GEOPHYSICAL AND GEOCHEMICAL REPORT

ON THE

JT 2, 3, 6, 7, 8, 9, 10 AND 11

MINERAL CLAIMS

KAMLOOPS MINING DIVISION

51 32'N; 119 53'W

JULY 4 - JULY 17TH, 1982

### 82M/12W

OWNED BY CONSOLIDATED REXSPAR MINERALS & CHEMICALS LTD.

WORK BY PLACER DEVELOPMENT LIMITED

JULY, 1982

R.W. CANNON, P. ENG.



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Plan Map of Fraser Filtered Date 1:5000

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Fig. 12 Appendix I

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		STATEMENT OF EXPENDITURES		
Man days	H. Goddard	July 6, 7, 10, 12	4	days
	R. Cannon	July 6, 8-14	9 8	days davs
	S. Campbell	July 17	1	day
			22	man days
Salary	H. Goddard	4 x \$125/day		500.00
	S. Tennant	9 x \$200/day	1,	800.00
	S. Campbell	$1 \times $150/day$	\$,	150.00
Benefits i	ncluding Compens	sation, Administration, Supervision: @ 74% of Salary:	\$3 <u>\$2</u>	3,810.00 ,819.40
		TOTAL:	\$6	.629.40
Room and B	oard @ 35/day/ma	ın x 22	\$	770.00
Transporta	tion (incl. fuel	) 10 days @ \$50/day	\$	500.00
Equipment	Costs:			
• •	Geonics EM-16 @	\$210/wk. x 9/7	\$	270.00
	Scintrex M.P2 Scintrex M.BS-2	: Magnetometer (15 day minimum) : Base Stn. Recorder (15 day minimum)	\$	255.00 510.00
			<u>بت</u> ¢۱	025 00
Casaba-iasi			÷τ	,035.00
Geochemica		325.50		
Report Wri	ting			500.00
Drafting				300.00
		Total Expenditure	\$1	0,059.40



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R.W. CANNON, P. ENG.

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#### Introduction:

The geophysical surveys were conducted in order to trace a NE-SW trending anomaly which supposedly extended onto the Rexspar claims from the Barrier Reef ground to the south. A total of 6.26 km of line were cut and flagged with stations marked every 20 metres along the lines. Magnetometer and VLF-EM readings were taken at each station along 5.46 km of line. Geochem soil samples were taken in order to test a VLF conductor.

### Location and Access:

The claims are located approximately 6 kilometres south of the community of Birch Island. Access to the claims is by means of a two wheel drive vehicle along an old logging road which goes from the Thompson River valley to Foghorn Mountain (see Figure 1 for location).

## <u>Claim Status:</u>

The claims status is as follows:

Name	<u>No. of Units</u>	Tag No.	Record No,.	Anniversary Date
JT 2	20	68432	3655	Julv 14th
JT 3	20	68433	3656	July 14th
JT 6	1	68456	3659	July 14th
JT 7	1	68457	3660	July 14th
JT 8	1	68458	3661	July 14th
JT 9	1	68459	3662	July 14th
JT 10	1	68460	3663	July 14th
JT 11	1	68461	3664	July 14th

## Previous Work:

Work by Barrier Reef mines located a massive sulfide outcrop which apparently was associated with a Dighem anomaly having a NE-SW strike direction. This anomaly was thought to continue onto the Rexspar property.

#### Geophysical Surveys:

A total of 5.46 line-kilometres of magnetometer and VLF-EM surveys were conducted, with readings taken a 20 metre intervals. Six lines were run on grid 1, and two lines plus the baseline were run on grid 2.

#### Equipment Used

The magnetometer survey was conducted using a Scintrex M.P.-2 Portable Proton Magnetometer. Instrument drift and diurnal corrections were made by use of the Scintrex MBS-2 Total Field Magnetic Base Station. The VLF-EM survey was conducted using a Geonics E.M.-16 and employing the Seattle transmitting station.



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#### Results of the Geophysical Surveys

The corrected magnetometer readings were plotted in profile form along with the E.M. Results (see Appendix I). The E.M.-16 results were plotted as if the operator was facing westerly along the line and therefore, proper cross overs are from east to west. Fraser filtered data has also been plotted on these profiles and it was calculated by the method put forth by D.C. Fraser (1969, Contouring of VLF-EM data; Geophysics, v.34, p. 958-967). A plan map of the contoured Fraser filtered data from Grid 1 has also been included in Appendix I (fig. 12).

#### Geochemical Survey:

#### Sampling Method

A total of 35 soil samples were collected every 20 metres along 5 lines on Grid 1 covering the VLF conductor. Samples were collected from the reddish-brown B horizon, where available, at depths of 15 to 40 centimetres, using a mattock. Notes were taken for each sample regarding line and station; soil composition and colour; stream road and claim post locations; sample depth; % residual and ground slope. Samples were collected in brown kraft paper bags and sent to the Placer Development Limited, Geochemistry Laboratory in Vancouver for analysis.

Analysis Method

The samples were dried in a hot air sample drying unit at 50° C and then the -80 mesh fraction was sieved out for analyses. The samples were analyzed for Cu, Pb, Zn, Ag, by digesting 0.5 grams of the -80 mesh fraction in a concentrated perchloric/nitric acid mixture for four hours. The Au analysis requires 3 gms digested in a HBr/Br solution for 12 hours. The digested sample was then brought up to 10 millilitres with the addition of distilled water and analyzed with a Perkins Elmer 603 Atomic Absoption Spectrophotometer. Background corrections using a simultaneous deturium were made for Pb and Ag. All analysis are in parts per million (ppm), see Appendix II.

The ranges of sensitivity using this method of analysis are: Pb, 2-3000 ppm; Zn, 2-3000 ppm; Ag 0.2-20 ppm, Cu, 2-4000 ppm; Au, 0.02-4 ppm.

Results of the Soil Survey

A computer printout of the results can be found in Appendix II.

#### Discussion of Results

#### Magnetometer Survey

No definite trends were detected by the magnetometer survey. A narrow dyke has been interpreted as occurring at station 1+60E on line 5N. A slight one point high on line 4N at 4+80E is the result of a culvert on a logging road.

VLF-EM Survey

Several weak surficial anomalies and one strong anomaly were detected on Grid 1. The strong anomaly has an apparent N-S strike which lines up almost exactly with the massive sulfide outcrop. A check along this conductor axis revealed the anomaly to be due to an apparent shear-zone. Several areas of water seepage occur along the trend of this anomaly. The mineralized outcrop appears to be quite restricted in size and may occur as a result of the intersection of the N-S shear zone and a suspected fault which seems to control the direction of Lute Creek.

On Grid 2, a conductor was located on Line 18N and along the baseline. This conductor appears to be on strike with the suspected Lute Creek fault. The anomaly pinches out near line 14N or else is masked by the water saturated surface material.

Geochemical Soil Survey

The results of the soil survey show that the N-S shear zone is very weakly mineralized along strike as far North as Line 2+00N. The values diminish on Line 3+00N and are at background on Line 4+00N.

Conclusions and Recommendations

It was concluded that a weakly mineralized N-S trending VLF anomaly occurs on the JT claims. It is recommended that further work does not seem warranted at this time.

R.W. CANNON, P. ENG.



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APPENDIX I

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APPENDIX II

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PLACER GEOCHEM ASSAY SYSTEM: DATA FROM Birch Island C. Camp

GPID	SAMPLE	PRUJECT	նե	Z N	a a	ΑJ	ن ۵
n	<b>0</b> +2₩	2116	55	214	20	\$3.2	<f. <="" p="" td=""></f.>
n	C+4CW	2115	25	123	20		<0.02
ñ	0+6.W	2116	45	148	23	11.5	<0.C2
ñ	0+26W	2116	57	301	35	د.ن	<0.02
0	1+000	2116	101	44 Ú	144	ů.4	<0.02
0	1+26W	2115	41	126	29	<u>.</u> 2	<0.01
1 N	1+4ć₩	2116	23	66	22	<ù.2	<0.02
1 N	1+6Cw	2116	20	91	22	<0.2	<0.02
1 N	1+868	2116	53	212	43	0.ž	<0.02
1 N	2+CuW	2116	65	206	66	<ū.2	<0.04
11v	2+204	2116	59	192	53	<u.2< td=""><td>&lt;0.02</td></u.2<>	<0.02
1 N	2+460	2116	54	196	50	Ú • Ľ	<0.02
1N	2+76W	2116	151	397	370	0.5	KU 102
	3+00W	2116	<u> </u>	120		<u><u+z< u=""></u+z<></u>	
2N	2+06W	2116	63 10	450	44 20		KC+UZ
219	27258	2110	70	104	63		
これ	24464	2110	17	151	32	το	<pre>&gt;1.04 &lt;0.02</pre>
2 10	2 T C U M 7 4 C C L	2116	47	121	21	20.2	<0.02
2 N	3+00+	2110	54	155	45	1) - 2	<0.02 <0.02
2 N	3+46₩	2116	29	125	43	J.3	<0.02
<u>3N</u>	3+8GW	2116	28	124	26	<u> </u>	<p.02< td=""></p.02<>
3N	4+CGW	2116	78	201	49	<0.2	<0.02
3N	4+2GW	2116	70	288	104	0.3	<0.02
3 N	4+4CWA	2116	41	58	19	<b>G</b> • 4	<0.02
3 N	4+4€₩6	2116	4 Û	136	20	<0.2	<0.02
3N	4+6GW	2116	33	105	12	<0.2	<0.02
<u>3 N</u>	4+80W	2116	33	105	12	<0.2	<u>&lt;0.02</u>
4 N	4+86W	2116	20	87	17	<0.2	<0.02
4 N	5+06W	2116	13	53	15	0.3	<0.02
4 N	5+2CW	2116	31	117	20	<0.2	<0.02
4 N	5+408	2116	21	102	14	0.2	KU+UZ 20.02
4 N	5+0LW	2110	42	102	23	0.2	
4 N	0+UCW	2110	42	141	22	0.0	X0+02
4 N 4 N	6+26W 6+20W+	2110	22	92	22	0+2	
<u>+IN</u>	<u></u>	2116	168	84	152	0.9	1000
1031 1051	STD F	2116	159	82	140	0.9	
tast		2116			1 - 0	0	1.10
test	STD AU	2116					1.03
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