

KRL Resources Corp.

MMPROPERTY

Stewart, B.C.

N.T.S. 104A/4

Report

on

1990 Fieldwork

by

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and

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October

~~MMPROPERTY~~
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SUMMARY

The MM Property of KRL Resources Corp. is well positioned for cost effective exploration, located only 8 kilometres from Stewart, B.C.. On the property, outcropping ore grade samples lie peripheral to airborne EM and ground VLF-EM anomalies, and are part of a mineralized belt that includes the Dunwell Mine and prospects of the Portland Canal Fissure Zone.

Needed for the 1991 field program on the MM Property is an expanded and more precise ground geophysical program, and detailed geology to better define drill targets. Road access and 1000 metres of diamond drilling is recommended to test for sulphide rich ores in fissure veins. Total cost for a 1991 program is \$259,000.

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**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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INTRODUCTION

The Stewart area is one of the major metal-mining districts of the Canadian Cordillera. More than 50 properties in the area produced in excess of 5.6 million tons of gold-silver-lead-zinc ore between 1910 and 1968 (Grove 1971). Presently the Big Missouri Mine is being exploited by Westmin Resources with a current reserve of 1.7 million tonnes at 3.12 g/t Au and 22.98 g/t Ag (Dandy 1990). The Eskay Creek deposit presently being drill evaluated lies within Stewart area geology. The deposit is now estimated to contain preliminary geological reserves of 4.36 million tons of 24.1 g/t Au and 910 g/t Ag (The Northern Miner Sept 24, 1990).

The MM property of KRL Resources Corp lies within a mineralized belt at a favourable stratigraphic position, and is well positioned for exploration and exploitation. The property overlooks the town of Stewart 8 kilometres away (Figure 1). A road, to the Dunwell Mine, is 400 metres from the property boundary.

The 1990 field program was centered on the upper reaches of Victoria Creek and on an area of relatively flat ground lying to the east. Fourteen kilometres of cut-line was established and surveyed. Victoria Creek gorge was prospected between elevations 500 to 720 metres. A new gold zone was identified on a cliff face on the north side of Victoria Creek at 700 metres elevation.

GEOLOGIC SETTING

Rocks significant to the economic geology of the Stewart Mining Camp are Lower Jurassic Hazelton Group calc-alkaline volcanic and lesser sedimentary rocks, associated alkaline granitic rocks, and related dykes (Figure 2). Minor limestone and thin bedded siliceous sediment overlie the volcanic rocks and mark the end of volcanism. Middle Jurassic Bowser Lake Group sedimentary rocks are in-folded along north-northwest-trending synclinal axes, and are disrupted by north-northeast trending faults. Plutonic rocks include marginal members of the Coast Crystalline Belt.

Metallogenesis of the Stewart area can be related to repeated cycles of volcanism, sedimentation, and plutonism. Base and precious metal enriched vein deposits are by far the most common form of economic mineralization located in major shear zones and dyke swarms. Massive sulphide deposits are conformable with volcanic and sedimentary units. Porphyry deposits are found in small stocks.

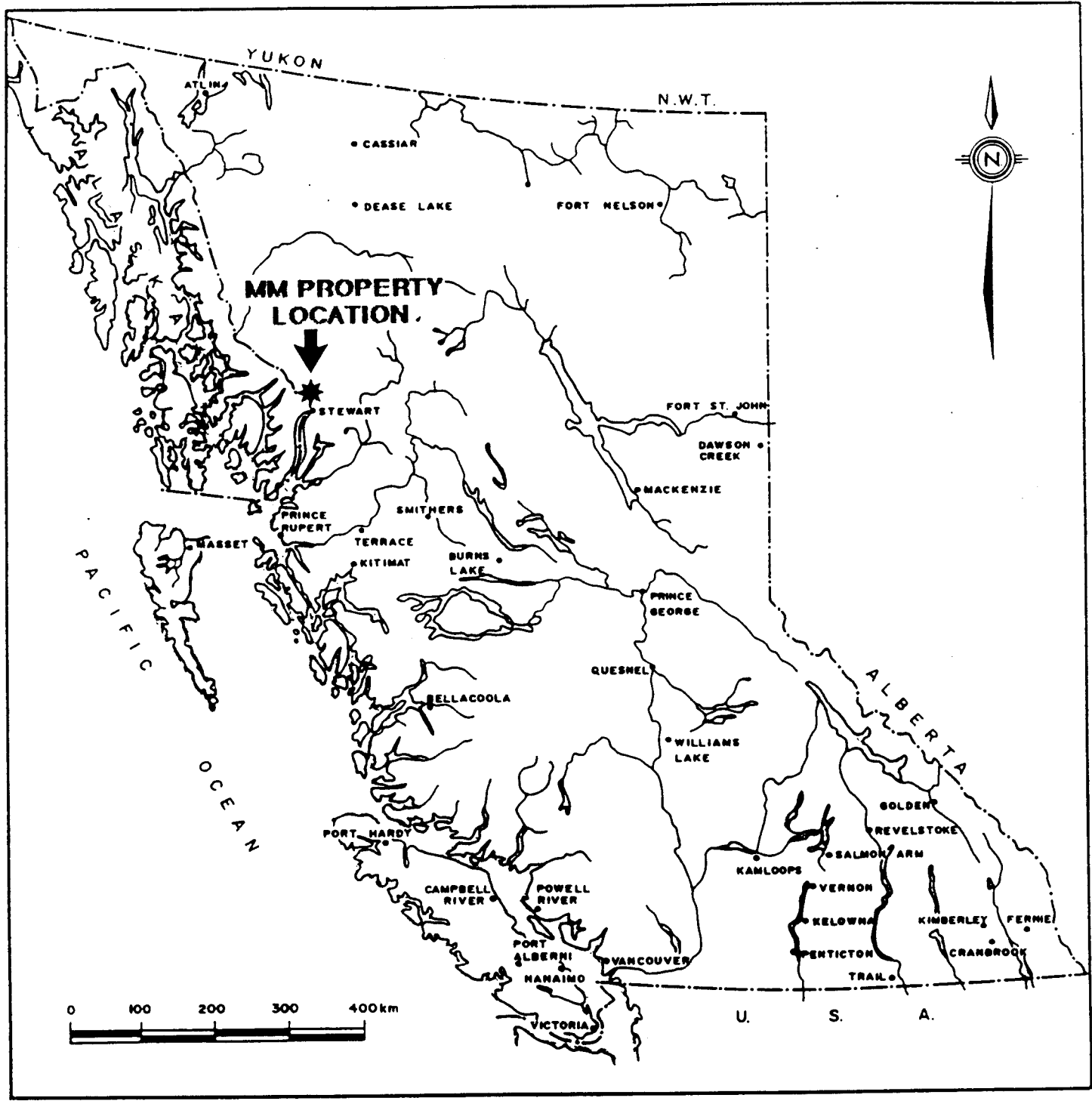


Figure 1. Location map, MM Property.

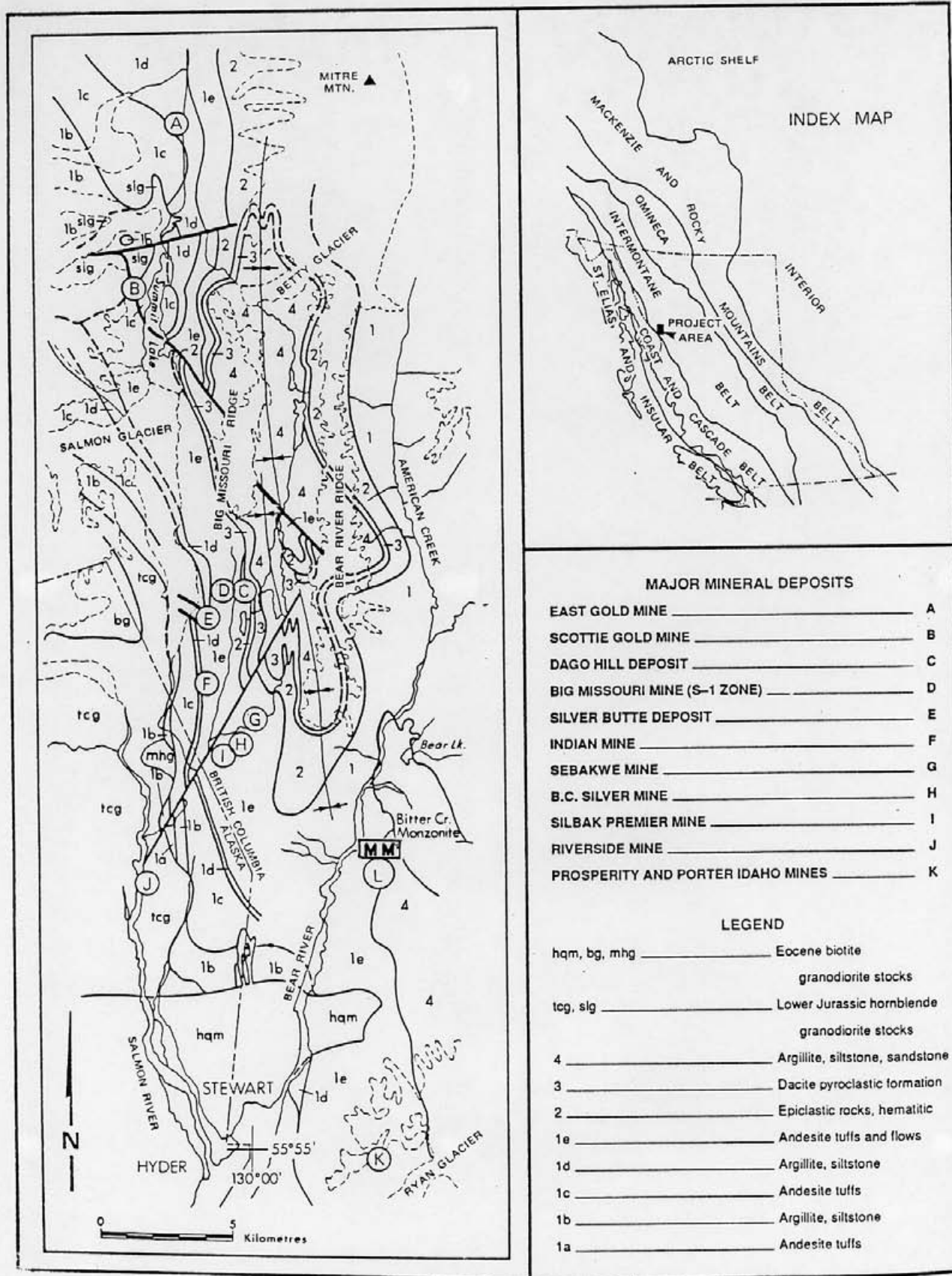


Figure 2. Geology map Stewart area (from Aldridge, 1985).

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MM PROPERTY _____ MM

PROPERTY DESCRIPTION

The MM Property lies within N.T.S. sheet 104A/4 in the Skeena Mining Division. Claim particulars are listed in Table 1 and the claim configuration is shown in Figure 3.

Table 1. The MM property.

Claim name	Record No.	No. of Units	Expiry Date
MM 100	1594	18	July 11, 1991
Lake 16	3139	1	July 23, 1991
Lake 17	3140	1	July 23, 1991
MM 2	3311	1	November 23, 1990
MM 3	3312	1	November 23, 1990
MM 5	3313	1	November 23, 1990
MM 1 Fraction	3314	1	November 24, 1990
MM 4 Fraction	3315	1	November 24, 1990
MM 6 Fraction	3316	1	November 24, 1990
Buck 709	3138	3	July 23, 1991
Dunwell 4 Fraction	5871	1	March 9, 1992
*Buck	8034	12	October 5, 1991

* to be added and presently owned by Dollie Johnson of Stewart.

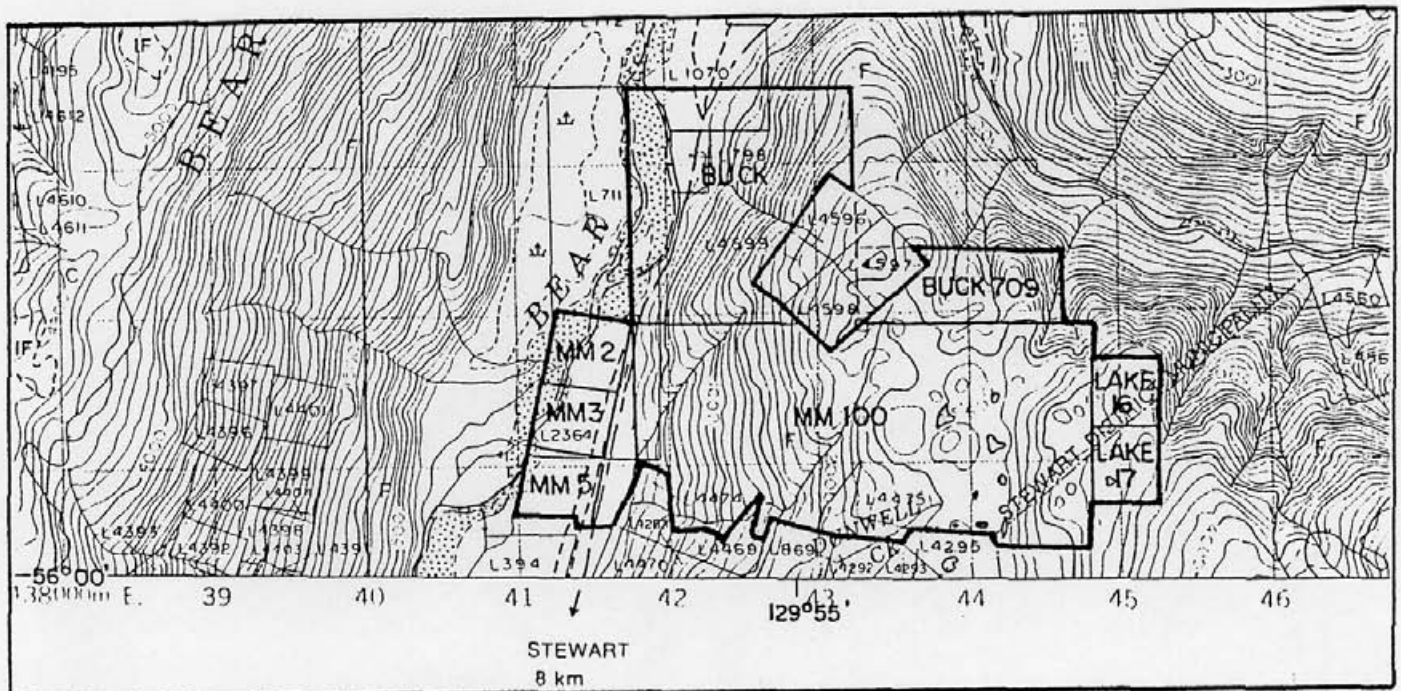


Figure 3. Claim map, MM property.

LOCATION, ACCESS AND PHYSIOGRAPHY

The Stewart area lies at the end of the Portland Canal in the rugged Boundary Ranges of the Coast Mountains of northwest British Columbia. The west half of the property covers the floor and steep slopes of the Bear River valley. The east half of the property covers open meadows with small lakes and open timber with knolls and ridges which range in elevation from 730 to 920 metres. The weather is generally mild year round however a heavy snowfall in the winter, particularly at higher elevations, restricts exploration.

The MM property is located 8 kilometres north of Stewart (Figure 1). Highway 37A passes through the property along the Bear River and the Dunwell Mine road comes within 400 metres of the property boundary. A tent frame camp is established on the edge of an open meadow at elevation 730 metres immediately above Victoria Creek. Present access to the property is by a 10 minute helicopter trip from Stewart.

MM PROPERTY HISTORY

Early discussions by B.C. Department of Mines geologists on the various prospects on the MM property form Appendix 1 of this report. The earliest recorded work is described in the 1908 annual report where reference is made to prospecting on the Main Reef vein. Other prospects are reported along the southern edge of the property and include the Victoria (Dandy), Tyee, Mayflower, Ben All, Emperor, Sunbeam and the Superior. Government reports of 1909 and 1911 describe a sample from the Tyee which returned 4.92 ounces per ton (opt) Au and 20.68 opt Ag, and samples from a 214 metre tunnel and short winze on the Main Reef vein that averaged 23.4 g/t Au. In 1925, a 7 ton shipment from the Main Reef vein returned 7 ounces Au, 20.68 ounces Ag, 4,915 lbs Pb, and 1,499 lbs Zn. Interest in the area waned after the late 1920's and most claims were allowed to lapse.

In 1980 most of the present claim group was staked by Doug Hopper and associates and subsequently acquired by Kingdom Resources Ltd, the predecessor company to KRL Resources Corp. Kingdom Resources conducted a program of geochemical soil and rock sampling, geological mapping, prospecting, trenching, and locating and sampling of old workings in 1981, 1982 and 1983 (Hopper 1980 and Harris 1981, 1983, 1984).

In April of 1990 KRL Resources Corp. surveyed the property by airborne geophysics (Pritchard 1990).

RESULTS

Results of the 1990 program are summarized on Map 1. Sample locations are shown on Map 2, and analytical results and sample descriptions are listed in Table 2. Ground magnetometer and VLF-EM survey results are shown on Maps 3, 4 and 5.

1. Ground geophysics

Fourteen kilometres of line was surveyed using an EM-16 and Scintrex MF-2 magnetometer.

Strong, well defined VLF-EM anomalies are located on the west and southwest sides of the surveyed area (Maps 4 and 5). These anomalies are part of a large airborne VLF-EM anomaly (Pritchard, 1990) that trends north-northeast and can be projected south of the property to encompass the Dunwell Mine area. These anomalies probably represent fault zones lying in and west of Victoria Creek, and are the continuation of structures that host the numerous ore prospects of the Portland Channel Fissure Zone (Grove, 1971). Of potential economic significance are moderately strong airborne EM anomalies (Pritchard, 1990) that lie within the areas of strong airborne and ground VLF-EM responses (Map 1).

Results of the ground magnetometer survey are inconclusive (Map 3). Better geological control is needed to properly interpret survey data. Scattered one line highs may represent mafic intrusive rocks or zones of disseminated pyrrhotite. Disseminated and patchy pyrrhotite is exposed in volcanoclastic rocks along Highway 37A near a contact with a large intrusive.

2. Geology

Geological relationships on the property have only been superficially studied. Excellent exposures along Victoria Creek were prospected however, most of the 1990 surveyed area is timber covered.

The MM property covers the upper contact zone of the Hazelton Group volcanic and related sedimentary rocks. The Bitter Creek Quartz Monzonite covers the north west corner of the property. A body of granodiorite covers the southwest corner of the property and may be part of the Hyder Monzonite. Steep to moderate northwest dipping faults of the Portland Canal Shear Zone project through the property. Prospects occur in faults cutting argillites and chert, and veins in intrusive rocks.

Stratigraphic units strike predominantly north-northeast with moderate west dips. Clastic mafic and intermediate volcanic rocks appear to overlie bedded argillites, cherts and siltstones however, stratigraphic relationships are complicated by near concordant faults and intrusive rocks. Amygdaloidal andesite flows are intracalated with the sedimentary rocks.

The area lying south of survey line 3+00N and west of 4+00W to Victoria Creek is underlain by cherty or silicified argillite with areas of disseminated pyrite which may represent hydrothermal alteration.

3. Economic Mineralization

To identify and characterize economic mineralization 137 rock samples were submitted to Min En Laboratories of Vancouver for chemical analysis. Analytical results and sample descriptions are listed in Table 2 and analytical certificates are located in Appendix 2. In Table 2 anomalous results are high-lighted in bold print with thresholds arbitrarily picked at 50 ppb Au, 5 ppm Ag, 50 ppm As, 200 ppm Cu, 100 ppm Pb and 200 ppm Zn.

Most of the mineralization examined in 1990 was in the Victoria Creek section of the study area collected from scree, mining dumps and outcrop. Scattered rock samples were picked from outcrops on the cut grid.

Two styles of mineralization were seen.

1. Ag+sphalerite+galena rich quartz veins with anomalous concentrations of Cu, Au and As cutting sedimentary rocks, of which the Dunwell Mine is an example. A one metre wide quartz fissure vein exposed in Victoria Creek at 1420 feet elevation (sample no. 502823) returned 3.45 % Zn, 30 ppm Ag and 0.55 % Pb may be the projection of the Main Reef Vein located above and exploited from the Victoria Adit. Unlike the veins that host the Dunwell Mine mineralization, which trends north-northeast, the Main Reef vein strikes at 130 degrees and probably occupies a fault that expresses itself as sharp bends in both Victoria and Dunwell creeks. Gold and arsenic concentration in these veins tends to be low. Alteration appears to be in the form of a wide halo of silicification carrying several percent fine grained pyrite.

The main body of mineralization at the Dunwell Mine is an ore shoot measuring 40 metres long by 1.2 metres wide by 115 metres deep, lying within a fissure vein having a traceable surface length of 300 metres and a vertical depth of 170 metres (Grove 1971).

2. **Au+arsenopyrite rich quartz veins** with anomalous Ag and Pb concentrations, of which the 518 Zone is an example. In the Victoria Creek section of the MM property quartz + arsenopyrite veins carrying high gold values appear to be restricted to fine and medium grained feldspar rich intrusive rocks.

The **518 zone** is exposed in a cliff face on the west side of Victoria Creek at an elevation of 670 metres. Here pyritic and cherty bedded argillite, trending north and dipping moderately west, is intruded by a 30 metre thick feldspar-rich sill. The upper and lower contacts of the sill are bleached and mineralized with patchy sulphides (sample number 502520 is an example). A massive, vertical vein of quartz and arsenopyrite, trending at 100 degrees, cuts the sill. The vein, up to 0.8 metres wide, was sampled where accessible for about 5 metres up the cliff face (samples 502615 to 502621). A sample of scree (sample 502518) found below the outcropping vein returned 62.5 grams/tonne Au, 160 ppm Ag and 2300 ppm Pb. Other similar veins at differing attitudes and cutting other sills were tested by adits (sample 502604 is an example). Mineralization described from the Tyee adit may also be an example of this style of mineralization. Alteration marginal to the veins tends to be narrow and consists of sericite, quartz and disseminated pyrite.

There is an indication of property scale zoning with Ag+Zn+Pb veins in the south and at lower elevations, and Au+As veins to the north at higher elevations. Anomalies east of Victoria Creek, at higher elevations are Au+As enriched.

Table 2. Analytical results and sample descriptions

SAMPLE No.	LOCATION	DESCRIPTION	Au ppm	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm
502512	Victoria Ck	scree sil'd w diss pv	2	1.0	6	90	22	41
502514	Victoria Ck	scree v sil'd w diss py (po?)	17	1.1	5	87	19	31
502515	Victoria Ck	o/c v sil'd w diss py (po?)	56	0.9	6	74	16	24
502516	Victoria Ck	scree v sil'd 5-10% pu	3	0.8	39	150	21	41
502517	Victoria Ck	scree Q w 20% cg py	6.42gm/L	61.0	500000	285	605	13
502518	Victoria Ck	scree sil'd cg aspy+py+Q in alt'd Int	62.5gm/L	160.0	38.50%	57	2300	31
502519	Little Faith Lk	ck float bl'd sil'd + carb alt'd 5% py	1.05gm/L	5.4	5000	580	64	2680
502520	Victoria Ck	o/c pat goss in Int bl'd 5% py	167	5.0	950	92	160	104
502521	2090' El. Victoria Ck	o/c sil'd Int 5cm Qvn @ 0.36	3.28gm/L	23.0	5625	125	460	91
502522	2090' El. Victoria Ck	float Q w 10% cg py	362	14.0	26250	124	460	28
502523	1980' El. Victoria Ck	float v sil'd Int w cg py on fractures	25	1.8	90	170	62	68
502524	1960' El. Victoria Ck	o/c v sil'd Int 2% cg py	16	0.6	72	23	34	71
502525	1250' El. Victoria Ck	o/c sil'd w 10% pat py	1	1.4	19	123	24	39
502526	1240' El. Victoria Ck	o/c v sil'd w v' vns po	3	0.7	21	93	21	53
502527	1220' El. Victoria Ck	float sil'd w 5% diss py	3	1.6	41	78	35	54
502528	1275' El. Victoria Ck	o/c Q stwk in fill @ 60E	32	4.8	350	15	20	33
502529	Victoria Ck		32	1.7	65	20	19	19
502530	1800' El. Victoria Ck	o/c v sil'd arg 20% Qvns 5% py	12	1.6	17	82	19	40
502531	Victoria Ck	dump gr abs sil'd w sulps	555	34.5	19375	93	7100	7230
502532	2450' El. Dunwell Ck	v sil'd Int w ustwk + diss py	3	1.4	1875	210	14	54
502533	2460' El. Dunwell Ck	v sil'd por ph? (py)	1	1.6	1450	270	16	64
502534	Dunwell Ck	v sil'd por ph? (py)	16	1.0	375	175	12	142
502535	11+00N, 0+75E	5cm Qv, vns w py @ 015/70W	1	3.4	375 *	1000	62	44
502536		3m Bl' vns @ 020/90 w 10stwk	1	0.2	375 *	16	3	8
502537		3m Qv vns @ 020/90 w 10stwk	1	0.2	375 *	9	5	6
502538	11+00N, 0+75E	5cm Qv vns w py @ 015/70W	24	2.8	125 *	1050	52	46
502539	11+00N, 0+35E	v sil'd Int? w mat frags (py)	1	1.3	125 *	170	24	64
502540	10+00, 6+75W	chty Int? w py @ 035/90	1	0.9	150 *	62	16	92
502541	10+00, 2+70E	2m Bl' @ 035/90	214	6.4	425 *	120	245	184
502542	0+50N, 4+00E	float Qbx w mss py	11	2.0	200 *	13	36	30
502543	0+50N, 4+00E	float Qbx w mss py	1	1.8	300 *	64	30	89
502544	0+50N, 4+00E	float Qbx w mss py	1	2.5	125 *	215	19	134
502545	200m S Dunwell Lk	v sil'd sst? w fq pv	3	1.4	250 *	64	20	54
502546	1+50N @ Vic Ck	float v sil'd w diss py	10	1.5	275 *	180	19	46
502547	20m S #546	sil'd Int? w py	5	1.1	250 *	60	14	28
502548	15m S #540, 5m N #515	float v sil'd Qstwk w py, po	2	1.0	325 *	96	16	66
502549	5m S #540, 5m E #515	v sil'd py, po, mag	1	1.1	350 *	58	10	31
502550	0+55N, 8+75W	sil'd Int fq pv (mag)	490	2.4	375 *	275	24	38
502551	0+90N, 0+75W	v sil'd por ph Int w diss + lam py, (po)	2	1.9	300 *	63	18	72
502552	10m W #518	scree sim to #518, 15cm vns Ar' py	31.50gm/L	97.0	18.90%	93	885	37
502553	10m up #552	scree sim as #552	28.00gm/L	85.0	29.50%	38	1030	60
502554	10m S #553	o/c ng l Fe sil'd (py) Qd 025/80W	165	1.4	1975	63	31	13
502555	20m S #554	scree Qvn in Int (py)	1.46gm/L	96.0	4375	10	710	16
502556	Vic Ck 60m S 10+00	o/c v sil'd py vnits	703	32.0	48125	174	430	137
502557	5m E #556	scree 1cm vnits of sulps	3.72gm/L	32.0	60000	38	215	29
502558	10m W #557	scree Q vn	13.20gm/L	45.0	270000	27	775	159
502559	Vic Ck 0+65S	5cm Qvn w diss py @ 140/65S, sil'd	137	1.0	625	54	58	36
502560	Vic Ck 0+70S	5cm Qvn w diss py @ 082/68S, sil'd	200	2.2	925	12	44	26
502561	1m up #560	10cm Qvn w mss py @ 100/70S	22.90gm/L	124.0	850	84	295	17
502562	70' El. @ 0+20S	10cm Qvn (py) @ 075/85S in sil'd	2.97gm/L	16.0	625	1070	1775	39
502563	Vic Ck @ 0+20S	float to #562	13	0.8	275	28	12	38
502564	Vic Ck	float Q w py	3.14gm/L	41.0	20625	2800	3550	105
502565	1m S #564	float v sil'd Int w sulps	105	2.5	9375	83	370	849
502566		dk. grv volc? fq py	15	2.1	31	172	36	111
502567	25m S 566	sil'd volc near Q ct	5	2.9	10	74	82	240
502568		Q w py, sp	20	0.6	9	9	18	73
502569	10m W 527	v sil'd w sulps ustwk	5	1.6	18	76	26	36
502570		dk. grv sil'd w py	10	2.0	8	143	28	540
502571		sil'd Int w cg py	5	0.7	4	10	23	162
502572		float v sil'd volc? w Q stwk + sulps	5	16.5	18	195	3700	1700
502573		v sil'd w sulps frags sil'd	260	12.6	5	107	230	1900
502574		same as #573	540	5.7	16	360	127	10000
502575		?	15	4.5	6250	1960	1000	9500
502576	Vic Ck	Fe sil'd sil'd	10	2.9	59	125	84	212
502577	Vic Ck 33m N Camp Ck	Mon	5	0.8	25	39	30	208
502578		volc cong w py	10	0.8	8	11	26	93
502579	Vic Ck 84m N Camp Ck	volc sed dr. grv	15	1.0	7	48	22	53
502580	150m N Camp Ck join	FP Int v sil'd fq py	20	0.8	6	9	49	73

* assumed analytical error

Table 2 continued

SAFIRE No.	LOCATION	DESCRIPTION	Au ppm	Ag ppm	As ppm	Cu ppm	Pb ppm	Zn ppm	Ba ppm
502581	5+00N, 5+60W	matic Int	5	0.9	5	10	21	83	
502582	5+00N, 4+70W	sil'd volc	10	0.5	6	40	20	45	
502583	5+00N, 9+25W	fl Int	5	0.7	7	34	21	64	
502584	5+00N, 0+40W	fl Int	5	1.2	5	152	27	63	
502585		sil'd ch? w eq py	5	0.8	6	169	30	261	
502586	5+00N, 1+80E	oc volc cong	175	1.2	1450	23	32	32	
502587	5+00N, 6+65W	dk. gry volc sed w lg py	65	1.0	750	51	32	77	
502588		?	10	1.1	69	35	27	112	
502589		FP Int vsil'd fg py	35	1.4	46	23	31	129	
502590		vsil'd Sst? eq py	5	0.9	32	86	25	51	
502591		all'd Int w bio hbld fg py	20	1.0	18	73	24	110	
502592		3cm Qvn (Fe st'd)	15	0.9	13	255	18	41	
502593		vsil'd Int? fg py magnetic	10	0.4	15	18	14	7	
502594		2m Qvn (Fe st'd)	10	0.8	18	79	24	41	
502595		vsil'd Sst? (fg py)	5	0.5	250	81	22	39	
502596		vsil'd Int FP?	60	0.6	78	13	16	8	
502597		float Q	14.60gm/l	44.8	104300	58	660	37	
502598		float 10cm Qvn w mss Aspy in G	3.18gm/l	20.0	4.19%	220	132	19	
502599		8m Qvn w Aspy	12.40gm/l	32.2	5.97%	355	185	29	
502600		same as # 599	10.35gm/l	50.3	11.67%	540	801	41	
502601		Int vsil' w py, near B ct	1	0.6	12	108	10	20	
502602		vsil' fg py, all'd sst?	4	1.2	800	140	26	36	
502603		sim # 602	1.49gm/l	19.6	33900	350	192	303	
502604		3cm Qvn w py, same as #521	4.56gm/l	61.3	23100	102	360	14	
502605		same as # 604	2	1.8	550	28	22	24	
502606		5cm Qvn @ 098/655 w sulps	5.22gm/l	61.9	128500	29	780	104	
502607		5cm Qvn w py @ 020/38W	104	4.0	2250	38	35	19	
502608	10m N #520	arg all'd Int or Sst, Fe st'd	7	9.9	575	42	1420	163	
502609	same as #562	10cm Qvn w py in sil' Int	15.70gm/l	63.1	7450	464	760	68	
502610	near #522	float Q w py	430	24.0	67600	386	1435	25	
502611			38	1.1	1525	21	40	22	
502612	near #531	Q ch w goss sulps (clay)	1.44gm/l	21.0	127000	82	9500	8600	
502613		same as #612	2.46gm/l	30.4	86900	370	6700	6400	
502614	1W to ch #412 & 613	all'd sed w lg py	45	16.8	5400	408	2750	5950	
502615	518 area cliff face	Qvn w Aspy to .8m	11.80gm/l	21.0	107700	530	380	134	
502616	518 area cliff face	Qvn w Aspy to .8m	10.25gm/l	21.5	115500	274	234	29	
502617	518 area cliff face	Qvn w Aspy to .8m	81	1.1	1875	336	58	52	
502618	518 area cliff face	Qvn w Aspy to .8m	6.18gm/l	22.0	57900	600	164	28	
502619	518 area cliff face	Qvn w Aspy to .8m	21.30gm/l	270.0	144700	955	3550	127	
502620	518 area cliff face	Qvn w Aspy to .8m	21.10gm/l	21.0	148900	540	140	23	
502621	518 area cliff face	Qvn w Aspy to .8m	20.06gm/l	18.1	162500	805	69	19	
502622	518 area cliff face	Qvn w Aspy to .8m	3.48gm/l	45.6	106700	98	268	26	
502623	518 area cliff face	Qvn w Aspy to .8m	1.17gm/l	11.8	124800	22	130	13	
502624		vsil'd ch?	19	0.8	1350	34	17	24	
502801	HH	oc mss FP w 1 py	10	1.7	26	31	22	63	196
502802	1111 Camp Cr L 3N	all'd FP bd in (grap) arg 10 py	5	2.1	61	145	10	85	479
502803	L2N @ 530W	rub ch all'd w 10 pat py	10	0.5	56	66	16	16	27
502804		chty arg	5	2.5	62	98	27	31	39
502805	L0 @ 670W	all'd FP? bl'd w 10py =#540	5	2.7	24	63	13	88	125
502806	L0 @ 650W	oc sil'd bl'd ser FP w 53py	5	1.3	66	61	21	37	44
502807	2390'E Dunwell Cr	oc mss Ch to 3py	10	0.9	45	25	15	36	42
502808	2370'E Dunwell Cr	oc sil'd Ch w 5 pat py	5	1.5	21	131	14	26	56
502809	Cr 2350'el @ L55	oc 15cm vn Q cc @ 160/90 in sd	5	1.0	15	32	16	7	6
502810	Cr	oc sil'd FP mar phenos? 2 vfg py	5	1.6	383	146	15	38	28
502811	Camp Cr @ Vic Lk	oc whsp sil'd arg 1 py @ FP ct	5	2.1	44	156	24	31	168
502812	Camp Cr @ Vic Lk	oc mss FP (all'd) 1 py @ ct	5	2.1	38	30	25	87	95
502813	cliff L2N @ 850W	chty all'd 2 py	10	1.6	38	76	27	46	49
502814	cliff 180N, 850W	in sil'd Q cc vns @ 025/25W	5	3.0	84	11	41	59	5
502815	L9W @ 110N	oc chty arg 5py =#624	5	1.5	47	38	21	36	54
502816		1cm Q+lim vns @ 095/90 sil'd sd	5	1.3	47	73	18	18	35
502817	cliff top @ 070N	chty arg+goss sim #816	5	1.1	66	34	16	78	63
502818	Vic Ridge 2160'E	pit? sil'd arg+vfq py @ 030/45W	5	1.5	19	103	19	18	63
502819	10m from cliff 1960'E	pat sil'd py in mss FP in 030 draw	5	1.9	69	172	23	52	87
502820	cliff top 1880'E	sil'd sed whsp ser 3py	20	2.5	59	124	14	42	72
502821	ridg @ Cr 1740'E	chty 5py arg @ 020/50W @ am And ct	5	3.5	38	117	49	39	52
502822	same #821	oc rub goss Q	5	0.9	46	27	21	23	32
502823	Vic Cr bend 1420'E	oc 1m Q+Pb+Zn vn @ 130/65W	15	30.1	64	361	5473	34553	43
502824	Vic Cr bend 1425'E	Q vn or pat blk chty arg 3py	5	3.2	219	150	125	542	12
502825	Vic Cr adit 1530'E	15cm Qvn 30py FP/Arg ct 360/65W	2.21gm/l	18.7	175	99	409	495	48

DISCUSSION

On the MM property of KRL Resources Corp. drill target potential exists in an area of airborne EM responses lying within strong ground and airborne VLF - EM anomalies. These geophysical responses correlate with structures that host economic ore concentrations off the property. On the property ore grade samples from Victoria Creek lie adjacent to the area of geophysical anomalies and may represent a halo to better mineralization. Airborne EM anomalies may be in response to sulphide-rich ore lenses concentrated in and near north-northeast trending, moderate to steep northwest dipping faults. This anomalous area also lies within the same stratigraphic sequence that hosts the large ore deposits of the Stewart Mining Camp. Needed to better define drill targets is more ground geophysical coverage on an expanded grid and detailed geological mapping.

Further, the MM Property is well positioned with nearby road access close to the town of Stewart that will result in excellent value for exploration dollars spent. Costly helicopter support is not needed.

RECOMMENDATIONS FOR FURTHER WORK

Recommended is a two phase program of evaluation for 1991:

1. extending the existing grid to the east and west, detailed geological mapping and ground geophysics.
2. road construction, mechanical trenching and drilling.

Phase 1:

Cut line 20 kilometres @ \$400/km	\$8,000
Geology 30 days @ \$500/day	\$15,000
Geophysics 20 kilometres @ \$1500/km	\$30,000
Helicopter 5 hours @ \$700/hr	\$3,500
Chemical analysis 100 samples @ \$25/sample	\$2,500
Truck 30 days @ \$75/day	\$2,250
Camp 30 days @ \$100/day	\$3,000
Mobilization	\$3,000
Report	\$3,000
Total cost for phase 1	\$70,250

Recommendations for further work continued.

Phase 2:

Road construction 1 kilometre	\$25,000
Diamond drilling 1000 metres @ \$125/m	\$125,000
Helicopter 5 hours @ \$700/hr	\$3,500
Supervision 30 days @ \$500/day	\$15,000
Chemical analysis 200 samples @ \$25/sample	\$5,000
Truck 30 days @ \$75/day	\$2,250
Mobilization	\$10,000
Report	<u>\$3,000</u>
Total cost for phase 2	\$188,750

Total cost for the proposed 1991 program \$259,000

REFERENCES

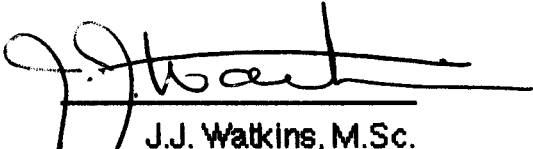
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STATEMENT OF QUALIFICATIONS

I, **John J. Watkins**, of 3527 South Island Highway, Royston, B.C., Canada, do hereby certify that:

1. I am a graduate of Queen's University, Kingston, Ontario (B.Sc. Honours Geology, 1972 and M.Sc. Geology, 1980).
2. I am a Fellow of the Geological Association of Canada and a Fellow of the Society of Economic Geologists.
3. To 1983, I was engaged in mining and mineral exploration in Canada for a number of companies, positions included mine geologist and senior geologist. Since 1983, I have been practising as a consulting geologist in mineral exploration, property development and deposit evaluation.
4. I supervised the work described in this report.
5. I have a direct interest in KRL Resources Corp. as a company director.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "J.J. Watkins", with a horizontal line drawn underneath it.

J.J. Watkins, M.Sc.

January 7, 1990

Royston, B.C.

STATEMENT OF COSTS

Wages:		\$18,565.00
J. Watkins, geologist, 26.3 days @ \$300/day	7,900.00	
M. Terry, geologist, 61 days @ \$165/day	10,065.00	
B. Watkins, assistant, 4 days @ \$150/day	600.00	
Contract Jobs:		25,290.07
Prospecting & ground geophysics	7,527.50	
Linecutting	6,727.50	
Geological consulting	11,035.07	
Equipment rentals:		3,590.00
Truck	2,350.00	
Camp	1,240.00	
Transportation:		10,365.90
Helicopter	8,451.26	
Vehicle	1,422.04	
Freight	492.60	
Travel, Accommodation, Board		5,951.47
Field Supplies		4,485.41
Laboratory Analysis		3,599.25
Other:		5,870.09
Maps, Reproductions	955.69	
Drafting	727.24	
Office	106.51	
Administration @ 10%	4,080.65	
		<hr/>
	TOTAL COSTS	<u>\$77,717.19</u>

APPENDIX 1

HISTORICAL INFORMATION

Annual Reports of the Minister of Mine, British Columbia

1909:

pages K65 and K66

To the northward over the hill from the *Sunbeam* claim, Ranch and
Main Reef Horseman have located the *Main Reef No. 1* and *No. 2*, and the vein seen
Mineral Claims. on these claims may be one of those noted on the Stewart Mining Com-
pany's property, as it is in the same line and has similar features. The claims
are reached by a trail $1\frac{1}{2}$ miles from the Bear River valley, and are at an altitude of 1,300 feet
above Glacier creek camp. A small creek has cut through the rock and shown up a fissure
in a slate country rock. A tunnel 33 feet long has been run in on this fissure, which has a
strike S. 75° E., a dip of 65° to the south, and is clearly defined, but is mostly filled with
crushed slate, slightly impregnated with quartz, but where the quartz is in any quantity, it
is heavily mineralised with iron pyrites and a little galena.

Some twisting and perhaps faulting of the strata has occurred along the line of the bed of
the creek, as what appears to be the same vein is seen on the opposite bank 250 feet farther
up the creek. Here a tunnel has been run in 30 feet on a fissure, which has the same features,
as noted on the other side, but the strike is S. 25° E. and the dip nearly vertical. A felsite
dyke lies along the east side of the fissure.

The owners shipped four tons of ore from this tunnel, which gave them the following
returns per ton:—Gold, 0.7 oz.; silver, 20.94 oz.; lead, 23%. Such returns encourage further
prospecting, in the hope that the filling of the fissure may change from crushed slate to ore,
which it might do in a very short distance, as the crushing movement noted at this point may be
purely local. Samples of galena and pyrites taken by the Government Assayer assayed as
follows:—Gold, 0.3 oz.; silver, 51.2 oz.; copper, none; lead, 64.2%.

This claim is owned by Bibeau & McKay, of Stewart, and was formerly
Tye. the *Mother Lode*. It is situated about a mile above Glacier creek and 300
feet vertically above Bear river. An ill-defined fissure in a granolitic rock,*
about 3 feet wide, is filled with quartz and there are also a number of small stringers of quartz.
An open cut 15 feet has crosscut this showing, and another short open cut 35 feet to the S. E.
has been run into the ore body. The quartz is well mineralised with iron pyrites and in places
a little copper. Samples of the quartz and pyrites taken by the Government Assayer gave
rather astonishingly high values, as follows:—Gold, 4.92 oz.; silver, 20.68 oz.

Annual Reports of the Minister of Mine, British Columbia

1918:

page K77 This group, consisting of four claims—*Mayflower*, *Trade Dollar*, *Kitty*, and *Mayflower Group*, *Blaine*—owned by H. P. Gibson, of Stewart, is situated about 1,000 feet above the Bear river on the east side, between Glacier and Bitter creeks. Along a small creek three or four veins of quartz and argillite, carrying pyrite, a little chalcopyrite, blende, and galena, are exposed in an argillite country-rock, termed the "Bitter Creek formation" by McConnell. A little work has been done by way of stripping and open-cutting, and a crosscut tunnel of 20 feet, with a further drift of 6 feet on one of the veins exposed on the surface. The drift will have to be advanced about 40 feet to get under the surface showing, which consists of a vein, about 4 feet wide, of quartz and argillite. This is a fair showing and deserving of the continuation of the drift to get under it, further work depending on the results obtained. A few tons of ore, running about \$60 a ton in gold values, was taken from a small vein lower down the hill, showing that there are good values in the vein. There is a good foot-trail from the railroad to the property and there would be no difficulty in getting ore down.

1919

page N65

Mayflower Group. This group is comprised of four claims—*Mayflower*, *Trade Dollar*, *Kitty*, and *Blaine*—situated on the east side of Bear river between Glacier and Bitter creeks, and is owned by H. P. Gibson, of Stewart. The property has had some little work done on it by way of open-cutting and a short crosscut tunnel driven, all of which were described in last year's Report. Recent work was done farther up the creek on the surface, with, I understand, satisfactory results. There is a good trail from the valley to the showings, over which ore could be packed.

1921:

page G65

Dandy Group. This group consists of four claims—*Dandy No. 1*, *Dandy No. 2*, *Star No. 1*, and *Star No. 2*—the first two being restakings of two of the claims of the old *Main Reef* group. The owner is Heine Horstman, of Stewart. The claims are situated on the east side of Bear river, about half-way between Glacier and Bitter creeks, at an elevation of 1,600 feet. There is a good trail to the old camp from the Bear River wagon-road, passing the *Tyce* cabin at 425 feet elevation and the *Mayflower* camp at 900 feet elevation.

The vein on the *Dandy* claims is about 4 feet wide, of broken-up argillite crossed with small quartz stringers, with a continuous small vein of quartz on the hanging-wall mineralized with zinc-blende and galena, principally the former. It lies in argillite country-rock on top of a greenish porphyry dyke about 40 feet wide. It strikes N. 30° W. (mag.) and dips 63° W., conforming with the strike and dip of the dyke.

The vein cuts diagonally across the creek and here shows only a seam of ore on the hanging-wall containing very little values. On the west side of the creek a tunnel was driven a considerable distance in the early days, but the mouth of it is now blocked up by a jam of debris in the creek, which has piled the creek-gravel over the top of the tunnel. This tunnel could not have gained much depth in a couple of hundred feet, as the surface above does not rise very rapidly. A shaft is said to have been sunk to a depth of 40 feet just inside the mouth of the tunnel, following a shoot of good ore from 12 to 14 inches wide all the way down, but I doubt it from the appearance of the rest of the vein exposed. However, it would not be a difficult undertaking to clear out the creek and get into the tunnel to unwater the winze. If there is a foot of \$75 ore, or even less, in the shaft, it will pay to mine and ship, as it is not over 2 miles down to the wagon-road and a 6-mile haul from there to the dock.

Tyce. This is one of the old properties worked on in the early days of the camp and is owned by Jim McKay and Charlie Bibeau, of Stewart. A shaft was sunk about 40 feet on a heavily pyritized vein, about 4 feet wide, of quartz and altered granite occurring in a granite stock. The ore carries some gold and silver values, but not enough to ship. The sulphides are too heavy to admit of sufficient concentration to raise the values to a shipping grade. A crosscut tunnel is now being driven by the owners to cut the vein, I should judge, a little lower than the bottom of the shaft and some distance to the north.

Annual Reports of the Minister of Mine, British Columbia

1922:

page N71

Mayflower Group. This group is situated about 1,000 feet above Bear river, on its eastern slope, between Glacier and Bitter creeks. The four claims comprising the group are *Mayflower*, *Kitty*, *Trade Dollar*, and *Blaine*, owned by H. P. Gibson, of Stewart. A few tons of ore assaying \$60 a ton in gold values was shipped some years ago. This ore was obtained from a small vein of brecciated quartz and argillite lying in the Bitter Creek formation and showing that these veins contain good gold values. Higher up the hill some work has been done in stripping and open-cutting on three or four similar veins, a crosscut tunnel has been driven 20 feet, and a drift of 6 feet driven on the vein, as yet not finding important values. There is a fair surface showing in a 4-foot vein of quartz and argillite about 40 feet beyond the face of the drift. Because of the heavy overburden, drifting on the vein seems the best possible means of exploration.

Annual Reports of the Minister of Mine, British Columbia

1924:

page B64

The *Dandy* group consists of four claims—*Dandy No. 1*, *Dandy No. 2*, *Star Victoria Mines, No. 1*, and *Star No. 2*—situated north of and adjoining the *Dumcell* group and east of the *Mayflower* group. Early in the spring this property was acquired by R. W. Martin and Eastern associates and some work done in the bed of a deep creek cutting across the claims. The work consisted of open-cutting and a crosscut tunnel about 70 feet in length, showing some small mineralized quartz veins and silicified bands bedded with the slate formation.

Later a company was organized called the Victoria Mines, Limited, with a capitalization of \$500,000, divided into 500,000 shares, with the registered office at Victoria. This company started work late in the fall and up to the end of the year a crosscut tunnel had been driven 90 feet with the object of cutting any or all of the north-south series of veins prominent on the *Dumcell*, and which, according to the prospectus issued by the company, must necessarily extend into the company's ground.

The *North Line* group includes three mineral claims and two fractions—*North Emperor Mines, Ltd.* *Line*, *North Line Fraction*, *South Line*, *South Line Extension*, and *Flat Fraction*—owned by James McKay, of Stewart, and situated north of the *Lakeview* group. Last year the claims were bonded to Gus Seiffert, who organized the North and South Line Syndicate in Vancouver on a basis of 300 units of a par value of \$200 a unit. To provide working funds 75 units were disposed of and work was started as early this spring as snow and trail conditions would permit. Under the supervision of Mr. Seiffert a very creditable amount and quality of work has been done this season, making a good start on a promising property.

The trail was put in passable condition from the *Lakeview* to the camp. Preliminary to starting development-work two log cabins were built, one 14 by 44 feet and the other 18 by 34 feet, for mess and bunk houses.

A great deal of surface work was done first in stripping and open-cutting at intervals of from 50 to 100 feet, this indicating a vein of from 7 to 14 feet in width. The vein has a quartz gangue mineralized with galena, zinc-blende, and pyrite.

A crosscut tunnel was driven 120 feet, striking the hanging-wall of the vein at a depth of about 85 feet. A cut of 13 feet in length was then driven across the vein without reaching the foot-wall. A drift was driven north 40 feet and another 25 feet south, both in the hanging-wall of the vein. Both faces were in good ore when work was stopped early in the winter. While the ore on the average is not high grade, it will at least make good milling-ore, with the probabilities that there will be shoots of shipping-grade ore in it.

Mr. Seiffert has now incorporated the Emperor Mines, Limited, with a capitalization of 1,500,000 shares at \$1 each par value, with registered office in Vancouver, to take over the property. It is expected there will be no difficulty in proving necessary funds to proceed in the spring on a comprehensive plan of development. A trail will be recommended to the property from the *Lakeview* or whatever point is most advantageous.

Annual Reports of the Minister of Mine, British Columbia

1925:

page 486, 487 and 488

This company was incorporated in December, 1924, with a capitalization of Emperor Mines, \$1,500,000, divided into 1,500,000 shares. Its registered office is in the Standard Bank Building, Vancouver. The claims owned by the company are situated north of the *Lakeview* and were purchased from Jas. McKay, of Stewart, the original staker. There are three claims and two fractions—*North Line*, *North Line Fraction*, *South Line*, *South Line Extension*, and *Flat Fraction*—known as the *North Line* group.

There is a first-class trail completed through to the *Lakeview* this year from the Bear River wagon-road. The portion from the *Lakeview* to the Emperor camp is in bad condition. A trail was recommended last year from the *Duncell* road to serve the *Lakeview*, Emperor, and claims beyond to the *Sunshine*, but was only constructed as far as the *Lakeview*. It will in all probability be extended next season through to the Emperor camp, which is at 2,950 feet elevation.

The country-rock, I think, would be classed as tuff. The showing is a brecciated vein, composed of quartz and country-rock more or less mineralized with pyrite, up to 20 feet in width. On the hanging-wall side is a small quartz vein varying from a few inches to a foot in width, in which very good values have been obtained. The main portion of the vein, however, is low grade, probably averaging between \$10 and \$12 to the ton in gold and silver.

At an elevation of 3,130 feet the first tunnel was driven 120 feet, cutting the vein at right angles at a depth of about 80 feet. The vein here is 16 feet or more in width, as the foot-wall was not reached. Drifts were run north 50 feet and south 25 feet along the hanging-wall of the vein, which strikes N. 15° W. (mag.) and dips from 80° to 85° W.

As no further depth could be obtained in drifting on this level, it was decided to start a crosscut tunnel at 2,880 feet elevation, which would obtain a depth of about 330 feet on the vein, intersecting it several hundred feet south of the upper tunnel, in a distance of about 500 feet. This work was started in the spring of 1925 and had been driven about 25 feet by the end of July, through the overburden to the solid rock. This of course had to be timbered and was slow work. In the meantime a log building 16 by 32 feet, covered with corrugated iron, was built at the mouth of the tunnel, housing a machine-shop and a 220-cubic-foot air-compressor driven by a 45-horse-power Seflle semi-Diesel engine. An exceptionally fine camp has been constructed, the main building, built of logs, being 16 feet wide by 72 feet long, and containing a well-appointed kitchen 16 by 16 feet, dining-room 12 by 16 feet, bunk-house 16 by 30 feet, and a dry-room 14 by 16 feet equipped with shower-baths and hot and cold water. The bunk-house section contains eight double-deck iron beds with mattresses. Another log building, 14 by 42 feet, has three rooms, used as manager's residence and office. Everything is most convenient and comfortable and with a small addition to the dining-room could accommodate forty men.

The mining equipment includes 3,000 feet of rails, one water Leyner machine and three jack-hammers, hoist, steel-sharpener, 2½ tons of machine-steel, 3,000 feet of assorted pipe, black-smithing outfit, drill-press, a Cameron sinking-pump, two ore-cars, 10,000-gallon-capacity oil-tank, 150 drums of crude oil, etc.; in all a very complete equipment for extensive development.

Since the installation of the compressor good progress has been made with the tunnel. Early in October a 5-foot vein was encountered at 280 feet from the portal, well mineralized with zinc-blende and pyrite. About the middle of November the big vein was struck at 470 feet from the portal and crosscut for 21 feet. The vein here shows about the same as where crossed in the upper tunnel, the manager stating that it will average a milling-grade ore. It is being drifted on to the north to get under the point at which it was cut in the upper tunnel. A raise will there be run for prospecting and ventilating purposes. The drift will be approximately 400 feet and the raise 325 feet. While the information gained so far is not conclusive, it is sufficient to give important prospective merit to the property as a milling enterprise.

The advertising statement made early in the year that there were \$2,000,000 worth of ore in sight was of course unjustified and decidedly misleading.

Operations are under the very efficient supervision of G. Seiffert.

This company was incorporated in April of this year to acquire the ground adjoining the Emperor holdings on the north, through which the Emperor vein extends. It is capitalized at \$500,000, divided into 1,500,000 shares, with the registered office in Vancouver. The four claims, *B.C.*, *O. & H. No. 1*, *O. & H. No. 2*, and *Albert*, were purchased outright from the owners, H. Horstman and associates. No attempt has as yet been made to explore the Emperor vein crossing this ground. A little work, consisting of shallow open-cuts and a 20-foot tunnel, has been done on a cross-vein at some distance from the Emperor vein and at 3,400 feet elevation. The showing here consists of some mineralization in small shear-veins lying on either side of a light-coloured, fine-grained dyke, the tunnel being on the foot-wall side of the dyke. High values in silver are claimed to have been found and form the reason for driving the tunnel. The intersection of this vein with the main Emperor vein should be an interesting point for exploration-work.

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1925 cont'd:

pages A90 and A92

This company was incorporated in September, 1924, and is capitalized for **Victoria Mines, Ltd.** \$500,000, divided into 500,000 shares, with its head office in the Winch Building, Victoria. The property is composed of the *Dandy* group—*Dandy No. 1*, *Dandy No. 2*, *Star No. 1*, and *Star No. 2*—partially the old *Main Reef* property, lying north of and adjoining the *Dunwell* and owned by H. Horstman, of Stewart. Early in 1924 the

property was optioned by R. W. Martin and Eastern associates, who did considerable work in surface cuts and a tunnel of 70 feet. After the organization of the company work was begun on a crosscut tunnel at 1,400 feet elevation, intended to cut the northern extension of the *Dunwell* series, if they extended so far. The tunnel was driven about 90 feet by the end of 1924.

In 1925 the claims were surveyed and further exploration-work was carried on under the management of A. Gaul, M.E. The old *Main Reef* vein (No. 1) was picked up on the east side of the creek, south of the old No. 2 tunnel. This vein was also traced north to the north-west corner of the *Dandy No. 2* claim, a distance of several hundred feet. A shallow tunnel was driven on it, but did not get below the surface oxidation. Another was started 100 feet lower and driven 32 feet, leaving about 20 feet farther to go to cut the vein.

With the discovery of the vein and high-grade ore on the *Sunbeam*, adjoining the *Dandy No. 1* claim on the south, the crosscut tunnel on the *Victoria* acquired great prospective importance. The *Sunbeam* vein was traced right up to the *Dandy No. 1* south line; in fact, there is an open-cut about 6 feet from the line. Open-cuts were put in on the *Victoria* ground along the strike of the *Sunbeam* vein, which were unsatisfactory on account of the very heavy overburden and surface oxidation.

The No. 4 crosscut tunnel was advanced from 90 to 430 feet without cutting the *Sunbeam* vein, though the last 50 feet shows a little mineralization and conditions similar to that vein. There is every probability of cutting the *Sunbeam* vein within a short distance. At 246 feet from the portal a vein was crossed, which no doubt is the *Main Reef* or No. 1 vein exposed in the No. 2 tunnel, from which some ore was shipped in 1925. This was drifted on 11 feet to the north and 73 feet to the south. Mr. Gaul states that the south drift is looking promising.

The property has advanced from "possibilities" to "probabilities," but I suppose the outcome will be considered speculative until ore is actually encountered and developed in the crosscut tunnel.

This company was incorporated in May, 1924, with a capitalization of \$250,000, **Silver Ledge Mining Co., Ltd.** divided into 1,000,000 shares of 25 cents each. Its registered office is in the Central Building, Victoria. The company acquired the *Bull Dog* group, consisting of *Bull Dog* and *Bull Dog Nos. 1, 2, and 3*, from H. A. Horstman, of Stewart. They are situated about a mile up the hill above Wards pass and north of the *Dandy No. 1* of the *Victoria Mines, Limited*. I understand that a trail was built up to the showings from the Bear River wagon-road and some surface work done in tracing the vein, under the supervision of H. Horstman.

This group, consisting of the *Mayflower*, *Mayflower Fraction*, *Mayflower Nos. 2, 3, and 4*, is situated west of or down the hill from the *Victoria Mines* claims.

The group is owned by H. P. Gibson, of Stewart, who has had two men on exploration-work all summer. Mr. Gibson states that the work uncovered two new veins, one of which, striking east-west, was exposed for about 80 feet, showing from 1 to 1½ feet of well-mineralized quartz, from which good assays were obtained. Another vein on the *Mayflower No. 2* shows 6 inches of ore, assaying up to \$70 to the ton in gold, silver, and lead values, in a vein-filling several feet in width. The tunnel was also advanced a short distance.

Annual Reports of the Minister of Mine, British Columbia

1926:

pages A91 and A92

**Victoria
Mines, Ltd.** (See 1925 Annual Report.) This company was incorporated in 1924 with a capitalization of \$500,000, divided into 500,000 shares, with its registered office in the Winch Building, Victoria. A little more development was done in 1926 by way of extending the crosscut tunnel, which has for its objective the cutting to the northward extension of the *Dunwoell* vein, which has been traced up to the line between the two properties. The work has not yet succeeded in finding the vein.

**Emperor
Mines, Ltd.** (See 1925 Annual Report.) This company was incorporated late in 1924 with a capitalization of \$1,500,000, divided into 1,500,000 shares. The registered office is in the Standard Bank Building, Vancouver. No mining has been done since the big vein was cut early last winter. The mineralization consists mainly of pyrite in a brecciated quartz and greyish medium-grained rock about 20 feet wide. An independent sampling is said to have averaged \$12 a ton, or about a border-line milling-ore. A small vein showing some pyritization was encountered about 200 feet from the big vein. Short drifts were run each way; in the north drift the vein opened up to about 5 feet in width of promising-looking mineralization.

It is one of the best-equipped small properties in the country and is just at the interesting stage where all dead-work has been done and the exploration of the vein can be proceeded with. An average of \$12 a ton across 20 feet would seem to be sufficiently encouraging to attract development capital.

Annual Reports of the Minister of Mine, British Columbia

1927:

page C90

This company was incorporated in December, 1924, with a capitalization of Emperor Mines, \$1,500,000, divided into 1,500,000 shares, the registered office being in the Standard Bank Building, Vancouver. The claims owned by the company are situated north of the *lakeview*, or about straight up the hill from the *Dunwell*. I do not believe anything has been done on the property since late in 1925. The showing is a wide silicified ledge in argillite mineralized with small amounts of iron, lead, and zinc sulphides. Small specks of chalcopyrite can be found and in one of the surface cuts a number of small patches of a fibrous mineral were observed, which may be jamesonite.

Very little work has been done on the surface, but several hundred feet of crosscutting has been done. At an elevation of 3,130 feet No. 1 tunnel was driven 120 feet to the vein, cutting it at 80 feet below the surface, and drifts were run both ways for 30 feet along the hanging-wall side of the vein. Sulphides are rather inconspicuous, except in the face of the south drift, where sphalerite and a little galena can be seen. Rather than continue drifting on this level, No. 2 tunnel was driven to intersect the vein about 300 feet south and 250 feet lower than No. 1 tunnel. This was driven 470 feet to the hanging-wall of the vein and continued another 33 feet, about 21 feet of which is ledge-matter. No drifting has been done on the vein from this tunnel. Samples taken in the crosscut indicate that the values are very low, running about 50 cents in gold to the ton, 1 to 3 oz. in silver to the ton, 3 to 7 per cent. zinc, and less than 2 per cent. lead.

A new vein is said to have been discovered higher up the hill, but as nothing has been done on it I did not examine it.

1928:

pages C101 and C102

This company, with registered office in the Beaman Building, Stewart, was Mayflower Mining incorporated in March, 1928, to acquire the *Mayflower* group of claims, consisting of the *Tyee*, *Mayflower*, *Mayflower Fraction*, *Mayflower 2, 3, and 4*, and the *Alice Nos. 1, 2, 3, and 4* claims. The group is approximately 5 miles from Stewart, on the east side of the Bear River valley. The cabin and showings are at about 300 feet elevation and are reached by a trail which leaves the road into the *Ben Ali* showings of the *Dunwell* property, a hundred yards or so before the road reaches the small creek flowing along the foot of the mountain.

The main showing is a vein in the small stock of granitic material which contains the *Ben Ali* vein of the *Dunwell* property. Both veins are shear-zones in the granitic material, mineralized with quartz, pyrite, and chalcopyrite, and both are known to contain gold values. The *Mayflower* vein on the *Tyee* claim strikes north-west and dips at 65° to 70° north-east. It is exposed just behind the cabin for a distance of 50 feet or less. In the northerly cut it is about 12 feet wide. A shaft, now filled with water, has been sunk on the vein at the southerly cut,

leaving exposed only about 3 feet of the hanging-wall section of the vein. A sample of this 3 feet assayed: Gold, trace; silver, 3.2 oz. to the ton; copper, 1 per cent.

A few feet below camp elevation, in a small creek-bed, is the portal of a 120-foot crosscut tunnel driven towards the vein. Between 27 and 30 feet from the face is a well-mineralized vein, from which a 3-foot sample, taken along the south wall of the crosscut, assayed: Gold, 0.14 oz. to the ton; silver, 1.1 oz. to the ton; copper, trace. Near the face a small stringer was found drifted on to the right in a S. 60° E. direction for 21 feet. A third small vein was cut at the portal of the tunnel.

The samples taken show that gold is found in the vein in encouraging amounts, and it is possible that further exploration might discover better values than are recorded here. Some high gold values are reported from this zone in previous Annual Reports.

Annual Reports of the Minister of Mine, British Columbia

1934:

page B23

King.

This group of fourteen claims is owned by J. Rochfort and associates, of Stewart, and adjoins the *Dunwell* on the north-east and lies northerly of the *Lakeview* group. The claims embrace a 1934 restaking of the property of old Emperor Mines, Limited. The property is reached by a good trail branching from the *Lakeview-Dunwell* trail. Considerable underground work was carried out by the Emperor Mines, Limited, and the property equipped with necessary buildings at elevation 2,880 feet and efficient machinery for exploratory work. The property is referred to in the 1920, 1925, 1926, and 1928 Annual Reports and also in the Geological Survey of Canada Memoir 159, 1929.

The main showing consists of a well-defined quartz vein about 15 feet wide, strike about north 15 degrees east, dip 50 degrees west, apparently following a fault-plane between two dykes. The vein is generally sparsely mineralized with pyrite, some chalcopyrite, galena, jamesonite, and possibly a manganese mineral. The strike and dip of the vein are similar to the strike and dip of the siliceous argillites of the Bitter Creek series. The latter are intruded by numerous granitic and lamprophyre dykes.

Very little surface work has been done, but two crosscut adits have intersected the main vein showing good definition but sparse mineralization. A sample across 5 feet of the best-mineralized section of the vein on the east side of the lower crosscut at elevation 2,880 feet assayed: Gold, 0.04 oz. per ton; silver, 3.9 oz. per ton; copper, 0.1 per cent.; lead, 0.5 per cent.; zinc, 14 per cent. An old adit ("McKay") and cut southerly from the surface outcrop above the upper adit shows intense oxidation evidently derived from sulphide mineralization. Other showings are reported but were not examined.

In view of the good width and definition of this vein and the fact that the small amount of work, particularly on the surface, along the strike has not adequately prospected this structure for the possible occurrence of ore-shoots, it is considered to be worthy of further exploration. This could constructively be carried out by surface-trenching and open-cutting both north and south of the known outcrop.

1935:

page B26

Mayflower.—(See Annual Reports of Minister of Mines, 1918, 1922, 1925, 1928, 1930, and Geological Survey of Canada Memoir No. 159.) This group of eight claims, situated on the east side of the Bear river, is reached by a good trail about half a mile long commencing at a point about 6 miles by road from Stewart. In former years open-cuts and adits were excavated on showings in proximity to the cabin. In recent years a new discovery was made in an open-cut at elevation of 800 feet in a creek-draw several hundred feet south of the above work. In the late autumn further exploration of the property was taken over by Clay Porter, of Hyder, and underground operations commenced.

Annual Reports of the Minister of Mine, British Columbia

1936:

page B17

Mayflower. This group of ten claims and fractions owned by H. P. Gibson, of Stewart, is situated on the east side of the Bear River Valley, about 6 miles from seaboard at the village of Stewart, Portland Canal Mining Division. The southerly claims of the group are adjoined on the south by the northerly claims of the Dunwell Mines, Limited, and to the east the group is adjoined by the *Silver Ledge* group and Victoria Mines property. To the west the claims abut on the Bear River Valley bottom. The property is reached by the Bear River Motor-road from Stewart for 6 miles to elevation 200 feet, from where a trail switchbacks for half a mile up the 20-degree rocky slope of the mountain to the cabin at elevation 410 feet. The west slope of the mountain, along which the claims are, located between 200 and 1,500 feet elevation, is thickly timbered with hemlock, cedar, and some spruce, and slopes through rock bluffs and ridges at an average angle of about 27 degrees to the Bear River Valley.

The claims were staked about twenty years ago and in 1928 the Mayflower Mining Company, Limited, was formed and carried out some underground exploration. Since that time intermittent exploration has been done by lessees and during 1936 some prospecting was done. The original discoveries were in the vicinity of the cabin, but about three years ago a new discovery was made several hundred feet southerly of these.

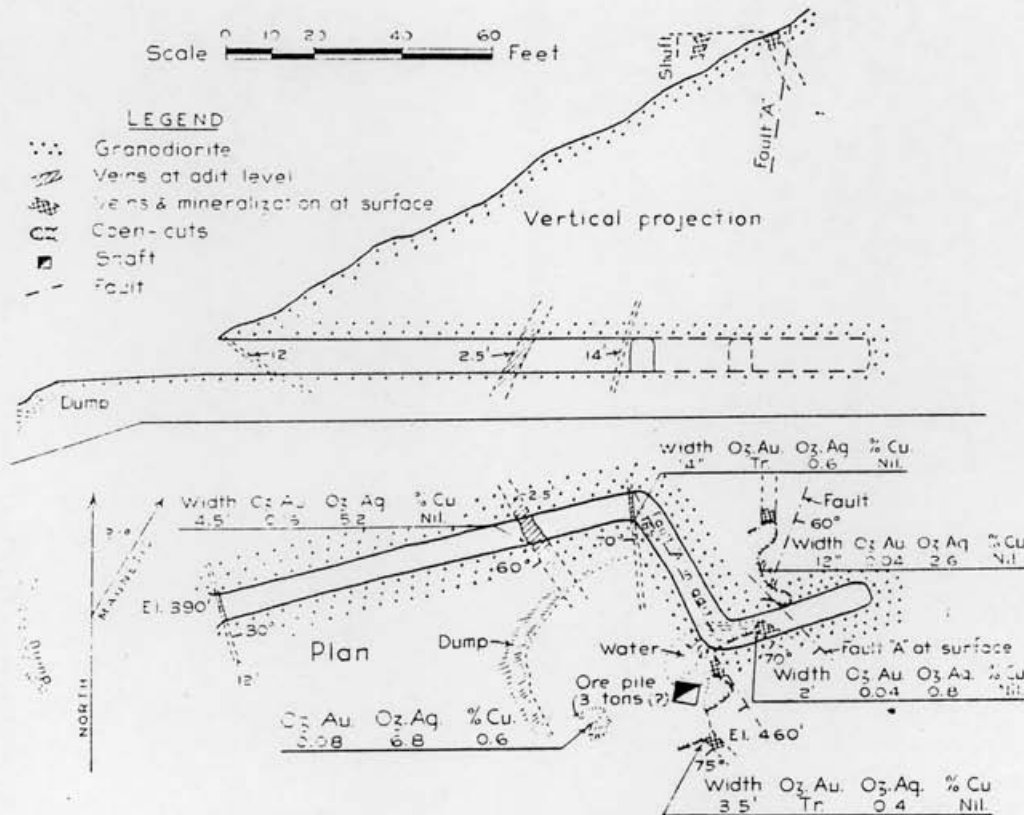
2

The rock formation of the locality is a small stock of granodiorite intrusive into argillite, tuffaceous sediments, and tuffs of the Bear River formation (lower Hazelton group). The exposed granodiorite occupies a strip aligned north-south, parallel with the Bear River Valley for a length of about 6,000 feet and a width of about 1,200 feet between the valley-bottom at 200 feet elevation to around 1,500 feet elevation. The granodiorite is generally phanero-crystalline with accessory biotite and hornblende. Major jointing strikes north 30 to 60 degrees west and dips steeply south, and minor jointing strikes north and dips steeply east.

The mineral deposit consists of quartz veins and lenses occupying joint-planes in granodiorite, locally sheared, and mineralized with pyrite, chalcopyrite, some galena and sphalerite. On the adjoining *Ben Ali* claim of the Dunwell Company a vein in the southerly section of the granodiorite stock, with similar mineralization as those on the *Mayflower*, contains good gold values and has been extensively mined.

1936:

page B17



Mayflower Group. Plan and Section of Workings.

On the *Tyce* claim of the *Mayflower* group at elevation 410 feet and about 300 feet east of the cabin a series of open-cuts along the edge of a low bluff expose irregular and lenticular quartz veins and silicification mineralized with pyrite and some sphalerite in blebs and patches. In the most northerly cut a well-defined quartz vein well mineralized with pyrite is exposed, striking north 2 degrees east and dipping 65 degrees east. The vein is obscured by overburden to the north and by talus in the cut. In the southerly extension of the cut along the bluff two patches of quartz, 12 inches wide and well mineralized with pyrite, are exposed on the foot-wall side of a fault which strikes north-easterly and dips 60 degrees south-easterly. A sample across the most westerly quartz-pyrite patch assayed: Gold, 0.04 oz. per ton; silver, 2.6 oz. per ton; copper, *nil*. The vein or veins exposed in these cuts are probably faulted by "A" fault, which is exposed in the cut about 20 feet south of the most northerly cut. The surface

Annual Reports of the Minister of Mine, British Columbia

1936 cont'd:

page B18

exposures south of Fault "A" cannot be definitely correlated with the quartz vein in the north cut.

About 5 feet south of Fault "A" a quartzose shear 2 feet wide is exposed in a cut along the brow of the bluff. This strikes south 60 degrees east and dips 70 degrees south-westerly and is sparsely mineralized with pyrite. A sample across 2 feet in this exposure assayed: Gold, 0.04 oz. per ton; silver, 0.8 oz. per ton; copper, *nil*.

About 10 feet south-easterly of this a crescent-shaped cut exposes about 8 feet of siliceous replacement in granodiorite moderately mineralized with pyrite at the north side of the cut and apparently contained in a weak structure striking north-west and dipping steeply south-west. About 5 feet south of this cut siliceous replacement 3.5 feet wide, sparsely mineralized with pyrite, is exposed on the brow of the bluff. This structure strikes south 41 degrees east and dips 75 degrees south-west, and a sample across 3.5 feet assayed: Gold, trace; silver, 0.4 oz. per ton; copper, *nil*. A shaft adjacent to the crescent-shaped cut was filled with water. These structures have not been traced on the surface beyond the cuts where possible continuity is obscured by heavily-timbered and somewhat bouldery overburden.

At elevation 390 feet in the bed of a small creek 120 feet west of these cuts, an adit has been driven north 77 degrees east for 99 feet in granodiorite. At the portal a quartz vein 12 inches wide moderately mineralized with pyrite, striking north 15 degrees west and dipping 30 degrees north-easterly, is intersected. At 71 feet a quartz vein 2.5 to 4.5 feet wide well mineralized with pyrite and sparse galena and sphalerite, striking north 33 degrees west, and dipping 60 degrees south-westerly, is intersected. A sample across this vein, 4.5 feet wide on the south wall of the adit, assayed: Gold, 0.16 oz. per ton; silver, 5.2 oz. per ton; copper, *nil*. At 99 feet the adit intersects a quartz vein 14 inches wide, striking north 10 degrees west and dipping 70 degrees west. This vein is sparsely and irregularly mineralized with blebs and small patches of pyrite. A sample across 14 inches in the south wall of the adit assayed: Gold, trace; silver, 0.6 oz. per ton; copper, *nil*. This vein should junction with the second vein at about 50 feet south of the adit. At the north wall of the adit the vein is intersected by a fault striking north 28 degrees west and dipping 85 degrees south-westerly. This is quite possibly Fault "A" exposed in the surface cuts. For some unknown reason the vein has been left unexplored in the south wall of the adit and the fault was drifted on for 36 feet, showing a few narrow patches of barren quartz. The working is then turned north 70 degrees east for 36 feet in barren granodiorite.

Several hundred feet southerly of these showings a new discovery was made in a deep creek-draw. This consists of a sheared quartz vein locally well mineralized with pyrite, chalcopyrite, some sphalerite and galena, striking north 66 degrees west and dipping 67 degrees south-westerly. The vein occurs in granodiorite close to the contact with the overlying volcanics of the Bear River series. The vein outcrops in the steep bed of a creek-draw and at elevation 800 feet an open-cut has been excavated on the showing. This exposes a width of 41 inches of sheared quartzose vein material, of which 18 inches on the hanging-wall is well mineralized. A sample across 41 inches at the bottom of the cut assayed: Gold, 0.2 oz. per ton; silver, 1.8 oz. per ton; copper, trace; lead, *nil*; zinc, 2 per cent.

Continuity of the vein above and below this showing is obscured by overburden and slide-rock in the creek-draw, but at about elevation 1,500 feet an exposure of similar mineralization occurring in hybrid contact-rocks may possibly be correlated with the lower exposure. During 1935 some further exploration of this occurrence was carried out in an adit by a lessee. The results of this work are reported to have been discouraging.

In view of the good gold values in quartz veins similarly mineralized and occurring in the same granodiorite stock on the *Ben Ali* claim, adjoining the *Mayflower* on the south, further exploration of the *Mayflower* veins and detailed surface-prospecting of the *Mayflower* ground is warranted.

1965:

page 52

Emperor (Silver Arrow Mines Ltd.)* (56° 129° S.W.) Company office, 800, 789 West Pender Street, Vancouver 1. F. S. Hofman, president. The company holds 65 claims by record on the north side of Glacier Creek about 6 miles north of Stewart. Work at the claims during 1965 included prospecting and tracing surface mineralization. About 300 feet of the Emperor vein was traced and stripped, the old adits were cleaned out, and an old bunk-house rehabilitated.

[Reference: *Geol. Surv., Canada, Mem. 175, 1935, pp. 113-114.*]

1913:

pages 42 and 43

The Main Reef.

This claim is situated about half a mile north of the Sunbeam and may possibly be on the same zone of fissuring. The vein explored is narrow, in places practically a single, well-defined line of fissuring, bordered by crushed slates. It overlies a large, westerly dipping dioritic dyke, which forms the foot-wall of the vein in portions of its course, and in others is separated from it by a few feet of argillite.

The vein or fissure has a general direction of N. 10° E. but curves slightly along its course, and it has a westerly dip of from 30° to 50°. It has been explored by a drift for a distance of 240 feet. Near the mouth a small ore-shoot up to 30 inches in width and about 40 feet in length was encountered, and light mineralization continues to the face. Near the end of the drift small bunches of galena in a calcite gangue occur in the fractured slates.

The ore consists of pyrite, galena, and blend in a calcite gangue. Four tons of picked ore, shipped, yielded:—

Gold, 0.7 ounce; silver, 20.94 ounces; lead, 23 per cent.

Several other showings on the claims have been prospected, one situated at the base of the same large dyke which underlies the main lead. This consists of 4 to 5 feet of silicified slates, mineralized with pyrite, blende, and some galena and chalcoppyrite.

OTHER SHOWINGS IN THE VICINITY OF GLACIER CREEK.

Tyee.

The Tyee is situated on the Main Reef trail from Bear river at an elevation of 300 feet above the valley. The argillites here are cut by a granitic stock, and the showing occurs in fractured granite. The development work consists of a shaft, filled with water at the time of my visit, and an open-cut 40 feet to the north. Three feet of shattered and partially silicified granite, holding considerable pyrite and occasional bunches of chalcoppyrite, are exposed in the cut.

1929:

pages 40, 41 and 42

TYEE GROUP

The claims of the Tye group are at an elevation of 500 feet on the east side of Bear river between Glacier and Bitter creeks. The country rock is a stock of granodiorite intrusive into volcanic rocks. A quartz vein 1 to 5 feet wide and 75 feet long is exposed by a shaft and open-cuts. The vein strikes northwest, is vertical, and consists of quartz and sulphides in approximately equal amounts by volume. The sulphide is chiefly pyrite, but some chalcopryite is present. A crosscut adit 60 feet below the vein-outcrop, has not been driven far enough to reach the vein. The vein matter is not of commercial grade, but locally assays several dollars per ton in gold.

MAYFLOWER GROUP

The Mayflower group is 1,000 feet above sea-level east of Bear river between Glacier and Bitter creeks and adjoins the Tye group on the east. The country rocks are tuffaceous sediments and tuffs of the lower part of the Bear River formation. The stock of granodiorite on which the Tye is located outcrops just below the Mayflower claims.

The workings consist of several open-cuts and three short adits. A shear zone 2 feet or less wide extends up hill in an easterly direction for 300 feet in the bottom of a small creek. The zone contains a quartz vein very sparsely mineralized with sulphide. Several quartz veins, individually a little wider than the one in the shear zone, join it and the adits have been driven along these branch veins. Two of the branch veins are 1 to 3 feet wide and are well mineralized with pyrite, galena, sphalerite, and chalcopryite. The bare metals, however, are not present in sufficient quantity to constitute commercial ore.

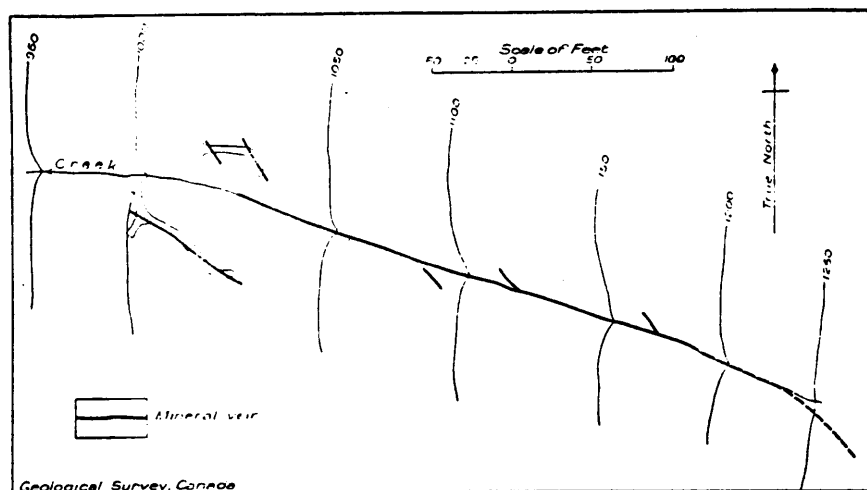


Figure 7. Plan showing vein system on Mayflower group.

Figure 7 shows the location of the veins exposed on the Mayflower group.

1929 cont'd:

EMPEROR MINES, LIMITED

The holdings of Emperor Mines, Limited, are situated between Glacier and Bitter creeks at an elevation of 3,000 feet. A good deal of snow was on the ground at the time the property was visited and some of the open-cuts were not visible.

The country rock is argillite of the Bitter Creek formation striking north and dipping west at moderate angles. Numerous dykes and sills of quartz diorite, gabbro, and lamprophyre occur intruding the argillite.

Two quartz veins occur on the property. The veins are parallel, 200 feet apart, strike north, and dip 50 degrees west. The more easterly vein is 6 to 30 feet wide and has been traced by open-cuts for 500 feet. The other vein is 6 feet wide, is not known on the surface, and only in one place underground. The veins consist chiefly of quartz and a little calcite and are sparsely mineralized with pyrite, galena, sphalerite, and jamesonite. The smaller vein is a single body, but the larger one in places where it is widest consists of closely spaced quartz veins separated by argillite.

The quartz, like that in other veins in the vicinity east of the Portland Canal fissure zone, is habitually drusy. The ore minerals are disseminated through the vein, but not in sufficient quantity to constitute commercial ore.

The underground development consists of three adits driven in an easterly direction to cut the large vein. The upper adit is a crosscut for 125 feet where it enters the large vein. A drift follows the vein for 60 feet. A fault with strongly marked horizontal grooves is the east wall of the vein in this adit. The next adit 200 feet southeast and 10 feet lower than the upper adit is 30 feet long and is little more than a large open-cut on the large vein. The lowest adit 650 feet southwest of the upper adit and 180 feet lower is 950 feet long and reaches the smaller vein at 520 feet from the portal and the large one at the face. On this adit a fault with horizontal grooves is the west wall of the smaller vein. This fault is west of, and parallel to, the one in the upper adit.

Emperor Mines, Limited (Locality 68)

References: Annual Report of the Minister of Mines, British Columbia, 1923, 1924, 1925, 1926, and 1927; Geol. Surv., Canada, Memoir 159.

The holdings of Emperor Mines, Limited, are situated between Glacier and Bitter creeks at an elevation of 3,000 feet. A good deal of snow was on the ground at the time the property was visited and some of the open-cuts were not visible.

Prior to 1925 the holdings were referred to as the North Line group.

The country rock is argillite of the lower part of the Hazelton group striking north and dipping west at moderate angles. Numerous dykes and sills of quartz diorite, gabbro, and lamprophyre occur intruding the argillite.

Two quartz veins occur on the property. The veins are parallel, 200 feet apart, strike north, and dip 50 degrees west. The more easterly vein is 6 to 30 feet wide and has been traced by open-cuts for 500 feet. The other vein is 6 feet wide, is not known on the surface, and only in one place underground. The veins consist chiefly of quartz and a little calcite and are sparsely mineralized with pyrite, galena, sphalerite, and jamesonite. The smaller vein is a single body, but the larger one in places where it is widest consists of closely spaced quartz veins separated by argillite. The quartz, like that in other veins in the vicinity east of the Portland Canal fissures zone, is habitually drusy. The ore minerals are disseminated through the vein, but not in sufficient quantity to constitute commercial ore.

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Mayflower Group (Locality 70)

References: Annual Report of the Minister of Mines, British Columbia, 1918, 1922, 1925, 1928, and 1930; Geol. Surv., Canada, Memoir 159.

The Mayflower group is 1,000 feet above sea-level east of Bear river between Glacier and Bitter creeks and adjoins and lies east of the Tye group. The country rocks are tuffaceous sediments and tuffs of the lower part of the volcanic member of the Hazelton group. The stock of granodiorite on which the Tye is located outcrops just below the Mayflower claims.

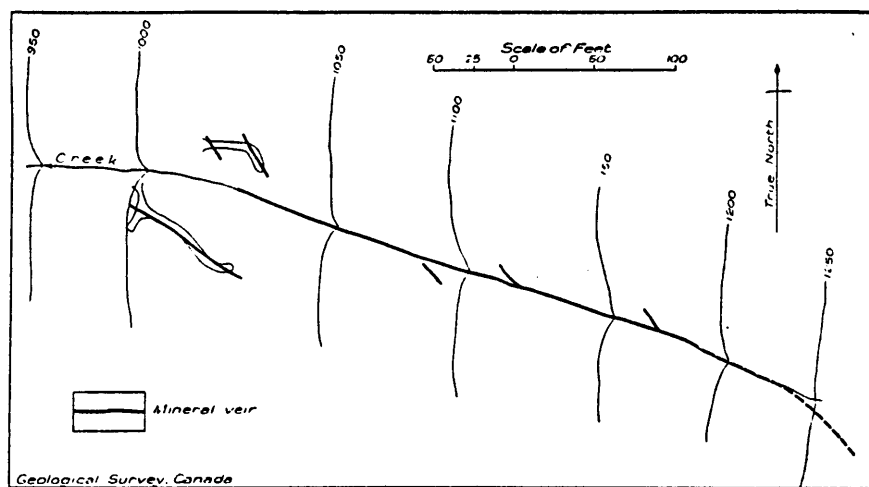


Figure 11. Plan showing vein system on Mayflower group.

The workings consist of several open-cuts and three short adits. A shear zone, 2 feet or less wide, extends up hill in an easterly direction for 300 feet along the bottom of a small creek. The zone contains a quartz vein very sparsely mineralized with sulphide. Several quartz veins, individually a little wider than the one in the shear zone, join it and adits have been driven along these branch veins. Two of the branch veins are 1 to 3 feet wide and are well mineralized with pyrite, galena, sphalerite, and chalcopryrite.

Superior Mines, Limited (Locality 67)

Reference: Annual Report of the Minister of Mines, British Columbia, 1925.

Superior Mines, Limited, was organized in 1925 to acquire a group of claims on Glacier creek adjoining and lying north of the Emperor group. A little work was done on two, narrow, mineral bodies on the sides of a light-coloured dyke. Good values in silver are reported.

Tyee Group (Locality 71)

References: Annual Report of the Minister of Mines, British Columbia, 1909 and 1921; Geol. Surv., Canada, Memoirs 32 and 159.

The claims of the Tyee group are at an elevation of 500 feet on the east side of Bear river between Glacier and Bitter creeks. The country rock is a stock of granodiorite that intrudes volcanic rocks. A quartz vein 1 to 5 feet wide and 75 feet long is exposed by a shaft and open-cuts. The vein strikes northwest, is vertical, and consists of quartz and sulphides in approximately equal amounts by volume. The sulphide is chiefly pyrite, but some chalcopyrite is present. A crosscut adit 60 feet below the vein-outcrop has not been driven far enough to reach the vein. The vein matter locally assays several dollars a ton in gold.

Victoria Mines, Limited (Locality 69)

References: Annual Report of the Minister of Mines, British Columbia, 1909, 1921, 1924, 1925, and 1926; Geol. Surv., Canada, Memoirs 32 and 159.

The holdings of Victoria Mines, Limited, consist of the Dandy and Main Reef groups situated at the northern end of the Portland Canal fissure zone. The country rock is argillite of the upper part of the lower sediments of the Hazelton group. Volcanic rocks overlie the sediments on the lower part of the property and the lowest adit begins in volcanic rock. Two adits on the property are each 400 feet long. Seven others are individually 60 feet or less in length.

Several veins striking north and dipping west have been found on the property. The Main Reef vein is known to be at least 700 feet long and varies from 1 to 4 feet in width. It is exposed on the surface 100 feet above No. 2 adit, has been drifted on for 400 feet in No. 2 adit, and is crosscut by No. 4 adit 120 feet lower. The vein, therefore, is known to extend to a depth of 220 feet. In most places the vein is in contact with a narrow, fine-grained dyke. The vein consists of quartz mineralized with pyrite, galena, and sphalerite. In most places the vein is below commercial grade, but a small shoot of ore from which some ore has been shipped exists in No. 2 adit near the portal.

Another vein is crosscut by No. 4 adit. This vein is 3 feet wide, is associated with a narrow, parallel dyke, and consists of quartz sparsely mineralized with pyrite, galena, and sphalerite. The vein is not known elsewhere on the Victoria holdings. Several other quartz sulphide veins opened by short adits exist farther up the hill. Only one of these, No. 10, is shown on Figure 1. The veins are 1 to 4 feet wide and consist of quartz mineralized with pyrite, galena, and sphalerite. The two uppermost veins contain a little chalcopyrite and arsenopyrite, as well as the usual pyrite, galena, and sphalerite.

A 4-ton shipment of ore made in 1909 yielded 0.7 ounce of gold, and 20 ounces of silver a ton and contained 23 per cent lead. A 7-ton shipment in 1925 yielded 0.6 ounce of gold and 30 ounces of silver a ton and contained 35 per cent lead and 10 per cent zinc.

APPENDIX 2

**CERTIFICATES
CHEMICAL ANALYSIS**



Geochemical Analysis Certificate

OS-0146-RG1

Company: K.R.L.
Project:
Attn: SEAMUS YOUNG

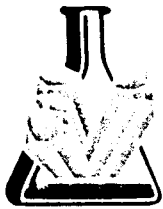
Date: JUL-23-90
Copy 1. KRL, VANCOUVER, B.C.
2. KRL, C/O MIN-EN LABS.

We hereby certify the following Geochemical Analysis of 23 ROCK samples submitted JUL-17-90 by S.YOUNG.

Sample Number	AL-FIRE PPH	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
502509	24	1.2	18	32	195	56
502510	4	1.1	6	295	30	46
502511	18	1.3	6	258	18	31
502512	39	1.4	4	270	12	24
502513	2	1.0	6	90	22	41
502514	17	1.1	5	87	19	31
502515	36	0.9	6	74	16	24
502516	3	0.8	39	150	21	41
502517	4870	61.0	500000	285	605	13
502518	52600	160.0		57	2300	31
502519	1000	5.4	5000	580	64	2680
502520	167	5.0	950	92	160	104
502521	3050	23.0	5625	125	460	91
502522	362	14.0	26250	124	460	28
502523	25	1.8	90	170	62	68
502524	16	0.6	72	23	34	71
502525	1	1.4	19	123	24	99
502526	3	0.7	21	83	21	58
502527	3	1.6	41	78	35	54
502528	39	4.8	350	15	20	33
502529	32	1.7	65	20	19	19
502530	12	1.6	17	82	19	40
502531	585	34.5	19375	93	7100	7230

Certified by

MIN-EN LABORATORIES



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THUNDER BAY LAB.:
TELEPHONE (807) 622-8958
FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0185-RG1

Company: **KRL RESOURCES**
Project: **RKL-MM**
Attn: **SEAMUS YOUNG**

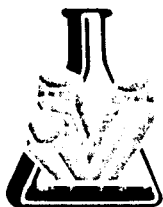
Date: **JUL-30-90**
Copy 1. **KRL RESOURCES, VANCOUVER, B.C.**
2. **KRL RESOURCES, C/O MIN-EN LABS.**

We hereby certify the following Geochemical Analysis of 13 ROCK samples submitted JUL-24-90 by SEAMUS YOUNG.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
502 532	3	1.4	1875	210	14	54
502 533	1	1.6	1450	270	16	64
502 534	16	1.0	375	175	12	142
502 535	1	3.4	375	1000	62	44
502 536	1	0.2	375	16	3	8
502 537	1	0.2	375	9	5	6
502 538	24	2.8	125	1050	52	46
502 539	1	1.3	125	170	24	64
502 540	1	0.9	150	62	16	92
502 541	214	6.4	425	120	245	184
502 542	11	2.0	200	13	36	30
502 543	1	1.8	300	64	30	89
502 544	1	2.5	125	215	19	134

Certified by _____

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FAX (604) 980-9621

THUNDER BAY LAB.:
TELEPHONE (807) 622-8958
FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0187-RG1

Company: **KRL RESOURCES**
Project: **KRL-MM**
Attn: **S. YOUNG**

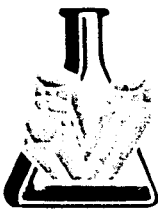
Date: **AUG-02-90**
Copy 1. **KRL RESOURCES, VANCOUVER, B.C.**
2. **KRL RESOURCES, C/O MIN-EN LABS**

We hereby certify the following Geochemical Analysis of 20 ROCK samples submitted JUL-23-90 by M.TERRY.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
502 545	3	1.4	250	64	20	54
502 546	10	1.5	275	180	19	46
502 547	5	1.1	250	60	14	28
502 548	2	1.0	325	96	16	66
502 549	1	1.1	350	58	10	31
502 550	490	2.4	375	275	24	38
502 551	2	1.4	300	63	18	72
502 552	28200	97.0		98	885	37
502 553	26400	85.0		88	1030	60
502 554	165	1.4	1975	63	31	18
502 555	1420	96.0	4375	10	710	16
502 556	703	32.0	48125	147	430	137
502 557	3640	32.0	60000	38	215	29
502 558	10900	45.0	270000	27	775	159
502 559	137	1.0	625	54	58	36
502 560	200	2.2	925	12	44	26
502 561	22000	124.0	850	84	295	17
502 562	3050	16.0	625	1070	1775	39
502 563	18	0.8	275	28	12	38
502 564	3200	41.0	20625	2800	3550	105

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TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0221-RG1

Company: **KRL RESOURCES**
Project:
Attn: **SEAMUS YOUNG**

Date: **AUG-16-90**
Copy 1. KRL RESOURCES, VANCOUVER, B.C.
2. KRL RESOURCES, C/O MIN-EN LABS.

We hereby certify the following Geochemical Analysis of 30 ROCK samples submitted AUG-02-90 by SEAMUS YOUNG.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
5025565	105	2.5	9375	83	370	849
5025566	15	2.1	31	172	36	111
5025567	5	2.9	10	74	82	240
5025568	20	0.6	9	9	18	73
5025569	5	1.6	18	76	26	36
5025570	10	2.0	8	143	28	540
5025571	5	0.7	4	10	23	162
5025572	5	16.5	18	195	3700	1700
5025573	260	12.6	6	107	230	1900
5025574	540	5.7	16	360	127	10000
5025575	15	4.5	6250	1960	1000	9500
5025576	10	2.9	59	125	84	212
5025577	5	0.8	25	39	30	208
5025578	10	0.8	8	11	26	93
5025579	15	1.0	7	48	22	53
5025580	20	0.8	6	9	49	73
5025581	5	0.9	5	10	21	83
5025582	10	0.5	6	40	20	45
5025583	5	0.7	7	34	21	64
5025584	5	1.2	5	152	27	63
5025585	5	0.8	6	169	30	261
5025586	175	1.2	1450	23	32	32
5025587	65	1.0	750	51	32	77
5025588	10	1.1	69	35	27	112
5025589	35	1.4	46	23	31	129
5025590	5	0.9	32	86	25	51
5025591	20	1.0	18	73	24	110
5025592	15	0.9	13	255	18	41
5025593	10	0.4	15	18	14	7
5025594	10	0.8	18	79	24	41

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FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Geochemical Analysis Certificate

OS-0221-RG2

Company: **KRL RESOURCES**
Project:
Attn: **SEAMUS YOUNG**

Date: **AUG-16-90**

Copy 1. **KRL RESOURCES, VANCOUVER, B.C.**
2. **KRL RESOURCES, C/O MIN-EN LABS.**

We hereby certify the following Geochemical Analysis of 6 ROCK samples submitted AUG-02-90 by SEAMUS YOUNG.

Sample Number	AU-FIRE PPB	AG PPM	AS PPM	CU PPM	PB PPM	ZN PPM
502595	5	0.5	250	81	22	39
502596	60	0.6	78	13	16	8
502597	12500	44.8	104300	58	660	37
502598	3000	20.0		220	132	19
502599	12000	32.2		355	185	29
502600	10000	50.3		540	801	41

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FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0146-RA1

Company: K.R.L.
Project:
Attn: SEAMUS YOUNG

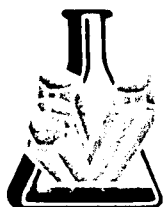
Date: JUL-23-90
Copy 1. KRL, VANCOUVER, B.C.
2. KRL, C/O MIN-EN LABS.

We hereby certify the following Assay of 1 ROCK samples
submitted JUL-17-90 by S.YOUNG.

Sample Number	AU g/tonne	AU oz/ton	AS %
502517	6.42	.187	
502518	62.50	1.823	38.50
502519	1.05	.031	
502521	3.28	.096	

Certified by

Benjamin
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FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0187-RA1

Company: **KRL RESOURCES**
Project: **KRL-MM**
Attn: **S. YOUNG**

Date: **AUG-02-90**
Copy 1. **KRL RESOURCES, VANCOUVER, B.C.**
2. **KRL RESOURCES, C/O MIN-EN LABS**

We hereby certify the following Assay of 8 ROCK samples
submitted JUL-23-90 by M.TERRY.

Sample Number	AU g/tonne	AU oz/ton	AS %
502 552	31.50	.919	18.90
502 553	28.00	.817	29.50
502 555	1.46	.043	
502 557	3.72	.109	
502 558	13.20	.385	

502 561	22.90	.668	
502 562	2.97	.087	
502 564	3.14	.092	

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[Signature]
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THUNDER BAY LAB.:
TELEPHONE (807) 622-8958
FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0221-RA1

Company: **KRL RESOURCES**
Project:
Attn: **SEAMUS YOUNG**

Date: **AUG-16-90**
Copy 1. **KRL RESOURCES, VANCOUVER, B.C.**
2. **KRL RESOURCES, C/O MIN-EN LABS.**

He hereby certify the following Assay of 4 ROCK samples submitted AUG-02-90 by SEAMUS YOUNG.

Sample Number	AU g/tonne	AU oz/ton	AS %
502597	14.60	.426	
502598	3.18	.093	4.19
502599	12.40	.362	5.97
502600	10.35	.302	11.67

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FAX (807) 623-5931

SMITHERS LAB.:
TELEPHONE/FAX (604) 847-3004

Assay Certificate

OS-0439-RA1

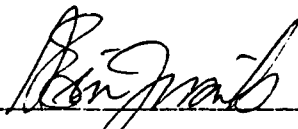
Company: **KRL RESOURCES**
Project: **MM**
Attn: **S. YOUNG/J. WATKINS**

Date: **SEP-10-90**
Copy 1. **KRL RESOURCES, VANCOUVER, B.C.**
2. **J. WATKINS, ROYSTON, B.C.**

We hereby certify the following Assay of 1 ROCK samples submitted SEP-04-90 by J. WATKINS.

Sample Number	AU g/tonne	AU oz/ton
502825	2.21	.064

Certified by _____


MIN-EN LABORATORIES



- LEGEND**
- Anomalous bedrock sample
 - Anomalous stream, river, float or mine dump sample
 - Sample site, no anomaly
 - ▲ Adit
 - ⊙ Airborne EM anomaly (NR indicates grade)
 - ⊖ VLF-EM ground anomaly
 - Vein
 - Lithologic contact
 - Strike & dip of bedding
 - Fault
- Au g/t (ppb)
 Ag ppm
 Pb ppm
 Zn ppm

GEOLOGICAL BRANCH ASSESSMENT REPORT

20,975

Contour interval 100 feet

KRL RESOURCES CORP.
MM PROPERTY

COMPILATION MAP

STEWART AREA
N.T.S. 104A-4 & 103P-13 SKEENA M.D., B.C.

SCALE 1:5000 DATE OCT. 1990
DRAWN BY J.J. WATKINS MAP NO. 1



LEGEND
 * Sample site & NR
 - Underground opening

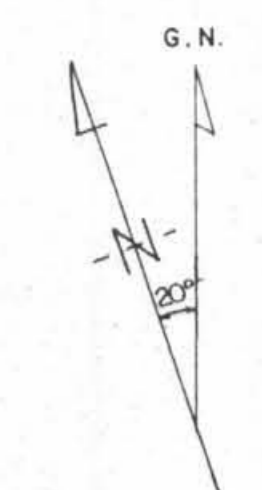
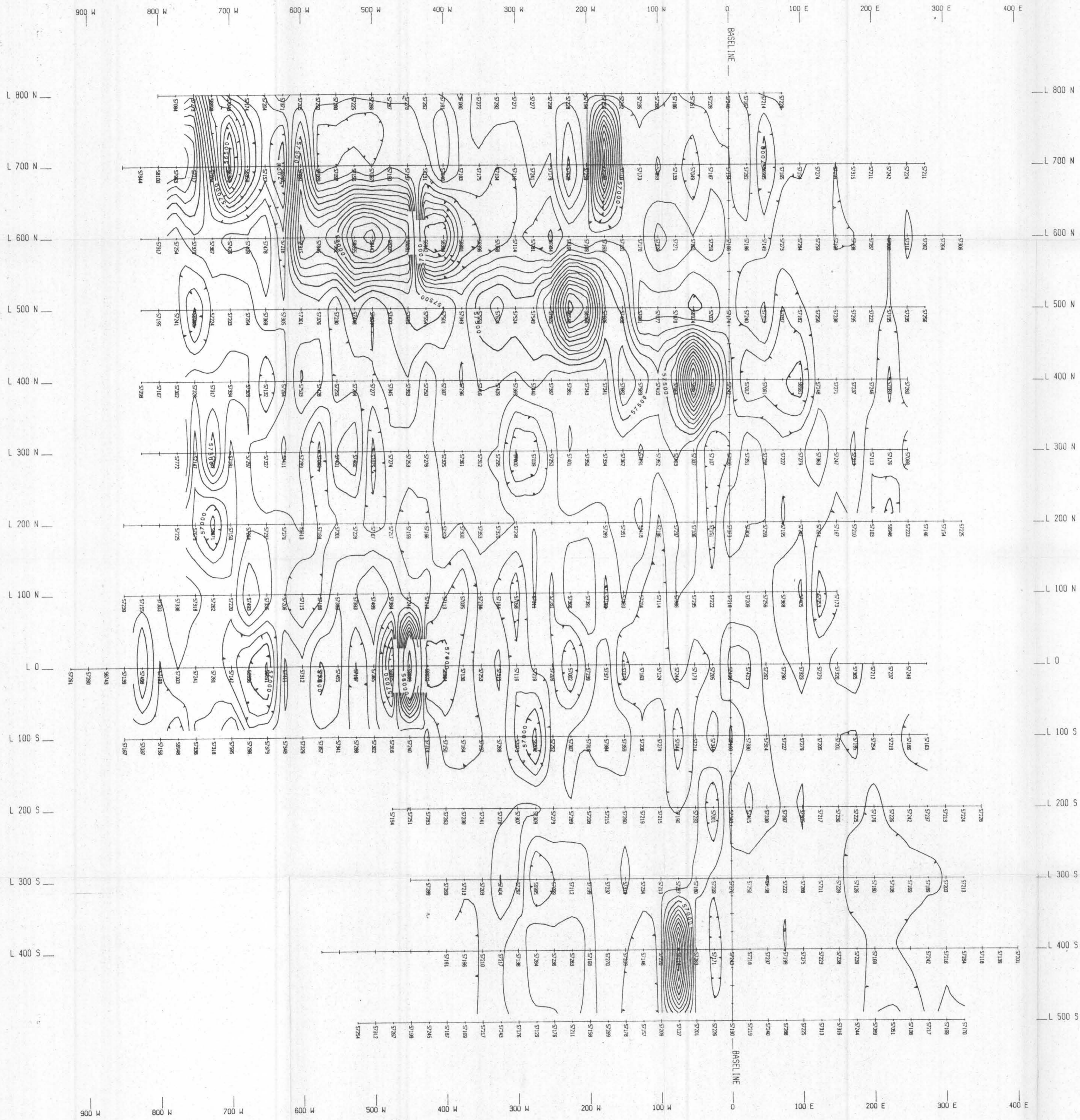
**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**

20,975

Contour interval 100 feet



KRL RESOURCES CORP.	
MM PROPERTY	
1990	
GRID SAMPLE LOCATIONS	
STEWART AREA	
N.T.S. 104A-4 B 103P-13	SKEENA M.D., B.C.
0 100 200 400 meters	
SCALE 1:5000	DATE OCT. 1990
DRAWN BY: J.J. WATKINS	MAP NO. 2



LEGEND

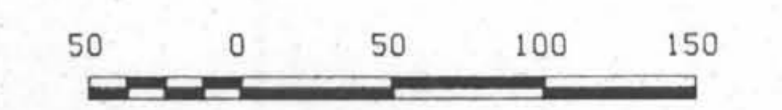
INSTRUMENTS: SCINTREX MP-2

CONTOUR INTERVAL

- 50 nT
- 100 nT

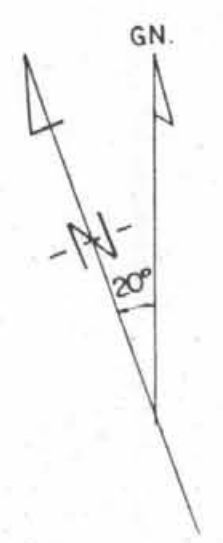
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

20,975



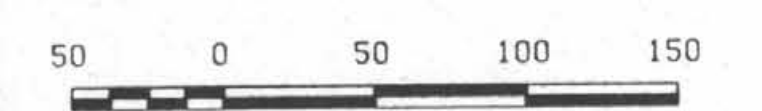
SCALE 1:2500

KRL RESOURCES LTD MM PROPERTY
TOTAL FIELD MAGNETIC SURVEY
Processed By OREQUEST CONSULTANTS LTD MAP No. 3



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

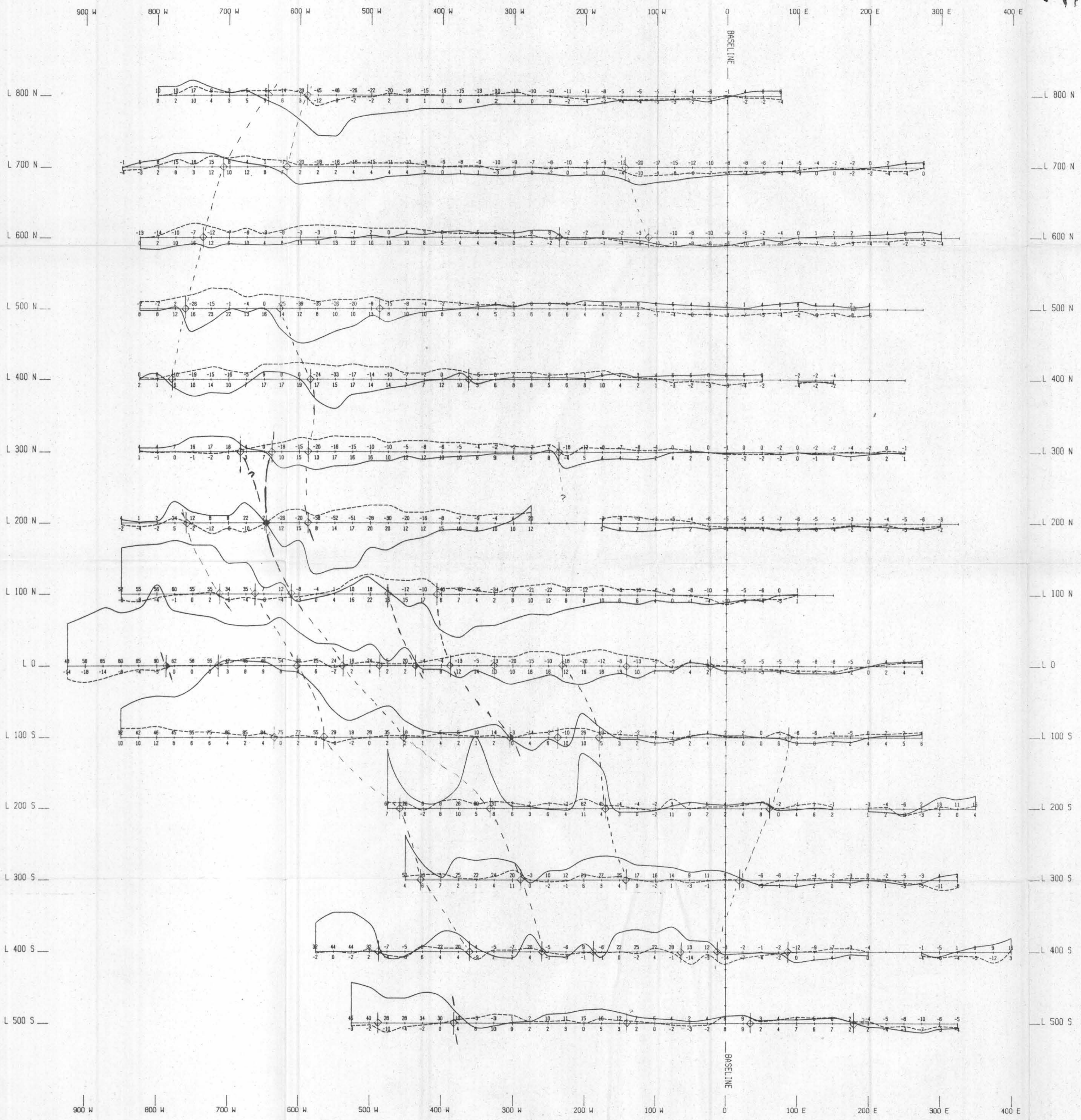
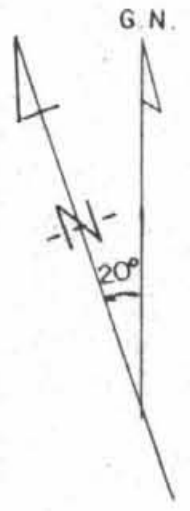
20,975



SCALE 1:2500

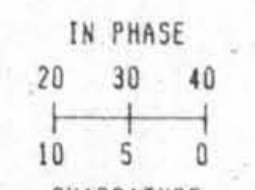
KRL RESOURCES LTD MM PROPERTY
VLF-EM SURVEY FRASER FILTER VALUES AND CONTOURS
Processed By DREQUEST CONSULTANTS LTD MAP No. 4

20,975



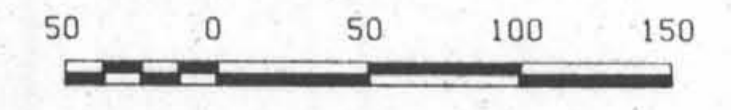
LEGEND

INSTRUMENT: GEONICS EM-16
TRANSMITTER: SEATTLE NLK (24.8 KHZ)
READING DIRECTION: EAST



PROFILE SCALE: 1 cm = 20m

- IN-PHASE
- - - QUADRATURE
- ANOMALY LOCATION
- CONDUCTOR AXIS



SCALE 1:2500

KRL RESOURCES LTD MM PROPERTY
VLF-EM SURVEY PROFILES
Processed By OREQUEST CONSULTANTS LTD MAP No 5