

2014 Annual Geotechnical Inspection of Selected Structures – Ulu Gold Project, Nunavut

Prepared for

Bonito Capital Corporation



Prepared by



SRK Consulting (Canada) Inc.
1CB027.001
October 2014

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1 Introduction and Scope of Work

The Ulu Gold Project is an advanced exploration project that is currently in care and maintenance status under Nunavut Water Licence 2BM-ULU0914 by Bonito Capital Corp (BCC), a wholly owned subsidiary of Elgin Mining Inc. (NWB 2011). The project is situated in the Kitikmeot region of Nunavut, with the underground exploration site located at UTM 12W 501,167E 7,421,069N. This is about 12 km north of Hood River and 150 km north of Lupin Mine, in the treeless arctic tundra where rock and glacial features dominate the landscape. Figure 1.1 shows the general location of the Ulu Gold Project.

Part D.10 of the water license states:

“An inspection of the earthworks, geological regime, and the hydrological regime of the Project is to be carried out by a Geotechnical Engineer prior to the recommencement of on-site activities and annually thereafter. The Geotechnical Engineer’s report shall be submitted to the Board within sixty (60) days of the inspection, with a covering letter from the Licensee outlining an implementation plan to respond to the Engineer’s recommendations.”

Mr. George Friesen, Manager of Technical Services for BCC, retained SRK Consulting (Canada) Inc. to conduct the 2014 geotechnical site inspection in fulfillment of these regulatory requirements. Specifically, SRK scope of work was to inspect the following structures:

- Ulu Gold Project main tank farm containment berm;
- Day fuel tank containment berm;
- Camp 3 fuel tank farm containment berm;
- Mine sump;
- Ore storage pad; and
- Portal laydown pad.

The inspection focuses on the geotechnical aspects of the structures listed above. This report summarizes SRK’s observations made during the 2014 site inspection and provides recommendations for remediation. The report does not include any commentary on fuel storage, fuel and waste management practices. Generally, the 2014 inspection found the mine facilities in good condition with some liner damage and erosion at most structures. SRK noted the Camp 3 fuel tank farm would require some attention.



Not to Scale



Bonito Capital Corp.

Ulu Project

Location Plan

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FIGURE:
1.1

2 Site Conditions

2.1 Site History

Echo Bay Mines Ltd. (EBM) purchased the Ulu Gold Project site lease from BHP Minerals in 1995. Underground development was initiated in 1996. The mining operation was suspended in 1997. In January 2003, Kinross Gold Corporation acquired EBM through a merger of companies. Following this, Wolfden Resources Inc. purchased a 100% interest in Ulu from Kinross in December 2003. Wolfden reopened the mine portal in May 2005 for grade and resource confirmation. Because of a safety concern, work in the mine was suspended once again and Ulu was put into care and maintenance in the summer of 2006.

Zinifex Canada Inc. purchased Wolfden in autumn 2007 and took over Ulu and other assets. In June 2008, Zinifex merged with Oxiana Ltd., forming OZ Minerals, which was purchased by China Minmetals to become MMG Resource Inc. In July 2011 BCC, a wholly owned indirect subsidiary of Elgin Mining Inc. purchased the site from MMG. An annual report was completed by BCC for 2011 summarizing site conditions (BCC 2012) and an annual geotechnical inspection was completed by TBT Engineering in 2011 (TBT 2011).

2.2 Site Infrastructures

Year round access to the site is by aircraft only. The Ulu Gold Project site (Figure 2.1) consists of three major areas: the Ulu Camp, airstrip, and Camp 3. The facilities at the Ulu Camp (Figure 2.2) consist of a 60-man camp, a vehicle repair shop, powerhouse, warehouse, cold storage, and office. The site also houses a fuel tank farm, day use fuel tank, fresh water and sewage systems, garbage incinerator, ore storage area, waste rock pad, mine portal and explosive magazines. All mine production was intended to be transported via an ice road during the winter months to the Lupin Mine for processing. No processing facility was constructed at Ulu. The Camp 3 area has a fuel tank farm and a vehicle repair shop.

The tank farm at Camp 3 consists of two 1,324,895 litre tanks and six 52,995 litre tanks; these are currently not in use. At the Ulu site, fuel is stored in five 52,995 litre tanks in the fuel tank farm and one an 8,800 litre day use tank.

Historically, P40 and P50 grade fuels were stored in the remote tank farm at Camp 3 until it was transferred to the Ulu camp as required. The Camp 3 fuel facility does not currently contain fuel. P50 grade fuel is currently stored in the Ulu site fuel tank farm.

2.3 Climate

There is no weather station on site to actively record data. The nearest recording station is at Lupin Mine site about 150 km south of Ulu. Generally, the area is characterized by high arctic climate with severe winter and mild summers. The overall temperature ranges from approximately -50°C in winter to 30°C in summer. Permafrost is found in and around the site and typically extends to several hundred metres (NWB 2009). The annual mean precipitation is assumed to be between 300 mm to 350 mm.

2.4 Site Geology


The BGC Engineering 2007 Annual Inspection Report provided a summary of geology on the Ulu Gold Project and is summarized as follows:

The Ulu claims are located within the High Lake Volcanic Belt of the Archean Slave Structural province. This geological province consists of basement gneisses overlaid by greywacke turbidite and basalt in thick sequences. The High lake Volcanic Belt is part of such a sequence and consists of a north-south trending volcanic and sedimentary sequence, enclosed by later Archean granitoid rocks.

The geology of the Ulu property consists of a sequence of folded mafic volcanic, mafic intrusive and sedimentary rocks, metamorphosed to upper greenschist / lower amphibolite phases. These rocks are intruded by later felsic intrusive rocks and diabase dykes. At least three phases of deformation are noted with the rocks at Ulu. The volcanic, intrusive, and sedimentary rocks are folded into a north trending anticline that plunges deeply to the north in the area of the Flood Zone. Gold occurs in laminated calc-silicate veins and in quartz veins. The highest concentrations of gold grains are found in quartz veins containing fine-grained arsenopyrite. Gold mineralization occurs primarily in the basalt and to some degree in the sediments. Very little gold mineralization occurs in the gabbroic rocks (BGC 2007).



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	Bonito Capital Corp.		ULU PROJECT		
	Bonito Capital Corp.		Ulu Facility Area Plan		
SRK JOB NO.: 1CL008.000	Bonito Capital Corp.		DATE:	APPROVED:	FIGURE:
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7421500 N



West
Lake

Dock

7421000 N

Ulu Access Road

Fresh Water Intake Line

Escape way
Raise Collar
Line

Portal
Laydown
Pad

Tank
Farm










Sewage Line

East
Lake

501000 E

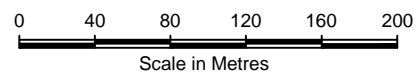
501500 E

LEGEND

-  Tank Farm Berm Outline
-  Building
-  Water Pipeline
-  Sewage Pipeline
-  Lake Shore, Drainage
-  Contour 1 m
-  Contour 5 m
-  Roads
-  Site Features Miscellaneous

NOTES

1. Topographic information and facilities outline provided by Bonito Capital Corporation.



Coordinate System: Nad_1983_UTM_Zone_12N
NTS Map Sheets 076L15



Bonito Capital Corp.

ULU PROJECT

Ulu Site Plan

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FIGURE:
2.2

3 Geotechnical Site Inspection

3.1 General

Mr. Alvin Tong, PEng, a senior geotechnical engineer with SRK, conducted the geotechnical inspection on August 20, 2014. After a general overview of the site by air, the detailed site inspection was carried out on foot and via ground transportation. Mr. George Friesen of BCC was present and accompanied SRK personnel for inspection.

Weather conditions during the inspection were overcast and cold with periods of flurry and high gusts of wind. A detailed photographic log of the inspection is included in Appendix A. Generally, the inspection indicated the facilities in Ulu are in good geotechnical condition with one minor concern noted below.

3.2 Ulu Camp

The Ulu Camp area consists of the following facilities:

- Mine sump;
- Ulu Gold Project main tank farm containment berm;
- Day fuel tank containment berm;
- Ore storage pad; and
- Portal laydown pad.

All the facilities are generally in good condition, in terms of stability and performance, where only minor damages are noted in geosynthetic liner and minor erosion in overliner that require maintenance.

All the facilities are generally in good condition, in terms of stability and performance. Only minor damages were noted in the geosynthetic liner and minor erosion in the overliner that require maintenance. The ore storage and portal laydown pads do not show any signs of instability.

During the inspection, part of the leading edge and the slopes of the liner in the mine sump were found to be exposed and should be covered at the first opportunity to protect the liner. Damage to the sump liner was also observed and should be repaired. These repairs and maintenance should be performed prior to utilizing the sump.

There are minor erosion issues near each crest of the fuel containment berms where liners are exposed and damaged. The erosion should be repaired to prevent further damage to the liner, as well as to prevent leakage during periods of high water levels. Both the ore storage and portal laydown pads are in satisfactory geotechnical condition.

3.3 Camp 3

The Camp 3 area consists of the following facilities:

- Camp 3 fuel tank farm; and
- Vehicle repair shop

Similar to facilities at Ulu, minor damage was noted in the liner and left exposed from erosion. The main concern observed during the Camp 3 inspection is that three fuel tanks are leaning because of broken cribbing at their base. It is recommended that the cribbing be repaired. The tanks should be set upright and leveled to prevent toppling and damage to the tanks and containment berm. Alternatively, the leaning tanks could be decommissioned and removed from the containment berm. The fuel tank farm containment berm was generally in good condition with no visual stability concerns. The parts of the liner that are damaged should be repaired and covered with appropriate backfill.

The vehicle repair shop was not part of the geotechnical inspection requirement.

4 Recommendations

Overall, the facilities are in good geotechnical condition; however, SRK makes the following recommendations for site maintenance and repairs:

- Cover all exposed liners and leading edges with granular fill for overliner protection.
- Repair all damaged liners in the fuel storage.
- Replace the broken cribbing at Camp 3 and re-level the fuel tank or decommission the tank.
- Repairs and perform maintenance on the liner in the mine sump shall be completed prior to utilizing it.
- BCC may wish to submit a request to the Nunavut Water Board for an amendment to the inspection schedule as there is no mining or exploration activity. The proposed inspection schedule would consist of bi-weekly inspections during May and June freshet, monthly inspections from July to October of the fuel containments and mine sump, and an annual inspection of the storage pad when the site is in care and maintenance status. The inspection schedule stated in the Part D. Item 8.e of Water Licence is:

“Inspections of the Retention Pond and structures are carried out weekly during periods of open water and records kept of these inspections for review upon request of an Inspector.”

This report “2014 Annual Geotechnical Inspection of Selected Structures – Ulu Gold Project, Nunavut” has been prepared by SRK Consulting (Canada) Inc.

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The opinions expressed in this report have been based on the information available to SRK at the time of preparation. SRK has exercised all due care in reviewing information supplied by others for use on this project. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information, except to the extent that SRK was hired to verify the data.

5 References

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Appendix A: Photo Log



Photo 1: Looking north at one of the leaning tanks in the front of the Camp 3 fuel tank farm.



Photo 2: Close up view of the broken cribbing underneath the tank.



Photo 3: Looking east at the Camp 3 fuel tank farm.



Photo 4: Close up view of the damaged liner in the southern bank of the Camp 3 fuel tank farm.



Photo 5: Close up view of the exposed liner between the 2 large tanks in Camp 3 fuel tank farm.



Photo 6: Looking at the exposed liner in the north bank of the Camp 3 fuel tank farm.



Photo 7: Looking north at the leaning tanks at the back of the Camp 3 fuel tank farm.



Photo 8: Close up view of the broken cribbing underneath the leaning tanks.



Photo 9: Close up view of the broken cribbing underneath the leaning tanks.



Photo 10: Close up view of the broken cribbing underneath the leaning tanks.



Photo 11: Look northeast at the south slope of Ore Pad.



Photo 12: Looking northwest at the west slope of the Ore Pad.



Photo 13: Looking north at the Ore Pad.



Photo 14: Looking northwest at the mine sump.

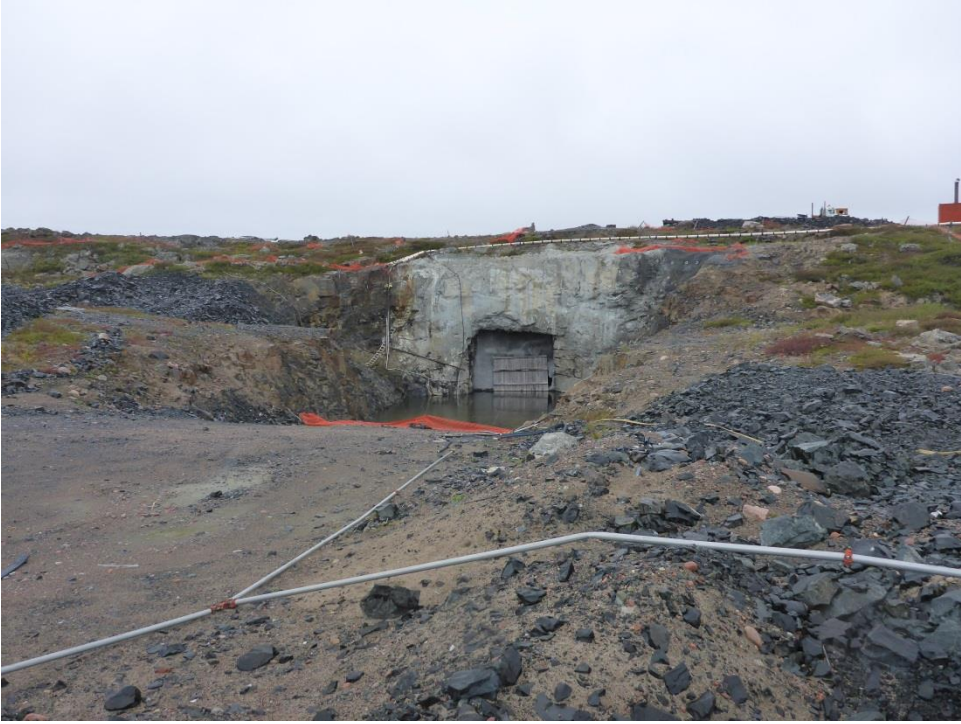


Photo 15: View of the portal and south slope of the mine sump.



Photo 16: Looking southwest at the south slope of the Portal Laydown Pad.



Photo 17: Looking southeast at the south slope of the Portal Laydown Pad.



Photo 18: Looking north at the Portal Laydown Pad.


	Bonito Capital Corporation	2014 Annual Geotechnical Inspection Ulu Mine		
		Sewage Pond Dam Inspection		
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Photo 19: Looking north at the Ulu Main Tank Farm.



Photo 20: Looking east banks of the Ulu Main Tank Farm.



Photo 21: Looking west banks of the Ulu Main Tank Farm



Photo 22: Looking north banks of the Ulu Main Tank Farm



Photo 23: Close up view of the exposed liner in the north banks.



Photo 24: View of the day fuel tank at Ulu camp.

	Bonito Capital Corporation	2014 Annual Geotechnical Inspection Ulu Mine		
		Sewage Pond Dam Inspection		
Job No: 1CB027.002 Filename: Photo_Log_1CB027_002_JN_20141008	Ulu Mine	Date: Oct 2014	Approved: AT	Figure: 4