, haul, place 0 - ¾ stone in pond
3201	Remove Snow from Slopes and floor of pond.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-25 **Day Shift** **Weather conditions: Sunny -10** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

REMOVE SNOW IN THE POND AND KEYTRENCH.
ASSISTING LAYFIELD ON LINER INSTALLATION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**3998**	**3998**	**0**	**1016**	**139**	**13**	
326511	Excavator CAT 349	X		**5030**	**5040**	**10**	**948**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3633**	**3633**	**0**	**544**	**2**	**43**	
325824	Haul Truck CAT 745	X		**3791**	**3794**	**3**	**500**	**0**	**0**	WORK ON WRP
327308	Dozer D6	X		**3916**	**3916**	**0**	**392**	**0**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-25 | **Night Shift** | **Weather conditions: Clear -13** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

NO WORK ON WRP. ALL CREW WORKING WITH MINE OPS :
- 374 IN THE PIT
- DOZER D6 PUSHING SNOW AT THE WASTE DUMP
- LOADER WA-600 AND 3 TRUCKS HAULING 2'' CRUSHED MATERIALS FROM QMR2 TO 105 STOCKPILE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		3998	4004	6	1016	145	13	WORK FOR MINE OPS
326511	Excavator CAT 349	X		5040	5040	0	948	903	0	
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3633	3643	10	544	12	43	WORK FOR MINE OPS
325824	Haul Truck CAT 745	X		3794	3804	10	500	10	0	WORK FOR MINE OPS
327308	Dozer D6		X	3916	3919	3	392	3	5	DOWN : SEE BELOW DESCRIPTION OF THE DAMAGE ON THE HYDRAULIC CYLINDER

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	MATERIAL DAMMAGE ON DOZER D6 32-73-08. A ROCK GOT STOCK BETWEEN THE BLADE AND LIFTING CYLINDER CAUSING DAMAGE AND CRACKING THE ELBOW FOR HYDRAULIC HOSE.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-26 **Day Shift** **Weather conditions: Sunny -13** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL IN THE POND AND KEYTRENCH.
ASSISTING LAYFIELD ON LINER INSTALLATION.
SNOW REMOVAL ON THE WEST SIDE EXPANSION POND AREA

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4004**	**4011**	**7**	**1025**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5040**	**5051**	**11**	**959**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3643**	**3650**	**7**	**553**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3804**	**3810**	**6**	**506**	**10**	**0**	WORK ON WRP
327308	Dozer D6		X	**3919**	**3919**	**0**	**392**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-26 **Night Shift** **Weather conditions: Clear -11** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL ON THE WEST SIDE EXPANSION POND AREA
FINE BEDDING (0-3/4") IN THE KEYTRENCH.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4011	4020	9	1034	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5051	5055	4	963	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3650	3659	9	562	12	43	WORK FOR MINE OPS
325824	Haul Truck CAT 745	X		3810	3819	9	515	10	0	WORK FOR MINE OPS
327308	Dozer D6		X	3919	3919	0	392	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: -8 Sunny Date: 26/10/19 Shift: Day

Management Code			3204		liner		Survey										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick up	12	13														
Timothy Tobin	#326511	349	10	12														
Michael Brassard	#326504	374	6	6		6												
Rock Bernier	#19-0306	352		5	7	7												
Daysie Brouillette	#ART-014	740	6	6		6												
Claude Savoie	#325817	745	6	6		6												
Roger Leblanc	#325824	745	6	6														
Roger Leblanc	#284	908			6	6												
Derrell Tobe	D0201	D6T	6	6		6												
Jeremy Ball	190036	Pick-up					12	6										

check with Nichola

Management Code	Activity Description
3204	After The Lip on The 349 Bucket been welded Timothy started cleanning The slope
	With (3) Truck and ① excavator we started removing snow at The west side of The pond
liner	Some of the SANA crew worked cleanning old section of liner on the ground. 352 worked with hayfield installing
	pannel of Liner.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: clear Date: OCT 26/19 Shift: nig Lt

Management Code			3201		3204												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13													1	13
Clarence Breau	19-0036	pick up	1														1	
" "	ART-014	wiggle	2	12													2	12
Sebastian Arsenault	32-65-04	374 EX	8	12													8	12
Patrick Simard	DZR-01	D6 dozer	8	12													8	12
Mark Sheass	32-65-11	349 EX			4	9											4	9
" "	284	mini loader	2	3													2	3
Sabestian Lafontaine	32-58-17	wiggle	10	12													10	12
Benjamen Dupuis	32-58-24	wiggle	9	12													9	12
Alex Lachance	19-03-06	352 EX					8	12									8	12

Management Code	Activity Description
3201	load, haul Snow from future Berm area at WRP pond
3204	place 0-¾ stone in Key trench
	assist mine ops in pit: 352 excavator

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-27 **Day Shift** **Weather conditions: Sunny -13** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL IN THE POND AND KEYTRENCH.
SNOW REMOVAL ON THE WEST SIDE EXPANSION POND AREA
EXCAVATION OF THE POND EXPANSION ON THE WEST SIDE. TAKING OUT BAD STUFF AND ICE.
CLEANING WORK AREA WITH LINER LEFTOVER AND MOVING ROLLOF LINER WITH 352.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 356	769	9 125	M^2	92%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 356	769	9 125	M^2	92%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4020**	**4030**	**10**	**1044**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5055**	**5066**	**11**	**974**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3659**	**3669**	**10**	**572**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3819**	**3827**	**8**	**523**	**10**	**0**	WORK ON WRP
327308	Dozer D6		X	**3919**	**3919**	**0**	**392**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-27	Night Shift	Weather conditions: Clear -9	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOW REMOVAL AROUND WRP.
FINE BEDDING (0-3/4") IN THE KEYTRENCH.
EXCAVATION OF THE POND EXPANSION ON THE WEST SIDE. TAKING OUT BAD STUFF AND ICE UNTIL WE REAXCH THE PERMAFROST. FILLING UP WITH ROQ.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	100	8 456	669	9 125	M^2	93%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	100	8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4030	4040	10	1054	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5066	5076	10	984	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3669	3678	9	581	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3827	3837	10	533	10	0	WORK ON WRP
327308	Dozer D6	X		3920	3929	9	401	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: Sunny -15°C Date: 27/10/19 Shift: D

Management Code			3204		liner		Survey										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	190037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Michael Brassard	326504	374	10	12														
Rock Bernier	19-0306	352	2	2														
Rock Bernier	284	908	3	10														
Roger Leblanc	284	908	3	3														
Roger Leblanc	325824	745	6	9														
Claude Savoie	325317	795	10	12														
Daysie Braillette	ART-14	740	10	12														
Darren Bury	D07-01	D-6	10	12														
~~Jeremy Batt~~	~~19-0336~~	~~Pick-up~~					~~12~~ 6	~~11~~										

27/10/19

Management Code	Activity Description
3204	374 + (3) Trucks worked removing a section of material along The south side key trench.
	After They continued working at the west section of the pond.
	349 worked cleanning snow for The liner crew
liner.	Small Loader worked cleanning left over of liner's crew and 352 moved some roll of liner

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: clear Date: OCT 27/19 Shift: night

Management Code			3204		3201		??										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13													1	13
Clarence Breau	19-0036	pick up	1	12													1	12
" "	ART-014	wiggle	2														2	
Sabestian Arsenault	32-65-04	374 EX	9	12													9	12
Benjamen Dupuis	32-58-24	wiggle	5	6	5	6											10	12
Sebastian Lafontaine	32-58-17	wiggle	5	6	4	6											9	12
Alexander Lachance	19-03-06	352 EX					9	12									9	12
Mark Sheaves	32-65-11	349 EX	3	4	6	8											9	12
Patrick Simard	32-73-08	D6 dozer	4	12													4	12

Management Code	Activity Description
3204	load, haul, place 0-¾ stone in Key trench load, haul, place ROQ in Key trench maintain Dump
3201	Snow removal around WRP maintain Dump
??	assist mine ops in pit

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-28 **Day Shift** **Weather conditions: Sunny -8** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FIX THE FINE BEDDING AT THE JONCTION OF THE NEW LINER AND WHERE WAS THE TEMPORARY BERM.
SNOW REMOVAL ON THE WEST SIDE EXPANSION POND AREA
EXCAVATION OF THE POND EXPANSION ON THE WEST SIDE. TAKING OUT BAD STUFF AND ICE.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4040**	**4048**	**8**	**1062**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5076**	**5087**	**11**	**995**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3678**	**3683**	**5**	**586**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3837**	**3841**	**4**	**537**	**10**	**0**	
327308	Dozer D6	X		**3925**	**3925**	**0**	**397**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
MAN POWER	ROCH-DAVID BERNIER IN THE PIT FOR MINE OPS.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-28 **Night Shift** **Weather conditions: Snow -4** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PUT ROQ IN KEYTRENCH
FINE BEDDING (0-3/4") IN THE KEYTRENCH.
CLEANING UP WASTE DUMP AND MAKING NEW ACCESS.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4048	4057	9	1071	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5087	5097	10	1005	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3683	3692	9	595	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3841	3850	9	546	10	0	WORK ON WRP
327308	Dozer D6	X		3925	3934	9	406	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: cloudy -7 Date: 28/10/19 Shift: D

Management Code			3204		Mine OPS		Liner										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Michael Brassard	326504	374	10	12														
Rock Bernier	19-0306	352			10	12												
~~Roger Leblanc~~	~~#284~~	~~908~~	~~5~~	~~7~~														
Roger Leblanc	#284	908																
Claude Savoie	325824	745		10				3										
Daisye Brouillette	ART 14	745		10				2										
Darren Bluffy				10				2										

Claude Savoie
Michael Brassard
> 1 hour overtime

28-10-19

Management Code	Activity Description
3204	Worked close To the liner at The bottom of pond to remove material close to the liner.
	We fixed at grade a section of Berm where the elevation was not at grade
	Remove snow close to the west side of pond.
Liner	We brought rolls of geotech and help put pannel of liner with the Layfield screw.
Mine OPS	Send the 352 for rework in the Pit.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: light Snow Date: OCT 28/19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13													1	13
Clarence Breau	19-0036	pick up	1	12													1	12
Benjamen Dupuis	32-58-24	wiggle	9	12													9	12
Sabastian Arsenault	32-65-04	374 Ex	9	12													9	12
Patrick Simard	32-73-09	D6 Dozer	9	12													9	12
Mark Shears	32-65-11	349 Ex	10	12													10	12
Sabastian Lafontaine	32-58-17	wiggle	9	12													9	12

Management Code	Activity Description
3204	- load, haul, place 0-3" Stone in Key trench - load, haul, place ROC in Key trench - clean up waste dump, build new access

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-29 | **Day Shift** | **Weather conditions: Fog and snow -5** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

ASSISTING LAYFIELD WITH 908 LOADER FOR HOUSE KEEPING.
RIPPING THE WEST SIDE EXPANSION POND WITH DOZER D9 TO REACH PERMAFROST.
EXCAVATION OF THE POND EXPANSION ON THE WEST SIDE. TAKING OUT BAD STUFF AND ICE.
ASSISTING MINE OPS ON THE WTP REPAIR AND SNOW REMOVAL.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4057**	**4062**	**5**	**1076**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5097**	**5103**	**6**	**1011**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3692**	**3702**	**10**	**605**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3850**	**3851**	**1**	**547**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3934**	**3944**	**10**	**416**	**3**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
MANPOWER	ROCH-DAVID BERNIER IN THE PIT WITH THE 352 FOR MINE OPS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-29	Night Shift	Weather conditions: Fog and Snow -4	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

RIPPING THE WEST SIDE EXPANSION POND WITH DOZER D9 TO REACH PERMAFROST.
EXCAVATION OF THE POND EXPANSION ON THE WEST SIDE. TAKING OUT BAD STUFF AND ICE.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4062**	**4070**	**8**	**1084**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5103**	**5113**	**10**	**1021**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3702**	**3710**	**8**	**613**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3851**	**3861**	**10**	**557**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3944**	**3951**	**7**	**423**	**3**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: André Desmeules weather: cloudy -5 Date: 29/10/19 Shift: Day

Management Code			3204		Mine Ops		Liner										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Michael Brassard	DZR-06	D-9	10	12														
Roger leblanc	284	908	10	12														
Daisy Brouillette	ART 14	740	10	12														
Claude Savoie	325817	745	10	12														
Darren Bury		D-6	10	12														
Rock Bernier	19-0306	352			10	12												

29-10-19

Management Code	Activity Description
3204	Ripped with D-9 at the west side to lower that area Haul everything at the waste dump.
	Remove snow around the east dith. To allow the extension latter on.
Mine OPS	352 worked at 610 Bench all day.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Fog- patches Date: OCT 29/19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Clarence Breau	19-0036	pick up	1															
" "	ART-014	wiggle	6	12														
Mark Shears	32-65-11	349 Ex	10	12														
Patrick Simard	32-73-08	D6 Dozer	6	8														
" "	DZR-06	D9 Dozer	2	4														
Sebastian Lafontaine	32-58-17	wiggle	8	12														
Sebastien Arseneault	32-65-04	374 Ex	8	12														
Benjamin Dupuis	32-58-24	wiggle	10	12														

Management Code	Activity Description
3204	Rip, load, haul, Dump waste material from proposed Berm area.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-10-30 | Day Shift | Weather conditions: Fog and snow -6 | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

RIPPING THE WEST SIDE EXPANSION POND WITH DOZER D9 TO REACH PERMAFROST.
LOAD AND HAUL WASTE MATERIAL FROM THE WEST SIDE EXPANSION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	100	8 556	569	9 125	M^2	94%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**4070**	**4070**	**0**	**1084**	**145**	**13**	WAITING FOR A NEW BUCKET
326511	Excavator CAT 349	X		**5113**	**5123**	**10**	**1031**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3710**	**3710**	**0**	**613**	**12**	**43**	
325824	Haul Truck CAT 745	X		**3861**	**3870**	**9**	**566**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3951**	**3951**	**0**	**423**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
MANPOWER	ROCH-DAVID BERNIER IN THE PIT WITH THE 352 FOR MINE OPS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-30 | **Night Shift** | **Weather conditions: Fog and Snow -8** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

RIPPING THE WEST SIDE EXPANSION POND WITH DOZER D9 TO REACH PERMAFROST.
LOAD AND HAUL WASTE MATERIAL FROM THE WEST SIDE EXPANSION.
ROAD MAINTENANCE WITH GRAVEL AND SNOW REMOVAL AROUND WRP.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	95	8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**4070**	**4070**	**0**	**1084**	**145**	**13**	WAITING FOR A NEW BUCKET
326511	Excavator CAT 349	X		**5123**	**5132**	**9**	**1040**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3710**	**3719**	**9**	**622**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3870**	**3879**	**9**	**575**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3951**	**3951**	**0**	**423**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Andre Desmeules weather: Cloudy -7 Date: 30/10/19 Shift: Day

Management Code			3204		Mine OPS												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Michael Brassard	D2R-06	D-9	10	12														
Roger Leblanc	284	908	8	12														
Daisy Brouillette	ART 14	740	10	12														
Claude Savoie	325824	745	10	12														
Darren Bury	325824	745		12	→ Training													
Rock Bernier	19-0306	352		1	10	12												

Management Code	Activity Description
3204	We ripped The west pond with D-9 To get as low as possible..
Mine OPS #	352 Worked for mine ops in The pit at Bench 610.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Snow Date: OCT 30/19 Shift: night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Mark Shears	32-65-11	349 EX	9	12														
Patrick Simard	DZR-06	D9 dozer	10	12														
Benjamin Dupuis	32-58-24	wiggle	9	12														
Sebastian Arseneault	284	mini loader	5	12														
Clarence Breau	ART-014	wiggle	6	12														
Sebastian Lafontaine	32-58-17	wiggle	9	12														

Management Code	Activity Description
3204	- rip + push waste material - load, haul waste material to dump - ice control

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-31 **Day Shift** **Weather conditions: Fog and snow -6** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

RIPPING THE WEST SIDE EXPANSION POND WITH DOZER D9 TO REACH PERMAFROST.
LOAD AND HAUL WASTE MATERIAL FROM THE WEST SIDE EXPANSION.
SNOW REMOVAL AROUND THE POND.
PUT GRAVEL ON THE ROAD AROUND THE POND.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 456	669	9 125	M^2	93%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**4070**	**4070**	**0**	**1084**	**145**	**13**	WAITING FOR A NEW BUCKET
326511	Excavator CAT 349	X		**5132**	**5136**	**4**	**1044**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3719**	**3729**	**10**	**632**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3879**	**3887**	**8**	**583**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3951**	**3955**	**4**	**427**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-10-31 | **Night Shift** | **Weather conditions: Fog and Snow -8** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

LOAD, HAUL AND PLACE ROQ IN THE WEST EXPANSION POND.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	112	8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**4070**	**4070**	**0**	**1084**	**145**	**13**	WAITING FOR A NEW BUCKET
326511	Excavator CAT 349	X		**5136**	**5145**	**9**	**1053**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3729**	**3738**	**9**	**641**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3887**	**3897**	**10**	**593**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3955**	**3965**	**10**	**447**	**3**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-01 | **Day Shift** | **Weather conditions: WHITOUT/BLIZZARD -4˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

NO WORK. TRY TO START THE SHIFT BY KEEPING THE ROAD OPEN AND PUTING GRAVEL, BUT CODE RED AT 9AM SO WW HAD TO STOP AND GO BACK DOWN.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		70 466	34 534	105 000	M.T.	67%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374		X	**4070**	**4070**	**0**	**1084**	**145**	**13**	WAITING FOR A NEW BUCKET
326511	Excavator CAT 349	X		**5145**	**5147**	**2**	**1055**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3738**	**3738**	**0**	**641**	**12**	**43**	
325824	Haul Truck CAT 745	X		**3897**	**3898**	**1**	**594**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3965**	**3967**	**2**	**449**	**3**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BUBBLE DOME	AS THE BUBBLE DOME IS ABOUT TO FALL. THIS ZONE IS RESTRICTED AND NO ENTRANCE IS ALLOWED. OUR SURVEY EQUIPMENT AND PORTABLE RADIO AND CHARGER IS INSIDE AND THEIR IS NO WAY TO GET IN UNTIL THE SNOW HAS STOP AND WE GOT THE GO AHEAD FROM BIM GENERAL MANGER AND MINE OPS SUPERINTENDANT.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-11-01	WHEATER DELAY. CODE RED AT THE WASTE DUMP AT 9AM.	9

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-01 | Night Shift | Weather conditions: Fog and Snow -6˚C | Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOW REMOVAL AFTER WHITOUT. HAD TO RE-OPEN ALL THE ROAD AND ACCES ROAD AROUND WRP. PUT RAVEL ON THE ROAD
WORKING ON NORTH BERM LIFT #8

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	704	71 170	33 830	105 000	M.T.	68%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4070	4070	0	1084	145	13	NEW BUCKET INSTALLED DURING NIGFHT SHIFT. READY TO GO.
326511	Excavator CAT 349	X		5147	5154	7	1062	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3738	3745	7	648	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3898	3906	8	602	10	0	WORK ON WRP
327308	Dozer D6	X		3967	3972	5	454	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BUBBLE DOME	AS THE BUBBLE DOME IS ABOUT TO FALL. THIS ZONE IS RESTRICTED AND NO ENTRANCE IS ALLOWED. OUR SURVEY EQUIPMENT AND PORTABLE RADIO AND CHARGER IS INSIDE AND THEIR IS NO WAY TO GET IN UNTIL THE SNOW HAS STOP AND WE GOT THE GO AHEAD FROM BIM GENERAL MANGER AND MINE OPS SUPERINTENDANT.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
2019-11-01	SNOW REMOVAL AFTER WHITOUT.	7

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières

weather: ~~Dry~~ snow wind -7 weather

Date: 01/11/19

Shift: Day

Management Code			3204				stand by										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger	325817	CAT 745		3				9										
Valère Cloutier				3				9										
Yan Martel Garoucha	325824	CAT 745	1	3				9										
Manuel Arseneault	18-0205	CAT 982	3	3				9										
Jason Fortier	326511	CAT 349	2	3				9										
Michaël Brassard	327308	CAT D6	2	3				9										
Jeremy Ball				3				3										

Management Code	Activity Description
3204	-snow removal - Haul 2½ clear for road sanding
	- shut down At 9:30am cause of bad weather- snow windy, bad visibility

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSIOTTE weather: _____ Date: 1-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSIOTTE	19-0037	Pick up		13														
ERIC HEBERT	326511	CAT 349	7.5	12														
Bobby Baldwin	180205	CAT 982	3	4														
" "	327308	D6	5	8														
Kevin Mallais	325817	CAT 745	8	12														
MARCO TRemblay	325824	CAT 745	8	12														
christian massecar	150202	WA600	1.5	2														
" "	284	CAT 908	2.5	2.5														
" "	180205	CAT 982	4	7.5														

Management Code	Activity Description
3204	Remove SNOW ON water treatment Road and POND access Load and HAULing MUCK From crusher Pad TO POND
	EXCAVATOR 326 FL Loose 2 chains guide ON TRACTION, TORQMONT HAVE PARTS ON his TRUCK

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-02 | **Day Shift** | **Weather conditions: Snow and fog -8˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
WORKING ON NORTH BERM LIFT #8. HAULING ROQ FROM SANA CRUSHER PAD TO NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	2592	73 762	31 238	105 000	M.T.	70%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4073**	**4083**	**10**	**1097**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5154**	**5154**	**0**	**1062**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3745**	**3755**	**10**	**658**	**12**	**43**	
325824	Haul Truck CAT 745	X		**3906**	**3916**	**10**	**612**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3972**	**3972**	**0**	**454**	**3**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BUBBLE DOME	AS THE BUBBLE DOME IS ABOUT TO FALL. THIS ZONE IS RESTRICTED AND NO ENTRANCE IS ALLOWED. OUR SURVEY EQUIPMENT AND PORTABLE RADIO AND CHARGER IS INSIDE AND THEIR IS NO WAY TO GET IN UNTIL THE SNOW HAS STOP AND WE GOT THE GO AHEAD FROM BIM GENERAL MANGER AND MINE OPS SUPERINTENDANT.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-02	Night Shift	Weather conditions: Snow and fog -10˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
WORKING ON NORTH BERM LIFT #8. HAULING ROQ FROM SANA CRUSHER PAD TO NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	2208	75 970	29 030	105 000	M.T.	72%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4083	4091	8	1105	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5154	5154	0	1062	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3755	3764	9	667	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3916	3926	10	622	10	0	WORK ON WRP
327308	Dozer D6	X		3972	3972	0	454	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
BUBBLE DOME	AS THE BUBBLE DOME IS ABOUT TO FALL. THIS ZONE IS RESTRICTED AND NO ENTRANCE IS ALLOWED. OUR SURVEY EQUIPMENT AND PORTABLE RADIO AND CHARGER IS INSIDE AND THEIR IS NO WAY TO GET IN UNTIL THE SNOW HAS STOP AND WE GOT THE GO AHEAD FROM BIM GENERAL MANGER AND MINE OPS SUPERINTENDANT.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -10 snow cloud Date: 02/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia Forgues Belanger 325817			9	12														
Valère Cloutier				12														
Manuel Arseneault	~~335834~~	18-0205	9	12														
Yan Martel Larouche	325824		9	12														
Jason Fortier	326504		10	12														
Gabriel Paré	190306		2	12														
Mickaël Brassard	~~327508~~	D2R06	9	12														
Jeremy Ball				6														

Management Code	Activity Description
3204	-Snow Removal -Sanding Road
	-Lift on North Berm
	- No GPS -Only 2 articulated truck in service
	~~3258~~ 24 need a radio Antena

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: SNOW FALLS Date: 2-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pickup		11														
" "	293	CAT 908	2	2														
ERIC Hebert	326504	CAT 374	10	12														
Bobby Baldwin	327308	D6	2	3														
" "	DZR006	D9	8	9														
Christian Masseau	180202	CAT 982	9	12														
MARC Tremblay	325824	CAT 745	10	12														
Kevin Mallais	325817	CAT 745	10	12														

Management Code	Activity Description
3204	Loading and Hauling Muck FROM SANA Crusher TO POND
	Remove SNOW ON POND Road and SAND The Road
	EXCAVATOR 326504 3 bolts missing ON a TRACTION Pad 1 Head Roller JAM ON TRACTION

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-03	Day Shift	Weather conditions: Snow fog and wind, -10˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
CLEANING SNOW AROUND WATER PLANT AND SEA CAN FOR LAYFIELD. HELPING LAYFIELD WITH MOVING THEIR STUFF IN THEIR SEACAN.
RIPPING THE WEST SIDE EXPANSION WITH DOZER D9 AND LOADING THIS FROZEN STUFF TO THE DUMP.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		75 970	29 030	105 000	M.T.	72%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4091**	**4094**	**3**	**1108**	**145**	**13**	WORK ON WRP FOR 3 HOURS THEN TOROMONT WORK ON IT
326511	Excavator CAT 349	X		**5154**	**5164**	**10**	**1072**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3764**	**3773**	**9**	**676**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3926**	**3935**	**9**	**631**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3972**	**3972**	**0**	**454**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-03 | **Night Shift** | **Weather conditions: Snow fog and wind, -12˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
RIPPING THE WEST SIDE EXPANSION WITH DOZER D9 AND LOADING THIS FROZEN STUFF TO THE DUMP.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		75 970	29 030	105 000	M.T.	72%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4094	4103	9	1117	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5164	5164	0	1072	903	0	
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3773	3782	9	685	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3935	3944	9	640	10	0	WORK ON WRP
327308	Dozer D6	X		3972	3972	0	454	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -12 snow Date: 3/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières	284		4	13														
Patricia F. Belanger	325817		9	12														
Valère Cloutier			10	12														
Yan Martel Larouche	325824		9	12														
Manuel Arseneault	180205		9	12														
Jason Cloutier	[redacted]	19-0306		12														
Gabriel Paré	326511		10	12														
Jeremy Ball				5														
Michaël Brassard	D2R06		10	12														

Management Code	Activity Description
3204	-snow removal -sanding the road
	-Clean snow around Buble tent and c-can for Layfield -help layfield moving their toot from Buble tent to Their C-can
	-Stock pile ROQ that the 793 was hauling to us -rip far west of the pond expension
	-Load and haul rip material from west pond to waste dump

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 3-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	190037	Pick up		13														
Eric Hebert	326704	CAT 374	9	12														
Bobby Baldwin	DZR006	D9	9	12														
christian Massam	180202	CAT 982	6.5	12														
Mario Tremblay	325824	CAT 745	9	12														
Kevin Mallais	325817	CAT 745	9	12														

Management Code	Activity Description
3204	Rip, loading and Hauling OB FROM PONS TO DUMP
	5400 Pond Road

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-04	Day Shift	Weather conditions: Snow and wind, -12˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
CLEANING SNOW AROUND WATER PLANT AND SEA CAN FOR LAYFIELD. HELPING LAYFIELD WITH MOVING THEIR STUFF IN THEIR SEACAN.
RIPPING THE WEST SIDE EXPANSION WITH DOZER D9 AND LOADING THIS FROZEN STUFF TO THE DUMP.
WORK ON LIFT #8 OF THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	1536	77 506	27 494	105 000	M.T.	74%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4103**	**4114**	**11**	**1128**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5164**	**5174**	**10**	**1082**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3782**	**3793**	**11**	**696**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3944**	**3954**	**10**	**650**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3972**	**3981**	**9**	**463**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-04 | **Night Shift** | **Weather conditions: Clear -18˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
WORK ON LIFT #8 OF THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	1504	79 010	25 990	105 000	M.T.	75%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4114	4124	10	1138	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5174	5180	6	1088	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3793	3802	9	705	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3954	3963	9	659	10	0	WORK ON WRP
327308	Dozer D6	X		3981	3984	3	466	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussieres weather: -12 snow wind Date: 04/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussieres	19-0037			13														
Patricia F. Belanger	325817		10	12														
Valère Cloutier				12														
Yan Martel Larouche	325824		10	12														
Manuel Arseneault	18-0205		10	12														
Jason Fortier	326504		11	12														
Gabriel Paré	326511		16	12														
Michaël Brassard	D2R06		3	12														
Michaël Brassard	284		3	12														
Jeremy Ball				6														

Management Code	Activity Description
3204	-snow clearing -sanding Road
	-rip west side of pond expension -continu a lift on North Berm
	-~~Install~~ -snow shoveling and setup a frost fighter between layfield C-can
	-blast at 2:30 pm
	-only 2 745 -D9 broke at 9:00 am so no more ripper

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: _____ Date: 4-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		13														
ERIC Hebert	326504	CAT 374	10	12														
Bobby Baldwin	327708		3	5														
	~~326504~~																	
	326511	CAT 349	6	7														
MARCO Tremblay	325824	CAT 745	6	12														
KEVIN MAILLOUX	325817	CAT 745	10	12														
Christian MASSEAU	180205	CAT 982	3.5	4														
	325824	CAT 745	4	8														

Management Code	Activity Description
3204	Loading and Hauling Muck FROM crusher Pad TO POND
	clean SNOW ON POND Road

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-05 **Day Shift** **Weather conditions: Sunny, -12˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
CLEANING SNOW AROUND WATER PLANT AND SEA CAN FOR LAYFIELD. HELPING LAYFIELD WITH MOVING THEIR STUFF.
RIPPING THE WEST SIDE EXPANSION WITH DOZER D9 AND LOADING THIS FROZEN STUFF TO THE DUMP.
ASSISTING LAYFIELD IN LINER INSTALLATION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		79 010	25 990	105 000	M.T.	75%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4124**	**4134**	**10**	**1148**	**145**	**13**	WORK ON WRP
326511	Excavator CAT 349	X		**5180**	**5190**	**10**	**1098**	**903**	**0**	WORK ON WRP
325809	Haul Truck CAT 745		X	**4470**	**4470**	**0**	**7**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3802**	**3811**	**9**	**714**	**12**	**43**	WORK ON WRP
325824	Haul Truck CAT 745	X		**3963**	**3973**	**10**	**669**	**10**	**0**	WORK ON WRP
327308	Dozer D6	X		**3984**	**3984**	**0**	**466**	**3**	**5**	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-05 **Night Shift** **Weather conditions: Clear -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL ON THE SLOPE AND KEYTRENCH.
WORK ON LIFT #9OF THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		79 010	25 990	105 000	M.T.	75%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4134	4144	10	1158	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5190	5194	4	1102	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3811	3822	11	725	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3973	3983	10	679	10	0	WORK ON WRP
327308	Dozer D6	X		3984	3994	10	476	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -19 sunny fog pm Date: 05/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières	P0037			13														
Patricia F. Belanger	325817		10	12														
Valère Cloutier				12														
Yan Martel Larouche	325824		10	12														
Manuel Arseneault	180205		10	12														
Jason Fortier	326511		10	12														
Gabriel Paré	326504		10	12														
Mickaël Brassard	D2R006		10	12														
Jeremy Ball				6														

Management Code	Activity Description
3204	-snow removal 982 - sanding 982
	- clean up spot for liner, generator,... for layfield 982 - start and move ~~the~~ light tower for layfield
	- snow removal and hold liner for layfield 349 - Haul material to hold road to sand road for float (crusher)
	- ripper on west side of pond expansion D9 - load and haul rip material
	- only 2 745 again - Valere did is 745 Hassesement on the field
	-Gabriel read 374 manual in class at MSC

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: _____ Date: 5-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		13														
ERIC Hebert	326504	CAT 374	10	12														
Bobby BALDWIN	327308	D6	7.5	9.5														
" "	326511	CAT 349	2.5	2.5														
Christian MASSEAU	180205	CAT 982	6	12														
KEVIN MALLAIS	325817	CAT 745	10	12														
MARCO Tremblay	325824	CAT 745	10	12														

Management Code	Activity Description
3204	Loading and Hauling Muck From crusher Pade To Pond
	Remove Snow on slope and Kay For Liner
	Sand Road ON POND area

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-06 | **Day Shift** | **Weather conditions: Sunny, -12˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE.
CLEANING SNOW AROUND WATER PLANT AND SEA CAN FOR LAYFIELD. HELPING LAYFIELD WITH MOVING THEIR STUFF.
RIPPING THE WEST SIDE EXPANSION WITH DOZER D9 AND LOADING THIS FROZEN STUFF TO THE DUMP.
ASSISTING LAYFIELD IN LINER INSTALLATION.
LEVELING THE WASTE DUMP WITH DOZER
NORTH BERM RISING

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	2073	83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4144	4153	9	1167	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5194	5203	9	1111	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3822	3829	7	732	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3983	3993	10	679	10	0	WORK ON WRP
327308	Dozer D6	X		3994	4004	10	486	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-06 | **Night Shift** | **Weather conditions:** Clear -25˚C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING FROM CRUSHER PAD TO POND

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		380	43	423	LIN.M.	90%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4153	4162	9	1176	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5203	5203	0	1111	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3829	3839	10	742	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3993	3999	6	685	10	0	WORK ON WRP
327308	Dozer D6	X		4004	4013	9	497	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	- clean up, load the remaining rip material at west of pond expansion - level the waste dump with dozer
	- clean up and move bunches of ~~the~~ textile and liner roll from underneath snow and move it ~~next~~ to layfield e-can
	- Remove snow that build up at every corner for good visibility - fuel and work on generator and Frost Fighter of layfield
	- keepon lifting North berm - only 2 745
	- Snow removal and liner instalation with layfield

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -19 nice and clear Date: 06/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Belanger	325817	CAT 745	9	12														
Valère Cloutier	325824	CAT 745	10	12														
Yan Martel Larouche				12														
Manuel Arseneault	18 0205	CAT 982	10	12														
Jason Ebrtier	326504	CAT 374	10	12														
Gabriel Pare	326511	CAT 349	10	12														
Mickaël Brassard	327308	CAT D6		12														
Jeremy Ball				12														

Management Code	Activity Description
3204	Loading and Hauling Muck From crusher Pad TO POND
	STOP operation FROM 9:00 RM TO 11:30 PM causing by Missing Fuel AFTer Fueling excavator Fuel Truck HAVE NO Fuel FOr Dozer and ReFuse TO comeback FOr
	Dozer , To avoid stopping operation For The Night I FiND Fuel my ~~self~~ For Dozer
	TRuck 325824 HAVe exhaust VAPor ON CAb SO I STOP iT

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: _____ Date: 6-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		13														
ERIC Hebert	326504	CAT 374	8	12														
Bobby Baldwin	327308	D6	7	12														
Kevin Mallais	325817	CAT 745	10	12														
MARC Tremblay	325824	CAT 745	6	12														
Christian Masseau				12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-07 | **Day Shift** | **Weather conditions: Sunny, -12˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL AND ROAD MAINTENANCE ON RING ROAD
SLOPE ON NORTH SIDE
RIPPING THE WEST SIDE EXPANSION WITH DOZER D9 AND LOADING THIS FROZEN STUFF TO THE DUMP.
ASSISTING LAYFIELD IN LINER INSTALLATION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING	15	395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4162	4172	10	1186	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5203	5213	10	1121	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3839	3849	10	752	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3999	3999	0	685	10	0	WORK ON WRP
327308	Dozer D6	X		4013	4014	1	498	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-07	Night Shift	Weather conditions: Clear -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM CRUSHER PAD TO POND
SNOW REMOVAL INSIDE POND FOR LINER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4172	4181	9	1195	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5213	5220	7	1128	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3849	3849	0	752	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		3999	4003	4	689	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-only 1 745 up - DG broke down at 8:00
	-Slope ~~was~~ on north side - install liner with layfield
	-start to open ring road with dozer

792-793

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -13 Date: 07/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Bélanger				12														
Valère Cloutier	3258 17		10	12														
Yan Martel Larouche				12														
Manuel Arseneault	284		2	12														
Jason Fortier	3265 04		10	12														
Gabriel Paré	3265 11		10	12														
Dave Lanoix	32 7308		3	12														
Jeremy Ball				12														
Manuel Arseneault	18 0205		6	12														

Management Code	Activity Description
3204	Loading and Hauling Muck From crusher Pad To pond MAKe sloap on Pond side
	Remove SNOW ON Pond For Liner
	TRUCK 325817 DOWN For Transmission issue TRUCK 325824 sTOP For Exhaust IN CAb

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 7-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	190037	Pickup		13														
" "	923	CAT 908	6															
Eric Hebert	326504	CAT 374		12														
Bobby Baldwin	326511	CAT 349	7	9														
" "	923	CAT 908	3	3														
Kevin Mallais	325817	CAT 745	0.5	6														
	325824	CAT 745	1	6														
Christian Massam	325817	CAT 745	2	6														
	325824	CAT 745	2	6														
Mario Tremblay				12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-08 **Day Shift** **Weather conditions: Sunny, -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING FROM CRUSHER TO POUND
snow removal for linerSNOW REMOVAL FOR LINER
ASSISTING LAYFIELD IN LINER INSTALLATION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4181	4192	11	1206	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5220	5231	11	1139	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3849	3856	7	759	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4003	4008	5	694	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-08	Night Shift	Weather conditions: Clear -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ FROM CRUSHER PAD TO POND
SNOW REMOVAL INSIDE POND FOR LINER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 691	3 039	17 730	M^2	83%	
INTERNAL BERM PROFILING		395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4192	4202	10	1216	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5231	5235	4	1143	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4470	4470	0	7	0	0	
325817	Haul Truck CAT 745	X		3856	3858	2	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4008	4014	6	700	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	Help Liner guy
	snow Removal for liner
	Hauling ROC from crusher to pond.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -22 Date: 08/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F Belanger				12														
Valère Cloutier	~~Art 0014~~			12														
Yan Martel Larouche	Art 014		10	12														
Manuel Arseneault	284		10	12														
Jason Cloutier	326504		10	12														
Gabriel Paré	326511		10	12														
Dave Ianoix	~~3[illegible]~~08			12														
	190306		6	12														
Antony Leguen																		

Management Code	Activity Description
3204	Loading and Hauling Muck From crusher pad To Pond

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 8-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	190037	Pick up		13														
Eric Hebert	326504	CAT 374	10	12														
Bobby Baldwin	180206	CAT 352	3	4														
	326511	CAT 349	7	8														
Kevin Malleis	ART014	CAT 740	3	4														
	325824	CAT 745	7	8														
Christian Massecar	325817	CAT 745	1	12														
Marco Tremblay				12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-09	Night Shift	Weather conditions: Clear -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING GRAVEL FROM CRUSHER PAD TO POUND AND BEGIN TO DO THE FINAL BEDDING ON NORTH BURM WEST END
SNOW REMOVAL INSIDE POND FOR LINER

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	150	14 841	2 889	17 730	M^2	84%	
INTERNAL BERM PROFILING		395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4212	4224	12	1238	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5249	5260	11	1161	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4483	4484	1	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4024	4033	9	719	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	Beggining of the day was not very productive, 2 excavators down and one with Lay field for the liner.
	Finally, when we have the 2 excavators good to go, we fix the slope with muck on North Side. We put it final => ready for 0-3/4
	for Night shift.
	• Continue to remove snow to discover the liner who was done.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Le Yuen Anthony weather: Sunny -20°C Date: 2019-~~11~~09 Shift: Day

Management Code			3204		Liner		Formation										total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Le Yuen Anthony	19-0037	PCR	1	12,5														
Jason Fortier	326504	374	10	12														
Patricia Bélanger	325824	745	9	12														
Valère Cloutier	Ant 14	740	10	12														
Yan Martel	19-0036	PCR	1	12														
Manuel Arsenault	284	908	9	12														
Gabriel Papé	326511	349	7			12												
Chris Broderick	/	/		12														
Dave Lanoix	190306	352	9	12														
Manuel Bussière	/	/					/	13										

Management Code	Activity Description
3204	Loading and Hauling 0 3/4 From crusher pad To Pond For sloap Fueling Tower Light and Frost Fighter

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 9-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	190037	Pick up		13														
Eric Hebert	326504	CAT 374	10	12														
Bobby Baldwin	326511	CAT 349	8	10														
" "	PZR006	DG	1.5	2														
Marco Tremblay	325824	CAT 745	9	12														
Christian Massam	325809	CAT 745	1	12														
Kevin Mallais				12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-10 **Day Shift** **Weather conditions: Sunny, -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SHAPE DE NORTH SIDE BURM ON WEST END TO BE READY TO DO FINAL BEDDING WITH GRAVEL
snow removal for linerSNOW REMOVAL FOR LINER
ASSISTING LAYFIELD IN LINER INSTALLATION.
HAULLING RIP RAP FROM CRUSHER PAD TO 110 LAYDOWN

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	14 941	2 789	17 730	M^2	84%	
INTERNAL BERM PROFILING		395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4224	4233	9	1247	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5260	5272	12	1173	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4033	4043	10	729	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-10 **Night Shift** **Weather conditions: Clear -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING GRAVEL FROM CRUSHER PAD TO POUND AND BEGIN TO DO THE FINAL BEDDING ON NORTH BURM WEST END
WORKING ON WEST DITCH POND BOTTOM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 941	2 789	17 730	M^2	84%	
INTERNAL BERM PROFILING		395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 652	473	9 125	M^2	95%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 568	557	9 125	M^2	94%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4233	4243	10	1257	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5272	5284	12	1185	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4043	4054	11	740	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-shoveling snow in pond -Receive the 345 rock breaker late afternoon
	-work on North berm slope -backfill south west internal berm
	-haul 3-6" riprap from

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussieres weather: -25 wind cold Date: 10/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M Bussieres				13														
Patricia F. Delanger	325824		10	12														
Valère Cloutier				12														
Yan Martel Larouche	Art 014		9	12														
Manuel Arseneault	284		9	12														
Jason Fortier	326504		9	12														
Gabriel Paré	326511		10	12														
Dave Lanoix	190306		8	12														
Anthony Le Guen				6														
William Provencher				12														
Carl Thomas				12														
Denis Edwards	345 Hamm		1	12														
Chris				12														
Benjamin				12														
Sebastien				12														
Maxime gagnon				12														

Management Code	Activity Description
3204	Loading and Hauling 0 3/4 From crusher Pad To Pond Loading and Hauling muck from crusher Pad to Pond
	Fueling Tower Light and Frost Fighter on Pond
	build south west burm (Dump side)

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: _____ Date: 10-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		13														
ERIC Hebert	326504	CAT 374	10	12														
Bobby Baldwin	326511	CAT 349	9.5	12														
MARCO Tremblay	325824	CAT 745	5.5	12														
Kevin Maltais	325824	CAT 745	3.5	12														
Christian Masseau	325809	CAT 745	6	12														

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: _____ Date: 10-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		13														
ERIC Hebert	326504	CAT 374	10	12														
Bobby Baldwin	326511	CAT 349	9.5	12														
MARCO Tremblay	325824	CAT 745	5.5	12														
Kevin Maltais	325824	CAT 745	3.5	12														
Christian Masseau	325809	CAT 745	6	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-11	Day Shift	Weather conditions: Sunny, -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WORK ON WEST SIDE POND DITCH
snow removal for linerSNOW REMOVAL FOR LINER
ASSISTING LAYFIELD IN LINER INSTALLATION.
HAULLING RIP RAP FROM CRUSHER PAD TO 110 LAYDOWN
SHOVEL SNOW

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 941	2 789	17 730	M^2	84%	
INTERNAL BERM PROFILING		395	28	423	LIN.M.	93%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	150	8 802	323	9 125	M^2	96%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	150	8 802	323	9 125	M^2	96%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4243	4255	12	1269	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5284	5296	12	1197	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4054	4066	12	752	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-11 | **Night Shift** | **Weather conditions: Clear -25˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SHAPE SOUTH WEST BURM
WORKING ON WEST DITCH POND BOTTOM
BRING 6 ROLL OF MEMBRANE FROM 110 LAYDOWN TO POND FOR LAYFIELD

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		14 941	2 789	17 730	M^2	84%	
INTERNAL BERM PROFILING	10	405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 802	323	9 125	M^2	96%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 802	323	9 125	M^2	96%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4255	4267	12	1281	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5296	5308	12	1209	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4066	4078	12	764	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-shovel snow -try to start frost fighter
	-fuel tower light -Rockhammer about 30 minute until 345 blow a hose
	and we tell mecanic that the right swing engine consume over than half is capacity in that time. I said keep add oil
	-Place ROC on south west side of internal pond -Excator with layfield
	-Haul 2-6" from sana crusher to 110 laydown
*	-operator of loader 284 was moving snow. She was closing if bucket and it was over full and a
	big chunk of ice mix with a little of gravel roll on the winshield. Result a big spider web winshield is still in one piece

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -21 nice Date: 11/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				12														
Patricia F. Belanger	325824		10	12														
Valère Clautier				12														
Yan Martel Lamarche	Art 014		10	12														
Manuel Arseneault	284	-	10	12														
Jason Fortier	326504		10	12														
Gabriel Paré	326511		10	12														
Anthony Legueux				6														
Dave Lahaie	190306	-	10	12														
William Provencher				12														
Carl Thomas				12														
Denis Edwards	Exc-05		1	12														
Chris Broderick				12														

Management Code	Activity Description
3204	Loading and Hauling Muck From crusher pad To Pond Build burem sooth owest Dump side
	Bring 6 Roll of Textile From 110 To pond
	Bring Truck 325817 From Pond To Nuna layDown
	Fueling Tower Light and Frost Fighter on Ponds

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 11-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	190037	Pick up		13														
Eric Hebert	326504	CAT 374	10	12														
Bobby Baldwin	326511	CAT 349	9.5	12														
Kevin Malais	325824	CAT 745	9.5	12														
Benjamin Dupuis	ART014	CAT 740	1	1.5														
	325809	CAT 745	6.5	10.5														
Marco Tremblay				12														
Christian Masseau	[illegible]284	CAT 908	1	12														
Anthony Le Guen	Surveyor 190025			12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-12 | **Day Shift** | **Weather conditions: Sunny, -25˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WORK ON WEST SIDE POND DITCH
SPREAD GRAVEL FOR BEDDIN ON NORTH BURM
ASSISTING LAYFIELD IN LINER INSTALLATION.
STOCKPILE WITH DOZER AT 110 LAYDOWN
SHOVEL SNOW

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	200	15 141	2 589	17 730	M^2	85%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 802	323	9 125	M^2	96%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 802	323	9 125	M^2	96%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4267	4279	12	1293	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5308	5320	12	1221	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4088	4098	10	784	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-12 **Night Shift** **Weather conditions: Clear -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING ROQ FROM CRUSHER PAD TO POND
FILL KEYWAY WITH GRAVEL
CONTINUE TO BUILD WOUTH WEST BURM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		15 141	2 589	17 730	M^2	85%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	100	8 902	223	9 125	M^2	98%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	100	8 902	223	9 125	M^2	98%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4279	4290	11	1304	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5320	5332	12	1232	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4098	4102	4	788	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3126	3130	4	4			
327308	Dozer D6	X		4014	4014	0	498	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-352 stockpile Roq at Crusher -dozer work the ring road
	-dozer make room at 110 Laydown 6"" stockpile -spread gravel on north berm
	- Art 014 had a Exhaust leak, no back up alarm, about no heat
	- 325824 Exhaust smell in cabin shut it down at 10:00 am
	- brought 325823, it was bone dry on grease all pin are dry, low on antifreeze, and antifreeze smell. lube truck top up grease, but pump for anti freeze wasn't working. When to see toromont, And Jo call alan to let him know
	-So about no production all day -gravel touch up on the toe of the south berm with small loader -349 with layfield all day

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -18 Date: 12/18/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia f. Belanger	325824		4	12														
Valère Cloutier				12														
Yan Martel Carouche				12														
Manuel Arseneault	284		10	12														
Jason ~~Gar~~ fortier	326504		10	12														
Gabriel Paré	326511		10	12														
Dave Lanoix	32~~6~~308		4	12														
Anthony Leguen				6														
Carl Thomas				12														
William Provencher				12														
Denis Edward				12														
Chris				12														
Dave Lanoix	~~3873~~	19 0306	6															

Management Code	Activity Description
3204	Hauling and Loading Muck From crushon Pad TO POND
	SPRAY 03/4 ON Key
	continue TO built the south west burm (Dump side)
	Put second Frost Fighter in place For LANDFIELD sea can

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Patrick Massicotte weather: _____ Date: 12-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Patrick Massicotte	190037	Pick up		13														
Eric Hebert	326504	CAT 374	10	12														
Bobby Baldwin	326511	CAT 349	10	12														
Kevin Mallais	325824	CAT 745	4.5	12														
Benjamin Dupuis	325823	CAT 745	4.5	12														
Mario Tremblay	325824	CAT 745	5	12														
Christian Masseau	325823	CAT 745	5	12														
Anthony Lequan	190025	Pick up		12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-13	Day Shift	Weather conditions: Sunny, -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WORK ON WEST SIDE POND DITCH
SPREAD GRAVEL FOR BEDDIN ON NORTH BURM
ASSISTING LAYFIELD IN LINER INSTALLATION.
HAULING FROM CRUSHER TO 110 LAYDOWN
SHOVEL SNOW

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	15 241	2 489	17 730	M^2	86%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		8 902	223	9 125	M^2	98%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		8 902	223	9 125	M^2	98%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4267	4279	12	1293	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5308	5320	12	1221	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4088	4098	10	784	10	0	WORK ON WRP
327308	Dozer D6	X		4014	4014	0	498	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-13 **Night Shift** **Weather conditions: Clear -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

HAULING ROQ FROM CRUSHER PAD TO POND
GRAVEL BEDDING ON WEST SIDE
CONTINUE TO BUILD WOUTH WEST BURM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	15 341	2 389	17 730	M^2	87%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	100	9 002	123	9 125	M^2	99%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	100	9 002	123	9 125	M^2	99%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4279	4290	11	1304	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5320	5332	12	1232	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4098	4102	4	788	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3126	3130	4	4			
327308	Dozer D6	X		4014	4014	0	498	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Mine ask if we can sand from 110 to sana stock pile so we did with the 982
	-Haul 2 to 6" from crusher to 110 from start to 9:00 then we shut down 325823 cause of red light Flashing and safety alarm, brake presure problem
	-still no rock breaker and still waiting on a ripper -1 truck haul 0 3/4 to south west part of ditch
	-352 is pilling ROQ at sana stock pile -284 loader smooth up the gravel and do some touch up on south berm

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel M. Bussières weather: -16 A bit of snow Date: 13/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel M. Bussières				13														
Patricia F. Bélanger	325823	CAT 745	6	12														
Valère Cloutier				12														
Yan Martel Larouche	325824	CAT 745	10	12														
Manuel Arseneault	284	CAT 908	6	12														
Jason Fortier	326504	CAT 374		12														
Gabriel Paré	326511	CAT 349		12														
Dave Lanoix	~~32~~ 19-0306	CAT 352	4	12														
Dennis Edwards				12														
Chris				12														
Anthony Legueux				6														
Manuel Arseneault	18 0205	CAT 982	4															
Dave Lanoix	327308	CAT D6	4															

Management Code	Activity Description
3204	Loading and Hauling Muck From crusher Pad TO POND continue TO build South west Burm and Floor (Dump side)
	Fueling Tower Light + Frost Fighter ON POND

Qikiqtaaluk SANA

Forman Report

11-837

Forman: PATRICK MASSICOTTE weather: _____ Date: 13-11-19 Shift: Night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
PATRICK MASSICOTTE	190037	Pick up		13														
ERIC Hebert	326504	CAT 374	9	12														
Bobby Baldwin	326511	CAT 349	8.5	12														
Benjamin Dupuis	325823	CAT 745	9	12														
Kevin MAllais	325824	CAT 745	6	12														
christian MASSeau	325824	CAT 745	3	12														
MARIO Tremblay				12														
ANTHONY Le guen	190025	Pick up		12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-14 | **Day Shift** | **Weather conditions: Sunny, -25˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WORK ON WEST SIDE POND DITCH
SPREAD GRAVEL FOR BEDDIN ON NORTH BURM
ASSISTING LAYFIELD IN LINER INSTALLATION.
HAULING FROM CRUSHER TO 110 LAYDOWN
SHOVEL SNOW

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	15 441	2 289	17 730	M^2	87%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	50	9 052	73	9 125	M^2	99%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	50	9 052	73	9 125	M^2	99%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4317	4327	10	1341	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5358	5368	10	1268	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4127	4137	10	823	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3155	3165	10	39			
327308	Dozer D6	X		4023	4033	10	517	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-14 | **Night Shift** | **Weather conditions:** Clear -25˚C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ AND GRAVEL FROM CRUSHER PAD TO POND
GRAVEL BEDDING ON WEST SIDE
CONTINUE TO BUILD WOUTH WEST BURM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	200	15 641	2 089	17 730	M^2	88%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	50	9 102	23	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	50	9 102	23	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4327	4330	3	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5368	5380	12	1280	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4137	4146	9	832	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3165	3172	7	46			
327308	Dozer D6	X		4033	4043	10	527	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: Sunny -15°C Date: 14/10/19 Shift: Day

Management Code			3204		Liner		MineOPS											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-Up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bernier	326504	374	10	12														
Dave Lanoix	D7R12	D9	3	4			7	8										
Daisy Brouillette	325823	745		12														
Claude Savoie	325824	745																
Roger Leblanc	19-0036	Pick-Up	12	12														
Denis Edwards				12														
Chris Broderick				12														
				12														

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Clear Date: Nov 14/19 Shift: night

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13													1	13
Clarence Breau	19-0036	pick up	1														1	
" "	32-58-23	wiggle	6	12													6	12
Benjamen Dupuis	32-58-24	wiggle	9	12													9	12
Mark Shears	32-65-11	Excavator	10.7	12													10.7	12
Sabastian Arseneault	32-65-04	Excavator	3	5													3	5
" "	19-03-06	Excavator	6	7													6	7
Patrick Simard	32-73-08	D6 Dozer	10	12													10	12

Management Code	Activity Description
3204	-load, haul, place 0-¾ Stone, west ditch - Excavate Key trench, west ditch. -load, haul, place RO@ west ditch

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-15 | **Night Shift** | **Weather conditions:** Clear -25˚C | **Working Hours:** 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ AND GRAVEL FROM CRUSHER PAD TO POND
GRAVEL BEDDING ON WEST SIDE
CONTINUE TO BUILD WOUTH WEST BURM
CONTINUE TO BACKFILL KEY TRENCH WITH GRAVEL
REMOVE SNOW FROM KEY TRENCH

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	200	15 641	2 089	17 730	M^2	88%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION	50	9 102	23	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION	50	9 102	23	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 228	597	9 825	M^2	94%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5389	5399	10	1299	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4156	4166	10	852	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3180	3189	9	63			
327308	Dozer D6	X		4050	4060	10	544	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204.	We finished The section of The dyke west side put at on grade
	Continue backfilling Key Trench with 0-314.
Liner	349 worked with liner crew installing liner.
Float	We brought on Top the BACOS with The hamme.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -23 cloud Date: 15/11/19 Shift: Day

Management Code			3204		Mine Opr		Float											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bernier	19-0306	352	10	12														
Dave Lanoix	D2R-12	D-9			10	12												
Roger Leblanc	# 284	908	8	12														
Daisy Brouillette	325823	745	10	12														
Claude Savoie	325824	745	10	12														
Darren Burn	327308	D-6	8	12														
Denis Edwards	Float	~~3~~					8	12										
Chris Broderick	Trainning			12														

Management Code	Activity Description
3204	- remove Snow from South Key trench - load, haul, place 0-¾ South Key trench - assist maintenance with track on Hammer - load, haul, place ROC west ditch
3802	- Survey work around pond

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: light Snow Date: Nov 15/19 Shift: night

Management Code			3204		3802												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Benjamin Dupuis	32-58-24	wiggle	10	12														
Anthony Leguen	19-0025	pick up			1	12												
Patrick Simard	32-58-23	wiggle	8	10														
" "	32-73-08	D6 Dozer	2	2														
Mark Shears	32-65-11	Excavator	10	12														
Sebestian Arseneault	19-03-06	Excavator	9	12														
Clarence Breau	19-0036	pick up	1	9														
" "	# 284	mini loader	2	3														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-16 | **Day Shift** | **Weather conditions: Sunny, -25˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WORK ON WEST SIDE POND DITCH
ASSISTING LAYFIELD IN LINER INSTALLATION.
SNOW REMOVAL FOR LINER
HELP LINER CREW

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	15 741	1 989	17 730	M^2	89%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5399	5411	12	1311	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4166	4177	11	863	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3189	3201	12	75			
327308	Dozer D6	X		4060	4060	0	544	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-16	Night Shift	Weather conditions: Clear -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HAULING ROQ AND GRAVEL FROM CRUSHER PAD TO POND
GRAVEL BEDDING ON WEST SIDE
CONTINUE TO BUILD WOUTH WEST BURM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	15 841	1 889	17 730	M^2	89%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5411	5421	10	1321	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4177	4189	12	875	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3201	3213	12	87			WORK ON WRP
327308	Dozer D6	X		4060	4069	9	553	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andri Desmeules Weather: -23 Date : 16-11-19 Shift : D

Management Code	Activity Description
3204	Cleaned snow at The bottom of pond. Cleaned snow along The liner. Continued slopping wet section with Roq
Float.	load and unload Sanvik crusher. Prepared Sea Can for loading

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -23 cloudy Date: 16-11-19 Shift: D

Management Code			3204		Float													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Besnier	19-0306	352 -	8	12														
Dave Lanoix	327308	D-6	2	12														
Daisy Brouillette	325823	745	10	12														
Claude Savoie	325824	745	10	12														
Roger Leblanc	284	908 -	6	12														
Darren	Burry			12														
Denis Edwards				6		6												

Management Code	Activity Description
3204	- Excavate Key trench west side - load, haul, place 0-¾ west ditch, west Key trench - ice control for wiggles on ring road. - fueling
3802	Survey around pond.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: clear Date: Nov 16 / 19 Shift: Night

Management Code			3204		3502												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Chris Broderick	32-58-23	wiggle	11	12														
Patrick Simard	32-73-08	06 bozer	10	12														
Clarence Breau	19-0036	pick up	1															
" "	284	mini ladder	4	12														
Mark Shears	32-65-11	excavator	9	12														
Sebastian Arseaunault	19-03-06	excavator	9.5	12														
Anthony Tequen	19-0025	pick up			1	12												
Benjamen Dupuis	32-58-24	wiggle	10	12														

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-17 **Day Shift** **Weather conditions: Sunny, -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WORK ON WEST SIDE POND DITCH
ASSISTING LAYFIELD IN LINER INSTALLATION.
SNOW REMOVAL FOR LINER
HELP LINER CREW
START TO DIG SOUTH TRENCH WITH 320 HAMMER (NOT GOING WELL)
BACKFILL KEY TRENCH WITH GRAVEL

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	50	15 891	1 839	17 730	M^2	90%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5421	5432	11	1332	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4189	4197	8	883	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3213	3225	12	99			
327308	Dozer D6	X		4069	4075	6	559	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-17 **Night Shift** **Weather conditions: Clear -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BACKFILL KEY TRENCH WITH GRAVEL
GRAVEL BEDDING ON WEST SIDE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	15 991	1 739	17 730	M^2	90%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 400	425	9 825	M^2	96%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5432	5441	9	1341	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4197	4207	10	893	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3225	3237	12	111			WORK ON WRP
327308	Dozer D6	X		4075	4081	6	565	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -23 Date: 17-11-19 Shift: Day

Management Code	Activity Description
3204	Backfill Trench on Dyke with 0-314. Put some RQ on Dyke To widden a bit. Started with The 320 To bust out The Trench on south side.
Float	Brought down at QMR 2 a Sea-Can.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -20 cloudy Date: 17/11/19 Shift: Day

Management Code			3204		Liner		Float		Mine OPS									
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bernier	~~19-0306~~	352	10	12														
Roger Leblanc	284	908		6	6	6												
Dave Lanoix	D2R12	D-9							10	12								
Daisy Brouillette	325823	745	10	12														
Claude Savoie	325824	745	10	12														
Darren	327308	D-6	6	12														
Denis Edwards	Float			6			6	6										

Management Code	Activity Description
3204	Fill tey trench

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: clear Date: Nov 17/19 Shift: Night

Management Code			3204		3802												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Anthony legaen	19-0075	pick up			1	12												
Clarence Breau	19-0036	pick up	1	12														
" "	284	mini loader	3															
Mark Shears	32-65-11	excavator	9	12														
Chris Broderick	32-58-23	wiggle	11	12														
Patrick Simard	32-73-08	D6 Dozer	4	12														
Sebastien Arseneault	19-03-06	excavator	10	12														
Benjamen Dupuis	32-58-24	wiggle	10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-18	Day Shift	Weather conditions: Sunny, -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

START THE SPILLWAY WORK
ASSISTING LAYFIELD IN LINER INSTALLATION.
SNOW REMOVAL FOR LINER ON THE SLOPE
CLEAN AROUND CULVERT TO START CULVERT WORK

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		15 991	1 739	17 730	M^2	90%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5441	5450	9	1350	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4207	4217	10	903	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3237	3237	0	111			
327308	Dozer D6	X		4081	4081	0	565	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-18 **Night Shift** **Weather conditions: Clear -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BACKFILL KEY TRENCH WITH GRAVEL
GRAVEL BEDDING ON WEST SIDE
HAMMER ON THE WEST NORTH DITCH

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		15 991	1 739	17 730	M^2	90%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5450	5460	10	1360	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4217	4227	10	913	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3237	3239	2	113			WORK ON WRP
327308	Dozer D6	X		4081	4088	7	572	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -20 Date : 18-11-19 Shift : D

Management Code	Activity Description
3204.	We worked at the bottom and slope to clean snow for the liner crew.
	We cleaned arround the calvert to remove material for the calvert extension.
	We started working at the area where the spillway will be establish.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -26 Date: 18-11-19 Shift: Day

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326587	349	10	12														
Rock-Bernier	19-0306	352	—	12														
Dave Hennix	327308	D-6	—	12														
Roger Leblanc	284	908	8	12														
Daisy Brouillette	ART 12	740	10	12														
Claude Sauvie	325824	745	10	12														
Denis Edward	—	—		12														
Doreen Bury	—	—		12														

Management Code	Activity Description
3204	Fill Fey trench
	Hammer west North Ditch

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: clear Date: Nov 18/19 Shift: Night

Management Code			3204		3802												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Patrick Simard	32-73-08	D6 dozer	8	12														
Anthony Jequen	19-0025	pick up			1	12												
Mark Shears	32-65-11	Excavator	9	12														
Clarence Braun	19-0036	pick up	1	6														
" "	284	mini loader	1	1														
" "	32-58-23	wiggle	4	5														
Sabestian Arsenault	19-03-06	excavator	9	12														
Benjamen Dupuis	32-58-24	wiggle	10	12														
Chris Broderick	ART-012	wiggle	8	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-19 | **Day Shift** | **Weather conditions: Sunny, -25˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SLOPE AND BEDDING ON THE UPPER PART OF THE NORTH BURM
ASSISTING LAYFIELD IN LINER INSTALLATION.
SNOW REMOVAL FOR SLOPING

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	100	16 091	1 639	17 730	M^2	91%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349	X		5460	5470	10	1370	903	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4227	4237	10	923	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3239	3239	0	113			WORK ON WRP
327308	Dozer D6	X		4088	4088	0	572	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-19 **Night Shift** **Weather conditions: Clear -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WORK ON THE SPILLWAY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		15 991	1 739	17 730	M^2	90%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	WORK ON WRP
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	DOWN
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4237	4247	10	933	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3239	3239	0	113			WORK ON WRP
327308	Dozer D6	X		4088	4088	0	572	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -20 Date : 19-11-19 Shift : D

Management Code	Activity Description
3204	Cleaned big bolders where The night shift push ROQ at The spillway
	-Cleaned material from The hammer and put a layer of 0-3/4 on it.
	-Started as a Test a section of the slope stripped in september -Remove snow -shaped with ROQ -Put some 0-34 on Top.
Float	~~Set~~ Sended The float at port Toget some blast matress.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -20 Date : 19-11-19 Shift : D

Management Code			3204		Liner		Float	Blast Mat										
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0087	Pick-up	12	13														
Timothy Tobin	326511	349	10	12														
Rock Bernier	19-0306	352		8	4	4												
Dave Lannoix	327308	D-6		12														
Roger Leblanc	19-0036	Pick-up	12	12														
Daisy Brouillette	ART-012	740	10	12														
Claude Savoie	325824	745	10	12														
Darren Burry	Float			3				10										
Denis Edward	Float			3				10										

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: Clear Date: Nov 19/19 Shift: Night

Management Code			3209		3082													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pickup	1	13														
Anthony Iequen	19-0035	pickup			1	12												
Mark Shears	19-03-06	excavator	8	12														
Sebastian Arseneault	19-03-06	excavator	2	6														
" "	18-02-05	loader	4	6														
Patrick Simard				12														
Clarence Breau	19-0036	pickup	1	12														
Benjamen Dupuis	32-58-24	wiggle	10	12														
Chris Broderick	ART-012	wiggle	10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-20 **Day Shift** **Weather conditions: Sunny, -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PROFILING THE NORTH BERM WITH 0-3/4'' AND ROQ
SNOW REMOVAL ON THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	150	16 241	1 489	17 730	M^2	92%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	NOT AT WRP - AT ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	DOWN
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	DOWN
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4249	4258	9	942	10	0	WORK ON WRP
325823	Haul Truck CAT 746	X		3239	3239	0	113			WORK ON WRP
327308	Dozer D6	X		4088	4088	0	572	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-20	Night Shift	Weather conditions: Clear -25˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

WORK ON THE SPILLWAY
PROFILING THE NORTH BERM WITH 0-3/4'' AND ROQ

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	105	16 346	1 384	17 730	M^2	92%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	NOT AT WRP - AT ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	DOWN
325809	Haul Truck CAT 745		X	4484	4484	0	11	0	0	DOWN
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	WORK ON WRP
325824	Haul Truck CAT 745	X		4237	4247	10	952	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3239	3239	0	113			WORK ON WRP
327308	Dozer D6	X		4088	4088	0	572	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-21	Day Shift	Weather conditions: Clear, -23˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

PROFILING THE NORTH BERM WITH 0-3/4'' AND ROQ
SNOW REMOVAL ON THE NORTH BERM.
ASSISTING LAYFIELD IN LINER INSTALLATION AND HOUSE KEEPING AROUND WRP.
STARTED SOME SNOW REMOVAL ON THE RING ROAD TO ACCES THE DITCH ON THE EAST SIDE.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")	175	16 521	1 209	17 730	M^2	93%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	NOT AT WRP - AT ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	DOWN
326513	Excavator CAT 336	X				0			0	
325809	Haul Truck CAT 745	X		4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4249	4258	9	961	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3250	3259	9	124			WORK ON WRP
327308	Dozer D6	X		4088	4092	4	572	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-21 | **Night Shift** | **Weather conditions: Clear and wind -17˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

LOAD, HAUL, PLACE 0-3/4'' IN THE KEY TRENCH.
EXCAVATION OF THE KEY TRENCH ON THE NORTH BERM.
FILLING UP THE KEYTRENCH ON THE SOUTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING		83 042	21 958	105 000	M.T.	79%	
FINE BEDDING (0-3/4")		16 521	1 209	17 730	M^2	93%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	NOT AT WRP - AT ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3240	3248	8	8	0	0	WORK ON WRP
325809	Haul Truck CAT 745	X		4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4258	4258	0	952	10	0	
325823	Haul Truck CAT 746	x		3259	3269	10	123			WORK ON WRP
327308	Dozer D6	X		4092	4092	0	572	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -24 Date : 21-11-19 Shift : Day

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	19-0306	352	10	12														
Rock Bernier		WA-600	10	12														
Michael Brassard	19-0036	Pick-up	12	12														
Rogercheblanc	284	908	6	12														
Darren Bury	327308	D-6T	8	12														
Daisy Brouillette	ART-012	740	10	12														
Claude Savoie	325823	745	10	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -24 Date : 21-11-19 Shift : Day

Management Code	Activity Description
3204	We continued shaping slopes on dyke. 0-314 - ROQ loading WA-600 and slopping with #352.
	- Started To remove snow on ring road east side To expose The ditch for further work later.

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: clear Date : Nov 21/19 Shift : Night

Management Code			3204																	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pickup	1	13																
Benjamen Dupuis	32-58-23	wiggle	10	12																
Clarence Breau	19-0036	pick up	1	4																
" "	ART-012	wiggle	2	4																
" "	15-02-02	loader	4	4																
Sebastian Arseneault	15-02-02	loader	2	3																
" "	19-03-06	excavator	8	9																
Patrick Simard	ART-012	wiggle	9	9																
" "	15-02-02	loader	3	3																
Mark Shears	19-03-06	excavator	3	4																
" "	32-65-13	excavator	8	8																

Code

3204 - load, haul, place 0-¾ for Key trench
- excavate Key trench North Side
- Backfill South Key trench.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-21 **Day Shift** **Weather conditions: Windy, -15˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BREAKING THE ICE FOR THE KEYTRENCH ON THE NORTH BERM. WEST SIDE.
EXCAVATION OF THE KEYTRENCH.
FINE BEDDING (0-3/4'') IN THE KEYTRENCH.
PUSHING SNOW WITH THE DOZER ON THE RING ROAD.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		96 864	8 136	105 000	M.T.	92%	
FINE BEDDING (0-3/4")	122	16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4330	4330	0	1344	145	13	NOT AT WRP - AT ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3248	3259	11	19		0	WORK ON WRP
325809	Haul Truck CAT 745	X		4484	4484	0	11	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4258	4258	0	952	10	0	
325823	Haul Truck CAT 745	X		3269	3281	12	135			WORK ON WRP
327308	Dozer D6	X		4106	4112	6	598	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-21 | **Night Shift** | **Weather conditions: Blowing snow -10˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

LOAD, HAUL AND PLACE ROQ ON THE FINAL LIFT - NORTH BERM ON THE EAST SIDE.
PROFILING BACK SLOPE OF THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
POND AND SPILLWAY							
BERM RISING	1088	97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		**4499**	**4509**	**10**	**1354**	**145**	**13**	WORK ON WRP // **4330HR WHEN IT WENT TO CRUSHER AND CAME BACK AT 4499HR (169 HR)**
326511	Excavator CAT 349		X	**5470**	**5470**	**0**	**1370**	**903**	**0**	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		**3259**	**3270**	**11**	**30**	**0**	**0**	WORK ON WRP
325809	Haul Truck CAT 745	X		**4484**	**4484**	**0**	**11**	**0**	**0**	
325817	Haul Truck CAT 745	X		**3858**	**3858**	**0**	**761**	**12**	**43**	
325824	Haul Truck CAT 745	X		**4258**	**4258**	**0**	**952**	**10**	**0**	
325823	Haul Truck CAT 746	x		**3281**	**3292**	**11**	**146**			WORK ON WRP
327308	Dozer D6	X		**4112**	**4120**	**8**	**606**	**3**	**5**	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -15 Date : 22/11/19 Shift : Day

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326513	336	10	12														
Rock Bernier	BAC-05	345	10	12														
Michael Brassard	15-0202	WA-600	6	12														
Roger Leblanc	284	908	6	12														
Darren Bury	327308	D-6	7	12														
Daisy Brouillette	ART-12	740	10	12														
Claude Savoie	325823	745	10	12														
	19-0036	Pick-up	12															

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Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -15 Date : 22/11/19 Shift : Day

Management Code	Activity Description
3204	We busted The Trench at The west side and shape it with 336 and place 0-3/4 into it
	We worke at The south Trench close To The drill pattern.

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Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: Blowing Snow Date: Nov 22/19 Shift: Night

Management Code			3204		3802													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
clarence Breau	19-0036	pick up	1	6														
" "	ART-012	wiggle	6	6														
Patrick Simard	32-73-08	Dozer	7	12														
Benjamen Dupuis	32-58-23	wiggle	10	12														
Mark Shears	32-65-13	excavator	10	12														
Sabastian Arseneault	32-65-04	excavator	10	12														
Mark Andre Blackburn						12												
Mark Andre Blackburn	Nov 21/19					12												

3204 – load, haul, Place RoQ on Pond perimeter
- Sloping back slope

3802 - Survey around pond.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-23 **Day Shift** **Weather conditions: Windy, -10˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL ON THE BACK SLOPE OF THE NORTH BERM.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
PLACING BLAST MATS ON THE BLAST WITH DYNO.
BLAST HAS HAPPEN ON THE KEYTRENCH.
CUTING THE BROKEN PART OF THE CULVERT.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4509	4519	10	1364	145	13	WORK ON WRP // **4330HR WHEN IT WENT TO CRUSHER AND CAME BACK AT 4499HR (169 HR)**
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3270	3279	9	39		0	WORK ON WRP
325809	Haul Truck CAT 745	X		4587	4591	4	15	0	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4281	4283	2	954	10	0	
325823	Haul Truck CAT 745	X		3292	3296	4	150			WORK ON WRP
327308	Dozer D6	X		4120	4125	5	611	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-23 | **Night Shift** | **Weather conditions: Light snow and fog -18˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

EXCAVATION OF THE BLASTED KEYTRENCH.
FINE BEDDING (0-3/4") IN THE KEYTRENCH.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4519	4530	11	1375	145	13	WORK ON WRP // **4330HR WHEN IT WENT TO CRUSHER AND CAME BACK AT 4499HR (169 HR)**
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3279	3291	12	51	0	0	WORK ON WRP
325809	Haul Truck CAT 745	X		4591	4601	10	25	0	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4283	4294	11	965	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3296	3296	0	150			
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-24 **Day Shift** **Weather conditions: Cloudy, -20˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL ON THE BACK SLOPE OF THE NORTH BERM.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
EXCAVATION OF THE BLASTED KEYTRENCH.
FINE BEDDING (0-3/4'') IN THE KEYTRENCH.
SNOW REMOVAL IN THE POND FOR LINER INSTALLATION.
ASSISTING LAYFIELD IN LINER INSTALLATION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4530	4541	11	1386	145	13	WORK ON WRP // **4330HR WHEN IT WENT TO CRUSHER AND CAME BACK AT 4499HR (169 HR)**
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3291	3301	10	61		0	WORK ON WRP
325809	Haul Truck CAT 745	X		4601	4611	10	35	0	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4294	4304	10	975	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3296	3296	0	150			
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-24 | **Night Shift** | **Weather conditions: Clear, -23˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PROFILING THE BACK OF THE NORTH BERM.
HAULING MATERIAL IN AND OUT THE SLOPE OF THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 600	225	9 825	M^2	98%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4541	4550	9	1395	145	13	WORK ON WRP // **4330HR WHEN IT WENT TO CRUSHER AND CAME BACK AT 4499HR (169 HR)**
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3301	3313	12	73	0	0	WORK ON WRP
325809	Haul Truck CAT 745	X		4611	4621	10	45	0	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4304	4314	10	985	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3296	3296	0	150			
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -17 Date : 24/11/19 Shift : D

Management Code			3204															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	~~E~~ 326513	~~336~~	10	12														
Rock Bernier	BAC-005	345	6	12														
Michael Brassard	326504	374	7	12														
Roger Leblanc	284	~~908~~	9	~~8~~ 12	12													
Darren Burry	19-0036	Pick-up	12	12														
Daisy Brouillette	325824	745	10	12														
Claude Savoie	325809	745	10	12														

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Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -17 Date : 24/11/19 Shift : Day

Management Code	Activity Description
3204.	We finished the south west trench Removed everything from yesterday blast Backfilled the bottom and slope with D-3/4
	Worked on the north side slope removing snow and reshaping slope.

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: clear Date: Nov 24/19 Shift: night

Management Code			3204		3302												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Mark Shears	32-65-13	excavator	10	12														
Benjamin Dupuis	32-58-24	wiggle	9	12														
Patrick Simard	32-58-09	wiggle	10	12														
Clarence Breau	19-0036	pick up	1	12														
Sabastian Arseneault	32-65-04	excavator	9	12														
Mark Andre Blackburn						12												

3204 - Sloping around pond
Hauling material

3502 - Survey

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-25 **Day Shift** **Weather conditions: Clear, -21˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL ON THE BACK SLOPE OF THE NORTH BERM.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
SNOW REMOVAL IN THE POND FOR LINER INSTALLATION.
ASSISTING LAYFIELD IN LINER INSTALLATION.
INSTALLATION OF THE CULVERT : PUT 300MM OF FINE BEDDING (0-3/4''), COMPACTION WITH THE BUCKET, PUT THE SECTION OF CULVERT AND BACKFILL AROUND THE CULVERT WITH FINE BEDDING AND ROQ OVER THE FINE.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3313	3325	12	85		0	WORK ON WRP
325809	Haul Truck CAT 745	X		4621	4626	5	50	0	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4214	4225	11	996	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3296	3305	9	159			WORK ON WRP
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
EQUIPMENT	EXC-006 (BIM 345) HAS A MINOR HYDRAULIC ISSUE, THE BOOM GOES DOWN SLOWLY BY HIMSELF. IT'S NOT SAFE FOR LINER INSTALLATION SO WE USE SANA 352 AS THE 336 WAS NEEDED ON THE SLOPE PROFILING WITH THE DITCH BUCKET.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-25 | **Night Shift** | **Weather conditions: Clear, -25˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PROFILING THE BACK OF THE NORTH BERM.
HAULING MATERIAL IN AND OUT THE SLOPE OF THE NORTH BERM.
ASSISTING MINE OPS WITH SOME SNOW REMOVAL AROUND THE WATER TREATMENT PLANT WITH THE SMALL LOADER.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3325	3337	12	97	0	0	WORK ON WRP
325809	Haul Truck CAT 745	X		4626	4626	0	50	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4225	4236	11	1007	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3305	3314	9	168			WORK ON WRP
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -25 Date: 25/11/19 Shift: Day

Management Code			3204		Liner													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Andre Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326513	336	10	12														
Rock Bernier	BAC006	345	8	12														
Michael Brassard	19-0306	352		4	8	8												
Roger Leblanc	284	908	7	12														
Darren Bury	19-0036	Pick up	12	12														
Daisy Brouillette	325824	745	10	12														
Claude Savoie	325823	745	10	12														

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Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -20 Date: 25/11/19 Shift: Day

Management Code	Activity Description
3204	- we worked on slope north side removing snow and reshaped it
	- we extended the ~~sno~~ calvert and backfill it with 0-314 and ROQ.
Liner.	- 352 worked with Liner crew to install panel of Liner. (2)

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Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: Clear Date : Nov 25/19 Shift : night

Management Code			3204		3802		3201											
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Mark Andre Blackburn	19-0035	pick up			1	12												
Sebastain Arseneault	19-03-06	excavator	9	12														
Patrick Simard	32-58-23	wiggle	9	12														
Clarence Breau	19-0036	pick up	1	10														
" "	284	mini loader					2	2										
Mark Shears	32-65-13	excavator	10	12														
Benjamen Dupuis	32-58-24	wiggle	10	12														

3204 - Sloping around pyke
- Hauling access material from Slope

3802 - Survey around Pyke for Slopes

3201 - assist mine ops with Snow Removal around Bubble Dome

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-26 **Day Shift** **Weather conditions: Cloudy, -20˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL ON THE BACK SLOPE OF THE NORTH BERM.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
SNOW REMOVAL IN THE POND FOR LINER INSTALLATION.
ASSISTING LAYFIELD IN LINER INSTALLATION.
FINALISATION OF THE ROCKFILL FOR THE CULVERT.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3337	3349	12	109		0	WORK ON WRP
325809	Haul Truck CAT 745	X		4626	4626	0	50	0	0	WORK ON WRP
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4335	4345	10	1017	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3314	3325	11	179			WORK ON WRP
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-26 **Night Shift** **Weather conditions: Clear, -25˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

BUSTING FROST IN THE BACK SLOPE WITH HAMMER.
REMOVE SNOW IN THE KEYTRENCH.
BACKFILL KEYTRENCH WITH 0-3/4'' AND ROQ.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3349	3360	11	120	0	0	WORK ON WRP
325809	Haul Truck CAT 745	X		4626	4626	0	50	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4345	4349	4	1021	10	0	WORK ON WRP
325823	Haul Truck CAT 746	x		3325	3334	9	188			WORK ON WRP
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -26 Date: 26/11/19 Shift: D

Management Code			3204		Liner													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326513	336	~~10~~	~~12~~														
Rock Bernier	15-0202	WA600	5	12														
Michael Brassard	284	908			~~5~~	12												
Roger Leblanc	284	908			4	12												
Darren Bury	19-0036	Pick-up	~~12~~	12														
Daisy Brouillette	325824	745	10	12														
Claude Savoie	325823	745	10	12														

Unsupported PDF data: 1000

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Andre Desmeules Weather: -20 Date: 26/11/19 Shift: D

Management Code	Activity Description
- 3204 -	We finished the culvert (Backfill) and we put on grade a section of the south berm. We removed ice close to the liner and remove snow on slope and fixed a section.
Liner	Brought some geotextile and clean snow with the small loader.

Unsupported PDF data:1000

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Keith Arnold weather: Clear Date: Nov 26/19 Shift: Night

Management Code			3204		3802												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Mark Andre Blackburn	19-0025	pick up			1	12												
Clarence Breau	19-0036	pick up	1	9														
" "	32-58-24	wiggle	2	3														
Sebastian Arseneault	006	excavator	2	6														
" "	005	hammer	6	6														
Patrick Simard	32-58-23	wiggle	8	12														
Mark Shears	32-65-11	excavator	10	12														
Benjamin Dupuis			Sick															

Management Code	Activity Description
3204	- Remove Snow in Key trench for liner - Backfill Key trench - Busting frost in Slope
3802	- Survey around Pond

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-27	Day Shift	Weather conditions: Clear, -20˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOW REMOVAL ON THE BACK SLOPE OF THE NORTH BERM.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
SNOW REMOVAL IN THE POND FOR LINER INSTALLATION.
ASSISTING LAYFIELD IN LINER INSTALLATION.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3360	3371	11	131		0	WORK ON WRP
325809	Haul Truck CAT 745	X		4626	4626	0	50	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4349	4359	10	1031	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3334	3335	1	189			WORK ON WRP
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
MANPOWER	LAST DAY WITH THE FULL CREW FROM SANA AND LAST NIGHT SHIFT.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-27 | **Night Shift** | **Weather conditions: Clear, -24˚C** | **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

PROFILING THE BACK SLOPE OF THE NORTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED - WILL BE DONE IN COLDER CONDITIONS
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	
EXCAVATION OF SOUTH CREST TO FINAL ELEVATION		423	0	423	LIN.M.	100%	
EXTRA - EXCAVATION OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - ROQ FILL OF INTERNAL POND EXPANSION		9 125	0	9 125	M^2	100%	
EXTRA - EXCAVATION OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	
EXTRA - ROQ FILL OF EXISTING POND FOUNDATION		9 825	0	9 825	M^2	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3371	3382	11	142	0	0	WORK ON WRP
325809	Haul Truck CAT 745	X		4626	4626	0	50	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4359	4359	0	1031	10	0	
325823	Haul Truck CAT 746	x		3335	3344	9	198			WORK ON WRP
327308	Dozer D6	X		4125	4125	0	611	3	5	

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS
MANPOWER	LAST DAY WITH THE FULL CREW FROM SANA AND LAST NIGHT SHIFT.

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: André Desmeules Weather: -19 Date: 27/11/19 Shift: D

Management Code			3264															
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
André Desmeules	19-0037	Pick-up	12	13														
Timothy Tobin	326513	336	10	12														
Rock Bernier	BAC006	345	6	12														
Michael Brassard	284	908	6	12														
Roger Leblanc	284	908	6	12														
Darren Bury	327308	D-6		12														
Daisye Brouillette	325823	745		12														
Claude Savoie	325824	745	6	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Keith Arnold Weather: clear Date : Nov 27/19 Shift : night

Management Code			3204		3802													
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Keith Arnold	19-0037	pick up	1	13														
Sebastian Arseneault				12														
Clarence Breau	19-0036	pick up	1	12														
Patrick Simard				12														
Mark Shears	32-65-13	excavator	10	12														
Mark Andre Blackburn	19-0025	pick up			1	12												
Benjamen Dupuis	32-58-23	waffle	8	12														

3204 - Sloping around pond
- Haul waste material

3802 - Survey Slopes

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-28 **Day Shift** **Weather conditions: Clear, -22˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FILLING UP THE KEY TRENCH WITH 0-3/4'' AND ROQ ON THE INTERNAL SOUTH BERM
PROFILING THE BACK SLOPE OF THE NORTH BERM.
SNOW REMOVAL IN THE POND FOR LINER INSTALLATION.
ASSISTING LAYFIELD IN LINER INSTALLATION.
SNOW REMOVAL ON THE INTERMAL BERM FOR THE 2M LIFT
START THE 2M LIFT ON THE INTERNAL SOUTH BERM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	576	576	23 802	24 378	M.T.	2%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3382	3392	10	152		0	WORK ON WRP
325809	Haul Truck CAT 745	X		4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		0	0	0	0	0	0	
325817	Haul Truck CAT 745	X		3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4363	4373	10	1045	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3344	3353	9	207			WORK ON WRP
327308	Dozer D6		X	4125	4125	0	611	3	5	TOROMONT LOCK OUT ON IT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -22 Date: 28/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia L. Bélanger	32-58-24		7	12														
Valérie Cloutier	32-58 23		10	12														
Mickael Brassard	WA 600		6	12														
	CAT 908	284	10															
marc-André Blackburn				12														
Justin	EXC006	CAT 345	10	12														
Travis	32 65 13	CAT 336	10	12														

Management Code	Activity Description
3204	- fill south key trench - Holding liner for layfield
	- start lift on south berm
	- work on outside slope of North berm - move material for layfield (textile, liner

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-11-29 **Day Shift** **Weather conditions: Clear, -22˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

FILLING UP THE KEY TRENCH WITH 0-3/4'' ON THE NORTH BERM.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
SNOW REMOVAL ON THE INTERMAL BERM FOR THE 2M LIFT.
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	1216	1 792	22 586	24 378	M.T.	7%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		405	18	423	LIN.M.	96%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5470	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3392	3403	11	152		0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3340	3344	4	0	0	0	
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4373	4382	9	1045	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3353	3358	5	207			WORK ON WRP
327308	Dozer D6		X	4125	4125	0	611	3	5	TOROMONT LOCK OUT ON IT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussière weather: -17° Date: 2019-11-29 Shift: Day

Management Code			3204		3802												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussière	19-0037	Pick Up	12	13														
Han. Andre Blackburn	19-0025	Pick Up			12	12												
Michael Brassard	15-0202	Loader WA-600	10	12														
Patricia F. Belanger	3258 24	745	10	12														
Valère Cloutier	3258 23	745	6	7														
" "	3258 12	745	4	5														
BIM { Justin Johnson	EXC006	Cat 345	10	12														
BIM { Travis Ens	3265 13	Cat 336	10	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel Bussière Weather: -17°C Date: 2019-11-29 Shift: Day

Management Code	Activity Description
3204	- Filling up north keytrench with 0-3/4" - Work on 2m lift on the south berm - Snowremoval for 2m lift on south berm.
	- Housekeeping around pound for layfield. - Profiling back on the slope - north beem. - 2 truks hauling, WA-650 loading truck all day.
	345 placing the 2m rockfill.
3802	- Survey around the pound + giving ride to layfield and housekeeping with the pick up truck.

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-11-30 **Day Shift** **Weather conditions: Light snow, -17˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
SNOW REMOVAL ON THE INTERMAL BERM FOR THE 2M LIFT. **(115 LOADS)**
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	256	2 048	22 330	24 378	M.T.	8%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING	18	423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5470	5480	10	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3403	3403	0	152		0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3344	3354	10	0	0	0	
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4382	4392	10	1045	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3358	3358	0	207			WORK ON WRP
327308	Dozer D6		X	4125	4125	0	611	3	5	TOROMONT LOCK OUT ON IT

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussieres weather: -14 Date: 30/11/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussieres	19-0037	Pick Up		13														
Patricia F-Belanger	325824	745 ART	10	12														
Valère Cloutier	325812	745 ART	10	12														
Mickael Brassard	284	CAT 908	7	7														
Marc-André Blackburn	19-0035	Pick Up		12														
Michael Brassard	WA 600	15-0202	5	5														
Justin Johnson	Exc. 06	CAT 345	10	12														
Travis Ellis	326513	CAT 336	10	12														

Management Code	Activity Description
3204	work on north slope deployed liner
	Snow removal along noth side of waste dump Work on 2m lift on south berm.
	House keeping for Layfield Move liner and textile for layfield
	Fuel light tower and Frost fighter

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-01	Day Shift	Weather conditions: Light snow, -27˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	2310	4 358	20 020	24 378	M.T.	18%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349		X	5480	5480	0	1370	903	0	NOT ON TOP - MAINTENANCE BY TOROMONT
326513	Excavator CAT 336	X		3403	3415	12	195		0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3354	3365	11	25	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4392	4403	11	1085	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3358	3358	0	221			
327308	Dozer D6		X	4125	4135	10	621	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -24 Date: 1/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	19-0037	Pick Up		9														
Patricia-E. Belanger	325824	745	10	12														
Valere Cloutier	325912	745	10	12														
Mickaël Brassard	150207	WA-600	10	12														
Marc Andre Blackburn	19-0025	Pick Up		12														
Manuel Bussiere	284	Cat 908	4	4														
Travis Ellens	326513	Cat 336	10	12														
Justin Johnson	EXC 006	Cat 345	10	12														

Management Code	Activity Description
3204	- North side slope - Snow removal on keyway and inside pond
	- lift on South berm - hold liner for layfield
	- house keeping for Layfield - move textile and Liner for layfield
	- Fuel Frost fighter and tower light

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-12-02 **Day Shift** **Weather conditions: Clear, -30˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.
ROAD MAINTENANCE WITH 2INCH GRAVEL.

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	2516	6 874	17 504	24 378	M.T.	28%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5480	5480	0	1370	903	0	ARRIVE ON TOP IN THE AFTERNOON.
326513	Excavator CAT 336	X		3421	3431	10	211		0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3365	3375	10	45	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4403	4413	10	1085	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3358	3358	0	221			
327308	Dozer D6		X	4140	4150	10	636	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussière weather: Clear -30°C Date: 2019-12-02 Shift: Day

Management Code			3204		3802												total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussière	19-0037	Pick Up	12	9														
"	284	CAT 908	4	4														
Michael Brassard	15-0202	WA-600	10	12														
Patricia F. Belanger	32 5824	CAT 745	10	12														
Valère Cloutier	32 5812	CAT 745	10	12														
Marc-André Blackburn	19-0025	Pick Up			12	12												
Justin Johnson	32738	Dozer D6	10	12														
Travis Ens	32 6513	Cat 336	10	12														

Qikiqtaaluk SANA

Foreman Report

11-837 - Expansion Project

Foreman: Manuel Bussière Weather: Clear -30°C Date: 2019-12-02 Shift: Day

Management Code	Activity Description
3204	- Puting gravel on the road for maintenance. - Rockfill of the 2m lift on the south berm. - Loading truck with loader WA-600, 2 trucks hauling and pushing with the ROQ with DC - Excavator 336 holding roll of liner for layfield. - " " working on the back slope north berm - Moving roll of liner with the baby loader. - House Keeping around the pond.
3802	Survey around pond.

Qikiqtaaluk SANA

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Baffinland

Date: 2019-12-03 **Day Shift** **Weather conditions: Clear, -32˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.
ROAD MAINTENANCE WITH 2INCH GRAVEL.
SNOW REMOVAL ALONG THE WASTE DUMP ON THE SOUTH BERM FOR 2M LIFT.
FILLING UP KEYTRENCH ON THE NORTH BERM WITH 0-3/4'' AND 0-6".

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	1792	8 666	15 712	24 378	M.T.	36%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5505	5529	24	1394	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3431	3455	24	235	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3375	3399	24	59	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4413	4437	24	1109	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3358	3358	0	221	0	0	
327308	Dozer D6		X	4150	4174	24	660	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -32 Date: 3/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	284	Loader 908	6	13														
Patricia F. Belanger	325824	745	10	12														
Valère Cloutier	325812	745	10	12														
Michaël Brassard	15-0202	WA-600	8	12														
Marc-André Blackburn	rm19-0025	Pickup		12														
Travis Enns	326513	CAT 336	10	12														
Justin Johnson	327308	CAT D6	10	12														

Management Code	Activity Description
3204	- Exc 326513 didn't start, we finally have it running at 9:00 am - toromont work on 326511 for about 45minute so no
	Loading during that time - clean snow and hold liner for lay field
	- work on north berm slope - continue lift on south berm
	- fuel tower light and frost fighter for Lay Field - house keeping for Layfield
	- move textile and Liner for Lay Field - snow removal on south berm along waste dump
	- North key trench 6" to 12" of 0 3/4 at the bottom and use 0 to 6" to Fill the rest as ask From Alan

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-03 **Day Shift** **Weather conditions: Clear, -32˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.
ROAD MAINTENANCE WITH 2INCH GRAVEL.
SNOW REMOVAL ALONG THE WASTE DUMP ON THE SOUTH BERM FOR 2M LIFT.
FILLING UP KEYTRENCH ON THE NORTH BERM WITH 0-3/4" AND 0-6".

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	2048	10 714	13 664	24 378	M.T.	44%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5529	5538	9	1403	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3455	3465	10	245	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3399	3399	0	59	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4437	4437	0	1109	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3358	3362	4	225	0	0	
327308	Dozer D6		X	4174	4184	10	670	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Lift on south berm - Remove snow for Lay field
	- hold liner for lay field - house keeping for lay field
	- move liner and textile - fuel tower light and frost fighter
	- backfill some of the north key trench - Park 325812 for soft Tire

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -32 Date: 4/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Belanger	325824		~~9~~ 10	12														
Valère Cloutier	325823		4	12														
Michael Brassard	326511		10	12														
Marc André Blackburn				12														
Valère	325912		6															
	284		10															
Travis Ens	~~325915~~	326513	10	12														
Justin Johnson	327308		10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-05	Day Shift	Weather conditions: Clear, -32˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
PROFILING THE BACK SLOPE OF THE NORTH BERM.
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.
ROAD MAINTENANCE WITH 2INCH GRAVEL.
SNOW REMOVAL ALONG THE WASTE DUMP ON THE SOUTH BERM FOR 2M LIFT.
REMOVE THE RAMP AT THE END SOUTH OF THE POND

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	2272	12 986	11 392	24 378	M.T.	53%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5538	5549	11	1414	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3465	3472	7	252	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3399	3399	0	59	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4437	4444	7	1116	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3362	3372	10	235	0	0	
327308	Dozer D6		X	4184	4194	10	680	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Lift on South Berm -Remove snow for Layfield
	-remove ramp on south west of berm -build a snow ramp at the end of pond south west
	-move liner and textile -hold liner
	-fuel tower light and frost fighter -

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -30 Date: 05/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	284		10	13														
Patricia F. Belanger	325824		10	12														
Valère Cloutier	325823		10	12														
Mickaël Brassard	326511		10	12														
Travis Ens	326513		10	12														
Dustin Johnson	327308		10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-06 **Day Shift** **Weather conditions: Clear, -32˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
LOADING, HAULING AND PLACING ROQ FOR THE 2M LIFT - SOUTH BERM.
SNOW REMOVAL FOR LAYFIELD INSIDE THE POND
OUSE KEEPING FOR LAYFIELD

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	1984	14 970	9 408	24 378	M.T.	61%	
FINE BEDDING (0-3/4")		16 643	1 087	17 730	M^2	94%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5549	5559	10	1424	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3472	3472	0	252	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3399	3399	0	59	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4444	4454	10	1126	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3372	3383	11	235	0	0	
327308	Dozer D6		X	4199	4209	10	695	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-326511 was left at drilling partern 620, so only start Loading at 7:30 (by mine ops)
	-One of the generator for Layfield ~~and an oth~~ was still not running this morning and an other one stop working
	during night so I have our mecanic have both running
	-keep working on south berm lift. Have to stop cause
	exc006 was on our way (nobody fix it yet)
	-Finish slop, gravel and key trench where the old ramp
	was on north berm south west of it.
	-snow removal for layfield
	-fuel frost fighter and tower light
	-house keeping for layfield and prepare textile
	-work the slope on south berm 2 meter lift (pond side)

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -31 Date: 7/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	284	CAT 908	10	13														
Patricia F. Belanger	325824	CAT 745	10	12														
Valère Cloutier	325823	CAT 745	10.5	12														
Mickael Brassard	326511	CAT 349	10	12														
Justin Johnson	326513	CAT 336		12														
Travis Ens	327308	CAT D6	6	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-08 **Day Shift** **Weather conditions: Clear, -32˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

ASSISTING LAYFIELD IN LINER INSTALLATION, MOVING ROLL OF LINER AND GEOTEXTILE.
WORK ON NORTH BURM OUTSIDE SLOPE
WORK ON SOUTH BURM ADDITIONNAL LIFT INSIDE SLOPE
FINISH DIGING THE KEY TRANCH ON NORTH BURM
SNOW REMOVAL FOR LAYFIELD INSIDE THE POND
FILL A PART OF KEY TRANCH ON NORTH BURM
HOUSE KEEPING FOR LAYFIELD

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	960	16 410	7 968	24 378	M.T.	67%	
FINE BEDDING (0-3/4")	224	16 867	863	17 730	M^2	95%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5599	5623	24	1473	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3535	3559	24	286	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3402	3426	24	86	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4474	4498	24	1170	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3398	3398	0	250	0	0	
327308	Dozer D6		X	4211	4235	24	721	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Toromont show up at 8:20 am to fix bucket pin on 32 65 11 so it only start working at 9:15am
	- Toromont switch a ~~tes~~ quick attach house on 326513
	- Hold liner for Layfield
	- work on North ~~side~~ berm, outside slope -work on South berm inside slope
	- snow removal for layfield - house keeping for layfield
	-fill some of the south key trench - make room on the snow dump to be ready for more ~~s~~
	snow removal - move EXC006 to 110 laydown to be fix

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -29 Date: 08/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Bélanger	325824	CAT 745	10	12														
Valère Cloutier	325812	CAT 745	10	12														
Michaël Brassard	284	CAT 908	10	12														
	327308	CAT D6	3															
Justin Johnson	326511	CAT 349	10	12														
Travis Ens	326513	CAT 336	10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-09	Day Shift	Weather conditions: Clear, -32˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

ROAD SANDING FOR SLIPERY CONDITION
WORK ON SOUTH BURM ADDITIONNAL LIFT INSIDE SLOPE
HAULING ROQ FOR SOUTH BURM ADDITIONNAL LIFT AND WORK ON IT
SNOW REMOVAL FOR LAYFIELD INSIDE THE POND
FILL A PART OF KEY TRANCH ON SOUTH BURM

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	2304	18 714	5 664	24 378	M.T.	77%	
FINE BEDDING (0-3/4")	128	16 995	735	17 730	M^2	96%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5623	5642	19	1492	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3559	3582	23	309	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3426	3450	24	110	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4498	4521	23	1193	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3398	3398	0	250	0	0	
327308	Dozer D6		X	4235	4260	25	746	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	- Fill keytrench on south berm - Keep lifting south berm
	- Snow removal on west side of south berm - Drive Layfield around in the morning
	- Fuel Frost fighter and tower light - sand the road to keep them drivable with 745

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières

weather: -26 windy

Date: 9/12/19

Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	284		10	13														
Patricia F. Belanger	325824	CAT 745	10	12														
Valère Cloutier	325812	CAT 745	10	12														
Michaël Brassard	327308	CAT D6	10	12														
Travis Ens	326513	CAT 336	10	12														
Justin Johnson	326511	CAT 349	10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-10	Day Shift	Weather conditions: Clear, -32˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

ROAD SANDING FOR SLIPERY CONDITION
WORK ON SOUTH BURM ADDITIONNAL LIFT
HAULING ROQ FOR SOUTH BURM ADDITIONNAL LIFT
SNOW REMOVAL FOR LAYFIELD INSIDE THE POND AND KEY TRANCH
FILL A PART OF KEY TRANCH ON SOUTH BURM
ASSIST LAYFIELD FOR LINER INSTALLATION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	3008	21 722	2 656	24 378	M.T.	89%	
FINE BEDDING (0-3/4")		16 995	735	17 730	M^2	96%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5642	5666	24	1516	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3582	3606	24	333	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3450	3474	24	134	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4521	4540	19	1212	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3398	3404	6	256	0	0	
327308	Dozer D6		X	4260	4283	23	769	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	- Hold liner for lay field - Clean up pond, key trench from snow
	- South berm Slope - Snow removal on west side of South berm
	- work on south berm lift - Toromont work on D6 for 1 hr
	- Shut down 325824 for Coolant leak - Equipment get really low on Grease, had to add some ourself on the 349
	- Fuel truck only have fuel sor for the last 3 day we are providing our own grease, engine oil, and coolant

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -24 Date: 10/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	284	cat 908	10	13														
Patricia F. Belanger	325824	Cat 745	5	12														
Valère Cloutier	325812	CAT 745	10	12														
Michaël Brassard	327308	CAT D6	10	12														
	325823	CAT 745	4															
Travis Ens	326513	CAT 336		12														
Justin Johnson	326511	CAT 349		12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-11 **Day Shift** **Weather conditions: Clear, -32˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

WORK ON SOUTH BURM ADDITIONNAL LIFT
HAULING ROQ FOR SOUTH BURM ADDITIONNAL LIFT
SNOW REMOVAL FOR LAYFIELD INSIDE THE POND AND KEY TRANCH
BACKFILL A PART OF KEY TRANCH ON SOUTH BURM
ASSIST LAYFIELD FOR LINER INSTALLATION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	736	22 458	1 920	24 378	M.T.	92%	
FINE BEDDING (0-3/4")	256	17 251	479	17 730	M^2	97%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5666	5691	25	1541	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3606	3616	10	343	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3474	3499	25	159	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4540	4540	0	1212	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3404	3428	24	270	0	0	
327308	Dozer D6		X	4283	4283	0	769	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	- Poromont work on 325823 for 5 hours, heater fan, brake pressure - They work on D6 too Fixing greasing system
	- Backfill south key trench on the west side - Move stuff for Layfield with 908
	- fuel up tower-light and frost fighter

Qikiqtaaluk
SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -26 Date: 11/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	327308	CAT D6	2	13														
Patricia F. Belange	325823	CAT 745	5	12														
Valère Cloutier	325812	CAT 745	10	12														
Michaël Brassard	326511	CAT 349	10	12														
	284	cat 908	10															
Murray Anthony	326513	CAT 336	10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-12	Day Shift	Weather conditions: Clear, -32˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SPREAD GRAVEL NSIDE NORTH KEY TRENCH FOR LINER
HOUSE KEEPING FOR LEY FIELD
HAULING GRAVEL AND 6 INCH MINUS FOR KEY TRENCH
BACKFILL A PART OF KEY TRANCH ON SOUTH BURM
ASSIST LAYFIELD FOR LINER INSTALLATION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)		22 458	1 920	24 378	M.T.	92%	
FINE BEDDING (0-3/4")	96	17 347	383	17 730	M^2	98%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5691	5714	23	1564	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3616	3640	24	367	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3499	3523	24	183	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4540	4540	0	1212	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3428	3450	22	292	0	0	
327308	Dozer D6		X	4301	4325	24	811	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
3204	-Gravel 0 3/4 on North key trench Before liner - Hold liner for layfield
	- house keeping for Layfield, Move liner, textile and bar -haul from stand crysher 0-6" close to south west side of burm
	a stock pile -place 0-6" on key trench. first we secure the
	textile all the way and then we ~~start~~ Keep Filling the key trench

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -23 Date: 12/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières	284	CAT 908	10	13														
Patricia F. Belanger	325823	CAT 745	10	12														
Valère Cloutier	325812	CAT 745	10	12														
Michaël Brassard	327308	CAT D6	10	12														
Murray Anthony	326511	CAT 336	10	12														
Justin Johnson	326511	CAT 349	10	12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-13	Day Shift	Weather conditions: Clear, -32˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

HOUSE KEEPING FOR LEY FIELD
HAULING GRAVEL AND 6 INCH MINUS FOR KEY TRENCH
HAULING ROQ FOR SOUTH BURM RISE ADDITIONNAL LIFT AND CONTINUE TO BUILD THAT LIFT
FINISH TO BACKFILL A PART OF KEY TRANCH ON SOUTH AND WEST BURM
ASSIST LAYFIELD FOR LINER INSTALLATION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	480	22 938	1 440	24 378	M.T.	94%	
FINE BEDDING (0-3/4")		17 347	383	17 730	M^2	98%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4550	0	1395	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5714	5738	24	1588	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3640	3664	24	391	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3523	3547	24	207	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4540	4540	0	1212	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3450	3475	25	317	0	0	
327308	Dozer D6		X	4325	4349	24	835	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Management Code	Activity Description
~~Finish~~ 3204	- finish to fill up key trench around west side - keep working south side berm lift
	- Fill up tower light and frost fighter - Move liner and textile for Layfield

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Marcel Bussières weather: -30 Date: 13/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Marcel Bussières	284		10	13														
Patricia I. Belanger	325823			12														
Valère Cloutier	325812			12														
Michaël Brassard	327308			12														
Justin Johnson	326513			12														
Murray Anthony	326511			12														

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-14	Day Shift	Weather conditions: Clear, -32˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

SNOW REMOVAL (STORMY CONDITION)
HAULING ROQ FOR SOUTH BURM RISE ADDITIONNAL LIFT AND CONTINUE TO BUILD THAT LIFT
WORK ON SOUTH BURM ADDITIONNAL LIFT SLOPE

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)	2304	25 242	-864	24 378	M.T.	104%	CONTINUE ON THE WEST SIDE PART UNTIL WE CAN
FINE BEDDING (0-3/4")	32	17 379	351	17 730	M^2	98%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4550	4574	24	1419	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5738	5738	0	1588	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3664	3691	27	418	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3547	3569	22	229	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4540	4540	0	1212	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3475	3497	22	339	0	0	
327308	Dozer D6		X	4349	4372	23	858	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-15	Day Shift	Weather conditions: Clear, -32˚C	Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am

DAILY ACTIVITIES

NO WORK DONE, BLIZZARD DAY

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		97 952	7 048	105 000	M.T.	93%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)		25 242	-864	24 378	M.T.	104%	CONTINUE ON THE WEST SIDE PART UNTIL WE CAN
FINE BEDDING (0-3/4")		17 379	351	17 730	M^2	98%	
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4574	4574	0	1419	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5738	5738	0	1588	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3691	3691	0	418	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3569	3569	0	229	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4540	4540	0	1212	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3497	3497	0	339	0	0	
327308	Dozer D6		X	4372	4372	0	858	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
15-12-2019	BLIZZARD	12

Baffinland Iron Mine
Site crushing and constructions services
Daily Report

BIM job no.
SANA job No. 11-837

Date: 2019-12-16 **Day Shift** **Weather conditions: Clear, -32˚C** **Working Hours: 5:30am-5:30pm ; 5:30pm-5:30am**

DAILY ACTIVITIES

SNOW REMOVAL AFTER THE STORM, A LOT OF SNOW
SPREAD GRAVEL ON THE ROADS
ASSIT LAYFIELD FOR LINER INSTALLATION
DO THE 0-6'' LIFT ON NORTH WEST BURM FOR LINER PROTECTION

DAILY PRODUCTION

WRP EXPANSION PROJECT

ITEMS	DAILY ADVANCEMENT	CUMULATIVE QUANTITY DONE	REMAINING QUANTITY	TOTAL PLANNED QUANTITY	UNIT	% COMPLETED	COMMENTS
RING ROAD AND DITCH							
DITCH - WEST		610	90	700	LIN.M.	87%	100% DONE BUT 90 LIN.M. TO BE CORRECTED.
DITCH - EAST		655	43	698	LIN.M.	94%	6% REMAINING IS THE 100 LIN.M. OF RIP RAP (6"CLEAR) MISSING.
POND AND SPILLWAY							
BERM RISING		105 000	0	105 000	M.T.	100%	
EXTRA - 2M LIFT ON THE INTERNAL BERM (SOUTH)		25 242	-864	24 378	M.T.	104%	CONTINUE ON THE WEST SIDE PART UNTIL WE CAN
FINE BEDDING (0-3/4")		17 379	351	17 730	M^2	98%	ALL POMD DONE, A PART OF NORTH KEY TRENCH STILL TO BE COMPLETED
INTERNAL BERM PROFILING		423	0	423	LIN.M.	100%	

NOTE* : QUANTITY IN M.T. ARE APPROXIMATIVE AS WE FOLLOW THE PROJECT IN LOAD OF TRUCK AND CONSIDERING 32 TONS / LOAD.

EQUIPEMENT

TOROMONT (PROJECTS) EQUIPMENT		UP	DOWN	HOURS AT START	HOURS AT END	HOURS USED	WRP cumul	M. ops cumul	KM106	***Cumul from 04-08-2019***
326504	Excavator CAT 374	X		4574	4588	14	1433	145	13	NOT ON TOP - AT THE ORE CRUSHER
326511	Excavator CAT 349	X		5738	5738	0	1588	903	0	WORK ON WRP
326513	Excavator CAT 336	X		3691	3705	14	432	0	0	WORK ON WRP
325809	Haul Truck CAT 745		X	4626	4626	0	50	0	0	
325812	Haul Truck CAT 745	X		3569	3583	14	243	0	0	WORK ON WRP
325817	Haul Truck CAT 745		X	3858	3858	0	761	12	43	
325824	Haul Truck CAT 745	X		4540	4540	0	1212	10	0	WORK ON WRP
325823	Haul Truck CAT 745	X		3497	3511	14	353	0	0	
327308	Dozer D6		X	4372	4386	14	872	3	5	WORK ON WRP

CONTRACTOR REMARKS

SCOPE AFFECTED	REMARKS

DELAYS

DATE	DELAY DESCRIPTION	HOURS LOST
15-12-2019	BLIZZARD	12

Management Code	Activity Description
3204	-After storm snow removal: road, around c-can, around Layfield liner and textil
	-Spread rock on the road -start every machine
	-~~fuel~~ fill up and restart frostfighter and tower light
	-hold liner for layfield -1 foot lift on west side of north berm with
	0 to 6"

Qikiqtaaluk SANA

Forman Report

11-837

Forman: Manuel Bussières weather: -23 Date: 16/12/19 Shift: Day

Management Code			3204														total	
Name	Equip #	Equip. Desc.	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M
Manuel Bussières				13														
Patricia F. Bélanger	325823		10	12														
Valère Cloutier	325812		10	12														
Michaël Brassard	327308		10	12														
	284		10															
Murray Anthony	326513		10	12														
Justin Johnson	326511		10	12														

APPENDIX F

DESIGN SPECIFICATIONS

REPORT

WRF Pond Expansion Drainage System

Submitted to:

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1.0 INTRODUCTION

Golder Associates (Golder) has been retained by Baffinland Iron Mines Corporation (BIM) to provide input into the design and operation of the Waste Rock Facility (WRF) at its Mary River Project. The Mary River Project is an operational iron mine on Baffin Island in Canada's Nunavut territory. Ore is mined from the open pit, crushed onsite, and hauled to the Milne Port (approximately 100 km from site) where it is stockpiled and shipped off-site for processing. Waste rock from the open pit is disposed of at the WRF which is located to the north of the open pit.

Golder recently carried out a review of the proposed WRF expansion considering waste rock production through the year 2022 (Golder 2018a). Expansion of the WRF pond is required to collect and manage the runoff generated over the expanded WRF footprint. This report provides the detailed design for the WRF Pond expansion drainage system.

2.0 BACKGROUND

Waste rock produced from the open pit mining operation is managed at the WRF. The WRF currently consists of a waste rock stockpile, a sedimentation pond (referred to herein as the "WRF Pond"), and perimeter ditches. Surface runoff and seepage from the WRF is currently collected in ditches and directed to the WRF Pond. Containment for the WRF Pond is provided by a berm (referred to herein at the "WRF Pond Berm") in conjunction with natural topography. The WRF Pond utilizes a geomembrane as the low permeability element. The existing WRF Pond was constructed from September 2015 to May 2016.

The WRF Pond was originally designed as a sedimentation pond. Once clarified, the collected flow was intended to be discharged directly to the environment without treatment. BIM recently identified that the WRF is potentially generating acid rock drainage (ARD). BIM is currently constructing a water treatment system (WTS) to treat and discharge the impacted water collected at the WRF Pond. While actions are currently being undertaken to reduce the future potential for continued ARD, at this time, forward planning of the WRF expansion considers that the requirement to collect and treat ARD may continue in the near-term.

It is noted that seepage out of the existing WRF Pond Berm has been identified. An inspection was carried out in September 2017 to identify the seepage source (Hatch 2017). No damage to the existing WRF Pond geomembrane was noted during the inspection, and the source of seepage was not conclusively determined. A more detailed inspection of the WRF Pond will be carried out at the time of the proposed expansion, and any required repair or remediation carried out.

3.0 SITE CONDITIONS

The following sections provide a discussion on the site conditions.

3.1 Geotechnical

Two boreholes, located approximately 2 km from the WRF, were drilled during a 2016 investigation (KPC 2006). The results of the investigation identified that the foundation conditions likely consist of 6.5 - 13.5 m of glacial till underlain by bedrock. The groundwater table was not record at the time of the investigation. The glacial till was typically a sand and gravel with some silt, though the composition varied with depth and by borehole. Refer to Appendix A for the relevant borehole logs.

It has been assumed that the site conditions from Appendix A are applicable to the WRF Pond. This assumption will be reviewed at the time of construction.

3.2 Climate and Hydrology

The project is located in the North Baffin Region of Baffin Island. Based on regional data collected by Knight Piesold (2012), the mean annual precipitation ranges from 200 mm to 400 mm and the mean annual temperature is approximately -15°C. The monthly average temperatures are mostly above freezing between June and August.

Golder carried out a hydrological study (Golder 2018b) to support the design of water collection and water treatment facilities based on local hydrometric and meteorological data collected on-site. The hydrometric station H07 with 11 available years of record, was selected as the most representative for the hydrological conditions around the WRF. A statistical analysis was carried out to estimate runoff for the return periods from 2 to 100 years and durations ranging between 1-day to 105-days.

Table 1 provides a summary of the estimated runoff values generated for various durations and return periods. As the return periods were assessed based on actual measured stream-flow data at station H07, the values in Table 1 account for varying hydrological events (i.e., including both rainfall events and freshet flows).

Table 1: Estimated Runoff (mm) by Return Period and Event Duration

Return Period (Years)	Flood Event Duration (Days)																	
	1	2	3	4	5	6	7	8	9	10	15	20	30	45	60	75	90	105
2	21	38	52	66	79	92	105	117	129	140	186	217	264	309	327	348	359	362
5	26	47	63	82	98	114	129	143	157	169	229	265	326	369	397	425	438	440
10	32	57	74	96	114	131	146	161	175	188	258	298	358	398	430	463	476	478
25	41	73	94	119	140	157	171	185	199	211	294	342	392	425	464	501	514	515
50	50	90	116	141	163	180	192	204	216	228	321	376	414	442	484	524	538	538
100	61	113	146	168	190	206	215	223	234	244	349	410	433	457	502	544	558	558

Golder (2018) recommended to apply a safety factor of 1.2 to the values presented in Table 1 due to the limitations of the study (e.g., data extrapolated from 11 years of data and runoff calculated from natural ground).

The short-term rainfall intensity-duration-frequency curves recommended by Knight Piesold (2012) for the Mary River Project site and established in the civil design criteria (Hatch 2013) are based on rainfall data from the Environment Canada Clyde River (ID 2400800) and Pond Inlet Airport (ID 2403201) climate Stations. The intensity-duration-frequency values in Table 2 present rainfall statistics for durations between 5 minutes and 24 hours for return periods between 2 years and 200 years.

Table 2: Short-term intensity-duration-frequency values for various return periods (KPC, 2012)

Duration	Return Periods								
	2-yr	5-yr	10-yr	15-yr	20-yr	25-yr	50-yr	100-yr	200-yr
5 min	0.8	1.0	1.2	1.3	1.3	1.4	1.5	1.7	1.8
10 min	1.2	1.5	1.7	1.9	2.0	2.1	2.3	2.5	2.7
15 min	1.5	1.9	2.2	2.4	2.5	2.6	2.9	3.1	3.4
30 min	2.5	3.1	3.6	3.9	4.1	4.3	4.8	5.2	5.7
1 hr	4.0	5.2	6.1	6.6	7.0	7.3	8.1	9.0	9.9
2 hr	6.0	7.7	9.1	9.9	10.5	10.9	12.2	13.5	14.8
6 hr	11.9	16.3	19.8	21.8	23.2	24.3	27.6	30.8	34.1
12 hr	15.9	21.8	26.4	29.1	30.9	32.4	36.7	41.1	45.4
24 hr	24.8	34.0	41.3	45.4	48.3	50.6	57.4	64.2	71.0

Local precipitation records from the meteorological station installed at the Mary River Mine site are only available for the last four years. The local records were compared against regional records for coastal sites operated by Environment and Climate Change Canada (Pond Inlet and Clyde River climate stations). A reliable correlation between the precipitation data on the coastal sites and the Mary River Mine site meteorological data was not observed. Additionally, given the short period of concurrent (or near-concurrent) rainfall data available and the rarity of high-intensity events, a statistically acceptable relationship between elevation and extreme rainfall could not be developed at this time. The rainfall intensity-duration-frequency statistics presented in the Hatch (2013) design criteria report and developed by Knight Piesold (2012) are considered valid. No update is recommended at this time, however, as the length of rainfall record at the Mary River climate station increases, it is recommended that the new data be used to verify every two or three years the adequacy of the rainfall intensity-duration-frequency statistics used for design.

4.0 PROPOSED SCOPE OF WORK

The WRF Expansion involves the following scope of work:

- Raise the WRF Pond Berm to crest elevation 579.7 meters above sea level (masl);
- Excavate the East Ditch;
- Excavate the West Ditch; and,
- Line the WRF Pond with a geomembrane.

Raising of the WRF Pond Berm will generally involve:

- Stripping of organic and deleterious materials over the expanded footprint;

- Placing fill materials in the berm and compacting layer by layer;
- Construction of the emergency spillway;
- Placing of the geomembrane bedding materials; and,
- Installation of the geomembrane.

BIM has observed seepage from the existing WRF Pond Berm. The existing geomembrane condition will be examined, and an attempt will be made to identify the source of the seepage. The existing geomembrane will be repaired, if possible, or replaced.

The East and West Ditches will be excavated to an approximate 1.0 m depth through the existing ground. Riprap will be provided, as necessary, to reduce observed erosion.

5.0 DESIGN BASIS

The following sections describe the WRF Pond expansion design basis. Refer to Appendix B for the Issued for Construction (IFC) drawings.

5.1 General

The WRF Pond expansion has been designed in accordance with the recommendations provided by the Canadian Dam Association (CDA). Applicable documents include:

- Canadian Dam Association Technical Bulletin: Application of Dam Safety Guidelines to Mining Dams (CDA 2014); and,
- Canadian Dam Association's Dam Safety Guidelines, (CDA 2007).

As well, the design is in accordance with provisions of Water Licence No. 2AM-MRY1325-Amendment No.1.

5.2 Dam Classification

The CDA recommends a dam classification system based on the consequence of failure. The dam classification is a measure of the greatest incremental losses that could result from the uncontrolled release of water or stored contents behind a dam, due to failure of the dam or its appurtenances based on the worst-case but realistic failure condition. Incremental losses are defined as losses from dam failures which are above and beyond those which may be expected to occur under the same natural conditions (e.g. flood, earthquake, or other event) with the dam in place, but without failure of the dam. The dam classification guidelines from the CDA are reproduced in Figure 1 below.

Dam class	Population at risk	Incremental Losses		
		Loss of life	Environmental and cultural values	Infrastructure and economics
Low	None	0	Minimal short-term No long term loss	Low economic losses; area contains limited infrastructure or services
Significant	Temporary only	Unspecified	No significant loss or deterioration of fish or wildlife habitat Loss of marginal habitat only Restoration or compensation in kind highly possible	Losses to recreational facilities, seasonal workplaces, and infrequently used transportation routes
High	Permanent	10 or fewer	Significant loss or deterioration of *important* fish or wildlife habitat Restoration or compensation in kind is highly possible	High economic losses affecting infrastructure, public transportation, and commercial facilities
Very high	Permanent	100 or fewer	Significant loss or deterioration of *critical* fish or wildlife habitat Restoration or compensation in kind possible but impractical	Very high economic losses affecting important infrastructure or services (e.g., highway, industrial facility, storage facilities, for dangerous substances)
Extreme	Permanent	More than 100	Major loss of *critical* fish or wildlife habitat Restoration or compensation in kind impossible	Extreme losses affecting critical infrastructure or services, (e.g., hospital, major industrial complex, major storage facilities for dangerous substances
See Table 2-1 in the CDA 2007 Guidelines for notes related to population at risk and implications of loss of life.				

Figure 1: Dam Classification (CDA 2014)

It is expected that a failure of the WRF Pond Berm and release of the contained water would have low impact. There is no potential for loss of life resulting from a dam failure, except for employees that may be working immediately downstream of the berm at the time of failure. Given the relatively low volume of water contained (~50,000 m^3), and that the retained flows will be continuously treated and discharged to the environment (i.e. the WRF Pond will be continuously drawn down), the uncontrolled release of the retained water does not pose significant or long-term environmental losses. The WRF Pond hazard classification is therefore considered “Low”.

5.3 Environmental Design Flood

The Environmental Design Flood (EDF) is defined as the most severe flood that is to be managed without release of untreated water to the environment. The existing WRF Pond is designed to manage (i.e., to contain) the 1:10 year 24 hr event. For the expanded WRF, the EDF has been selected as the 1:10 year 15-day event. The use of a longer duration, more severe design event is proposed as a result of the requirement for the WRF Pond to temporarily function as a treatment pond. The 1:10 year 24-hr design event used for the original pond design was selected based on the expectation that the WRF Pond would solely act as a sedimentation pond.

The CDA specifies for the EDF to be determined on a site-specific basis, though return periods of 1:50 to 1:200 years are identified as typical (CDA 2007). These higher return periods are considered appropriate for Life of Mine structures that have typical service lives of >30 years, and often for perpetuity. Given the expected temporary nature of the proposed WRF Pond expansion (a new Life of Mine sedimentation pond, or additional expansion of the existing WRF pond, will be required to manage expansion of the WRF beyond the 585,000 m^2 footprint), the use of a 1:100 year return period event is not justified. The WRF Pond design criteria will be reviewed and revised if necessary, prior to expansion of the WRF beyond the proposed 585,000 m^2 footprint.

5.4 Flood Routing

The Inflow Design Flood (IDF) is defined as the most severe inflow flood for which a dam is designed. While the WRF Pond has been sized to store the EDF, it is proposed that the IDF be safely conveyed through the emergency spillway and discharged to the environment.

The IDF is selected on the basis of the Dam Classification and the consequence of failure of the structures. Based on the dam classification of "Low", the IDF recommended by the CDA is a storm event with a 1:100 year return period. Consistent with the previously developed civil design criteria (Hatch 2013), the IDF adopted for the WRF Pond expansion is the 1:200 year 24-hr event (71 mm of rainfall over 24 hours). The WRF Pond spillway has been sized to pass this flow. It was conservatively assumed that there will be no remaining storage capacity within the WRF Pond at the onset of the IDF occurrence.

5.5 Freeboard Requirements

The WRF Pond is designed to maintain a minimum freeboard requirement to reduce potential for overtopping of the berm during the IDF, or as a result of wave action. The CDA guidelines recommend a minimum freeboard of 95% of the waves caused by the most critical wind at the maximum design pond elevation (CDA 2007). A frequency analysis was performed for the hourly wind velocity from Pond Inlet A climate station (1976 – 2017). The data from 2009 to 2012 were removed from the analysis due to more than half of their data missing from the record. Table 3 presents the wind velocity associated with various return periods.

Table 3: Frequency analysis of the wind velocity measured at the Pond Inlet A Climate Station

Return Period	Wind Velocity (m/s)	95% Confidence Interval (m/s)
5	20.1	21.2 – 21.2
10	22.5	22.9 – 22.9
50	24.0	20.8 – 27.1
100	25.0	21.1 – 29.2
500	27.4	21.6 – 34.4
1,000	28.4	21.7 – 36.9

The maximum windspeed recorded at the Mary River Mine site meteorological data from 2013 – 2017 was 28.4 m/s.

Assuming the maximum fetch of 250 m across the pond, the 1,000 year wind velocity (upper value of the 95% confidence interval) and a pond depth of 5.3 m, the significant wave height is estimated to be 0.51 m.

5.6 WRF Pond Capacity

The existing WRF Pond has a design capacity of approximately 9,000 m^3 at the maximum operating water level (MOWL) of 575.8 masl. The existing berm has a crest elevation of 577.0 masl and the geomembrane installed to elevation 575.8 masl. The emergency spillway is set at elevation 576.0 masl. The WRF Pond is currently sized to retain the 1:10 year 24 hour storm event (Hatch 2013). The existing pond has a surface area of approximately 9,900 m^2 at a water elevation of 575.8 masl.

Figure 2 provides the volume of inflow to the WRF pond less treatment for the 1:10 year event with varying durations. The runoff values are those from Table 1 applied to a catchment area of 585,000 m^2. The predicted pond inflow considers a water treatment rate of 280 m^3/h.

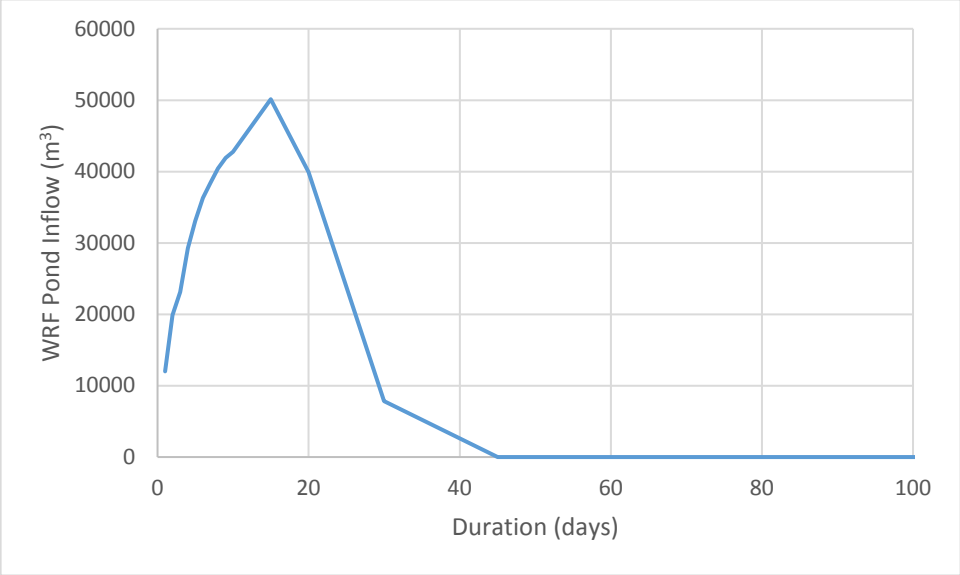

Figure 2: Predicted WRF Pond Inflow

The maximum WRF Pond inflow of 50,130 m^3 is predicted to occur for the 15 day event (the EDF), and is the design capacity for the current expansion. The predicted inflow for the 1:10 year 24 hour event (current design criteria) is 12,000 m^3. Where the WRF Pond capacity is 0 m^3, the rate of treatment of 280 m^3/h is predicted to exceed the rate of pond inflow.

Figure 3 below provides the struck level curve for the proposed expanded WRF Pond.

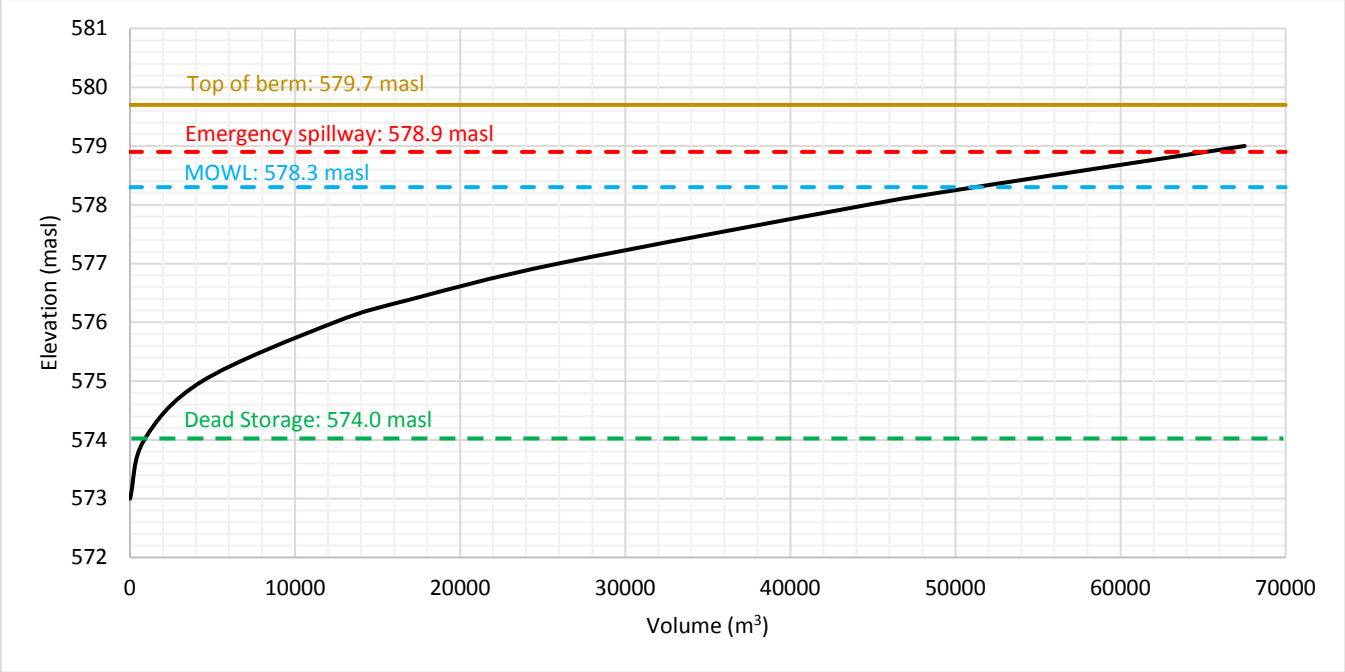

Figure 3: Proposed WRF Pond Struck Level Curve

The WRF Pond capacity at the MOWL (elevation 578.3 masl) will be approximately 51,000 m^3. To accommodate uncertainties in the hydrological data a minimum factor of safety of 1.2 has been applied to the pond capacity (Golder, 2018). The geomembrane is therefore proposed to be installed to elevation 579.3 masl, corresponding to a total storage volume of 65,000 m^3 (27% increase in volume over the 51,000 m^3 design capacity) at the spillway invert of 578.9 masl, and providing 0.2 m of additional freeboard above the IDF water level of 579.1 (see Section 5.8). The WRF Pond surface area at elevation 579.3 masl is approximately 25,000 m^2 (15,000 m^2 increase over the existing condition).

Inflow into the WRF Pond will be treated and discharged to the environment on a continuous basis. The water treatment system (WTS) intake will be located at the deepest section of the WRF Pond to minimize the dead storage volume. The dead storage volume below elevation 574.0 m is 900 m^3.

5.7 WRF Pond Berm Stability

The WRF Pond Berm is designed to be stable under the expected loading conditions, including: rapid drawdown of the pond, surcharge in the pond water level, wind and wave action, and seismic loading.

The following minimum Factors of Safety (FOS) for the WRF Pond Berm slopes have been adopted (CDA 2007):

- End of Construction: 1.3
- Long-term steady state: 1.5
- Seismic loading: 1.0

Based on the dam classification of “Low”, the design earthquake recommended by the CDA is the 1:100 year return event. The Peak Ground Acceleration (PGA) based on the 2015 National Building Code and determined by Earthquakes Canada is 0.019g for the 1:100 year return period.

The WRF Pond Berm is a homogeneous rockfill berm with a geomembrane installed on the upstream slope as the low permeability element. Refer to Appendix B for the detailed design. Table 4 below provides a summary of the material strength parameters input into the slope stability model. Refer to Section 5.7.2 for further discussion on the material strength parameters.

Table 4: Material Strength Parameters

Material	Unit Weight (kN/m^3)	Friction Angle (º)	Cohesion (kPa)
Rock Fill	20	40	0
Till	20	34	0
Bedrock	Impenetrable		

5.7.1 Stability Analysis Results

The WRF Pond Berm slope stability was analyzed using Slope/W 2018 version 9.0.4.15639 developed by GEO-SLOPE International Ltd. This software uses the limit equilibrium method for the stability analysis. The Morgenstern-Price method was used where the interslice shear forces were represented with a half-sine function.

The FOS, defined as the ratio of the forces tending to resist failure over the forces tending to cause failure, was computed for a series of potential failure surfaces. A range of potential slip surfaces were analysed:

- Static loading conditions for the upstream and downstream face; and,
- Seismic loading conditions for the upstream and downstream face.

For each loading condition, the lowest FOS was determined for the slip surface within the berm slope, and also for a deep-seated foundation failure. The slip surface was analyzed using both the grid and radius and entry/exit definition methods.

The Hynes-Griffin and Franklin (1984) procedure was used for the pseudo-static analysis. This procedure recommends that horizontal acceleration input into the stability analysis be half the predicted bedrock PGA. Based on this method, a horizontal acceleration of 0.0095 g, which is half the PGA of 0.019g for a 1:100 year event, was input into the stability analysis model.

The results of the stability analysis are provided as Figure 4 below.

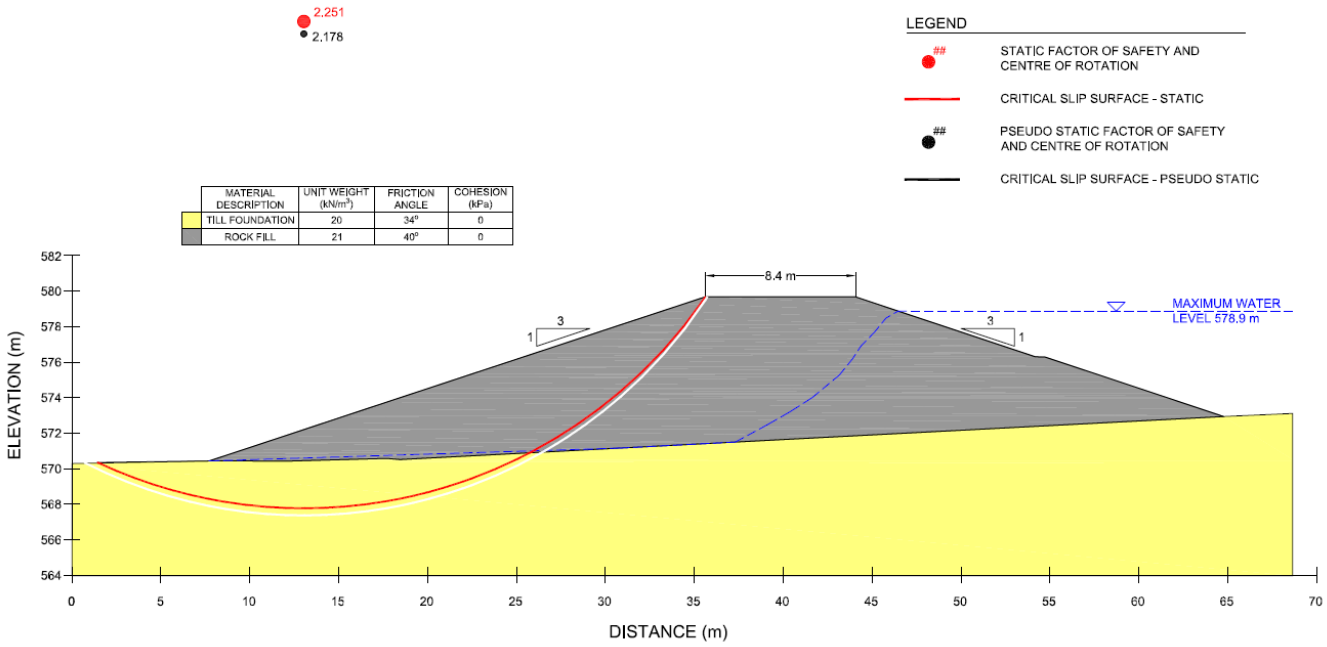

Figure 4: WRF Pond Berm Stability Analysis Results

The minimum FOS for the static and pseudo-static condition is 2.25 and 2.18, respectively. These FOS exceed the minimum requirements specified under Section 5.7.

Rapid draw down of the WRF Pond is not expected to have significant impact on the WRF Pond berm stability. At a treatment rate of 280 m^3/hr the maximum WRF Pond drawdown rate varies from 0.13 – 0.33 m/hr depending on the pond elevation. It is expected that the rockfill WRF Pond Berm will drain at a similar rate.

5.7.2 Limitations

The material strength parameters and foundation conditions input into the slope stability model are assumed based on professional judgement. No laboratory testing has been carried out to verify the strength parameters.

The foundation conditions have been assumed based on the results of the two boreholes located approximately 2.0 km from the WRF Pond (KPC 2006). No additional information is available on the foundation conditions at the WRF Pond Berm. It is recommended that test pitting be carried out along the WRF Pond Berm expanded foundation, prior to construction of the berm, if ground conditions permit. The foundation conditions should then be verified against the material strength parameters assumed in Table 4. The presence of weak foundation materials may require removal or result in the requirement to flatten or buttress the WRF Pond Berm downstream slope. The presence of continuous layers of ground ice within the foundation may also result in creep of the WRF Pond Berm slopes. If test pitting is not feasible due to frozen ground conditions, it is recommended that survey monitoring pins be installed along the WRF Pond Berm downstream slope.

5.8 WRF Pond Emergency Spillway

The WRF Pond emergency spillway will be located at the north east abutment of the WRF Pond Berm. The spillway has been sized to safely pass the 200-yr 24-hr IDF. Refer to Section 5.4 for discussion on the IDF selection and definition. The Hydrologic Engineering Centre Hydrologic Modelling System (HEC-HMS) software

(USACE 2013) was used for the flood routing. Losses along the flow path upstream of the WRF Pond were simulated using the SCS Curve Number (CN). A CN of 97 was assumed for the waste rock (based on recommended CN values for prepared ground). The CN value for waste rock accounts for direct runoff plus interflow (i.e., flow which infiltrates into the waste rock but later reports as toe seepage); however the lag effects associated with the interflow are ignored, making this value more conservative.

The spillway design elements include the following:

- Total drainage area of 585,000 m^2;
- Invert elevation of 578.9 m (0.8 m below the WRF Pond Berm crest);
- Base width of 5.0 m with 10H:1V side slopes at the berm crest for truck trafficability;
- The spillway channel will be approximately 50 m long;
- The spillway channel will have a slope of 12% (i.e. 8.5H:1V);
- The spillway channel will be protected with riprap.

Refer to Drawing C-200 (Appendix B), for the spillway detailed design.

The spillway peak discharge for the 200-yr 24-hr storm event is predicted to be 1.35 m^3/s. The maximum water surface elevation above the spillway invert under the design storm event conditions would be 579.11 m, which is 0.59 m below the berm crest elevation, thus satisfying the freeboard requirements of 0.51 m described in Section 5.5. An overflow spillway channel will be constructed on the downstream face of the WRF Pond Berm with adequate riprap (400 mm riprap, minimum D_{50} of 200 mm) to withstand the design peak flow velocity of 2.0 m/s. The spillway channel will have a bottom width of 5 m, a total depth of 0.5 m (including a 0.3 m freeboard) and will transition from 10H:1V side slopes at the berm crest into 2H:1V side slopes at the outlet. The spillway channel will have a 5 m long energy dissipation area at the toe.

The riprap placed within the spillway invert will be covered by a 200 mm thick sacrificial layer of granular to permit vehicle access through the spillway. This granular wearing layer is expected to washout during activation of the spillway, and would subsequently have to be replaced to restore vehicle access.

5.9 Diversion Ditches

The WRF design includes the design of contact water collection ditches surrounding the facility. As shown on Drawing G-200 (Appendix B), two perimeter ditches are proposed, one on either side of the WRF. It has been assumed that the ditches will generally drain north, discharging the collected runoff into the WRF Pond.

The following design criteria have been established for the ditches:

- Ditches convey the 1:25 year (Hatch 2013) 10-min event with an intensity of 12.4 mm/hr (based on the time of concentration calculated for each ditch) including 0.3 m of freeboard;
- Flood events up to the 1:100 year storm event would be fully contained within the ditches, but ditch erosion would likely require ditch maintenance works after such an event;

- Provide riprap erosion protection for sections of the ditch with velocities greater than 1.5 m/s (Hatch 2013). Riprap to be extended a minimum of 3.0 m into sections where riprap is not required to create a stilling basin;
  - Riprap may not be placed at the time of ditch excavation. The requirement for riprap will be assessed by BIM based on site observations and performance monitoring.
- Reduce potential for collection of non-contact runoff;
- Trapezoidal channel with a base width of 1.0 m and minimum depth of 1.0 m; and,
- Side slopes of 2H:1V or flatter as required by ground conditions.

Spoil from the ditch excavation will be utilized to construct a berm on the outside of the ditch (the side opposite from the WRF) to reduce potential for collection of non-contact water. The geometry of the clean water diversion berm shown on Drawing C-130 (Appendix B) may be modified in the field, at the time of construction, based on the material conditions.

The peak flow rates were calculated for the ditches using the Rational Method and assuming a runoff coefficient of 0.9 for the catchments draining to the ditches (0.26 km^2 and 0.27 km^2 for the west and east ditch respectively). The calculated peak flows are 0.82 m^3/s and 0.86 m^3/s for the west and east ditches respectively. The hydraulic capacity of the ditch was determined using Manning's Equation. The ditches will be protected with riprap at locations where the flow velocity exceeds 1.5 m/s.

Table 5 below provides the location, slope, water depth, the flow velocity and the riprap requirements under the design storm event. The minimum riprap thickness shall be twice the riprap D_{50} value. The requirement for riprap will be assessed by BIM based on site observations and performance monitoring.

Table 5: Collection Ditch Design Parameters

	Upstream Station	Downstream Station	Slope (%)	Flow Depth (m)	Flow Velocity (m/s)	Minimum Riprap D_{50} (mm)
West Ditch	0+000	0+022	0.08%	0.7	0.5	Not required
	0+022	0+102	1.5%	0.4	1.3	Not required
	0+102	0+150	2.5%	0.3	1.6	200
	0+150	0+293	1.6%	0.4	1.4	Not required
	0+293	0+393	1.6%	0.4	1.4	Not required
	0+393	0+518	1.4%	0.4	1.3	Not required
	0+518	0+587	0.9%	0.4	1.1	Not required
	0+587	0+710	1.6%	0.4	1.4	Not required
	0+710	0+755	3.7%	0.3	1.8	200
	0+755	0+795	4.0%	0.3	1.9	200
	0+795	0+830	4.4%	0.3	2.0	200
	0+830	0+865	4.5%	0.3	2.0	200
	0+865	0+913	5.4%	0.3	2.1	300
	0+913	0+946	5.7%	0.3	2.2	300

	Upstream Station	Downstream Station	Slope (%)	Flow Depth (m)	Flow Velocity (m/s)	Minimum Riprap D_{50} (mm)
	0+946	0+990	5.9%	0.2	2.2	300
	0+990	1+037	5.8%	0.3	2.2	300
	1+037	1+081	6.6%	0.2	2.3	300
East Ditch	0+000	0+014	6.6%	0.2	1.5	300
	0+014	0+048	4.1%			CSP Culvert Riprap to be provided at outlet
	0+048	0+135	2.0%	0.3	1.5	Not required
	0+135	0+178	3.2%	0.3	1.8	200
	0+178	0+215	2.4%	0.3	1.6	200
	0+215	0+280	1.1%	0.4	1.2	Not required
	0+280	0+427	4.0%	0.3	1.9	200
	0+427	0+559	5.0%	0.3	2.1	300
	0+559	0+665	4.7%	0.3	2.0	300
	0+665	0+742	4.7%	0.3	2.0	300
	0+742	0+828	5.2%	0.3	2.1	300
	0+828	0+906	4.9%	0.3	2.1	300
	0+906	0+932	5.4%	0.3	2.2	300
	0+932	0+962	5.8%	0.3	2.2	300
	0+962	0+991	5.3%	0.3	2.1	300
	0+991	1+034	5.7%	0.3	2.2	300
	1+034	1+068	5.1%	0.3	2.1	300

5.9.1 Culvert Crossing

A culvert will be installed in the East Ditch between station 0+014 and 0+048 to accommodate a proposed road to access the water treatment system pad. The Federal Highway Administration (FHWA) HY-8 software (FHWA 2012) was used for sizing the culvert based on a peak flow of 0.86 m^3/s.

The following assumptions were considered in the model:

- The culverts were assumed to be located at the bottom of the cross-sections and installed on the grade provided in Table 5.
- The culvert “roughness” (i.e. Manning’s n value) corresponds to that of corrugated steel pipe (CSP).
- The culverts are free of debris.

Considering a slope of 4%, one circular CSP culvert of 900 mm of diameter is recommended to convey the 0.86 m^3/s peak flow at this intersection.

6.0 CONSTRUCTION

6.1 Construction and Operating Considerations

The construction considerations related to the WRF Pond include the following:

- Test pitting to be carried out along the footprint of the expanded WRF Pond Berm prior to any fill placement, if ground conditions permit. The requirement for survey monitoring pins installed along the WRF Pond Berm downstream slope will be considered if ground conditions do not permit test pit excavation.
- The pond shall be completely drained and the condition of the existing geomembrane inspected prior to construction of the WRF Pond expansion;
- Sedimentation and erosion mitigation measures, as required, shall be in place before commencing construction;
- A temporary water management plan shall be developed and implemented prior to construction;
- All materials shall be placed in horizontal lifts with a nominal compacted thickness of 1.0 m or less;
- Each lift shall be compacted by dozer tracking across the entire width of the lift;
- Culverts should be placed on a 0.3 m thick layer of prepared sand and gravel foundation;
- The minimum depth of cover to be provided over any culvert at a road crossing should be determined to withstand heavy load from traffic using the road;
- Culverts should be extended at least 1.5 m from the embankment at the inlet and the outlet to avoid blockage from any falling debris from the road; and,
- An as-built survey shall be collected to document all construction activities.

The operating conditions related to the WRF Pond include:

- Inflow into the WRF Pond will be continuously treated and discharged to the environment. The water level will be maintained at the lowest practical level.
- The WRF Pond water level must not be drawn down from above elevation 575.8 m when ice is present due to the potential for ice to damage the geomembrane on the upstream slope at the elevation 575.8 m bench.
- The WTS feed pump will be located on the WRF Pond Berm crest at approximate station 0+300, at the deepest location of the WRF Pond to reduce the dead storage volume.
- The WTS Feed pump discharge line will be routed along the upstream edge of the WRF Pond Berm crest.

6.2 Construction Materials

The following sections provide the gradation for the proposed fill materials.

6.2.1 500 mm minus Rock Fill

Rock fill for the WRF Pond Berm construction shall be obtained from an approved construction material source, as required under Water Licence No. 2AM-MRY1325-Amendment No.1. The material shall be well graded within the limits defined in Table 6 below.

Table 6: 500 mm Minus Rock Fill Gradation

Sieve (mm)	% Passing by Weight	
	Lower	Upper
500	100	100
150	100	50
75	40	20
37.5	23	15
19	15	8
4.75	5	0
2	5	0
0.075	5	0

6.2.2 Intermediate Bedding Material

The Intermediate Bedding Material shall be placed be placed as a transition material between the geomembrane bedding layer and the underlying rock fill. The bedding material shall be produced from an approved construction material source as required under Water Licence No. 2AM-MRY1325-Amendment No.1. The material shall be well graded within the limits defined in Table 7 below.

Table 7: Intermediate Bedding Material Gradation

Sieve (mm)	% Passing by Weight	
	Lower	Upper
32	100	100
19	100	85
13.2	100	70
9.5	100	50
4.75	70	30
1.18	40	10
0.3	22	5
0.075	8	0

6.2.3 Fine Bedding Material

The Fine Bedding Material shall be placed be placed as a transition material between the geomembrane and underlying Intermediate Bedding Material. The fine bedding material shall be produced from an approved construction material source as required under Water Licence No. 2AM-MRY1325-Amendment No.1. The material requirements are defined as follows:

- The material shall be well graded;
- The maximum particle size shall be 2.0 mm.
- The fines content (% passing the #200 sieve) shall not exceed 5%.

Alternatively, the fine bedding material can be replaced by a non-woven geotextile.

6.2.4 Riprap

Riprap shall be placed as erosion protection at the emergency spillway and the within the East and West Diversion Ditches in the reaches noted in Table 5. Riprap within the spillway channel shall be sourced from an approved construction material source as required under Water Licence No. 2AM-MRY1325-Amendment No.1. Riprap placed within the East and West Diversion Ditches can be produced from waste rock. The requirement for Riprap within the East and West Diversion Ditches will be assessed by BIM based on performance monitoring (i.e., the riprap may not be placed at the time of ditch excavation).

The riprap requirements are defined as follows:

- The material shall be well graded;
- The maximum riprap particle gradation shall not exceed 2 times the specified D_{50} value;
- The fines content (% passing the #200 sieve) shall not exceed 5%

Signature Page

Golder Associates Ltd.



Brian Andruchow,
Geotechnical Specialist



Ken De Vos, P.Geo.
Principal, Project Director



Ken Bocking, P.Eng.
Principal

BA/KB/ba

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https://golderassociates.sharepoint.com/sites/22103g/technical work/phase 2000/2003 pond upgrade/1790951_design brief/1790951-2000-doc028_bimwasterockfacilitypondupgrade_15jun2018.docx

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APPENDIX A

Historical Borehole Logs

Project: Mary River Project	Drill Hole No. **MWD 003**	PAGE	1 of 3
Drilling Co: **Boart Longyear**	In Situ Sampler: **HQ Core Barrel**	Date Started:	**4 Jul 06**
Drilling Method: **Rotary Coring - Longyear Fly 38**	Elevation: **519 m**	Date Completed:	**5 Jul 06**
Location: **Mary River, Baffin Island**	Total Depth: **31.6 m**	Logged by:	**RLV/RBK/ACK**
Coordinates: **7,915,196 N , 564,290 E**	Inclination: **-90**	Reviewed by:	**KEH**

DEPTH (m)	ELEVATION (m)	DESCRIPTION OF MATERIALS	RUN RECOVERY (%)	FROZEN SOIL DESCRIPTION	SAMPLE RECOVERY (%)	SAMPLE NO.	BLOW COUNT/ RQD (%)	SPT 'N' VALUE/ RMR	FIELD VANE SHEAR STRENGTH (Remould (▲) Peak (△)) / SPT TEST DATA 'N' VALUES (Uncorrected (×) Corrected (□)) PL MC LL 20 40 60 80	INSTRUMENTATION DEPTHS (m)	INSTRUMENTATION DETAILS
2	518.0	**2 - TILL** (0 to 13.5) Reddish brown, well graded sand and gravel with trace silt and cobble and boulder fragments (up to 10cm dia). Poor fines (sand and silt) recovery in areas was due to thawing and washing of soil matrix by drilling fluid.	39	Nbe Vx		1					
4	516.0	Frozen soils were recovered below 3.0m depth and were typically well bonded with and without excess ice with some ice and soil stratification and 5cm to 10cm massive ice lenses. Total visible ice within the stratum was less than 2 percent.									
6	514.0	Sample 1 (3.7m to 4.0m) - Well graded silty sand with some gravel. Sample 2 (5.4m to 5.8m) - Gap graded sand and gravel with trace silt.	100	Nbe Vx		2					
8	512.0	Sample 3 (6.8m to 7.2m) - Poorly graded gravelly sand with trace silt.				3					
10	510.0	Sample 4 (7.9m to 8.1m) - Poorly graded sand with trace gravel and trace silt. Sample 5 (9.6m to 10.0m) - Well graded, ice rich, gravelly sand with some silt.	100	Nbn. Vs		4 5					
12	508.0	Sample 6 (11.0m to 11.4m) - Poorly graded, ice rich, gravelly sand with some silt.	65	Nbn		6					
14	506.0	**5B - HIGHLY FRACTURED GNEISS** (13.5 to 22) Dark gneissic bedrock with white specks. Highly fractured with extensive weathering.									

FROZEN SOIL DESCRIPTIONS:

Nf - POORLY BONDED
Nbn - WELL BONDED, NO EXCESS ICE
Nbe - WELL BONDED, EXCESS ICE
Vx - INDIVIDUAL ICE INCLUSIONS
Vc - ICE COATINGS ON PARTICLES
Vr - RANDOM OR IRREGULARLY ORIENTED ICE FORMATIONS
Vs - STRATIFIED OR DISTINCTLY ORIENTED ICE FORMATIONS
I+C - ICE WITH SOIL INCLUSIONS
ICE - ICE WITHOUT SOIL INCLUSIONS

SAMPLE SYMBOL: AUGER, SPLITSPOON, THERMISTOR, CORE, SHELBY TUBE

Baffinland
Mary River Project

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
NB102-00181/3	2	0

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Project: Mary River Project	Drill Hole No. **MWD 003**	PAGE	2 of 3
Drilling Co: **Boart Longyear**	In Situ Sampler: **HQ Core Barrel**	Date Started:	**4 Jul 06**
Drilling Method: **Rotary Coring - Longyear Fly 38**	Elevation: **519 m**	Date Completed:	**5 Jul 06**
Location: **Mary River, Baffin Island**	Total Depth: **31.6 m**	Logged by:	**RLV/RBK/ACK**
Coordinates: **7,915,196 N , 564,290 E**	Inclination: **-90**	Reviewed by:	**KEH**

DEPTH (m)	ELEVATION (m)	GRAPHIC LOG	DESCRIPTION OF MATERIALS	RUN RECOVERY (%)	FROZEN SOIL DESCRIPTION	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT/ RQD (%)	SPT 'N' VALUE/ RMR	FIELD VANE SHEAR STRENGTH Remould (▲) Peak (△) / SPT TEST DATA 'N' VALUES Uncorrected (×) Corrected (□) PL MC LL 20 40 60 80	INSTRUMENTATION DEPTHS (m)	INSTRUMENTATION DETAILS
16				87	Nbn I+S								
	502.0												
18				92	Nbn								
	500.0												
20													
	498.0			89	N/R				33				
22			**6B - GNEISSIC BEDROCK** (22 to 31.6) Dark blueish grey gneissic bedrock with white specks. Strong and hard with some fracturing.										
	496.0												
24				99	N/R				93				
	494.0												
26													
	492.0			86	N/R				73				
28													
	490.0												

FROZEN SOIL DESCRIPTIONS:

Nf - POORLY BONDED
Nbn - WELL BONDED, NO EXCESS ICE
Nbe - WELL BONDED, EXCESS ICE
Vx - INDIVIDUAL ICE INCLUSIONS
Vc - ICE COATINGS ON PARTICLES
Vr - RANDOM OR IRREGULARLY ORIENTED ICE FORMATIONS
Vs - STRATIFIED OR DISTINCTLY ORIENTED ICE FORMATIONS
I+C - ICE WITH SOIL INCLUSIONS
ICE - ICE WITHOUT SOIL INCLUSIONS

SAMPLE SYMBOL:

AUGER | SPLITSPOON | THERMISTOR | CORE | SHELBY TUBE

Baffinland
Mary River Project

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
NB102-00181/3	2	0

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Project: Mary River Project | Drill Hole No. **MWD 003** | PAGE 3 of 3

Drilling Co: Boart Longyear | In Situ Sampler: HQ Core Barrel | Date Started: 4 Jul 06

Drilling Method: Rotary Coring - Longyear Fly 38 | Elevation: 519 m | Date Completed: 5 Jul 06

Location: Mary River, Baffin Island | Total Depth: 31.6 m | Logged by: RLV/RBK/ACK

Coordinates: 7,915,196 N , 564,290 E | Inclination: -90 | Reviewed by: KEH

DEPTH (m)	ELEVATION (m)	GRAPHIC LOG	DESCRIPTION OF MATERIALS	RUN RECOVERY (%)	FROZEN SOIL DESCRIPTION	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT/ RQD (%)	SPT 'N' VALUE/ RMR	FIELD VANE SHEAR STRENGTH Remould (▲) Peak (△) / SPT TEST DATA 'N' VALUES Uncorrected (×) Corrected (□) PL MC LL 20 40 60 80	INSTRUMENTATION DEPTHS (m)	INSTRUMENTATION DETAILS
	488.0			69	N/R				50				
			End of Drillhole: 31.6 m										
32	486.0												
34	484.0												
36	482.0												
38	480.0												
40	478.0												
42	476.0												
44													

FROZEN SOIL DESCRIPTIONS:

Nf - POORLY BONDED
Nbn - WELL BONDED, NO EXCESS ICE
Nbe - WELL BONDED, EXCESS ICE
Vx - INDIVIDUAL ICE INCLUSIONS
Vc - ICE COATINGS ON PARTICLES
Vr - RANDOM OR IRREGULARLY ORIENTED ICE FORMATIONS
Vs - STRATIFIED OR DISTINCTLY ORIENTED ICE FORMATIONS
I+C - ICE WITH SOIL INCLUSIONS
ICE - ICE WITHOUT SOIL INCLUSIONS

SAMPLE SYMBOL:

AUGER | SPLITSPOON | THERMISTOR | CORE | SHELBY TUBE

Baffinland
Mary River Project

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
NB102-00181/3	2	0

I:\102-00181-3\ASSIGNMENT\DATA\GINT\LIBRARY\LIBRARY_BAFFINLAND_RB.GLB, DRILLHOLE LOG_METRIC, DRILLHOLE_M_BAFFINLAND_RB.GDT, 28 Feb 07

I:\102-00181-3\ASSIGNMENT\DATA\GINT\PROJECTS\INFRASTRUCTURE TRIAL.GPJ

Project: Mary River Project | Drill Hole No. **MWD 004** | PAGE 1 of 2

Drilling Co: Boart Longyear | In Situ Sampler: HQ Core Barrel | Date Started: 30 Jun 06

Drilling Method: Rotary Coring - Longyear Fly 38 | Elevation: 473 m | Date Completed: 3 Jul 06

Location: Mary River, Baffin Island | Total Depth: 31.6 m | Logged by: RLV/ACK

Coordinates: 7,915,488 N , 564,716 E | Inclination: -90 | Reviewed by: KEH

DEPTH (m)	ELEVATION (m)	GRAPHIC LOG	DESCRIPTION OF MATERIALS	RUN RECOVERY (%)	FROZEN SOIL DESCRIPTION	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT/ RQD (%)	SPT 'N' VALUE/ RMR	FIELD VANE SHEAR STRENGTH Remould (▲) Peak (△) / SPT TEST DATA 'N' VALUES Uncorrected (×) Corrected (□) PL MC LL 20 40 60 80	INSTRUMENTATION DEPTHS (m)	INSTRUMENTATION DETAILS
0	472.0		**2 - TILL** (0 to 6.5) Reddish brown, well graded sand and gravel with trace silt and cobble and boulder fragments (up to 10cm dia). Low recovery of fines (sand and silt) due to thawing and washing of soil matrix by drilling fluid. Frozen soils were recovered below 0.4m depth and were typically well bonded soils with some ice and soil stratification and a 5cm massive ice lens. Total visible ice within the stratum was less the 2 percent total visible ice.	42	Nbn								
2	470.0												
4	468.0			86	Nbn Vx								
6	466.0		**5B - HIGHLY FRACTURED GNEISS** (6.5 to 12.5) Dark gneissic bedrock with white specks. Highly fractured with extensive weathering.										
8	464.0			96	N/R				*40*				
10	462.0												
12	460.0		**6B - GNEISSIC BEDROCK** (12.5 to 31.6) Dark blue gneissic bedrock with white specks. Strong and hard with reduced fracturing with depth.	98	N/R				*56*				
14	458.0			98	N/R				*66*				

FROZEN SOIL DESCRIPTIONS:

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ICE - ICE WITHOUT SOIL INCLUSIONS

SAMPLE SYMBOL:

AUGER | SPLITSPOON | THERMISTOR | CORE | SHELBY TUBE

Baffinland
Mary River Project

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
NB102-00181/3	2	0

I:\102-00181-3\ASSIGNMENT\DATA\GINT\LIBRARY\LIBRARY_BAFFINLAND_RB.GLB, DRILLHOLE LOG_METRIC, DRILLHOLE_M_BAFFINLAND_RB.GDT, 28 Feb 07

I:\102-00181-3\ASSIGNMENT\DATA\GINT\PROJECTS\INFRASTRUCTURE TRIAL.GPJ

Project:	**Mary River Project**	Drill Hole No.	**MWD 004**	PAGE	2 of 2
Drilling Co:	**Boart Longyear**	In Situ Sampler:	**HQ Core Barrel**	Date Started:	**30 Jun 06**
Drilling Method:	**Rotary Coring - Longyear Fly 38**	Elevation:	**473 m**	Date Completed:	**3 Jul 06**
Location:	**Mary River, Baffin Island**	Total Depth:	**31.6 m**	Logged by:	**RLV/ACK**
Coordinates:	**7,915,488 N , 564,716 E**	Inclination:	**-90**	Reviewed by:	**KEH**

DEPTH (m)	ELEVATION (m)	GRAPHIC LOG	DESCRIPTION OF MATERIALS	RUN RECOVERY (%)	FROZEN SOIL DESCRIPTION	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT/ RQD (%)	SPT 'N' VALUE/ RMR	FIELD VANE SHEAR STRENGTH Remould (▲) Peak (△) / SPT TEST DATA 'N' VALUES Uncorrected (×) Corrected (□) PL MC LL 20 40 60 80	INSTRUMENTATION DEPTHS (m)	INSTRUMENTATION DETAILS
18	456.0			99	N/R				83				
20	454.0			97	N/R				78				
22	452.0			100	N/R				80				
24	450.0			100	N/R				80				
26	448.0			100	N/R				66				
28	446.0												
30	444.0												
	442.0		End of Drillhole: 31.6 m										

FROZEN SOIL DESCRIPTIONS:

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- Nbe - WELL BONDED, EXCESS ICE
- Vx - INDIVIDUAL ICE INCLUSIONS
- Vc - ICE COATINGS ON PARTICLES
- Vr - RANDOM OR IRREGULARLY ORIENTED ICE FORMATIONS
- Vs - STRATIFIED OR DISTINCTLY ORIENTED ICE FORMATIONS
- I+C - ICE WITH SOIL INCLUSIONS
- ICE - ICE WITHOUT SOIL INCLUSIONS

SAMPLE SYMBOL:

AUGER, SPLITSPOON, THERMISTOR, CORE, SHELBY TUBE

Baffinland
Mary River Project

Knight Piésold CONSULTING

Project No.	Ref. No.	Rev.
NB102-00181/3	2	0

I:\102-00181-3\ASSIGNMENT\DATA\GINT\LIBRARY\LIBRARY_BAFFINLAND_RB.GLB, DRILLHOLE LOG_METRIC, DRILLHOLE_M_BAFFINLAND_RB.GDT, 28 Feb 07

I:\102-00181-3\ASSIGNMENT\DATA\GINT\PROJECTS\INFRASTRUCTURE TRIAL.GPJ

APPENDIX B

Issued for Construction Drawings

MARY RIVER PROJECT
WRF POND EXPANSION DRAINAGE SYSTEM
DETAILED DESIGN

DRAWINGS INDEX				
PLAN NO.	TITLE	REV.	DESCRIPTION	DATE
G-100	COVER PAGE	A	ISSUED FOR CONSTRUCTION	2018-06-15
G-200	WRF POND EXPANSION - GENERAL ARRANGEMENT	A	ISSUED FOR CONSTRUCTION	2018-06-15
C-100	WRF POND EXPANSION - PLAN & PROFILE	A	ISSUED FOR CONSTRUCTION	2018-06-15
C-120	WRF POND EXPANSION - SECTIONS AND DETAILS	A	ISSUED FOR CONSTRUCTION	2018-06-15
C-130	WRF POND EXPANSION - SECTIONS AND DETAILS	A	ISSUED FOR CONSTRUCTION	2018-06-15
C-200	WRF POND EXPANSION - SPILLWAY - PLAN, PROFILE & SECTIONS	A	ISSUED FOR CONSTRUCTION	2018-06-15

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GOLDER ASSOCIATES LTD.
Signature
Date 15 June 2018
PERMIT NUMBER: P 049
NT/NU Association of Professional Engineers and Geoscientists

ISSUED FOR CONSTRUCTION

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2018-06-15	ISSUED FOR CONSTRUCTION	SEC	BA	MT	KAB

SEAL

REGISTERED PROFESSIONAL ENGINEER
K.A. BOCKING
LICENSEE
N.W.T.

CLIENT
Baffinland

CONSULTANT
GOLDER
MISSISSAUGA OFFICE
6925 CENTERY AVENUE, SUITE 100
MISSISSAUGA, ON
CANADA
905-567-444
www.golder.com

PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION
DRAINAGE SYSTEM

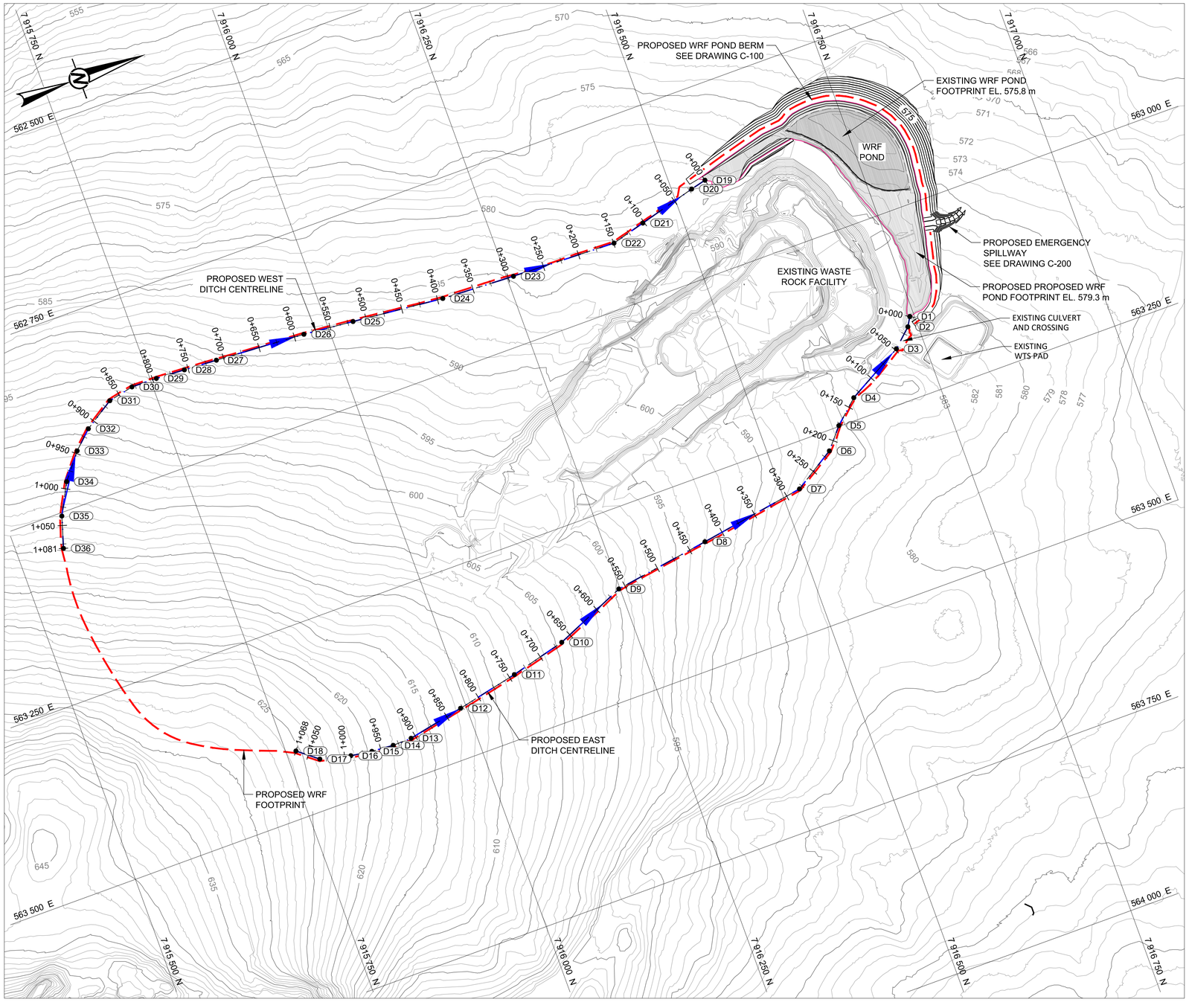
TITLE
COVER PAGE

PROJECT NO.	PHASE	REV.	of	DRAWING
1790951	2003	A		G-100

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 25 mm

Path: \\10.41.90.35\sim$\Clients\Baffinland_Iron_Mines_Corp\Baffin_Island\99_PROJ\1790951_WasteRock_Planning\40_PROD\0001_WasteRock_Mgmt_Planning\ | File Name: 1790951-0001-CM-0001.dwg | Last Edited By: scarlson Date: 2018-06-15 Time:2:25:05 PM | Printed By: SCarlson Date: 2018-06-15 Time:3:03:56 PM



LEGEND

- EXISTING GROUND CONTOURS (1 m INTERVAL)
- PROPOSED GROUND CONTOURS (1 m INTERVAL)
- DITCH CENTRELINE AND FLOW DIRECTION
- PROPOSED WRF EXPANSION FOOTPRINT

NOTE(S)

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. COORDINATE SYSTEM IS UTM (NAD83) ZONE 17.
3. THE GROUND SURFACE IS APPROXIMATE AND MAY VARY FROM THAT SHOWN.
4. THE CONTRACTOR SHALL CARRY OUT AN AS-BUILT SURVEY OF THE EXISTING CONDITION AND ALL NEW CONSTRUCTION.

REFERENCE(S)

1. TOPOGRAPHY PROVIDED BY BAFFINLAND.
2. AS-BUILT CONTOURS PROVIDED BY BAFFINLAND ON MAY 17, 2018.

WEST DITCH POINTS SETOUT TABLE

POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
D19	562875.20	7916546.74	579.300
D20	562880.21	7916525.74	579.483
D21	562900.92	7916448.04	580.169
D22	562913.04	7916402.12	581.357
D23	562908.71	7916259.07	583.664
D24	562904.21	7916159.03	585.297
D25	562891.98	7916034.34	587.065
D26	562885.47	7915966.03	587.688
D27	562877.94	7915842.89	589.702
D28	562875.38	7915797.80	591.359
D29	562873.31	7915758.26	592.935
D30	562872.84	7915723.34	594.457
D31	562880.10	7915688.84	596.063
D32	562905.87	7915648.59	598.634
D33	562928.75	7915624.15	600.563
D34	562963.06	7915596.53	603.188
D35	563004.45	7915574.53	605.913
D36	563046.32	7915561.67	608.795

EAST DITCH POINTS SETOUT TABLE

POINT No.	EASTING (m)	NORTHING (m)	ELEVATION (m)
D1	563143.03	7916744.05	579.300
D2	563155.21	7916736.76	579.985
D3	563177.93	7916711.89	581.400
D4	563220.33	7916635.24	583.122
D5	563248.84	7916603.40	584.504
D6	563276.56	7916579.64	585.386
D7	563311.08	7916524.10	586.118
D8	563334.50	7916379.54	592.006
D9	563354.66	7916248.35	598.661
D10	563396.03	7916151.18	603.586
D11	563415.08	7916076.07	607.237
D12	563433.09	7915992.12	611.678
D13	563448.27	7915915.51	615.518
D14	563448.97	7915889.46	616.934
D15	563446.77	7915859.54	618.658
D16	563442.57	7915830.80	620.182
D17	563432.50	7915789.89	622.592
D18	563411.19	7915763.25	624.315

0 100 200
1:3,000 METRES

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GOLDER ASSOCIATES LTD.
Signature
Date 15 June 2018
PERMIT NUMBER: P 049
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REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2018-06-15	ISSUED FOR CONSTRUCTION	SEC	BA	MT	KAB

SEAL
REGISTERED PROFESSIONAL ENGINEER
K. A. BOCKING
LICENSEE
NWT

CLIENT
Baffinland

CONSULTANT
GOLDER
MISSISSAUGA OFFICE
6925 CENTERY AVENUE, SUITE 100
MISSISSAUGA, ON
CANADA
905-567-444
www.golder.com

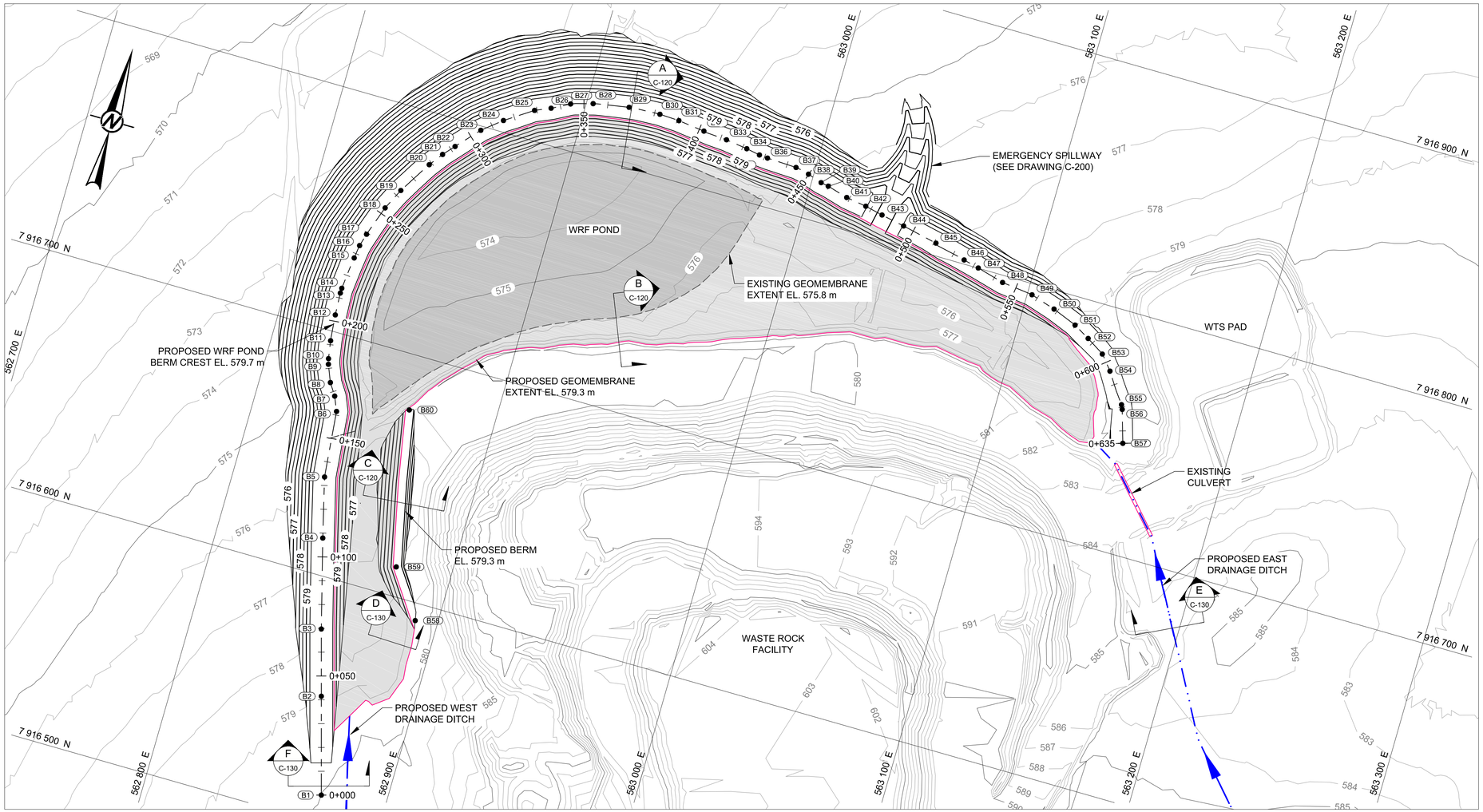
PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION
DRAINAGE SYSTEM

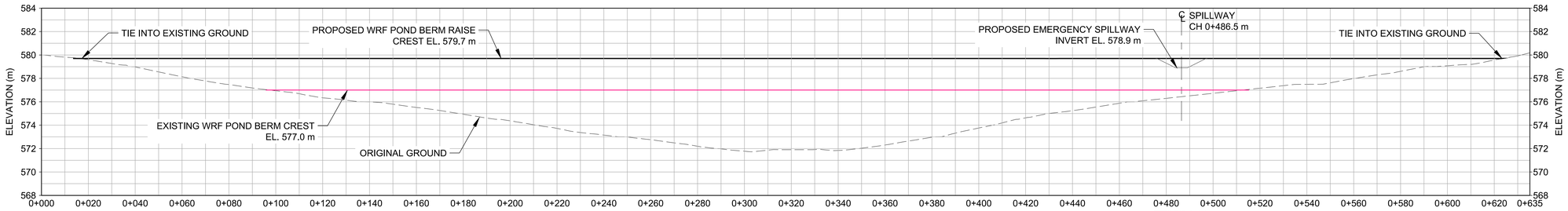
TITLE
WRF POND EXPANSION - GENERAL ARRANGEMENT

PROJECT NO.	PHASE	REV.	of	DRAWING
1790951	2003	A		G-200

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D
0 25 mm

Path: \\10.41.90.35\sim$\Users\Baffinland_Iron_Mines_Corp\Baffin_Island\99_PROJ\1790951_WasteRock_Planning\40_PROD\0001_WasteRock_Mgmt_Planning\ | File Name: 1790951-0001-CM-0002.dwg | Last Edited By: scarlson Date: 2018-06-15 Time:2:40:35 PM | Printed By: SCarlson Date: 2018-06-15 Time:3:04:56 PM





PROFILE - BERM RAISE

HORIZONTAL SCALE 1:1000 VERTICAL SCALE 1:200

LEGEND

- PROPOSED DESIGN CONTOURS (0.5 m INTERVAL)
- EXISTING GROUND CONTOURS (1.0 m INTERVAL)
- EXISTING WRF POND
- PROPOSED WRF POND EXPANSION
- PROPOSED EXTENT OF GEOMEMBRANE
- DRAINAGE DITCH AND FLOW DIRECTION

NOTE(S)

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. COORDINATE SYSTEM IS UTM (NAD83) ZONE 17.
3. THE GROUND SURFACE IS APPROXIMATE AND MAY VARY FROM THAT SHOWN.
4. THE WRF POND SHALL BE DEWATERED AND THE CONDITION OF THE EXISTING GEOMEMBRANE INSPECTED PRIOR TO RAISING OF THE WRF POND BERM.
5. REFER TO DRAWING C-120 FOR THE WRF POND BERM SETOUT POINTS. SETOUT POINTS TO BE VERIFIED AT TIME OF CONSTRUCTION.

REFERENCE(S)

1. TOPOGRAPHY PROVIDED BY BAFFINLAND.
2. ASBUILT CONTOURS PROVIDED BY BAFFINLAND ON MAY 17, 2018.

0 50 100
1:1,000 METRES

ISSUED FOR CONSTRUCTION

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2018-06-15	ISSUED FOR CONSTRUCTION	SEC	BA	MT	KAB

SEAL

REGISTERED PROFESSIONAL ENGINEER — K.A. BOCKING — LICENSEE — NWT

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GOLDER ASSOCIATES LTD.
Signature
Date 15 June 2018
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NT/NU Association of Professional Engineers and Geoscientists

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6925 CENTERY AVENUE, SUITE 100
MISSISSAUGA, ON
CANADA
905-567-444
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PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION
DRAINAGE SYSTEM

TITLE
WRF POND EXPANSION - PLAN & PROFILE

PROJECT NO.	PHASE	REV.	of	DRAWING
1790951	2003	A		C-100

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 25 mm

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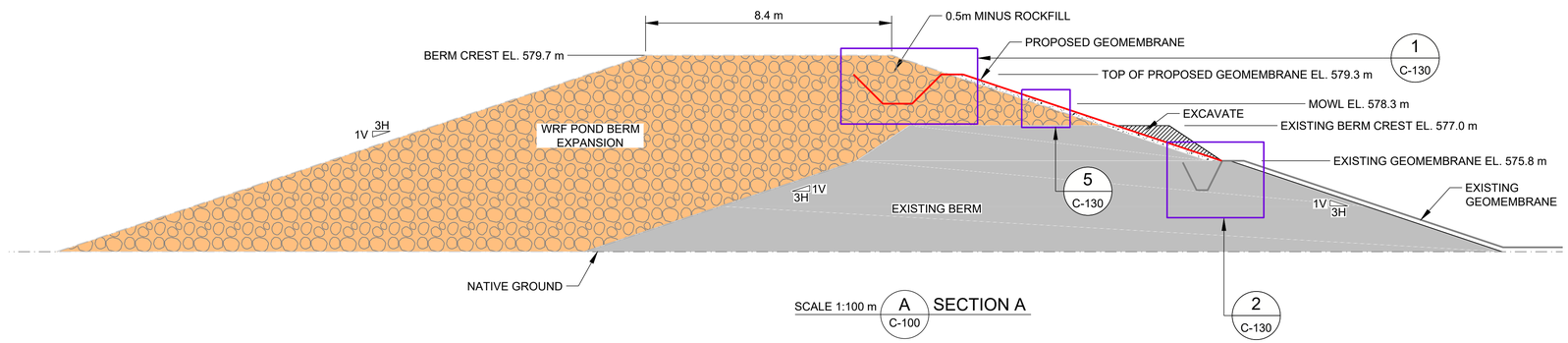

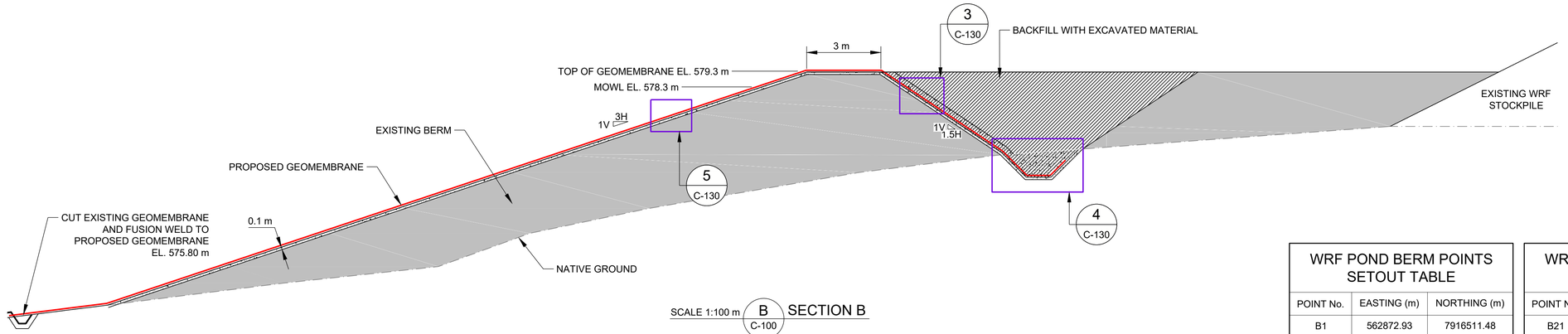

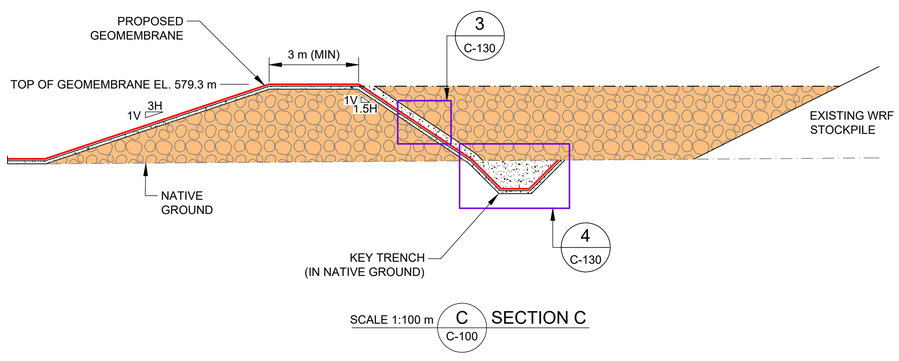

LEGEND

- 0.5m MINUS ROCKFILL
- INTERMEDIATE BEDDING
- EXCAVATION AREA
- EXISTING BERM
- PROPOSED
- RIPRAP
- GEOMEMBRANE
- NON-WOVEN GEOTEXTILE

NOTE(S)

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. ORGANIC AND DELETERIOUS MATERIALS TO BE STRIPPED FROM FOUNDATION PRIOR TO FILL PLACEMENT.
3. NON-WOVEN GEOTEXTILE MAY BE REPLACED BY 0.1 m THICKNESS OF FINE BEDDING MATERIAL.
4. GEOMEMBRANE TO BE LAYFIELD ENVIROLINER 6060 OR APPROVED EQUIVALENT. GEOTEXTILE TO BE LAYFIELD LP7 OR APPROVED EQUIVALENT.

WRF POND BERM POINTS SETOUT TABLE

POINT No.	EASTING (m)	NORTHING (m)
B1	562872.93	7916511.48
B2	562861.51	7916551.38
B3	562853.75	7916578.52
B4	562843.84	7916615.40
B5	562837.50	7916640.25
B6	562834.77	7916668.09
B7	562832.26	7916674.06
B8	562828.95	7916679.04
B9	562826.05	7916686.18
B10	562825.44	7916688.47
B11	562824.21	7916695.95
B12	562823.12	7916706.90
B13	562822.64	7916716.32
B14	562822.67	7916718.41
B15	562824.17	7916732.07
B16	562824.93	7916737.70
B17	562826.42	7916743.06
B18	562830.88	7916755.85
B19	562835.20	7916764.69
B20	562843.70	7916778.38

WRF POND BERM POINTS SETOUT TABLE

POINT No.	EASTING (m)	NORTHING (m)
B21	562847.90	7916784.06
B22	562852.02	7916788.72
B23	562860.54	7916798.22
B24	562868.55	7916804.78
B25	562879.93	7916812.45
B26	562886.35	7916815.24
B27	562893.74	7916819.21
B28	562902.79	7916821.94
B29	562917.74	7916824.63
B30	562930.97	7916825.38
B31	562939.38	7916824.99
B32	562950.67	7916823.65
B33	562960.80	7916822.75
B34	562970.01	7916821.50
B35	562975.83	7916820.44
B36	562979.45	7916820.10
B37	562992.06	7916819.61
B38	562997.85	7916818.35
B39	563003.93	7916816.39
B40	563007.21	7916815.78

WRF POND BERM POINTS SETOUT TABLE

POINT No.	EASTING (m)	NORTHING (m)
B41	563015.98	7916813.34
B42	563024.69	7916812.02
B43	563032.25	7916810.35
B44	563042.22	7916808.42
B45	563057.26	7916805.22
B46	563070.57	7916801.69
B47	563077.20	7916800.08
B48	563088.70	7916797.04
B49	563102.00	7916795.47
B50	563112.54	7916792.24
B51	563122.88	7916788.21
B52	563129.70	7916784.31
B53	563137.21	7916779.66
B54	563142.27	7916773.66
B55	563150.80	7916761.44
B56	563151.64	7916759.62
B57	563155.79	7916746.01
B58	562890.67	7916592.75
B59	562876.82	7916612.24
B60	562863.96	7916677.09

PERMIT TO PRACTICE
GOLDER ASSOCIATES LTD.
Signature
Date 15 June 2018
PERMIT NUMBER: P 049
NT/NU Association of Professional Engineers and Geoscientists

ISSUED FOR CONSTRUCTION

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2018-06-15	ISSUED FOR CONSTRUCTION	SEC	BA	MT	KAB

SEAL

REGISTERED PROFESSIONAL ENGINEER
K. A. BOCKING
LICENSEE
N.W.T.

CLIENT
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MISSISSAUGA OFFICE
6925 CENTERY AVENUE, SUITE 100
MISSISSAUGA, ON
CANADA
905-567-444
www.golder.com

PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION
DRAINAGE SYSTEM

TITLE
WRF POND EXPANSION - SECTIONS AND DETAILS

PROJECT NO.	PHASE	REV.	of	DRAWING
1790951	2003	A		C-120

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 25 mm

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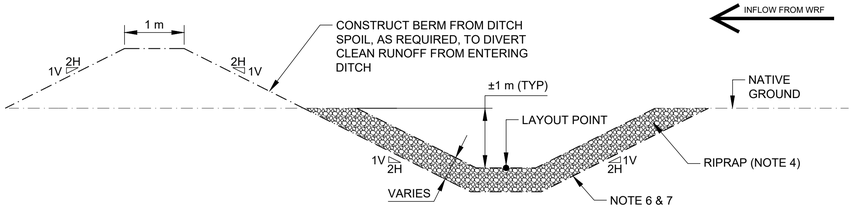
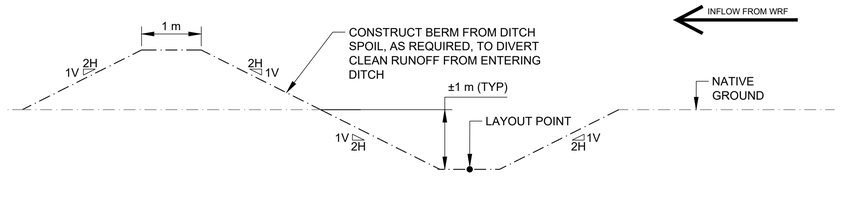
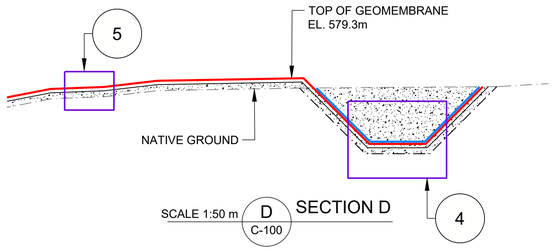


SCALE 1:50 m — E C-100 — TYPICAL DIVERSION DITCH WITH RIP-RAP



SCALE 1:50 m — F C-100 — TYPICAL DIVERSION DITCH WITHOUT RIP-RAP



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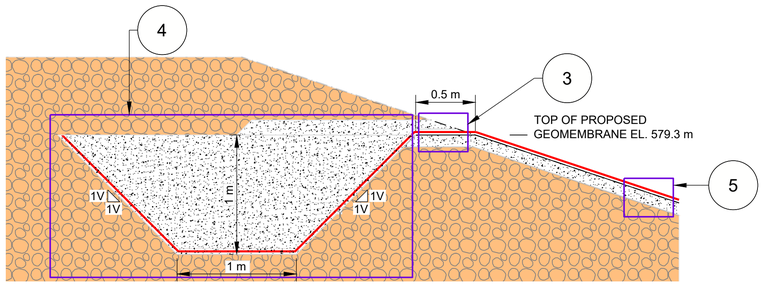
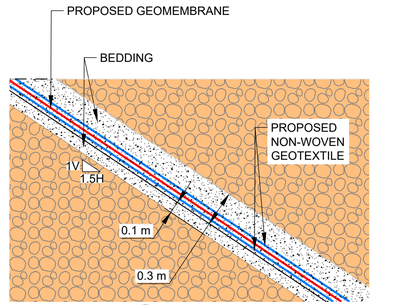


SCALE 1:25 m — 1 — DETAIL 1



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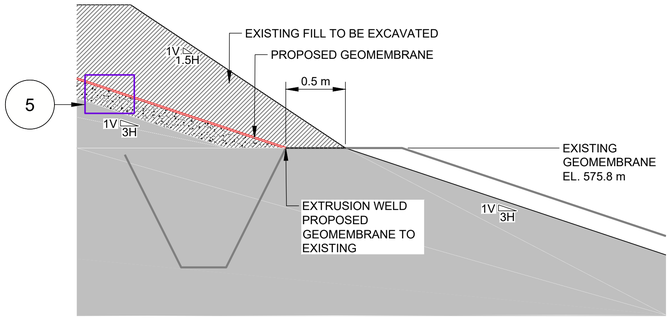

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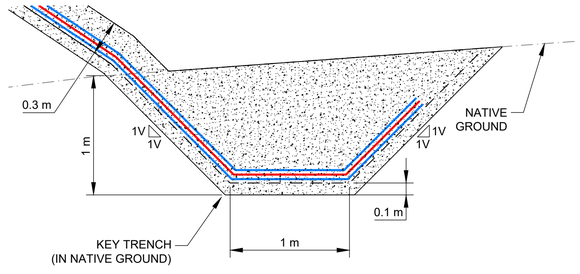

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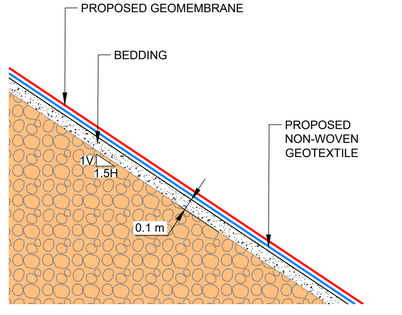

SCALE 1:25 m — 5 — TYPICAL BEDDING DETAIL 2

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Signature
Date 15 June 2018
PERMIT NUMBER: P 049
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LEGEND

- 0.5m MINUS ROCKFILL
- INTERMEDIATE BEDDING
- EXCAVATION AREA
- EXISTING BERM
- PROPOSED
- RIPRAP
- GEOMEMBRANE
- NON-WOVEN GEOTEXTILE

NOTE(S)

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. ORGANIC AND DELETERIOUS MATERIALS TO BE STRIPPED FROM FOUNDATION PRIOR TO FILL PLACEMENT.
3. NON-WOVEN GEOTEXTILE MAY BE REPLACED BY 0.1 m THICKNESS OF FINE BEDDING MATERIAL.
4. REFER TO TABLE FOR RIPRAP GRADATION, THICKNESS, AND LOCATIONS WHERE REQUIRED.
5. GEOMEMBRANE TO BE LAYFIELD ENVIROLINER 6060 OR APPROVED EQUIVALENT. GEOTEXTILE TO BE LAYFIELD LP7 OR APPROVED EQUIVALENT.
6. RIPRAP MAY NOT BE INSTALLED AT THE TIME OF DITCH EXCAVATION. REQUIREMENT FOR RIPRAP TO BE DETERMINED BASED ON PERFORMANCE MONITORING.
7. RIPRAP SHALL BE EXTENDED 3.0 m INTO THE DITCH SECTION WHERE RIPRAP IS NOT REQUIRED.

RIP-RAP SETOUT TABLE

	Upstream Station	Downstream Station	Slope (%)	Flow Depth (m)	Flow Velocity (m/s)	Minimum Riprap D_{50} (mm)
West Ditch	0+000	0+022	0.08%	0.7	0.5	Not required
	0+022	0+102	1.50%	0.4	1.3	Not required
	0+102	0+150	2.50%	0.3	1.6	200
	0+150	0+293	1.60%	0.4	1.4	Not required
	0+293	0+393	1.60%	0.4	1.4	Not required
	0+393	0+518	1.40%	0.4	1.3	Not required
	0+518	0+587	0.90%	0.4	1.1	Not required
	0+587	0+710	1.60%	0.4	1.4	Not required
	0+710	0+755	3.70%	0.3	1.8	200
	0+755	0+795	4.00%	0.3	1.9	200
	0+795	0+830	4.40%	0.3	2	200
	0+830	0+865	4.50%	0.3	2	200
	0+865	0+913	5.40%	0.3	2.1	300
	0+913	0+946	5.70%	0.3	2.2	300
	0+946	0+990	5.90%	0.2	2.2	300
	0+990	1+037	5.80%	0.3	2.2	300
	1+037	1+081	6.60%	0.2	2.3	300
East Ditch	0+000	0+014	6.60%	0.2	1.5	300
	0+014	0+048	4.10%			CSP Culvert Riprap to be provided at outlet
	0+048	0+135	2.00%	0.3	1.5	Not required
	0+135	0+178	3.20%	0.3	1.8	200
	0+178	0+215	2.40%	0.3	1.6	200
	0+215	0+280	1.10%	0.4	1.2	Not required
	0+280	0+427	4.00%	0.3	1.9	200
	0+427	0+559	5.00%	0.3	2.1	300
	0+559	0+665	4.70%	0.3	2	300
	0+665	0+742	4.70%	0.3	2	300
	0+742	0+828	5.20%	0.3	2.1	300
	0+828	0+906	4.90%	0.3	2.1	300
	0+906	0+932	5.40%	0.3	2.2	300
	0+932	0+962	5.80%	0.3	2.2	300
	0+962	0+991	5.30%	0.3	2.1	300
	0+991	1+034	5.70%	0.3	2.2	300
	1+034	1+068	5.10%	0.3	2.1	300

RIPRAP THICKNESS SHALL BE TWICE THE D50 VALUE

ISSUED FOR CONSTRUCTION

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2018-06-15	ISSUED FOR CONSTRUCTION	SEC	BA	MT	KAB

SEAL

REGISTERED PROFESSIONAL ENGINEER — K. A. BOCKING — LICENSEE — NWT

CLIENT: Baffinland

CONSULTANT: GOLDER

MISSISSAUGA OFFICE
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PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION
DRAINAGE SYSTEM

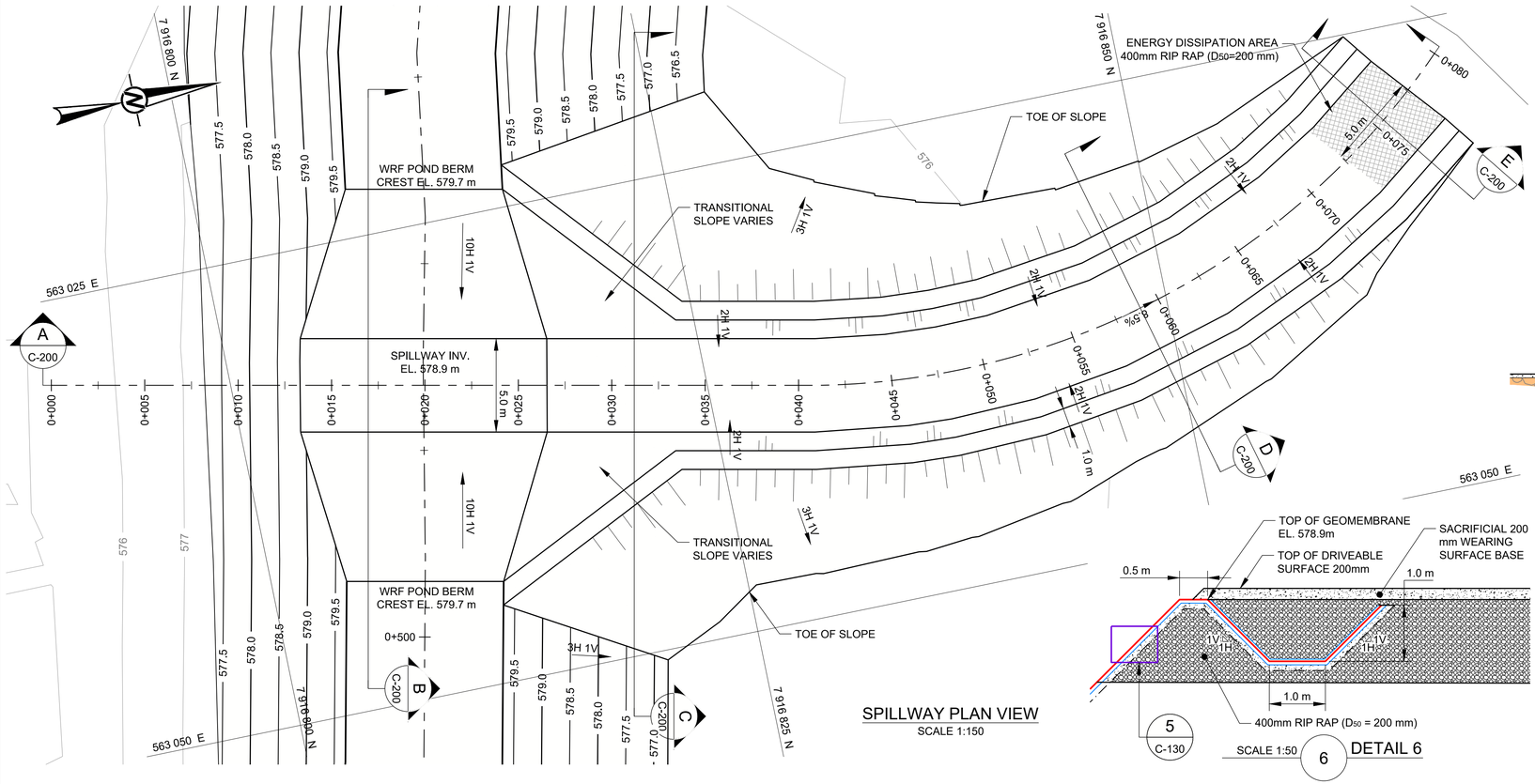
TITLE
WRF POND EXPANSION - SECTIONS AND DETAILS

PROJECT NO.	PHASE	REV.	of	DRAWING
1790951	2003	A		C-130

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 25 mm

Path: \\10.41.90.3\sim$\Clients\Baffinland_Iron_Mines_Corp\Baffin_Island\99_PROJ\1790951_WasteRock_Planning\40_PROD\0001_WasteRock_Mgmt_Planning\ | File Name: 1790951-0001-CM-0004.dwg | Last Edited By: scarlson Date: 2018-06-15 Time:3:02:32 PM | Printed By: SCarlson Date: 2018-06-15 Time:3:08:17 PM



SPILLWAY PLAN VIEW
SCALE 1:150

SCALE 1:50 — 6 — DETAIL 6

LEGEND

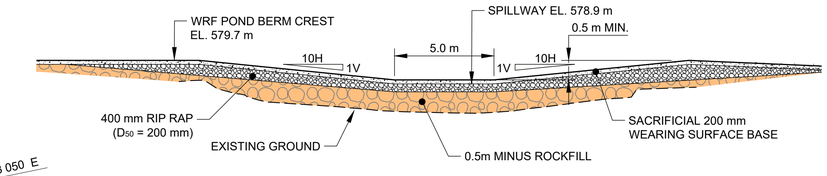
- 0.5m MINUS ROCKFILL
- INTERMEDIATE BEDDING
- PROPOSED
- RIPRAP
- 576 — EXISTING CONTOURS
- 579.0 — PROPOSED CONTOURS
- GEOMEMBRANE
- NON-WOVEN GEOTEXTILE

NOTE(S)

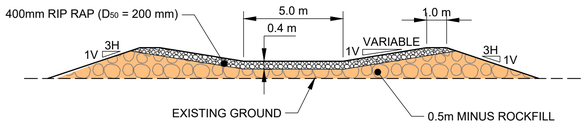
1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. COORDINATE SYSTEM IS UTM (NAD83) ZONE 17.
3. THE GROUND SURFACE IS APPROXIMATE AND MAY VARY FROM THAT SHOWN.
4. THE CONTRACTOR SHALL CARRY OUT AN AS-BUILT SURVEY OF THE EXISTING CONDITION AND ALL NEW CONSTRUCTION
5. GEOMEMBRANE TO BE LAYFIELD ENVIROLINER 6060 OR APPROVED EQUIVALENT. GEOTEXTILE TO BE LAYFIELD LP7 OR APPROVED EQUIVALENT.
6. NON-WOVEN GEOTEXTILE MAY BE REPLACED BY 0.1 m THICKNESS OF FINE BEDDING MATERIAL.

REFERENCE(S)

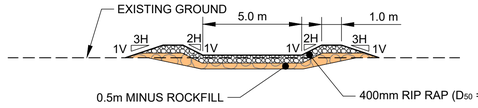
1. TOPOGRAPHY PROVIDED BY BAFFINLAND.
2. AS-BUILT CONTOURS PROVIDED BY BAFFINLAND ON MAY 17,2018.



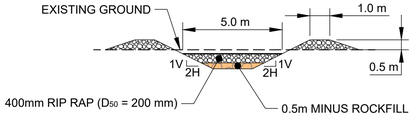
SCALE 1:150 — B C-200 — SPILLWAY CREST SECTION



SCALE 1:150 — C C-200 — SPILLWAY CHUTE SECTION IN FILL



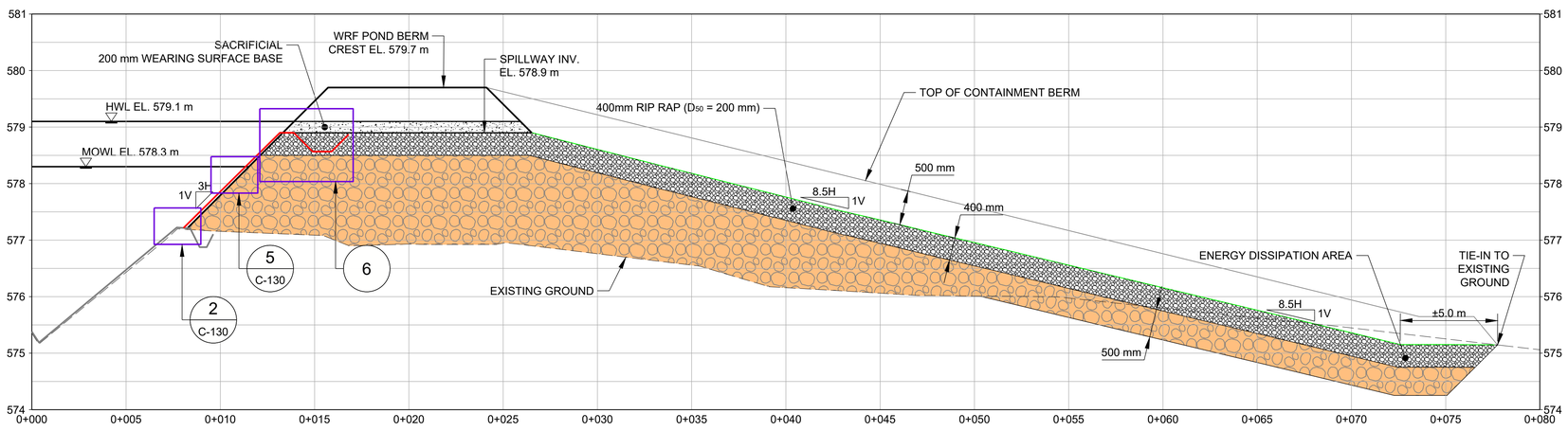
SCALE 1:150 — D C-200 — SPILLWAY CHUTE SECTION IN CUT



SCALE 1:150 — E C-200 — ENERGY DISSIPATOR

0 2 4
1:50 METRES

0 5 10
1:150 METRES



HORIZONTAL SCALE 1:150
VERTICAL SCALE 1:50
A C-200 — SPILLWAY LONGITUDINAL SECTION

PERMIT TO PRACTICE
GOLDER ASSOCIATES LTD.
Signature
Date 15 June 2018
PERMIT NUMBER: P 049
NT/NU Association of Professional Engineers and Geoscientists

ISSUED FOR CONSTRUCTION

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2018-06-15	ISSUED FOR CONSTRUCTION	SEC	BA	MT	KAB

SEAL

CLIENT: Baffinland

CONSULTANT: GOLDER

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PROJECT
MARY RIVER PROJECT
WRF POND EXPANSION
DRAINAGE SYSTEM

TITLE
WRF POND EXPANSION - SPILLWAY - PLAN, PROFILE & SECTIONS

PROJECT NO.	PHASE	REV.	of	DRAWING
1790951	2003	A		C-200

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

25 mm

Path: \\10.41.90.35\sim$\sim\Clients\Baffinland_Iron_Mines_Corp\Baffin_Island\09_PROJ\1790951_WasteRock_Planning\40_PROD\0001_WasteRock_Mgmt_Planning\ | File Name: 1790951-0001-CM-0006.dwg | Last Edited By: scarlson Date: 2018-06-15 Time:3:11:45 PM | Printed By: SCarlson Date: 2018-06-15 Time:3:14:23 PM



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SPECIFICATION

The document revision number is indicated below. Please replace all revised pages of this document and destroy the superseded copies.

PROJECT:	MARY RIVER PROJECT				SPECIFICATION NO.: 1790951		REV 0
PROJECT NO:	1790951				GOLDER REFERENCE NO.: 1790951-S		
TITLE:	WRF Pond Expansion						
ISSUED FOR	REV NO.	ORIGIN	DATE		ISSUED-PAGES/SECTIONS		INITIAL
			OUT	IN			
Client Review	A	Golder	7-Aug-18	17-Aug-18	All	All	MJT/KAB
Issued for Construction	0	Golder	17-Aug-18		All	All	MJT/KAB

New Issue

Revised Sheet Only Attached

Entire Document Reissued

REGISTERED PROFESSIONAL ENGINEER
K.A. BOCKING
LICENSEE
N.W.T.
17 Aug 2018

PERMIT TO PRACTICE
GOLDER ASSOCIATES LTD.
Signature Ken Bocking
Date 17 Aug 2018
PERMIT NUMBER: P 049
NT/NU Association of Professional Engineers and Geoscientists

FINAL DOCUMENT APPROVAL

BAFFINLAND APPROVAL		GOLDER APPROVAL	
Mine Manager:	Simon L. Fleury	Senior Review:	Ken Bocking
Date:	17-AUG-2018	Date:	August 17, 2018
Environmental Manager:	[signature]	Project Manager:	M Tyldesley
Date:	17-Aug-2018	Date:	August 17, 2018
Engineering Lead:	[signature]	Originator:	[signature]
Date:	17-AUG-2018	Date:	August 17, 2018

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1.0 GENERAL REQUIREMENTS

1.1 Definitions

1. The definition of primary terms used on the Drawings and in the Specification for this contract is listed below:

a)	CONTRACTOR	The party (parties) awarded the contract(s) by the OWNER and all SUBCONTRACTORS and vendors secured by the party (parties) for execution of the work under or related to the Specifications. Work under this Specification includes procurement and supply of materials, equipment, tools, supervision, and labor for performing all parts of work specified in this document. Various portions of the Work described in this Specification may be awarded to multiple CONTRACTORs and, therefore, "CONTRACTOR" does not refer to one sole party. For earthworks activities the OWNER will act as the CONTRACTOR.
b)	CQA	Construction Quality Assurance (CQA) refers to the means and methods utilized by the OWNER to verify conformity to the design intent, the Specifications, and Drawings.
c)	CQC	Construction Quality Control (CQC) refers to the actions taken by the CONTRACTOR to ensure that the materials provided to them, the materials they produce, and their own workmanship, meet the requirements of their construction quality control program, the Specifications, and the Drawings.
d)	Drawings	The Issued for Construction Drawings prepared by the ENGINEER.
e)	ENGINEER	The qualified company or person(s) who is appointed by the OWNER to develop the Specifications and Drawings. The ENGINEER for the Mary River Project- WRF Pond Expansion as identified by these Specifications is Golder Associates Ltd. (Golder). The ENGINEER is an agent of the OWNER.
f)	OWNER	Wherever used in this Specification shall mean Baffinland Iron Mines Corporation, unless otherwise specified.
g)	OWNER'S REPRESENTATIVE	The qualified company or person(s) who is appointed by the OWNER to work as the OWNER's agent in the construction work to perform quality assurance testing and monitoring to verify and document that the CONTRACTOR(s) work is in compliance with the Specifications, Drawings, and CQC/CQA Plan. The OWNER'S REPRESENTATIVE reports to and is a representative of the OWNER.
h)	Project	The Project refers to a combination of the Site, the Work, and all associated people, parties, and products for construction of the Mary River Project- WRF Pond Expansion.

i)	Site	Wherever used in these Specifications shall mean the Mary River Mine.
j)	Specifications	Refers to this document.
k)	Work	The work that is executed by the CONTRACTOR(S) for the OWNER.

1.2 Acronyms and Abbreviations

1. The acronyms and abbreviations commonly used in the Drawings and in the Specification are listed below:

a)	2H:1V	Slope of 2 horizontal units to 1 vertical unit.
b)	ASTM	ASTM International; formerly known as American Society for Testing and Materials.
c)	CSP	corrugated steel pipe.
d)	CSA	Canadian Standards Association.
e)	m	metre.
f)	mm	millimetre.
g)	N	Newton.
h)	SPMDD	Standard Proctor Maximum Dry Density
i)	t	tonne.

1.3 Summary of Work

1. Earthwork shall consist of supplying all labor, supervision, equipment, and materials necessary to construct and protect the earthworks for the WRF Pond and diversion ditches as shown on the Drawings or as required by the OWNER including:
   a) Raising of the WRF Pond Berm will require:
      i) Stripping of deleterious materials from the expanded berm footprint;
      ii) Placing of zoned fill materials layer by layer; and,
      iii) Construction of an emergency spillway channel.
   b) Construction of the diversion ditches will require:
      i) Excavation of the ditch along the design alignment;
      ii) Placement of spoil as a berm on the downstream side of the ditch excavation; and,
      iii) Placement of rip rap (as required).
   c) Geomembrane installation will require:
      i) Inspection of the existing geomembrane condition and identification to repair or replace (to be carried out by the OWNER)
      ii) Preparation of the geomembrane subgrade; and,
      iii) Installation of the geosynthetic materials in accordance with these Specifications.

1.4 Drawings and Specifications

This Specification defines the requirements for performing the Work as outlined on the most recent revision of the Drawings presented in Table 1.

Table 1: Issued for Construction Drawings

Drawing Number	Drawing Title	Revision
G-100	Cover Page	A
G-200	WRF Pond Expansion – General Arrangement	A
C-100	WRF Pond Expansion – Plan & Profile	A
C-120	WRF Pond Expansion – Sections and Details	A
C-130	WRF Pond Expansion – Sections and Details	A
C-200	WRF Pond Expansion – Spillway – Plan, Profile & Sections	A

1.5 Technical Contradictions

1. The general technical requirements specified herein shall apply to all activities and operations relating to carrying out the Work or as required by the OWNER. In the event of a contradiction in the Specifications and Drawings, the CONTRACTOR shall refer all questions to the OWNER for final decision. Work that concerns the contradiction shall not be performed until the contradiction is remedied or explained by the OWNER. In all events, the decision of the OWNER is final.

1.6 Codes and Standards

1. Cited Codes and Standards refer to the newest version of the referenced code. Tests carried out by the ENGINEER, CONTRACTOR, or OWNER will be performed in accordance with the latest principles and methods prescribed by the American Society for Testing and Materials (ASTM) and other such recognized industry standards as approved by OWNER. The tests shall include Control and Record Tests.
2. In carrying out the Work, the CONTRACTOR shall comply with the site Water Licence No. 2AM-MRY 1325.
3. The CONTRACTOR shall carry out the Work in accordance with all environmental regulations and OWNER site policies.

1.7 Continuity of Work

1. The CONTRACTOR shall complete the Work within the Contract period.
2. The CONTRACTOR shall carry out the Work on a continuous basis, without undue delay, unless agreed upon otherwise with the OWNER.
3. In the event that there is a dispute regarding the payment for any part of the Scope of Work, whether completed, in progress, or planned, the CONTRACTOR shall continue to carry out the Work without undue delay. The CONTRACTOR shall not stop the Work progress as a result of any payment dispute.

2.0 CONSTRUCTION QUALITY CONTROL (CQC) AND CONSTRUCTION QUALITY ASSURANCE (CQA)

1. The CQC testing program shall consist of testing of materials used in the Project. The types of materials are defined in the Specifications. All tests shall be performed by the CONTRACTOR on-site and/or at an approved geotechnical testing laboratory.
2. The objective of this plan is to assure that the proper materials, construction techniques, and procedures are followed by the CONTRACTOR, and that the intent of the design is met.
3. The CQC Plan is independent of the CQA programs conducted by the OWNER'S REPRESENTATIVE. The intent of the CQC Plan is to provide verification and testing, to demonstrate that the CONTRACTOR has met its obligations in the supply and installation of the Work according to the Drawings and Specifications.
4. Quality assurance is provided by the OWNER or OWNER'S REPRESENTATIVE and refers to those actions taken by the OWNER or OWNER'S REPRESENTATIVE to verify that the CONTRACTOR has provided materials and workmanship that meet the requirements of the Drawings and Specifications.

2.1 Reference Standards

1. Throughout this Specification, reference is made to the standards published by the ASTM.
2. Materials and workmanship shall comply with the active version of the relevant standard.
3. Standards applicable to earthworks are listed below. If the CONTRACTOR offers services that conform to a standard other than that specified, the standard offered shall be equal to or superior, when tested, to the specified standard and full details of the differences between the standard offered and the standard specified shall be provided to the ENGINEER by the CONTRACTOR.

a) ASTM D422	Standard Test Method for Particle-Size Analysis of Soils
b) ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft3 [600 kN-m/m^3])
c) ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by Sand- Cone Method
d) ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/ft^3 (27,000 kN-m/m^3))
e) ASTM D2216	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
f) ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soil
g) ASTM D5030	Standard Test Methods for Density of Soil and Rock in Place by the Water Replacement Method in a Test Pit
h) ASTM D5856	Standard Test Method for Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter

i) ASTM D6938 Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

Standards related to geotextile are provided under Section 6.0, and for the geomembrane under Section 7.0.

2.2 Inspection and Testing

1. The OWNER will provide CQA measures to monitor for compliance with the Drawings and Specification requirements with input from the ENGINEER.
2. The CONTRACTOR shall perform activites to meet the CQC requirements.
3. Construction checklist forms included at the end of the Specification are required for documenting the CQC and other aspects of construction activities. The checklists included in Section 8.0 shall be finalized and signed off by the CONTRACTOR, the OWNER'S REPRESENTATIVE and THE ENGINEER for acceptance of the construction activities. If the ENGINEER is not on site, the the OWNER'S REPRESENTATIVE is required to provide the information to the ENGINEER.

2.2.1 CQC Requirements

1. During construction, the CONTRACTOR shall coordinate testing of all CQC Samples at a site laboratory or a commercial geotechnical laboratory, to verify that the earthwork construction is in accordance with the Specifications. The CONTRACTOR shall collect samples for testing. The tests to be performed, and the testing frequency, for each material type are listed in Table 2. The testing frequencies shall be increased when the OWNER determines that construction conditions (such as, but not limited to adverse weather, equipment breakdown, improper compaction, excessive lift thickness, improper soil type, improper moisture conditioning, etc.) warrant additional tests. It is important to note that additional requirements for CQC testing are presented throughout this Specification. It is the responsibility of the CONTRACTOR to ensure that all CQC requirements are satisfied.

Table 2: Minimum CQC Testing Frequency for Earthworks Construction

Test Description	Test Designation	Frequency	Applicable Material Types
Visual inspection for ice and boulders	N/A	Continuously	All
Layer thickness	N/A	Continuously	All
Elevation of compacted lift	N/A	Continuously	All
Standard Method of Test For Grain-Size Analysis of Granular Soil Materials	ASTM D422	1 every 5,000 m^3	Intermediate Bedding and Fine Bedding Material
Maximum Particle Size (Visual Inpsection)	N/A	Continuously	500 mm Minus Rockfill

Table 2: Minimum CQC Testing Frequency for Earthworks Construction

Test Description	Test Designation	Frequency	Applicable Material Types
Compaction Effort including number of passes and equipment traffic pattern	N/A	Continuously	500 mm Minus Rockfill, Intermediate Bedding, and Fine Bedding Material

2. CQC requirements related to the geomembrane are under Section 7.0.

2.2.2 CQA Requirements

1. The OWNER will be responsible for carrying out CQA checks to verify that the final constructed product conforms to the Drawings and Specifications. Quality assurance measures undertaken by the OWNER may include but are not limited to:

   a) Visual inspection of the completed works for general design conformance.

   b) Laboratory testing of any construction materials to confirm compliance with the Specifications.

   c) Review of the CONTRACTOR's construction quality control laboratory testing results to confirm compliance with the Specifications.

   d) Verify that the construction fill has been placed to the required standard (i.e., check lift thickness, compaction, moisture content and material gradation).

2. If the laboratory testing results of either the CONTRACTOR or the OWNER indicate that the Work was not completed in accordance with the Specifications, then the CONTRACTOR will be required to repair the work at no cost to the OWNER.

3.0 DEWATERING AND SEDIMENT CONTROL

1. The CONTRACTOR will be responsible for the implementation of any temporary works, including erosion protection and sediment control best management practices to protect the work from stormwater damage.

2. The CONTRACTOR shall use materials, construction practices, mitigation techniques and monitoring of operation at every water crossing in order to prevent harmful alteration, disruption or destruction of fish habitat or the impairment of water quality.

3. The CONTRACTOR shall phase the construction activities to minimize the size of the disturbed area and the duration of soil exposure. All excavations shall have stable side slopes to minimize erosion. Permanent erosion protection shall be provided as soon as is practical.

4. Runoff from the work area shall be channelized and monitored for sedimentation.

5. The CONTRACTOR shall monitor the effectiveness of his sedimentation and erosion control measures and provide additional means to control siltation as required.

6. The CONTRACTOR shall prepare a contingency plan to respond, mitigate and remedy, in a timely manner, the effect due to unforeseen events such as flood and spill contaminants. To implement the contingency plan, the CONTRACTOR shall maintain in standby, adequate supply of material, equipment and the like throughout the duration of construction.

7. The CONTRACTOR shall report to the OWNER any unexpected discharge of silt, sediment or other deleterious substance to a watercourse.

8. The CONTRACTOR shall be responsible for providing temporary surface water controls during construction and shall be responsible for, and shall repair at his own expense, any damage to any part of the work caused by storm water runoff, or failure of any temporary surface water controls.

9. All temporary surface water controls not part of the permanent facility shall be removed, leveled, and graded by the CONTRACTOR after completion of the Work.

10. The CONTRACTOR shall have full responsibility for the adequacy of the temporary surface water controls. The sizing for temporary surface water controls should consider the duration of the construction activities, the time of the year of construction, characteristics of the storms during the construction seasons, cost of possible damage, cost of delay to the construction completion of the work, and the safety of workers.

11. The CONTRACTOR shall dewater any stormwater from the construction areas during the time required to complete construction. Acceptable dewatering measures include, but are not limited to, pumping, construction of dewatering sumps, and temporary diversion of surface flows.

4.0 FUEL AND OIL SPILLS

1. The CONTRACTOR shall work in accordance with all environmental regulations and the OWNER's site policies regarding spills of fuels and oils. In the event of an accidental spill on land or into a watercourse, the OWNER's spill response and reporting procedures shall be strictly adhered to.

2. Corrosive, toxic, flammable or otherwise polluting fluids shall not be discharged. Spills of such fluid shall be contained and cleaned in accordance with the spill response and reporting procedures.

3. Portable fuel tanks and fuel cans shall not be left at locations near a watercourse of any kind. All fuel tanks must be double walled and equipped with 360° vehicle protection. A list of emergency contact numbers for key personnel must be provided by the CONTRACTOR to the OWNER at the start of construction.

5.0 EARTHWORKS

This specification describes the requirements for placement and compaction of earth fill and rock fill zones for construction of the WRF Pond Berms, and diversion ditches.

5.1 Excavation

1. Excavation shall be carried out as required to achieve the lines, grades and dimensions shown on the Drawings and/or required to expose suitable subgrade materials. The suitability of the subgrade materials shall be subject to inspection and approval by the OWNER.
2. At the East and West Diversion Ditches, spoil from the ditch excavation shall be used be used for construction of a berm to prevent clean run-off from entering the ditch, as shown on the Drawings.

5.2 Subgrade Preparation

1. The WRF Pond Berm subgrade shall be prepared, inspected, and approved by the OWNER prior to any fill placement for the WRF Pond Berm construction.
2. Subgrade preparation shall involve removal of all unsuitable and deleterious materials (e.g. saturated materials, organics, etc.) from the WRF Pond Berm foundation.
3. The prepared subgrade shall be nominally compacted by heavy equipment traffic prior to fill placement.

5.3 Construction Tolerances

1. All excavations and fill shall be completed to be within (+/-) 0.3 m horizontally and plus (+) 0.05 m vertically of specified lines and grades unless otherwise approved by the OWNER. The CONTRACTOR shall provide and have available at all times during their working hours, the necessary staff and equipment to ensure that proper and correct setting out of the Works is continually maintained during construction. Should any errors in setting out the Works occur, such errors shall be corrected and any necessary adjustment to previously placed fill materials resulting from such errors shall be made good to the satisfaction of the OWNER prior to further placement of fill materials, at no additional cost to the OWNER.
2. Slopes shall not be steeper than those shown on the Drawings unless otherwise approved by the ENGINEER.
3. Temporary excavation and fill slopes shall be in compliance with local health and safety regulations.
4. Finished grades and slopes shall be in general conformance with the Drawings. Deviations from finished grades or slopes are subject to approval by the ENGINEER and shall not result in low spots, non-uniform slopes or contours, or result in slopes that are steeper than design, unless approved in writing by the OWNER.

5.4 Fill Materials

The following sections describe the fill material requirements.

5.4.1 General Requirements

1. Fill materials shall not be frozen and shall be free from organic and other unsuitable matter. They shall be composed of sound, hard, durable particles that will not be affected by the addition of water or by the elements. Materials such as shale or thinly bedded limestone which may break upon exposure or freezing is not acceptable.
2. Fill materials shall generally be well-graded within the specified limits. Material placement and spreading techniques shall prevent segregation of the fill.
3. All fill materials are to be placed in the dry. No fill shall be placed through standing water or under adverse weather conditions (e.g. rain, snow, etc.) that prevent the performance of satisfactory work. In the event that the prepared surface becomes damaged or loosened due to exposure to frost, rain or any other cause, the CONTRACTOR shall remove all affected material, at no additional cost to the OWNER, to the satisfaction of the OWNER prior to further fill placement.
4. The OWNER shall be allowed access to all sampling locations (stockpiles and embankments) and reserves the right to take CQA samples at any time without notice to the CONTRACTOR.
5. Materials furnished by the CONTRACTOR that do not conform to the requirements of the Specifications shall be considered as defective. All defective materials, whether in place or not, will be rejected and shall be removed from the site of the Work or shall be substantially corrected and approved by the OWNER.
6. All fill materials shall be free from organic matter, debris, or other deleterious matter.
7. The placement of frozen fill will not be permitted.
8. The fill materials shall be free from lenses, pockets or layers of materials which are significantly different in gradation from the surrounding materials within the same zone.
9. Dumping of material on slopes will not be permitted.

5.4.2 500 mm minus Rock Fill

The 500 mm minus rock fill shall be obtained from an approved construction material source, as required under Water Licence No. 2AM-MRY 1325-Amendment No.1. The material shall be well graded within the limits defined in Table 3 below:

Table 3: 500 mm Minus Rock Fill Gradation

Sieve (mm)	Percent Passing by weight	
	Lower Bound	Upper Bound
500	100	100
150	100	50
75	40	20
37.5	23	15
19	15	8
4.75	5	0
2	5	0
0.075	5	0

Nests of cobble size material will not be permitted and any segregation which might result in discrete zones of coarse material occurring within the fill will also not be permitted

The maximum compacted lift thickness shall be 1.0 m.

5.4.3 Intermediate Bedding Material

Intermediate Bedding Material shall be placed as a transition material between the geomembrane bedding material, and the underlying rock fill. The bedding material shall be provided by the OWNER from an approved construction material source as required under Water Licence No. 2AM-MRY 1325-Amendment No.1.
The material shall be well graded within the limits defined in Table 4 below:

Table 4: Intermediate Bedding Material Gradation

Sieve (mm)	Percent Passing by weight	
	Lower Bound	Upper Bound
32	100	100
19	100	85
13.2	100	70
9.5	100	50
4.75	70	30
1.18	40	10
0.3	22	5
0.075	8	0

5.4.4 Fine Bedding Material

Fine Bedding Material shall be placed as a transition material between the geomembrane and underlying Intermediate Bedding Material. The Fine Bedding Material shall be provided by the OWNER from an approved construction material source as required under Water Licence No. 2AM-MRY 1325-Amendment No.1.
The material requirements are defined below:

1. The material shall be well graded
2. The maximum particle size shall be 2.0 mm
3. The fines content (percent passing the #200 sieve) shall not exceed 5%.

With approval from the ENGINEER and OWNER, the Fine Bedding Material can be replaced by a non-woven geotextile meeting specifications in Section 6.0.

5.4.5 Rip Rap D_{50} = 300 mm

Rip rap shall be placed as erosion protection at the emergency spillway and within the East and West Diversion Ditches (as required). Rip rap within the spillway channel shall be sourced from an approved construction material source as required under Water Licence No. 2AM-MRY 1325-Amendment No.1. Rip rap placed within the East and West Diversion Ditches can be produced from waste rock. The rip rap gradation requirements are defined as follows:

1. The material shall be well graded;
2. The maximum rip rap particle gradation shall not exceed 600 mm
3. At least 50% of the particles shall exceed 300 mm.
4. The fines content (percent passing the #200 sieve) shall not exceed 5%.

The requirement for rip rap at the East and West Diversion Ditches will be assessed by the OWNER based on performance monitoring. The rip rap requirements will be communicated to the CONTRACTOR as required.

5.4.6 Rip Rap D_{50} = 200 mm

Rip rap shall be placed as erosion protection at the emergency spillway and within the East and West Diversion Ditches (as required). Rip rap within the spillway channel shall be sourced from an approved construction material source as required under Water Licence No. 2AM-MRY 1325-Amendment No.1. Rip rap placed within the East and West Diversion Ditches can be produced from waste rock. The rip rap gradation requirements are defined as follows:

1. The material shall be well graded;
2. The maximum rip rap particle gradation shall not exceed 400 mm
3. At least 50% of the particles shall exceed 200 mm.
4. The fines content (percent passing the #200 sieve) shall not exceed 5%.

The requirement for rip rap at the East and West Diversion Ditches will be assessed by the OWNER based on performance monitoring. The rip rap requirements will be communicated to the CONTRACTOR as required.

5.5 Fill Compaction

5.5.1 500 mm Minus Rockfill

1. Compaction shall be provided by heavy equipment traffic (e.g. dozer tracking) as approved by the OWNER and ENGINEER. Each lift shall be compacted and approved by the OWNER prior to placement of the subsequent lift.
2. Compaction shall be as uniform as practicable over the entire lift surface.
3. Where compaction equipment causes rutting, uneven surfaces, or excessive cross-slope, the surface shall be flattened with additional compaction, or through smoothing with construction equipment.
4. Each lift shall be compacted with a minimum 6 passes by heavy equipment traffic.

5.5.2 Other Materials

1. Compaction of the Intermediate and Fine Bedding Materials placed on the WRF Pond Berm slope shall be provided by excavator bucket. The material shall be nominally compacted.
2. Compaction of the Intermediate and Fine Bedding Materials placed on the WRF Pond floor shall be provided by dozer. The material shall be nominally compacted.
3. Rip Rap shall be knuckled in place by excavator bucket to produce a tightly interlocked mass.

5.6 Survey Control

1. Survey benchmarks to be provided by the OWNER.
2. The CONTRACTOR shall be responsible for establishing temporary construction benchmarks. Benchmarks shall be established on immobile objects or bedrock. Benchmarks shall not be established on ground susceptible to movement.
3. The CONTRACTOR shall carry out a pre-construction as-built survey prior to any fill placement or excavation. The survey shall be submitted to the OWNER for review and approval prior to any fill placement.
4. Survey points shall be appropriately coded such that the intention of the collected survey can be understood.
5. The CONTRACTOR shall provide the OWNER with an accurate ground survey of the completed works for as-built documentation and quantities. The survey shall include sufficient detail to define all breaklines, fill boundaries, and the full extent of any work carried out.
6. Sufficient survey control and records shall be maintained to provide the following:
   a) Layout of the work.
   b) Measurement of in-place quantities of each product placed
   c) Verification of the accuracy of the work.

6.0 GEOTEXTILE

This section describes the requirements for the manufacturing, supply, and installation of nonwoven geotextile to be placed as a bedding between the HDPE liner and underlying bedding material.

6.1 Reference Standards

a)	ASTM D4354	Practice for Sampling Geosynthetics for Testing.
b)	ASTM D4355	Test Method for Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water (Xenon-Arc Type Apparatus).
c)	ASTM D4491	Test Method for Water Permeability of Geotextiles by the Permittivity Method.
d)	ASTM D4533	Test Method for Trapezoid Tearing Strength of Geotextiles
e)	ASTM D4632	Test Method for Breaking Load and Elongation of Geotextiles (Grab Method).
f)	ASTM D4751	Test Method for Determining Apparent Opening Size of a Geotextile

g) ASTM D4833 — Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products.

h) ASTM D4873 — Guide for Identification, Storage and Handling of Geotextiles

i) ASTM D5262 — Standard Test Method for Measuring Mass per Unit Area of Geotextiles

j) ASTM D 6241 — Test Method for Static Puncture Strength of Geotextiles and Geotextile Related Products Using a 50-mm Probe.

6.2 Products

1. Geotextile to be nonwoven, needle-punched polypropylene or polyester material meeting or exceeding the criteria specified in Table 5 of this specification.
2. Geotextile manufacturer(s) to be approved by the OWNER.
3. Provide test results from the manufacturer for the geotextile product, as well as a certification that the material properties meet or exceed the specified values.

Table 5: Property Specifications for Non-Woven Geotextile

Material Property	Qualifier	Unit	Specified Value	Test Method
Mass	minimum	g/m^2	237	ASTM D5261
Grab Tensile Strength	minimum	N	800	ASTM D4632
Grab Elongation	minimum	%	50	ASTM D4632
Tear Resistance	minimum	N	333	ASTM D4533
CBR Puncture Strength	minimum	N	2000	ASTM D6241
Apparent Opening Size	maximum	mm	0.212	ASTM D4751
Permittivity	minimum	sec^{-1}	1.4	ASTM D4491
Water Flow Rate	minimum	$L/min/m^2$	4,074	ASTM D4491
UV Resistance	minimum	% @ 500 hr	70	ASTM D4355

6.3 Mill Certificates

At least two (2) weeks prior to start of work, furnish the OWNER with copies of mill test data and a certificate indicating that the geotextile delivered to the site meets the requirements of this Specification.

6.4 Labelling, Delivery, and Storage

1. Geotextile labelling, shipment and storage shall follow ASTM D 4873.
2. Product labels shall clearly show the manufacturer or supplier name, style name and roll number.
3. Each geotextile roll shall be wrapped with a material that will protect the geotextile from damage due to shipment, water, sunlight and contaminants.
4. During storage, geotextile rolls shall be elevated off the ground and adequately covered to protect them from site construction damage, extended exposure to ultra-violet (UV) radiation, precipitation, chemicals, flames, sparks, temperatures in excess of 71°C and any other environmental condition that might damage the geotextile.

6.5 Installation

1. Place material by unrolling onto the prepared surface in a manner consistent with the manufacturer's instructions for placement of the geotextile. Any snow and/or debris accumulated on the surface must be removed prior to placement of the geotextile.
2. Geotextile may be retained in place with sandbags during placement and during periods of wind. Pins or stakes will not be permitted.
3. Place panels to minimize any folds or wrinkles especially along overlaps prior to seaming.
4. Geotextile panels to be either:
   a) overlapped a minimum of 0.5 m on the sides and 1.0 m at the end and securely fastened to prevent any movement or slipping during placement of Fill materials.
   b) sewn or bonded in an approved manner, with an overlap of at least 150 mm.
5. Place geotextile such that factory sewn seams remain visible to facilitate inspection after deployment.
6. Protect geotextile and prepared surfaces from damage during installation.
7. Do not permit passage of any vehicle directly on the geotextile at any time. A minimum thickness of 300 mm of granular fill shall be maintained between rubber tire equipment and the geotextile.
8. Remove and replace damaged or deteriorated geotextile as directed by the OWNER. Remove deleterious materials from geotextile prior to covering.
9. Testing of any field samples ordered by the OWNER and conducted by a geosynthetics CQA laboratory company to be at OWNER's cost, except that costs of "failed" tests shall be deducted from monies owing to the CONTRACTOR.
10. Overlaps shall be arranged in the direction of slopes. Horizontal overlaps running across slopes are not acceptable.

6.6 Repair

1. Repair any holes or tears in the geotextile by heat bonding in place a patch made from the same geotextile, with a minimum of 600 mm overlap in all directions.
2. Take care to remove any soil or other material which may have penetrated the torn geotextile.

7.0 HDPE GEOMEMBRANE SUPPLY AND INSTALLATION

This section describes the requirements for the manufacturing, supply, and installation of 60 mil Layfield Enviroliner 6060 as the low permeability element for the WRF Pond.

7.1 Reference Standards

a) ASTM D792	Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
b) ASTM D1004	Test Method for Initial Tear Resistance of Plastic Film and Sheeting.
c) ASTM D1238	Test Method for Flow Rates of Thermoplastics by Extrusion Plastomer.
d) ASTM D1505	Test Method for Density of Plastics by the Density-Gradient Technique.
e) ASTM D1603	Test Method for Carbon Black in Olefin Plastics.
f) ASTM D3895 Analyses.	Test Method for Oxidative Induction Time of Polyolefins by Thermal
g) ASTM D4833	Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes and Related Products.
h) ASTM D 5199 Geomembranes.	Test Method for Measuring Nominal Thickness of Geotextiles and
i) ASTM D5397	Standard Test Method for Evaluation of Stress Crack Resistance of Polyolefin Geomembranes Using Notched Constant Tensile Load Test.
j) ASTM D5596	Test Method for Microscopic Evaluation of the Dispersion of Carbon Black in Polyolefin Geosynthetics.
k) ASTM D5721	Standard Practice for Air-Oven Aging of Polyolefin Geomembranes.
l) ASTM D5885	Standard Test Method for Oxidative Induction Time of Polyolefin Geosynthetics by High-Pressure Differential Scanning Calorimetry.
m) ASTM D5994	Standard Test Method for Measure Core Thickness of Textured Geomembranes.
n) ASTM D6392	Standard Test Method for Determining the Integrity of Non-reinforced Geomembrane Seams Produced Using Thermo-Fusion Methods.
o) ASTM D6693	Standard Test Method for Determining Tensile Properties of Non-reinforced Polyethylene and Non-reinforced Flexible Polypropylene Geomembranes.

p) GRI Standard GM13 (Revision 10) Geosynthetics Research Institute December 14, 2012

q) GRI Standard GM19 (Revision 6) Geosynthetics Research Institute October 3, 2011.

7.2 Products

7.2.1 Raw Materials

1. Geomembrane to be manufactured from virgin, first-quality polyethylene resin, designed and manufactured specifically for use in HDPE geomembrane and meeting the requirements of the GRI Standard GM13.
2. Reclaimed polymer or reprocessed geomembrane not to be added to the virgin resin, however, the use of edge trimmings recycled during the manufacturing process of the same batch of geomembrane is permitted if recycled polymer does not exceed 10% by weight.
3. Resin raw material specifications are:

Minimum Density (ASTM D1505)	0.932 g/cm^3
Maximum Melt Index (ASTM D1238, Condition 190/2.16)	1.0 g/10 min

4. The manufacturer to provide a certificate stating the name of the resin supplier, complete with product description, properties and certification that the resin product has not been produced from a blend of resins.
5. Extrudate rod and/or bead to be produced from the same resin used in the manufacture of the geomembrane rolls.
6. At least two (2) weeks prior to delivery of the geomembrane to the job site, the manufacturer is to provide written certification and supporting documentation / test results to the OWNER that all raw materials used to manufacture geomembrane and extrudate rod and/or bead meet or exceed the requirements given in this specification.

7.2.2 Manufactured Geomembrane

1. Material specifications for the double-sided textured, white-surfaced (on top side only) HDPE geomembrane to meet or exceed those listed in Table 2b of the GRI Standard GM13 for 1.5 mm (60 mil) textured geomembrane (attached).
2. Geomembrane shall have one side in white colour. White side shall be exposed following installation.
3. Geomembrane to be free of pinholes, blisters, undispersed raw material, striations or any sign of contamination by foreign matter.
4. Rolls to consist of a continuous width seamless panel.
5. The minimum length of each roll shall be the manufacturer's standard length for the specified thickness such that seaming requirements are minimized.
6. Each roll to be clearly marked at two separate locations on the roll, with the following information:
   a) Manufacturer
   b) Product Type
   c) Thickness
   d) Resin Lot Number
   e) Roll Number
   f) Length and Width

7. At least two (2) weeks prior to delivery of the geomembrane to the job site, the manufacturer is to provide written certification and supporting documentation/test results to the OWNER that the geomembrane sheet is in compliance with the specification given in Table 2b of the GRI Standard GM13 for 1.5 mm textured geomembrane (attached).

7.2.3 Geomembrane Manufacturer and Installer Qualifications

1. The Geomembrane manufacturer and installer shall be recognized and well established with proven ability with HDPE geomembrane.
2. Each geomembrane installation crew shall include a Master Seamer in both extrusion and fusion welding, who has served in this capacity on the installation of at least 500,000 m^2 of polyethylene geomembrane over the three years prior to this project.
3. All welding technicians shall have project experience amounting to at least 100,000 m^2 of HDPE welding.

7.3 Material Warranty

The geomembrane manufacturer to provide OWNER with a written warranty against manufacturing defects for a period of ten (10) years from the date of installation.

7.4 Guarantee

The CONTRACTOR to guarantee and provide OWNER with a written guarantee against defects in installation and workmanship for a period of two (2) years from the date of final acceptance, including the services of qualified technicians and materials necessary for repairs, at no cost to the OWNER.

7.5 Storage

1. Protect geomembrane from direct sunlight, excessive heat, mud, debris, dust, snow and deformation.
2. Geomembrane shall not be stored on a coarse granular surface that may puncture the geomembrane.
3. Temporary storage of HDPE geomembrane rolls in the field shall not result in crushing of the core or flattening of the rolls.

7.6 Installation

1. At least two (2) weeks prior to installation of the geomembrane, the installer shall provide proposed panel layout drawings to the OWNER for approval. The locations of the geomembrane seams shall be approved by the OWNER.
2. The identification of each roll of geomembrane required by Section 7.2.2 shall be checked against the manufacturer's submittals for consistency prior to installation. Any damaged rolls shall be rejected and replaced.
3. Prior to installation, the installer to inspect the subgrade and provide written certification to the OWNER stating that the prepared surface is suitable for the geomembrane installation.
4. Geomembrane shall be installed in the dry. No panels shall be deployed through standing water.
5. Maintain the subgrade surface at a suitable condition throughout the geomembrane installation period.
6. Placement of the geomembrane is to be done in accordance with the sequence on the approved shop drawings, and/or as may be revised on site (with the approval of the OWNER), to suit field conditions.
7. All seams within the key trenches are to be oriented down slope and not across slope.

8. Equipment used to handle and weld the geomembrane shall not cause any damage to the geomembrane or the subgrade due to handling, trafficking, leakage of hydrocarbons or any other means.
9. No vehicles are allowed to travel directly on the geomembrane liner except for All Terrain Vehicles (ATV's) provided the following criteria and practices are adhered to:
   a) Maximum tire pressure of 40 kPa (6 psi);
   b) 90 degrees entrance and exits into the liner area;
   c) No driving over wrinkles;
   d) No abrupt starting or stopping of ATV's (i.e., use rolling stops);
   e) One person per vehicle;
   f) Maximum 50lbs of equipment/supplies allowed on the ATV;
   g) No ATV's on key trench slopes;
   h) No refueling of ATV's over the liner area
   i) ATV use will be limited to work either exclusively on the liner or off the liner, but not a mix of both; and
   j) Any ATV used off the liner surface shall be thoroughly cleaned and inspected with signoff by the OWNER and CONTRACTOR before being allowed on the liner surface
10. Any damage caused to the Geosynthetics by the use of ATV's shall be immediately rectified at no additional cost to the owner.
11. Personnel to not engage in activities or wear footwear which could damage the geomembrane.
12. Apart from approved welding equipment, no mechanical equipment will be allowed on the geomembrane. Electrical generator equipment required for powering the welding equipment shall be placed on a geotextile cushion at all times while working on the geomembrane surface. Appropriate measures must be taken to avoid any damage to the geomembrane when moving the generator equipment. Precautions must be taken to ensure no hydrocarbon spills occur on the liner.
13. Sufficient material slack shall be provided to allow for thermal expansion and contraction of the material.
14. Place panels in such a way as to minimize scratches, crimps and other damage to the geomembrane. Minimize wrinkles and "fishmouths" along seams.
15. Do not deploy geomembrane panels if moisture prevents proper placement or seaming.
16. Do not allow geomembrane to "bridge over" voids or low areas in the subgrade. Repair subgrade if required and place geomembrane such that it rests entirely on the subgrade surface.
17. At the end of each day or installation segment, all unseamed edges to be anchored by sand bags or other approved device. Staples, U-shaped rods or other penetrating anchors are not to be used to secure the geomembrane. Any damage to the liner due to inclement weather to be the sole responsibility of the installer.
18. The OWNER must be made aware of any incident that occurs that could have damaged the liner (e.g., vehicle going off the road where liner has been placed and bulldozer tracks contacting the liner during spreading of the cover soil layers). Any panel or part thereof which has been seriously damaged shall be replaced at no additional cost to the OWNER. Such damaged 'panels' shall be removed from the site immediately. Minor damage such as crimps, wrinkles, small punctures etc., to be repaired as described in Section 6.6.

7.7 Seaming

1. All seaming to be performed under the direct supervision of the "Master-Seamer".
2. At least two weeks prior to liner installation, the installer shall provide to the OWNER the proposed method of performing seaming operations including the equipment to be used.
3. Seams to have Minimum Seam Shear Strength and Peel Strength (force per unit width at yield) as given in the GRI Standard GM19 (Table 1b) for 1.5 mm textured geomembrane (attached).
4. Approved seaming methods are double hot wedge fusion welding and extrusion welding on repairs and pipe penetration details only.
5. All geomembrane seams are to be welded.
6. Seaming to be a continuous operation along the entire seam, with a minimum number of interruptions.
7. Fusion welder to be equipped with gauges which indicate the temperatures and speeds during welding.
8. Extrusion welding equipment to be equipped with gauges indicating barrel and nozzle temperatures. Extruder to be purged of all heat degraded extrudate prior to commencement of each seaming sequence.
9. Minimum overlap shall be 75 mm (3 in) for extrusion welding and 125 mm (5 in) for fusion welding. Sufficient overlap must be provided on both sides of the double fusion weld to allow for destructive testing.
10. Methods used to temporarily bond adjacent rolls are not to result in any damage to geomembrane. Solvents and/or adhesives are not to be used.
11. If hot air leisters are used to provide temporary bonding, no damage to the geomembrane will be permitted. If damage is noted upon visual inspection and/or destructive testing, it shall be repaired to the satisfaction of the OWNER.
12. Align seams to provide minimum wrinkles and "fishmouths". Seam area to be free of dirt, dust, moisture, debris or any other foreign matter.
13. If grinding is required along the seam, do so according to manufacturer's recommendations.
14. Seaming procedures described in this Section relate to ambient temperatures between 5°C and 40°C. Do not perform seaming when ambient temperatures are greater than 40°C.
15. Welding may be permitted below 5°C subject to approval of the OWNER, and provided that the seam is protected from excessive cooling by wind or other adverse conditions.
16. Keep seam areas clean, dry and sheltered from wind during seaming operation.

7.8 Repairs

1. Entire geomembrane surface to be examined to confirm it is free of damaged areas, defects, pinholes, blisters, undispersed raw material or contamination by foreign matter.
2. If necessary, the installer shall clean the surface of the geomembrane to enable inspection by the OWNER.
3. Gouges or scratches associated with grinding or from other sources whose depth is in excess of 10% of the geomembrane thickness, to be classified as defects and will require appropriate repairs.
4. Small tears, wrinkles or pinholes are to be repaired by seaming or patching. Other areas are to be patched or capped.
5. Patches to be round or oval, of the same material and thickness, and shall extend a minimum of 150 mm beyond the damaged or faulty area in all directions.
6. Cut and repair any large wrinkles or "fishmouths" identified by the OWNER.
7. All repairs to be non-destructively tested using a vacuum box. Vacuum box testing requirements to be agreed on with the OWNER.

7.9 Disposal of Scrap Material

1. Remove scrap material and trash from the site and recycle or dispose of as approved by the OWNER. No scrap material shall be left on the geomembrane surface.

7.10 Documentation

1. Provide the necessary field assistance, notes, test results, etc. necessary for the OWNER to prepare an "As-Built" Drawing which documents the location of all panels, seams, repairs, and other pertinent data.
2. The installer shall provide all CQC documentation to the OWNER within 2 weeks of completion of the geomembrane installation.

7.11 Quality Control

This section describes the requird CQC activites to be carried out by the Installer and CONTRACTOR.

7.11.1 Quality Control Certificates

At least two (2) weeks prior to delivery of materials to job site, furnish the OWNER with copies of quality control certificates as detailed below:

1. Origin of resin, brand name, number and production date;
2. Certificate that all resin used in the manufacture of the geomembrane for this project complies with the requirements of the GRI Standard GM13;
3. Quality Control certificates issued by the resin supplier;
4. Quality control certificates and certification that the geomembrane supplied complies with the project requirements of the GRI Standard GM13 for 1.5 mm textured geomembrane (Table 2b of GM13, attached); and,
5. Certification that the geomembrane and extrudate rod have the same properties.

7.11.2 Test Seams

1. Each seamer and his welding unit to produce two test seams per day per welding apparatus, one made at the beginning of each shift and one at mid-shift, as directed by the Owner. If a seamer is required to use a different welding unit, a new test seam will be required prior to seaming operations with each new unit.
2. Test seams to be made on a piece of geomembrane identical to that being installed. Sample to measure a minimum of 1 metre long by 0.3 metres wide with the seam centred lengthwise and overlapped as specified in Section 7.7. Test seam welding to be carried out under ambient conditions that replicate actual field conditions.
3. Four adjoining 25 mm wide specimens from the test seam sample to be tested by the installer, in shear and in peel using a field tensiometer. Each specimen must not fail in the seam. If a specimen fails in the seam, a second seam is to be produced and tested. The seam shear strength and peel strength to meet requirements of the GRI Standard GM19 (Tables 1b, attached) for 1.5 mm textured geomembrane. A second failure will result in rejection of either the seamer and/or equipment until the deficiency has been corrected. This will be verified by the production and successful testing of two consecutive test seams.

7.11.3 Non Destructive Testing

1. All seams to be subject to non-destructive testing for their full length (air pressure test for fusion welds, vacuum box testing of extrusion welds). Perform non- destructive testing concurrently using equipment and methods approved by the OWNER.
2. Provide all equipment and manpower required for non-destructive testing. All testing to be witnessed by the OWNER.
3. All defects shall be clearly marked for repair.
4. Repair and test again any seam failing a test.
5. Ensure that all repairs and associated testing is complete prior to requesting final checking by the OWNER.

7.11.4 Destructive Testing

1. Destructive seam testing to be performed concurrent with seaming.
2. Samples to be taken for testing at a minimum average frequency of one sample per 150 metres of seam. Locations to be predetermined by the OWNER, however, the installer shall not be informed of pre-selected locations.
3. Testing frequency may be increased by the OWNER if there is reason to suspect the presence of excess crystallinity, contamination, offset welds or any other potential defect. Poor test results may also result in an increased testing frequency.
4. Samples to be cut by the installer under the direction of the OWNER. Each sample shall be numbered and its location recorded by the OWNER on the shop drawings.
5. Each sample to be 0.3 metres wide by 1.2 metres long with the seam centred lengthwise. One 25 mm wide sample to be taken from each end for shear and peel testing by the installer.
6. Remainder of sample to be cut by the installer into three equal portions: one for the Installer and two for the OWNER. Results of field laboratory tensiometer testing by OWNER will determine acceptability. In case of disputes, samples are to be sent to a pre- determined geosynthetics CQA laboratory for confirmation verification testing and the results will determine acceptability. The cost for the geosynthetics CQA laboratory testing is to be paid by the OWNER unless the results do not meet the specifications, in which case the cost will be deducted from monies owing to the CONTRACTOR.
7. The OWNER to cut and test ten (10) 25 mm wide replicate specimens from his sample and shall test 5 specimens for seam shear strength and 5 for peel strength. To be acceptable, the strength of 4 out of the 5 replicate samples must pass for each mode of testing. The fifth must meet or exceed 80% of the values given in Table 1b of the GRI Standard GM19 for 1.5 mm thick textured HDPE geomembrane attached). In addition, the shear percent elongation and the peel separation must satisfy the values given in the GRI Standard GM19 (see Table 1b, attached).
8. The test method and procedures to be used employ a grip separation rate of 50 mm/min for peel and shear and shall be in accordance with ASTM D6392. A calibrated field tensiometer is to be provided by the Installer.
9. Area of test strip to be repaired as described in this Section. All seams created by repair to be non-destructively tested.

7.11.5 Acceptance of Seams

1. A seam will be considered acceptable only when it is bounded by two destructive test locations which meet the specified criteria.
2. A double hot wedge fusion seam will be considered acceptable only when both outside and inside track welds are destructively tested and meet the specification criteria.
3. If a seam fails the destructive test, the Installer may reconstruct the seam between the point of failure and any previously accepted test. Alternatively, the installer may trace the extent of unacceptable seam by taking 25 mm samples at minimum 3 metre distance on each side of failed section. Test in both shear and peel. If one or both tests fail, continue along seam at minimum 3 metre increments. Continue until tests indicate pass results. Then take large samples for field laboratory tensiometer testing. If field laboratory tests pass, make repairs - if fail, continue.
4. Reconstruction or repair of failed seam lengths to be either by capping of the failed seam (extrusion or fusion weld) or, in the case of a double fusion weld, by extrusion fillet welding the overlap to the bottom sheet. Cutting off the overlap and topping the failed fusion weld with extrudate will not be permitted.
5. If the overlap of the outside (i.e. visible) weld is less than 30 mm, extrusion welding of the overlap to the bottom sheet in the failed section will not be permitted.
6. Continuity of all reconstructed seams to be subject to non-destructive testing. If reconstructed length exceeds 50 metres, sample shall be taken for destructive testing.
7. All trial seam welding as well as non-destructive and destructive testing of field seams carried out by installer are to be at no additional cost to the OWNER.

7.12 Completion of Work

The installation of the geomembrane shall be considered totally complete when all required deployment, seaming, repairs, testing and site clean-up, including sand bags, have been completed by the Installer; the Installer has submitted all the required certifications to OWNER; and the OWNER is satisfied that the geomembrane has been installed in accordance with the above Specifications.

GRI – GM19 Specification – Table 1b

Table 1(b) – Seam Strength and Related Properties of Thermally Bonded **Smooth and Textured** High Density Polyethylene (HDPE) Geomembranes **(S.I. Units)**

Geomembrane Nominal Thickness	0.75 mm	1.0 mm	1.25 mm	1.5 mm	2.0 mm	2.5 mm	3.0 mm
Hot Wedge Seams[1]							
shear strength[2], N/25 mm.	250	350	438	525	701	876	1050
shear elongation at break[3], %	50	50	50	50	50	50	50
peel strength[2], N/25 mm	197	263	333	398	530	661	793
peel separation, %	25	25	25	25	25	25	25
Extrusion Fillet Seams							
shear strength[2], N/25 mm	250	350	438	525	701	876	1050
shear elongation at break[3], %	50	50	50	50	50	50	50
peel strength[2], N/25 mm	170	225	285	340	455	570	680
peel separation, %	25	25	25	25	25	25	25

GRI – GM13 Specification –Table 2b

Table 2(b) – High Density Polyethylene (HDPE) Geomembrane - Textured

Properties	Test Method	Test Value							Testing Frequency (minimum)
		0.75 mm	1.00 mm	1.25 mm	1.50 mm	2.00 mm	2.50 mm	3.00 mm	
Thickness mils (min. ave.) • lowest individual for 8 out of 10 values • lowest individual for any of the 10 values	D 5994	nom. (-5%) -10% -15%	nom. (-5%) -10% -15%	nom. (-5%) -10% -15%	nom. (-5%) -10% -15%	nom. (-5%) -10% -15%	nom. (-5%) -10% -15%	nom. (-5%) -10% -15%	per roll
Asperity Height mils (min. ave.)	D 7466	0.40 mm	0.40 mm	0.40 mm	0.40 mm	0.40 mm	0.40 mm	0.40 mm	every 2nd roll *(1)*
Formulated Density (min. ave.)	D 1505/D 792	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	90,000 kg
Tensile Properties (min. ave.) *(2)* • yield strength • break strength • yield elongation • break elongation	D 6693 Type IV	11 kN/m 8 kN/m 12% 100%	15 kN/m 10 kN/m 12% 100%	18 kN/m 13 kN/m 12% 100%	22 kN/m 16 kN/m 12% 100%	29 kN/m 21 kN/m 12% 100%	37 kN/m 26 kN/m 12% 100%	44 kN/m 32 kN/m 12% 100%	9,000 kg
Tear Resistance (min. ave.)	D 1004	93 N	125 N	156 N	187 N	249 N	311 N	374 N	20,000 kg
Puncture Resistance (min. ave.)	D 4833	200N	267 N	333 N	400 N	534 N	667 N	800 N	20,000 kg
Stress Crack Resistance *(3)*	D 5397 (App.)	500 hr.	500 hr.	500 hr.	500 hr.	500 hr.	500 hr.	500 hr.	per GRI GM10
Carbon Black Content (range)	D 4218 *(4)*	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	9,000 kg
Carbon Black Dispersion	D 5596	note *(5)*	note *(5)*	note *(5)*	note *(5)*	note *(5)*	note *(5)*	note *(5)*	20,000 kg
Oxidative Induction Time (OIT) (min. ave.) *(6)* (a) Standard OIT — or — (b) High Pressure OIT	D 3895 D 5885	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	90,000 kg
Oven Aging at 85°C *(6), (7)* (a) Standard OIT (min. ave.) - % retained after 90 days — or — (b) High Pressure OIT (min. ave.) - % retained after 90 days	D 5721 D 3895 D 5885	55% 80%	55% 80%	55% 80%	55% 80%	55% 80%	55% 80%	55% 80%	per each formulation
UV Resistance *(8)* (a) Standard OIT (min. ave.) — or — (b) High Pressure OIT (min. ave.) - % retained after 1600 hrs *(10)*	D 7238 D 3895 D 5885	N.R. *(9)* 50%	N.R. *(9)* 50%	N.R. *(9)* 50%	N.R. *(9)* 50%	N.R. *(9)* 50%	N.R. *(9)* 50%	N.R. *(9)* 50%	per each formulation

(1) Alternate the measurement side for double sided textured sheet

(2) Machine direction (MD) and cross machine direction (XMD) average values should be on the basis of 5 test specimens each direction.
Yield elongation is calculated using a gage length of 33 mm
Break elongation is calculated using a gage length of 50 mm

(3) The SP-NCTL test is not appropriate for testing geomembranes with textured or irregular rough surfaces. Test should be conducted on smooth edges of textured rolls or on smooth sheets made from the same formulation as being used for the textured sheet materials.
The yield stress used to calculate the applied load for the SP-NCTL test should be the manufacturer's mean value via MQC testing.

(4) Other methods such as D 1603 (tube furnace) or D 6370 (TGA) are acceptable if an appropriate correlation to D 4218 (muffle furnace) can be established.

(5) Carbon black dispersion (only near spherical agglomerates) for 10 different views:
9 in Categories 1 or 2 and 1 in Category 3

(6) The manufacturer has the option to select either one of the OIT methods listed to evaluate the antioxidant content in the geomembrane.

(7) It is also recommended to evaluate samples at 30 and 60 days to compare with the 90 day response.

(8) The condition of the test should be 20 hr. UV cycle at 75°C followed by 4 hr. condensation at 60°C.

(9) Not recommended since the high temperature of the Std-OIT test produces an unrealistic result for some of the antioxidants in the UV exposed samples.

(10) UV resistance is based on percent retained value regardless of the original HP-OIT value.

8.0 CONSTRUCTION CHECKLISTS

The following construction checklist forms documenting CQA and CQC and other aspects of the construction activities, by work activity, are attached:

- WRF Pond Site Checklist –Embankment Construction
  - Subgrade Inspection
  - Fill Inspection
- WRF Pond Site Checklist – Liner Placement
  - Pre-Liner Inspection
  - Completion of Liner Inspection

The CONTRACTOR may propose alternative forms for approval by the OWNER'S REPRESENTATIVE and the ENGINEER.

The checklists are to be signed by all parties prior to acceptance of each activity within the defined work area.

WRF Pond Site Checklist – Embankment Construction -Subgrade Inspection

CONTRACTOR:	DATE:	SHIFT: DAY - NIGHT
LOCATION:		WEATHER:

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER's REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		
2	Unsuitable Materials, snow, ice and loose or saturated materials removed.		
3	Dewatering measures provided, if required.		
4	Required compaction of subgrade materials performed.		
5	Surface of subgrade compacted, smooth, and graded to promote drainage at end of every fill operation or the end of each shift, whichever occurs sooner.		
6	As-built survey conducted pre- and post- construction. Final work photographed.		

REMARKS:

DEVIATIONS: (Attach list if necessary)

DATE OF RECTIFICATION:

ACCEPTED BY ENGINEER	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: _____	NAME: _____	NAME: _____
SIGNATURE: _____	SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____	DATE: _____

WRF Pond Site Checklist – Embankment Construction – Fill Inspection

CONTRACTOR:	DATE:	SHIFT: DAY - NIGHT
LOCATION:		WEATHER:

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		
2	Required assessment of Fill Material before placement (visual inspection, laboratory tests).		
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		
4	Dewatering measures provided, if required.		
5	Fill lift thickness according to Specifications.		
6	Fill materials contain no frozen lumps or Unsuitable Material.		
7	Segregation of fill materials controlled during placement.		
8	Required visual inspection of placed materials performed and photographed.		
9	Required compaction of fill materials performed.		
10	Surface of fill left compacted, smooth, and graded to promote drainage at end of every fill operation or the end of each shift, whichever occurs sooner.		
11	As-built survey conducted pre- and post- construction. Final work photographed.		

REMARKS:

DEVIATIONS: (Attach list if necessary)

DATE OF RECTIFICATION:

ACCEPTED BY ENGINEER	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: _____	NAME: _____	NAME: _____
SIGNATURE: _____	SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____	DATE: _____

WRF Pond Site Checklist – Ditch Excavation

CONTRACTOR:	DATE:	SHIFT: DAY - NIGHT
LOCATION:		WEATHER:

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		
2	Spoil disposal area or spoil berm locations identified.		
3	Dewatering measures provided, if required.		
4	Preconstuction condition photographed.		
5	Unsuitable materials, snow, ice and saturated materials removed from area.		
6	Visual inspection during excavation performed and photographed.		
7	Surface competent and free of major protrusions and photographed.		
8	Final surface conditions meet the Specifications and photographed.		
9	As-built survey conducted pre- and post- excavation and disposal of removed materials or downstream berms.		

REMARKS:

DEVIATIONS: (Attach list if necessary)

DATE OF RECTIFICATION:

ACCEPTED BY ENGINEER	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: _____	NAME: _____	NAME: _____
SIGNATURE: _____	SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____	DATE: _____

WRF Pond Site Checklist – Ditch Construction

CONTRACTOR:	DATE:	SHIFT: DAY - NIGHT
LOCATION:		WEATHER:

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		
2	Visual inspection of existing conditions before Fill Material placement.		
3	Required assessment of Fill materials before placement (visual inspection of maximum particle size).		
4	Unsuitable materials, snow, ice and loose or saturated materials removed prior to placement.		
5	Dewatering measures provided, if required.		
6	Fill lift thickness according to Specifications		
7	Fill material contain no frozen lumps or unsuitable material.		
8	Segregation of Fill materials controlled during placement.		
9	Required visual inspection of placed materials performed and photographed.		
10	As-built survey conducted pre- and post- subgrade preparation. Final work photographed.		

REMARKS:

DEVIATIONS: (Attach list if necessary)

DATE OF RECTIFICATION:

ACCEPTED BY ENGINEER	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: _____	NAME: _____	NAME: _____
SIGNATURE: _____	SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____	DATE: _____

WRF Pond Site Checklist – Liner Placement - Pre-Liner Installation

CONTRACTOR:	DATE:	SHIFT: DAY - NIGHT
LOCATION:		WEATHER:

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		
2	Required assessment of Fill Material before placement (visual inspection of particle size Intermediate Bedding, Fine Bedding (if applicable) maximum particle size).		
3	Unsuitable Materials, snow, ice and loose or saturated materials removed prior to placement.		
4	Dewatering measures provided, if required.		
5	Liner bedding surface is acceptable and contains no potentially damaging materials		
6	Fill materials contain no frozen lumps or Unsuitable Material.		
7	Required visual inspection of placed materials performed and photographed.		
8	Written certification from the CONTRACTOR stating the prepared surface is suitable for the geomembrane installation.		
9	Weather conditions meet requirements during fill placement and compaction.		

REMARKS:

DEVIATIONS: (Attach list if necessary)

DATE OF RECTIFICATION:

ACCEPTED BY QA REPRESENTATIVE	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: _____	NAME: _____	NAME: _____
SIGNATURE: _____	SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____	DATE: _____

WRF Pond Site Checklist – Liner Placement – Completion of Liner Inspection

CONTRACTOR:	DATE:	SHIFT: DAY - NIGHT
LOCATION:		WEATHER:

No.	ITEMS TO BE INSPECTED	INSPECTED BY CONTRACTOR	INSPECTED BY OWNER'S REPRESENTATIVE
1	Survey lines and layout conform to the Drawings.		
2	Required visual inspection of condition of completed Liner.		
3	Dewatering measures provided, if required.		
4	Liner installed as per Specifications.		
5	All defects addressed.		
6	All seams and patches tested.		
7	QC Testing and documentation completed.		
8	Site cleaned of waste materials.		
9	As-built survey conducted post- construction. Final work photographed.		

REMARKS:

DEVIATIONS: (Attach list if necessary)

DATE OF RECTIFICATION:

ACCEPTED BY QA REPRESENTATIVE	ACCEPTED BY CONTRACTOR	ACCEPTED BY OWNER'S REPRESENTATIVE
NAME: _____	NAME: _____	NAME: _____
SIGNATURE: _____	SIGNATURE: _____	SIGNATURE: _____
DATE: _____	DATE: _____	DATE: _____

END OF SECTION: 1790951

https://golderassociates.sharepoint.com/sites/22103g/technical work/phase 2000/2003 pond upgrade/1790951_design brief/specifications/final/1790951-s-doc029_final-wrfpondearthworks_aug172018.docx



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Part 1 General

1.1 SECTION INCLUDES

.1 Enviro Liner 6060 field-installed geomembrane

1.2 RELATED SECTIONS

.1 Section 31 22 13 - Rough Grading

.2 Section 31 23 23 – Backfilling

.3 Section 33 42 13 – Pipe Culverts

.4 Section 01 78 10: Warranties.

1.3 REFERENCES

.1 ASTM D638 – Test Method for Tensile Properties of Plastics

.2 ASTM D792 – Test Methods for Density and Specific Gravity of Plastics by Displacement

.3 ASTM D814 - Standard Test Method for Rubber Property- Vapor Transmission of Volatile Liquids

.4 ASTM D1434- Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting

.5 ASTM D1505 – Test Method for Density of Plastics by the Density-Gradient Technique

.6 ASTM D4218 – Standard Test Method for Determination of Carbon Black Content in Polyethylene Compounds by the Muffle-Furnace Technique

.7 ASTM D4329 – Practice for Fluorescent UV Exposure of Plastics

.8 ASTM D4437 - Standard Practice for Determining the Integrity of Field Seams Used in Joining Flexible Polymeric Sheet Geomembranes

.9 ASTM D4533 – Standard Test Method for Trapezoidal Tearing Strength

.10 ASTM D4759 – Standard Practice for Determining the Specification Conformance of Geosynthetics

.11 ASTM D4833 – Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products

.12 ASTM D5199 – Standard Test Method for Measuring the Nominal Thickness of Geosynthetics

.13 ASTM D5397 – Standard Test Method for Evaluation of Stress Crack Resistance of Polyolefin Geomembrane Using Notched Constant Tensile Load Test

.14 ASTM D5596 – Standard Test Method for Microscopic Evaluation of the Dispersion of Carbon Black in Polyolefin Geosynthetics

.15 ASTM D5641 – Standard Practice for Geomembrane Seam Evaluation by Vacuum Chamber

.16 ASTM D5820 – Standard Practice for Pressurized Air Channel Evaluation of Dual Seamed Geomembranes

.17 ASTM D5885 – Standard Test Method for Oxidative Induction Time of Polyolefin Geosynthetics by High Pressure Differential Scanning Calorimetry

.18 ASTM D6370 – Standard Test Method for Rubber – Compositional Analysis by Thermogravimetry (TGA)

.19 ASTM D6392 – Test Method for Determining the Integrity of Non-Reinforced Geomembrane Seams Produced Using Thermo-Fusion Methods

.20 ASTM D6497- Standard Guide for Mechanical Attachment of Geomembrane to Penetrations or Structures.

1.4 SUBMITTALS

.1 Section 01 33 00; Submission Procedures

.2 Product Data:

- .1 Provide specification sheets for geomembrane
- .2 Provide mill test reports for geomembrane roll stock used to make liner
- .3 Provide shop test reports for each fabricated panel produced
- .4 Provide field test reports for all welds completed in the field

1.5 QUALITY ASSURANCE

.1 Geomembrane manufacturer to have a registered Quality Management System that meets the requirements of ISO 9001.

.2 Fabricator to have a registered Quality Management System meeting the requirements of ISO 9001 or follow ISO 9001 compliant procedures.

.3 Installer to follow documented installation plan and work procedures.

1.6 WARRANTY

.1 Section 01 78 10: Warranties

.2 Provide a manufacturer's pro-rated weathering warranty for Enviro Liner 6030

- .1 Twenty five (25) years for black-surfaced geomembrane in manufacturer's approved applications
- .2 Fifteen (15) years for white-surfaced geomembrane in manufacturer's approved applications

Part 2 Products

2.1 MANUFACTURERS

.1 Layfield Poly Films Ltd.

2.2 MATERIALS

.1 Geomembrane:

.1 Geomembrane material
Enviro Liner 6060 coextruded material with one white and one black surface and a black core layer.

.2 Surface: Smooth, no striations, gels, pinholes or bubbles.

.3 Thickness (ASTM D 5199): Avg. thickness must exceed value with no individual reading lower than 10% below the average: 1.50 mm (60 mil ; 0.060 inches).

.4 Maximum Membrane Density (ASTM D792 or ASTM D1505): ≤ 0.939 g/cc.

.5 Minimum Tensile Properties (ASTM D638 or ASTM D6693): Machine direction and perpendicular to machine direction average values on the basis of five (5) test specimens each direction:

.1 Break Strength: 44 kN/m (255 lb/in).

.2 Break Elongation: 1000% calculated from a gauge length of 38mm (1.5”).

.6 Minimum Trapezoidal Tear Resistance (ASTM D4533): 480 N (108 lb).

.7 Minimum Puncture Resistance (ASTM D4833):400 N (90 lb).

.8 Total Pigment Content: >2.0%

.1 Measured by Carbon Black content test ASTM D6370 (or D4218).

.9 Carbon Black Dispersion (ASTM D5596):

.1 Carbon Black dispersion for 10 different views:

.2 Minimum nine views in categories 1 or 2 and 1 view in Category 3.

.10 High Pressure Oxidative Induction Time (ASTM D5885):

.1 Minimum 2000 minutes.

.11 Stress Crack Resistance Under Constant Load (ASTM D5397):

.1 Minimum 1000 hours.

.12 UV Resistance (ASTM D4329):

.1 Minimum 90% strength retained after 10,000 hours testing

.1 Testing performed on 0.75mm (30 mil) specimen

.2 Irradiance of 0.90 w/m^2 at a wavelength of 310 nm

.3 Alternating 10 hour UV cycles at 60C followed by 2 hour condensation cycles at 50C

.13 Axi-Symmetric Break Resistance (ASTM D5617)

.1 Minimum: 80%

.14 Methane Permeability (ASTM D1434 testing on EL 6030)

.1 Transmission Rate: <2.11×10^{-4} $m^3/(m^2 \cdot day)$

.15 Solvent Vapour Transmission (ASTM D814 tested on EL 6040):

.1 ASTM Fuel C: ≤10 g/(m^2 • hr)

.2 Ethanol: ≤10 g/(m^2 • hr)

.3 Methanol: ≤10 g/(m^2 • hr)

.4 ASTM IRM 903: ≤10 g/(m^2 • hr)

.16 Field Seam Properties (ASTM D6392):

.1 Shear Strength: 15.7 kN/m (90 lb/in).

.2 Peel Strength (wedge welds): 13.1 kN/m (75 lb/in).

.3 Peel Strength (extrusion welds): 11.6 kN/m (66 lb/in)

2.3 ACCESSORIES

.1 Welding Rod will be manufactured from the same formulation as the geomembrane.

Part 3 Execution

3.1 INSTALLER

.1 The Geomembrane Installer shall have at least three years experience in the installation of the geomembrane. The Geomembrane Installer shall have installed at least 500,000 m^2 (5,000,000 ft^2) geomembrane during the last three years.

.2 Geomembrane Installer shall be certified by the geomembrane manufacturer and follow manufacturer's installation specifications.

3.2 PREPARATION

.1 Ensure subgrade is compacted and surface finished to not impair installed membrane.

.2 Subgrade to provide firm, unyielding surface with no sharp changes or abrupt breaks in grade. A smooth drum rolled surface is preferable.

.3 Ensure surfaces to be lined are smooth, free of foreign and organic material, sharp objects, or debris of any kind.

.4 If a suitable sub-grade is not available then a cushion layer of 100mm (4 inches) of clean sand and/or an LP8 nonwoven geotextile shall be placed prior to liner placement.

.5 Excavate anchor trench to line, grade, and width indicated on drawings, prior to liner placement. Provide slightly rounded corners in the trench to avoid sharp bends in the geomembrane.

.6 Prepare mechanical attachments according to ASTM D6497 Standard Guide for Mechanical Attachment of Geomembrane to Penetrations or Structures.

.7 All concrete surfaces to which the liner will attach shall have "smooth trowel" finish. All the corners should have radius to a minimum 25mm (1 inch) as per the drawing.

.8 Compaction at pipe penetrations and areas of mechanical attachment will be inspected carefully as these are areas where differential settlement can occur.

.9 A certificate of subgrade acceptance will be prepared by the liner installation contractor prior to liner installation.

3.3 INSTALLATION

.1 Installation of the geomembrane shall be performed in a logical sequence.

.2 Place panels according to the drawings, the panel layout, and the label on each panel.

.3 Sufficient thermal slack shall be incorporated during placement to ensure that harmful stresses do not occur in service.

.4 Weather Conditions at Time of Installation:

.1 Site welding may proceed at any temperature providing a suitable qualification weld can be prepared at site conditions using the operator, equipment, and materials intended for the project.

.2 Installation of membrane in winds above 20 km/h (12 mph) can proceed only if the installer can demonstrate that the liner will not be at risk of damage.

.3 Do not install membrane during precipitation or in the presence of excessive moisture.

.4 Do not install in weather conditions that may be detrimental to the function of the membrane.

.5 Ensure personnel working on geomembrane do not use damaging footwear.

.6 Protect completed panels from damage; handle carefully to avoid damaging the liner.

.7 Equipment and methods used to unroll liner panels should not damage the prepared subgrade.

.8 Ballast used to prevent uplift by wind must not damage the geomembrane. A continuous load is recommended along the edges of panels to eliminate the risk of wind uplift.

.9 Qualification Seams

.1 A qualification seam will be run prior to any field seams.

.2 A qualification seam is made with separate pieces of geomembrane using the same material and equipment that will be used for production welding.

.3 Machine conditions, and operator used for welding must be the same as those used for the qualification weld.

.4 Qualification seam must be tested in shear and peel, and meet the specified requirements for the material as stated in the materials section.

.5 A qualification seam must be rerun whenever the operator is changed, the equipment adjusted, or at least every 4 hours.

.10 Field Seams

.1 Field seams will be sampled for testing in a way that does not compromise the installed liner

.1 One sample to be tested for every 150m (500 ft) of field seam

.2 Test samples are to be removed from the ends of seams, from the anchor trench, or other location that does not introduce a defect into the liner.

.3 Samples to be approximately 100 mm (4 inches) long to permit testing of one shear and two peel specimens (ASTM D6392).

.4 Test samples immediately after seaming

.5 Record date, location and pass/fail description

.2 Field seams must meet the specified requirements in peel and shear for the material.

.3 A written record will be maintained for all field seam tests.

.4 All completed field seams will be 100% non-destructively tested using an air lance test (ASTM D4437 method 7.2) or a dual-seam air pressure test (ASTM D5820) as applicable.

3.4 TOLERANCES

.1 Seam Destructive Tests:

.1 Follow the procedure in ASTM D6392

.2 Test three specimens per sampling point, one in shear and two in peel.

.1 All specimens to meet seam strength requirements

.3 Procedures for Destructive Test Failure:

.1 Cut out seam and re-weld; or,

.2 Retrace welding path to 3 m (10 feet) from location of failed test. Take sample for additional test. If passed - cap strip or extrusion weld between failed location and original failed location.

3.5 REPAIR

.1 Inspect seams and non-seam areas for defects, holes, blisters, undispersed raw materials.

.2 Identify any sign of foreign matter contamination.

.3 Repair all through-thickness defects.

.4 Defective Seams: Cap strip or replace.

.5 Small Holes: Repair by extrusion welding using a bead of extruded material over hole. Patch if hole is larger than 6 mm (1/4 inch).

.6 Tears: Patch and seal round sharp ends of tears on slope or stressed area prior to patching.

.7 Repair blisters, large cuts and undispersed raw materials with patch.

.8 Secure Patches by Extrusion Welding, Hot Air Welding, or with the Enviro Liner Welding Gun:

.1 Extrusion welding.

.1 Clean area to be patched.

.2 Tack patch in place with hot air welding or with double sided tape.

.3 Prepare patch area by roughening with a wire brush or by grinding

.4 Extrude all the way around patch.

.5 More than one extrusion bead can be laid side-by-side on Enviro Liner 6000 materials. A maximum of three extrusion beads can be laid side-by side on Enviro Liner 6000.

.2 Hot Air Welding

.1 Hand hot air welding is permitted for patching Enviro Liner.

.2 Clean area to be patched.

.3 Hand-weld the patch with a hot air gun and suitable roller.

.3 Enviro Liner Welding Gun

.1 Use for small patches and repairs after the installation crew has left site

.2 Clean area to be patched

.3 Tack patch in place using the double sided tape supplied

.4 Prepare patch area by roughening with a wire brush

.5 Extrude a bead to secure the patch follow the Enviro Liner Welding Gun instructions

.9 Patches: Round or oval, of same geomembrane. Extend minimum 75 mm (3 inches) beyond the edge of the defect.

.10 Verification of Repairs: All repairs to be non-destructively tested using

.1 Air Lance Test, ASTM D4437 Method 7.2, or,

.2 Vacuum Box Test ASTM D5641

.11 Redo failed repairs and re-test.

.12 Keep records of all repairs and the results of repair testing.

3.6 CLEANING

.1 Section 01 74 00.

.2 Cleaning solvents shall not be used unless product is approved by membrane manufacturer.

.3 Use water and rags for all cleaning. If soap is used for cleaning rinse with clean water and dry before welding.

3.7 PROTECTION OF FINISHED WORK

.1 Section 01 45 00: Protecting installed work.

.2 Protect finished Work from damage. See instructions on backfilling if applicable.

END OF SECTION