

86-729-15333

12/87

PRELIMINARY GEOLOGICAL, MAGNETIC AND
 GEOCHEMICAL SURVEYS
 CLARE MINERAL CLAIM
 VANCOUVER MINING DIVISION
 WOODFIBRE AREA, HOWE SOUND, B.C.
 NTS 92 G/11 W
 LATITUDE 49° 37' N, LONGITUDE 123° 17' W
 38.2'

Prepared for
 FONTANA RESOURCES LTD.

Owner: PACED SYSTEMS CORP.
 Operator: L.B. GOLDSMITH

GEOLOGICAL BRANCH
 ASSESSMENT REPORT

15,333

ARCTEX ENGINEERING SERVICES

Locke B. Goldsmith, P.Eng.
 Consulting Geologist

FILMED

September 16, 1986

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(Pocket inside back cover)	

PRELIMINARY GEOLOGICAL, MAGNETIC AND
GEOCHEMICAL SURVEYS
CLARE MINERAL CLAIM
VANCOUVER MINING DIVISION
WOODFIBRE AREA, HOWE SOUND, B.C.

SUMMARY

Disseminated sulphides, chiefly pyrite with occasional pyrrhotite and chalcopyrite, occur discontinuously in gabbro exposures on cliffs near the southern boundary of the Clare claim. A magnetic high-low anomaly trends east-west along the south claim line. Soil geochemistry may suggest very weak anomalous conditions could be associated with the anomaly. Detailed magnetometer surveys, prospecting and hand trenching along the trend of the magnetic anomaly are recommended at a cost of \$5,000.00.

INTRODUCTION

The Clare mineral claim is located on the west side of Howe Sound directly opposite the former mining community of Britannia, B.C., approximately 35 km north-northwest of Vancouver. The southern part of the property is on the northeast flank of Mt. Ellesmere. Most suitable access is by boat to floating docks at the terminus of a logging road. Camp was maintained on a boat moored to the docks. At the time that work was undertaken, yellow cedar was being hauled from a clearcut adjacent to the southeast corner of the claim. The road was in good condition and movement of exploration personnel was facilitated by travelling in the logger's support trucks. Co-operation of the timber lease operator, Mr. Whittaker, was greatly appreciated.

Topography is steep and rugged on the walls of a creek which flows from west to east through the centre of the claim. Cliffs in the area of interest south of the creek hinder direct access. Elevations range from 500 m (1700') in the creek valley on the eastern margin of the property to 1070 m (3500') in the north-west and southwest corners of the claim.

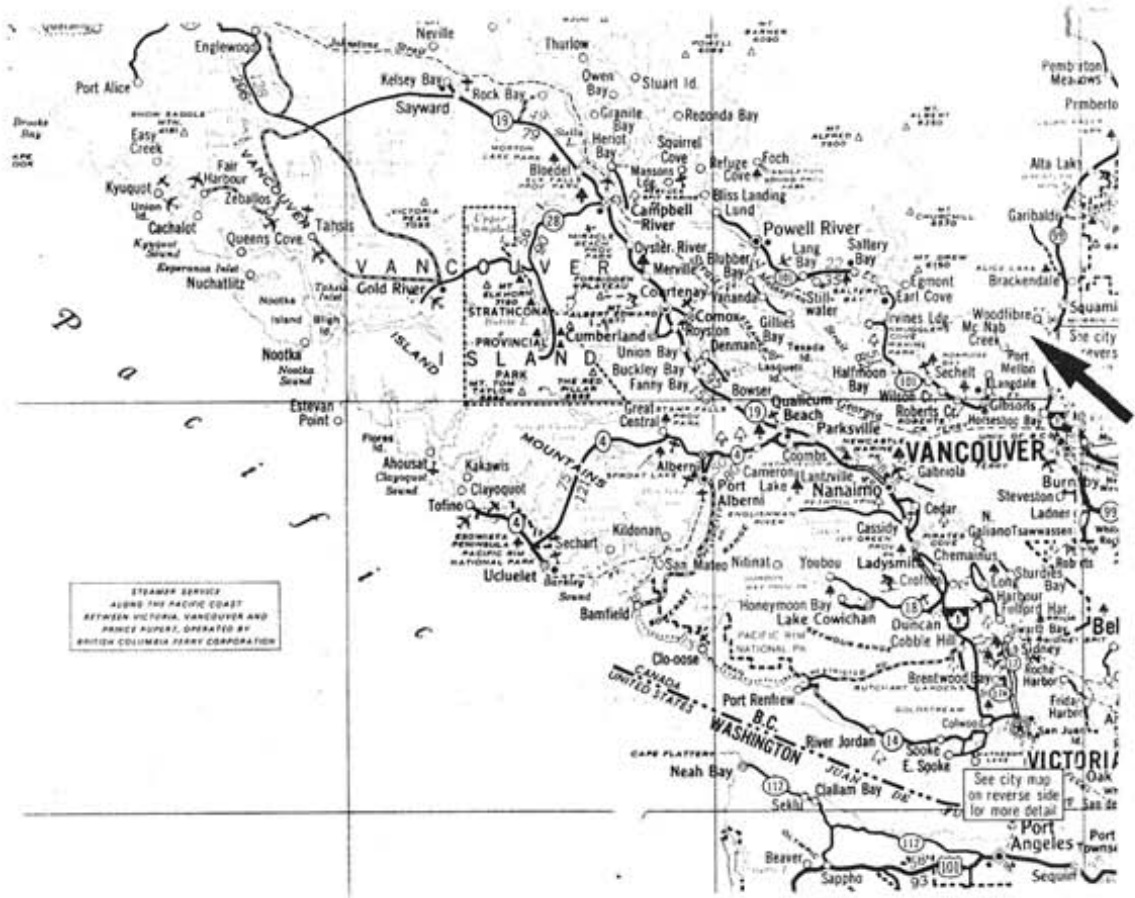
Prospecting of sulphide showings in gabbro has been undertaken in 1975 and some air-photo studies completed in 1981 (von Rosen, October, 1981).

Recording data of the claim are as follows:

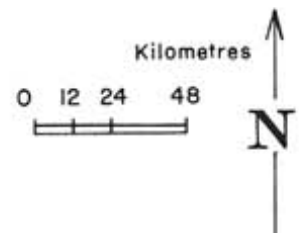
<i>Name</i>	<i>Record No.</i>	<i>No. of Units</i>	<i>Date of Staking</i>
Clare	1(3)	6	March 24, 1975

GEOLOGY

Quartz diorite of the Coast intrusions underlies the area north of the creek. Gabbro and related ultrabasic phases are exposed in cliffs in the south one-quarter of the claim. Within the 1:5000 map area, the gabbro appears in general to become more anorthositic to the west. Serpentinite with carbonate development was noted in one small outcrop. Shearing in an easterly direction was noted at one location.



Location Map



N.T.S. 92G/11W

CLARE Mineral Claim

WOODFIBRE AREA, B.C. VANCOUVER Mining Division

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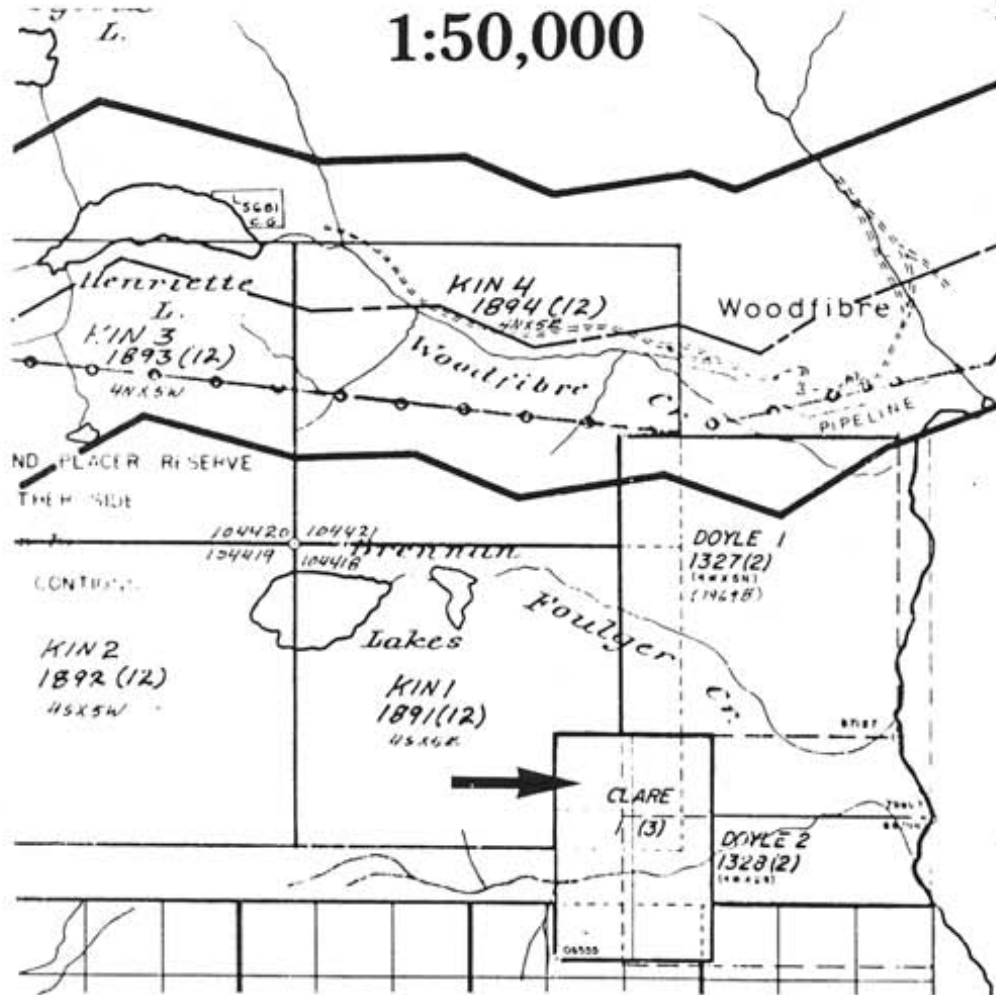
TO ACCOMPANY SEPTEMBER 1986 REPORT BY
LOCKE B. GOLDSMITH, P.Eng.
CONSULTING GEOLOGIST

ARCTEX ENGINEERING SERVICES



123° 15'
49° 41'

1:50,000



Claim Map

SCALE



N.T.S. 92G/11W

CLARE Mineral Claim

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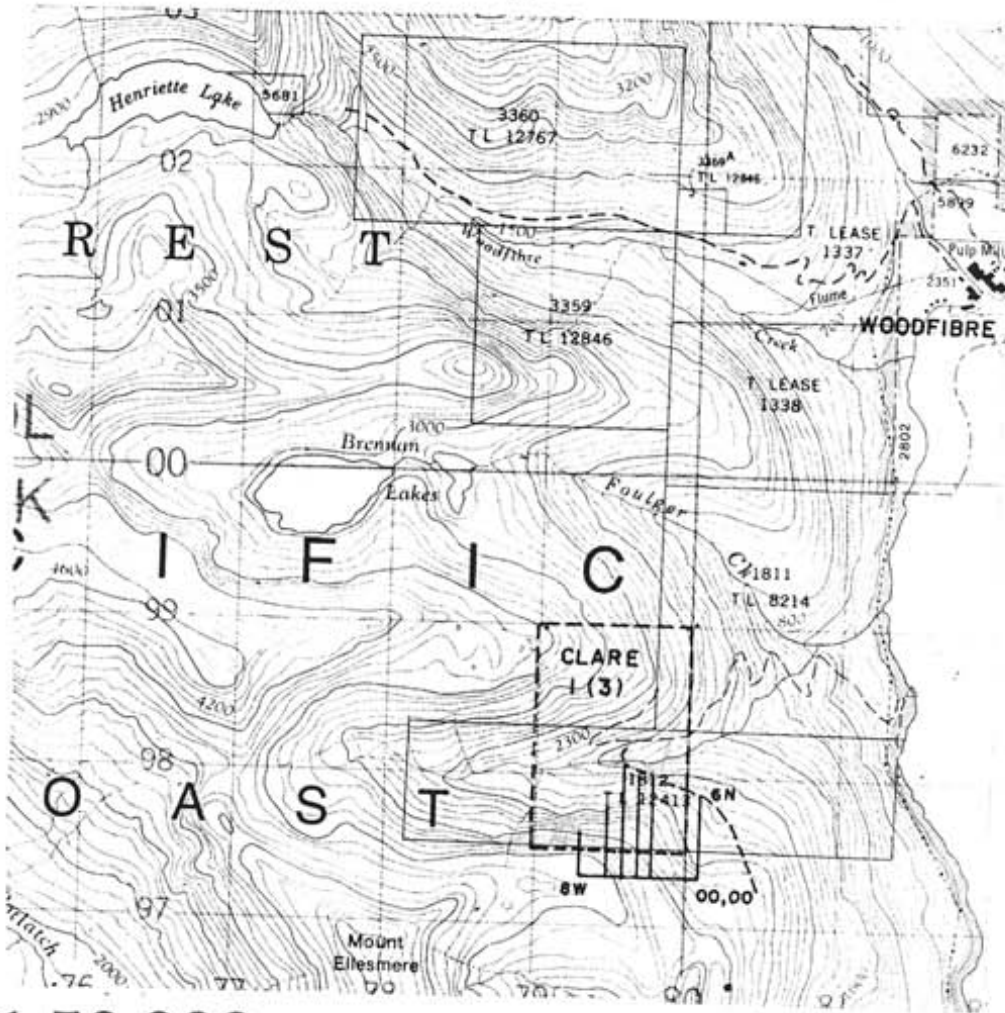
ARCTEX ENGINEERING SERVICES



Topographic Map

123° 15'

49° 41'



1:50,000

SCALE



METRES

N.T.S. 92G/11W

CLARE Mineral Claim

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Sulphides occur sporadically as patches of disseminations or blebs along the cliff faces. Pyrite is the preponderant sulphide, with occasional pyrrhotite and chalcopyrite.

Rock geochemical results contain up to 4900 ppm (0.49% Cu) with 510 ppm Ni (0.05% Ni) from a picked sample of pyrite plus chalcopyrite. No appreciable amount of this mineralization could be found. Significant gold or platinum was not detected.

MAGNETIC SURVEY

A Scintrex MF-1 magnetometer was used. A linear high-low pair with an amplitude peak of 3600 gammas appears to trend along the southern border of the claim. No obvious explanation for the anomaly was observed. Detailed magnetic readings would help to define the extent of the trend.

SOIL GEOCHEMICAL SURVEY

A total of 64 samples was collected from 30-45 cm below organic debris with a narrow elongate spade. Soils are generally sandy with subordinate clay, and tan to rusty in colour. Highest values for copper and nickel were obtained in soils on or immediately below the steep cliffs where sulphides are present in outcrop. A very small increase in copper values of perhaps 5-10 ppm may be associated with the magnetic trend discussed in the previous section but at this time it is not considered to be significant. A total of 4.3 km of grid was completed.

CONCLUSIONS

Base metal sulphides which are exposed in the cliff faces do not appear to have economic potential at this time. A magnetic linear to the south of the cliff tops suggests an untested target for base metals. Precious metals do not appear to be associated with sulphide mineralization.

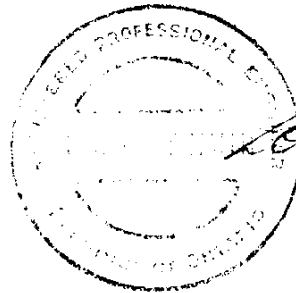
RECOMMENDATIONS

Close-spaced magnetic readings should be taken along the trend of the linear. Prospecting and shallow trenching by hand should be undertaken concurrently, guided by the magnetic responses.

Light motorcycles suitable for climbing steep grades on the access road should be used during the next phase of work. The logging operations were nearing completion and the benefit of transport from sea level to 760 m (2500') ASL will not be available.

COST ESTIMATE

A detailed magnetic survey, prospecting, and shallow hand trenching is estimated to cost approximately \$5,000.00.



Respectfully submitted,

A handwritten signature in black ink that reads "Locke B. Goldsmith".

Locke B. Goldsmith, P.Eng.
Consulting Geologist

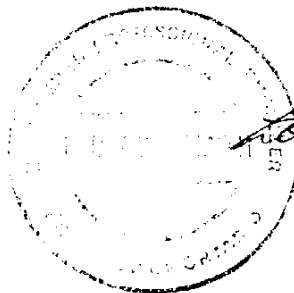
Vancouver, B.C.

September 16, 1986

**ENGINEER'S CERTIFICATE
LOCKE B. GOLDSMITH**

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 27 years.
4. I have authored the report entitled, "Preliminary Geological, Magnetic and Geochemical Surveys, Clare Mineral Claim, Vancouver Mining Division, Woodfibre Area, Howe Sound, B.C." dated September 16, 1986. The report is based upon fieldwork and research supervised by the author.
5. I have no ownership in the property, nor in the stocks of Fontana Resources Ltd.
6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds.

Respectfully submitted,



Locke B. Goldsmith

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B.C.

September 16, 1986

REFERENCES

- von Rosen, G. October 19, 1981. Assessment geological report (airphoto fracture density analysis) on the Clare [1](3): MC3[444](7): OC4[445](7) mineral claims, Mt. Ellesmere area, Woodfibre, B.C. Private report for O. Contini.
- von Rosen, G. November 10, 1981. Recommendation report, Clare (1) mineral claim, Woodfibre, B.C. Private report for Raft Mines Ltd.

COST STATEMENT, 1986 PROGRAMME

Personnel:

L.B. Goldsmith, $\frac{1}{4}$ July 31, $\frac{1}{2}$ Aug. 5, 6, $\frac{1}{4}$ 7, 8, 9, $\frac{1}{4}$ Sept. 3, $\frac{1}{4}$ 4, $\frac{3}{4}$ 16, $\frac{1}{4}$ 19, total 5 $\frac{1}{2}$ days @ \$400/day	\$2,200.00	
J. Randa, $\frac{1}{2}$ Aug. 5, 6-9, total 4 $\frac{1}{2}$ days @ \$230/day	1,035.00	
G. Savard, $\frac{1}{2}$ Aug. 5, 6-9, total 4 $\frac{1}{2}$ days @ \$230/day	1,035.00	
	<u>\$4,270.00</u>	\$4,270.00

Accommodation, Food:

Boat rental	\$ 550.00	
Grub	339.06	
	<u>\$ 889.06</u>	889.06
\div 14.5 days = \$61.31/man/day		

Travel:

246 km @ \$0.30/km	\$ 73.80	
Gas	35.00	
	<u>\$ 108.80</u>	108.80
\div 5.5 days = \$19.78/day		

Analyses:

69 samples cost \$763.25 = \$11.06/sample 763.25

Field Supplies:		128.84
Magnetometer Rental: 5 days @ \$20/day		100.00
Mobile Phone Rental: 5 days @ \$10/day		50.00
Report: Drafting, prints, typing, photocopying, materials		<u>494.89</u>
	Total:	\$6,804.84

A P P E N D I X

ROCK SAMPLE DESCRIPTIONS

CLARE MINERAL CLAIM

FONTANA RESOURCES LTD.

- FON 1 Picked sample. Disseminated pyrite + chalcopyrite in fine- to coarse-grained gabbro. In small stream cut. Starter steel and shovel leaning against cliff.
- FON 2 Chip-grab sample. Disseminated pyrite in gabbro. Areas of disseminations form pod shapes to 40 cm in diameter.
- FON 3 Chip-grab sample. Disseminated pyrite with occasional blebs of chalcopyrite in coarse gabbro. Several concentrations of coarse pyrite within 2 cm diameter. Old pit blasted at the base of the cliff.

Gold F.A.-A.A. Combo Method ppb:

For low grade samples and geochemical materials, 10 gram samples are fused in litharge, carbonate and siliceous flux with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO₃ and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer.

Detection limit: 5 ppb

Copper, Lead, Zinc, Silver ppm:

1.0 gm sample is digested with perchloric-nitric acid (HClO₄-HNO₃) for approximately 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Copper, lead, zinc and silver are determined by atomic absorption techniques. Silver and lead are corrected for background absorption.

Detection limit: Copper, Zinc - 1 ppm
Silver - 0.2 ppm
Lead - 2 ppm

Arsenic ppm:

A 1.0 gm sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with NaBH₄ and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ARCTEX ENGINEERING

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8616497-001-A
INVIGICE # : I8616497
DATE : 25-AUG-86
P.C. # : NONE
CLARE

Sample description	Prep code	Cu ppm	Ni ppm	Au ppb FA+AA	Pt ppb			
0 + 50	201	16	5	5	--	--	--	--
0 + 100	201	7	1	<5	--	--	--	--
0 + 150	201	23	11	<5	--	--	--	--
0 + 200	201	4	2	<5	--	--	--	--
0 + 250	201	41	12	<5	--	--	--	--
0 + 300	201	17	2	<5	--	--	--	--
0 + 350	201	16	7	<5	--	--	--	--
0 + 400	201	17	2	<5	--	--	--	--
0 + 450	201	27	8	<5	--	--	--	--
0 + 500	201	10	8	<5	--	--	--	--
0 + 550	201	16	6	<5	--	--	--	--
0 + 600	201	18	7	<5	--	--	--	--
1 + 350	201	11	1	<5	--	--	--	--
1 + 450	201	13	7	<5	--	--	--	--
1 + 500	201	16	7	<5	--	--	--	--
1 + 550	201	9	1	<5	--	--	--	--
1 + 600	201	17	5	<5	--	--	--	--
3+00W 0+00N	201	5	1	<5	--	--	--	--
3+00W 0+50N	201	10	1	<5	--	--	--	--
3+00W 1+00N	201	6	2	<5	--	--	--	--
3+00W 1+50N	201	7	2	<5	--	--	--	--
3+00W 2+00N	201	6	1	<5	--	--	--	--
3+00W 2+50N	201	6	2	<5	--	--	--	--
3+00W 3+00N	201	15	1	<5	--	--	--	--
3+00W 3+50N	201	14	2	<5	--	--	--	--
3+00W 4+00N	201	6	1	<5	--	--	--	--
3+00W 4+50N	201	9	1	<5	--	--	--	--
3+00W 5+50W	217	10	1	<5	--	--	--	--
3+00W 6+15N	201	52	2	<5	<50	--	--	--
4+00W 0+50N	201	7	2	<5	--	--	--	--
4+00W 1+00N	217	8	3	<5	--	--	--	--
4+00W 1+50N	201	17	3	<5	--	--	--	--
4+00W 2+00N	201	14	2	<5	--	--	--	--
4+00W 2+50N	201	8	3	<5	--	--	--	--
4+00W 3+00N	201	11	1	<5	--	--	--	--
4+00W 3+50N	201	6	1	<5	--	--	--	--
4+00W 4+00N	201	12	4	<5	--	--	--	--
4+00W 4+50N	217	39	1	<5	--	--	--	--
4+00W 5+00N	201	48	5	<5	--	--	--	--
4+00W 5+50N	201	294	7	5	--	--	--	--

VOI rev. 4/85

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TO : ARCTEX ENGINEERING

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8616496-001-A
INVOICE # : I8616496
DATE : 25-AUG-86
P.O. # : NONE
CLARE

Sample description	Prep code	Cu ppm	Ni ppm	Au ppb FA+AA	Pt ppb		
FON-1	205	4900	510	20	<50	--	--
FON-2	205	600	137	<5	<50	--	--
FON-3	205	870	138	10	<50	--	--

Certified by *Hart Bichler*



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CERTIFICATE OF ANALYSIS

TO : ARCTEX ENGINEERING

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8616497-002-A
INV. # : I8616497
DATE : 25-AUG-86
P.O. # : NONE
CLARE

Sample description	Prep code	Cu ppm	Ni ppm	Au ppb FA+AA	Pt ppb			
4+00W 6+00N	201	170	14	<5	--	--	--	--
4+00W 6+50N	201	20	1	<5	--	--	--	--
4+00W 6+85N	201	17	3	<5	--	--	--	--
5+00W 0+50N	201	6	1	<5	--	--	--	--
5+00W 1+00N	201	4	1	<5	--	--	--	--
5+00W 1+50N	201	6	1	<5	--	--	--	--
5+00W 2+00N	201	3	1	<5	--	--	--	--
5+00W 2+50N	201	14	2	<5	--	--	--	--
5+00W 4+50N	201	248	12	<5	--	--	--	--
5+00W 5+00N	201	155	27	<5	--	--	--	--
5+00W 5+50N	201	212	8	<5	--	--	--	--
5+00W 6+50N	201	189	8	<5	--	--	--	--
5+00W 7+40N	201	15	2	<5	--	--	--	--
6+00W 0+50N	217	12	1	<5	--	--	--	--
6+00W 1+00N	201	15	2	<5	--	--	--	--
6+00W 2+00N	201	13	5	<5	--	--	--	--
6+00W 3+00N	201	7	7	<5	--	--	--	--
6+00W 3+50N	201	6	3	<5	--	--	--	--
6+00W 4+00N	201	7	2	<5	--	--	--	--
8+00W 0+00N	201	5	1	<5	--	--	--	--
8+00W 0+50N	201	5	1	<5	--	--	--	--
8+00W 1+00N	201	5	1	<5	--	--	--	--
8+00W 1+50N	201	8	1	<5	--	--	--	--
8+00W 2+00N	201	14	5	<5	--	--	--	--
8+00W 2+50N	217	6	2	<5	--	--	--	--
8+00W 3+00N	201	10	2	<5	--	--	--	--

Hart Buchler

Certified by

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,333

Rock sample location

FON 1 *
ppm Cu
ppm Ni
ppb Au
ppb Pt

Abbreviations
used in rock
sample descriptions

PYR - PYRITE
PYRRH - PYRRHOTITE
CPY - CHALCOPYRITE

A ANORTHOSITE
G GABBRO

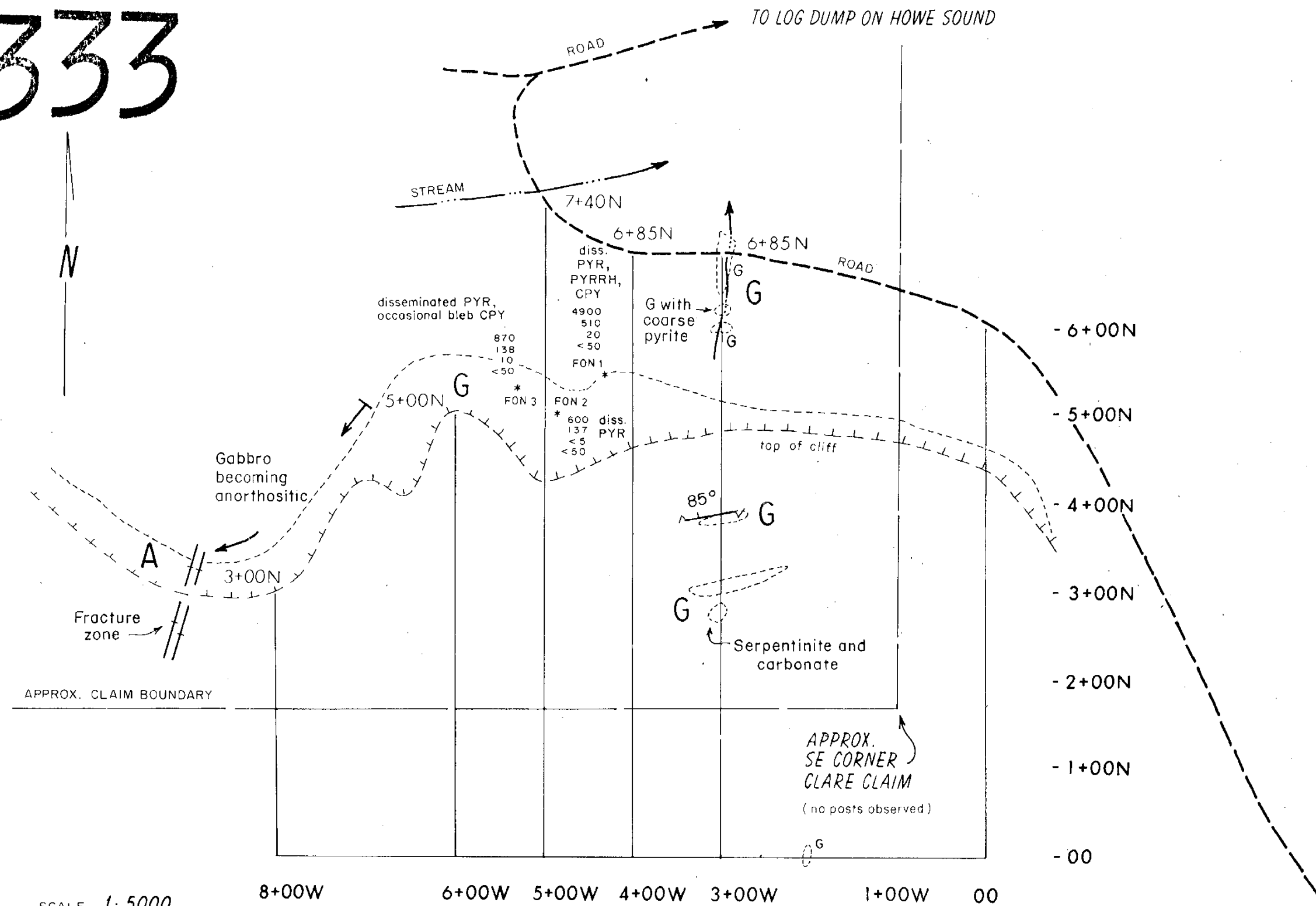
OUTCROP
SHEAR



GEOLOGY MAP

N.T.S. 92G/11W
CLARE Mineral Claim
WOODFIBRE AREA, B.C. VANCOUVER Mining Division
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CONSULTING GEOLOGIST
ARGTEX ENGINEERING SERVICES



SCALE 1:5000



Rock sample location

FON 1 *
 ppm Cu
 ppm Ni
 ppb Au
 ppb Pt

Soil sample values:

ppm Cu / ppm Ni / ppb Au / ppb Pt
 (3+00W 6+15N only)



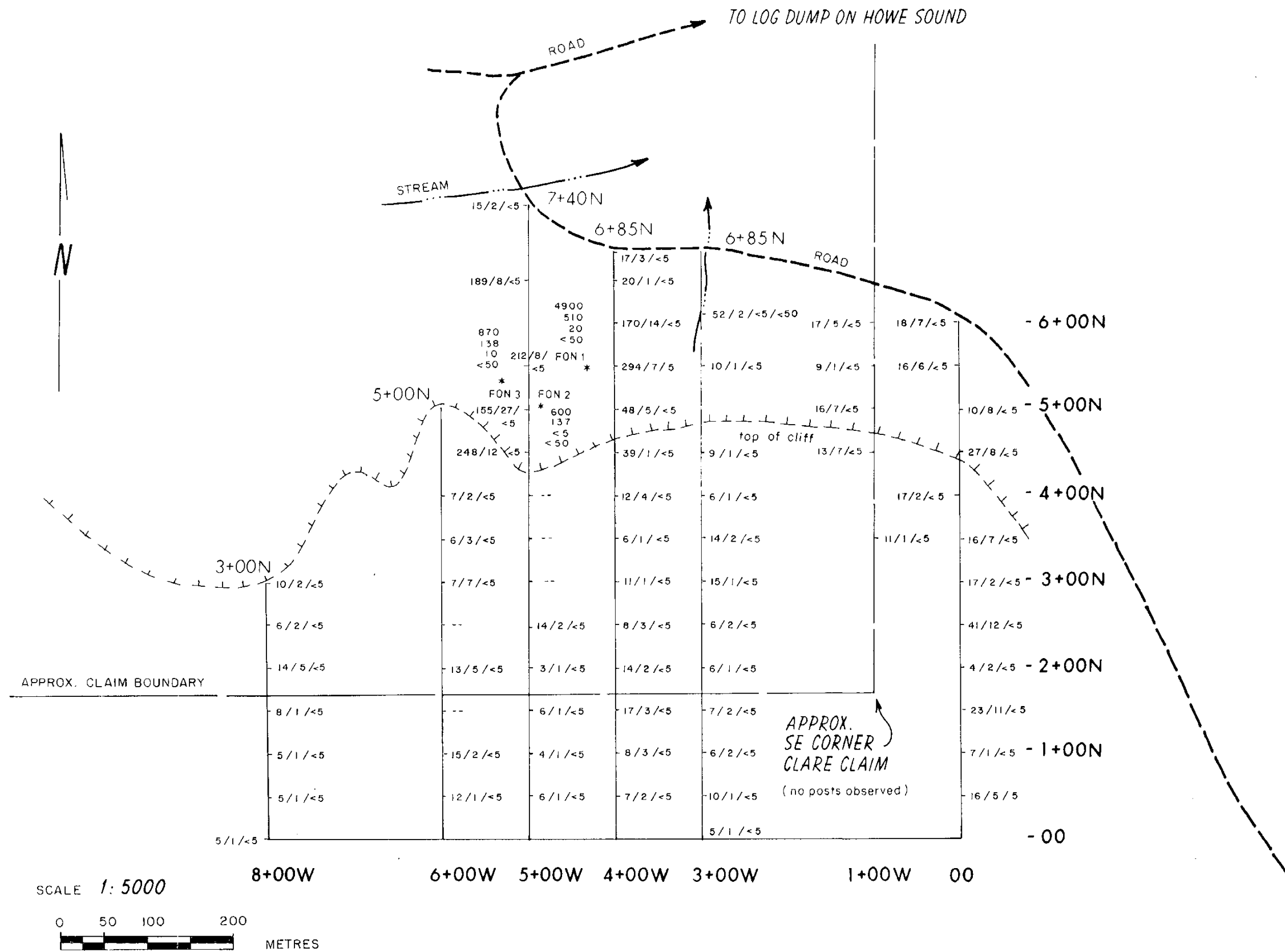
GEOLOGICAL BRANCH
 ASSESSMENT REPORT

**SOIL & ROCK
 GEOCHEMISTRY**

N.T.S. 926/11W
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,333

CONTOUR INTERVAL:
1000 GAMMAS



SCINTREX MF-1

MAG SURVEY

N.T.S. 926/11W

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