

REPORT

on the

VLF SURVEY

ON THE JOHN 1 - 5 CLAIMS

of the

BAYONNE PROPERTY

NELSON MINING DIVISION - BRITISH COLUMBIA

Lat. 49° 10' N

Long 116° 56' W

for

GOLDRICH RESOURCES INC.

GUNSTEEL RESOURCES INC.

NUGGET MINES LTD.

by

STAN A. ENDERSBY, P.Eng.

LOG NO:	0815	RD.
ACTION:		
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LOG NO:	23-01	RD.
ACTION:	<i>Date received back from amendment.</i>	
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,198

August 13, 1990

Vancouver, B. C.

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SUMMARY AND CONCLUSIONS:

Goldrich Resources Inc., Gunsteel Resources and Nugget Mines Ltd., together have a 100% interest in the 166 claims and claim units which comprise the Bayonne property. A VLF-EM survey was done on the southwest corner of the property, where overburden is quite extensive, to determine whether more detailed surveys are warranted to look for other structures similar to the steeply dipping gold bearing quartz veins which occur on other parts of the property, particularly at the Bayonne Mine.

It is recommended that a program of geophysical and geochemical surveying be carried out over the property to further outline extensions of the existing veins. The program should include some work over the known veins to determine the response where a vein is known to occur. Trenching and mapping should be done on the indicated anomolous extension of existing known veins and on indicated new veins.

INTRODUCTION:

The Bayonne property is located about 50 kilometres southeast of Nelson, B. C. and about 12 kilometres east of the Sheep Creek gold mining camp, the majority of which is owned by the above three companies. The Bayonne property includes the Bayonne mine which produced 85000 tons of ore averaging 0.47 ounces of gold per ton between 1936 and 1942. The gold values are in steeply dipping quartz veins varying up to 3.0 metres in width but averaging about 0.5 metres. Exploration work has indicated the likely presence of other veins and the purpose of the survey which is the subject of this report is to test for other vein structures in the southwest corner of the property.

LOCATION, ACCESS, PHYSIOGRAPHY

The Bayonne property, which includes the John 1-5 mineral claims, is situated in the Nelson Mining Division in southeastern British Columbia, approximately 50 kilometres southeast of Nelson and 450 kilometres due east of Vancouver. It lies about 15 kilometres north of the U.S. boundary.

Access to the property is via about 6 kilometres of gravel road north up the valley of Bayonne Creek from the southern trans-provincial highway, about 32 kilometres west of Creston and 50 kilometres east of Salmo. The access road leaves the highway at about 1200 metres elevation and rises to about 1890 metres at the lower workings of the Bayonne mine.

The topography of the property is moderately rugged, with elevations ranging from about 1350 metres to 2225 metres at the peak of John Bull Mountain. The country is heavily timbered where it has not been logged. Climatic conditions are not excessively severe.

HISTORY

The earliest recorded history of the Bayonne property was in 1901 when the Bayonne and Echo claims received some attention. Early work consisted of numerous trenches and three short adits on the 1st, 6th, and 8th levels developing the original vein exposures. Very little work was carried out between 1915 and 1935 when the 17 original Crown grant claims including the Bayonne and Echo claims were acquired by Bayonne Consolidated Mines, Ltd. Underground development and mining began and a 60 ton cyanide concentrator was constructed, coming into full production in 1936. Production was slowed down in 1939 in favour of an extensive development program and then continued unabated up to 1942.

The mine was at a standstill due to labour and material shortage until 1945 when it began operations again until 1946. Minor tonnages were produced by lessees between 1947 and 1951.

In 1963 Torwest Resources Ltd. optioned the property and carried out rehabilitation work, diamond drilling and a resampling program under the direction of W.G. Hainsworth, P. Eng. This work continued up to October, 1964. Up to 1963 access was by a 37 kilometer gravel road from Tye Siding on the west side of Kootenay Lake but the completion of the Salmo-Creston Highway in that year provided shorter access to the south. Logging roads were constructed from the Highway and extended by Torwest to the mine in 1964. The distance to the Trail smelter where shipments of vein material can be made is about 96 kilometers.

HISTORY CONT'D

Torwest Resources Ltd. carried out sufficient work to their satisfaction to justify construction of a new concentrator. Reserves were considered to be 12,450 tons averaging 0.79 oz Au per ton. Site preparation for the new 50 ton per day mill was commenced, two 300 ton ore bins were constructed, the main haulageway (5 level) was retracked when Torwest dropped their interest (and the option) in favour of other exploration properties.

Total production is reported as being 85,000 tons averaging 0.47 oz Au and 1.12 oz Ag. This includes shipments made by lessees in 1947 - 1951 that totalled 673 tons averaging 0.67 oz Au, 4.75 oz Ag, 4.4% Pb and 2.3% Zn.

In June, 1968 the property was optioned by Liberty Mines Ltd. but no work was carried out, other than an examination by G.L. Mill, P. Eng.

In early 1980 Goldrich Resources, Inc. acquired the property and began a program of rehabilitation, retimbering, diamond drilling and resampling under the direction of R.A. Wells and F. O'Grady. A trial stope on the 8 level was begun and a shipment of 43 tons averaging 0.15 oz Au, 1.2 oz Ag, 0.4% Pb, 0.2% Zn and 78.3% SiO₂ was made to the Cominco Smelter at Trail.

In 1987 Terra Mines Ltd. optioned the Goldrich claims and conducted geochemical, geophysical surveying, trenching and sampling. In July 1990, the Boards of Directors of Goldrich Resources, Nugget Mines Ltd., and Gunsteel Resources, subject to shareholder and regulatory approval, agreed to amalgamate the three companies to put all the Bayonne property, along with most of the Sheep Creek gold camp about 12 Km to the west into one ownership to provide sufficient ore for production.

GEOLOGY AND MINERALIZATION

The area in which the Bayonne Property is located is underlain by fine to medium grained granodiorite of Mesozoic age intruding green argillaceous quartzite, limestone and coarse sediments of the Horsethief Creek series of late Precambrian age. The property is located near the southwest end of an elongate, northeast-trending, 60 km long body of granodiorite known as the Bayonne batholith. It varies in composition from a granite to a calcic granodiorite and contains phases described as coarse grained, fine grained, porphyritic, non-porphyritic, pink and light to dark grey and is often gneissic in nature. The variety centered on John Bull Mountain and underlying the Bayonne property is referred to as the Mine Stock and H.M. Rice believes this to be a separate and older body rather than a part of the Bayonne batholith. Mineralization consists of quartz filled fissure veins striking N80E and dipping vertically. The veins vary in width from a few centimeters to 3 meters and average about 0.5 meters in width. Gold and silver are intimately associated with pyrite, galena, sphalerite and chalcopyrite.

PROPERTY AND OWNERSHIP

The Bayonne property consists of the following contiguous mining claims:

CLAIM NAME	LOT NO. OR RECORD NO.	CLAIM TYPE	UNITS	EXPIRY DATE	OWNER
Bayonne	5083	c.g.	1		Goldrich Resources
Pat	5706	c.g.	1		Goldrich Resources
Columbus	5951	c.g.	1		Goldrich Resources
Ohio	5962	c.g.	1		Goldrich Resources
New Jersey	5967	c.g.	1		Goldrich Resources
Virginia	6887	c.g.	1		Goldrich Resources
Shookum	9350	c.g.	1		Goldrich Resources
Michigan	10775	c.g.	1		Goldrich Resources
Maggie Aikens	10776	c.g.	1		Goldrich Resources
Summit Belle	10777	c.g.	1		Goldrich Resources
Montana	10778	c.g.	1		Goldrich Resources
Lynn 1-18	5543-5558	2 post	17	Mar 16/91	F. Critchlow *
John #1	5687	m.g.	18	May 17/91	F. Critchlow *
John #2	5688	m.g.	18	May 18/91	F. Critchlow *
John #3	5689	m.g.	10	May 19/92	F. Critchlow *
John #4	5690	m.g.	12	May 21/91	F. Critchlow *
John #5	6153	m.g.	20	Mar 22/91	F. Critchlow *
Oxford	725	r.c.g.	1	Aug 15/92	Goldrich Resources
Deleware	726	r.c.g.	1	Aug 15/92	Goldrich Resources
Illinois	727	r.c.g.	1	Aug 15/92	Goldrich Resources
Echo	728	r.c.g.	1	Aug 15/92	Goldrich Resources
Echo Fr.	729	r.c.g.	1	Aug 15/92	Goldrich Resources
Ontario	730	r.c.g.	1	Aug 15/92	Goldrich Resources
Portland	731	r.c.g.	1	Aug 15/92	Goldrich Resources
St. Elmo Fr.	732	r.c.g.	1	Aug 15/92	Goldrich Resources
Idaho	733	r.c.g.	1	Aug 15/92	Goldrich Resources
Maryland	773	r.c.g.	1	Aug 29/92	Goldrich Resources
Kentucky	774	r.c.g.	1	Aug 29/92	Goldrich Resources
May Flower	1918	r.c.g.	1	Aug 21/91	Goldrich Resources
BlueBird	1919	r.c.g.	1	Aug 21/91	Goldrich Resources
Last Chance	1920	r.c.g.	1	Aug 21/91	Goldrich Resources
Bayonne 1	2503	m.g.	20	Nov 17/90	Goldrich Resources
Bayonne 2	2504	m.g.	20	Nov 17/90	Goldrich Resources
Yukon	2681	m.g.	1	June 28/92	Goldrich Resources
Amic I	2708	m.g.	2	July 20/91	Goldrich Resources
Amic II	2709	m.g.	1	July 20/91	Goldrich Resources
B Mac 1	2724	2 post	1	Aug 3/91	Goldrich Resources
B Mac 2	2725	2 post	1	Aug 3/91	Goldrich Resources

166 units

The work for this report was done primarily on the John #1 claim, which is in the John 1-5 group and is part of the Bayonne property.

* In Trust for Nugget Mines Ltd. & Gunsteel Resources Inc.

VLF-EM SURVEYMethod and Instrumentation

A total of 10.3 kilometres of VLF-EM surveying was conducted on the southwest corner of the Bayonne property, primarily on the John 2 claim.

The VLF-EM survey utilizes long range submarine communications which are broadcast from radio stations in the 12 to 24 kilohertz range. The magnetic component of the electromagnetic field remains horizontal if undisturbed. The presence of conductive zones (massive sulphides, shear zones, etc.) will induce a vertical component in the magnetic field. The electromagnetic field will also have increased field strength in areas where conductors are present. These conductors can be located and, to a degree, interpreted by measuring the various parameters of the electromagnetic field.

The VLF-EM equipment used was a Sabre Model-27 VLF-EM receiver manufactured by Sabre Electronic Instruments Ltd. The receiver measures the dip angle of the resultant magnetic field (in degrees) and the normalized field strength of the horizontal component. Conductive zones are interpreted to underlie the point on a traverse line where there is a substantial change in the dip angle of the resultant magnetic field ($>5^{\circ}$) and an associated field strength increase.

The VLF-EM received was tuned to Seattle, Washington (24.8 KHZ) and readings were taken at 25 metre intervals.

Interpretation and Evaluation of Results

The VLF-EM survey shows few anomalies and those which are present are weak in nature. Most of the anomalies are present on the northern portion of the survey area on lines 10 and 12. On line 10 there are anomalies at 35N, 100N and 200N. The anomaly at 35N has no field strength increase associated with it and is likely caused by topographic changes. The other two anomalies are weak. On line 12 there are anomalies at

625S, 710S and 825S. All three anomalies have very small field strength increases associated with them and may be topography related. The scarcity of data in this region makes it impossible to determine if the anomalies have any strike length. A more thorough survey of the area surrounding lines 10 and 12 is needed to determine the significance of these weak anomalies.

The only other anomaly in the survey area is on line 00 at 200N. The narrow peak to peak distance (25 metres) of the dip angle measurement indicates a conductor at or near surface, however heavy snow during the survey period prevented further investigation at the conductor by prospecting. This anomaly does not appear on any other lines in the survey area but the line 100 metres away (line 01) ends just south of the anomaly on line 00 and the next closest line is 400 metres away (line 04). Therefore, the conductor may continue in a north easterly fashion and further VLF-EM surveys should be conducted in this area to ascertain the continuity of this conductor.

The survey area overlies the Bayonne Batholith, a massive granitic unit, and so any continuous VLF-EM anomaly which represents a conductor, even if it is weak, would be significant. Because of this the anomalies mentioned should be followed up to see if they are continuous over a significant distance.

LOCATION MAP

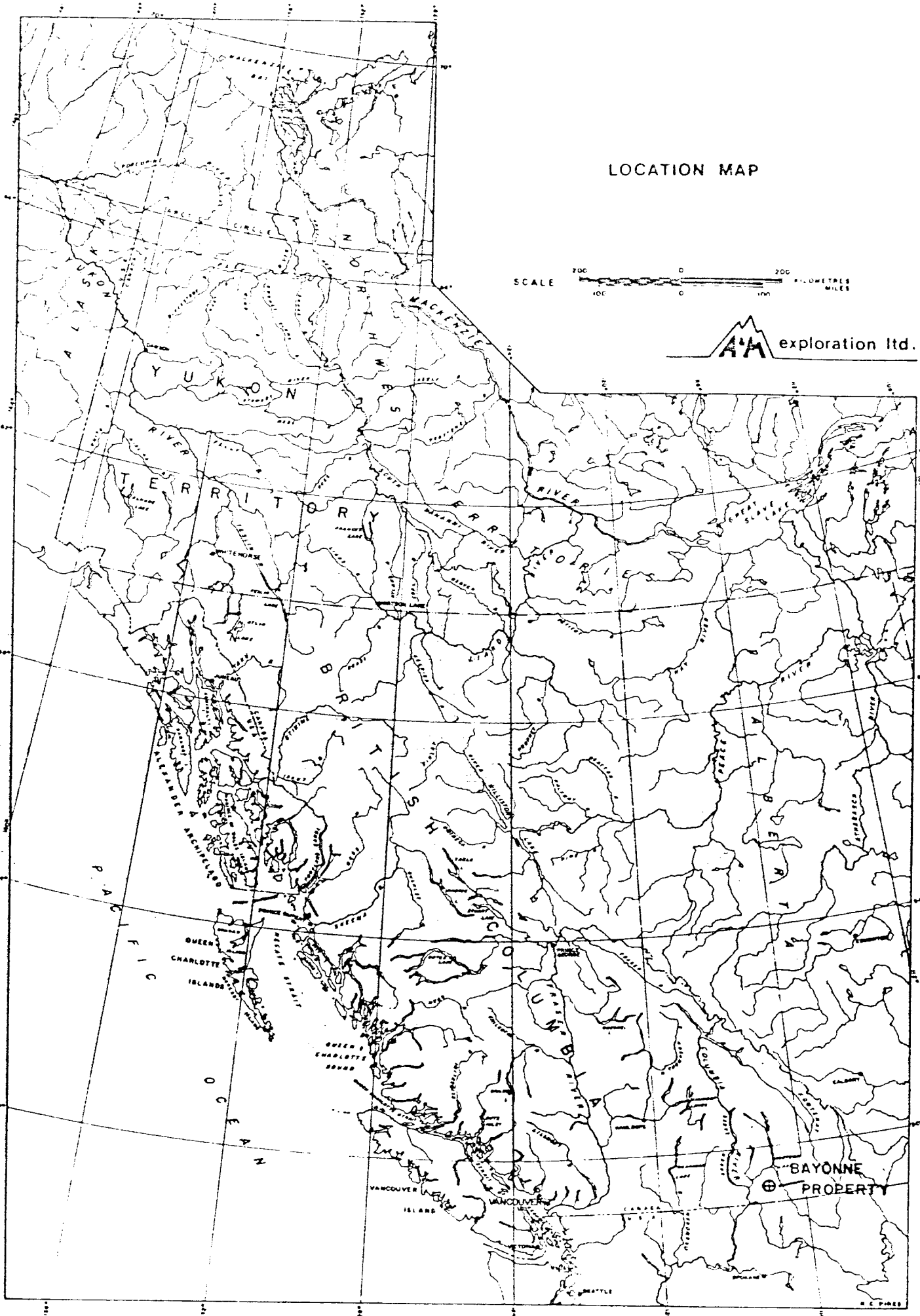
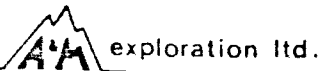
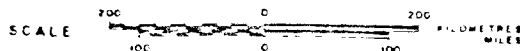
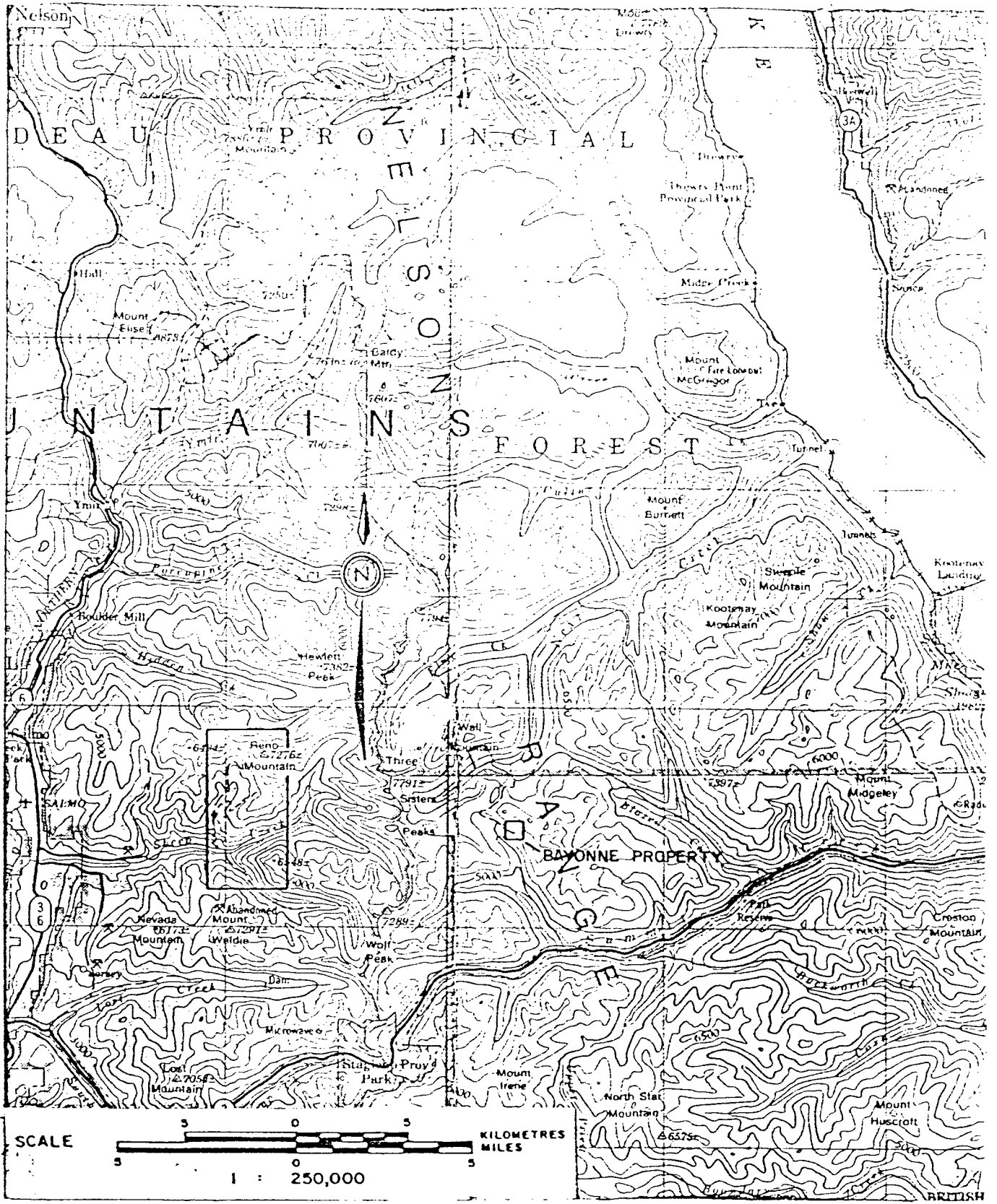
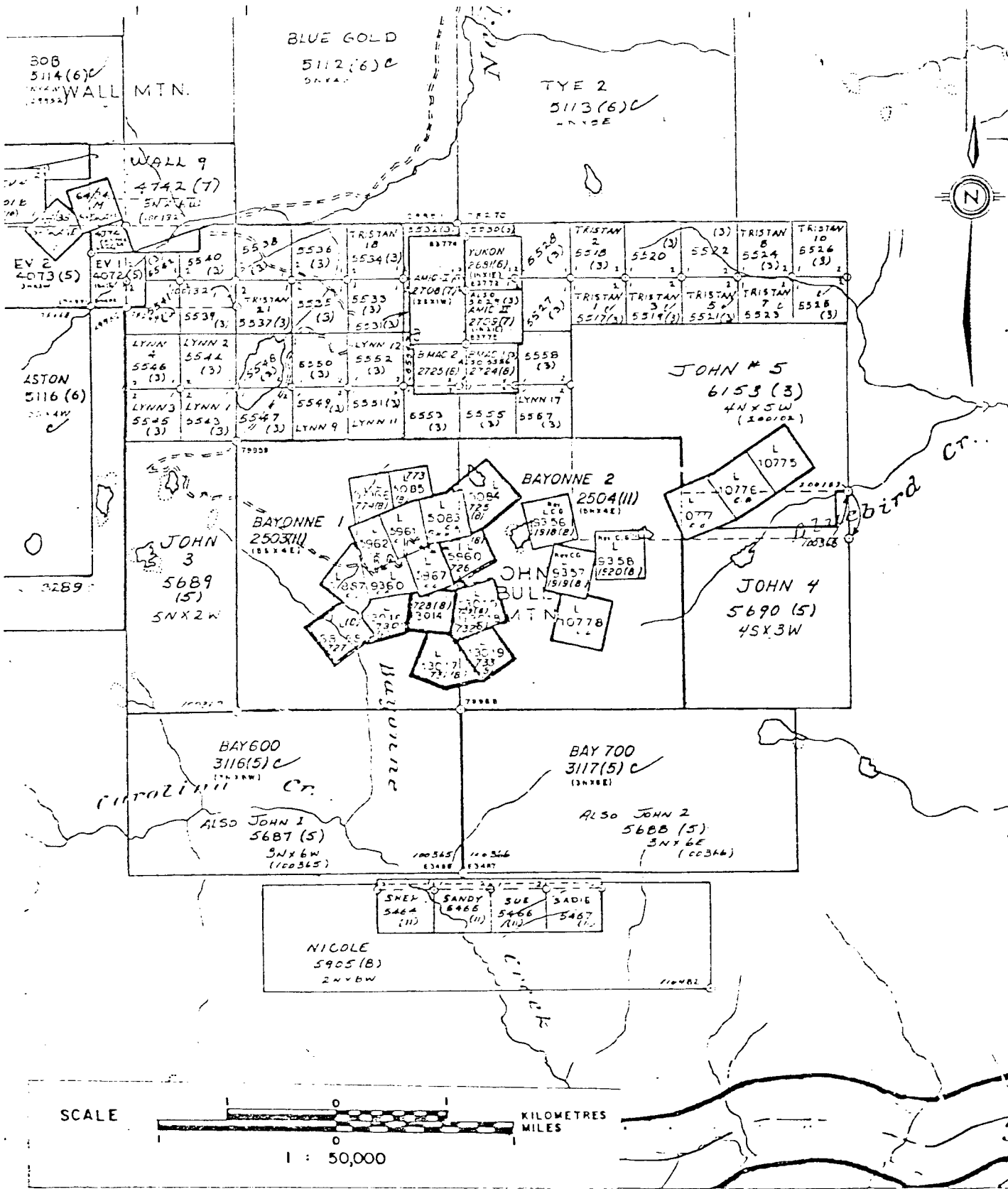


FIGURE - 1



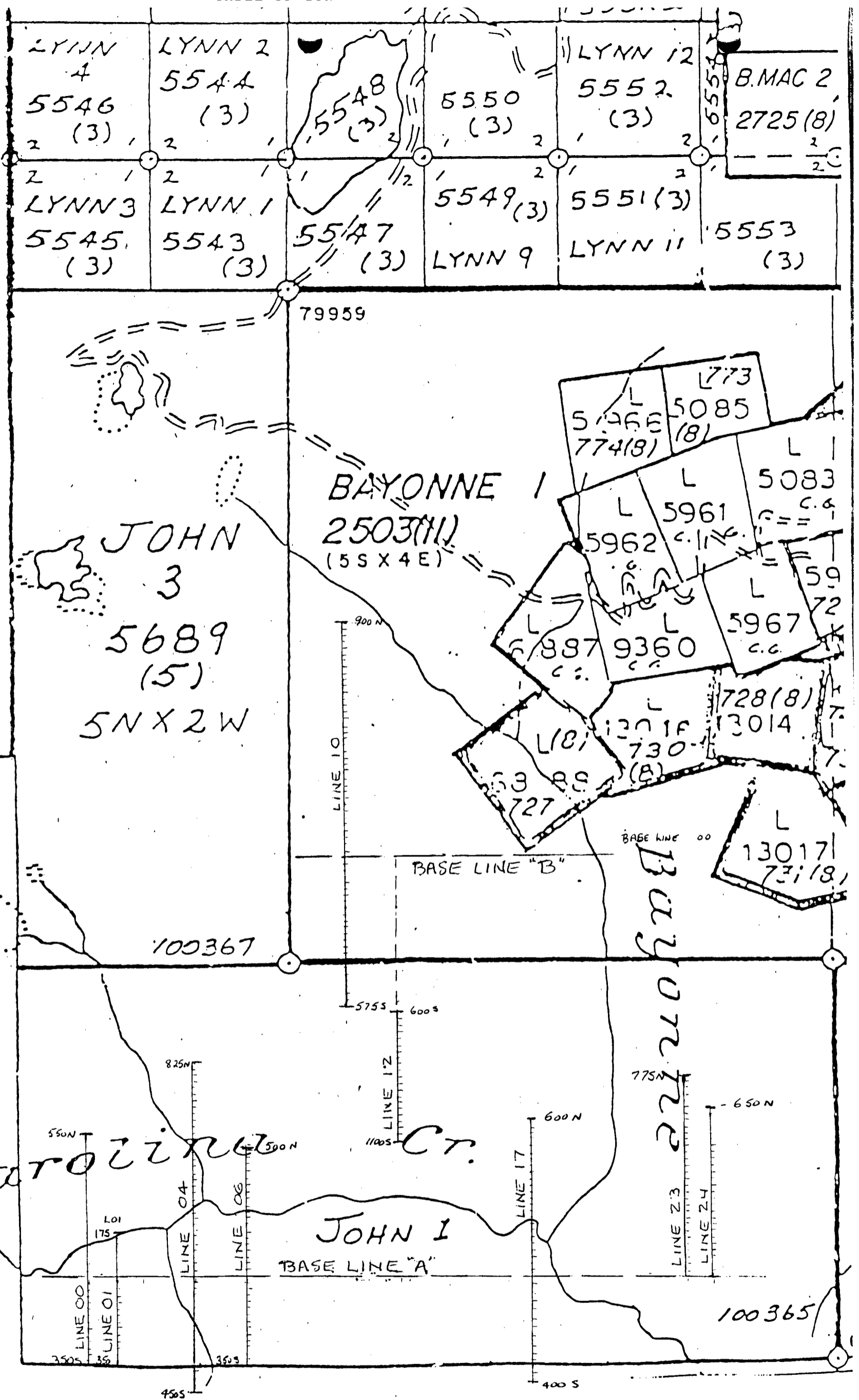
ACCESS MAP



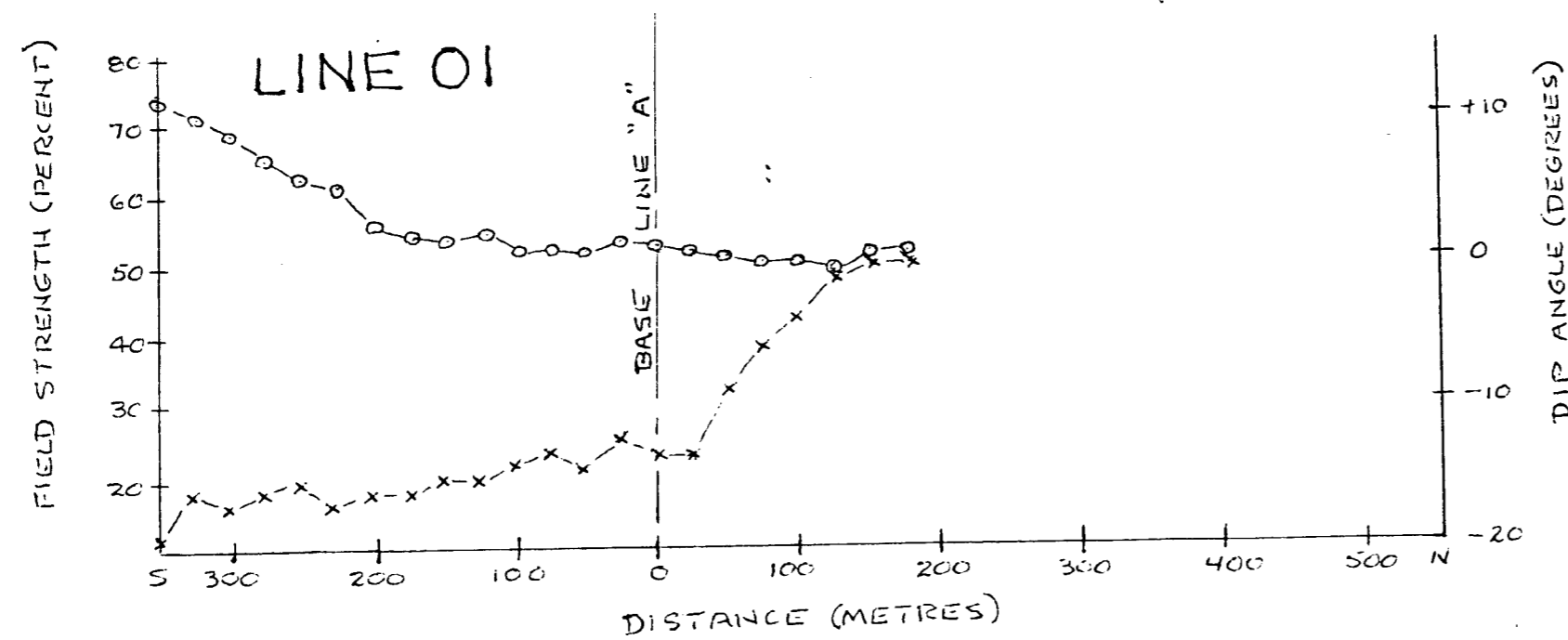
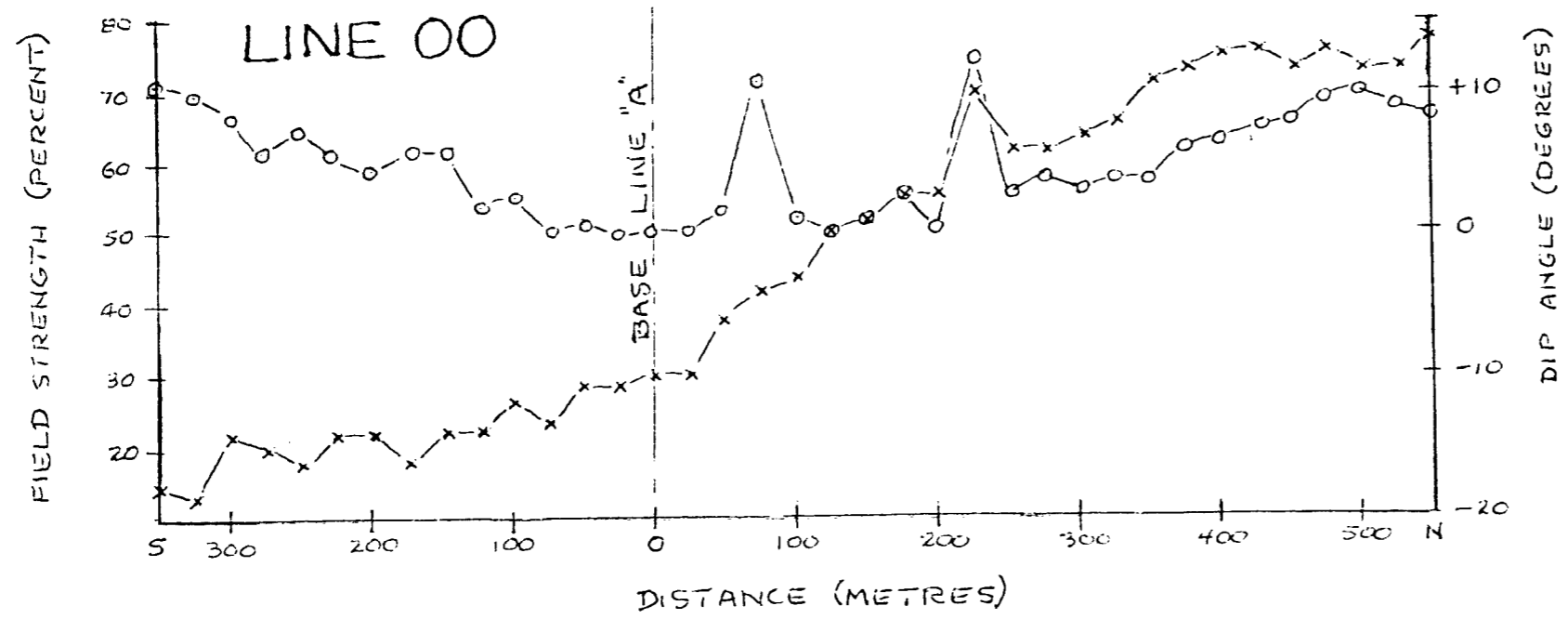
BAYONNE PROPERTY
CLAIM MAP

FIGURE 3

ASTON
5116 (6)
5S X 4W
✓



KEY MAP
SHOWING
LOCATION OF VLF-EM LINES
BAYONNE PROPERTY



○-○-○ FIELD STRENGTH (PERCENT)
 x-x-x DIP ANGLE (DEGREES)

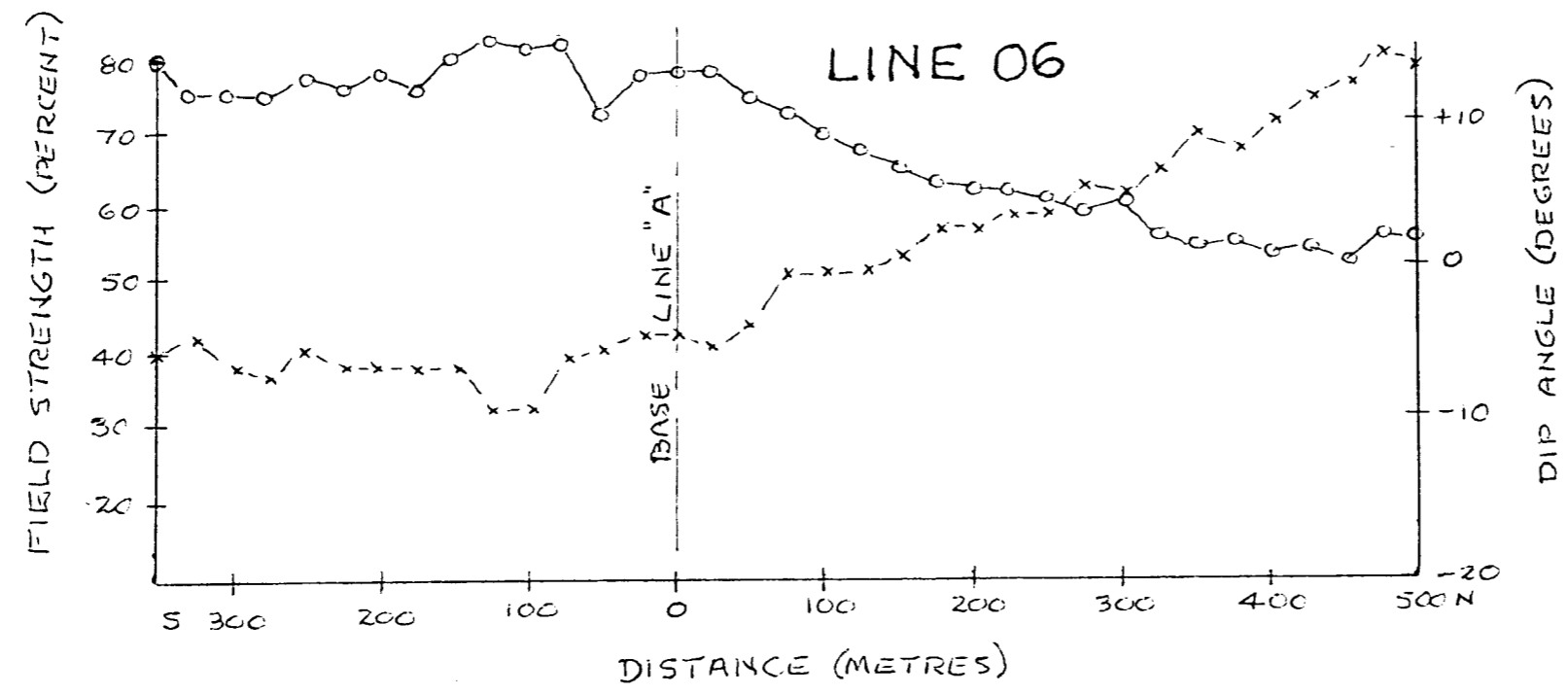
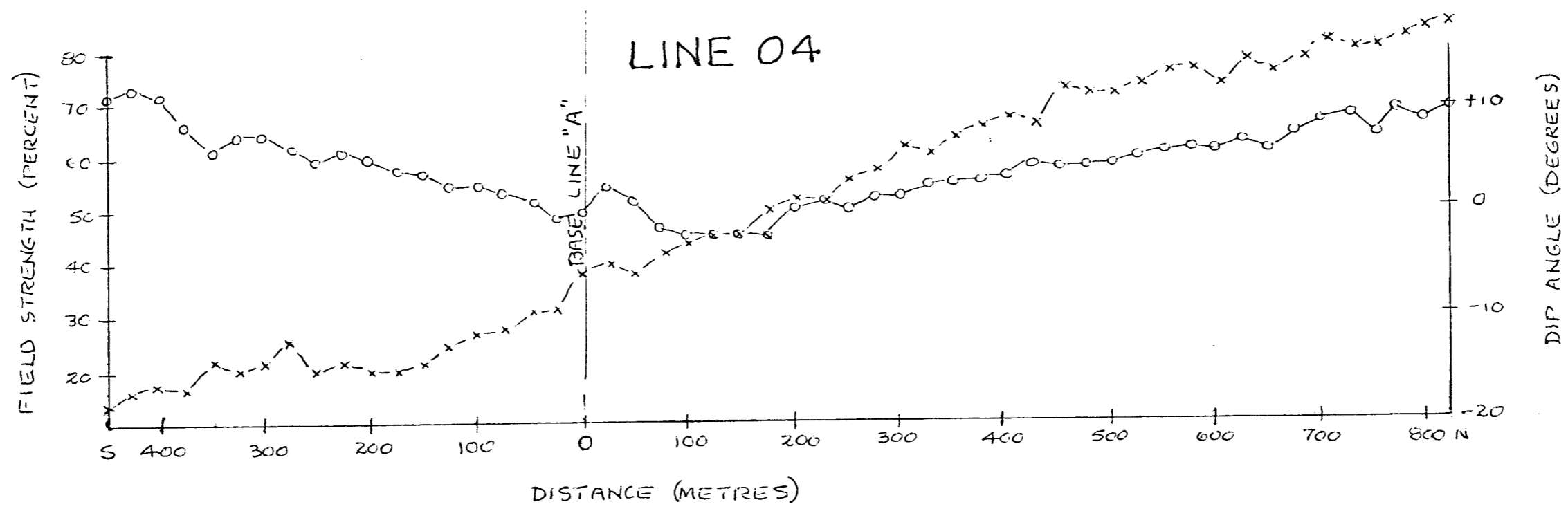
STATION: SEATTLE, WASH.
 OPERATOR FACING EAST.

VLF-EM PROFILES

BAYONNE PROPERTY

AUG 13, 1950

FIGURE 5



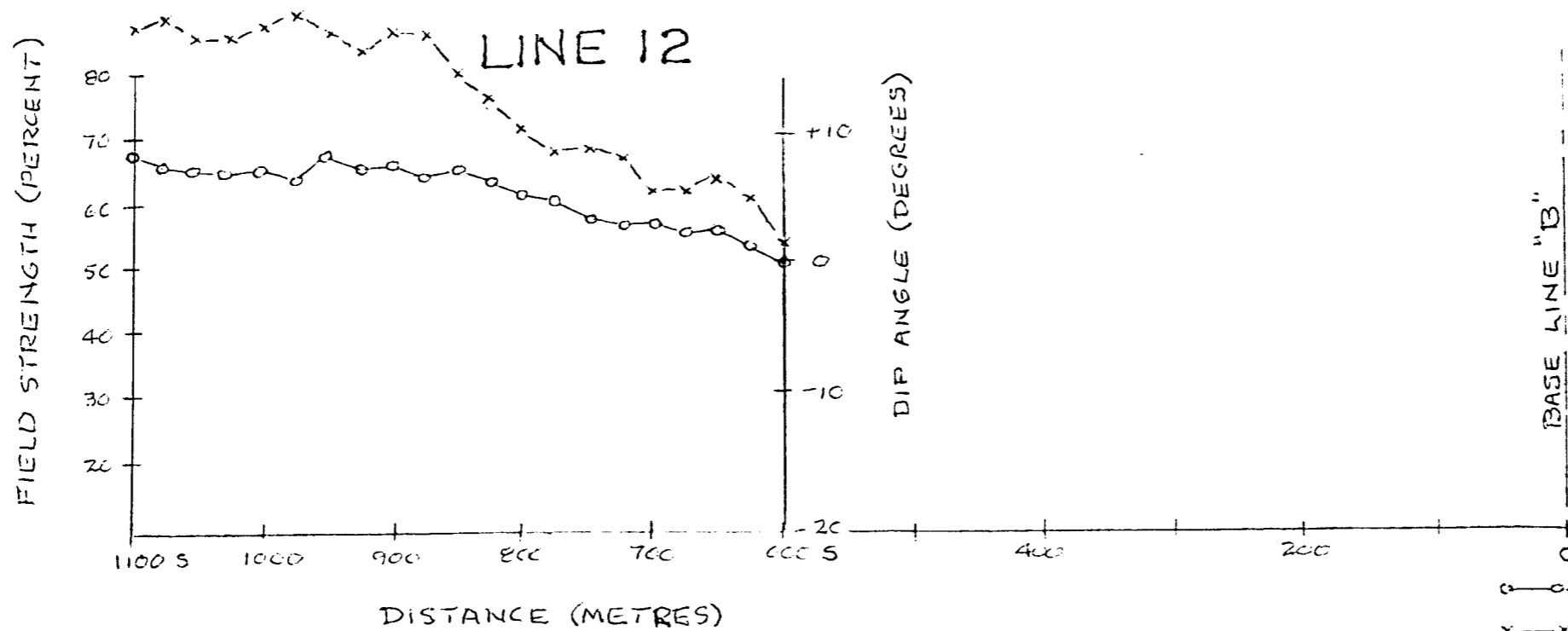
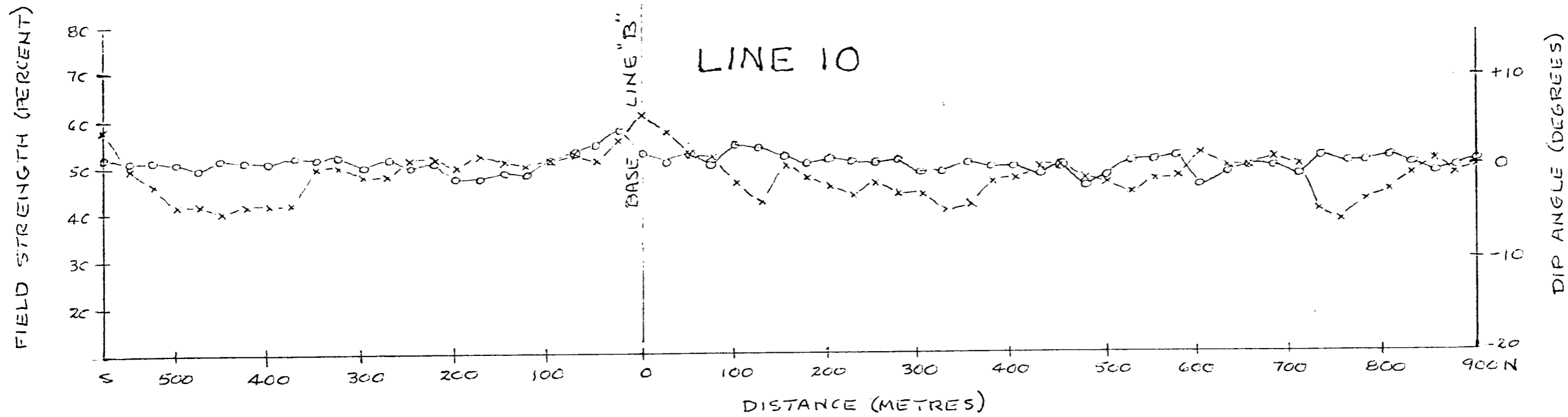
○—○—○ FIELD STRENGTH (PERCENT)
 x—x—x DIP ANGLE (DEGREES)
 STATION: SEATTLE, WASH.
 OPERATOR FACING EAST

VLF-EM PROFILES

BAYONNE PROPERTY

FIGURE 6

Aug 13, 1950



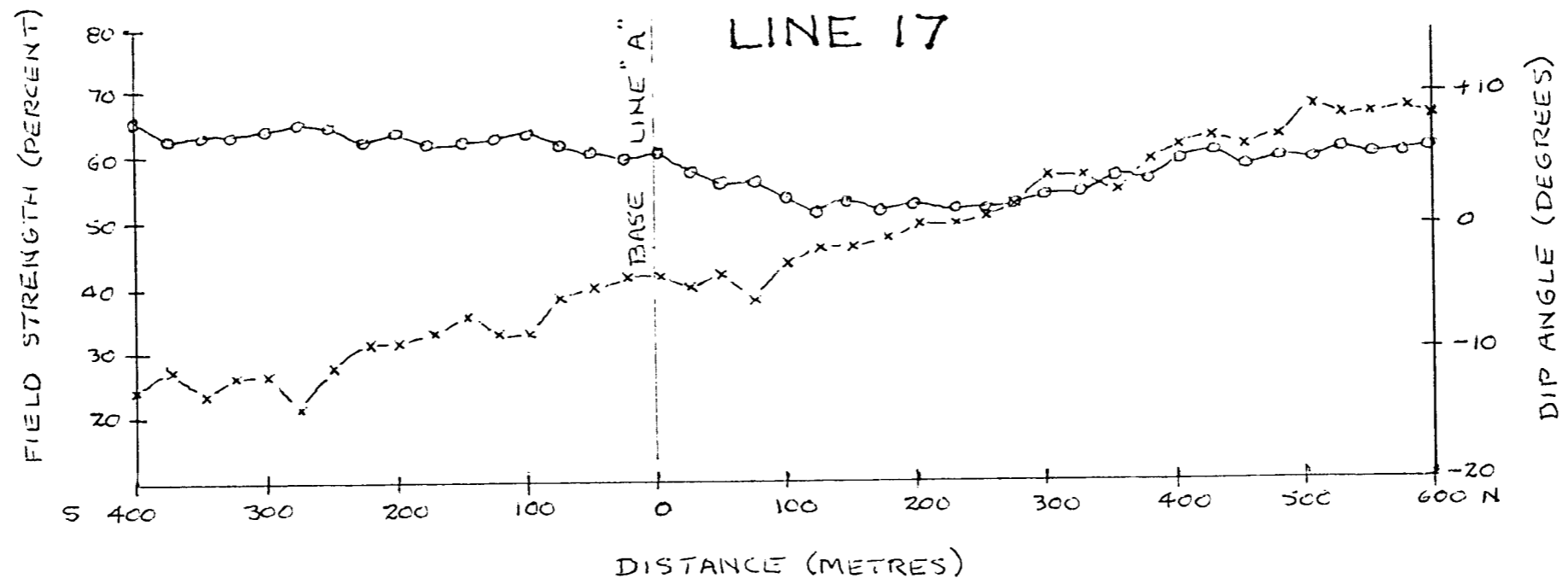
○—○—○ FIELD STRENGTH (PERCENT)
 x—x—x DIP ANGLE (DEGREES)

STATION: SEATTLE, WASH
 OPERATOR FACING EAST

VLF-EM PROFILES
 BAYONNE PROPERTY

AUG 13, 1950

FIGURE 7



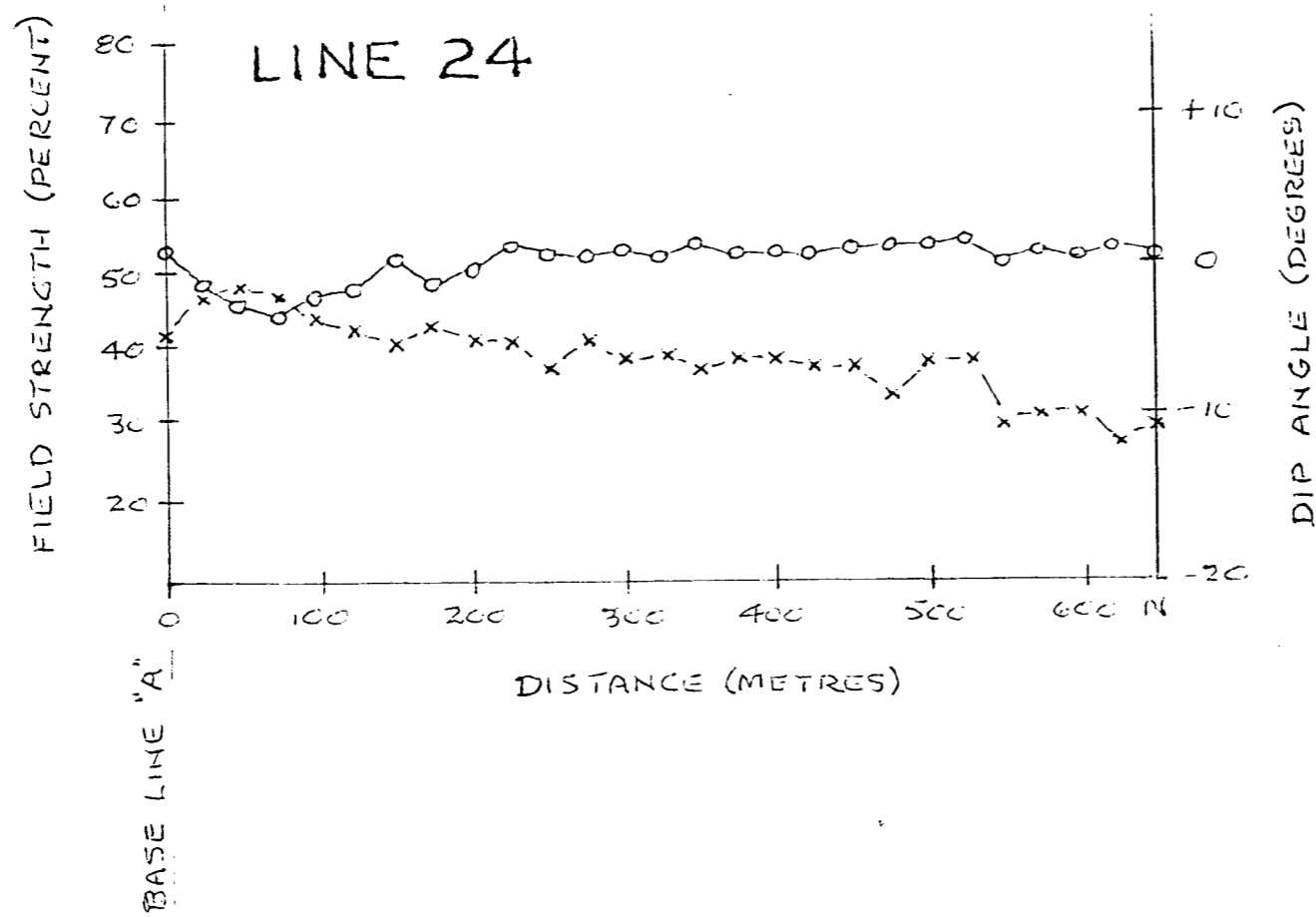
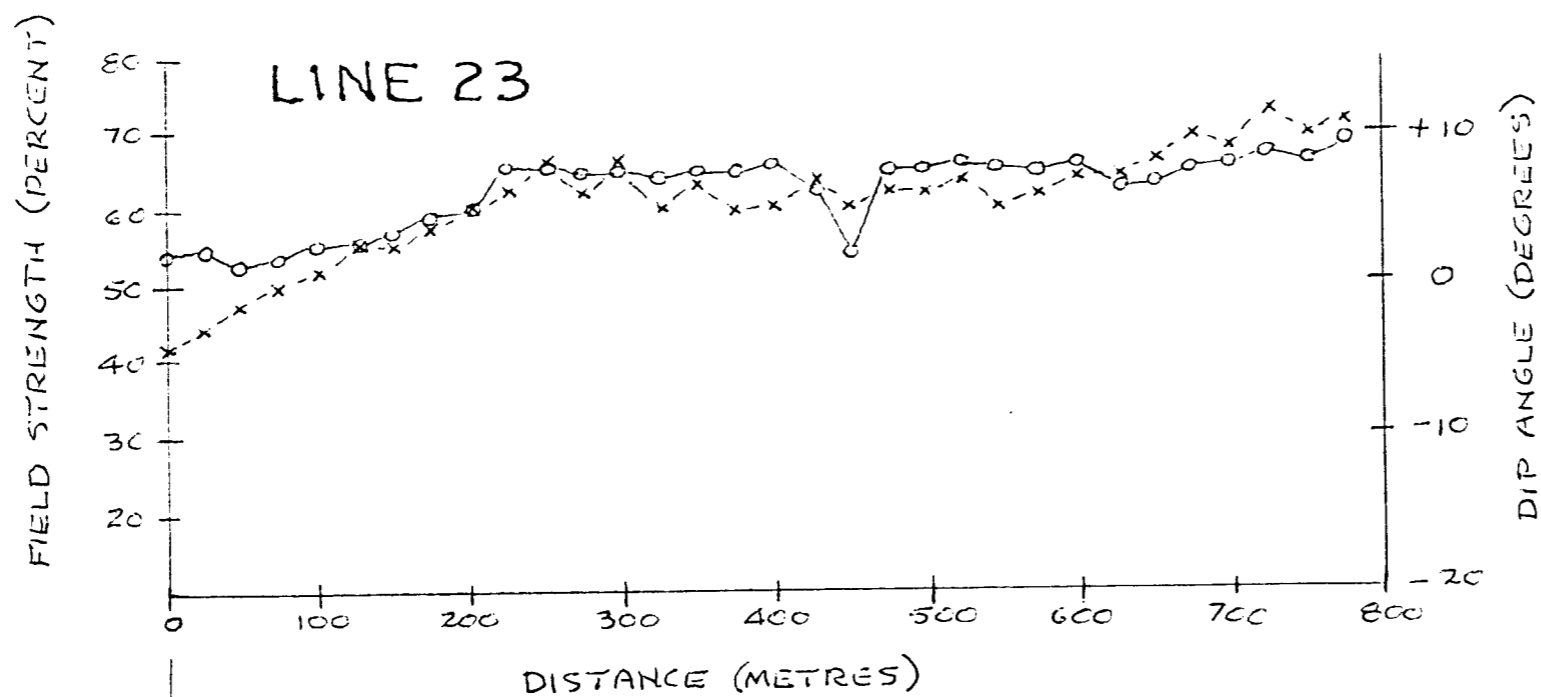
○—○—○ FIELD STRENGTH (PERCENT)
 x—x—x DIP ANGLE (DEGREES)

STATION: SEATTLE, WASH
 OPERATOR FACING EAST.

VLF-EM PROFILES BAYONNE PROPERTY

AUG 13, 1990

FIGURE 5



○—○—○ FIELD STRENGTH (PERCENT)
 x—x—x DIP ANGLE (DEGREES)

STATION: SEATTLE, WASH.
 OPERATOR FACING EAST.

VLF-EM PROFILES BAYONNE PROPERTY

AUG 13, 1990

FIGURE 9

REFERENCES

- 1.) RICE, H. (1941) Nelson Map Area, East Half. Geological Survey
Canada Memoir 229.
- 2.) PHENDLER, R. W. - P. Eng. - "Report on the Bayonne Property"
Nelson Mining Division. October 4, 1982.
- 3.) WELLS, R. A. and O'GRADY, F. - P. Eng. - "Exploration and
Development Proposal - Bayonne Mining Property"
Nelson Mining Division, British Columbia,
July 20, 1984.
- 4.) ALLEN, G. M. - P. Eng. (Ont.) - "Report on the Bayonne Property"
Nelson Mining Division, B. C. - Bluebird 1919,
Last Chance 1920, B. Mac 1-2724, B Mac 2-2725,
September 28, 1989.

AFFIDAVIT OF EXPENSES

This certifies that geophysical work was carried out on the John 1 - 5 claims (Carolina Group) on the Bayonne property in the Nelson Mining Division during the period March 15, 1990 to April 30, 1990 to the value of the following:

Mobilization and Fieldwork

Wages - F. Critchlow - 11 days @ \$175	\$1925.00
- W. Critchlow - 11 days @ \$120	1320.00
Vehicle Rental - 11 days @ \$35/day	385.00
Mileage - 1200 Km @ 0.20/km.	240.00
Rental of 2 snowmobiles - 5 days @ \$100	500.00
VLF-EM Rental	110.00
Materials, flagging, etc.	50.00

Report Preparation

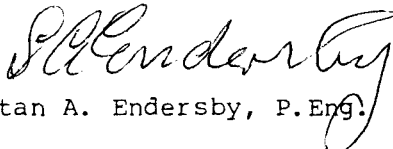
	<u>655.00</u>
TOTAL	<u>\$5185.00</u>

CERTIFICATE

I, Stan A. Endersby, certify that:

- 1.) I am a graduate of the University of British Columbia in Chemical Engineering (B.A.Sc. 1953). 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 Bayonne property between March 15, 1990 and April 30, 1990 and supervised by myself.
- 4.) I have an interest in the Bayonne property through claims held in trust for Gunsteel Resources Inc. and Nugget Mines Ltd.

August 31, 1990
Vancouver, B. C.


Stan A. Endersby, P. Eng.

CERTIFICATE

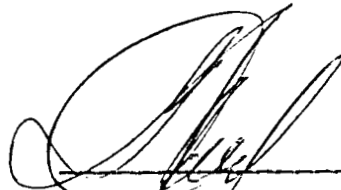
I, Fredric H. Critchlow, certify that;

- (1) I am a prospector, free miners certificate #280908 (1989), #294865 (1990), and reside at 523-105th Street, Castlegar, B.C. VIN 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 Wade Critchlow.
- (4) I have no interests in any of the company properties.
- (5) The instrument used on the John group of claims was a VLF-EM, and the station used was Seattle.
(All readings taken facing east)

Dated at Salmo, B.C.

on

04/03/90



Fredric H. Critchlow