

TITAN
SITE #64
MINFILE# 105M 027

1. LOCATION AND ACCESS

The site is located on an unnamed creek (named Titan for the purposes of this report) that merges with the South McQuesten River 1km to the southwest. The junction of Titan Creek with the South McQuesten River is just 1km upstream of where Christal Creek and the South McQuesten River merge. The site is located on old winter trail that goes from the McQuesten Lake Road to the Shanghai showing. However, vehicle access is no longer possible by this trail as it has become too overgrown and a helicopter was used to access the site. The approximate UTM co-ordinates are 7 093 150m N and 473 300m E (Latitude: 63° 57' 27" N and Longitude: 135° 33' 18" W).

2. SITE PHYSIOGRAPHY

The site is in on the northwest side of the broad valley that the South McQuesten River flows down. Surface runoff from the site drains to the southeast via Titan Creek and into the South McQuesten River. The area is well populated with spruce trees, poplar, alders, small shrubs and moss.

3. GEOLOGY AND MINERALIZATION

According to the Minfile on the site the host rock is the Keno Hill Quartzite, near the Keno Hill Quartzite and Hyland Group schist and phyllite contact. There is at least one strong vein. Vein breccia and siderite gangue is present in float and one outcrop with a 1.8m wide vein exposure. Galena panned from overburden here is high in silver.

4. SITE HISTORY

Bulldozer trenches were excavated between 1963 and 1974. Between 1977 and 1979, 105 percussion drill holes were drilled.

5. MINE DEVELOPMENT

None of the bulldozer trenches were visited because of limited time. Eleven trenches can be counted from the airphoto.

6. MINE SITE INFRASTRUCTURE

There is reportedly a cabin with a fireguard, on the east side of Titan Creek, just south of the winter road. No other mine site infrastructure was reported or observed.

7. SOLID WASTE DUMPS

There were no solid waste dumps observed at the site.

8. POTENTIAL CONTAMINANTS OF CONCERN

No hazardous materials were encountered at this site. Potential contaminants of concern include any metals that wash from the trenches.

9. WATER QUALITY

Three water samples were collected for analysis. The first sample (sample Titan Creek 09/18/99) is from Titan Creek, just downstream of the site. The second and third samples (sample S1 – South McQuesten upstream of Titan' Creek – 09/18/99, and S2, a duplicate) is a background sample and was collected from the South McQuesten River, just upstream of where it merges with Titan Creek. Sampling results can be found on Attachment 1.

10. RECLAMATION

Those trenches viewed from the helicopter had a cover of alders and poplar.

11. REFERENCES AND PERSONAL COMMUNICATIONS

Minfile #105M 027

ATTACHMENT 1: 1999 TITAN WATER SAMPLES

LABORATORY RESULTS

Sample Number	Detection Limit	Units	(S1) South McQuestion Upstream of Titan Creek - 09/18/99	(S2) South McQuestion Upstream of Titan Creek - 09/18/99	Titan Creek - 09/18/99
Site Description			A background sample, collected just upstream of where Titan and the South McQuesten River merge.	Duplicate of S1	Collected just downstream of the Titan site.
pH (field)	N/A	pH	-	-	-
Conductivity (field)	N/A	µS/cm	-	-	-
pH (Lab)	0.01	pH	7.88	7.82	7.97
Conductivity (Lab)	0.01	µS/cm	310	315	430
Total Alkalinity	5	mg CaCO3/L	92	92	135
Chloride	0.25	mg/L	<0.25	0.32	0.39
Hardness (CaCO3 equiv)	5	mg/L	153	153	229
Nitrate-N	0.05	mg/L	<0.05	<0.05	0.07
Nitrite-N	0.003	mg/L	0.004	0.003	0.006
Sulphate	1	mg/L	60.7	61.3	69.7
Total Dissolved Solids	5	mg/L	246	262	287
Analysis by ICP-USN					
Aluminum	0.0008	mg/L	0.179	0.175	0.0059
Antimony	0.005	mg/L	<0.005	<0.005	<0.005
Arsenic	0.01	mg/L	<0.01	<0.01	<0.01
Barium	0.00004	mg/L	0.0441	0.0441	0.0556
Beryllium	0.00001	mg/L	<0.00001	<0.00001	<0.00001
Bismuth	0.0004	mg/L	<0.0004	<0.0004	<0.0004
Boron	0.002	mg/L	<0.002	<0.002	<0.002
Cadmium	0.00006	mg/L	0.00022	0.00021	0.00004
Calcium	0.002	mg/L	39	39.1	66.9
Chromium	0.00006	mg/L	<0.00006	<0.00006	<0.00006
Cobalt	0.00003	mg/L	0.00131	0.00128	<0.00003
Copper	0.00003	mg/L	0.00226	0.00217	0.00126
Iron	0.00001	mg/L	0.137	0.141	0.028
Lead	0.0003	mg/L	<0.0003	<0.0003	0.0042
Lithium	0.001	mg/L	0.005	0.006	0.005
Magnesium	0.0005	mg/L	13.7	13.7	12.7
Manganese	0.00002	mg/L	0.0619	0.0612	0.00219
Mercury	0.0001	mg/L	<0.0001	<0.0001	<0.0001
Molybdenum	0.00007	mg/L	0.00044	0.00044	0.00054
Nickel	0.00001	mg/L	0.0145	0.0145	0.0006
Phosphorus	0.03	mg/L	<0.03	<0.03	<0.03
Potassium	0.4	mg/L	<0.4	0.4	0.8
Selenium	0.004	mg/L	<0.004	<0.004	<0.004
Silicon	0.004	mg/L	1.62	1.62	2.55
Silver	0.00005	mg/L	<0.00005	<0.00005	<0.00005
Sodium	0.004	mg/L	1.2	1.2	1.2
Strontium	0.00002	mg/L	0.169	0.169	0.151
Sulphur	0.008	mg/L	19.8	19.9	22.6
Thallium	0.001	mg/L	<0.001	<0.001	<0.001
Titanium	0.00002	mg/L	0.00034	0.0003	<0.00002
Vanadium	0.00003	mg/L	<0.00003	<0.00003	<0.00003
Zinc	0.0002	mg/L	0.0358	0.0357	<0.0002
Analysis by Hydride AA					
Arsenic	0.0002	mg/L	0.001	0.0008	0.0011
Selenium	0.0001	mg/L	0.0006	0.0005	0.0004