

TRUE FISSURE PROJECT

THEON MOUNTAIN

93M/6

OMINECA MINING DIVISION

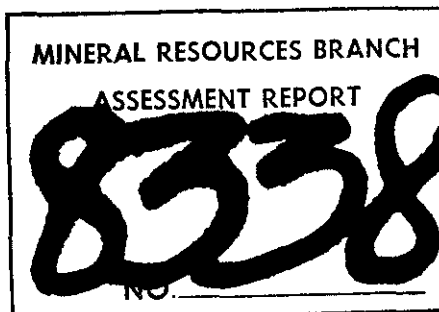
D.C. PLECASH - Geologist

October 1980

D. GROOT LOGGING LTD.

BOX 520

SMITHERS, B.C.



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## STATEMENT OF QUALIFICATIONS

I, Donald C. Plecash, of 3869 - 12 Avenue, Box 2694, Smithers, B.C. Certify that:

- 1) I attended Queens University, Kingston, Ontario from September 1947 to May 1950.
- 2) I was employed by Yale Lead & Zinc Mines of Ainsworth, B.C. as a Mine Surveyor, Junior Engineer and Junior Geologist from 1950 to 1956.
- 3) I was employed by Canam Copper Mines Ltd. of Hope, B.C. as a Mine Engineer and Mine Geologist from 1956 to 1957.
- 4) I was employed by Reeves MacDonald Mines Ltd. of Remac, B.C. as a Mine Engineer and Mine and Exploration Geologist from 1957 to 1969.
- 5) I was employed by Norex Uranium Ltd. of 605-535 Thurlow Street, Vancouver, B.C. as Exploration Manager and Geologist from June 1969 to October 1969.
- 6) I was employed by Nadina Explorations Ltd. of 1005-789 West Pender Street, Vancouver, B.C. as Mine Engineer and Mine Geologist then Mine Manager from November 1969 to September 1973.
- 7) I was employed from September 1973 to April 1980 in another industry.
- 8) I am employed by D. Groot Logging Ltd. of Box 520, Smithers, B.C. as a Geologist from May 1980 to present time.

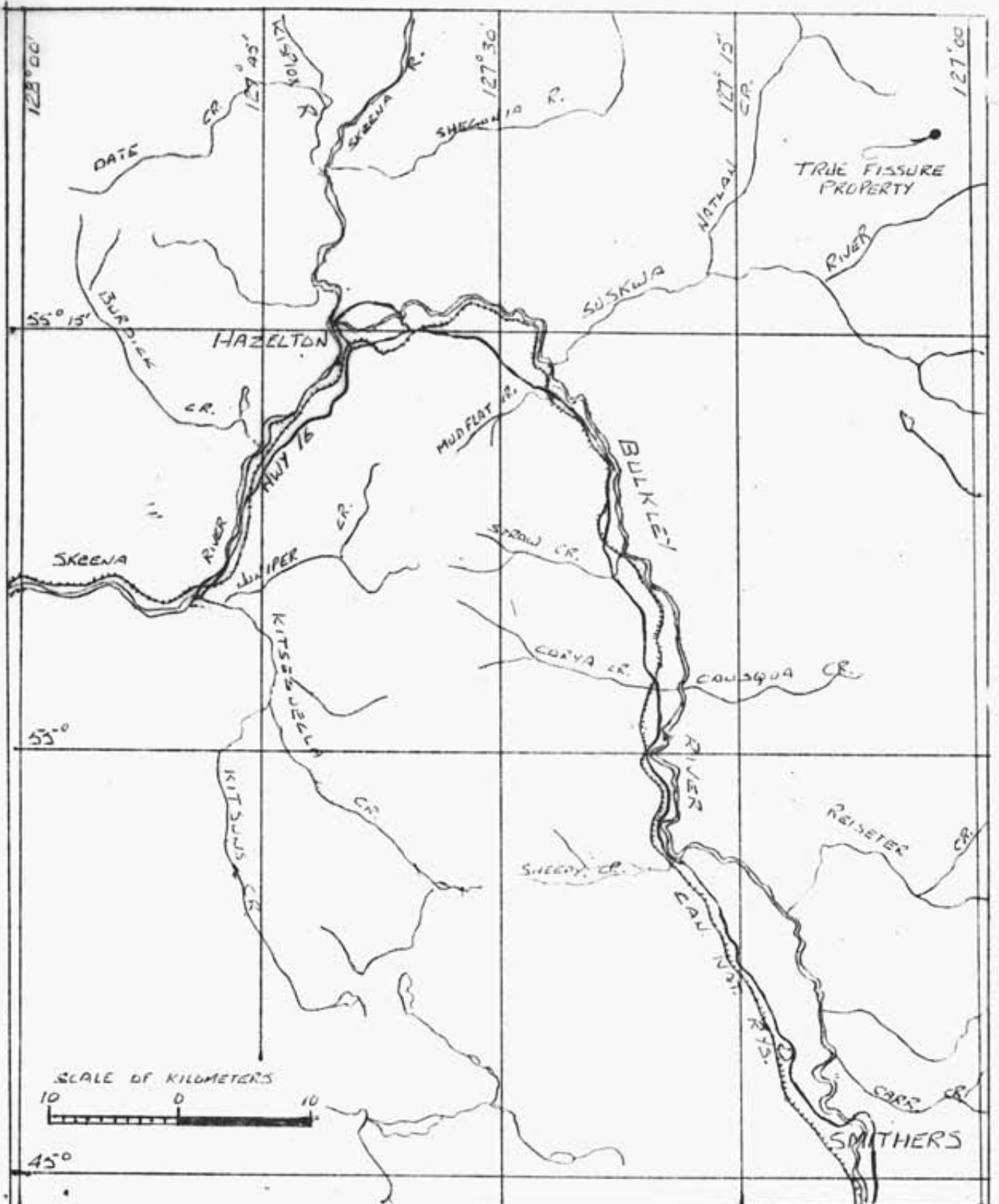
THEON MOUNTAIN ( TRUE FISSURE ) PROJECT

SUMMARY:

On June 18, 1980 and August 27, 1980 to September 1, 1980 the author with a crew of two men, employed by D.GROOT LOGGING LTD. of Smithers, B.C., did work on the True Fissure property under option from L. Warren of Smithers, British Columbia.

Results from samples taken on the vein structure show that the silver content does not appear to be of value in comparison to the results that are shown in the Minister of Mines reports. One reason is that the samples were taken across the true width of the vein and not just selected sections as before.

The results of the Self Potential Survey show that there is a continuation of the vein system along the strike and to the north east direction. The length of this vein system is in the area of at least 900 meters and there is no reason for it to stop at this point.



D. GROOT LOGGING LTD.		
THOEN MNT.		
TRUE FISSURE PROPERTY		
1:11000 M.	D.C.P.	FIG. 1

LOCATION AND ACCESS:

The True Fissure property is situated in West Central British Columbia at latitude  $55^{\circ} - 24' - 30''$  N and longitude  $127^{\circ} - 01' - 50''$  W.

This area is at the head of 31 Mile Creek, a southerly flowing tributary of the Suskwa River, approximately 50 kilometers from Hazelton, B.C. It is located immediately west of Thoen Basin in the south side of the mountain.

A logging road that is presently in use is within 9.5 kilometers of the property but the easiest access now is by helicopter from Smithers, B.C.

The main showing is an adit at 1585 meters elevation and vein exposures at elevations between 1794 meter and 1980 meters.

## HISTORY:

In reference to the Minister of Mines, B.C., of 1921, 1927, and 1929 the claims were first staked in 1926 by Gordon McLennan and Pete Jennings. In 1927 the claims were turned over to J.A. Rutherford. A tunnel was driven on the lower part of the vein for a few feet. This followed a 10" wide mineralized vein. At 165 feet, higher up on the vein, an open cut was put in to expose the vein where it still was about 10" wide. In 1929 the lower tunnel was advanced to a total length of 30 feet.

In 1930 J.A. Rutherford held the claims, at which time were known locally as Suskwa Mines. To this time the vein structure was well gone over and numerous hand picked samples were taken and assayed. Some of the selected samples ran as high as 203.4 oz. Ag., 36.0% Pb. and 20.0% Zn.

To date no other information had been obtained or work been performed on the True Fissure Claims until the author and his crew worked the area this summer.

#### REGIONAL GEOLOGY:

The rock formations exposed on and near the property consist of quartzites, argillites and tuffaceous sandstone of the Hazelton formation which are intruded by dykes of porphyritic granodiorite. The strata strike north 40 degrees east and dip 35 degrees northwest.

#### PROPERTY GEOLOGY:

The main ore occurrence is a replacement type of vein occupying a shear zone. The vein varies in width from 10 inches to 2½ feet, strikes north 72° east and dips 52° to the southeast.

The vein consists of sphalerite, galena, pyrite, tetrahedrite, and chalcophrite in a gangue of quartz, carbonate and altered wall-rock. In places the vein is considerably leached and consists largely of iron oxide.

At exposed lower elevation of the vein the width seems to be about 10" wide, but as you approach the higher elevations the vein seems to be about 36" wide with massive sphalerite, galena and tetrahedrite.

Another shear zone lies about 500 feet north of the main vein. This is beside a granodiorite dyke and the vein is between 20" and 50" wide where it runs up the steep basin. Some arsenopyrite and pyrrhotite is visible in small amounts. No sphalerite or galena mineralization was present in this zone.



GEOPHYSICAL SURVEY - Self Potential Method

Equipment R.S.P. - 6

THEORY : Exploration procedures based on the flow of natural currents rely on "Self Potential" currents which arise spontaneously in certain mineral bodies due to polarization of these bodies.

An electric current to be generated in a manner similar to the process taking place in a galvanic cell, one or more metallic conductors of electricity must be in contact with one or more electrolytes ( solutions of salts, acids or alkalies that are themselves electrically conductive ).

The major factor in the generation of spontaneous polarization currents appears to be the difference in acidity (P.H.) between near surface electrolytes and the solutions at depth which normally are somewhat alkaline. It is in this phase of the phenomenon that actively oxidizing sulphides enter to give a boost to the current generation. The acids formed during oxidation of sulphides lower the PH of near surface solutions and increase the contrast between them and the less acid, neutral or alkaline electrolytes at depth. The difference in PH between near surface and deep lying electrolytes largely control the actual strengths of the electrical currents excited by that contrast.

METHOD : Two porous pots with internal copper electrodes filled with a super-saturated solution of copper sulphate were attached to two wire leads of 16 gauge flame seal covered stranded wire whose fixed ends are connected to the RSP-6 machine. Both electrodes are moved continually with a fix distance of separation between them, 50 feet apart. The electrodes are moved along each survey line in a leap-frog fashion. This method produces the gradient of the potential or electric field along the lines surveyed.

## CONCLUSIONS:

The work on the True Fissure Property showed that the better mineralization is up in the higher elevations. The upper vein area is also more in a minning width category that would lend itself to less dilution for drilling and blasting. This top area is about 100 meters in heighth and about 100 meters in length. This measurement was established by a tape and brunton survey.

From running a base line in an easterly direction from the 10 meter adit and having cross lines cut and flagged the Self Potential Survey showed that the vein is still continuous in the area that our survey was conducted in.

If more readily accessability was available, then some trenching and diamond drilling could be performed at a nominal cost to further develop the vein system.

CLAIM LIST :

<u>NAME</u>	<u>RECORD NUMBER</u>	<u>DATE STAKED</u>
THOEN # 1	2181	October 26, 1980
THOEN # 2	2182	October 26, 1980
THOEN # 3	2183	October 26, 1980
THOEN # 4	2184	October 26, 1980

SELF POTENTIAL RSP.6 READINGS

<u>AN</u>	=	<u>M VOLTS</u>	<u>BS</u>	=	<u>M VOLTS</u>	<u>CN</u>	=	<u>M VOLTS</u>
0-1	=	-117	0-1	=	-105	0-1	=	-22
1-2	=	-158	1-2	=	-35	1-2	=	-65
2-3	=	-100	2-3	=	-22	2-3	=	-34
3-4	=	- 94	3-4	=	-12	3-4	=	-21
4-5	=	- 86	4-5	=	-43	4-5	=	-28
5-6	=	-145	5-6	=	-45	5-6	=	-43
6-7	=	-198	6-7	=	- 8	6-7	=	-19
7-8	=	-104	7-8	=	-15	7-8	=	-56
8-9	=	-128	8-9	=	-15	8-9	=	- 4
9-10	=	- 7	9-10	=	+16	9-10	=	-67
10-11	=	+ 19	10-11	=	+23	10-11	=	-56
11-12	=	+ 8	11-12	=	+48	11-12	=	+12
12-13	=	+ 35	12-13	=	-11	12-13	=	-38
13-14	=	- 20	13-14	=	-10	13-14	=	-57
14-15	=	+ 2	14-15	=	- 7	14-15	=	-20
15-16	=	- 17	15-16	=	-21	15-16	=	- 1
16-17	=	+ 2	16-17	=	-14	16-17	=	-10
17-18	=	- 57	17-18	=	+11	17-18	=	+ 7
18-19	=	- 47	18-19	=	-30	18-19	=	-36
19-20	=	- 21	19-20	=	-43	19-20	=	-16
20-21	=	- 44	20-21	=	-55	20-21	=	-32
21-22	=	- 28	21-22	=	+ 7	21-22	=	-15
22-23	=	- 43	22-23	=	-24	22-23	=	- 1
23-24	=	- 27	23-24	=	-27	23-24	=	+ 4
24-25	=	-126	24-25	=	-29	24-25	=	+ 3
25-26	=	+117	25-26	=	- 0	25-26	=	+22
26-27	=	+ 26	26-27	=	-14	26-27	=	+ 0
27-28	=	+ 42	27-28	=	- 5	27-28	=	+ 2
28-29	=	+ 21	28-29	=	-11	28-29	=	- 2
29-30	=	+ 2	29-30	=	-14			

DS = M VOLTS

0-1 = +17  
1-2 = -23  
2-3 = -18  
3-4 = + 3  
4-5 = 0  
5-6 = - 8  
6-7 = -11  
7-8 = -33  
8-9 = -14  
9-10 = -26  
10-11 = -32  
11-12 = -28  
12-13 = -55  
13-14 = -48  
14-15 = -20  
15-16 = +24  
16-17 = +19  
17-18 = +36  
18-19 = +21  
19-20 = -12  
20-21 = -17

EN = M VOLTS

0-1 = -26  
1-2 = -13  
2-3 = - 6  
3-4 = -13  
4-5 = - 5  
5-6 = - 2  
6-7 = 0  
7-8 = -13  
8-9 = + 4  
9-10 = - 7  
10-11 = + 8  
11-12 = +35  
12-13 = -15  
13-14 = +17  
14-15 = -30  
15-16 = 0  
16-17 = + 2  
17-18 = +17  
18-19 = -51  
19-20 = - 9  
20-21 = -30  
21-22 = -46  
22-23 = -35  
23-24 = -39  
24-25 = -19  
25-26 = -60  
26-27 = -161  
27-28 = -58  
28-29 = -84  
29-30 = +187  
30-31 = +39  
31-32 = +40

FS = M VOLTS

0-1 = -26  
1-2 = +58  
2-3 = +105  
3-4 = +35  
4-5 = +75  
5-6 = +25  
6-7 = +28  
7-8 = +25  
8-9 = +20  
9-10 = +10  
10-11 = - 1  
11-12 = +11  
12-13 = 0  
13-14 = +23  
14-15 = +40  
15-16 = - 9  
16-17 = -13  
17-18 = -43  
18-19 = - 3  
19-20 = -42  
20-21 = -33  
21-22 = + 2  
22-23 = -14  
23-24 = -23  
24-25 = -25  
25-26 = -38  
26-27 = -33  
27-28 = - 8

COST STATEMENT

Equipment & Supplies			465.84
Assaying Costs			219.10
Wages ( Including Fringe Benefits ) :			
	M. Chapmen	7 Days	850.00
	H. Dejong	6 Days	750.00
	D.C. Plecash	9 Days	<u>1607.06</u>
			3207.06
Helicopter			<u>1852.80</u>
TOTAL:			<u>\$ 5744.80</u>

COST BREAK DOWN

TOTAL EXPENDITURES \$ 5744.80

1) 4 days cutting line and Self Potential Survey \$ 3829.83

THOEN # 1 - 1266 meters @ \$ 1.3476/N = \$ 1706.01

THOEN # 2 - 700 meters @ \$ 1.3476/M = \$ 943.32

THOEN # 3 - 21 meters @ \$ 1.3476/M = \$ 28.30

Outside area - 855 meters @ \$ 1.3476/M = \$ 1152.20

\$ 3829.83


2) 2 days cleaning out adit and sampling \$ 1914.97

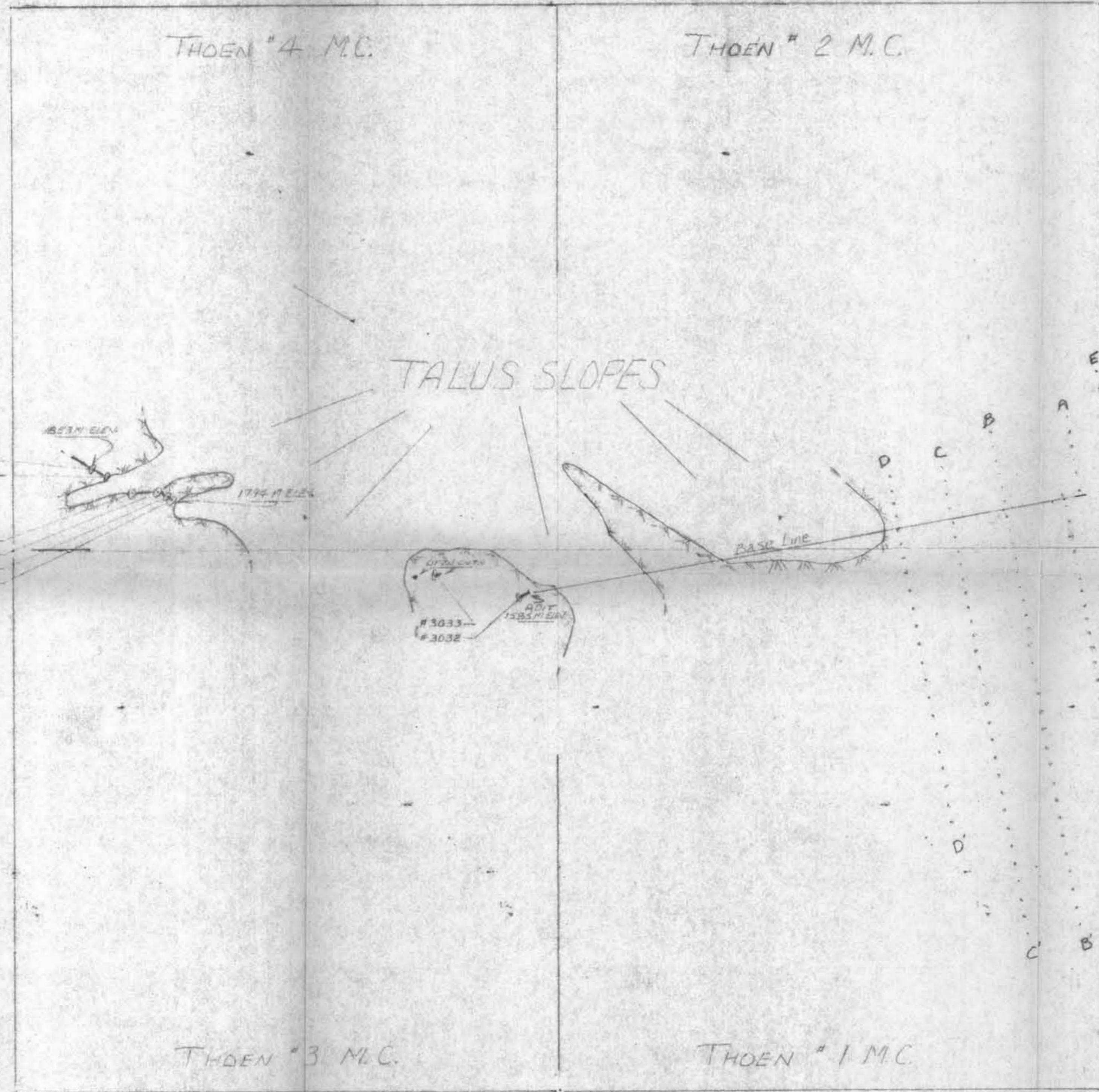
THOEN # 3 - Cleaning adit and sampling = \$ 1436.23

THOEN # 4 - Cleaning off vein & sampling = \$ 478.74

\$ 1914.97

\$ 5744.80

  
D.C. PLEKASH,  
GEOLOGIST.



**LEGEND**

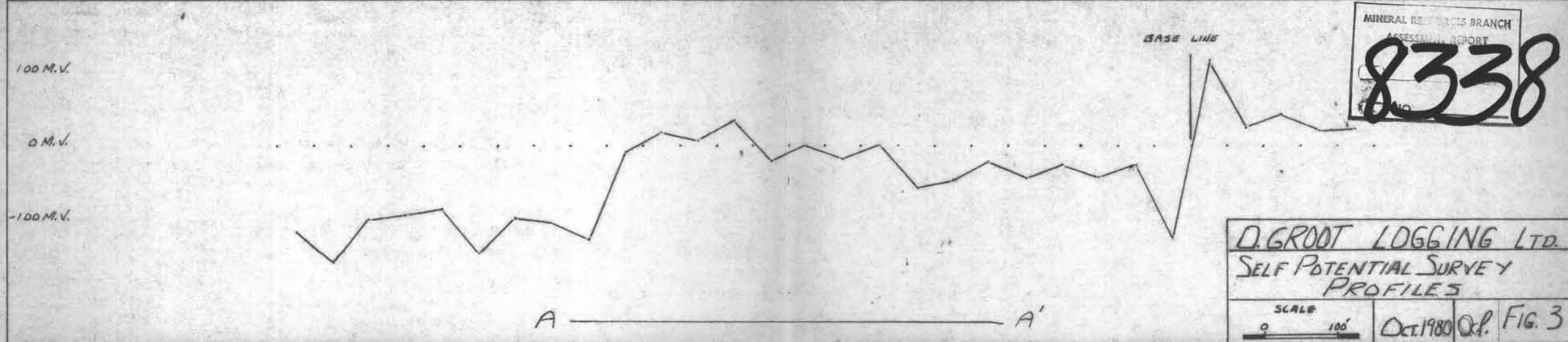
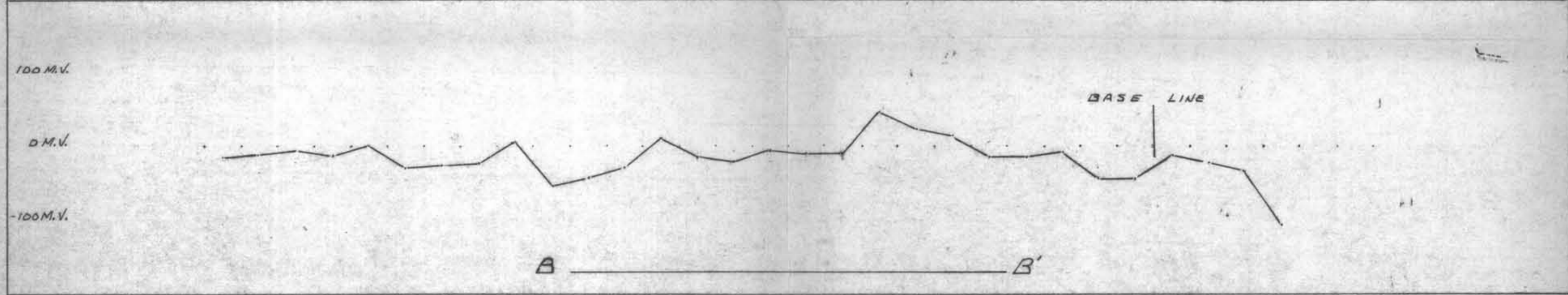
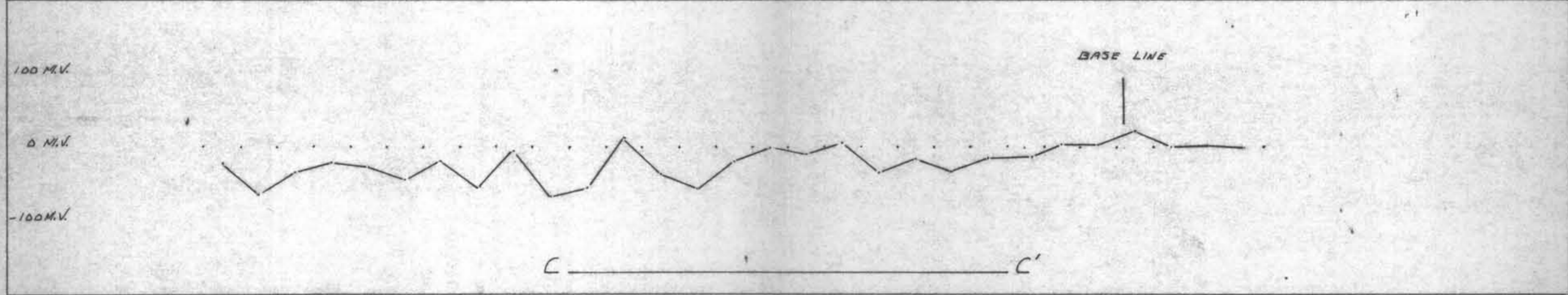
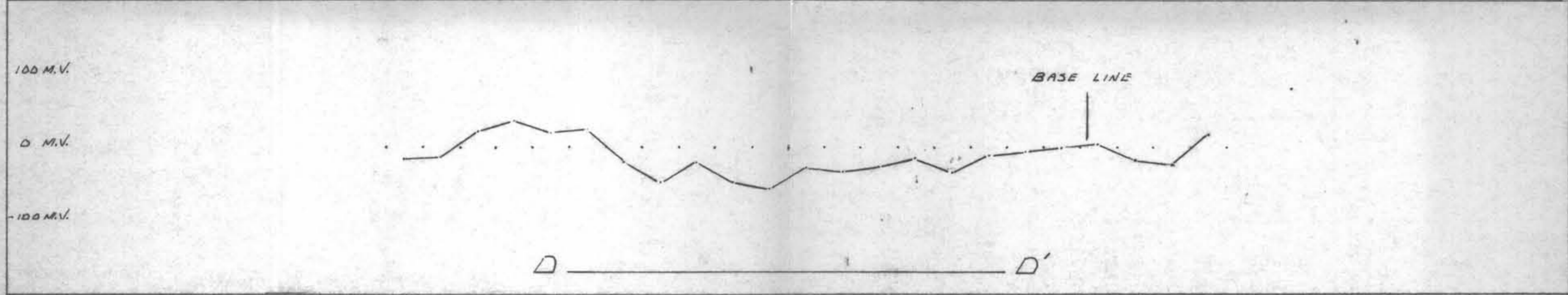
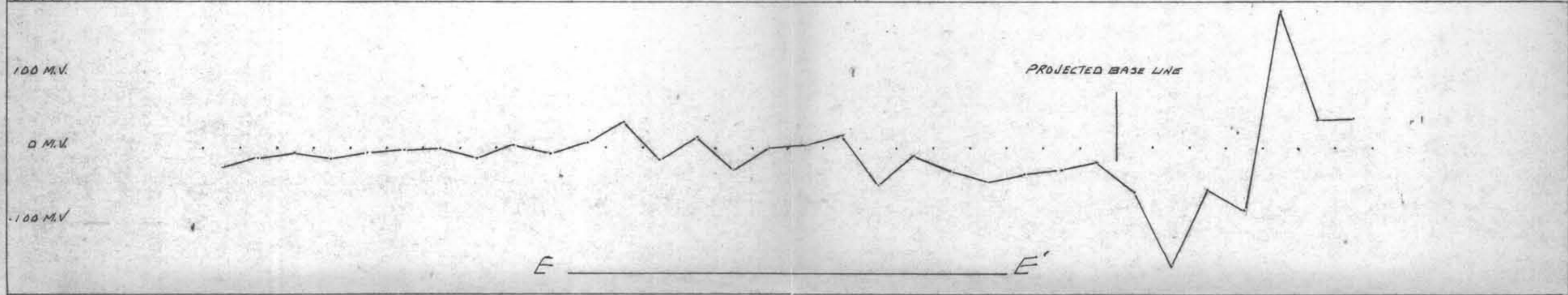
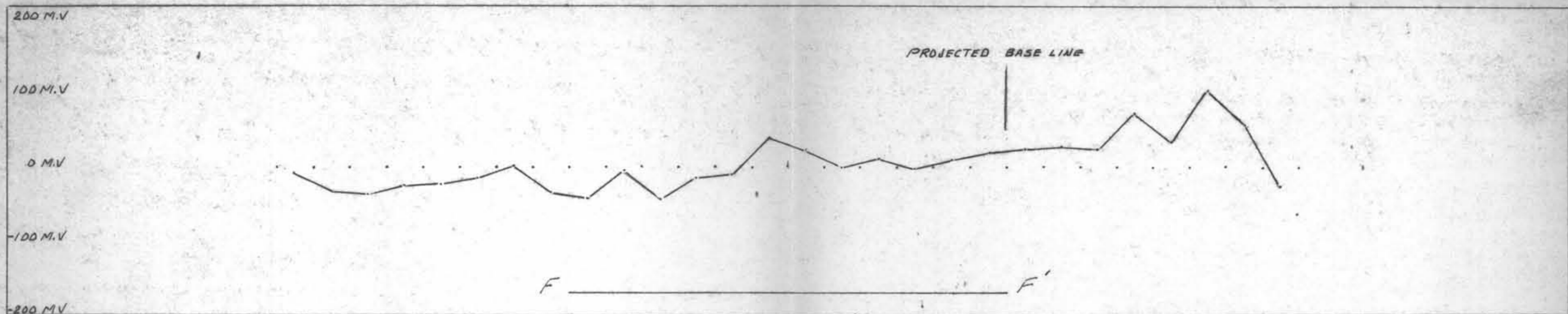
- EDGE OF TALUS SLOPE
- ... SELF-POTENTIAL SURVEY STA.
- ⊞ SAMPLED AREA
- MINERALIZED VEIN

**ASSAY RESULTS**

NUMBER	WIDTH	OZ. Au	OZ. Ag	% Pb	% Zn
# 3026	30 inches	0.081	0.68	0.06	0.70
# 3027	30 "	0.028	16.14	2.36	12.71
# 3028	20 "	0.071	48.67	13.69	4.59
# 3029	30 "	0.340	31.76	5.28	5.76
# 3030	30 "	0.022	15.40	0.80	3.13
# 3031	33 "	0.023	20.26	4.99	6.25
# 3032	14 "	0.031	1.57	0.96	0.39
# 3033	23 "	0.020	0.44	0.31	2.91

D. GROOT LOGGING LTD.  
 THOEN MINT. AREA  
 TRUE FISSURE SHOWING  
 SURFACE PLAN SHOWING  
 VEIN, ASSAYS - SAMPLES &  
 SELF-POTENTIAL GRID  
 Scale 200' Date: Oct. 1980 FIG. 2  
 Drawn by: [Signature]





MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8338**

D. GROOT LOGGING LTD.  
SELF POTENTIAL SURVEY  
PROFILES  
SCALE 0 100' Oct. 1980 Q.P. FIG. 3