GEOLOGICAL SURVEY BRANNEL ASSESSMENT REPORTS

GEOLOGICAL AND GEOPHYSICAL REPORT

DATE RECEIVED

MAY 1 6 1996

on the

BELL, B-1 TO B-4 AND JUNIPER 5 AND 6 MINERAL CLAIMS

and

JUNIPER (LOT 1604) AND BULLION FR. (LOT 3450) REV CGS

Olalla Area Osoyoos Mining Division

82E-4W, 5W (49°15' N. Lat.,119°49'Long.)

for

GRANT F. CROOKER Box 404 Keremeos, B.C. VOX 1NO (OWNER AND OPERATOR)

FILMED

by

GRANT F. CROOKER, P.Geo., CONSULTING GEOLOGIST

SSESSMENT REPOR May, 1996

TABLE OF CONTENTS

Page

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1.0	SUM	IMARY AND RECOMMENDATIONS	1
2.0	INTI	RODUCTION	2
	2.1	General	2
	2.2	Location and Access	2
	2.3	Physiography	2
	2.4	Property and Claim Status	2
	2.5	Area and Property History	3
3.0	EXP	LORATION PROCEDURE	6
4.0	GEC	DLOGY AND MINERALIZATION	7
	4.1	Regional Geology	7
	4.2	Claim Geology	8
	4.3	Mineralization	9
5.0	GEC	OPHYSICS	10
	5.1	Magnetic Survey	10
6,0	CON	NCLUSIONS AND RECOMMENDATIONS	11
7.0	REF	FERENCES	12
8.0	CEF	RTIFICATE OF QUALIFICATIONS	15

APPENDICES

Appendix I	Geophysical Equipment Specifications
Appendix II	Magnetic Data
Appendix III	Cost Statement

ILLUSTRATIONS

FIGUR	E	PAGE
1.	Location Map	follows page 1
2.	Claim Map	follows page 2
3.	Property Geology	follows page 7
4.	Geology	pocket
5.	Magnetometer Survey	pocket

1.0 SUMMARY AND RECOMMENDATIONS

The Juniper-Bell Property is located five kilometres north of Keremeos B.C., and is owned by Grant Crooker of Keremeos, B.C.. It consists of one modified grid claim, six two post claims and two Reverted Crown Grants covering 28 units.

The area has been the scene of exploration for base and precious metals since the late 1890's and properties including the Shepherd-Sunrise, Golconda, Something Good, Dolphin, Opulence and Bullion have been actively explored since that time.

Previous work on the Juniper-Bell property has discovered a number of small showings with gold and silver values. Mineralization is related to skarns, shears and quartz veins. The highest assay values have been from 3 to 6 centimetre wide quartz veinlets which gave up to 0.324 oz/ton gold and 17.20 ozs/ton silver. Skarn mineralization on the Juniper Reverted Crown Grant has given values up to 0.084 oz/ton gold and a poorly exposed silicified and carbonate altered magnetite rich skarn at line 11700E & 10175N gave values up to 1030 ppb (0.03 oz/ton) gold.

The 1996 exploration program consisted of carrying out a total field magnetic survey and geological mapping and prospecting over the B-1 to B-4 mineral claims (Opulence showing).

The magnetic survey indicated an increasing magnetic gradient from south to north. The area of extremely high magnetism to the north is underlain by magnetite bearing pyroxenite of the Olalla stock.

Geological mapping and prospecting indicate that the copper and gold mineralization at the Opulence showing is related to a small diorite intrusion. Sampling by previous operators has indicated copper values up to 4% and gold values in the 0.01 oz/ton range.

Recommendations are as follows:

1) Detailed geological mapping and geochemical sampling should be carried out near the Opulence showing to fully evaluate the potential for copper-gold mineralization.

2) Detailed evaluations should also be carried out over other areas of the Juniper-Bell property which have gold, copper or copper-gold mineralization.

Respectfully submitted, CRODKER Grant Crooker, P.Geo., Consulting Geologist



2.0 INTRODUCTION

2.1 GENERAL

Work was carried out on the Juniper-Bell Property by Grant Crooker, Geologist, from April 5th to 13th, 1996.

A ground magnetic survey and geological mapping were carried out over the B-1 through B-4 claims. One grid line was re-established.

2.2 LOCATION AND ACCESS

The property (Figure 1) is located at Olalla, 5 kilometres north of Keremeos in Southern British Columbia. The property lies between 49°14' and 49°16' north latitude and 119°48' and 119°50' west longitude (NTS 82E-4W, 5W).

Access to the property is via Highway 3A, which bisects the property. Several logging and mining roads give good access to various areas of the property. Access to the area of the old Opulence showings is via Liddicoat Drive and then an old logging road that leads to the Columns Provincial Park.

2.3 PHYSIOGRAPHY

The property covers the bottom of the Keremeos Creek Valley and extends up the hillsides on the east and west sides of the valley. Elevation varies from 500 to 1000 metres above sea level and topography varies from flat on the valley bottom to steep, impassable cliffs on the valley sides. A number of areas are extremely precipitous.

Keremeos Creek flows in a southerly direction through the claims. Vegetation consists of sage-brush and bunch grass with scattered fir and pine trees.

2.4 PROPERTY AND CLAIM STATUS

The Juniper-Bell Property (Figure 2) is owned by Grant Crooker of Keremeos, B.C..

The property consists of one modified grid claim (Bell), six two post claims (Juniper 5 and 6, B-1 to B-4) and two reverted Crown Grants (Juniper Lot 1604, Bullion Fr Lot 3450). The property is located in the Osoyoos Mining Division.



Claim	Units	Mining Division	Tenure No.	Record Date	Expiry Date
Bell	20	Osoyoos	246250	04/24/80	04/24/97*
Juniper	1	Osoyoos	246559	05/13/85	05/13/98*
Juniper 5	1	Osoyoos	247173	04/04/90	04/04/00*
Juniper 6	1	Osoyoos	247174	04/04/90	04/04/00*
Bullion Fr	1	Osoyoos	247160	03/15/90	03/15/99*
B-1	1	Osoyoos	334675	03/29/95	03/29/99
B-2	1	Osoyoos	334676	03/29/95	03/29/99
B-3	1	Osoyoos	334677	03/29/95	03/29/98
B-4	1	Osoyoos	334678	03/29/95	03/29/99

*Upon acceptance of this report.

2.5 AREA AND PROPERTY HISTORY

The Juniper-Bell property is located in the Olalla Gold Camp in southern British Columbia (Figure 3). Mining activity has been carried out in this area since the 1880's. The property is also located 20 kilometres southeast of Hedley, where Mascot Gold Mines Limited (Homestake Mining) began production in 1987 by open pit methods.

A number of mining properties have been explored in the Olalla area since the 1880's. These include the Opulence, Bullion, Dolphin, Golconda, Something Good and Shepherd-Sunrise. Exploration has been oriented towards copper, molybdenum, silver and gold. Goldcliff Resource Corporation has been carrying out exploration on the Cliff Claims immediately east of the Bell Claim since 1986. Exploration has been directed towards gold with encouraging results.

On the Something Good property (Lot 1451, Minfile 82E-SW-014) immediately west of the Bell Claim, a carbonate shear and breccia zone occurs in argillaceous and cherty sediments near the contact of a large pyroxenite body. Calcite, quartz and pyrite occur within the zone.

Three adits were driven on the zone in 1936-1937. The No. 1 adit (2541 feet ASL) was driven for 350 feet, and followed the footwall of the shear zone. The first 110 feet of the adit followed a well defined breccia zone and samples taken by the resident geologist for the B.C. Dept. of Mines in 1937 (M.S. Hedley) ranged from 0.05 oz/ton gold over 54 inches to 2.20 oz/ton gold over 11 inches. Beyond this point the graphitic shear contained negligible gold values. The No. 3 adit (2342 feet ASL) was driven for 385 feet in the pyroxenite, but negligible gold values were encountered. Limited diamond drilling was also carried out with some gold values reported.

On the Golconda property (Minfile 82E-SW-016) located one kilometre west of the Juniper-Bell property a shear zone up to five feet wide and made up of one or more slickenside and gouge



filled fault planes cuts pyroxenite. A number of quartz lenses between 30 and 60 feet long and 12 to 50 inches wide occur within the shear zone. These zones appear to occur at changes in attitude in the structure. The quartz is crudely banded and contains pyrite, chalcopyrite, molybdenum and minor galena with values in gold and silver. Several adits follow the shear zone, which strikes south 56° east. Limited production has come from the property, and a small mill has operated several times.

The Shepherd-Sunrise property (Lot 18s, Minfile 82E-SW-015) located along the western boundary of the Bell Claim appears to have the most economically significant mineralization in the Olalla Camp. Several mineralized quartz veins on the property have been explored by trenching, diamond drilling and several adits. The mineralization appears to be related to the east-west striking Valley Fault.

The diamond drilling was carried out in two phases, the first between 1946 and 1948, and the second during 1961 and 1962. The work has indicated ore reserves of 3100 tons of 0.85 oz/ton gold and 2.00 ozs/ton silver. It has been reported that 300 tons of ore averaging 0.53 oz/per ton gold and 0.45 oz/per ton silver were shipped during the 1946-1948 period.

During drilling on the quartz veins, a gold bearing pyritic-silicious breccia zone was discovered. This breccia zone also appears to be related to the Valley Fault, and reported drill hole intersections include 39.1 feet of 0.056 oz/ton and 35.5 feet of 0.110 oz/ton gold.

The Juniper-Bell property surrounds the Bullion property (Lots 3116, 3117, 82E-SW-013). The Bullion property contains quartz vein and/or breccia mineralization as well as skarn mineralization. The most significant gold mineralization is associated with the skarns but the quartz veins and breccias also contain anomalous amounts of gold. The skarn mineralization has developed where diorite has contacted limestones and calcareous sediments of the Apex Mountain Group.

A number of references are available on the Bullion with the most comprehensive being plan and section maps compiled by C.C. Starr in 1934. This work shows 3 main adits at the 2680 (No. 1), 2500 (No. 2) and 2025 (No. 3) foot levels ASL.

The most significant skarn mineralization occurs in the area of the No. 1 adit where numerous workings have exposed garnet skarns with pyrite, pyrrhotite, magnetite and chalcopyrite. Gold values of 3.0 oz/ton and silver values of 0.70 oz/ton are reported over 4.6 feet. A number of other significant gold and silver assays have been taken in the area including two by Friday Mines Ltd. in 1962 which gave 3.0 feet of 0.88 oz/ton and 3.25 feet of 0.32 oz/ton gold. The higher gold values appear to be associated with higher copper values.

The No. 2 and No. 3 adits were driven to intersect the mineralization at a lower elevation. The No. 2 adit did not intersect significant mineralization while the No. 3 adit was not driven far enough to intersect the mineralized zone.



On the Juniper-Bell property, a small pie shaped fraction between the Bullion Crown Grants was acquired by staking the Juniper 5 and 6 mineral claims. This pie shaped fraction contains the West Tunnel which was sampled by Starr in 1934. The highest value returned from this sampling was 0.04 oz/ton gold and 0.34 oz/ton silver over 3.5 feet in skarn mineralization.

Two references were found on the Juniper-Bell property in the B.C. Department of Mines Annual Reports for 1899 and 1900. They report several open cuts and a 40 feet deep shaft in the vicinity of the Roadside showing (108+00E and 83+00N). Good copper ore assaying about \$ 7.00 per ton in gold was reported.

During the period 1980 through 1995 geological mapping, prospecting and geophysical and geochemical surveys were carried out over much of the property by the present owner. Several skarn zones, shear zones and narrow quartz veins containing anomalous gold and silver values were found.

The highest assays of 0.324 oz/ton gold and 17.20 ozs/ton silver were obtained from a 3 to 6 centimetre wide quartz vein above adits B and C. The quartz vein contained malachite, azurite, chalcopyrite and tetrahedrite. Several other 3 to 5 centimetre wide quartz veins with up to 0.198 oz/ton gold and 17.20 ozs/ton silver occur at Adits B and C.

Skarn mineralization occurs on the Juniper claim at Adit A. A northeast striking, steeply northwest dipping limestone lens 50 metres long and 3 to 5 metres wide has been partially altered to skarn. Massive pyrrhotite and pyrite occur sporadically throughout the lens and gold values ranged from 0.002 to 0.176 oz/ton gold.

During 1984 a limited X-ray diamond drilling program was attempted in the vicinity of the Roadside showing. Two holes totalling 19.76 metres were drilled when the program was abandoned due to hard, broken ground and poor core recovery. A sludge sample from DDH-84-1 ran 15.5 ppm silver over 5.80 metres and a sludge sample from DDH-84-2 ran 1258 ppm copper over 1.55 metres. No anomalous gold values were returned from the sludge samples.

A trench found in 1990 and located at 117+00E and 101+75N exposes a magnetite rich skarn with pervasive silicification and carbonate alteration. Up to 5% pyrite occurs within the zone and gold values of up to 1030 ppb were obtained.

The Opulence property (Lot 1910, Minfile 82E-SW-074) is covered by the B-1 and B-2 claims. Several shafts as well as a number of trenches are found on the property and copper oxide mineralization is found at most of the workings. Chalcopyrite is found at a few locations, mainly associated with a diorite intrusion. Diamond drilling was carried out on the property in 1969 but no information is available as to the results of the drilling.



3.0 EXPLORATION PROCEDURE

The 1996 program consisted of carrying out a ground magnetic survey and geological mapping and prospecting over the B-1 to B-4 claims. Grid line 12500E was also re-established.

GRID PARAMETERS

-baseline direction E-W along 8350N -survey lines perpendicular to baseline -survey line separation 100 metres -survey station spacing 25 metres, slope corrected -survey total - 1.6 kilometres -declination 21°

GEOPHYSICAL SURVEY PARAMETERS

TOTAL FIELD MAGNETIC SURVEY

-survey line spacing 100 metres -survey station spacing 25 metres -survey totals - 10.1 kilometres -instrument - Scintrex MP-2 Proton Magnetometer -measured total magnetic field in nanoteslas -instrument accuracy ± nanotesla -the operator faced north for all readings

Readings were taken along the baseline to obtain standard readings for all baseline stations. All loops ran off the baseline were then corrected to these standard values by the straight line method. The total field magnetic contours were plotted on figure 5 and the data listed in appendix II.



4.0 GEOLOGY AND MINERALIZATION

4.1 REGIONAL GEOLOGY

The Juniper-Bell property is located within the Intermontane Belt of British Columbia. An ultramafic to alkalic stock in the central portion of the property (Figure 3) has intruded marine sedimentary and volcanic rocks in the northern, southern and eastern portions of the property. Younger Tertiary sedimentary and volcanic rocks rest unconformably on the basement rocks along the eastern portion of the property.

Early work in the area by Bostock and others described the marine sedimentary and volcanic sequence as belonging to the Old Tom, Shoemaker, Bradshaw and Independance Formations. However as these formations do not form distinct, mappable units, Milford (1984) referred to the sequence as the Apex Mountain Group.

The Apex Mountain Group consists of five major lithofacies: massive and bedded chert, greenstone, chert breccia, argillite and limestone. Together they form a broadly folded, east dipping sequence that has an overall increase in age towards structurally higher rocks in the area. The maximum and minimum ages based on faunal ages in limestone and chert are Early Carboniferous and Middle to Late Triassic respectively.

The depositional environment of the Apex Mountain Group is interpreted to be generally deep, open-ocean basin. Shallow water deposition occurred locally. The group is interpreted to represent at least part of an ancient subduction complex that formed by eastward directed underthrusting and accretion of successively younger slices of oceanic sedimentary and volcanic rocks.

Other assemblages possibly temporally correlative with the Apex Mountain Group include the Kobau, Chapperon, Harper Ranch and Cache Creek Groups.

The ultramafic to alkalic stock occupies approximately six square miles and is of late Mesozoic age. The stock grades from a peripheral zone of pyroxenite, high in mafics and magnetite, to a magnetite deficient granitic core. Faulting with associated veining, brecciation and mineralization occurred as contemporaneous or post consolidation features.

Sedimentary rocks of the Tertiary Springbrook Formation rest unconformably on the pre-tertiary basement rocks. The Springbrook Formation is believed to be of middle Eocene age and to range in thickness from 200 to 700 feet. Volcanic rocks of the Marron Formation overlie the Springbrook Formation with slight unconformity. The Yellow Lake Member of the Marron Formation overlies the Springbrook in the area of the Juniper-Bell property and ranges in thickness from 500 to 1800 feet in the area.





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4.2 CLAIM GEOLOGY

Ultramafic to alkalic intrusive rocks of the Olalla Stock (Figure 4) underlie the central portion of the property. Fine grained, light grey to buff to pink syenite (Unit 3) occurs within the central core of the stock. The main constituent is orthoclase with augite being the main ferromagnesium mineral. Coarse grained pink syenite dykes are found along the contact with the pyroxenite. The syenite was not observed during the 1996 program.

Augite pyroxenite (Unit 2) makes up the largest portion of the stock. This is a dark green, fine to medium grained equigranular rock consisting almost entirely of subhedral augite with varying amounts of magnetite. Occasionally large books of biotite occur within the pyroxenite. This unit occurs peripherally to the syenite and outcrops on the B-1 and B-2 claims.

A light grey, fine to medium grained diorite (Unit 4) occurs at a number of locations on the property, including near the Opulence showings. Augite is the dominant mafic mineral with significant concentrations of magnetite. The unit may or may not be associated with the Olalla Stock and mineralization in the Olalla area is often associated with the dykes and irregular shaped bodies of this unit.

The southern, northern and eastern portions of the property are underlain by sedimentary and volcanic rocks of the Apex Mountain Group (Unit 1). This is generally a black, grey or green chert or a light grey quartzite. Hornfels alteration was noted near the contact with the pyroxenite. Very fine grained greenish greenstone and light blue thinly bedded crystalline limestone are found within the Apex Mountain Group on the Juniper Reverted Crown Grant. This unit occurs on the western portions of the B-2 and B-4 claims.

Tertiary rocks of the Springbrook formation (Unit 6) rest on the Apex Mountain Group on the B-2 to B-4 claims. The basal beds of the Springbrook Formation are composed of polymictic conglomerate and breccia containing many large angular boulders of pre-tertiary basement rocks including limestone. These boulders are up to tens of metres in size. This formation grades upwards into a conglomerate composed of smaller, better sorted materials, while uppermost strata includes tuffaceous sandstones and silts. The beds generally strike northwesterly and dipping gently to the northeast.

The Yellow Lake Member (Unit 7) of the Marron Formation overlies with slight angular unconformity the Springbrook Formation on the B-2 and B-3 claims. The rocks of this unit are broadly classed as anorthoclase-augite porphyry with many rocks containing rhomb shaped phenocrysts of anorthoclase. In many places the rocks are amygdaloidal and contain abundant calcite and natrolite.



4.3 MINERALIZATION

Mineralization on the Juniper-Bell property is related to shear zones, skarns and quartz veins. The highest assay values have been from 3 to 6 centimetre wide quartz veinlets which gave up to 0.324 oz/ton gold and 17.20 ozs/ton silver (Adits B and C).

Skarn mineralization on the Juniper Reverted Crown Grant gave gold values up to 0.084 oz/ton and a magnetite rich skarn at line 11700E and 10175N gave up to 1030 ppb gold. The West Tunnel which occurs on the Juniper 5 and 6 claims was sampled by Starr in 1934 and gave 0.04 oz/ton gold over 3.5 feet in skarn mineralization.

A small, sloughed trench is located at 10910E & 8115N. Dump material is a grey-white, rusty quartzite containing 1% pyrite, ½% chalcopyrite and traces of malachite and azurite. One rock sample gave 10 ppb gold, 0.8 ppm silver and 3761 ppm copper.

Copper mineralization at the Opulence showing appears to be related to a small diorite intrusion. Sparse amounts of chalcopyrite is associated with the diorite, and the mineralization at the two old shafts occurs near the contact of the diorite and sheared sediments. Copper values of up to 4% have been recorded by previous operators, with gold values in the 0.01 oz/ton range. Most of the copper occurs in oxide form, and no rock samples were taken during the 1996 program.

One showing was found in an old trench on line 13000E at 9425N. A 10 to 20 centimetre wide silicified shear zone with 1 to 4 millimetre wide quartz veinlets, 1 to 10% pyrite and 1 to 2% magnetite is exposed in the trench. The shear trends 088°, dips 52° east and is exposed for about 4 metres in the trench.

5.0 GEOPHYSICS

5.1 MAGNETIC SURVEY

A total field magnetic survey was carried out over grid lines 12500E through 13000E in the area of the Opulence showing (Figure 5). The magnetic response was very active with total field magnetic values ranging from 55262 to 75050 nT.

The magnetic gradient shows an increase from south to north. The area of lower magnetism in the south is underlain by sedimentary rocks while the area of extremely high magnetism to the north is underlain by pyroxenite of the Olalla stock. The high magnetic values in the Olalla stock are caused by high concentrations of magnetite.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The 1996 exploration program consisted of carrying out a total field magnetic survey and geological mapping and prospecting over the B-1 to B-4 mineral claims (Opulence showing).

The magnetic survey indicated an increasing magnetic gradient from south to north. The area of extremely high magnetism to the north is underlain by magnetite bearing pyroxenite of the Olalla stock.

Geological mapping and prospecting indicate that the copper and gold mineralization at the Opulence showing is related to a small diorite intrusion. Sampling by previous operators has indicated copper values up to 4% and gold values in the 0.01 oz/ton range.

Recommendations are as follows:

1) Detailed geological mapping and geochemical sampling should be carried out near the Opulence showing to fully evaluate the potential for copper-gold mineralization.

2) Detailed evaluations should also be carried out over other areas of the Juniper-Bell property which have gold, copper or copper-gold mineralization.

Respectfully submitted, OFESSION PROVINCE Gran Crooker, P.Geo., Consulting Geologist



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8.0 CERTIFICATE OF QUALIFICATIONS

I, Grant F. Crooker, of Upper Bench Road, P.O. Box 404, Keremeos, in the Province of British Columbia, Canada, V0X 1N0 do certify as that:

I am a Consulting geologist registered with the Association of Professional Engineers and Geoscientists of the province of British Columbia (Registration Number 18961);

I am a Fellow of the Geological Association of Canada (Registration Number 3758) and I am a Member of the Canadian Institute of Mining and Metallurgy and Petroleum;

I am a graduate (1972) of the University of British Columbia with a Bachelor of Science degree (B.Sc.) from the Faculty of Science having completed the major program in geology;

I have practised my profession as a geologist for over 20 years, and since 1980, I have been practising as a consulting geologist and, in this capacity, have examined and reported on numerous mineral properties in North and South America;

I am the owner of the Bell, Juniper, Bullion Fr, Juniper 5 and 6 and B-1 to B-4 mineral claims.

Respectfully submitted,

. CROOKER

Grant, F. Crooker, F.Geo., GFC Consultants, inc. May 10, 1996



Appendix I

GEOPHYSICAL EQUIPMENT SPECIFICATIONS

MP-2 PROTON PRECESSION MAGNETOMETER

	Resolution:	1 gamma
	Total Field Accuracy:	± gamma over full operating range
: : .	Range:	20,000 to 100,000 gammas in 25 overlapping steps.
	Internal Measuring Program:	A reading appears 1.5 seconds after depression of Operate Switch & remains displayed for 2.2 secs. Recycling feature permits automat- ic repetitive readings at 3.7 sec. intervals.
	External Trigger:	External trigger input permits use of sampling intervals longer than 3.7 seconds.
	Display:	5 digit LED readout displaying total magnetic field in gammas or normalized battery voltage.
	Data Output:	Multiplied precession frequency and gate time outputs for base station recording using interfac- ing optionally available from Scintrex.
	Gradient Tolerance:	Up to 5,000 gammas/meter.
	Power Source:	8 size D cells ≈25,000 readings at 25° C under reasonable conditions.
	Sensor:	Omnidirectional, shielded, noise- cancelling dual coil, optimized for high gradient tolerance.
	Harness:	Complete for operation with staff or back pack sensor.
	Operating Temperature Range:	-35 to +60° C.
	Size:	Console, 8 x 16 x 25 cm; Sensor, 8 x 15 cm; Staff 30 x 66 cm;
	Weights:	Console, 1.8 kg; Sensor, 1.3 kg; Staff, 0.6 kg;
	Manufacturer:	Scintrex 222 Snidercroft Road Concord, Ontario

Appendix II

MAGNETIC DATA

Grant Crooker Data Listing Line and Station: + = northing/easting - = southing/westing Area: Juniper-Bell Claims File Name: B0496.xyz Grid: Bell Date: April 08, 1996 Instrument Type: Geonice EM-16 Scintrex MP-2 Details: Facing northwesterly, Seattle Data Types VLF-EM In-Phase Values, Seattle (1995) #1 VLF-EM Quadrature Values, Seattle (1995) #2 Corrected Total Field magnetic Values (1996) #3

line #	Station	# 1	# 2	# 3
baseline 8350				
8350	12500			56534
8350	12525			56231
8350	12550			56872
8350	12575			56580
8350	12600			56913
8350	12625			56866
8350	12650			56775
8350	12675			55935
8350	12700		•	57010
8350	12725			56531
8350	12750			57332
8350	12775			56605
8350	12800			56658
8350	12825			56438
8350	12850			56224
8350	12836			56393
8350	12900			56636
8350	12905			56284
8350	12950			56378
8350	12975			56335
8350	12000			56346
line 13500	13000			50540
12500	7850			56233
12500	7830			56201
12500	7873			56278
12500	7900			56097
12500	7923			55054
12500	7930			56104
12500	1913			56109
12500	8000			56224
12500	8025			56070
12500	8030			56102
12500	8075			20192
12500	8100			50808
12500	8123			50158
12500	8150			50092
12500	81/5			56001
12500	8200			50382
12500	8225			56194
12500	8250			56200
12500	8275			56218
12500	8300			56198
12500	8325			56431
12500	8350			56534
12500	8375			56792
12500	8400			57231
12500	8425			56941
12500	8450			56486
12500	8475			56667
12500	8500			56614
12500	8525			56663

	· .					1			
		:							
	12500	8550			57069				
	12500	8575			57045				
	12500	8600			57459				
	12500	8625			57069				
	12500	8650			57212				
	12500	8675			57234				
	12500	8700			57393				
	12500	8725			57785				
	12500	8750			57968				
	12500	8775			57896				
	12500	8800			58875				
	12500	8825			58974				
	12500	8850			58600				
	12500	8875			59018				
	12500	8900			59291				
	12500	8925			59452				
	12500	8950			59985				
	12500	8975			60039				
	12500	9000			60405				
	12500	9025			60806				
	12500	9050			62775				
	12500	9075			62018				
	12500	9100			62552				
	12500	9125			66521				
	12500	9150			62122				
	12500	9175			65562				
	12500	9200			69509				
	12500	9225			76793				
	12500	9250			65729				
	12500	9275			68201				
	12500	9300			68692				
	12500	9325			70924				
_	12500	9350			70707				
	12500	9375			70325				
	12500	9400			67482				
	12500	9425			64049				
	12500	9450			62078				
	line 12600								
	12600	7850-	19	2	56495				
	12600	7875	-20	-3	56231				
	12600	7900	-25	-4	56447				
	12600	7925	-25	-7	56136				
	12600	7950	-27	-10	56156				
	12600	7975	-27	-8	56377				
	12600	8000	-26	-15	55983				
	12600	8025	-33	-20	56106				
	12600	8050	-17	-20	56082				
	12600	8075	5	-12	55936				
	12600	8100	1	-11	55821				
	12600	8125	3	-8	56914				
	12600	8150	20	-2	56095				
	12600	8175	11	8	56065				
	12600	8200	14	21	55914				
	12600	8225	13	23	55697				
	12600	8250	20	19	56718				
	12600	8275	16	14	56282				
	12600	8300	19	14	56538				
	12600	8325	23	13	56580				
	12600	8350	18	11	56913				
	12600	8375	18	11	56616				
	12600	8400	10	11	57117				
	12600	8425	6	13	57660				
	12600	8450	2	11	57042				
	12600	8475	-4	4	57157				
	12600	8500	-5	-4	56061				
	12600	8525	2	-1	56620				
	12600	8550	14	2	56654				





12600	8575	10	5	56701	
12600	8600	12	8	56008	
12000	9435	12	12	56064	
12000	8023	1	12	30904	
12600	8650	6	3	57317	
12600	8675	0	7	57393	
12600	8700	9	8	57522	
12600	8725	13	9	57609	
12600	9750	13	ó	57005	
12000	0730	11	0	57737	
12600	8//5	4	5	58204	
12600	8800	2	7	58304	
12600	8825	-1	8	58641	
12600	8850	-3	9	58759	
12600	8875	-3	7	59132	
12000	9000	-5		60220	
12000	8900	-9	0	59320	
12600	8925	-5	5	59932	
12600	8950	-5	5	60344	
12600	8975	-6	4	60868	
12600	9000	-3	4	61359	
12600	0025	17	,	62350	
12000	9023	-17	-1	03339	
12600	9050	-20	-5	61/1/	
12600	9075	-22	2	63255	
12600	9100	-2 0	5	63799	
12600	9125	-11	5	66111	
12600	9150	-15	3	68814	
12000	0175	-15	3	00014	
12600	9175	-9	1	66173	
12600	9200	-8	· 1	64128	
12600	9225	-4	1	65987	
12600	9250	-7	2	69308	
12600	9275	-8	-2	61507	
12600	0200	-0	-2	61704	
12000	9300	- 9	-4	01794	
12600	9325	-17	1	69971	
12600	9350	-13	2	72288	
12600	9375	-10	1	74247	
12600	9400	-48	-3	63683	
12600	9425	.57	.3	60202	
12000	9429	-57	• 5	60373	
12000	9450	-28	-3	62302	
line 12700					
12700	7850	-50	8	56089	
12700	7875	-55	9	56350	
12700	7900	-54	9	56644	
12700	7975	-51	Ś	56154	
12700	7743	-51	5	50154	
12700	7950	-53	-3	56160	
12700	7975	-40	-1	56508	
12700	8000	-32	0	55658	
12700	8025	-49	-9	56233	
12700	8050	-53	-14	56048	
12700	9075	.41	12	55005	
12700	8100	-41	-12	55775	
12700	8100	-18	-10	56260	
12700	8125	-4	-4	55965	
12700	8150	12	-1	56106	
12700	8175	0	-6	56015	
12700	8200	8	8	55984	
12700	9115	1	0	55571	
12700	8223	-1	,	55571	
12700	8250	19	20	86665	
12700	8275	38	20	56549	
12700	8300	26	6	56336	
12700	8325	17	1	57798	
12700	8350	14	-5	57010	
12700	9275	11	ň	57043	
12/00	03/3	11	-4	37043	
12700	8400	14	-2	20208	
12700	8425	13	4	56911	
12700	8450	11	6	57066	
12700	8475	1	7	56874	
12700	8500	-1	. 7	56341	
12700	0500	•.,	,	501971	
12/00	8323	-11	6	26487	
12700	8550	15	5	56520	
12700	8575	-7	6 ·	56574	

12700	8600	-7	4	56887	
12700	8625	-1	6	56742	
12700	8650	· c	õ	57176	
12700	0000	•)	,	57170	
12700	8675	0	15	57522	
12700	8700	3	14	57838	
12700	8725	7	14	57841	
12700	0760	,	17	69222	
12700	8750	8	12	58232	
12700	8775	9	13	58524	
12700	8800	7	12	58801	
12700	8875	2	0	50176	
12700	0023	5	7	39170	
12700	8850	0	9	60071	
12700	8875	-3	10	56612	
12700	8900	1	10	60057	
11700	8076			60409	
12700	8925	4	11	00408	
12700	8950	2	7	60998	
12700	8975	-1	6	63325	
12700	0000		6	64025	
12700	2000	-2	0	04035	
12700	9025	-9	3	64068	
12700	9050	-1	6	64186	
12700	9075	4	10	63169	
11700	0100	,	,	67300	
12700	9100	-3	3	67299	
12700	9125	-7	5	70018	
12700	9150	-4	4	68793	
12700	0175	5	2	68750	
14700	2113	-5		00137	
12700	9200	-6	4	67664	
12700	9225	-11	· 6	71119	
12700	9250	-11	6	75050	
12700	0775	14	ñ	72202	
12700	9273	-14	2	(20000	
12700	9300	-10	1	68839	
12700	9325	-7	1	67037	
12700	9350	-15	1	66983	
12700	0375		.)	69615	
12700	0400	-23	-2	0)013	
12700	9400	-32	-6	61821	
12700	9425	-39	-8	63409	
12700	9450			60779	
line 12800					
10000	7070		-		
12800	7850	-14	2	56661	
12800	7875	-17	3	56613	
12800	7900	-22	1	56680	
12800	7975	-40	-5	55677	
12000	7050		-5	55021	
12800	7950	-49	-1	56743	
12800	7975	-60	-2	56017	
12800	8000	3	15	56120	
12800	8025	51	1	56329	
12000	0023	-51	1	50528	
12800	8050	-31	0	56169	
12800	8075	-17	4	56472	
12800	8100	-31	-2	56552	
12800	8125	.44		56504	
12000	0125		-3	56364	
12800	8120	-29	0	55262	
12800	8175	-4	11	55681	
12800	8200	8	13	55680	
12800	8725	23	22	56778	
12000	8225	23	22	50428	
12800	8250	20	11	56652	
12800	8275	20	3	56876	
12800	8300	12	1	56625	
12800	8325	10	1	57040	
11000	9760			51040	
12800	0330	3	-4	30038	
12800	8375	14	6	56757	
12800	8400	13	5	57017	
12800	8475	10	2	57010	
13000	0460	-	3	51017	
12800	8450	/	و	56970	
12800	8475	8	4	56915	
12800	8500	11	5	56940	
12800	8525	10	ζ.	\$7157	
12000	0525	10	ر م	51151	
12800	8220	8	4	57283	
12800	8575	5	0	57475	
12800	8600	10	2	57489	
	-		-		

12800	8625	10	6	56748
12800	8650	5	13	57641
12800	8675	-13	23	57211
12800	8700	-1	16	57278
12800	8725	1	16	57548
12800	8750	2	14	57837
12800	8730	2	14	59107
12800	8775	-2	12	58197
12800	8800	-13	12	58904
12800	8825	-18	13	59622
12800	8850	-10	15	60196
12800	8875	-14	13	60767
12800	8900	-15	4	60886
12800	8925	-8	17	61579
12800	8950	2	18	61477
12800	8075	0	16	61977
12000	0000	9	10	()(()
12800	9000	11	10	62662
12800	9025	-2	11	72087
12800	9050	-6	12	68826
12800	9075	-4	12	66027
12800	9100	2	14	66652
12800	9125	3	12	65285
12800	9150	8	18	67873
12800	9175	7	17	73351
12800	0200	, ,	10	74521
12000	9200	2	10	(9202
12000	9223	-9	1	08393
12800	9250	-18	10	6/365
12800	9275	-11	13	66884
12800	9300	-10	14	68694
12800	9325	-11	8	70558
12800	9350	-13	4	66324
12800	9375	-18	5	64671
12800	9400	-35	0	70706
12800	9425	-31	-5	61142
12800	9450	-51	-5	61670
12800	9430			01020
line 12900	30.50	-	~ ~	
12900	/850	-2	-25	56229
12900	7875	-4	-4	56351
12900	7900	-5	-2	56477
12900	7925	-5	1	56360
12900	7950	-4	2	56352
12900	7975	-1	5	56309
12900	8000	-21	6	56475
12900	8025	-29	5	57001
12900	8050	-28	3	56240
12000	9075	-20	s	57240
12900	8100	-23	3	57248
12900	8100	06-	-0	56424
12900	8125	-28	-8	55536
12900	8150	-19	-6	55840
12900	8175	-13	-2	56659
12900	8200	-20	-7	55688
12900	8225	-16	-3	55585
12900	8250	1	5	55911
12900	8275	8	4	56666
12900	8300	6	2	56890
12900	8325	10	-4	56836
12000	8350	õ	, 1	56636
12000	9275	ć	1 7	56405
12200	9400	0	-4	50403
12900	04(10)	1	-2	20337
12900	8425	5	-3	56346
12900	8450	8	1	56370
12900	8475	0	1	56514
12900	8500	-5	2	56698
	0,000			
12900	8525	-2	3	56745
12900 12900	8525 8550	-2 0	3 4	56745 56857
12900 12900 12900	8500 8525 8550 8575	-2 0 -1	3 4 5	56745 56857 56916
12900 12900 12900	8500 8525 8550 8575 8600	-2 0 -1	3 4 5 5	56745 56857 56916 56942
12900 12900 12900 12900	8500 8525 8550 8575 8600	-2 0 -1 -2	3 4 5 5	56745 56857 56916 56962







12900	8650	-3	4	57065
12900	8675	1	4	57194
12900	8700	0	3	57767
12000	8775	1	3	57360
12900	9750	-1	2	57300
12900	0736	1	3	57747
12900	8//3	2	2	57965
12900	8800	2	4	58326
12900	8825	-6	1	58707
12900	8850	-11	-1	59063
12900	8875	-10	0	59153
12900	8900	-6	2	59251
12900	8925	-6	4	59833
12900	8950	0	8	60538
12900	8975	7	9	61511
12900	9000	6	6	62740
12900	9025	0	6	63319
12900	9050	-14	8	64069
12900	9075	-21	8	64537
12900	9100	-19	10	65569
12900	9125	-23	15	65981
12900	9150	-2	25	66982
12900	9175	-3	25	71458
12900	9200	2	13	69651
12900	9225	-3	12	65658
12900	9250	-15	11	62154
12900	9275	-23	19	66103
12900	9300	-17	19	66907
12900	9375	-17	15	67459
12900	9350	-12	12	60860
12900	0175	-24	12	60200
12900	9400	-30	-1	74206
12900	9400	-33	-1	14290
12900	942.9	-37	-3	63303
12900	9450			62471
11000	70.50			
13000	/850	-1	1	56364
13000	7875	-1	2	56233
13000	7900	-1	I	56818
13000	7925	-1	0	56680
13000	7950	0	1	56760
13000	1915	I	3	56511
13000	8000	-3	2	56677
13000	8025	-5	1	56611
13000	8050	-6	3	56682
13000	8075	-9	8	56345
13000	8100	-13	10	56439
13000	8125	-21	6	56538
13000	8150	-21	3	55984
13000	8175	-11	3	56146
13000	8200	-7	1	56344
13000	8225	-9	6	56344
13000	8250	-17	4	56648
13000	8275	-11	4	57063
13000	8300	-1	3	5687 0
13000	8325	16	10	56084
13000	8350	8	6	56346
13000	8375	5	4	56482
13000	8400	8	2	56455
13000	8425	9	1	56585
13000	8450	10	1	56471
13000	8475	5	-2	56511
13000	8500	3	-2	56614
13000	8525	3	-1	56460
13000	8550	Ő	-1	56482
13000	8575	ž	-1	56518
13000	8600	, Q	0	56907
13000	8675	11	1	56077
13000	8650	0	1 1	57100
1.0000	00.00	,	1	

13000	8675	6	0	57289
13000	8700	3	-1	57165
13000	8725	4	0	57120
13000	8750	3	2	57209
13000	8775	8	3	57208
13000	8800	7	4	56905
13000	8825	0	2	5757 0
13000	8850	-6	1	57605
13000	8875	-10	2	58201
13000	8900	-9	-4	58909
13000	8925	-8	-8	59184
13000	8950	0	-6	59282
13000	8975	5	-7	59465
13000	9000	10	-7	59758
13000	9025	19	-5	59638
13000	9050	25	-3	60280
13000	9075	14	-1	60325
13000	9100	3	-1	61107
13000	9125	-1	1	61890
13000	9150	2	2	62760
13000	9175	0	6	63802
13000	9200	-12	11	64869
13000	9225	-20	18	65444
13000	9250	-4	24	66592
13000	9275	6	26	68425
13000	9300	-7	23	69755
13000	9325	-20	13	74099
13000	9350	-20	9	62625
13000	9375	-24	13	64595
13000	9400	-23	14	65455
13000	9425	-25	7	72375
13000	9450	-31	-1	67369

Appendix III

COST STATEMENT

COST STATEMENT

SALARIES

Grant Crooker, Geo April 5-10, 12, 13, 19	blogist 996	
8 days @ \$ 400.00/da	ay	\$ 3200.00
MEALS AND ACCOMMO	DDATION	
Grant Crooker - 5 day	ys @ \$ 60.00/day	300.00
TRANSPORTATION		
Vehicle Rental (Ford April 5-9, 1996	3/4 ton 4x4)	
5 days @ \$ 60.00/day		300.00
Gasoline		30.00
EQUIPMENT RENTAL		
Magnetometer - Scint April 7-10 1996	trex MP-2	
4 days @ \$ 25.00/day	1	100.00
SUPPLIES		
Hipchain thread, flag	ging etc.	20.00
DRAUGHTING		150.00
PREPARATION OF REPO	DRT	
Secretarial, reproduct	tion, telephone, office overhead, etc	150.00
	TOTAL	\$ 4250.00



