

ASSESSMENT REPORT

105M-07-1

KALZAS TWINS

PREPARED BY

DIAND TECHNICAL SERVICES

JANUARY, 1994

105M-07-1

KALZAS TWINS

LOCATION

Latitude: 63° 15'58"N

Longitude: 134° 43'31"W

The site is located approximately 68km southeast of the village of Mayo and is accessible only by aircraft. A gravel airstrip has been constructed approximately one kilometre north of the exploration camp with a road connecting the airstrip, the camp, and the exploration site.

The site is between 1700-1800m above sea level on Kalzas Twins Mountain adjacent to Big Kalzas Lake.

Location maps and airphotos of the site are included as Appendix A of this report.

WORK HISTORY

A work history has been compiled from the Department of Indian Affairs and Northern Development Yukon Minfile record 105M-066. This work history follows.

August, 1978 - First staked as Black, Wolf, etc. claims by J. Randolph.

1980 - These claims were optioned to Union Carbide Mining Ltd.

1981 - Mapping and sampling was completed.

1982 - Sampling and rock trenching was completed.

1983 - Fram claims were added in March, and 2 holes were drilled (668m) with additional rock trenching.

1984 - Additional rock trenching was completed and Its claims to the north were added in June. Union Carbide dropped its option later in the year.

1989-1991 - Randolph trenched the Blackie claims in 1989, added more Wolf claims in July, 1990, and trenched in 1991.

CLAIMS STATUS

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

<u>CLAIM NAME/NUMBERS</u>	<u>EXPIRY DATE</u>	<u>OWNER</u>
PAT, BLACKIE, DAVID	August 28, 1995	J.D. Randolph
WOLF 1-4, 5-10	July 12, 1995	J.D. Randolph

Tungsten and tin are identified as the major commodities. Minor commodities include molybdenum, lead, silver, and beryllium.

Geologic conditions at the site consist of wolframite with minor amounts of scheelite, molybdenite, cassiterite, galena, and beryl in a 1000 x 800m quartz stockwork cutting gritty quartzite and phyllite of the late Proterozoic/early Cambrian Hyland group. Veins reach 60cm in width. Molybdenite, arsenopyrite, pyrrhotite, and argentiferous galena occur in quartz veins peripheral to the tungsten-tin zone.

CURRENT SITE CONDITIONS

The Kalzas Twins exploration site is located in a remote location approximately 68km southeast of the village of Mayo. The site can be reached only by air, either by fixed wing aircraft to an airstrip just north of the site or by helicopter.

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

The exploration site is located on Kalzas Twins between the Stewart River to the north and Big Kalzas Lake to the south. The site is on a barren eroded peak with weathered and fractured bedrock at the surface. The exploration site is above tree line and has little or no vegetative cover. The camp location lower and is just at tree line with a sparse covering of black spruce to 5m high, willows, and short grasses. There were no streams or fish habitat observed close to the site.

Disturbance from exploration covers quite a large area measuring approximately 1.0x1.0 km over the west side of Kalzas Twins. The site has been explored extensively with a gridwork of trails over the exploration area. Most of these trails appear to have been developed for drill access and trenching above the camp location. These trails are on the steep hillside of Kalzas Twins and have been constructed by cutting into the slope and pushing the "cut" material down the slope. Most of this trail construction was done on steep slopes with little or no vegetative cover and is quite visible. All exploration was conducted from the surface and no exploration adits have been recorded at this site.

Remaining infrastructure is located primarily at the exploration camp. Fuel barrels are also located at the airstrip and on the mountain side.

A listing of infrastructure found at this site included;

- * one Toyota four wheel drive pickup truck stored under a lean to structure attached to one of the tent frames,
- * 3 wooden tent frames. One tent frame measures 5x7m and the two others measure 4x5m. Two of these tent frames are closed in with tarps. All doorways and openings were secure at the time of inspection.
- * core in core boxes neatly stacked and measuring 3x1.5mx 2m high,
- * one sample crusher,
- * 2 - 204 litre barrels containing residual amounts of diesel,
- * 4 - 204 litre barrels of diesel at the camp site,
- * 15 - 204 litre barrels of aviation gas located at the airstrip, and
- * 2 - 204 litre barrels on the mountainside (Contents unknown).

RECOMMENDATIONS

Trenching and trail construction at this site has resulted in extensive surficial disturbance. This trail construction has taken place on steep, dry, rock talus slopes with little or no vegetative cover. These trails were constructed on steep slopes by "cutting" into the side slope and "filling" or "wasting" material down the slope to provide a flat road surface. The result has been that placing this material downslope has left this very visible feature on the landscape. However, because the material is rock and well drained, the slopes are stable and this activity should not cause slope failures in the future. The environmental damage caused by the exploration at this site is only visual. Site remediation to rectify the visual impact would involve extensive reshaping of the trails to the original topography. This is not considered a practical solution as it would be very costly and cause additional disturbance to an exposed site. It is recommended that this **LOW** priority remote site be left in its present condition.

At the exploration camp significant effort has been made to clean up the area. All remaining equipment and supplies were neatly piled, and the tent camp was well secured. The highest risk at the camp and airstrip is the possibility of the remaining fuel on site could 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. 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 or remove the fuel from the site to Mayo. Once the fuel is disposed from the site, clean up of the remainder of the site would be considered a **LOW** priority.

If a program to clean up low priority sites is initiated the camp could be dismantled and cleaned up. This should include cataloguing all core, removing any metal waste, demolishing the wood frame structures, and burning all wood waste on-site.

SUMMARY

Extensive surface exploration resulted in significant ground disturbance at this site. This disturbance has left a highly visible site in a remote location. However the work that has taken place should not cause additional damage in future. It is recommended that the exploration site be left alone to avoid further damage and allow any naturally occurring remediation to take place.

The hydrocarbon products on-site are well contained, volumes are relatively small, but they could potentially spill or leak into the surrounding environment. The need to remove and properly dispose of these remaining hydrocarbon products should be considered a **HIGH** priority.

The need to clean up of remaining buildings is considered a **LOW** priority at this time.

Overall, the site has been left in good condition and was methodically secured when it was closed.

APPENDIX A

SITE LOCATION MAPS



EXPLORATION SITE

SITE NAME: **KALZAS TWINS**

SITE NUMBER: **105M-07-1**

MAP NUMBER: **105M**

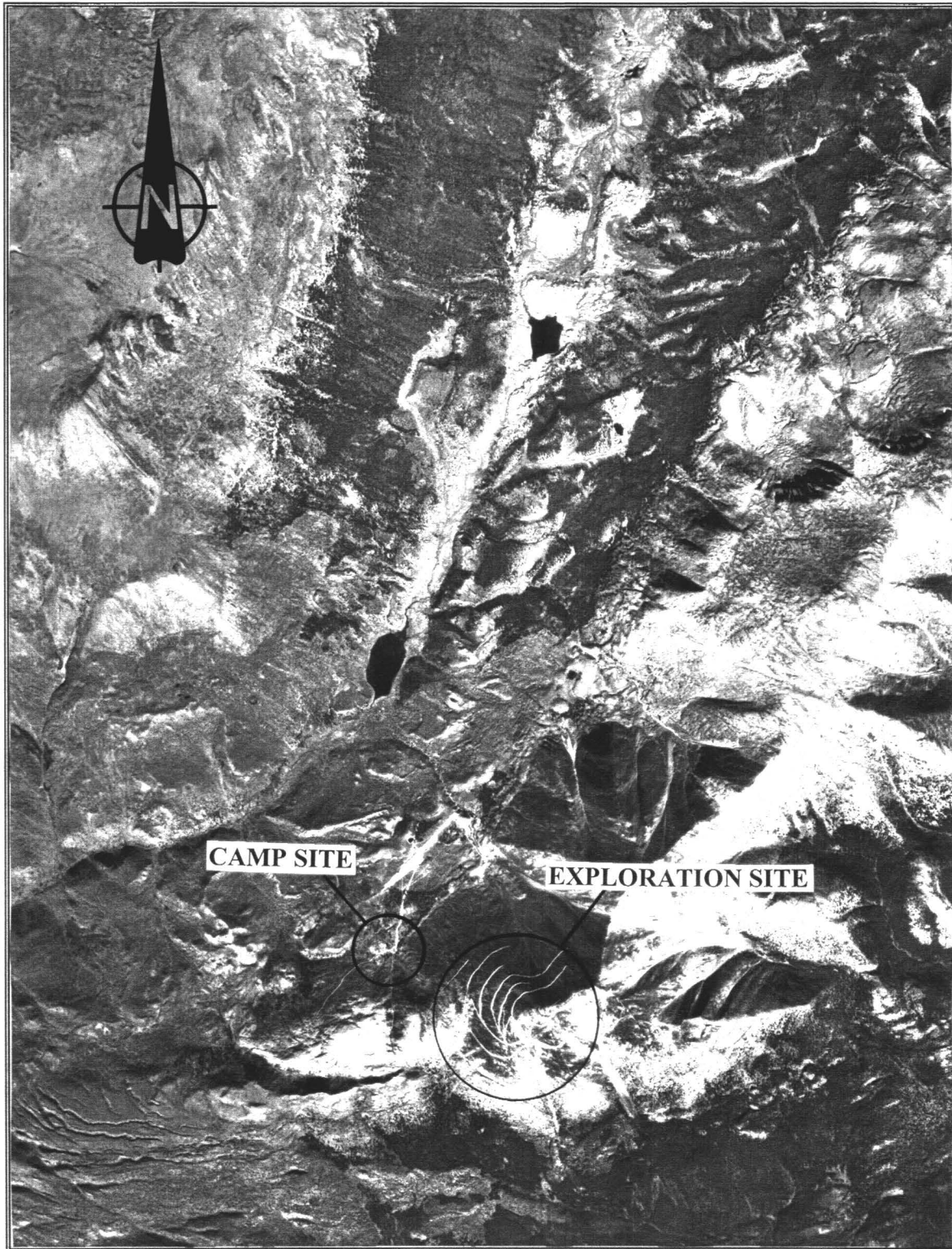
MAP NAME: **MAYO**

MAP SCALE: **1:250000**

SITE LOCATION:

LATITUDE: **63° 15'58"**

LONGITUDE: **134° 43'31"**



SITE NAME: KALZAS TWINS

SITE NUMBER: 105M-07-1

AIRPHOTO NUMBER: A27384-180 YEAR: 1988

AIRPHOTO SCALE: 1:40000

SITE LOCATION: LATITUDE: 63° 15'58"

LONGITUDE: 134° 43'31"

APPENDIX B

SITE PHOTOGRAPHS



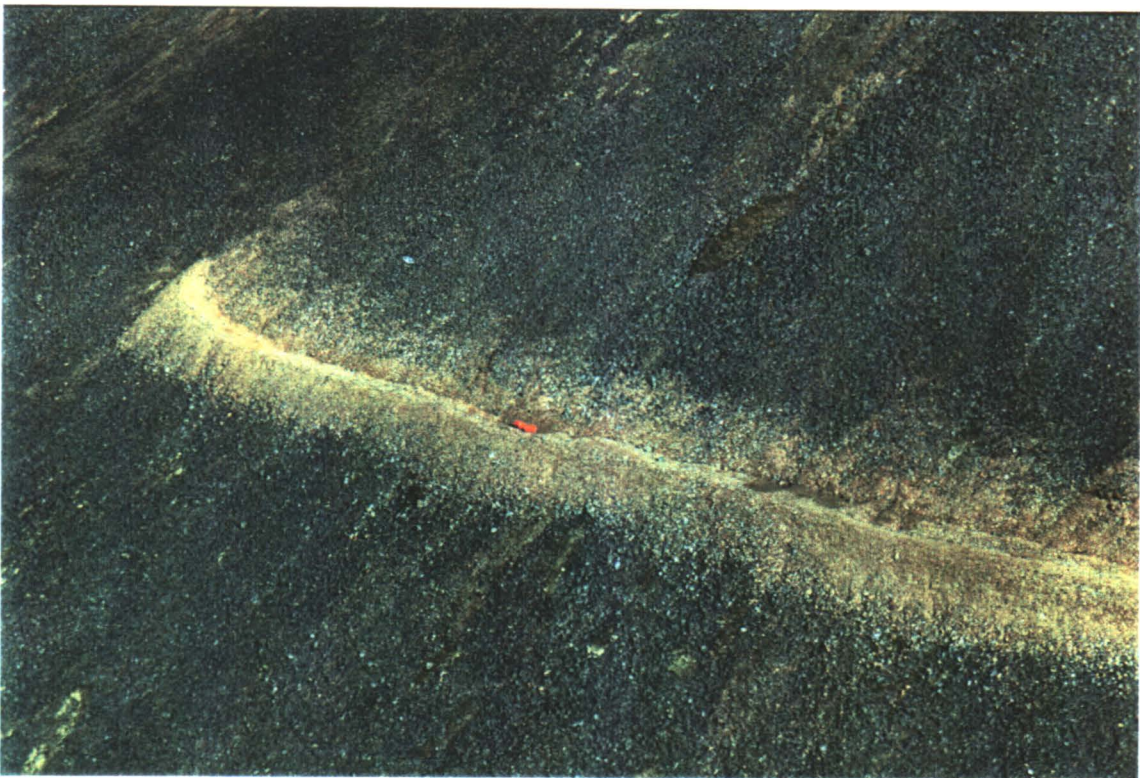
AIRSTRIP, CAMPSITE, AND EXPLORATION AREA



EXPLORATION TRAILS



EXPLORATION TRAILS



FUEL BARRELS ON EXPLORATION TRAIL



FUEL BARRELS ON AIRSTRIP



CAMP SITE



CAMP SITE



CORE AT CAMP SITE