1996
103P/11
820121 Near Stewart, BC

RUBICON MINERALS CORPORATION

PROPERTY SUBMISSION SUMMARY

LAHTE GOLD PROPERTY

Purpose

This summary is to highlight the exploration potential of the Lahte gold property for the purpose of providing Cyprus Canada Inc with all information available to help judge the merits of specifying the property as a selected property under the Cyprus-Rubicon Agreement.

Background

The Lahte property is a gold prospect, consisting of 148 claim units, located 50 km southeast of the Red Mountain Gold Deposit and 55 km southeast of Stewart, B.C. Logging roads with access to the Stewart-Cassiar highway are within 8 km of the property. The property was staked based on anomalous gold silt geochem, as part of a regional survey released by the government BCGS in early June '95 (see 06/06/95 memo of MacVeigh to Parry attached).

The property is underlain by a north striking, steeply dipping, sequence of Late Triassic(?) cherts and clastic rocks in the central portion of the claim bounded to the west by "purple and green" Early Jurassic Hazelton intermediate to mafic volcanics. To the east, in thrust fault contact(?), the property is underlain by Late Jurassic Bowser Group fine-grained sediments. A Jurassic(?), locally strongly sheared, pyritic, feldspar porphyry intrusion cuts the Hazelton Group volcanics on the west part of the property and is flanked by extensive carbonate +/- sericite alteration. Tertiary hornblende-feldspar porphyry dykes and sills cut the Late Triassic to Early Jurassic rocks.

The Lahte gold property was identified as a potential staking target before the BCGS silt geochem release based on a multi-element silt anomaly (As, Zn, Cu, Hg) and its location near the Hazelton Volcanic - Bowser Sediment contact. Upon release of the silt survey data, Rubicon staked 20 units to cover the Lahte Creek gold anomaly (229ppb). Follow-up work included additional staking, then prospecting, silt and rock sampling (10 man days). This work confirmed anomalous silt drainages, the presence of an altered pyritic intrusion (Jurassic?) and roughly located the Hazelton-Bowser contact.

Previous work on the claim area involved two small base metal VMS programs; one in 1980 by Hudson Bay Exploration and Development and later in 1989 by Dolly Varden Minerals. The most significant results from this exploration was the prospecting by Dolly Varden that led to the discovery of a Ba-Zn-Pb showing (4.8% Zn, 1.4% Pb) and rock sampling that returned a number of gold values in outcrop (up to 100ppb), scree (up to 240ppb) and float (up to 20420ppb). Prospecting by Hudson Bay traced mineralized float (also sampled by Rubicon) to source Cu-Zn-Pb-Ag showings just west of the Lahte property boundary.

Field work in 1995 by Rubicon-Cyprus was directed at explaining the anomalous silt geochem and to assess the geology for a Red Mountain-type setting. Silts confirmed the elevated gold contents of the drainages in general, though the main anomaly returned less than detection. Large carbonate zones near the south fork of Lahte Creek returned a high of 0.32 g/t Au. A large sheared feldspar porphyry intrusive, previously described as a volcanic, was identified and sampled. A barite-sphalerite-galena showing, originally discovered by Dolly Varden Mines, returned a high of 1.01g/t Au from grab samples.

Data compilation products presented as attachments with this submission includes all historic work on the claims (see attached 1:10,000 map), the RGS silt geochem release and X-Y Plots of the Red Mtn and Lahte samples.

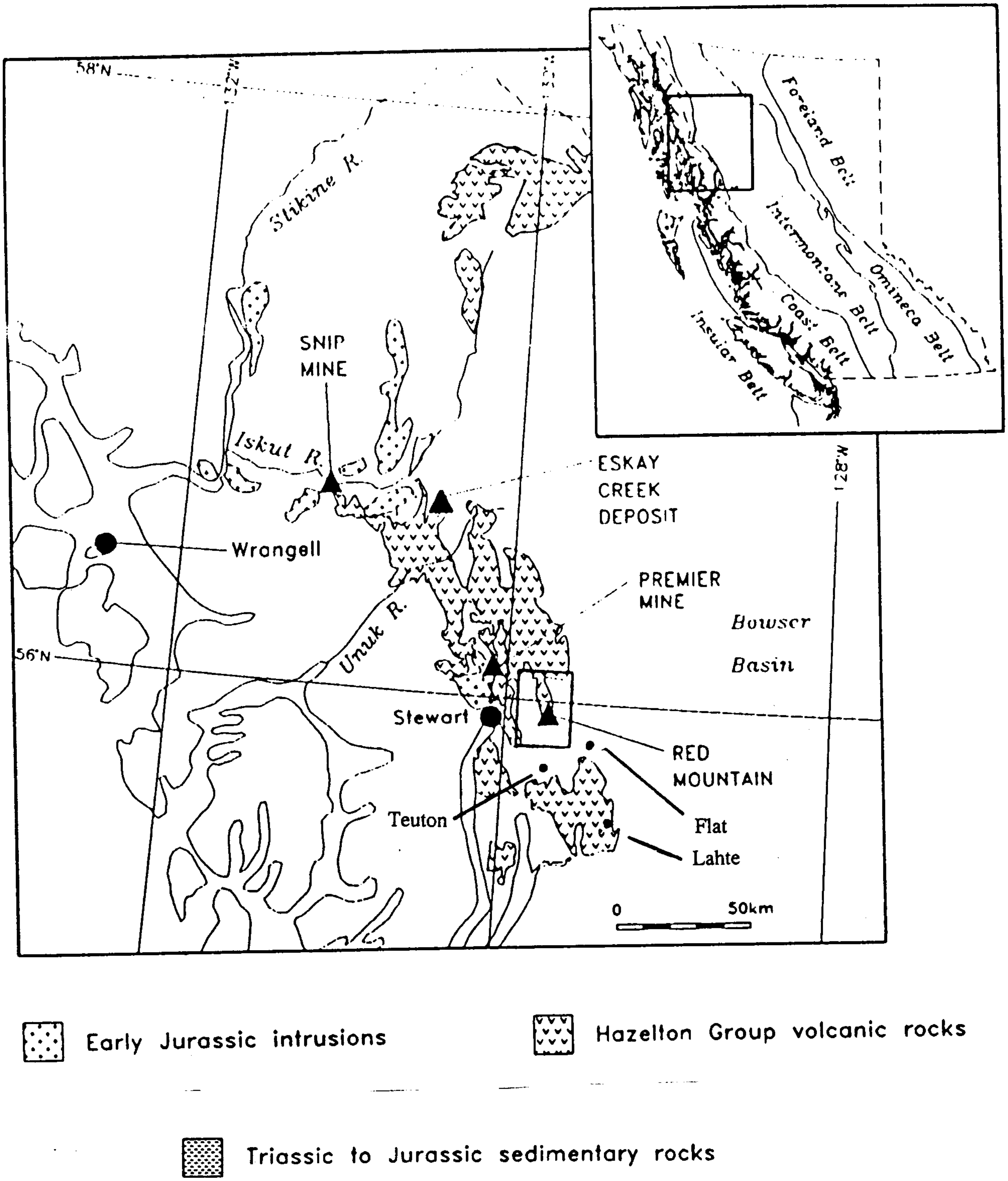
The results from this compilation work point to potential related to: i) the northwest portion of the property where anomalous to high gold values were returned by Dolly Varden and base metal mineralization with elevated gold values is associated with a tuffaceous package (attached table); ii) the altered strongly sheared pyritic intrusion with up to 0.32 g/t Au associated with large carbonate-sericite-silica alteration zones; iii) the thick package of rusty cherts and fine-grained clastics similar to those at Red Mountain. The attractive features of the property are summarized below.

Attractive Features

-nearby roads
-anomalous Au in silts and rocks
-similar geological setting to the Red Mountain Gold Deposit
-underexplored for Au
-potential stratiform base-precious metal horizons (analogous to Premier Northern Lights zone)

Recommendations

Based on the favourable geological setting and the anomalous gold in rocks and silts, the Lahte gold property represents a good grass roots gold opportunity in the Stewart Gold Camp with potential to host a >1-3M oz Red Mountain-type target. It is therefore recommended that Cyprus accept the Lahte property as a "Selected Property" under the Cyprus-Rubicon Agreement.


58°N
56°N
Stikine R.
Iskut R.
Unuk R.
SNIP MINE
ESKAY CREEK DEPOSIT
Wrangell
PREMIER MINE
Bowser Basin
Stewart
RED MOUNTAIN
Teuton
Flat
Lahte
0
50km
Foreland Belt
Intermontane Belt
Omineca Belt
Coast Belt
Insular Belt
Early Jurassic intrusions
Hazelton Group volcanic rocks
Triassic to Jurassic sedimentary rocks

PROJECT STATUS REPORT

LAHTE GOLD PROPERTY

COMMODITIES: Au, Ag

TARGET: Premier - Red Mountain-type high sulphidation Au (>1-5 Moz Au)
Shear related - hematitic? Au (recent Teuton discovery) (>1 Moz Au)

LOCATION & ACCESS: The Lahte gold property is located 55 km southeast of Stewart 45 km south-southwest of the Meziadin logging camp and 155 km northwest of Smithers, B.C. (Skeena Mining Division; NTS 103P/11). A logging road comes within 8 km of the property. The property is easily accessed by helicopter from Meziadin or Stewart.

INFRASTRUCTURE: None on the property. Logging roads, part of the Lavender Mainline from the Nass Camp to the south, link up with the Stewart-Cassiar highway and come to within 7 km of the property. Because the property is located on the east side of the Coast Range, it would be feasible to establish road access from the Kitwanga-Stewart Highway.

INTRODUCTION: The Lahte property is a Au-Ag "Red Mountain type" prospect consisting of 148 claim units. The claims were staked based on anomalous Au (224, 299ppb) from a government silt geochem survey released on June 2nd,1995. Pre-release compilation of existing silt geochem data indicated a favourable environment based on highly anomalous As-Zn-Cu-Hg silt geochem in a geological setting similar to that at the Red Mountain gold deposit, or to Camnor's Willoughby prospect.
The property is underlain by Late Triassic to Early Jurassic mafic to intermediate volcanics and sediments, and by Late Jurassic to Early Cretaceous sediments. These rocks are cut by feldspar porphyry intrusives (Jurassic?) and by felsic hornblende porphyry dykes of probable Tertiary age. Gold mineralization from outcrop is locally associated with carbonate alteration (up to 0.32g/t Au) in the west central area and with a barite-Zn-Pb section of stratigraphy (up to 1.01g/t Au) in the northwest portion of the claims.

MINERAL INVENTORY: None established.

CLAIM STATUS: Claims are in good standing until June 1997 once assessment credits have been applied.

OWNERSHIP: 100% owned by Rubicon Minerals Corporation. There are no underlying agreements on the property.

EXPENDITURES:

Year	Nominal $	Cumulative
1981	16,100	16,100
1990	~10,000	26,100
1995	*38,000	58,100
	$58,100	$58,100

WORK DONE:

1981: Hudson Bay Exploration and Development Co. Ltd., as part of a base metal VMS exploration program, collected soils (52; on 2 N-S contour lines, 200m apart on the SE portion and just E of the 6 claim), prospecting, rock sampling (2) and recce mapping.

1989: Dolly Varden Mineral Inc., as part of a base-precious metal VMS program, collected pan con silts (4), rocks (9), and conducted prospecting, and recce mapping all on the now "Lah-8" claim. Total 6 man days from a fly camp.

1995: Cyprus Canada and Rubicon Minerals staked 148 units based on a regional gold silt geochem release and collected 140 rock samples (86 have Au+ICP and 54 have WR+Au+ICP), thirteen (13) silts, three (3) moss mats, and one (1) soil, and conducted prospecting.

RESULTS:

1981: Hudson Bay Exploration - Prospecting identified the source area of rhyolitic Zn-Pb-Cu-Ag float boulders on the south side of Lahte Creek and corresponding to the historic "Leftover" Showing (just west of the Lahte property boundary). Extensive areas of "sheared volcanics" with lenses of felsic(?) porphyry were roughly mapped. Soil geochem indicated a 300m section of 0.7 to 1.4ppm Ag on one contour line (gold was not analyzed for).

1989: Dolly Varden Mines - Significant gold and base metal values were returned from outcrop, scree and float. Gold values ranged to 20240ppb Au in float from "narrow veins". A number of gossans were identified, including a Ba-Zn-Pb showing within a 40m thick intermediate feldspar crystal rich tuffaceous package marked by 2m thick quartz-sericite-pyrite horizons. Samples returned 433ppm Zn and 447ppm Pb from grab samples and 48295ppm Zn and 14471ppm Pb from selected high grade mineralization. Pan con silts returned 2430ppb and 4040ppb Au from the northwest fork of Lahte Creek, however, these samples were not plotted on the assessment maps. Significantly, many gossans were not prospected or sampled from the northwest drainage due to difficulties in crossing the creeks. Although Dolly Varden interpreted the showing as stratiform mineralization, the company expected more felsic stratigraphy than was observed (using the Dolly Varden VMS Deposit Model). Follow-up work was recommended.

1995: Cyprus & Rubicon - Anomalous 0.32 to 1.01 g/t Au was returned from grab samples from outcrop. The 1.01 g/t Au sample is from a gossan near a Ba-Zn-Pb showing. Recce prospecting indicates the "sheared volcanics" mapped by Hudson Bay Exploration may be a feldspar porphyry intrusion, associated with a major structure.

DISCUSSION:

A summary map of the property at 1:10,000 shows the claims, sample locations, geochemical data, and interpreted key geological contacts. A complete list of geochemical data that highlights elevated results of important elements is provided with the maps, and is also attached to the text as an appendix.

Several geochemical plots (attached) are used to show the relationship of the whole rock geochemical signature of the Lahte and Flat samples relative to a background of Red Mountain geochemistry which represents approximately 1200 samples from drill core within and in the immediate vicinity of the Red Mountain Deposit. The Lahte "Porphyries" in all plots overlap the Red Mountain data and generally reflect the alkalic signature of both the unaltered and altered samples. A well defined trend of K_2O enrichment associated with samples that are anomalous in one or more elements in the Lahte porphyries mimics the Red Mountain data (see SiO_2 vs K_2O). Because the stratigraphic setting at Lahte is similar to Red Mountain it is encouraging to see these geochemical parallels.

Field work on the property by Rubicon has identified a large area of sheared, altered and pyritized "Porphyry" that trends northwest and may have a strike length of up to five kilometers. Sampling from part of this zone returned one gold value (320ppb Au) an elevated silt sample (225ppb Au) and several elevated base metal values. Only a restricted portion of this zone has been sampled, and it therefore warrants more prospecting.

In the northwest part of the property, one sample located twenty metres to the northwest of a barite-base metal showing returned 1.01gAu/t. On strike to the northwest of this sample is a large gossan that is evident from the helicopter and is noted on Dolly Varden's assessment map, but was not sampled. Two silt samples collected from the north Lahte drainage in this area returned values of 625ppb and 125ppb Au. These results precipitated the acquisition of an additional claim by Rubicon to cover this prospective area which may be an analogy to the base metal rich Northern Lights Zone at the Premier. This area requires more work.

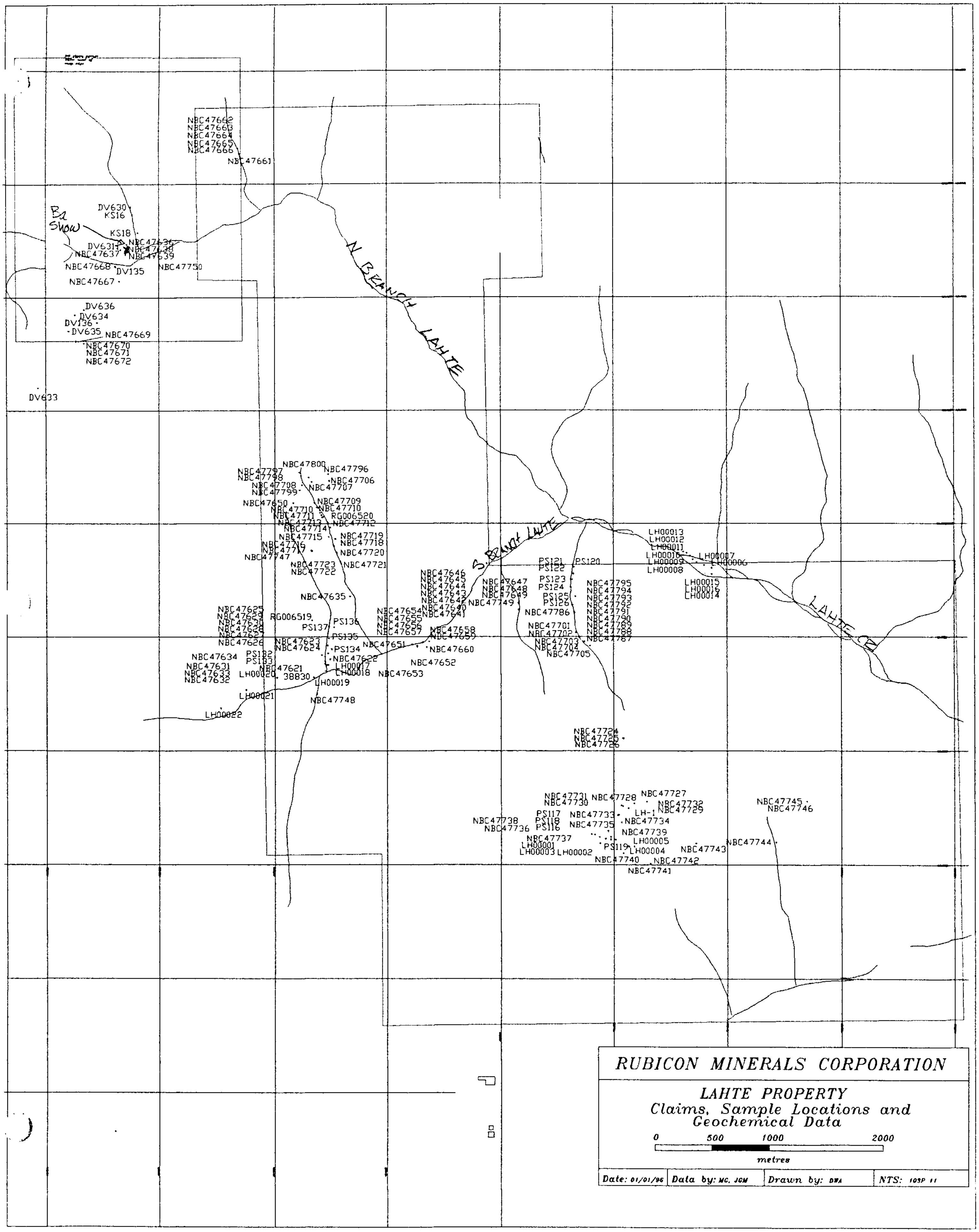
CONCLUSIONS & RECOMMENDATIONS:

The Lahte gold property has a geological setting similar to the Premier Mine and the Red Mountain Gold Deposit. The 1995 geochemical release by the BCGS for gold and additional elements, and follow-up work by Rubicon shows a cluster of adjacent drainages with elevated gold values in silts. Previous work was mainly focused on base metal potential even though significant gold values were returned (eg Dolly Varden). Rubicon's work has established that a favourable geological and geochemical setting for a Red Mountain or Premier-Type gold target exists on the property. The Teuton-Minvita shear-related gold target should also be considered.

A low cost exploration program of detailed prospecting, rock sampling and contour soil sampling is recommended to evaluate the underexplored gold potential of the Lahte property.

REFERENCES:

BC Assessment File Reports # 20,086; #9823; #8904.



Ba Show
N BRANCH LAHTE
S. BRANCH LAHTE
LAHTE CR
RUBICON MINERALS CORPORATION
LAHTE PROPERTY
Claims, Sample Locations and Geochemical Data
0 500 1000 2000
metres
Date: 01/01/96
Data by: MC, JGM
Drawn by: DWA
NTS: 103P 11

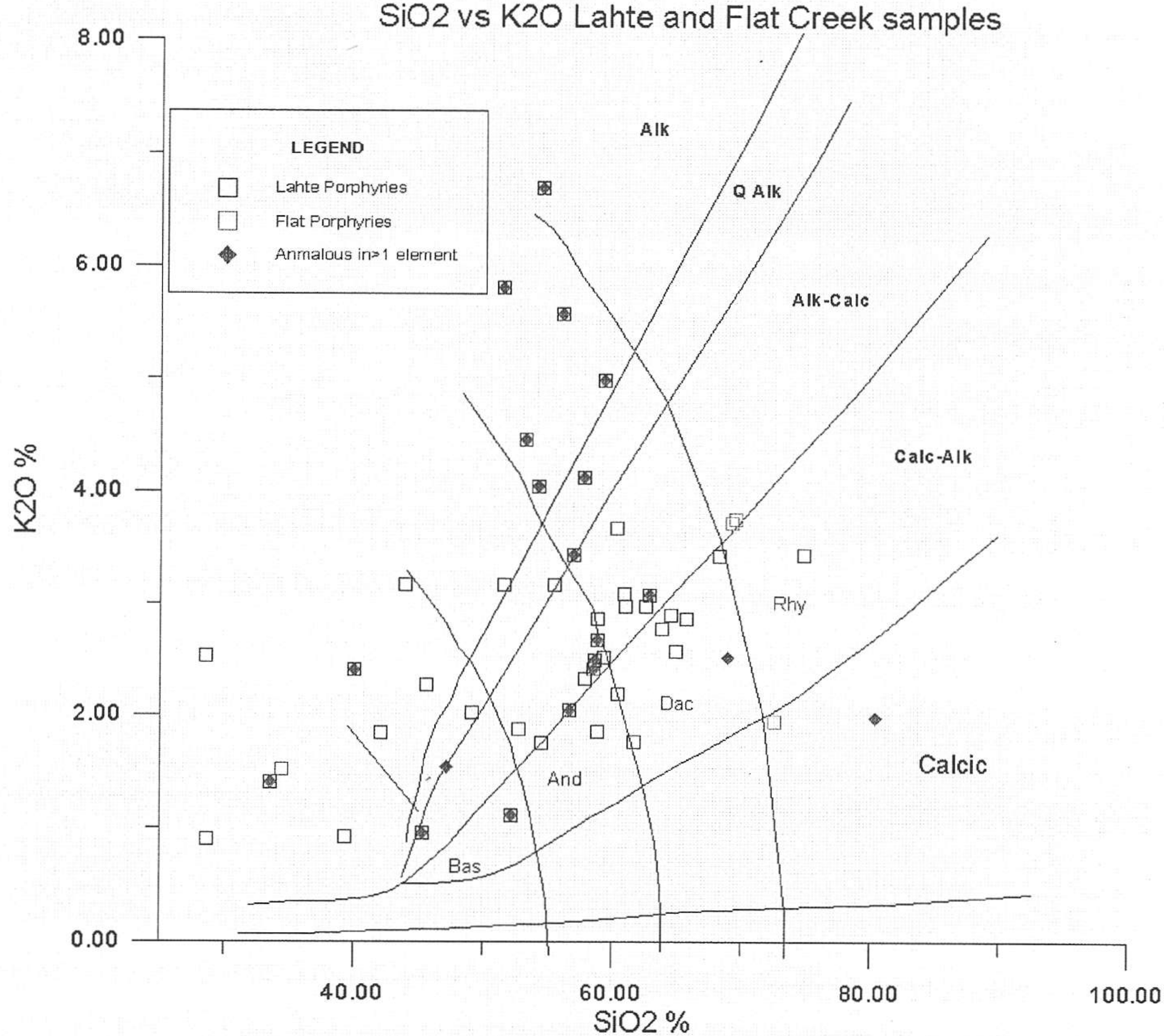
SUBTYPE	SAMPLE	CERT_NO	AU_PPB	AU_GT	Ag	Al	As	Ba	Be	Bi	Ca%	Cd	Co	Cr	Cu	Fe%	Ga	Hg	K%	La	Mg%	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Tl	V	W	Zn
bflt	LH00006	A9520821	0	-0.005	16	0.04	306	-10	-0.5	-2	0.03	14	1	108	27	13.7	-10	8	0.03	-10	0.01	10	4	-0.01	1	100	2570	118	1	96	-0.01	5	-10	1645
bflt	LH00007	A9520821	0	-0.005	60	0.16	336	90	-0.5	-2	0.27	5	12	292	690	1.77	10	8	0.01	-10	0.03	50	12	0.01	8	980	4680	260	1	372	-0.01	10	-10	172
bflt	LH00008	A9520821	0	-0.005	47	0.18	616	-10	-0.5	-2	0.23	87	22	401	137	-15	10	37	0.04	-10	0.02	40	17	0.01	10	1270	>10000	224	3	230	-0.01	11	-10	9160
bflt	LH00009	A9520821	0	-0.005	24	0.12	260	200	-0.5	-2	0.15	29	10	357	455	1.23	-10	20	0.02	-10	0.01	30	9	-0.01	8	600	>10000	148	1	66	-0.01	6	-10	2400
bflt	LH00010	A9520821	0	-0.005	14	0.03	490	-10	-0.5	-2	0.32	3	18	212	111	-15	10	6	0.01	-10	0.01	45	13	-0.01	8	1530	4500	38	1	107	-0.01	7	-10	44
bflt	LH00011	A9520821	0	-0.005	10	0.08	378	10	-0.5	-2	0.1	2	12	344	114	6.89	-10	-1	0.01	-10	0.01	30	7	-0.01	11	410	4090	54	-1	241	-0.01	6	-10	52
bflt	LH00012	A9520821	0	-0.005	0.2	1.16	8	130	-0.5	-2	13.5	1	16	23	51	6.15	-10	-1	0.2	-10	5.38	3910	-1	0.01	15	560	52	8	7	226	-0.01	49	40	316
bflt	LH00013	A9520821	0	-0.005	18	0.15	376	-30	-0.5	-2	0.39	3	23	183	112	-15	10	4	0.07	-10	0.02	40	8	0.01	10	1850	5540	36	2	63	-0.01	12	-10	84
bflt	LH00014	A9520821	0	-0.005	9.8	0.34	366	10	-0.5	-2	0.29	62	43	253	66	6.58	10	37	0.02	-10	0.12	155	11	-0.01	10	390	>10000	68	1	114	-0.01	14	10	7790
bflt	LH00015	A9520821	0	-0.005	-0.2	0.96	2	150	-0.5	-2	5.38	-0.5	9	24	5	3.27	-10	-1	0.23	10	1.85	2090	-1	0.05	2	1020	58	4	2	117	-0.01	12	10	92
bflt	LH00016	A9520821	0	-0.005	20	0.1	262	-10	-0.5	-2	0.1	2	13	282	68	-15	10	-1	0.01	-10	0.03	60	31	-0.01	4	390	>10000	72	1	54	-0.01	13	-10	66
bflt	LH00017	A9520821	0	-0.005	-0.2	1.22	-2	130	-0.5	-2	4.08	0.5	9	24	6	3.16	-10	-1	0.2	-10	1.39	1010	-1	0.06	1	1300	40	2	3	149	-0.01	28	-10	90
bflt	LH00018	A9520821	0	-0.005	0.2	0.38	2	90	-0.5	-2	13.9	0.5	3	157	24	1.21	-10	-1	0.03	-10	0.25	4230	-1	0.02	2	30	32	2	2	564	-0.01	7	10	40
bflt	LH00019	A9520821	0	-0.005	-0.2	1.34	6	110	-0.5	-2	3.34	-0.5	11	30	13	2.27	-10	-1	0.49	-10	0.36	480	1	0.03	2	1440	28	2	1	104	-0.01	18	-10	28
chip	NBC47647	A9527304	0	-0.005	0.2	0.15	22	70	0.5	-2	-15	-0.5	1	6	8	2.3	-10	1	0.06	-10	7.2	660	-1	0.02	7	160	2	2	-1	695	-0.01	10	-10	18
chip	NBC47798	A9526354	0	-0.005	0.6	0.58	4	200	-0.5	-2	1.06	-0.5	7	38	10	3.55	-10	-1	0.18	-10	0.04	1240	-1	0.06	2	1110	36	2	4	43	-0.01	8	-10	114
chip	NBC47799	A9526354	0	-0.005	0.4	0.6	-2	110	-0.5	-2	0.66	3	5	40	8	4.08	-10	-1	0.19	10	0.13	775	-1	0.06	1	1130	96	2	3	34	-0.01	8	-10	356
chip	NBC47800	A9526354	0	-0.005	0.4	0.61	12	140	-0.5	-2	1.16	2.5	6	52	8	4.17	-10	-1	0.21	10	0.09	1150	-1	0.06	2	1210	142	2	3	37	-0.01	5	-10	322
float	LH00020	A9520821	0	-0.005	18	0.07	- 92	10	-0.5	-2	0.25	0.5	6	204	60	8.32	-10	-1	0.01	-10	-0.01	70	3	0.01	7	590	3660	28	1	185	-0.01	7	-10	14
float	LH00022	A9520821	0	-0.005	-0.2	2.19	4	20	-0.5	-2	0.16	-0.5	11	51	27	5.9	10	-1	0.31	-10	0.58	160	-1	0.1	5	880	44	8	6	49	-0.01	51	-10	228
float	**NBC47629**	**A9527304**	**0**	**0.035**	**0.2**	**0.31**	**- 4**	**100**	**-0.5**	**-2**	**-15**	**0.5**	**2**	**97**	**4**	**1.22**	**-10**	**-1**	**0.17**	**-10**	**0.75**	**1745**	**-1**	**0.07**	**1**	**220**	**24**	**-2**	**7**	**1430**	**-0.01**	**6**	**-10**	**34**
float	NBC47631	A9527304	0	-0.005	0.2	0.37	2	440	-0.5	-2	6.85	1.5	1	32	88	0.71	-10	1	0.24	-10	0.21	895	-1	0.03	1	650	4	2	1	244	-0.01	6	-10	30
float	NBC47640	A9527304	0	0.01	0.2	0.82	20	160	-0.5	-2	8.31	16	19	14	89	4.6	-10	-1	0.53	-10	2.44	1455	7	0.03	40	3030	122	4	7	374	-0.01	44	-10	756
float	NBC47641	A9527304	0	-0.005	0.2	0.81	38	280	0.5	-2	11.5	-0.5	28	80	67	3.3	-10	-1	0.62	-10	1.49	1345	-1	0.03	73	1430	6	2	14	430	-0.01	39	-10	40
float	NBC47643	A9527304	0	-0.005	-0.2	-0.05	16	20	-0.5	-2	-15	-0.5	9	56	8	2.59	-10	-1	0.02	-10	4.99	1975	-1	0.02	6	190	2	2	9	402	-0.01	23	-10	34
float	NBC47644	A9527304	0	-0.005	-0.2	0.64	14	100	-0.5	-2	10.2	-0.5	16	74	61	4.44	-10	-1	0.3	-10	3.22	1375	-1	0.02	17	590	2	-2	14	478	-0.01	35	-10	26
float	NBC47646	A9527304	0	-0.005	-0.2	2.11	12	60	-0.5	-2	5.27	-0.5	25	28	148	5.44	-12	-1	0.08	-10	2.09	990	-1	0.03	14	1500	6	-2	12	304	-0.01	109	-10	66
float	NBC47648	A9527304	0	-0.005	0.2	0.06	38	10	-0.5	2	-15	-0.5	1	14	2	3.51	-10	1	0.01	-10	6.78	700	1	0.01	22	110	4	4	1	859	-0.01	15	-10	22
float	NBC47649	A9527304	0	-0.005	-0.2	1.48	16	50	-0.5	-2	5.93	-0.5	24	27	89	6.19	-10	-1	0.11	-10	2.28	1000	-1	0.02	95	3850	12	2	8	330	-0.01	58	-10	62
float	NBC47654	A9526198	0	-0.005	-0.2	0.11	-2	40	-0.5	-2	9.66	-0.5	23	21	40	4.03	-10	-1	0.07	-10	3.53	1560	-1	0.01	20	1170	4	6	13	154	-0.01	27	10	44
float	NBC47655	A9526198	0	-0.005	-0.2	0.5	-2	40	-0.5	-2	6.02	0.5	8	8	52	3.81	-10	-1	0.06	-10	1.91	1335	-1	0.02	2	1340	2	12	18	150	-0.01	57	-10	52
float	NBC47656	A9526198	0	-0.005	-0.2	0.26	-2	2080	-0.5	-2	9.33	1	14	10	6	5.25	-10	-1	0.06	-10	4.01	2480	-1	0.02	7	630	2	4	9	263	-0.01	20	20	82
float	NBC47657	A9526198	0	-0.005	-0.2	-0.38	-2	1060	-0.5	-2	4.56	-0.5	13	12	68	3.35	-10	-1	0.12	-10	1.85	1190	-1	0.01	6	1100	4	8	7	526	-0.01	19	-10	60
float	NBC47659	A9526198	0	-0.005	-0.2	0.51	18	80	-0.5	-2	9.04	0.5	32	54	86	4.45	-10	1	0.18	-10	3.68	1220	-1	0.01	27	1430	10	6	20	333	-0.01	63	20	50
float	NBC47670	A9526198	0	-0.005	0.2	0.57	-2	720	-0.5	-2	8.93	0.5	12	54	52	5.23	-10	-1	0.17	20	0.99	2890	-1	0.03	1	1290	18	8	15	224	-0.01	37	10	104
float	NBC47671	A9526198	0	-0.005	0.2	0.18	-2	140	-0.5	-2	-15	-0.5	4	8	4	1.52	-10	-1	0.03	-10	0.29	2910	-1	-0.01	-1	70	30	4	2	899	-0.01	15	20	54
float	NBC47672	A9526198	0	-0.005	-0.2	0.42	-2	320	-0.5	-2	4.24	-0.5	7	24	7	3.24	-10	-1	0.14	20	0.16	1315	-1	0.08	-1	1150	6	4	5	151	0.03	58	-10	58
float	NBC47701	A9526354	0	0.02	-0.2	0.33	72	40	-0.5	-2	6.1	-0.5	8	60	22	4.39	-10	-1	0.09	-10	3.21	790	-1	0.03	43	610	20	14	6	688	-0.01	15	-10	52
float	NBC47702	A9526354	0	0.005	-0.2	0.27	42	30	-0.5	-2	5.8	-0.5	7	85	20	3.39	-10	-1	0.09	-10	2.86	680	-1	0.03	36	540	12	8	5	586	-0.01	11	-10	34
float	**NBC47703**	**A9526354**	**0**	**0.045**	**0.4**	**0.15**	**156**	**40**	**-0.5**	**-2**	**7.93**	**0.5**	**18**	**30**	**35**	**13.4**	**-10**	**-1**	**0.03**	**-10**	**2.88**	**1600**	**1**	**0.01**	**40**	**300**	**30**	**36**	**6**	**319**	**-0.01**	**15**	**-10**	**22**
float	NBC47745	A9526354	0	-0.005	-0.2	0.98	18	80	-0.5	-2	0.61	-0.5	9	153	10	2.15	-10	-1	0.11	10	0.7	640	-1	0.02	45	370	14	-2	2	42	-0.01	12	-10	52
float	NBC47746	A9526354	0	-0.005	-0.2	1.93	-2	80	-0.5	-2	0.11	-0.5	8	118	16	3.54	-10	-1	0.12	10	1.23	175	1	0.02	64	540	6	2	2	15	-0.01	24	-10	78
float	NBC47787	A9526354	0	-0.005	0.2	0.67	20	130	0.5	-2	3.71	-0.5	28	20	94	6.7	-10	-1	0.28	-10	1.77	1090	-1	0.05	62	5410	12	8	10	229	-0.01	57	-10	88
float	NBC47788	A9526354	0	-0.005	0.6	0.27	12	230	-0.5	-2	14.2	-0.5	12	7	218	3.44	-10	-1	0.1	-10	4.57	2200	-1	0.03	10	420	16	4	7	651	-0.01	17	-10	28
float	NBC47792	A9526354	0	-0.005	-0.2	0.13	44	20	-0.5	-2	10.6	-0.5	5	20	9	5.89	-10	-1	0.03	-10	3.81	1515	-1	0.01	50	310	8	4	3	282	-0.01	19	-10	12
float	NBC47793	A9526354	0	-0.005	0.4	1.06	34	70	-0.5	-2	11.1	-0.5	25	20	112	5.1	-10	-1	0.13	-10	1.85	1145	-1	0.01	33	1190	8	6	12	372	-0.01	38	-10	53
float	NBC47794	A9526354	0	-0.005	0.2	0.4	42	60	-0.5	-2	10.2	-0.5	16	8	112	4.59	-10	-1	0.17	-10	3.97	1535	-1	0.02	21	1710	8	4	10	622	-0.01	22	-10	18
float	NBC47795	A9526354	0	-0.005	0.2	0.35	8	60	-0.5	-2	3.08	-0.5	12	44	51	2.95	-10	-1	0.16	-10	1.03	715	-1	0.05	20	1180	12	8	5	145	-0.01	17	-10	60
float	PS116	A9520821	0	-0.005	-0.2	2.06	24	140	-0.5	-2	2.2	-0.5	24	43	177	4.58	10	-1	0.88	-10	0.93	1045	-1	0.05	5	2920	12	12	14	160	-0.01	173	10	56
float	PS117	A9520821	0	-0.005	-0.2	1.55	34	40	-0.5	-2	1.22	-0.5	44	76	123	5.13	10	-1	0.08	-10	1.03	765	6	0.06	36	1390	22	8	14	64	-0.01	191	-10	70
float	PS118	A9520821	0	-0.005	-0.2	0.91	86	140	-0.5	-2	7.77	0.5	18	19	139	5.13	10	-1	0.27	-10	1.31	1970	2	0.04	5	1680	36	16	10	518	-0.01	99	10	46
float	PS119	A9520821	0	-0.005	0.2	0.92	8	140	-0.5	-2	0.04	-0.5	8	99	34	2.05	-10	-1	0.44	-10	0.04	90	6	0.02	25	100	18	8	3	11	-0.01	12	-10	6
float	PS120	A9520821	0	-0.005	-0.2	0.19	-2	60	-0.5	-2	5.99	-0.5	2	217	5	2.26	-10	-1	0.07	-10	2.76	625	-1	0.02	15	400	2	4	2	530	-0.01	12	10	14

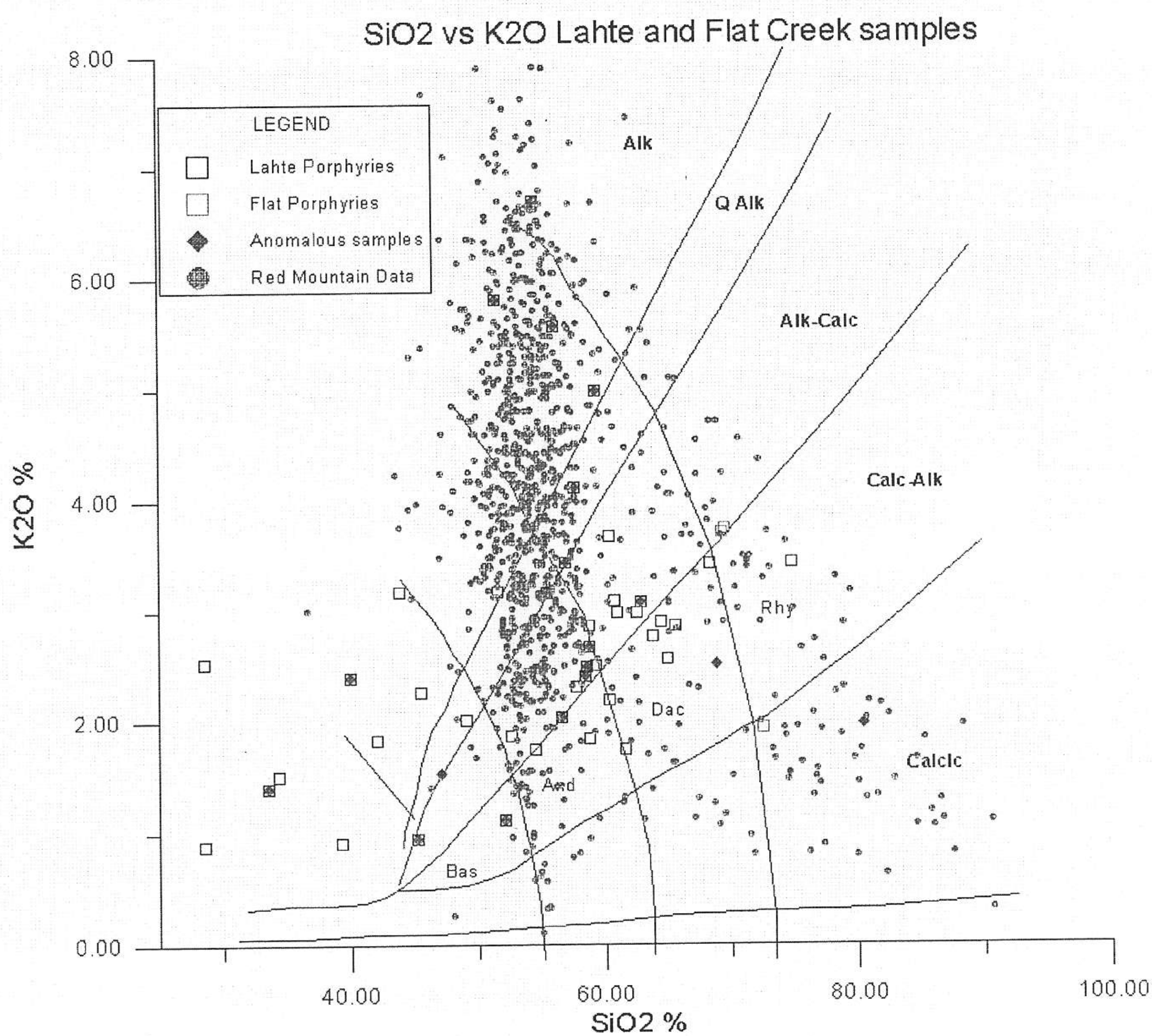
SUBTYPE	SAMPLE	CERT_NO	AU_PPB	AU_GT	Ag	Al	As	Ba	Be	Bi	Ca%	Cd	Co	Cr	Cu	Fe%	Ga	Hg	K%	La	Mg%	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Tl	V	W	Zn
float	PS121	A9520821	0	-0.005	-0.2	1.14	148	160	-0.5	-2	1.74	-0.5	55	88	164	9.71	10	-1	0.48	-10	2.95	615	-1	0.07	62	1640	4	18	23	150	-0.01	100	10	168
float	PS122	A9520821	0	-0.005	-0.2	0.46	8	70	-0.5	2	2.05	1	2	289	7	1.45	-10	-1	0.21	-10	0.66	525	22	0.02	6	290	4	4	4	138	-0.01	14	-10	68
float	PS124	A9520821	0	-0.005	0.8	0.55	108	110	-0.5	-2	0.07	0.5	2	168	21	2.74	-10	-1	0.27	-10	0.03	130	3	0.03	6	770	10	16	4	12	-0.01	18	-10	108
float	PS129	A9520825	0	-0.005	0.2	1.05	20	30	-0.5	-2	0.05	-0.5	3	252	7	1.83	-10	-1	0.07	-10	0.74	115	1	0.03	33	250	2	-2	1	8	-0.01	32	-10	30
float	PS132	A9520821	0	-0.005	0.6	2.81	16	40	-0.5	-2	3.04	-0.5	17	56	48	9.59	20	-1	0.19	-10	2.32	980	-1	0.06	1	1140	36	14	5	119	-0.01	61	20	266
float	**PS133**	**A9520821**	**0**	**0.32**	**0.6**	**0.38**	**14**	**110**	**-0.5**	**-2**	**1.62**	**-0.5**	**3**	**284**	**136**	**2.55**	**-10**	**-1**	**0.19**	**-10**	**0.52**	**300**	**1**	**0.03**	**5**	**410**	**114**	**54**	**2**	**56**	**-0.01**	**9**	**-10**	**54**
float	PS135	A9520821	0	-0.005	-0.2	1.58	10	40	-0.5	-2	1.06	-0.5	13	50	51	4.25	10	-1	0.32	-10	1.1	385	-1	0.09	1	1300	14	6	2	66	-0.01	36	-10	78
m.mat	**NBC47660**	**A9526200**	**255**	**0**	**-0.2**	**1.1**	**20**	**670**	**-0.5**	**-2**	**0.85**	**0.5**	**28**	**34**	**94**	**5.65**	**-10**	**-1**	**0.2**	**-10**	**0.92**	**1575**	**1**	**0.01**	**31**	**1740**	**14**	**4**	**13**	**102**	**0.02**	**67**	**-10**	**82**
m.mat	NBC47743	A9526358	-5	0	0.4	0.8	52	110	-0.5	-2	0.71	1	18	20	66	3.69	-10	-1	0.8	10	0.42	900	3	0.01	54	2050	24	6	6	54	-0.01	28	-10	114
m.mat	NBC47748	A9526358	-5	0	0.8	1.1	14	430	-0.5	-2	0.53	0.5	14	23	55	5.33	-10	-1	0.09	10	0.55	1090	-1	0.01	21	1680	30	4	8	68	0.03	92	-10	156
ocp	LH00001	A9520821	0	-0.005	0.2	0.31	16	450	-0.5	-2	11.1	0.5	10	66	62	3.62	-10	-1	0.16	-10	3.96	1635	-1	0.04	9	1390	2	10	16	811	-0.01	49	20	44
ocp	NBC47634	A9527304	0	0.01	-0.2	0.09	4	1600	-0.5	-2	12.6	0.5	6	21	2	2.64	-10	-1	0.06	-10	1.3	3070	-1	0.01	1	420	10	-2	1	297	-0.01	6	-10	174
ocp	NBC47639	A9527304	0	0.08	14	1.66	180	10	-0.5	-2	2.43	>100	75	12	###	4.41	-10	86	0.11	-10	0.79	5600	1	-0.01	8	750	>10000	12	4	106	-0.01	37	##	>10000
ocp	NBC47652	A9526198	0	-0.005	-0.2	0.24	-2	70	-0.5	2	8.82	1	15	30	49	2.89	-10	-1	0.11	-10	3.21	1425	-1	-0.01	18	530	6	4	5	197	-0.01	16	10	96
ocp	NBC47653	A9526198	0	-0.005	-0.2	0.11	-2	80	-0.5	-2	13.4	1	17	25	16	4.28	-10	-1	0.04	-10	4.91	2390	1	-0.01	13	150	4	4	2	263	-0.01	24	20	82
ocp	NBC47705	A9526354	0	-0.005	-0.2	0.22	14	20	-0.5	-2	2.68	-0.5	3	202	38	2.01	-10	-1	0.06	-10	1.19	450	-1	0.01	14	370	4	4	1	238	-0.01	7	-10	50
ocp	NBC47712	A9526354	0	-0.005	1.4	0.32	20	90	-0.5	-2	8.3	5	3	46	120	3.46	-10	1	0.04	-10	2.26	3000	1	0.04	1	530	16	12	4	105	-0.01	10	-10	428
ocp	NBC47715	A9526354	0	0.04	0.8	0.66	10	240	-0.5	-2	0.33	1	4	18	27	3.9	-10	-1	0.11	-10	0.15	675	2	0.05	1	1030	48	2	3	28	-0.01	12	-10	200
ocp	NBC47717	A9526354	0	-0.005	-0.2	0.33	10	100	-0.5	-2	2.97	0.5	2	27	9	1.35	-10	1	0.11	-10	1.11	1490	-1	0.03	9	530	14	4	3	72	-0.01	14	-10	98
ocp	NBC47725	A9526354	0	0.015	1	0.55	22	160	-0.5	-2	0.15	-0.5	4	37	22	1.94	-10	-1	0.24	20	0.05	85	1	0.06	12	1060	24	6	2	37	-0.01	23	-10	30
ocp	NBC47728	A9526354	0	-0.005	-0.2	1.1	24	230	-0.5	-2	0.74	-0.5	7	31	17	2.79	-10	-1	0.28	10	0.42	325	-1	0.04	12	1160	2	2	2	28	-0.01	14	-10	88
ocp	NBC47733	A9526354	0	-0.005	0.4	0.53	76	150	-0.5	-2	6.13	0.5	27	34	128	5.05	-10	-1	0.16	-10	1.24	1340	2	0.06	31	1600	6	4	15	148	-0.01	27	-10	70
ocp	NBC47735	A9526354	0	-0.005	0.2	0.47	52	210	-0.5	-2	2.1	-0.5	9	22	45	3.13	-10	-1	0.21	10	0.31	770	-1	0.02	4	500	4	2	7	61	-0.01	6	-10	48
ocp	NBC47737	A9526354	0	-0.005	0.2	0.83	154	70	-0.5	-2	2.7	0.5	24	43	138	4.48	-10	-1	0.12	-10	0.89	665	-1	0.05	19	1870	20	4	16	172	-0.01	74	-10	68
ocp	NBC47739	A9526354	0	-0.005	0.2	1.85	8	100	-0.5	-2	0.68	-0.5	11	12	20	3.55	-10	-1	0.18	10	1.16	350	-1	0.02	4	120	6	2	4	43	-0.01	11	-10	138
ocp	**NBC47740**	**A9526354**	**0**	**0.04**	**0.6**	**0.18**	**26**	**20**	**-0.5**	**-2**	**0.25**	**0.5**	**4**	**96**	**29**	**9.85**	**-10**	**-1**	**0.04**	**-10**	**0.12**	**150**	**45**	**-0.01**	**24**	**40**	**26**	**6**	**2**	**10**	**-0.01**	**-1**	**-10**	**106**
ocp	PS115	A9522843	0	0.015	0.4	0.56	136	160	-0.5	2	8.75	-0.5	27	72	227	2.3	10	-1	0.3	-10	0.28	970	1	0.02	11	700	8	8	6	414	-0.01	19	-10	12
ocp	PS123	A9520821	0	-0.005	-0.2	0.26	16	50	-0.5	-2	7.79	-0.5	2	191	15	4.11	-10	-1	0.11	-10	3.08	1090	-1	0.02	13	310	-2	14	2	733	-0.01	18	10	22
ocp	PS125	A9520821	0	0.015	-0.2	0.76	48	130	-0.5	-2	2.83	0.5	10	36	56	3.67	10	-1	0.34	-10	0.95	715	-1	0.06	21	1310	6	20	5	106	-0.01	27	-10	32
ocp	PS126	A9520821	0	-0.005	-0.2	0.13	14	20	-0.5	-2	6.46	-0.5	2	222	7	2.55	-10	1	0.05	-10	2.96	680	-1	0.02	19	210	4	8	1	745	-0.01	11	10	14
ocp	PS134	A9520821	0	-0.005	-0.2	1.05	-2	240	-0.5	-2	6.7	-0.5	8	213	5	2.66	-10	-1	0.07	-10	0.58	1285	-1	0.02	2	340	8	6	2	287	-0.01	19	-10	78
ocp	PS136	A9520821	0	0.055	0.2	0.84	-2	100	-0.5	-2	3.41	-0.5	18	53	7	4.4	-10	-1	0.25	-10	1.08	500	-1	0.09	5	1360	14	40	7	121	-0.01	24	-10	64
ocp	PS137	A9520821	0	0.045	-0.2	0.44	-2	60	-0.5	-2	3.87	0.5	16	26	11	4.1	-10	-1	0.14	-10	1.32	710	1	0.05	2	1660	4	8	6	99	-0.01	16	10	72
ocp?	NBC47666	A9526198	0	-0.005	9	0.18	94	20	-0.5	-2	5.38	6	4	65	110	8.58	-10	-1	0.13	-10	1.31	5580	-1	-0.01	-1	610	1135	36	2	193	-0.01	10	10	708
silt	**NBC47621**	**A9527303**	**225**	**0**	**0.2**	**1.05**	**20**	**90**	**-0.5**	**-2**	**0.65**	**1.5**	**20**	**2**	**131**	**7.77**	**-10**	**-1**	**0.07**	**-10**	**0.38**	**1325**	**7**	**0.01**	**4**	**1970**	**42**	**2**	**4**	**109**	**-0.01**	**29**	**-10**	**188**
silt	NBC47651	A9526200	-5	0	-0.2	0.9	-2	250	-0.5	-2	1.59	0.5	11	10	57	3.8	-10	-1	0.02	-10	0.56	1045	-1	-0.01	7	1860	36	4	5	74	0.01	51	-10	126
silt	NBC47661	A9526200	-5	0	2	0.92	44	540	-0.5	-2	0.54	6.5	15	10	92	5.26	-10	-1	0.06	-10	0.4	4680	2	-0.01	8	1740	204	12	6	69	-0.01	36	-10	926
silt	NBC47667	A9526200	-5	0	-0.2	1.01	-2	290	-0.5	-2	2.34	0.5	11	8	86	3.63	-10	-1	0.06	10	0.8	1250	-1	0.01	3	1580	28	4	3	67	0.03	59	-10	128
silt	**NBC47668**	**A9526200**	**125**	**0**	**-0.2**	**1.41**	**4**	**260**	**-0.5**	**-2**	**2.8**	**-0.5**	**12**	**14**	**77**	**3.51**	**-10**	**-1**	**0.06**	**-10**	**1.14**	**995**	**-1**	**0.01**	**6**	**1350**	**20**	**4**	**7**	**74**	**0.02**	**64**	**-10**	**84**
silt	NBC47669	A9526200	5	0	-0.2	1.16	-2	230	-0.5	4	0.58	-0.5	10	9	53	4.06	-10	-1	0.07	10	0.95	995	-1	0.01	6	1590	20	4	4	29	0.04	80	-10	94
silt	NBC47721	A9526358	20	0	0.6	0.7	42	100	-0.5	-2	0.52	3	18	4	74	5.69	-10	-1	0.08	10	0.23	1995	3	0.02	9	1680	108	2	4	45	-0.01	23	-10	284
silt	NBC47734	A9526358	10	0	0.6	1.76	48	130	-0.5	-2	0.79	0.5	28	35	105	8.72	-10	-1	0.19	10	2.24	1040	-1	0.01	29	1790	26	4	18	57	0.16	255	-10	94
silt	NBC47742	A9526358	-5	0	0.2	1.78	32	300	-0.5	-2	1.32	-0.5	24	58	100	5.74	-10	1	0.21	10	2.1	975	-1	0.01	22	1560	16	2	17	75	0.11	155	-10	66
silt	NBC47744	A9526358	-5	0	0.4	3.84	66	170	1	-2	0.71	1.5	82	58	50	4.08	-10	-1	0.07	20	0.56	5260	2	-0.01	##	1630	32	10	5	67	0.01	27	-10	346
silt	NBC47749	A9526358	-5	0	0.4	1.57	24	140	-0.5	-2	0.82	-0.5	23	57	90	5.15	-10	-1	0.12	10	1.71	805	1	0.01	41	1360	18	4	11	55	0.08	93	-10	84
silt	**NBC47750**	**A9526358**	**625**	**0**	**0.4**	**1.25**	**16**	**250**	**-0.5**	**-2**	**2.24**	**0.5**	**14**	**11**	**99**	**4.94**	**-10**	**-1**	**0.06**	**10**	**0.96**	**1035**	**-1**	**0.01**	**7**	**1560**	**62**	**4**	**6**	**67**	**0.04**	**82**	**-10**	**106**
silt	NBC47786	A9526358	-5	0	0.2	2.33	48	250	1	-2	0.64	0.5	44	37	34	3.73	-10	-1	0.06	10	0.34	4630	1	-0.01	83	1100	30	6	4	122	-0.01	26	-10	236
skree	LH00002	A9520821	0	-0.005	-0.2	1.73	84	130	-0.5	-2	4.14	-0.5	37	114	63	6.8	10	-1	0.45	-10	4.01	585	-1	0.03	51	710	2	12	24	257	-0.01	89	20	90
skree	LH00021	A9520821	0	-0.005	0.2	2.02	18	60	-0.5	-2	0.21	13	36	56	151	6.1	10	1	0.41	-10	0.62	80	2	0.03	19	1110	234	10	7	32	-0.01	62	-10	1005
soil	NBC47708	A9526358	-5	0	0.2	0.35	6	370	-0.5	-2	0.26	1.5	10	2	16	4.42	-10	-1	0.05	-10	0.04	1585	-1	0.01	1	1400	86	2	5	15	-0.01	8	-10	170
	Anomalous Cut-offs		*50*	*0.025*	*3*		*100*					*10*			*200*			*10*					*10*		*50*		*200*	*20*						*200*

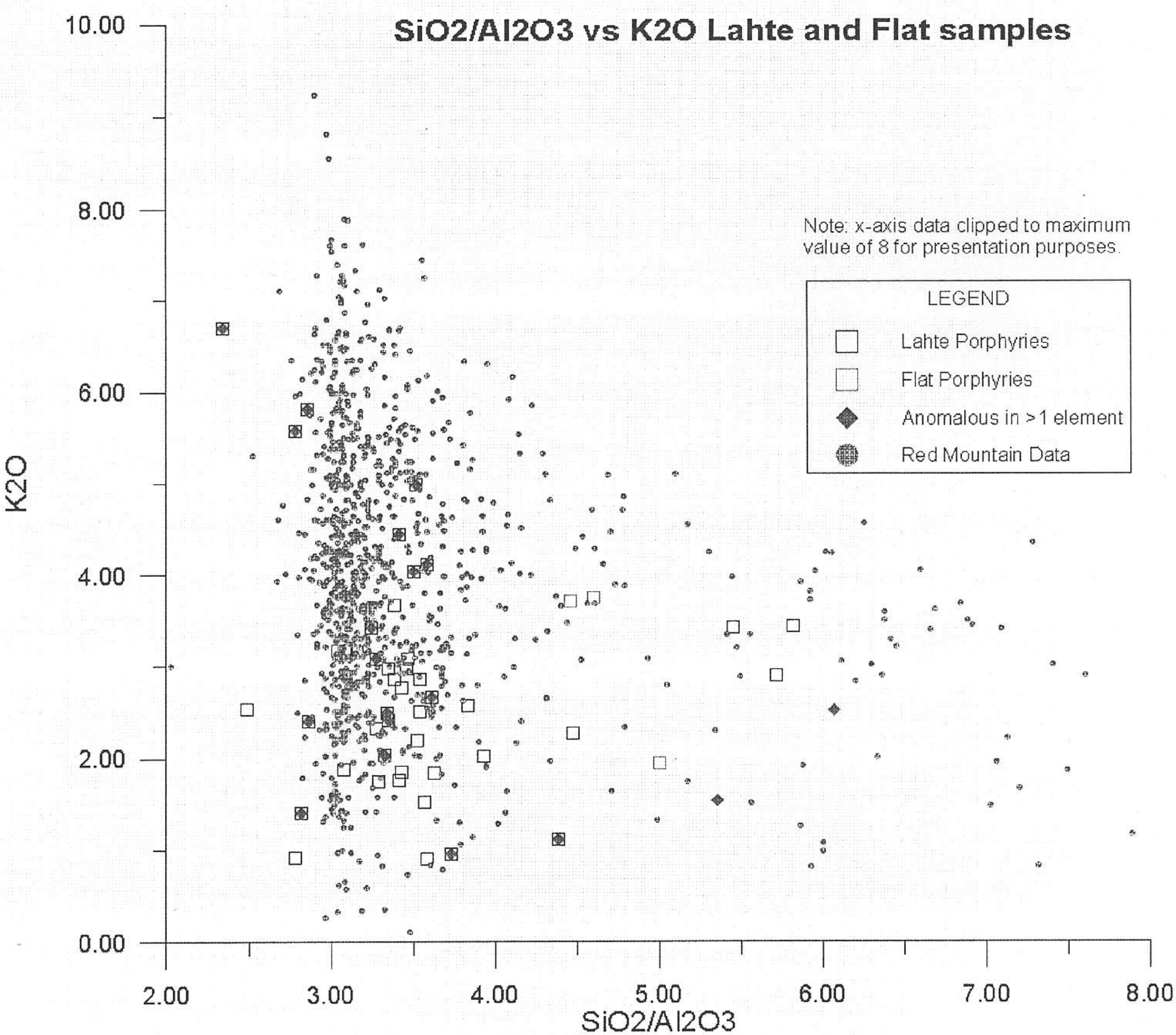
Lahte wr and icp data

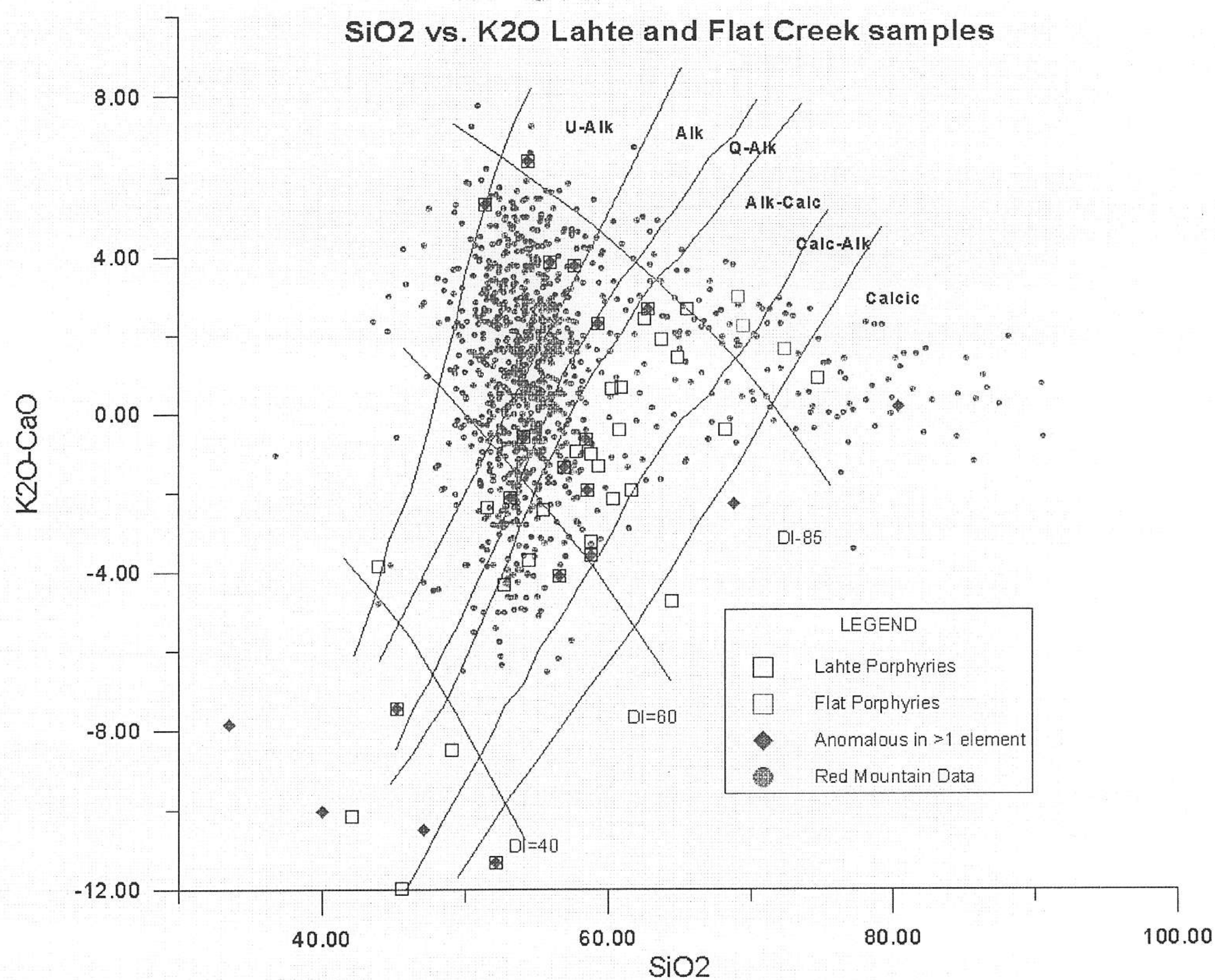
SAMPLE	SUBTYPE	ROCKTYPE	AU_ppm	AU_GT	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe%	Ga	Hg	K%	La	Mg%	Mn	Mo	Na%	NI	P	Pb	Sb	Sc	Sr	Tl	Th	U
NBC47729	chip	chert, blk - wh	0	-0.005	0.2	0.18	32	100	-0.5	-2	1.24	1	8	82	31	1.62	-10	-1	0.08	-10	0.16	510	6	-0.01	13	410	10	4	3	30	-0.01	-10	-10
NBC47732	chips	sed	0	-0.005	0.2	0.17	14	70	-0.5	-2	2.91	-0.5	6	72	33	2.1	-10	-1	0.09	-10	0.99	550	-1	-0.01	13	160	6	2	4	116	-0.01	-10	-10
NBC47622	float	sil-ser rk	0	-0.005	-0.2	0.38	4	220	-0.5	-2	2.12	-0.5	4	36	26	0.48	-10	-1	0.26	10	0.32	300	-1	0.03	1	1150	2	2	-1	97	-0.01	-10	-10
NBC47627	float	sil-ser-py	0	-0.005	-0.2	1.77	4	80	-0.5	-2	3.27	0.5	7	68	20	1.67	-10	1	1.15	-10	0.4	350	-1	0.16	2	1140	8	2	1	197	-0.01	-10	-10
NBC47628	float	ser-sil rk	0	-0.005	0.2	0.67	2	60	-0.5	-2	2.33	-0.5	6	31	8	3.24	-10	-1	0.26	-10	0.5	310	2	0.06	2	1060	14	-2	2	92	-0.01	-10	-10
NBC47630	float	SM py	0	0.015	1.8	1.95	32	-10	-0.5	2	6.76	9.5	23	57	80	14.4	-10	-1	0.14	10	1.34	1095	-1	0.07	3	2070	178	-2	7	235	-0.01	-10	-10
NBC47632	float	Ser-Sil rk	0	-0.005	-0.2	0.51	2	190	-0.5	-2	3.84	-0.5	2	17	9	2.31	-10	-1	0.18	-10	0.53	1370	1	0.05	1	1050	2	-2	3	74	-0.01	-10	-10
NBC47635	**float**	**Ser'c rk**	**0**	**0.06**	**0.4**	**1.09**	**6**	**-10**	**-0.5**	**-2**	**0.24**	**0.5**	**14**	**97**	**42**	**5.56**	**-10**	**-1**	**0.41**	**-10**	**0.44**	**100**	**3**	**0.02**	**2**	**830**	**42**	**-2**	**4**	**15**	**-0.01**	**-10**	**-10**
NBC47642	float	sed/int?	0	-0.005	0.2	0.24	28	180	-0.5	-2	11.9	2	11	33	44	2.81	-10	-1	0.14	-10	3.85	1400	-1	0.08	13	470	24	-2	11	257	-0.01	-10	-10
NBC47645	float	alt'd porphyry	0	-0.005	-0.2	0.58	20	150	-0.5	-2	9.93	-0.5	17	10	86	3.96	-10	-1	0.31	-10	3.21	1665	-1	0.04	5	1030	4	-2	10	329	-0.01	-10	10
NBC47662	float	chl-ser rk	0	-0.005	0.8	0.43	24	60	-0.5	2	2	5	12	13	26	3.99	-10	-1	0.1	-10	0.55	2810	1	-0.01	1	1310	102	8	2	45	-0.01	-10	-10
NBC47663	float	sil rk	0	-0.005	1	0.8	4	240	-0.5	-2	4.56	1	15	18	50	4.44	-10	-1	0.1	-10	0.75	1830	1	-0.01	2	1330	58	6	4	154	-0.01	-10	-10
NBC47664	float	sil rk	0	-0.005	3.6	0.21	60	30	-0.5	-2	0.4	9.5	10	12	101	7.97	-10	-1	0.13	-10	0.43	2840	2	-0.01	1	1010	156	12	3	13	-0.01	-10	-10
NBC47665	float	Qtz-ser-py sch	0	-0.005	1	0.37	24	50	-0.5	-2	0.23	4	14	31	20	4.24	-10	1	0.21	-10	0.01	45	2	0.02	2	1060	48	6	1	14	-0.01	-10	-10
NBC47789	**float**	**Alt'd Porphyry**	**0**	**0.06**	**-0.2**	**1.97**	**2**	**60**	**-0.5**	**-2**	**5.42**	**-0.5**	**28**	**148**	**82**	**5.21**	**-10**	**-1**	**0.07**	**-10**	**3.16**	**995**	**-1**	**0.02**	**35**	**970**	**4**	**2**	**24**	**398**	**-0.01**	**-10**	**-10**
NBC47790	float	alt'd Porphyry	0	-0.005	0.4	0.32	68	390	-0.5	-2	8.82	-0.5	32	54	86	6.38	-10	-1	0.14	-10	3.05	1565	-1	0.03	39	1110	8	4	21	404	-0.01	-10	-10
NBC47791	float	cb rk	0	-0.005	0.2	0.31	40	40	-0.5	-2	4.49	-0.5	19	14	112	5.91	-10	-1	0.12	-10	2.19	1025	-1	0.01	19	1230	4	4	11	247	-0.01	-10	-10
LH00004	ocp	Felsic Dyke	0	-0.005	-0.2	2.2	-2	270	-0.5	-2	0.34	-0.5	8	10	28	2.71	10	-1	0.49	20	1.32	225	-1	0.04	5	300	8	-2	6	26	-0.01	-10	-10
LH00005	ocp	Felsic Dyke	0	-0.005	-0.2	0.97	8	220	-0.5	-2	2.5	-0.5	9	13	11	3.24	10	-1	0.29	10	0.24	805	-1	0.14	4	1020	8	4	6	85	-0.01	-10	-10
NBC47623	**ocp**	**lim'c-cb'd rk**	**0**	**0.07**	**-0.2**	**1.14**	**4**	**140**	**-0.5**	**-2**	**9.67**	**-0.5**	**17**	**67**	**7**	**4.93**	**-10**	**-1**	**0.55**	**-10**	**1.88**	**2080**	**-1**	**0.2**	**2**	**1280**	**4**	**-2**	**10**	**277**	**-0.01**	**-10**	**-10**
NBC47624	ocp		0	-0.005	-0.2	0.34	2	300	-0.5	-2	6.23	-0.5	5	32	20	1.92	-10	1	0.21	-10	0.54	1435	-1	0.03	1	900	4	-2	1	159	-0.01	-10	-10
NBC47625	ocp	cb-sil sch	0	-0.02	-0.2	1.34	2	210	-0.5	-2	4.87	-0.5	9	61	9	3.1	-10	-1	0.49	-10	0.99	880	-1	0.29	1	1460	6	2	6	163	-0.01	-10	-10
NBC47626	ocp	P&G sch	0	-0.005	0.6	0.33	6	370	-0.5	-2	10.8	-0.5	14	47	190	3.73	-10	-1	0.2	-10	1.62	2210	-1	0.04	2	850	8	-2	4	313	-0.01	-10	-10
NBC47633	ocp	ser-chl sch	0	-0.005	0.2	1.01	10	300	-0.5	-2	8.51	-0.5	14	52	163	5.58	-10	-1	0.19	-10	1.44	2970	10	0.07	2	690	6	4	4	164	-0.01	-10	-10
NBC47636	**ocp**	**Min chl-ser**	**0**	**0.025**	**2.4**	**1.06**	**96**	**90**	**-0.5**	**-2**	**0.85**	**>100**	**28**	**9**	**283**	**2.6**	**-10**	**4**	**0.17**	**-10**	**0.4**	**1230**	**6**	**-0.01**	**5**	**1280**	**2370**	**4**	**1**	**73**	**-0.01**	**-10**	**-10**
NBC47637	**ocp**	**Min chl-ser rk**	**0**	**1.01**	**2.6**	**1.2**	**260**	**20**	**-0.5**	**-2**	**2.87**	**97**	**41**	**22**	**184**	**5.12**	**-10**	**1**	**0.2**	**-10**	**0.45**	**2490**	**3**	**0.01**	**6**	**1100**	**492**	**-2**	**2**	**367**	**-0.01**	**-10**	**-10**
NBC47638	ocp	fsp xtal rock (tuff/int)	0	-0.005	-0.2	1.82	4	420	-0.5	-2	3.72	0.5	6	22	10	2.32	-10	1	0.66	10	0.67	1685	-1	0.07	-1	970	12	-2	2	98	-0.01	-10	-10
NBC47650	ocp	FP diorite	0	-0.005	-0.2	1.75	4	130	-0.5	-2	2.86	-0.5	7	16	19	3.29	-10	-1	0.12	10	0.69	1015	-1	0.02	2	1360	6	-2	4	66	-0.01	-10	-10
NBC47658	ocp	amp Porp	0	-0.005	-0.2	2.24	-2	460	-0.5	4	2.61	-0.5	8	55	12	2.54	10	-1	0.56	10	0.97	575	-1	0.13	3	940	-2	6	3	115	-0.01	-10	-10
NBC47704	ocp	dyke	0	0.005	-0.2	1.03	22	100	-0.5	-2	3.69	0.5	10	45	8	3.69	-10	-1	0.16	-10	1.36	755	-1	0.08	3	1140	8	4	4	162	-0.01	-10	-10
NBC47706	ocp	fsp-hbl-diorite	0	-0.005	-0.2	1.85	-2	190	-0.5	-2	2.42	-0.5	12	31	13	3.03	-10	-1	0.19	10	0.74	905	-1	0.03	3	1060	6	4	3	115	-0.01	-10	-10
NBC47707	ocp	Equigran diorite	0	0.01	-0.2	1.44	2	210	-0.5	-2	3.63	-0.5	6	42	-1	2.62	-10	-1	0.2	10	0.45	765	-1	0.08	-1	1230	6	2	2	152	-0.01	-10	-10
NBC47709	ocp	sch-ser's-py'c	0	-0.005	0.2	0.53	-2	160	-0.5	-2	3.05	10.5	8	47	16	3.27	-10	2	0.14	-10	0.63	1575	-1	0.08	2	1120	168	2	4	93	-0.01	-10	-10
NBC47710	ocp	py'c ser's schist	0	0.01	0.4	0.46	-2	240	-0.5	-2	3.84	2.5	5	38	15	3.03	-10	-1	0.13	10	0.27	1125	-1	0.06	3	970	46	2	3	###	-0.01	-10	-10
NBC47711	**ocp**	**schistose, ser'c**	**0**	**0.085**	**2.8**	**0.82**	**40**	**110**	**-0.5**	**-2**	**3.57**	**0.5**	**5**	**49**	**19**	**3.78**	**-10**	**-1**	**0.09**	**-10**	**0.63**	**1595**	**-1**	**0.06**	**1**	**960**	**98**	**4**	**5**	**147**	**-0.01**	**-10**	**-10**
NBC47713	ocp	carb alt'd	0	-0.005	0.4	0.49	4	240	-0.5	-2	0.6	1	6	31	23	4.08	-10	-1	0.11	-10	0.07	1265	-1	0.05	3	1080	30	2	4	40	-0.01	-10	-10
NBC47714	ocp	carb-talcose (pyrophyl)	0	-0.005	0.8	0.67	6	310	-0.5	-2	8.06	2	5	33	119	3.55	-10	-1	0.05	-10	1.09	2610	2	0.07	1	790	30	6	5	125	-0.01	-10	-10
NBC47716	ocp	py-sil rk	0	-0.005	2	0.26	130	60	-0.5	-2	8.53	1.5	26	77	268	6.35	-10	1	0.04	-10	2.98	4470	2	0.02	20	830	62	22	8	156	-0.01	-10	-10
NBC47718	ocp	banded unit	0	-0.005	3.2	0.44	118	90	-0.5	-2	6.25	11	35	46	216	8.48	-10	1	0.03	-10	2.9	3680	6	0.02	99	670	448	14	4	101	-0.01	-10	-10
NBC47719	ocp	bnd'd creamy rock	0	-0.005	2	0.29	74	110	-0.5	-2	6.3	23.5	19	27	129	4.07	-10	5	0.06	-10	2.88	3620	4	0.02	58	740	458	16	4	95	-0.01	-10	-10
NBC47720	ocp	strong alt'd	0	-0.005	0.4	0.28	-2	140	-0.5	-2	6.63	1.5	9	43	21	5.17	-10	-1	0.07	-10	0.98	1240	-1	0.04	-1	670	30	2	4	148	-0.01	-10	-10
NBC47722	ocp	Int?, kspar	0	-0.005	0.2	1.33	-2	130	-0.5	-2	1.64	0.5	6	18	12	3.16	-10	-1	0.17	10	0.65	930	1	0.04	1	1190	12	2	3	37	-0.01	-10	-10
NBC47723	**ocp**	**ser'c, lim'c**	**0**	**0.09**	**0.2**	**1.38**	**-2**	**520**	**-0.5**	**-2**	**0.28**	**0.5**	**10**	**26**	**26**	**3.68**	**-10**	**-1**	**0.18**	**-10**	**0.33**	**810**	**2**	**0.06**	**2**	**1240**	**8**	**2**	**3**	**20**	**-0.01**	**-10**	**-10**
NBC47724	ocp	Fsp Porp	0	-0.005	0.2	2.61	16	180	-0.5	-2	7.28	-0.5	28	145	141	5.5	-10	-1	0.17	-10	1.65	950	-1	0.01	36	1550	2	4	18	376	-0.01	-10	-10
NBC47726	ocp	Hbl Porphyry	0	-0.005	0.2	2.23	-2	150	-0.5	-2	2.18	0.5	10	21	4	3.49	-10	-1	0.23	-10	1.23	610	-1	0.03	7	1260	4	2	2	100	-0.01	-10	-10
NBC47727	ocp	Hbl-Por	0	-0.005	0.2	1.22	-2	100	-0.5	-2	4	0.5	9	26	73	4.36	-10	-1	0.16	-10	1.68	785	-1	0.02	29	1200	6	4	4	185	-0.01	-10	-10
NBC47730	ocp	chty sed	0	-0.005	0.2	0.25	14	80	-0.5	-2	2.46	0.5	9	74	24	2.38	-10	-1	0.06	-10	0.34	650	-1	0.01	15	290	4	2	3	43	-0.01	-10	-10
NBC47731	ocp	chty sed	0	-0.005	0.6	0.3	34	120	-0.5	-2	1.31	1.5	8	76	57	1.78	-10	-1	0.15	10	0.44	630	11	0.01	40	460	12	4	2	51	-0.01	-10	-10
NBC47736	ocp	cb-chl vn bx	0	-0.005	0.2	3.33	30	80	-0.5	-2	5.3	0.5	37	220	127	8.3	-10	-1	0.08	-10	3.26	1020	-1	0.03	44	1370	12	4	30	455	-0.01	-10	-10
NBC47738	**ocp**	**sil vn**	**0**	**0.025**	**0.6**	**0.33**	**62**	**100**	**-0.5**	**-2**	**9.47**	**33**	**32**	**18**	**140**	**6**	**-10**	**2**	**0.04**	**-10**	**2.49**	**2680**	**-1**	**0.03**	**33**	**840**	**28**	**8**	**13**	**378**	**-0.01**	**-10**	**-10**
NBC47741	ocp	alt'd FP?	0	-0.005	0.2	0.54	14	100	-0.5	-2	3.83	-0.5	15	18	47	4.27	-10	-1	0.18	-10	1.09	920	-1	0.06	6	1440	8	2	12	106	-0.01	-10	-10
NBC47796	ocp	hbl-fsp P	0	-0.005	-0.2	1.53	4	280	-0.5	-2	2.93	-0.5	9	32	6	2.79	-10	-1	0.17	10	0.71	635	-1	0.05	2	1010	8	4	3	101	-0.01	-10	-10
NBC47797	ocp	alt'd porphyry	0	-0.005	0.8	0.58	2	300	-0.5	-2	0.13	-0.5	3	11	9	2.98	-10	-1	0.17	-10	0.12	95	-1	0.03	1	960	20	-2	2	14	-0.01	-10	-10
NBC47747	scree	Diorite	0	-0.005	-0.2	1.89	2	720	-0.5	-2	2.01	23	7	19	13	3.51	-10	3	0.19	10	1.05	2390	-1	0.03	2	1130	8	4	3	94	-0.01	-10	-10
		Anomlous Cut-Offs	*50*	*0.025*	*3*		*100*					*10*			*200*			*10*					*10*		*50*		*200*	*20*					

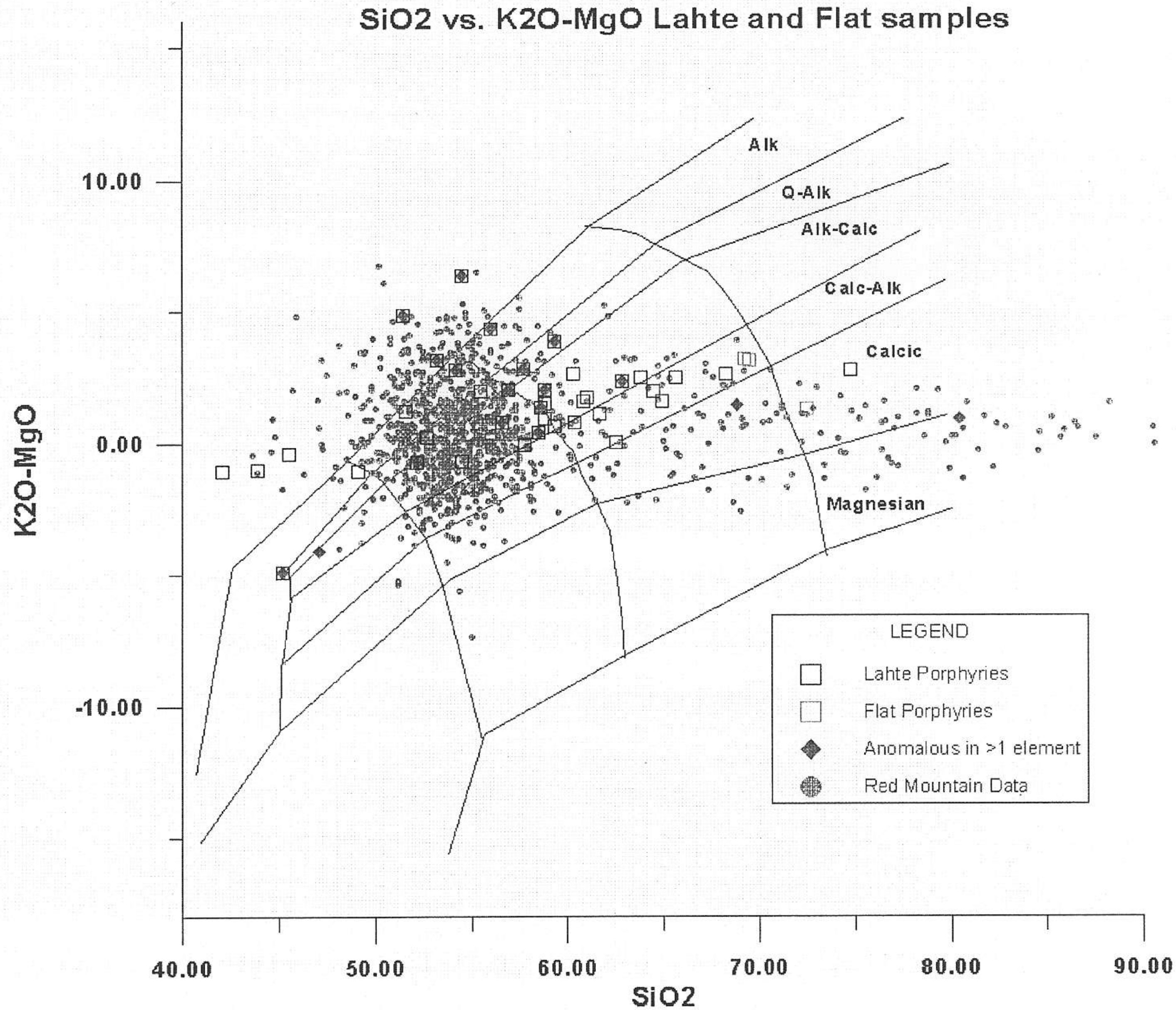
SAMPLE	V	W	Zn	Al2O3	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	TiO2	LOI	TOTAL	Ba	Rb	SR	NB	Zr	Y
NBC47729	8	-10	88	4.11	1.75	0.02	2.58	1.17	0.4	0.07	0.1	0.11	86.57	0.23	2.82	99.93	720	20	30	-10	50	10
NBC47732	3	-10	92	4.96	4.2	0.03	3.45	1.38	1.88	0.08	0.26	0.04	76.63	0.27	6.11	99.29	780	30	130	-10	60	20
NBC47622	2	-10	16	12.85	2.52	-0.01	1.11	3.44	0.68	0.04	0.52	0.25	74.77	0.19	3.34	99.71	1660	80	170	-10	110	10
NBC47627	16	-10	42	12.52	3.84	0.02	2.83	3.42	0.77	0.04	0.52	0.23	68.24	0.32	6.49	99.24	1340	80	270	-10	110	10
NBC47628	11	-10	42	17.83	3.04	0.03	5.39	3.67	1.05	0.04	1.77	0.22	60.31	0.53	5.29	99.17	1740	80	340	-10	110	20
NBC47630	40	-10	768	11.9	9.27	0.03	24.11	1.41	2.72	0.15	0.78	0.45	33.51	0.24	14.51	99.08	700	20	350	-10	90	20
NBC47632	12	-10	70	17.55	5.61	0.02	5.11	3.16	1.16	0.24	2.54	0.28	55.46	0.49	8.08	99.7	1240	60	240	-10	90	20
NBC47635	**17**	**-10**	**78**	**16.09**	**0.36**	**0.04**	**11.04**	**4.12**	**1.3**	**0.01**	**0.36**	**0.22**	**57.69**	**0.54**	**7.71**	**99.48**	**2560**	**80**	**80**	**-10**	**70**	**10**
NBC47642	33	-10	122	7.97	19.05	0.02	5.88	0.9	8.19	0.28	3.24	0.15	28.58	0.26	24.38	98.9	480	10	360	-10	20	10
NBC47645	79	-10	62	9.62	14.86	0.01	7.77	1.52	6.52	0.31	3.04	0.31	34.35	0.39	20.39	99.09	740	20	440	-10	40	10
NBC47662	8	-10	400	16.86	2.68	0.01	7.41	4.98	1.09	0.48	0.2	0.3	59.32	0.5	5.99	99.82	1200	140	60	-10	70	20
NBC47663	21	-10	216	15.59	6.59	0.02	8.69	4.45	1.31	0.32	0.21	0.3	53.2	0.43	7.42	98.53	2020	120	180	-10	60	10
NBC47664	12	-10	1065	18	0.5	0.01	13.09	5.81	0.93	0.47	0.21	0.24	51.46	0.53	8.78	100.03	1200	160	40	-10	90	10
NBC47665	6	-10	382	23.28	0.3	0.02	6.72	6.7	0.31	-0.01	0.58	0.23	54.49	0.67	6.38	99.68	2040	170	110	-10	90	160
NBC47789	**83**	**-10**	**58**	**12.12**	**8.43**	**0.05**	**9.08**	**0.96**	**5.87**	**0.17**	**2.88**	**0.26**	**45.22**	**0.51**	**13.56**	**99.11**	**780**	**20**	**670**	**-10**	**40**	**10**
NBC47790	42	-10	50	11.45	14.72	0.06	11.94	2.53	5.86	0.32	1.01	0.3	28.52	0.59	21.78	99.08	1060	50	470	-10	30	10
NBC47791	27	-10	50	14.2	7.04	0.01	10.27	3.17	4.18	0.18	1.25	0.31	43.89	0.69	14.13	99.32	1060	70	320	-10	50	10
LH00004	22	-10	48	18.09	0.55	-0.01	4.64	2.98	2.96	0.02	4.11	0.09	62.54	0.69	2.78	99.45	1480	100	150	10	240	50
LH00005	22	-10	106	18.05	3.7	-0.01	5.24	1.76	0.64	0.11	4.4	0.26	61.65	0.69	3.58	100.08	1220	30	640	10	130	10
NBC47623	**31**	**-10**	**162**	**13.97**	**12.43**	**0.03**	**8.05**	**2.4**	**3.1**	**0.33**	**1.52**	**0.29**	**39.99**	**0.51**	**16.98**	**99.6**	**680**	**40**	**380**	**-10**	**70**	**10**
NBC47624	5	-10	80	11.28	7.64	0.02	3.76	2.9	0.91	0.22	0.5	0.2	64.46	0.25	6.9	99.04	920	60	200	-10	70	10
NBC47625	22	-10	76	17.12	6.19	0.04	5.36	1.88	1.66	0.13	3.61	0.32	52.69	0.67	10.18	99.85	740	30	370	-10	120	10
NBC47626	9	-10	170	10.17	14.24	0.05	6.43	2.27	2.65	0.36	0.63	0.2	45.52	0.3	16.17	98.99	760	40	350	-10	50	10
NBC47633	21	-10	184	11.59	12	0.03	10.67	1.84	2.88	0.52	0.65	0.2	42.07	0.35	16.98	99.78	800	30	280	-10	60	10
NBC47636	**15**	**-10**	**>10000**	**20.14**	**1.71**	**0.02**	**7.32**	**5.57**	**1.24**	**0.27**	**1.24**	**0.34**	**56.03**	**0.52**	**4.56**	**98.96**	**3540**	**150**	**250**	**-10**	**70**	**20**
NBC47637	**25**	**-10**	**6730**	**15.46**	**4.62**	**0.01**	**11.21**	**4.04**	**1.24**	**0.48**	**1.03**	**0.27**	**54.15**	**0.46**	**6.38**	**99.3**	**2300**	**100**	**550**	**-10**	**70**	**20**
NBC47638	29	-10	226	17.56	4.79	0.01	4.69	3.43	1.4	0.25	3.76	0.24	56.94	0.38	6.25	99.7	1380	90	310	-10	90	20
NBC47650	33	-10	88	17.36	3.87	0.01	5.86	2.86	1.35	0.14	3.35	0.28	58.8	0.46	4.76	99.1	760	60	170	-10	90	20
NBC47658	33	-10	80	16.77	3.83	0.03	4.6	2.51	1.85	0.08	4.16	0.22	59.33	0.56	5.4	99.34	1540	50	660	10	120	10
NBC47704	19	-10	116	16.58	5.46	0.03	6.03	1.75	2.41	0.11	3.24	0.27	54.48	0.74	8.65	99.75	1020	30	670	-10	110	10
NBC47706	22	-10	172	17.53	3.49	-0.01	5.34	3.09	1.48	0.14	1.69	0.24	60.82	0.65	5.46	99.93	1700	70	390	-10	120	10
NBC47707	13	-10	102	17.14	5.1	0.01	4.48	1.85	0.9	0.11	4.02	0.26	58.8	0.56	5.71	98.94	1660	30	730	10	120	10
NBC47709	7	-10	920	17.52	4.45	0.02	5.23	2.49	1.15	0.25	1.64	0.25	58.57	0.43	7.92	99.92	1240	40	390	-10	90	20
NBC47710	6	-10	234	16.3	6.25	0.03	5.26	2.67	0.62	0.2	1.27	0.24	58.83	0.4	6.54	98.61	2560	60	###	-10	80	20
NBC47711	**11**	**-10**	**116**	**17.01**	**6.16**	**0.02**	**6.44**	**2.04**	**1.23**	**0.28**	**1.5**	**0.24**	**56.6**	**0.41**	**7.34**	**99.27**	**980**	**40**	**440**	**-10**	**80**	**10**
NBC47713	8	-10	160	18.61	0.87	0.02	5.84	2.77	0.29	0.18	1.5	0.25	63.8	0.45	5.39	99.97	1540	70	520	-10	100	20
NBC47714	14	-10	248	11.89	12.45	0.01	5.76	1.12	1.82	0.44	1.24	0.18	52.15	0.28	11.85	99.19	1000	20	370	-10	60	10
NBC47716	41	-10	198	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7773	-7777	320	10	210	-10	30	10
NBC47718	16	-10	1205	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	500	20	180	-10	30	10
NBC47719	14	-10	3330	8.79	12.04	0.04	7.86	1.54	5.61	0.76	0.63	0.21	47.1	0.3	13.74	98.67	720	30	200	-10	40	10
NBC47720	4	-10	134	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	840	30	370	-10	50	10
NBC47722	31	-10	104	18.22	2.33	0.03	5.24	2.98	1.23	0.14	2.79	0.27	60.99	0.46	5.11	99.79	1180	70	180	-10	100	20
NBC47723	**18**	**-10**	**110**	**19.18**	**0.4**	**-0.01**	**5.79**	**3.08**	**0.7**	**0.12**	**1.64**	**0.28**	**62.85**	**0.5**	**4.77**	**99.31**	**1420**	**60**	**200**	**-10**	**100**	**10**
NBC47724	80	-10	76	12.5	10.52	0.03	9.09	2.02	3.07	0.15	0.98	0.37	49.07	0.61	10.71	99.16	1820	40	450	-10	40	10
NBC47726	30	-10	108	17.65	3.29	-0.01	6.05	2.32	2.39	0.09	3.86	0.3	57.78	0.87	4.47	99.07	1340	40	690	10	130	10
NBC47727	25	-10	86	16.92	1.15	0.04	4.47	2.57	0.97	0.04	4.37	0.27	64.9	0.55	3.21	99.46	2000	60	660	10	140	10
NBC47730	5	-10	66	4.08	3.51	0.02	3.82	1.03	0.67	0.09	0.16	0.08	81.58	0.26	4.04	99.34	720	20	60	-10	70	10
NBC47731	13	-10	158	6.75	1.81	0.01	2.76	1.98	1.04	0.09	0.17	0.12	80.4	0.35	3.8	99.28	1200	40	80	-10	90	20
NBC47736	206	-10	106	14.13	8.39	0.09	14.11	0.92	5.98	0.17	3.34	0.35	39.29	0.78	11.86	99.41	560	20	620	-10	60	10
NBC47738	**41**	**-10**	**9740**	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	-7777	**420**	**10**	**410**	**-10**	**30**	**10**
NBC47741	17	-10	50	16.94	5.54	0.01	6.84	3.17	1.96	0.16	1.99	0.34	51.55	0.45	10.62	99.57	1260	70	270	-10	40	10
NBC47796	19	-10	94	17.12	4.35	0.01	4.93	2.19	1.41	0.09	3.72	0.25	60.33	0.64	4.29	99.33	1540	40	740	-10	120	10
NBC47797	5	-10	84	18.55	0.2	-0.01	4.59	2.86	0.38	0.01	2.76	0.23	65.62	0.45	3.84	99.49	1140	80	180	-10	90	20
NBC47747	38	-10	1980	17.45	3.07	0.01	6.06	2.41	2	0.38	4.24	0.27	58.47	0.43	4.57	99.36	2520	40	370	-10	90	20
			200																			


SiO2 vs K2O Lahte and Flat Creek samples
LEGEND
Lahte Porphyries
Flat Porphyries
Anmalous in>1 element
Alk
Q Alk
Alk-Calc
Calc-Alk
Calcic
Rhy
Dac
And
Bas
K2O %
8.00
6.00
4.00
2.00
0.00
40.00
60.00
80.00
100.00
SiO2 %


SiO2 vs K2O Lahte and Flat Creek samples
LEGEND
Lahte Porphyries
Flat Porphyries
Anomalous samples
Red Mountain Data
Alk
Q Alk
Alk-Calc
Calc-Alk
Calclc
Rhy
Dac
And
Bas
K2O %
SiO2 %
8.00
6.00
4.00
2.00
0.00
40.00
60.00
80.00
100.00


SiO2/Al2O3 vs K2O Lahte and Flat samples
Note: x-axis data clipped to maximum value of 8 for presentation purposes.
LEGEND
Lahte Porphyries
Flat Porphyries
Anomalous in >1 element
Red Mountain Data
K2O
10.00
8.00
6.00
4.00
2.00
0.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
SiO2/Al2O3


SiO2 vs. K2O Lahte and Flat Creek samples
K2O-CaO
8.00
4.00
0.00
-4.00
-8.00
-12.00
40.00
60.00
80.00
100.00
SiO2
U-Alk
Alk
Q-Alk
Alk-Calc
Calc-Alk
Calcic
DI-85
DI=60
DI=40
LEGEND
Lahte Porphyries
Flat Porphyries
Anomalous in >1 element
Red Mountain Data


SiO2 vs. K2O-MgO Lahte and Flat samples
Alk
Q-Alk
Alk-Calc
Calc-Alk
Calcic
Magnesian
10.00
0.00
-10.00
K2O-MgO
40.00
50.00
60.00
70.00
80.00
90.00
SiO2
LEGEND
Lahte Porphyries
Flat Porphyries
Anomalous in >1 element
Red Mountain Data

Memorandum

DATE: June 5, 1995

TO: Steve Parry

FROM: Garfield MacVeigh

RE: RGS Release Staking

CC:

The British Columbia Geological Survey released stream sediment results for gold + 30 element INAA in the Nass and Terrace 1:250,000 map sheets on June 2, 1995. The Nass Map sheet includes Lac's Red Mountain property , and the town of Stewart in the NW corner. A total of about 1800 silt samples were included in the survey. The samples were collected in 1978 and silver and base metals including arsenic by AA had previously been released. Prior to the June 2, 1995 release Rubicon acquired and reviewed the old geochemistry and identified several target areas. An expected association with the distribution of arsenic indicated that many of the anomalous arsenic areas were open for staking or had recently come open for staking.

As a result of the release Rubicon has acquired two 20 unit claims in two separate areas on the southeast side of the Cambria Icefield and northeast of Kitsault. These properties are shown on the accompanying 1:250,000 topo fax and 1:500,000 abbreviated geology. A Highland helicopter is based out of the Meziadin logging camp, ten minutes from the Flat Creek property. Although access is by helicopter the properties are located on the west edge of the Bowser basin with active logging within 5 - 10 km of both properties.

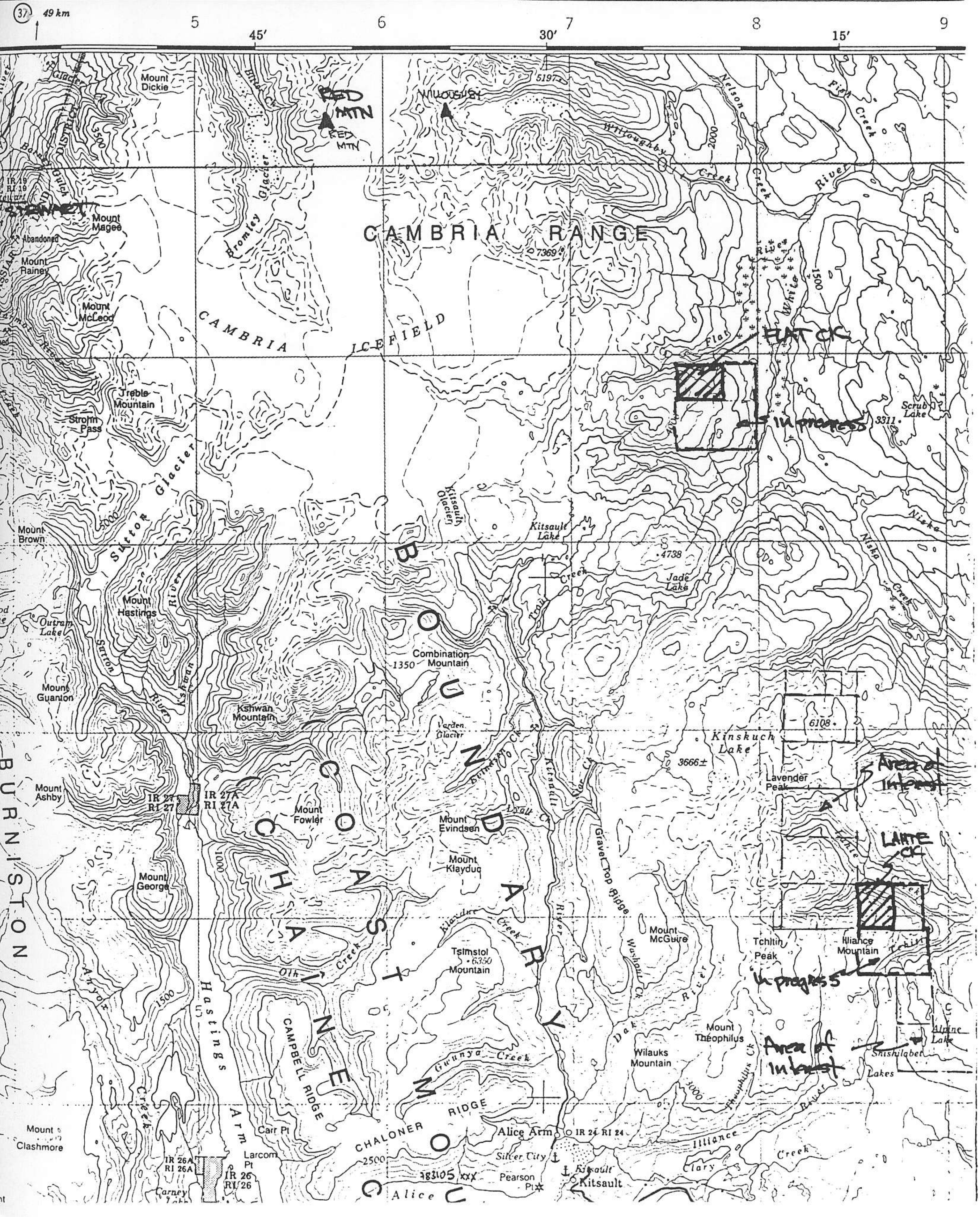
The **Flat Creek Property** covers the east side of Banded Mountain and contained the highest gold content of any catchment basin in the survey (1290 ppb). It is located 25 km southeast of Red Mountain, and 20 km from Don McLeod's Willoughby prospect in a similar geological environment. Previous limited work has focused on the west side of Banded Mountain including some regional work by Lac Minerals during an option period in 1990-91. The Lac Minerals - GSC IPP program has documented favourable Hazelton geology in this area. Other adjacent catchment basins on the east side of Banded Mountain are also anomalous in gold (up to 120 ppb) and additional claims are being staked to consolidate this land position. The silt sample in the staked catchment analyzed Au (1290ppb), As (30ppm), Sb (4.3ppm). Adjacent catchments that are currently being acquired contain 65 and 120 ppb Au.

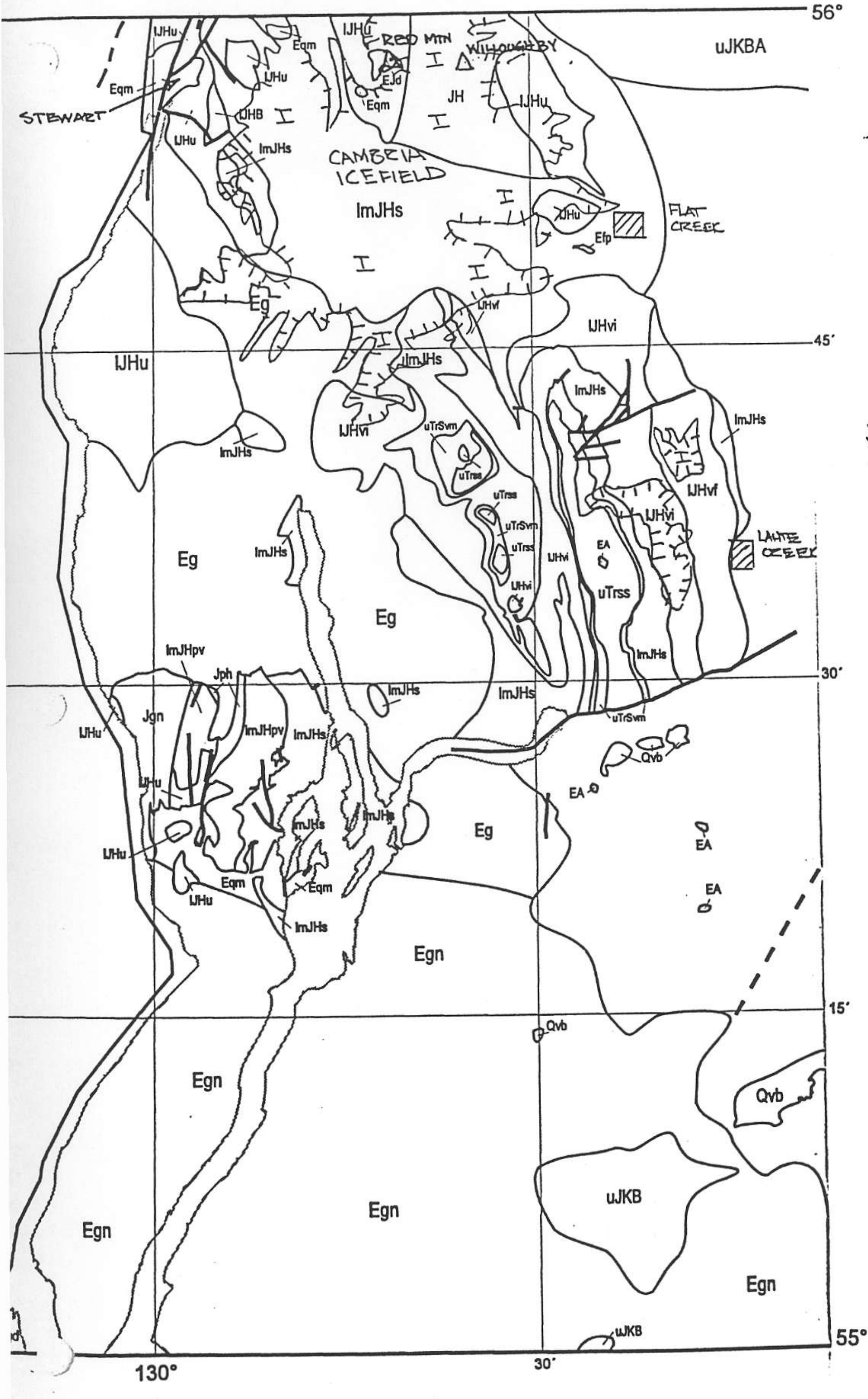
The **Lahte Creek Property** is located 22 km northeast of Kitsault and 30 km south and slightly east of the Flat Creek claims. This area was targeted pre-release as a priority target if gold was elevated. A twenty unit claim has been staked on a catchment that analyzed Au (224 ppb), As (553ppm), Sb (19.3 ppm). Three additional claims consisting of about 60 units are being staked to consolidate this target. In the Lahte Creek area Rubicon has acquired the best geochemical target that we know is in favourable geology at the Hazelton - Bowser contact. It is however only part of a larger hot spot that would require staking a total of 260 units.

Rubicon will conduct some additional prospecting on other targets it has identified during the consolidation staking, and will stake these if justified. We expect other companies to quickly follow-up up on the results of this release and recommend that Cyprus consider acquisition of a larger position in the Lahte Creek area, over and above the additional staking in progress. We feel that companies have been slow to react to the release because of the expectation that most targets would be staked (which they are not), and perhaps because of the lack of activity at Red Mountain.

I strongly recommend that Cyprus have a serious look at Red Mountain - I am a strong believer that it will be a 2.0 million ounce + deposit

1:250,000 (Nass Sheet)





ICEFIELD OUTLINE

NTS 103O/P
Nass River

UTM Zone 9
NAD 83

0 20 km
1:500 000

JURASSIC / LOWER CRETACEOUS
BOWSER LAKE GROUP

UKJB - undivided
UKJBA - Facies A
UKJBB - Facies B

LOWER TO MIDDLE JURASSIC
HAZELTON GP

JH undivided
lmJHS Smithers Formation
lmJHPV pillow lava

Refer to Open File text for geology legend.

lJHB Betty Creek Formation
lJHU Unuk River Formation
lJHvi Intermediate Volcanic
lJHvf Epiclastic/Felsic Volc

INTRUSIVE ROCKS
PALEOCENE TO EOCENE

Egn - gneissic rocks/CPC
Eg - Coast Plutonic C
Eqm - Erin Stock
EA - Alice Arm Intrusions
ETg - Strohn Ck Pluton
ETqm - quartz monzonite

Bedrock Geology

NTS 103O/P - Nass River
B C RGS 43

Overlay

TABLE 3. Alteration zones recognized at Red Mountain. Information is based on macroscopic observation by the authors and on petrography by Thompson (1994). The alteration types are overlapping and commonly gradational. Alteration is listed from highest (actinolite) to lowest (quartz stockwork, molybdenum-copper), and corresponds with decreasing elevation. The geochemistry is based on whole rock and ICP data from the Hillside porphyry and the Goldslide porphyry.

Alteration	Thickness	Geochemistry	Veins	Mineralogy of pervasive alteration
Actinolite dominant alteration	>150 m	MnO > 0.14%; Na_2O > 3.3%; K_2O < 0.5%; LOI < 3%; Sr > 400 ppm; SiO_2 < 56%; CaO > 2.8%	Chlorite + pyrite + actinolite + calcite	Green to grey K-feldspar + actinolite + chlorite + titanite + albite + pyrite (<1%) ± pyrrhotite (<.5%)
Tourmaline stockwork	100-300 m	MnO > 0.14%; Na_2O > 3.3%; K_2O < 0.5%; LOI< 3%; Sr> 400 ppm; SiO_2 < 56%; CaO > 2.8%	Tourmaline + pyrite + chlorite + pyrrhotite	Grey K-feldspar + chlorite + titanite + pyrite (<1%) + tourmaline + pyrrhotite (<0.5%); pyrrhotite:pyrite <0.5
Pyrrhotite-dominant alteration	100-200 m	MnO > 0.14%; Na_2O > 3.3%; K_2O <0.5%; LOI < 3%; Sr > 400 ppm; SiO_2 < 56%; CaO > 2.8%	Pyrrhotite + pyrite ± chalcopyrite ± chlorite ± calcite ± quartz ± sphalerite ± galena	Grey to brown-grey K-feldspar + sericite + pyrrhotite (<0.5%, commonly <.5%) + pyrite (<.5%) + chlorite ± tourmaline; pyrrhotite:pyrite <0.5
Auriferous pyrite + pyrrhotite stockwork[1]	10-50 m	K_2O >5%; Na_2O <1.5%; MnO < 0.1%; SiO_2 >54%; high values in Au (>0.5 ppm); Ag, As, Sb and locally Cu, Zn correspond with ore zones	Pyrite ± pyrrhotite ± quartz ± chlorite	Intense grey sericite + pyrite; mantled by disseminated and veinlet sphalerite + pyrrhotite + pyrite (2-20%); pyrrhotite:pyrite variable, usually <0.5
Pyrite-dominant alteration	100-200 m	SiO_2=52-56%; MnO < 0.1%; Na_2O < 3.5%; K_2O > 4%; LOI > 3%; Sr <100 ppm; CaO < 3.3%	Pyrite ± calcite ± quartz ± chlorite	Cream to tan sericite, pyrite (>2%) ± calcite ± chlorite ± tourmaline; pyrrhotite:pyrite <0.5
Gypsum stockwork[2]	<5-100 m	Similar to pyrite-dominant alteration	Gypsum + pyrite + calcite ± quartz	Pale grey sericite + pyrite (>1%) ± quartz ± K-feldspar
Quartz stockwork, molybdenum-copper	>200 m	Cu > 300 ppm; Mo > 30 ppm; SiO_2 >55% and similar values to pyrite dominant alteration for MnO, Na_2O, K_2O, CaO, LOI and Sr	Quartz + pyrite ± chlorite ± epidote ± magnetite ± molybdenite ± chalcopyrite	Green to grey sericite + quartz + pyrite (>1%) + chlorite + K-feldspar ± epidote ± tourmaline ± magnetite ± hematite

[1]Locally developed at the top of the quartz stockwork, molybdenum-copper alteration
[2]Locally developed at or above the transition from pyrite- to pyrrhotite-dominant alteration

quartz + pyrite ± arsenopyrite ± galena ± sphalerite veins commonly occur within the faults or in their immediate wallrocks. The veins often intersect the faults obliquely and have steeper dips. Together with shallow dipping cleavage in some faults, this suggests a normal sense of displacement (cf. Helmstaedt, 1991). The Fe-carbonate veins are cut by vuggy calcite + quartz + pyrite veins that locally seal fault gouge. Steep-dipping gouge fabrics and cleavage that disrupt Fe-carbonate veins in faults and displaced markers indicate late reverse movements on some of these faults (e.g. the 050 Fault, Fig. 10c).

East-west trending, steeply dipping non-penetrative cleavage is locally developed in Triassic cherty sedimentary rocks and Biotite porphyry sills north of the exploration camp. Its significance and relationship to other structures was not ascertained.

Alteration and Mineralization Related to the Goldslide Intrusions

Hydrothermal alteration affects pre-Tertiary rocks on Red Mountain, including all phases of the Goldslide intrusions. The red colour of the mountain results from the widespread development of iron oxides after disseminated and veinlet pyrite and pyrrhotite.

Porphyry-style quartz stockwork veins associated with weak molybdenite ± chalcopyrite mineralization and propylitic alteration are developed within the Goldslide porphyry throughout the cirque and in sills of Biotite porphyry north of the exploration camp and beneath the summit (Figs. 3 and 11). K-feldspar, sericite, pyrite, chlorite, epidote and molybdenite often occur in the quartz veins or in envelopes. Mafic phenocrysts are commonly altered to actinolite, chlorite, titanite, magnetite, hematite and pyrite. Groundmass and plagioclase phenocrysts are commonly replaced by or contain disseminated sericite, epidote, quartz, K-feldspar and pyrite. Quartz veins are locally sheeted but typically form stockworks. Veins vary from 0.3 cm to 4 cm in width and are spaced 0.2 m to 1 m apart. Stockwork quartz veins are locally cut by pyrite, epidote, chlorite ± magnetite veinlets, and rarely, molybdenite ± pyrite veinlets. Alteration intensity increases to the east in the stockwork zones, where it becomes texturally destructive. Disseminated tourmaline is developed locally in this area as well.

Quartz stockwork veins extend from exposures in the cirque to beneath the summit of Red Mountain where they occur within the Goldslide porphyry near its upper contact and extend into adjacent Hillside porphyry. In this area, several shallowly northwest-dipping alteration zones are developed above the quartz stockwork veins (Figs. 3 and 10). These outcrop west of the surface exposure of the Marc zone on the north side of the cirque and in the valley of Rio Blanco Creek (Fig. 2). The alteration zones are subparallel to the upper contact of the Goldslide porphyry. The quartz stockwork molybdenum-copper alteration passes up into successive alteration assemblages that are characterized by the presence of gypsum veins, pyrite, pyrrhotite, tourmaline veins and actinolite (Table 3). They are generally gradational over 5 m to 30 m, but boundaries can be abrupt. Vein mineralogy generally reflects the pervasive alteration mineralogy suggesting that they formed together. An expansive volume of gold mineralization (>0.3 g/t gold) occurs at or just above the transition from pyrite- to pyrrhotite-dominant alteration over a >1 km² area that is 10 m to 100 m thick (Figs. 3 and 10a, 10b and 10d). Higher grade gold-silver mineralization in pyrite stockwork veins associated with more intense alteration occurs within the area of anomalous gold and locally projects upward into higher alteration zones (Table 3). These higher grade stockworks are described in the following section.

Gypsum ± calcite ± pyrite ± quartz stockwork veins and veinlets are developed locally over thicknesses of 20 m to 100 m at the top of the molybdenum-copper zone, below the AV zone, and typically within the Goldslide porphyry (Fig. 10d). The veins occur within intense, pale grey coloured sericite ± K-feldspar alteration (Fig. 12). Coarse pyrite (>5 mm grains) occurs in many veins. The top of the gypsum stockwork is commonly broken and rubbly, due to the dissolution of gypsum veins.

Pyrite-dominant alteration occurs above the gypsum and quartz stockworks and is characterized by >2% disseminated and veinlet

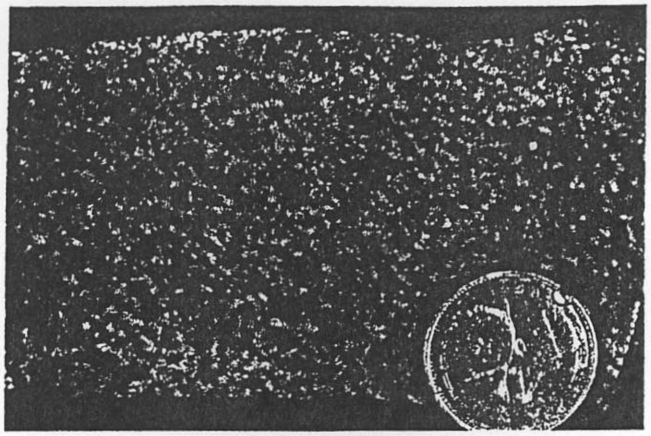


FIGURE 4. Hillside porphyry. The coin is 2.4 cm in diameter.

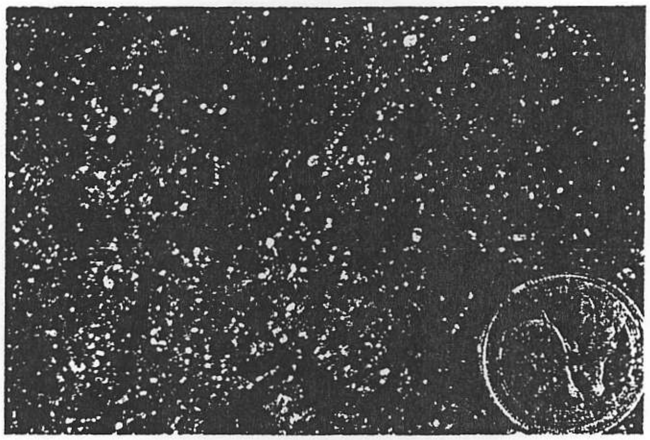


FIGURE 5. Goldslide porphyry.

angular clasts of mudstone, siltstone, chert, and locally, volcanic rocks, in a poorly sorted coarse greywacke matrix. Rounded to subangular clasts of hornblende and biotite porphyritic monzodiorite that are texturally, mineralogically and chemically similar to phases of the Goldslide intrusions (see below) are abundant in some conglomerate and agglomerate beds on the north side of Rio Blanco, near Red Mountain summit and in extensive debris flow conglomerates that occur in the Cambria zone (Fig. 3). Agglomerate beds with pyroxene porphyritic volcanic clasts occur locally west of Red Mountain summit. These clastic and volcaniclastic lithologies are conformably overlain by interbedded green and maroon andesite to trachyandesite tuff, tuff breccia, volcanic conglomerate and subordinate siltstone, greywacke and possible andesitic flows that occur north of Red Mountain across Rio Blanco glacier (Fig. 3). Locally developed accretionary lapilli in maroon tuffs suggest that some of the volcanic rocks are subaerial ashfall tuffs.

Early Jurassic Intrusive Rocks on Red Mountain: The Goldslide Intrusions

The Goldslide intrusions occur extensively at Red Mountain, forming sills, dikes and irregular intrusive bodies which intrude the Triassic and lower parts of the Early Jurassic stratified sequences (Fig. 3). The Goldslide intrusions are all hydrothermally altered to some degree. The intrusions comprise three texturally and chemically distinctive phases, here termed the Hillside porphyry, the Goldslide porphyry and the Biotite porphyry. All phases locally contain a trachytic fabric outlined by hornblende phenocrysts that has variable orientation, but is generally subparallel to contacts.

Medium-grained hornblende + plagioclase porphyry, termed the Hillside porphyry, occurs extensively on the south ridge and the east side of Red Mountain as discordant intrusive bodies (Fig. 3). Phenocrysts are generally 1 mm to 3 mm long and comprise 10% to 20% acicular hornblende and 30% to 50% lath shaped plagioclase (Fig. 4). The latter commonly have rounded corners. The phenocrysts occur in an aphanitic groundmass. Amphibolite xenoliths, 0.5 cm to 4 cm wide, are locally common in these intrusions on the south ridge of Red Mountain.

The Goldslide porphyry is a hornblende-biotite ± quartz porphyry intrusion that underlies most of the Red Mountain çirque (Figs. 2 and 3). It comprises 5% to 15%, 2 mm to 10 mm long blocky hornblende phenocrysts and trace to 5%, 2 mm to 5 mm long biotite phenocrysts in a groundmass of fine-grained (typically <1 mm) equant plagioclase (35% to 50%) with an aphanitic matrix (Fig. 5). Quartz is locally present as 1 mm to 5 mm phenocrysts that are commonly rounded or embayed. Apatite is a common accessory mineral, and with plagioclase it is commonly encapsulated in hornblende phenocrysts. The Goldslide porphyry is distinguished from the Hillside porphyry by (1) the larger size and blocky habit of hornblendes, (2) small and equant plagioclase phenocrysts, and (3) the common presence of quartz and biotite phenocrysts. The presence of Goldslide porphyry dikes cross-cutting Hillside porphyry and xenoliths of Hillside porphyry within the Goldslide porphyry indicate that the Goldslide porphyry is the younger of the two phases.

Sills of Biotite porphyry intrude cherty sedimentary rocks on the west side of Red Mountain (Fig. 3). The Biotite porphyry (Fig. 6) is texturally similar to the Hillside porphyry, and contains approximately 5% to 15% acicular, 1 mm to 4 mm long hornblende phenocrysts, 20% to 35% plagioclase phenocrysts, and 1% to 5% blocky, 2 mm to 6 mm wide biotite phenocrysts within an aphanitic groundmass. It is distinguished from the Hillside porphyry by the presence of biotite phenocrysts and a greater proportion of groundmass, and from the Goldslide porphyry by the small size and shapes of the hornblende and plagioclase phenocrysts. No con-

TABLE 1. Average compositions of least-altered samples of the Goldslide intrusions. The samples were collected mainly on surface. Major elements were analyzed in 1994 at Chemex Labs Ltd. in Vancouver, British Columbia by XRF pressed palate with detection limits of 0.01%. Ba, Rb, Sr, Nb, Zr and Y were analyzed at X-Ral Labs in Don Mills, Ontario also by XRF pressed palate. Detection limits were 2 ppm except for Zr (3 ppm). Analyses do not total 100%, probably because of the presence of carbonate, sulphide and boron-bearing alteration minerals in many of the samples.

Element*	Hillside porphyry (n = 90)		Goldslide porphyry (n = 73)		Biotite porphyry (n = 70)	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
SiO_2	54.89	3.97	58.06	2.74	56.42	2.44
Al_2O_3	17.20	1.36	17.17	1.06	17.73	1.21
TiO_2	0.58	0.20	0.44	0.10	0.40	0.08
Fe_2O_3	7.07	1.56	6.15	1.12	5.98	1.19
MnO	0.10	0.05	0.10	0.04	0.09	0.05
MgO	3.57	0.80	3.20	1.10	2.98	0.53
CaO	4.70	2.43	3.62	1.60	3.38	1.48
Na_2O	4.06	1.55	3.83	1.14	4.37	1.25
K_2O	3.31	1.35	3.44	1.10	3.64	1.02
P_2O_5	0.34	0.08	0.27	0.02	0.28	0.03
Cr_2O_3	0.01	0.01	0.01	0.01	0.01	0.01
LOI	3.30	1.31	2.89	0.86	3.46	1.05
Total	99.13	0.72	99.05	0.86	98.74	0.77
Ba (ppm)	1637	737	2632	1411	3172	1201
Rb (ppm)	64	22	62	22	66	22
Sr (ppm)	538	167	510	155	464	132
Nb (ppm)	10	10	7	2	7	1
Zr (ppm)	101	44	102	33	113	127
Y (ppm)	21	5	20	5	21	4

*units are in % unless otherwise noted