DUNCAN

SITE #43

MINFILE# 105M 003

1. LOCATION AND ACCESS

The Duncan site is located near the top of Keno Hill, approximately 1 km west, southwest of Caribou Hill summit and 1km east of Monument Hill summit. Access by foot to Caribou Hill is possible via the Hope Gulch Trail, however, no foot trail exists from the cirque rim to the shaft. The site is located at the approximate UTM co-ordinates 7 090 770m N and 492 200m E (Latitude: 63° 56' 36"N, Longitude: 135° 08' 32"W).

2. SITE PHYSIOGRAPHY

The site area is straddles the north and south sides of the Silver Basin Gulch cirque at an elevation of 5600ft (1700m). The trenches are on the moderately steep south side of the cirque, just below the rim. The Duncan showing and shaft are on the very steep north facing cirque wall approximately 90m below the rim of the cirque. Surface runoff from the trenches likely drain into Hope Gulch, a tributary of Lightening Creek. Surface runoff from the shaft area drains into Silver Basin Gulch, a tributary of the Keno Ladue River.

3. GEOLOGY AND MINERALIZATION

The Minfile reports that the host rock is the Keno Hill Quartzite and that the veining contains galena and tetrahedrite in a siderite gangue. Some quartz, in a rusty coloured quartz-muscovite-sericite-phyllite, was observed around the shaft, but it could have come from above the shaft. In all five trenches, Earn Group rocks, mainly quartz, sericite chlorite, phyllite and lessor carbonaceous phyllite were observed. One trench had a section of siliceous carbonaceous metasiltstone.

4. SITE HISTORY

Between 1919 and 1923 a 14m shaft and 12m of drifting was excavated in the shaft. Roughly 11.8 tonnes of ore grading 23,147 g/t silver and 22% lead was shipped from the cirque workings. Between 1946 and 1962 and in 1989 the bulldozer trenches were excavated south of the cirque rim.

5. MINE DEVELOPMENT

Mine development consists of one shaft, five trenches and associated waste rock piles. No ore was processed at this site and no tailings were encountered. Site details can be found on Figure 1 and site photos are in Appendix 1.

5.1 Mine Openings and Excavations

Shaft (photo 43-1)

The shaft is located roughly 90m vertically below the rim of the cirque. It has collapsed approximately 1m below the collar. There is a windless and broken log cribbing at the entrance to the shaft.

Dimensions (L x W x H): 1.5m x 1.5 m x 14m

Supports: The log cribbing has collapsed and blocks the entrance to the shaft.

Condition: The shaft is collapsed approximately 1m below the surface.

Accessibility: The shaft could not be accessed.

Trenches

Four trenches cut bedrock immediately south of the cirque rim and a fifth trench is located approximately 350m south of the cirque rim.

Trench #1

Trench #1 is the westernmost trench immediately to the south of the cirque rim.

Dimensions (L x W x H): 55m x 2m x 1m

Condition: The trench appeared stable at the time of the site visit.

Accessibility: The trench is accessible.

Trench #2

Trench #2 is 10m to the east and parallel to trench #1, immediately south of the cirque rim

Dimensions (L x W x H): 35m x 2m x 1m

Condition: The trench appeared stable at the time of the site visit.

Accessibility: The trench is accessible.

Trench #3 (photo 43-2)

Trench #3 is 5m to the east of trench #2, immediately south of the cirque rim.

Dimensions (L x W x H): 40m x 2-4m x 1m

Condition: The trench appeared stable at the time of the site visit.

Accessibility: The trench is accessible.

Trench #4

Trench #4 is 10m to the east and parallel to trench #3, immediately south of the cirque rim.

Dimensions (L x W x H): 40m x 1-4m x 1m

Condition: The trench appeared stable at the time of the site visit.

Accessibility: The trench is accessible.

Trench #5

Trench #5 is located approximately 350m south of the cirque rim, to the south-southwest of trench #1.

Dimensions (L x W x H): 20m x 2-4m x 0.5-2.5m

Condition: The trench appeared stable at the time of the site visit.

Accessibility: The trench is accessible.

5.2 Waste Rock Disposal Areas

There are six small waste rock piles associated with the Duncan workings. At the time of the site visit, there was no surface water encountered on top of any of the piles.

A pile of waste rock roughly 5m deep was observed near the shaft. The surface of the waste rock pile is composed of rusty coloured chlorite sericite schist with minor quartz veining. Given the size of the shaft the waste rock pile was expected to be larger, however, the shaft site is on a steep slope and consequently dump material likely moved down slope.

There are small waste rock piles located at the ends of the five trenches. The surface of the waste rock is mostly overburden with a small volume of sericite phyllite (Earn Group rocks).

6. MINE SITE INFRASTRUCTURE

There is one collapsed building at this site. No mine site infrastructure such as rail and trestle, electrical equipment or fuel storage areas was encountered.

6.1 Building 43A (photo 43-3)

One collapsed wood frame building was noted on site located 25m northwest of the shaft.

Dimensions (L x W x H): 10m x 10m x ?

Paint: No paint was observed.

Asbestos: No asbestos was observed.

Foundation: none

Non-Hazardous Contents: No non-hazardous contents were observed.

Hazardous Contents: No hazardous contents were observed.

7. SOLID WASTE DUMPS

There were no solid waste dumps encountered at this site.

8. POTENTIAL CONTAMINANTS OF CONCERN

No hazardous materials were encountered at the site. Potential contaminants of concern include any metals washing from the waste rock piles and the trench walls.

9. WATER QUALITY

There was no surface water encountered at the site.

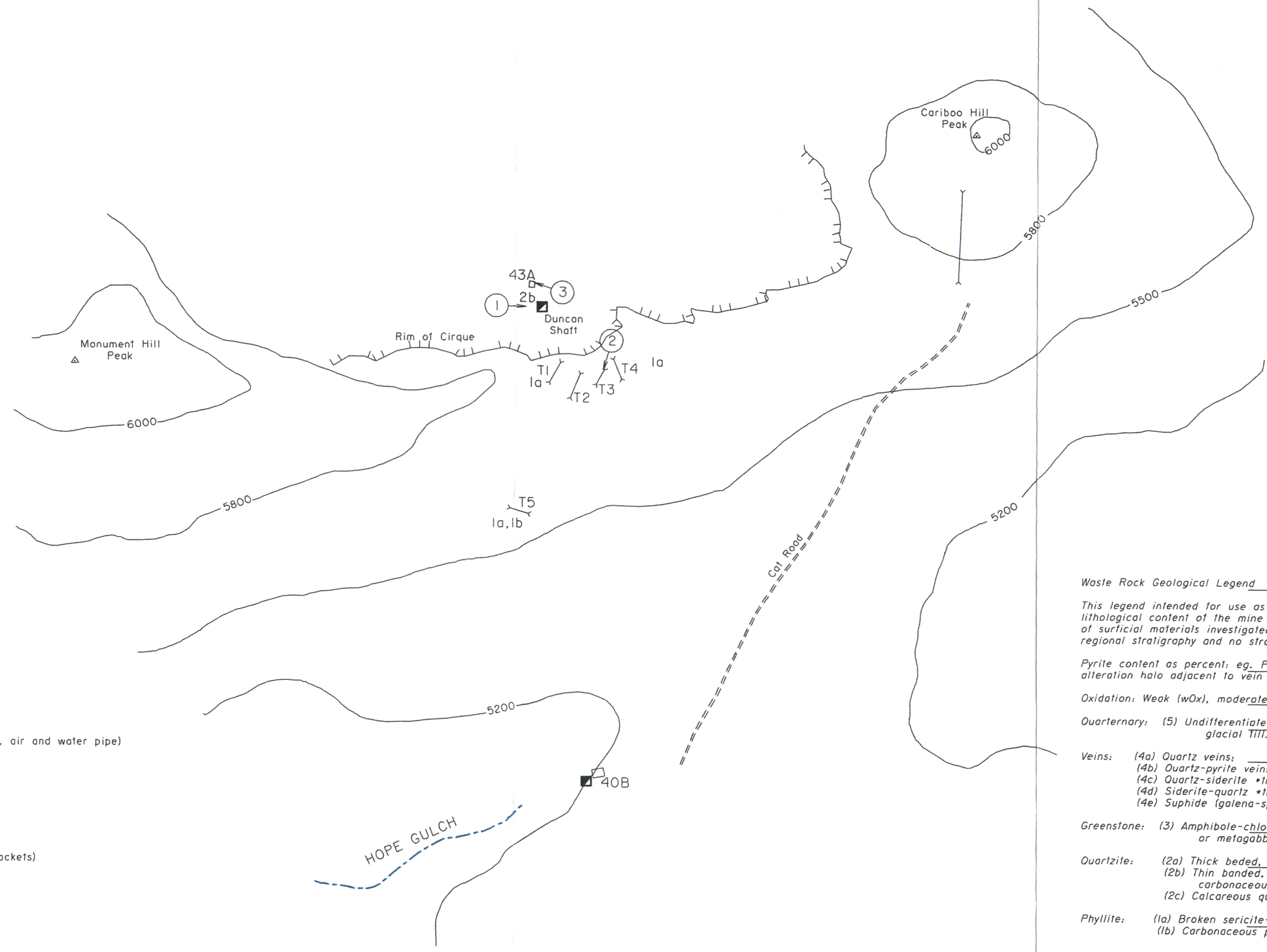
10. RECLAMATION

The five trenches are naturally revegetating.

11. REFERENCES AND PERSONAL COMMUNICATIONS

Minfile #105M 003

- Building (22A: building site present reference* Indicates Asbestos Material
- 22A Collapsed Building
- Adit
- Collapsed Adit
- Shaft
- Collapsed/Backfilled Shaft
- Mine Rock Dump
- Bedrock Open Pit
- Trench
- Stripped Overburden Stockpile
- Stripped / Disturbed Area
- Outcrop Boundary
- Highway
- Road (gravel, 2 wheel drive)
- Road (gravel, 4X4 accessible)
- Road (inaccessible)
- Trail
- Culvert
- 24501-01 1999 Soil Sample (this study)
- Pre 1999 Soil Sample (other sources)
- 25WR04-01 1999 Waste Rock Sample (this study)
- Pre 1999 Waste Rock Sample (other sources)
- WO-12-06 1999 Water Sample
- Pre 1999 Water Sample
- Tension Cracks
- Mass Movement (note: for Forms: BelleKeno)
- Groundwater Seep
- Surface Water Flow (Stream, Creek, River)
- Lake
- Settling Pond / Water Treatment Pond
- Tailings Dam / Tailings Pond / Mill Tails
- Ponded Water / Trench
- Barrels
- Abandoned Equipment (compressors, ore cars, rails, air and water pipe)
- Mine Rails / Trestle
- Collapsed Trestle
- Solid Waste Disposal Site
- Area of Soil Contamination
- *(6) Transformer Loaction (number of transformer in brackets)
- Power Line
- Power Line Collapsed
- Aerial Transmission Towers
- 5 Photo Site (arrow shows view direction)
- GPS Survey Location
- Former Building Site (Elsa)



Traced From Air Photo NW95030-60

0 100 200 300 400

Scale 1:10,000

CAD FILE: SITE43.DGN

Waste Rock Geological Legend

This legend intended for use as a key to the observed lithological content of the mine dumps and stockpiles of surficial materials investigated.It does not represent regional stratigraphy and no stratigraphic sequence is implied.

Pyrite content as percent: eg. Py 2%. Occurs as an alteration halo adjacent to vein fault structure.

Oxidation: Weak (wOx), moderate (mOx) and intense (iOx).

Quarternary: (5) Undifferentiated, unconsolidated colluvium, glacial Till.

Veins: (4a) Quartz veins;
(4b) Quartz-pyrite veins;
*(4c) Quartz-siderite *trace galena-sphalerite veins;*
*(4d) Siderite-quartz *trace galena-sphalerite veins;*
*(4e) Suphide (galena-sphalerite) *quartz*siderite veins.*

Greenstone: (3) Amphibole-chlorite-plagioclase metadiorite or metagabbro.

Quartzite: (2a) Thick beded, blocky gray quartzite;
(2b) Thin banded, broken, quartzite with carbonaceous phyllite interbeds;
(2c) Calcareous quartzite.

Phyllite: (1a) Broken sericite-chlorite phyllite;
(1b) Carbonaceous phyllite.

Public Works And Government Services Canada / Travaux publics et Services gouvernementaux Canada

Architectural & Engineering Services Western Region

Drawing title: / Titre du dessin:

Duncan Site #43 Site Assessment

Yukon Territory

date:	
designed by:	
concu par:	
drawn by: / dessine par:	C.S. Nov./99
approved by: / approuve par:	
revisions:	
project no. / no. du projet:	125-12.01
dwg. no. / dessin no.	1 of 1

Photo 43-1 : Duncan. Collapsed shaft with windlass still in place across the top. (Azimuth ~090°)

Photo 43-2 : Duncan. Trench #3 with waste rock pile at the end. (Azimuth 215°)

Photo 43-3 : Duncan. View of Building 43A. (Azimuth ~300 ^{o})