

ASSESSMENT REPORT

105C-13-1

SLATE MOUNTAIN

PREPARED BY

DIAND TECHNICAL SERVICES

JANUARY, 1994

105C-13-1

SLATE MOUNTAIN

LOCATION

Latitude: 60° 59'28"N

Longitude: 133° 43'49"W

The site is located approximately 75km northeast of Whitehorse. The site is accessible from two separate ways. The first way to access the site is to fly from Whitehorse to an airstrip at the confluence of Boswell and Wiley Creeks. From this airstrip the site is approximately 10km to the southeast on Slate Mountain. A road from the airstrip is in place. Alternatively, the site is accessible from a road intersecting the South Canal Road at Sidney Creek south of Quiet Lake approximately 40km east of the site. This road is overgrowing with willows in some sections, is being eroded in some areas, and has several creek crossings. Depending on the time of year, the creeks could be quite deep to ford. It is possible to access the site most of the summer using four wheel drive all-terrain vehicles, however this trip is expected to be difficult.

The site is between 1300-1400m above sea level on Slate Mountain in the Sawtooth Range of the Pelly Mountains.

Refer to Appendix A for location maps and airphotos of the site.

WORK HISTORY

A work history has been compiled from the Department of Indian Affairs and Northern Development Yukon Minfile records. Records 105F-003, 105F-004, 105C-008, and 105C-009 were used to compile this history. Adjacent and overlapping claims cover this area. The work history at this site follows, which is complicated because of the overlapping and adjacent claims.

1920-1934 - The area was extensively prospected and staked in the 1920's and an adit had been driven in 1934 when it was first visited by the Geological Survey of Canada. Records of these early claims have not been found.

August, 1953 - Staked as Red claims by J. Mohagen.

March, 1965 - Staked as Gopher claims by J. Mohagen which were sold to Boswell River Mining Ltd. later in the year.

1966-1968 - Boswell performed mapping, geochemical, geophysical surveys, and limited hand trenching.

August, 1976 - Restaked as Bug claims by Tintina Silver Mining Ltd.

September, 1979 - Restaked as Chess claims by Golden Empire Mining Ltd. which performed linecutting, trenching in 1980 and 1981, and mapping, geochemical sampling, and road construction in 1982.

October, 1981 - Skagway Moly Incorporated added Moly claims to the west, changed its name to Shakwak Exploration Co. Ltd., and performed dozer trenching in 1982.

October, 1988 - Restaked as RG claims by Dominion Exploration Incorporated.

CLAIMS STATUS

Status of mineral claims including claim names and numbers, claim expiry dates, and current owners in the vicinity of the Slate Mountain site have been noted as of 1992/05/15 as follows;

<u>CLAIM NAME/NUMBERS</u>	<u>EXPIRY DATE</u>	<u>OWNER</u>
BUG 1-84	December 1, 1992	Amoco Canada Petroleum Ltd./ Tintina Mines Ltd.
SM 1-8	December 1, 1992	Amoco Canada Petroleum Ltd./ Tintina Mines Ltd.
GUB 1-92	December 2, 1992	Amoco Canada Petroleum Ltd./ Tintina Mines Ltd.
SAW 1-6	July 24, 1992	Noranda Exploration Co. Ltd.

Major commodities identified at this site includes silver, lead, and molybdenum. The minor commodity is zinc.

The geology at the site consists of galena in quartz lenses within a thin 1-2m dolomite horizon at the contact between a tuff unit to the south and schist resembling the Klondike schist of the Paleozoic age.

CURRENT SITE CONDITIONS

The Slate Mountain exploration site is located in a remote location approximately 75km northeast of Whitehorse. The site can be reached using a trail from the South Canal Road or by flying to an airstrip about 10km northwest of the site. Accessing the site either of these ways is not very practical unless adequate support equipment is available. Site access is most practicable using helicopters.

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

The exploration site covers Slate Mountain, part of the Sawtooth Range of the Pelly Mountains. This site is on an eroded peak that consists of weathered bedrock at the surface. The surface material is extensively oxidized weathered rock overlying the

bedrock. The exploration site is just above tree line with short grasses and alpine vegetation covering the area above the camp location. Black spruce is growing below the camp. There are no streams or fish habitat close to the site.

Disturbance from exploration at this site covers an area approximately 2.0x1.0 km over the peak of Slate Mountain. The site has been extensively developed with a gridwork of trails over the exploration area. Most of these trails appear to have been developed for drill access with minor amounts of trenching, mostly above the camp location. The vegetation has been removed wherever the road or trenching operations took place. No exploration adit was found at this site.

Remaining infrastructure is located at three adjacent locations below the main exploration area, named for the purposes of this report as;

- 1) exploration tent camp and core storage site,
- 2) equipment and fuel storage site, and
- 3) sample storage area.

A list of specific items found at this site includes;

1) Exploration Tent Camp and Core Storage Site

- * 3 - 4.9x4.9m wood frame plywood clad storage buildings, one used to store petroleum products, and one used as a cook shack,
- * 1 - 4.9x6.1m wood frame plywood clad all purpose building with several old bags of polygel and hole stabilizer,
- * 6 - 4.9x6.1m wood frame plywood clad core storage buildings filled with core,
- * 1 - 1.2m diameter x 3.7m long fuel storage tank with approximately 300mm diesel fuel in the bottom of the tank,
- * 1 - 1.8m diameter x 5.5m long rusted fuel storage tank with approximately 150mm diesel fuel in the bottom of the tank,
- * 4 - 204 litre fuel barrels (1 full, 3 empty).

2) Equipment and Fuel Storage Site

- * one row measuring 6.1m wide x 30.5m long with wood waste including wooden pallets, timbers, etc.,
- * one row measuring 6.1m wide x 30.5m long with mostly metal waste including approximately 100 pieces of drill pipe (ranging from 38-76mm outside diameter and 3.1m long), 2 corrugated metal pipe culverts, several bundles of 25mm diameter hose, one large sleigh, 2 empty 204 litre fuel barrels, a cable spool with cable, etc.,
- * 1 wheeled wagon with a 1.2x3.1m deck,
- * 26 - 204 litre jet B barrels (one barrel was half full, all others were empty),
- * 7 - 204 litre diesel fuel barrels (all full),

- * 3 - 2.1m diameter x 6.1m long fuel storage tanks (one has approximately 300mm diesel fuel in bottom of tank, all others are empty). All tanks are on saddles on timber blocking,
- * 1 - 1.8m diameter x 4.9m long empty fuel tank on metal skids,
- * 57 empty 204 litre barrels.

3) Sample Storage Area

Several thousand plastic pails (300x300x457mm) full of sample cuttings have been stacked 3 high in a separate level storage area east of the camp and fuel storage site.

RECOMMENDATIONS

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

Exploration Area

Extensive road construction and stripping across this area has resulted in significant damage to the vegetation. There is no evidence that additional problems such as erosion, slope failures, contamination of water courses, etc. have been caused from the original activity. 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 reseedling due to its remoteness, and the difficulty of promoting growth in an extremely dry environment with very poor soil.

It is very unlikely that the constructed roads will cause future instability in the area because the site is very dry and they are constructed on shallow surficial soils overlying bedrock. This situation would not normally result in causing instability.

Camp Site

As noted, there are three parts to the camp site, namely;

- exploration camp and core storage area,
- equipment and fuel storage area, and
- sample storage area.

Overall, significant effort has been made before the exploration site was abandoned to clean up the area. All remaining equipment and supplies were neatly piled, and the tent camp was secured as well as possible.

However, the **HIGHEST** risk is for the potential of the remaining fuel on site to be spilled as long as it remains unprotected. This should be considered an environmental hazard at this site and should be cleaned up as soon as is practicable. It appears, due to very difficult road access, that the most practical way to dispose of this fuel from this remote location would be to fly a portable incinerator to the site and incinerate all remaining fuel. It is recommended that because some of the fuel is in large tanks, that they be drained into small containers to ease incineration. The back of the tanks should be raised to drain all remaining fuel. This could be accomplished by jacking the back of each tank when draining is in progress.

Once the fuel is disposed from the site, clean up of the remainder of the site would be considered a **LOW** priority. Cleaning up the site completely would require significant effort. The following steps provide an example of complete site clean up.

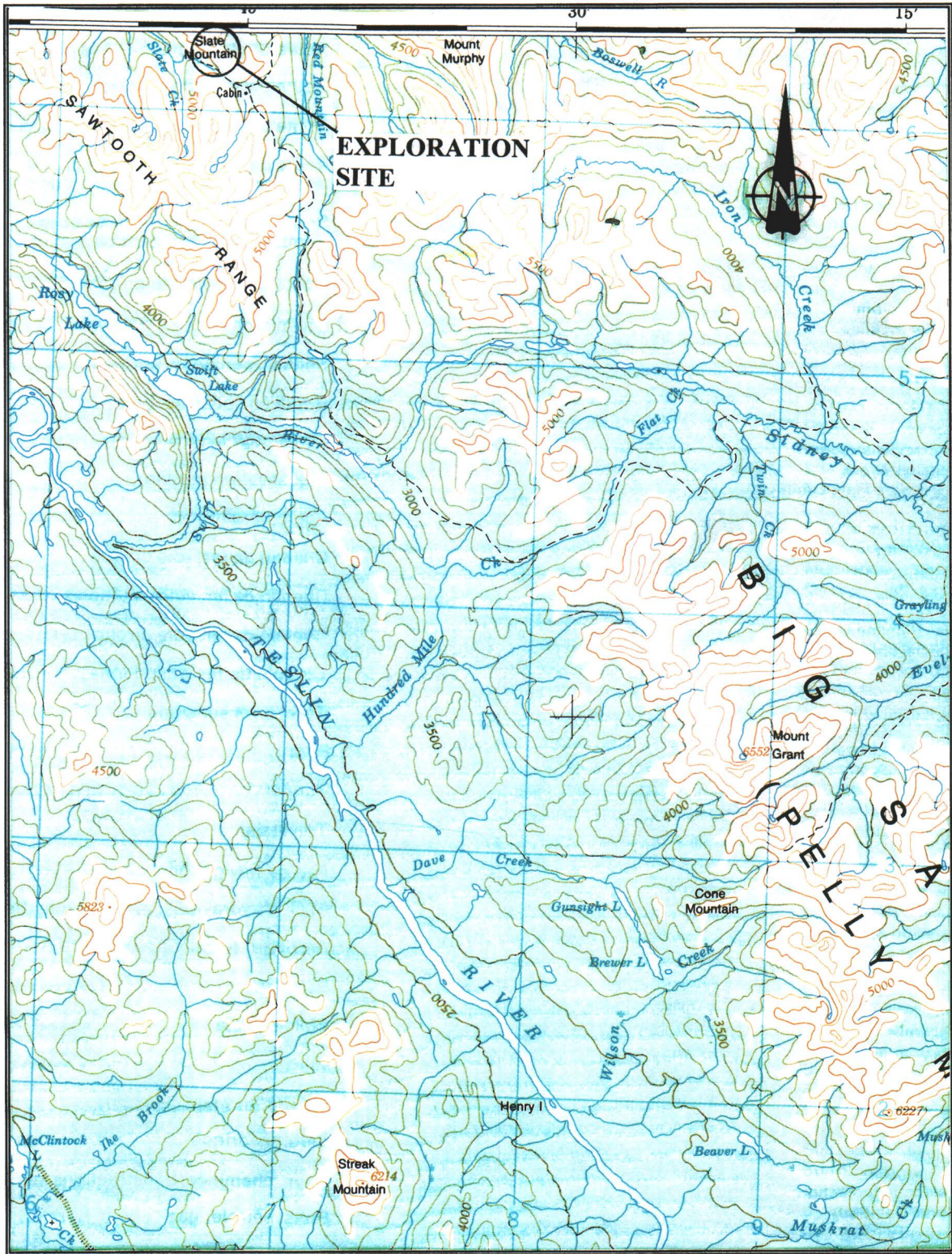
- Repair the road adequately to drive trucks into the site. This would require proper installation of culverts and clearing of overgrown right of way using approved environmental practices.
- Empty all fuel storage tanks and either incinerate or remove all hydrocarbon products from the site using acceptable methods, only if it has not been completed as a separate exercise.
- Dismantle and remove all tanks and barrels from the site.
- Load and remove any additional metal waste from the site such as pipe, sleighs, equipment, etc.
- Dismantle all wooden tent frames, wood blocking, wood buildings, etc., and burn materials in a suitable area.
- Catalogue, remove, and store rock core to an approved location.
- Assess the need to catalogue all container samples. Either catalogue and remove the container samples from the site, or empty and spread all container samples over the site and remove the containers from the site.
- Remove any temporary culverts, fill from stream crossings, and regrade the road to minimize erosion potential using current environmental practices.
- Regrade any unsightly or unsafe areas after all material has been disposed and removed from the site.

SUMMARY

In summary, disturbance is extensive at this site and significant infrastructure has been left behind. Although quantities are quite small, the need to remove and properly dispose of the remaining hydrocarbon products 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 Slate Mountain is not considered a practical solution to improving site conditions.

APPENDIX A

SITE LOCATION MAPS



SITE NAME: **SLATE MOUNTAIN**

SITE NUMBER: **105C-13-1**

MAP NUMBER: 105C

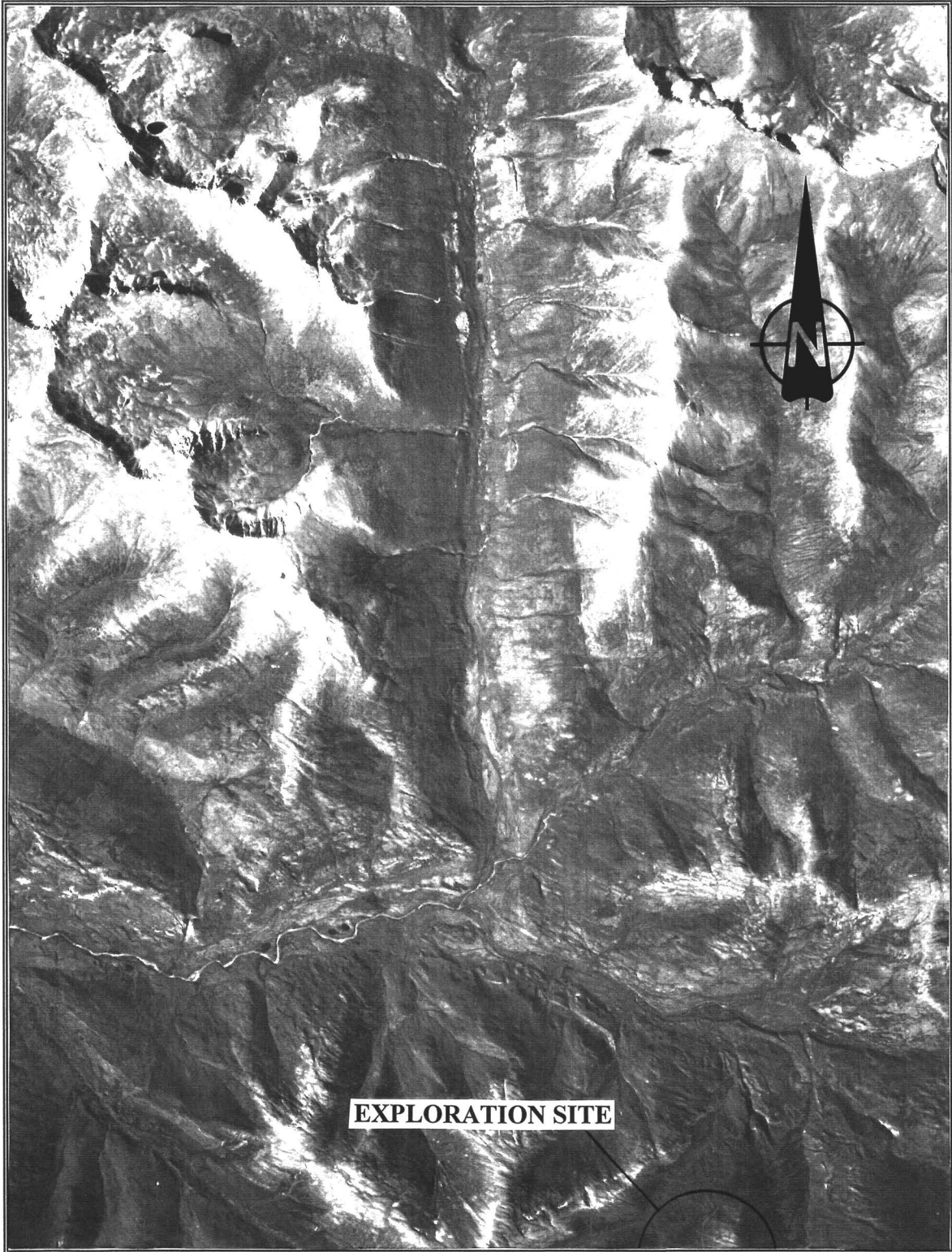
MAP NAME: TESLIN

MAP SCALE: 1:250000

SITE LOCATION:

LATITUDE: 60° 59'28"

LONGITUDE: 133° 43'49"



SITE NAME: SLATE MOUNTAIN

SITE NUMBER: 105C-13-1

AIRPHOTO NUMBER: A24519-23 YEAR: 1976

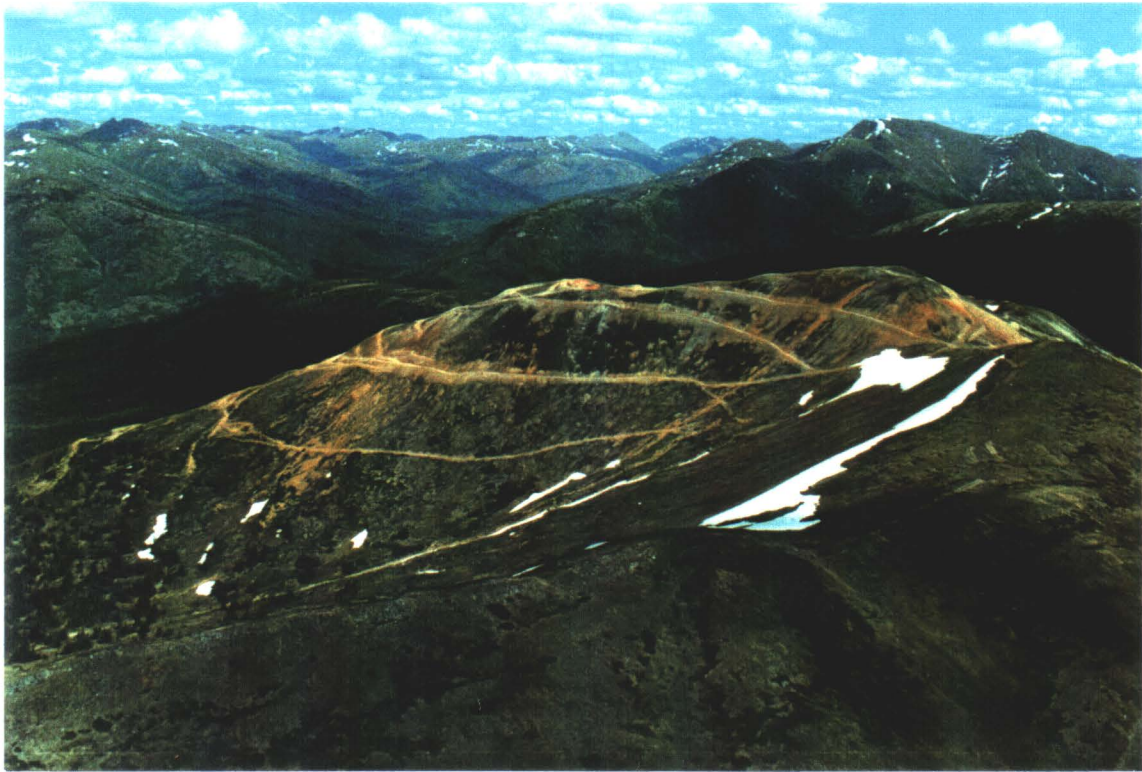
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SITE LOCATION: LATITUDE: 60° 59'28"

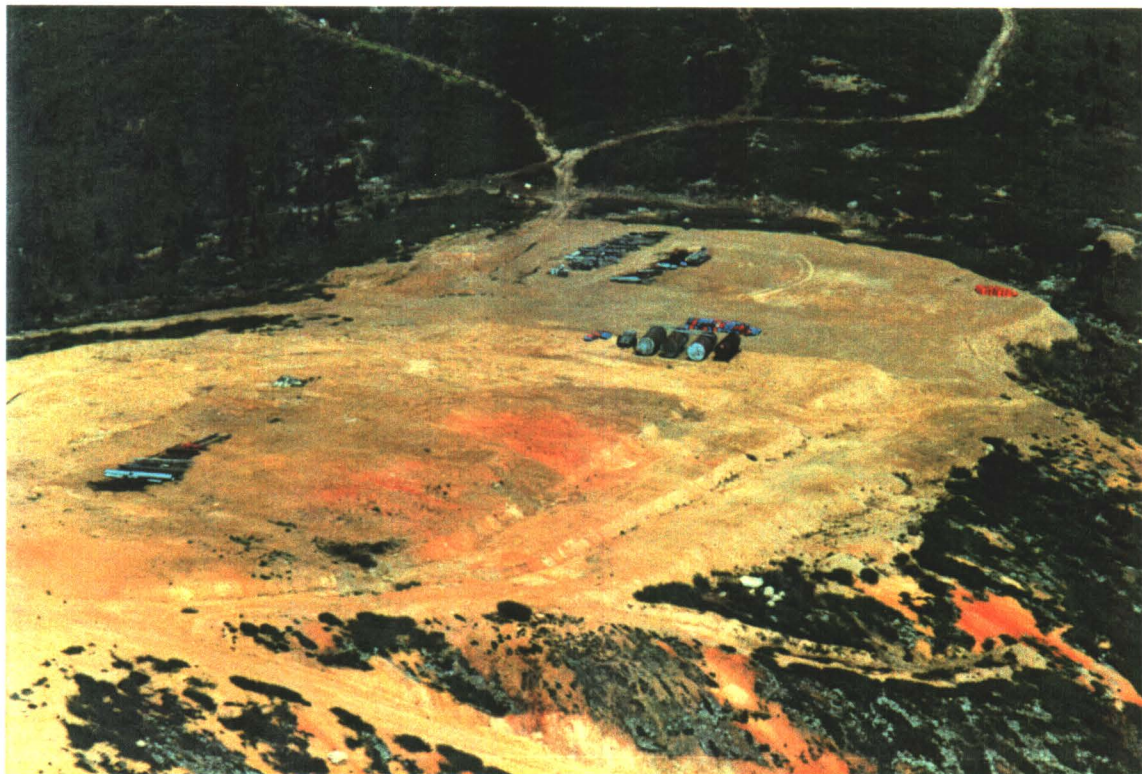
LONGITUDE: 133° 43'49"

APPENDIX B

SITE PHOTOGRAPHS



SLATE MOUNTAIN EXPLORATION SITE



EXPLORATION EQUIPMENT STORAGE AREA



BULK SAMPLE STORAGE AREA



EXPLORATION CAMP AND CORE STORAGE AREA



LOCAL AIRSTRIP



ROW OF WOOD WASTE



ROW OF METAL WASTE



FUEL TANKS AND BARRELS



FUEL STORAGE BUILDING AND TANK



FUEL TANK NEAR CAMP AREA



CAMP AREA AND CORE STORAGE BUILDINGS



CORE STORAGE BUILDINGS



BULK SAMPLES



CONTENTS OF BULK SAMPLE