

**ASSESSMENT REPORT**

**1050-01-1**

**TOM**

**PREPARED BY**

**DIAND TECHNICAL SERVICES**

**MARCH, 1994**

**1050-1-1**

**TOM**

**LOCATION**

Latitude: 63° 09'37"N

Longitude: 130° 09'26"W

The site is in a remote location approximately 175km northeast of the community of Ross River. The site is accessible from Ross River via the North Canal Road. The site is approximately 3km east of the North Canal Road at the top of the Macmillan Pass.

The site is between 1600-1800m above sea level.

Refer to Appendix A for location maps of the site.

**WORK HISTORY**

A work history has been compiled from the Department of Indian Affairs and Northern Development Yukon Minfile record 1050 001. This work history follows.

September, 1951 - Staked as Tom claims by L. Seville and A. Lindsay for Hudson Bay Mining and Smelting Ltd. which explored with mapping and hand trenching.

1951-1953 - 37 holes totalling 5435m of drilling was completed.

1966 - Mapping, geochemical, and magnetometer surveys were completed.

June, 1967 - Fringe staking was completed for the Star claims to the east by Spartan Exploration Ltd.

1968 - 16 holes totalling 3233m of drilling was completed.

1970-1971 - 1809m of drifting, 3617m of drilling in 75 underground holes, bulk sampling, and metallurgical tests were completed.

July, 1976 - The Star claims were restaked as Cree and Sioux claims by Welcome North Mining Ltd., which later entered a joint venture with Canico (Inco).

1976-1978 - Mapping, geochemical sampling, electromagnetic surveys, gravity surveys, 587m of drilling in 5 holes, and dozer trenching was completed. Inco explored the Star claims with mapping and magnetometer surveys in 1977 and dropped the option in 1978. Yumac Syndicate tied on the Argo claims to the north in August, 1976, and conducted mapping and geochemical sampling in 1977 and 1978.

1979 - 2295m of drilling was completed in 15 holes. Hudson Bay Mining and Smelting Ltd. added Tom claims to the south and explored with geological and geophysical surveys.

1980 - Welcome North optioned its claims to Charlotte Resources Ltd.

- 1980-1982 - Hudson Bay Mining and Smelting completed part of a major feasibility study which included 120m of drifting to rehabilitate the adit portal, 1457m of drilling from 12 surface holes, 1174m of drilling from 18 underground holes, 923m of decline, bulk sampling, engineering and environmental studies.
- 1981 - Hudson Bay Mining and Smelting Ltd. added the TS claims to the north and explored with test pitting later in the year.
- 1983 - Earlier excavated trenches which failed to reach bedrock were deepened.
- 1985 - Hudson Bay Mining and Smelting Ltd. in a joint venture with Aberford Resources Ltd. performed minor trenching and carried out a joint feasibility study on the adjoining Jason deposit.
- 1988-1991 - Cominco optioned the property and staked Tome claims to the east, Jerry claims to the south, and Mac claims to the north. Cominco remapped the property and began a program of surface drilling to test for extensions to the west and southeast zones at depth. This program included 2226m of drilling in 4 holes in 1988, 2175m of drilling in 4 holes in 1989, 3578m of drilling in 7 holes in 1990, and 2882.7m of drilling in 8 holes in 1991. The 1991 holes tested for peripheral geochemical and geological targets. More Jerry claims were added in July, 1990 and explored with contour soil sampling in 1991.

### CLAIMS STATUS

Status of mineral claims including claim names and numbers, claim expiry dates, and current owners in the vicinity of the Plata & Inca site have been noted as of 1994/03/10 as follows;

<u>CLAIM NAME/NUMBERS</u>	<u>EXPIRY DATE</u>	<u>OWNER</u>
Tom 1-142	October 12, 1997	Hudson Bay Exploration and Development Co. Ltd.
Jason Group	December 31, 1996	Mac Pass Resources Ltd.
Tome Group	February 11, 1992	Mac Pass Resources Ltd.

Major commodities identified at this site includes zinc, lead, silver, and barium. Minor commodities include copper and antimony.

The Tom lead-zinc deposits consist of galena, sphalerite, and barite in fine-grained black clastic rocks of the Devono-Mississippian Earn Group. All mineralization at the Tom property occurs at or near the contact between conglomeratic submarine fan deposits and overlying blue-grey weathering carbonaceous cherty mudstone and radiolarian chert. The host rocks are believed to have been deposited in narrow grabens during Devonian rifting of the Cordilleran passive margin. The Tom deposits are confined to a small basin outlined by the outcrop pattern of chert pebble conglomerates of the Macmillan Pass member and a thickened isopach of the Tom Sequence rocks.

## CURRENT SITE CONDITIONS

The Tom exploration site is located in a remote location approximately 175km northeast of the community of Ross River. The site can be reached by travelling the North Canol Road to the top of the Macmillan Pass and is about three kilometres east of an airstrip beside the North Canol Road. This road is open only during the summer season after the snow has melted.

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

The exploration site is in a steep mountainous region of the Selwyn Mountains near the headwaters of an unnamed creek that drains into the Macmillan River. The access road from the Canol Road to the site parallels this creek. This area is above treeline and vegetation cover is limited to short grasses and northern alpine shrubs. The area is also subject to avalanches.

Surface water consists of a seasonal creek flowing through the camp site which is adjacent to the adit and waste rock dump. Groundwater flow apparently high in iron (orange staining noted in this drainage channel) also exits the adit and flows into the seasonal creek.

Rock talus is at the surface across the site.

An extensive network of exploration trails and trenched areas cross the site above the camp location. The installation of 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 large cut and fill slopes which eliminated any natural vegetation cover over much of this area. These exposed slopes are now much more susceptible to erosion from wind and water.

Two open adits remain at the site. A large volume of water (estimated to be between 100-200litres/minute) is flowing from one adit and draining in a channel it cut to the creek below. This water appears to have a high iron content due to orange staining. Piping extends into this same adit. The other adit was dry and appeared to be the adit used for exploration. Snow from the previous winter was still not melted at the entrance at the time of inspection on 1993/07/27.

As noted the camp and adits are located near the headwaters of a confined mountain creek. This location is confined in a narrow valley that is susceptible to avalanches. A recent avalanche through the camp has eliminated four trailers and scattered debris from these trailers downslope into the tank farm area. This avalanche also dislocated large empty fuel storage tanks from their cradles in a dyked containment area..

An extensive amount of infrastructure still remains at the camp and adits. A list of the major items found at this site includes;

### 1) Buildings

- ✓ 1 - 1.5x3.0m Territorial trailer storing electrical gear,
- ✓ 6 - 3.0x20m Territorial trailers connected to form a kitchen, recreation hall, and dining room. The kitchen is equipped with stoves, overhead fans, walk-in freezers, a pool table, shelving, tables, chairs, washroom fixtures, etc.
- ✓ 8 - 3.0x20m Artisan sleeping unit trailers with central corridor. Four of the eight trailers have been destroyed by an avalanche.
- ✓ 1 - 4.0x22.0m mobile home trailer with furniture and fixtures,
- ✓ 3 ATCO trailers (overall dimensions measuring 10x17m) connected and once used as an office and laboratory. These trailers contain benches, shelving, a hooded fan, etc.
- 1 - 12x13m Stran metal clad workshop with concrete floor. Core, equipment parts, lead-acid batteries, fire extinguishers, electrical switching equipment, etc. is scattered throughout this workshop.
- ✓ 2 Territorial Leasing trailers measuring 6x18m,
- 1 - 10x14m metal clad workshop,
- 1 - 3 bay metal frame metal clad garage measuring 13x20m with overhead doors,
- ✓ 2 connected trailers measuring 6x18m used as a dry change room complete with dry baskets, lockers, washroom facilities including showers, sinks, water closets, etc.
- 1 - 2.4x4.8m old wood clad building on skids and used to store lubricating oil.

### 2) Fuel Storage Tanks

- 1 empty 1.2m diameter by 4.0m long tank,
- 5 empty 1.8m diameter by 6.1m long Tidy Welders tanks,
- 4 empty 3.0m diameter by 6.1m long Tidy Welders tanks,
- 1 empty 1.2m diameter by 4.0m tank,
- 1 empty skid mounted tank,
- 7 empty 2.0m diameter by 4.0m tanks stored between the exploration site and the Canol Road,
- between 10-20 empty 204 litre barrels scattered across the site,
- approximately 10 - 204 litre barrels with varying amounts of lubricating oil.

### Miscellaneous

- 1 Nu West Video System satellite television dish,
- 60-80 pieces of 152mm diameter by 7.0m long victaulic pipe,
- approximately 80 pieces of 76mm diameter by 7.0m long victaulic pipe,
- 4 spools of electrical cable,
- a large amount of core and core boxes on metal frame racks measured approximately 102m long by 2m high,
- 3 ore cars,

- 3 large spools of hose,
- pile of rail,
- collapsed multiplate culvert,
- reinforcing bar,
- I-beams and other metal waste piled adjacent to the adits,
- spool of copper wire

This list of equipment lists only the major items found on-site. Many small pieces of equipment still remain but were not listed. In summary this site has a large number of buildings, equipment, and buildings. This site does not show any signs of being properly secured or dismantled.

### **RECOMMENDATIONS**

Exploration activity at this site has resulted in extensive disturbance to the site. Recommendations for additional site investigations and site remediation plans are provided for the exploration area and the camp site and adits separately.

#### Exploration Area

Extensive road construction and stripping across this area has resulted in damage to the vegetation and surficial soils. The roads and stripping is extensive on very steep slopes and some erosion has been obviously caused from this development. Vegetation over the trenched areas is sparse so destruction of vegetation does not appear to have been significant. Site remediation, if it was undertaken, would consist of reshaping cut slopes to blend with the natural slopes and revegetating the site. This method of remediation would be very costly and also result in additional disturbance to the site setting back any revegetation that may have started. Instead, it is recommended that leaving the site to recover naturally is the most suitable solution for this site. However, it must be understood that recovery of the site will be slow in this area that is extremely remote, dry, and sensitive to disturbance. Revegetation of the site is likely best left to natural reseeding due to its remoteness, and the difficulty of promoting growth in an extremely dry environment with very poor soil.

#### Adits

Two adits are located beside the camp site and accessible by road. These adits are open and accessible to the public. Even though these adits are located in a remote location they still pose a safety hazard and it is recommended that they should be properly sealed to prevent anyone from entering them. This should be considered a **HIGH** priority.

The large volumes of water draining from one adit should not be blocked.

## Camp Site

This camp has been abandoned with most of the infrastructure left in place including all buildings, fuel storage facilities, large volumes of core, and pieces of equipment and material. In summary these include;

- \* A total of 23 mobile trailers were left on-site. Four of these trailers have been eliminated by an avalanche (or avalanches) and the remains have been scattered across the site,
- \* 3 large metal frame, metal clad workshops,
- \* one old wood frame wood clad building storing hydrocarbon products,
- \* 19 large fuel storage tanks,
- \* approximately 30 - 204 litre barrels, 10 of these containing hydrocarbon products,
- \* one video satellite television receiving system,
- \* a large amount of pipe, electrical cable, ore cars, and miscellaneous pieces of equipment and parts scattered throughout the site.

This amount of material left on-site represented a large investment at one time. Clean-up of this remote site will also be quite expensive, although some recovery of expenditures could be possible from the sale of some of the assets. However, recovery of cost is not likely to offset expenditures. The site represents a visible mess, but ongoing damage or potential damage to the environment from this site appears limited. Potential for further damage could be;

- \* spillage of any remaining hydrocarbon products left on-site,
- \* from avalanches coming through the site and demolishing more of the camp facilities.

It is recommended that the hydrocarbon products be removed from the site. This should be considered a **HIGH** priority.

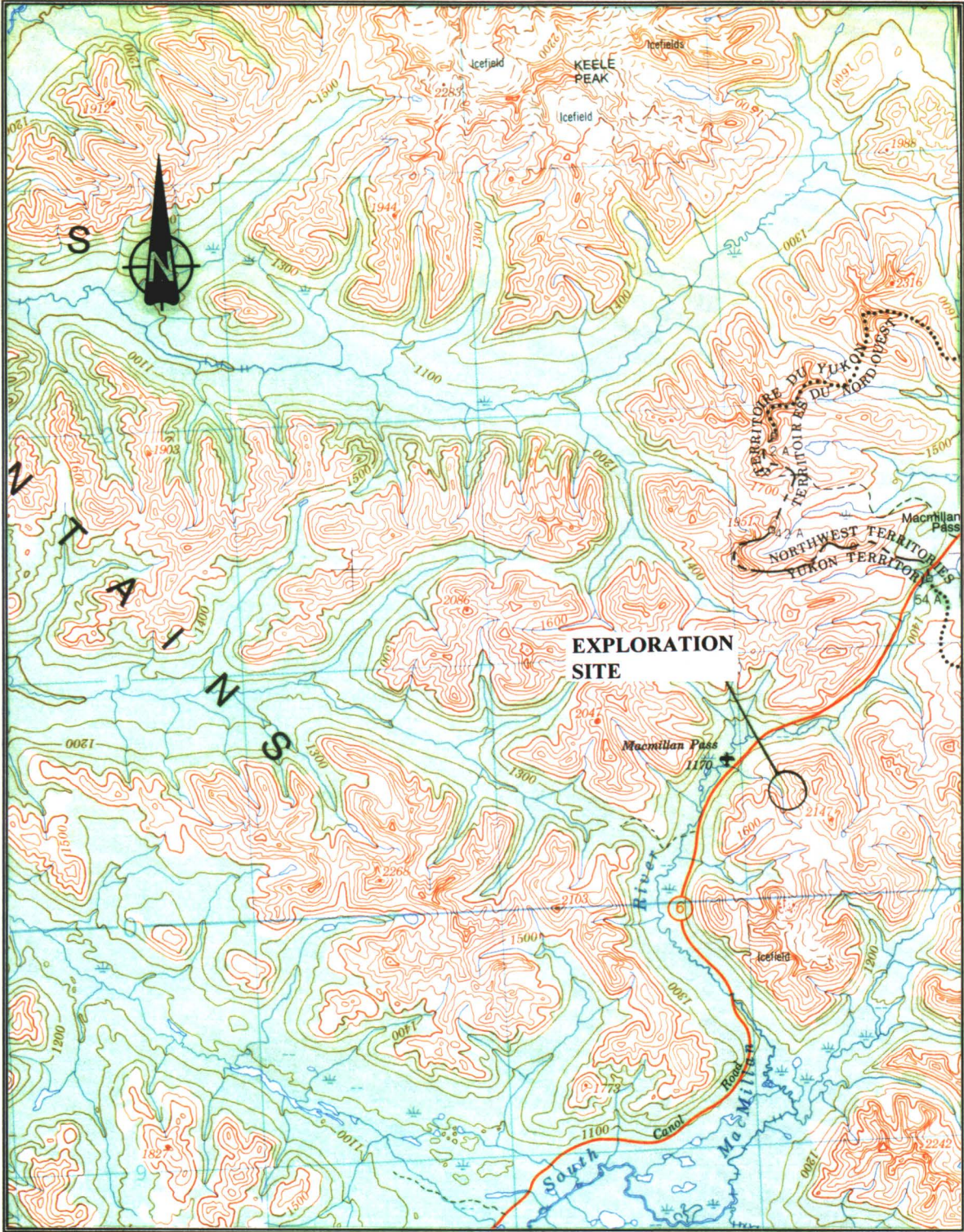
It is also recommended that all the infrastructure be removed from the site. Failure to remove the trailers, tanks, and core from the site will result in further deterioration of this infrastructure and materials. This should be considered a **MEDIUM** priority because of the potential damage from future avalanches. Clean-up could be accomplished by removing all material by road during the summer.

## SUMMARY

In summary, disturbance is extensive at this site and significant infrastructure has been left behind. Removal of the large quantities of the remaining hydrocarbon products and closure of the adits should be considered a **HIGH** priority. Clean-up of remaining buildings should be considered a **lower** priority than clean-up of the hydrocarbons. Overall regrading and revegetation of the road grid over the exploration area is not considered a practical solution to improving site conditions.

**APPENDIX A**

**SITE LOCATION MAPS**



SITE NAME: **TOM**

SITE NUMBER: **1050-1-1**

MAP NUMBER: **1050**

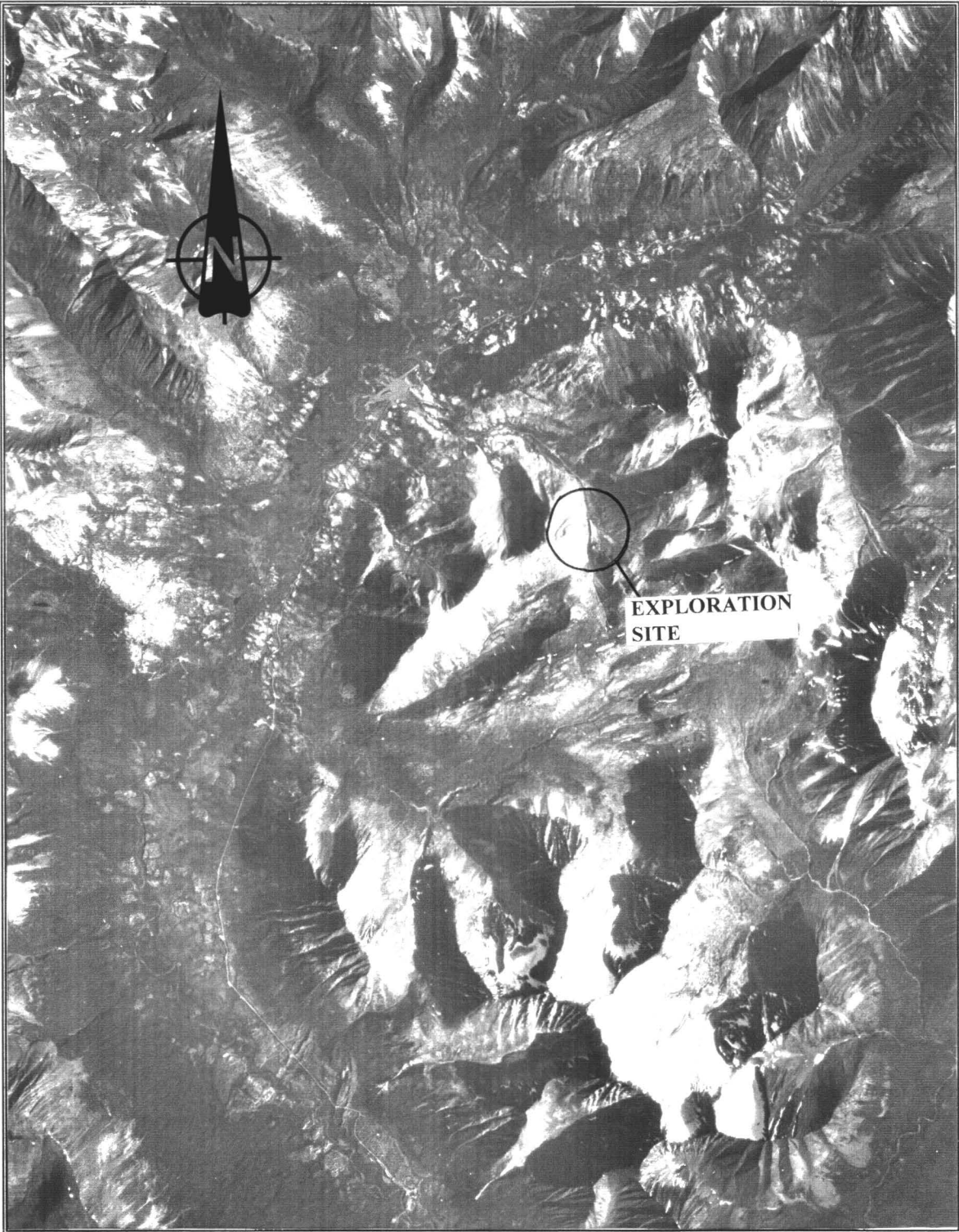
MAP NAME: **NIDDERY LAKE**

MAP SCALE: **1:250000**

SITE LOCATION:

LATITUDE: **63° 09'37"**

LONGITUDE: **130° 09'26"**



SITE NAME: **TOM**

SITE NUMBER: **1050-1-1**

AIRPHOTO NUMBER: **A24763-185** YEAR: **1977**

AIRPHOTO SCALE: **1:66000**

SITE LOCATION:           LATITUDE: **63° 09'37"**

LONGITUDE: **130° 09'26"**

**APPENDIX B**

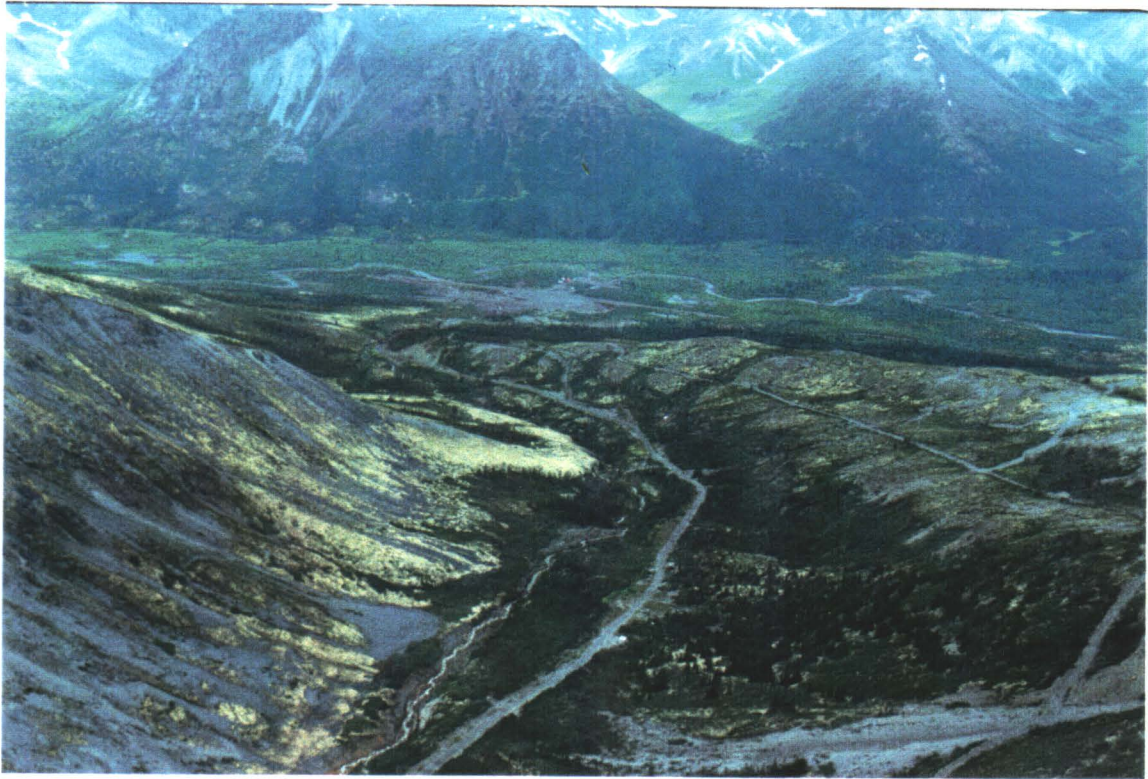
**SITE PHOTOGRAPHS**



CAMP AND ADIT LOCATION



TRENCHING AND DRILL AREA



ACCESS ROAD BETWEEN NORTH CANOL ROAD AND SITE



CAMP SITE AND DEMOLISHED TRAILERS FROM AVALANCHE



FUEL STORAGE TANKS, WORKSHOP, AND DEBRIS FROM TRAILERS



FUEL STORAGE TANKS



WATER STORAGE TANK



INTERIOR OF WORKSHOP



WORKSHOP AND CORE STORAGE



3 BAY GARAGE



WORKSHOP



INTERIOR OF 3 BAY GARAGE



ADIT (NOTE WATER DRAINING AND VENTILATION AND WATER PIPES)



MAIN COLLAPSING ADIT WITH SNOW AT ENTRANCE



CORE STORAGE AND SATELLITE RECEIVING SYSTEM



VICTAULIC PIPE