

Geological Report
on the
Christina Jean Property

British Columbia

Mapsheet NTS: 093 O/4

123⁰ 50" West and 55⁰ 03" North

Omineca Mining Division

For

Happy Creek Minerals Ltd.
P.O. Box 1852, Squamish, B.C.
V0N 3G0

By

David E. Blann, P.Eng.
Standard Metals Exploration Ltd

January, 2006

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Summary

The Christina Jean Property is located approximately 140 kilometres northwest of Prince George, B.C., or approximately 10 kilometres southeast of Mt. Milligan deposit owned by Placer Dome.

The property is underlain by dominantly glacial till, however bedrock geology is known from local outcrop and from drill core. Flow, tuff and breccia of andesite to basalt composition are cut by small stocks and dikes of monzonite-monodiorite composition. These rocks are cut by strong north northwest trending regional faults and contain widespread quartz-sericite-pyrite and chlorite-epidote alteration, and locally k-feldspar, quartz and magnetite is accompanied by pyrite, chalcopyrite and associated copper and gold values. Airborne radiometric data suggest a large zone of potassium enrichment is in part obscured by till cover, or reflects potassium depletion related to alteration.

In 2005, diamond drill holes performed between 1994 and 1996 were reviewed, and fill-in sampling conducted under an agreement with Amarc Resources. Drill core was laid out, marked for sampling by Richard Haslinger, P.Eng., and split under his supervision. One half of the split sample was sent to Acme Analytical Laboratories, Vancouver, B.C. for assay by ICP-MS.

Core samples taken in 2005 were compiled with previous samples and composite assays calculated. CJ96-5 returned 125.8 metres containing 0.15 g/t gold, including 2.0 metres of 7.1 g/t gold, 0.21% copper., and CJ96-4 returned 122.9 metres containing 0.06 g/t gold, 0.05% copper, including 22.5 metres of 0.13 g/t gold, 0.07% copper. Drill holes CJ94-1 returned several intersections of approximately 10-25.6 metres in width containing anomalous gold values, including 1.0 metres of 1.79 g/t gold, 0.11% copper.

The Christina Jean property contains geology, alteration and sulphide minerals consistent with a porphyry copper system, and further work is recommended to include additional induced polarization surveys followed by drilling of 4 holes totaling 800 metres at a cost of approximately \$200,000.

Location and Access

The Christina Jean property (CJ) is located approximately 140 km northwest of Prince George, B.C., on the Finlay Philip Forest Service Road, and approximately 10 kilometres southeast of the Mt. Milligan copper-gold deposit of Placer Dome Inc (Figure 1). The CJ property is centered on approximately 55° 03' north latitude and 123° 54' west longitude, or 443000E, 6101000N on TRIM sheet 93O.001. It is generally accessible by logging roads from May to October.

Topography and Vegetation

The area is characterized by gentle sloped hills ranging from 980 metres to 1250 metres elevation and is covered with economic stands of spruce, fir and locally poplar trees. Glacial till underlies approximately 99% of the property, often greater than 30 metres in thickness. Outcrop exposure is limited to less than 1% with the best exposures found along road cuts and at higher elevations.

Property Status

The CJ Property consists of three cell claims as shown below and in Figure 2.

Tenure Number	Owner	Map Number	Good To Date	Mining Division	Area (Ha)
504979	108650 (100%)	093O	2007/JAN/31	Omineca	185.342
512528	108650 (100%)	093O	2007/JAN/31	Omineca	722.589
514287	108650 (100%)	093O	2007/JAN/31	Omineca	426.241
					<hr/> 1334.172

History

The property is located 10 kilometers southeast of Placer Dome's Mt. Milligan copper/gold porphyry deposit. The southern part of the property was explored by BGM Diversified Energy Inc. in 1991 following the exploration boom in the area associated with the Mt. Milligan discovery (Leriche, 1991). An airborne magnetic and VLF survey was conducted and three significant copper soil anomalies were identified. Although additional work was recommended, the claims were allowed to lapse.

In 1991, the Geological Survey of Canada (GSC) conducted a high resolution airborne gamma ray spectrometric (AGRS) survey over the Mt. Milligan area (Shives et al. 1991). The survey identified potassic anomalies over the Mt. Milligan, Taylor, Wit, Churchi

prospects and identified several new targets, including the K6 anomaly that occurs on the CJ property.

The property was re-staked by Dave Foreshaw, a local prospector, and optioned to Pacific Mariner Exploration Ltd., later renamed Abitibi Mining Corp., in February 1994. Wide-spaced soil sampling was completed over the potassic geophysical anomaly in the spring of 1994 and additional ground was staked to cover the southern part of the potassic anomaly that included the BGM copper soil anomaly. Three diamond drill holes were completed in August of 1994 to test the core of the potassic anomaly. The drilling returned low but significant values of copper and gold. Three additional holes were completed in 1996, returning similar results. Minor soil sampling was completed between 1997 and 2004 for assessment work.

Regional Geology

The regional geology of the area is described from Minfile number 093N 194 of the Mt. Milligan deposit (Figure 3).

The CJ property lies within the Quesnel Trough comprised of Upper Triassic Takla Group andesite to basalt massive volcanic flows, sills and volcanoclastic rocks metamorphosed to greenschist facies and cut by large scale faults and subvolcanic and plutonic rocks of mafic to intermediate composition. Lithology of the Takla Group includes augite and plagioclase porphyritic flows and tuffs and their subvolcanic equivalents, massive non-porphyritic flows and crystal lapilli tuffs. The intrusive suite includes a complex mix of syenite, monzonite, diorite/monzodiorite and gabbro/monzogabbro from the Late Triassic – Early Jurassic and Late Cretaceous granite.

The Mt. Milligan deposit is underlain by coarse-grained labradorite diorite and biotite-bearing monzodiorite in the north, a central segment of quartz porphyritic and megacrystic feldspar porphyritic phases, and a southern segment of biotite quartz diorite.

The pluton is complicated by several complex sheeted and pegmatitic dyke phases and xenoliths and rafts of biotite hornfels wallrock.

The dominant structural trend is north-northwest with most rock units subvertically oriented, probably due to block faulting and rotation. Faults and shear zones are mainly oriented northeast and northwest.

Property Geology

The CJ property is approximately 99% covered by glacial till up to 30 metres in thickness. Glacial orientation is directed northeast for the area (Plouffe and Ballantyne 1993).

Diamond drill core is weak to strongly fractured, and locally faulted in proximity with dykes of monzonite composition. Volcanic and intrusive rocks of mafic to intermediate composition contain magnetite and pyrite from trace to 10% and locally trace chalcopyrite occurs with quartz, sericite, carbonate, chlorite and locally k-feldspar in fractures and replacing feldspar and mafic minerals in the rock matrix. Disseminated pyrite occurred throughout most of the drill core. Pyrrhotite also occurs with the pyrite in the diorite and gabbro (Southam, 1994).

Indirect methods of interpreting geology include airborne radiometric and magnetic surveys performed in 1991. Important information about the economic potential of the property may be obtained from magnetic, total potassium and thorium/potassium survey data (Figure 4, 5, and 6, respectively).

2005 Drillcore Sampling

A map of drill locations along with geophysical and geochemical grids is located in Figure 7. Between May 1 and May 30th, 2005, drill core from holes CJ96-4, CJ96-5,

CJ96-6, stored at the private residence of David Forshaw, was reviewed under the direction of Richard Haslinger, representing Amarc Resources Inc., and a total of 52 un-sampled intervals were split and ½ of the core sent to Acme Analytical Laboratories in Vancouver, B.C. for analysis by ICP-MS using a 15 gram sample. Selected core samples were also submitted for petrographic analysis (Appendix 1).

Results from this work were incorporated into the existing drill data and entered into Excel spreadsheet format from which composite values were calculated. For assays returning less than the detection limit, a value of ½ the detection limit was assumed. A summary of drill hole results and a detailed listing of all samples is located in Table 1 and Table 2, respectively and assay certificates are located in Appendix 2.

Fill-in sampling of the drill core allows a wider zone of alteration and mineralization to be evaluated for economic gold and copper values. These new results include 125.8 metres containing 0.15g/t gold, 0.03% copper including 2.0 metres containing 7.10 g/t gold, 0.21% copper in hole CJ96-4, and 122.9 metres containing 0.06g/t gold, 0.05% copper in hole CJ96-4, and 159.5 metres containing 0.02 g/t gold, 0.02 % copper in hole CJ96-6.

Conclusions

The CJ Property is located approximately 10 km southeast of Placer Dome's Mt. Milligan deposit, or approximately 140 kilometres northwest of Prince George, B.C. Previous work identified airborne magnetic and radiometric, and induced polarization geophysical anomalies and soil geochemical anomalies. Diamond drilling of 6 holes on the property has partially tested the potential for bulk tonnage copper-gold deposits.

The property is 99% covered by glacial till, however drill core, and float samples suggest it is underlain by Takla Group volcanic and intrusive rocks of mafic to intermediate composition. These rocks are cut by strong fault and fracture zones and weak to locally

strong quartz, sericite, magnetite, chlorite, carbonate, k-feldspar alteration minerals occur in fractures and replace feldspar and mafic minerals. Pyrite from trace to 10% occurs and trace to 1% chalcopyrite occurs with associated copper and gold values that are moderately correlated.

Fill-in drill core sampling was performed in 2005 to better assess the bulk grade of the holes. CJ96-5 returned 125.8 metres containing 0.15 g/t gold, including 2.0 metres of 7.1 g/t gold, 0.21% copper., and CJ96-4 returned 122.9 metres containing 0.06 g/t gold, 0.05% copper, including 22.5 metres of 0.13 g/t gold, 0.07% copper. Drill holes CJ94-1 returned several intersections of approximately 10-25.6 metres in width containing anomalous gold values, including 1.0 metres of 1.79 g/t gold, 0.11% copper

The CJ property contains geology, alteration, sulphides and associated copper-gold values consistent with a high-level porphyry system.

Recommendations

Approximately 10 km of additional induced polarization geophysical survey is recommended prior to diamond drilling of 4 holes totaling 800 metres. The cost for this work would be approximately \$200,000.

David E. Blann, P.Eng.
Standard Metals Exploration Ltd.

Statement of Costs

Wages	# days	\$/day	Totals
D. Blann, P.Eng	2	500	\$1,000.00
R. Haslinger, P.Eng.	2	500	\$1,000.00
D. Forshaw, Prospector	2	175	\$350.00
			\$2,350.00
 <u>Disbursements</u>			
Truck	2	100	\$200.00
Room/Board	4	60	\$240.00
Communications	2	2	\$4.00
Field Supplies			\$25.00
Analyses			
Assays Drill Core	52	19.65	\$1,021.80
Petrographics	4	175	\$700.00
PIMA	1	20	\$20.00
Reproductions			\$150.00
Report			\$1,000.00
			\$3,340.80
			Wages and
			Disbursements
			\$5,690.80
			10% on Wages and
			Disbursements
			\$569.80
			\$6,259.88
			GST @ 7%
			\$438.19
			\$6,698.07

References

- Lerliche, P.D. 1991. Geological, geochemical, geophysical report on the Gold Power Property, Omineca Mining Division, B.C.; BC Assessment Report #22011.
- Plouffe, A. and Ballantyne, S.B. 1993. Regional till geochemistry, Manson River and Fort Fraser Area, B.C. (93K, 93N), silt plus clay and clay size fractions; GSC Open File 2593.
- Shives, R.B.K, Ballantyne, S.B. and Harris, D.C. 1991. Gamma ray spectrometry: Applications to the search for ore; part of promotional display of GSC Open File 2535 – Airborne Geophysical Survey of the Mt. Milligan Area, B.C. Sept. 1991, NTS 93 O/4W, 93 N/1 and 93 N/2E.
- Southam, P. 1994. Geochemical report on the RPF and Christina Jean claims, Omineca Mining Division, B.C., BC Assessment Report #23453.
- Southam, P. 1997. Diamond Drilling report on the CJ Property, Omineca Mining Division, B.C. Prepared for Abitibi Mining Corp.

Statement of Qualifications

I, David E. Blann, P.Eng., of Squamish, British Columbia, do hereby certify:

That I am a Professional Engineer registered in the Province of British Columbia.

That I am a graduate in Geological Engineering from the Montana College of Mineral Science and Technology, Butte, Montana, 1987.

That I am a graduate in Mining Engineering Technology from the B.C. Institute of Technology, 1984.

That I have been actively engaged in the mining and mineral exploration industry since 1984, and conclusions and recommendations within this report are based on review of public files and drill core from the property.

Dated in Squamish, B.C., January 4, 2006

David E Blann, P.Eng.

Tables

Hole #	Total Depth (m)	From (m)	To (m)	Width (m)	Au g/t	Cu %	Au (ppb)	Cu (ppm)
CJ94-1	158.54	15.5	37.0	21.5	0.16	0.01	162	70
		75.1	85.8	10.7	0.25	0.04	253	449
		includes 76.8	77.8	1.0	1.79	0.11	1790	1100
		88.8	134.5	25.6	0.16	0.01	158	68
CJ96-4	125.9	3.0	125.9	122.9	0.06	0.05	62	482
		includes 15.9	38.4	22.5	0.13	0.07	129	744
CJ96-5	138.72	12.2	138.0	125.8	0.15	0.03	154	349
		includes 90.0	92.0	2.0	7.10	0.21	7100	2100
CJ96-6	177.74	18.3	177.7	159.5	0.02	0.02	16	248
		includes 158.0	162.0	4.0	0.13	0.17	128	1650

Hole #	Sample #	From (m)	To (m)	Width (m)	Au ppb	Cu ppm
CJ94-1	1	15.48	17.34	1.86	45	60
CJ94-1	2	17.34	19.29	1.95	40	57
CJ94-1	3	19.29	21.15	1.86	65	58
CJ94-1	4	21.15	23.00	1.85	10	44
CJ94-1	5	23.00	24.86	1.86	<5	39
CJ94-1	6	24.86	26.72	1.86	95	64
CJ94-1	7	26.72	28.58	1.86	15	105
CJ94-1	8	28.58	30.44	1.86	10	64
CJ94-1	9	30.44	32.30	1.86	1180	62
CJ94-1	10	32.30	34.16	1.86	70	88
CJ94-1	11	34.16	35.09	0.93	450	127
CJ94-1	12	35.09	36.95	1.86	110	101
CJ94-1	13	36.95	38.81	1.86	15	95
CJ94-1	14	38.81	40.67	1.86	30	66
CJ94-1	15	40.67	42.70	2.03	<5	40
CJ94-1	16	42.70	43.70	1.00	10	70
CJ94-1	17	43.70	44.80	1.10	<5	174
CJ94-1	18	44.80	46.80	2.00	20	82
CJ94-1	19	46.80	48.80	2.00	35	76
CJ94-1	20	48.80	50.80	2.00	100	83
CJ94-1	21	50.80	52.80	2.00	30	32
CJ94-1	22	52.80	54.80	2.00	25	17
CJ94-1	23	54.80	56.70	1.90	20	11
CJ94-1	24	56.70	58.70	2.00	45	66
CJ94-1	25	58.70	60.70	2.00	50	183
CJ94-1	26	60.70	62.70	2.00	30	132
CJ94-1	27	62.70	64.70	2.00	<5	135
CJ94-1	28	64.70	66.70	2.00	<5	127
CJ94-1	29	66.70	68.70	2.00	25	48
CJ94-1	30	68.70	70.70	2.00	20	13
CJ94-1	31	70.70	72.70	2.00	120	29
CJ94-1	32	72.70	75.10	2.40	<5	22
CJ94-1	33	75.10	76.80	1.70	40	100
CJ94-1	34	76.80	77.80	1.00	1790	1100
CJ94-1	35	77.80	78.80	1.00	15	154
CJ94-1	36	78.80	79.80	1.00	165	1980
CJ94-1	37	79.80	81.65	1.85	270	483
CJ94-1	38	81.65	83.65	2.00	40	82
CJ94-1	39	83.65	85.75	2.10	35	155
CJ94-1	40	85.75	87.30	1.55	10	22
CJ94-1	41	88.75	89.75	1.00	205	15
CJ94-1	42	92.85	94.85	2.00	35	36
CJ94-1	43	94.85	96.85	2.00	180	186
CJ94-1	44	96.85	98.00	1.15	120	38
CJ94-1	45	106.60	108.70	2.10	200	56
CJ94-1	46	110.20	111.40	1.20	55	71
CJ94-1	47	111.40	112.55	1.15	55	83
CJ94-1	48	112.55	113.85	1.30	115	39
CJ94-1	49	113.85	115.35	1.50	270	42

Hole #	Sample #	From (m)	To (m)	Width (m)	Au ppb	Cu ppm
CJ94-1	50	115.35	116.85	1.50	555	32
CJ94-1	51	116.85	118.35	1.50	200	65
CJ94-1	52	118.90	120.40	1.50	75	85
CJ94-1	53	123.90	125.60	1.70	10	67
CJ94-1	54	128.50	130.00	1.50	20	54
CJ94-1	55	130.00	131.50	1.50	70	46
CJ94-1	56	131.50	133.00	1.50	130	53
CJ94-1	57	133.00	134.50	1.50	380	140
CJ94-1	58	134.50	135.80	1.30	15	167
CJ94-1	59	138.80	140.10	1.30	<5	44
CJ94-1	60	140.10	141.75	1.65	<5	83
CJ94-1	61	142.75	144.51	1.76	<5	48
CJ94-1	62	144.51	145.76	1.25	<5	850
CJ94-1	63	148.15	150.15	2.00	<5	77
CJ94-1	64	150.15	152.15	2.00	<5	126
CJ94-1	65	152.15	153.25	1.10	<5	420
CJ94-1	66	156.00	157.50	1.50	<5	82
CJ94-2	67	16.00	17.50	1.50	<5	137
CJ94-2	68	17.50	18.70	1.20	<5	124
CJ94-2	69	24.30	25.30	1.00	<5	72
CJ94-2	70	46.20	47.70	1.50	<5	118
CJ94-2	71	47.70	49.20	1.50	<5	120
CJ94-2	72	58.80	60.60	1.80	30	113
CJ94-2	73	62.75	64.75	2.00	<5	200
CJ94-2	74	64.75	66.25	1.50	<5	343
CJ94-2	75	66.25	67.75	1.50	<5	340
CJ94-2	76	67.75	69.00	1.25	<5	306
CJ94-2	76A	69.00	70.00	1.00	<5	340
CJ94-2	77	70.00	71.50	1.50	<5	265
CJ94-2	78	71.50	73.15	1.65	<5	400
CJ94-2	79	73.15	74.75	1.60	<5	288
CJ94-2	80	74.75	76.25	1.50	<5	245
CJ94-2	81	76.25	78.25	2.00	<5	145
CJ94-2	82	78.25	79.60	1.35	<5	218
CJ94-2	83	79.60	80.60	1.00	<5	390
CJ94-2	84	80.60	81.60	1.00	65	254
CJ94-2	85	81.60	83.60	2.00	<5	150
CJ94-2	86	83.60	85.30	1.70	<5	165
CJ94-2	87	86.50	88.00	1.50	<5	145
CJ94-2	88	88.00	89.60	1.60	<5	356
CJ94-2	89	91.65	92.80	1.15	<5	385
CJ94-2	90	92.80	93.80	1.00	<5	135
CJ94-2	91	93.80	95.00	1.20	<5	680
CJ94-2	92	95.00	96.00	1.00	<5	245
CJ94-2	93	101.20	102.20	1.00	<5	255
CJ94-2	94	104.20	105.50	1.30	25	365
CJ94-2	95	105.50	107.00	1.50	30	238
CJ94-2	96	107.00	108.50	1.50	10	250
CJ94-2	97	108.50	110.50	2.00	25	324

Hole #	Sample #	From (m)	To (m)	Width (m)	Au ppb	Cu ppm
CJ94-3	98	32.00	34.00	2.00	<5	136
CJ94-3	99	34.00	36.00	2.00	<5	325
CJ94-3	100	36.00	38.00	2.00	<5	226
CJ94-3	101	38.00	39.50	1.50	<5	145
CJ94-3	102	39.50	41.00	1.50	<5	120
CJ94-3	103	57.00	59.00	2.00	<5	70
CJ94-3	104	59.00	61.00	2.00	<5	70
CJ94-3	105	61.00	62.50	1.50	<5	75
CJ94-3	106	62.50	64.50	2.00	<5	130
CJ94-3	107	66.50	68.50	2.00	<5	76
CJ94-3	108	70.50	72.50	2.00	<5	182
CJ94-3	109	72.50	74.50	2.00	<5	120
CJ94-3	110	74.50	76.50	2.00	<5	110
CJ94-3	111	76.50	78.50	2.00	<5	135
CJ94-3	112	78.50	80.50	2.00	<5	850
CJ94-3	113	80.50	82.50	2.00	<5	25
CJ94-3	114	82.50	84.50	2.00	<5	76
CJ94-3	115	84.50	86.50	2.00	<5	120
CJ94-3	116	86.50	88.50	2.00	<5	77
CJ94-3	117	88.50	90.50	2.00	<5	70
CJ94-3	118	90.50	92.50	2.00	<5	73
CJ94-3	119	92.50	94.50	2.00	<5	86
CJ94-3	120	94.50	96.50	2.00	<5	100
CJ94-3	121	120.84	122.80	1.96	<5	43
CJ94-3	122	122.80	124.80	2.00	<5	55
CJ94-3	123	124.80	126.80	2.00	<5	118
CJ94-3	124	126.80	128.80	2.00	<5	93
CJ94-3	125	128.80	130.80	2.00	<5	55
CJ94-3	126	130.80	132.80	2.00	<5	55
CJ94-3	127	132.80	134.80	2.00	<5	33
CJ94-3	128	134.80	136.80	2.00	<5	18
CJ94-3	129	136.80	138.80	2.00	<5	22
CJ94-3	130	138.80	140.80	2.00	<5	49
CJ94-3	131	140.80	142.80	2.00	<5	148
CJ94-3	132	142.80	144.80	2.00	<5	55
CJ94-3	133	144.80	146.80	2.00	<5	480
CJ94-3	134	146.80	148.80	2.00	<5	95
CJ94-3	135	148.80	150.80	2.00	<5	36
CJ94-3	136	150.80	152.00	1.20	<5	50
CJ94-3	137	152.00	153.35	1.35	<5	300
CJ96-4	CJ-000.1	3.00	7.60	4.60	2.6	82.8
CJ96-4	CJ-000.2	7.60	12.50	4.90	4.6	155.8
CJ96-4	1	12.50	12.95	0.45	30	450
CJ96-4	CJ-001.1	12.95	15.90	2.95	6.7	255.4
CJ96-4	2	15.90	17.40	1.50	150	1400
CJ96-4	3	17.40	18.90	1.50	90	580
CJ96-4	CJ-003.1	18.90	20.40	1.50	5.2	303
CJ96-4	4	20.40	22.40	2.00	165	1450
CJ96-4	5	22.40	24.40	2.00	570	630

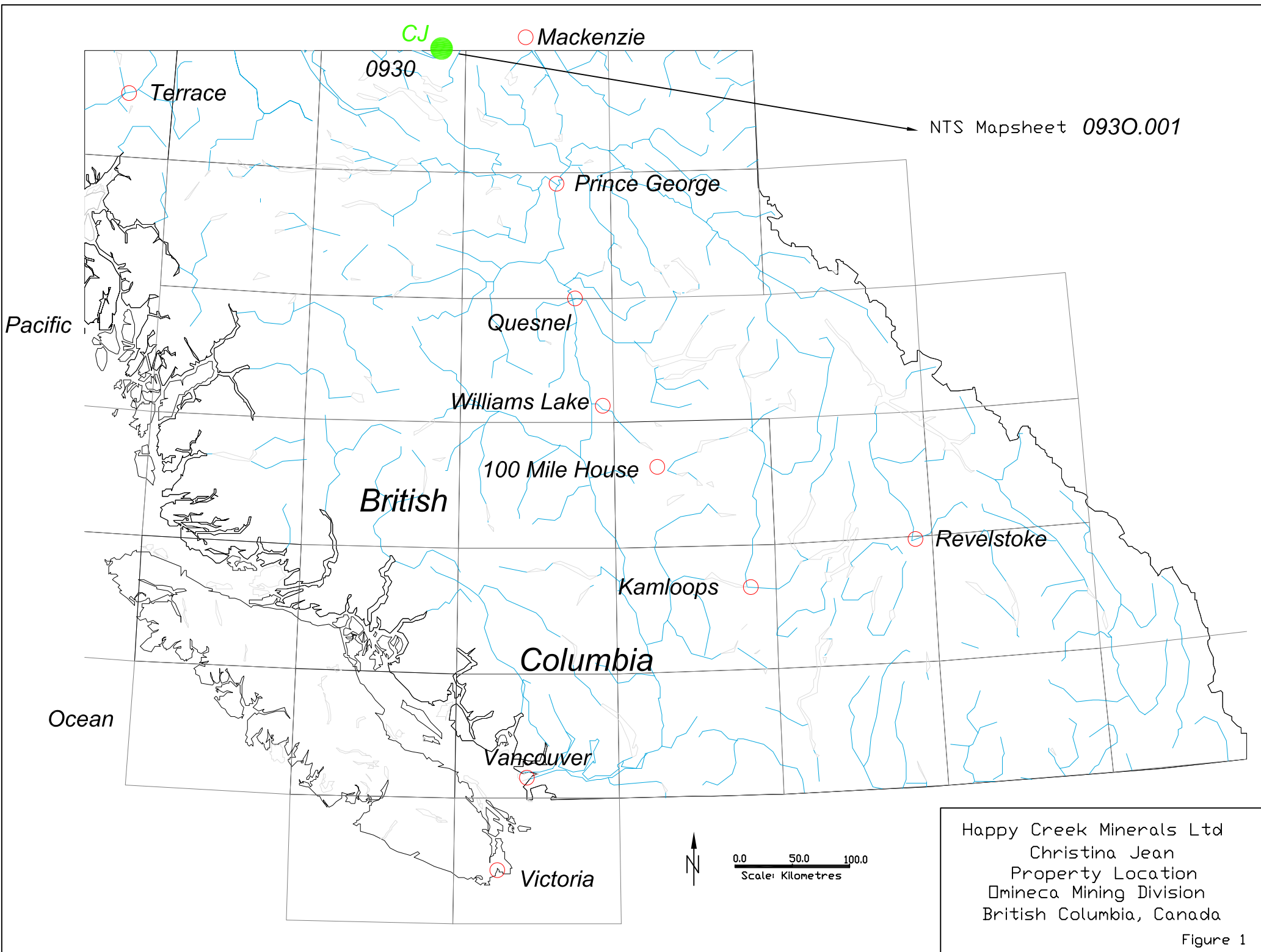
Hole #	Sample #	From (m)	To (m)	Width (m)	Au ppb	Cu ppm
CJ96-4	6	24.40	26.40	2.00	60	520
CJ96-4	7	26.40	28.40	2.00	25	530
CJ96-4	8	28.40	30.40	2.00	70	900
CJ96-4	9	30.40	32.40	2.00	150	540
CJ96-4	10	32.40	34.40	2.00	100	280
CJ96-4	11	34.40	36.40	2.00	60	760
CJ96-4	12	36.40	38.40	2.00	65	1050
CJ96-4	13	38.40	40.40	2.00	25	125
CJ96-4	14	40.40	42.40	2.00	160	166
CJ96-4	15	42.40	44.40	2.00	55	76
CJ96-4	16	44.40	46.40	2.00	10	78
CJ96-4	17	46.40	48.40	2.00	15	94
CJ96-4	CJ-017.1	48.40	53.00	4.60	18.4	185.1
CJ96-4	18	53.00	55.00	2.00	5	141
CJ96-4	CJ-018.1	55.00	57.00	2.00	4.3	256.6
CJ96-4	19	57.00	59.00	2.00	<5	210
CJ96-4	CJ-019.1	59.00	61.00	2.00	3.5	148.5
CJ96-4	20	61.00	63.00	2.00	<5	205
CJ96-4	CJ-020.1	63.00	66.00	3.00	16.6	368.2
CJ96-4	21	66.00	68.00	2.00	15	550
CJ96-4	CJ-021.1	68.00	71.00	3.00	34.3	644
CJ96-4	22	71.00	73.00	2.00	55	425
CJ96-4	CJ-022.1	73.00	76.00	3.00	14.2	381.2
CJ96-4	23	76.00	78.00	2.00	10	510
CJ96-4	24	78.00	79.50	1.50	15	340
CJ96-4	25	79.50	81.50	2.00	270	2000
CJ96-4	26	81.50	83.50	2.00	25	830
CJ96-4	27	83.50	85.00	1.50	40	1800
CJ96-4	28	85.00	87.00	2.00	<5	280
CJ96-4	29	87.00	89.00	2.00	<5	420
CJ96-4	30	89.00	91.00	2.00	320	1150
CJ96-4	31	91.00	93.00	2.00	<5	270
CJ96-4	32	93.00	95.00	2.00	<5	235
CJ96-4	33	95.00	97.00	2.00	585	235
CJ96-4	34	97.00	99.00	2.00	25	880
CJ96-4	CJ-034.1	99.00	101.00	2.00	9.4	32.1
CJ96-4	35	101.00	103.00	2.00	10	415
CJ96-4	CJ-035.1	103.00	105.00	2.00	12.5	349
CJ96-4	36	105.00	107.00	2.00	<5	170
CJ96-4	37	107.00	109.00	2.00	15	670
CJ96-4	38	109.00	111.00	2.00	<5	790
CJ96-4	CJ-038.1	111.00	113.00	2.00	35.6	1457.1
CJ96-4	39	113.00	115.00	2.00	<5	275
CJ96-4	40	115.00	117.00	2.00	<5	290
CJ96-4	41	117.00	118.50	1.50	230	210
CJ96-4	CJ-041.1	118.50	125.91	7.41	79.4	585.8
CJ96-5	89A	12.20	14.00	1.80	<5	170
CJ96-5	89	14.00	16.00	2.00	30	630
CJ96-5	90	16.00	18.00	2.00	<5	429

Hole #	Sample #	From (m)	To (m)	Width (m)	Au ppb	Cu ppm
CJ96-5	91	18.00	20.00	2.00	<5	99
CJ96-5	92	20.00	22.00	2.00	<5	277
CJ96-5	CJ-092.1	22.00	25.00	3.00	16.8	414.8
CJ96-5	93	25.00	27.00	2.00	<5	444
CJ96-5	CJ-093.1	27.00	30.00	3.00	9.8	255.5
CJ96-5	94	30.00	32.00	2.00	<5	189
CJ96-5	CJ-094.1	32.00	35.00	3.00	1.5	217.4
CJ96-5	95	35.00	37.00	2.00	<5	178
CJ96-5	CJ-095.1	37.00	40.00	3.00	6.4	222.9
CJ96-5	96	40.00	42.00	2.00	<5	195
CJ96-5	CJ-096.1	42.00	45.00	3.00	18.1	114.7
CJ96-5	97	45.00	47.00	2.00	<5	158
CJ96-5	98	47.00	49.00	2.00	150	421
CJ96-5	99	49.00	51.00	2.00	360	538
CJ96-5	100	51.00	53.00	2.00	15	360
CJ96-5	101	53.00	55.00	2.00	30	234
CJ96-5	102	55.00	57.00	2.00	45	281
CJ96-5	103	57.00	59.00	2.00	105	93
CJ96-5	104	59.00	61.00	2.00	<5	32
CJ96-5	105	61.00	63.00	2.00	<5	161
CJ96-5	106	63.00	65.00	2.00	<5	146
CJ96-5	107	65.00	67.00	2.00	<5	44
CJ96-5	108	67.00	69.00	2.00	<5	79
CJ96-5	CJ-108.1	69.00	72.00	3.00	46.5	851.8
CJ96-5	109	72.00	74.00	2.00	<5	202
CJ96-5	CJ-109.1	74.00	77.00	3.00	7.1	74.1
CJ96-5	110	77.00	79.00	2.00	30	796
CJ96-5	CJ-110.1	79.00	82.00	3.00	27.7	807.2
CJ96-5	111	82.00	84.00	2.00	495	163
CJ96-5	112	84.00	86.00	2.00	330	118
CJ96-5	113	86.00	88.00	2.00	300	211
CJ96-5	114	88.00	90.00	2.00	15	355
CJ96-5	115	90.00	92.00	2.00	7100	2100
CJ96-5	116	92.00	94.00	2.00	30	412
CJ96-5	117	94.00	96.00	2.00	30	272
CJ96-5	CJ-117.1	96.00	99.00	3.00	16.3	323.4
CJ96-5	118	99.00	101.00	2.00	60	558
CJ96-5	CJ-118.1	101.00	104.00	3.00	5.6	85.3
CJ96-5	119	104.00	106.00	2.00	30	179
CJ96-5	CJ-119.1	106.00	109.00	3.00	17.7	152.2
CJ96-5	120	109.00	111.00	2.00	<5	122
CJ96-5	121	111.00	113.00	2.00	30	441
CJ96-5	122	113.00	115.00	2.00	<5	76
CJ96-5	123	115.00	117.00	2.00	<5	198
CJ96-5	CJ-123.1	117.00	119.00	2.00	2.5	154.9
CJ96-5	124	119.00	121.00	2.00	<5	139
CJ96-5	CJ-124.1	121.00	124.00	3.00	17.9	96
CJ96-5	125	124.00	126.00	2.00	<5	326
CJ96-5	CJ-125.1	126.00	129.00	3.00	27.7	1285.4

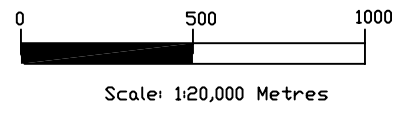
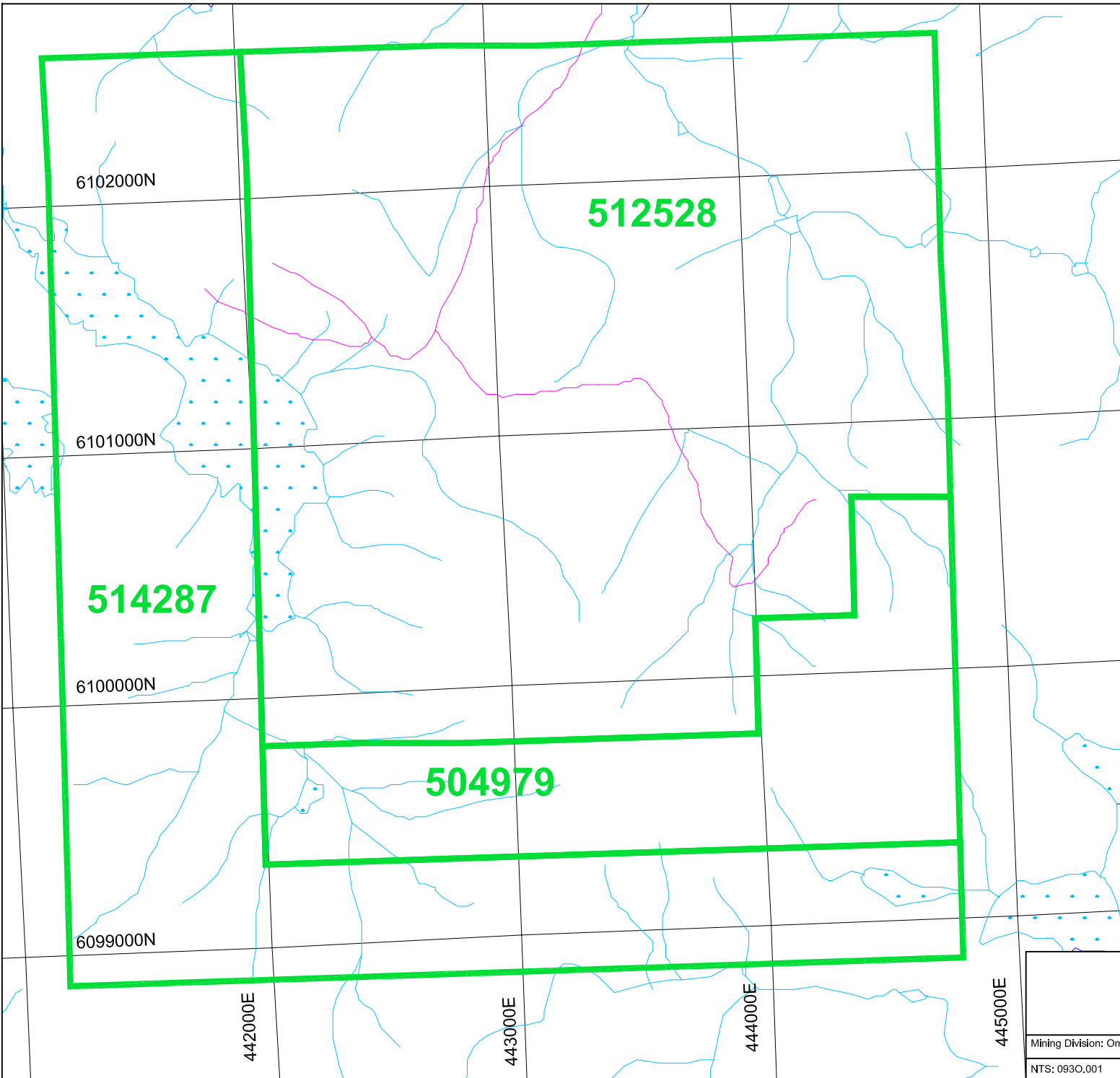
Hole #	Sample #	From (m)	To (m)	Width (m)	Au ppb	Cu ppm
CJ96-5	126	129.00	131.00	2.00	<5	904
CJ96-5	CJ-126.1	131.00	136.00	5.00	25.4	617.7
CJ96-5	127	136.00	138.00	2.00	75	178
CJ96-6	42	18.29	20.00	1.71	20	104
CJ96-6	43	20.00	22.00	2.00	15	500
CJ96-6	44	22.00	24.00	2.00	25	195
CJ96-6	45	24.00	26.00	2.00	20	300
CJ96-6	CJ-045.1	26.00	29.00	3.00	18.8	149.7
CJ96-6	46	29.00	31.00	2.00	10	139
CJ96-6	CJ-046.1	31.00	34.00	3.00	8.1	161.9
CJ96-6	47	34.00	36.00	2.00	10	177
CJ96-6	CJ-047.1	36.00	39.00	3.00	18.5	124.4
CJ96-6	48	39.00	41.00	2.00	15	290
CJ96-6	CJ-048.1	41.00	44.00	3.00	6.6	135.7
CJ96-6	49	44.00	46.00	2.00	<5	128
CJ96-6	CJ-049.1	46.00	49.00	3.00	14.8	471.5
CJ96-6	50	49.00	51.00	2.00	35	1150
CJ96-6	CJ-050.1	51.00	54.00	3.00	22.4	230.9
CJ96-6	51	54.00	56.00	2.00	<5	156
CJ96-6	CJ-051.1	56.00	59.00	3.00	20	399.5
CJ96-6	52	59.00	61.00	2.00	<5	187
CJ96-6	CJ-052.1	61.00	64.00	3.00	12.2	163.6
CJ96-6	53	64.00	66.00	2.00	<5	230
CJ96-6	CJ-053.1	66.00	67.00	1.00	10.4	138.2
CJ96-6	54	67.00	69.00	2.00	<5	127
CJ96-6	55	69.00	71.00	2.00	10	117
CJ96-6	56	71.00	73.00	2.00	10	375
CJ96-6	57	73.00	75.00	2.00	<5	860
CJ96-6	58	75.00	77.00	2.00	<5	111
CJ96-6	59	77.00	79.00	2.00	<5	33
CJ96-6	60	79.00	81.00	2.00	<5	124
CJ96-6	61	81.00	83.00	2.00	<5	65
CJ96-6	62	83.00	85.00	2.00	15	55
CJ96-6	63	85.00	87.00	2.00	15	136
CJ96-6	CJ-063.1	87.00	89.00	2.00	8.4	263
CJ96-6	64	89.00	91.00	2.00	15	22
CJ96-6	CJ-064.1	91.00	94.00	3.00	6.4	171.2
CJ96-6	65	94.00	96.00	2.00	<5	205
CJ96-6	CJ-065.1	96.00	99.00	3.00	2.8	125.3
CJ96-6	66	99.00	101.00	2.00	<5	138
CJ96-6	CJ-066.1	101.00	104.00	3.00	5.5	152
CJ96-6	67	104.00	106.00	2.00	<5	165
CJ96-6	CJ-067.1	106.00	109.00	3.00	4.1	127.1
CJ96-6	68	109.00	111.00	2.00	<5	250
CJ96-6	CJ-068.1	111.00	115.00	4.00	6.2	418.2
CJ96-6	69	115.00	117.00	2.00	<5	220
CJ96-6	CJ-069.1	117.00	119.00	2.00	9.8	120.2
CJ96-6	70	119.00	121.00	2.00	<5	116
CJ96-6	CJ-070.1	121.00	124.00	3.00	7.3	98.1

Hole #	Sample #	From (m)	To (m)	Width (m)	Au ppb	Cu ppm
CJ96-6	71	124.00	126.00	2.00	<5	270
CJ96-6	CJ-071.1	126.00	130.00	4.00	10.9	213.5
CJ96-6	72	130.00	132.00	2.00	<5	89
CJ96-6	73	132.00	134.00	2.00	15	110
CJ96-6	CJ-073.1	134.00	136.00	2.00	6.5	13.1
CJ96-6	74	136.00	138.00	2.00	10	250
CJ96-6	75	138.00	140.00	2.00	10	380
CJ96-6	CJ-075.1	140.00	145.00	5.00	15.1	200.6
CJ96-6	76	145.00	147.00	2.00	<5	235
CJ96-6	CJ-076.1	147.00	149.00	2.00	9.9	260.9
CJ96-6	77	149.00	151.00	2.00	40	182
CJ96-6	CJ-077.1	151.00	154.00	3.00	42.2	251.9
CJ96-6	78	154.00	156.00	2.00	25	285
CJ96-6	CJ-078.1	156.00	158.00	2.00	11.1	153.3
CJ96-6	79	158.00	160.00	2.00	120	1400
CJ96-6	80	160.00	162.00	2.00	135	1900
CJ96-6	81	162.00	164.00	2.00	45	280
CJ96-6	82	164.00	166.00	2.00	25	146
CJ96-6	83	166.00	168.00	2.00	60	225
CJ96-6	84	168.00	170.00	2.00	45	140
CJ96-6	85	170.00	172.00	2.00	50	30
CJ96-6	86	172.00	174.00	2.00	15	106
CJ96-6	87	174.00	176.00	2.00	35	225
CJ96-6	88	176.00	177.74	1.74	15	96

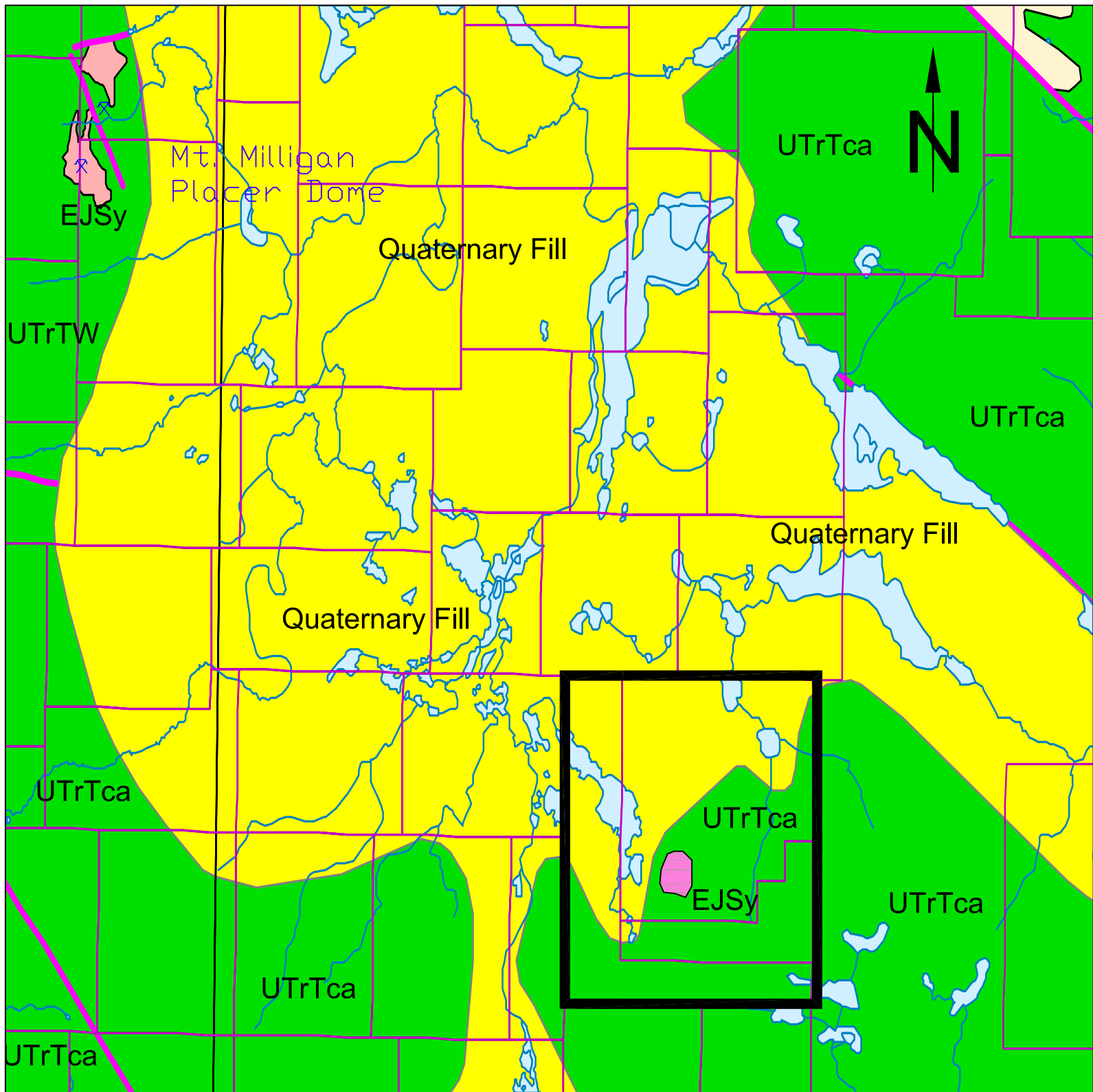
Figures






Happy Creek Minerals Ltd
Christina Jean
Property Location
Omineca Mining Division
British Columbia, Canada
Figure 1



		Happy Creek Minerals Ltd			
		Christina Jean Property Mineral Claim Location			
Mining Division: Omineca		SIZE Ltr	FSCM NO.	DWG NO. CJ-05-2	REV 01/06
NTS: 0930.001		SCALE 1:50000	Drawn: D. Blann		Figure 2



	Quaternary Glacial Till, Glaciofluvial Till
	EJSy Early Jurassic Syenite-Monzonite Intrusive Rocks
	UTrTW Late Triassic Takla Group Witch Lake Formation Volcaniclastic Rocks
	UTrTca Upper Triassic Takla Group calc-alkaline volcanic rocks
	Major Fault/ Contact

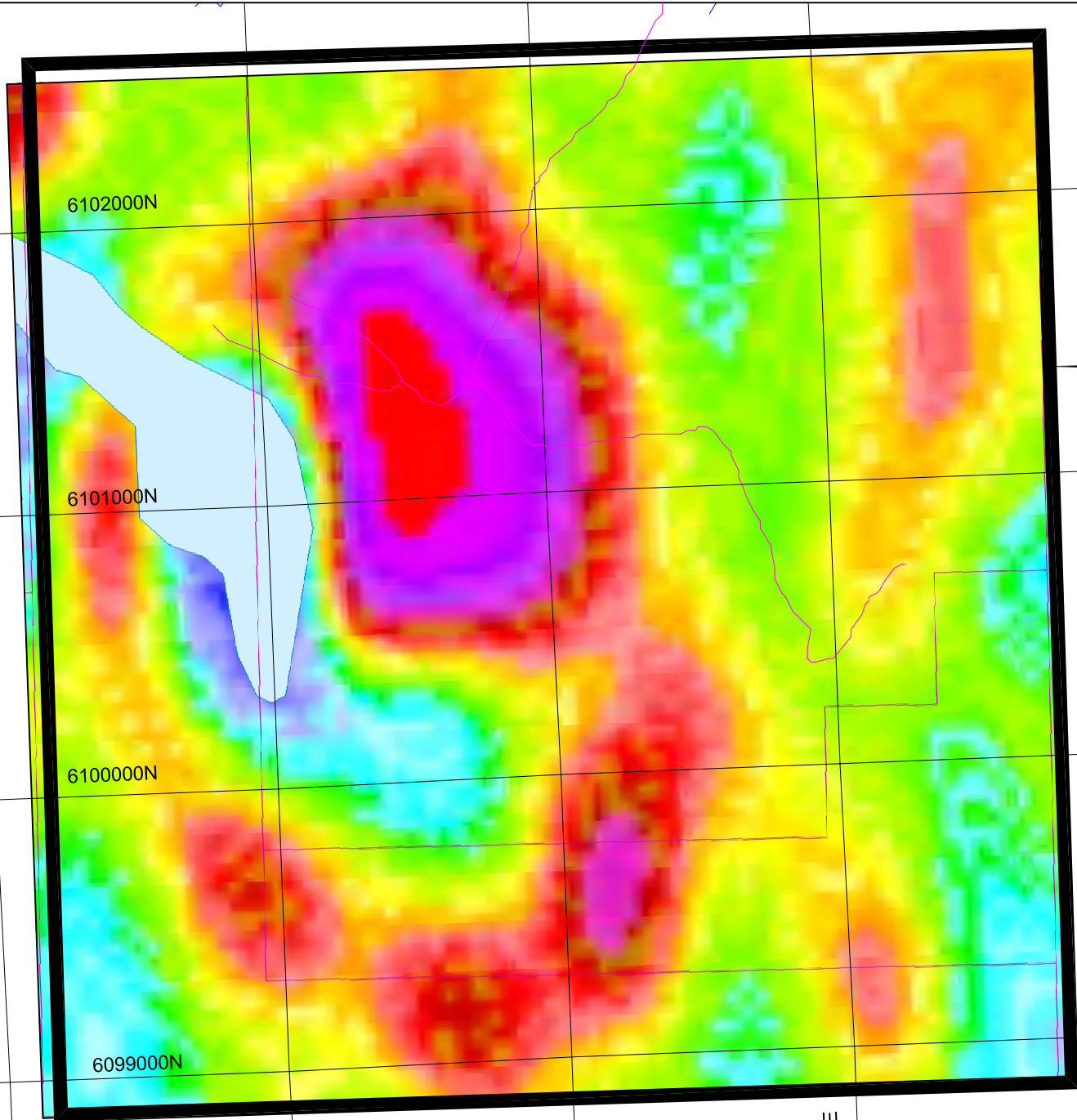
0 250 500

 Scale: 1:20,000 Metres

Mining Division: Omineca
 NTS: 0930.001

Happy Creek Minerals Ltd

Christina Jean Property
 Regional Geology

SIZE Ltr	FSCM NO.	DWG NO. CJ-05-23	REV 01/06
SCALE 1:50000	Drawn: D. Blann	Figure 3	



Property Outline



Scale: 1:20,000 Metres

442000E

443000E

444000E

445000E

6102000N

6101000N

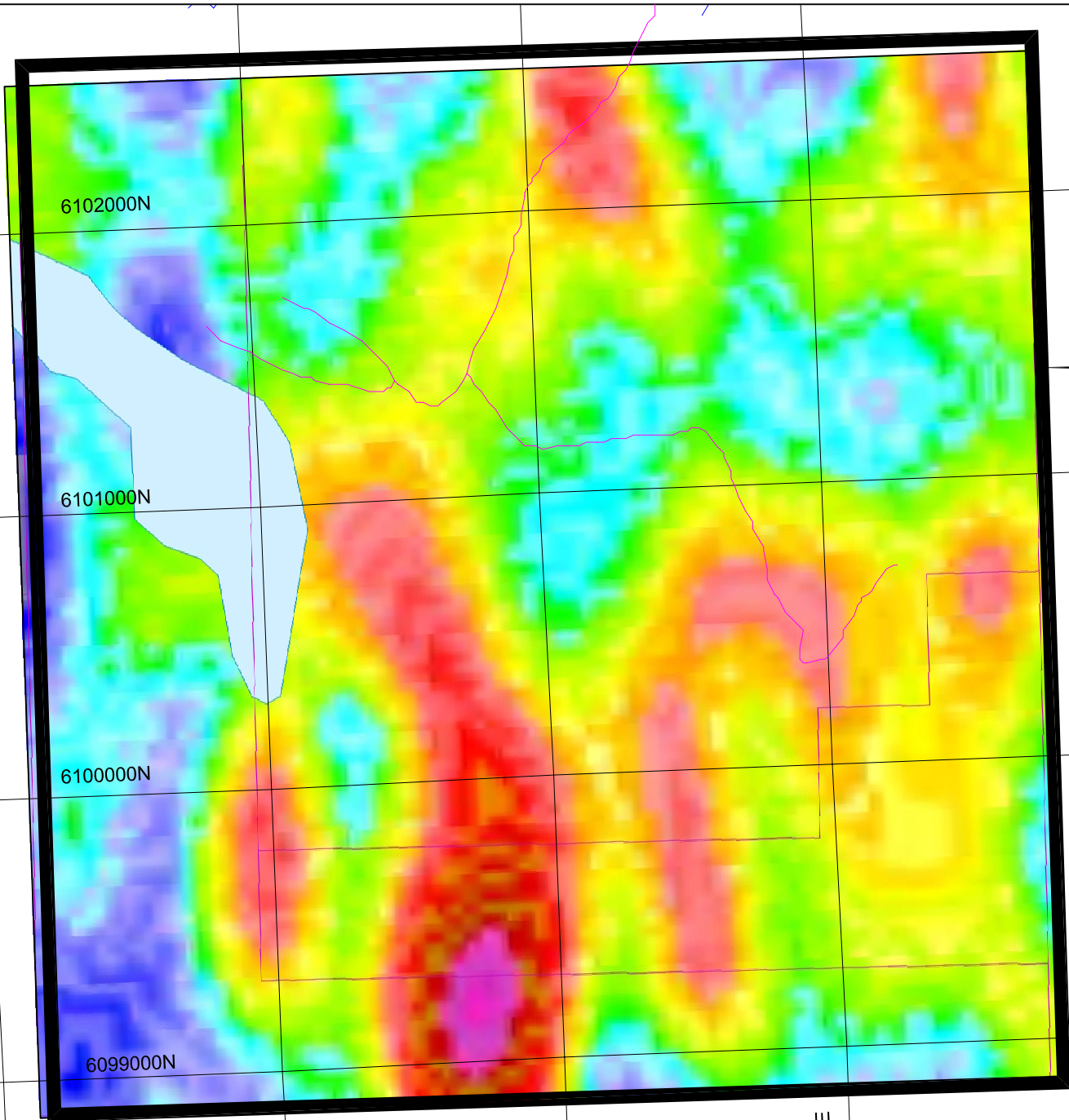
6100000N

6099000N

Happy Creek Minerals Ltd

Christina Jean Property
Airborne Total Potassium

Mining Division: Omineca	SIZE Ltr	FSCM NO.	DWG NO. CJ-05-2	REV 01/06
NTS: 0930.001	SCALE 1:50000	Drawn: D. Blann	Figure 5	



6102000N

6101000N

6100000N

6099000N

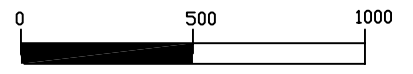
442000E

443000E

444000E

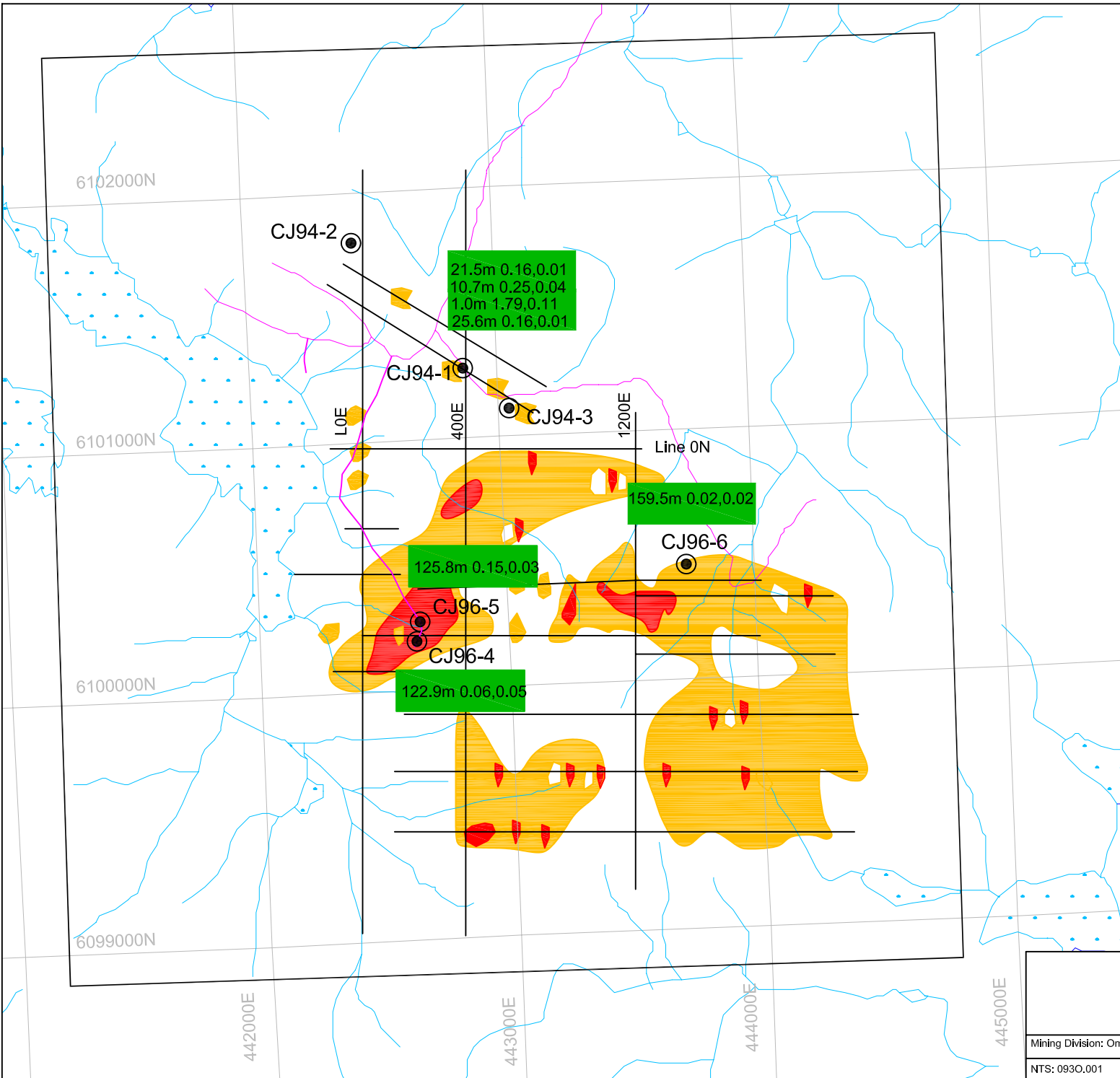
445000E

Property Outline



Scale: 1:20,000 Metres

					Happy Creek Minerals Ltd				
					Christina Jean Property Airborne Thorium/Potassium				
Mining Division: Omineca			SIZE Ltr	FSCM NO.	DWG NO. CJ-05-2	REV 01/06			
NTS: 0930.001			SCALE 1:50000	Drawn: D. Blann		Figure 6			



Legend

- CJ94-2 ● Drill Hole Collar
25.6m,0.16,0.01
Width (m), Au (g/t) Cu (%)
- > 175 ppm Copper in Soil
- 75-175 ppm Copper in Soil
- IP and Soil Grid (1994-1996)
- Logging Roads
- Creeks

Scale: 1:20,000 Metres

0 500 1000

N

Happy Creek Minerals Ltd				
Christina Jean Property Drill Hole Location				
Mining Division: Omineca	SIZE Ltr	FSCM NO.	DWG NO. CJ-05-7	REV 01/06
NTS: 0930.001	SCALE 1:50000	Drawn: D. Blann	Figure 7	

Appendices



GEOCHEMICAL ANALYSIS CERTIFICATE

AMARC Resources PROJECT BCGE #504 File # A501907 Page 1
1020 - 800 W. Pender St., Vancouver BC V6C 2V6 Submitted by: Richard Haslinger

CHRISTINA
SEAN



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
CJ-000.1	.7	82.8	1.0	74	.1	45.8	26.8	1027	5.23	6.3	.2	2.6	1.1	138	<.1	.8	<.1	195	3.39	.103	3	155.2	3.57	140	.174	1	2.99	.032	.47	.2	<.01	13.2	.1	<.05	9	<.5
CJ-000.2	1.1	155.8	1.6	50	.1	25.5	23.3	558	4.12	7.0	.2	4.6	.4	148	.1	1.1	<.1	185	2.18	.177	3	58.7	1.84	287	.225	2	1.94	.016	.76	.2	<.01	6.3	.2	.09	6	<.5
CJ-001.1	1.2	255.4	1.7	61	.1	43.5	25.0	658	4.34	4.9	.2	6.7	1.0	126	.1	1.5	<.1	152	1.92	.120	3	135.9	2.30	270	.232	<1	2.29	.022	1.10	.2	<.01	4.7	.2	.14	6	<.5
RE CJ-001.1	1.1	248.7	1.8	60	.2	43.4	24.4	641	4.24	4.9	.3	8.3	1.0	124	.1	1.4	<.1	147	1.90	.121	3	134.8	2.26	251	.240	1	2.24	.022	1.05	.2	<.01	4.6	.2	.13	6	<.5
RRE CJ-001.1	1.2	266.2	1.8	56	.1	43.0	24.1	652	4.33	4.7	.3	7.2	1.0	128	.1	1.5	<.1	144	1.97	.117	2	129.1	2.29	251	.250	1	2.34	.020	1.06	.2	<.01	4.3	.2	.15	5	<.5
CJ-003.1	1.9	303.0	1.4	42	.3	3.1	7.6	614	2.54	4.5	.9	5.2	5.1	144	.1	.5	.1	57	2.57	.125	8	5.8	1.29	175	.092	2	1.63	.033	.90	.1	<.01	3.5	.2	.12	6	<.5
CJ-017.1	5.4	185.1	5.1	35	.2	3.5	13.9	697	3.80	11.7	1.1	18.4	4.8	297	.1	.5	.1	48	2.91	.134	12	4.7	1.28	131	.019	2	2.12	.020	.67	.1	<.01	2.6	.1	.87	6	.5
CJ-018.1	7.9	256.6	2.3	53	.4	3.1	14.2	882	4.22	4.0	1.1	4.3	3.9	244	.1	.4	.1	55	3.60	.146	10	7.0	1.21	106	.024	1	1.98	.020	.44	.1	<.01	2.3	.1	.50	7	<.5
CJ-019.1	1.5	148.5	1.7	37	.2	1.9	8.4	663	3.23	3.9	1.4	3.5	5.0	171	.2	.5	<.1	49	2.45	.124	12	4.2	.91	93	.070	2	1.60	.037	.66	.1	<.01	2.8	.3	.17	6	<.5
CJ-020.1	5.6	368.2	1.8	38	.3	1.5	10.7	504	2.86	17.2	1.8	16.6	5.1	196	.2	.4	.1	27	2.43	.091	10	3.7	.63	71	.008	2	1.31	.019	.32	.1	<.01	1.3	.2	.45	4	.6
CJ-021.1	8.8	644.0	2.7	34	.7	1.7	9.4	480	2.62	27.4	2.8	34.3	5.0	215	.3	.6	.2	17	2.69	.080	9	2.1	.39	68	.008	1	1.00	.015	.33	.5	.04	1.0	.4	.92	3	.7
CJ-022.1	33.1	381.2	1.9	30	.3	1.5	9.5	445	2.79	10.4	2.4	14.2	5.2	203	<.1	.2	.2	25	2.19	.082	10	4.4	.53	69	.004	2	1.22	.021	.30	.1	<.01	1.6	.1	.47	4	.7
CJ-034.1	5.2	32.1	2.0	31	.1	2.6	10.9	561	3.66	6.3	1.2	9.4	4.9	206	<.1	.3	.1	43	2.03	.115	12	2.5	1.13	97	.063	1	1.92	.022	.94	.1	<.01	2.6	.2	.37	6	<.5
CJ-035.1	3.1	349.0	3.8	37	.3	6.3	12.0	609	4.12	12.2	.6	12.5	2.5	308	.1	.4	.1	51	2.68	.115	11	11.9	1.09	94	.041	2	2.12	.020	.82	.1	<.01	2.9	.2	.51	6	.7
CJ-038.1	9.9	1457.1	2.2	46	1.0	5.2	12.0	359	2.64	6.4	1.1	35.6	5.4	165	.4	.2	.1	24	1.98	.085	9	13.3	.67	86	.006	2	1.27	.024	.36	.1	<.01	.8	.1	.55	4	1.2
CJ-041.1	8.4	585.8	3.5	34	.4	6.0	18.0	368	3.61	18.3	1.2	79.4	3.5	185	.2	.8	.1	43	1.57	.084	8	15.5	.88	68	.036	2	1.63	.027	.53	.1	<.01	2.9	.2	.71	6	2.1
CJ-045.1	1.9	149.7	1.7	62	.1	12.2	21.8	1188	4.48	22.8	.3	18.8	1.5	276	.1	.6	.1	76	4.91	.157	6	16.7	1.94	165	.119	1	2.22	.014	.98	.2	<.01	3.7	.1	.56	6	.7
CJ-046.1	2.4	161.9	2.2	61	.1	18.1	30.0	1046	5.02	10.1	.2	8.1	.6	199	<.1	1.0	<.1	148	3.42	.190	3	29.2	2.74	339	.237	1	2.85	.031	2.18	.2	<.01	4.3	.2	.61	7	.6
CJ-047.1	1.2	124.4	1.7	81	.2	18.2	37.4	1250	7.59	12.1	.2	18.5	.7	157	.1	.5	.1	247	4.12	.235	4	34.2	3.21	269	.255	1	3.54	.023	1.93	.2	.01	7.1	.3	.71	11	.8
CJ-048.1	1.5	135.7	1.6	68	.1	15.8	27.4	972	4.17	6.6	.2	6.6	.6	182	.1	.9	<.1	111	3.29	.191	4	30.6	2.34	242	.178	1	2.51	.025	1.38	.2	<.01	4.8	.2	.34	6	.5
CJ-049.1	1.9	471.5	2.4	67	.4	18.7	32.3	1750	5.51	7.7	.3	14.8	.9	353	.3	.5	.2	166	9.57	.140	4	40.3	2.55	135	.123	1	2.69	.015	1.08	.1	<.01	7.9	.2	.71	9	.7
CJ-050.1	1.6	230.9	2.6	79	.2	17.5	35.6	1442	6.30	9.8	.2	22.4	1.3	268	.1	.4	.3	120	6.39	.168	5	25.5	2.90	127	.066	1	3.08	.014	.79	.1	<.01	6.3	.1	1.16	9	1.3
CJ-051.1	1.9	399.5	3.0	59	.4	14.7	28.8	1205	5.62	7.1	.2	20.0	1.4	192	.2	.8	.4	98	5.17	.167	5	25.7	2.36	139	.137	<1	2.57	.015	1.14	.2	<.01	4.7	.1	1.74	7	1.7
CJ-052.1	2.0	163.6	2.5	61	.2	13.4	23.6	1058	4.89	5.9	.3	12.2	.9	174	.1	.6	.1	109	4.54	.164	5	25.7	2.16	155	.167	<1	2.41	.024	1.33	.2	.01	4.9	.2	.99	7	.7
CJ-053.1	1.5	138.2	1.6	76	.1	16.6	27.9	1247	5.61	5.9	.6	10.4	1.9	200	.1	.4	.1	133	4.70	.182	8	34.2	2.44	226	.170	1	2.85	.021	1.97	.1	<.01	6.8	.2	.62	9	.6
CJ-063.1	1.2	263.0	1.7	77	.2	15.5	27.0	1316	5.53	6.6	.2	8.4	.6	243	.2	.4	.1	119	5.54	.187	5	22.2	2.45	151	.144	1	2.80	.024	1.14	.2	<.01	5.8	.1	.58	9	.5
CJ-064.1	1.4	171.2	1.7	77	.1	16.2	27.7	1166	4.88	6.0	.2	6.4	.6	189	.1	.7	<.1	141	4.30	.189	4	32.0	2.72	178	.227	<1	2.90	.024	1.65	.2	<.01	4.4	.2	.44	8	<.5
CJ-065.1	1.1	125.3	1.7	78	.1	18.3	29.1	1092	4.55	6.3	.3	2.8	1.9	172	.1	.6	<.1	100	4.14	.197	6	47.1	2.56	134	.184	1	2.58	.026	1.25	.2	<.01	4.6	.1	.58	8	.5
CJ-066.1	1.6	152.0	2.5	53	.1	12.8	21.0	1044	4.41	6.2	.2	5.5	.7	177	.1	.5	.1	76	4.76	.163	4	18.1	2.10	143	.127	1	2.16	.022	.90	.2	<.01	2.9	.1	1.34	6	.9
CJ-067.1	1.5	127.1	1.1	94	.1	28.2	30.2	1321	6.63	6.7	.1	4.1	.5	148	.1	.4	.1	248	4.83	.156	2	57.4	4.00	149	.178	<1	3.63	.017	1.13	.2	<.01	6.5	.1	.49	9	.7
CJ-068.1	.7	418.2	.9	86	.3	30.6	43.4	1312	7.56	7.8	.1	6.2	.3	157	.2	.7	<.1	307	5.61	.136	2	90.1	3.71	130	.228	<1	3.43	.008	1.03	.2	<.01	14.5	.1	.23	10	<.5
CJ-069.1	1.6	120.2	2.2	58	.1	16.1	25.4	1049	4.96	5.6	.6	9.8	1.9	157	.1	.7	<.1	133	5.09	.169	4	31.5	2.55	130	.168	1	2.41	.028	.87	.2	<.01	6.4	.1	1.24	8	.5
CJ-070.1	1.8	98.1	2.2	53	.1	16.4	24.6	875	4.14	6.6	.2	7.3	.6	156	.1	1.0	<.1	115	4.09	.187	4	30.4	2.10	225	.214	1	2.17	.031	1.26	.3	<.01	3.8	.1	.95	6	.7
CJ-071.1	1.8	213.5	2.7	48	.2	20.2	37.5	924	4.18	6.1	.2	10.9	.9	149	.1	1.4	<.1	126	4.54	.148	2	42.7	1.95	119	.217	<1	1.93	.026	.71	.3	<.01	3.7	.1	1.02	5	<.5
STANDARD DS6	11.5	121.7	30.0	146	.3	24.8	10.8	724	2.86	21.4	6.6	46.0	3.1	39	5.9	3.5	5.0	54	.87	.082	14	184.4	.59	173	.076	18	1.96	.073	.15	3.6	.23	3.2	1.8	<.05	6	4.3

GROUP 10X - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data 1 FA _____ DATE RECEIVED: MAY 12 2005 DATE REPORT MAILED: May 24/05





AMARC Resources PROJECT BCGE #504 FILE # A501907

CHRISTINA JEAN



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	% ppm	ppm	ppm	% ppm	% ppm	% ppm	%	%	% ppm	ppm	ppm	ppm	ppm	% ppm	ppm	ppm		
CJ-073.1	.7	13.1	1.6	92	<.1	30.7	40.7	1240	9.13	5.6	.1	6.5	.4	107	.1	1.0	.1	401	3.79	.104	1	80.3	3.88	214	.267	1	3.92	.017	1.79	.3	<.01	7.5	.2	.53	12	<.5	
CJ-075.1	.6	200.6	3.6	93	.2	34.6	40.8	1600	8.47	7.5	.1	15.1	1.5	355	.1	1.0	<.1	401	6.94	.114	2	105.5	4.23	146	.181	1	3.85	.013	1.04	.1	<.01	30.4	.2	.92	12	<.5	
CJ-076.1	1.5	260.9	6.8	83	.4	31.2	39.2	1610	8.79	7.2	.6	9.9	1.2	511	.2	.8	.1	412	7.04	.184	3	76.8	3.93	182	.223	1	3.82	.016	1.61	.2	.01	33.0	.3	1.40	13	.8	
CJ-077.1	1.6	251.9	17.9	78	.8	11.0	22.9	1283	4.78	32.2	.5	42.2	2.5	444	.7	.8	.2	27	6.15	.165	4	5.0	1.58	80	.013	1	1.05	.010	.40	.2	.01	3.4	.1	2.09	2	1.1	
CJ-078.1	1.9	153.3	7.6	72	.3	23.9	30.1	1461	6.12	8.0	1.2	11.1	.9	590	.2	.5	.1	125	8.03	.153	4	90.1	2.72	103	.078	<1	2.22	.009	.76	.3	<.01	15.1	.1	1.66	6	.9	
CJ-092.1	.9	414.8	3.0	60	.3	16.5	24.7	713	5.34	5.1	.3	16.8	1.1	149	.2	.8	<.1	205	2.59	.220	5	27.4	1.82	243	.217	1	2.01	.018	1.24	.4	<.01	5.0	.2	.11	7	.5	
CJ-093.1	1.5	255.5	1.4	50	.2	9.0	17.5	581	3.57	3.3	.3	9.8	1.3	139	.1	.7	<.1	148	1.32	.183	6	7.3	1.52	372	.189	1	1.99	.039	1.58	.1	<.01	4.2	.2	<.05	6	<.5	
CJ-094.1	1.8	217.4	.9	50	.1	9.2	22.9	793	4.83	6.0	.3	1.5	.9	130	.1	.7	<.1	182	1.63	.233	5	5.2	2.28	380	.189	<1	2.80	.029	1.37	.5	<.01	5.4	.2	<.05	7	<.5	
CJ-095.1	.7	222.9	.9	47	.1	8.5	23.1	736	4.66	8.0	.3	6.4	1.0	127	.1	.8	<.1	168	1.75	.235	5	5.2	2.08	448	.211	1	2.74	.032	1.70	.2	<.01	4.2	.2	.13	6	<.5	
CJ-096.1	1.8	114.7	2.2	47	.1	9.2	20.6	973	4.99	14.2	.6	18.1	2.9	101	.1	.6	.1	108	2.75	.150	6	38.9	2.08	308	.166	1	2.80	.027	2.25	.4	<.01	4.0	.3	.69	8	.6	
CJ-108.1	5.2	851.8	3.3	78	.8	6.0	18.4	738	4.19	6.3	.7	46.5	2.9	202	1.0	.5	.1	72	2.47	.153	11	7.7	1.37	128	.084	1	2.14	.028	.97	.1	<.01	3.7	.2	.43	7	.5	
CJ-109.1	7.2	74.1	1.6	39	<.1	3.3	12.3	648	4.03	7.0	.5	7.1	1.7	119	<.1	.7	<.1	72	1.49	.151	7	6.4	1.36	77	.128	1	2.12	.031	1.06	.8	<.01	2.2	.3	.23	6	<.5	
CJ-110.1	5.3	807.2	1.8	42	.5	2.2	10.5	562	3.10	7.4	2.2	27.7	4.7	143	.3	.4	.1	49	2.30	.129	14	2.5	.95	84	.059	<1	1.65	.023	.90	.2	<.01	2.6	.3	.37	5	<.5	
CJ-117.1	10.2	323.4	1.6	51	.3	7.8	14.7	1072	5.28	4.9	1.0	16.3	2.4	197	.2	.2	.1	83	4.38	.135	15	21.6	1.40	122	.084	<1	2.38	.024	.96	.5	<.01	4.6	.2	.41	8	<.5	
CJ-118.1	14.8	85.3	1.2	43	.1	7.6	9.6	702	4.59	3.5	.6	5.6	1.5	159	<.1	.3	.1	81	1.99	.121	11	24.2	1.38	72	.080	<1	2.10	.030	.75	.2	<.01	4.3	.2	.20	9	<.5	
CJ-119.1	234.1	152.2	3.1	32	.1	4.0	9.5	551	3.49	8.0	.8	17.7	2.4	111	<.1	.4	.1	48	2.28	.090	11	11.5	1.02	98	.070	<1	1.59	.028	.97	.2	<.01	2.8	.3	.75	6	.7	
CJ-123.1	2.4	154.9	3.5	28	.1	4.4	8.1	696	2.96	6.4	.7	2.5	2.4	209	.1	.8	<.1	42	4.24	.091	5	18.0	.89	75	.112	1	1.48	.031	1.12	.8	<.01	1.9	.3	.34	5	1.3	
CJ-124.1	1.3	96.0	2.1	29	.1	4.1	6.7	359	3.18	6.8	.7	17.9	2.8	104	.1	.6	<.1	62	1.14	.083	5	16.1	.96	73	.122	2	1.55	.051	.85	.4	<.01	2.2	.2	.33	6	.5	
RE CJ-124.1	1.3	94.5	2.1	30	.1	3.8	6.3	355	3.13	7.0	.7	12.4	2.8	102	.1	.6	<.1	61	1.10	.085	5	15.5	.94	71	.120	1	1.52	.052	.85	.4	<.01	2.1	.2	.33	6	.5	
RRE CJ-124.1	2.0	103.0	2.2	32	.1	4.9	6.7	365	3.16	7.4	.8	28.3	2.9	99	<.1	.6	<.1	64	1.12	.086	5	20.6	.97	69	.118	2	1.52	.048	.85	.9	<.01	2.0	.2	.36	6	.6	
CJ-125.1	5.9	1285.4	2.6	49	1.0	4.6	18.3	347	2.77	12.2	1.0	27.7	3.4	64	.5	.4	.1	37	1.49	.081	6	13.6	.80	71	.081	1	1.22	.046	.84	.3	<.01	2.4	.2	.71	4	1.4	
CJ-126.1	6.8	617.7	1.0	43	.4	4.2	14.2	570	3.78	6.5	.8	25.4	3.0	77	.2	.4	<.1	69	1.31	.155	6	8.8	1.52	167	.175	1	2.21	.033	1.92	.7	<.01	2.2	.4	.31	5	.6	
RH-R-020 ROCK	.5	18.4	1.0	5	3.3	1.3	1.8	48	.62	1.9	<.1	3973.9	.9	.1	5	<.1	.1	<.1	8	.17	.006	1	11.8	.06	14	.004	<1	.15	.005	.06	.3	<.01	.5	<.1	<.05	<1	<.5
STANDARD DS6	11.4	121.3	29.6	147	.3	25.2	10.6	715	2.87	21.7	6.6	48.2	2.9	38	6.2	3.6	5.0	58	.84	.080	14	186.9	.58	173	.078	19	1.94	.073	.17	3.6	.23	3.3	1.7	<.05	6	4.4	

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

PETROGRAPHIC REPORT

Core Samples Hole 96 - 5

January 11, 2006

Prepared For: **David Blann**
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Background

A set of 4 samples was received from David Blann of Standard Metals on October 20, 2005. The objective of the work was to define the characteristics of the alteration, mineralization and ore associations. The samples were prepared as polished thin sections for petrographic analysis. No detailed geologic or spatial information was provided with the samples.

The petrographic work included basic transmitted and reflected light observations, covering description of lithologies (where possible), alteration and mineralization. The analyses were carried out by Anne Thompson and Alexandra Mauler at the PetraScience office, Vancouver. The observations are summarized below and descriptions follow. All percentages in the descriptions are approximate.

Sample Characterization

Lithologies

The samples are variably altered and deformed igneous, fine- to medium-grained holocrystalline rocks. Samples 96-5-20m and 96-5-173m are too altered to allow further classification. Sample 96-5-109m and 96-5-138m appear dominated by K-feldspar of primary and secondary origin with minor primary partly preserved plagioclase and biotite. Additionally, quartz appears to be mostly the result of alteration, suggesting the protolith is likely a (alkali) syenite.

Alteration

Alteration and deformation variably affect the samples. In sample 96-5-20m the original mineralogy and textures are completely replaced by patchy epidote-clinozoisite, actinolite-tremolite, shreddy biotite, K-feldspar and carbonate. Sample 96-5-173m is also pervasively altered with its original mineralogy extensively replaced by carbonate-quartz aggregates occurring within a linear fabric marked by ribbons of chlorite and sericite. Sample 96-5-109m is strongly sheared but is the less altered sample, marked by the replacement of plagioclase and original K-feldspar by secondary K-feldspar, in turn partially replaced by carbonate and muscovite-sericite and the replacement of mafic minerals by elongated ribbons of shreddy biotite, chlorite and muscovite-sericite. Alteration in sample 96-5-138m is dominated by K-feldspar, shreddy biotite, carbonate with additional epidote.

Mineralization

Mineralization in all samples is very low, consisting of minor disseminated pyrite and chalcopyrite. Trace ilmenite also occurs in all the samples. Additionally, magnetite and trace sphalerite were observed in sample 96-5-173m.

Sample: 96 – 5 20m

LITHOLOGY: ?Medium-grained mafic rock

ALTERATION TYPE: Actinolite-tremolite, epidote-clinozoisite, biotite, K-feldspar, carbonate

Hand Sample Description:

Massive mafic core sample made essentially of cm-large dark subrounded patches, rimmed by greenish foliated and anastomosing ribbons. Also cut by several greenish veinlets up to 5 mm wide. Not magnetic, no reaction to dilute HCl and no visible K-feldspar stain.

Thin Section Description:

The sample is a medium-grained rock that has been pervasively replaced by epidote-clinozoisite, amphibole, biotite, chlorite, K-feldspar and carbonate.

Partially preserved fine-to medium-grained, tabular plagioclase is replaced by K-feldspar (locally replaced by carbonate), or less commonly by granular epidote-biotite aggregates. Former mafic phases are pseudomorphed by actinolite-tremolite, itself partly to completely replaced by granular aggregates of epidote and titanite or of biotite and chlorite. Outlines of former tabular minerals are occasionally preserved by epidote replacement. Thin carbonate veinlets occur throughout, controlling weak and patchy carbonate replacement in their surroundings.

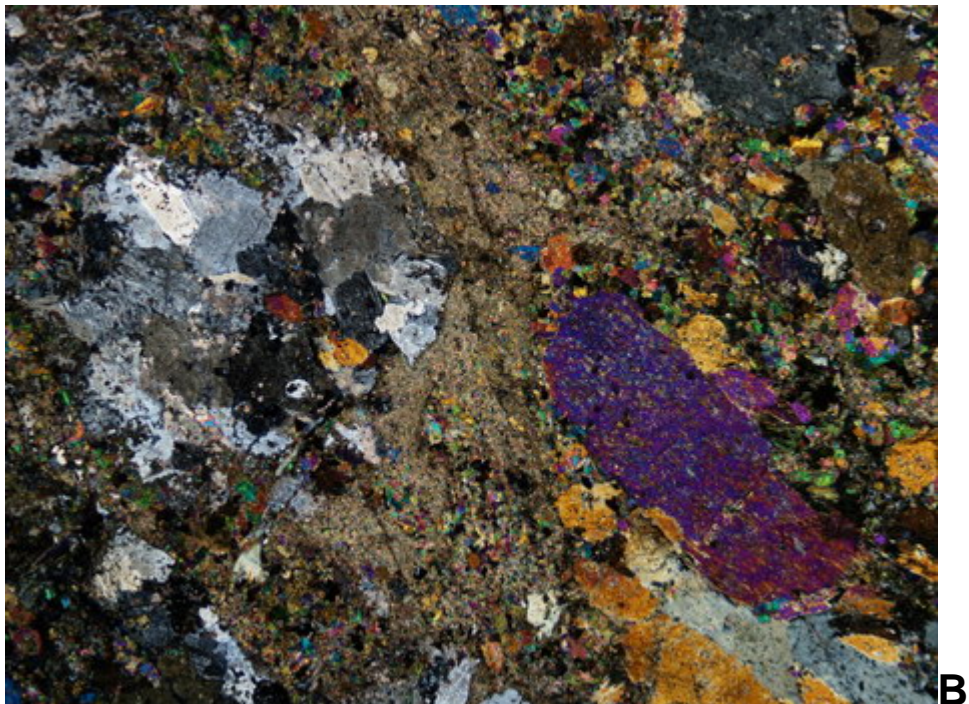
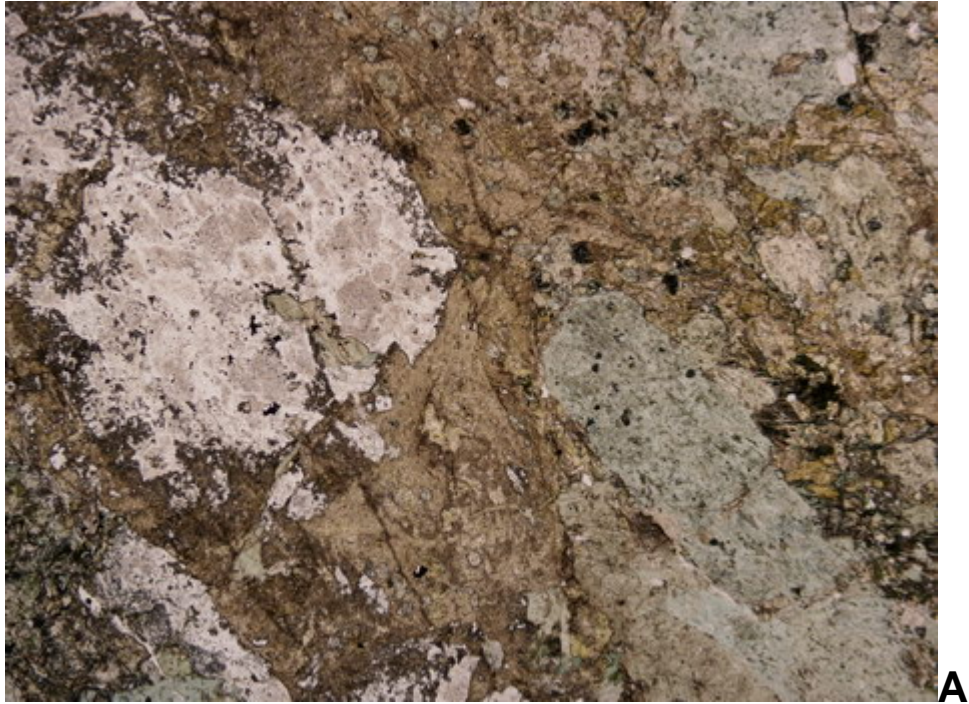
Sulfide dissemination is weak only consisting of fine disseminated chalcopyrite and lesser pyrite.

MAJOR MINERALS

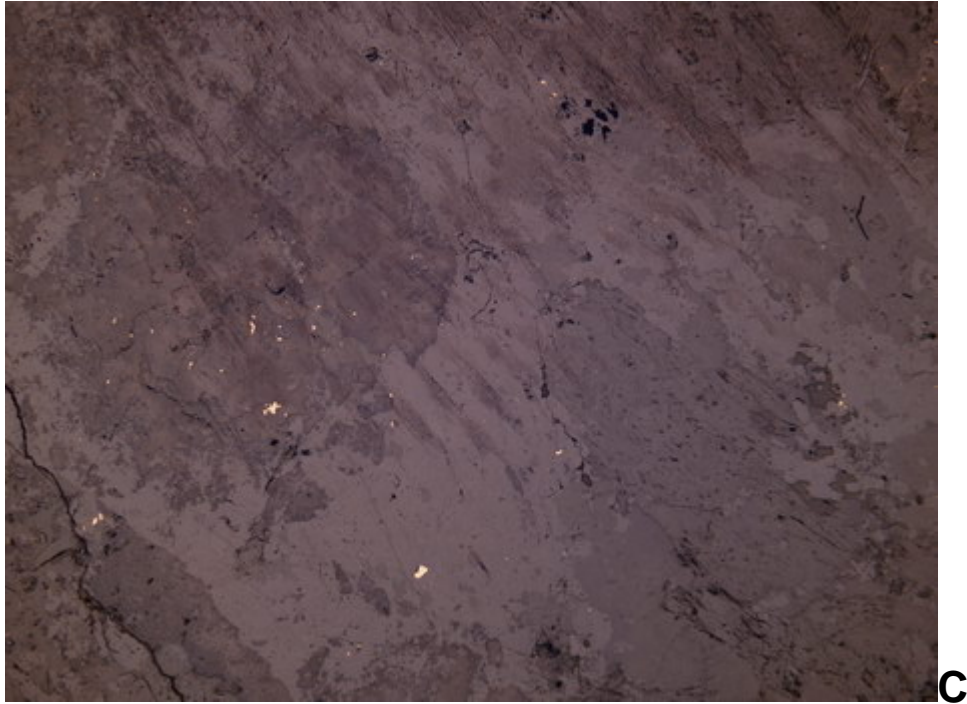
Mineral	%	Distribution & Characteristics	Optical
Epidote	40	Massive to granular clusters of fine to very fine grains, occurring with biotite as replacement of the original mineralogy	
Actinolite-tremolite	30	Fine to medium-sized anhedral to euhedral grains, patchy, pervasively altered by granular aggregates of epidote and / or biotite	<i>Pleo. Cream to green, ob. and straight extinction, cleavages at 56°</i>
Biotite	15	Clusters of very fine subhedral grains, pitting plagioclase and mafic minerals. Also as medium-sized subhedral and foliated primary grains, pervasively replaced by ?epidote	<i>Sg pleochroism from yellow to green</i>
Chlorite	05	Foliated masses intermixed with shreddy biotite, also partly replaces actinolite-tremolite	

MINOR MINERALS

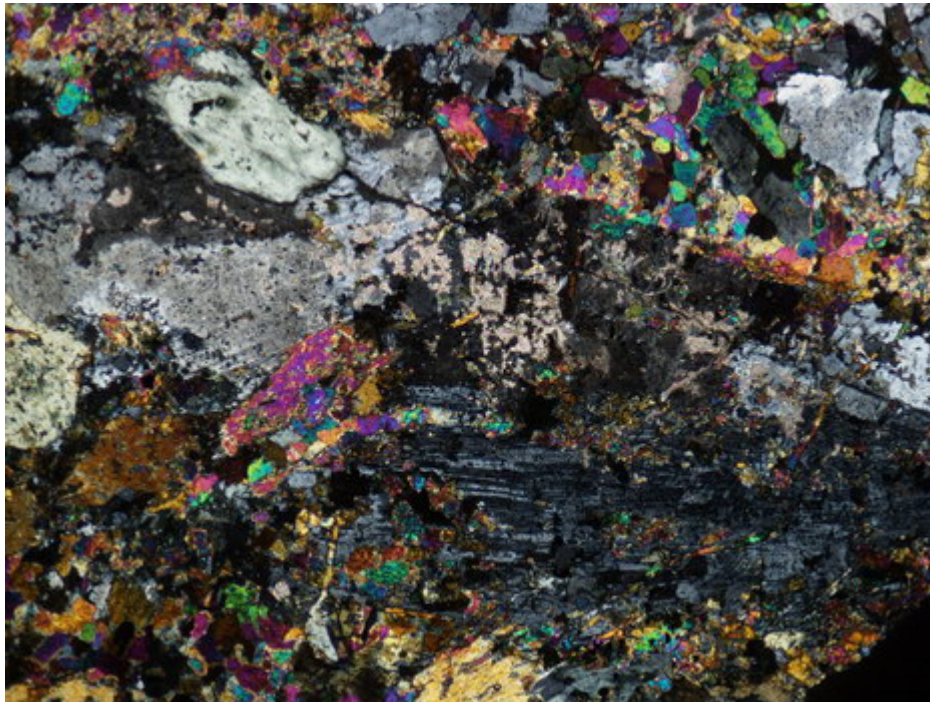
Mineral	%	Distribution & Characteristics	Optical
Plagioclase	03	Medium-grained, tabular subhedral and twinned grains, typically extensively replaced by K-feldspar or epidote	
K-feldspar	02	Fine to medium-sized anhedral grains throughout, likely secondary after plagioclase, also forming a discontinuous veinlet	
Chalcopyrite	01	Very fine to fine anhedral grains disseminated	
?Titanite	01	Extremely fine-grained, anhedral to subhedral clusters, grungy brown, locally skeletal, occurs with very fine epidote as replacement of earlier ?mafic minerals	
Carbonate	tr-01	Very fine discontinuous veinlet cutting the sample. Also as very fine patches, occurring with epidote as vein-controlled replacement of feldspars	
Pyrite	tr	Very fine anhedral grains disseminated	
Quartz	tr	Very fine anhedral masses throughout, typically associated with epidote	
Apatite	tr	euhedral, hexagons	



96 – 5 20m: Overview of the sample, showing medium-grained K-feldspar and actinolite (greenish in PPL), and selective replacement by very fine granular epidote. A) PPL, B) XPL, FOV = 8.5 mm



C



D

96 – 5 20m: C) same view as above, showing the weak and very fine-grained chalcopyrite dissemination. RL, FOV = 8.5 mm. D) Detailed view showing epidote , biotite and carbonate replacement of feldspars. XPL, FOV 3.5 mm

Sample: 96 – 5 109m

LITHOLOGY: Sheared medium-grained feldspar-dominated holocrystalline rock (?Syenite)

ALTERATION TYPE: K-feldspar, shreddy biotite, muscovite-sericite, quartz, carbonate

Hand Sample Description:

Massive foliated core sample with foliation essentially defined by the alignment of black, flattened anhedral grains and masses varying in length from 1mm to 1.5 cm. The foliation typically wraps around white, translucent patches, 1-5 mm large that typically stained yellow with sodium cobaltrinite indicating they contain K-feldspar. Not magnetic, local fizz with dilute HCl.

Thin Section Description:

The sample is a sheared, medium-grained feldspar-dominated rock with a foliation defined by subparallel ribbons of micas and quartz wrapping around feldspar phenocrysts. Primary minerals include medium-grained subhedral twinned plagioclase and biotite sheaves. Rare subhedral ?clinopyroxenes also occur throughout. Plagioclase is pitted by muscovite-sericite, and selectively replaced by K-feldspar. Ribbons of muscovite-sericite, biotite-chlorite-ilmenite-rutile or granular quartz-chlorite are developed around feldspars and primary biotite as result of the alteration of original minerals and of deformation. Calcite aggregates also occur within the foliation, partially rimming K-feldspars. Minor calcite veinlets also occur. Mineralization is very weak, only consisting of trace pyrite and chalcopyrite.

MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
K-feldspar	45	Fine to medium anhedral grains, commonly zoned, forming most of the sample and commonly pitted by very fine laths of muscovite-sericite, biotite or calcite preferentially within their cores. Commonly secondary, as result of the alteration of plagioclase. Common perthitic textures	
Biotite	15	- Few flattened, internally deformed medium-sized primary grains occurring within the foliation - Elongated masses and ribbons of very fine foliated anhedral to tabular secondary grains intermixed with chlorite, defining the foliation that wraps around K-feldspars. Typically associated with quartz and rutile	
Muscovite-sericite	20	Very fine laths and masses of laths, variously replacing the cores of K-feldspars. Also as medium-sized elongated masses and ribbons of very fine foliated grains, defining the foliation with secondary biotite and chlorite.	
Calcite	05	Fine locally elongated grains in discontinuous veinlets cutting the sample. Also as patches throughout as result of the alteration of feldspars	
Quartz	05	Very fine-grained granular aggregates of intermixed with secondary biotite and chlorite as result of alteration.	
Chlorite	05	Foliated masses disseminated associated with biotite as replacement	

MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Plagioclase	02	Fine subhedral grains, commonly replaced by secondary K-feldspar but with preserved polysynthetic twinning	
?Clinopyroxene	01	Fine anhedral grains in disseminated aggregates	<i>Weakly pleochroic, high int. colors,</i>
?Rutile	tr-01	Extremely fine-grained granular aggregates associated with biotite, chlorite and ilmenite	
?Ilmenite	tr	Fine masses intermixed with rutile, biotite and chlorite	
Pyrite	tr	Rare very fine to fine anhedral grains	
Chalcopyrite	tr	Rare very fine to fine anhedral grains	

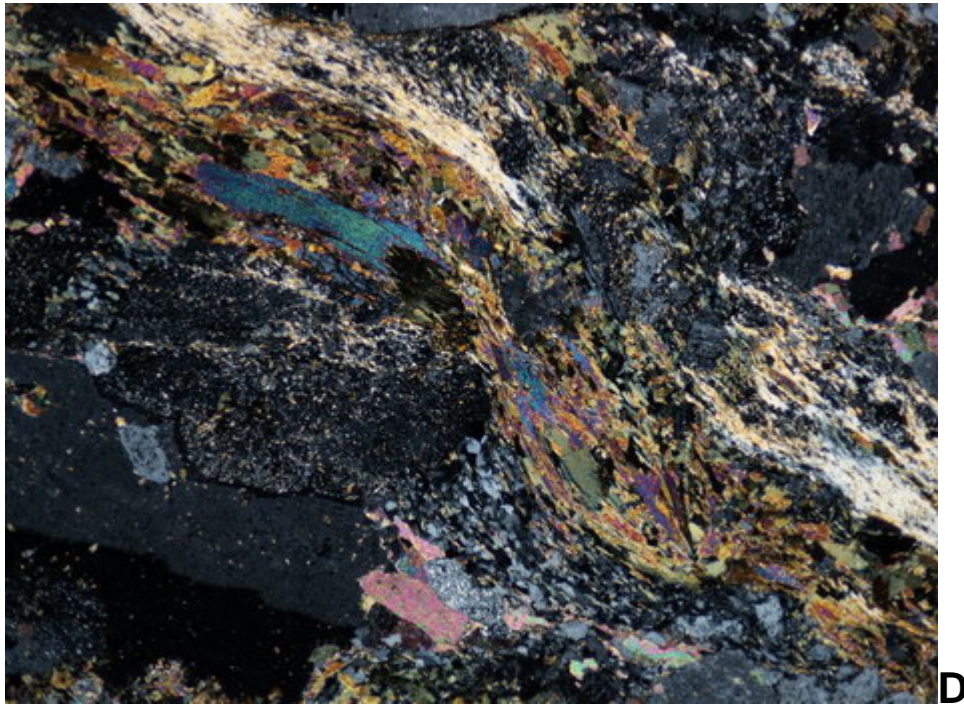
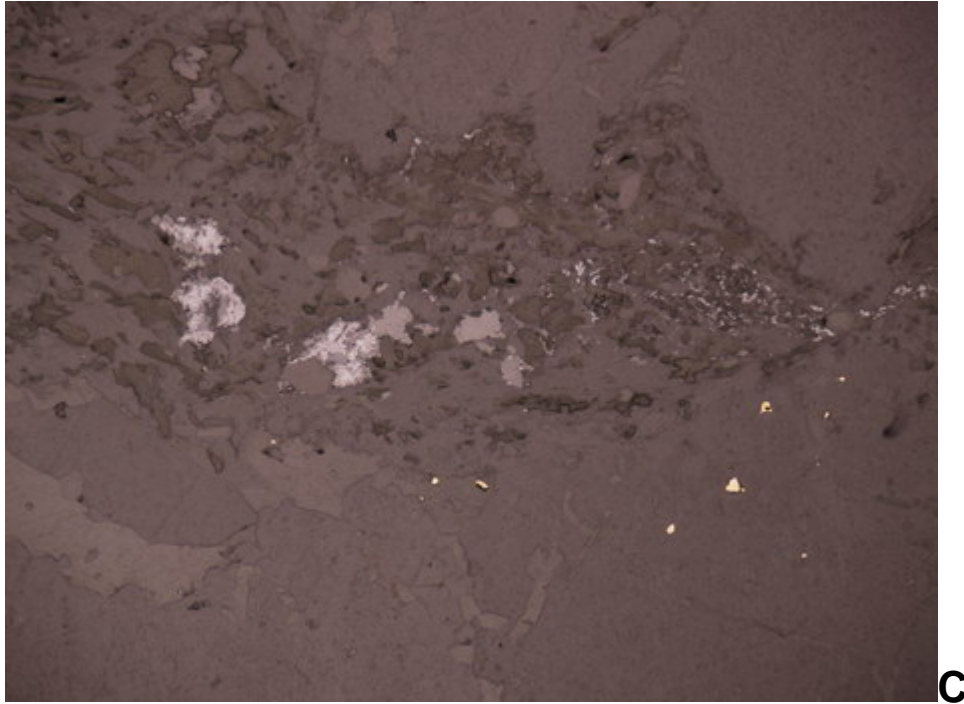


A



B

96 – 5 109m: Overview of the sample showing ribbons of fine-grained biotite and muscovite-sericite defining a strong foliation that wraps around medium-grained K-feldspars. A) PPL, B) XPL, FOV = 8.5 mm



96 – 5 109m: C) Different view of the sample, showing the occurrence of very fine disseminated chalcopyrite as well as masses of ilmenite (light grey) and rutile (dark grey). RL, FOV = 1.75 mm.

D) Detailed view of the sample showing from top to bottom ribbons of muscovite-sericite, biotite and granular quartz occurring in the pressure shadow of the K-feldspar. Carbonate also occurs throughout. XPL, FOV = 3.5 mm.

Sample: 96 – 5 138m

LITHOLOGY: Sheared medium-grained feldspar-dominated holocrystalline rock (?Syenite)

ALTERATION TYPE: K-feldspar, biotite, epidote, quartz, carbonate

Hand Sample Description:

Massive core sample made essentially of 60% white patches 0.5 to 1 cm large, commonly containing a weakly greenish subhedral and ?zoned core and 40% fine black masses and ribbons, typically less than 0.5 cm, locally rimming the coarser white patches. Sodium cobaltrinite stain is strong throughout the white patches, but typically preserved the zoned subhedral phenocrysts. Not magnetic, no reaction to dilute HCl.

Thin Section Description:

The sample is a medium-grained feldspar dominated rock with minor fine-grained subhedral plagioclase, anhedral quartz and locally tabular ?clinopyroxene, all of primary origin. K-feldspar is dominant, but may be both primary and secondary. Some remnant perthitic textures are present. Alteration also consists of replacement of plagioclase by K-feldspar or by granular epidote. Mafic minerals are replaced by masses of biotite-chlorite-epidote or of biotite-quartz, locally preserving the tabular shape of the mineral they replace. Ilmenite and rutile are locally associated with biotite alteration. Carbonates occur as fine patches replacing feldspars, or associated with chlorite, as well as very thin veinlets throughout. One thin veinlet was observed with local chalcopyrite, pyrite and chlorite infill.

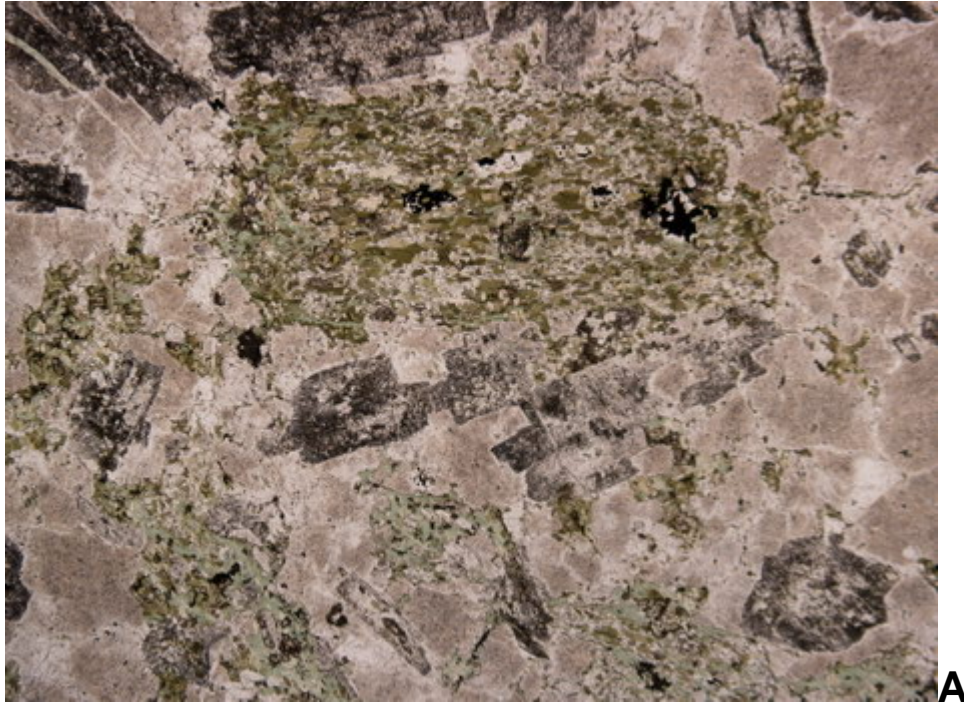
Mineralization is very weak, only consisting of trace pyrite and chalcopyrite.

MAJOR MINERALS

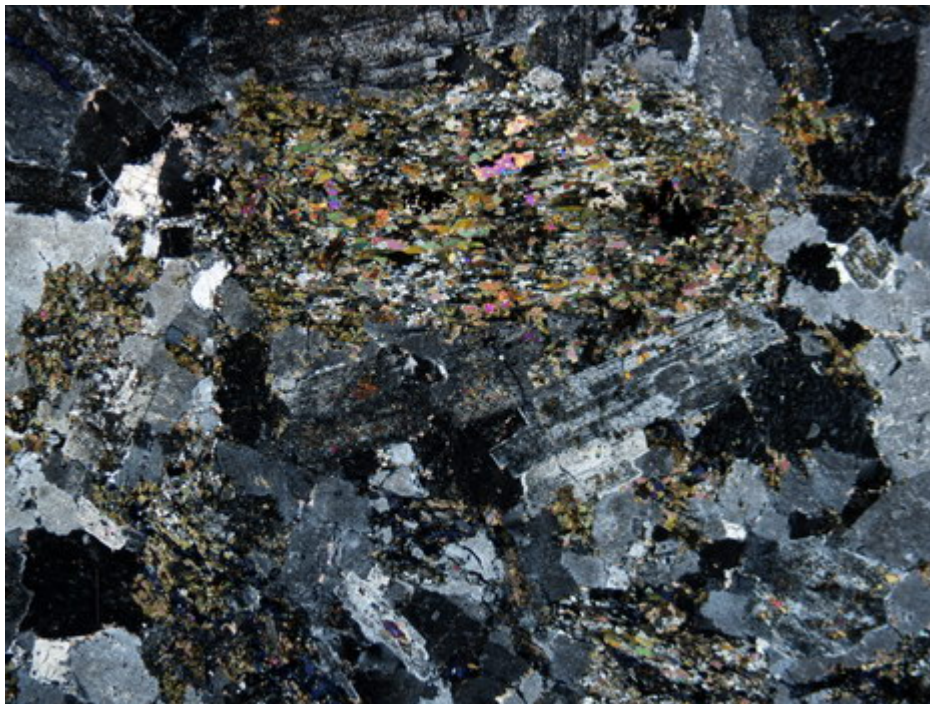
Mineral	%	Distribution & Characteristics	Optical
K-feldspar	55	Fine to medium anhedral grains, cloudy; Commonly pitted by very fine granular epidote. Partly secondary, as result of the alteration of plagioclase, or primary K-feldspar.	
Biotite	20	Fine to very fine anhedral to tabular sheaves. Commonly associated with quartz, chlorite and epidote in anhedral to subhedral aggregates, locally respecting the subhedral outlines of the minerals they replace.	
Epidote	15	Granular masses of extremely fine grains pitting plagioclase and less commonly K-feldspar. Coarser grained in aggregates with biotite and chlorite as replacement of mafic minerals	

MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Plagioclase	03	Fine- to medium-sized subhedral grains, commonly extensively replaced by secondary K-feldspar but with preserved polysynthetic twinning. Also commonly pitted by extremely fine granular epidote	
Carbonate	02	Rare fine anhedral grains and patches throughout and very thin veinlets throughout	
Quartz	01	Rare medium-sized anhedral grains exhibiting undulous extinction. Also as masses of very fine grains intermixed with biotite	
Chlorite	01	Fine to very fine sheaves intermixed with biotite and epidote in anhedral masses, as replacement of mafic minerals. As infill in one partial very thin veinlet	<i>Green pleoc, abnormal blue biref</i>
?Clinopyroxene	tr-01	Fine subhedral grains partially replaced by biotite sheaves	<i>Weakly pleochroic, high int. colors,</i>
?Rutile	tr	Extremely fine-grained granular aggregates associated with ilmenite	
Ilmenite	tr	Very fine anhedral patches, commonly occurring with biotite and rutile	
Pyrite	tr	Rare fine anhedral masses and very fine anhedral to subhedral grains	
Chalcopyrite	tr	Rare clusters of very fine to fine anhedral grains. Locally filling part of a very thin carbonate-chlorite veinlet	



A



B

96 – 5 138m: Overview of the sample showing equigranular , cloudy feldspar (now dominantly K-feldspar), a subhedral aggregate of biotite, epidote, chlorite and carbonate as well as tabular plagioclase grains partially replaced by extremely fine granular epidote giving the plagioclases a grungy black color in PPL.
A) PPL, B) XPL, FOV = 8.5 mm



96 – 5 138m: C) Close up on the sulfides in photograph A, showing they mostly consist of fine anhedral pyrite and lesser chalcopyrite. RL, FOV = 3.5mm.

Sample: 96 – 5 173m

LITHOLOGY: Fine- to medium-grained sheared, ?igneous rock

ALTERATION TYPE: Carbonate, chlorite, quartz, sericite

Hand Sample Description:

Massive core sample, with a strong linear fabric, essentially composed of a black aphanitic groundmass and anhedral creamy white patches that very locally stained yellow with sodium cobaltrinite. Few fine quartz veinlets, less than 2 mm wide crosscut the samples. In the direction parallel to the linear fabric, groundmass and patches are highly flattened and become alternating thick black and thin creamy white bands. Varies magnetically throughout (from not to strongly). Creamy white patches locally react with dilute HCl.

Subhedral pyrite cubes less than 5mm large and ribbons of very fine sulfides occur throughout, commonly in the vicinity of quartz veins.

Thin Section Description:

The original texture and mineralogy of the rock is strongly obliterated by patches of intermixed fine carbonate and quartz, underlined by ribbons of very fine laths of chlorite and muscovite that are the result of alteration and deformation.

Discontinuous veinlets of medium-grained, internally deformed quartz accompany the alteration assemblage. Fine to medium-grained anhedral and twinned plagioclase are locally preserved within masses of quartz-carbonate.

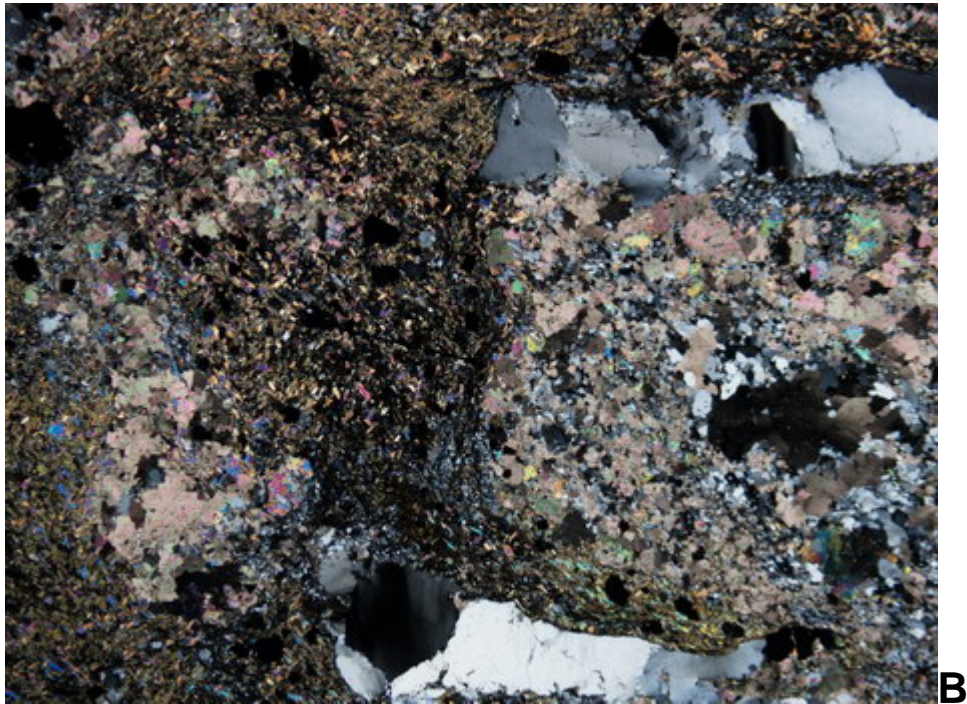
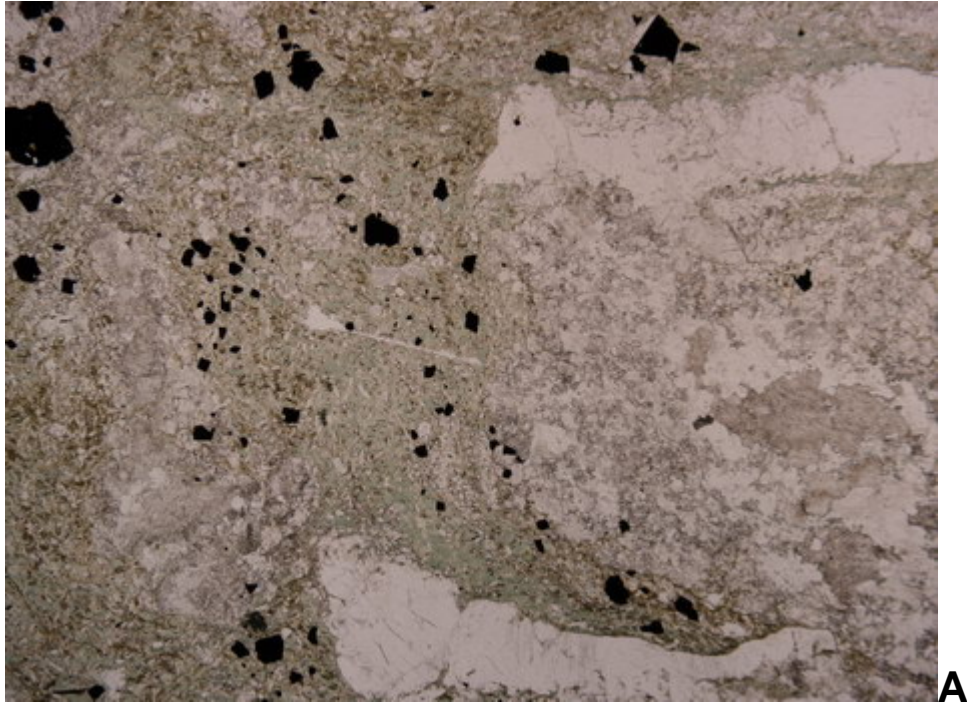
Magnetite, ilmenite and rutile occur within masses of chlorite likely as replacement of biotite. Pyrite occurs disseminated, rarely intergrown with fine sphalerite. Trace chalcopyrite occurs as inclusion within magnetite and pyrite.

MAJOR MINERALS

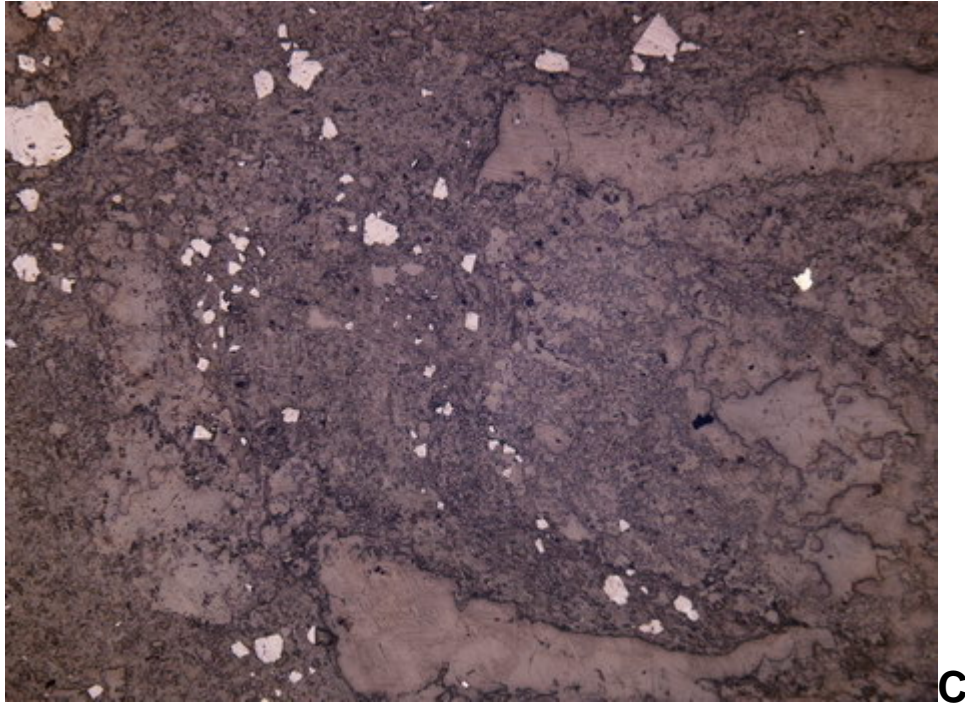
Mineral	%	Distribution & Characteristics	Optical
Carbonate	35	Fine anhedral grains and masses throughout occurring as result of the alteration of primary feldspars	
Chlorite	25	Masses and ribbons of very fine foliated anhedral to tabular secondary grains. Typically intermixed with very fine quartz and muscovite-sericite	
Quartz	20	Very fine-grained granular aggregates of anhedral grains intermixed with secondary chlorite, muscovite-sericite and carbonate as result of alteration. Also as medium-sized, commonly elongated anhedral grains and masses of grains with evidence of internal deformation, likely as the result of deformation of quartz veinlets	
Muscovite-sericite	10	Fine laths and masses of laths, intermixed with secondary chlorite and quartz. Occurs in ribbons and patches.	

MINOR MINERALS

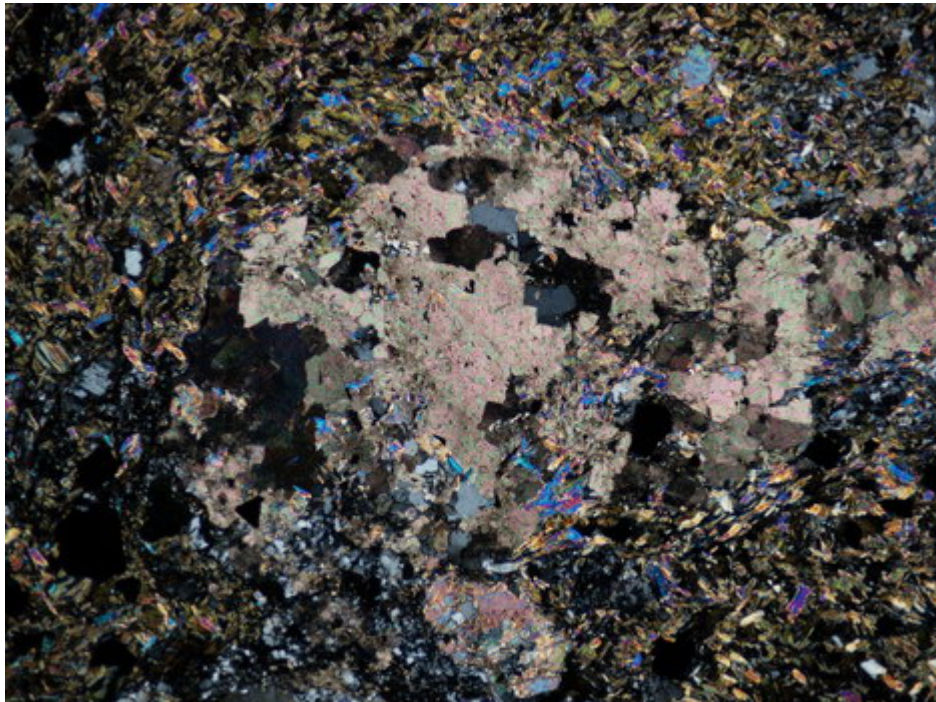
Mineral	%	Distribution & Characteristics	Optical
Magnetite	02	Fine subhedral grains, occurring in clusters throughout. Commonly weakly replaced along grain boundaries by ilmenite	
Biotite	01	Fine foliated masses typically partly replaced by chlorite, rutile and sulfides	
K-feldspar	01	Fine anhedral grains disseminated, commonly resulting from plagioclase replacement and partially replaced by carbonate	
Plagioclase	01	Fine subhedral grains, commonly replaced by secondary K-feldspar but some, fresh with preserved polysynthetic twinning (possible ?albite)	
Rutile	tr-01	Very fine-grained granular aggregates commonly disseminated within masses of chlorite	
Pyrite	tr	Fine anhedral grains disseminated	
Chalcopyrite	tr	Rare fine inclusions within pyrite and magnetite	
Ilmenite	tr	Very fine patches occurring as replacement of magnetite	
Sphalerite	tr	Very fine inclusions within pyrite	



96 – 5 173m: Overview of the sample, showing medium-grained elongated quartz (?discontinuous veinlets) and masses of alteration minerals consisting mostly of carbonate, quartz, chlorite and lesser muscovite-sericite. A) PPL, B) XPL, FOV = 8.5 mm



C



D

96 – 5 173m: C) Same view as above showing the fine dissemination of magnetite grains throughout. RL, FOV = 8.5 mm. D) Close-up on the carbonate-quartz mass at the bottom left of photographs A & B, showing very fine laths of intermixed chlorite and sericite surrounding the carbonate-quartz. XPL, FOV = 3.5 mm.