LOG NO: 09-11 RD.
ACTION:
FILE NO:

GEOCHEMICAL, GEOPHYSICAL AND GEOLOGICAL

ASSESSMENT REPORT

on the

JERO CLAIMS

(ROSSLAND PROPERTY)

Trail Creek Mining Division - British Columbia

Lat. 49° 03' N. Long. 117° 48' W.

NTS 82F/4W

for

GUNSTEEL RESOURCES INCORPORATED

by

S. A. ENDERSBY, P. Eng.

Sept. 4, 1990

Vancouver, B. C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,250

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SUMMARY AND CONCLUSIONS

Gunsteel Resources Inc. holds eight mineral claims totalling 106 units immediately to the south of the Rossland gold camp in southern British Columbia. This camp is the second largest producer of gold to date in British Columbia. Recorded production from the Centre Star, Le Roi and War Eagle mines is 2,700,000 ounces of gold, 3,300,000 ounces of silver and 100,000 tons of copper from 5.9 million tons of ore.

Mineralization in the Rossland camp consists predominantly of pyrrhotite-rich quartz veins containing up to 70% sulfides found along faults intersecting augite porphyry or diorite porphyry or diorite porphory intrusions.

The claim area is underlain by sedimentary, volcanic and sub-volcanic intrusive rocks of the Rossland Group which are intruded by northeast-trending dikes of quartz feldspar porphyry. Except for the presence of pyrite and pyrrhotite, no mineral occurences are known on the Jero claims; however outcrops are sparse and work to date has revealed the presence of widespread zinc, lead, arsenic and scattered gold geochemical anomalies in soils. Ground VLF-electromagnetic surveys confirm the presence of previously outlined airborne electromagnetic anomalies.

The work covered in this report comprised a VLF-EM survey on part of the westerly portion of the Jero 3 claim between May 1 and June 8, 1990 and extended a VLF-EM grid done previously to the east of the present work. The VLF-EM data was collected on about 6.0 kilometers of grid.

A strongly anomalous area was identified from 9+50W to 11+00W on the base line, and was encountered more strongly from about 8+25W to 9+50W on the parallel line 100 metres to the north, but shifted to the northeast. uhis anomaly is coincident with anomalous levels of zinc, lead and arsenic on a line of soil samples that Gunsteel had taken previously.

RECOMMENDATIONS

Further work is recommended to delineate the nature and extent of the VLF-EM anomaly encountered along the two northerly east-west lines. Co-incident with this, some geological mapping and further soil sampling should be done to better define the area. In particular the surveys should be extended to the north and northeast, and to the southwest of the anomalous zone.

INTRODUCTION

Gunsteel Resources Inc. holds eight mineral claims totalling 106 units immediately to the south of the Rossland gold camp in southern British Columbia. This report covers work done on the Jero 3 claim, which is part of Gunsteels group of claims in the area.

The Rossland camp is the second largest producer of gold to date in British Columbia, with a recorded production of 2,700,000 ounces of gold, 3,300,000 ounces of silver and 100,000 tons of copper from 5.9 million tons of ore. Most of this production came from the Centre Stan, Le Roi, and War Eagle mines

The claim area is underlain by sedimentary, volcanic and sub-volcanic intrusive rocks of the Rossland group. Outcrops are scarce on the Jero 3 claim, where the work outlined in this report was done.

The 1990 exploration program on the westerly part of the Jero 3 claim extended part of a previous grid and consisted of 6.0 kilometres of VLF-electromagnetic surveying using a Sabre Model 27 VLF-EM received tuned on Seattle. The field work was performed by Messrs. F. Critchlow and D. Llewellyn. A strong VLF-EM anomoly was encountered along the northern part of the grid and this warrants follow up to determine its nature and extent. A previous line of soil samples passing through the same anomalous VLF-EM area showed anomalous levels of zinc, lead and arsenic. Further work is proposed for this area..

LOCATION, PHYSIOGRAPHY, ACCESS

The Jero 3 claim lies about 2 kilometres southwest of Rossland. It is most easily accessed by a road leading due south from Rossland which terminates at the north claim boundary. Vegetation is a second growth of fir, cedar, jack pine, spruce, birch and alder.

CLAIM DATA

The Jero 2, 3, 4, 5, 7, 8, 10 and 11 claims, totalling 106 units, are registered in the name of Gunsteel Resources Incorporated. The data on these claims is as follows:

Claim Name	Record No.	No. of Units	Expiry Date
JERO 2	654	6	June 8, 1991
JERO 3	741	18	June 8, 1991*
JERO 4	742	4	June 8, 1991
JERO 5	773	18	Dec.12, 1990
JERO 7	865	18	Nov. 5, 1990
JERO 8	866	15	Feb.10, 1991
JERO 10	948	18	Feb.24, 1991
JERO 11	949	9	Feb.19, 1991

*Subject to acceptance of this report for assessment purposes.

HISTORY:

The Rossland mining camp was the second largest gold camp in British Columbia in terms of recorded production. Total recorded production (mainly during the period 1895-1937) is 2,706,000 ounces of gold and 3,300,000 ounces of silver from 5,915,000 tons of ore; with an average grade of 0.47 ounces of gold per ton, 0.6 ounces of silver per ton and 1% copper. Most production came from four deposits (Le Roi, Centre Star, War Eagle and Josie) in the core of the camp. Molybdenum was produced at Red Mountain during the period of 1966 to 1971.

Examination of old claim maps indicates that the JERO claim area has been staked and restaked many times, but apparently little systematic exploration work has been carried out. Sheldrake (1981) conducted an airborne electromagentic survey and outlined a number of electromagnetic anomalies which have been verified by ground VLF-EM surveys. Pasieka (1981) conducted a geochemical survey for gold on the TAP claim (now covered by the JERO 5 claim)

and outlined a number of significant gold anomalies. Since 1982, Jero Resources has conducted claim acquisitions and has carried out preliminary geological, geophysical and geochemical surveys. In 1985, Jero Resources amalgamated with Gunsteel Resources, who have continued work on the claims.

GEOLOGY

Regional Geology

The Rossland area lies in the Nelson Map Area, 82F (West Half), the geology of which has been described by Little (1960). The geology of the Rossland Mining Camp has been well documented by Drysdale (1915), Bruce (1917), Gilbert (1948), Fyles (1970), Fyles et al (1973), Thorpe (1973) and Little (1982). In summary, the gold deposits of the Rossland camp occur in a complex environment in which major volcanic, sedimentary and intrusive rocks occur. Oldest rocks are the Carboniferous Mount Roberts Formation which consists of siltstone, sandstone, conglomerate and minor limestones. They are overlain by volcanic rocks and interbedded sediments of the Jurassic Rossland Group. Irregular bodies and dikes of augite porphyry were apparently coeval with the Rossland volcanics. These rocks are intruded by five groups of plutonic rocks; The Fossland monzonite, the Trail batholith (granodiorite) Coryell intrusions (syenite), Rainy Day stock (quartz diorite) and a large number of dikes including diorite, lamprophyre, syenite, and quartz feldspar porphyry.

Ore Deposits of Rossland Camp

The gold-copper deposits of the Rossland camp are predominantly pyrrhotite-rich quartz veins containing up to 70% sulphides. They are localized by east and north-trending faults where they intersect or lie along contacts of highly competent rocks such as augite porphyry and diorite porphyry. Thorpe (1973) has definied three zones; central, intermediate and outer. Veins of the central zone have a high chalcopyrite content and high Au:Ag ratio. Veins in the outer zone contain sphalerite, galena and tetrahedrite and have a lower Au:Ag ratio. Veins in the intermediate zone are characterized by a wide range of mineralogies including pyrrhotite, chalcopyrite, arsenopyrite, pyrite, molybdenite, cobaltite, gold, bismuth and bismuthinite.

The molybdenite deposits on Red Mountain occur in brecciated granodirite and hornfelsic and skarny sedimentary rocks of the Mount Roberts Formation. Mineralization consists of irregularly distributed disseminations and veinlets of pyrrhotite, pyrite, magnetite, molybdenite, scheelite and chalcopyrite (Eastwood, 1966; Fyles 1967; Hainsworth 1966). Appreciable amounts of gold are reported in the deposits.

Property Geology

The claim area is underlain by sedimentary, volcanic and sub-volcanic intrusive rocks of the Rossland group which are intruded by northeast-trending dikes of quartz feldspar porphyry. The Jero 3 claim, where the work outlined in this report was done, is shown by Fyles to be underlain by green volcanic congomerate, breccia, and sandstone. Outcrops are sparse.

VLF-ELECTROMAGNETIC SURVEY

Instrumentation

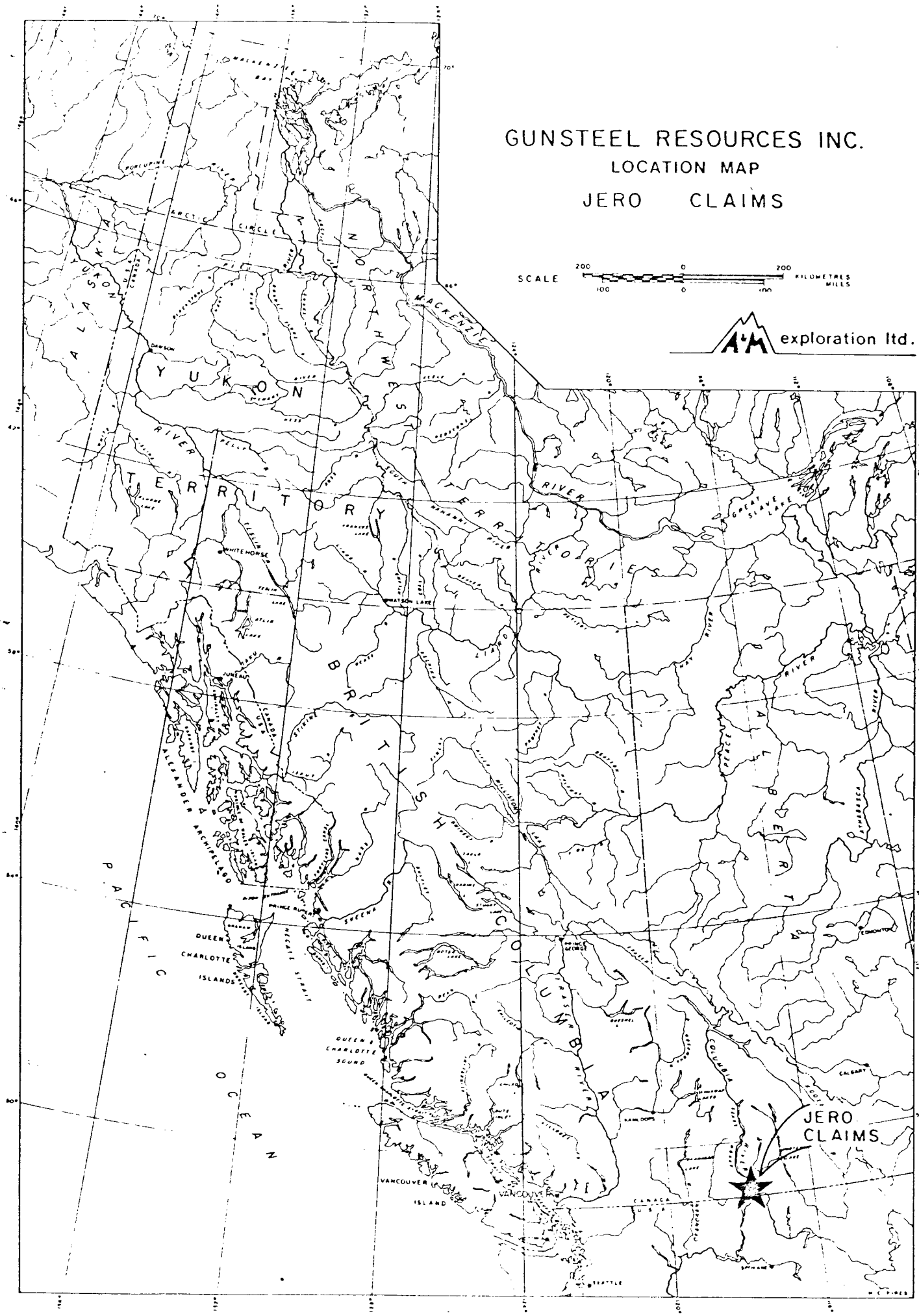
The VLF-electromagnetic (VLF-EM) received used for the survey was a Sabre Model 27 VLF-EM receiver. This receiver is manufactured by Sabre Electronics of Burnaby, British Columbia.

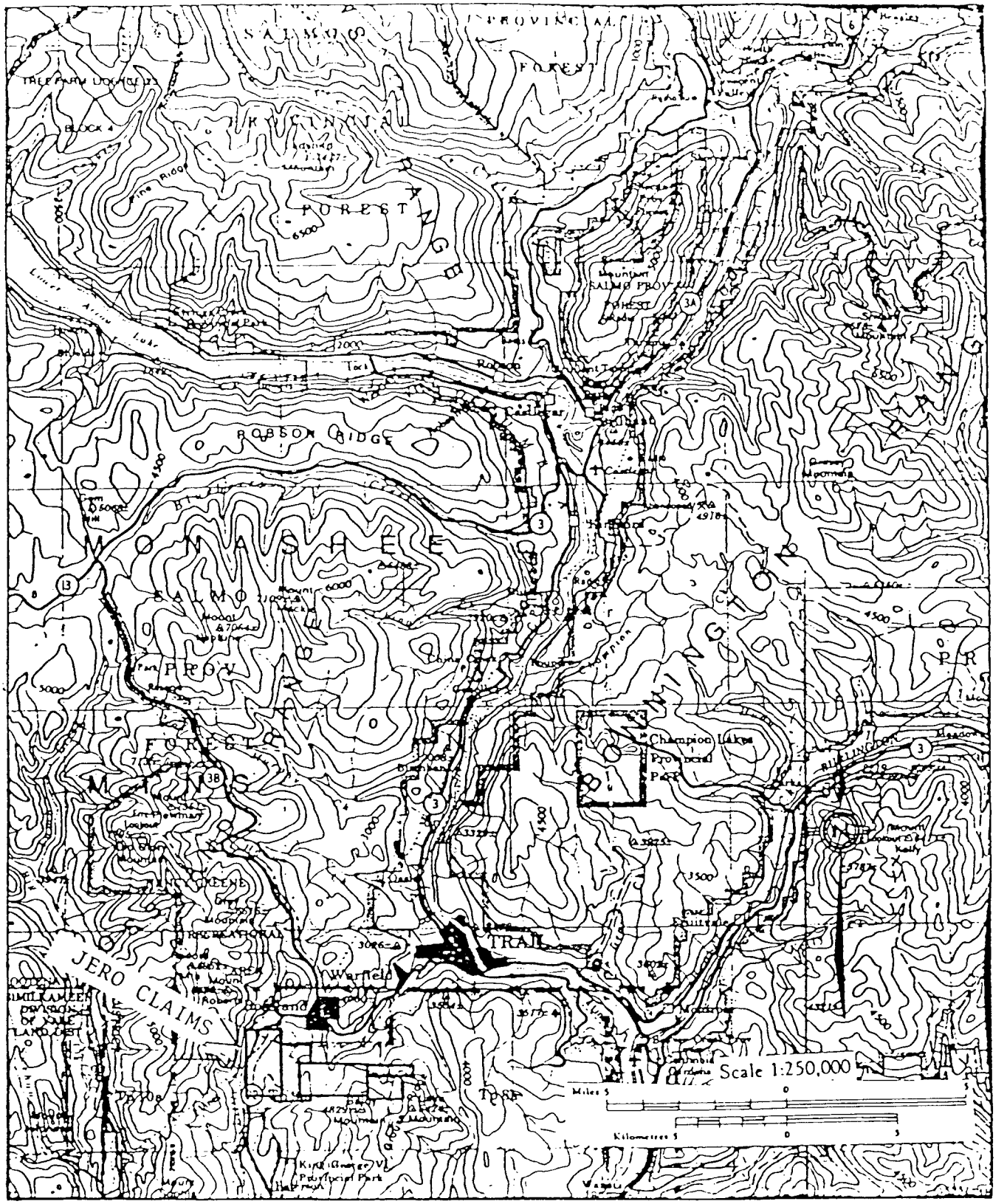
Method

A total of 6.0 kilometres of VLF-electromagnetic surveying was carried out on part of the westerly portion of the Jero 3 claim, extending part of a previous grid which had been done to the east of the present grid. An east west base line was established about 400 metres south of the north claim boundary. Parallel lines were established 100 metres north of the base line and 500 metres south of the base line, and a number of tie lines were then run between them. Reading intervals were generally at 25 metre intervals, with some at 50 metre intervals in some sections.

Results

A strongly anomalous area was encountered from 9+50W to 11+00W on the base line, and was encountered more strongly from about 8+25W to 9+50W on the parallel line 100 metres to the north, but shifted to the northeast. The north-south tie lines between these east-west base lines showed the same strong anomaly. This is to be followed up with further work to determine its nature and extent. The profiles of these VLF-EM lines are shown in Figures 6 and 7. A previous line of soil samples passing through the same anomalous VLF-EM area showed anomalous levels of zinc, lead and arsenic.


GUNSTEEL RESOURCES INC.
LOCATION MAP
JERO CLAIMS
SCALE
200 0 200 KILOMETRES
100 0 100 MILES
A+M exploration ltd.
YUKON TERRITORY
NORTHWEST TERRITORIES
BRITISH COLUMBIA
ALBERTA
ALASKA
PACIFIC OCEAN
QUEEN CHARLOTTE ISLANDS
VANCOUVER ISLAND
JERO CLAIMS



N.T.S. 82 F

GUNSTEEL RESOURCES INC.

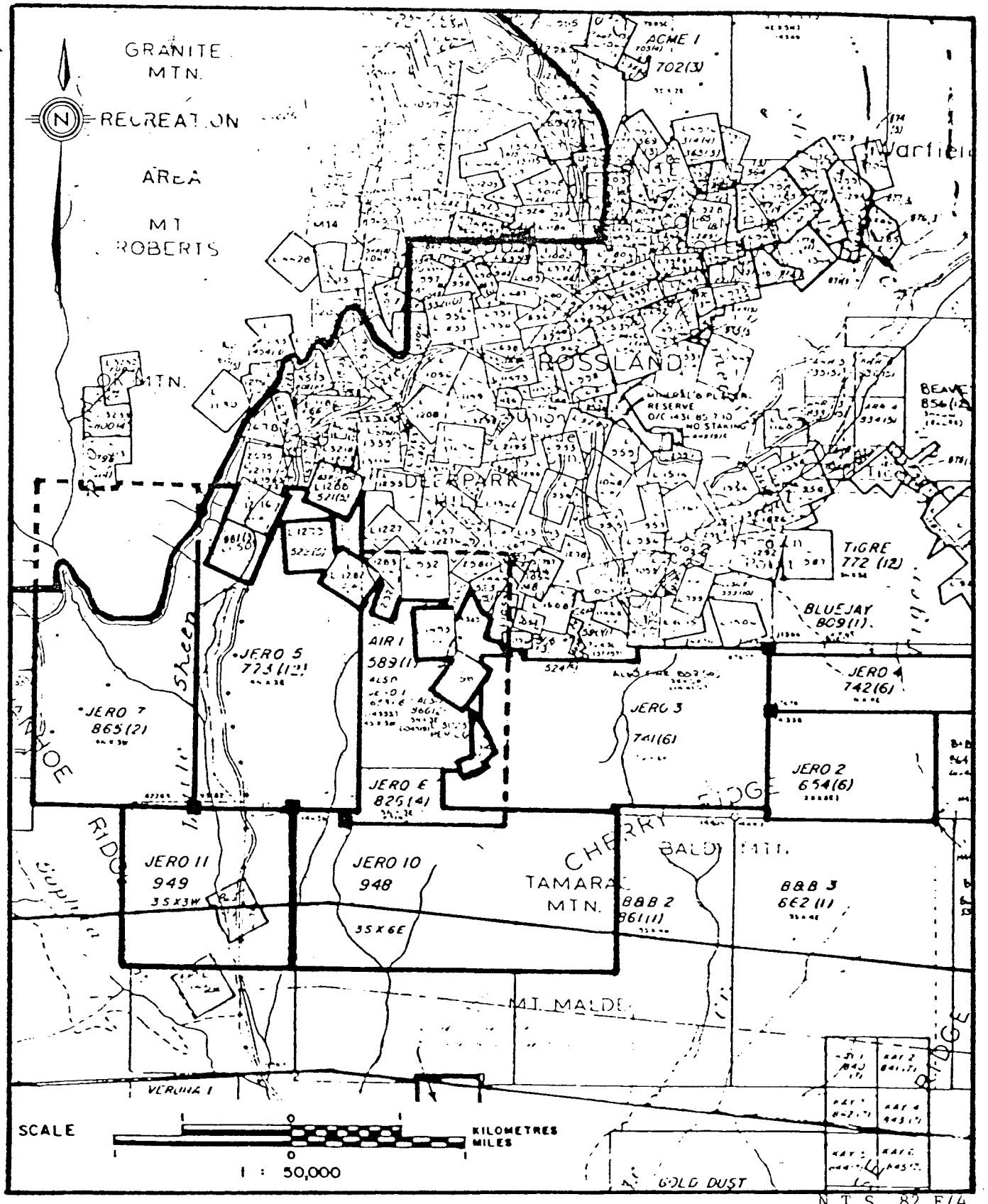
ACCESS MAP

JERO CLAIMS

Trail Creek Mining Division - British Columbia

AM exploration ltd.

Figure 2



N.T.S. 82 F/4

GUNSTEEL RESOURCES INC.

CLAIM MAP

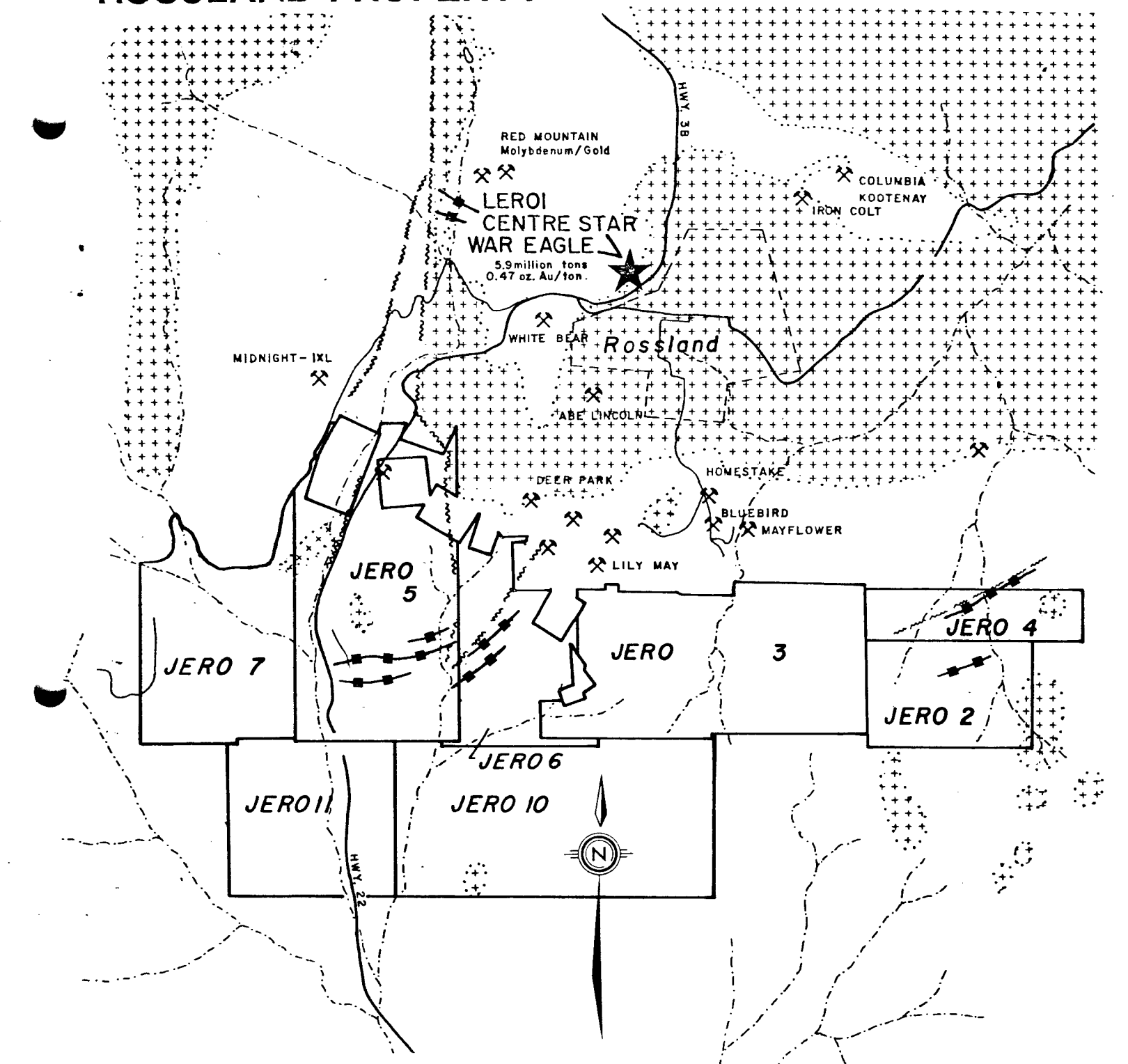
JERO CLAIMS

Trail Creek Mining Division – British Columbia

A·M exploration ltd.

Figure 3

ROSSLAND PROPERTY



LEGEND

- CREEK
- HIGHWAY
- GRANITIC INTRUSIVE ROCKS
- FAULT
- MINERAL SHOWING
- EM CONDUCTOR

GUNSTEEL RESOURCES INC.

JERO CLAIMS

TRAIL CREEK MINING DIVISION - BRITISH COLUMBIA

0 1 2 3 KM.

SCALE

CLAIMS & GEOLOGY

A·M exploration ltd

Figure 4

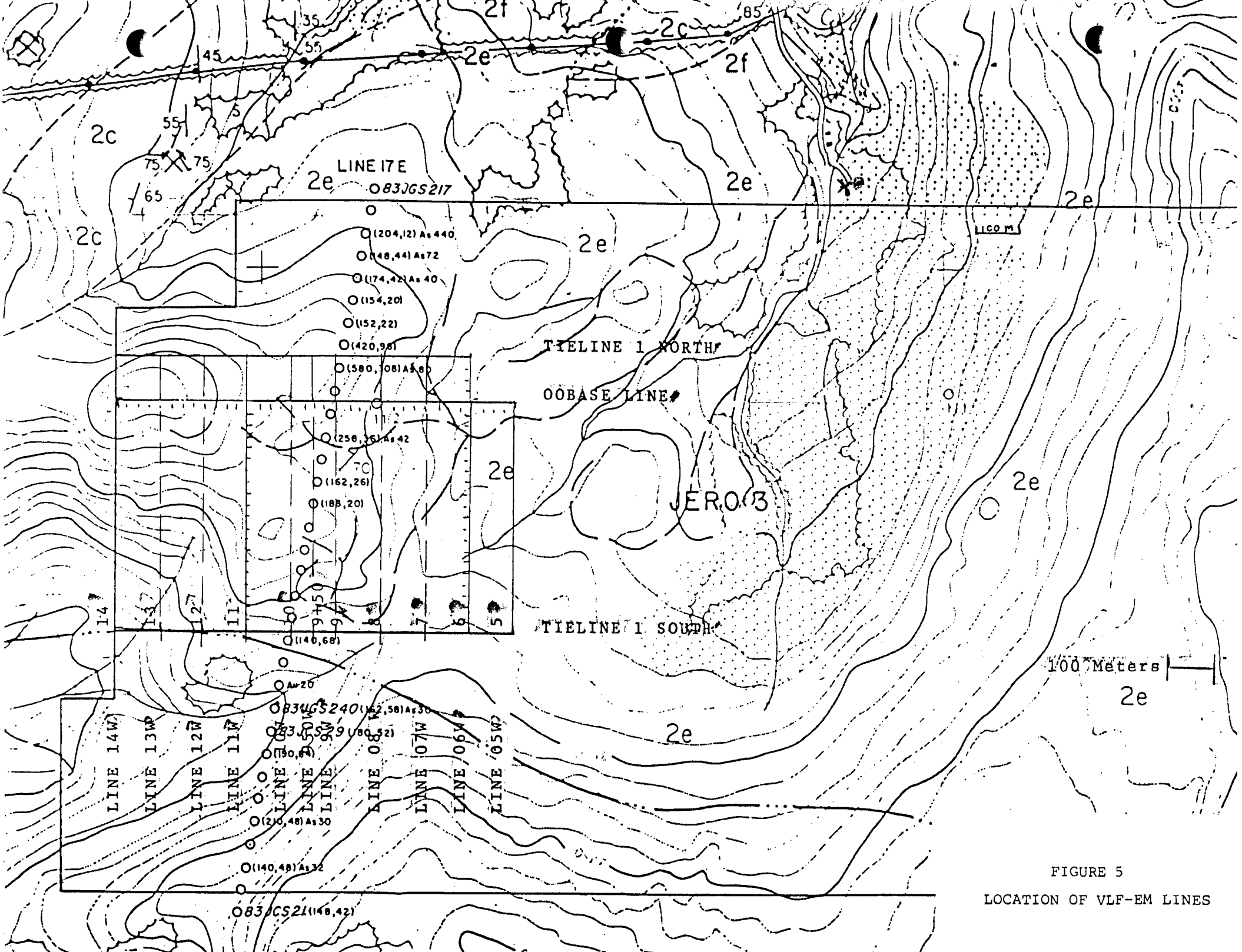
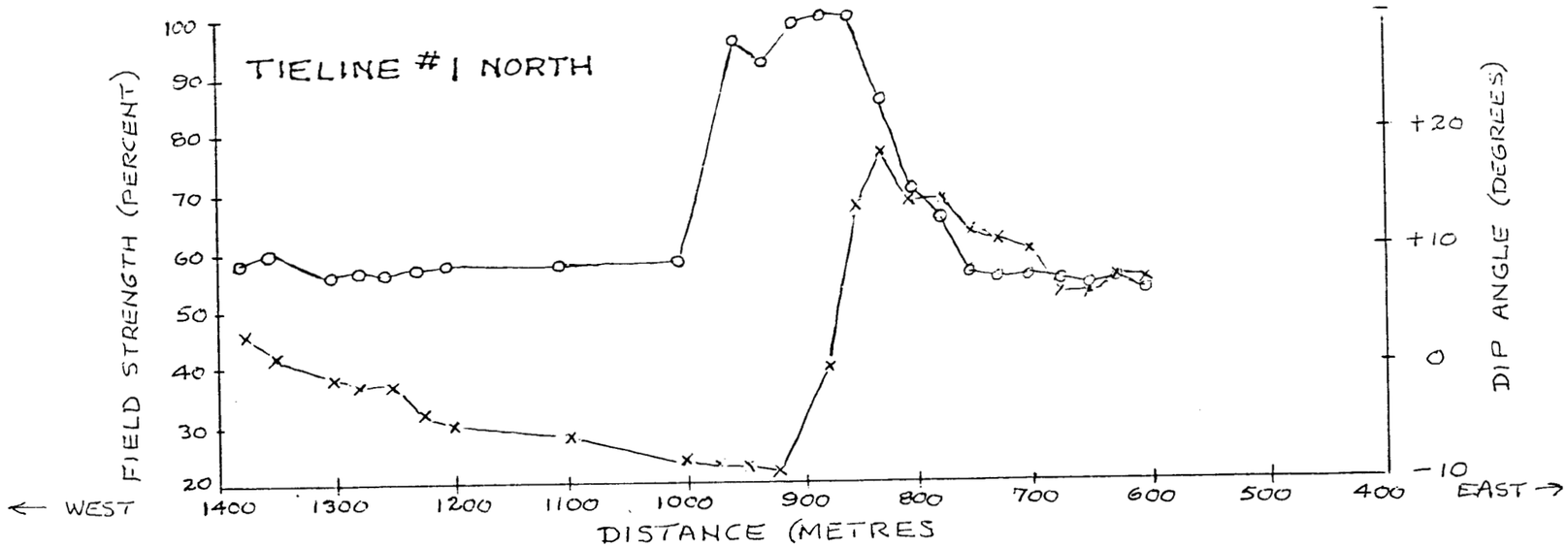
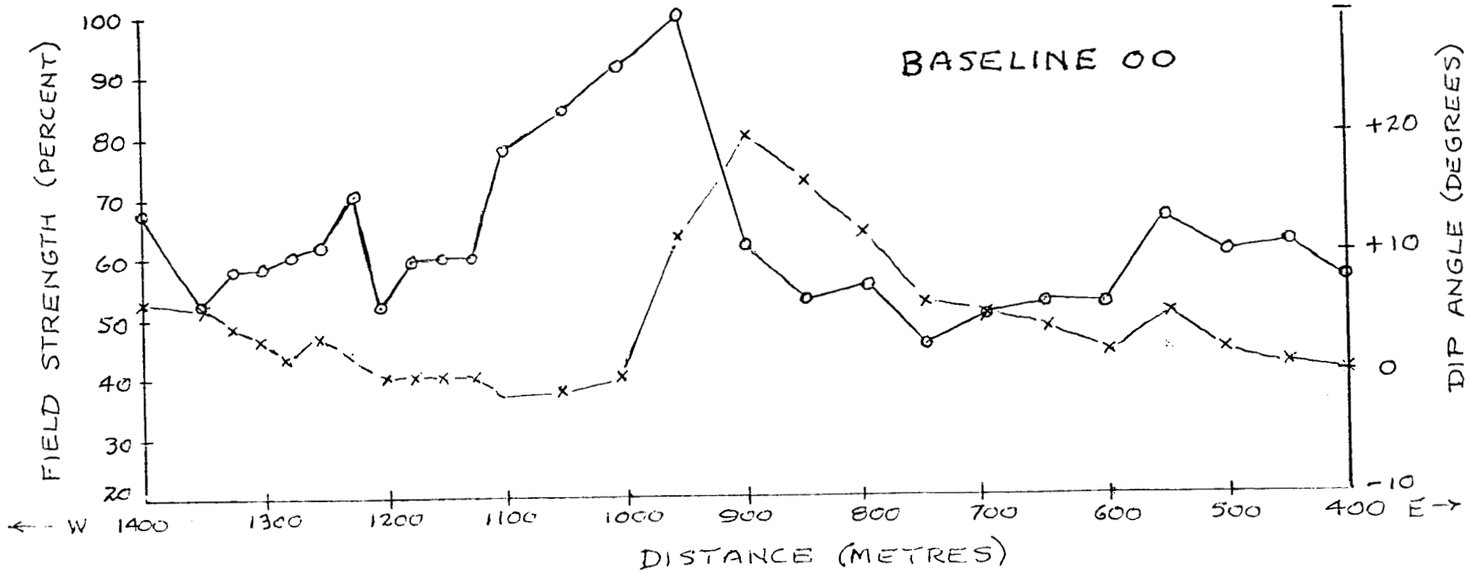


FIGURE 5

LOCATION OF VLF-EM LINES





o—o—o FIELD STRENGTH (PERCENT)

x—x—x DIP ANGLE (DEGREES)

STATION : SEATTLE, WASH.

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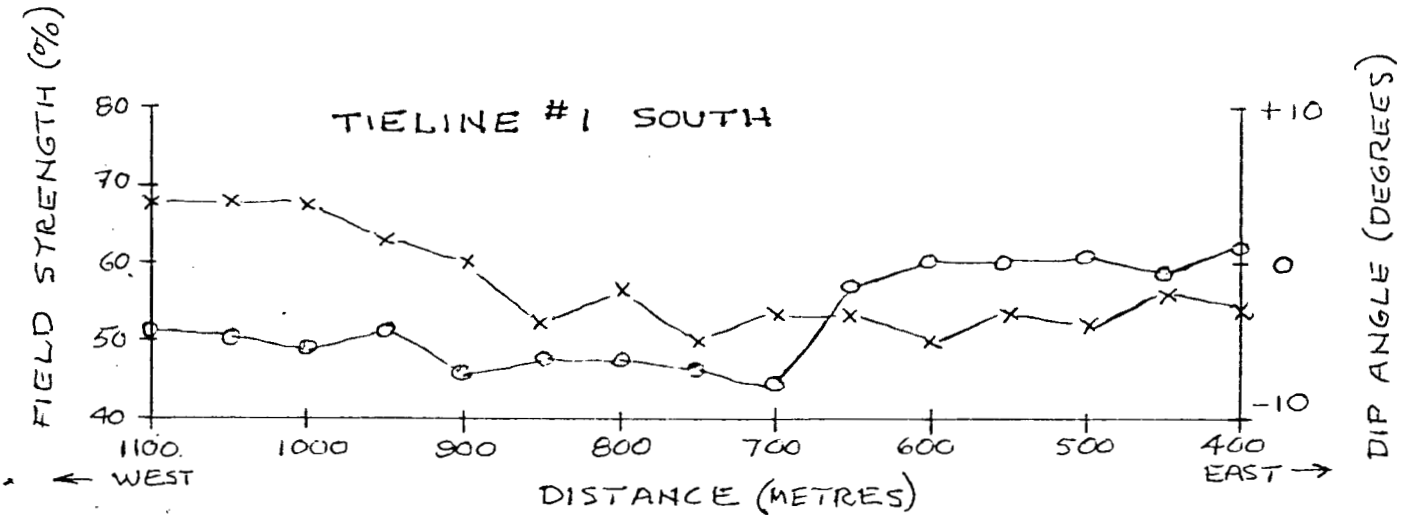
VLF-EM PROFILES

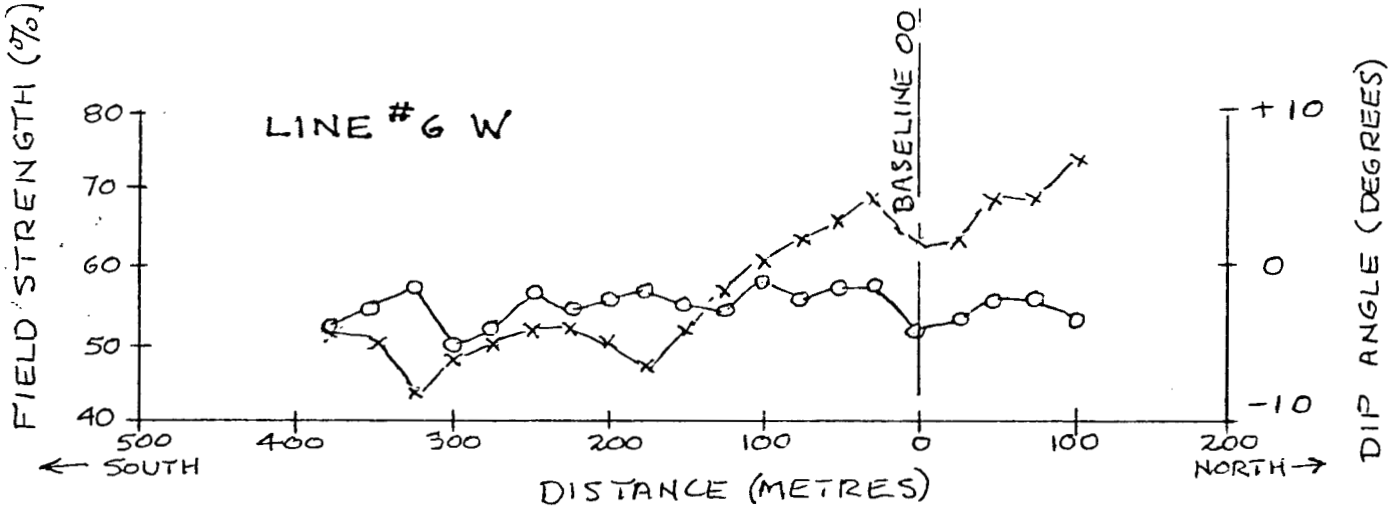
JERO PROPERTY
ROSSLAND, B.C

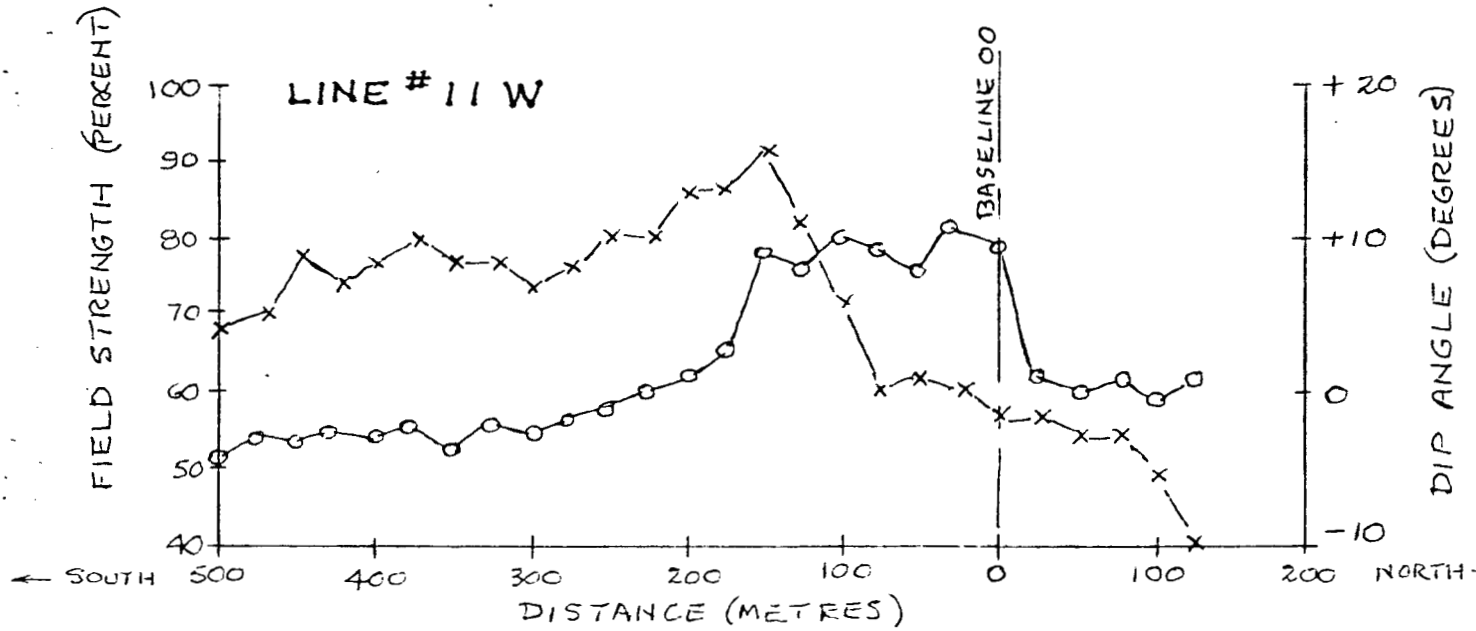
SEPT. 5, 1990

FIGURE 6

STATION : SEATTLE, WASH.







o—o—o FIELD STRENGTH (%)
×—×—× DIP ANGLE (DEGREES)

VLF-EM PROFILES

JERC PROPERTY — ROSSLAND B.C.

SEPT. 5, 1990

FIGURE 7

AFFIDAVIT OF EXPENSES

This certifies that geophysical work was carried out on the Jero 3 mineral claim on the Jero property in the Trail Creek Mining Division during the period February 1, 1990 to June 8, 1990 to the value of the following:

Mobilization and Fieldwork

Wages - F. Critchlow	- 6 days at $175	$1050.00
- D. Llewellyn	- 6 days at $175	1050.00
Vehicle Rental	- 6 days at $35/day	210.00
Mileage - 700 km. @ 0.20/km.		140.00
VLF-EM Rental		180.00
Materials, flagging, etc.		50.00
Report Preparation		550.00
		$3230.00

REFERENCES

Allen, D.G. and Sykes, E. (1989). Geophysical Assessment Report on the Jero 10 and 11 claims.

Allen, G.M. (1986). 1986 Assessment Report describing Geophysical and Geochemical Surveys on the Jero 2 to 6 claims (Rossland Property).

Allen, D.G. and MacQuarrie, D.R. (1986). 1985 Assessment Report on the Jero 2 to 6 claims.

Allen, D.G. and MacQuarrie, D.R. (1985). 1984 Assessment Report on the Jero 1 to 5 claims.

Allen, D.G. and MacQuarrie, D.R. (1984). 1983 Assessment Report on the Jero 1 to 4 claims.

Brownlee, D.J. (1988). Geochemical, Geophysical and Geological Assessment Report on the Jero Claims. (Rossland Property). Report for Gunsteel Resources Inc. April 28, 1988.

Fyles, J.T. (1984). Geological Setting of the Rossland Mining Camp. B. C. Department of Mines, Bulletin No. 74.

Gravel, J., Allen, D.G. and MacQuarrie, D.R. (1987). Geochemical and Geophysical Assessment Report on the Jero Claims.

Little, H.W. (1982). Geology of the Rossland-Trail Map Area. Geol. Survey of Canada. Paper 79-26

CERTIFICATE

I, Stan A. Endersby, certify that:

1.) I am a graduate of the University of British Columbia in Chemical Engineering (B.A.Sc. 1954). Also have a M.Sc. 1965.

2.) I am a member in good standing of the Association of Professional Engineers of B. C.

3.) This report is based on fieldwork carried out by Mr. F. Critchlow on the Jero property between February 1, 1990 and June 17th, 1990 and supervised by myself.

4.) I have an indirect interest in the Jero property through Gunsteel Resources Inc.

S.A. Endersby

Stan A. Endersby, P. Eng.

September 5, 1990
Vancouver, B. C.

I, Fredric H. Critchlow, certify that;

(1) I am a prospector, free miners certificate #280908 (1989), #294865 (1990), and reside at 523-105th Street, Castlegar, B.C. V1N 3G7.

(2) I have been practicing my profession, including prospecting, geochem, and geophysics since 1963, largely by contract basis with various companies in British Columbia.

(3) This work was carried out by myself with the help of Dennis Llewellyn.

(4) I have no interests in any of the company properties.

**Instrument used for the survey on the Jero Group was a Sabre 27 and the station used was Seattle.

Fredric H. Critchlow

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE # Baseline 00		HEADING West	LINE # Baseline 00 **Cont...		HEADING West
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 400M	0	56	+1200M	0	52
+ 450M	+1	62	+1225M	+2	70
+ 500M	+2	60	+1250M	+3	62
+ 550M	+5	67	+1275M	+2	60
+ 600M	+2	52	+1300M	+3	58
+ 650M	+4	52	+1325M	+4	57
+ 700M	+5	50	+1350M	+6	52
+ 750M	+6	45	+1400M	+6	68
+ 800M	+12	56			
+ 850M	+16	53			
+ 900M	+20	62			
+ 950M	+12	100			
+1000M	0	92			
+1050M	-2	84			
+1100M	-2	78			
+1125M	0	60			
+1150M	0	60			
+1175M	0	59			

MISC INFORMATION: Note Field strength test at start of day was 091.

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE # Tieline #1 North HEADING West Located 100 M north of 00 Baseline			LINE # Tieline #1 HEADING West (Continued)		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
6+00M	+7	53	10+25M	No Readings	
6+25M	+7	56	10+50M	"	"
6+50M	+6	54	10+75M	"	"
6+75M	+6	55	11+00M	-6	58
7+00M	+10	56	11+25M	No Readings	
7+25M	+11	56	11+50M	"	"
7+50M	+12	57	11+75M	"	"
7+75M	+14	66	12+00M	-5	58
8+00M	+14	70	12+25M	-4	57
8+25M	+18	87	12+50M	-2	56
8+50M	+13	100	12+75M	-2	57
8+75M	0	100	13+00M	-1	56
9+00M	-9	99	13+25M	No Readings	
9+25M	-8	93	13+50M	+1	60
9+50M	-8	97	13+75M	+3	58
9+75M	No Readings				
10+00M	-8	58			

MISC INFORMATION:

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE #Tieline 1South HEADING West *Located 500M South of 00Baseline			LINE # HEADING		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 400M	-3	62			
+ 450M	-2	59			
+ 500M	-4	61			
+ 550M	-3	60			
+ 600M	-5	60			
+ 650M	-3	57			
+ 700M	-3	44			
+ 750M	-5	46			
+ 800M	-2	47			
+ 850M	-4	47			
+ 900M	0	45			
+ 950M	+2	51			
+1000M	+4	49			
+1050M	+4	50			
+1100M	+4	51			

MISC INFORMATION:

VLF SURVEY ZERO #3 (Using Sabre 27)

June 04-08/90.

LINE # 6 West HEADING South **From Baseline 00**			LINE # 6 West HEADING North **From Baseline 00**		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 00M	+2	52	+ 00M	+2	52
+ 25M	+4	57	+ 25M	+2	53
+ 50M	+3	57	+ 50M	+4	55
+ 75M	+2	56	+ 75M	+4	55
+100M	0	58	+100M	+7	53
+125M	-2	54			
+150M	-4	55			
+175M	-7	57			
+200M	-5	56			
+225M	-4	55			
+250M	-4	57			
+275M	-5	52			
+300M	-6	50			
+325M	-8	57			
+350M	-5	55			
+375M	-4	52			

MISC INFORMATION:

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE # 7 West HEADING North			LINE # 8 West HEADING North		
From Baseline 00			**From Baseline 00**		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 00M	+ 5	50	+ 00M	+12	56
+ 25M	+ 7	75	+ 25M	+12	72
+ 50M	+ 5	72	+ 50M	+15	73
+ 75M	+10	72	+100M	+14	70
+100M	+10	56			

MISC INFORMATION:

APPENDIX

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE # 9 West HEADING North **From 00 Baseline**			LINE # 9 + 50M West HEADING North **From 00 Baseline**		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 00M	+20	62	+ 00M	+ 12	100
+ 25M	+24	78	+ 25M	0	100+
+ 50M	+16	100+	+ 50M	- 05	100+
+ 75M	-02	100+	+ 75M	- 07	100+
+100M	-09	99	+100M	- 08	97
			+125M	- 10	90
			+150M	- 10	84

MISC INFORMATION:

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE # 10 West HEADING North **From Baseline 00**			LINE # HEADING		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 00M	0	92			
+ 25M	-1	62			
+ 50M	-4	64			
+ 75M	-6	61			
+100M	-8	58			

MISC INFORMATION:

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE # 11 West HEADING South **From Baseline 00**			LINE # 11 West HEADING South ***Continued****		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 00M	-2	78	+425M	+7	54
+ 25M	0	82	+450M	+8	53
+ 50M	+1	76	+450M	+5	53
+ 75M	0	78	+500M	+4	51
+100M	+6	80			
+125M	+12	76			
+150M	+16	78	LINE # 11 WEST HEADING NORTH		
+175M	+13	65			
+200M	+13	62	+ 00M	-2	78
+225M	+10	60	+ 25M	-2	62
+250M	+10	57	+ 50M	-3	60
+275M	+8	56	+ 75M	-3	61
+300M	+7	54	+100M	-6	59
+325M	+8	56	+125M	-10	62
+350M	+8	52			
+375M	+10	55			
+400M	+8	54			

MISC INFORMATION:

VLF SURVEY JERO #3 (Using Sabre 27)

June 04-08/90.

LINE # 12 West HEADING North **From Baseline 00**			LINE # 13 West HEADING North ** From Baseline 00**		
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 00M	0	52	+ 00M	+ 3	58
+ 25M	-2	56	+ 25M	+ 2	58
+ 50M	-3	61	+ 50M	0	56
+ 75M	-3	58	+ 75M	0	56
+100M	-5	58	+100M	-1	56

MISC INFORMATION:

VLF SURVEY JERO #1 (Using Sabre 27)

June 04-08/90.

LINE # 14 West	HEADING North		LINE #	HEADING	
** From Baseline 00**					
DISTANCE	DIP	FIELD STRENGTH	DISTANCE	DIP	FIELD STRENGTH
+ 00M	+6	68			
+ 25M	+4	67			
+ 50M	+1	65			
+ 75M	0	65			
+100M	*No Reading (over cliff)				

MISC INFORMATION: