BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1997/1998
REPORT #:	PAP 97-18
NAME:	ANDREW MOLNAR

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Andrew Molnar Reference Number 97/98 141

LOCATION/COMMODITIES 092INE 108, 066

Project Area (as listed in Part A) Kamloops - Sun claims MINFILE No. if applicable 058

Location of Project Area NTS 92I/15W Lat 50° 48' Long 120° 45.5'

Description of Location and Access By road from Savona approx. 24 km NE on Sabiston Cr. Rd to centre of claim group.

Main Commodities Searched For Cu, Au, Ag, Pb, Zn.

Known Mineral Occurrences in Project Area Cu, Au, Hg, Ag.

WORK PERFORMED

1. Conventional Prospecting (area) 10 km sq.
2. Geological Mapping (hectares/scale) 65 Ha / 1:5000
3. Geochemical (type and no. of samples) Rock.
4. Geophysical (type and line km) Mag/VLF
5. Physical Work (type and amount) Grid survey. Road work
6. Drilling (no,. holes, size, depth in m, total m)
7. Other (specify)

SIGNIFICANT RESULTS

Commodities Cu, Au, Ag, Hg, Pb, Zn Claim Name Sun 1+2

Location (show on map) Lat 50° 48' Long 120° 45.5' Elevation 700 m

Best assay/sample type Rock. 1890 ppb Au, 41475 ppm Cu, 76 ppm Zn, 33.9 ppm Ag.

Description of mineralization, host rocks, anomalies 3 episodes of mineralization for the property are postulated. Over the old workings; basalt showing, gangue containing malachite, bornite and chalco. (mesothermal). An epithermal type stockwork of layered chalcedonic quartz-carbonate veins in the centre. Massive qtz containing cuprite malachite and cinnabar + sandstone w/ cinnabar on the west side of the claim group. Several mag anomalies appear in the centre of the claim group.

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act.*

Assessment Report

On the

Sun Claims

Kamloops Mining Division

Latitude 50 48' North
Longitude 120 45.5' West

NTS: 92I/15W

Prepared by: Andrew W. Molnar
for
Rio Minerals Limited

Date of Report: January, 1998
Work Permit No: Kam 97-1500303-65

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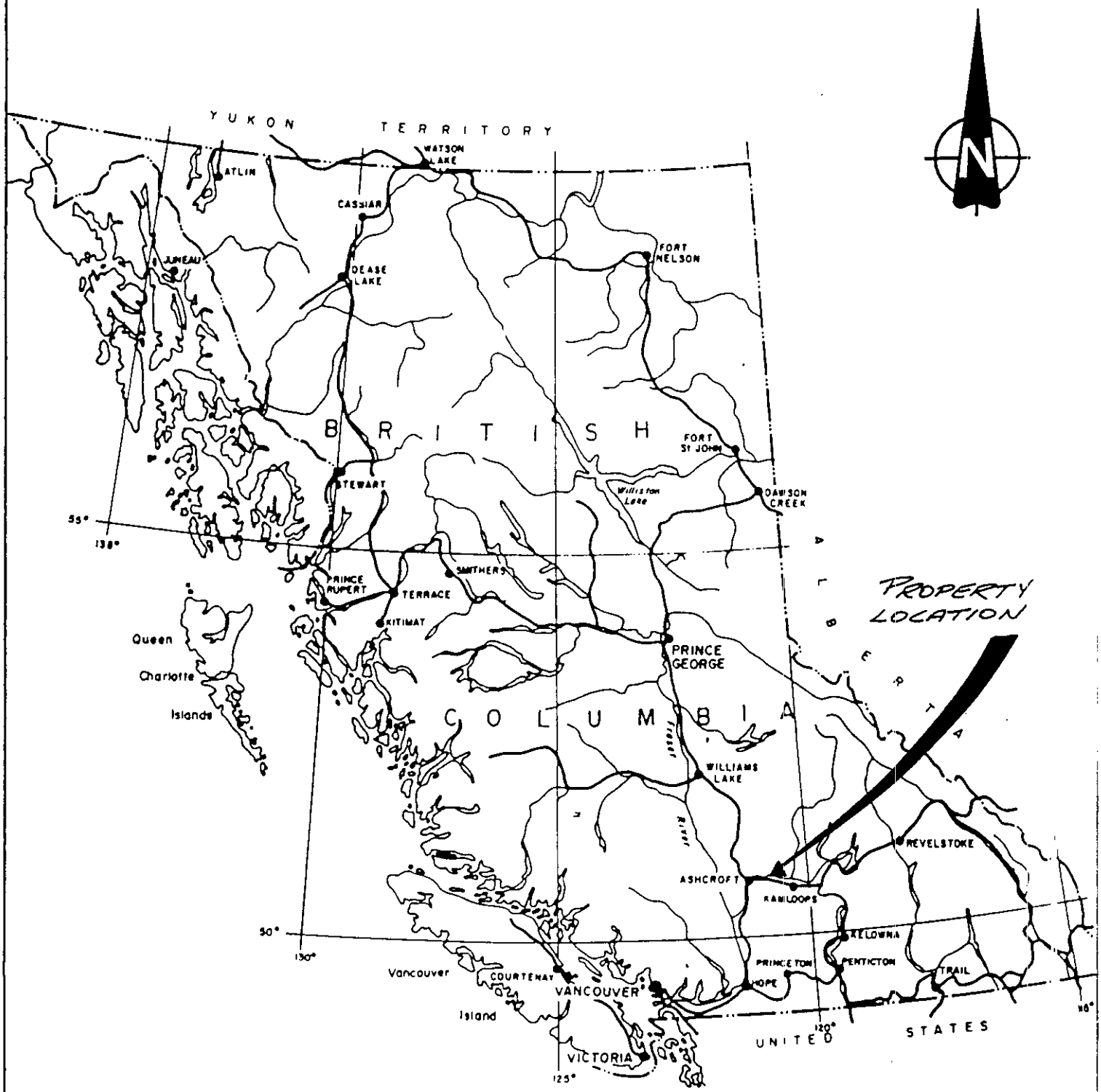
Location, Access, and Topography

The Sun claim group is located On the North-central side of Kamloops Lake. Secondary roads provide access to most of the property. A Canadian National Rail line with siding runs along the north side of the Thompson River from Savona, through the property, to Kamloops. Power and telephone lines are located on the property at Copper Creek, and water is available from Carabine Creek, which runs through the center of the claim group. The property occurs on the mid-portion of the interior plateau of British Columbia and covers an area extending 2.5km. north and 3.0km wide from the north-central shores of Kamloops Lake. Elevations vary from 1200 to 2500 feet. Vegetation is sage and scattered Ponderosa pine.

The Sun Group consists of two modified grid claims for a total of 20 contiguous units.

Claim Information

Claim	Units	Record Date	Expiry Date
Sun 1	10	January 12, 1991	January 12, 2001
Sun 2	20	January 12, 1991	January 12, 2001



Rio Minerals Limited

Sun 1 & 2 Claims
Property Location

NTS: 92I/15	DATE: OCT '92	FIGURE: 1

History

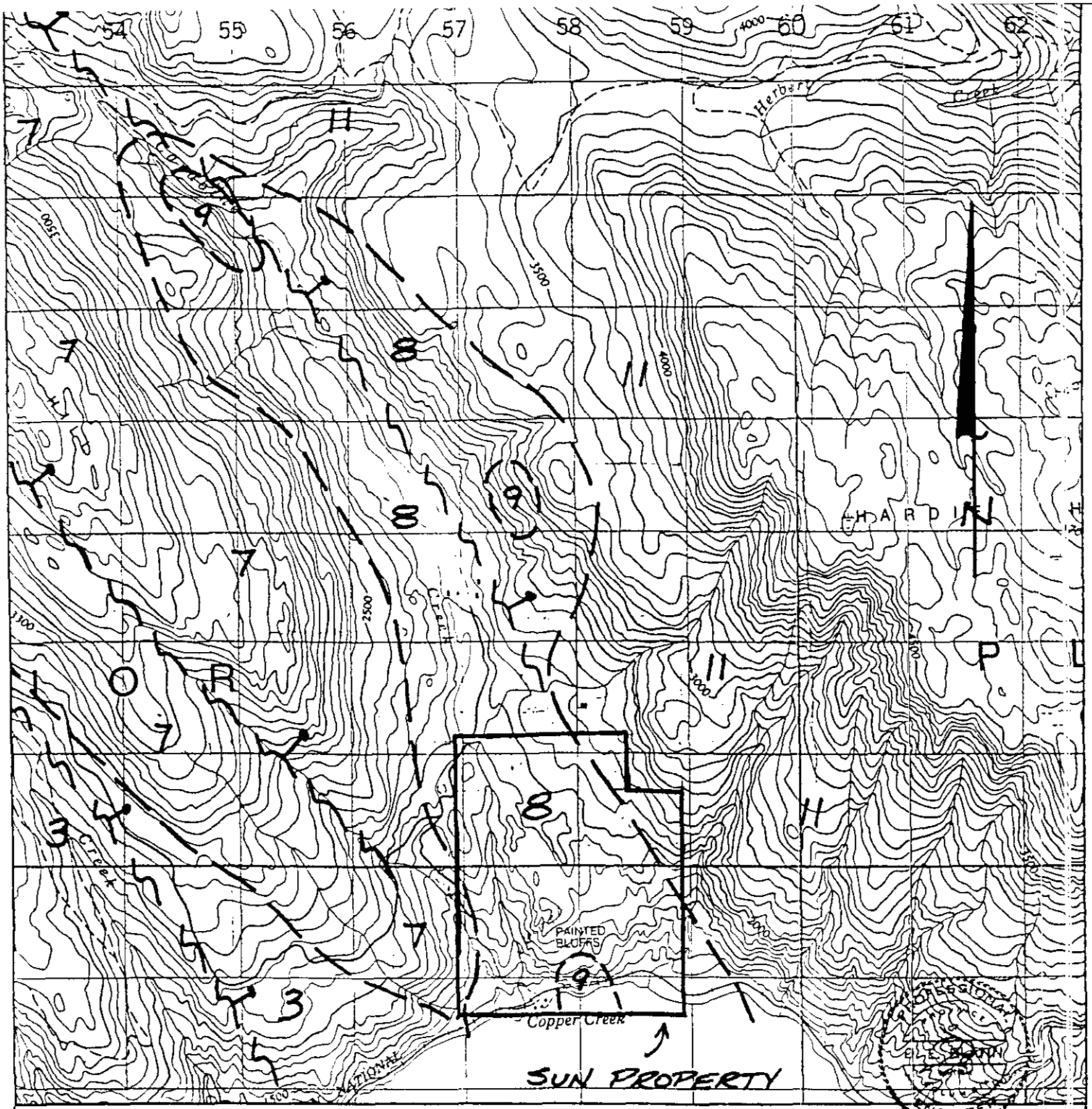
The property has seen intermittent production and exploration from 1888 to the present. A 200 x 450 meter crown granted mineral named the Tenderfoot was staked in 1889 to cover an outcrop containing bornite mineralization. The claim area was worked intermittently until Falaise Lake mines Ltd. performed prospecting, soil sampling, and diamond drilling (Chisolm, 1972). Roccoco Resources Ltd. performed soil geochemistry, VLF-EM geophysics, percussion and diamond drilling in the vicinity of the Tenderfoot showing between 1982 and 1985.

Table 2

Summary of Drilling Results (1982-1983)

Hole	Depth	From	To	Width	Cu	Au	Ag
	Ft.	Ft	Ft	Ft	%	oz/t	oz/t
P82-1	100	10	100	90	0.44	0.004	0.12
P82-2	105	10	105	95	0.82	0.005	0.18
P82-3	35	15	35	20	0.06	0.002	0.02
P82-4	135	10	135	125	0.30	0.002	0.08
*DDH 83-1	200	42	200	158	0.31	0.001	?
*DDH 83-2	204	32	100	68	0.72	0.001	0.23

Drill core for holes 83-3 and 83-4 was only partially sampled. Drill logs indicate higher-grade mineralization contained up to 4% copper over 1.5 meters (83-1). A more detailed description of these work programs may be found in assessment reports 11,354 and 15,071.



LEGEND

KAMLOOPS GROUP

12 Tranquille Beds: conglomerate, sandstone, tuff, minor coal
11 Rhyolite, andesite, basalt, tuffs, agglomerate
10 Coldwater Beds: conglomerate, sandstone

CRETACEOUS OR TERTIARY

9 Copper Creek Intrusions: granite, granodiorite, granite porphyry
8 Andesite basalt, picrite, agglomerate, breccia, tuff, minor conglomerate, sandstone
7 Conglomerate, sandstone and shale

UPPER TRIASSIC

3 Nicola Group: greenstone, andesite-basalt, agglomerate, breccia, minor argillite, limestone, conglomerate

Thrust fault (ball on downthrown side)

0 0.5 1.0 2.0 3.0
KMS

Rio Minerals Limited

Sun Property
Regional Geology

NTS: 92I/15 | SCALE: 1:50,000 | FIGURE: 3

The property was staked by the Sun Joint Venture in 1991 at which time a short reconnaissance program was carried out. During the winter of 1997 Rio Minerals Limited carried out a program of literature compilation, road rehabilitation, prospecting, regional sampling, 34km of flagged and picketed grid, 32km of Mag/VLF geophysical surveys, as well as geological mapping and sampling. This program resulted in the discovery of widespread copper mineralization, several previously unknown adits and workings, and several areas of epithermal quartz-calcite-chalcedony stockworks which exhibit elevated gold values.

The Afton copper-gold porphyry mine is located 17 kilometers to the east-southeast of the property and several mercury mines are located on the Sun 1 claim. Prospects in the area include several epithermal style gold-silver showings, and numerous copper and mercury showings.

Regional Geology

Rocks of Upper Triassic to Tertiary age underlie the area north of Kamloops Lake. Descriptions follow.

Kamloops Group

Dewdrop Flats formation
Prophyritic basalt, breccia, andesite and agglomerate

Tranquille formation
Conglomerate, sandstone, shale and tuff

Coldwater formation
Conglomerate, sandstone, shale, coal

Ashcroft formation
Coarse conglomerate (+minor sandstone)

CLAIM BOUNDARY

2500'

2000'

1500'

ACCESS ROAD

CNR

KAMLOOPS LAKE

LEGEND

- Quartz-Carbonate Stockwork
- Quartz-Carbonate Vein/Dip
- Fracture/Dip
- Fault-Shear/Dip
- Lithological Contact
- 1. Pyroxene Porphyritic Basalt
- Andesite-Basalt, Lamprophyre, Rhyolite Dyke
- Quartz Diorite Intrusion
- Rock Sample Location
- Cp Chalcopyrite
- bo Bornite

N

0 100 200 400 600 800 1000

METRES

Rio Minerals Limited		
Sun 1 & 2 Claims **Preliminary Geology Plan**		
NTS: 92I/15	SCALE: 1:10,000	FIGURE: 4

Post-Lower Cretaceous

Copper Creek Intrusions
granite, granodiorite, granite porphyry

Lower Cretaceous – Upper Triassic

Nicola Group
andesite, basalt, picrite, serpentine, tuffs, augite porphyry,
conglomerate, sandstone, argillite, limestone.

Property Geology

The property is predominantly underlain by prophyritic augite and olivine basalt that are cut by various andesite to basaltic dykes and a granodiorite-quartz-diorite stock. Conglomerate and minor sandstone of the Kamloops group overlie the volcanic rocks to the west of the property. Detailed petrographic analyses of several rock types was performed by Game, 1983, and is summarized below.

Porphyritic augite basalt

Reddish or green prophyritic rock composed of augite crystals in a fine grained plagioclase-rich groundmass. The plagioclase has undergone extensive alteration to serecite and saussurite. The phenocrysts are stained reddish with hematite. Calcite and serpentine fills fractures and vugs in the matrix.

Prophyritic olivine basalt (Picrite porphyry)

Hard, dark green or reddish phenocrysts in a soft, soapy, light green aphanitic groundmass. Composed of serecite-saussurite altered plagioclase, olivine and calcite. The olivine is almost completely altered to serpentine, calcite and hematite.

Andesite (dykes)

Fine grained plagioclase groundmass with secondary vein minerals of quartz, calcite and chlorite.

Biotite, diorite, quartz-diorite

Light grey, phaneritic biotite quartz-diorite. Weakly sericitic euhedral plagioclase crystals, biotite, magnetite and pyrite with crosscutting calcite veins. Biotite exhibits both primary and secondary phases (Game, 1985).

To the west of the quartz diorite intrusion, biotite lamprophyre or diabase, and rhyolite occurs (Figure 3). Several areas of the property contain highly serpentinous-clay altered volcanic rocks.

Structures

The bedded rocks trend 120- 140 degrees/15-50 degrees NE and are cut by structures of various orientations. Strong 270-360 degree/subvertical shears are cut by 020-050 degree/40-70 degrees W faults and fractures. Measurements of several north trending/west dipping faults indicate right-lateral reverse movement with a 15-30 degree south rake. Shallow east-dipping veins and shears occur in the centre of the old workings. Andesite-basalt dykes trend 086/70 S to 120/90, basalt-lamprophyre dykes trend 020/60 W and the rhyolite dyke trends 060/80 E.

Alteration and mineralization

The volcanic rocks are moderate to strongly chlorite-epidote-saussurite altered throughout the property, with development of carbonate, serpentinite, and silicified zones. Secondary biotite alteration has converted to chlorite (Game, 1985). Three episodes of mineralization are postulated. The main-central workings are hosted in a basalt showing gangue containing malachite, bornite and chalcopyrite of the mesothermal type. West of this central area is a series of multiply layered chalcedonic quartz-carbonate epithermal veins hosted in basalt. A third area of mineralization occurs in the western portion of the claim group. This area is host to numeral mercury mines dating back to the late 1890's. Approximately 76 flasks or 14,000 lbs. of mercury have been produced from this area. In addition to mapping of this area, prospecting has uncovered massive quartz containing azurite, malachite and cinnabar.

Discussion

The Sun claims are underlain by highly altered and sheared Nicola volcanic rocks that are cut by quartz-diorite, andesite-basalt, diabase-lamprophyre and rhyolite. A major shear system trends through the property in a northerly direction and mineralized shears and veins trend west, northwest and northeast. The complex nature of the faulting and extensive alteration suggests a highly active tectonic and hydrothermal environment.

Mineralization consists dominantly of hematite, pyrite, chalcopyrite and bornite with elevated values of gold, silver, mercury and antimony; sphalerite and galena occur locally.

Dominant west-northwest trending copper mineralization appears to be associated with a particular phase of structural deformation. Silicification, lead-zinc and gold-mercury mineralization appear to have different trends.

Several samples contain elevated values of gold, copper, silver, lead, zinc, and mercury.

Conclusions

The Sun property contains chlorite-epidote-carbonate altered Nicola Group augite-olivine prophyritic basaltic volcanic rocks. These are cut by fine to medium grained andesite-basaltic, lamprophyre-diabase and rhyolite dykes, and a quartz-diorite stock. Fracture controlled bornite, chalcopyrite and pyrite mineralization with associated gold and silver values occurs within the volcanic rocks. Erratic occurrences of copper to over 1% with up to 1890ppb gold appear in shears and veins from .1 to over a meter in width. Copper has been noted on the eastern, central, and western areas of the claim group. Elevated to anomalous mercury and antimony values occur with copper mineralization and also within area of intense silicification, quartz stockwork and breccia.

The property appears to contain extensive hydrothermal alteration and shearing developed within a highly active tectonic environment. Continuous veins and shears of copper mineralization may be dissected by strong regional structures, however the presence of elevated quantities of mercury, antimony, and anomalous gold and silver within proximity to the intrusions indicates potential for more recent epithermal-style mineralization.

References

Cockfield, W.E., 1948. Geology and Mineralogy of the Nicola Map area, British Columbia; Geological Survey of Canada Memoir 249.

Game, R.E., 1984, Economic Geology and Mineralogy of the Bornite Property, Savona, B.C., Unpublished B.A.Sc. thesis.

Preto, V.A., 1967. Nicola Volcanics, Plutons, and Mineral Deposits; Fieldtrip No. 5 Guidebook, GAC-SEG Annual Meeting 1977.

Game, R.E., 1985, Assessment Report on the Bornite Claims and Tenderfoot Crown Grant. Assessment Reports #11,354, #15,071.

Blann D.E. Assessment report on the Sun Claim Group. For Sun Joint Ventures. 1992,

Basil, Christopher. Geophysical Assessment Report on the Sun Claims for Rio Minerals Limited. 1996.

Statement of Qualifications:

I

Andrew W. Molnar

of

Vancouver, British Columbia

Certify that:

I have completed the Malispina Advanced Prospecting Course (1991)

I have been employed in various capacities in my profession for the past 12 years.

That the information, and conclusions in the report are based on personal work on the property during 1997, and a review of the pertinent literature.

Dated at Vancouver, British Columbia this 23 day of January, 1997.

_____.

Andrew W. Molnar.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Rio Minerals Inc. Canada PROJECT SUN File # 9800173

106 - 400 Smithe St., Vancouver BC V6B 5E4 Submitted by: Ed Ronyecz

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
7826	1	41044	6	123	50.1	317	51	1013	6.38	12	<8	<2	<2	53	4.9	<3	31	264	1.99	.105	3	578	6.84	77	.01	5	3.52	.04	.02	<2	<5	<1	96
7827	9	58910	20	92	44.4	257	41	986	6.85	5	<8	<2	<2	46	7.1	<3	<3	249	2.01	.071	3	495	6.08	21	.01	6	3.76	.03	.02	<2	<5	1	108
7828	<1	446	<3	34	.6	554	43	571	3.63	<2	<8	<2	<2	107	1.0	<3	<3	76	1.05	.101	2	499	8.17	174	.14	6	3.06	.28	1.53	2	<5	1	6
7829	6	667	13	105	.5	13	15	800	4.90	19	<8	<2	4	88	1.1	<3	<3	151	1.94	.245	35	10	2.12	270	.50	6	2.47	1.40	.67	<2	<5	4	2
7830	<1	50	3	32	<.3	82	20	410	3.55	14	<8	<2	<2	283	1.0	<3	<3	55	4.22	.065	5	86	2.56	185	.19	6	1.12	.11	.06	2	<5	<1	1
7831	<1	3625	<3	58	3.0	17	21	1524	5.52	4	<8	<2	<2	106	1.3	<3	<3	233	4.99	.137	12	15	4.88	535	.02	4	1.36	.07	.05	<2	<5	<1	5
7832	<1	42	<3	32	<.3	579	42	1013	3.11	6	<8	<2	<2	175	.7	3	<3	47	3.83	.033	1	219	12.41	611	.01	12	.23	.03	.18	<2	<5	1	1
7833	1	24876	<3	80	17.4	250	45	975	6.01	286	<8	<2	<2	82	4.9	50	8	227	2.89	.098	3	451	5.65	51	.02	4	2.45	.04	.04	<2	<5	22	215
7834	119	11475	13	79	33.9	184	36	894	5.75	38	<8	<2	<2	89	8.6	12	11	209	3.54	.083	3	329	5.06	226	.02	5	2.34	.04	.05	<2	<5	6	1890
7835	<1	6617	4	68	6.0	289	32	1050	4.00	6	9	<2	<2	330	2.5	<3	10	145	7.45	.098	2	533	4.43	62	.02	<3	2.43	.03	.02	2	<5	<1	37
7836	1	243	<3	50	.4	644	48	1388	4.32	6	<8	<2	<2	406	1.8	<3	3	112	8.02	.067	3	955	8.57	130	.02	14	2.15	.03	.11	<2	<5	1	14
7837	9	330	65	102	1.6	59	13	462	1.39	52	<8	<2	<2	33	4.2	30	<3	47	1.65	.014	1	70	.77	50	<.01	3	.51	.01	.06	4	<5	1	61
7838	38	143	6	16	.3	213	40	227	1.93	465	<8	<2	<2	73	.2	27	<3	39	.17	.009	<1	118	.32	264	<.01	9	.45	<.01	.14	<2	<5	844	5
7839	3	37	<3	10	<.3	58	6	46	.40	19	<8	<2	<2	20	.2	8	<3	9	.08	.002	<1	86	.19	17	<.01	7	.25	<.01	.05	2	<5	277	6
7840	<1	1655	8	46	1.1	91	15	957	3.01	216	<8	<2	<2	73	.8	488	<3	63	7.06	.007	1	16	3.01	603	<.01	5	.09	.01	.02	4	<5	765	4
7841	2	111	30	74	<.3	101	23	1669	3.65	51	<8	<2	<2	292	2.7	54	<3	194	16.13	.038	3	73	5.86	104	<.01	12	.87	.01	.12	2	<5	6	11
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RE 7842	1	108	25	79	.3	60	18	1937	3.09	73	<8	<2	<2	279	2.2	60	<3	257	18.97	.026	1	16	4.80	194	<.01	11	.20	.01	.12	8	<5	5	26
7843	1	12	8	31	<.3	17	5	239	1.24	<2	<8	<2	<2	67	.2	24	<3	13	2.55	.005	1	13	1.03	904	<.01	8	.08	.01	.06	4	<5	773	2
7844	1	9	20	134	<.3	289	21	1082	2.70	9	<8	<2	<2	508	1.1	35	<3	34	10.24	.027	4	95	5.76	226	<.01	12	.22	.01	.14	3	<5	99	81
7845	1	8	<3	32	<.3	189	21	2134	2.78	10	<8	<2	<2	333	1.2	<3	<3	44	17.15	.016	4	78	7.52	1423	<.01	7	.24	.02	.07	<2	<5	2	3
7846	<1	9	<3	26	<.3	481	43	1363	2.88	7	<8	<2	<2	287	.7	<3	<3	43	5.47	.047	1	267	11.44	99	<.01	11	.22	.02	.20	<2	<5	<1	2
STANDARD C3/AU-R	25	65	30	169	5.8	36	12	768	3.41	57	15	2	18	30	23.9	17	23	80	.59	.087	18	166	.65	156	.10	19	1.88	.04	.17	19	<5	2	500
STANDARD G-1	2	14	3	50	<.3	8	4	596	2.16	3	<8	<2	5	74	.2	<3	<3	43	.65	.084	8	85	.71	265	.15	4	1.08	.06	.51	<2	<5	<1	14

22 samples

1GP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: ROCK AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JAN 19 1998 DATE REPORT MAILED: Jan 27/98 SIGNED BY. C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

** TOTAL PAGE.002 **

Data FA

GEOPHYSICAL AND GEOLOGICAL ASSESSMENT REPORT

ON THE

SUN PROPERTY
TENURE # 333439, 333440

KAMLOOPS MINING DIVISION

LATITUDE 50 48' NORTH
LONGITUDE 120 45.5' EAST

NTS 92I/15

BY
ED RONYCZ / CHRISTOPHER BASIL / ANDREW MOLNAR
COAST MOUNTAIN GEOLOGICAL LTD.
1680-650 WEST GEORGIA STREET
VANCOUVER, B.C.
V6B 4N9

MARCH 1998
WORK PERMIT No: KAM 97 1500303-65
PROSPECTOR ASSISTANCE PROGRAM #97-98-P41

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SUMMARY

The Sun property is comprised of 30 contiguous claim units on the north side of Kamloops Lake, at Copper Creek, in the Kamloops Mining Division. The Afton copper-gold porphyry mine lies 17 kilometers to the south-southeast. The claims have a history of mercury mining and drift and shaft prospection into copper and gold mineralization. In December 1997, a program entailing 33 kilometers of gridding, road access repair, geological sampling and 32 kilometers of magnetometer and VLF-EM survey was conducted.

Geologic sampling of shear hosted copper occurrences yielded values from 0.6% to 5.8% Cu in excess of 0.5 meters width along 100 meters strike length of old workings. Elevated mercury values up to 844 ppm were returned from outcrops near the historic mercury workings.

The magnetometer survey results helped delineate the overburdened obscured contact between the regionally mapped Cretaceous or Tertiary conglomerate/sandstone unit to the west from the basalt/serpentinized volcanic unit to the east.

The VLF-EM survey showed a series of generally N-S to NW-SE trending anomalies corresponding to cultural features, lithological contacts and structures. Of potential interest are a grouping of converging conductive features coincident with the high copper values returned from the sampling program.

Further work to evaluate potential economic targets on the property is recommended.

INTRODUCTION

The Sun claims are comprised of 30 contiguous claim units currently held by Andrew W. Molnar of Vancouver, B.C. Between September 1 and December 28, 1997 the central portion of the Sun 1 and Sun 2 claims was examined with a program entailing 33 kilometers of gridding, road access repair, geologic sampling, and 32 kilometers of magnetometer and VLF-EM surveys.

TABLE 1

CLAIM INFORMATION

CLAIM	RECORD #	# UNITS	EXPIRY DATE
SUN 1	333439	10	January 12, 2001*
SUN 2	333440	20	January 12, 2001*
	TOTAL UNITS	30	

*Pending acceptance of this report.
The claims are recorded in the Kamloops Mining Division.

LOCATION/ACCESS/INFRASTRUCTURE

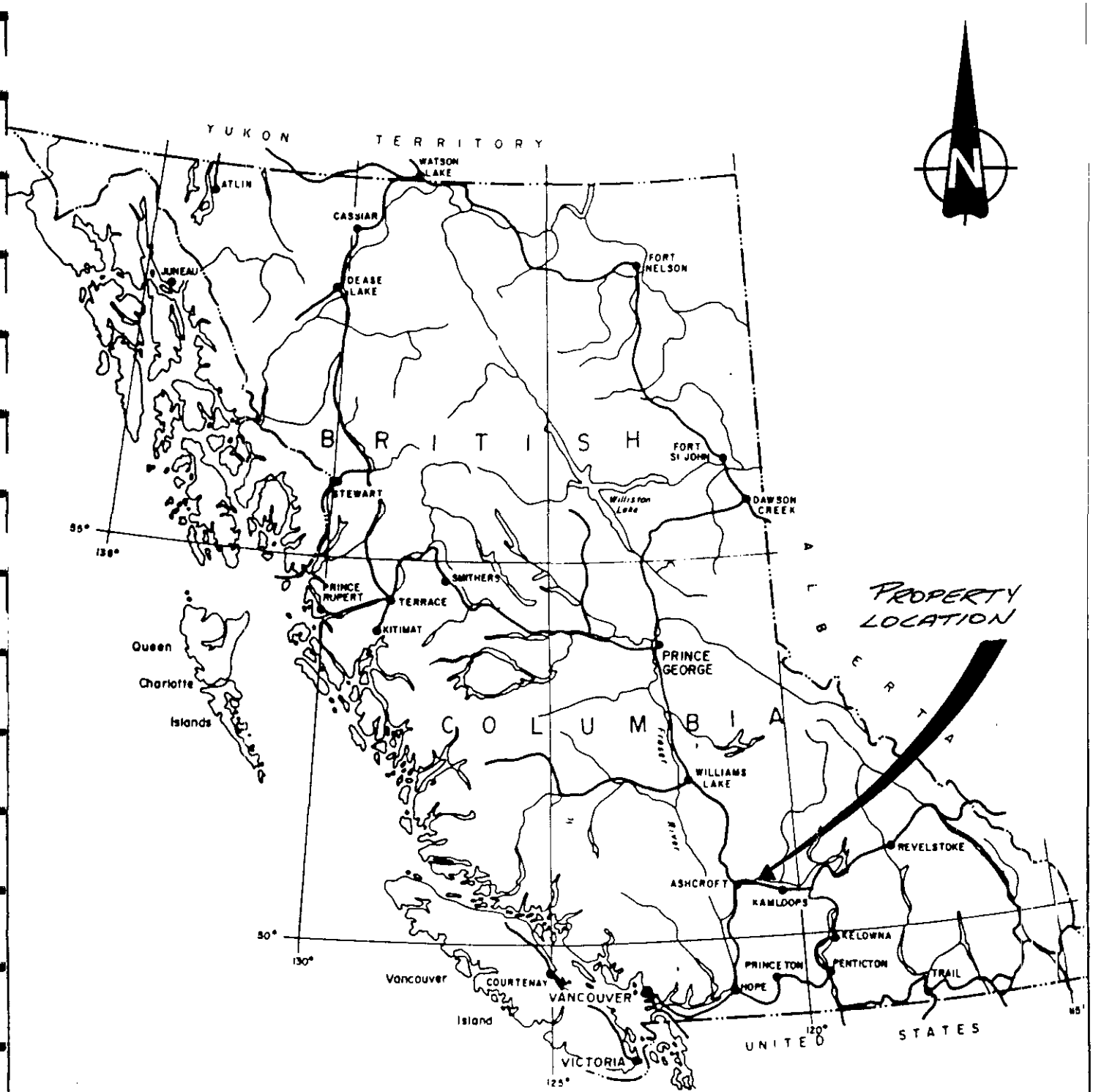
The Sun Property is located on the north side of Kamloops Lake (Thompson River) at Copper Creek, 20 kilometres west-northwest of Kamloops, B.C. A Canadian National Rail line with siding runs along the north side of the Thompson River from Savona, through the property, to Kamloops. Good condition all-weather roads from Highway #1 at Savona and North Kamloops connect to the property via the Carabine Creek road to Copper Creek. Power and telephone lines are located on the property at Copper Creek, and water is available from Carabine Creek that runs through the property.

GENERAL GEOGRAPHY

The Sun Property covers an area of moderately rolling hills transected by north trending valleys. The topography ranges from approximately 1200 to 2500 feet in elevation. The area is generally dry, with open pine forest at higher elevations. Precipitation is limited to about 20 inches per year, most of which occurs in the winter months between November and March.

HISTORY

The Sun Property has been explored since the late 1890s, with copper and mercury receiving the most attention. A 200 x 450 metre crown granted mineral claim called the Tenderfoot was staked in 1889



SUN CLAIMS

PROPERTY LOCATION

KAMLOOPS MINING DIVISION

NTS 92I/15 FIGURE 1

to cover an outcrop containing bornite mineralization. Intermittent work in the area continued until Falsaise Lake Mines Ltd. performed prospecting, soil sampling and diamond drilling (Chisolm, 1972).

Roccoco Resources Ltd. performed soil geochemistry, VLF-EM geophysics, percussion and diamond drilling in the vicinity of the Tenderfoot showing between 1982 and 1985.

TABLE 2

SUMMARY OF DRILLING RESULTS (1982-1983)

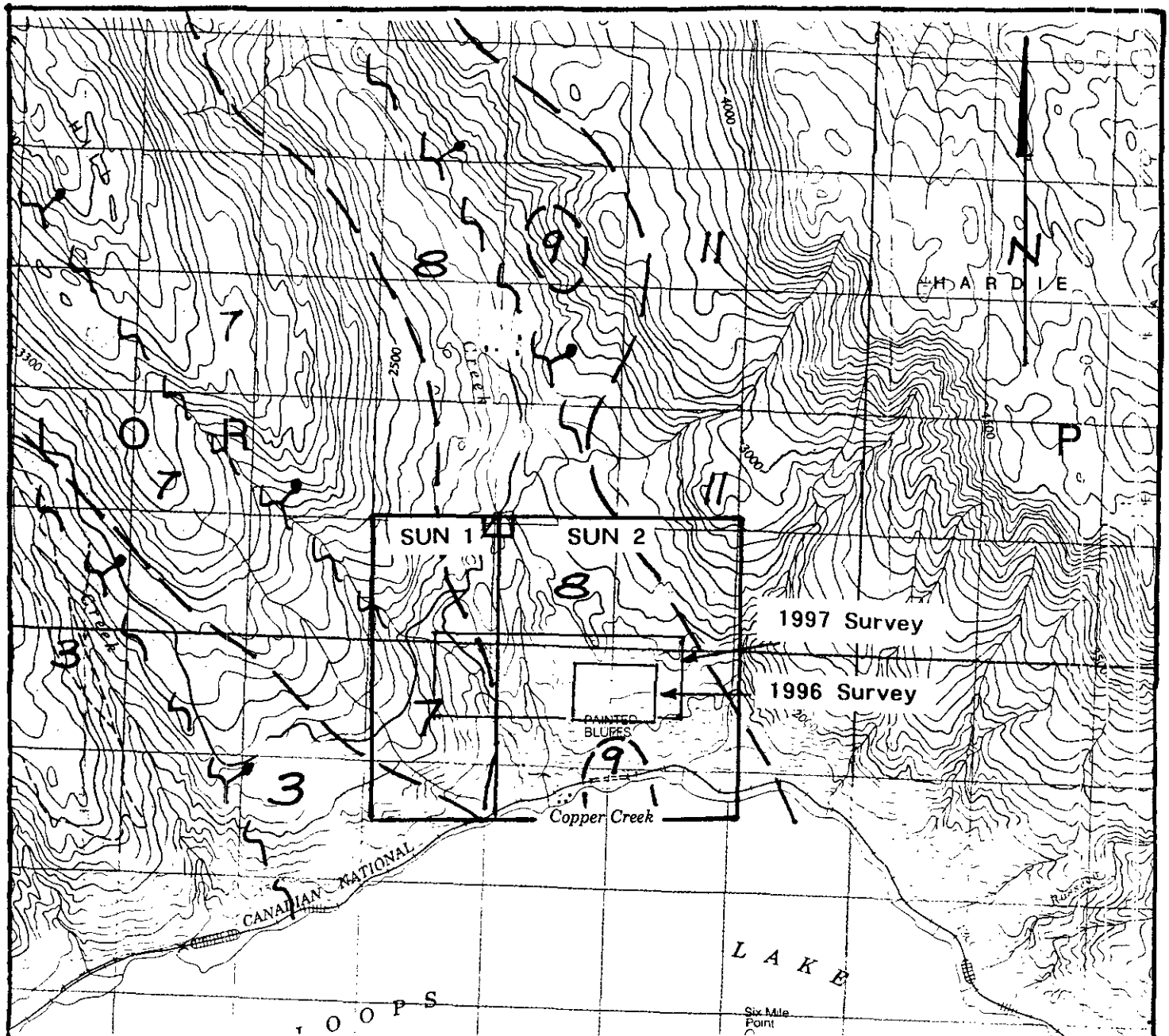
HOLE	TOTAL DEPTH (ft)	FROM (ft)	TO (ft)	INTERSECTION WIDTH	Cu%	Au (oz/t)	Ag (oz/t)
P82-1	100	10	100	90	0.44	0.004	0.12
P82-2	105	10	105	95	0.82	0.005	0.18
P82-3	35	15	35	20	0.06	0.002	0.02
P82-4	135	10	135	125	0.30	0.002	0.08
*DDH 83-1	200	42	200	158	~0.31	~0.001	?
*DDH 83-2	204	32	100	68	~0.72	~0.001	~0.23

*DDH 83-3 no samples, minor mineralization noted
*DDH 83-4 no samples, minor mineralization noted

A more detailed description of these work programs may be found in assessment report #11,345 and #15,071.

In 1992, a program of mapping and sampling was undertaken.. Grab samples from the adit dump returned values as high as 18,325 ppm copper, 667 ppb gold, 15.1 ppm silver, while a 2 meter sample from a stockwork zone southwest of the adit returned 10,786 ppm copper, 214 ppb gold, 8.9 ppm silver and 236,000 ppb mercury. The variations in vein mineralogy, and crosscutting structures noted in this program suggest several periods of mineralization has occurred.

In 1996, a resistivity survey was conducted over the central portion of the Sun 2 claim. This survey delineated a NW-SE trending high resistivity feature flanking the area of shear hosted copper mineralization Results from the 1997 VLF-EM survey are consistent with and correspond well to those results.



LEGEND

KAMLOOPS GROUP

12 Tranquille Beds: conglomerate, sandstone, tuff, minor coal
11 Rhyolite, andesite, basalt, tuffs, agglomerate
10 Coldwater Beds: conglomerate, sandstone

CRETACEOUS OR TERTIARY

9 Copper Creek Intrusions: granite, granodiorite, granite porphyry
8 Andesite basalt, picrite, agglomerate, breccia, tuff, minor conglomerate, sandstone
7 Conglomerate, sandstone and shale

UPPER TRIASSIC

3 Nicola Group: greenstone, andesite-basalt, agglomerate, breccia, minor argillite, limestone, conglomerate

Thrust fault (ball on downthrown side)

SUN PROPERTY
LOCATION & REGIONAL GEOLOGY

92I/15 FIGURE 2

1:50,000

0 0.5 1 KMS 2 3

REGIONAL GEOLOGY

The area north of Kamloops Lake is underlain by rocks of Upper Triassic to Tertiary age. The following rocks occur in the Sun Property area (after Game, 1985). (Figure 2)

Kamloops Group

Dewdrop Flats Formation
porphyritic basalt, breccia, andesite and agglomerate

Tranquille Formation
conglomerate, sandstone, shale, tuff

Coldwater Formation
conglomerate, sandstone, shale, coal

Ashcroft Formation
coarse conglomerate (+minor sandstone)

Post-Lower Cretaceous

Copper Creek Intrusions
granite, granodiorite, granite porphyry

Lower Cretaceous-Upper Triassic

Nicola Group
andesite, basalt, picrite, serpentine, tuffs, augite porphyry
conglomerate, sandstone, argillite, limestone

The Afton copper-gold porphyry mine is located 17 kilometres to the east-southeast of the property and an old mercury mine occurs along the western border of the claim. Prospects in the area include gold-silver epithermal style mineralization and numerous mercury showings.

For a more detailed review of the regional geology, works of Cockfield, 1948, or Preto, 1977 can be referred to.

PROPERTY GEOLOGY

The Sun Property is predominantly underlain by porphyritic augite and olivene basalt that are cut by various andesite to basaltic dykes and a granodiorite-quartz-diorite stock. Conglomerate and minor sandstone of the Kamloops Group overlie the volcanic rocks to the west of the property. Detailed petrographic analyses of several rock types was performed by Game, 1983, and is summarized below: (Figure 3)

porphyritic augite basalt

Reddish or green porphyritic rock composed of augite crystals in a fine grained plagioclase-rich groundmass. The plagioclase has undergone extensive alteration to sericite and saussurite. The phenocrysts are stained reddish with hematite. Calcite and serpentine fill fractures and vugs in the matrix.

porphyritic olivene basalt (Picrite porphyry)

Hard, dark green or reddish phenocrysts in a soft, soapy, light green aphanitic groundmass. Composed of sericite-saussurite altered plagioclase, olivene and calcite. The olivene is almost completely altered to serpentine, calcite and hematite.

Andesite (dykes)

Fine grained plagioclase groundmass with secondary vein materials of quartz, calcite and chlorite.

biotite diorite, quartz diorite

Light grey, phaneritic biotite quartz- diorite. Weakly sericitic euhedral plagioclase crystals, biotite, magnetite and pyrite with crosscutting calcite veins. Biotite exhibits both primary and secondary phases (Game, 1983).

To the west of the quartz diorite intrusion, biotite lamprophyre, or diabase, and rhyolite occurs. Several areas of the property contain highly serpentinous-clay altered volcanic rocks.

STRUCTURES

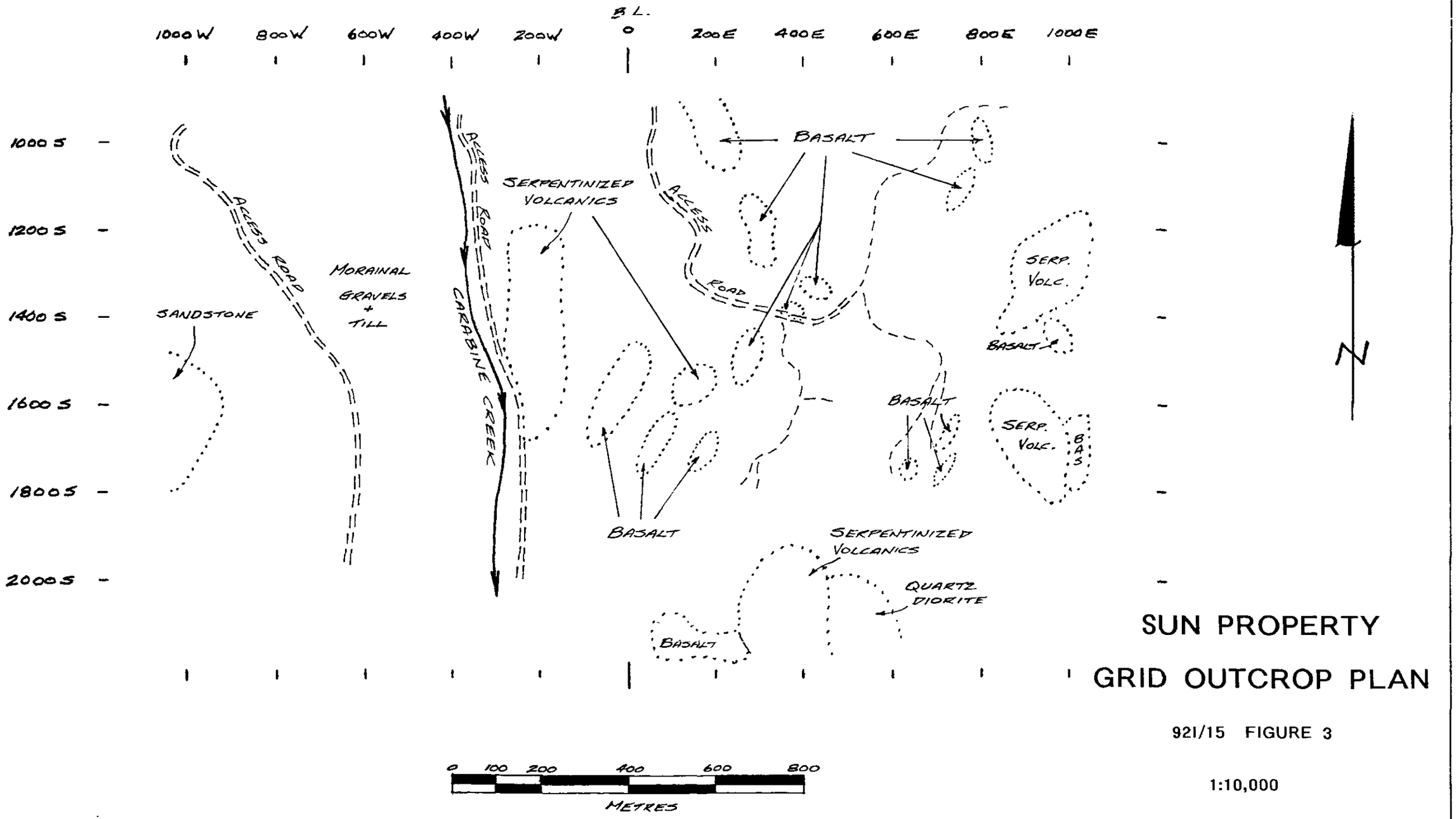
The bedded rocks trend 120-140°/ 15-50°NE and are cut by structures of various orientations. Strong 270-360°/subvertical shears are cut by 020-050°/40-70°W faults and fractures. Measurements by Blann, 1992, of several north trending/west-dipping faults indicate right-lateral reverse movement with a 15-30° south rake.

Andesite-basalt dykes trend 086°/70°S to 120°/90°, the basalt-lamprophyre dyke trends 020°/60°W and the rhyolite dyke trends 060°/80°E.

ALTERATION AND MINERALIZATION

The volcanic rocks are moderately to strongly chlorite-epidote-saussurite altered throughout the property with serpentine and silicified zones. Secondary biotite alteration has converted to chlorite (Game, 1985). Mineralization consisting of bornite, chalcopyrite and malachite occurs within shears trending northwest and are cut by northeast trending fractures. The mineralization occurs as massive veinlets and veins in shears from 0.1 to 2 metres in width with disseminations and smears along microfractures and veinlets. The gangue consists of quartz, carbonate, chlorite, epidote-saussurite and clays. Gypsum, anhydrite and possibly fluorite and mariposite occur with quartz-carbonate veins and chalcopyrite- bornite mineralization (Blann, 1992).

Rock sample 7827 is from a 70 cm wide shear above an old adit which contains 58,910 ppm copper, 44.4 ppm silver and 108 ppb gold. Rock sample 7831 is from a steeply west dipping quartz



SUN PROPERTY

GRID OUTCROP PLAN

92I/15 FIGURE 3

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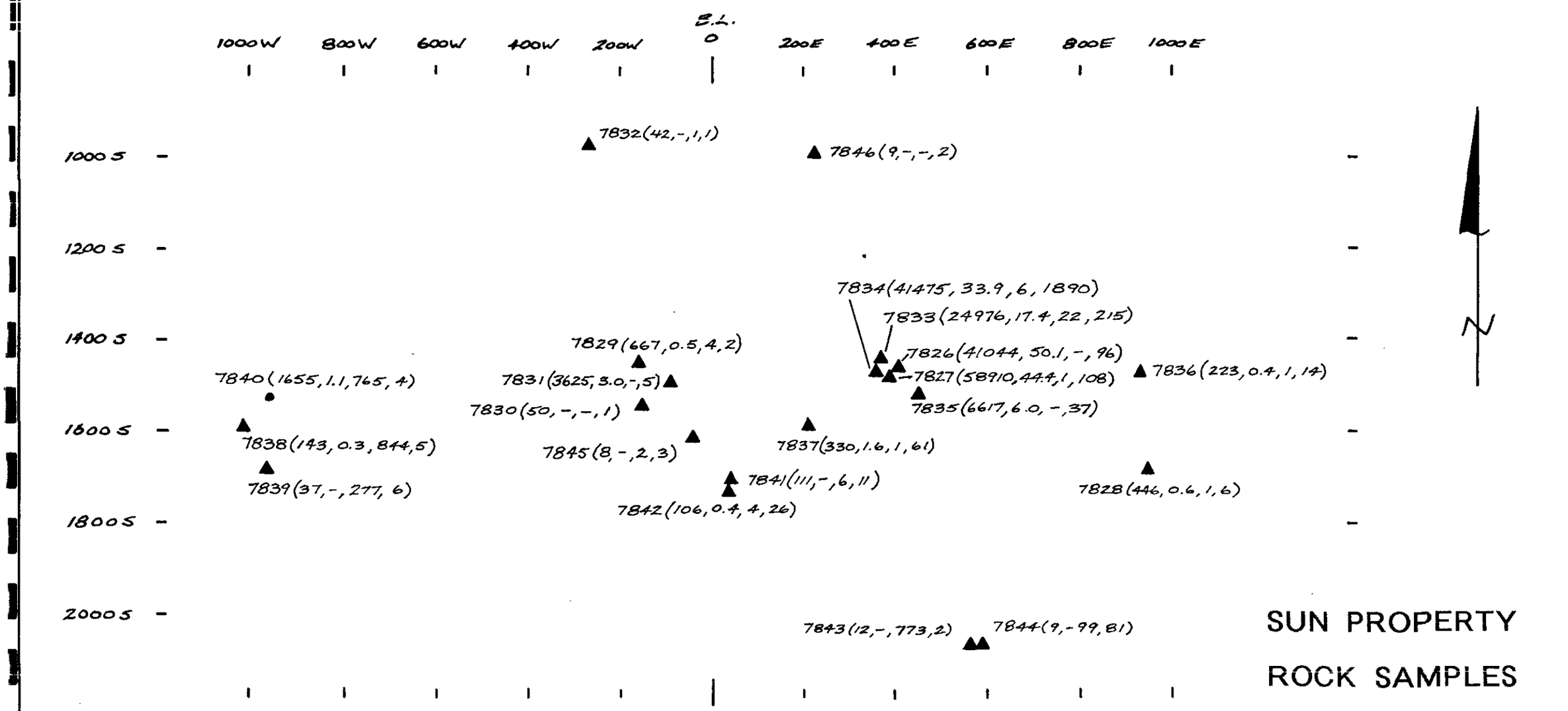


SUN PROPERTY

ROCK SAMPLES

92I/15 FIGURE 4

1:10,000

carbonate vein assaying 3625 ppm copper. A 0.5 metre sample, 7844, across the eastern contact of the quartz diorite intrusion assayed 9 ppm copper, 99 ppm mercury and 81 ppb gold. A sample, 7840, of a quartz vein contained 1655 ppm copper, 488 ppm antimony and 765 ppm mercury. Shears and veins throughout the property contain elevated copper (Cu), silver (Ag), arsenic (As), antimony (Sb), mercury (Hg) and gold (Au). (Figure 4)

1997 GEOPHYSICAL SURVEY

The 1997 magnetometer and VLF-EM survey was performed with an EDA mag/VLF field receiver in conjunction with an EDA magnetometer base station. Readings were taken at 12.5 meter intervals along the 32 kilometers of flagged and picketed lines. The magnetic diurnal variations were removed by processing the field with the base station data. The surveyed grid put in place during this program had its origin (0+00/0+00) at the 1E/0S ID Post of the Sun 2 claim. The Baseline ran due south from the origin. East-west lines were surveyed from the baseline, starting at 1000 S through 1600 S.

Magnetometer Survey

The total field magnetic values on the property ranged 2,600 nT, from 56,300 nT to 58,900 nT. The western third of the surveyed area, from 300W to 1000W, exhibited a relatively low and flat magnetic response. This magnetic domain contrasts sharply with the higher magnetics exhibited to the east and is consistent with an interpreted contact between the sandstone/sediment unit on the east the basalt/volcanic unit to the west.(Figures G1a, G1b)

The remaining two thirds of the property to the east is typified by predominantly higher magnetics with significantly greater local variation. A number of magnetic highs occur as isolated features or along roughly N-S trends. Mapping of the limited outcrop in this region showed serpentinized volcanics and basalt, however, no strong correlation between the mag highs and either rock type was exhibited.

VLF-EM Survey

The VLF-EM survey primarily utilized the transmitting station in Seattle, Washington, as its signal strength and geometry was favourable for coupling with postulated N-S structures. Over portions of

the grid the transmitting stations in Cutler Maine and Hawaii were also utilized to test for other crosscutting structures, however the orientation of the grid was most suitable for the Seattle signal.

A number of N-S and NW-SE trending anomalies were delineated by the survey. (Figures G2a-d) Three sets of anomalies, (A-C), are labelled on the VLF figures. Anomaly A appears like a conductive, narrow, near surface body, and subsequent research by the author determined that this is due to a buried water pipeline supplying water for a ranch north of the property.

The anomalous features 'B' are related to the flank of a mapped serpentinized volcanic unit and may represent the contrasting conductivity of this unit to the sandstones to the west and basalts to the east. The conductive features 'C' are of interest as they are coincident with the copper values returned from the sampling program and may represent structures and shears controlling this mineralization.

DISCUSSION

In the extreme western portion of the grid is an area of moderately dipping sandstone trending to the north- northeast which hosted some mercury workings of at the turn of the century. Massive quartz, sample 7840, was found near these workings which assayed 1655 ppm copper and 765 ppm mercury. Large conglomerate boulders were also found in the area and represent a unit believed to be younger than the sandstone. Between the western end of the grid and Carabine Creek is an irregular hummocky topography of morainal gravels and till.

The grid from Carabine Creek through the eastern edge of the grid consists of a thick sequence of porphyritic olivine basalt grading into a porphyritic augite basalt with some small interbedded tuffs. Hosted in the basalt are old workings in the center of the property lining up in a 100 meter long northwesterly trend and assay values from 0.6% to 5.8% copper in the shear material. Northwesterly trending multiply layered quartz- carbonate veins form an epithermal stockwork past the height of land to the west of the old workings. The ridge to the east of Carabine Creek is cut by moderately east dipping, north- northeast trending andesite dykes irregularly coated with traces of malachite on calcite veinlets. Elsewhere on the property the andesite dykes have a less uniform orientation while crosscutting the basalt. To the south is a quartz diorite intrusion with quartz veins throughout as well as stockwork containing elevated levels of mercury at the contact with the basalt, sample 7844.

There are at least two episodes of mineralization postulated for this property with the old workings hosted in the basalt containing malachite, bornite and chalcopyrite show a shear hosted epithermal type. The multiply layered (chalcedonic?) series of quartz- carbonate veins hosted in the basalt to the west of the old workings show an epithermal type stockwork. The other episode of mineralization is at the extreme west end of the grid with sandstone hosted cinnabar in old workings as well as massive quartz containing azurite, malachite and cinnabar in the area. Crosscutting veins, northwesterly and northeasterly trending shears and fractures suggest several periods of mineralization for the property.

CONCLUSIONS

The Sun Property is dominated by a thick sequence of chlorite-carbonate altered Nicola Group grading from a lower olivene to an upper augite porphyritic basalt. These basalts are cut by fine to medium grained andesitic-basaltic, lamprophyre-diabase and rhyolitic dykes and a quartz diorite stock in the south. Shear hoasted surficial occurrences of copper ranging from 0.6% to 5.8% in excess of 0.5m width along 100m strike length of old workings were sampled. Elevated mercury values occurred near the old mercury workings as well as near the quartz diorite stock.

The Sun Property contains low sulfidation hydrothermal alteration and shearing developed within an active tectonic environment. Regional structures tend to truncate surface expressions of veins and shears. Elevated values of antimony and mercury within the proximity of the intrusion indicates potential for an epithermal type mineralization.

RECOMMENDATIONS

Further work on the property should consist of geophysics over the areas of the property not covered by this program, more detailed mapping and sampling of the old workings as well as a property wide sampling program. Economic targets to be evaluated are shear hosted copper deposits, epithermal gold veins to the west of the old copper workings and sediment hosted mercury deposits in the west of the property.

REFERENCES

Basil, C.M., 1997 Assessment Report on the Sun Property

Blann, D.E., 1992: Assessment Report on the Sun Property.

Cockfield, W.E., 1948: Geology and Mineralogy of the Nicola Map-Area, British Columbia; Geological Survey of Canada, Memoir 249.

Game, R.E., 1984: Economic Geology and Mineralogy of the Bornite Property, Savona, B.C., Unpublished B.A.Sc. thesis.

Game, R.E., 1985: Assessment Report on the Bornite Claims and Tenderfoot Crown Grant. Assessment Reports #11,354, #15,071.

Preto, V.A., 1967: Nicola volcanics, Plutons, and Mineral Deposits; Fieldtrip No. 5 Guidebook,, GAC-SEG Annual Meeting, 1977.

APPENDIX 2

STATEMENT OF QUALIFICATIONS

I, EDWARD A. RONYECZ, of 3668 West 19th Avenue, in the City of Vancouver, in the Province of British Columbia, hereby certify:

1. THAT I am a geologist residing at 3668 West 19th Avenue, in the City of Vancouver, in the Province of British Columbia.

2. THAT I obtained a Bachelor of Science degree in Geology from the University of British Columbia, in the city of Vancouver, Canada, in 1993.

3. THAT I have been practicing my profession as a geologist in North and South America, both permanently since 1993 and seasonally since 1991.

4. THAT the information, conclusions and recommendations in the report are based on personal work on the property, and a review of pertinent literature.

Dated in Vancouver, British Columbia, this 11th day of March 1998.

Edward Ronyecz

Edward A. Ronyecz, B.Sc. (Geol.)

STATEMENT OF QUALIFICATIONS

I, CHRISTOPHER M. BASIL, of 403-1080 Broughton Street, Vancouver British Columbia, DO HEREBY CERTIFY:

1) That I have been employed by Coast Mountain Geological LTD since 1988 as a Geophysical Operator and Project Manager.

2) That I majored in Physics at McGill University, Montreal, Quebec from 1977 to 1981.

3) That I completed the Advanced Prospecting Course through Malaspina College.

4) That I have been practicing my profession for 17 years.

5) That the information, conclusions and recommendations in the report are based on personal work on the property, and a review of pertinent literature.

Dated at Vancouver, British Columbia this 19th day of March, 1998.

Christopher Basil
Vice President, Coast Mountain Geological Ltd.

STATEMENT OF QUALIFICATIONS

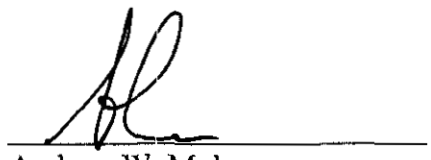
I ANDREW W. MOLNAR of Vancouver British Columbia do hereby certify:

1. I have completed the Malaspina Advanced Prospecting Course (1991)

2. I have been employed in various capacities in my profession for the past 12 years

3. That the information and conclusions in this report are based on personal work on the property during 1997, and a review of the pertinent literature.

Dated at Vancouver, British Columbia this 12th day of March, 1998



Andrew W. Molnar

APPENDIX 3

SUN PROPERTY PROJECT

ROCK HAND SPECIMENS - FIELD DESCRIPTIONS

SAMPLE NO.	DESCRIPTIONS
7826	Fault gouge (124°/83°N) in basalt, 50 cm outcrop chip sample @ 1460S, 405E. Fine grained, light green and brownish-gray intermixed groundmass, moderate hardness, semi - competent, surficial plating of malachite, some minor quartz crystals, non - magnetic.
7827	Fault gouge (121°/86°N) in basalt, 70 cm outcrop chip sample @ 1470S, 395E. Fine grained, light green and brownish-gray intermixed groundmass, moderate hardness, semi - competent, surficial plating of malachite, non- magnetic.
7828	Serpentinized volcanics (Painted Bluffs), 25 cm outcrop sample @ 1680S, 950E. Very fine grained, dark green groundmass, moderate hardness, semi- competent, primarily altered to serpentine, trace magnetic, internal layering at (061°/75°SE).
7829	Andesite dyke (158°/55°E) in serpentinized volcanics, 50 cm outcrop sample @ 1450S, 160W. Fine grained, dark gray groundmass, hard, very competent, quartz carbonate on fracture surfaces, non-magnetic.
7830	Silicified andesite dyke (173°/70°E) in serpentinized volcanics, 50 cm outcrop sample @ 1540S, 150W. Very fine grained, pink to purple groundmass, very hard, very competent, calcite and epidote on fracture surfaces, dendritic manganese oxide, non- magnetic.
7831	Quartz carbonate vein (193°/75°W) in basalt dyke (178°/35°E), 30 cm outcrop sample @ 1490S, 90W. Aphanitic, brownish white groundmass, hard, competent, malachite and epidote present on surfaces, siderite present, magnetic, moderate vein intensity.
7832	Basalt, 40 cm outcrop sample @ 985S, 275W. Aphanitic, pale green to light brown groundmass, moderate hardness, semi- competent, primarily altered to serpentine, non- magnetic, crosscutting layered calcite and quartz vein stockwork.

SUN PROPERTY PROJECT

ROCK HAND SPECIMENS - FIELD DESCRIPTIONS

SAMPLE NO.	DESCRIPTIONS
7833	Fault gouge in basalt (surface extension of sample 7826), 20 cm outcrop chip sample @ 1455S, 375E. Fine grained, light green and brownish-gray intermixed groundmass, moderate hardness, semi - competent, surficial plating of malachite, some crosscutting veinlets, non - magnetic.
7834	Fault gouge in basalt (surface extension of sample 7827), 50 cm outcrop chip sample @ 1460S, 370E. Fine grained, light green and brownish-gray intermixed groundmass, moderate hardness, semi - competent, surficial plating of malachite, possible chalcopyrite, non - magnetic.
7835	Quartz carbonate vein (122°/57°SW) in basalt, 20 cm outcrop chip sample @ 1510S, 455E. Coarse grained, white veins crosscutting medium to dark green groundmass, hard, competent, clumps of bornite exclusively in veins, malachite associated with bornite as well as gouge material, non- magnetic.
7836	Porphyry basalt, 1 m outcrop chip sample @ 1475S, 925E. Fine grained, purple- green groundmass, moderate hardness, competent, subparallel layering (082°/84°N) within unit, trace malachite, non - magnetic.
7837	Quartz vein (139°/64°SW) in porphyry basalt, 15 cm outcrop chip sample @ 1585S, 210E. Medium grained, white intergrown layered quartz crystals, very hard, competent, possible trace of chalcopyrite, vugs present, non- magnetic.
7838	Sandstone (026°/39°SE), 15 cm outcrop chip sample @ 1590S, 1010W. Fine to medium grained, light brown to tan coloured, hard, competent, surficial manganese oxide coatings, trace cinnabar, non- magnetic.
7839	Sandstone, 50 cm outcrop chip sample @ 1680S, 960W. Very fine grained, serpentinized/chloritized? pale green groundmass, moderate hardness, competent, quartz veinlets through rock, some vugs, hematite stained, non- magnetic.

SUN PROPERTY PROJECT

ROCK HAND SPECIMENS - FIELD DESCRIPTIONS

7840	Quartz, 60 cm float sample @ 1525S, 950W. Medium to coarse grained, light brown tinted white groundmass, very hard, very competent, surficial malachite and azurite, possible chalcopyrite, non- magnetic.
7841	Siderite veins (112°/69°N), 15 cm outcrop chip sample @ 1705S, 40E. Fine to coarse grained, medium brown layered groundmass, hard, moderately competent, bladed crystals along exposed layers (vugs?), trace magnetic.
7842	Siderite veins (098°/74°S), 15 cm outcrop chip sample @ 1715S, 40E. Fine to coarse grained, medium brown layered groundmass, hard, moderately competent, bladed crystals along exposed layers (vugs?), trace magnetic.
7843	Quartz vein in quartz diorite, 10 cm outcrop chip sample @ 2075S, 570E. Coarse grained, clear to white groundmass, very hard, competent, pale brown (hematite?) tinted portions near edges of veins, non- magnetic.
7844	Quartz diorite/Basalt contact, 50 cm outcrop chip sample @ 2075S, 580E. Aphanitic to fine grained, pale green to medium brown intermixed groundmass, hard, competent, serpentine altered, hematite present, non - magnetic.
7845	Quartz vein (072°/70°S) in basalt, 10 cm outcrop chip sample @ 1610S, 40W. Medium grained, light brown groundmass, hard, competent, trace light green mariposite? in vein, some calcite veinlets, non- magnetic, vein cuts between beds of basalt conglomerate and basalt.
7846	Serpentinized basalt, 60 cm outcrop sample @ 990S, 225E. Fine to medium grained, medium green to brown intermixed groundmass, moderately hard, competent, serpentine altered, hematite present, non- magnetic.

SUN PROPERTY
ROCK SAMPLES

Sample Number	Location	Description	Cu ppm	Ag ppm	As ppm	Sb ppm	Hg ppm	Au ppb
7826	1460S/405E	fault gauge in basalt	41,044	50.1	12	<3	<1	96
7827	1470S/395E	fault gauge in basalt	58,910	44.4	5	<3	1	108
7828	1680S/950E	painted bluffs	446	0.6	<2	<3	1	6
7829	1450S/160W	andesite dyke	667	0.5	19	<3	4	2
7830	1540S/150W	silicified andesite	50	<0.3	14	<3	<1	1
7831	1490S/90W	basalt, moderately veined	3,625	3.0	4	<3	<1	5
7832	985S/275W	basalt, trace malachite	42	<0.3	6	3	1	1
7833	1455S/375E	7826 extension	24,976	17.4	286	50	22	215
7834	1460S/370E	7827 extension (199 ppm Mo)	41,475	33.9	38	12	6	1,890
7835	1510S/455E	quartz carbonate vein in basalt	6,617	6.0	6	<3	<1	37
7836	1475S/925E	porphyry basalt, trace malachite	223	0.4	6	<3	1	14
7837	1585S/210E	porphyry basalt, trace malachite	330	1.6	52	30	1	61
7838	1590S/1010W	sandstone, trace manganese oxide	143	0.3	465	27	844	5
7839	1680S/960W	sandstone, trace malachite/azurite	37	<0.3	19	8	277	6
7840	1525S/950W	quartz float, malachite/azurite	1,655	1.1	216	488	765	4
7841	1705S/40E	siderite veins	111	<0.3	51	54	6	11
7842	1715S/40E	siderite veins	106	0.4	75	60	4	26
7843	2075S/570E	quartz vein in quartz diorite	12	<0.3	<2	24	773	2
7844	2075S/580E	quartz diorite/basalt contact	9	<0.3	9	35	99	81
7845	1610S/40W	basalt, trace malachite	8	<0.3	10	<3	2	3
7846	990S/225E	sepentinized basalt, tr. malachite	9	<0.3	7	<3	<1	2

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Rio Minerals Inc. Canada PROJECT SUN File # 98C0173

106 - 470 Smithe St., Vancouver BC V6B 5B4 Submitted by: Ed Konyecz

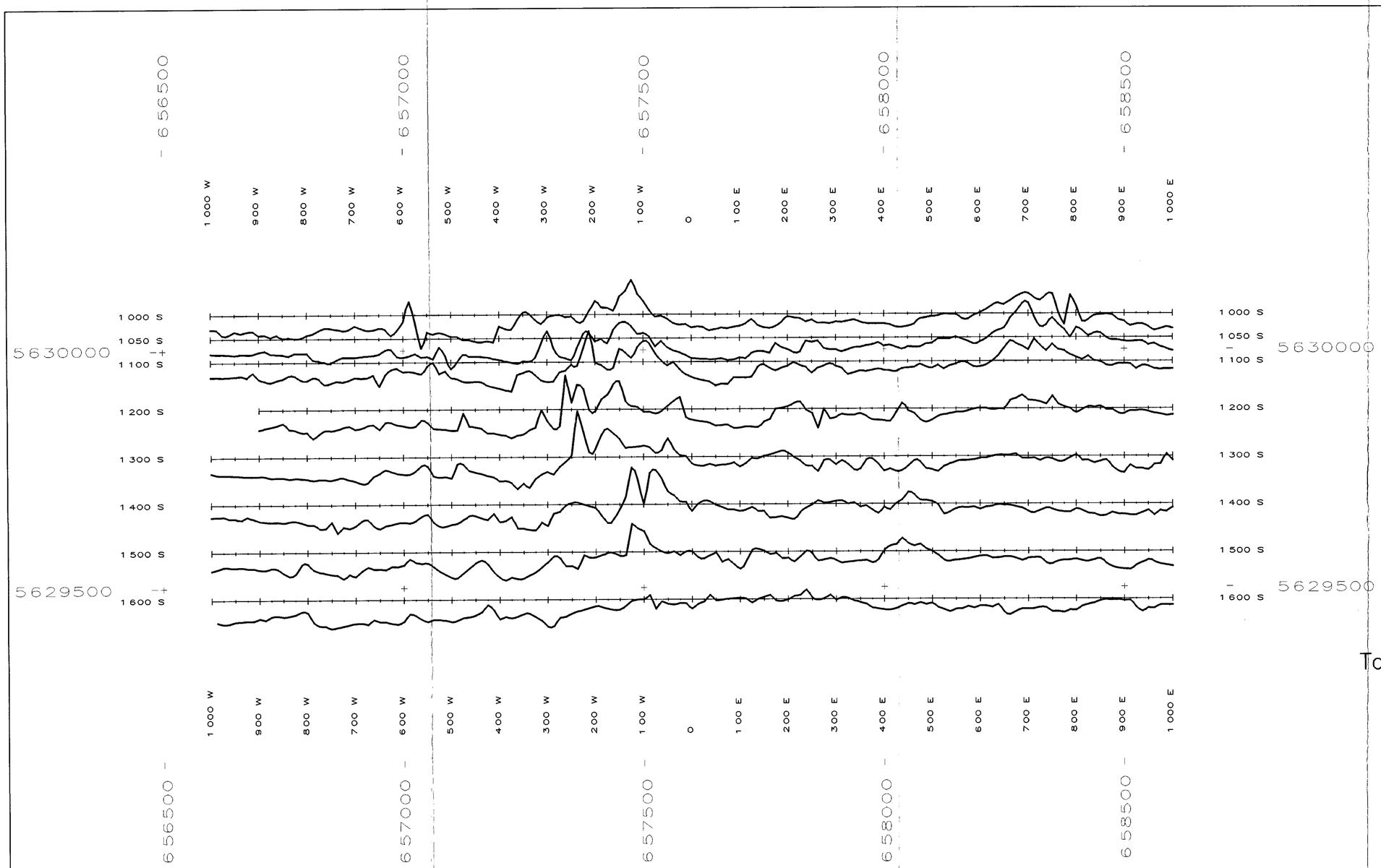
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Hg ppm	Au* ppb
7826	1	47044	6	123	53.1	317	51	1013	6.38	12	<8	<2	<2	53	4.9	<3	31	264	1.99	.105	3	578	5.84	77	.01	5	3.52	.04	.02	<2	<5	<1	96
7827	9	58910	20	92	44.4	257	41	986	6.85	5	<8	<2	<2	46	7.1	<3	<3	249	2.01	.071	3	495	5.08	21	.01	6	3.76	.03	.02	<2	<5	1	108
7828	<1	446	<3	34	.6	554	43	57'	3.63	<2	<8	<2	<2	107	1.0	<3	<3	76	1.05	.101	2	499	9.17	174	.14	6	3.06	.28	1.53	2	<5	1	6
7829	5	667	13	105	.5	13	15	800	4.90	19	<8	<2	4	88	1.1	<3	<3	151	1.94	.245	35	10	2.12	270	.50	6	2.47	1.40	.67	<2	<5	4	2
7830	<1	30	3	32	<.3	82	20	410	3.55	14	<8	<2	<2	283	1.0	<3	<3	55	4.22	.065	3	86	2.56	185	.19	6	1.'2	.11	.06	2	<5	<1	1
7831	<1	3625	<3	58	3.0	17	21	1524	5.52	4	<8	<2	<2	106	1.3	<3	<3	233	4.99	.137	12	'5	4.88	535	.02	4	1.36	.07	.05	<2	<5	<1	5
7832	<1	42	<3	32	<.3	579	42	1013	3.1'	6	<8	<2	<2	175	.7	3	<3	47	3.83	.033	1	2'9	12.41	61'	.01	12	.23	.03	.18	<2	<5	1	1
7833	1	24876	<3	80	17.4	250	45	975	5.0'	286	<8	<2	<2	82	4.9	50	8	227	2.89	.098	3	451	5.65	5'	.02	4	2.45	.04	.04	<2	<5	22	215
7834	119	41475	13	79	33.9	194	36	894	5.75	38	<8	<2	<2	89	8.6	12	11	209	3.54	.083	3	329	5.06	226	.02	5	2.34	.04	.05	<2	<5	6	1890
7835	<1	6617	4	68	6.0	289	32	1050	4.08	6	9	<2	<2	330	2.5	<3	10	145	7.45	.098	2	533	4.43	62	.02	<3	2.43	.03	.02	2	<5	<1	37
7836	1	243	<3	50	.4	644	43	1388	4.32	6	<8	<2	<2	406	1.8	<3	3	112	8.02	.067	3	955	8.57	130	.02	14	2.15	.03	.11	<2	<5	1	16
7837	9	330	65	102	1.6	59	13	462	1.39	52	<8	<2	<2	33	4.2	30	<3	47	1.65	.014	1	70	.77	50	<.01	3	.51	.01	.06	4	<5	1	61
7838	38	143	5	16	.3	213	43	227	1.93	465	<8	<2	<2	73	.2	27	<3	39	.17	.009	<1	118	.32	264	<.01	9	.65	<.01	.14	<2	<5	344	5
7839	3	37	<3	10	<.3	58	5	46	.40	19	<8	<2	<2	20	.2	8	<3	9	.08	.002	<1	86	.19	17	<.01	7	.25	<.01	.05	2	<5	277	6
7840	<1	1665	8	46	1.1	91	15	957	3.01	216	<8	<2	<2	73	.8	488	<3	63	7.06	.007	1	16	3.01	603	<.01	5	.09	.01	.02	4	<5	765	4
7841	2	111	30	74	<.3	101	23	1669	3.66	51	<8	<2	<2	292	2.7	54	<3	194	16.13	.038	3	73	5.86	104	<.01	12	.87	.01	.12	2	<5	6	11
7842	1	106	27	78	.4	59	18	1928	3.09	75	<8	<2	<2	277	2.2	55	<3	257	18.93	.026	1	17	4.80	187	<.01	11	.20	.01	.12	8	<5	4	21
RE 7842	1	108	25	79	.3	60	19	1937	3.09	73	<8	<2	<2	279	2.2	60	<3	257	18.97	.026	1	16	4.80	196	<.01	11	.20	.01	.12	8	<5	5	26
7843	1	12	8	31	<.3	17	5	239	1.26	<2	<8	<2	<2	67	.2	24	<3	13	2.55	.005	1	13	1.03	904	<.01	8	.08	.01	.06	4	<5	773	2
7844	1	9	20	134	<.3	289	21	1082	2.70	9	<8	<2	<2	508	1.1	35	<3	34	10.24	.027	4	95	5.76	226	<.01	12	.22	.01	.14	3	<5	99	81
7845	1	8	<3	32	<.3	189	21	2134	2.78	10	<8	<2	<2	333	1.2	<3	<3	44	17.15	.016	4	78	7.52	1423	<.01	7	.24	.02	.07	<2	<5	2	3
7846	<1	9	<3	26	<.3	48'	43	1363	2.88	7	<8	<2	<2	287	.7	<3	<3	43	5.47	.047	1	267	11.44	99	<.01	11	.22	.02	.20	<2	<5	<1	2
STANDARD C3/AU-R	25	65	30	169	5.8	36	12	768	3.41	57	15	2	18	30	23.9	17	23	30	.59	.087	18	166	.69	156	.10	19	.38	.04	.17	19	<5	2	500
STANDARD G-1	2	14	3	50	<.3	8	4	595	2.16	3	<8	<2	5	74	.2	<3	<3	43	.65	.084	8	85	.71	265	.15	4	.08	.06	.51	<2	<5	<1	14

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO '0 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.
- SAMPLE TYPE: ROCK AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED.(10 GM)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JAN 19 1998 DATE REPORT MAILED: Jan 27/98 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

Data ___ FA ___



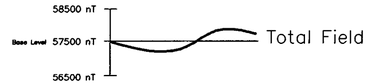
LEGEND

Instrumentation:

Field Unit: EDA OMNI–PLUS

Base Unit: EDA OMNI–PLUS

PROFILES



SUN JOINT VENTURE

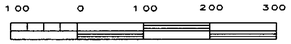
SUN PROPERTY

Total Magnetic Field Intensity (nT)
PROFILES

Kamloops M.D. N.T.S. 92 I/15

NAD 27 Zone 10

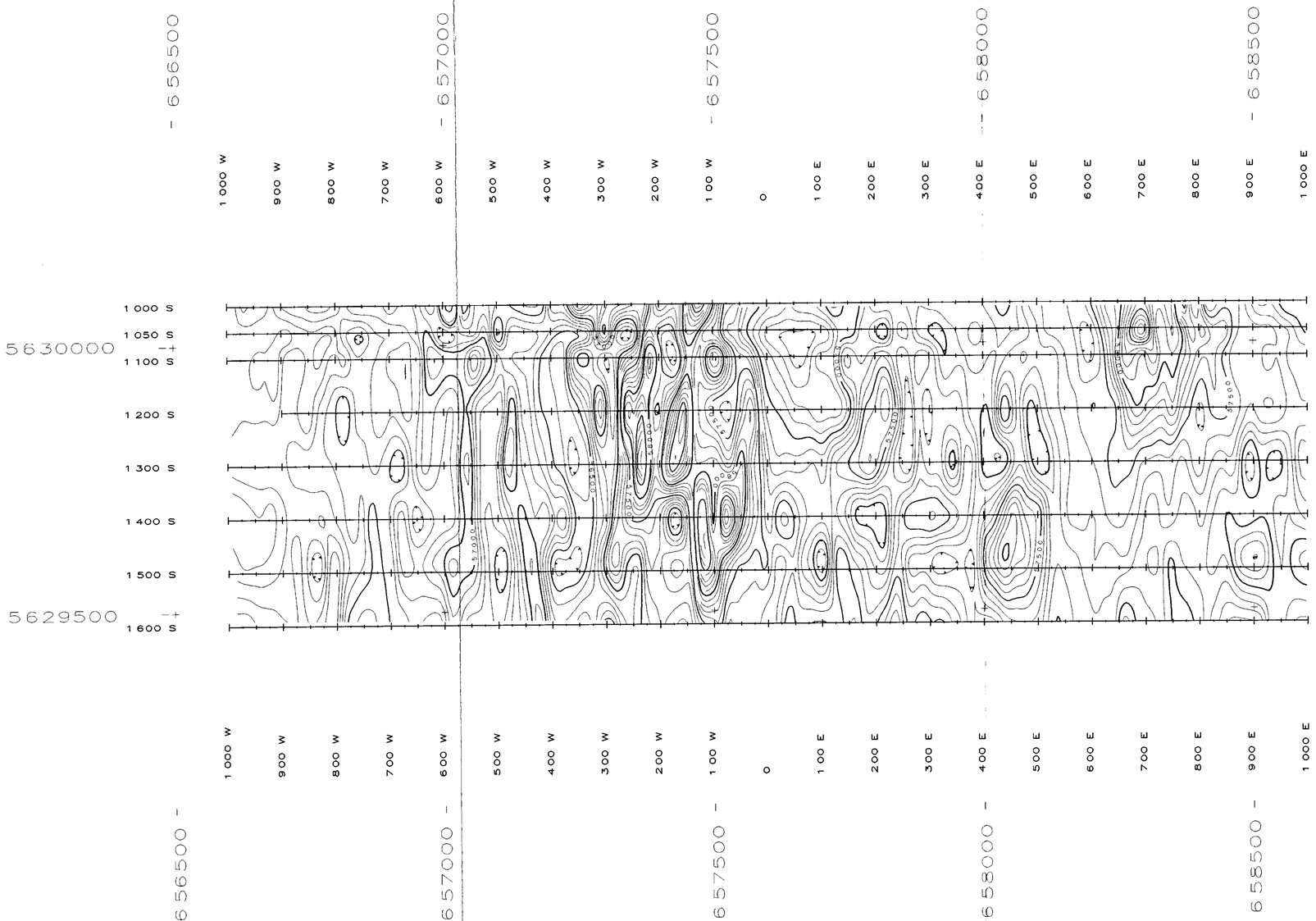
Scale in Metres



January, 1998 Plate G1a

SJ Geophysics Ltd.

97-18 (1)



LEGEND

Instrumentation:

Field Unit: EDA OMNI–PLUS

Base Unit: EDA OMNI–PLUS

Magnetic Contour Levels

100 nT

500 nT

1000 nT

SUN JOINT VENTURE

SUN PROPERTY

Total Magnetic Field Intensity (nT) CONTOURS

Kamloops M.D. N.T.S. 92 I/15

NAD 27 Zone 10

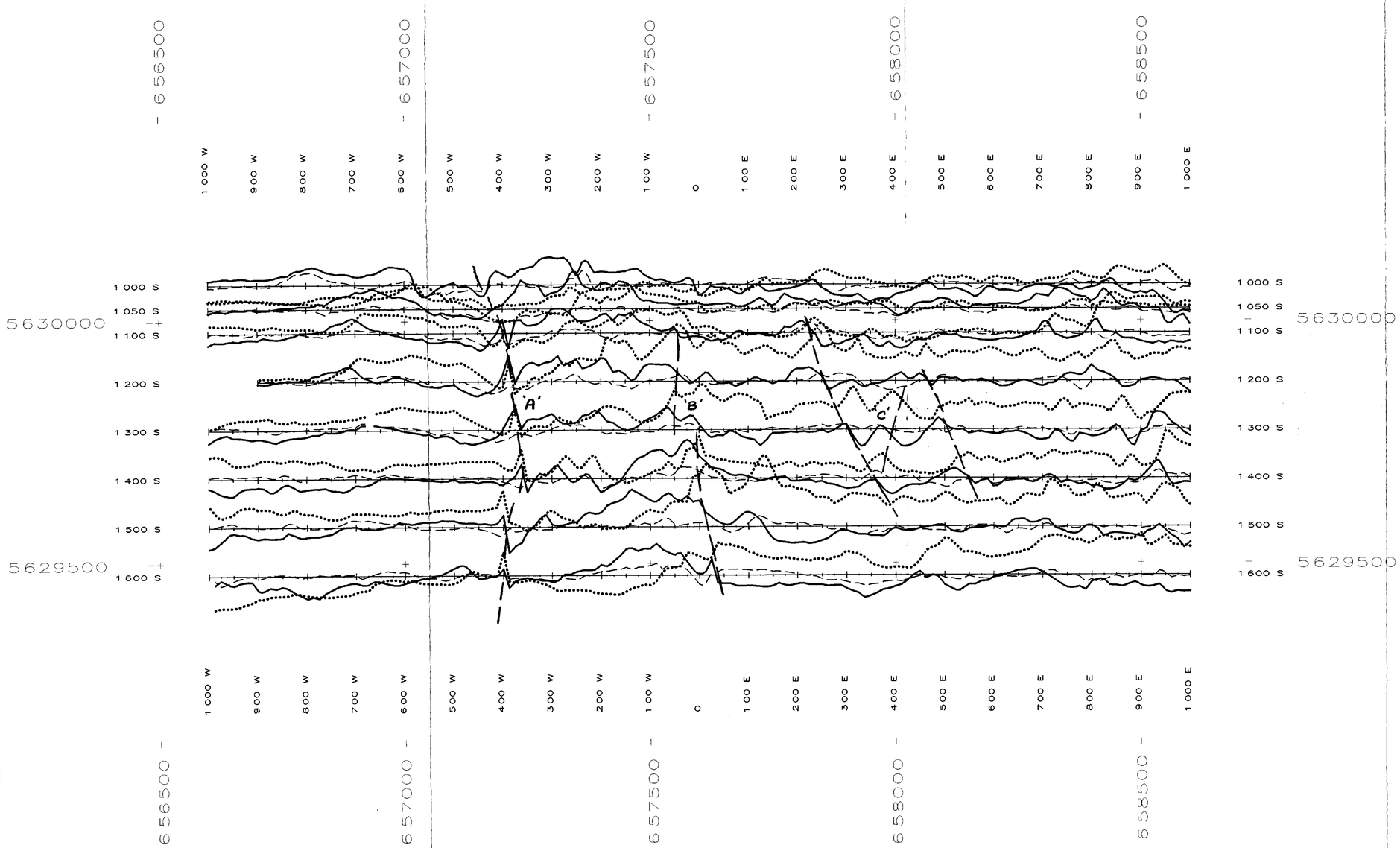
Scale in Metres

100 0 100 200 300

January, 1998 Plate G1b

Du Dessault Ltd.

97-18 (2)



LEGEND

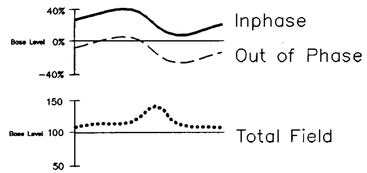
Instrumentation:

Field Unit: EDA OMNI–PLUS

Base Unit: EDA OMNI–PLUS

Operator Facing Easterly

PROFILES



SUN JOINT VENTURE

SUN PROPERTY

VLF EM PROFILES

NLK 24.8 kHz., Seattle, WA

Kamloops M.D. N.T.S. 92 I/15

NAD 27 Zone 10

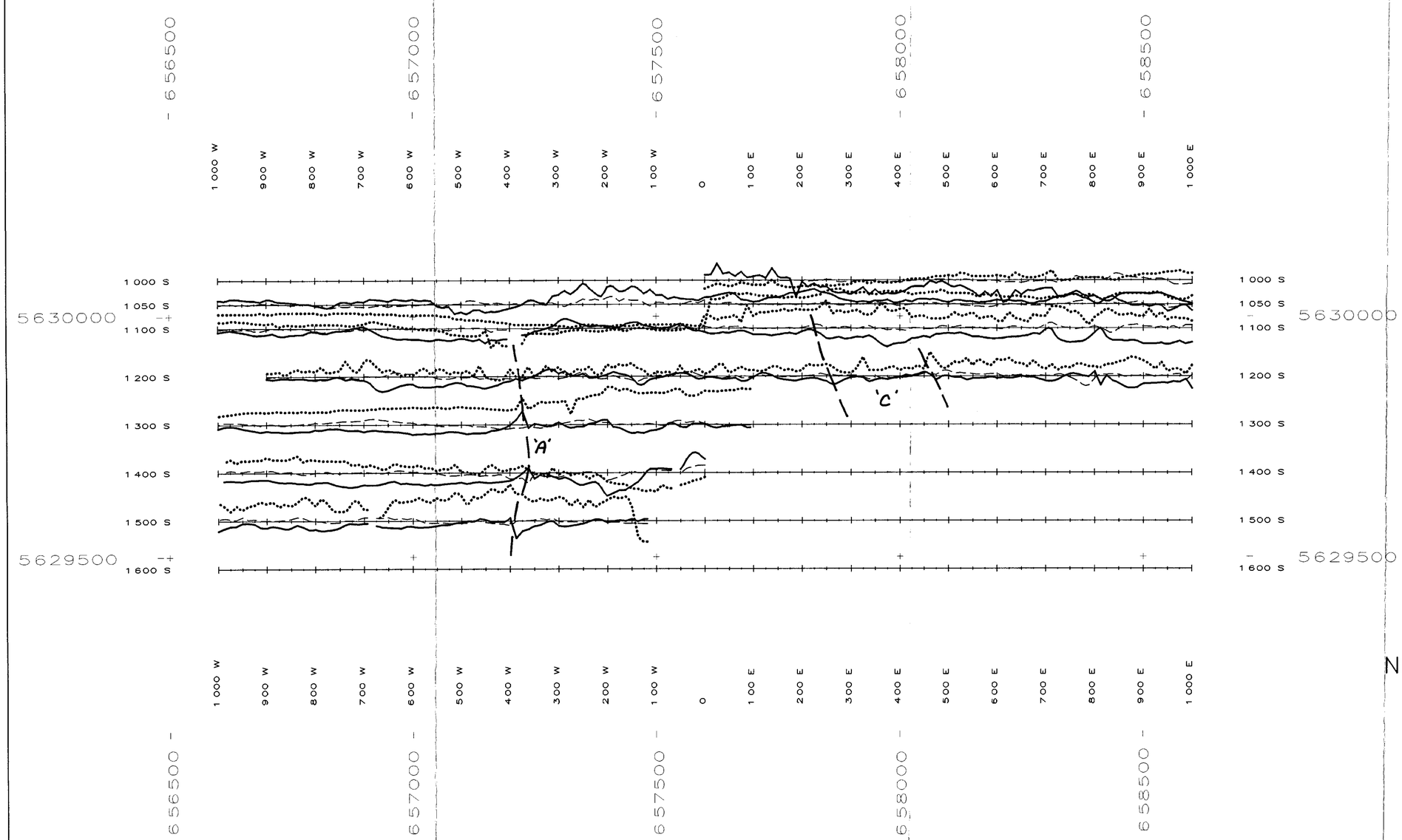
Scale in Metres

1 00 0 1 00 200 300

January, 1998 Plate G2a

SJ Geophysics Ltd.

97-18 (3)



LEGEND

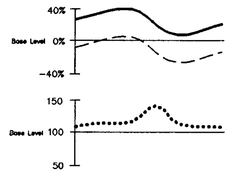
Instrumentation:

Field Unit: EDA OMNI–PLUS

Base Unit: EDA OMNI–PLUS

Operator Facing Easterly

PROFILES



SUN JOINT VENTURE

SUN PROPERTY

VLF EM PROFILES

NPM 21.4 kHz., Lualualei, Hawaii

Kamloops M.D. N.T.S. 92 I/15

NAD 27 Zone 10

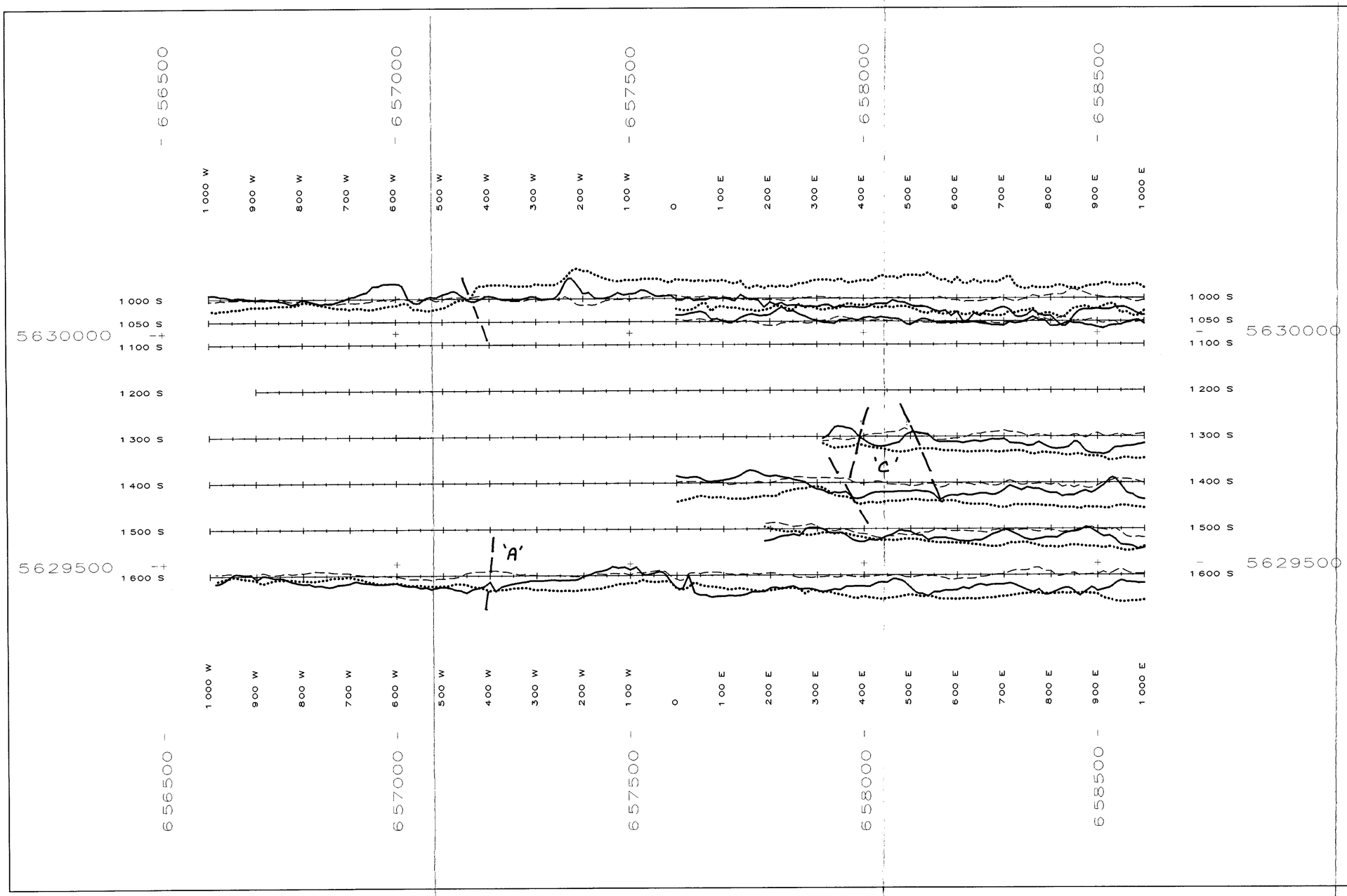
Scale in Metres

100 0 100 200 300

January, 1998 Plate G2b

SJ Geophysics Ltd.

97-18 ④



LEGEND

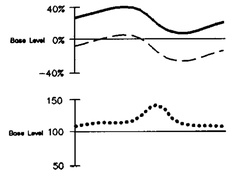
Instrumentation:

Field Unit: EDA OMNI–PLUS

Base Unit: EDA OMNI–PLUS

Operator Facing Easterly

PROFILES



SUN JOINT VENTURE

SUN PROPERTY

VLF EM PROFILES

NAA 24.0 kHz., Cutler, ME

Kamloops M.D. N.T.S. 92 I/15

NAD 27 Zone 10

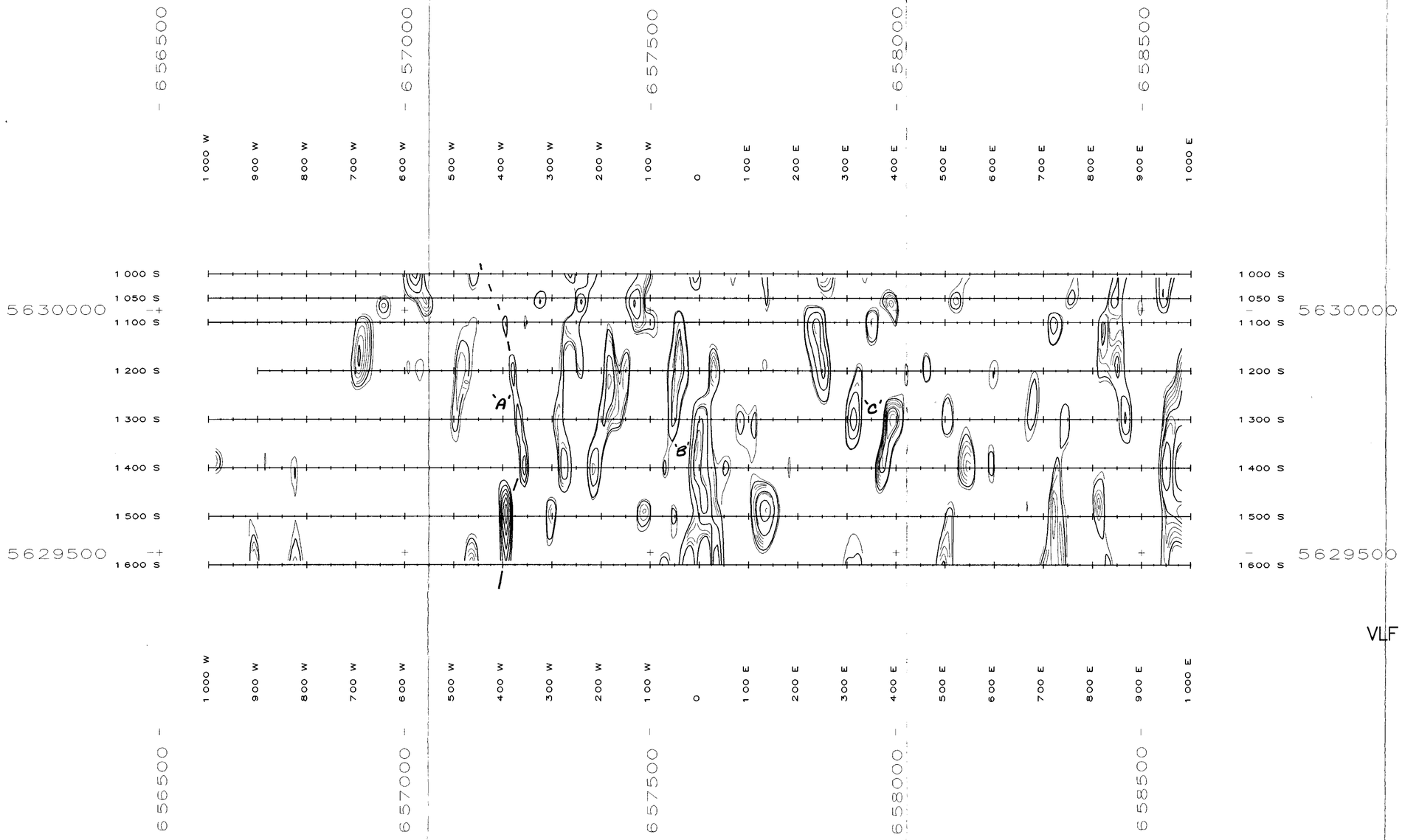
Scale in Metres

100 0 100 200 300

January, 1998 Plate G2c

SJ Geophysics Ltd.

97-18 (5)



LEGEND

Instrumentation:

Field Unit: EDA OMNI–PLUS

Base Unit: EDA OMNI–PLUS

Operator Facing Easterly

In–Phase Fraser Filter Contours

2 %

10 %

SUN JOINT VENTURE

SUN PROPERTY

VLF EM IN–PHASE FRASER FILTER CONTOURS

NLK 24.8 kHz., Seattle, WA

Kamloops M.D. N.T.S. 92 I/15

NAD 27 Zone 10

Scale in Metres

100 0 100 200 300

January, 1998 Plate G2d

SJ Geophysics Ltd.

97-18 (6)