

TIN CAN (#15)
MINFILE# 105M 001q

1. LOCATION AND ACCESS

There is no access road into this site, although there is some evidence of a very old track running uphill south of the site, possibly from near the Galkeno 900 adit. The nearest access road is Highway 2 located approximately 250 meters downhill to the east of shaft #1.

Shaft #1 is located at 63° 55' 31.6" N; 135° 19' 53.3" W and shaft #2 is located approximately 25 meters north east of the first shaft. The shallow test pits are located approximately 100 meters uphill (west) of shaft #1. The shafts are at an approximate elevation of 960 m and the test pits at 980 m. UTM co ordinates are 7088748.512m N 483743.845m E.

2. SITE PHYSIOGRAPHY

Site drainage is down the steep valley slope east toward Christal Creek. A seasonal stream is located south of the site running parallel to the two shafts approximately 100 m south of the site. No surface drainage was noted from the site. The shafts are located in a relatively level area of open muskeg forest. The test pits are located on a slope immediately uphill (west) of the shafts in rocky terrain. Drainage from the pit area is probably towards a second seasonal channel to the northwest, however, this was dry at the time of the site visit.

3. GEOLOGY AND MINERALIZATION

The area is underlain by Earn Group schist and phyllite with greenstone lenses. The Greenstone forms ridges, and the workings at the greenstone contacts. An ankerite-calcite-quartz-siderite vein up to 1.5m wide is mineralized with sphalerite, pyrite, limonite, cerussite, anglesite and galena. The vein cuts greenstone, quartzite, phyllite and graphitic schist. The workings are all overgrown, and the site geology is therefore from literature.

4. SITE HISTORY

Two shafts, 9.8m and 4.6m deep were dug pre-1926. It is unknown which of the two shafts located is the deeper. Ground sluicing is also reported, and a narrow ditch was located that channeled water from a flat marshy area to a steep slope, with little disturbance evident at this time. This ground sluice is located about 30m west of the shafts. Several shallow (0.5m deep) test pits were dug on the ridge to the west in the same era. All workings are overgrown.

There is no evidence of more recent work, however a trail crosses the area that may be a winter skid road from exploration since the 1960's.

5. MINE DEVELOPMENT

Mine development was limited to two shallow timber-lined shafts as well as four identifiable small test pits uphill from the shafts.

5.1 Mine Openings And Excavations

Shaft #1 (photo 15-1)

A hole in a boggy area filled almost to the rim with water. Remains of an old ladder project from the hole.

Location: 63° 55' 31.6" N; 135° 19' 53.3" W.

Dimensions (L x W x H): 2 m x 2 m, depth unknown

Supports: None evident.

Condition: Organic material has slumped into hole. Quite stable due to water filling hole.

Accessibility: Easy access on foot. Low risk, similar to a natural pond.

Samples: No samples were collected, as no inorganic material was visible or readily accessible.

Shaft # 2(photo 15-2)

Collapsing timbered shaft, dense revegetation. Digging into waste pile located rusty greenstone with about 1% pyrite.

Location: 63° 55' 31.6" N; 135° 19' 53.3" W.

Dimensions (L x W x H): 2 m x 1.5 m x ~2.5 m

Condition: Partially collapsed, filled with debris.

Supports: Rotted timbers.

Accessibility: Access by foot, dense vegetation surrounding shaft limits hazard.

Samples: No samples were collected, as waste pile was completely overgrown.

Test Pits (photo 15-3)

A series of four small test pits were noted at the site. All of these had overgrown and were difficult to locate.

Location: Test pits are scattered throughout an area beginning approximately 100 m uphill (west-southwest) of the two shafts.

Dimensions (L x W x H): All less than 2 m x 2 m x 1 m.

Condition: The pits are extensively overgrown and there is little evidence of their former usage.

Accessibility: Only accessible up the steep hill from road approximately 300 m to the east-northeast.

5.2 Waste Rock Disposal Areas

Waste rock piles from the shafts are very small and completely overgrown and are therefore not described.

5.3 Tailings Impoundments

No tailings impoundments were observed at the site.

5.4 Minesite Water Treatment

No wastewater treatment facilities were observed on site.

6. MINE SITE INFRASTRUCTURE

6.1 Buildings

No buildings are present at the site.

6.2 Fuel Storage

No fuel storage was noted at the site.

6.3 Rail and Trestle

No rails or trestles were noted at the site.

6.4 Milling and Processing Infrastructure

No milling or processing infrastructure was present at the site.

6.5 Electrical Equipment

No electrical equipment was present at the site.

7. SOLID WASTE DUMPS

No solid waste dumps were identified at the site.

8. POTENTIAL CONTAMINANTS OF CONCERN

No hazardous materials were encountered at this site.

9. WATER QUALITY

There is no surface water upstream of the site on this slope. A seasonal stream (photo 15-4), paralleling the site, surfaces downgradient from the test pits but upstream of the two shafts. A surface water sample (15-WQ-StrCD-03) and duplicate (15-WQ-StrCD-04) were collected from this stream immediately downstream of the test pit area. Stream flow was less than 1 L/s at the time of the site visit.

The seasonal stream running adjacent to the site flows into Christal Creek approximately 400 meters downstream of the site. A surface water sample was collected in Christal Creek downstream (>500 m) of the seasonal stream (Christal Cr-01-WATER).

Shaft #1 was flooded to near ground level. There was no surface runoff from this area at the time of the site visit. A water sample and duplicate were collected from the ponded water (WQ-StrCD-01 & WQ-StrCD-02).

Laboratory sample analysis data and field data is provided in Attachment B.

10. RECLAMATION

No reclamation appears to have been completed at any of the test pits. The shafts were filled into less than one meter below grade, however, it could not be determined whether the shafts had failed or were intentionally filled in.

11. OTHER INFORMATION AND DATA

No other information was identified.

12. REFERENCES AND PERSONAL COMMUNICATIONS

United Keno Hill Mines Limited. 1996. *United Keno Hill Mines Limited – Site Characterization*. Report No. UKH/96/01, prepared by Access Mining Consultants Limited.

United Keno Hill Mines Limited. 1996. *United Keno Hill Mines Limited – Site Characterization, Technical Appendices I-VI*. Report No. UKH/96/01, prepared by Access Mining Consultants Limited.

Sample Number	Detection Limit	Units	15-WQ-StrCD-01 - Tin Can	15-WQ-StrCD-02 - Tin Can	15-WQ-StrCD-03 - Tin Can	15-WQ-StrCD-04 - Tin Can
Site Description						
pH (field)	0.01	pH	7.8	na	7.3	na
Conductivity (field)	0.01	µS/cm	430	na	2080	na
Total Alkalinity	5	mg CaCO3/L	137	139	103	103
Chloride	0.25	mg/L	<0.25	<0.25	0.5	na
Chloride	0.5	mg/L	na	na	na	<0.5
Electrical Conductivity	0.01	µS/cm	480	460	1900	1900
Hardness (CaCO3 equiv)	5	mg/L	257	264	1290	1320
Nitrate-N	0.05	mg/L	<0.05	<0.05	0.3	0.3
Nitrate-N	0.1	mg/L	na	na	na	na
Nitrite-N	0.003	mg/L	<0.003	<0.003	0.004	<0.003
pH	0.01	pH	7.68	7.81	7.35	7.39
Sulphate	1	mg/L	99.4	104	1050	1060
Total Dissolved Solids	5	mg/L	333	332	1650	1650
ICP-USN Total Metals Scan in Water						
Aluminum	0.0008	mg/L	0.0061	0.0106	0.0035	0.0027
Antimony	0.005	mg/L	<0.005	<0.005	<0.005	<0.005
Arsenic	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Barium	0.00004	mg/L	0.0167	0.0171	0.0204	0.0202
Beryllium	0.00001	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Bismuth	0.0004	mg/L	<0.0004	<0.0004	<0.0004	<0.0004
Boron	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Cadmium	0.00001	mg/L	0.00011	0.00009	0.00175	0.00198
Calcium	0.002	mg/L	71.2	72.8	360	367
Chromium	0.00006	mg/L	<0.00006	<0.00006	<0.00006	<0.00006
Cobalt	0.00003	mg/L	0.00016	0.00014	<0.00003	<0.00003
Copper	0.00003	mg/L	0.00216	0.0015	0.00226	0.00227
Iron	0.00001	mg/L	0.183	0.048	0.08	0.035
Lead	0.0003	mg/L	0.0006	<0.0003	0.0009	<0.0003
Lithium	0.001	mg/L	<0.001	<0.001	0.027	0.029
Magnesium	0.0005	mg/L	14.3	14.7	63.3	64.2
Manganese	0.00002	mg/L	0.0432	0.035	0.0046	0.00181
Mercury	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum	0.00007	mg/L	<0.00007	<0.00007	0.00043	0.00038
Nickel	0.00001	mg/L	0.0007	0.0006	0.0018	0.0023
Phosphorus	0.03	mg/L	<0.03	<0.03	0.04	<0.03
Potassium	0.4	mg/L	0.4	<0.4	0.7	0.8
Selenium	0.004	mg/L	<0.004	<0.004	<0.004	<0.004
Silicon	0.004	mg/L	2.49	2.44	5.2	5.28
Silver	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Sodium	0.4	mg/L	0.5	<0.4	3.5	3.5
Strontium	0.00002	mg/L	0.116	0.119	0.577	0.584
Sulphur	0.008	mg/L	30.7	33.4	372	378
Thallium	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Titanium	0.00002	mg/L	0.00019	0.00015	<0.00002	<0.00002
Vanadium	0.00003	mg/L	<0.00003	<0.00003	<0.00003	<0.00003
Zinc	0.0002	mg/L	0.0241	0.0101	0.819	0.979
Total Arsenic by Hydride AA						
Arsenic	0.0002	mg/L	0.0005	0.0009	0.0017	0.0012
Total Selenium by Hydride AA						
Selenium	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001



Photo 15-1: Remains of shaft #1. Note water level just below grade.



Photo 15-2: Timber-lined remains of shaft#2.



Photo 15-3: Reclaimed small test pit above shaft site.



Photo 15-4: Small creek above shaft site.