

REPORT ON  
SOIL GEOCHEMISTRY, ROCK SAMPLING  
AND DIAMOND DRILLING

1980 EXPLORATION PROGRAM

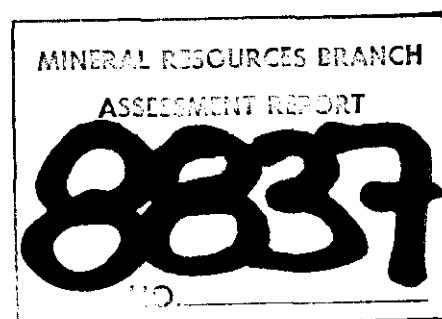
ST MINERAL CLAIM  
NANAIMO MINING DIVISION  
N.T.S. MAP-AREA 92L/12E  
LAT.  $50^{\circ}40'N$ ; LONG.  $127^{\circ}42'W$ .

OWNED AND OPERATED BY  
ELECTRA RESOURCES CORPORATION

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Under supervision of  
W.G. SMITHERINGALE & ASSOCIATES LTD.

FEBRUARY 28, 1981



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## SUMMARY

1. Mineralization is contained in rock having typical skarn mineralogy at or near volcanic or volcanic-sedimentary contacts. Sphalerite, pyrite, chalcopyrite and galena are the visible sulfide minerals. Values range from: 0.15% to 1.4% Cu, 0.01% to 1.4% Pb, 0.50% to 10.2% Zn and 0.10 oz/ton to 1.67 oz/ton Ag. Gold values averaged 0.002 oz/ton.
2. Exploration in 1980 consisted of extending the soil geochemical grid, prospecting and trenching, geological mapping, rock sampling, surveying and diamond drilling. Total cost of the program was \$32,342.05.
3. No mineable mineralization was delineated. Two previously unknown areas of mineralization were outlined and the potential of the property was thus increased.

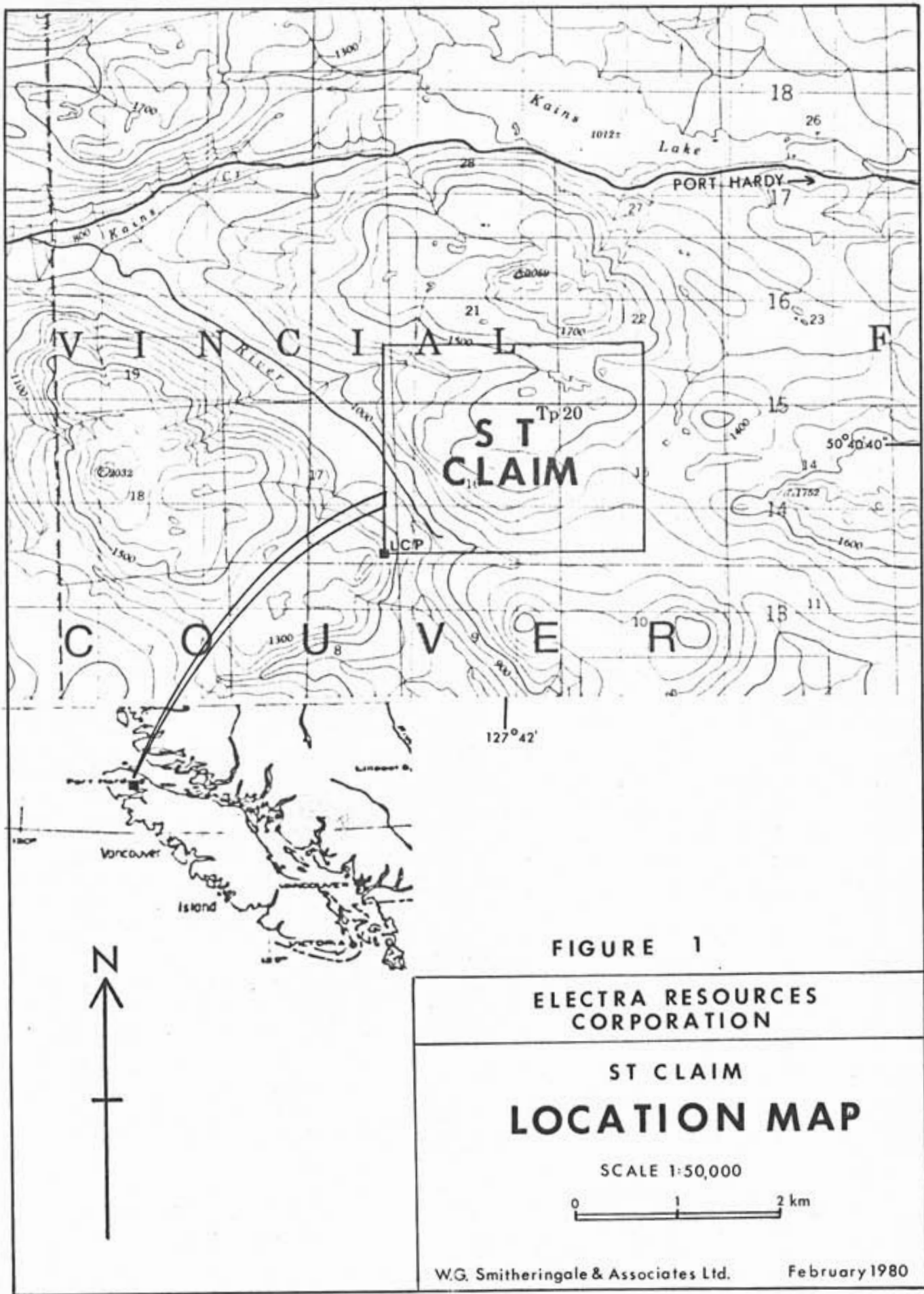
## INTRODUCTION

The ST claim is located in northern Vancouver Island at Lat.  $50^{\circ}40'N$  and Long.  $127^{\circ}42'W$  in the Nanaimo Mining Division, NTS map-area 92L/12E (Fig.1). The property is easily accessible by 30 km (19mi) of gravel road from Port Hardy.

The ST claim was staked by the modified grid system in November, 1978. It overlapped several existing claims and consequently it consists of 14 full units and 4 partial units. It is currently owned and operated by Electra Resources Corp. of Vancouver, B.C. The property contains one or more tabular bodies up to 1.5m thick of semi-massive to disseminated sphalerite with lesser galena, chalcopyrite and pyrite in a skarn host. The continuity and extent of the mineralized zone(s) has not yet been determined.

Part of the property was geologically mapped and soil sampled in 1979 (Smitheringale, 1980). The 1980 program described herein was based on the 1979 results and consisted of the following.

1. Further geological mapping of the main showing area (300m x 300m) on a scale of 1:500 (Fig.2).
2. Geochemical soil survey: 112 samples (Fig.3).
3. Rock sampling and assaying: 24 samples.



4. Hand trenching: 4 two metre long trenches.
5. Diamond drilling: 226m of BQ core, 26 assays.
6. Chain and compass survey of drill sites, trenches and rock sample sites within the 300m x 300m area of the main showing.

These features are shown on Fig. 2.

#### GEOLOGY

The rock types encountered during mapping were quartz-eye feldspar porphyry, feldspar-hornblende porphyry, massive amygdaloidal and porphyritic volcanics, limestone and skarn.

Mineralization occurs in typical skarn mineralogy at the contacts of quartz-eye feldspar porphyry or feldspar-hornblende porphyry. Typically the sulfides are contained within a matrix of coarsely bladed dark green hornblende with minor epidote and calcite. No evidence was obtained to conclusively deny or support a syngentic theory of mineral emplacement.

#### GEOCHEMICAL SOIL SURVEY

An area east of the 1979 grid was soil sampled on 50m centres. Samples were collected from the lower B or C horizon using a soil auger. The samples were collected

in kraft paper soil sample bags and sent to Min-En Labs of North Vancouver for analysis. There they were dried and sieved, and the -80 mesh fraction was analyzed for Cu, Pb and Zn using a nitric-perchloric acid digestion and atomic adsorption analysis. A total of 112 samples were collected and analyzed. The results are shown on Fig.3.

No anomalous areas were encountered, although some spot highs were found.

#### ROCK SAMPLING

Continuous chip samples, R1 through R17 were taken from skarn outcrops. The samples were assayed for Cu, Pb, Zn, Ag, Au, Mo, and  $WO_3$ . The sample locations are shown on Fig.2 and the assay results are tabulated in Table 1. No significant values of Mo or  $WO_3$  were encountered. Gold values were low.

TABLE 1 - ROCK SAMPLE ASSAY RESULTS, 1980

Assay Sample No.	Map Sample No.	Sample Length (m)	Cu %	Pb %	Zn %	Ag oz/ton	Au oz/ton	Mo %	WO <sub>3</sub> %
Continuous Chip Samples									
860	R1	3.2	0.695	0.05	8.20	0.33	0.002	0.002	0.001
861	R2	3.2	0.420	0.06	8.10	0.29	0.002	0.002	0.001
862	R3	3.2	0.256	0.04	7.00	0.21	0.003	0.003	0.001
863	R4	4.3	0.225	0.05	3.95	0.21	0.003	0.003	0.001
864	R5	3.2	0.535	0.01	6.65	0.21	0.002	0.002	0.001
865	R6	1.0	0.020	0.11	0.52	0.09	0.002	0.001	0.001
866	R7	1.1	0.074	0.08	0.21	0.40	0.002	0.003	0.001
867	R8	3.2	0.683	0.17	7.80	0.63	0.003	0.003	0.001
868	R9	3.2	0.512	0.25	10.20	0.70	0.002	0.002	0.001
873	R10	3.5	0.614	0.25	4.77	0.77	0.003		
876	R11	4.0	0.032	1.38	2.95	0.86	0.003		
875	R12	4.5	0.149	1.01	3.63	0.53	0.004		
869	R13	3.0	0.984	0.20	3.77	1.67	0.002		
870	R14	3.0	0.344	0.02	4.16	0.70	0.001		
871	R15	3.0	0.060	0.02	1.29	0.25	0.002		
872	R16	4.0	0.187	0.02	2.43	0.38	0.002		
874	R17	2.5	1.385	0.58	6.22	0.71	0.008		
Spot Chip Samples									
JR-1			0.262	-	0.02	0.12	0.009	-	0.001
JR-2			-	0.01	0.04	0.23	0.003	-	0.001
JR-3			-	0.01	33.20	0.10	0.066	-	0.001
HBH3			0.034	0.06	31.70	1.88	0.006	-	0.001
HBH2-A			0.009	1.47	20.50	0.22	0.003	-	0.001
895			0.104	3.38	6.24	4.12	0.003		
896			0.042	0.48	1.60	0.53	0.002		



## PROSPECTING AND TRENCHING

Mineralized float, noted in 1979, was traced to its source and exposed by four hand dug trenches over a distance of 75 metres (246 ft.). The trenches varied from 1.5m to 2.5m in length. The mineralization appears to continue under overburden that was too deep to trench by hand in a short period of time. The mineralization consists of chalcopyrite, pyrite, sphalerite and galena scattered throughout a coarsely bladed hornblende matrix. It occurs at the contact of a quartz-eye feldspar porphyry unit and the zone is open to both the east and west.

Float noticed at the side of the road in the previous year was trenched, exposing 13 metres (42.6 ft) of mineralized outcrop. The mineralization in this outcrop strikes under the road and under overburden. A drill hole was collared in mineralization here, indicating a shallowly dipping zone in direct contact with feldspar-hornblende porphyry. Mineralization consists of a fine grained black mass of sphalerite irregularly distributed in recrystallized limestone and green skarn. This zone is open to the east, west and south.

TABLE 2 - DIAMOND DRILL HOLE DATE

<u>Hole No.</u>	<u>Azimuth</u>	<u>Inclination</u>	<u>Length</u> (m)
80-1	295 <sup>o</sup>	-45 <sup>o</sup>	17.7
80-2	226 <sup>o</sup>	-60 <sup>o</sup>	32.3
80-3	150 <sup>o</sup>	-45 <sup>o</sup>	53.0
80-4	20 <sup>o</sup>	-45 <sup>o</sup>	83.8
80-5	20 <sup>o</sup>	-45 <sup>o</sup>	9.4
80-6	20 <sup>o</sup>	-60 <sup>o</sup>	17.1
80-7		-90 <sup>o</sup>	6.1
80-8	90 <sup>o</sup>	-45 <sup>o</sup>	6.5

TABLE 3 - 1980 DIAMOND DRILL HOLE ASSAY RESULTS

<u>Sample No.</u>	<u>Interval (metres)</u>	<u>Cu %</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Ag oz/ton</u>	<u>Au oz/ton</u>
DH 80-1						
852	1.3 - 1.6	0.402	1.06	6.15	0.99	0.001
853	1.6 - 3.3	0.576	0.44	9.80	0.42	0.001
854	3.3 - 5.2	0.124	0.32	4.95	0.32	0.003
855	5.2 - 6.6	0.007	0.01	0.07	0.06	0.002
856	6.6 - 8.2	0.005	0.01	0.03	0.03	0.001
DH 80-2						
857	4.6 - 5.9	0.562	0.45	7.68	0.51	0.003
858	5.9 - 7.2	0.012	0.01	0.13	0.07	0.002
859	7.2 - 9.8	0.004	0.01	0.03	0.02	0.002
DH 80-4						
877	87.9 -90.2	0.020	0.01	0.03	0.09	0.002
878	86.3 -87.9	0.026	0.01	0.01	0.10	0.002
879	84.9 -86.3	0.042	0.02	0.01	0.10	0.002
880	83.0 -84.9	0.001	0.01	0.01	0.10	0.003
DH 80-5						
884 *	1.3 - 2.6	2.060	0.02	1.46	2.42	0.002*
885	1.3 - 2.6	0.902	0.02	1.63	1.21	0.002
886	2.6 - 3.6	0.858	0.01	0.74	0.90	0.003
887	5.2 - 6.2	0.390	0.01	0.30	0.82	0.002
DH 80-6						
894	3.7 - 4.7	0.061	0.29	0.62	0.39	0.002
DH 80-7						
881	5.9 - 6.6	0.045	0.02	0.50	0.81	0.002
882	4.6 - 5.9	0.022	0.01	0.16	0.10	0.002
883	1.0 - 4.6	0.388	0.43	4.58	0.78	0.003
DH 80-8						
892	1.3 - 3.3	0.860	0.01	4.01	0.68	0.002
893	3.3 - 5.2	0.261	0.02	11.80	0.30	0.005
888 *	1.0 - 2.3	1.086	0.01	0.84	0.83	0.003*
889 *	2.3 - 3.9	0.401	0.01	5.40	0.32	0.002*
890	3.9 - 4.6	0.602	0.01	5.69	0.49	0.003*
891 *	4.6 - 6.9	0.169	0.01	0.96	0.20	0.002*

\* Drill cuttings were tested instead of core. \*

## SURVEYING

A crude map was prepared using a metric chain and a brunton compass to indicate the relative locations of the drill setups, rock sampling locations and outcrops. Closure was within 10 metres.

## DIAMOND DRILLING

A total of eight shallow diamond drill holes were drilled totalling 226m (741 ft) of BQ drilling. Twenty-six core samples were taken for assay. The drill hole data are given in Table 2, the assay results in Table 3 and a summary of assay data in Table 4.

TABLE 4 - SUMMARY OF DIAMOND DRILL HOLE ASSAYS

Hole #	Intercept (metres)	Average Assays			Ag oz/ton	Au oz/ton
		Cu %	Pb %	Zn %		
80-1	3.9	0.378	0.45	7.50	0.44	0.002
80-2	1.3	0.562	0.45	7.68	0.51	0.003
80-4	5.3	0.027	0.01	0.02	0.10	0.002
80-5	4.9	0.735	0.01	0.96	1.00	0.002
80-6	1.0	0.061	0.03	0.62	0.39	0.002
80-7	.7	0.045	0.02	0.50	0.81	0.002
	3.6	0.388	0.43	4.58	0.78	0.003
80-8	3.9	0.560	0.02	7.90	0.49	0.003

*Note - The diamond drill core is being stored  
at 11120 Bridge Road, Surrey, B.C.*

## CONCLUSION

1. The mineralization is found at the contacts of quartz-eye feldspar porphyry and feldspar-hornblende porphyry with other rock units. It exhibits typical skarn mineralogy. There is no evidence to support or deny a syngenetic origin for the mineralization.
2. Three zones of mineralization are presently known on the property with a strong probability that more exist.
3. Mineralization consists of sphalerite and pyrite with minor chalcopyrite, galena. Silver values are present.
4. Although no mineable ore was delineated the potential of the property remains good. The new zone needs to be adequately tested.
5. The extended soil grid encompassed no new anomalies. However, some spot highs were present. The grid covers only a small fraction of the entire property.
6. The drill program did not adequately test the known exposures. Their true potential remains yet to be determined.

ITEMIZED COST STATEMENT OF WORK PERFORMED  
1980 EXPLORATION PROGRAM, ST CLAIM

1.	Geologist: 20 days @ \$110/day	\$ 2,200.00
2.	Labourers: 47 man days @ \$60/day	2,820.00
3.	Analysis:	
	(a) 50 rock samples, assay for Cu (\$6.50), Pb (\$7.00), Ag (\$7.50), Au (\$8.00) plus preparation (\$2.75)	\$2,012.00
	(b) 22 rock samples, assay for Mo (\$9.00) and WO <sub>3</sub> (\$11.00)	440.00
	(c) 112 soil samples for Cu, Pb and Zn, plus preparation at \$4.65 ea.	<u>520.80</u>
		2,972.65
4.	Camp costs: 67 man days @ \$15/day/man	1,005.00
5.	Drilling: 741 feet including mobilization and demobilization	22,744.40
6.	Report	<u>600.00</u>
	TOTAL	\$ <u>32,342.05</u>

## CERTIFICATION

I, Andy Glatiotis, BSc., of Vancouver, British Columbia, do hereby state:

1. I am a geologist. I graduated from the University of Calgary, Alberta in 1977 with a Bachelor of Science degree in geology.
2. I have practised exploration geology for six years on a seasonal basis and two years on a fulltime basis. My experience was gained in B.C., the Yukon, the Northwest Territories and Tasmania.
3. I am contracted by Electra Resources to write this report and supervise exploration programs.
4. I maintain a modest investment interest in the company.
5. The report may be used by Electra Resources Corporation to be filed for property assessment work.

Dated at Vancouver, B.C.  
the 29th day of February, 1981

ELECTRA RESOURCES CORPORATION



Andy Glatiotis, B.Sc.  
Geologist

## CERTIFICATION

I, William G. Smitheringale, certify that:

I am a practising Professional Geological Engineer, resident at 219 - 145 Keith Road, North Vancouver, B.C.

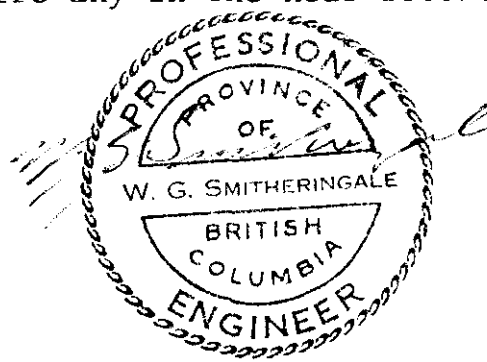
I am a graduate of the University of British Columbia with a degree in Geological Engineering (B.Ap.Sc., 1955) and of the Massachusetts Institute of Technology with the degree of Doctor of Philosophy in Geology (Ph.D., 1962).

I have practised my profession continuously for nineteen years as geologist with the Geological Survey of Canada, as Assistant and Associate Professor, Department of Geology, Memorial University of Newfoundland, and since 1974, as a Consulting Geologist.

I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

I was not on the ST property while the work described in this report was being done, however, I visited the property after the work was completed and confirmed that the work described herein was done.

I hold no interest in the ST claim or Electra Resources Corp., nor do I expect to acquire any in the near future.



W.G. SMITHERINGALE, P.Eng.

September 4, 1981

## BIBLIOGRAPHY

1. Muller, J.E., Northcote, K.E., Carlisle, D. 1974: Geology and Mineral Deposits of Alert Bay - Cape Scott Map Area, Vancouver Island, British Columbia; Geological Survey Canada, paper 74-8.
2. Philip, R.H.D., 1979: Report on the ST Claim, Nanaimo Mining Division, B.C.; unpublished report prepared for Electra Resources Corp., 907-1112 West Pender Street, Vancouver, B.C.
3. Smitheringale, W.G., 1980: 1979 Exploration Program, ST Mineral Claim, Northern Vancouver Island, B.C.; unpublished report for Electra Resources Corporation, 907-1112 West Pender Street, Vancouver, B.C.



A P P E N D I X I

DIAMOND DRILL HOLE LOGS

ELECTRA RESOURCES CORP.

ST PROJECT

DDH #80-1

Logged by W.G. Smitheringale  
April 1, 1981

<u>Depth</u> (m)	<u>Description</u>
0- 1.2	A few fragments of core; mineralized skarn?
1.2- 5.2	Skarn (map unit 4): f, med & cse gr; banded, limey; well mineralized. Banding to C.A.: 1.5-1.8m 60°-90°; 2.4-4.0m broken & variable; 4.0m 45°. 4.9-5.2m mainly epidote; margin of skarn zone.
5.2	Contact with hbe-plag. por'y.
5.2- 7.3	(map unit 5): Altered por'y. 5.2-5.8m pink, feldspathized (pink plag.) 5.8-7.3m strongly epidotized
7.3-17.7	<u>Hbe-plag por'y</u> : greenish grey; f-med gr; hbe partly epidotized. Several 1-2cm calcite bands (probably veins) 35° to C.A. No dissem. po. seen.
17.7	END

<u>Depth</u> (m)	<u>Description</u>
0- 4.3	Partial Core Recovery - ground fragments of med-gr. qtz dio&dk. green f-gr andesite (overburden boulders?)
4.3- 6.7	Skarn (map unit 4): banded; generally dk. green; local lt. green-grey bands hbe-plag rk. that looks like underlying hbe-plag por'y; limey. Banding to C.A.: 4.3-6.7m 30-45° 4.3-5.5m well mineralized mainly ZnS, minor PbS & Cp. 5.5-6.7m dk. green, f-med gr. andesitic, lithic-xtle tuff; locally almost completely epidotized. Only sparsely mineralized. Banding to C.A.: 4.3-6.7m 30-45°
6.7	Approx. contact
6.7-22.9	<u>Hbe-plag por'y</u> : (map unit 5): green & grey; f-med gr; no po.; plag & hbe phenos. epidotized. Banding to C.A.: 10.0m fr. cleav. 10°-30°. 6.7-14.0m med. green, mainly f-gr; e.g. Spec.80-2 -1. 11.3m Spec. 80-2-1 for thin secn. 14.0-20.7m light greenish grey, phenos mainly med-gr. At 16.8m contains apparent frags of andesite?, e.g. Spec. 80-2-2 for thin section. Occasional calcite veins 45° to C.A. 20.7-22.2m same as 6.7-14.0m 22.2m Contact interbanded, e.g. Spec. 80-2-3 for thin section. Contact 40° to C.A.
22.9-24.4	<u>Breccia</u> : mostly frags of white aphanitic rk. (plag. ± chert?) in matrix of f-gr. hbe-plag por'y of various shades & textures. But locally frags are hbe-plag por'y in white aphanitic matrix. No fr-cleav or shear planes. Probably a tectonic bx, but I suspect it could be primary, or else layers of white aphanitic material in por'y subsequently fragmented prior to lithification.
24.4-25.6	<u>Hbe-plag por'y</u> : green-grey, med-gr. like 14.0-20.7m.
25.6-26.8	<u>Hbe-por'y</u> : med. green; med-gr. hbe phenos in lt. green-grey aphanitic matrix; somewhat resembles 6.7-14.0m.
26.8-32.3	<u>Hbe-plag por'y</u> : like 14.0-14.6m. 29.6-32.0m breccia: Deformed broken calcite-qtz. veinlets containing py & PbS in hbe-plag por'y matrix i.e. two phases of fracturing or brecciation.
32.3	END

<u>Depth</u> (m)	<u>Description</u>
0- 4.3	Ground core fragments of mixed lithology
1.4- 5.5	Skarn (map unit 4): banded white aphanitic plag.? (cherty?) and f-gr. hbe-plag. por'y in aphanitic matrix of various shades of green. Much epidotization. Some pink feldspar near contact. Not mineralized. This interval looks like non-mineralized skarn below mineralization in DH 80-2.  Contact with hbe-plag. por'y is disrupted but appears to be gradational.  Banding to C.A.: 4.3-5.4m at 45°.
5.5- 45	Hbe-plag. por'y (map unit 5): Lt. greenish grey, f. to med-gr. phenos. A few scattered fragments of green, finer gr. hbe-plag. por'y.  6.7-7.3m grey-green, f.gr. hbe plag. por'y. Contacts in broken & missing core.  14.0-14.9 same as 6.7-7.3m. Small lithic frags at lower contact. Upper contact obscured by broken core.  Lower contact alt'd & disrupted but it appears to be abruptly gradational.  25.0-25.3m skarn-like zone of epidote, pink feldspar & hbe-plag por'y of various shades & textures; vaguely banded; contains 0.5% ZnS & minor cp. & py.  28.0-28.7m Bx; lt. green & grey aphanitic broken bands & fragments in f.gr. hbe-plag. por'y matrix. Like 22.9-24.4m in DH 80-2.  Por'y grades into & out of finer grained zones with darker & partly aphanitic matrix.  39.3-40.5m Shear Zone; shear cleav. 50° to C.A.  40.5-41.7m Lt. grey hbe por'y; matrix is f.gr. to aphanitic plag? - distinctly lighter than normal por'y. Contacts abrupt & one shows possible chilled margin. May be a dyke.  43.3-44.8m Same as 40.5-41.7m.
41.7	Contact sharp; no chill effects.
41.7-47.9	Andesite (map unit 5a): dk. green, f-gr.  44.8-46.3m little epidote.  46.3-47.9 numerous blebs of epidote, some with calcite cores. Could be amygdules. (flow overturned?)

ELECTRA RESOURCES CORP.

ST PROJECT

DDH #80-3

Logged by W.G. Smitheringale  
April 1, 1981

<u>Depth</u> (m)	<u>Description</u>
47.9	Contact flt'd, but appears sharp. No chill effects.
47.9-48.8	Hbe-plag por'y (map unit 5): lt. grey, med.gr. like normal 5.5-41.7m.
48.8-50.3	Andesite (map unit 5a): dk.green, f.med gr., plag porphyritic. Plag epidotized.
50.3	Contact sharp. No effects. Contact 45° to C.A.
50.3-53.0	Qtz. eye por'y (map unit 6): lt. grey; med-gr. hbe & qtz. phenos in aphanitic matrix. Possibly a few plag. phenos. Qtz. phenos anhedral to euhedral. Hbe & qtz vary 30%-70% to 70%-30%. Hbe (& plag?) phenos epidotized. 50.6m Spec. 80-3-1 for thin secn. Qtz eye Por'y. N.B. Hbe & plag in entire hole epidotized. 53.0 END

## ELECTRA RESOURCES CORP.

## ST PROJECT

DDH #80-4

Logged by W.G. Smitheringale

April 1, 1981

<u>Depth</u> (m)	<u>Description</u>
0- 1.8	Ground core fragments, mixed lithology
1.8-79.0	<u>Limestone</u> (Quatsino); med grey, aphanitic; locally with argillaceous beds; but generally massive. 1.8-10.7m Local tight folding; Axial plane cleav. 30° to C.A. 9.1m flt. 12.1m flt. 19.8-22.9m cleav. 20° to C.A. 25.9m cleav. 30° to C.A. 39.6m cleav. 30° to C.A. 57.9m cleav. 35° to C.A. 71.6m cleav. 35° to C.A. 73.1m L.S. becomes laminated 78.9m Sharp contact.
78.9-82.0	<u>Felsic tuff</u> : lt. grey, aphanitic, to very f.gr. (plag?) laths; very pyritic (10%+); in places banded, in places cherty & often with calcite "eyes". e.g. 3 specimens. Spec. 80-4-1 for thin <u>secn.</u> 82.0m Abrupt contact, altho tuff for 1 ft. next to contact is dk.green & contains andesitic frags, i.e. andesite probably underlies tuff.
82.0-83.8	<u>Basalt</u> (or Andesite) (map unit 1): dk.green, f.gr. chloritized; top 1 ft. vesicular.
83.8	END

ELECTRA RESOURCES CORP.

ST PROJECT

DDH #80-5

Logged by W.G. Smitheringale  
April 1, 1981

<u>Depth</u> (m)	<u>Description</u>
0- 1.5	No core
1.5- 1.8	<u>Basalt</u> (or andesite): Appears to be a tuff; dk.green, f.gr. contact missing.
1.8- 3.4	<u>Skarn</u> (map unit 4): lightly mineralized with ZnS, cp & py; locally banded most core missing. Contact sharp, 70° to C.A.
3.4- 4.9	<u>Limestone</u> : med. grey, aphanitic, faintly bedded. Bedding (transposed?) 50° to C.A.
4.9- 5.8	<u>Skarn</u> : dk.green, med-cse gr. amphibolite, minor qtz. & calcite; locally chloritic. Not mineralized.
5.8- 9.4	<u>Qtz. eye por'y</u> (map unit 6): lt.grey; med gr. qtz & hbe phenos in aphanitic matrix. ~50/50 qtz. & hbe; possibly some plag. Hbe epidotized.
9.4	END

ELECTRA RESOURCES CORP.

ST PROJECT

DDH #80-6

Logged by W.G. Smitheringale  
April 1, 1981

<u>Depth</u> (m)	<u>Description</u>
0- 3.0	Core missing
3.0- 3.3	LS: med grey, aphanitic. Like 3.4-4.9m in DH80-5.
3.3- 4.6	Skarn: dk.green; f-cse gr. bladed amphibole & epidote, locally cherty & tuffaceous.
4.6- 8.5	Andesite (or basalt): dk.green, f.gr., appears to be tuffaceous.
8.5- 8.8	Qtz. eye por'y (map unit 6): f.gr.-med.gr. Qtz. in aphanitic lt.grey matrix. No hbe phenos, just small hbe shreds. Contacts in missing core.
8.8-14.9	Andesite (or basalt) (map unit 7): dk.green, most. with f-med gr. plag. phenocrysts set in a f.gr. matrix. Some appears tuffaceous, some appears amygdaloidal. Plag. epidotized. Lower contact abrupt.
14.9-17.1	Andesite or basalt (map unit 7): dk.green, f.gr.; probably a flow.
17.1	END



ELECTRA RESOURCES CORP.

ST PROJECT

DDH #80-7

Logged by W.G. Smitheringale  
April 1, 1981

<u>Depth</u> (m)	<u>Description</u>
0- .9	Ground frags of green-blk. basalt. Could be overburden.
.9- 4.3	<u>Skarn</u> (map unit 4): med-cse.gr. bladed amphibolite; sparsely mineralized.
4.3- 4.9	<u>Skarn</u> : dk.green; f-med gr. strongly epidotized; appears to be an andesitic lithic tuff.
4.9- 5.2	Qtz-epidote vein.
5.2- 5.5	Epidote sand; no core.
5.5- 6.1	<u>Andesite</u> : dk.green, f-gr.; med gr. plag. phenos set in f.gr. matrix; plag epidotized. Probable flow.
6.1	END

ELECTRA RESOURCES CORP.

ST PROJECT

DDH #80-8

Logged by W.G. Smitheringale  
April 1, 1981

<u>Depth</u> (m)	<u>Description</u>
0- 1.2	Ground frags of basalt Most core missing.
1.2- 4.3	Skarn (map unit 4): amphibole & epidote. Mod to heavily mineralized with ZnS, cp. & py. 3.4-4.3m massive ZnS.
4.3- 6.4	<u>Qtz. eye por'y</u> (map unit 6): lt.grey, f-med gr, qtz & hbe phenos in aphanitic matrix. About 50-50% qtz & hbe; possibly some plag phenos; hbe epidotized. 6.4m Flt gouge.
6.5	END

A P P E N D I X    I I

ASSAY CERTIFICATES

MIN-EN LABORATORIES LTD.

705 WEST 15TH STREET  
NORTH VANCOUVER, B.C.  
Phone: 980-5814

Certificate of Assay

Attn:

TO: Electra Resources,  
616-510 W. Hastings St.,  
Vancouver, B.C.

PROJECT No. D. Stelling

DATE July 18/80.

File No. 0-461

SAMPLE No.	Mo %	Cu %	Pb %	Zn %
852	.002	.402	1.06	6.15
853	.001	.576	.44	9.80
854	.001	.124	.32	4.95
855	.001	.007	.01	.07
856	.001	.005	.01	.03
857	.001	.562	.45	7.68
858	.001	.012	.01	.13
859	.001	.004	.01	.03
860	.002	.695	.05	8.20
861	.002	.420	.06	8.10
862	.003	.256	.04	7.00
863	.003	.225	.05	3.95
864	.002	.535	.01	6.65
865	.001	.020	.11	.52
866	.003	.074	.08	.21
867	.003	.683	.17	7.80
868	.002	.512	.25	10.20
JR-1	--	.262	--	.02
2	--	--	.01	.04
JR-3	--	--	.01	33.20
HBH#3	--	.034	.06	31.70
HB2-A	--	.009	1.47	20.50

PH 80-1  
10-1  
15-1  
16-20  
80-1  
20-25'  
14'-18'  
18'-22'  
20-2  
22'-30'

R1  
R2  
R3  
R4  
R5  
R6  
R7  
R8  
R9

MIN-EN Laboratories Ltd

CERTIFIED BY

MIN-EN LABORATORIES LTD.

705 WEST 15TH STREET  
 NORTH VANCOUVER, B.C.  
 Phone: 980-5814

Certificate of Assay

TO: Electra Resources,  
616-510 W. Hastings St.,  
Vancouver, B.C.

Attn: D. Stelling  
 PROJECT No. \_\_\_\_\_

DATE July 18/80.

File No. 0-461

SAMPLE No.	Ag	Au	WO <sub>3</sub> %	
	oz/ton	oz/ton		
852	.99	.001	.001	
853	.42	.001	.001	
854	.32	.003	.001	
855	.06	.002	.001	
856	.03	.001	.001	
857	.51	.003	.001	
858	.07	.002	.001	
859	.02	.002	.001	
860	.33	.002	.001	
861	.29	.002	.001	
862	.21	.003	.001	
863	.21	.003	.001	
864	.21	.002	.001	
865	.09	.002	.001	
866	.40	.002	.001	
867	.63	.003	.001	
868	.70	.002	.001	
JR-1	.12	.009	.001	
2	.23	.003	.001	
JR-3	.10	.066	.001	
HBH#3	1.88	.006	.001	
HB2-A	.22	.003	.001	

MIN-EN Laboratories Ltd.

CERTIFIED BY .....

MIN-EN LABORATORIES LTD.

705 WEST 15TH STREET  
NORTH VANCOUVER, B.C.  
Phone: 980-5814

Certificate of Assay

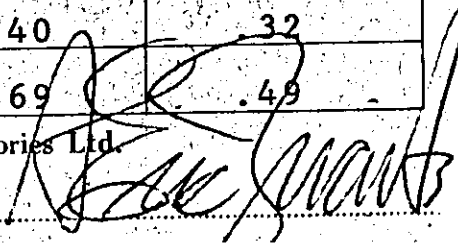
TO: Electra Resources Ltd.,  
616-510 W. Hastings St.,  
Vancouver, B.C.

Attn: D. Stelling  
PROJECT No. D. Stelling  
DATE July 30/80.  
File No. 0-526

SAMPLE No.	Cu %	Pb %	Zn %	Ag	Au
				oz/ton	oz/ton
869	.984	.20	3.77	1.67	.002
870	.344	.02	4.16	.70	.001
871	.060	.02	1.29	.25	.002
872	.187	.02	2.43	.38	.002
873	.614	.25	4.77	.77	.003
874	1.385	.58	6.22	.71	.008
875	.149	1.01	3.63	.53	.004
876	.032	1.38	2.95	.86	.003
877	.020	.01	.03	.09	.002
878	.026	.01	.01	.10	.002
879	.042	.02	.01	.10	.002
880	.001	.01	.01	.10	.003
881	.045	.02	.50	.18	.002
882	.022	.01	.16	.10	.002
883	.388	.43	4.58	.78	.003
884	2.060	.02	1.46	2.42	.002
885	.902	.02	1.63	1.21	.002
886	.858	.01	.74	.90	.003
887	.390	.01	.30	.82	.002
888	1.086	.01	.84	.83	.003
889	.401	.01	5.40	.32	.002
890	.602	.01	5.69	.49	.003

MIN-EN Laboratories Ltd.

CERTIFIED BY .....





A P P E N D I X    I I I

Soil Geochem Data



PROJECT No.:

MIN - EN Laboratories Ltd.

112  
ST 1980  
Geoderm

DATE: Aug. 12

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980.

ATTENTION: D. Stelling

Sample Number	6 Mg ppm	10 Cu ppm	15 Pb ppm	20 Zn ppm	25 Ni ppm	30 Co ppm	35 Ag ppm	40 Fe ppm	45 Hg ppb	50 As ppm	55 Mn ppm	60 Au ppb	65	70	75	80
81	86	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
0.0BL150S		29	26	54												
200S		no sample														
0.0BL250S		84	5	58												
5.0E150S		38	20	118												
200S		29	45	129												(60 mesh)
2.50S		35	18	144												
5.0E300S		no sample														
1.00E150S		10	4	22												
200S		62	16	373												
1.00E250S		27	12	78												
1.50E150S		24	5	83												
200S		77	58	242												
1.50E250S		37	9	45												
2.00E150S		30	9	49												
200S		22	27	91												
2.00E250S		13	5	16												
2.50E150S		41	61	98												(20 mesh)
200S		32	4	17												
2.50E250S		84	5	366												(20 mesh)
3.00E500N		32	6	30												
450N		38	6	26												
400N		36	6	23												
350N		17	4	22												
300N		62	10	48												
250N		no sample														
200N		54	25	71												
150N		36	47	54												
100N		33	19	84												
50N		41	59	54												(40 mesh)
3.00E00		44	21	84												

*[Handwritten signature]*  
15

PROJECT No.: \_\_\_\_\_

MIN - EN oratories Ltd.

Date: Aug. 12

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2

PHONE (604) 980-5814

ATTENTION: D. Stelling

1980.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb			
6	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
81	86	90	95	100	110	115	120	125	130	135	140	145	150	155	160
40.0E5.0S		7	37	14											
1.00S		9	2	8											
1.50S	107		57	71											
2.00S		no sample													
40.0E2.50S		43	3	20											
4.50E3.00N		29	1	26											
2.50N		36	5	18											
2.00N		34	4	18											
1.50N		23	5	18											
1.00N		21	8	18											
5.0N		16	3	22											
4.50E0.0		33	18	39											
4.50E5.0S		28	12	40											
1.00S		40	4	19											
1.50S		36	1	21											
2.00S		11	3	14											
4.50E2.37S		15	2	13											
5.00E3.00N		26	3	27											
2.50N		51	5	30											
2.00N		32	5	25											
1.50N		48	4	31											
1.00N		49	5	30											
5.0N		28	9	26											
5.00E0.0	135		10	52											
5.00E5.0S		18	6	16											
1.00S		20	6	12											
1.50S		22	5	30											
2.00S		22	9	18											
5.00E2.50S		no sample													
5.50E3.00N		47	4	26											

(40 mesh)

CERTIFIED BY \_\_\_\_\_

PROJECT No.: \_\_\_\_\_

MIN - EN Laboratories Ltd.

DATE: Aug. 12

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2  
PHONE (604) 980-5814

1980.

ATTENTION: D. Stelling

Sample No	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb	70	75	80
6	15	20	25	30	35	40	45	50	55	60	65	70	75	80
81	95	100	105	110	115	120	125	130	135	140	145	150	155	160
300E50S	no sample													
100S	4.1	7	22											
150S	1.8	9	24											
200S	3.0	5	34											
250S	no sample													
300E300S	2.2	6	19											
350E500N	2.8	6	29										(40 mesh)	
450N	2.3	6	24											
400N	1.5	5	17											
350N	5.5	5	31											
300N	2.3	4	25										(40 mesh)	
250N	6.5	9	78										(40 mesh)	
200N	3.6	7	37										(20 mesh)	
150N	2.9	5	41											
100N	1.6	2.0	5.7											
50N	4.6	4.1	2.9											
350E00	2.2	2.3	6.8										(40 mesh)	
350E50S	2.2	1.2	4.9											
100S	5.2	9	2.8											
150S	1.6	5	2.5										(20 mesh)	
200S	2.0	9	1.9											
250S	no sample													
350E272S	3.6	6	2.7											
400E300N	6.1	9	5.2											
250N	no sample													
200N	2.2	8	1.9											
150N	3.8	8	2.6											
100N	3.2	1.0	2.8											
50N	3.2	1.9	2.4										(40 mesh)	
400E00	4.5	1.2	3.5											

*[Handwritten signature]*





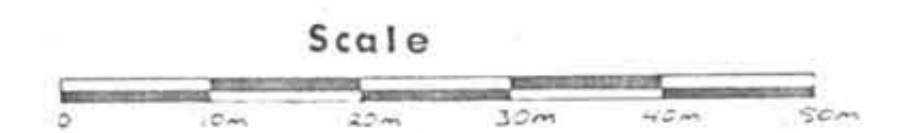
### Legend

- 1 Quartz-eye, Feldspar Porphyry
- 2 Feldspar, Hornblende Porphyry  
Rare Quartz-eyes
- 3 Limestone
- 4 Skarn
- 5 Volcanics: amygdaloidal and massive
- Outcrop
- △ Float
- Test pit
- Diamond Drill Hole
- Chip Sample
- Cat Trench

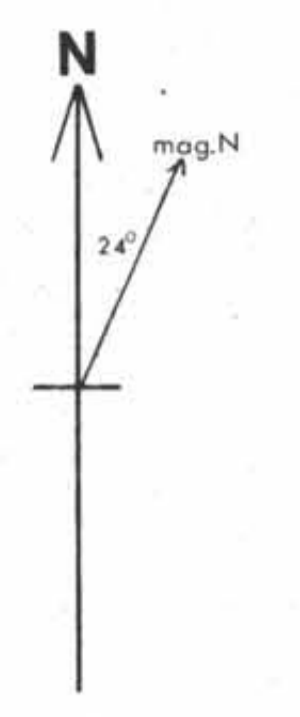
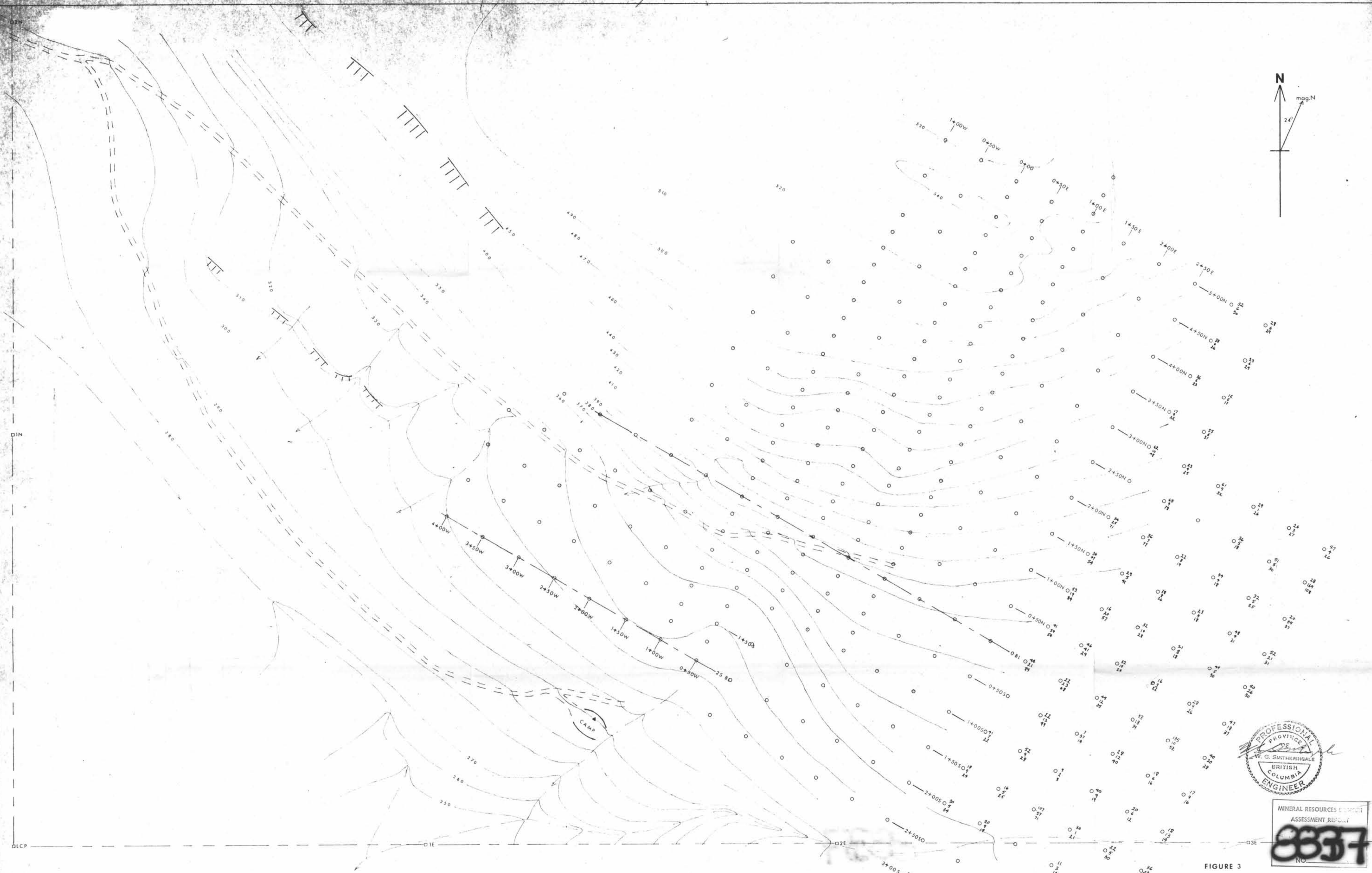


MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8837**  
NO.

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8837**



**Electra Resources Corp.**  
**ST Property**  
Geology  
Mapping by: A.Glatiotis (BSc. geology)  
Draughting by: A.C.G. July 24<sup>th</sup>/1980



MINERAL RESOURCES REPORT  
ASSESSMENT REPORT  
**8837**  
NO.

FIGURE 3

ELECTRA RESOURCES CORPORATION

ST CLAIM

SOIL GEOCHEMISTRY, Cu, Pb, Zn 1980

scale 1:2000  
0 50 100  
metres  
contour interval 10m

WG. SMITHERINGALE & ASSOCIATES LTD. FEB 1981

- 2E— claim post and line
- ▲ arbitrary datum 300 M
- ||||| rock bluff
- == 4 x 4 road
- 1 Cu PPM
- 1 Pb PPM
- 3 Zn PPM