2010 Annual Geotechnical Inspection
Various Earth Structures
Ulu, Nunavut

Prepared For:

MMG Resources Inc.

200-1159 Alloy Drive
Thunder Bay, On
P7B 6M8

Prepared By:

TBT Engineering Consulting Group
Thunder Bay Testing & Engineering Limited
1918 Yonge Street
Thunder Bay, ON., P7E 6T9

November 3, 2010

Ref. No. 10-069

TBT ENGINEERING
CONSULTING GROUP

November 3, 2010
TBTE Ref. No. 10-069

Andrew Mitchell, P.Geo.
Development Manager - Canadian Operations
MMG Resources Inc.
200-1159 Alloy Drive
Thunder Bay, Ontario, P7B 6M8

Re:

2010 Annual Geotechnical Inspection
Various Earth Structures
ULU Mine, Nunavut

Introduction

In order to fulfill terms of the Water License for the Ulu site, MMG Resources Inc. has requested geotechnical inspections be conducted for the 2010 season. The inspections were undertaken by TBT Engineering Limited on August 24, 2010. This report provides a summary of these inspections and documents the findings.

The Ulu Gold Project is an advanced exploration project, owned by MMG Resources Inc.. The Water Board License for the mine was transferred to MMG when MMG acquired OZ Minerals and ownership of the mine in 2009. The project is located in Nunavut, approximately 530 km north east of Yellowknife at 66º55'N and 110º58'W, as shown in Enclosure 1. Mine locations and layout have been illustrated on Enclosures 1-3.

The purpose of the annual geotechnical inspection is to visually evaluate the performance of water and waste retaining structures from a geotechnical perspective. Following the inspection, the owner (MMG) is to be notified of any deficiencies.

The following facilities and structures have been identified previously for the annual geotechnical inspection program:

- Ulu Main tank farm containment berm.
- Day tank containment berm.
- Camp 3 tank farm containment berm.
- Mine sump
- Ore storage pad.
- Portal laydown pad.

Background

The following description of the mine history was provided in earlier inspection reports (BGC Engineering Inc. 2007)

> "The Ulu Property was originally discovered by BHP Minerals in 1988, then there followed several years of additional exploration work. Mining consultant H.A. Simons Ltd. completed a pre-feasibility study of the project in September 1995, followed by the sale of the property to Echo Bay Mines Ltd. (Echo Bay) in November 1995. After receipt of appropriate permits and approvals in early 1996, Echo Bay mobilized camp and mining equipment over the winter road to their temporary Camp 3, located south of the Ulu site. Following from that initial mobilization, Echo Bay built the 8 km all-weather road to the Ulu airstrip and the Ulu camp facilities undertook surface diamond drilling and excavated a portal and completed a 632 m ramp to the 75 m level.
>
> In February 1997, Echo Bay submitted an environmental assessment for the project. Also in 1997, additional ramp development was undertaken to the 155 m level, along with other development and diamond drilling work, but the project was shut down in August 1997 due to low gold prices. Echo Bay then provided updated Feasibility Studies

> in December 1997 and October 1998, but the project activity generally remained dormant.
>
> In December 2003, Wolfden purchased the Ulu Property from Echo Bay. Echo Bay's Water License for the site was transferred to Wolfden by the NWB in a letter dated March 23, 2004. Zinifex subsequently purchased Wolfden earlier in 2007, and then merged with Oxiana Ltd. in 2008 to form OZ Minerals. "

In 2009 the property was transferred to MMG Resources Inc. as a part of the acquisition of Oz Minerals.

No mining activity occurred at the site over the past two years.

Project Elements

The Ulu project site consists of three main components, from south to north:

1. Camp 3 (fuel tank farm and maintenance building), borrow pits and explosives magazines located on an esker just northwest of Reno Lake North.
2. An airstrip, approximately 1350 m long x 30 m wide, located over bedrock exposures to the north.
3. The Ulu camp and portal, located at the north end of the site.

As reported earlier (BGC Engineering Inc. 2007), the Ulu camp location is on a glacially modified bedrock outcrop bounded by West Lake and East Lake to the southeast. Ulu Lake is located to the northeast. The terrain consists of exposed bedrock, boulder fields, and occasional glacial erratics. Areas near the lakes and watercourses contain wetlands and sedge grasses. The majority of the surface drainage from the camp site, waste rock and ore storage pads drains into East Lake, which discharges into Ulu Lake. Some surface drainage from the northern end of the campsite pad flows overland and then into Ulu lake. A small southwestern portion of the ore storage pad flows west, possibly into West Lake.

The Ulu project site is located within the continuous permafrost zone of northern Canada. The Lupin Mine, approximately 150 km to the south is reported to have a permafrost depth of approximately 540 m. At High Lake, approximately 50 km to the north of Ulu, permafrost has been calculated from temperature measurements taken in exploration drill holes to be approximately 440 m deep.

Climatic Information

No long term climate records are available for the Ulu site. Data provided to us based on regional correlations of nearby weather stations and suggests:

- One day Probable Maximum Precipitation (PMP) estimate of 157 mm.
- Mean annual precipitation amount of 280 mm
- Mean annual lake evaporation value of 240 mm.

Site Inspections

The various earth structures at the Ulu Mine were inspected by TBT Engineering on August 24th, 2010. The inspections were completed by Gordon Maki, P.Eng. and Ernie Krause, Sr. Technologist of TBT Engineering.

Each of the earth structures was visually inspected, photographed and a standardized site inspection form was completed. Findings of the inspection were discussed with Andrew Mitchell of MMG via teleconference.

Findings And Conclusions

Details of the various site inspections have been documented on the attached individual site reports (Appendix A). These have been updated in a standardized format to be consistent with previous Annual Inspections.

The inspections confirm the earth structures are generally in satisfactory condition with some liner related issues to be attended to. Repairs and restoration of the gravel covers at some locations which were identified last year have been carried out. However, at the Camp 3 Tank Farm Containment Berm, some exposed patches of liner exist and some repairs to the berm slope and an erosion gully have been recommended. In addition, one of the smaller tanks is now leaning due to a broken foundation timber which may need to be repaired to ensure stability of the tank. The mine sump pit remains in the same condition as last year with exposed liner with small holes and loose ends. This should be repaired before the sump is ever put back into operation. In addition, the existing silt curtain downstream of the Portal Laydown Pad is in need of repair / maintenance.

The above comments are based on the current Ulu operational conditions; the site is currently not being used, there are no mining activities. Prior to reinstatement of mine operations the earth structures should be re-evaluated to confirm their suitability to the specific operational situations.

Closure

We trust the above addresses your requirements at this time. Please contact us at your convenience should you have any questions.

Yours truly,
For TBT Engineering

REGISTERED PROFESSIONAL ENGINEER
G.C. MAKI
LICENSEE
NWT/NU

Gordon Maki, P. Eng.
Manager of Geotechnical Engineering

Wayne Hurley
Principal

PERMIT TO PRACTICE
TBT ENGINEERING LIMITED
Signature
Date Nov 3/10
PERMIT NUMBER: P561
NWT/NU Association of Professional Engineers and Geoscientists

APPENDIX “A”

2010 ANNUAL GEOTECHNICAL INSPECTION
OF SELECTED STRUCTURES

ULU TANK FARM CONTAINMENT BERM

LOCATION: Northeast corner of the Ulu camp pad.

FUNCTION: Provides secondary containment for five large fuel tanks and numerous barrels of fuel.

SIZE: ~20 m wide by ~50 m long.

BERM HEIGHT: ~1.5 to 2 m above adjacent grade.

CREST ELEVATION: No survey information available

BERM CONDITION: Berm is constructed from esker sand and gravel and appears in good condition. Numerous animal burrows observed on the outside slope of the berm. Areas of exposed liner noted last year have now been covered.

SEEPAGE: No evidence of seepage observes at the exterior berm toe. Small amounts of water with oil sheen are being retained within the storage area.

MAINTENANCE/MONITORING RECOMMENDATIONS: None.

CONCLUSIONS: The berm appears in generally satisfactory condition.

Exterior Berm

Exterior Berm

Animal Burrow

Small amount of water with oily sheen

DAY TANK CONTAINMENT BERM

LOCATION: Adjacent to powerhouse area.

FUNCTION: Provides secondary containment for one fuel tank.

SIZE: ~5 m wide by ~5 m long.

BERM HEIGHT: ~1 to 1.2 m above adjacent grade.

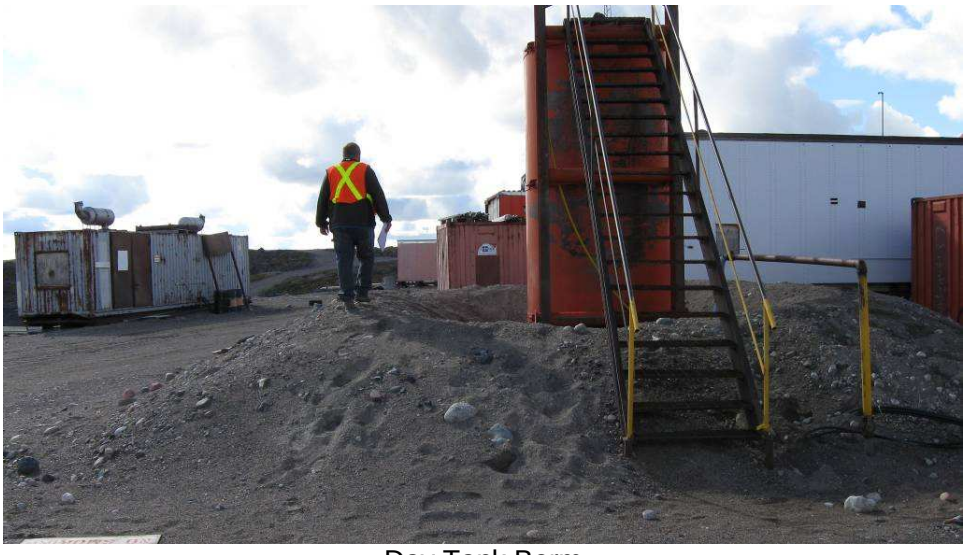
CREST ELEVATION: No survey information available.

BERM CONDITION: Berm is constructed from esker sand and gravel and appears in overall good condition. Where liner was exposed last year, it is now covered.

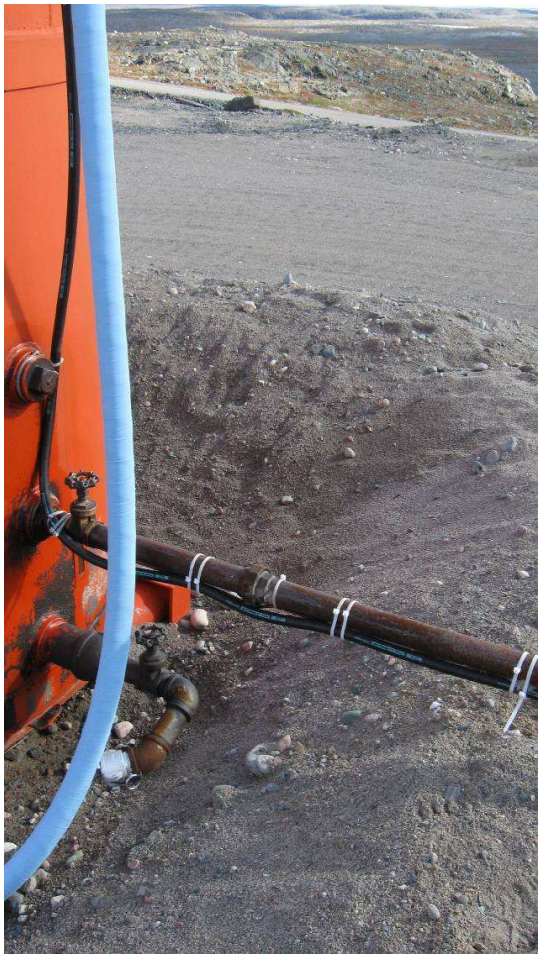
SEEPAGE: No evidence of seepage observes at the berm toe.

MAINTENANCE/MONTORING RECOMMENDATIONS: None.

CONCLUSIONS: The berm appears in generally satisfactory condition.



Day Tank Berm



Area Exposed Liner Last Year - Now Covered

Inside of Berm Dry

CAMP 3 TANK FARM CONTAINMENT BERM

LOCATION: Far southern end of the esker, west of Reno Lake North.

FUNCTION: Provides secondary containment for two large fuel tanks and six smaller skid-mounted tanks.

SIZE: ~30 m wide by ~60 m long.

BERM HEIGHT: ~1.5 to 2 m above adjacent grade on one side and ~1 to 1.2 m on the other.

CREST ELEVATION: No survey information available

BERM CONDITION: Berm is constructed from esker sand and gravel and appears in good condition. It appears the some of the exposed liner areas have observed last year have now been covered. Could not confirm is small tears were repaired. Liner still exposed at one location between tanks and one location on downstream slope. There is also one area where it appears that some material has been cut from the toe of slope leaving an area with an over steepened slope. One erosion gully was observed near the toe of slope. It appears that one of the smaller tanks has a broken timber foundation support and the tank is now leaning. This should be repaired.

SEEPAGE: No evidence of seepage observes at the berm toe.

MAINTENANCE/MONTORING RECOMMENDATIONS: Two areas of exposed liner should be recovered with granular fill. The one area of cut slope near the toe and the one erosion gully should be repaired.

CONCLUSIONS: The berm appears in generally satisfactory condition. See above maintenance items. The leaning tank should be repaired

Camp 3 Tank Farm

Last Year Exposed Liner – Now Covered

Exposed Liner Between Tanks

One Area of Exposed Liner on Downstream Slope

Area of Cut Into Downstream Slope

Leaning Tank

Broken Timber Support

Gap below tank

Erosion Gully Near Toe of Enbkmentment S/E Corner

MINE SUMP

LOCATION: Directly outside the portal, uphill from both a local access road and the portal laydown pad.

FUNCTION: Provides containment for settling and sediment retention of mine water pumped from the decline ramp.

SIZE: ~20 m wide by ~30 m long.

BERM HEIGHT: ~1.5 to 2 m above adjacent grade.

CREST ELEVATION: No survey information available.

BERM CONDITION: Berm is constructed from rockfill (waste rock) and esker sand and gravel, The banks are over-steepened.

Geomembrane liner within berm is exposed at numerous locations along the north, east and west sides. The liner at north end of the pond is loose. Small tears are developing in the liner.

SEEPAGE: No evidence of seepage observed at the berm toe. Current water depth inside sump is about 150 mm.

MAINTENANCE/MONTORING RECOMMENDATIONS: Before the sump is put back into service the liner and side slopes should be repaired/restored.

CONCLUSIONS: The berms are suitable for the interim. Before the sump is put back into use, the liner and slopes must be repaired.

Mine Sump Pit – Exposed Liner

Exposed and Loose End of Liner

Typical Small Tear in Liner

Typical Small Tear in Liner

PORTAL LAYDOWN (WASTE ROCK) PAD

LOCATION: Pad is located just downhill from the portal and local access road, approximately 150 m from East Lake.

FUNCTION: Initially constructed from waste rock from the decline ramp development. Mine muck material was placed on the pad covers a portion of the silt control fence.

SIZE: ~50 m wide by ~200 m long.

PAD THICKNESS: Ranges from 1 to 5 m above original topography.

CREST ELEVATION: No survey information available.

PAD CONDITION: Pad is constructed from rockfill (waste rock). Toe of the pad sits at the angle of repose for rockfill. Scarps and cracks have developed on downhill toe due to sloughing and erosion of loose fill.

TOE DISCHARGE: No seepage observed at the toe of the pad.
Any potential pad drainage heads downhill into East Lake.

MAINTENANCE/MONTORING RECOMMENDATIONS: Existing downstream stream silt fencing is in need of repair.

CONCLUSIONS: The pad appears to shows signs of instability and erosion on the downstream side. Re-grading and shaping will be required before the pad is put into use. Runoff from the pad is collected within East Lake that passes through a wetland before entering Ulu Lake. The existing down slope silt curtain is in need of repair and has been covered by the toe of the pad at some locations. The silt curtain should be restored.

Portal Laydown Pad

Downhill Face of Pad

Silt Fence

Silt Fence

Silt Fence

Silt Fence

Slump Cracking Downhill Side

ORE STORAGE PAD

LOCATION: Pad is located southwest of the Portal Laydown Pad, approximately 325 m from East Lake.

FUNCTION: Constructed from waste rock and then partially covered with esker sand and gravel. The pad was originally constructed for temporary storage of ore before its proposed shipment. Two small ore stockpiles are currently located on the pad.

SIZE: ~100 m wide by ~200 m long.

PAD THICKNESS: Ranges from 1 to 3 m above original topography.

CREST ELEVATION: No survey information available.

PAD CONDITION: Pad is constructed from rockfill (waste rock) and esker sand and gravel. Two ore stockpiles located on the east corner of the pad. Toe of the pad sites at the angle of repose for rockfill.

TOE DISCHARGE: None noted.
Surficial pad drainage would head west from the southwest corner of the pad. No drainage was observed in this direction.

MAINTENANCE/MONTORING RECOMMENDATIONS: No current concerns.

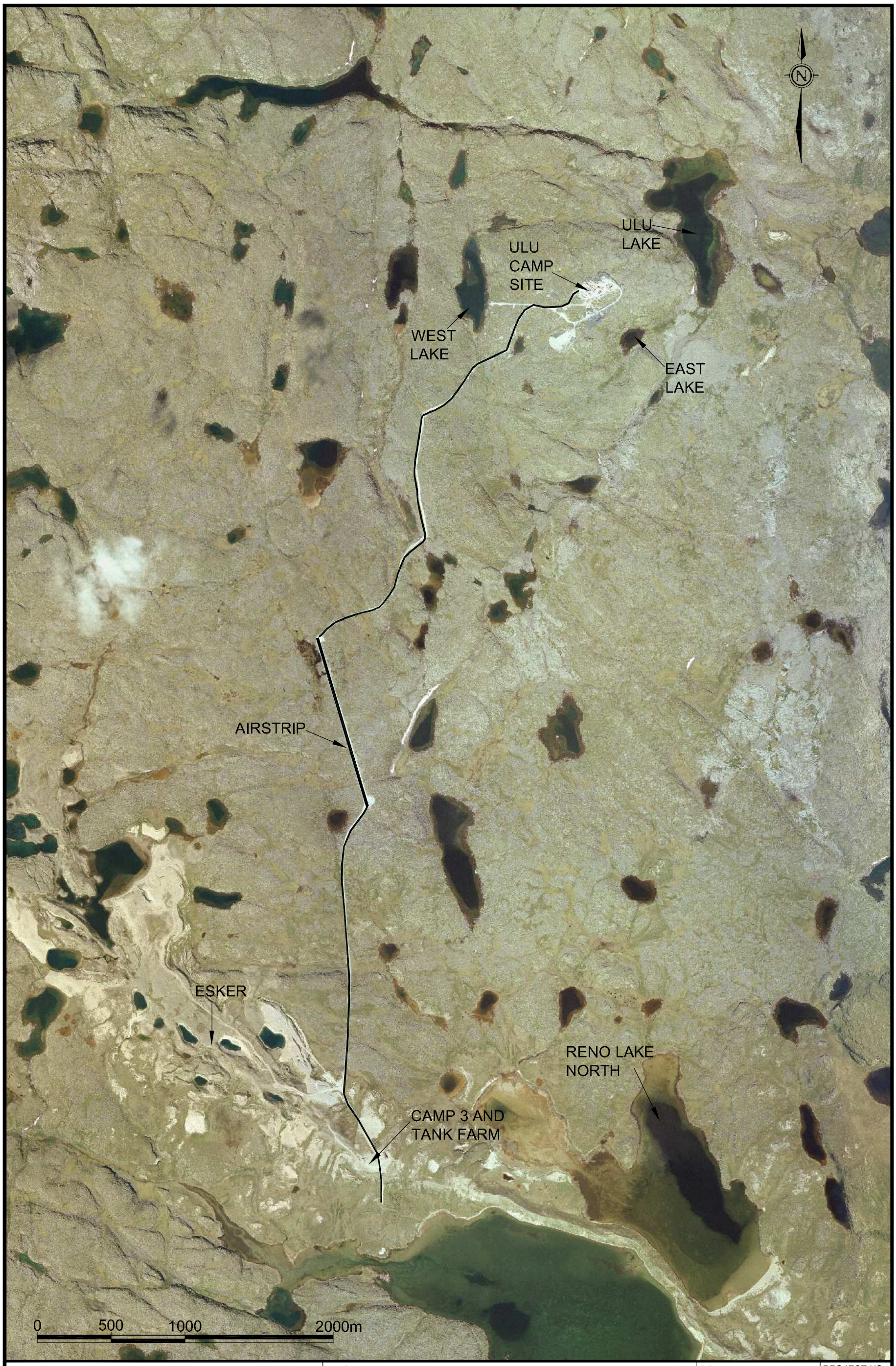
CONCLUSIONS: The pad appears stable with no signs of erosion or instability.

Storage Pad Outside Edge

Storage Pad Area

ENCLOSURES

CLIENT: MIN METALS GROUP LTD (MMG)	DWG. TITLE: ULU FACILITY - OVERVIEW MAP	SCALE: 1:7,500	PROJECT NO. 10-069
TBT ENGINEERING CONSULTING GROUP	PROJECT: ULU MINE ANNUAL INSPECTION ULU FACILITY, NUNAVUT		DATE: OCT.2010 ENCLOSURE 1



CLIENT: MIN METALS GROUP LTD	DWG. TITLE: ULU FACILITY AREA PLAN	SCALE: 1:25,000	PROJECT NO. 10-069
TBT ENGINEERING CONSULTING GROUP	PROJECT: ULU MINE ANNUAL INSPECTION ULU FACILITY, NUNAVUT		DATE: OCT.2010 ENCLOSURE 2

CLIENT:

MIN METALS GROUP LTD

TBT ENGINEERING
CONSULTING GROUP

DWG. TITLE: ULU FACILITY PLAN

SCALE: 1:3000

PROJECT:

ULU MINE ANNUAL INSPECTION

ULU FACILITY, NUNAVUT

PROJECT NO. 10-069

DATE: OCT.2010

ENCLOSURE 3