

83-#607-11514

GEOLOGICAL, GEOCHEMICAL AND GEOPHYSICAL REPORT

on the

GOLDEN ZONE PROPERTY

located in the

OSOYOOS MINING DIVISION

N.T.S. 82E/5W

49°27'N LATITUDE 119°29'W LONGITUDE

owned by:

AGUR LOGGING COMPANY,
BOX 930, SUMMERLAND, B.C.
VOH 120

Operated by :

MIDLAND ENERGY CORPORATION,
#463-1155 WEST GEORGIA STREET,
VANCOUVER, B.C. VOE 3H4

report written by:

PETER PETO, Ph.D., F.G.S.C.
#207-669 Martin St.,
PENTICTON, B.C. V2A 5L5

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16 JULY 1983

11,514

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SUMMARY

A property evaluation program consisting of 10km of grid preparation, geological mapping, soil sampling and VLF-EM-16 geophysical surveying was undertaken on the Golden Zone property, 22 to 27 June, 1983. The property is underlain by hornfelsed, sediments that have been mineralized by precious metal bearing quartz veins, replacements and fault gouge along a persistent east trending fracture system. The fracture system has been explored along a strike length of some 100 metres to a depth of about 30 metres resulting in the average indicated grades of 0.008 oz. Au and 3.22 oz. Ag in quartz veins, 0.235 oz. Au and 2.19 oz. Ag, in replacements, 0.266 oz. Au and 0.41 oz. Ag in fault gouge. Tailings from underground workings yielded 0.035 oz. Au and 0.95 oz. Ag and percussion drill hole intersections yielded 0.03 oz. Au and 1.33 oz. Ag on average. Soils adjacent to the mineralized area carry anomalous concentrations of Ag, Zn and As and on this basis the mineralized zone may extend at least 120 metres to the north and east of the workings. A VLF-EM-16 survey indicates that the mineralized zone is characterized by high negative amplitude responses which extend 300 metres to the east and that a strong NE trending conductor, coincident with anomalous soils, can be traced 300 metres away from the main workings. A surface program consisting of grid extension, soil sampling, ground magnetometer and induced polarization surveying is recommended over the "B.C." crown grant to better trace the mineralized structure for a subsequent diamond drilling program. The structure is presently untested to the east and at depth and in the writers estimation merits further investigation.

INTRODUCTION

At the request of Mr. Arnold Kucherhan, president of Midland Energy Corporation, a property evaluation program was undertaken on the Golden Zone crown grants from the 22nd to the 27th of July, 1983. The program consisted of claim staking (9 units), establishing 10 line km. of chained, blazed and flagged grid with 30 metre station intervals and 60 metre line spacings, the collection of 62 soil samples and 25 rock chip samples for chemical analysis, a VLF-EM16 survey totaling 9 line km., combined with geological mapping and prospecting, in conjunction with additional information obtained from other sources, are presented in this report.

PROPERTY LOCATION, ACCESS, TITLE AND HISTORY

The property is situated at the headwaters of Hedley Creek, between the Nickel Plate and Broken Creek tributaries, on gently rolling plateau at elevations between 5700 and 6100 feet above sea level. (Figure 1) The claims are accessed by road from Penticton, a distance of some 45 km. The first 37 km. is by all weather gravel road to Apex Village, however the final 9 km. is suitable only for 4-wheel drive vehicles. The property consists of three crown grants, namely the Silver Bell, Golden Zone and B.C., comprising some 120 acres designated by lot numbers 905, 904 and 903 respectively. (Figure 2).

The property was originally claimed in 1900, underground exploration was carried out between 1905 to 1909, subsequently

abandoned, reactivated between 1930 to 1932 and again from 1936 to 1937 resulting in the construction of some 1292 feet of underground workings. The property remained idle for 43 years until Agur Logging initiated a program of road upgrading, bulldozer trenching and 1364 feet (415 metres) of percussion drilling (Holt 1980). The property was subsequently optioned to MIDLAND ENERGY CORP. in 1982 which commissioned a property examination (Cruz, 1982) and the present investigation.

REGIONAL GEOLOGY

According to regional geological mapping by Bostock (1940), the property occupies a contact zone between a roof pendant of Triassic volcanics and sediments belonging to Hedley Formation (Nicola Group?) and granodioritic to granitic intrusions of the Okanagan batholith of Middle Jurassic age. (Figure 3) The geological environment is therefore conducive to both fissure vein and contact metamorphic deposits. The area is blanketed by a variable covering of glacial till deposited by Pleistocene glaciers which advanced in a south-easterly direction.

PROPERTY GEOLOGY

The property was mapped initially by Camsell (1908) on a scale of 1:7200 wherein he reported that a persistent, east trending quartz vein, 2 to 4 feet wide, carrying pyrite, arsenopyrite, sphalerite and chalcopyrite can be traced for 1200 feet (365 metres) through granite into siliceous, hornfelsed sediments consisting of limestone, quartzites and tuffs. A

belt of fine grained, foliated biotite granite separates coarse grained granite from the metasediments and both are intruded by a leucocratic quartz-porphry situated to the south of the claims. Values are in gold and silver with gold showing higher grades in the sediments. Assays reported in the Minister of Mines annual reports (1931) vary from 1.18 to 0.04 oz. gold and from 1.0 to 3.7 oz. silver per ton. According to Hedley (1937) the character of the mineralization changes underground inasmuch as arsenopyrite gives way to pyrite, quartz occurs as small fissure fillings and replacement bodies up to widths of 12 feet, nearby ground is shattered and blocky due to fault zones which host broad zones of gouge, mineralization occurs as pyrite stringers, smears, scattered aggregates and pockets of massive sulphide with small amounts of arsenopyrite, sphalerite and jamesonite. In general the sediments dip 30° to 60° westerly and are cut by apophysis of granite and post-mineral, north-trending and east dipping dolerite dykes. Mineralized widths, attitudes and values are irregular but the better gold values (0.7 - 1.8 oz. per ton) appear to occur in narrow (1 to 10 inches) east-west strands. The character of the mineralization also changes laterally inasmuch as quartz-arsenopyrite-pyrite replacements in the sediments gives way to a narrow drusy, ribbon-banded to cox-comb milky quartz vein carrying sphalerite and pyrite in the granite. Gold values drop off to 0.02 oz. per ton but silver

values increase to as much as 10 oz. per ton!

During the course of this investigation, the property was mapped on a scale of 1:2000 and the resulting map is shown on figure 4. Mapping was hindered by the paucity of outcrops, particularly on the north grid, however the geological configuration reported by Camsell (1908) was confirmed. The old diggings, Agur's trenching and roadwork and rockchip sample locations are plotted. The assay and rock geochem results are listed in appendix #1.

The geological configuration lends itself to the following interpretation. The sediments and volcanic rocks have been hornfelsed by successive intrusion of a fine grained, foliated, biotite granite, a marginal chill zone, which was subsequently intruded by the main mass of the coarse grained "McNulty" granite batholith and still later a small satellitic body of "Empress" leucogranite porphyry. The occurrence of McNulty granite to the south and west in relation to the NW trending wedge of fine grained, biotite granite chill zone suggests that the Golden Zone property covers an epizonal "roof" zone above the batholith. The zone is probably down-faulted to the north and tilted upward to the south along a prominent system of east trending fracture and fissure zones which have acted as channelways for mineralizing hydrothermal solutions emanating from the McNulty or Empress granites. It is also probable that other such east-trending mineralized fracture systems may occur adjacent to and

most likely to the north of the main Golden Zone fracture system. The mineral and metal distribution patterns observed are indicative of a hypogene metal zonation proceeding from Ag, Zn, As, Fe and Au, or mineralogically from sphalerite to arsenopyrite to pyrite, with depth. However, metal distribution patterns might also be complicated by mineral paragenesis as indicated by the variety of ore textures: fracture, breccia, drusy, disseminated, massive, stringer, quartz vein, replacement, gouge, etc. In any case, there is little doubt that mineralization was episodic and essentially mesothermal in character.

A sketch map of the main workings on the Golden Zones (Figure 5) indicates that it is at least 140 metres long and 25 metres wide. To the north it is defined by a 2 to 4 foot wide quartz vein (R17 to 24) which appears to terminate at about 75W-10N and is replaced by a 12 foot wide zone of shattered quartz and arsenopyrite (R24-25) over an exposed distance of 30 metres to about 40W - 10N. To the south, the zone is defined by an east trending fault zone which hosts mineralized gouge (R34, 40 & 41), and quartz replacements (R26, 27). Samples from the ore dump (R36-38) were collected to provide an estimate of the average grade underground. These and other assays compiled from various sources (listed in table #1) were used to estimate some average grades, namely: quartz vein - 0.008 oz. Au and 3.22 oz. Ag over 1.3m. replacement pods - 0.235 oz. Au and 2.19 oz. Ag over 1.5m. Fault gouge - 0.266 oz. Au and 0.41 oz. Ag over 0.3m. Tailings from dumps - 0.035 oz Au & 0.95 oz. Ag.

Percussion Drilling intersections - 0.03 oz. Au & 1.33 oz. Ag over 6.7m.

Silver is highest in quartz veins cutting granite whereas gold is highest in quartz replacements and fault gouge in the sediments. Furthermore the average grade from percussion drill hole intersections are similar to those from underground tailings fines collected from the surface of the dumps. However, caution is required inasmuch as drill hole recoveries in mineralized zones were low (66%) and the surface samples from the dump probably reflect the grades from the last stage of underground exploration. There is also a considerable discrepancy between grades from surface samples and underground samples with a bias to higher values taken at the surface. Inspection of table #1 reveals that underground samples taken by Hedley (1937) are systematically lower than samples collected at surface by others. The average indicated grades collected from that portion of the Golden Zone presently explored (ON-15E to 90W), valued at today's metal prices (\$400 U.S./oz. gold and \$12U.S./oz. silver) yields a net value of about \$30/ton of ore.

SOIL GEOCHEMICAL SURVEY

A total of 62 soil samples were collected in an attempt to trace the extent of the mineralization in areas obscured by transported glacial till. (Figure 6) Soils adjacent to quartz veins were anomalous in Ag, As and Zn and appear to have traced the vein from 330W-20S to 420W-15S. Strong metal concentrations

were also found from 0 to 120W and 90S to 120N. The samples collected near the workings were probably mechanically contaminated by trenching and stripping operations. Pronounced metal dispersion occurs to the north of this area, up to the limit of sampling, and may reflect underlying mineralization or down-slope hydromorphic (secondary) metal dispersion from the workings. However, since anomalous concentrations of Ag and As also occur to the south and east, it is more likely due to underlying mineralized rock. In any case, it is clear that either the main mineralized zone extends to the ENE or there is another zone trending northeasterly in the vicinity of 90W-30N, 60W-60N and 60E-90N. Further sampling is in order.

VLF-EM16 SURVEY

A geophysical survey was undertaken, on the recommendation of Cruz (1982) to trace the mineralized structures in areas of overburden. A Geonics EM-16 was used and measurements were taken every 30 metres over grid lines by monitoring the signals from Cutler, Maine and Seattle, Washington. The signals from Cutler were judged to be weak and less sensitive than those from Seattle and hence the responses for Seattle (18.6 khz) are plotted on figure 7. In general, the frequency and amplitude of responses detected over the sediments were greater than those over the granites. Moreover, very strong amplitudes were noted along the south grid at stations 300E-90S, 180E-30S, 120E-60S and 60E-90S and corresponding aberrations at 60W-60N and 120W-30N. A relatively strong cross-over (conductor) was noted

on the NE grid at stations 300E-60N, 240E-120N, 180E-60N, 120E-40N and 60E-60N(?). The mineralized zone appears to give a high, negative amplitude response but no clear conductor axis appears to be indicated. Nevertheless the present data suggests that the zone dies out at 180E but continues eastward to the limit of the survey at 300E. Furthermore a conductor axis, broadly coincident with anomalous metal concentrations trending to the NE, is indicated.

CONCLUSIONS

On the basis of the foregoing considerations I have come to the following conclusions.

- (1) The "Golden Zone" occupies the edge of a roof pendant which is mineralized by epizonal fissure veins and replacement pods bearing minerals of a mesozonal character.
- (2) Precious metal values are erratic but clearly show that gold is concentrated in replacements and fault zones in country rock whereas silver is concentrated in quartz veins cutting granite.
- (3) The best gold values occur in narrow, east trending fault zones.
- (4) On average the underground tailings yield precious metal values similar to those obtained by percussion drilling but underground values tend to be lower than those obtained at surface.
- (5) Assays obtained from percussion drill hole sampling of the mineralized horizon are suspect due to low recoveries (average

66%; range: 15 to 90%).

(6) The indicated grades, from the zone presently explored, about 105 metres of strike length to a depth of 30 metres, is subeconomic at this time.

(7) Anomalous concentrations of Ag, As and Zn in soils collected adjacent to the mineralized area indicate that the mineralized area can be extended to the north and east by at least 120 metres.

(8) The EM-16 survey has indicated that the mineralized zone is characterized by high negative amplitudes which extend to the east and that a strong NE trending conductor, broadly coincident with anomalous metal concentrations in soils, can be traced at least 300 metres beyond the area of known mineralization.

(9) That the mineralized structure(s) most probably continues to the east and that it remains untested both along strike and at depth in this direction.

RECOMMENDATIONS

In my estimation the Golden Zone is a strongly mineralized, persistent structure that has been insufficiently tested to date and therefore merits further investigation as to its economic potential. The findings of this investigation gives reason to believe that the mineralized structure continues to the east for a distance of at least 300 metres and thereby triples the indicated strike length. It is plausible that higher grade mineralization may occur both along strike and at depth along this structure. With this in mind, I recommend that the following course of action be taken:

(1) That the existing grid be extended to cover the area of the

"B.C." crown grant.

(2) That the soil sampling be extended to better delineate the mineralized area.

(3) That a ground magnetometer survey be taken over the extended grid to delineate possible alteration zones (magnetic lows) and the granite-country rock contact (by magnetic contrast).

(4) That an induced polarization survey be undertaken over the Golden Zone and B.C. crown grants to better delineate zones of sulphide concentration along the structure.

(5) That pending favourable results from the above surface program, the best geophysical targets be drilled and tested. Since core recovery from mineralized zones are known to have been poor, due to badly broken ground and zones of clay gouge carrying good gold values, care should be taken to collect drill cuttings. It might also be necessary to use mud.

Respectfully submitted,

Peter Peto

Peter Peto, Ph.D., F.G.S.C.
(Consulting Geologist)



REFERENCES CITED

- B.C. Dept. Mines Annual Report (1930) Golden Zone, p.216-219
B.C. Dept. Mines Annual Report (1931) Golden Zone, p.133
Bostock, H.S. (1940) G.S.C. Map 628A, Olalla
Camsell, C. (1908) Hedley Mining District, G.S.C. Memoir #2, Map 4A, p.204-206
Cruz, E.D. (1982) Report on Golden Zone Group, VSE prospectus report, 15p.
Hedley, M.S. (1937) Golden Zone Mines Ltd., B.C. Dept Mines Annual Report, p.D14-17
Holt, E.S. (1980) Report of Examination and percussion drilling results Golden Zone Mineral Claims, private report, D. Agur.

ITEMIZED COST STATEMENT

Field Salaries

Peter Peto: 6 days @\$200/day.....	\$1200.00	
Lance Parrish: 60 hours @ \$10/hour.....	600.00	\$1800.00
Accommodation.....	no charge	
Food.....	17.74	17.74
Analytical Services.....	596.50	
Freight.....	18.70	615.20
Courier Service.....	9.50	
Telephone.....	5.56	15.06
Truck Rental (6 days and milage).....	457.46	
Gasoline.....	91.10	548.56
VLF-EM16 Rental (Direct Billing).....		
Chain Saw Rental.....	15.00	
Supplies: (plastic bags, flagging, copies).....	34.94	
62. soil sample bage @10¢/bage.....	6.90	41.80
<u>Report Preparation</u>		
Drafting, report writing, typing, etc. 4½ days.....	900.00	
Reproduction charges.....		
Stationary.....		
	<u>960.46</u>	<u>960.46</u>
	TOTAL	\$ 3998.82

CERTIFICATE OF QUALIFICATION

I, Peter S. Peto, of #207-669 Martin Street, town of Penticton, Province of British Columbia, DO HEREBY CERTIFY:

That I am a consulting geologist with the above business address.

That I am a graduate of the University of Alberta where I obtained my B.Sc. and MSc. degrees in geology in 1968 and 1970 respectively. I am also a graduate of the University of Manchester where I obtained my doctoral degree in geology in 1975.

That I am a fellow of the Geological Association of Canada

That I have practiced my profession actively since 1975.

That I have no interest in the Golden Zone property, nor in the securities of Midland Energy Corp., nor do I expect to receive any.

That information contained in this report is the result of my field investigation and literature made available to me.

That I hereby consent to the publication of my report on the Golden Zone property, dated 16 July 1983, in a prospectus or statement of material facts.

Dated this 16 day of July, 1983, at Penticton, B.C.

Peter Peto

Peter Peto, Ph.D., F.G.S.C.



TABLE 1. ASSAY COMPILATION

<u>SAMPLE NO.</u>	<u>TYPE</u>	<u>WIDTH(M)</u>	<u>Au oz/T</u>	<u>Ag oz/T</u>	<u>SOURCE</u>
R-51017	Qz Vein	2.0	ND	0.5	This report
R-51018	"	Grab	ND	1.5	"
R-51019	"	2.0	0.003	2.31	"
R-51020	"	1.3	0.002	1.87	"
R-51021	"	1.5	0.003	2.94	"
R-51022	"	1.4	0.010	4.69	"
R-51023	"	1.0	0.004	3.01	"
R-51028	"	1.6	0.010	0.95	"
R-51039	"	1.0			"
R-2417	"	1.0	0.001	3.22	Holt (1980)
R-2418	"	0.7	0.001	3.72	"
829	"	Grab	0.022	6.56	Cruz (1982)
830	"	1.1m	0.028	1.24	"
831	"	1.1m	0.002	2.22	"
A	"	Grab	0.02	8.0	Hedley (1937)
B	"	Grab	trace	1.2	"
#1	"	1.3m	0.02	10.8	BCDM (1930)
AVERAGE		1.3m	0.008	3.22	
R-51024	Qz Pod	Grab	0.085	0.66	This report
R-51025	"	4.0	0.169	1.56	"
R-51026	"	3.0	0.015	3.22	"
R-51027	"	1.0	0.031	1.75	"
2414	"	3.1	0.148	1.60	Holt (1980)
2415	"	Grab	0.422	5.07	"
2416	"	1.0	0.071	0.44	"
832	"	Grab	0.568	1.24	Cruz (1982)
833	"	0.3	0.208	1.41	"
834	"	Grab	0.272	0.92	"
#1	"	1.9	Trace	0.5	Hedley (1937)
#2	"	Grab	0.10	10.5	"
#3	"	1.0	0.01	0.6	"
#4	Pyrite	0.1	0.10	6.0	"
#5	Qz Pod	2.4	0.06	0.60	"
#6	Pyrite	0.1	0.74	1.2	"
#7	Qz Pod	1.1	Trace	0.4	"
#8	"	0.25	1.30	0.6	"
#2	"	Grab	0.12	0.8	BCDM (1930)
#1	"	0.9	0.46	3.7	BCDM (1931)
#2	"	3.0	0.26	3.0	"
#3	"	1.5	0.06	1.0	"
#4	"	Grab	0.04	4.8	"
#5	"	Grab	0.04	1.0	"
#6	Pyrite	Grab	0.64	2.3	"
AVERAGE		1.5	0.235	2.19	

SAMPLE NO.	TYPE	WIDTH(M)	Au oz/T	Ag oz/T	SOURCE	
R51036	Tailings	10.0(fin.es)	0.034	1.13	Hedley(1937)	
51037	"	" "	0.065	1.06	"	
51038	"	" "	0.031	1.42	"	
2411	"	6.0 "	0.041	0.68	Holt (1980)	
2412	"	" "	0.032	0.50	"	
11828	"	7.5 "	0.017	0.95	"	
11829	"	6.0 "	0.024	0.88	"	
{834}	"	grab	0.272	0.92	Cruz (1982)	
{#3}	"	"	0.76	4.30	BCDM (1930)	
{#7}	Concentrate	grab	1.18	3.7	BCDM (1931)	
{#8}	Tailings	grab	0.13	1.4	"	
AVERAGE			0.035	0.95		
PDH #3	25-85% recovery	6.10	0.018	0.32	Holt (1980)	
PDH #4	20-85%	9.23	0.033	0.82	"	
PDH #5	25-90%	7.62	0.043	2.23	"	
PDH #9	15-90%	7.62	0.005	1.69	"	
PDH #13	85%	3.04	0.053	1.60	"	
AVERAGE			66%	6.72	0.030	1.33

FIGURE #1: LOCATION MAP

1:50,000 Topographic
NTS 82E15W

GOLDEN ZONE CROWN GRANTS

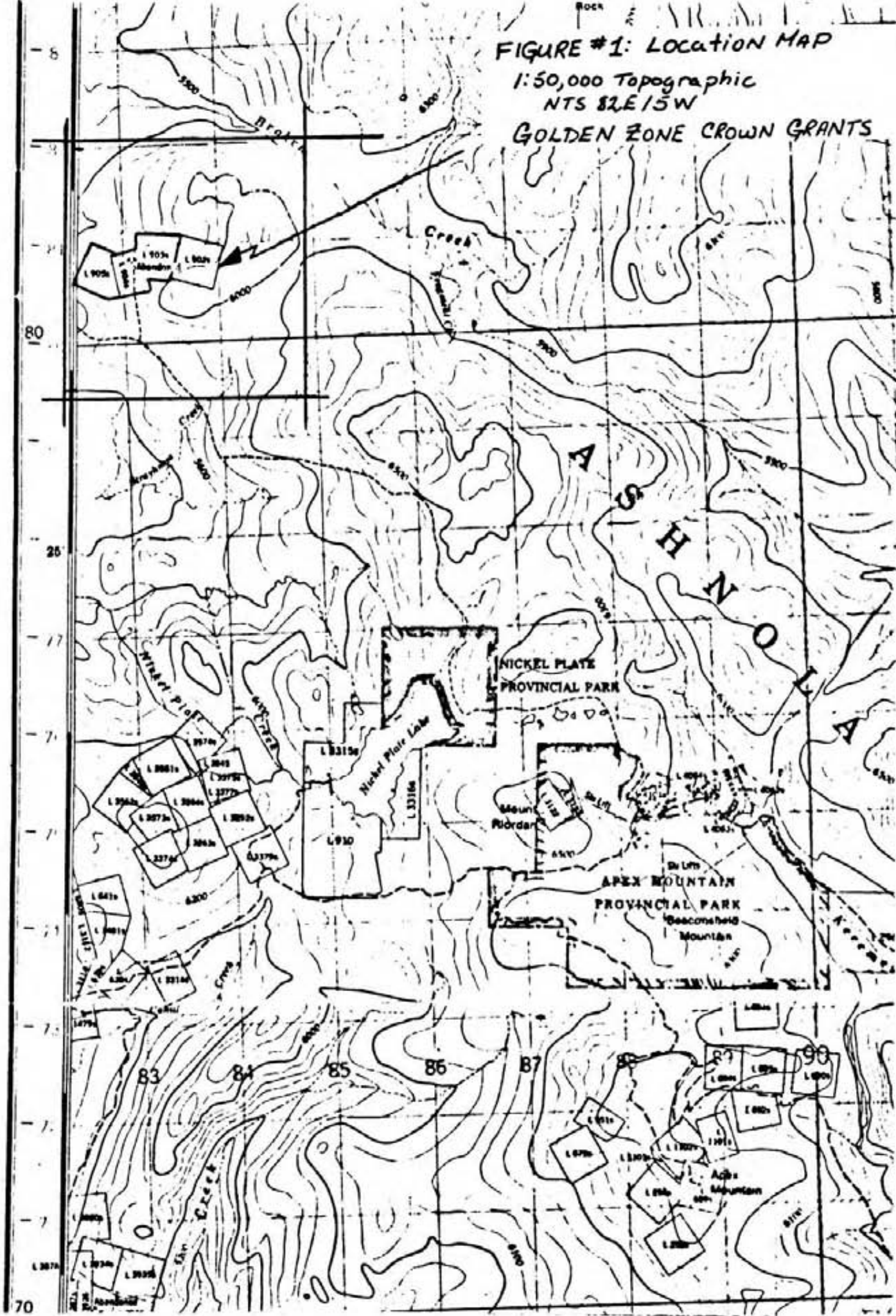




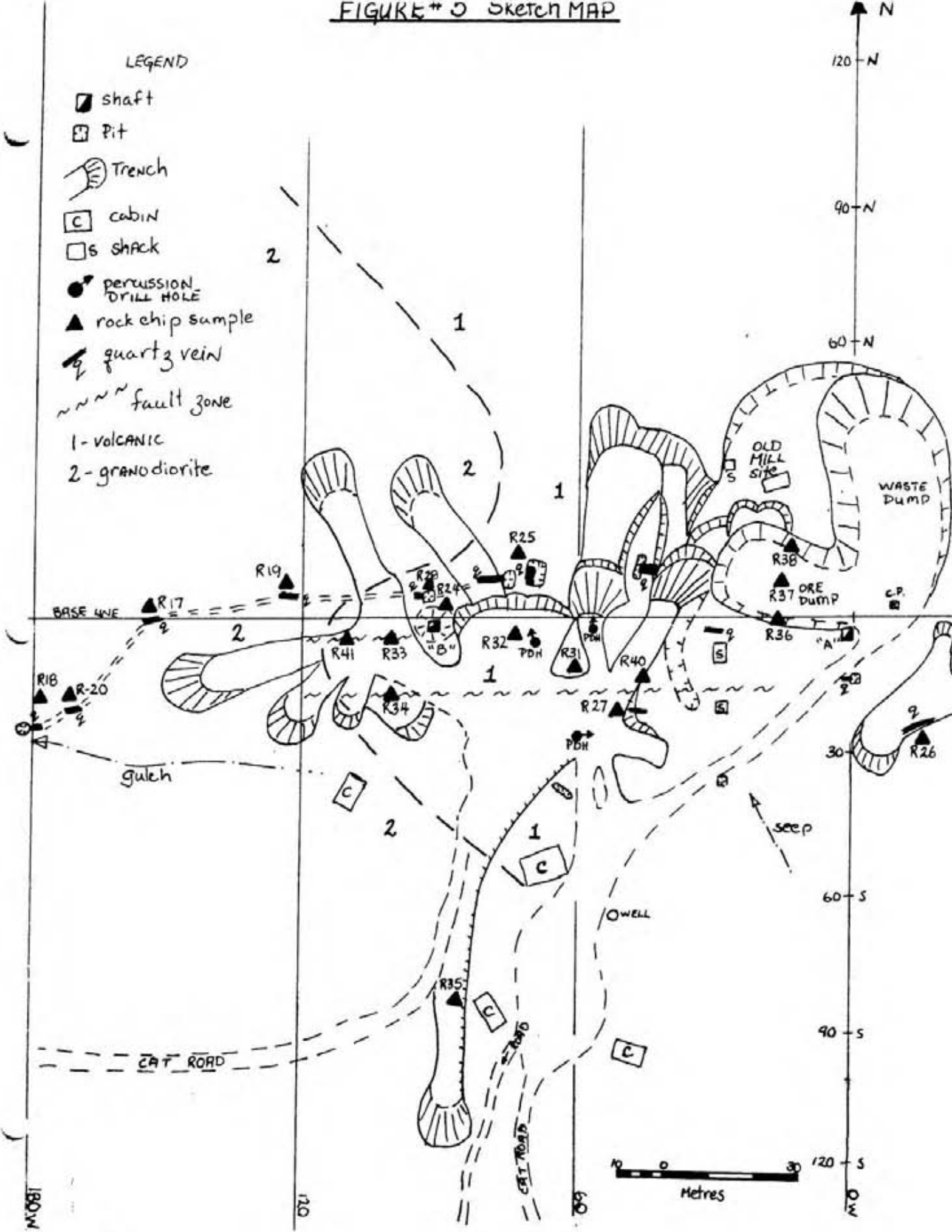
FIGURE #3. Regional Geology MAP.
 1:63360 (1" to 1 mile) GSC Map 628A
 5b - Nicola Gp 10 - McNulty granite
 9 - OKANAGAN granodiorite 11 - Qz porphyry

Map of Map 568A, Hedley

FIGURE # 3 SKETCH MAP

LEGEND

- ▣ shaft
- ▣ Pit
- ☞ Trench
- ▣ cabin
- ▣ shack
- percussion DRILL HOLE
- ▲ rock chip sample
- ⚡ quartz vein
- ~ ~ ~ fault zone
- 1- volcanic
- 2- granodiorite



ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
 THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
 THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
 SAMPLE TYPE - P1-2 SOIL P3-ROCK

ASSAYER Dean Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

MR PETER PETO PROJECT # GOLDEN ZONE FILE # B3-0984 PAGE# 1

SAMPLE	CU ppm	ZN ppm	AG ppm	AS ppm	AU ppm
30N 420W	11	99	.2	16	ND
15N 420W	10	135	.1	15	ND
0S 420W	14	123	.3	19	ND
15S 420W	17	141	.4	20	ND
30S 420W	11	150	.2	13	ND
0S 360W	10	142	.4	8	ND
15S 360W	23	341	1.2	21	ND
30S 360W	17	209	.9	20	ND
10S 330W	16	112	.5	10	ND
120N 180W	27	73	.2	8	ND
90N 180W	25	93	.3	7	ND
60N 180W	26	76	.2	10	ND
0S 180W	15	162	1.3	23	ND
30S 180W	29	113	.3	16	ND
0S 150W	22	159	2.1	22	ND
120N 120W	10	41	.1	4	ND
90N 120W	16	72	.4	13	ND
60N 120W	19	93	.3	19	ND
30N 120W	19	157	.4	18	ND
0S 120W	17	162	1.9	37	ND
30S 120W	31	266	1.1	396	ND
60S 120W	11	127	1.0	344	ND
60N 90W	15	120	.3	71	ND
30N 90W	155	678	4.0	3913	ND
30S 90W	35	276	1.0	413	ND
120N 60W	23	134	.7	337	ND
90N 60W	25	118	.6	376	ND
60N 60W	18	287	.8	488	ND
30N 60W	41	239	3.1	1242	ND
0S 60W	44	247	.9	699	ND
30N 60W	23	164	.7	166	ND
60N 60W	23	126	.4	126	ND
90N 60W	14	113	.2	29	ND
120S 60W	20	60	.2	63	ND
STD A-1	30	186	.3	10	ND

SAMPLE	CU ppm	ZN ppm	AG ppm	AS ppm	AU ppm
30N 30W	55	253	6.9	3936	ND
05 30W	68	318	1.7	1827	ND
30N 30W	27	99	.5	227	ND
60S 30W	39	55	1.9	53	ND
120N 0	14	109	.5	27	ND
90N 0	17	98	.4	47	ND
60N 0	14	68	.4	65	ND
30N 0	233	732	18.4	2841	ND
30S 0	17	142	1.2	362	ND
60S 0	19	115	.4	160	ND
90S 0	23	107	1.1	82	ND
120S 0	18	92	.3	56	ND
60N 60E	14	72	.4	35	ND
45N 60E	26	119	.4	31	ND
30N 60E	49	139	.8	49	ND
05 60E	18	89	.3	67	ND
15S 60E	16	80	.4	34	ND
30S 60E	22	176	.7	30	ND
45S 60E	20	104	.3	37	ND
60S 60E	24	89	.4	53	ND
120N 120E	13	66	.4	48	ND
90N 120E	13	195	.8	63	ND
60N 120E	13	87	.3	27	ND
30N 120E	13	69	.3	28	ND
05 120E	13	67	.3	23	ND
10S 120E	13	64	.3	23	ND
20S 120E	13	69	.3	17	ND
30S 120E	13	62	.1	12	ND
STD A-1	29	184	.3	9	ND

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ASSAY CERTIFICATE

SAMPLE TYPE : PULP
AG** AND AU** BY FIRE ASSAYS

Assay check of 19

ASSAYER *Deje* DEAN TOYE, CERTIFIED B.C. ASSAYER

MR PETER PETO PROJECT # GOLDEN ZONE FILE # 83-0984B PAGE# 1

SAMPLE	AG** OZ/TON	AU** OZ/TON
R51019	2.31	.003
R51020	1.87	.002
R51021	2.94	.003
R51022	4.69	.010
R51023	3.01	.004
R51024	.66	.085
R51025	1.56	.169
R51026	3.22	.015
R51029	1.75	.031
R51030	.95	.010
R51034	.39	.262
R51036	1.42	.031
R51037	1.06	.065
R51038	1.13	.034

SAMPLE	CU ppm	ZN ppm	AG ppm	AS ppm	AU ppm
R51017	4	11	15.7	13	ND
R51018	4	86	47.4	6	ND
R51019*	19	1666	81.7	130	ND
R51020*	6	55	69.0	16	ND
R51021*	7	348	103.4	56	ND
R51022*	31	3799	133.9	32	ND
R51023*	21	802	99.9	45	ND
R51024*	10	17	22.7	45167	2
R51025*	24	11	52.0	45630	5
R51026*	17	69	104.9	1258	ND
R51027	23	116	1.8	580	ND
R51028	10	38	6.1	233	ND
R51029*	5	3	58.3	4451	ND
R51030*	74	2488	31.4	4068	ND
R51031*	43	305	6.7	4334	ND
R51032	56	310	9.9	4481	ND
R51033	34	818	1.4	646	ND
R51034*	21	10	13.2	35551	7
R51035*	18	25	.7	387	ND
R51036*	30	106	46.7	5276	ND
R51037*	36	304	34.1	12347	2
R51038*	74	840	36.3	9324	ND
R51039	7	160	10.9	103	ND
STD A-1	29	182	.3	10	ND

* Au Au Assay Suggested.



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CERTIFICATE OF ASSAY

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

TO Midland Energy Corp.
8121 Wiltshire Blvd.
North Delta, B.C. V4C 4B5

Certificate No. K-2932

Date July 18, 1980

REVISED

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No	Marked	GOLD	SILVER	Pb	Zn	Cu				
		Ounces Per Ton	Ounces Per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1	G20 0-0 EAST TRENCH	.05	8.16	-	-	-	EAST of "A"	SHAFT		
2	G2 1-W MAIN DUMP	.10	2.69	.13	1.83	.03	WEST of "A"	SHAFT		
3	G2 10-W WEST TRENCH	.468	4.28	.06	.01	-	NORTH EAST of "B"	SHAFT		

NOTE:
Rejects retained three weeks.
Pulps retained three months

D. J. ...



KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

2095 WEST TRANS CANADA HIGHWAY — KAMLOOPS B.C.

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PHONE: (604) 372-2784 — TELEX: 048-8320

CERTIFICATE OF ASSAY

B.C. LICENSED ASSAYERS
GEOCHEMICAL ANALYSTS
METALLURGISTS

TO Midland Energy Corp.

8121 Wiltshire Blvd.

North Delta. B.C. V4C 4B5

Certificate No. K-2962

Date July 31, 1980

I hereby certify that the following are the results of assays made by us upon the herein described _____ samples

Kral No.	Marked	GOLD	SILVER							
		Ounces Per Ton	Ounces Per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1	G-2 # 1	.40	2.89	50' OF MAIN DUMP MINERALIZED SAMPLE 12' CHIP SAMPLE W. TRENCH						
2	G-2 # 3	.44	2.63							

NOTE:
Rejects retained three weeks.
Pulps retained three months
unless otherwise arranged.

David J. B.G.S.

Registered Assayer, Province of British Columbia



TO
 Midland Energy Corp.
 c/o John Kucherhan
 197 Granby Ave,
 Penticton, B.C.
 V2A 2Z1
 Re: Golden Zone Crown Grants Claims.

General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W7.
 PHONE (604) 254-1647 TELEX 04-507514 CABLE SUPERVISI

CERTIFICATE OF ASSAY

No.: 8110-1551 DATE: Oct. 27/81

We hereby certify that the following are the results of assays on: Ore

MARKED	GOLD	SILVER	Copper	Lead	Zinc	Silica	Arsenic	XXX
	oz/pt	oz/st	Cu (%)	Pb (%)	Zn (%)	SiO ₂ (%)	As (%)	
829 T	0.022	6.56	0.03	0.33	4.80			
830 T	0.028	1.94	0.01	0.01	0.07			
831 T	0.002	2.22	0.01	0.09	1.84			
832 T	0.568	1.24	0.01	0.10	0.01			
833 T	0.208	1.41	0.01	0.07	0.01			
834 T	0.272	0.92	0.01	0.04	0.11			

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR.

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L. Wong
 L. Wong

PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER: American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
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This is a copy of the original report. The original report is held by the client. This copy is provided for your information only.

GEOCHEMICAL, GEOPHYSICAL AND DIAMOND DRILLING REPORT

on the

GOLDEN ZONE PROPERTY

located in the

OSOYOOS MINING DIVISION

N.T.S. 82E/5W

49°27'N LATITUDE & 119°29'W LONGITUDE

owned by:

AGUR LOGGING COMPANY,
BOX 930, SUMMERLAND, B.C.
VOH 1Z0

operated by:

MIDLAND ENERGY COPORATION,
#463-1155 WEST GEORGIA STREET,
VANCOUVER, B.C. VOE 3H4

report written by:

PETER PETO, Ph.D., F.G.S.C.,
#207-669 MARTIN ST.,
PENTICTON, B.C. V2A 5L5

10 September 1983

SUMMARY

An exploration program consisting of grid preparation, soil sampling, detailed IP measurements, bulldozer trenching, rock chip sampling and diamond drilling on the "Golden Zone" precious metal property was carried out between 24 July and 31 August, 1983 by MIDLAND ENERGY CORPORATION. The property is underlain by hornfelsed felsites, limestone and granite which host an east trending, mineralized zone, up to 60 metres wide and at least 500 metres long. An area of anomalous Zn, Ag and As concentrations in soils, measuring 240 by 60 metres, was delineated. Induced polarization measurements indicate that the mineralized structure can be traced 180 metres east of the underground workings. Bulldozer trenching has exposed a mineralized fault, up to 1 metre wide, which yielded assays as high as 0.55 Au and 1.33 Ag (oz/T). Exploratory diamond drilling of 193 metres of BQ core in 6 holes resulted in the following intersections: DDH#2-0.133Au & 3.74 Ag over 26 feet, DDH#3-0.131 Au & 0.33 Ag over 5 feet, DDH#4-0.032 Au & 0.04 Ag over 4.5 feet, DDH#5-0.139 Au & 1.2 Ag over 9 feet (oz/T). Grades of 0.141 Au & 5.37 Ag over 5 feet and 0.028 Au & 10.32 Ag over 6 feet were attained in DDH#2. Further, grades of 0.312 Au & 4.10 over 1 foot and 0.237 Au & 2.46 Ag over 1.5 feet were recovered in DDH#5. In the writer's estimation, the results are sufficiently encouraging to recommend an additional 3000 feet of diamond drilling to further test the mineralized zone along strike and at greater depths.

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INTRODUCTION

A mineral exploration program consisting of grid preparation, systematic collection of 65 soil samples, 1.17 line km. of detailed induced polarization measurements, bulldozing of 7 trenches, collection of 10 rock chip channel samples and the drilling of 6 BQ diamond drill holes totalling 635 feet (193.5 metres), was carried out between 24 July and 31 August, 1983, on behalf of MIDLAND ENERGY CORPORATION. The above program was undertaken to follow-up an earlier surface evaluation program consisting of geological mapping, rock chip and soil sampling and VLF-EM16 surveying between 22 to 27 July, 1983.

PROPERTY LOCATION, ACCESS, TITLE AND HISTORY

The Golden Zone property is located west of Penticton and north of Hedley, in the Okanagan highlands, at elevations between 5700-6100 feet above sea level (Figure 1). The claims are accessed by road from Penticton, via the road to Apex Village, a distance of some 45 km. The property consists of three crown grants, namely the Silver Bell (L.905), Golden Zone (L.904) and B.C. (L903), comprising some 120 acres (Figure 2). The showings were originally claimed in 1900, underground exploration was carried out between 1905 to 1909, subsequently abandoned, reactivated between 1930-1932 and 1936-1937, resulting in the construction of some 1292 feet of underground workings. No further work was recorded on the property until Agur Logging initiated a program of road construction, bulldozer trenching and percussion drilling (415 metres) in 1980.

The property was subsequently optioned to MIDLAND ENERGY CORPORATION in 1982 which commissioned the present investigations.

PROPERTY GEOLOGY

According to Bostock (1940) the property is situated along the contact between a roof pendent of Triassic cover rocks belonging to the Hedley Formation and granodioritic to granitic intrusions belonging to the Middle Jurassic Okanagan batholith. The Golden Zone was initially mapped by Camsell (1908) and he showed a persistent, east trending quartz vein, 2 to 4 feet wide, carrying pyrite, arsenopyrite, sphalerite and chalcopyrite which extended 1200 feet through granite into siliceous, hornfelsed sediments. A zone of fine grained biotite granite separates coarse grained granite from hornfelsed tuffs and limestones and both are intruded by leucocratic quartz porphyry intrusion to the south of the claims. Mineral values are mainly in precious metals with gold and silver assays reported as high as 1.8 and 10.0oz./ton respectively.

According to Hedley (1937), the character of mineralization changes from arsenopyrite with depth, quartz occurs as fissure fillings and replacement bodies with widths of up to 12 feet. Nearby rock is shattered due to fault zones which host clay gouge and stringers, smears and pockets of pyrite. In general, the sediments dip 30 to 60 degrees westerly and are cut by post-mineral granite and dolerite dykes. Mineralized widths, attitudes and values are irregular but higher gold values (0.7-1.8 oz./ton) occur in narrow, 1 to 10 inch, east trending fault strands.

The character of the mineralization also changes laterally inasmuch as quartz replacements bearing pyrite-arsenopyrite in hornfelsed sediments give way to narrow, drusy, cox-comb milky quartz veins carrying sphalerite in granite.

The present investigation has largely corroborated the findings of previous investigators but in addition it has also delineated mineralized fault zones to the immediate south of the main system of mineralized quartz veins and replacements, which are further elaborated in this report.

GEOCHEMICAL SOIL SURVEY

A total of 65 soil samples were collected to augment the 62 samples previously reported and the combined results are shown in Figure 3 and in appendix 2. Soil samples were collected from the "B" horizon by means of a mattock, placed in kraft paper bags, dried, sieved to -80 mesh, and analyzed for Cu, Pb, Zn, Ag and As by induced coupled plasma spectrometry (ICP) at Acme Analytical Laboratories. The analytical procedure used consisted of taking a 0.5 gram sample split, digesting it in 3 ml. of 3:1:3 hydrochloric acid to nitric acid to water at 90°C for one hour and subsequent dilution to 10 mls with water before analysis.

Anomalous concentrations of Zn (100-732ppm), Ag (0.5-184ppm) and As (20-3936ppm) in soils originate in an area measuring 120x250 metres which is coincident with an area hosting precious metal mineralization. The 100ppm As contour defines an

L-shaped anomaly with extreme co-ordinates situated at 120W-60S, 120E-120S and 60W-330N. The conspicuous tongue or apron of high As concentration situated along lines 0 and 60 west is thought to be due to secondary, hydromorphic, downslope dispersion of surface mineralization leached from ore dumps and stripped areas. Supergene sulphide cementing unconsolidated soil fines, observed to occur immediately north of the ore dumps, would support this interpretation. However, another tongue also defined by the 100ppm As contour projecting uphill to 120E-120S is more indicative of mineralized bedrock. Areas underlain by limestone and granite to the NE and W of the workings respectively, are characterized by much lower metal concentrations, but areas to the NW, underlain by volcanic hornfels still carry relatively high metal concentrations.

INDUCED POLARIZATION SURVEY

An induced polarization survey, over the mineralized area, was undertaken by Peter Walcott and four assistants from 26 to 29 July, 1983 and the results are shown in Figure 4 and Appendix 3. A Hunttec 7.5 Mark 2 transmitter and Crone Mark 4 receiver was used to make time domain IP measurements every 15 metres, in a pole-dipole electrode configuration, for two separations per station. A total of 1.17 line kilometres were completed in which apparent chargeability and apparent resistivity were measured in milliseconds and ohm-metres respectively. Chargeability profiles and resistivity for $n=1$ are shown in Figure 4. A very well defined IP anomaly characterized by relatively high chargeability and

low resistivity was observed to coincide with the mineralized zone. The IP anomaly characterized by relatively high chargeability and low resistivity was observed to coincide with the mineralized zone. The IP anomaly is at least 180 metres long and 60 metres wide with maxima situated at 60W-15S, 0W-30S, 60E-15S and 120E-15S. The amplitude of the anomaly diminishes gradually eastward but is open and untested to the west of line 60W.

Another lesser, partially defined, IP anomaly also occurs to the south with maxima at about 60W-105S, 0W-150S and 120E-105S. An abrupt contrast in resistivity occurs at 60E-45S and 120E-45S and is thought to coincide with a pyritic volcanic hornfels to limestone contact zone. Another abrupt change at 120E-195S coincides with the hornfels to quartz porphyry intrusive contact. These resistivity contrasts are broadly coincident with previously reported VLF-EM16 anomalies and are now believed to be their underlying cause. It should be noted that IP maxima do not coincide with the surface trace of the mineralized quartz vein system but rather occur, about 15 to 30 metres to the south, along the trace of previously inferred, east trending, fault zone.

BULLDOZER TRENCHING & SAMPLING

Several bulldozer trenches were dug to better expose and sample the mineralized fault zone at surface and to uncover areas with anomalous metal concentrations in soils. The locations and rock chip samples collected from these trenches are shown in Figure 5 and listed as follows:

<u>SAMPLE NO.</u>	<u>TYPE</u>	<u>LOCATION</u>	<u>WIDTH(M)</u>	<u>Au(oz/ton)</u>	<u>Ag(oz/ton)</u>
51142	gouge	48W-10S	0.7	0.113	0.32
51143	gouge	46W-9S	1.1	0.551	1.33
51144	gouge	50W-25S	2.4	0.013	0.08
51145	gouge	100W-10S	2.1	0.067	0.11
51146	gouge	95W-10S	1.4	0.031	0.18
51147	gouge	95W-10S	2.0	0.036	0.08
51175	gouge	100W-10S	grabs	0.285	0.56
51180	hornfels	60W-150N	grabs	tr	0.02
51181	hornfels	60W-210N	grabs	tr	0.02
51182	hornfels	0W-240N	grabs	tr	0.02

Gouge samples previously reported yielded the following assays, #51034: 0.262 Au & 0.39 Ag, #51040: 0.391 Au & 0.86 Ag and 51041: 0.147 Au (ounces per ton). The mineralized fault zones consist of highly fractured, rusty rock which carry seams of clay + chlorite + epidote + pyrite gouge up to a metre in width with 5 to 10mm wide quartz veinlets and irregularly distributed pods of quartz, pyrite and arsenopyrite up to 0.5 metres wide, which carry the best gold values. The fault zone trends easterly, dips steeply, and is 30 to 60 metres in width and coincident with the IP anomaly previously discribed. It is thought that this broad fault zone hosts much narrower mineralized quarty vein fissure fillings, quartz-sulphide replacement bodies and propylitic-sulphide gouge zones in which precious metal values are concentrated. The tenor of these variously mineralized zones has been estimated in my previous report and is now further refined using the assays given above.

<u>MINERAL TYPE</u>	<u>TYPICAL WIDTHS(M)</u>	<u>GOLD(oz/t)</u>	<u>SILVER(oz/t)</u>
quartz fissure fillings	0.3-1.3	0.008	3.22
quartz-sulphide replacements	1.0-4.0	0.235	2.19
propylitic-sulphide gouge	0.1-1.0	0.291	0.69
aggregate	2.0	0.03	0.8
volcanic hornfels	—	0.001	0.01

DIAMOND DRILL PROGRAM

A program of exploratory diamond drilling, totalling 635 feet (193.5 metres) of BQ core in six inclined holes, were completed between 14 to 24 August, 1983 by Beaupre Drilling of Princeton, B.C., using a skid mounted E-15 Boyles Bros. rig. The purpose of the program was : (1) to test the persistence and grade of precious metal values with depth in quartz sulphide replacements and mineralized fault zones, (2) to determine the nature of the IP anomaly, and (3) to extend further and compare assays with percussion drill holes reported by Holt (1980). The location of the drill holes are shown in Figure 6, assay results are shown in Appendix 1 and core logs are given in Appendix 4. The core recovered is held in storage by Mr. John Kucherhan at 197 Granby Avenue, Penticton, B.C. A brief account of each hole and an interpretation of the drilling results is presented below.

Drill hole #1 was intended to intersect a 12 foot quartz-sulphide pod at shallow depths (figure 6C) but the hole had to be abandoned for lack of core recovery in highly shattered regolith. Another attempt was made at -66° and hole #2 en-

countered highly fractured granite and felsite hosting arsenopyrite and pyrite as fracture fills, disseminations and in quartz veinlets in the hanging wall at 30-32.5 and 44-50 feet that yielded 0.126 and 0.153 oz/T gold respectively. The main vein was intersected between 50 and 76 feet; it consisted of milky quartz carrying up to 25% sulphide in fractures and pockets, became richer in sphalerite from 70-76 feet, until it broke into the old workings. The average grade over a true thickness of 13 feet was 0.133 gold and 3.74 silver associated with 1.1 to 3.9 percent arsenic.

Drill hole #3 was intended to test an IP anomaly which was three times background and to intersect a fault zone which yielded a surface assay of 0.391 oz/T gold (figure 6C). The hole encountered highly fractured, oxidized felsite which would collapse around the drill rods. At 32 to 37 feet it intersected a zone of sulphide-rich gouge which yielded 0.131 oz. Au, 0.33 oz. Ag and 3.94% As. The felsite carried 5-15% very finely disseminated pyrite, very low Au-Ag values, which in conjunction with the fault zone, could account for the IP anomaly.

Drill hole #4 was intended to intersect the down-dip extension of a 12 foot quartz-sulphide pod which yielded 0.244 oz. Au and 1.96 oz. Ag at surface and 0.053 to 0.06 oz. Au and 1.61 to 3.37 oz. Ag in percussion drill hole intersections (figure 6B). The hole was collared in granite, intersected a post-mineral dolerite dyke, penetrated highly fractured fel-

sites, water circulation was lost 95 feet down and it eventually encountered the quartz pod at 131.4 to 135.8 feet before entering another dolerite dyke. Unfortunately the hole had to be abandoned after an unsuccessful attempt to cement the collapsing bore hole. The first 4.4 feet of quartz yielded 0.042 oz. Au and 1.05 oz. Ag.

Drill hole #5 was aimed to intersect the same fault zone as in hole #3, to broadly test the IP anomaly between lines 60 and 0 West and to sample the down dip extension of the main quartz-sulphide vein below the underground workings (figure 6a). The hole encountered a 1 foot pod of sulphide in fractured felsite at 90 feet and a mineralized gouge zone from 99.5 to 104 feet. Grey to pale green fractured felsites with disseminated pyrite (5-10%), quartz-sulphide veinlets, sulphide stringers and pockets were cored from 165 to 186.5 feet in the hanging wall but resulted in modest Au and Ag values in both core and sludge assays. Milky quartz, with arsenopyrite, pyrite and sphalerite stringers, was cut between 186.5 to 194 feet and it yielded 0.139 oz. Au and 1.2 oz. Ag over a true thickness of 6.2 feet, a sludge assay between 185 to 191 feet yielded 0.118 oz. Au and 1.30 oz. Ag. The foot wall consisted of highly fractured felsite and fault gouge between 194-197 feet after which the hole had to be abandoned.

Drill hole #6 was intended to test at depth a zone of mineralized gouge zones which at surface yielded encouraging assays of 0.285 to 0.147 oz. Au (figure 6d). The hole was

collared near mineralized gouge in fine grained granite which was locally altered to pyrite-epidote-chlorite bearing zones but these carried low values. Felsite was cut after 86 feet and at 110 and 115 feet quartz veins were cut; these also yielded low assays. In general, the drilling program has resulted in the following conclusions: (1) quartz-sulphide veins dip steeply to the south, persist to depths of at least 130 feet below surface, possibly taper down and have slightly lower grades than at surface. (2) The IP anomaly, is probably due to a broad, highly fractured zone of pyritic felsite which carries local concentrations of mineralized gouge, quartz-sulphide veins, veinlets and sulphide fracture fillings with erratic Au values of 0.55 to 0.1 oz/T, over 1 to 5 foot intervals. (3) A narrow zone of well mineralized gouge trending N70E-vertical situated 20 to 30 metres south of the main quartz-sulphide fissure system can be traced from 105W to 45W and is open to the east. (4) Hanging wall felsites are mineralized at least 10 feet away from quartz fissure fillings and may carry from 3 to 0.4 percent arsenic.

CONCLUSIONS

On the basis of the foregoing investigation I have concluded the following:

- (1) An area measuring 120 x 250 metres carries anomalous concentrations of Zn, Ag and As in soils and overlies an area of precious metal mineralization.
- (2) An induced polarization anomaly, measuring at least 240 x 260 metres, is coincident with the mineralized area, but diminishes in intensity eastward from the main workings.

(3) Trenching has exposed a mineralized fault zone from 105 to 45 west which carry values of 0.55 to 0.03 Au and 1.33 to 0.08 Ag (oz/T) over widths of 0.7 to 2.4 metres.

(4) Diamond drilling indicated the quartz-sulphide veins extend at least 130 feet below surface and where tested over a 200 foot strike length, it typically grades 0.081 oz. Au and 1.71 oz. Ag over 11 foot intervals.

RECOMMENDATIONS

Clearly mineralized quartz-sulphide veins and mineralized fault zones have been tested over a limited strike length of some 200 feet and to shallow depths of 130 feet below surface. The present investigation has indicated that precious metal mineralization occurs over minable widths (in excess of 5 feet), in at least two separate structures, and that economic grades are attained locally. In my estimation, there is sufficient encouragement to warrant 3000 feet of diamond drilling to further test the mineralized structure at greater depth and along strike to the east. I therefore recommend that further drilling be carried out on the Golden Zone at a cost estimated below:

COST ESTIMATE

(1)	3000 feet of diamond drilling (NQ) @ \$30/ft.....	\$90,000
(2)	Assaying 300 samples @ \$12.50/sample.....	3,750
(3)	Travel & accommodation 90 mandays @ \$50/day.....	4,500
(4)	Geological supervision 30 days @ \$200/day.....	6,000
(5)	Freight.....	500
(6)	Supplies.etc.....	1,000
(7)	Report preparation 6 days @ \$200/day.....	<u>1,200</u>
	TOTAL	<u>\$106,950</u>

ITEMIZED COST STATEMENT, GOLDEN ZONE

Field Salaries

Peter Peto: 16 days @ \$200/day	\$ 3,200.00	
Carl Polhman: 2 days @ \$60/day	120.00	
Brian Holmes: 3 days @ \$70/day	210.00	
A. Kucherhan: 2 days @ \$100/day	200.00	
J. Kucherhan: 2 days @ \$100/day	<u>200.00</u>	\$ 3,930.00
Accommodation & Food (19 man days @ \$50/day) ...	950.00	
Gasoline	<u>50.82</u>	1,000.82
Induced Polarization Survey Costs (as per invoice)		2,618.36
Road Repair (Frontend loader & labour)		175.00
Truck Rentals (as per invoice)		707.31
Analytical Services (rock & soil assays) (as per invoices)- Acme Analytical Laboratories Ltd.		1,278.81
Diamond Drilling Costs (as per invoice) Beaupre Diamond Drilling Ltd.		13,827.00
Report Preparation (as per invoice)		<u>800.00</u>
TOTAL		<u>\$24,337.30</u>

The sum of \$107,000 should be made available for the above program.

Respectfully submitted,

Peter Peto
Peter Peto, Ph. D., F.G.S.C.

REFERENCES CITED

Bostock, H.S. (1940) G.S.C. Map 628A, Olalla (1"=1mi.)

Camsell, C. (1908) Hedley Mining Districk, G.S.C. Memoir #2, Map 4A, p.204-206

Hedley, N.S. (1937) Golden Zone Mines Ltd., B.C. Department of Mines Annual Report, p. D14-17

Holt, E.S. (1980) Report of Examination & percussion Results, Golden Zone Mineral Claims, private report, (D. Agur) 21p.

Peto, P. (1983) Geological, Geochemical and Geophysical Report on the Golden Zone Property, assessment report, 11p.

SURVEY SPECIFICATIONS.

The induced polarization (I.P.) survey was carried out using a pulse type system, the principal components of which are manufactured by Crone Geophysics Ltd. and Huntec Limited of Metropolitan Toronto, Ontario.

The system consists basically of three units; a receiver (Crone), a transmitter and a motor generator (Huntec). The transmitter, which provides a maximum of 7.5 kw d.c. to the ground, obtains its power from a 7.5 400 c.p.s. three phase alternator driven by a gasoline engine. The cycling rate of the transmitter is 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through electrodes C_1 and C_2 , the primary voltage (V) appearing between the two potential electrodes, P_1 and P_2 , during the "current-on" part of the cycle, and the apparent chargeability (M_a) presented as a direct readout using a 450 millisecond delay and a 450 millisecond sample window by the Crone receiver.

The apparent resistivity (P_a) in ohm metres is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the "pole-dipole" method of surveying. In this method the current electrode, C_1 , and the two potential electrodes, P_1 and P_2 , are moved in unison along the survey lines. The spacing "na" (n an integer) between C_1 and P_1 is kept constant for each traverse at a distance roughly equal to the depth to be explored by that traverse, while that of P_1 and P_2 (the dipole) is kept constant at "a". The second current electrode C_2 is kept constant at "infinity".

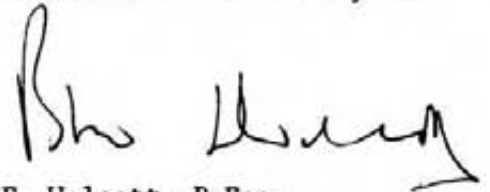
Thus usually on a "pole-dipole" array traverse with an electrode spacing of 100 metres a body lying at a depth of 50 metres will produce a strong response, whereas the same body lying at a depth of 100 metres will only just be detected. By running subsequent traverses at different electrode separations, more precise estimates can be made of depth, width, thickness and percentage of sulphides of causative bodies located by the I.P. method.

The survey was carried out using a 30 metre dipole and obtaining first and second separation measurements. In all some kilometres of surveying were completed.

STATEMENT OF QUALIFICATIONS.

I, Peter E. Walcott, of the Municipality of Coquitlam, British Columbia, hereby certify that:

1. I am a Graduate of the University of Toronto with a B.A.Sc. in Engineering Physics, Geophysics Option, in 1962.
2. I have been practising my profession for the last 21 years.
3. I am a member of the Association of Professional Engineers of British Columbia and Ontario.
4. I personally carried out the I.P. survey for Midland Energy Corporation on the property near Apex Mountain between July 27th and 29th, 1983.



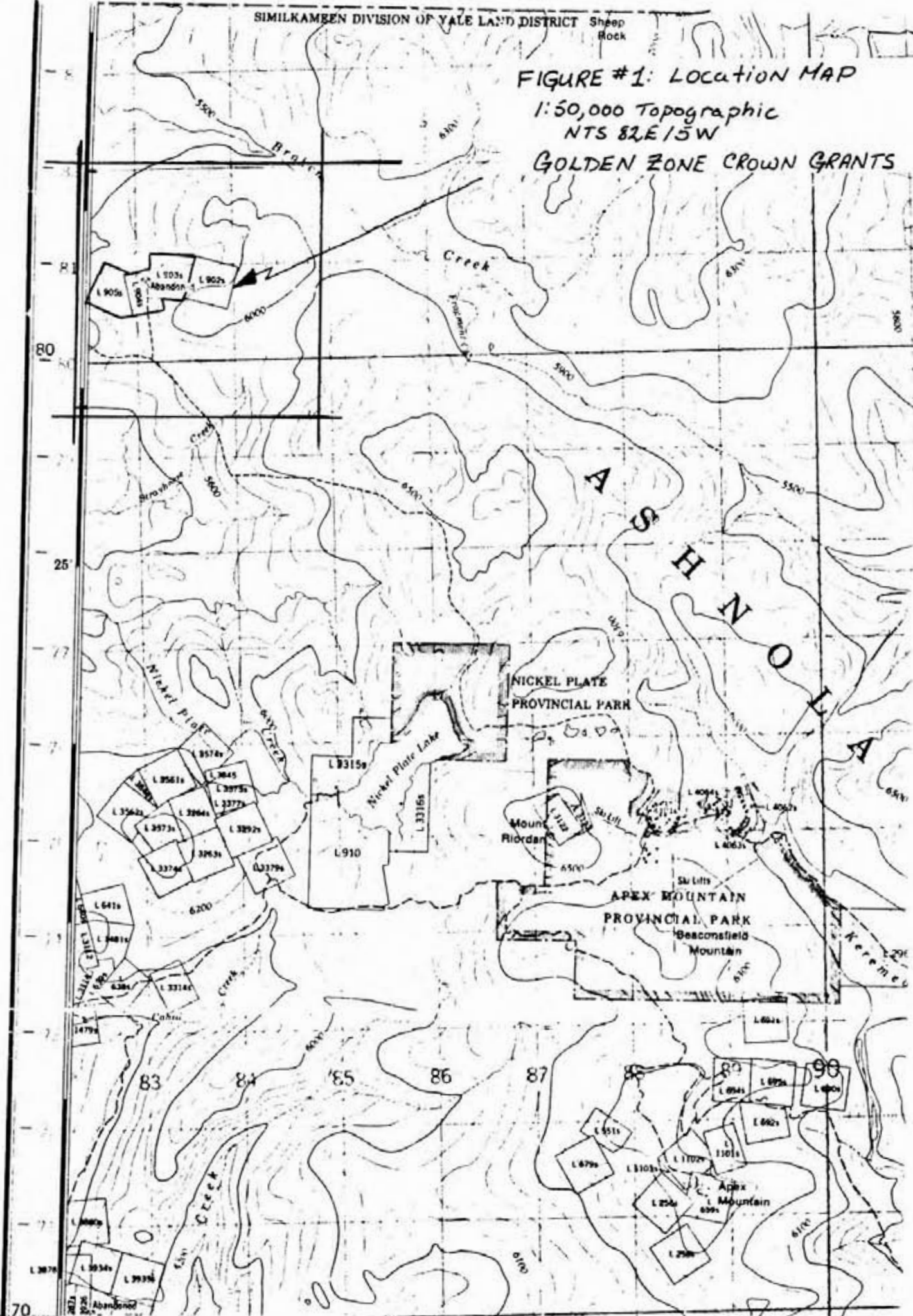
Peter E. Walcott, P.Eng.

Vancouver,
British Columbia,
September 1983

FIGURE #1: LOCATION MAP

1:50,000 Topographic
NTS 82E15W

GOLDEN ZONE CROWN GRANTS



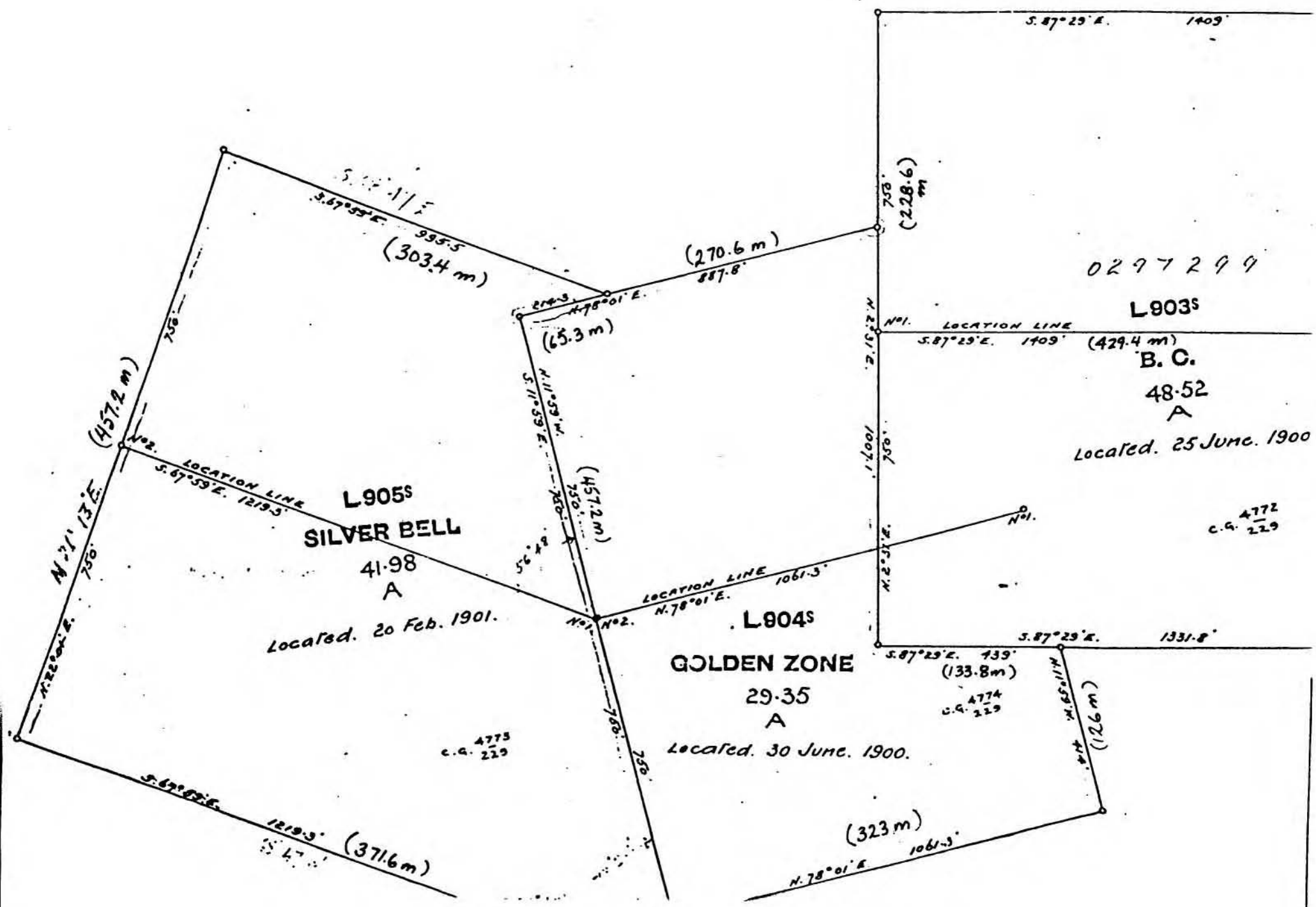
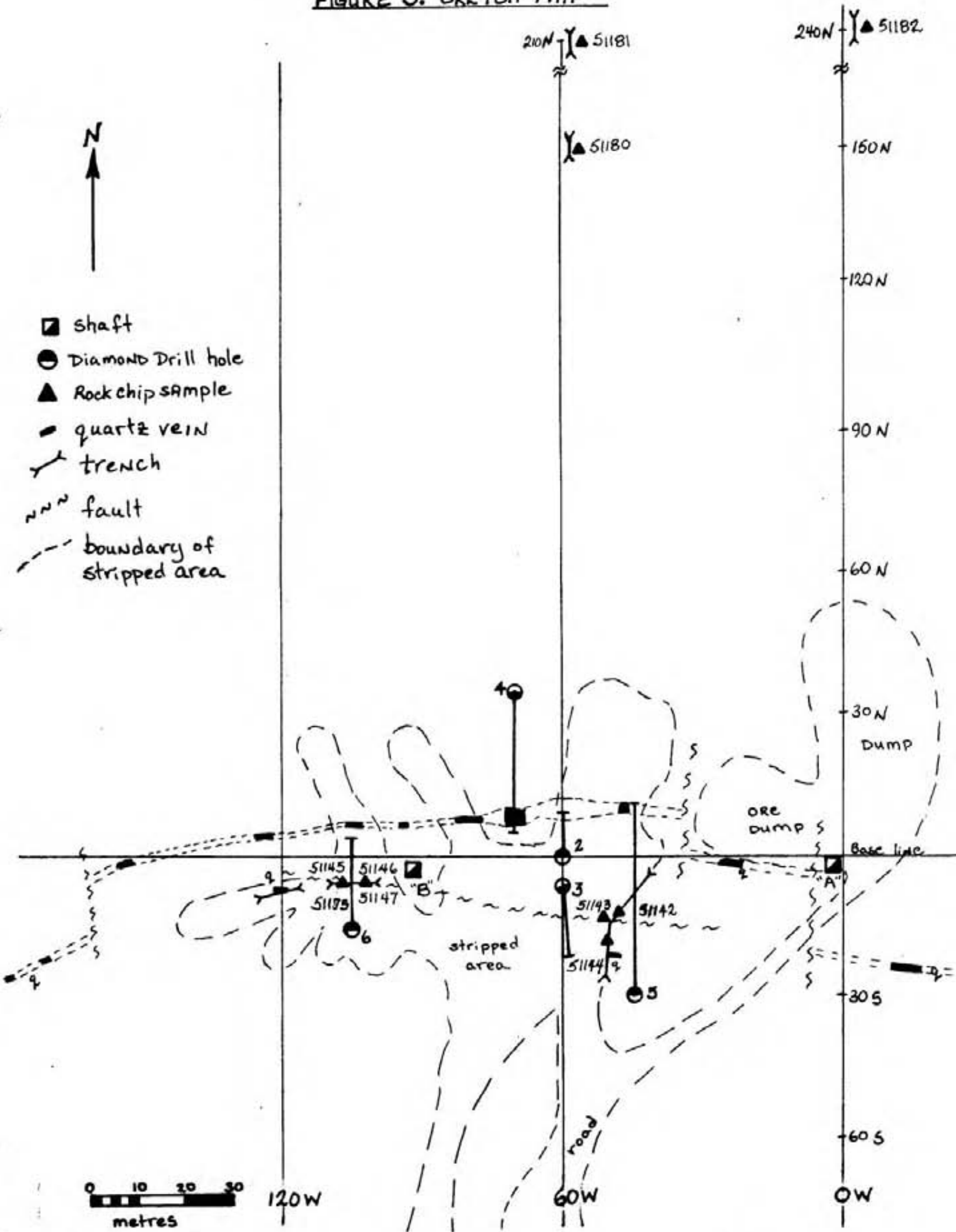


FIGURE 5. SKETCH MAP



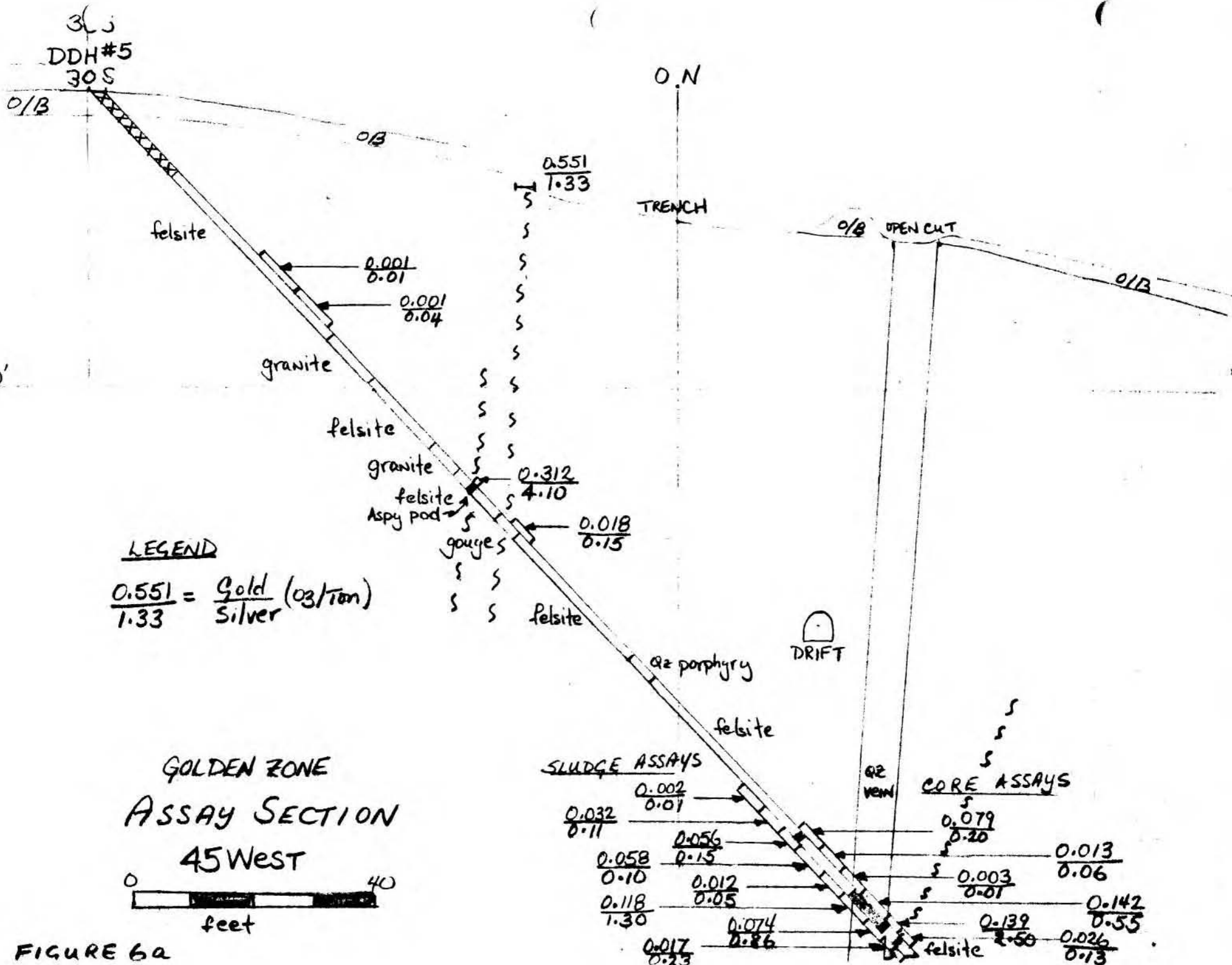
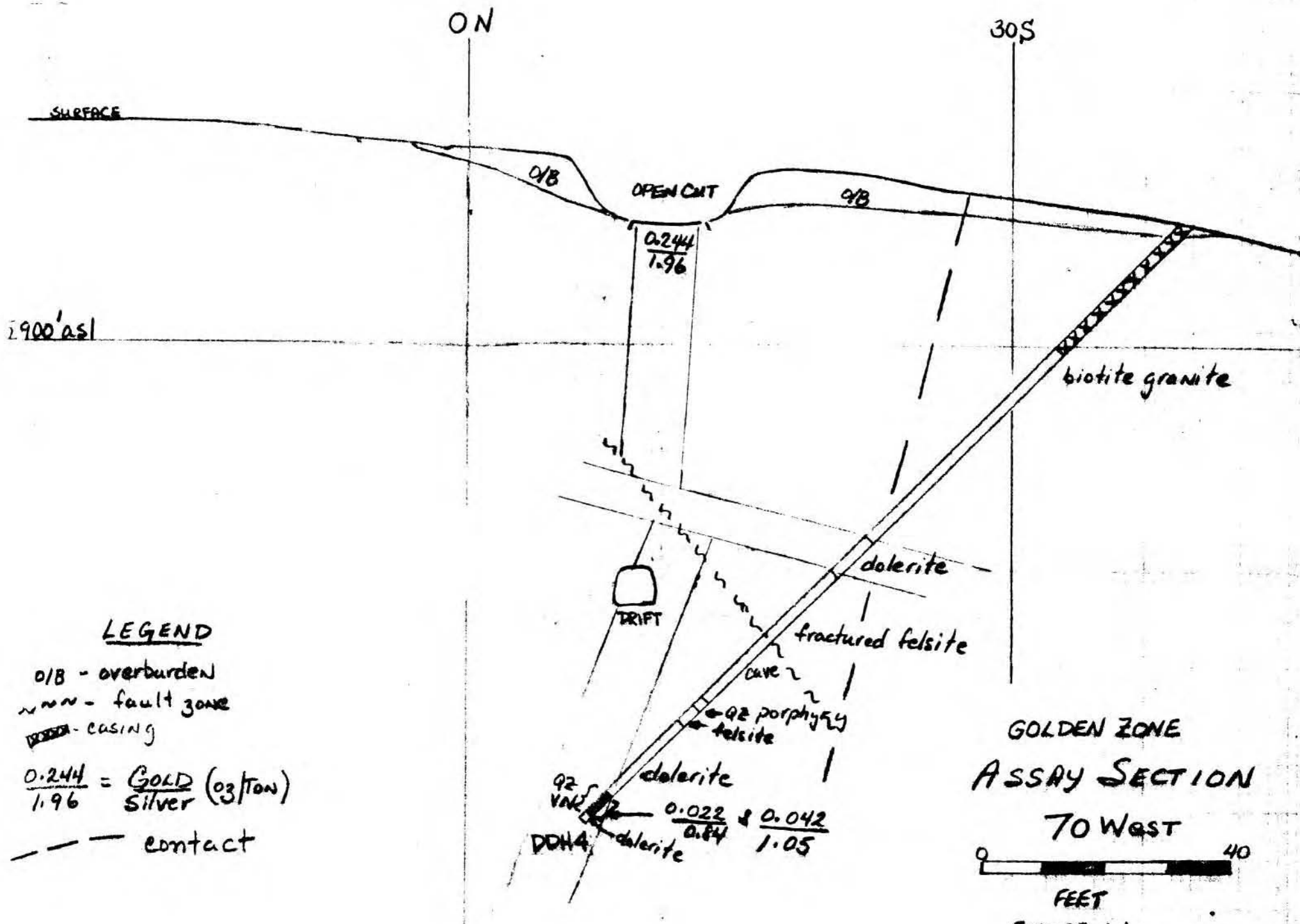
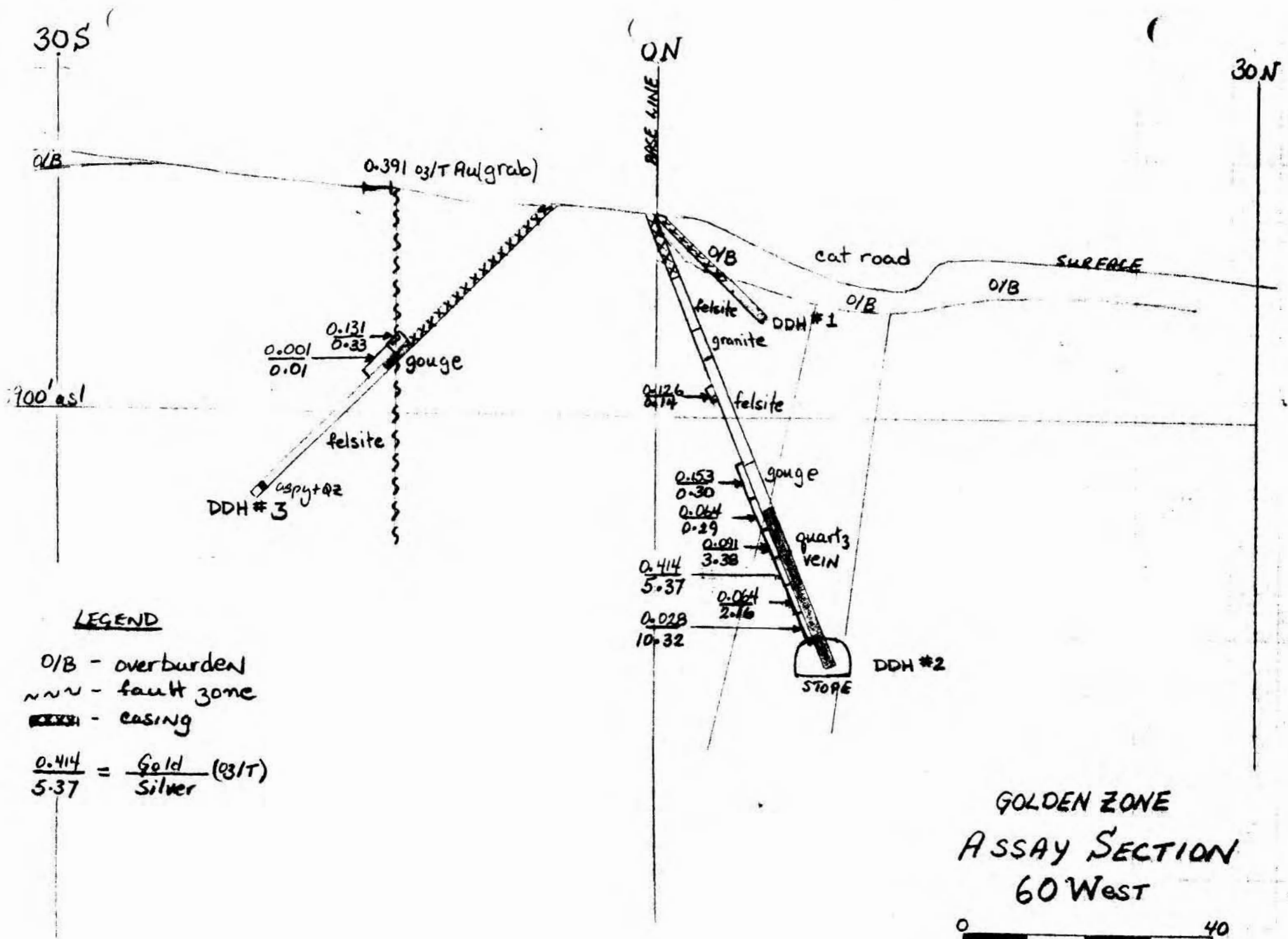


FIGURE 6a





LEGEND

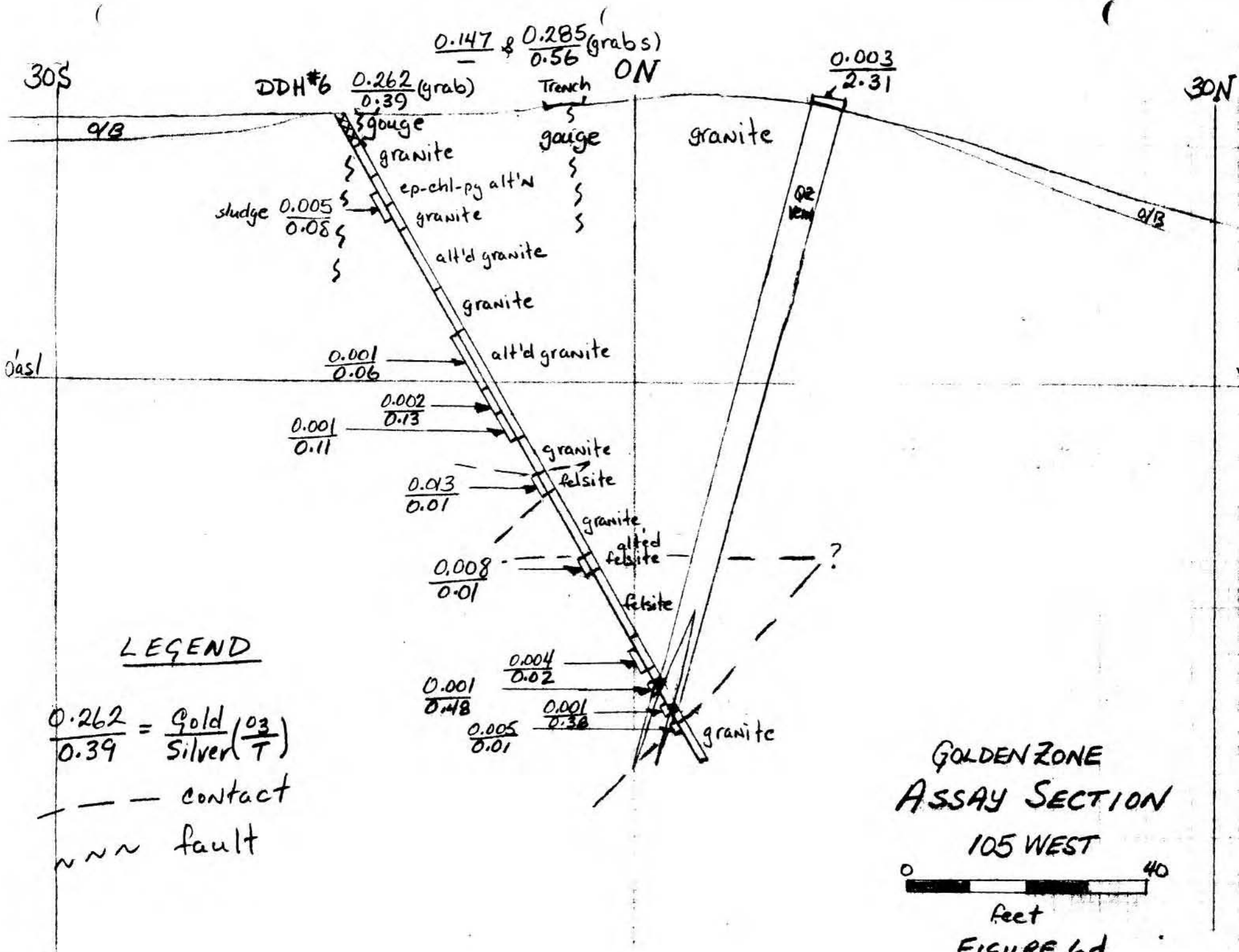
- O/B - overburden
- ~ ~ ~ - fault zone
- XXXXX - easing

$$\frac{0.414}{5.37} = \frac{\text{Gold (oz/T)}}{\text{Silver}}$$

**GOLDEN ZONE
ASSAY SECTION
60 West**



Feet
FIGURE 6C



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ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.

THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, W, Ba, Si, Sr, Cr AND B. Au DETECTION 3 ppm.

SAMPLE TYPE - SLUDGE

ASSAYER *P. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

PETER PETO PROJECT # GOLDEN ZONE FILE # 83-1741A

PAGE# 1

SAMPLE	CU ppm	ZN ppm	AS ppm	AG ppm	AU ppm
51102 CORE	70	52	796	1.0	ND
51103 CORE	43	50	243	.4	ND
51104 CORE	17	11	30200	7.8	2
51076	160	169	415	.5	ND
51077	221	173	12014	.6	ND
51078	122	110	9125	2.9	ND
51079	112	125	8037	1.6	ND
51080	136	118	27672	6.2	3
51081	165	340	39287	11.7	3
51082	143	206	11402	8.4	ND
51083	148	179	21026	29.6	4
51084	146	281	26299	43.4	3
51085	122	295	11852	11.7	ND
51092	277	288	39434	12.1	2
51093	298	281	16440	8.2	ND
51094	129	255	19940	11.4	ND
51095	87	148	9891	4.7	ND
51096	81	129	10978	4.9	ND
51097	87	115	8357	3.7	ND
51098	81	110	10773	4.5	ND
51099	133	148	11192	3.5	ND
STD A-1	30	183	10	.3	ND

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DATE RECEIVED AUG 19 1983

DATE REPORTS MAILED

Aug 25/83

ASSAY CERTIFICATE

SAMPLE TYPE : CORE - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER *De Toy* DEAN TOYE, CERTIFIED B.C. ASSAYER

PETER PETO PROJECT # GOLDEN ZONE FILE # 83-1741B

PAGE# 1

SAMPLE	AG	AU
	OZ/TON	OZ/TON
51086	.30	.153
51087	.29	.064
51088	3.38	.091
51089	5.37	.414
51090	2.16	.064
51091	10.32	.028
51100	.33	.131
51101	.01	.001

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DATE REPORTS MAILED

Aug 27/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK & CORE

ASSAYER *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

PETER PETO PROJECT # GOLDEN ZONE FILE # 83-1786B PAGE# 1

SAMPLE	AG	AU
	OZ/TON	OZ/TON
51142	.32	.113
51143	1.33	.551
51144	.08	.013
51145	.11	.067
51146	.18	.031
51147	.08	.036
DDH-4 131.4-135.7	.84	.022

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DATE RECEIVED AUG 23 1983

DATE REPORTS MAILED *Aug 29/83*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
SAMPLE TYPE - SLUDGE

ASSAYER *P. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

MR. PETER PETO FILE # 83-1786A Project # GoldenZee PAGE# 1

SAMPLE	CU ppm	ZN ppm	AG ppm	AS ppm	AU ppm
51105	94	759	.4	262	ND
51106	245	828	.3	301	ND
51107	115	623	.2	157	ND
51108	99	621	.3	99	ND
51109	128	873	2.1	58	ND
51110	121	828	.2	47	ND
51111	88	604	.3	74	ND
51112	77	665	.2	33	ND
51113	53	218	.3	91	ND
51114	104	265	.4	168	ND
51115	421	366	.6	38	ND
51116	403	350	.6	33	ND
51117	220	205	.6	73	ND
51118	100	117	.7	210	ND
51119	89	95	.8	219	ND
51120	160	1105	2.0	372	ND
51121	135	197	.8	767	ND
51122	128	204	.7	195	ND
51123	123	147	.7	97	ND
51124	179	178	.8	79	ND
51125	224	205	.6	82	ND
51126	113	133	.6	128	ND
51127	154	166	.6	132	ND
51128	147	168	.5	95	ND
51129	123	144	.5	585	ND
51130	263	328	2.1	3399	ND
51131	170	505	1.2	220	ND
51132	160	197	.6	196	ND
51133	156	174	.5	203	ND
51134	140	161	.4	155	ND
51135	199	221	.9	373	ND
51136	192	182	.4	258	ND
51137	197	1443	2.3	3001	ND
STD A-1	30	186	.3	10	ND

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DATE RECEIVED AUG 26 1983

DATE REPORTS MAILED Aug 30/83

ASSAY CERTIFICATE

SAMPLE TYPE : CORE - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

PETER PETO PROJECT # GOLDEN ZONE FILE # 83-1842 PAGE# 1

SAMPLE	AG	AU
	OZ/TON	OZ/TON
51162	.01	.005
51163	.38	.001
51164	.48	.001
51165	.02	.004
51166	.01	.008
51167	.01	.013
51168	.11	.001
51169	.13	.002
51170	.06	.001
51171	.08	.005
51172	.01	.001
51173	.04	.001

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DATE RECEIVED JULY 25 1983

DATE REPORTS MAILED *July 30/83*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
 THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
 THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Sr,Cr AND B. Au DETECTION 3 ppm.
 SAMPLE TYPE - SOIL

ASSAYER *De Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

PETER PETO FILE # B3-1344 PROJECT:GOLDEN ZONE PAGE# 1

SAMPLE	CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm
330N 60W	25	6	71	.3	139
300N 60W	14	4	63	.2	92
270N 60W	20	6	57	.3	169
240N 60W	25	4	80	.4	319
210N 60W	24	4	128	.5	338
180N 60W	29	5	141	.6	330
150N 60W	52	6	266	1.0	400
330N 0W	19	7	73	.5	57
300N 0W	16	3	62	.3	110
270N 0W	15	6	80	.3	107
240N 0W	44	6	87	.7	308
210N 0W	15	7	64	.3	68
180N 0W	12	6	58	.2	24
150N 0W	15	6	81	.2	34
330N 60E	54	5	67	.9	42
300N 60E	27	7	78	.8	35
270N 60E	21	7	73	.4	48
240N 60E	16	9	75	.2	46
210N 60E	17	6	69	.5	56
180N 60E	11	5	67	.3	46
150N 60E	13	3	75	.2	109
120N 60E	12	6	109	.3	20
90N 60E	14	9	103	.4	22
60N 60E	20	4	70	.2	46
30N 60E	18	6	79	.2	58
0N 60E	25	6	109	.3	26
30S 60E	16	5	90	.2	154
60S 60E	17	16	99	.8	225
90S 60E	22	8	88	.7	84
330N 120E	21	3	72	.8	25
300N 120E	11	6	55	.1	36
270N 120E	14	6	81	.2	44
240N 120E	26	7	74	.7	30
210N 120E	44	9	93	.8	33
180N 120E	33	7	88	.2	23
150N 120E	14	7	79	.3	26
120N 120E	13	7	68	.1	16
STD A-1	31	36	180	.3	10

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DATE RECEIVED AUG 25 1983

DATE REPORTS MAILED

Aug 30/83

ASSAY CERTIFICATE

SAMPLE TYPE : SLUDGE & CORE

ASSAYER *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

PETER PETO PROJECT # GOLDEN ZONE FILE # 83-1832B PAGE# 1

SAMPLE	AG	AU
	OZ/TON	OZ/TON
51148	.01	.002
51149	.11	.032
51150	.15	.056
51151	.10	.058
51152	.05	.012
51153	1.30	.118
51154	.86	.074
51155	.23	.017
51156	.20	.079
51157	.06	.013
51158	.01	.003
51159	.55	.142
51160	2.50	.139
51161	.13	.026

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DATE REPORTS MAILED Aug 30/83

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca, P, Mg, Al, Ti, La, Na, K, W, Ba, Si, Sr, Cr AND B. Au DETECTION 3 ppm.
SAMPLE TYPE - SLUDGE

ASSAYER Dean Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

MR. PETER PETO FILE # 83-1832A Project # Golden Zone PAGE # 1

SAMPLE	CU ppm	ZN ppm	AG ppm	AS ppm	AU ppm
51138	209	756	1.3	1843	ND
51139	226	560	1.2	1152	ND
51140	176	1956	2.0	1787	ND
51141	135	387	1.0	555	ND

SAMPLE	CU ppm	PB ppm	ZN ppm	AG ppm	AS ppm
90N 120E	11	9	67	.1	16
60N 120E	14	8	70	.1	22
30N 120E	12	7	65	.1	21
0N 120E	13	8	79	.5	10
30S 120E	25	8	91	.3	39
60S 120E	26	7	84	.6	39
90S 120E	23	11	98	.5	47
120S 120E	46	12	88	.7	119
150S 120E	28	10	125	.4	51
180S 120E	21	10	87	.2	40
240N 180E	10	9	65	.1	12
210N 180E	10	7	59	.2	19
180N 180E	9	5	51	.2	14
150N 180E	13	6	49	.2	28
120N 180E	11	7	67	.1	11
90N 180E	16	7	71	.2	18
60N 180E	15	8	85	.3	15
30N 180E	20	6	81	.3	23
0N 180E	41	12	106	1.2	48
240N 240E	10	7	56	.1	8
210N 240E	11	6	61	.1	12
180N 240E	15	6	66	.1	12
150N 240E	13	5	55	.1	12
120N 240E	36	8	70	.5	23
90N 240E	16	10	79	.1	15
60N 240E	22	5	102	.3	28
30N 240E	24	9	117	.3	36
0N 240E	21	8	126	.2	30
STD A-1	28	38	173	.2	10

PROPERTY _____
 DRILL HOLE NO. 2
 DRILL TYPE _____
 DATES _____

DRILL HOLE LOG & ASSAYS

LOCATION _____
 ELEVATION _____
 BEARING _____
 DIP _____

LENGTH _____
 % RECOVERY _____
 LOGGED BY _____
 PAGE 2 OF TWO

SAMPLE	FROM	TO	LENGTH	NOTES	ASSAYS			
					oz Au	oz Ag		
				CORE LOG				
	0	11	11	CASING				
	11	20	9	grey, v. fm gr. felsite, pyritic, chlorite frags				
	20	25	5	grey to white, argillic, med. gr. granite				
	25	44	19	grey, highly fractured, pyritic felsite, aspy-py frags				
	44	52	8	highly fractured felsite gouge & aspy-py veins				
	52	74.5	22.5	milky oz vein & aspy-py-sphalerite clots & frags				
	74.5	79.0	4.5	NO core; intersect stope; stop hole.				
				CORE loss at 15-19, 42-44, 49.6-51.6, 71.5-74.5.				

PROPERTY GOLDEN ZONE
 DRILL HOLE NO. 3
 DRILL TYPE BQ wireline
 DATES 15-16 August 1983

DRILL HOLE LOG & ASSAYS
 LOCATION 65-60W
 ELEVATION 3930 feet
 BEARING 170°
 DIP -45°

LENGTH 67.5 feet
 % RECOVERY 72
 LOGGED BY P. Peto
 PAGE 1 OF ONE

SAMPLE	FROM	TO	LENGTH	NOTES	ASSAYS				
					oz Au	oz Ag	As	Zn	Cu
51100	32	35	3.0	core loss, py-asp-y-Qz gouge zone in felsite	0.131	0.33	-	-	-
51101	35	41	6.0	core loss, compact grey felsite c̄ 5% sulphides	0.001	.01	-	-	-
51102	41	45	4.0	highly fractured felsite c̄ py-chlor fracs p. Qz vlt	ND	1.0	796	52	70
51103	45	55	10.0	core loss, fractured felsite c̄ 10% pyrite	ND	0.4	243	50	43
51104	66	66.5	0.5	Qz-py-asp-y vein	2	7.8	30200	11	17
				sludge geochem. in ppm	As	Zn	Cu	Hg	Pb
51092	32	37	5.0	sulphide rich sludge	39434	288	277	12.1	2
51093	37	41	4.0	sludge	16440	281	298	8.2	ND
51094	41	45	4.0	sludge	19940	255	129	11.4	ND
51095	45	50	5.0	sludge	9891	148	87	4.7	ND
51096	50	55	5.0	sludge	10978	129	81	4.9	ND
51097	55	60	5.0	sludge	8357	115	87	3.7	ND
51098	60	65	5.0	sludge	10773	110	81	4.5	ND
51099	65	67.5	2.5	sludge	11192	148	133	3.5	ND
				CORE LOG					
	0	32	32	CASING					
	15	32	17	highly fractured, grey, v. fr. gr, rusty felsite, diss py					
	32	37	5	as above, Qz-py-asp-y gouge in fault zone					
	37	67.5	30.5	highly fractured, grey felsite, Qz vein 66.5, 5-10% diss py					
				CORE loss at 15-19, 27.5-35, 37-41, 43-45, 46.6-58.					
				Hole abandoned due to tight rods, cave					
				& excessive bit wear.					

PROPERTY GOLDEN ZONE
 DRILL HOLE NO. 4
 DRILL TYPE BQ wireline
 DATES 17-20 August 1983

DRILL HOLE LOG & ASSAYS
 LOCATION 70W-35N
 ELEVATION 5920 feet
 BEARING 180°
 DIP -45°

LENGTH 137.7 feet
 % RECOVERY 77
 LOGGED BY P. Peto
 PAGE 1 OF TWO

SAMPLE	FROM	TO	LENGTH	NOTES	ASSAYS				
					oz Au	oz Ag			
-	131	136	5.0	milky qz-sulph vein, py-aspy-sp, 10cm lens @ 134.5'	0.022	0.84			
51178	131	135	4.0	as above, replicate assay.	0.042	1.05			
				Sludge geochem reported in ppm.	AS	ZN	Cu	Ag	Au
51105	32	40	8.0	sludge	262	759	94	0.4	ND
51106	40	45	5.0	sludge	301	828	245	0.3	ND
51107	45	60	15.0	sludge	157	623	115	0.2	ND
51108	60	65	5.0	sludge	99	621	99	0.3	ND
51109	65	70	5.0	sludge	58	873	128	2.1	ND
51110	70	75	5.0	sludge	47	828	121	0.2	ND
51111	75	80	5.0	sludge	74	604	88	0.3	ND
51112	80	85	5.0	sludge	33	665	77	0.2	ND
51113	85	90	5.0	sludge	91	218	53	0.3	ND
51114	90	95	5.0	sludge	168	265	104	0.4	ND
				CORE LOG					
	0	28	28	CASING					
	28	72	44	fractured, into med. gr. biotite granite					
	72	80	8	dk green, massive amygdaloidal dyke					
	80	109.5	29.5	fractured, dk green, compact felsite, 5-10% diss py					
	109.5	111.5	2.0	pale grey, qz-feldspar porphyry dyke					
	111.5	115	3.5	dk green felsite					
	115	131.4	16.4	dk green, porphyry dyke, ep-chl frags, 1% py					
	131.4	135.8	4.4	milky qz vein c py-sph clots, 20% sulphides					

PROPERTY GOLDEN ZONE
 DRILL HOLE NO. 5
 DRILL TYPE BQ
 DATES 21-23 August 1983

DRILL HOLE LOG & ASSAYS
 LOCATION 30S-45W
 ELEVATION 5950 feet
 BEARING NORTH 0°
 DIP -46.5°

LENGTH 200 feet
 % RECOVERY 63
 LOGGED BY P. Peto
 PAGE 1 OF FOUR

SAMPLE	FROM	TO	LENGTH	NOTES	ASSAYS				
					oz Au	oz Ag			
51172	37.5	47	9.5	pale green felsite, ep-chl-py alt'n, py frags	0.001	0.01			
51173	47	54	7.0	as above, fractured, 10-15% diss. pyrite	0.001	0.04			
51176	99.5	104	4.5	highly fractured, chloritic felsite gouge c̄ py-asp-y-Qz	0.018	0.15			
51179	90	91	1.0	massive py-asp-y-sp-Qz pocket	0.312	4.10			
51156	170	175	5.0	fractured grey to pale green felsite, py-asp-y 10%	0.079	0.20			
51157	175	180	5.0	as above, 1-2 mm py stringers, 1-5 mm Qz vlt's, ep-chl alt'n	0.013	0.06			
51158	180	185	5.0	as above	0.003	0.01			
51159	185	191	6.0	milky Qz vein c̄ py-asp-y-sp? stringers to 5mm, 15%	0.142	0.55			
51160	191	194	3.0	drusy Qz vein, as above	0.139	2.50			
51161	194	197	3.0	core loss, highly fractured grey felsite, 10% sulph.	0.026	0.13			
				Sludge geochem reported in ppm	As	Zn	Cu	Ag	Au
51115	25	30	5.0	sludge	38	366	421	0.6	ND
51116	30	35	5.0	sludge	33	350	403	0.6	ND
51117	35	40	5.0	sludge	73	205	220	0.6	ND
51118	40	45	5.0	sludge	210	117	100	0.7	ND
51119	45	50	5.0	sludge	219	95	89	0.8	ND
51120	50	55	5.0	sludge	372	1105	160	2.0	ND
51121	55	60	5.0	sludge	767	197	135	0.8	ND
51122	60	65	5.0	sludge	195	204	128	0.7	ND
51123	65	70	5.0	sludge	97	147	123	0.7	ND
51124	70	75	5.0	sludge	79	178	179	0.8	ND
51125	75	80	5.0	sludge	82	205	224	0.6	ND

PROPERTY _____
 DRILL HOLE NO. 5
 DRILL TYPE _____
 DATES _____

DRILL HOLE LOG & ASSAYS
 LOCATION _____
 ELEVATION _____
 BEARING _____
 DIP _____

LENGTH _____
 % RECOVERY _____
 LOGGED BY _____
 PAGE 2 OF Four

SAMPLE	FROM	TO	LENGTH	NOTES	ASSAYS				
					oz Au	oz Ag	Cu	Ag	Au
51126	80	85	5.0	sludge	128	133	113	0.6	ND
51127	85	90	5.0	sludge	132	166	154	0.6	ND
51128	90	95	5.0	sludge	95	168	147	0.5	ND
51129	95	100	5.0	sludge	595	144	123	0.5	ND
51130	100	105	5.0	sulphide rich sludge	3399	328	263	2.1	ND
51131	105	110	5.0	sludge	220	505	170	1.2	ND
51132	110	115	5.0	sludge	196	197	160	0.6	ND
51133	115	120	5.0	sludge	203	174	156	0.5	ND
51134	120	125	5.0	sludge	155	161	140	0.4	ND
51135	125	130	5.0	sludge	373	221	199	0.9	ND
51136	130	135	5.0	sludge	258	182	192	0.4	ND
51137	135	140	5.0	sludge	3001	1443	197	2.3	ND
51138	140	145	5.0	sludge	1843	756	209	1.3	ND
51139	145	150	5.0	sludge	1152	560	226	1.2	ND
51140	150	155	5.0	sludge	1787	1956	176	2.0	ND
51141	155	160	5.0	sludge	555	387	135	1.0	ND
51148	160	165	5.0	sludge assays for Au & Ag only	0.002	0.01			
51149	165	170	5.0	" " " " " "	0.032	0.11			
51150	170	174	4.0	" " " " " "	0.056	0.15			
51151	174	180	6.0	" " " " " "	0.058	0.10			
51152	180	185	5.0	" " " " " "	0.012	0.05			
51153	185	191	6.0	" " " " " "	0.118	1.30			

PROPERTY _____
 DRILL HOLE NO. 5
 DRILL TYPE _____
 DATES _____

DRILL HOLE LOG & ASSAYS
 LOCATION _____
 ELEVATION _____
 BEARING _____
 DIP _____

LENGTH _____
 % RECOVERY _____
 LOGGED BY _____
 PAGE 3 OF Four

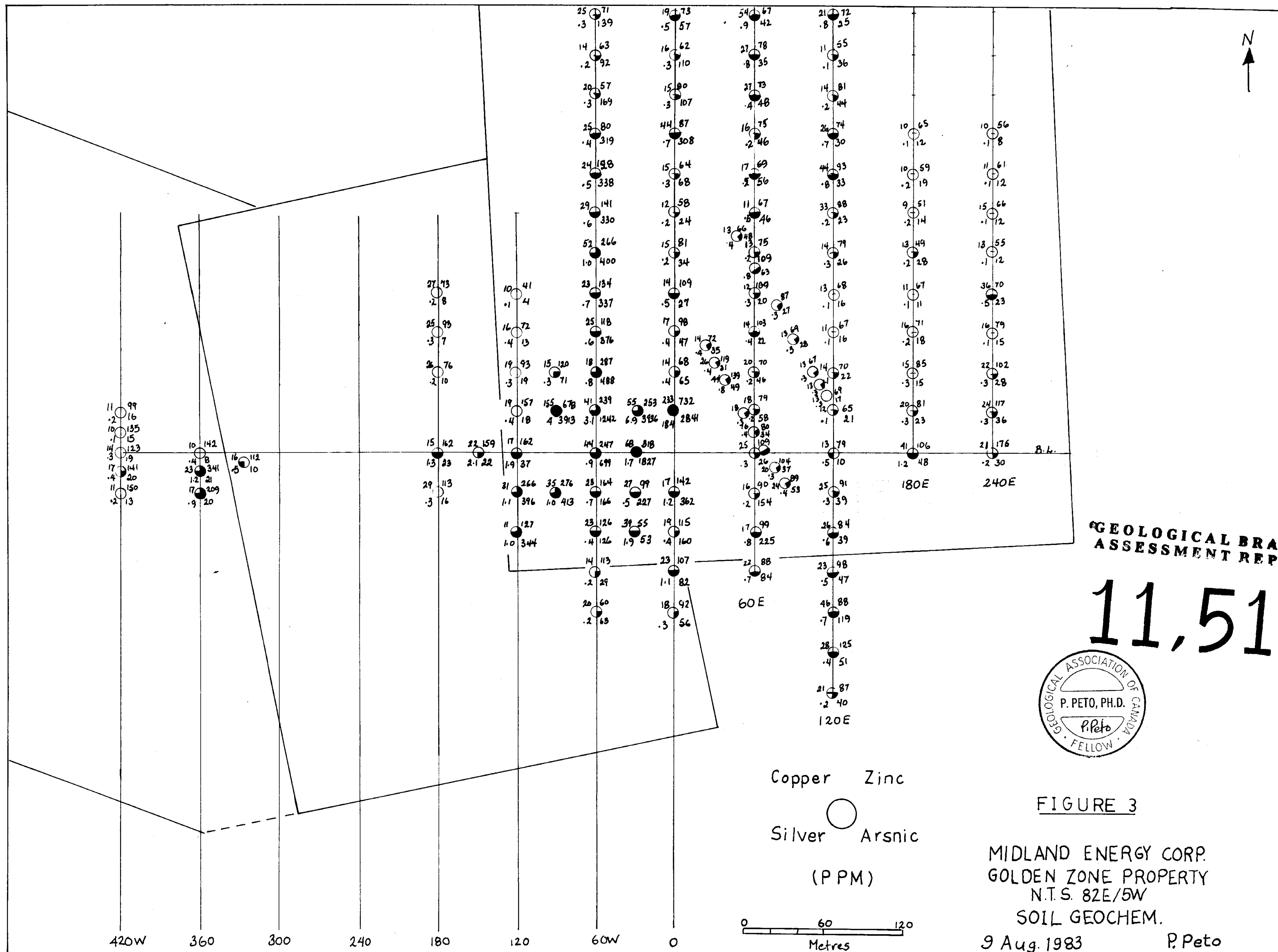
SAMPLE	FROM	TO	LENGTH	NOTES	ASSAYS				
					oz Au	oz Ag			
51154	191	195	4.0	sludge assays for Au & Ag only	0.074	0.86			
51155	195	200	5.0	" " " " " "	0.017	0.23			
CORE LOG									
	0	20	20	CASING					
51172	20	43	23	highly fractured, rusty, grey compact felsite					
	43	49	6	pale green, fractured felsite or Qz porphyry dyke					
51173	49	58	9	highly fractured, grey-green felsite, ep-chl alt'd, 10% py					
	58	68	10	mottled green, grey, white, med gr. granite, 10-15% py					
	68	83	15	grey, compact felsite, 10% py, py-chl frags					
	83	89	6	chl-ep alt'd, med gr. granite, 25% py					
	89	92	3	streaky, siliceous altered felsite					
	92	99.5	7.5	as above, 1-2mm Qz-py vlt's, 5-10% diss py					
51176,9	99.5	104	4.5	highly fractured, grey gouge zone, aspy-py-Qz					
	104	125	21	highly fractured, grey felsite, 10-15% diss py					
	125	127.5	2.5	pale green felsite					
	127.5	128	0.5	dark green porphyry dyke					
	128	132	4	pale green felsite, 5-10% diss py, py-chlor frags					
	132	137	5	dk green, fn gr., Qz-feldspar porphyry dyke					
	137	144	7	pale green, felsite, 1-2mm Qz-py vlt's					
	144	165	21	fractured grey felsite, 1-5mm Qz-py-aspvlt's, 5-10% diss py					
51157-60	165	186.5	19.5	dk grey, fn gr. felsite, as above, massive aspy 173-174'					
51161	186.5	194	7.5	milky Qz vein & py-Aspy-sph stringers to 5mm,					

PROPERTY GOLDEN ZONE
 DRILL HOLE NO. 6
 DRILL TYPE BD
 DATES 23-24 August 1983

DRILL HOLE LOG & ASSAYS
 LOCATION 15S-105W
 ELEVATION 5945 feet
 BEARING North 0°
 DIP -60°

LENGTH 126 feet
 % RECOVERY 85
 LOGGED BY P. Peto
 PAGE 1 OF TWO

SAMPLE	FROM	TO	LENGTH	NOTES	ASSAYS				
					oz Au	oz Ag			
51171	15	20	5.0	sludge	0.005	0.08			
51170	43	53	10.0	CORE loss, pale green felsite, ep-chloration, 5% py	0.001	0.06			
51169	53	58	5.0	as above, bleached frac envelopes, Qz seams	0.002	0.13			
51168	58	63	5.0	as above	0.001	0.11			
51167	70	73	3.0	pale green felsite, sulph smears, c. py cubes, Qz vlt.	0.013	0.01			
51166	87	89	2.0	Qz-asp-py vein	0.008	0.01			
51165	104	108	4.0	pale green felsite, ep-chl-py alt'n, Qz seams	0.004	0.02			
51164	110	112	2.0	Qz-py-sph vein (110-110.5'), grey felsite	0.001	0.48			
51163	114	116	2.0	Qz-py-sph vein, grey felsite	0.001	0.38			
51162	118	120	2.0	pale green felsite	0.005	0.01			
CORE LOG									
	0	6	6	Casing					
	6	12	6	fractured, rusty, fine grained biotite granite					
	12	17.5	5.5	pale green, ep-chl-py alt'n, 1-2mm Qz vlt					
	17.5	22.5	5.0	grey, fine gr. biotite granite					
	22.5	34	11.5	pale green alt'd granite					
	34	42	8.0	grey fine gr. biotite granite					
	42	63	11.0	pale green, alt'd granite					
	63	70	7.0	dk grey, bio granite, ep-chl frac					
	70	73.5	3.5	alt'd granite, ep-chl-py, sulph smears					
	73.5	86	12.5	dk grey, streaky, fine gr. granite 1-5mm Qz vlt					
	86	89	3.0	pale green felsite, 87-88' Qz-asp-py vein					



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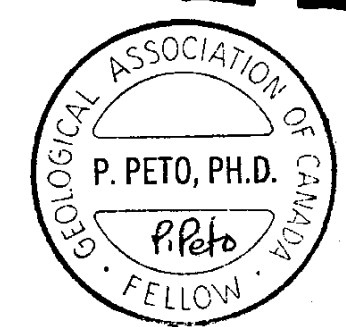
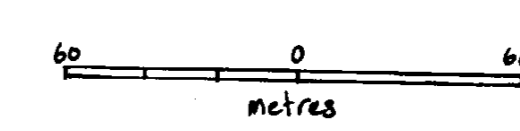
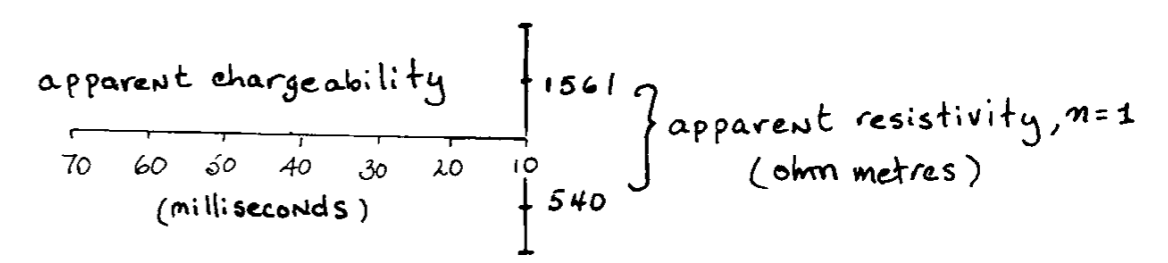
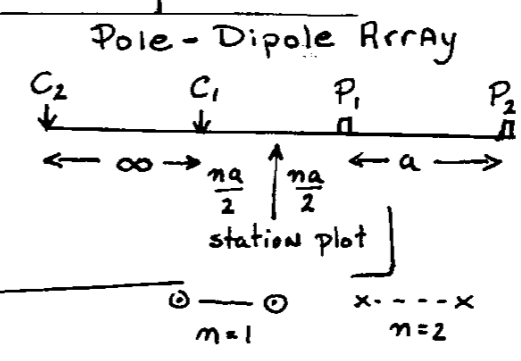
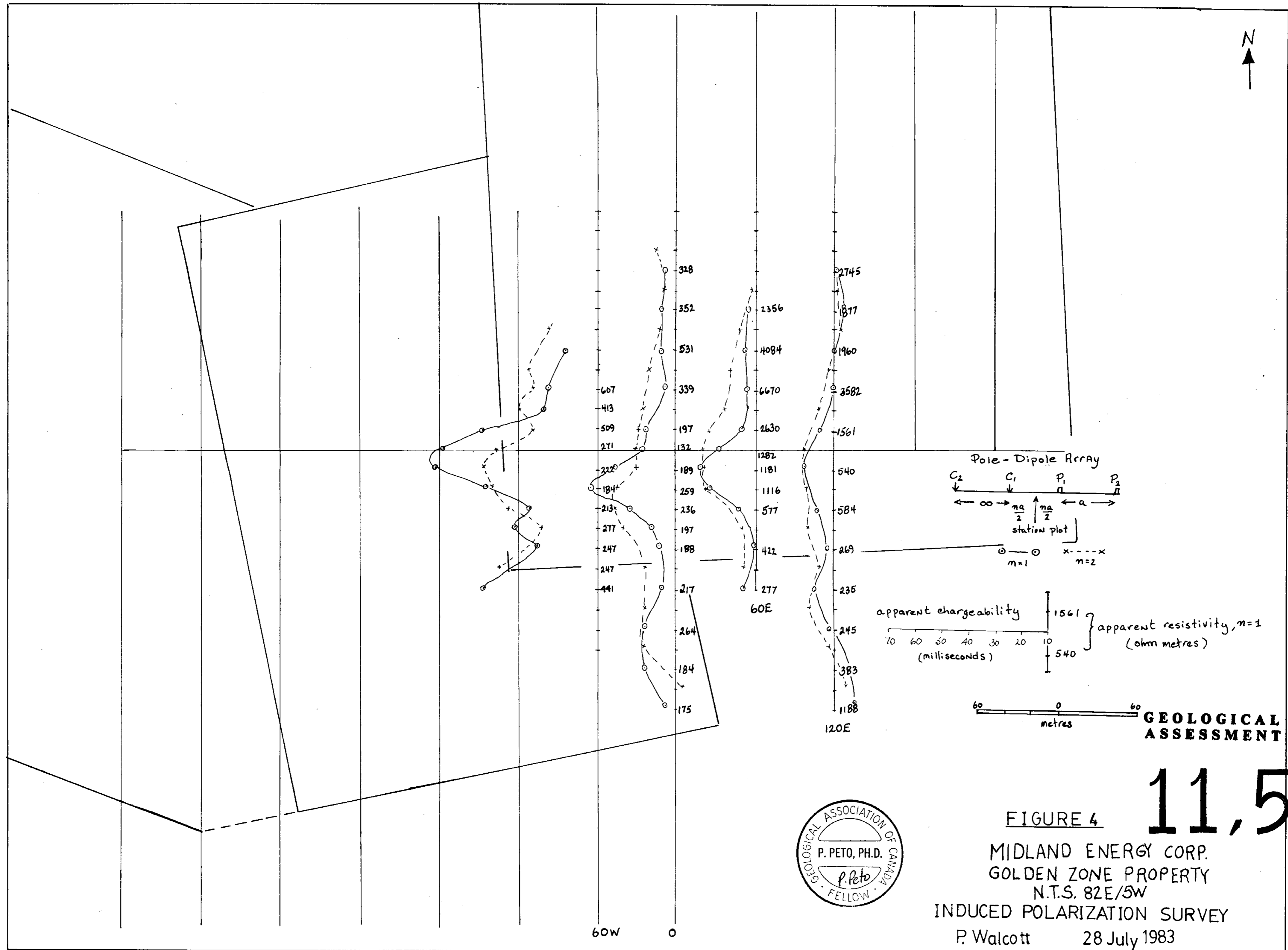


FIGURE 3

MIDLAND ENERGY CORP.
GOLDEN ZONE PROPERTY
N.T.S. 82E/5W
SOIL GEOCHEM.

9 Aug. 1983 P. Peto



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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FIGURE 4
 MIDLAND ENERGY CORP.
 GOLDEN ZONE PROPERTY
 N.T.S. 82E/5W
 INDUCED POLARIZATION SURVEY
 P. Walcott 28 July 1983

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LEGEND

- shaft
- ▣ pit
- △ float
- + outcrop
- ▣ cabin
- trench
- adit
- - - fault
- ~ ~ ~ road
- == vein
- q quartz
- py pyrite
- Aspy Arsenopyrite
- R 28 rock chip sample

UNITS

- 1 - Volcanics
- 2a - fn.gr. granite
- 2b - cr.gr. granite
- 3 - Quartz porphyry

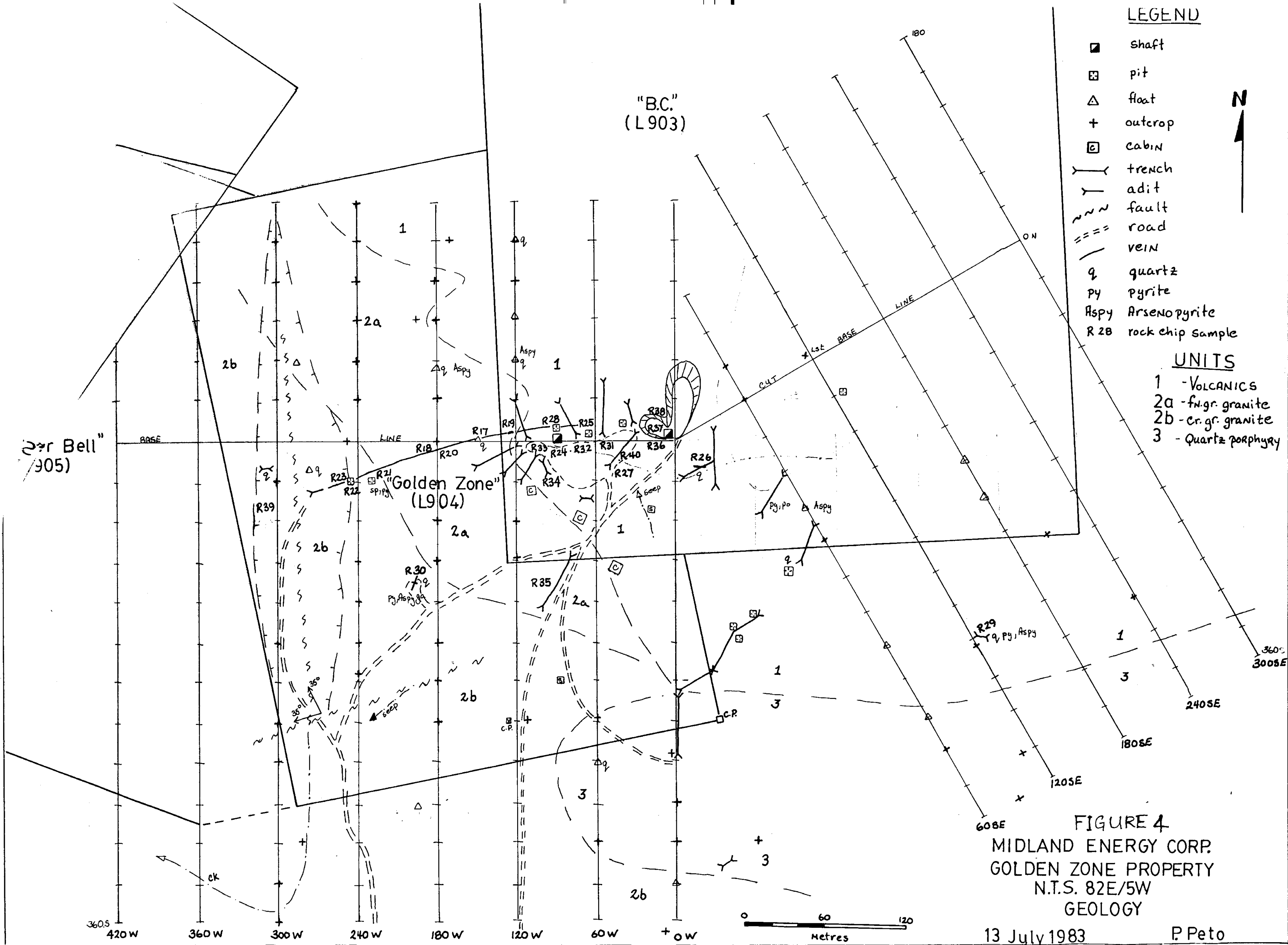
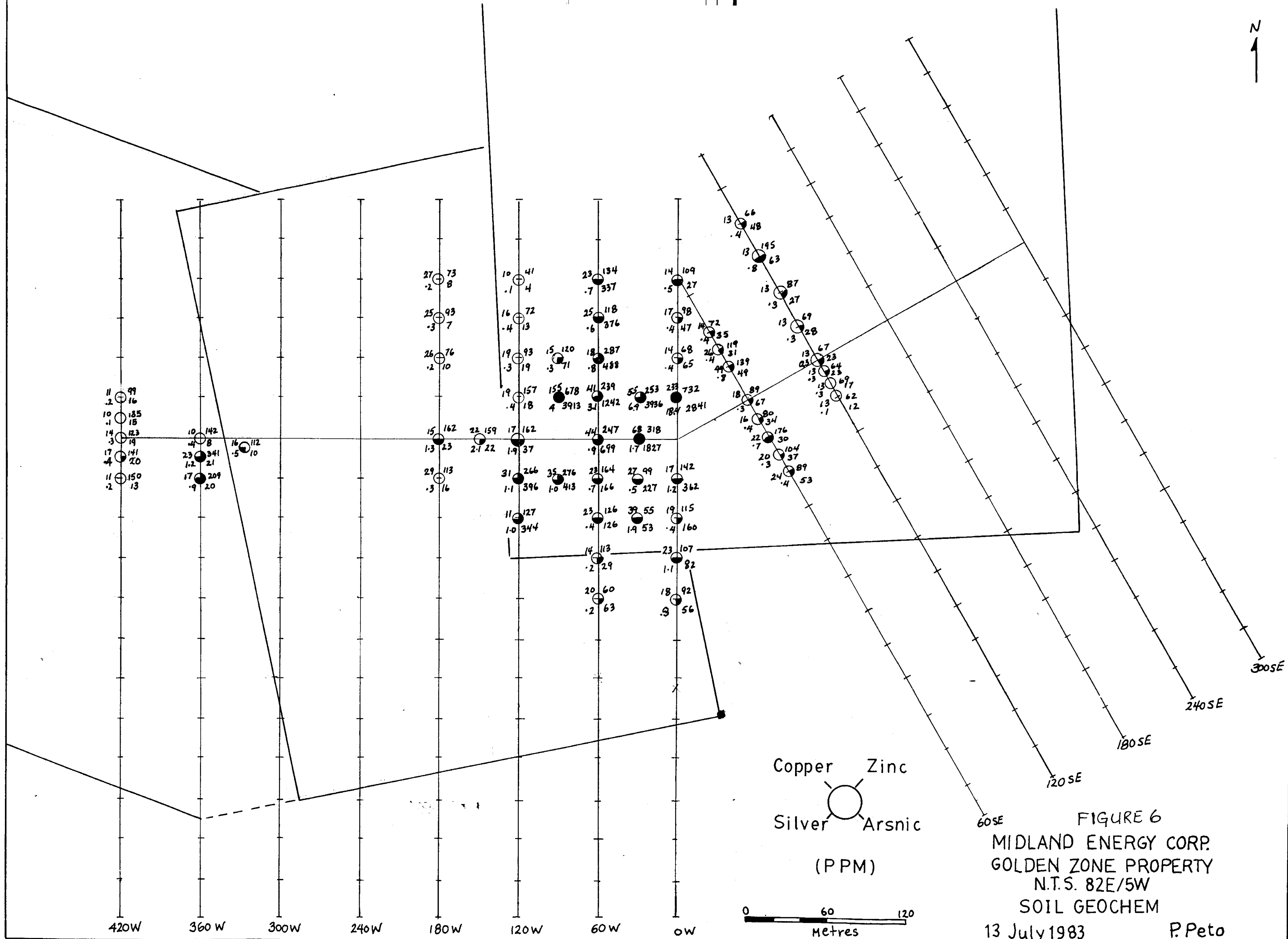


FIGURE 4
MIDLAND ENERGY CORP.
GOLDEN ZONE PROPERTY
N.T.S. 82E/5W
GEOLOGY

13 July 1983 P. Peto



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FIGURE 6
MIDLAND ENERGY CORP.
GOLDEN ZONE PROPERTY
N.T.S. 82E/5W
SOIL GEOCHEM
13 July 1983 P.Peto

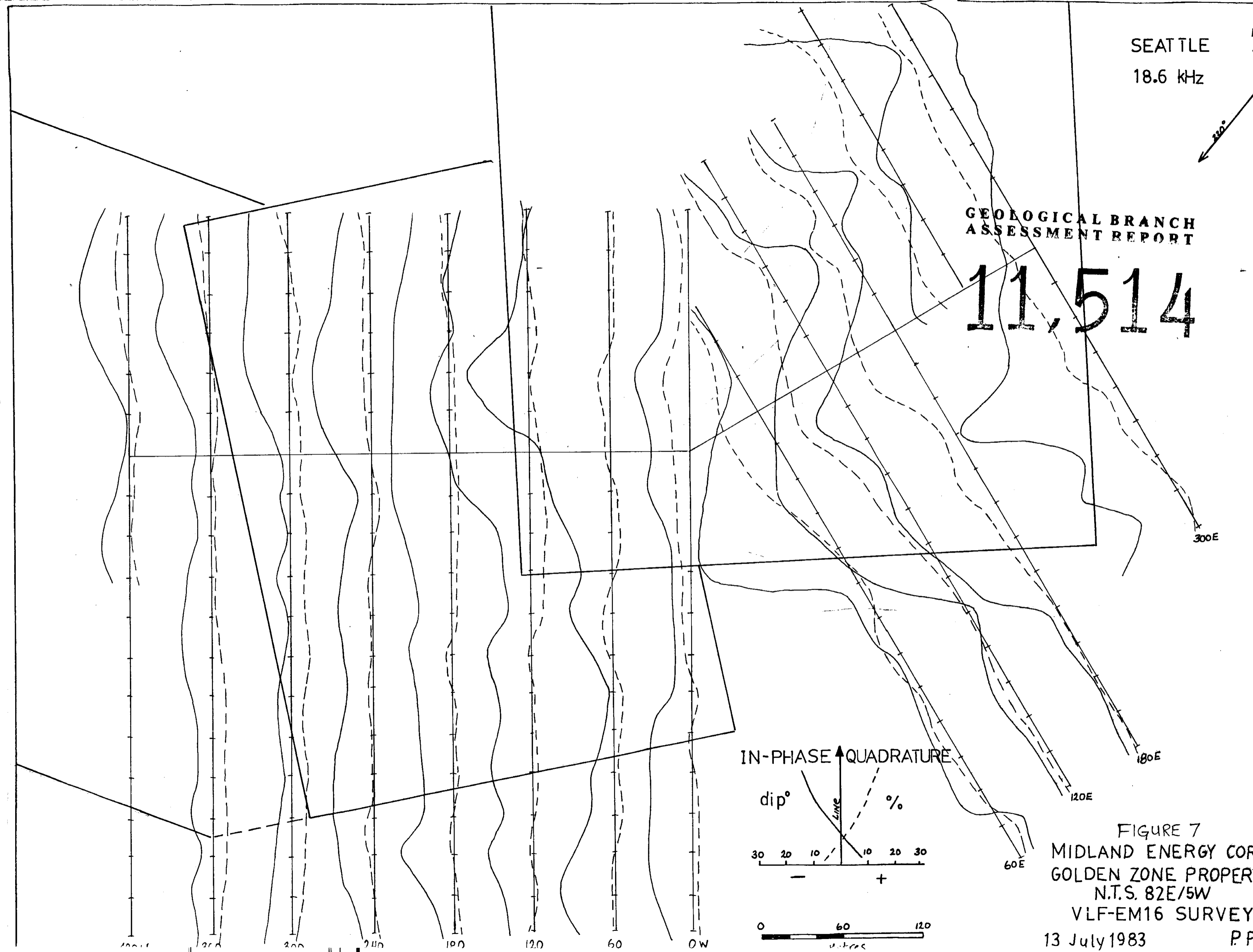
Copper Zinc
 Silver Arsenic
 (PPM)

0 60 120
Metres

SEATTLE
18.6 kHz

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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IN-PHASE QUADRATURE

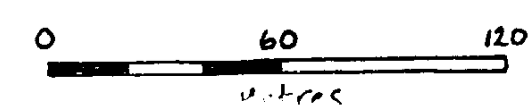
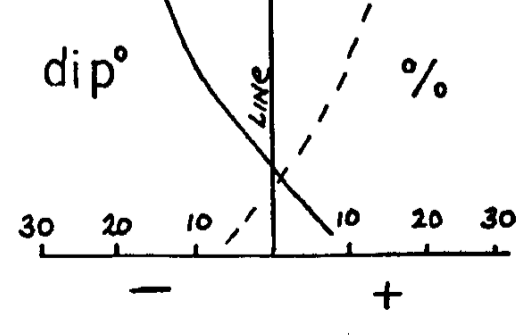


FIGURE 7
 MIDLAND ENERGY COR
 GOLDEN ZONE PROPER
 N.T.S. 82E/5W
 VLF-EM16 SURVEY
 13 July 1983 P.F.