

ASSESSMENT REPORT

115I-06-1

LAFORMA

PREPARED BY

DIAND TECHNICAL SERVICES

MARCH, 1994

115I-06-1

LAFORMA

LOCATION

Latitude: 62° 16'03"N

Longitude: 137° 06'55"W

The site is located approximately 48km northwest of the community of Carmacks on the south slope of Mount Freegold. The site can be reached by road from the Mount Freegold road from Carmacks.

The site is between 1175-1250m above sea level.

Location maps of the site are attached as Appendix A to this report.

WORK HISTORY

A work history has been compiled from the Department of Indian Affairs and Northern Development Yukon Minfile record 115I 054. This work history follows.

March, 1931 - The G-3 vein was first staked as Spruce claims by Livingstone Wernecke and transferred to A.L. Major. A. Brown and G. Fairclough staked the adjoining Wild Rose, Theodore, etc. claims.

April, 1931 - W.J. Langham added Goose, etc. claims.

1932-1933 - A short adit was started at the 1188.7m level

1934-1936 - Mount Freegold Yukon Mines Ltd. drove a short adit and constructed a 9 tonne mill on the Wild Rose vein in 1936. The Langham, Forrest, Major property was optioned in 1934-35 by N.A. Timmins Corporation, and in 1935-36 by Yukon Consolidated Gold Corporation.

1938-1940 - T.C Richards and E. Keobke purchased the Brown-Fairclough property, from which they moved the 9 tonne mill to the No. 2 adit on the G-3 vein. 1286 tonnes were milled before the option was dropped. Underground development to this point consisted of about 386m in the No.2 adit level, 213m in the No. 3 adit plus several raises, and a 67m adit was driven on the Alpha vein.

1946 - The property was investigated by Transcontinental Resources Ltd.

1951 - The property was optioned by Garski Gold Mines Ltd. which performed limited trenching until 1955.

1958 - Ormsby Mines Ltd. purchased both the Laforma and Brown-Fairclough groups.

1959 - The claims were surveyed and taken to lease.

1960-1965 - The G-3 vein was explored with 633m of underground drilling and over 762m of drifting. A new No. 4 adit outlined two ore shoots called the South and North zones.

1964 - Discovery Mines Ltd. formed by the merger of Ormsby Mines Ltd. and Consolidated Discovery Yellowknife Mines Ltd. constructed a 113 tonne mill.

1965-1966 - 8653 tonnes were milled before closure due to poor recovery.

1974-1975 - Discovery conducted a geochemical survey and transferred the property to a private company, Botha Lake Mining Corporation. It was then optioned to Rayrock Mines Ltd. and Ashland Oil Canada Ltd. which drilled 13 holes (998.8m) and performed more geochemical surveys.

August, 1979 - Esperanza Exploration Ltd. added the Gnat claims to the north.

February, 1980 - The Discovery Mines Ltd. property was optioned.

May, 1980 - The Esperanza interests were acquired by Arctic Red Resources Corporation.

1981-1982 - Arctic Red rehabilitated the No. 4 level and drilled 11 underground holes (944.9m) beneath the South zone.

1983 - A joint venture with S.J. Resources Corporation completed 222m of drifting on the No. 4 level, 15 underground holes (1252.7m) beneath the North zone, and continued underground rehabilitation and metallurgical testing.

1987 - After the Arctic Red option expired in 1986, the property was optioned by Tally-Ho Exploration which commenced a low level adit in a joint venture with Equity Silver Mines Ltd. Approximately 610m of the proposed 762m adit was completed before the program was terminated.

1989 - Mainstreet Mining put a lien on the property and acquired the claims.

CLAIMS STATUS

No claims were found for this site.

ACTIVE CLAIMS - REGISTERED '94 - MAINSTREET.

The major commodity identified at this site is gold. Minor commodities include silver, lead, zinc, and copper.

The site geology consists of more than ten northeast trending and steeply northwest dipping quartz veins found on the Laforma and Brown-Fairclough properties. These cut complex and strongly altered intrusive rocks. The best vein, the G-3, is a shear zone containing lenses of broken, brownish stained vein quartz, occasionally gray with finely disseminated pyrite and arsenopyrite. Seams of crushed pyrite and occasional arsenopyrite, chalcopyrite, sphalerite, and galena are also present. The gold occurs mainly as fine disseminations of free gold in the quartz. The granitic material in the shear zone is almost completely altered to clay and sericite and the wallrocks exhibit similar alteration.

CURRENT SITE CONDITIONS

The Laforma exploration site is located in a remote location approximately 48km northwest of the community of Carmacks. The site is accessible by the Mount Freegold road which is open during the short summer season.

Site photographs showing current site conditions are attached as Appendix B to this report.

The exploration site is on the south facing slope of Mount Freegold which forms part of the Dawson Range of the Yukon Plateau. The site is above Seymour Creek which drains into Big Creek and eventually into the Yukon River. No surface water was observed at the old mill site, however it appears that intermittent flow from storm events and spring runoff occurs in nearby gullies. The site is thickly covered with black spruce, birch, willow, labrador tea, etc. The surface material consists of a silt till.

A steep road from the Mount Freegold road rises to the two mill sites. Above the upper mill site the trails continue upslope to an extensive network of trench sites. The trails and trenching has caused a significant amount of surface disturbance over an area covering several square kilometers. This disturbance is in the form of cut and fill slopes which eliminated any natural vegetation cover wherever these roads and trenches were installed. These exposed slopes are susceptible to erosion from wind and water.

The site consists of a lower mill site, lower camp area, upper mill site, and a trenching area above the upper mill site. A description of infrastructure and material left at each of these sites is described below.

Camp Site

The camp site is a large cleared area below the lowest mill site. No trailers or accommodation buildings remain at the site. Remaining buildings and material left at the camp site includes;

- 7.3x7.3m wood frame plywood clad locked storage shed,
- 4.9x7.3m wood frame plywood clad locked storage shed,
- 9000 litre empty storage tank (may have been used as a water storage tank),
- oil fired electric incinerator.

Lower Mill Site

This is the newest and largest of the two mills at this exploration site. This site also contains most of the remaining infrastructure at the Laforma site.

It is estimated that between 40-50 litres/minute of water flows from one of the adits. Rail also extends into this adit.

A large waste rock dump measuring approximately 30m wide, 15m long, and is about 12m deep is situated below the adit and to the left side (facing downslope) of the mill buildings. Other buildings and infrastructure remaining at this site includes;

- 12.2x12.8m wood frame plywood clad mill building. This building houses large concrete foundations which once supported the mill. The mill has since been removed. Mill balls and empty pails of Cyanamid AERO Promoter 404 were also found inside.
- 45.7m long and 12.2m wide enclosed metal clad timber frame conveyor and dump structure,
- 5.5x7.3m metal clad core storage shed with sample bags and 12 layers of core stored behind this building (measuring 3x4.5m),
- 3.6x4.6m metal clad core storage shed filled with core,
- 7 ore cars left beside the core storage buildings, and
- 6.1x14.6m wooden loading dock.

It appears that the tailings may have been drained downslope of the the mill building, however no tailings were found or really suspected as there are no containment dykes. There were no other visible signs of contamination such as vegetation stress.

Upper Mill Site

Remains of an old 9 tonne mill is located close to 2 adits. The mill is a very old collapsing log and wood frame structure situated on the edge of a gully.

A waste dump measuring approximately 45m wide, 30m long, and approximately 15m deep at the toe is situated to the right side (facing downslope) of the mill and spills into the adjacent gully.

Two open adits were found at this site. Both adits are collapsed but the entrances are still open. Rail extends from the lower adit.

Other remaining infrastructure at the site includes;

- 6.1x12.2m log garage with collapsed roof,
- roof of a collapsed 3.1x6.1m log structure,
- old Gardner Denver pump,
- approximately 100 pieces of 25-75mm diameter rusted pipe, and
- a few old 204 litre empty barrels and other pieces of metal waste.

This site has been left in its present condition for a long time and the site is overgrowing with vegetation over most of the site.

Trenched Area

An extensive area of trenching has been completed above the two mill sites across the top and down the south facing slope of Mount Freegold. Roads and trenches on the steeper parts of the slope were constructed by sidecasting material down the slope. This has resulted in significant disturbance of the site with removal or coverage of the vegetation. The roads down the steep slopes are very steep and are susceptible to erosion, however the material is quite coarse and the erosion to date is not significant. The trenching across the top of Mount Freegold has disturbed only the areas wherever the trenching took place. Vegetation has been removed but the potential for erosion is very limited to isolated situations.

RECOMMENDATIONS

Exploration activity at this site has resulted in significant disturbance to the site. Recommendations for additional site investigations and site remediation plans are provided for the trenched areas, mill sites and adits, and camp location separately.

Camp Site

Remaining infrastructure at the camp site is limited to two buildings, an incinerator, and a large tank. This remaining material poses little ongoing environmental liability. The camp site has been cleaned up and the remaining buildings, incinerator, and tank should be removed if a general clean-up program is initiated in the area.

Lower Mill Site

The lower mill site contains two large structures namely the mill building and the conveyor and dump structure. These buildings are well constructed and will stand for several years. Salvaging these buildings would require a labour intensive dismantling process and would be quite costly in this remote location. However, salvage of the material from these buildings may offset some of the costs of removal. If clean-up of these buildings is to be considered, then a tender package for removal and site clean-up should be the method considered to reduce costs as much as possible. There are numerous hazards in these structures and entrance should be prohibited and the buildings should be properly secured against entry. If these buildings are left in their present condition then they should at least be posted to warn anyone that they are not safe to enter. Proper notice and security of these buildings should be considered a **HIGH** priority.

As this was an operating mill tailings would have been produced. Although there is no evidence of any tailings it is recommended that vegetation downslope of the mill be analyzed to verify that there is no lingering contamination in the area.

The adits have not been properly secured and are considered a safety hazard. These adits should be secured against possible entry and posted to warn anyone entering the area of the potential hazard. This should be considered a **HIGH** priority.

The remaining core sheds and storage buildings are deteriorating slowly with time, however they do not appear to pose any ongoing environmental hazard. These buildings should be removed from the site only if a general clean-up program is initiated in the area. This is considered a **LOW** priority. The remaining core should be assessed by a qualified geologist if salvage of the core is to be considered.

The large rock waste dump appears stable and appears to be incurring only minor amounts of erosion. It is recommended that this rock waste pile be left untouched as it does not appear to present any major environmental hazard.

Upper Mill Site

The upper mill site consists of very old collapsing buildings, a waste rock dump, and two open adits. The site is growing over with vegetation and much of the original site is difficult to identify. Generally the site does not appear to be causing any ongoing environmental damage in addition to what has been caused when the site was originally developed. Ongoing concerns related to this site includes potential safety hazards.

The most significant safety hazard at this location is considered to be the open adits. These two adits should be sealed so that nobody can enter them. This should be considered a **HIGH** priority.

The collapsing buildings are considered a small hazard for anyone entering them. It is recommended that these buildings be piled and burned to remove any potential hazard. However this would have to be done with care to avoid starting any fire in the nearby forested area. If this work is undertaken, any of the remaining metal waste should be gathered and removed from the site. This should be considered a **LOW** priority.

The rock waste pile does not appear to be causing any additional damage to the environment, and it is not feasible to remove or treat the area without causing additional damage to the site. It is recommended that the waste pile be left in its present condition.

Roads and Trenched Areas

The roads and trenched areas over Mount Freegold cover a significant area and these workings are quite visible. Significant damage has been done to the vegetation that has been either removed or covered. Recovery of this vegetation is slow and it will take many years to regrow naturally in this dry northern climate. However it is not considered feasible to revegetate this area because the site is so remote and dry. It is recommended that the site be left to recover naturally.

Reshaping any of the site is also not recommended as this will set back any recovery that has already started.

SUMMARY

The site is very spread out with the camp site located in a separate site, the two mill sites located separately, and the trench sites located across the top of the mountain.

Each component of the site needs to be considered separately as outlined above, with the biggest concern being for public safety at each of the locations.

APPENDIX A

SITE LOCATION MAPS



SITE NAME: **LAFORMA**

SITE NUMBER: **115I-06-1**

MAP NUMBER: **115I**

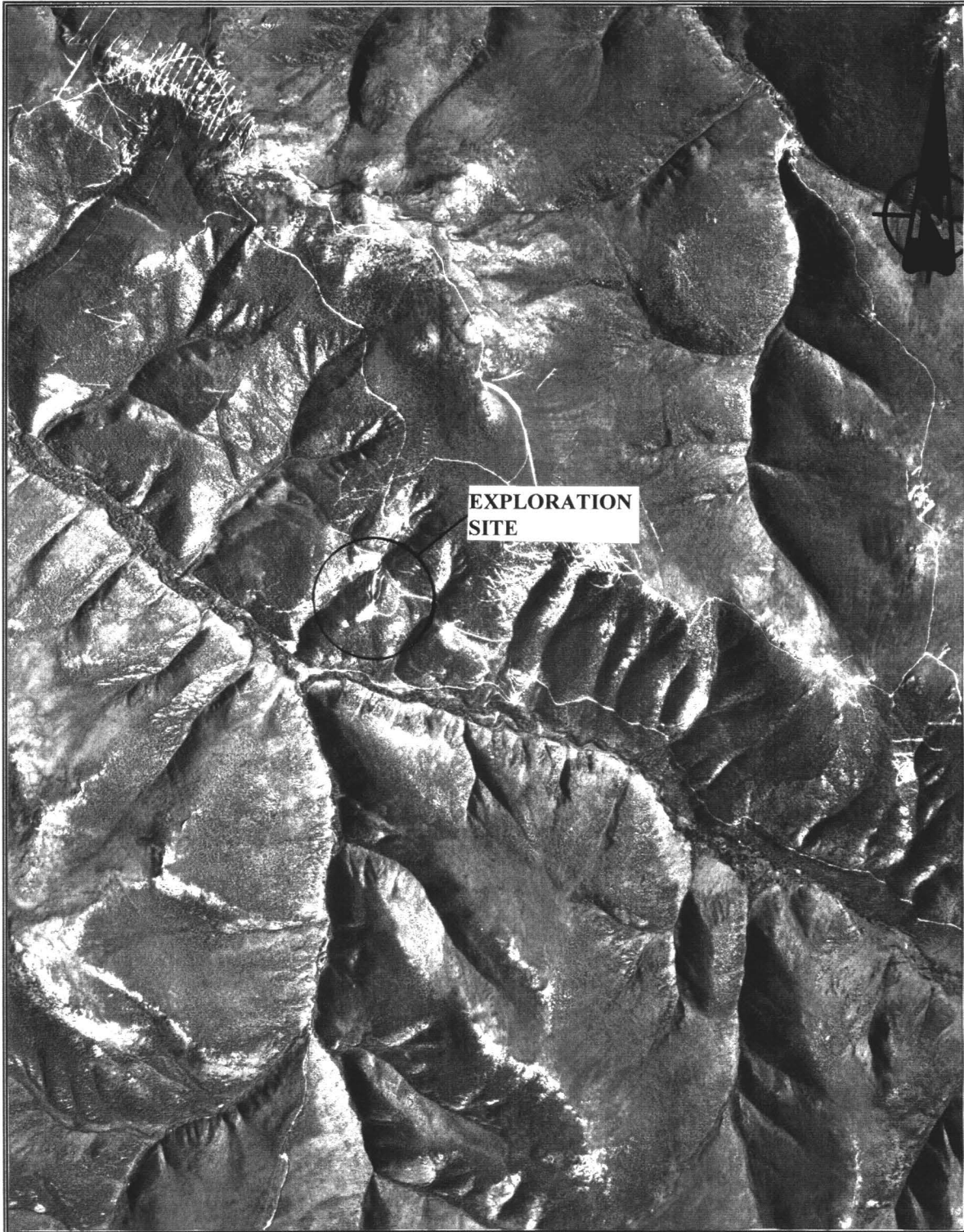
MAP NAME: **CARMACKS**

MAP SCALE: **1:250000**

SITE LOCATION:

LATITUDE: **62° 16'03"**

LONGITUDE: **137° 06'55"**



SITE NAME: **LAFORMA**

SITE NUMBER: **115I-06-1**

AIRPHOTO NUMBER: **A27478-154** YEAR: **1989**

AIRPHOTO SCALE: **1:40000**

SITE LOCATION: LATITUDE: **62° 16'03"**

LONGITUDE: **137° 06'55"**

APPENDIX B

SITE PHOTOGRAPHS



UPPER MILL SITE



LOG STORAGE SHED



UPPER ADIT



UPPER MILL SITE AND ROCK WASTE ON LEFT



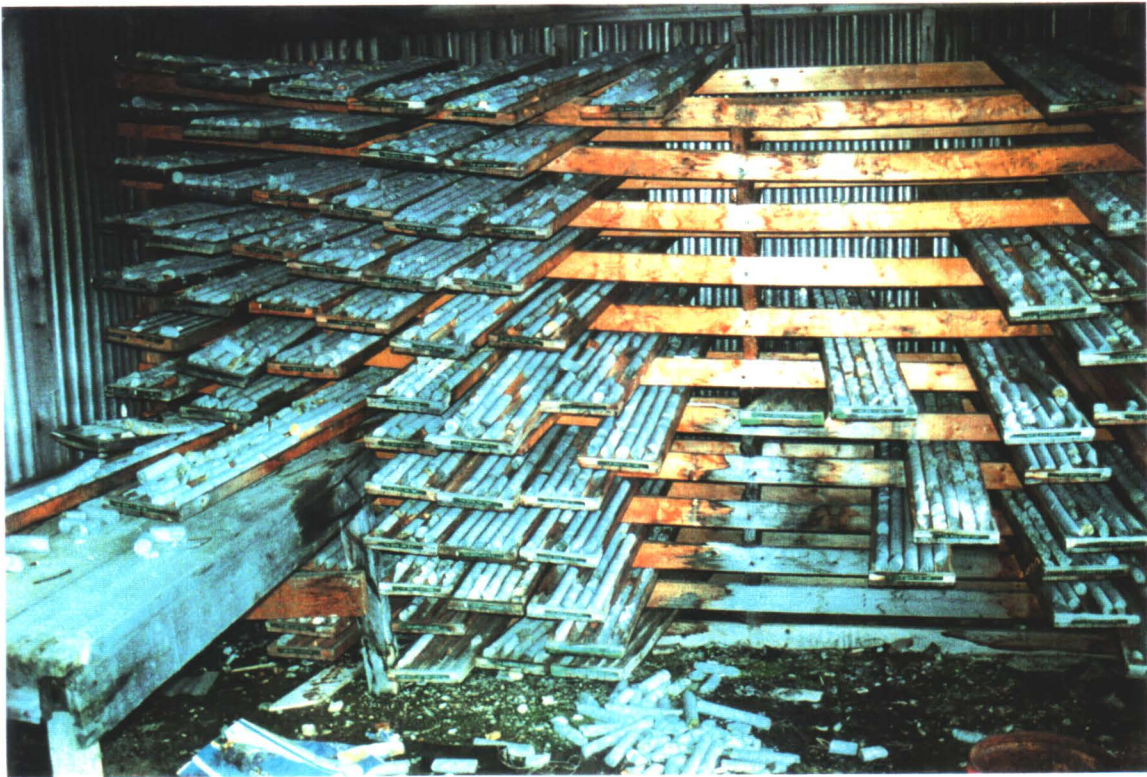
MIDDLE ADIT AND DRAINAGE FROM ADIT



INTERIOR OF MIDDLE ADIT



STORAGE SHEDS, ORE CARS, AND ROCK CORE



CORE IN STORAGE SHED



PROBABLE CATCHMENT CHANNEL FOR TAILINGS



ROCK WASTE DUMP



MILL BUILDING



INTERIOR OF MILL BUILDING



CORE STORAGE SHEDS



LOWER MILL SITE



STORAGE SHEDS AT CAMP SITE



STORAGE TANK AT CAMP SITE