ASSESSMENT REPORT

105D-03-2

BECKER COCHRAN

PREPARED BY

DIAND TECHNICAL SERVICES

NOVEMBER, 1993

105D-03-2

BECKER COCHRAN

LOCATION

Latitude: 60° 11'03"N
Longitude: 135° 13'08"W

The exploration site is located approximately 27km west of the village of Carcross approximately 2km northwest of Mount Bell in the Boundary Ranges (Coast Mountains). The site is reached by first travelling approximately 30km on the Wheaton River valley road (Annie Lake Road) from the Robinson intersection south of Whitehorse on the South Klondike Highway. From the Wheaton River valley road at Becker Creek the site is 9.2km up a trail accessible to all terrain vehicles or four wheel drive vehicles. From the intersection at Becker Creek the trail parallels the Becker Creek valley rising approximately 600m to the site, which is between 1500-1550m above sea level.

Site maps showing the location of the site are attached as Appendix A to this report.

WORK HISTORY

The site was first investigated about 86 years ago. A summary of the work history follows.

1907-1915 - Limited trenching was completed and a 30.5m adit was extended during this period.

1940-1951 - Restaked as Caroline claims by J. Cox and W. McAlister who conducted hand trenching until 1948, added Mac claims in July, 1949 and drove a 27.4m adit in 1951. The adjoining Carbon claims to the west were staked in February, 1951 by Yukon Mining Corporation Ltd. which conducted dozer trenching later in the year.

October, 1962 - Restaked as Al and Star claims by A. Gatey.

June, 1964 - Restaked as Lum and Joan claims by Yukon Antimony Corporation Ltd. which performed extensive trenching, mapping, and sampling.

1965-1966 - Three adits (431.2m) were driven and drilled 566.9m (about half underground).

1970-1971 - The property was optioned by National Lead Corporation Ltd. Yukon Antimony was reorganized into International Mariner Resources Ltd.

1973-1974 - Restaked as Pop claims by E. Bergvinson and optioned in 1974 by Belmoral Mining Ltd. which explored with mapping and geochemical sampling.

1976-1977 - Con-Am Resources Ltd. explored with mapping and an electromagnetic survey, underground rehabilitation and sampling, 7 drill holes (584m), and constructed roads. Bang and Whiz claims were added in 1977.

1982-1987 - The claims were transferred to Berglynn Resources Ltd. which performed mapping and geochemical sampling in 1985 on the Stan claims; road construction, trenching, and mapping in 1986; and mapping, electromagnetic surveys, geochemical surveys, dozer trenching, and 4267m of drilling in 1987.

CLAIMS STATUS

Status of mineral claims including claim names and numbers, claim expiry dates, and current owners in the vicinity of the Becker Cochran site have been noted as of 1992/05/01 as follows;

CLAIM NAME/NUMBERS	EXPIRY DATE	OWNER
Pop 1-70, 71-104, 101-122	1, December, 1994/95/ 98/99	Berglynn Resources Inc.

The major commodity identified at this site is antimony. Minor commodities include lead, silver, and gold. These commodities occur in lenses of quartz and barite that cuts a rhyolite dyke and older andesite. This is poorly exposed at the surface and has weathered to a grey gangue containing red and yellow streaks and boulders of massive sulphide.

CURRENT SITE CONDITIONS

The Becker Cochran exploration site is accessible by trail 9.2km south of the Wheaton River road. The access road parallels Becker Creek starting on a gentle slope and becoming steep near the exploration site. The road is accessible using four wheel drive vehicles. The road should be clear to traffic after the seasonal snowpack has melted by the end of June. At the time of inspection on 1993/06/24 snow still covered the road at one location as well as a north facing exploration adit.

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

The site is above treeline and is covered with short grasses and alpine vegetation. The adits are located adjacent to steep gullies that drain into the headwaters of Becker Creek. These gullies are very steep and susceptible to erosion during periods of runoff. Runoff occurs during periods of snowmelt.

The exploration site appears to have two separate eras of development, the underground workings dating back to 1965-1966, and the trenching on the mountain plateaus to the west of the underground workings being developed much later in 1987.

The remaining infrastructure is confined to two areas, namely;

- mine adits and associated waste dumps, and
- drill access roads and trenching area.

A description of the remaining infrastructure follows.

Mine Adits and Waste Dumps

A total of three adits were found at the time of inspection on 1993/06/24. Of the three accessible adits at the time of inspection, one adit is collapsed at the entrance and the other two adits are still intact. Both adits are sealed with widely spaced wooden cross bracing. Access to each adit could be gained by crawling through the openings in the bracing. Low volumes of water (less than 3-4 litres/minute) was flowing from both adits at the time of inspection. Most of the flow appears to be from snowmelt inside the adits.

Approximately 2000 cubic metres of waste rock from both adits was dumped over the steep bank in front of each entrance. Avalanche tracks above the exploration adits are filled with snow and annual melt is causing erosion through the waste rock piles and into the valley below. The waste rock at the lower adit contains sulphides and was giving off a distinct odour of sulphur at the time of inspection.

The only remaining infrastructure at this site is one empty metal tank (approximately 2000 litres), less than 50m of rail and track, various pieces of metal waste including barrels, pipe, tin cans and general purpose refuse that has been dumped or washed down the gully below the lower adit. Some wood waste is also scattered around the site.

Railway track once used by ore cars is still in place extending from inside the lower exploration adit to the waste dump. Once outside the adit, the track extends to the edge of the waste dump.

Drill Access Roads and Trenching Site

Across the gully, trails have been extended on the plateau to the west. These trails extend approximately 5km across this plateau to a variety of trench and drill sites. One specific area of trenching has been left with large piles of excavated material.

The road development and trenching is situated in an area on the top of a mountain that is made up of weathered bedrock, is very dry, and supports very little vegetation cover. Very little revegetation appears to have taken place since the road construction and trenching was completed.

No metal waste of any kind was found.

RECOMMENDATIONS

Exploration activity at this site has resulted in disturbance to the site mainly from the construction of exploration tote roads, trenching, and adit excavation.

Recommendations for site remediation are specified for the trenching site and adit and waste dump separately.

Mine Adit and Waste Dump

The mine adits are secured against entry, but still accessible to the public because of the way the adits were sealed.. As this site is accessible by road and relatively close to populated areas (Whitehorse and Carcross), it is recommended that the adits should either be better secured or at least posted against entry.

The waste area has been developed by extending railway track from the adit to the edge of the slope and dumping the waste rock over the slope below the adit. As noted, the waste rock was dumped down the slope below the adit and is perched at a steep angle between 35-45 degrees. Because of development in the area with road cuts, and wasting material over the slopes, the exploration area in the very confined gully has been oversteepened. This material is susceptible to both wind and water erosion, both which are occurring. The obvious erosion is caused by the snowmelt channeled through the waste area. Whether or not any of the metal waste in the gully below the site was caused by this erosion or was originally dumped downslope, is unknown. As the dumped material is so coarse, it is unlikely that much of it has found its way into one of the tributaries to Becker Creek below the site. **It may be possible that the sulphides are being dissolved in the water and a weak acid is being generated.** If this is the case this likely has been occurring naturally for a long time. **It is recommended that water samples be taken and analyzed to determine the water chemistry from this area.** Because the local streams are so steep fish habitat is not suspected in the vicinity of the site. This erosion process is expected to continue as part of a much larger geologic weathering process in the area, so the downstream impacts from this one site are expected to be minimal. It is recommended that the site not be disturbed any more to avoid any additional impact in the area. Revegetation of the area is also considered impractical in an area that is so dry, steep and void of organic cover.

If a waste clean-up program is implemented in the area, it is recommended that the metal waste be gathered and removed from the site. At the same time, the remaining wood waste should be piled and burned in an acceptable location. This work should be considered a **LOW** priority at this location.

Drill Access Roads and Trenching Site

Damage to the vegetative cover appears to be the only significant impact to the area because of the all the drill access roads and trenching completed in the area. There is little evidence that erosion, slope failures, contamination of water courses, etc. have been caused from the past activity.

Site remediation, if it was considered would consist of reshaping cut slopes to blend with the natural slopes, refilling trenches, and attempting to revegetate this work once it was completed. However attempting to complete this work is expected to be very costly and delay any natural recovery that has started. The benefits to attempting this kind of expensive remediation program in this remote area are not evident. This work should be considered as a **VERY LOW** priority.

Summary

Overall, some environmental damage has occurred and is continuing from erosion at the site. Eliminating the potential for further erosion would be difficult and costly to accomplish. It is recommended that, before embarking on an expensive site remediation program for this relatively small, remote site where the wildlife or fish habitat does not appear to be impacted, that reinspection of the site should take place periodically instead. **However, it is recommended that water samples be taken and analyzed to confirm water quality in the area.**

Posting of the adits against entry should be completed to warn the public about the potential danger if these adits are entered.

Clean-up of metal waste should be considered if an ongoing waste clean-up program is undertaken in the area. However, the remaining waste is considered to have a **low** level of impact on the environment.

Revegetating roads, drill sites, and trenching sites is considered a **LOW** priority for this area.

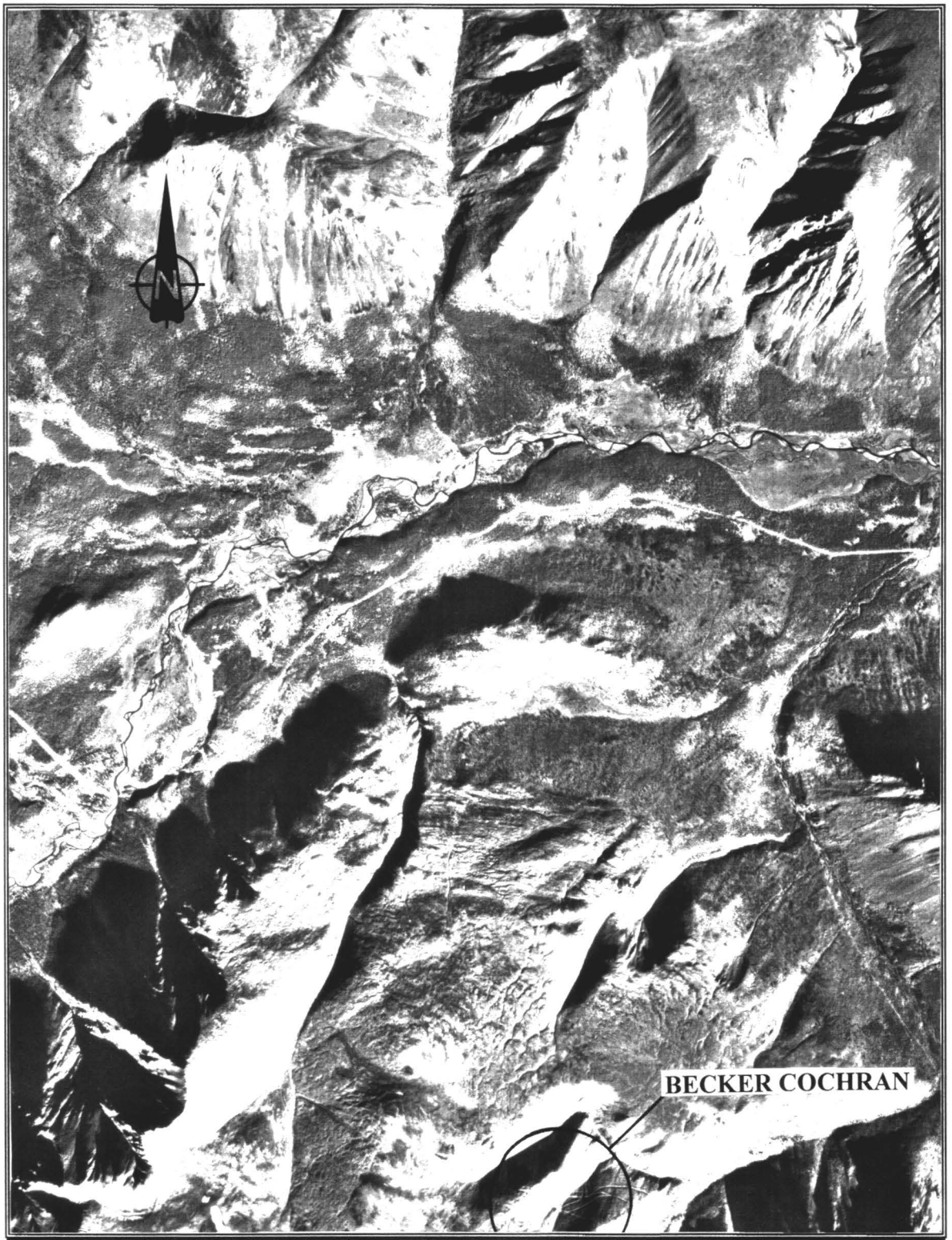
APPENDIX A

SITE LOCATION MAPS

SITE NAME: **BECKER COCHRAN** SITE NUMBER: **105D-03-2**

MAP NUMBER: **105D** MAP NAME: **WHITEHORSE** MAP SCALE: **1:250000**

SITE LOCATION: LATITUDE: **60° 11'03"** LONGITUDE: **135° 13'08"**



SITE NAME: **BECKER COCHRAN** SITE NUMBER: **105D-03-2**

AIRPHOTO NUMBER: **A27040-20** YEAR: **1986** AIRPHOTO SCALE: **1:40000**

SITE LOCATION: LATITUDE: **60° 11'03"** LONGITUDE: **135° 13'08"**

APPENDIX B

SITE PHOTOGRAPHS

UPPER AND LOWER ADITS AND WASTE DUMPS (NOTE EROSION)

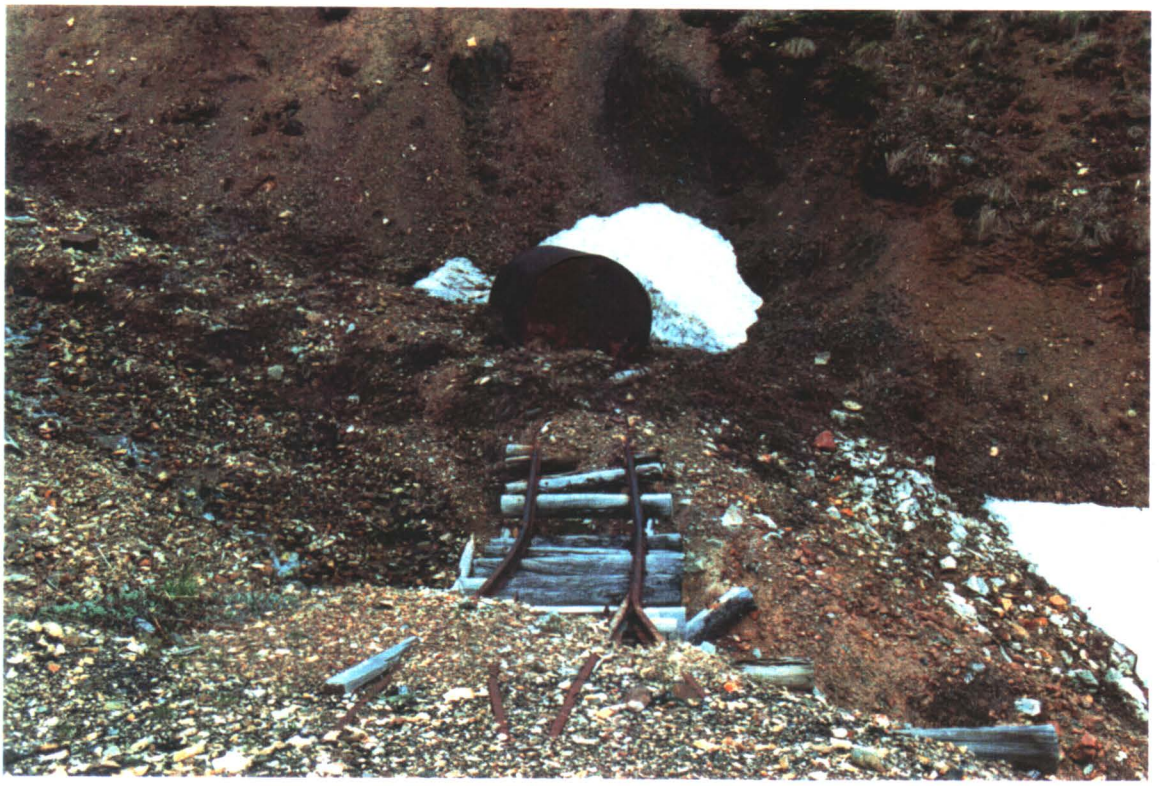
UPPER ADIT

LOWER ADIT

LOWER WASTE ROCK DUMP AND EROSION IN GULLY

UPPER WASTE ROCK DUMP AND GULLY

COLLAPSED ADIT



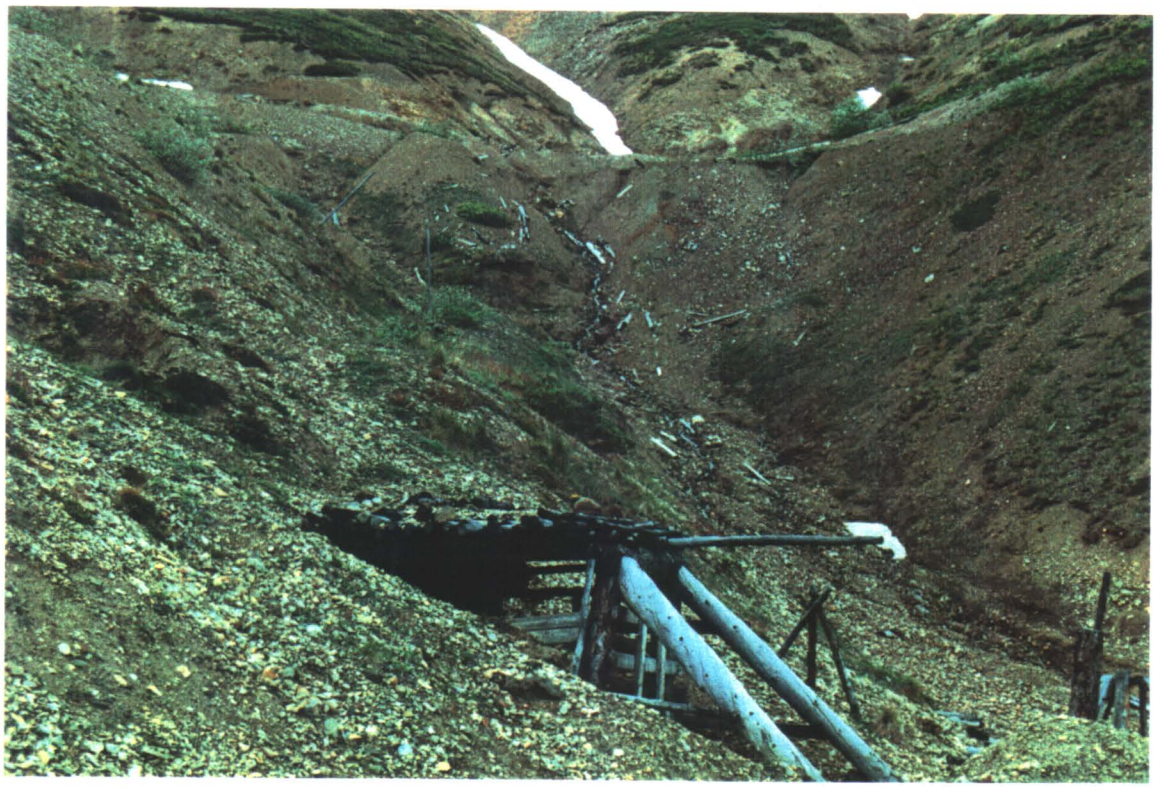
TRACK AND TANK AT LOWER ADIT

LOWER ADIT

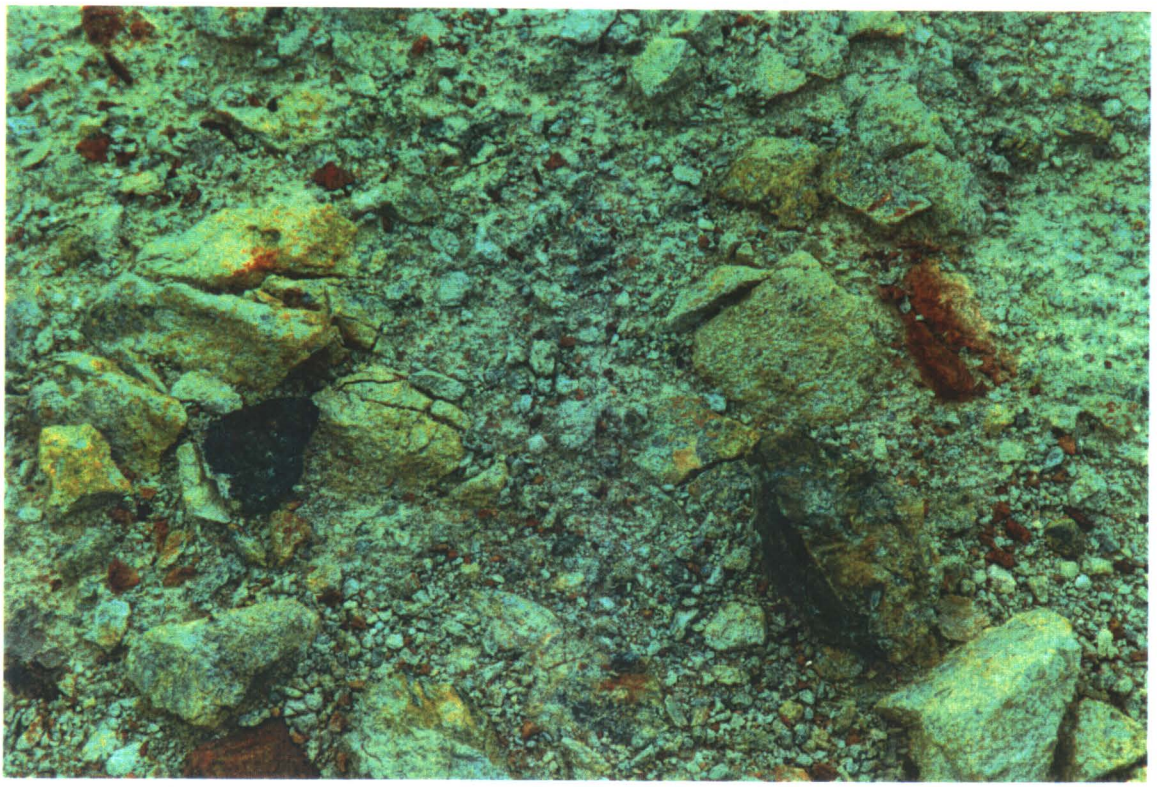
INTERIOR OF LOWER ADIT

LOWER WASTE ROCK DUMP

LOWER ADIT, WASTE DUMP, AND ADJACENT GULLY



LOWER ADIT LOOKING UPSLOPE (NOTE WASTE IN GULLY FROM UPPER ADIT)



SULPHIDES IN LOWER WASTE ROCK DUMP

TRENCHING