

**ASSESSMENT REPORT**

**106F-07-1**

**CREST**

**PREPARED BY**

**DIAND TECHNICAL SERVICES**

**MARCH, 1994**

**106F-07-1**

**CREST**

**LOCATION**

Latitude: 65° 16'00"N

Longitude: 133° 08'00"W

The site is in an extremely remote location approximately 230km northeast of the community of Mayo. The site is located in the Backbone Ranges of the Mackenzie Mountains near the headwaters of the Snake River. An airstrip near the site allows fixed wing aircraft to access the area.

The exploration site covers a large area and ranges in elevation from 750-1450m above sea level.

Site location maps are included as Appendix A. Site photographs showing site conditions are attached as Appendix B.

**WORK HISTORY**

A work history has been compiled from the Department of Indian Affairs and Northern Development Yukon Minfile record 106F 008. This work history follows.

1962 - A total of 862 claims (an area of about 240 square kilometres) were staked by California Standard Co. Ltd. and transferred them to a new subsidiary company, Crest Exploration Ltd. which drilled one hole and mapped the area.

1963-1964 - 19 holes were drilled and 45 channel samples were cut. The entire property was surveyed and taken to lease and a feasibility study was carried out by Canadian Bechtel Ltd. for which two bulk samples totalling about 110 tonnes were shipped out for metallurgical tests. A total of approximately 3000m of drilling was completed, including 7 holes drilled on the NWT claims.

**CLAIMS STATUS**

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

<u>CLAIM NAME/NUMBERS</u>	<u>EXPIRY DATE</u>	<u>OWNER</u>
- 525 Iron claims	1992/1993	Crest Exploration Ltd.

The major commodity identified at this site is iron.

Geology at this site is an iron formation composed essentially of unaltered hematite and jasper occurring near the base of the Rapitan Formation of the Upper Proterozoic age. Thickness is up to 152m and average iron content is 43% and ranges as high as 65%. Thin layers with primary sedimentary features suggest that chemical deposition of alternating silica and hematite rich layers was interrupted by the influx of flows of conglomerate and mud, which scoured channels in the soft iron and silica sediment. Some of the fine grained clastic beds impregnated with hematite have the appearance of tuff or volcanic ash that settled in the soft hematitic ooze. The hematite and silica are believed to have been carried in solution by fumarolic waters and precipitated in grabens on the sea floor. Phosphorus is the main impurity, occurring as finely disseminated apatite.

#### **CURRENT SITE CONDITIONS**

The Crest exploration site is located in the Backbone Ranges of the Mackenzie Mountains near the headwaters of the Snake River. The site is very remote and is only accessible by aircraft. An airstrip has been constructed on the east side of the Snake River making the use of fixed wing aircraft to the site possible.

The site covers a very large area of mountains in the area. No evidence was found of any past exploration activity on the mountain slopes, however the camp location near the airstrip was found and inspected on 1993/07/25.

Vegetation at the site varies from a covering of willows and short black spruce in the Snake River valley to very sparse vegetation on the surrounding mountain slopes.

The only surface water in the area is the Snake River, a braided stream flowing from the surrounding mountains draining into the Peel River to the north.

Infrastructure found at the airstrip includes;

- 4.9m diameter and 7.3m high vertical fuel storage tank. The tank is empty,
- approximately 60 - 204 litre barrels. Over 25 barrels are full of very old aviation gasoline,
- 6 - 204 litre barrels of oil,
- 4 - 23 litre pails of oil,
- 6 - 45 litre barrels (empty).

Across the airstrip remains of a camp and radio transmission tower have been left in place. This camp is currently in use by an outfitter with most of the buildings being maintained and stocked. A list of these buildings includes;

- 3.7x4.9m wood frame plywood clad sleeping cabin,
- 4.9x4.9m wood tent frame (folded),
- 2.4x3.7m wood frame wood clad smoke house,
- 4.9x6.1m wood frame wood clad cookhouse, and
- 2.4x3.7m wood frame wood clad maintenance shed.

Some or all of these buildings may be from the time exploration was underway at this location, however this could not be confirmed from the inspection.

The airstrip appears to be useable, however vegetation is beginning to encroach onto the airstrip and will eventually need to be cleared if the airstrip is to be maintained.

### **RECOMMENDATIONS**

The site is in an extremely remote location and covers a large area of approximately 240 square kilometres. The exact location of past exploration could not be found within this very large exploration area and is no longer very obvious .

The airstrip constructed in the area is the most obvious environmental damage that occurred at this site. It is recommended that this airstrip be left in its present condition to provide access to the area.

The only remaining material found from the exploration activity centred around the airstrip. At the airstrip a large damaged fuel storage tank has been left from the exploration in the early 1960's. The main environmental concern observed was the 25 barrels of aviation gasoline, 6 barrels of oil, and 4 pails of oil left on-site. These hydrocarbon products have been left at this site for many years and the product does not appear useable. However, these hydrocarbon products still could be spilled and cause environmental damage to the area. Although this site is extremely remote, people are entering the area and a spill could be caused. It is recommended that the hydrocarbon products be either removed from the site or properly incinerated.

The remaining buildings appear to have been put to use and are currently being used by an outfitter in the area. It is recommended that these buildings be excluded from any clean-up program initiated for the area.

## SUMMARY

Construction of the airstrip appears to have caused the most environmental impact at this site. There appears to be little ongoing impact from this past construction and no further action is recommended.

The hydrocarbon products left on-site pose the highest potential damage to the environment. Although no spill appears to have resulted over the many years the fuel has been left on-site, the potential for a spill still exists. It is recommended that this fuel be removed from the site or incinerated. It is also recommended that all metal barrels and storage tanks also be removed if a general clean-up program is initiated in the area.

The camp site is obviously being used and should not be touched at this time. If any effort is made to clean-up this area, the user of the remaining facilities should be first consulted.

**APPENDIX A**

**SITE LOCATION MAPS**



SITE NAME: **CREST**

SITE NUMBER: **106F-07-1**

MAP NUMBER: **106F**

MAP NAME: **SNAKE RIVER**

MAP SCALE: **1:250000**

SITE LOCATION:

LATITUDE: **65° 16'00"**

LONGITUDE: **133° 08'00"**



SITE NAME: CREST

SITE NUMBER: 106F-07-1

AIRPHOTO NUMBER: A20683-165 YEAR: 1968

AIRPHOTO SCALE: 1:55000

SITE LOCATION: LATITUDE: 65° 16'00"

LONGITUDE: 133° 08'00"

**APPENDIX B**

**SITE PHOTOGRAPHS**



GENERAL VIEW OF SITE



GENERAL VIEW OF AREA



TANK, END OF AIRSTRIP, AND OUTFITTER'S CAMP



EMPTY FUEL STORAGE TANK



BARRELS LEFT ON-SITE



STEEL TOWER AND DISMANTLED TENT FRAME