

86-176-15072

GEOCHEMICAL  
and  
GEOPHYSICAL  
REPORT ON THE  
GOLDEN GROUP CLAIMS  
HEDLEY, B. C.

OSOYOOS MINING DIVISION  
BRITISH COLUMBIA

FILMED

---

PROPERTY : LATITUDE - 49° 26.1' NORTH  
LONGITUDE - 119° 59.5' WEST  
: NTS 82E/5W

OWNER/OPERATOR : R. B. STEWART  
#1403-650 16th Street  
West Vancouver, B.C. V7V 3R9

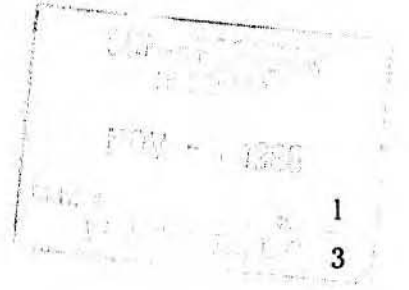
WRITTEN BY : R. T. McKNIGHT, P.Eng.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

DATED : March 20, 1986

15,072

## TABLE OF CONTENTS



SUMMARY	1
LOCATION	3
ACCESS AND PHYSIOGRAPHY	3
CLAIMS	4
HISTORY	4
REGIONAL GEOLOGY	6
PETROGRAPHIC ANALYSIS	6
GEOCHEMISTRY	7
GEOPHYSICAL SURVEY	8
MAGNETOMETER	9
VLF-EM	9
WESTERN BOUNDARY SURVEY	10
SHAFT REHABILITATION	11
CONCLUSIONS	11
RECOMMENDATIONS	12
DETAILED COST STATEMENT	15
CERTIFICATE OF QUALIFICATIONS	16
BIBLIOGRAPHY	17
MAP 1 - LOCATION	24
MAP 2 - CLAIM MAP	25
MAP 3 - SOIL AND ROCK GEOCHEMISTRY	In Pocket
MAP 4 - GOLDEN ZONE FR and GOLD 1 VLF-EM PROFILES	In Pocket
MAP 5 - B.C.FR: VLF-EM PROFILES	26
MAP 6 - GOLDEN ZONE FR: WESTERN BOUNDARY SURVEY	27
APPENDIX 1 - PETROGRAPHIC ANALYSIS	28
APPENDIX 2 - SOIL AND ROCK GEOCHEMISTRY	34
APPENDIX 3 - B.C. FR: CORRECTED MAGNETOMETER READINGS	39
APPENDIX 4 - B.C. FR: MAGNETOMETER PROFILES	40
APPENDIX 5 - GOLD 1: VLF-EM FILTERED READINGS	48
APPENDIX 6 - GOLDEN ZONE FR: VLF-EM FILTERED READINGS	50
APPENDIX 7 - B.C. FR: VLF-EM FILTERED READINGS	52

# GEOCHEMICAL and GEOPHYSICAL

## REPORT ON THE

### GOLDEN GROUP CLAIMS

#### SUMMARY

The Golden Group Claims are located approximately 31 kilometres west of Penticton, B.C. (see Map 1) in the Osoyoos Mining Division at 49° 26.1'N Latitude and 119° 59.5'W Longitude (NTS 82E/5W). Altitude ranges from 1550 metres to 1900 metres. Terrain is gently rolling, heavily treed with second growth timber and drainage is west to Hedley Creek. Good road access to and through the claims is from the Mascot Gold Mines road.

The claims are underlain primarily by granitic rocks of the Okanagan Batholith near its contact with Nicola Group of Upper Triassic metavolcanics. Both groups are host to the Hedley Mining camp to the south with the Nicola series the more favourable.

Reconnaissance geochemical, geophysical surveys, prospecting, surveying of a claim line and partial rehabilitation of an old shaft were completed. Eight-eight soil and rock samples were taken, 10.35 line kilometres of VLF-EM readings completed, 2.7 line kilometres of magnetometer results recorded, a section of claim boundary surveyed and a shaft collar stabilized. This work continued the program started in 1984 to establish a basis for a more intensive exploration commitment in the future.

Anomalous concentrations of Au and Ag occur on the GOLDEN ZONE FR, GOLD 1 and the NICKEL 3 with additional secondary targets identified. The VLF-EM survey concurred with work by others on adjacent ground and was coincident with a geochemical anomaly on the GOLDEN ZONE FR. A northwest-southeast trending structure is evident on the B.C. FR claim. Further investigation on the GOLD 1 of two VLF-EM targets is warranted. A strong VLFEM conductor correlated with the airborne geophysical survey (Mark, 1985) across the B.C. FR and GOLD 1 claims and supported the airborne survey results and conclusions. A western boundary survey established that an old shaft is located on the GOLDEN ZONE FR. The shaft corresponds with geochemical anomalies and rehabilitation at the collar was initiated.

Sufficient work was completed, data obtained and targets identified to recommend a comprehensive program of mapping, geochemical and geophysical exploration of the property with followup investigation of anomalous areas to include diamond drilling. A Three Phase program is recommended totalling \$441,800 with the First Phase estimated at \$ 96,800. All phases are contingent on an engineer's report and recommendations.

## LOCATION

The Golden Group claims are located approximately 31 kilometres West of the town of Penticton B. C. (see Map 1) in the Osoyoos Mining Division at Latitude of 49 degrees 26.1 minutes North, Longitude 119 degrees 59.5 minutes West. NTS mapsheet is 82 E/5W. Altitude ranges from 1550 meters to 1900 meters ASL.

## ACCESS AND PHYSIOGRAPHY

Good road access to much of the property is available by four wheel drive vehicle over a rough track leading northwesterly from the Mascot Gold Mines road. This access, which traverses the claim group, leads eventually to the Golden Zone property (a former gold mine), which is adjacent to the claim group. About one kilometer from the minesite, an old sideroad leads down to Hedley Creek. At one time this road was a main route up from the town of Hedley to the Golden Zone, but the track is now heavily overgrown with small saplings. The road is barely passable to 4 x 4's as far as Hedley Creek where an old bridge is washed out.

The claim group is heavily treed with second-growth timber interspersed with swampy patches and old burn areas. The terrain is gently rolling high plateau with infrequent rock outcrop. Drainage is to the west into Nickel Plate or Strayhorse Creeks, tributaries of Hedley Creek. Snowfall is probably considerable in winter months (the Apex ski area is nearby) thus restricting access in this season to snowmobile or snowshoes. The area is generally dry in summer with warm days and cool nights.

## CLAIMS

The Golden Group claims are registered to Raymond B. Stewart of West Vancouver, B. C. The group is comprised of the

<u>CLAIM NAME</u>	<u>RECORD NUMBER</u>	<u>RECORD DATE</u>
NICKEL 2	2177( 1)	January 28, 1985
NICKEL 3	2180( 1)	January 29, 1985
NICKEL FR.	2153( 1)	January 7, 1985
HEDLEY	2121(10)	October 16, 1984
HEDLEY 1	2122(10)	October 16, 1984
HEDLEY 2	2123(10)	October 16, 1984
GOLD FR.	2124(10)	October 17, 1984
GOLD 1	2141(11)	November 14, 1984
GOLD 2	2142(11)	November 14, 1984
B.C.FR.	2130(10)	October 19, 1984
GOLDEN ZONE FR.	2129(10)	October 19, 1984

## HISTORY

The Hedley area in the late 1800's and early part of this century has been the scene of extensive gold mining and exploration activities. The ore deposits were first discovered in 1896 and by 1899 a wagon road had been constructed up to the portal on Nickel Plate Mountain and a tramway built to deliver ore to the mill in the Similkameen Valley. The mines operated until the 1950's. Gold production totalled about 1,500,000 ounces at an average grade of 0.45 oz/ton.

In 1900, a satellite camp was established several miles north to develop and explore a gold-bearing fissure vein deposit. This vein system trends east-west for over 1200 feet into the 1 x 4 mile roof pendant of Hedley metavolcanics. The property,

now called the Golden Zone consisting of four Crown Grants, is near the northern end of the claim group. By 1910 two shafts and some drifting were in place along with a stamp mill. The property lay dormant until the mid-1930's when additional development was undertaken, including upgrading of the road up Hedley Creek for automobile traffic. Various reports have described the deposit which has in previous years assayed gold as high as 1.9 oz/ton. Accessory mineralization consists of arsenopyrite, pyrite, sphalerite and chalcopyrite.

Midland Energy Corporation purchased three of the Crown Grants and in preliminary surface sampling obtained values to .568 oz/ton Au and 6.56 oz/ton Ag (Cruz, 1982). Drill intersections as high as .414 oz/ton Au and 5.37 oz/ton Ag across 5 feet were encountered at 60-65 feet (Peto, 1983).

The area surrounding the Golden Zone Camp had not been investigated until the current work was undertaken to explore specific areas in a large claim block staked by R.B. Stewart of West Vancouver, B.C. An AIRBORNE GEOPHYSICAL SURVEY (Mark, 1985) of this claim block suggested a more southerly (200 to 2000 metres) location of the Nicola/Nelson contact than has been heretofore expected. This coupled with several VLF-EM conductors and lineations established the purpose of the current program of prospecting, soil and rock sampling and geophysical surveys to develop a data base and familiarity with the property.

Recently, the entire Hedley area has been experiencing a revival of exploration interest. Only 2 km south of the claim block, Mascot Gold Mines is developing an open pit gold mine on the site of the original Hedley Mascot operation and this has spurred exploration throughout the area.

## REGIONAL GEOLOGY

No mapping was undertaken in 1985. Bostock's regional mapping in 1927 (Olalla mapsheet) show the claim group to be underlain primarily by granites and granite porphyries of the Okanagan Batholith. A roof pendant of marine deposited sediments and volcanic tuffs belonging to the Nicola Group of Upper Triassic Age underlies the northern part of the property. As noted above the contact, as suggested by the airborne geophysical survey, could be further south. Both groups are host to the Hedley Mining Camp with the Nicola being regarded as the more favourable.

Outcrops are not plentiful and are generally, highly weathered. The intrusives in this area are coarse to medium-grained and occasionally prophyritic with feldspar phenocrysts. Magnetite is commonly present as small crystals and as coatings on fracture surfaces.

## PETROGRAPHIC ANALYSIS

Three petrographic analyses (see Appendix 1) on rock samples taken on the GOLDEN ZONE FR (see Map 3) describe the altered volcanics in detail. They are classified as altered andesitic tuffs. Minerals are:

	L19 3 + 05 <u>EAST PIT</u>	L17 2+50N <u>SHAFT</u>	L13 <u>3+75N</u>
plagioclase	60%	38%	45%
tremolite		22	20
diopside	17	18	20
quartz vein		8	
quartz	12	6	7
garnet		5	
K-spar	6	minor	4
plagioclase (vein)	3		
pyrrhotite	2	2	4
sphene	minor	1	minor
calcite			trace
chalcopyrite	trace	trace	trace
epidote	trace	trace	

(Appendix 1-Vancouver Petrographics Ltd., A.L.Littlejohn, M.Sc.)



## GEOCHEMISTRY

Eighty-eight soil and rock samples were obtained and submitted for assay (see Appendix 2 and Map 3). Soil samples were taken from the 'B' horizon by means of a mattock, placed in kraft paper bags, dried, sieved to -80 or -20 mesh and analyzed for 30 elements by induced coupled plasma spectrometry (ICP) at Acme Analytical Laboratories in Vancouver, B.C. All samples on the GOLDEN ZONE FR except G.Z.FR L20 1+40N+25W, G.Z.FR L5 0+70N+17W, G.Z.FR L3 3+10N+7W and G.Z.FR DDH-3 were sieved to -80 mesh. A .5 gram split was digested with 3 ML 3-1-2 HCL -HN03-H20 at 95° C for one hour and diluted to 10 ML with water. Au ppb was by fire assay and atomic absorption from a 10 gram sample. All other samples including those excepted above were sieved to -20 mesh and pulverized prior to digesting and Au ppb was by atomic absorption from a 10 gram sample.

Samples were taken in five areas over the claims to indicate values in these sections of the total claim block and to aid in establishing a data base for future statistical analysis on the properties held by R.B. Stewart. The areas sampled for this report are the GOLDEN ZONE FR, GOLD 1, HEDLEY 1, NICKEL 3 and B.C. FR. Based on a 355 sample base taken over all of the Stewart claims the following statistics are obtained:

<u>SAMPLES 355</u>	<u>Au</u>	<u>Ag</u>	<u>As</u>
Mean	7 ppb	.3 ppm	12 ppm
Std.Dev.-Sample	17 ppb	1.3 ppm	28 ppm
Std.Dev.-Pop	17 ppb	1.3 ppm	28 ppm
Variance	277 ppb	1.7 ppm	782 ppm
Mean + 1 Std.Dev.	24 ppb	1.6 ppm	40 ppm

While arsenic values are not plotted on Map 3, they provide additional justification for high Au and Ag values were it

is coincidentally anomalous due to its importance in the Mascot camp to the south.

In addition, anomalous As values are secondary targets for future exploration particularly where elevated As levels coincide with Au and Ag values above Mean. The following are primary and secondary anomalous locations:

<u>SAMPLE LOCATION</u>	<u>Au ppb</u>	<u>Ag ppm</u>	<u>As ppm</u>
GOLDEN ZONE FR			
<u>Primary</u>			
L13 3+75N 'B' Pit Rock	790	175.4	13,253
L19 3+05N West Pit Rock	60	.9	9
L13 7+50N Pit	45	.8	333
<u>Secondary</u>			
L 0+75 10	20	.1	60
L 3+50 2	11	.3	44
L 3+50 1	3	.5	70
G.Z. DDH-3	12	.9	56
GOLD 1			
<u>Primary</u>			
GO-1 Hedley L2 425W+15S	75	22.7	359
<u>Secondary</u>			
GOLD 1 Hedley L3 4+00W	17	.6	20
NICKEL 3			
<u>Secondary</u>			
NICKEL 3 L2 8+00S	27	.1	2

#### GEOLPHYSICAL SURVEY

Two geophysical methods were employed in 1985, magnetometer and VLF-EM.

## MAGNETOMETER

A magnetometer survey was conducted with a Scintrex MP-2 proton precession instrument over an east-west grid covering the BC FR claim. Lines were spaced 25 meters and readings recorded every 25 meters. Loops were made back to the baseline (B/L 0+00) to allow correction for diurnal variations in the magnetic field. Corrected readings are given in Appendix 3.

The mag profiles reveal a northwest-southeast trending structure in the eastern part of the grid (see Appendix 4). The feature is distinct and the structure would, based on existing geologic mapping, be within the area that the metavolcanics occur. No interpretation can be made at present.

## VLF-EM

A Sabre Electronics VLF-EM, model 27 was used and measurement taken by monitoring signals from Seattle, Washington (24.8 khz) on the following grids:

GOLD 1	Lines - 25 m., Readings 25 m
GOLDEN ZONE FR.	Lines - 50 m., Readings 20 m
B.C. FR	Lines - 25 m., Readings 25 m

The data was Fraser filtered and is listed in Appendix 5 for GOLD 1 and Appendix 6 for GOLDEN ZONE FR and Appendix 7 for B.C. FR.

Peto (1983) notes the "mineralized zone appears to give a high, negative amplitude response but no clear conductor axis appears to be indicated." This confirms results at both the GOLDEN ZONE FR and GOLD 1.

On the GOLD 1 (see Map 4) relatively strong amplitudes occur at L6 and L5 2+75W to 3+25W. To a lesser degree they are maintained at L4 3+00W to 3+75W, L3 3+00W to 3+50W, L2 3+25W

to 3+75W and L1 4+00W to 4+75W. Crossovers on L1 to L8 striking northwesterly at 3+00W through to 4+75W are coincident with the geochemical anomaly at L2 4+75W+15S and should be investigated further.

A high negative response on the GOLDEN ZONE FR (see Map 4) at L19 3+00N and L17 2+80N corresponds with Peto's (1983) results. A similar structure is suggested at L7 to L17 0+40N to 1+20N. Crossovers striking northwesterly across the claim at 0+60N and 1+00N to 2+60N and 3+20N are coincident with high geochemistry values in the northwest sector of the claim and higher than the mean values found in the southeast corner.

On the B.C. FR (see Map 5) the strong negative amplitudes support the magnetometer results to indicate metavolcanics. These strong crossovers maintained at 1+00E through 1+50E, 1+50E to 2+25E and 2+75E through 3+50E on all lines 1 to 6 suggest continuous conductors.

The crossovers on the GOLD 1 and the B.C. FR correspond to conductor 'a' described in the airborne geophysical report (Mark, 1985). Herein, Mark noted conductor 'a' strikes N 20°E, increasing "in strength towards the south with the strongest part on the GOLD 1 claim".

#### WESTERN BOUNDARY SURVEY - GOLDEN ZONE FR 2129(10) (See Map 6)

The importance of the claim boundary in the northwest corner of the GOLDEN ZONE FR was apparent due to metavolcanic outcrops and a shaft. The southeast surveyed corner post of the GOLDEN ZONE Crown Grant L904S was located and a Kimt Kern Model Theodolite No. 303243 was employed using the original survey notes as a guide. It was established that the outcrops were on the GOLDEN ZONE FR as was the shaft.

## SHAFT REHABILITATION - GOLDEN ZONE FR

A shaft caved at the collar was located approximately 70 metres, northeast of the southeast corner of the GOLDEN ZONE Crown Grant L904S on the northwest slope of the ridge centered on the GOLDEN ZONE FR. Preliminary excavation of the shaft indicated a support structure was necessary to prevent slumping of the walls. A log cribbing and platform was constructed to provide a station from which to continue excavation and to contain the loose overburden at the collar.

Approximately ten (10) feet of the shaft was stabilized with at least eight (8) feet of loose fill remaining to be excavated. This should be completed and the exposed rock examined for mineralization.

## CONCLUSIONS

Based on the above, I have concluded the following:

1. Anomalous concentrations of Au, Ag and As occur in the northwest corner of the GOLDEN ZONE FR and at L2 425W+15S on the GOLD 1 claim.
2. Secondary geochemical targets are on the GOLDEN ZONE FR at L0+75 10, L3+50 1 and 2 and G.Z. DDH-3; on the GOLD 1 at L3 4+00W; and on the NICKEL 3 at L2 8+00S.
3. A northwest/southeast trending structure was noted by the magnetometer survey on the B.C. FR claim.
4. Further investigation on the GOLD 1 of VLF-EM results at L6 and L5 2+75W to 3+25W and crossovers on Lines 1 to 8 striking northwesterly at 3+00W through to 4+75W coincident with a geochemical anomaly at L2 4+25W+15S should be completed.

5. The VLF-EM survey concurred with previous work by others of the northwest corner of the GOLDEN ZONE FR with a possible similar structure from L7 to L17 at 0+40N to 1+20N. This corresponds with high geochemistry values and warrants further investigation.

6. The B.C. FR VLF-EM survey revealed three strong conductors striking northeast across the claim. This corresponds with conductor 'a' of the airborne geophysical results (Mark, 1985) with continuation onto GOLD 1. Further investigation of this strong anomaly is warranted.

7. Rehabilitation of the old shaft situated on the GOLDEN ZONE FR has provided sufficient values to indicate the original purpose was to explore mineralization on the ridge centered on the GOLDEN ZONE FR.

8. The western boundary of the GOLDEN ZONE FR was established and it was determined an old shaft is located on the claim.

9. In addition to the specific targets identified in this broad survey, sufficient data has been identified on the claim block to recommend a full program of exploration over the properties to provide an accurate evaluation of the potential for mineralization as has been found in the rest of the Hedley camp.

## RECOMMENDATIONS

A three phase program is recommended.

### PHASE 1

Geological mapping, geochemical sampling and a geophysical program to cover the claim group with detailing of anomalous

areas.

Geological mapping	\$ 15,000
Geochemical sampling, grid layout	15,000
Geophysical survey	15,000
Geochemical analyses	12,000
Food and lodging	5,000
Equipment and supplies	2,000
Transportation	7,000
Data treatment and reporting	7,000
Typing and drafting	3,000
Engineering and supervision	<u>7,000</u>
	88,000
Contingencies @ 10%	<u>8,800</u>
	\$ <u>96,800</u>

PHASE 2

A detailed geophysical survey, rock geochemistry and limited diamond drilling to explore favourable targets.

Detailed geophysical survey	\$ 7,000
Rock geochemistry	2,000
Geological mapping and support	12,000
Dozer trenching	7,500
Diamond drilling	72,000
Geochemical analyses	1,500
Core analyses	3,000
Food and lodging	4,000
Equipment and supplies	2,500
Transportation	4,000
Data treatment and reporting	3,000
Typing and drafting	2,500
Engineering and supervision	<u>5,000</u>
	126,000
Contingencies @ 15%	<u>18,900</u>
	\$ <u>144,900</u>

PHASE 3 - Diamond Drilling

Diamond drilling incl. mob-demob. bits, core boxes, etc. 950 m @ \$130/m	\$123,500
Bulldozer pad and road construction, drill skidding	10,500
Geological support	12,000
Assay analysis	2,500
Food and lodging	3,000
Equipment and supplies	2,000
Transportation	3,000
Permits and compliance	7,000
Engineering and supervision	5,000
Report	<u>5,500</u>
	174,000
Contingencies @ 15%	<u>26,100</u>
	<u>\$200,100</u>

Results of each Phase should be reviewed, evaluated and reported by an engineer with continuation of the program based upon favourable recommendations.



DETAILED COST STATEMENT  
1985 FIELD PROGRAM

A. Wages and Fees

1. R.T. McKnight, P.Eng. (3.25 days @ \$300/day), Aug. 31; Sept. 1, 2, 1985	\$ 975.00
2. Raymond W.B. Stewart (11 days @ \$200), June 28,29,30; July 1; Aug. 12,13,14; Sept 1,2, 1985	2,200.00
3. Michelle Johnson (5 days @ \$75/day), June 28,29; Aug. 12,13,14, 1985	375.00
4. Paul W. LaFontaine (8 days @ \$150), June 28,29,30; July 1; Aug. 30,31; Sept 1,2, 1985	1,200.00
5. Roderick S. Stewart (5 days @ \$175), June 28,29; Aug. 12,13,14, 1985	875.00

B. Food, Accommodation (32 man-days) 1,029.82

C. Transportation

4 wheel drive, 4 trips Vancouver - property 592.46

D. Analyses

88 samples (\$14.32/sample) 1,260.02

E. Equipment

Magnetometer, 7 days @ \$175/day 1,225.00

VLF-EM, 7 days @ \$50/day 350.00

F. Report

Drafting maps, typing, prints, photo copying, materials 437.86

TOTAL \$10,520.16

## CERTIFICATE OF QUALIFICATIONS

I, Robert T. McKnight, P.Eng., residing in North Vancouver, B.C. do certify that:-

1. I am a registered Professional Engineer in the Province of British Columbia.
2. I have a degree of Bachelor of Applied Science in Geological Engineering from the University of British Columbia. I am a member of the Canadian Institute of Mining and Metallurgy.
3. I have practiced as a geologist, geophysicist and mining financial analyst in B.C., Alberta, and other Provinces of Canada since 1972.
4. I am the author of the Report entitled "GEOLOGICAL and GEOPHYSICAL REPORT ON THE GOLDEN GROUP CLAIMS". The report is based on a trip to the property by myself and on fieldwork supervised by myself.
5. I have no financial interest in the ownership of the property nor do I expect to receive such interest.

Respectfully Submitted,

*Robert T. McKnight*

Robert T. McKnight, P.Eng.  
Vancouver, B.C.  
March 20, 1986



## B-1

BIBLIOGRAPHY

- AMENDOLAGINE, E. 1982. Geology and soil geochemistry survey report, GM claim Similkameen mining division. Assessment report 10013, part 1, for Kelly Kerr Energy Corporation.
- 1982. Geology and soil geochemistry survey report, EA claim, Similkameen mining division. Assessment report 10014, part 1, for Tuscaloosa Oil & Gas Inc.
- 1982. Geology and soil geochemistry survey report, VA claim, Similkameen mining division. Assessment report 10015, part 1, for Kadrey Energy Corporation.
- 1982. Geology and soil geochemistry survey reports, JA claim, Similkameen mining division. Assessment report 10016, part 1, for Berle Oil Corporation.
- BEAUDOIN, P.G. 1971. Work report for the Hed Property, 20 miles west of Penticton, B.C. Assessment report 3399 for Canex Aerial Exploration Ltd.
- BELLAMY, Allan F. 1981. Geological, geochemical, geophysical surveys of the Oro-Zone-Reno-Neva claims group. Apex-Nickel Plate Lake area, Osoyoos mining division. Assessment report 9706 for Gordon Ramsay.
- B.C. MINISTER of MINES Annual Reports. 1909-10, 1913, 1927-28, 1931-34, 1936-37.
- CAMSELL, Charles. 1910. The geology, and ore deposits of Hedley Mining District, British Columbia. Geological Survey of Canada, Memoir 2, 218 p.
- CRUZ, E.D. 1982. Report of the Golden Zone Group, Twenty Mile Creek, Hedley, Osoyoos mining division, B.C. Report for Midland Energy Corporation.
- GOLDSMITH, Locke B. 1980. Hedley area gold property, NN, JB, KR, LF, and Skidoo claims. Assessment report 8727 for Mercedes Petroleum Ltd.
- GRUENWALD, W. 1979. Geological, geochemical and geophysical report on the Cathedral claims Osoyoos and Similkameen mining divisions. Assessment report 7511 for Union Oil Company of Canada Ltd.
- GUTRATH, G. 1972. Geochemical survey report of the Patricia claim group, Osoyoos mining division, B.C. Assessment report 3561 for Corval Resources Ltd.

---- 1973. Geological and geochemical report on the Patricia claim group, Osoyoos mining division, B.C. Assessment report 4233 for Corval Resources Ltd.

HAINSWORTH, W.G. May 1, 1980. Report on the Nickel Plate property Osoyoos mining division, Hedley, B.C., for Mascot Nickel Plate Mines Ltd.

---- August 1, 1980. Progress report on the Nickel Plate property.

---- July 1, 1981. Summary of the 1980-81 exploration and rehabilitation program and the ongoing exploration program at the Nickel Plate property, Osoyoos mining division, for Mascot Gold Mines Limited.

---- December 17, 1982. Assessment report on work completed on crown grants: Iron Duke L. 1600 and Copperfield L 742, Osoyoos mining division, British Columbia. Assessment report 11016 for Mascot Gold Mines Limited.

HANSEN, M.C. 1985. Geophysical report on the airborne magnetic and VLF-EM surveys over the Tough Oaks claim group, Broken Creek, Hedley area, Osoyoos mining division. Report for Charles Marshall.

JOHNSON, Darrel L. 1978. Report on percussion drilling, McNulty mineral claims, Osoyoos mining division. Assessment report 6822 for Lacana Mining Corporation.

---- 1981. A report on geochemical sampling on the Bluff 1 and 2, Arseno and Smith mineral claims, Similkameen mining division. Assessment report 9408 for Lacana Mining Corporation.

JONES, Harold M. 1982. A geological and geochemical report on Goldmine and Goldhill claims, Similkameen mining division, B.C. Assessment report 10882 for Philex Gold and Energy Corporation.

JURY, Rae G. 1969. Geological and geophysical survey report on Stenwinder Mountain property, Hedley, B.C. Assessment report 2182 for Greyledge Mines Ltd.

---- 1970. Magnetometer survey, Hedley property, B.C. Assessment report 2183 for Greyledge Mines Ltd.

KELLY, Sherwin F. 1983. Report on a magnetometer survey of Orion, R.J. Group, John and Jim Group claims, Osoyoos mining division, B.C. Assessment report 11534 for Primont Resources Ltd.

LAMB, John, 1967. Geological report on the Good Hope - Nighthawk claims (Jumbo Group) Hedley area, B.C. Assessment report 971 for Highpoint Mines Ltd.

## B-3

- LEIGHTON, D.G. 1979. Drilling report on the Ash 1-3 mineral claims, Agur-Ash property, Osoyoos mining division, B.C. Assessment report 7362 for -----
- LOGAN, James M., and GOLDSMITH, Locke B. 1981. Geology and soil geochemistry of the Cahill Group and adjoining areas, Osoyoos mining division, Hedley, B.C. Report for Arctex Engineering Services.
- MACDONALD, Colin C. 1976. Geology, geochemistry and diamond drilling of the Hed claims, Similkameen mining division, British Columbia. Assessment report 6060 for Canadian Occidental Petroleum Ltd.
- MACRAE, Rod, and BARAKSO, J. 1970. A geochemical and linecutting report on the Hed group, Osoyoos mining division, B.C. Assessment report 2709 for Anaconda American Brass Ltd.
- McKNIGHT, Robert T. 1984. Assessment report on the WB-1 and WB-3 claims, Osoyoos mining division, B.C. Report for Loss Lament Investments Ltd.
- 1984. Assessment report on the Plate, Plate 1 and WB-4 claims, Osoyoos mining division, B.C. Report for the Okanagan Mining Syndicate.
- 1985. Assessment report on the Nickel Group claims, Osoyoos mining division, B.C. Private report for Raymond B. Stewart.
- MARIANO, Alejo, Jr. 1982. Prospecting report on the Goldmine mineral claim, Similkameen mining division, B.C. Assessment report 10882 for Philex Gold and Energy Corporation.
- MARK, David G. 1983. Geophysical report on magnetic and VLF-EM surveys over the Jan claim group and the Louise claim group, Hedley area, Similkameen and Osoyoos mining divisions, B.C. Assessment report 11103 for Kirby Energy Ventures Inc.
- 1983. Geophysical report on airborne magnetic and VLF-EM surveys over the Golden Mist, Gold Haze, Gold Breeze, Gold Cloud and Gold Dog claims, Hedley area, Osoyoos mining division, B.C. Assessment report for Golden Dawn Exploration Ltd.
- 1983. Geophysical report on airborne magnetic and VLF-EM surveys over the Gold Star, Gold Bite, Gold Frog, Golden Flea and Gold Tooth claims, Hedley area, Osoyoos and Similkameen mining divisions, B.C. Assessment report for Tunstall Resources Ltd.
- 1983. Geophysical report on a VLF-EM survey over the Sun 1 and 2 claims, Hedley area, Osoyoos mining division, B.C. Assessment report 11274 for Gold Cup Resources Ltd.

## B-4

- 1983. Geophysical report on a VLF-EM survey over the Skidoo 1 and Windy 2 claims, Hedley area, Osoyoos mining division, B.C. Assessment report 11855 for Western Informational Services Ltd.
  - 1984. Geophysical report on airborne magnetic and VLF-EM surveys over the Hedley property, Osoyoos and Similkameen mining divisions, B.C. Assessment report 11874 for Pacific Seadrift Resources Ltd.
  - 1983. Geophysical report on a VLF-EM survey over the Skidoo 1 and Windy 2 claims, Hedley area, Osoyoos mining division, B.C. Assessment report 11993, part 1, for Western Informational Services Ltd.
  - 1984. Geochemical report on a soil sample survey over the Skidoo 1 and Windy 2 claims, Osoyoos mining division, B.C. Assessment report 11993, part 2, for Western Informational Services Ltd.
  - 1983. Geophysical report on airborne magnetic and VLF-EM surveys over the Jan claim group and Louise claim group, Hedley area, Osoyoos and Similkameen mining divisions, B.C. Assessment reports 12019 (for Jan claims) and 12020 (for Louise claims) for Kirby Energy Ventures Inc.
  - 1985. Geophysical report on airborne magnetic and VLF-EM surveys over the Golden Zone property, Hedley area, Osoyoos mining division, B.C. Private report for the Okanagan Mining Syndicate and R.B. Stewart.
- OLSON, D.C. 1982. Geology report on the MA claim, Similkameen mining division. Assessment report 10019, part 1, for Emanuel Amendolagine.
- 1982. Geology report on the SA claim, Similkameen mining division. Assessment report 10020, part 1, for Emanuel Amendolagine.
- PATMORE, W.H. 1941. Pseudo-pyrometasomatic gold at Hedley, British Columbia. Unpublished PhD thesis, Princeton University, 196 p.
- PEATFIELD, G.R. 1978. Geologic history and metallogeny of the 'Boundary District', southern British Columbia and northern Washington. Unpublished PhD thesis, Queen's University, 250 p.
- PETO, Peter. 1983. Geological, geochemical and geophysical report on the Golden Zone property, Osoyoos mining division, B.C. Report for Midland Energy Corporation.

- 1983. Geochemical, geophysical and diamond drilling report on the Golden Zone property, Osoyoos mining division, B.C. Report for Midland Energy Corporation.
- PEZZOT, E. Trent, and WHITE, Glen E. 1982. Geophysical report on an airborne VLF-EM and magnetometer survey, GM claim, Similkameen mining division, B.C. Assessment report 10013, part 2, for Kelly Kerr Energy Corporation.
- 1982. Geophysical report on an airborne VLF-EM and magnetometer survey, EA claim, Similkameen mining division, B.C. Assessment report 10014, part 2, for Tuscaloosa Oil & Gas Inc.
- 1982. Geophysical report on an airborne VLF-EM and magnetometer survey, VA claim, Similkameen mining division, B.C. Assessment report 10015, part 2, for Kadrey Energy Corporation.
- 1982. Geophysical report on an airborne VLF-EM and magnetometer survey, JA claim, Similkameen mining division, B.C. Assessment report 10016, part 2, for Berle Oil Corporation.
- 1982. Geophysical report on an airborne VLF-EM and magnetometer survey, MA and SA claims, Similkameen mining division, B.C. Assessment report 10019, part 2, for Emanuel Amendolagine.
- 1982. Geophysical report on an airborne VLF-EM and magnetometer survey, MA and SA claims, Similkameen mining division, B.C. Assessment report 10020, part 2, for Emanuel Amendolagine.
- PHENDLER, R.W. 1981. Diamond drilling report on the Mission property, Hedley, Osoyoos mining division, B.C. Assessment report 9222, part 1, for Agio Resource Corporation.
- SERAPHIM, R.H. 1982. Report on Banbury Gold Mines Ltd., Hedley, B.C.
- 1984. Report on Banbury Gold Mines Ltd., Hedley, B.C.
- SINGHAI, G.C. 1976. Report on Tough Oaks, Bwinaby, and Glynne Hill mineral claims, Broken Creek, Osoyoos mining division, B.C. Assessment report 6091 for Charles Marshall.
- SOOKOCHOFF, L. 1980. Geophysical survey (VLF-EM and magnetometer) on Tough Oaks property, Broken Creek, Osoyoos mining division B.C. Assessment report 8737 for Tricor Resources Ltd.
- 1981. Diamond drilling on Tough Oaks property, Broken Creek, Osoyoos mining division, B.C. Assessment report 9780 for Tricor Resources Ltd.

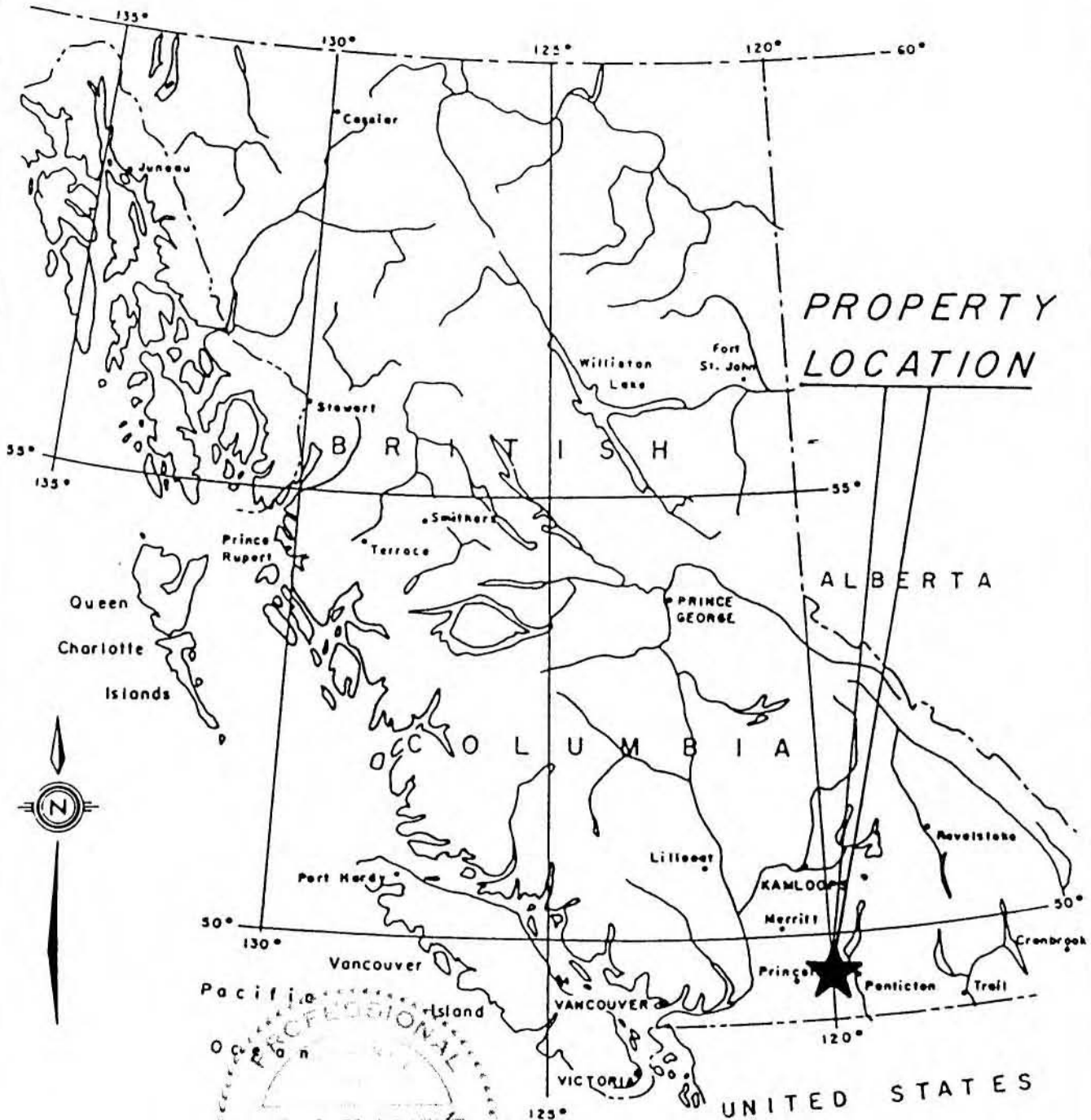
## B-6

- 1984. Geological evaluation report for Golden Dawn Explorations Ltd. on the Hedley claim group, Osoyoos mining division. In prospectus for Golden Dawn Explorations Ltd.
- TULLY, Donald W. 1983. Assessment report on a preliminary geological and geochemical survey, Patsy 1 mineral claim, Similkameen mining division, B.C. Assessment report 11901 for Vandorex Energy Corporation.
- WESTERVELT, R.D. 1983. A preliminary report on the Cahill claim group, Hedley, B.C. Report for Barsand Resources Inc.
- WEYMARK, William J. 1980. Geological, geochemical, geophysical surveys of the Oro-Zone mineral claims group, Hedley, Nickel Plate Creek area, Osoyoos mining division, B.C. Assessment report 8753 for Gordon Ramsay.
- 1983. Geological and geophysical surveys of the Oro-Zone-Reno-Neva mineral claims group, Hedley-Nickel Plate Creek area, Osoyoos mining division, B.C. Assessment report 11687 for Gordon Ramsey.
- WHITE, Glen E., and PARENT, D. 1972. Geochemical and geophysical report, Flint claim group, Osoyoos mining division, B.C. Assessment report 3904 for Austro-Can Explorations Ltd.
- WHITE, Glen E. 1976. Geophysical report on the French Mine claims, Hedley, B.C. Assessment report 6274 for Grove Explorations Ltd.
- 1980. Geophysical report on an induced polarization survey, Flint and Mission claims, Hedley area, Osoyoos mining division, B.C. Assessment report 9222, part 2, for Agio Resource Corporation.
- WILMOT, A.D. 1980. Report on percussion drilling, Lake mineral claims, Osoyoos mining division, B.C. Assessment report 8732 for Good Hope Resources Ltd.
- 1980. Report on percussion drilling, Canty property, Osoyoos mining division, B.C. Assessment report 8786 for Good Hope Resources Ltd.
- 1981. Report on percussion drilling, Good Hope property, Osoyoos mining division. Assessment report 10196 for Good Hope Resources Ltd.
- 1981. Report on diamond and percussion drilling, Canty property, Osoyoos mining division, B.C. Assessment report 10213 for Good Hope Resources Ltd.

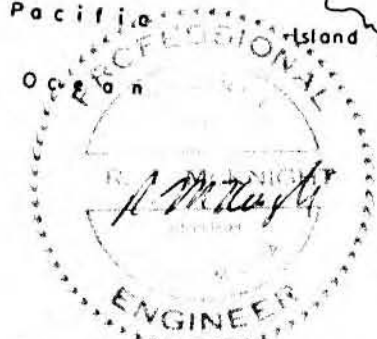


## B-7

- 1982. Report on the Canty property, diamond drilling, 1982. Osoyoos mining division, B.C. Assessment report 10800 for Good Hope Resources Ltd.
- 1982. Report on the Horsefly property, diamond drilling, 1982. Osoyoos mining division, B.C. Assessment report 10801 for Good Hope Resources Ltd.
- YOUNG, R.J. 1984. Grid construction and geochemical report on the R.J. Group, Jim Group, Orion claim, Cyrus claim, John claim, Cygon 1 claim, Cygon 2 claim, and Cygon 3 claim, Osoyoos mining division, B.C. Assessment report 12850 for Placer Development Limited.
- 1984. Grid construction, geological, geochemical and geophysical report on the Taurus, Taurus Add 1, Taurus Add 2, New Hope, Star 1, Star 2, and Star 3 mineral claims, Osoyoos mining division, B.C. Assessment report 13012 for Placer Development Limited.

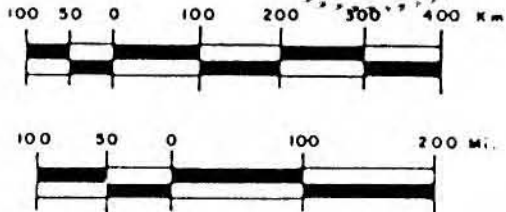


PROPERTY LOCATION

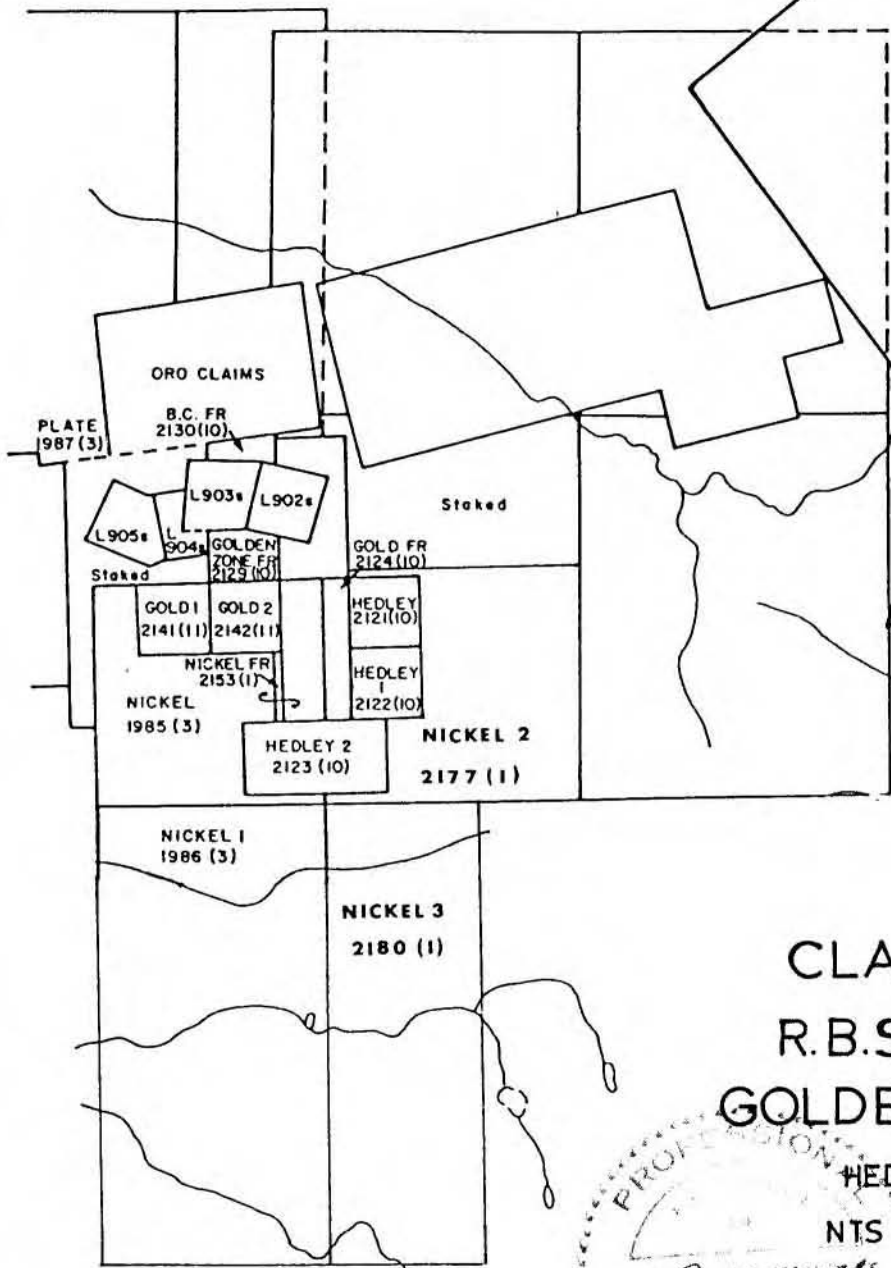


GOLDEN ZONE AREA

GOLDEN GROUP



TO ACCOMPANY REPORT BY R.T. McKNIGHT, PENG.



CLAIM MAP  
 R.B. STEWART  
 GOLDEN GROUP

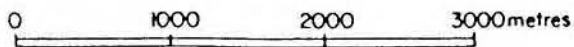
HEDLEY, B.C.

NTS 82 E 5/W

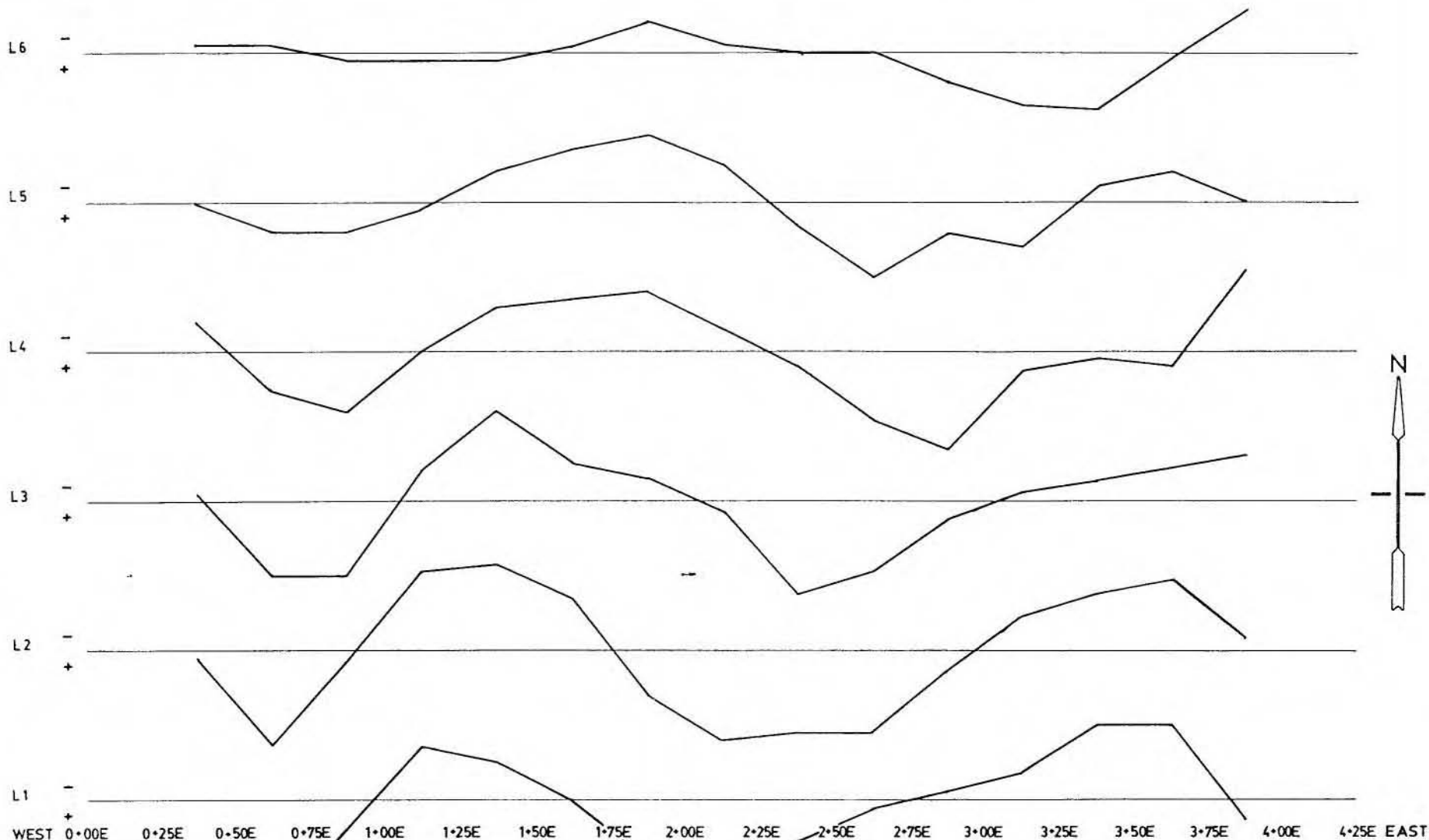
MAP 2



To accompany report by ROBERT T. MCKNIGHT, P. Eng.



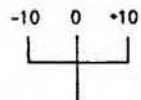
Scale 1:50,000



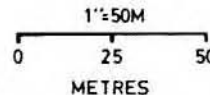
-26-

82E/5W  
MARCH 1986

SEATTLE 24.8 khz.

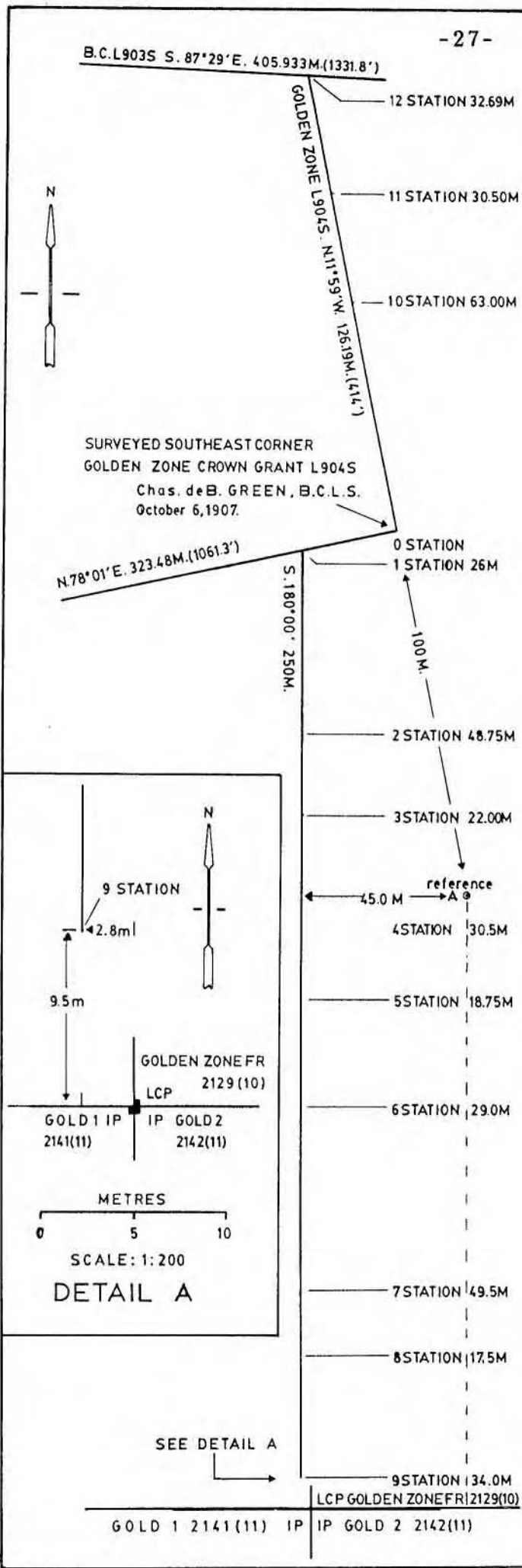


B.C. FR  
VLF-EM PROFILES  
TO ACCOMPANY REPORT BY R.T. MCKNIGHT, PENG



R.B. STEWART  
GOLDEN GROUP  
HEDLEY, B. C.  
050Y005 M.D.

MAP 5

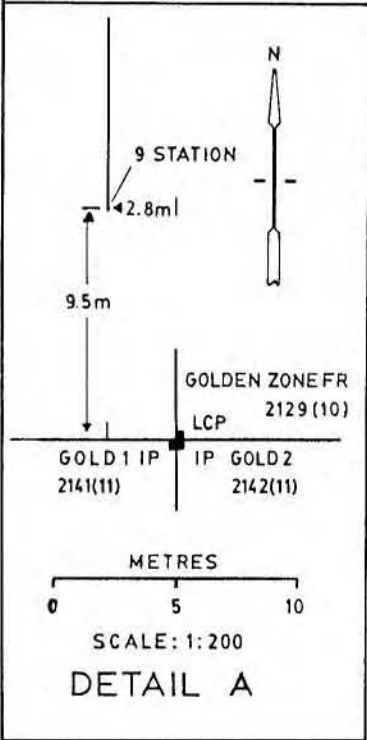


WESTERN BOUNDARY SURVEY  
GOLDEN ZONE FR 2129(10)

FIELD NOTES

KIMM KERN MODEL THEODOLITE NO 303243  
Tripod and Level

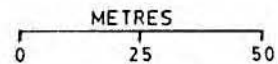
- 0 STN S.E. corner Golden Zone L904S. Sunk 10" spike into original S.E. post. With compass (theodolite) established N11°59'W. Established with a backsite reference target A-100m from Station 0. With compass established N78°01'E
- 1 STN Using rod sighted 25m. Using tape and theodolite set in line, measured 26m. T 26m Moved theodolite-sighted back to Station 0. Set theodolite at S.180°
- 2 STN Using theodolite and rod sighted 48.75 m. Moved theodolite to Station 2. 48.75m Sighted back to Station 1, back target for setting up.
- 3 STN Using theodolite and rod sighted 22.0 m. Moved theodolite to Station 3. Shot back to back target behind Station 2. 22.0m
- 4 STN Using theodolite and rod sighted 25.5 m. Using theodolite and tape added 5 m-30.5m. Moved theodolite to Station 4. 30.5m
- 5 STN Shot back to Station 3. Using theodolite and rod sighted 13.75m. Taped off with theodolite 5.0m-18.75m. Set theodolite at Station 5. Shot back to Station 4. 18.75m
- 6 STN Using theodolite and rod sighted 24.0 m. Using tape and theodolite sighted 5m-29.0m. Set theodolite to Station 6. Shot back to Station 4. 29.0m
- 7 STN Using theodolite and rod sighted 49.5 m. Set theodolite at Station 7. Sighted back to Station 4. 49.5m
- 8 STN Using theodolite and rod sighted 17.5 m. Set theodolite at Station 8. Sighted back to Station 4. 17.5m
- 9 STN Using theodolite and rod sighted 26m. Using theodolite and tape measured 8 m - 34.0m. 39.0m  
Set theodolite up at Station 9. Sighted back to Station 8. Shot distance measure from LCP's and IP's.  
LCP Golden Zone FR 2129(10), Gold 1 2141(11), Gold 2 2142(11) located 9.5 m south and 2.8 m east of Station 9.  
Set theodolite at 90° to shoot east direction. Shot back to A target.  
Set theodolite up at Station 0. Shot back to target behind Station 1. Set N78°01'E. Turned theodolite 90° to read N.11°59'W.
- 10 STN Using theodolite and rod sighted 63 m. Set theodolite at Station 10 sighted back to Station 0. 63.0m
- 11 STN Using theodolite and rod sighted 25.5 m. Using theodolite and tape measured 5.0m - 30.5m. 30.5m
- 12 STN Using theodolite and rod sighted 32.69m 32.69 m. T 126.19m



SEE DETAIL A

R.B. STEWART  
GOLDEN ZONE FR  
WESTERN BOUNDARY  
SURVEY

1:1000 RBS NTS 82E/5W MAP6  
TO ACCOMPANY REPORT BY R.I. McKNIGHT, PENG.



APPENDIX 1 - PETROGRAPHIC ANALYSIS



# Vancouver Petrographics Ltd.

JAMES VINNELL, Manager  
JOHN G. PAYNE, Ph.D. Geologist

P.O. BOX 39  
8887 NASH STREET  
FORT LANGLEY, B.C.  
VOX 1J0

PHONE (604) 888-1323

Invoice 5274

Report for: R. B. Stewart,  
Westbank Leasing Ltd.,  
1725, Two Bentall Centre,  
Vancouver, B.C.,  
V7X 1K1.

July 31, 1985

Samples: L19-3+05 East Pit; L13-3+75N; L17-2+50N Shaft.

## Summary:

All three samples are altered andesitic tuffs, consisting of a very fine plagioclase matrix with scattered quartz and plagioclase fragments. L19-3+05 East Pit and L17-2+50N Shaft are broadly similar but have been altered slightly differently. L13-3+75N is much finer grained, is indistinctly layered and may contain large quartzitic fragments. Plagioclase fragments in all three rocks are a relatively small component.

The alteration is all of the same type but differs in some details. Diopside is common to all three rocks and forms very fine grains disseminated throughout. It is associated with disseminated pyrrhotite. In L13-3-75N large patches of poekiloblastic tremolite grains have formed around and within the large quartz fragments. Pyrrhotite is intergrown with these. In L17-2+50N Shaft there are thin veinlets and vein-like patches containing quartz and garnet; large poekiloblastic tremolite grains occur in the rock adjacent to these. Pyrrhotite is intergrown with the garnet and quartz. In L19-3-05 East Pit there are a few thin veinlets of plagioclase intergrown with pyrrhotite. No tremolite occurs in this rock.

A. L. Littlejohn, M.Sc.

RECEIVED  
AUG 1 1985

L19-3+05 East Pit: ALTERED (DIOPSIDE) ANDESITIC TUFF.

This sample is an andesitic tuff consisting of small quartz and plagioclase fragments scattered unevenly within a fine grained matrix of plagioclase. Pervasive alteration by diopside has occurred. This is associated some pervasive K-spar alteration. Pyrrhotite is disseminated throughout and also occurs in veinlets of plagioclase which perhaps may have been remobilised during the alteration. Minerals are:

plagioclase	60%
diopside	17
quartz	12
K-spar	6
plagioclase (vein)	3
pyrrhotite	2
sphene	minor
chalcopyrite	trace
epidote	trace

The matrix consists of a mass of subrounded interlocking plagioclase grains about 0.05mm in size. Scattered unevenly throughout this are rounded grains and aggregates of quartz 0.2 to 0.8mm in size; there is one aggregates 2mm in size consisting of rounded quartz grains about 0.05mm in size. Plagioclase fragments (making up about 10% of the rock) are tabular or shapeless and about the same size as the quartz fragments. Aggregates do not occur. Throughout the mass of plagioclase there is very fine K-spar which occurs between the grains in fine diffuse patches. This has sometimes penetrated between the grains in the quartz aggregates; the large fragment contains a fairly high proportion of K-spar. Some of the plagioclase fragments have been replaced by fine K-spar.

Diopside is the main alteration mineral. It forms rounded grains less than 0.05mm in size which are disseminated throughout the rock amongst the matrix plagioclase. It coalesces into shapeless patches and coarser grains up to 1mm in size. There is often a narrow zone of diopside around the quartzitic fragments and small patches occur in the plagioclase fragments. The diopside is sometimes associated with sphene which forms very fine grains occurring within and around small diopside aggregates. The may coalesce to form rounded or shapeless grains up to 0.3mm in size which are scattered about the rock.

There is also a thin zone of diopside concentration adjacent to a few discontinuous plagioclase veinlets up to 1.5mm in width. In these the plagioclase (perhaps sodic, but not albite since RI is greater than balsam) forms subhedral grains about 0.5mm in size. As well as occurring adjacent to these there is some diopside intergrown with it. A few small grains of epidote occur amongst the diopside in these veinlets.

These veinlets contain much of the pyrrhotite in the rock and it forms shapeless elongated grains and aggregates up to 2mm in length intergrown with the plagioclase. Pyrrhotite is also disseminated throughout the rock where it forms ragged grains 0.02 to 0.2mm in size, often occurring in clusters associated with diopside patches. Grains up to 0.5mm in size are intergrown with quartz. Rare chalcopyrite occurs adjacent to larger pyrrhotite grains.



L17-2+50N Shaft: ALTERED (DIOPSIDE, TREMOLITE) ANDESITIC TUFF.

This sample is an altered volcanoclastic rock originally consisting of quartz fragments scattered unevenly throughout a fine plagioclase matrix. Pervasive alteration by diopside and tremolite has occurred. This is associated with the development of thin discontinuous quartz veinlets containing garnet and pyrrhotite, which is also disseminated throughout. Minerals are:

plagioclase	38%
tremolite	22
diopside	18
quartz vein	8
quartz	6
garnet	5
pyrrhotite	2
sphene	1
K-spar	minor
epidote	trace
chalcopyrite	trace

Plagioclase forms a mass of subrounded grains about 0.05mm in size. Scattered within this are a few lath-like grains (fragments ?) up to 0.5mm in size. Quartz fragments are subangular or rounded and range in size from 0.2 to 1.0mm. The smaller ones are less rounded and are usually single grains. The larger more rounded ones are aggregates of a few large grains or several small ones.

Pervasive diopside mineralization has occurred and this forms rounded grains less than 0.05mm in size which are disseminated throughout between and within the plagioclase, often coalescing into small diffuse patches. It is associated with tremolite which forms broad irregularly shaped grains of variable size from 0.2 to 2.0mm. The smaller ones are intergrown with the diopside and plagioclase. The larger ones form poekiloblastic grains enclosing plagioclase. The diopside tends to be concentrated in a thin zone around the tremolites. Very fine grains of sphene sometimes occur within small diopside patches; these coalesce to form rounded grains up to 0.4mm in size which are scattered about the rock. Minor amounts of extremely fine K-spar are associated with the pervasive alteration. This occurs in small indistinct patches within the plagioclase.

There are patches of large poekiloblastic tremolites adjacent to quartz veinlets and vein-like patches cutting through the rock. These are up to 1mm wide and consist of subrounded interlocking quartz grains about 0.5mm in size and are intergrown with garnet. This sometimes forms patches a few millimeters in size which "spill over" into the adjacent rock.

(continued)

L17-2+50N Shaft. (cont.)

Pyrrhotite is associated with the garnet in the veinlets and the diopside in the rock. Shapeless or rounded grains 0.02 to 0.2mm in size are disseminated throughout, mainly occurring in small diopsidic concentrations, often in clusters. Larger irregularly shaped grains up to 1mm in size are intergrown with the quartz and garnet, sometimes being contained in the garnet; in places there is a narrow zone of tremolite between the pyrrhotite and garnet. There is a massive patch of pyrrhotite 2.5mm in size within a small vein-like patch of quartz. This is weathering to marcasite; elsewhere limonitic stain has developed. Rare small grains of chalcopyrite occur adjacent to pyrrhotite. In places there are small epidote grains which cluster around the disseminated pyrrhotite.

L13-3+75N: ALTERED (DIOPSIDE, TREMOLITE) ANDESITIC TUFF.

This sample is a fine grained layered volcanoclastic rock consisting of very fine plagioclase with quartz and/or plagioclase fragments occurring in some layers. Layering is rather indistinct and has been obscured by pervasive alteration, and perhaps by pre-alteration movement (slumping during consolidation ??). Layers are 2 to 10mm thick. Minerals are:

plagioclase	45%
diopside	20
tremolite	20
quartz	7
K-spar	4
pyrrhotite	4
sphene	minor
calcite	trace
chalcopyrite	trace

Plagioclase forms a mass of rounded grains less than 0.005mm in size. There is little difference between layers in the plagioclase but layering is a result in varying proportions of fragmental material. In the wider layers there are rounded quartz fragments up to 1mm in size consisting of a mass of rounded grains about 0.1mm in size. Some of the thinner layers mainly contain small quartz fragments (single grains and aggregates); others mainly contain small laths of plagioclase. In those in which quartz fragments are dominant there has been pervasive K-spar alteration. In those containing mainly plagioclase, K-spar alteration has affected the plagioclase laths and occurs in extremely thin diffuse veinlets.

Diopside forms thin prismatic grains about 0.05mm in size which are disseminated within plagioclase throughout the rock. They sometimes coalesce to forms small diffuse patches or occur in extremely thin discontinuous veinlets. The patches may be associated with fine grains of sphene.

Tremolite forms highly irregularly shaped grains 0.1 to 0.2mm in size which have grown within the matrix plagioclase, but more commonly occur within the plagioclase fragments. However much of the tremolite is associated with the quartz fragments. In that part of the rock containing large quartz fragments there are highly poekiloblastic grains of tremolite up to 2mm in size. These have grown within the plagioclase around the quartz fragments and partly replace those also. There is a patch of this material several millimeters in size. The tremolite grains are usually peppered with fine diopside.

Pyrrhotite is associated with the tremolite and quartz. Subrounded or ragged grains 0.02 to 0.2mm in size are disseminated throughout the rock, often occurring in small clusters in around small tremolites or within diopsidic patches. Most occurs intergrown with the large poekiloblastic tremolite grains and with the quartz in the altered fragments. In these parts it forms clusters of irregularly shaped grains of variable size up to 1mm. Minor alteration to marcasite has occurred. Small calcite and/or sphene grains may occur adjacent to pyrrhotite which is intergrown with quartz. Small grains of chalcopyrite occur amongst the clusters of fine pyrrhotite.

APPENDIX 2 - SOIL AND ROCK GEOCHEMISTRY

**GEOCHEMICAL ICP ANALYSIS**

.50g SOIL SAMPLE IS DIGESTED WITH JML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR NA, FE, CA, P, CR, MG, BA, TI, B, AL, K, NI, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: SOILS/ROCKS AU\*\* ANALYSIS BY FAHRA FROM 10 SOIL SAMPLES.

DATE RECEIVED: JULY 23 1985 DATE REPORT MAILED: *July 21/85* ASSAYER: *T. Saundry*. DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

R. STEWART PROJECT - G.Z.F.R FILE # 85-1524

PAGE 1

SAMPLE#	No	Cu	Pb	Zn	Ag	Mi	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	M	Au**
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
L0+75 1	1	15	11	98	.1	13	6	881	2.41	6	5	ND	7	18	1	2	3	38	.16	.11	17	13	.39	124	.09	3	2.17	.01	.07	1	2
L0+75 2	1	9	3	59	.1	7	5	539	1.91	15	5	ND	4	15	1	3	2	32	.20	.06	14	10	.23	76	.07	2	1.15	.01	.07	1	18
L0+75 3	1	14	9	64	.1	7	5	433	2.18	4	5	ND	6	17	1	2	2	38	.19	.05	10	8	.32	89	.11	6	1.29	.01	.11	1	5
L0+75 4	1	12	11	52	.1	7	4	218	1.82	14	5	ND	4	19	1	2	2	33	.18	.02	11	9	.25	70	.09	4	1.10	.02	.06	1	3
L0+75 5	1	13	5	85	.1	10	6	589	2.18	37	5	ND	3	24	1	3	2	45	.19	.06	9	17	.32	102	.12	2	1.39	.02	.07	1	7
L0+75 6	1	13	6	92	.1	9	6	510	2.21	23	5	ND	6	16	1	2	3	43	.15	.10	6	12	.24	104	.12	4	1.76	.02	.07	1	2
L0+75 7	1	16	2	89	.1	13	7	431	2.27	36	5	ND	4	16	1	2	2	43	.14	.09	6	13	.25	116	.11	3	1.79	.02	.07	1	1
L0+75 8	1	14	8	81	.1	9	5	349	1.91	24	5	ND	3	25	1	2	2	39	.19	.04	12	12	.28	102	.12	6	1.53	.02	.07	1	12
L0+75 9	2	20	11	108	.1	9	7	632	2.69	34	5	ND	5	19	1	2	2	50	.16	.06	11	16	.34	115	.12	4	1.90	.01	.12	1	5
L0+75 10	2	31	5	114	.1	13	8	466	3.11	60	5	ND	5	23	1	2	2	60	.18	.06	14	17	.42	136	.14	3	2.37	.01	.13	1	20
L3+50 0	2	21	6	101	.2	20	8	443	2.60	25	5	ND	1	26	1	2	2	51	.21	.06	5	18	.31	108	.12	2	1.98	.02	.06	1	6
L3+50 1	2	46	16	172	.5	29	9	630	3.01	70	6	ND	2	36	1	2	3	54	.30	.16	12	22	.38	109	.10	4	2.67	.02	.06	1	3
L3+50 2	1	23	7	82	.3	18	7	335	2.43	44	5	ND	3	18	1	2	2	48	.14	.07	5	18	.31	104	.12	5	1.96	.01	.05	1	11
L3+50 3	2	19	7	78	.1	19	7	357	2.72	37	5	ND	3	16	1	2	2	51	.13	.08	9	22	.35	112	.13	4	2.39	.02	.04	1	8
L3+50 4	1	17	6	90	.1	12	7	788	2.58	35	5	ND	2	30	1	2	2	54	.24	.07	7	17	.33	107	.12	7	2.15	.02	.06	1	4
L3+50 5	1	15	3	89	.1	11	5	339	2.32	14	5	ND	2	14	1	2	2	45	.12	.09	5	14	.21	71	.12	3	2.16	.02	.04	1	3
L3+50 6	2	16	7	72	.1	13	5	474	2.39	19	5	ND	2	14	1	2	2	47	.12	.11	5	13	.22	79	.11	5	2.07	.02	.04	1	2
L3+50 7	2	16	5	76	.1	13	6	441	2.20	17	5	ND	2	15	1	3	2	41	.14	.11	6	14	.23	81	.09	3	1.78	.01	.05	1	1
L3+50 8	2	19	7	91	.1	13	7	404	2.61	24	5	ND	2	14	1	2	2	50	.13	.09	5	14	.31	84	.10	2	2.18	.01	.05	1	1
L3+50 9	2	21	5	76	.2	16	7	420	2.26	20	5	ND	1	14	1	2	2	42	.14	.10	5	15	.24	74	.09	6	1.92	.01	.04	1	4
L3+50 10	2	22	10	95	.2	19	9	620	3.07	29	5	ND	2	21	1	3	2	59	.19	.10	5	20	.37	115	.11	4	2.50	.02	.06	1	5
L13 7+50N PIT	2	25	30	78	.8	22	8	268	3.39	333	5	ND	6	15	1	3	8	55	.13	.06	10	28	.44	88	.10	5	2.08	.01	.07	1	45
L15 1+15M 0+00E	1	15	7	64	.1	11	4	231	2.25	26	5	ND	5	14	1	2	2	42	.12	.05	8	12	.28	65	.10	6	1.36	.01	.07	1	4
L17 0+05N 0+00E	1	13	2	79	.2	12	6	471	2.50	9	5	ND	12	13	1	2	2	43	.11	.08	10	12	.30	105	.12	2	1.83	.01	.09	1	2
L17 0+05N 0+12E 0+45S	1	10	4	90	.1	10	5	736	3.42	8	5	ND	18	21	1	3	2	39	.32	.05	33	10	.52	112	.05	3	1.67	.01	.10	1	1
L13 3+75N 1' PIT ROCK	1	70	21	15	.6	29	8	63	1.78	6	5	ND	2	191	1	7	2	11	1.80	.16	12	8	.09	35	.09	13	1.79	.16	.06	1	3
L13 3+75N 8' PIT ROCK	3	17	885	3	175.4	5	2	59	2.48	13253	5	ND	1	5	1	198	956	1	.01	.01	2	4	.01	13	.01	5	.01	.01	.03	1	790
L17 2+50N A ROCK	3	75	19	45	2.5	29	10	263	2.06	117	5	ND	1	106	1	9	7	24	1.26	.11	6	10	.07	79	.12	10	1.08	.26	.05	1	12
L19 3+05N EAST PIT ROCK	3	50	12	23	.2	18	7	150	1.36	18	5	ND	1	25	1	7	2	22	.57	.11	6	5	.16	34	.18	8	.26	.07	.04	1	1
L19 3+05N WEST PIT ROCK	14	154	7	377	.9	72	14	110	2.63	9	5	ND	3	106	3	9	2	50	1.71	.15	16	14	.09	37	.11	13	1.21	.30	.07	1	60
STD C/FA AU	21	60	41	134	7.1	69	27	1096	3.95	41	15	8	38	53	19	16	20	61	.48	.16	36	62	.88	175	.08	37	1.71	.06	.13	11	50

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN, FE, CA, P, CR, MG, BA, TI, B, AL, NA, K, W, SI, ZR, CE, SN, Y, NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: SOIL <sup>-20 mesh & pretreated</sup> ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: DEC 10 1985 DATE REPORT MAILED: *Dec. 13/85* ASSAYER: *V. Saundry* DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

R. STEWART FILE # 85-3262

PAGE 1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au#
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	I	I	PPM	PPM	I	PPM	I	PPM	I	I	I	PPM	PPB
NICKEL 3 L0 2+00S	1	5	3	30	.1	3	2	249	1.19	2	5	ND	1	16	1	2	2	22	.15	.02	11	4	.12	57	.06	2	.64	.02	.03	1	1
NICKEL 3 L0 4+00S	1	5	3	17	.1	1	2	96	.75	2	5	ND	1	21	1	2	2	10	.18	.03	9	4	.09	53	.04	2	.65	.02	.02	1	8
NICKEL 3 L0 4+30S	5	5	2	31	.3	3	4	2284	2.06	12	7	ND	1	29	1	2	2	19	.34	.06	30	4	.11	127	.02	6	.82	.02	.03	2	1
NICKEL 3 L0 8+00S	1	10	2	29	.1	7	3	347	1.85	3	5	ND	2	13	1	2	2	32	.10	.09	5	9	.12	58	.07	2	1.48	.02	.03	1	1
NICKEL 3 L0 12+00S	1	7	6	32	.1	5	3	214	1.42	3	5	ND	1	21	1	2	2	23	.19	.04	9	7	.26	81	.07	2	1.46	.02	.04	1	2
NICKEL 3 L0 13+75S	1	2	2	20	.1	1	2	386	1.02	3	7	ND	2	12	1	2	2	13	.15	.03	19	4	.11	50	.03	3	.51	.02	.03	1	1
NICKEL 3 L0 16+00S	1	4	4	23	.1	3	2	134	.70	2	5	ND	1	17	1	2	2	13	.14	.04	14	4	.15	62	.06	2	.99	.04	.03	1	2
NICKEL 3 L0 20+00S	1	10	10	33	.1	2	4	225	1.99	3	5	ND	3	13	1	2	2	31	.10	.09	9	9	.17	67	.08	5	1.61	.02	.03	1	1
NICKEL 3 L0 24+00S	1	5	4	25	.1	3	2	159	1.11	2	5	ND	1	16	1	2	2	19	.14	.04	14	5	.16	61	.06	2	1.10	.02	.03	1	3
NICKEL 3 L0 28+00S	1	10	6	33	.1	6	3	175	1.90	5	5	ND	4	9	1	2	2	30	.08	.08	8	8	.16	48	.07	2	1.66	.02	.02	2	2
NICKEL 3 L2 2+00S	1	5	5	40	.1	4	2	169	1.36	5	5	ND	3	10	1	2	2	19	.09	.07	5	6	.09	49	.05	2	1.06	.02	.03	1	20
NICKEL 3 L2 4+00S	7	18	14	46	.6	9	4	197	1.89	11	9	ND	2	25	1	2	2	29	.23	.10	46	10	.26	225	.08	4	3.27	.02	.05	2	7
NICKEL 3 L2 4+33S	2	3	2	17	.1	1	2	361	1.12	6	5	ND	3	8	1	2	2	12	.11	.03	8	1	.09	36	.03	3	.37	.02	.03	1	3
NICKEL 3 L2 8+00S	1	5	6	14	.1	2	1	59	1.07	2	5	ND	1	16	1	2	2	16	.11	.03	6	4	.06	50	.06	3	.80	.02	.02	1	27
NICKEL 3 L2 12+00S	1	6	6	29	.1	5	3	258	1.63	4	5	ND	3	11	1	2	2	25	.09	.07	4	4	.12	64	.06	2	1.23	.02	.03	1	3
NICKEL 3 L2 15+00S	1	3	3	12	.1	1	1	339	1.04	5	5	ND	4	6	1	2	2	11	.10	.02	15	2	.05	26	.03	5	.26	.02	.02	1	2
NICKEL 3 L14 14+00M	3	13	5	41	.5	4	3	651	1.41	4	9	ND	2	31	1	2	4	20	.34	.04	44	6	.20	100	.07	4	1.23	.03	.04	4	1
NICKEL 3 L14 10+00M	1	7	9	29	.1	5	3	169	1.68	2	5	ND	4	6	1	2	2	27	.07	.07	4	6	.11	44	.06	2	1.38	.02	.03	1	1
NICKEL 3 L14 8+00M	1	1	5	16	.1	2	1	214	.45	2	5	ND	1	13	1	2	2	7	.10	.02	8	3	.07	59	.04	2	.50	.02	.02	1	1
NICKEL 3 L14 4+00M	2	10	8	37	.1	4	4	236	1.86	4	5	ND	4	10	1	2	2	28	.09	.07	7	8	.16	63	.07	3	1.46	.02	.04	1	1
NICKEL 3 L14 2+00M	2	2	3	14	.1	1	1	160	.98	2	5	ND	1	7	1	2	2	14	.09	.04	7	2	.08	31	.02	2	.41	.01	.03	1	1
NICKEL 3 L14 0+00M	1	10	8	37	.1	3	3	293	1.88	4	5	ND	4	8	1	2	2	29	.08	.10	5	9	.14	43	.07	4	1.65	.02	.04	1	1
NICKEL 3 L15 14+30S	1	1	4	18	.1	1	2	279	.86	3	5	ND	2	8	1	2	2	10	.10	.02	7	2	.12	40	.03	4	.39	.02	.04	1	3
NICKEL 3 L15 4+00S	1	9	5	31	.1	5	3	194	1.80	5	5	ND	2	9	1	2	2	30	.09	.07	4	8	.13	52	.06	2	1.13	.02	.03	1	2
NICKEL 3 L15 8+00S	2	5	10	35	.1	3	2	769	1.44	2	5	ND	2	11	1	2	4	22	.11	.07	4	5	.12	70	.06	3	1.14	.02	.03	1	3
NICKEL 3 L15 11+00S	3	3	2	23	.1	3	3	906	1.51	5	5	ND	2	10	1	2	2	11	.11	.02	5	4	.08	58	.02	2	.39	.03	.04	3	1
NICKEL 3 L15 15+00S	2	10	6	36	.1	5	3	172	1.37	2	8	ND	3	15	1	2	2	21	.14	.04	15	6	.19	72	.08	2	1.48	.03	.03	1	2
STD C/AU-0.5	21	57	36	128	7.2	66	28	1122	3.92	38	17	7	32	45	16	17	21	56	.48	.14	37	55	.88	169	.07	36	1.72	.06	.11	12	490

SAMPLE#	Mo	Cu	Pb	Zn	As	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Li	B	Al	Na	K	M	Au+
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
NICKEL 3 L15 19+00S	2	9	5	53	.1	3	4	235	1.84	2	5	ND	4	6	1	2	2	26	.05	.08	4	7	.16	57	.07	2	1.42	.02	.04	1	2
NICKEL 3 L15 23+00S	1	10	7	44	.1	5	4	431	1.80	2	5	ND	4	10	1	2	2	26	.10	.12	6	7	.15	70	.08	2	1.52	.02	.04	1	3
NICKEL 3 L15 27+00S	1	9	7	37	.1	1	3	339	1.76	2	7	ND	4	16	1	2	2	26	.14	.05	7	5	.17	64	.10	2	.96	.03	.04	1	1
NICKEL 3 L15 30+00S	1	5	10	13	.2	1	1	81	.50	2	5	ND	1	18	1	2	4	8	.16	.03	11	4	.07	80	.06	2	.75	.03	.02	1	3
HEDLEY 1 0+100N	2	13	4	49	.1	5	5	180	2.08	12	5	ND	3	12	1	2	2	36	.10	.11	6	11	.18	74	.08	4	1.50	.02	.05	1	2
HEDLEY 1 0+290N	2	12	7	33	.1	1	10	1195	1.86	15	7	ND	2	26	1	2	2	32	.32	.05	27	8	.22	84	.05	2	.82	.02	.06	2	7
HEDLEY 1 0+330N	2	9	8	44	.1	6	5	1389	2.17	8	5	ND	6	25	1	2	2	27	.31	.06	12	7	.25	126	.07	5	.66	.03	.11	1	2
HEDLEY 1 0+400N	1	14	3	51	.2	6	4	239	2.12	9	5	ND	6	19	1	2	2	36	.16	.09	9	10	.21	86	.08	3	1.62	.03	.05	1	4
HEDLEY 1 500N+130E	2	13	9	56	.1	6	5	666	2.09	11	5	ND	2	25	1	2	2	34	.25	.07	15	10	.24	83	.07	3	1.35	.02	.05	1	7
HEDLEY 1 500N+300E+30S	2	17	6	67	.6	13	5	722	2.40	9	5	ND	4	31	1	2	2	39	.36	.05	36	12	.28	102	.10	2	2.11	.02	.05	1	2
HEDLEY 1 500N+400E	3	35	11	82	.7	18	7	1001	3.39	21	19	ND	3	45	1	2	2	55	.48	.07	54	21	.36	170	.09	3	2.74	.03	.08	1	3
HEDLEY 1 500N+500E+54S	4	13	3	53	.1	10	8	1595	3.59	15	5	ND	2	31	1	2	2	41	.36	.07	18	10	.23	109	.05	3	.94	.02	.05	1	1
HEDLEY 1 500N+500E+106S	1	23	6	51	.4	12	5	213	1.77	6	9	ND	1	45	1	2	2	28	.50	.04	28	15	.27	132	.08	2	1.84	.03	.06	1	1
BC FRACTION L1+00 1	1	11	3	106	.1	11	6	256	2.15	4	5	ND	2	18	1	2	2	37	.15	.11	4	9	.20	102	.13	2	2.29	.03	.04	1	1
BC FRACTION L1+00 3	1	15	2	76	.1	10	7	306	2.47	8	5	ND	2	18	1	2	2	44	.17	.10	3	9	.26	94	.12	2	1.85	.02	.05	1	1
BC FRACTION L1+00 5	2	15	8	80	.2	13	8	534	2.97	11	5	ND	2	22	1	2	2	58	.26	.06	5	14	.42	112	.12	2	2.12	.02	.08	1	1
BC FRACTION L1+00 7	1	21	5	114	.1	12	8	457	2.94	22	5	ND	2	20	1	2	2	55	.19	.07	7	12	.38	116	.11	2	2.20	.02	.06	1	1
BC FRACTION L1+00 9	2	14	6	105	.2	12	7	470	2.55	21	5	ND	1	24	1	2	2	48	.38	.05	4	11	.32	119	.10	2	1.88	.03	.05	1	2
GOLD 1 HEDLEY L1 4+00N	1	18	7	119	.2	13	6	416	2.44	47	5	ND	3	15	1	2	2	40	.13	.10	7	11	.23	99	.08	2	1.78	.02	.06	1	7
GOLD 1 HEDLEY L1 2+00N	1	14	4	111	.2	9	5	661	2.15	13	5	ND	6	20	1	2	2	31	.21	.07	17	10	.25	130	.09	2	1.82	.03	.06	1	5
GO-1 HEDLEY L2 425N+15S	4	31	243	2461	22.7	5	3	159	1.48	359	5	ND	1	3	76	8	197	2	.02	.01	2	4	.01	60	.01	2	.07	.01	.01	1	75
GOLD 1 HEDLEY L3 4+00N	1	14	15	105	.6	10	6	552	2.45	20	5	ND	3	16	1	2	2	40	.15	.10	8	8	.21	93	.08	2	1.59	.02	.05	1	17
GOLD 1 HEDLEY L3 2+00N	1	14	7	110	.3	9	6	437	2.21	33	5	ND	5	13	1	2	2	35	.10	.09	11	12	.23	99	.09	2	1.80	.02	.05	1	8
GOLD 1 HEDLEY L5 4+00	1	14	5	49	.1	7	5	338	2.08	24	5	ND	3	20	1	2	2	34	.15	.06	11	9	.23	99	.08	2	1.37	.02	.06	1	2
GOLD 1 HEDLEY L5 2+00	1	12	2	77	.1	11	5	546	2.13	11	5	ND	5	14	1	2	2	36	.14	.12	10	9	.21	94	.09	2	1.77	.02	.04	1	2
GOLD 1 HEDLEY L7 4+00	1	14	8	37	.1	7	4	349	1.90	37	5	ND	4	23	1	2	2	32	.20	.05	12	10	.29	57	.09	2	.90	.02	.06	1	2
GOLD 1 HEDLEY L7 2+00	1	14	10	113	.3	9	5	369	2.32	27	5	ND	6	15	1	2	2	39	.13	.11	10	9	.21	84	.08	2	1.70	.03	.05	1	7
STD C/AU=0.5	19	57	39	130	7.3	72	28	1141	3.92	36	18	7	32	46	17	16	19	57	.48	.15	37	57	.88	173	.07	39	1.72	.06	.11	13	490

R. STEWART FILE # 85-3262

PAGE 3

SAMPLE#

Mo Cu Pb Zn Ag Ni Co Mn Fe As U Au Th Sr Cd Sb Bi V Ca P La Cr Mo Ba Tl B Al Na K W Au\*  
 PPM PPM PPM PPM PPM PPM PPM PPM I PPM PPM PPM PPM PPM PPM PPM PPM I I PPM PPM I PPM I I I I PPM PPM

6.7.FR L20 1+40N+25W	1	13	5	52	.1	12	6	426	2.16	10	5	ND	8	17	1	2	2	29	.20	.06	19	17	.32	61	.06	2	1.19	.03	.09	1	1
6.7.FR L5 0+70N+17W	2	2	7	52	.1	14	2	916	.63	46	5	ND	3	28	1	3	2	9	.87	.22	31	8	.14	60	.07	2	.35	.13	.04	1	8
6.7.FR L3 3+10N+7W	1	105	2	27	.2	9	14	227	1.70	12	5	ND	2	35	1	2	2	21	1.07	.08	5	5	.30	37	.08	4	.70	.11	.06	1	21
6.7.FR DDH-3	4	195	12	25	.9	53	28	216	4.22	56	5	ND	2	42	1	6	2	35	.76	.10	4	18	.15	26	.13	3	.58	.14	.03	15	12
STD C/AU-0.5	20	58	39	134	7.0	70	29	1173	3.96	37	18	8	33	47	18	15	20	59	.48	.15	37	59	.86	177	.08	41	1.72	.06	.12	13	490



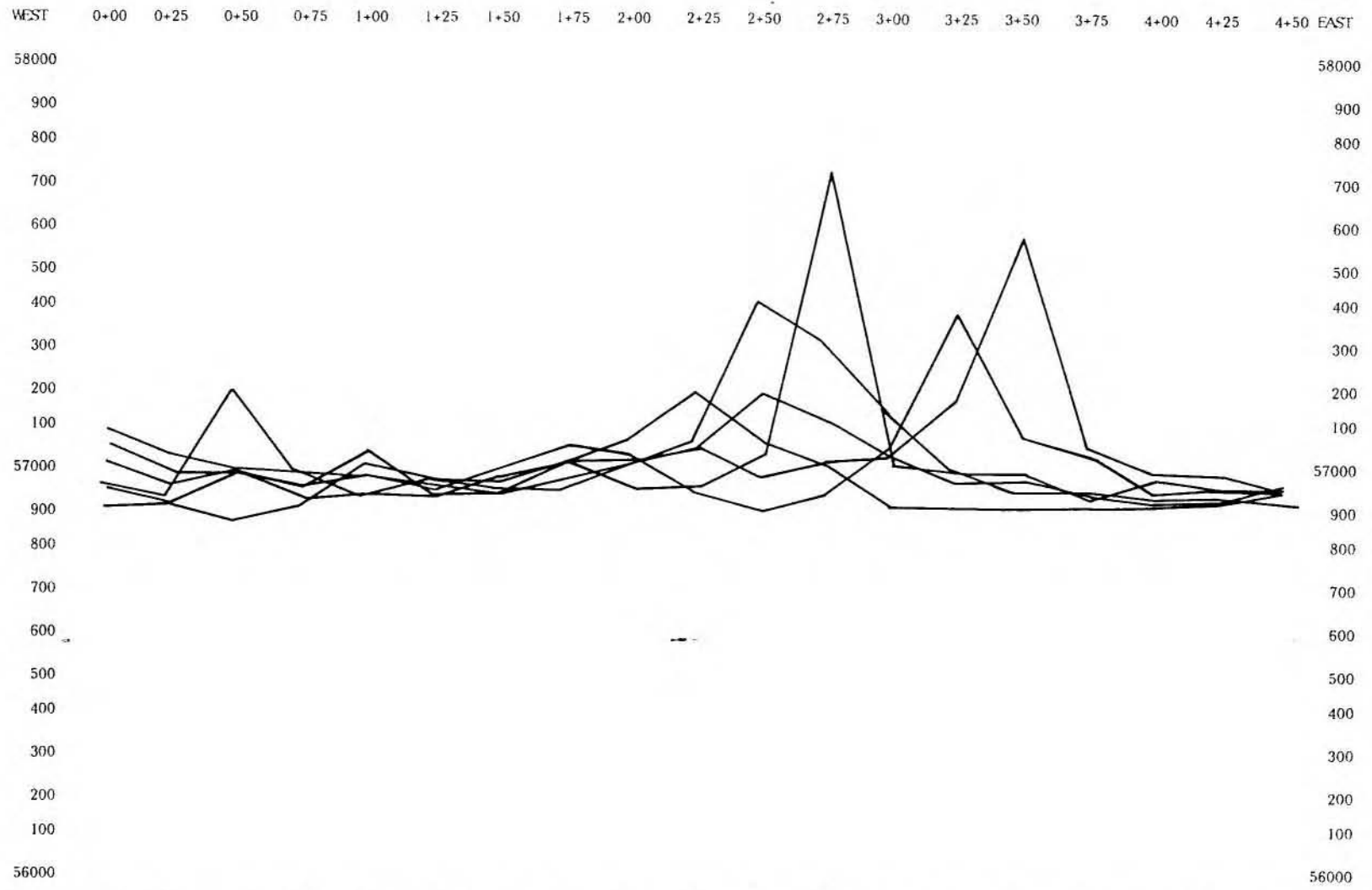
APPENDIX 3

B.C. FR 2130 (10)

CORRECTED MAGNETOMETER READINGS

	<u>E W</u>	<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>L4</u>	<u>L5</u>	<u>L6</u>
B/L	0+00	56925	56966	56982	57079	57115	57030
	0+25	56934	56934	56951	57009	57048	56975
	0+50	56887	57000	57214	57012	57014	57004
	0+75	56928	56974	57019	56942	57003	56963
	1+00	57032	56998	56946	56958	56988	57055
	1+25	56995	56970	56984	56950	56961	56946
	1+50	56985	56948	56965	57001	57015	56952
	1+75	57034	56995	56966	57032	57067	57025
	2+00	57095	57033	57025	56973	57045	57032
	2+25	57202	57064	57085	56979	56957	57065
	2+50	57092	57199	57426	57058	56912	56994
	2+75	57029	57133	57333	57745	56955	57033
	3+00	56930	57042	57158	57037	57069	57042
	3+25	56924	56980	57020	57010	57398	57184
	3+50	56921	56984	56963	57006	57098	57579
	3+75	56924	56954	56966	56944	57048	57072
	4+00	56926	56930	56950	56995	56958	57009
	4+25	56932	56938	56951	56976	56973	57002
	4+50	56958	56970	56928	56969	56960	56964

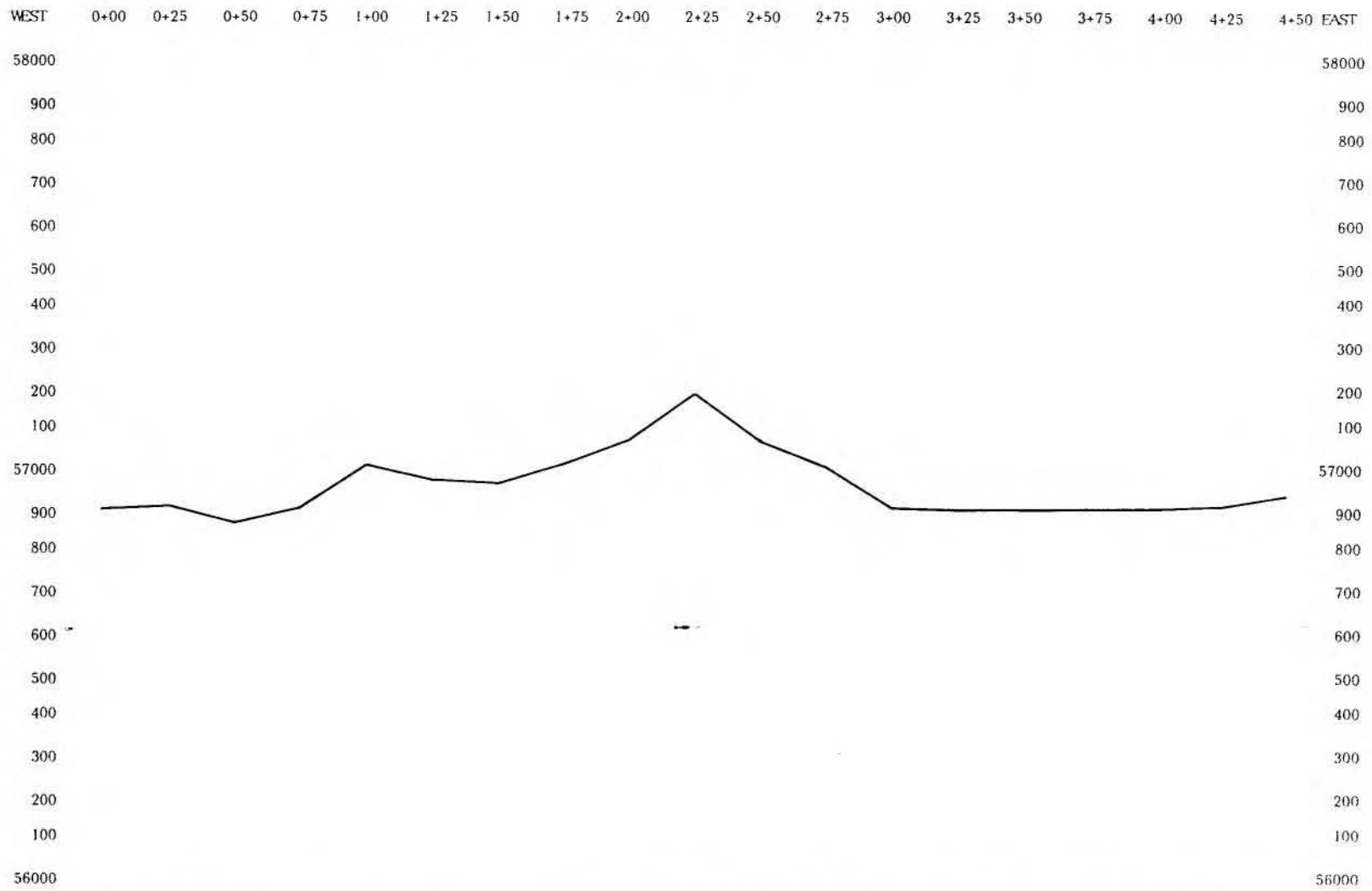
APPENDIX 4 - B.C. FR MAGNETOMETER PROFILES



Magnetometer Readings Diurnally Corrected  
 Scale: 1" = 60 metres

COMPOSITE - ALL LINES

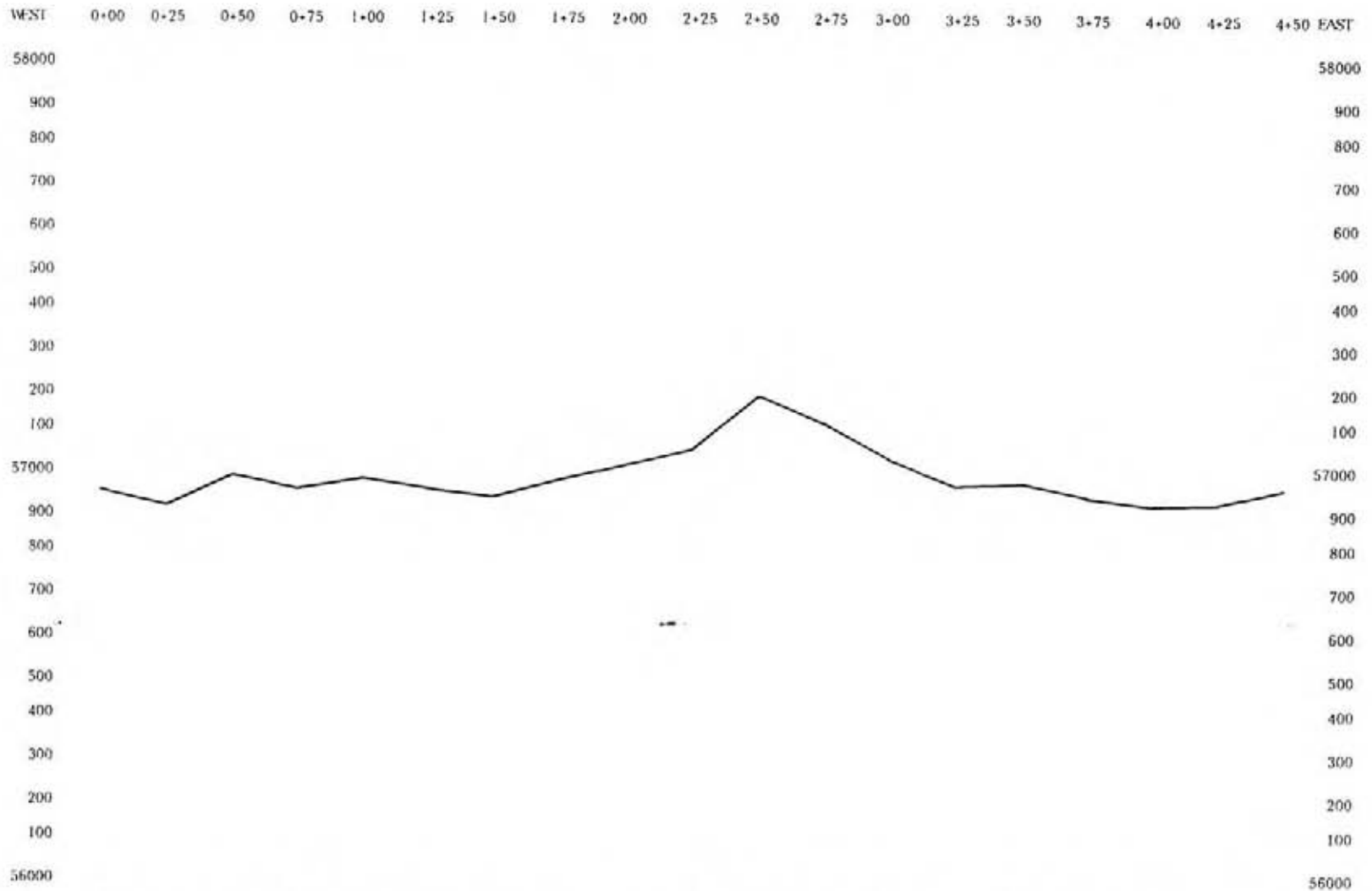
MAGNETOMETER PROFILES  
 B.C. FR 2130(10)  
 GOLDEN CLAIM GROUP  
 OSOYCOS M.D., NTS 82E/5W



Magnetometer Readings Diurnally Corrected  
 Scale: 1" = 60 metres

LINE 1

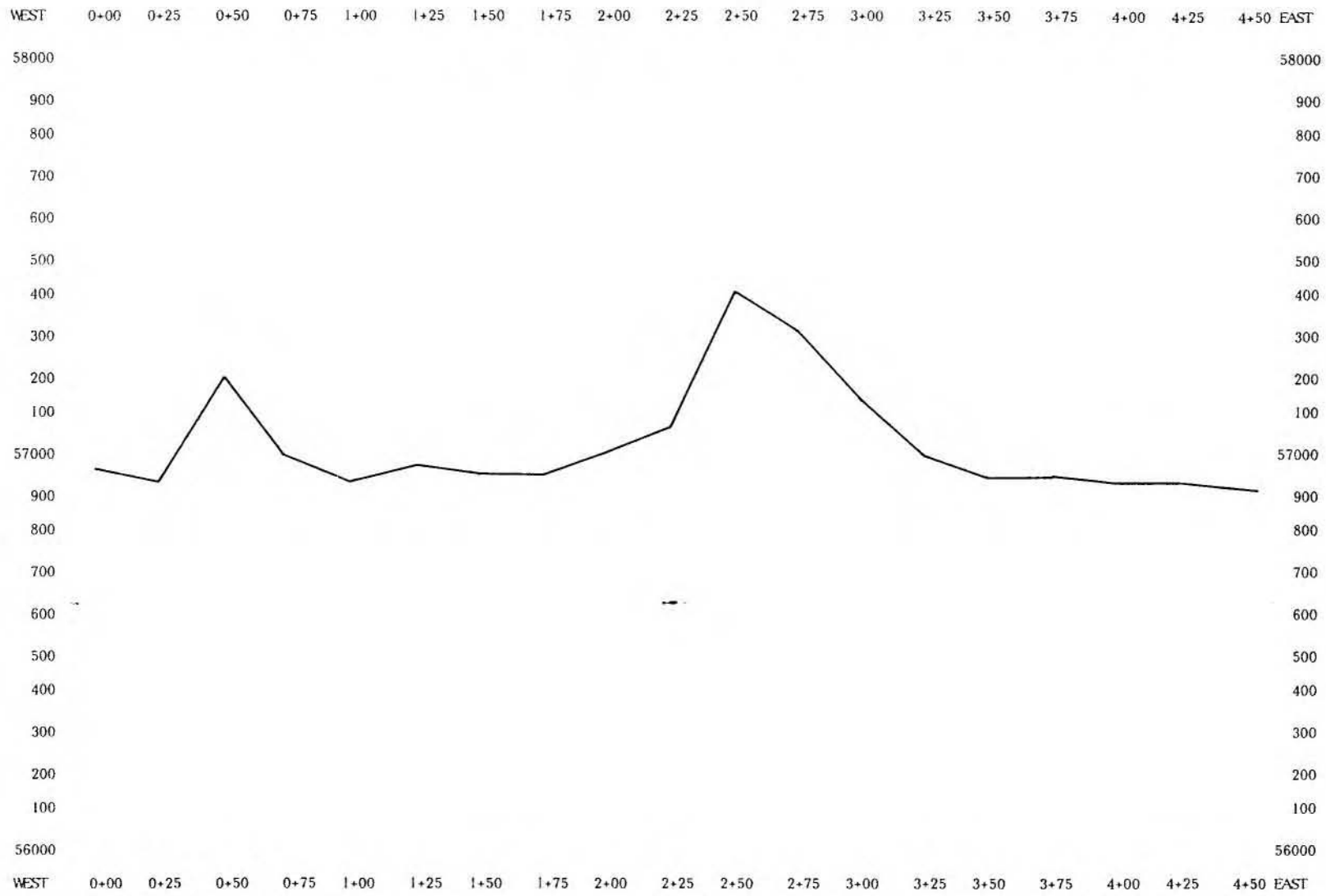
MAGNETOMETER PROFILES  
 B.C. FR 2130(10)  
 GOLDEN CLAIM GROUP  
 OSOYCOS M.D. NTS 82E/SW



Magnetometer Readings Diurnally Corrected  
 Scale: 1" = 60 metres

LINE 2

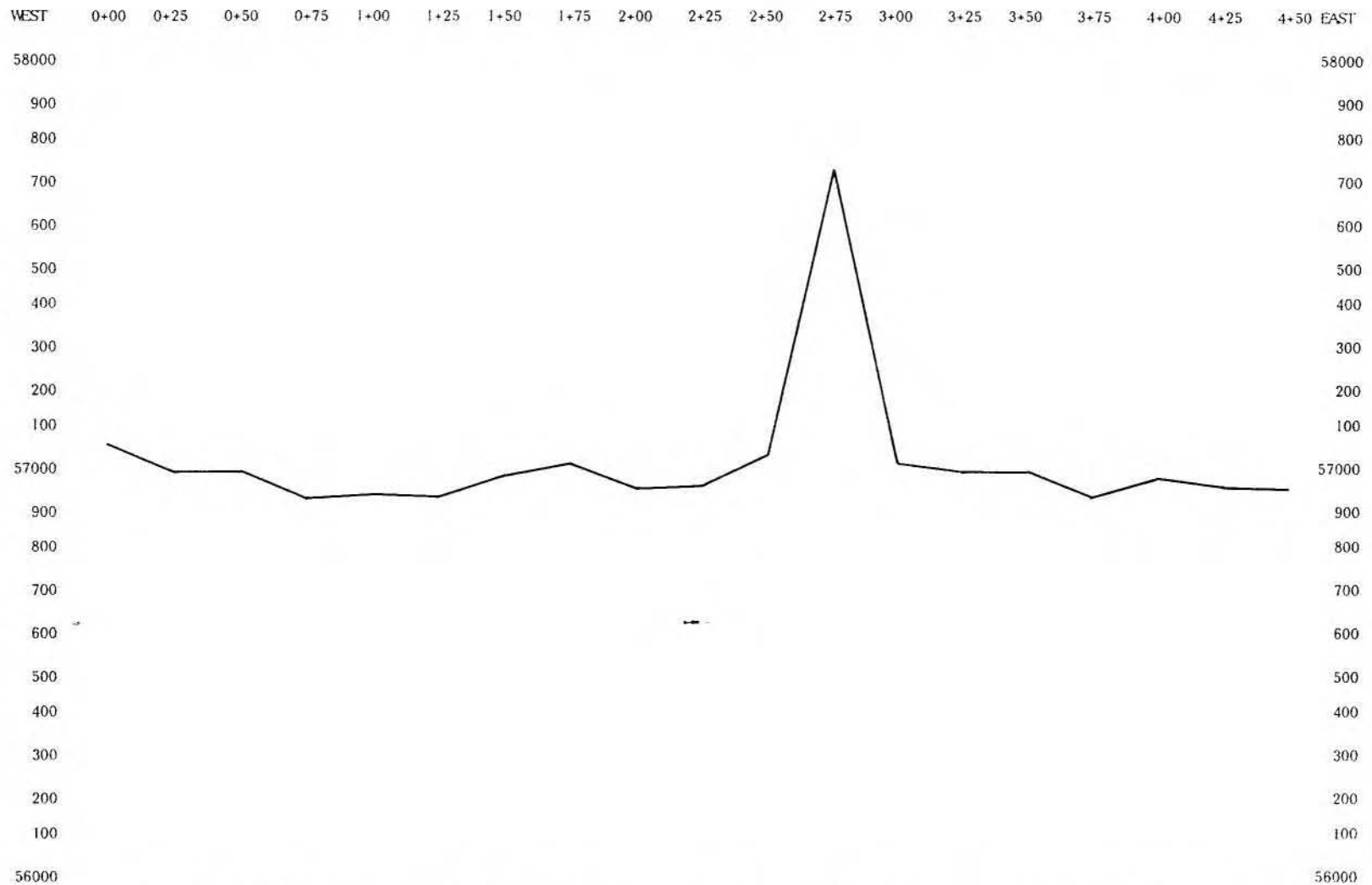
MAGNETOMETER PROFILES  
 B.C. PR 2130(10)  
 GOLDEN CLAIM GROUP  
 OSOYOGS M.D. NTS 82E/SW



Magnetometer Readings Diurnally Corrected  
 Scale: 1" = 60 metres

LINE 3

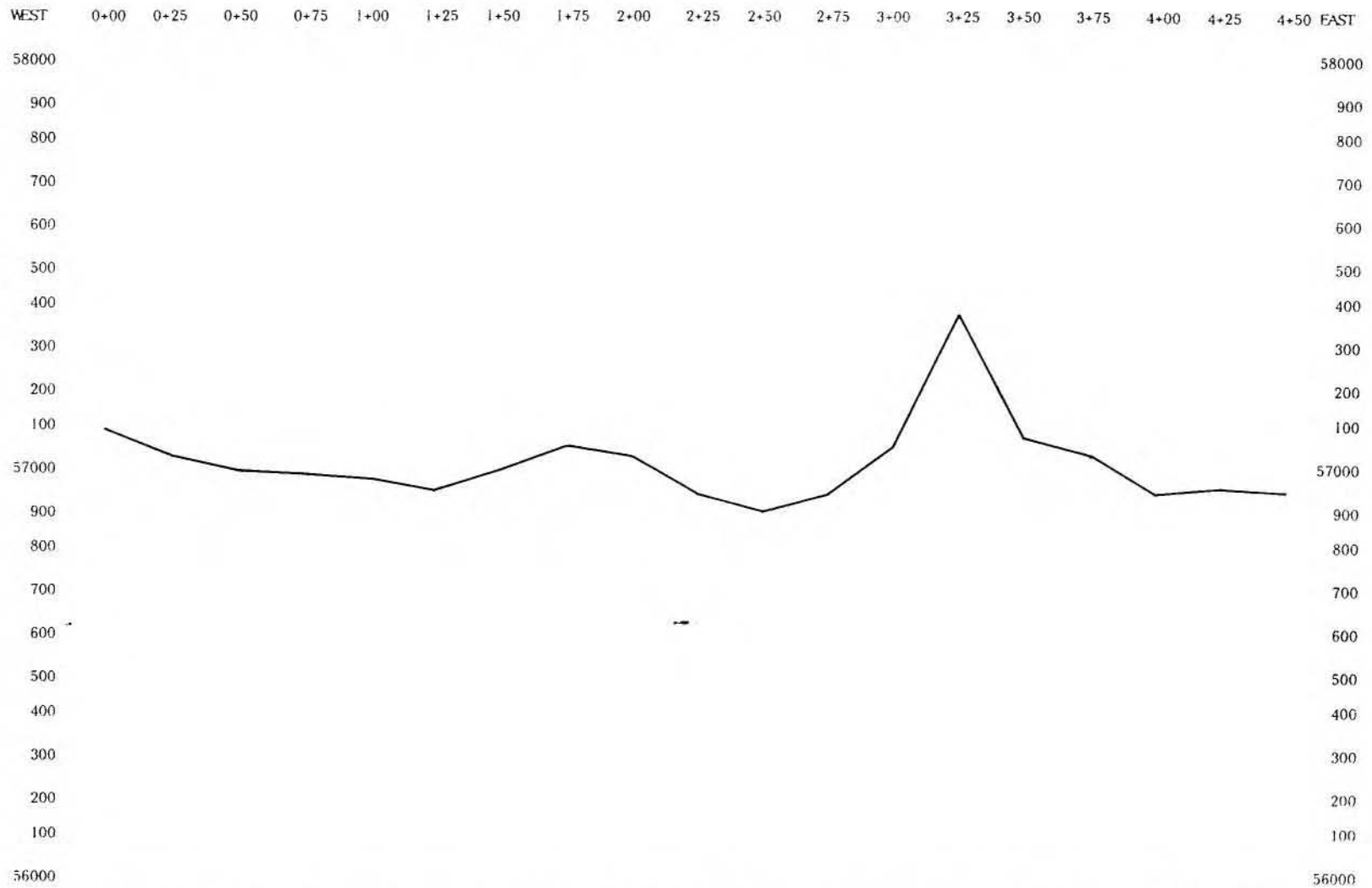
MAGNETOMETER PROFILES  
 B.C. FR 2130(10)  
 GOLDEN CLAIM GROUP  
 OSOYCOO M.D. NTS 82E/5W



Magnetometer Readings Diurnally Corrected  
 Scale: 1" = 60 metres

LINE 4

MAGNETOMETER PROFILES  
 B.C. FR 2130(10)  
 GOLDEN CLAIM GROUP  
 OSOYCOS M.D. NTS 82E/5W

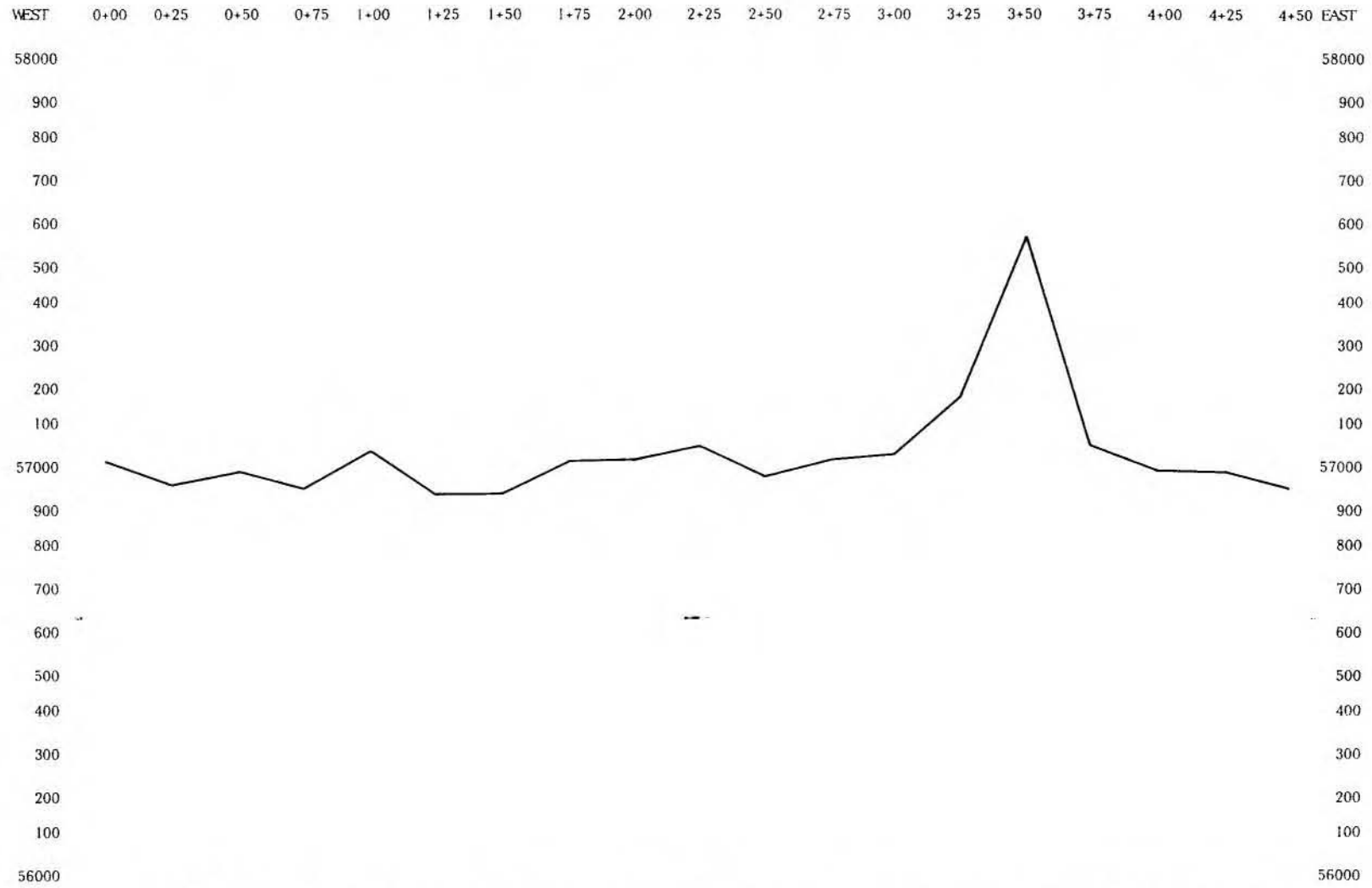


Magnetometer Readings Diurnally Corrected  
 Scale: 1" = 60 metres

LINE 5

MAGNETOMETER PROFILES  
 B.C. FR 2130(10)  
 GOLDEN CLAIM GROUP  
 OSOYCOS M.D. NTS 82E/5W





Magnetometer Readings Diurnally Corrected  
 Scale: 1" = 60 metres

LINE 6

MAGNETOMETER PROFILES  
 B.C. FR 2130(10)  
 GOLDEN CLAIM GROUP  
 OSOYDOS M.D. NTS 82E/SW

APPENDIX 5

GOLD 1: SAMPLE LOCATION, FIELD STRENGTH, FRASER FILTERED

<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>
<u>L1</u>			<u>L2</u>			<u>L3</u>			<u>L4</u>			<u>L5</u>		
0+00W	31		0+00W	36		0+00W	33		0+00W	35		0+00W	35	
0+25W	32	- 1	0+25W	35	- 3	0+25W	34	- 3	0+25W	38	+ 5	0+25W	36	+ 3
0+50W	34	+ 2	0+50W	33	- 4	0+50W	36	- 3	0+50W	37	0	0+50W	33	0
0+75W	33	- 6	0+75W	32	+ 5	0+75W	36	- 2	0+75W	37	+ 2	0+75W	27	- 4
1+00W	30	- 3	1+00W	33	+ 6	1+00W	35	+ 4	1+00W	37	+ 2	1+00W	32	- 7
1+25W	33	+ 9	1+25W	37	- 1	1+25W	35	+ 3	1+25W	37	- 1	1+25W	30	- 1
1+50W	35	+ 6	1+50W	37	- 2	1+50W	39	- 3	1+50W	34	- 2	1+50W	40	+ 2
1+75W	37	0	1+75W	37	0	1+75W	38	+ 2	1+75W	38	- 2	1+75W	40	+ 3
2+00W	30	0	2+00W	37	+ 1	2+00W	37	+ 6	2+00W	36	+ 1	2+00W	42	+12
2+25W	32	- 1	2+25W	37	+ 4	2+25W	38	+ 4	2+25W	39	+ 5	2+25W	40	+ 9
2+50W	35	- 1	2+50W	37	+ 6	2+50W	36	+ 2	2+50W	40	+ 2	2+50W	36	- 4
2+75W	37	+ 1	2+75W	37	+ 2	2+75W	38	- 4	2+75W	39	- 2	2+75W	36	- 2
3+00W	35	+ 1	3+00W	35	- 3	3+00W	35	- 4	3+00W	37	- 3	3+00W	40	+ 1
3+25W	35	+ 2	3+25W	37	- 3	3+25W	36	0	3+25W	36	- 1	3+25W	36	- 7
3+50W	37	+ 2	3+50W	32	0	3+50W	38	0	3+50W	37	+ 5	3+50W	40	0
3+75W	37	- 2	3+75W	37	0	3+75W	38	+ 2	3+75W	36	+ 3	3+75W	37	+12
4+00W	36	- 4	4+00W	34	0	4+00W	38	+ 4	4+00W	38	- 1	4+00W	43	+ 6
4+25W	36	- 4	4+25W	36	0	4+25W	38	0	4+25W	37	- 1	4+25W	42	+ 4
4+50W	37	0	4+50W	36	- 4	4+50W	38	- 4	4+50W	37	- 4	4+50W	42	+ 5
4+75W	37	-	4+75W	34		4+75W	34		4+75W	33		4+75W	40	
5+00W	36		5+00W	35		5+00W	38		5+00W	33		5+00W	40	

GOLD 1: SAMPLE LOCATION, FIELD STRENGTH, FRASER FILTERED

<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>
<u>L6</u>			<u>L7</u>			<u>L8</u>		
0+00W	46		0+00W	47		0+00W	52	
0+25W	41	+ 2	0+25W	38	- 7	0+25W	52	- 6
0+50W	45	+ 8	0+50W	42	- 3	0+50W	52	- 4
0+75W	45	+ 3	0+75W	47	- 3	0+75W	50	+ 1
1+00W	45	0	1+00W	45	- 3	1+00W	52	- 1
1+25W	45	0	1+25W	44	+ 1	1+25W	50	0
1+50W	47	+ 4	1+50W	52	+ 1	1+50W	52	+ 8
1+75W	42	+ 6	1+75W	52	+ 2	1+75W	55	+ 8
2+00W	47	+ 6	2+00W	52	+ 4	2+00W	54	+ 2
2+25W	45	+ 4	2+25W	50	+ 5	2+25W	55	+ 2
2+50W	45	- 8	2+50W	52	+ 6	2+50W	54	+ 2
2+75W	42	- 8	2+75W	54	+ 4	2+75W	55	- 1
3+00W	40	+ 4	3+00W	55	+ 2	3+00W	56	+ 1
3+25W	42	+ 4	3+25W	55	+ 1	3+25W	55	+ 1
3+50W	44	+ 4	3+50W	55	0	3+50W	57	- 3
3+75W	44	+10	3+75W	57	+ 1	3+75W	60	0
4+00W	42	+ 2	4+00W	58	+ 5	4+00W	55	+ 4
4+25W	42	- 7	4+25W	56	+ 4	4+25W	56	+ 4
4+50W	40	0	4+50W	53	- 6	4+50W	58	+ 6
4+75W	42		4+75W	54		4+75W	55	
5+00W	42		5+00W	52		5+00W	52	

APPENDIX 6

GOLDEN ZONE FR: SAMPLE LOCATION, FIELD STRENGTH, FRASER FILTERED

<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>
<u>L1</u>			<u>L3</u>			<u>L5</u>			<u>L7</u>			<u>L9</u>		
0+00N	44		0+00N	42		0+00N	42		0+00N	45		0+00N	50	
0+20N	43	+12	0+20N	38	+9	0+20N	41	+6	0+20N	45	+1	0+20N	43	+11
0+40N	42	+4	0+40N	38	+4	0+40N	44	-4	0+40N	45	+3	0+40N	47	+4
0+60N	42	-10	0+60N	41	+2	0+60N	48	-4	0+60N	42	+5	0+60N	49	-2
0+80N	44	-6	0+80N	43	0	0+80N	40	-1	0+80N	47	-3	0+80N	52	-13
1+00N	40	+7	1+00N	43	0	1+00N	50	-7	1+00N	53	-12	1+00N	56	-14
1+20N	39	+6	1+20N	43	-1	1+20N	47	-3	1+20N	53	-2	1+20N	58	0
1+40N	43	0	1+40N	41	-3	1+40N	44	+7	1+40N	53	+4	1+40N	50	+9
1+60N	44	-2	1+60N	47	0	1+60N	42	+5	1+60N	50	-1	1+60N	53	+6
1+80N	42	-3	1+80N	43	-1	1+80N	50	-3	1+80N	50	-1	1+80N	55	-1
2+00N	45	-5	2+00N	45	-2	2+00N	48	-6	2+00N	50	-3	2+00N	54	-6
2+20N	50	-2	2+20N	45	-4	2+20N	46	-8	2+20N	52	-5	2+20N	63	-11
2+40N	48	-2	2+40N	47	-7	2+40N	48	-8	2+40N	51	-2	2+40N	58	-7
2+60N	45	-5	2+60N	45	-1	2+60N	47	-1	2+60N	47	0	2+60N	56	+1
2+80N	45	+1	2+80N	35	+2	2+80N	42	+6	2+80N	43	-2	2+80N	54	+2
3+00N	45	+1	3+00N	38	-2	3+00N	46	+4	3+00N	42	0	3+00N	53	+9
3+20N	45	-1	3+20N	38	-2	3+20N	45	0	3+20N	48	+6	3+20N	57	+11
3+40N	43	+4	3+40N	41	+2	3+40N	47	-4	3+40N	47	+9	3+40N	55	+2
3+60N	44		3+60N	43		3+60N	47		3+60N	48		3+60N	60	
3+80N	38	-	3+80N	46		3+80N	52		3+80N	52		3+80N	64	

GOLDEN ZONE FR: SAMPLE LOCATION, FIELD STRENGTH, FRASER FILTERED

<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>
<u>L11</u>			<u>L13</u>			<u>L15</u>			<u>L17</u>			<u>L19</u>		
0+00N	48		0+00N	42		0+00N	49		0+00N	49		0+00N	46	
0+20N	47	+ 8	0+20N	34	+ 8	0+20N	48	- 4	0+20N	44	+ 1	0+20N	46	+ 2
0+40N	45	+ 9	0+40N	32	+ 6	0+40N	50	+ 7	0+40N	55	-18	0+40N	47	+ 2
0+60N	41	- 9	0+60N	33	- 1	0+60N	48	+ 1	0+60N	63	-15	0+60N	46	- 8
0+80N	51	-23	0+80N	36	-12	0+80N	55	-12	0+80N	48	+ 4	0+80N	47	- 5
1+00N	62	+ 1	1+00N	44	-14	1+00N	52	- 3	1+00N	55	- 2	1+00N	43	- 1
1+20N	48	+15	1+20N	42	+ 5	1+20N	52	+ 3	1+20N	57	0	1+20N	45	- 7
1+40N	48	+ 5	1+40N	40	+15	1+40N	55	-13	1+40N	57	- 7	1+40N	49	- 1
1+60N	55	-11	1+60N	37	+ 5	1+60N	61	0	1+60N	50	+ 7	1+60N	42	+ 5
1+80N	56	-20	1+80N	32	-17	1+80N	56	-10	1+80N	46	+17	1+80N	37	0
2+00N	60	- 8	2+00N	44	- 9	2+00N	50	+ 6	2+00N	46	+18	2+00N	32	+ 2
2+20N	55	- 1	2+20N	57	+ 9	2+20N	48	+ 7	2+20N	48	+ 2	2+20N	36	+ 5
2+40N	57	+ 5	2+40N	45	- 1	2+40N	46	+ 1	2+40N	56	-16	2+40N	38	+ 4
2+60N	57	+ 9	2+60N	47	+ 9	2+60N	46	- 3	2+60N	63	-19	2+60N	41	- 8
2+80N	55	+ 1	2+80N	40	+ 8	2+80N	48	+ 2	2+80N	65	-16	2+80N	47	-21
3+00N	57	- 4	3+00N	39	- 5	3+00N	45	+ 7	3+00N	65	-18	3+00N	46	-12
3+20N	55	- 2	3+20N	42	- 5	3+20N	47	+ 3	3+20N	55	-18	3+20N	43	+ 8
3+40N	61	- 3	3+40N	44	+ 5	3+40N	42	-10	3+40N	52	-11	3+40N	43	+13
3+60N	61		3+60N	45		3+60N	60		3+60N	45		3+60N	42	
3+80N	62		3+80N	48		3+80N	62		3+80N	46		3+80N	44	

APPENDIX 7

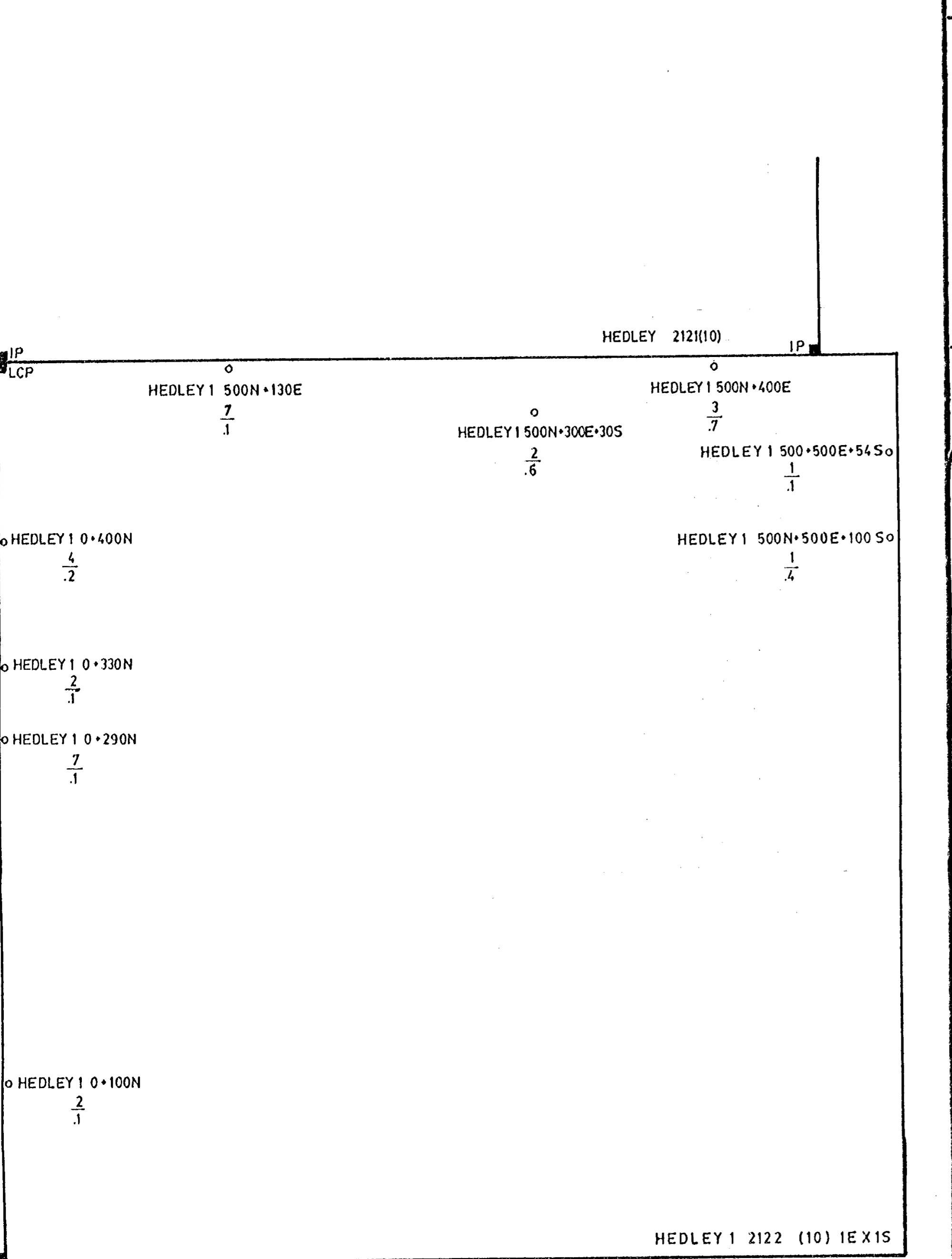
B.C. FR: SAMPLE LOCATION, FIELD STRENGTH, FRASER FILTERED

<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>	<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>
<u>L1</u>			<u>L2</u>			<u>L3</u>			<u>L4</u>			<u>L5</u>		
0+00E	32		0+00E	34		0+00E	42		0+00E	44		0+00E	36	
0+25E	45	+16	0+25E	44	+ 2	0+25E	45	- 2	0+25E	45	- 8	0+25E	46	0
0+50E	42	+30	0+50E	42	+25	0+50E	39	+20	0+50E	40	+10	0+50E	40	+ 8
0+75E	46	+ 4	0+75E	44	+ 3	0+75E	44	+20	0+75E	46	+16	0+75E	46	+ 8
1+00E	42	-14	1+00E	46	-21	1+00E	42	- 8	1+00E	44	0	1+00E	40	+ 2
1+25E	38	-10	1+25E	40	-23	1+25E	42	-24	1+25E	44	-12	1+25E	44	- 8
1+50E	42	0	1+50E	40	-14	1+50E	45	-10	1+50E	42	-14	1+50E	36	-14
1+75E	48	+16	1+75E	48	+12	1+75E	40	- 6	1+75E	36	-16	1+75E	38	-18
2+00E	46	+19	2+00E	48	+24	2+00E	45	+ 3	2+00E	42	- 6	2+00E	40	-10
2+25E	40	+11	2+25E	46	+22	2+25E	48	+25	2+25E	50	+ 4	2+25E	46	+ 6
2+50E	45	+ 3	2+50E	45	+22	2+50E	53	+19	2+50E	45	+18	2+50E	34	+20
2+75E	40	- 2	2+75E	35	+ 6	2+75E	45	+ 5	2+75E	47	+26	2+75E	36	+ 8
3+00E	37	- 7	3+00E	38	- 9	3+00E	38	- 2	3+00E	48	+ 5	3+00E	48	+12
3+25E	33	-20	3+25E	38	-15	3+25E	36	- 5	3+25E	42	+ 2	3+25E	48	- 4
3+50E	30	-20	3+50E	35	-19	3+50E	31	- 9	3+50E	36	+ 4	3+50E	33	- 8
3+75E	34	+ 5	3+75E	35	- 3	3+75E	34	-12	3+75E	32	-22	3+75E	30	0
4+00E	48		4+00E	46		4+00E	36		4+00E	35		4+00E	35	
4+25E	54		4+25E	52		4+25E	46		4+25E	38		4+25E	35	

B.C. FR: SAMPLE LOCATION, FIELD STRENGTH, FRASER FILTERED

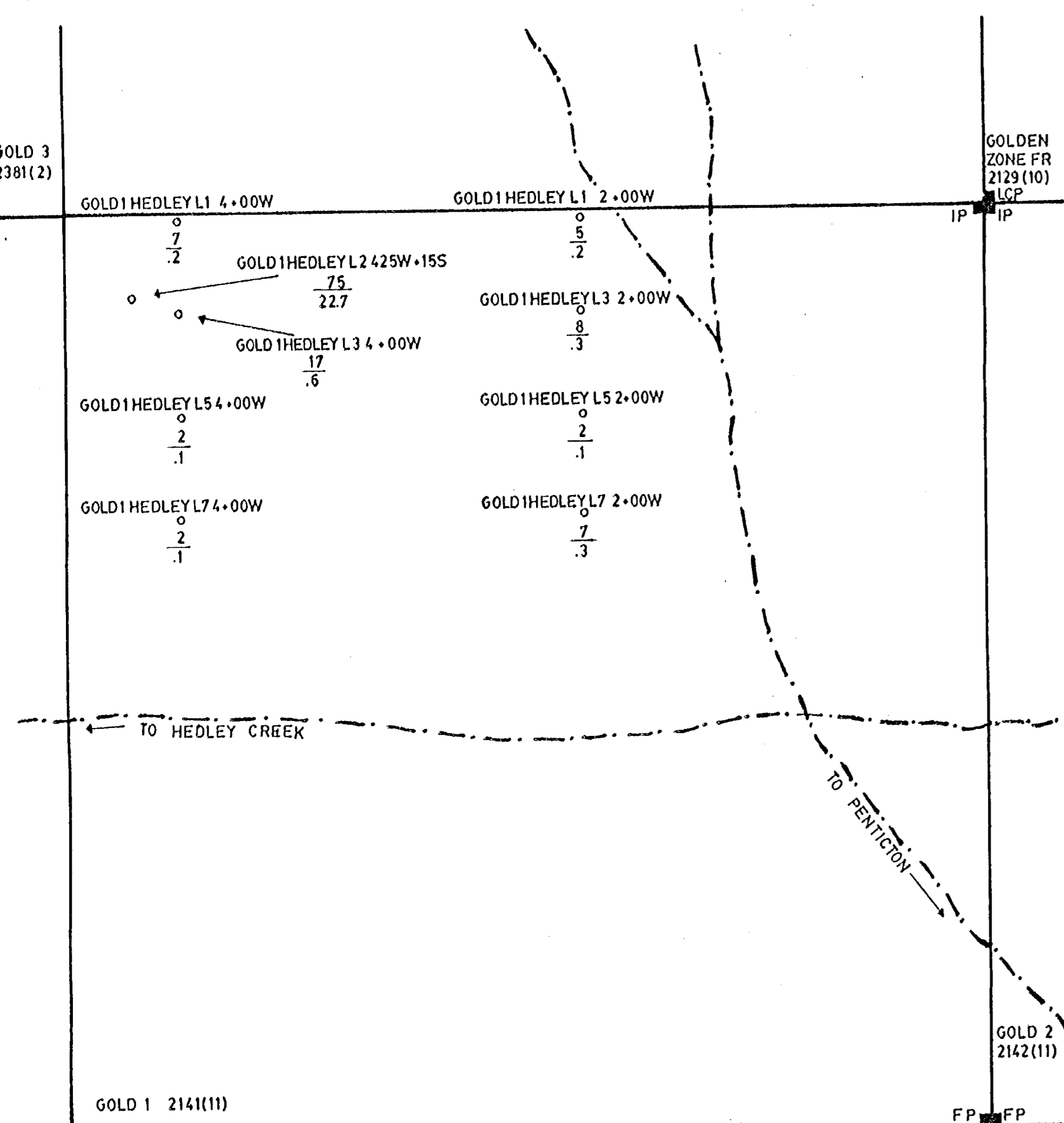
<u>LOC</u>	<u>F.S.</u>	<u>FILT</u>
<u>L6</u>		
0+00E	46	
0+25E	45	- 2
0+50E	44	- 2
0+75E	42	+ 2
1+00E	44	+ 2
1+25E	48	+ 2
1+50E	42	- 2
1+75E	42	- 8
2+00E	36	- 2
2+25E	44	0
2+50E	25	0
2+75E	35	+ 8
3+00E	41	+14
3+25E	48	+15
3+50E	43	+ 1
3+75E	33	-12
4+00E	35	
4+25E	32	

DETAIL A HEDLEY 1



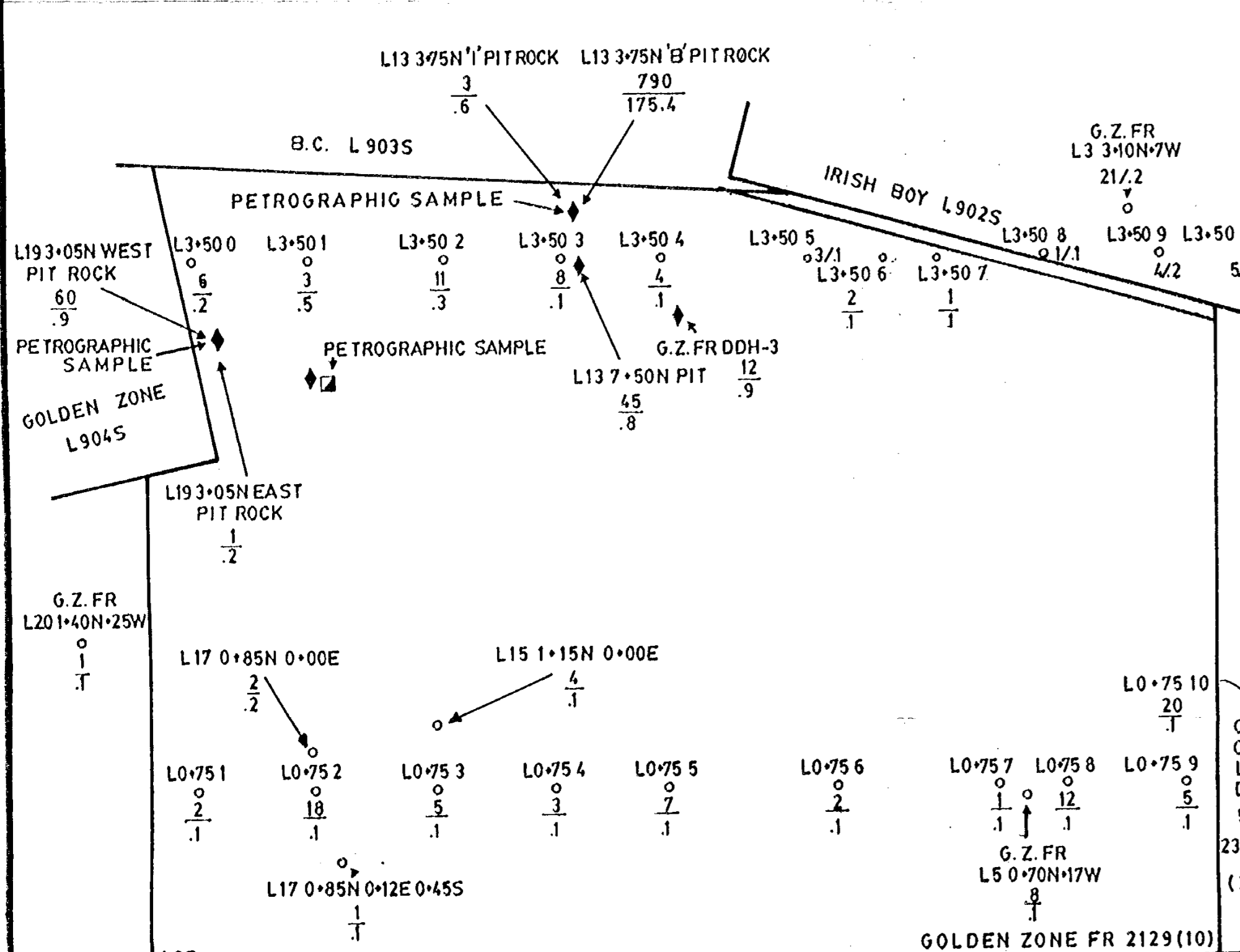
DETAIL A  
HEDLEY 1 SOIL & ROCK GEOCHEMISTRY  
NICKEL 2 2177(1) 3N X 3E  
1:2000

DETAIL B GOLD 1

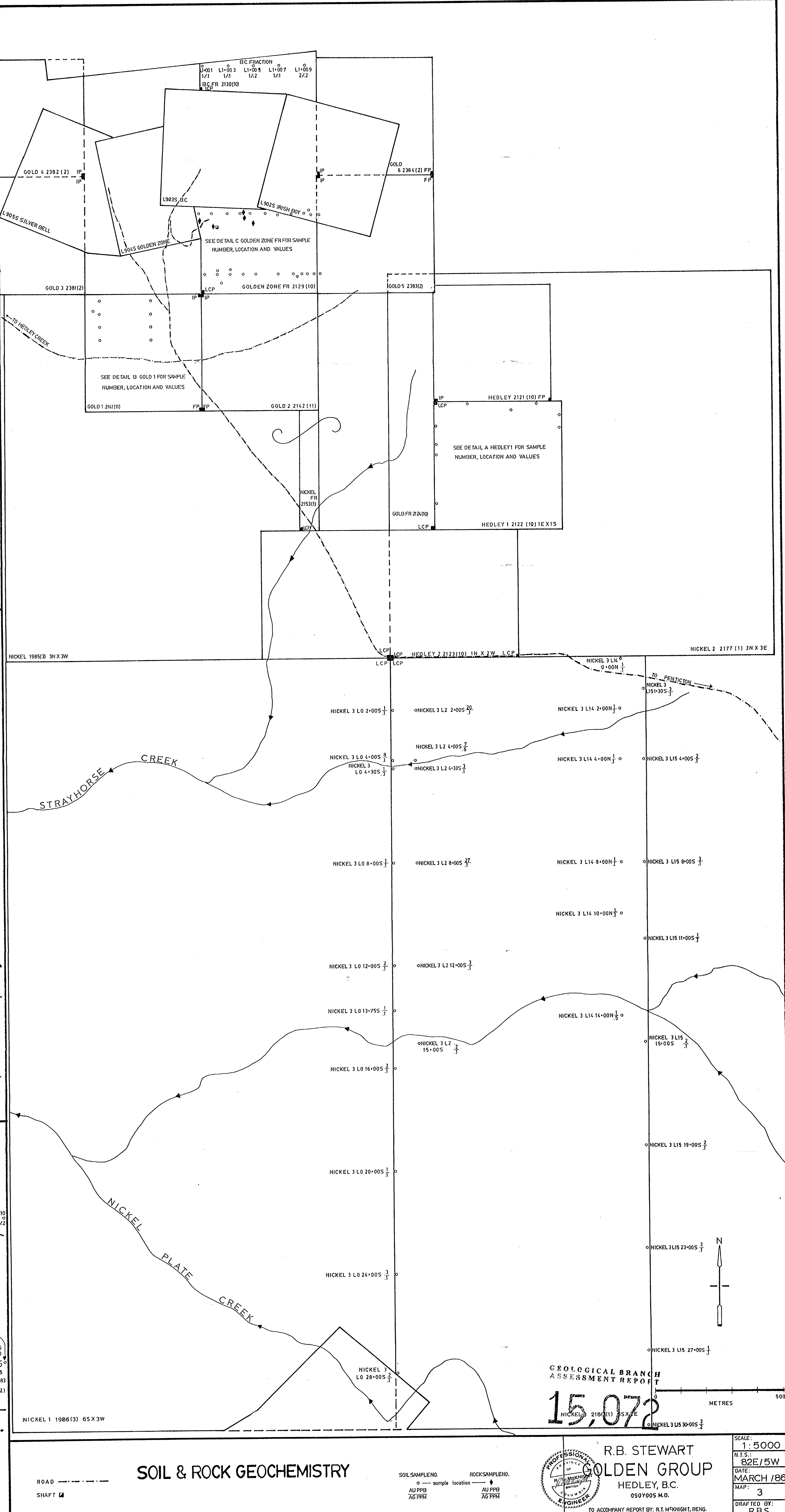


DETAIL B  
GOLD 1 SOIL & ROCK GEOCHEMISTRY  
NICKEL 1985(3) 3N X 3W  
1:2000

DETAIL C GOLDEN ZONE FR



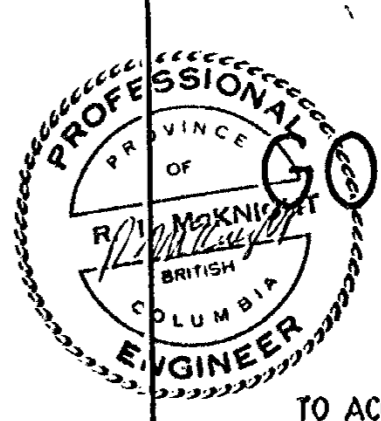
DETAIL C  
GOLDEN ZONE FR SOIL & ROCK GEOCHEMISTRY  
NICKEL 1985(3)  
1:2000



SOIL & ROCK GEOCHEMISTRY

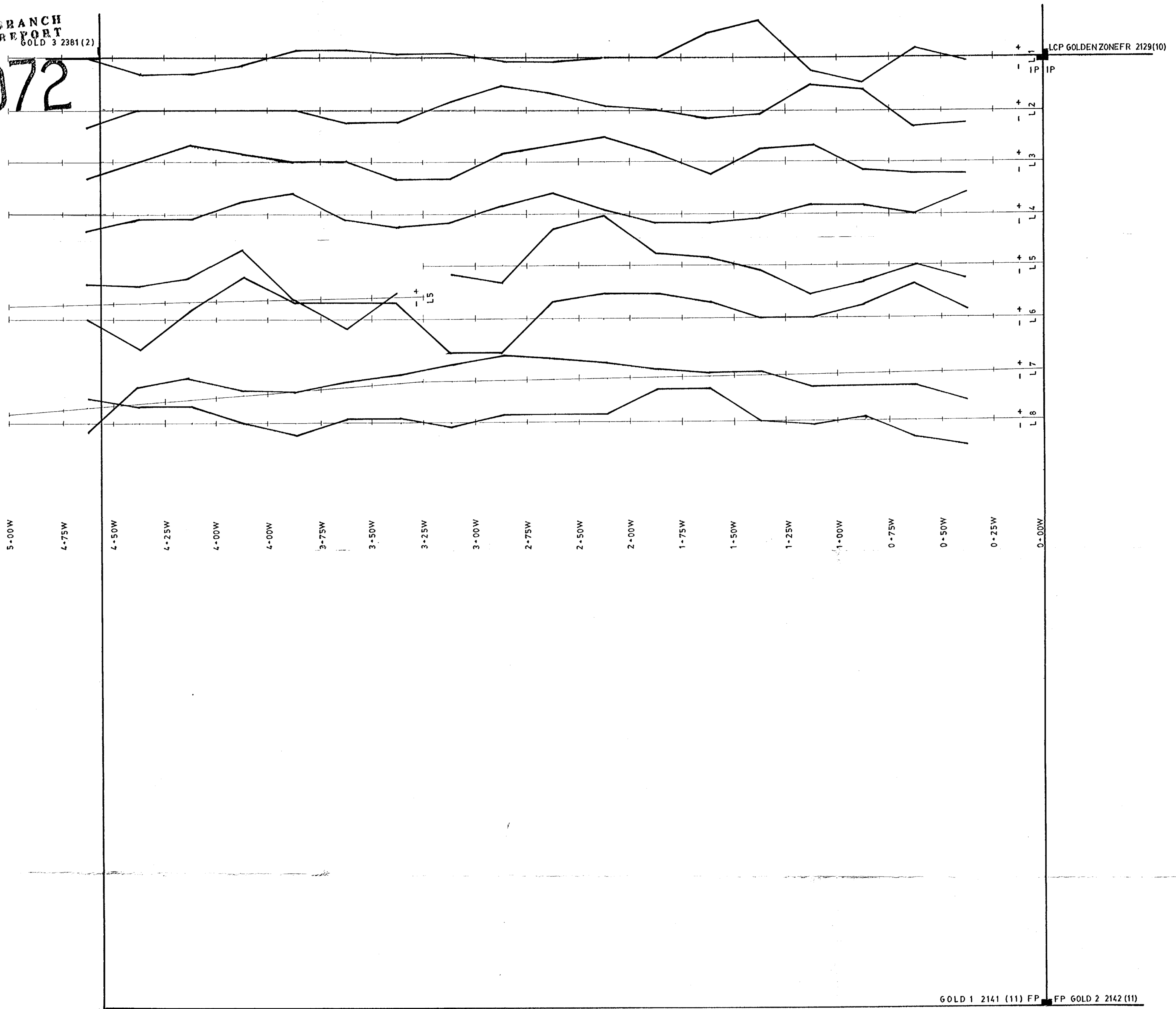
1:5000  
N.T.S.: 82E/5W  
DATE: MARCH /86  
MAP: 3  
DRAFTED BY: R.B.S.  
R.B. STEWART  
GOLDEN GROUP  
HEDLEY, B.C.  
050Y005 M.D.  
TO ACCOMPANY REPORT BY: R.T. McKNIGHT, BENG.

15,072





15,072

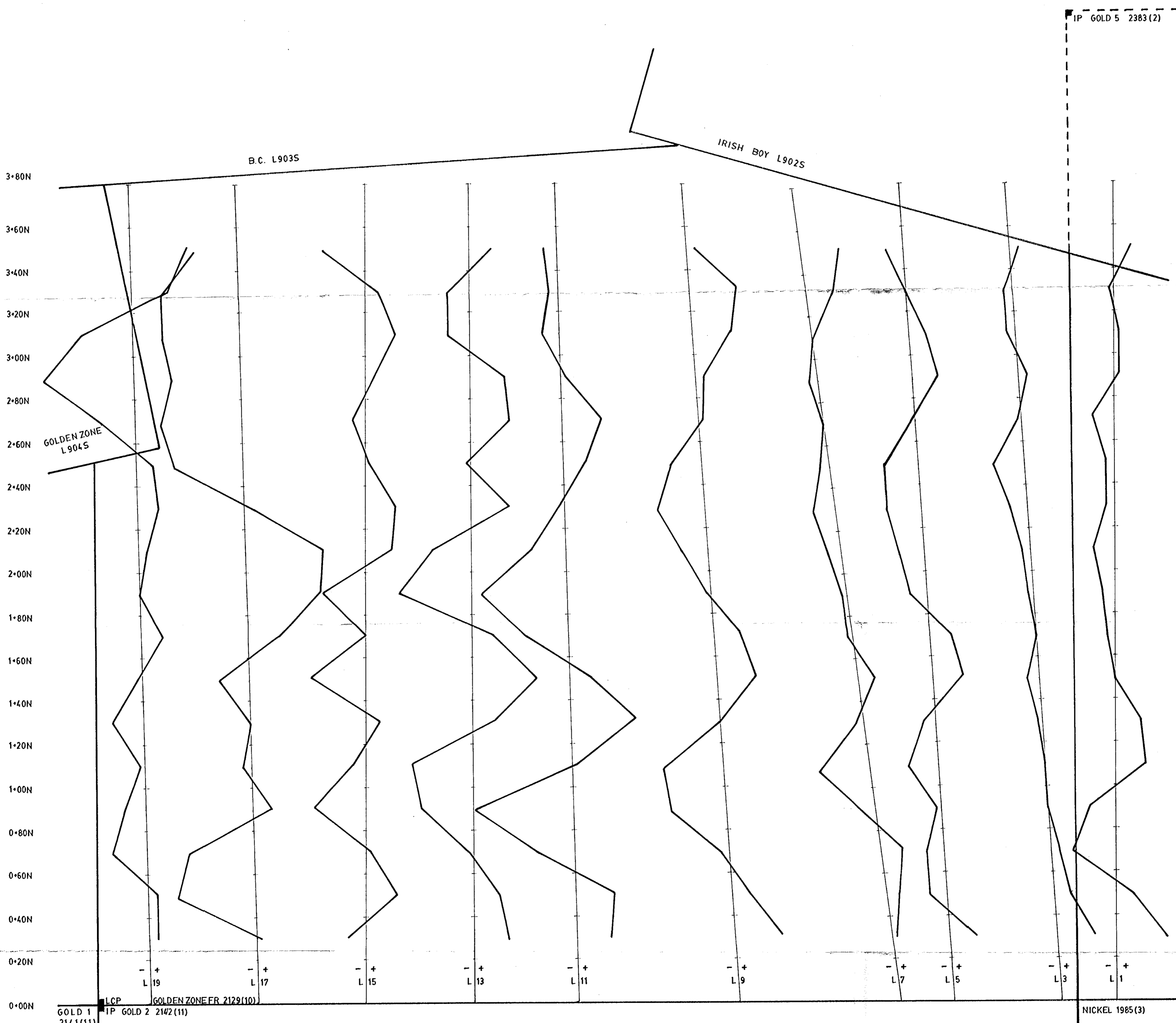
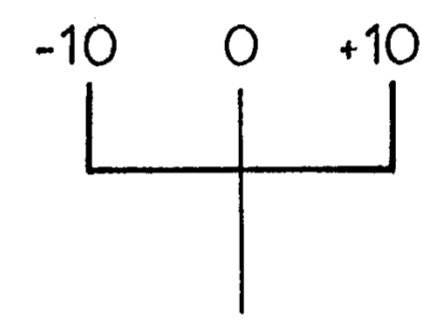
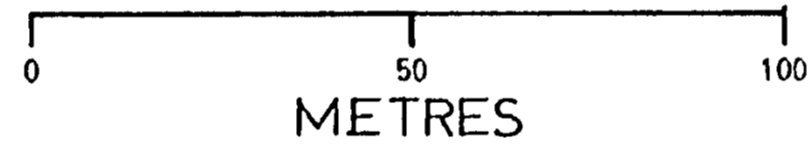


NICKEL 1985(3)

GOLD 1

VLF-EM PROFILES

SEATTLE 24.8 khz.

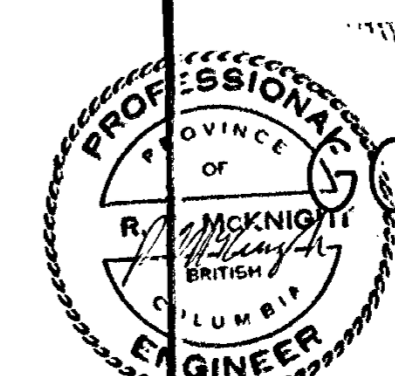
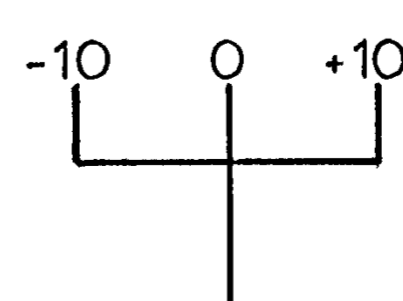
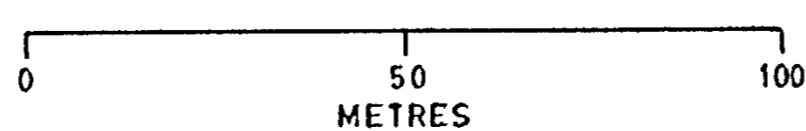


GOLD 1  
2141(11)

NICKEL 1985(3)

SEATTLE 24.8 khz.

GOLDEN ZONE FR  
VLF-EM PROFILES



R.B. STEWART  
GOLDEN GROUP  
HEDLEY, B.C.  
0501005 M.D.

TO ACCOMPANY REPORT BY R.T. MCKNIGHT, P.E.

SCALE:	1: 1000
N.T.S.:	82E/5W
DATE:	MARCH/86
MAP:	4
DRAFTED BY:	R.B.S.