

PROPERTY NAME: Barnato Area

NTS: 82E/7W

LAT: 49° 28'

LONG: 118° 54'

The Barnato area is located about 35 kilometres north of Westbridge, on the west side of the Kettle River. Access to the area is via the Christian Valley road up the East Kettle River from Westbridge, and then by various logging and mining roads to the showings.

The area was covered by the Discovery Heavy Mineral Sampling Program. Several drainages were found to be strongly anomalous in Au and As, with weak accompanying Sb, Th, Cu, Zn, W and Ba anomalies. Four main creeks were found to be anomalous: Crick Creek, Wasmes Creek, Guttridge Creek and Crouse Creek. Each of these areas will be discussed below. The creeks in which the anomalies occur drain a large area underlain by Anarchist volcanics in which a number of old workings are known. These showings consist mainly of quartz veins and shear zones within the Anarchist volcanics, as well as minor disseminated pyrite in volcanics, subvolcanics and intrusives. The purpose of this examination was to view the main showings and to locate the source of the heavy mineral anomalies.

The Barnato area is mainly underlain by Anarchist Group metasediments and metavolcanics which have been intruded by various dykes and stocks of the Nelson, Valhalla and Coryell suites. A major north trending fault up the Kettle River emplaces Tertiary volcanics and sediments to the east.

CRICK CREEK AREA:

Crick Creek was the most northerly of the anomalous creeks, draining the approximate area of the Barnato workings. At the Barnato showing, a short adit has been driven on a rusty quartz filled shear zone, and a number of trenches have been dug. The shear zone averages about 10 to 15 metres in width where exposed on surface and

is hosted in silicified, pyritic and locally brecciated Nelson intrusive. A number of fresh Tertiary dykes (feldspar porphyry, syenite) and stocks are exposed in outcrop and trenches nearby. Although there is no clear evidence, these appear to post-date mineralization. Seven samples were collected from the Barnato area, as listed below. The main shear zone runs up to 8.9 g/t in samples collected, and probably accounts for the heavy mineral anomaly in Crick Creek. Because of the limited size and grade of the system, this is not felt to be a good target.

WASMES CREEK AREA:

Wasmes Creek flows easterly, about 1.5 kilometres south of Crick Creek. Two old showings occur within the creek drainage. At the headwaters of the creek, silicified, pyritic volcanics and intrusives are exposed in trenches on the Lily May property. Four samples were collected from this area and only weakly anomalous gold values were present. Near the mouth of the creek, a short adit has been driven on a quartz filled shear zone. The dump material from this adit is within the creek bed. The shear zone itself ran up to 1.1 g/t Au over a 40 cm width where sampled. Two silt samples were collected from the creek, one above and one below the workings, in order to determine if this narrow shear zone was the source of the heavy mineral anomaly. The sample upstream of the workings was not anomalous in gold, while the one collected downstream was, confirming the source of the anomaly. Because of the very low grades and small system, this is not a good target.

GUTTRIDGE CREEK AREA:

Guttridge Creek drains a large area with several old showings. On the plateau above the creek valley to the south, a minor amount of recent trenching and drilling has been done on a sulfide rich (pyrite, arsenopyrite) shear zone within volcanics or subvolcanics of the Anarchist Group. No record of this work could be found. Samples across a one metre true width of this zone ran 8.56 g/t Au.

The zone is exposed in several pits and grades are reasonable consistent, however the zone is narrow and probably not a good target. Closer to the mouth of the creek a number of adits have been driven on a series of narrow gold bearing quartz veins (Montana claims). These showings were not visited in the field, but as they are reported to occur within the creek bed, could very easily explain the heavy mineral anomaly.

CROUSE CREEK:

Weak gold anomalies were obtained from heavy mineral samples collected from Crouse Creek. The creek drains a very large area with several known alteration zones. These alteration zones consist primarily of rusty, sheared Nelson intrusives with minor disseminated pyrite and lesser chalcopyrite. Very weak gold values accompany these zones on the Blue Jay property and probably account for the heavy mineral anomaly. Because of the very low grades these zones are relatively insignificant.

In summary, each of the four anomalous drainages has been adequately explained by the field examination. None of the showings visited is felt to be a good exploration target.

A minor amount of prospecting was done to the east of the Kettle River, in an area underlain by Tertiary volcanics and sediments, although no heavy mineral anomalies occurred in this area. Several Tertiary faults were seen and sampled, however these were not anomalous. No further work in this area is warranted.

SAMPLE DESCRIPTIONS AND RESULTS:

		Au*	Ag	Cu
		ppb	ppm	ppm
BCS 18207	Blue Jay; rusty, py dior intrus	56	0.6	382
BCS 18208	Blue Jay; rusty, py dior intrus	207	0.2	108
BCS 18209	Blue Jay; sheared dior intrusive	25	3.5	980
BCS 18210	Crouse Creek Road; coarse porphyry Shingle Creek equivalent	1	0.2	5
BCS 18211	Montana? fng mafic volc, diss py	2	0.4	8
BCS 18212	Montana? small pity, silic mafic volc, 5% py	29	0.7	91
BCS 18213	Montana? recent trench, rusty silic volcs, 30% py,apy	(15.8)	4.0	3170
BCS 18214	Montana? recent trench, clay alt'd intrusive?	(2.6)	6.9	220
BCS 18215	Montana? recent pit, rusty silic bx, mafic volc, 20% veins py,apy	(6.8)	13.4	6500
BCS 18351	Lily May; silic gst, 5% py	10	0.9	134
BCS 18352	Lily May; silic dior, 5% py	2	0.6	57
BCS 18353	Lily May; silic gst, 5% py	5	1.3	300
BCS 18354	Lily May; silic intr, 10% py	98	1.0	358
BCS 18355	Barnato Area; rusty gossan from 20 m wide shear zone	4	1.2	185
BCS 18356	Barnato Area; silic, bx gst from blast trench	30	0.7	93
BCS 18357	Barnato Adit; silic Nelson intrus 20% py, from dump pile	(8.9)	1.9	285
BCS 18358	Barnato Adit; pyritic, bx intrus from dump pile	24	0.9	168
BCS 18359	Barnato Adit; rusty, fract'd qtz vein, 5% py, from dump	(2.5)	0.9	70
BCS 18360	Barnato Adit; Nelson intrus host rock, 5% py	47	0.5	84
BCS 18361	Barnato Adit trenches; py gossan from blast pit	78	1.3	250
BCS 18362	Wild Horse; rusty Nelson intrus	128	0.6	76
BCS 18363	Wasmes Creek; 40 cm qtz filled shear at adit entrance	(1.1)	1.5	410
BCS 18364	Wasmes Creek; qtz float on dump	15	1.0	124
BCS 18365	Montana? recent trench, 1 m channel across coarse sulfide zone	(8.6)	4.9	1550
BCS 18366	Montana? recent trench, subvolc dior host rx	(2.2)	0.7	152
BCS 18367	Montana? older trench, qtz breccia	340	2.1	830
BCS 18368	Montana? older trench, sulf rich silic volc float from dump	670	2.2	390
BCS 18369	Paturges Creek; 3 m wide shear zone, strong carb alt'n	10	0.9	15
BCS 18370	Thone Lake Area; sheared alt'd Tertiary volcs	2	0.2	12

* Values in brackets are in units g/t

SAMPLE DESCRIPTIONS AND RESULTS cont.

		Au*	Ag	Cu
		ppb	ppm	ppm
BCS 18371	Thone Lake Area; rusty, sheared Mes intrus	9	0.1	5
BCS 18372	Thone Lake Area; rusty, sheared Mes intrus	10	0.1	5
BST-001	Wasmes Creek; silt samp above adit	5	2.4	115
BST-002	Wasmes Creek; silt samp below adit	45	1.6	78

* Values in brackets are in units g/t

RECOMMENDATIONS: The anomalous heavy mineral samples resulting from the Discovery Heavy Mineral Sampling Program have been adequately explained by this examination. No good exploration targets were found and further work in the area is not recommended.


L. Lee

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