ASSESSMENT REPORT

105O-02-1

SAMOVAR

PREPARED BY

DIAND TECHNICAL SERVICES

MARCH, 1994

105O-02-1

SAMOVAR

LOCATION

Latitude: 63° 01'11"N
Longitude: 130° 35'30"W

The exploration site is located approximately 165km northeast of the village of Ross River off the North Canol Road. The site located in the Selwyn Mountains, is approximately 10km northwest of the North Canol Road and southwest of the Macmillan Pass.

The site is approximately 1500m above sea level.

Site maps showing the location 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 Minfile record 105O 020. A summary of the work history follows.

August, 1975 - First staked as Tea claims by Welcome North Mining Ltd. which mapped and bulk sampled later in the year.
1976 - The barite rights were optioned to Yukon Barite Ltd. which did some bulk sampling and constructed a 12.5km road to the site. The VAR claims were added to the south by Mackenzie Resources Ltd.
1979 - The site was explored with dozer trenching and shallow drilling.
1980 - Yukon Barite Ltd. drilled one hole (128m) and shipped a 900 tonne test sample in a joint venture with Milchem Incorporated.
1981 - Some diamond drilling was completed.
1982 - Yukon Barite purchased the property and trucked 8000 tonnes to Ross River for processing into drilling mud for the Beaufort Sea market.
1984-1985 - Minor dozer trenching was performed. A majority interest was awarded by the Yukon Court of Appeal to James Eisenman in 1985.
1986 - 296m of drilling in 4 holes was completed to verify reserves.
October, 1989 - Part of the Tea claims were transferred from the estate of J. Eisenman to Coyne & Sons Ltd.
1990 - J. Coyne restaked some claims as Tay and carried out trenching and development work.

CLAIMS STATUS

Status of mineral claims including claim names and numbers, claim expiry dates, and current owners in the vicinity of the Samovar site have been noted as of 1992/03/31 as follows;

CLAIM NAME/NUMBERS	EXPIRY DATE	OWNER
Tay 1-32	February 26, 1996	Jim Coyne

The major commodity identified at this site is barite.

The barite rich zone about 100m thick occurs at the base of a shale member of the Devono-Mississippian Earn Group. Bulk sampling indicated that the barite is of high quality and requires only screening prior to grinding to yield a product exceeding minimum drilling mud specifications. Minor amounts of variscite occur with the barite. The deposit is easily amenable to open pit mining with no stripping ratio and 250000 tonnes of ore with a specific gravity of 4.24. The main showing grades from a carbonate rich base (witherite and limestone), with grey baritic shale and black carbonaceous shale, to a sulphate-rich top (bedded barite). Minor interbedded chert occurs throughout the section but tends to be more common towards the base. At least three other small showings occur nearby.

CURRENT SITE CONDITIONS

The Samovar exploration site is accessible by a 12.5km road trending northwest off the North Canol Road. The road follows the bottom of an unnamed valley that eventually leads into the site. The last part of the road rises steeply up a mountainside to the exploration site. The road appears accessible to two wheel drive vehicles.

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

The exploration part of the site is above treeline, and is covered with short grasses and alpine vegetation.

The exploration site has weathered bedrock at the surface. A detailed description of geologic conditions was give in the section above.

The only surface water in the area is from local snowmelt.

Physical development within the last 18 years included road construction, trenching, drilling, and bulk sampling. Remains from this activity includes;

- exploration trails,
- small waste piles from trenching and road construction,
- and remains of a 3.6x4.9m wood frame building.

The predominant feature from the development is the road up the valley and the exploration trails on the steep mountain slope. The road to the site was well constructed with minimal disturbance to the surrounding terrain in the valley portion of the road. As the road rises up the mountain to the main exploration area significant mass wasting down the mountain slope has been caused by excavating material out of the mountainside. This method of exploration has buried much of the original vegetation. This disturbed material has also eroded downslope. No terrain instability was apparent at the time of inspection on 1993/07/27.

The only other site disturbance is from the remains of an exploration camp. An old wood frame building with plywood walls but no roof, two pieces of metal sheathing (each measuring 2x3m), and a plywood clad outhouse are the only remaining buildings on-site. Some scattered wood lumber appears to be the only other remnants from the exploration activity left around the camp site.

RECOMMENDATIONS

The most impact at this site has been caused by the exploration activity on the mountainside This exploration activity has caused extensive damage to the vegetative cover as well as causing erosion of the excavated material that had been pushed downslope. Site remediation, if it was undertaken, would consist of reshaping the excavated mountainside. This would likely cause additional damage to vegetation and damage any new vegetation that had started to regrow on these excavated slopes. Because there appears to be little ongoing damage it is recommended that reshaping and revegetation techniques not be considered at this very remote, dry site.

Themain access road has been developed in the least damaging way, generally following the bottom of the valley leading to the site. Very little cutting or filling of the slopes resulted and no evidence of any slope instability or erosion was observed or expected. It is recommended that this road not be touched and revegetation left to occur naturally at this remote site.

The only other remaining infrastructure impacting the environment at this site is the remaining building and wood waste. This material has a **VERY LOW** impact on the environment, with the major impact being visual. It is recommended that this material be removed from the site only if a clean-up program has been initiated in the area. The wood waste material, if it was disposed, should be piled and burned in an appropriate area.

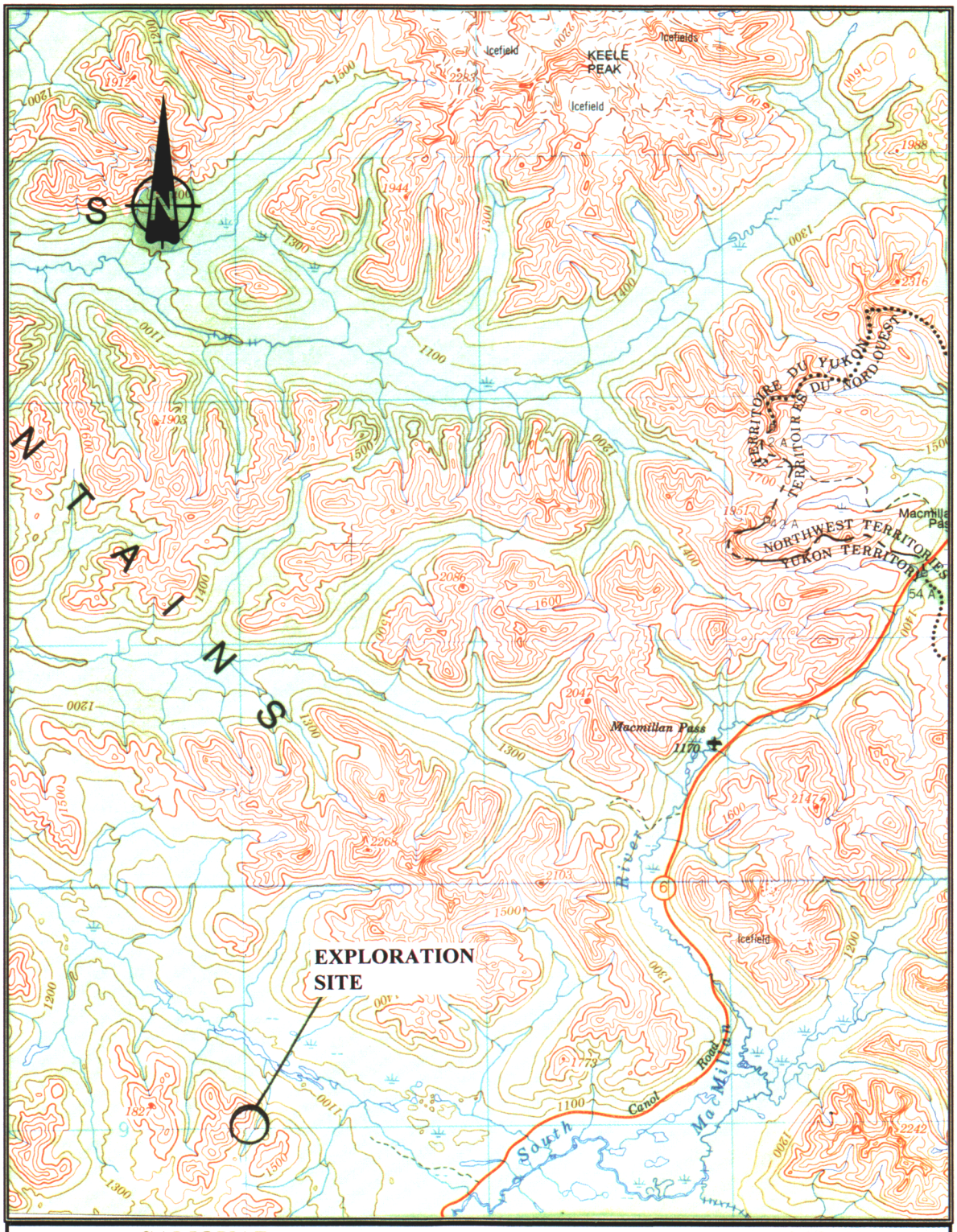
SUMMARY

The most significant environmental damage at this site occurred from the road construction and trench excavating. The impact on the environment from this activity is considered **LOW** at this site as there does not appear to be any resulting stability or serious erosion problems. Revegetating the roads, drill sites, and trenching sites is considered a low priority for this site.

The waste that has been left around the site does not appear toxic in any way and is considered to have a **LOW** impact on the area. However the site should be included in any ongoing clean-up program initiated in the area.

APPENDIX A

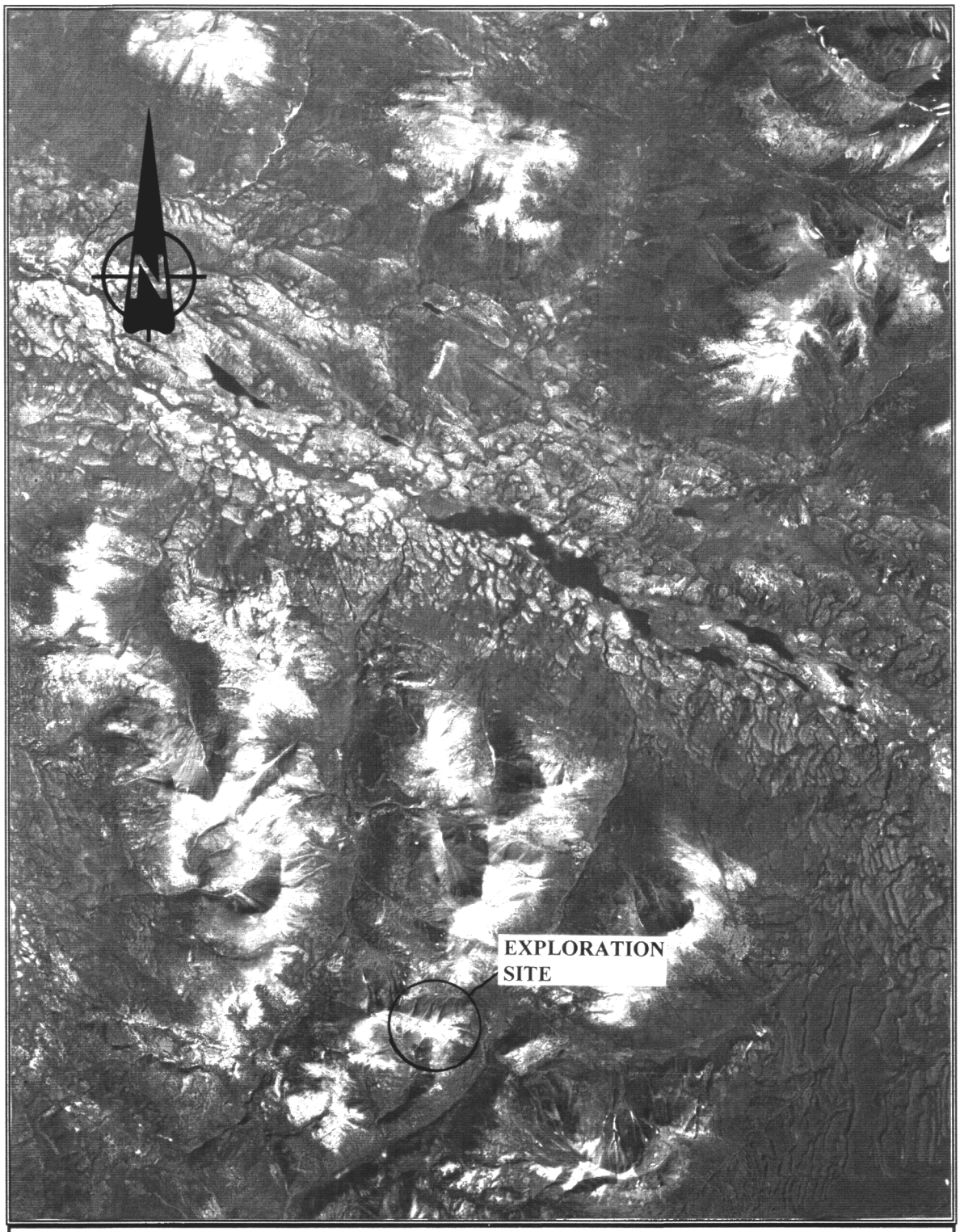
SITE LOCATION MAPS



SITE NAME: **SAMOVAR** SITE NUMBER: **105O-02-1**

MAP NUMBER: **105O** MAP NAME: **NIDDERY LAKE** MAP SCALE: **1:250000**

SITE LOCATION: LATITUDE: **63° 01'11"** LONGITUDE: **130° 35'30"**



SITE NAME: **SAMOVAR** SITE NUMBER: **105O-02-1**

AIRPHOTO NUMBER: **A24516-72** YEAR: **1976** AIRPHOTO SCALE: **1:66000**

SITE LOCATION: LATITUDE: **63° 01'11"** LONGITUDE: **130° 35'30"**

APPENDIX B

SITE PHOTOGRAPHS

ACCESS ROAD AND EXPLORATION SITE ON MOUNTAIN (LEFT)

EXPLORATION AREA

ROAD BETWEEN CAMP AND EXPLORATION AREA

CAMP SITE