

REPORT ON  
TEST PITTING AND  
GEOCHEMICAL SAMPLING  
PARROTT LAKE PROSPECT  
IRK CLAIMS  
HOUSTON AREA  
OMINECA MINING DIVISION  
93 L/ 2E

Latitude 54°12' Longitude 126°38'  
Asarco Exploration Company of Canada, Limited  
(Owner and Operator)

by

R. E. Gale

October 1982

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**10,949**

TABLE OF CONTENTS

	<u>Page</u>
LOCATION	1
CLAIMS	1
OBJECTIVE OF WORK AND METHOD	1
RESULTS OF PITTING	2
GEOCHEMICAL RESULTS	4
CONCLUSIONS AND RECOMMENDATIONS	4
REFERENCES	6
APPENDIX	
A - Assay Data	
B - Statement of Expenditures	
FIGURES	
1 - Location Map	
2 - Claim Location Map	
3 - Pit Locations (In Pocket)	

## LOCATION

Figure 1 is a location map of B.C. showing the approximate location of the Parrott Lake Prospect (IRK Claims) about 64 kilometers southeast of Smithers, B.C.

## CLAIMS

Figure 2 is a more detailed location map showing the claims location 21.7 kms. south of Houston. Inset is a claims map showing the IRK I - X claims inclusive.

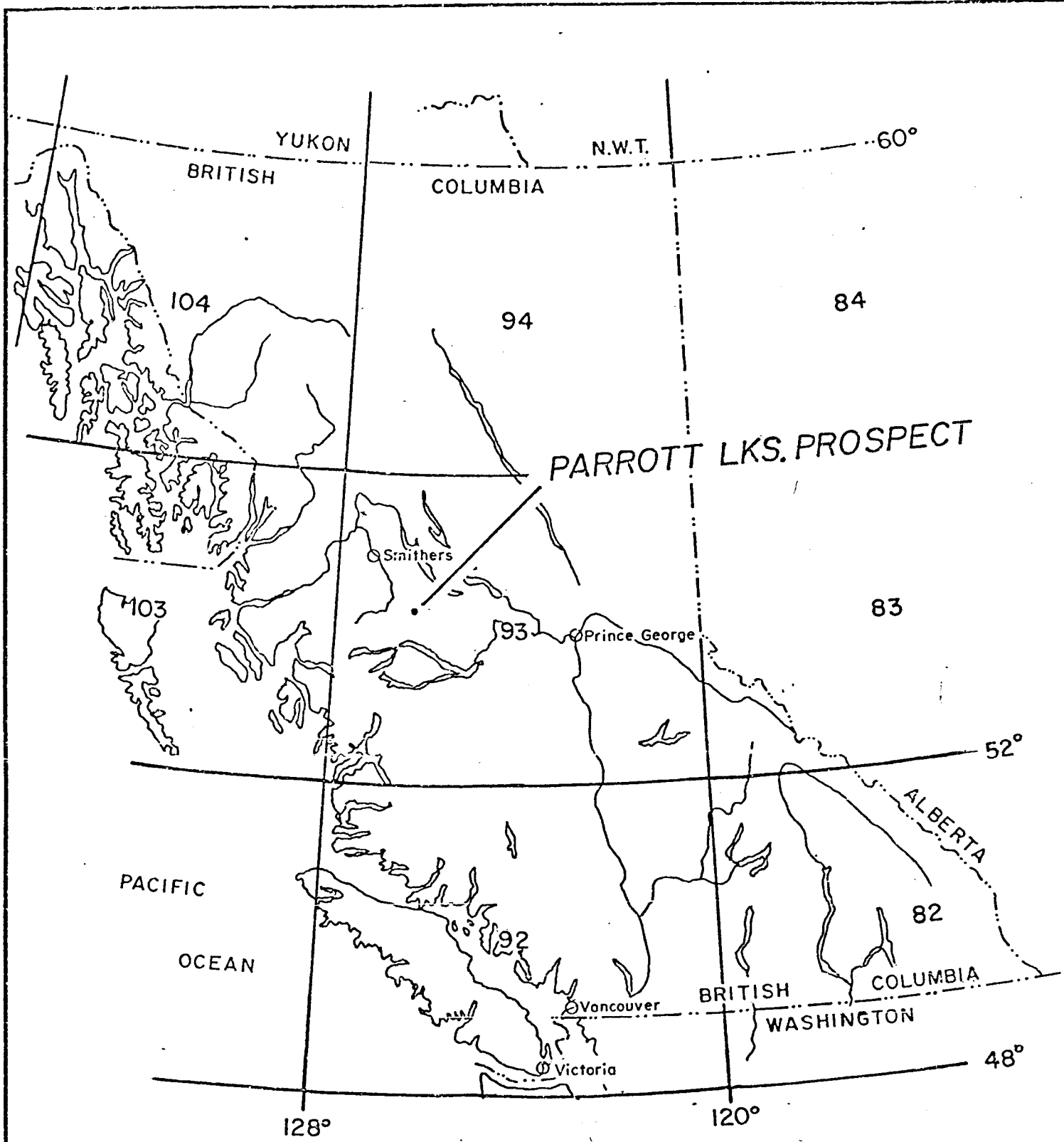
## OBJECTIVE OF WORK AND METHOD

A program of test-pitting to bedrock utilizing a backhoe was carried out on the IRK I, 6, VII and IX claims during the period July 5 - 17, 1982.

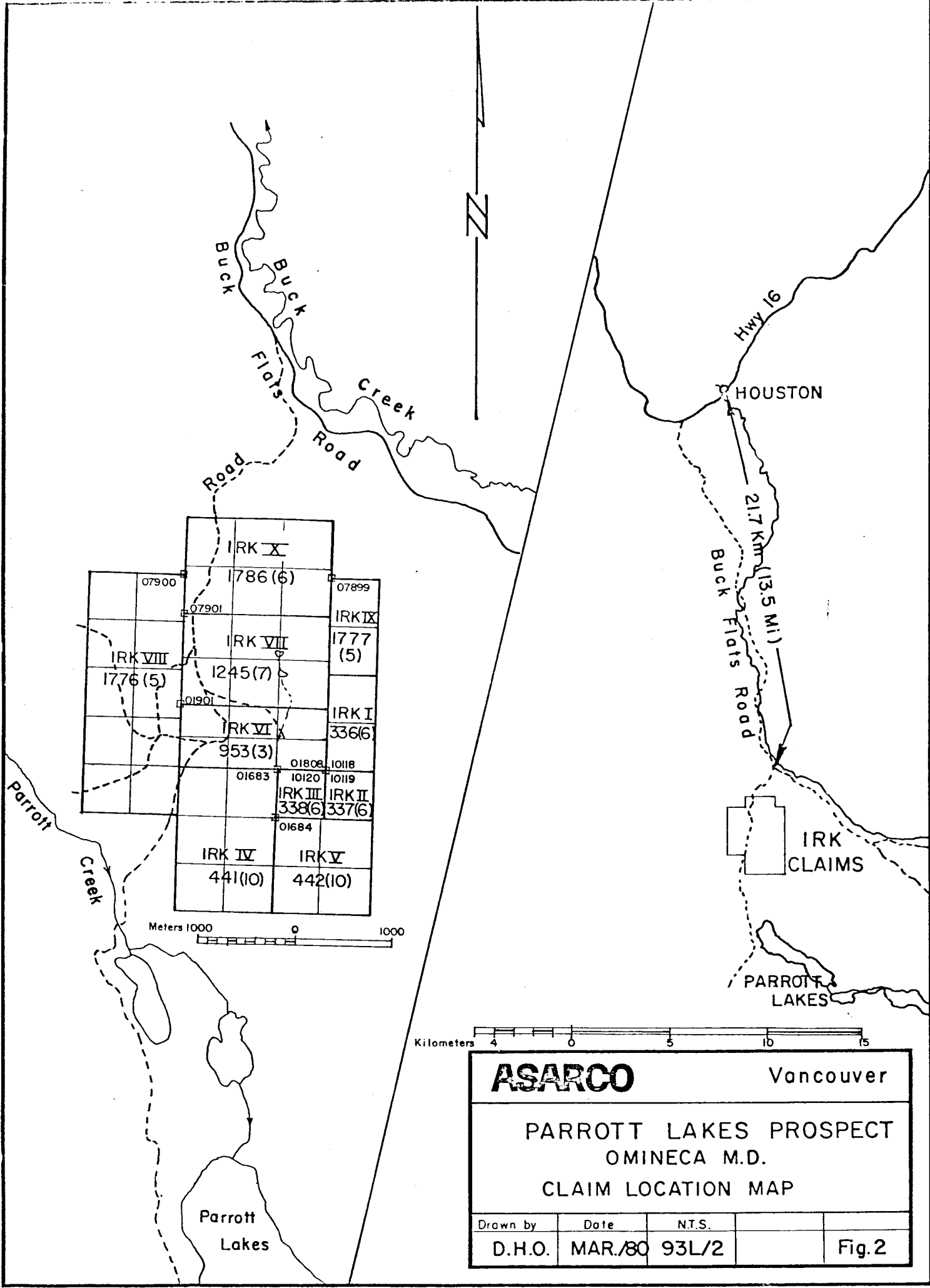
The purpose of the program was to attempt to find mineralization in bedrock beneath shallow soil cover, in areas where VLF anomalies and Pb-Zn-Cu-Ag soil geochem anomalies had been detected by earlier surveys.

In all, 35 pits were dug with backhoe reaching bedrock at depths of .66 to 2 meters. Because the area is open to cattle grazing all pits were filled in, following sampling, and soil cover was restored as near as possible to its original configuration.

The first 11 pits were dug in relatively accessible areas requiring little trail construction for access. This work was performed by a standard backhoe contracted from B and E Enterprises, Houston B.C. The remaining area of more difficult access



<b>ASARCO</b>		Vancouver		
<b>PARROTT LKS. PROSPECT LOCATION MAP</b>				
Drawn by	Date	NTS.		Figure
D.H.O.	MAR/80	93L/2E		I



<b>ASARCO</b>		Vancouver	
PARROTT LAKES PROSPECT OMINECA M.D. CLAIM LOCATION MAP			
Drawn by	Date	NT.S.	
D.H.O.	MAR./80	93L/2	Fig. 2

required cutting of trees and trail construction utilizing a skidder-mounted backhoe contracted from J. Hidber, Telkwa, B.C.

In about half of the pits, bedrock was not reached within 2 meters depth, in which case only boulders carrying pyrite or other sulfides, and soils were sampled. Geochem samples were taken from the walls of pits at .66 meters (2') and 2 meters (6') depth, unless bedrock was reached above 6' depth in which case a soil sample was taken just above the bedrock surface.

All samples of soil, float boulders and bedrock were run by Acme Analytical Labs using the I.C.P. method. In addition all samples were run geochemically for Au by the combined Fire Assay bead and Atomic Absorption method and Hg and Ag were run by the Atomic Absorption method.

Work in the field was carried out under the supervision of R. E. Gale.

### RESULTS OF PITTING

The following is a tabulation of the type of material found in each pit. Less than half the pits reached bedrock and in many the depth of soil is greater than 4 meters.

<u>Pit No.</u>	<u>Type Soil</u>	<u>Type Float Boulders</u>	<u>Bedrock Depth</u>	<u>Type Bedrock</u>
P 1	Red Clay	Pyritic-Siliceous intrusive rock?	+4 meters	?
P 2	"	" "	+3 meters	?
P 3	Red-Brown Clay	Frac volc w/barite	+2 meters	?
P 4	Red-Brown Clay	Pyritic silicif volc.	+3 meters	?
P 5	Red-Brown Sandy Clay	Bleached pink volc. rock	+2 meters	?

Pit No.	Type Soil	Type Float Boulders	Bedrock Depth	Type Bedrock
P 6	Red-Brown Sandy Clay	Bleached pink volc. rock	+2 meters	?
P 7	"	"	+2 meters	?
P 8	"	Frac volc.w/barite?	4 meters	Red And Tuff
P 9	"	Silicif-bleached volc.	.1 meter	?
P 10	"	"	+3 meters	?
P 11	"	Silicified-bleached diorite-monzonite	+1 meter	?
P 12	Red Clay	"	.66 meter	Red Feld. Xtal Tuff
P 13	"	Bleached volc.rock	+2 meters	?
P 14	"	"	.66 meters	Strong bleached alt volc.
P 15	"	None collected	1.3 meters	"
P 16	"	"	1.3 meters	"
P 17	"	"	.66 meters	Red volc. tuff
P 18	"	"	.33 meters	Strongly bleached volc.
P 19	"	"	2.33 meters	"
P 20	"	"	+2 meters	?
P 21	"	"	+2 meters	?
P 22	"	"	1.33 meters	Fresh Hbl Gd Dike?
P 23	Black sooty soil	"	1.66 meters	Carb calc. arkose
P 24	"	"	+2 meters	"
P 25	"	"	.66 meters	w/gal sph
P 26	"	"	.66 meters	carbonaceous arkose
P 27	Red clayey soil	"	4.66 meters	bleached volc. tr malachite
P 28	"	"	+2 meters	?
P 29	"	"	1.33 meters	red volc. breccia

<u>Pit No.</u>	<u>Type Soil</u>	<u>Type Float Boulders</u>	<u>Bedrock Depth</u>	<u>Type Bedrock</u>
P 30	Red clayey soil	None Collected	2 meters	bleached andesite
P 31	"	"	+2 meters	?
P 32	"	"	+2 meters	?
P 33	"	"	1 meter	Fresh Silt-stone
P 34	"	"	4 meter	Bleached Co <sub>3</sub> -veined Pink tuff
P 35	Red-brown clay	"	+2 meters	?

#### GEOCHEMICAL RESULTS

Geochemical results, for soils, float boulders and bedrock in pits 1 - 35 are included as Appendix A. Samples are too few in number to determine statistically anomalous limits.

It is evident that in the 2 different areas explored, as shown on Figure 3, rocks and soils from the western part of the area, (pits 1 - 11) are relatively enriched in Cu-Ag and Zn while those from the eastern section (Pits 12 - 35) are generally enriched in Pb-Zn, Mo, As and Cd.

#### CONCLUSIONS AND RECOMMENDATIONS

In both areas sampled, the predominant rock type is a pink-hematite rich, fine grained andesite tuff which is sheared, fractured and veined by calcite, chlorite, sericite and possibly barite.

In pits 23, 24, 25, 26 an unusual calcareous arkose or greywacke conglomerate carrying abundant probable carbonaceous



plant remains with 2-3% pyrite, galena and sphalerite was found in bedrock. Some of the sulfides appear to be fragments themselves and it is possible that they are an erosion product derived from older rocks rather than products of localized hydrothermal alteration and mineralization.

No bedding attitudes are visible and judging by the sheared nature of the andesitic rocks, faulting in the area is likely. It is possible that the arkosic conglomerate and the red andesitic volcanic rocks are in fault contact along steep dipping, northerly-trending faults.

According to mapping by Church (1970) the reddish andesitic volcanic rocks are probably part of his Tip Top Hill volcanics of Paleocene or Upper Cretaceous age and the arkosic conglomerate is probably part of an un-named early Mesozoic sequence of rocks.

In pits 1 and 11 near the west side of the area of test-pitting no bedrock was located but large pyritized float boulders .5 meters wide, which look to be of local derivation, were exposed. These boulders appear to be silicified intrusive rocks, possibly diorite or monzonite. The boulders from pit 1 are enriched in Ag and Au, and one boulder from pit 11 has 34.6 ppm Ag and 1787 ppm Cu. The geochem results here suggest that a concealed mineralized intrusion may exist "up glacial trend" to to north or northeast from pits 1 and 11.

Further test pitting by backhoe is warranted in the area of anomalous copper values in soils, which were detected in earlier surveys.



R. E. GALE, P. Eng.

REFERENCES

- Church, B. N., 1970: B.C. Department of Mines and Petroleum Resources, GEM 1970, pp. 119 - 125.
- MacIntyre, D. G., November 1978: Assessment Reports, Soil Geochemistry - Parrott Lakes Prospect - Irk VI claim.
- Gale, R. E., August 15, 1979: Assessment Report - Soil Geochemistry, Parrott Lakes Prospect, Irk VII, VIII, IX and X claims.
- Mullan, Ashton, W., November 27, 1979: Report on Induced Polarization and Resistivity Survey on the Parrott Lakes Prospect.
- Olson, D. H., March, 1980: Assessment Report on the Percussion Drilling Program on the Parrott Lakes Prospect - Irk Claims.
- Porter, J. R., June 3, 1982: Assessment Report VLF-EM and Total Field Ground magnetic surveys - Parrott Lakes Prospect.

APPENDIX "A"

ASSAY DATA

## ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO<sub>3</sub> TO H<sub>2</sub>O 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, Mn, Ba, Si, Sr, Cr AND B. Au DETECTION 3 ppm.

AGI ANALYSIS BY AA. AU ANALYSIS BY AA FROM 10 GRAM SAMPLE. HGI ANALYSIS BY FLAMELESS AA FROM .500 GRAM SAMPLE. SAMPLE TYPE - SOILS & ROCKS

DATE RECEIVED JULY 13 1982

DATE REPORTS MAILED

*July 19/82*

ASSAYER

*D. Toye*

DEAN TOYE, CERTIFIED B.C. ASSAYER

ASARCO FILE # 82-0578 (Soil Geochem Values)

PAGE # 1

SAMPLE #	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	M	Aut	Hgt	Agt
Pit #	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppb	ppm	ppm	
1 IRK P1-2	1	41	51	291	.5	18	10	677	3.83	31	2	ND	2	81	1	2	2	80	.31	.06	11	29	.25	289	.01	6	1.33	.02	.10	2	2	60	.5
1 IRK P1-6	1	54	59	450	1.2	32	17	1011	3.71	37	6	ND	2	177	2	2	2	75	2.45	.09	8	28	.48	666	.01	10	1.09	.03	.16	2	2	20	1.2
1 IRK P1-12	1	48	22	205	.3	51	20	1135	3.57	32	2	ND	2	172	1	2	2	64	1.47	.08	7	28	.59	513	.01	10	.97	.03	.18	2	2	70	.4
2 IRK P2-2	1	52	93	427	.4	11	10	551	3.90	40	2	ND	2	98	1	2	2	78	.30	.07	9	27	.29	285	.01	7	1.43	.02	.15	2	3	45	.5
2 IRK P2-7	1	46	29	207	.3	43	19	1034	3.52	32	3	ND	2	180	1	2	2	68	1.99	.08	7	32	.67	565	.01	10	1.01	.03	.15	2	2	70	.4
2 IRK P2-10	1	44	29	218	.3	27	14	730	3.70	28	2	ND	2	156	1	2	2	70	1.92	.09	8	32	.64	603	.01	12	1.11	.03	.19	2	2	35	.3
3 IRK P3-2	1	35	77	445	.3	24	17	1360	3.44	25	9	ND	2	145	2	2	2	70	2.91	.09	9	21	.50	684	.01	9	1.23	.03	.14	2	1	70	.2
3 IRK P3-6	1	39	54	352	.3	23	16	1162	3.62	26	5	ND	2	144	2	2	2	70	2.21	.10	9	24	.59	418	.01	9	1.26	.04	.16	2	2	30	.3
4 IRK P4-2	1	43	44	338	.5	28	13	850	4.10	26	2	ND	2	135	2	2	2	87	.55	.10	13	26	.42	414	.02	11	1.40	.03	.15	2	2	60	.4
4 IRK P4-6	1	37	39	293	.3	31	21	1503	3.53	26	2	ND	2	148	3	2	2	74	2.09	.09	9	26	.56	516	.01	12	1.09	.04	.17	2	2	30	.3
4 IRK P4-10	1	37	55	287	.3	25	15	1072	3.59	32	3	ND	2	153	3	2	2	78	2.29	.10	9	30	.63	409	.01	13	1.04	.05	.15	2	2	50	.4
5 IRK P5-6	1	31	24	138	.3	25	13	822	3.03	16	9	ND	2	238	2	2	2	66	3.60	.11	15	19	.65	479	.05	9	1.34	.04	.12	2	2	35	.2
6 IRK P6-2	1	24	19	137	.2	13	17	1491	3.14	22	3	ND	2	130	1	2	2	71	1.80	.11	9	13	.49	356	.02	10	.92	.06	.09	2	2	40	.3
6 IRK P6-6	1	24	21	112	.1	20	13	907	3.11	7	2	ND	3	179	1	2	2	69	1.28	.13	19	15	.84	517	.09	7	1.53	.05	.12	2	2	25	.2
7 IRK P7-2	1	43	26	233	.4	23	13	973	4.42	20	2	ND	2	147	1	2	2	97	.72	.10	12	23	.42	352	.01	9	1.58	.06	.11	2	2	80	.4
7 IRK P7-6	1	38	34	237	.6	30	16	1048	3.31	31	4	ND	2	182	2	2	2	64	2.08	.10	10	22	.54	355	.01	11	1.07	.04	.15	2	2	40	.5
8 IRK P8-2	1	36	57	282	.7	20	10	643	4.06	29	2	ND	2	136	1	2	2	86	.55	.10	17	28	.39	517	.02	10	1.54	.03	.12	2	2	70	.6
8 IRK P8-5	1	34	49	253	.4	24	15	1005	3.62	23	2	ND	2	151	2	2	2	80	.99	.12	14	21	.55	342	.03	11	1.29	.06	.13	2	2	20	.5
8 IRK P8-12	1	11	36	161	.3	10	10	607	2.95	33	2	ND	2	124	1	2	2	63	2.06	.09	7	9	.30	1578	.01	7	1.04	.04	.21	2	2	50	.3
9 IRK P9-3	1	41	32	210	.3	42	21	2158	3.50	26	10	ND	2	183	2	2	2	67	4.26	.11	11	20	.45	480	.02	9	1.02	.03	.11	2	2	30	.3
10 IRK P10-2	1	50	58	551	.4	43	25	1495	4.35	33	3	ND	2	124	3	2	2	87	1.08	.10	10	29	.34	424	.02	10	1.05	.03	.12	2	2	55	.5
10 IRK P10-9	1	42	34	290	1.0	33	15	730	3.82	30	2	ND	2	134	1	2	2	72	1.38	.10	10	25	.62	570	.02	11	.99	.06	.15	2	2	30	.9
11 IRK P11-2	1	35	60	262	.3	18	10	543	3.82	29	2	ND	2	138	1	2	2	76	.53	.10	12	25	.34	516	.01	8	1.36	.03	.11	2	2	70	.3
11 P11-6	1	28	158	148	.3	25	16	1152	3.28	23	2	ND	2	194	2	2	2	71	1.62	.11	12	16	.59	363	.03	10	1.16	.06	.11	2	2	20	.3
11 P11-R	3	25	11	243	.5	27	17	1002	3.67	67	2	ND	2	427	2	2	2	47	1.44	.08	6	8	.46	984	.01	9	.60	.04	.15	2	2	100	.5

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 ppa. Au & ANALYSIS FROM 10 GRAM FA+AA. Ag & ANALYSIS BY AA. Hg & ANALYSIS BY FLAMELESS AA FROM .500 GRAM SAMPLE. SAMPLE TYPE - SOIL - PULVERIZED

DATE RECEIVED JULY 21 1982 DATE REPORTS MAILED July 29 1982 ASSAYER D. Toy DEAN TOYE, CERTIFIED B.C. ASSAYER

ASARCO PROJECT # IRK CLAIMS FILE # 82-0639 (Soil Geochem Samples) PAGE # 1

Table with columns: Pit #, SAMPLE #, No, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Hg, Ba, Ti, B, Al, Na, K, W, Au#, Hg#, Ag#. Rows represent soil samples from various pits (14, 15, 13, 18, 35, 17, 16, 18, 19, 20, 20, 24, 25, 26, 23, 22, 21, 21, 28, 27, 27, 29, 30, 30, 31, 31, 34, 34, 33, 32, 32) with corresponding analytical data for 26 elements and detection limits.



APPENDIX "B"

1982 Statement of Expenditures

PARROTT LAKES PROSPECT - OMINECA MINING DIVISION

IRK I, VI, VII, IX

Backhoe Contracting

B & E Enterprises	\$ 510.00	
J. Hidber - Backhoe	2250.00	
Mobe & Demobe	159.12	
Trail Clearance -Felling etc.	<u>750.00</u>	<u>\$ 3669.12</u>

Truck Rental - Asarco 290.90

Expenses - Asarco - R. Gale

Motel	\$ 148.40	
Airfare	261.35	
Meals	<u>100.00</u>	509.75

Assaying - Acme Analytical Labs 1275.43

Supervision - R. Gale - 4 days @ \$150/day 600.00

Drafting and Report Writing - 1 day @ \$150/day 150.00

TOTAL \$2826.08

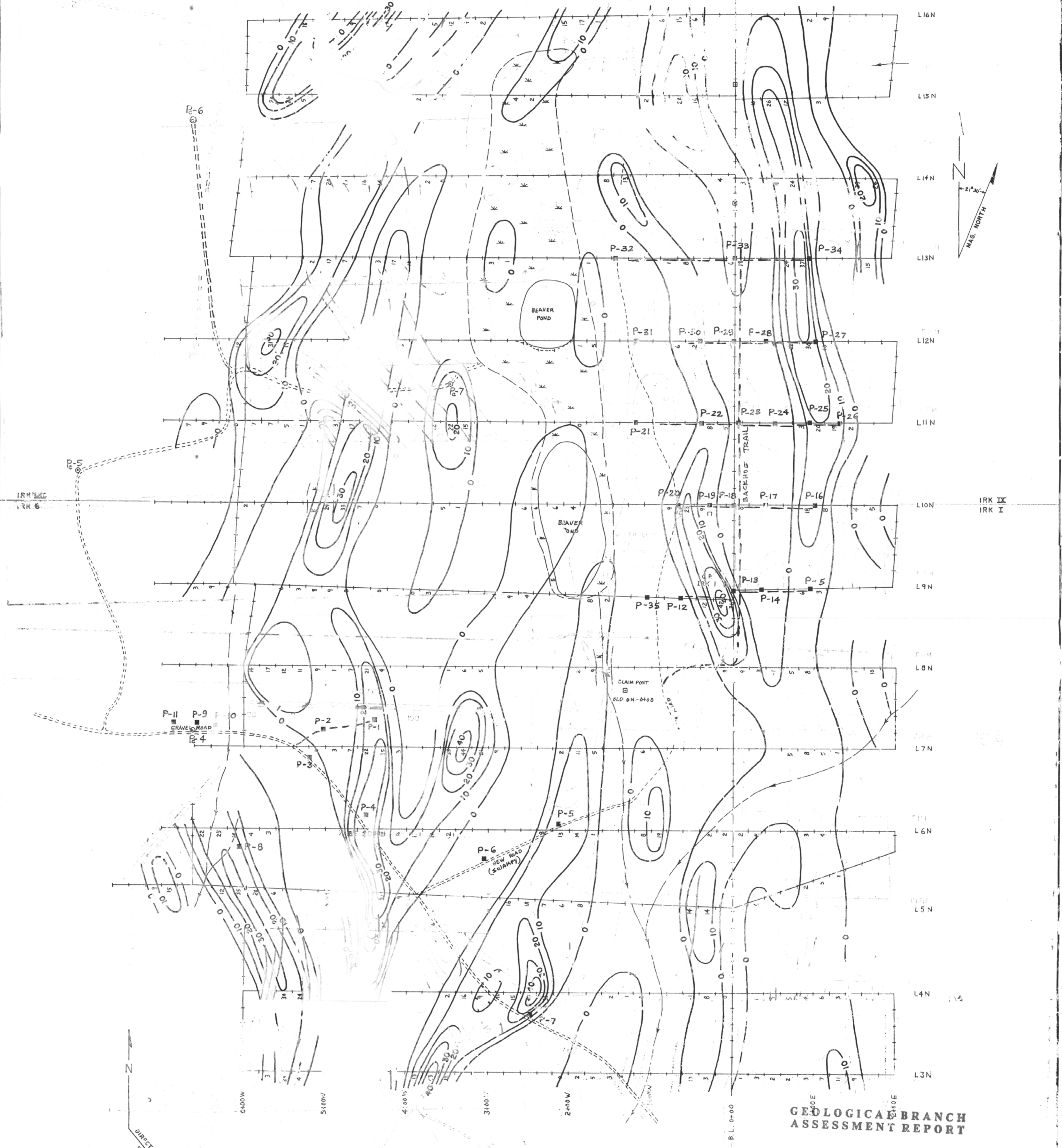
GRAND TOTAL \$6495.20

*R E Gale*

R. E. Gale, P. Eng.

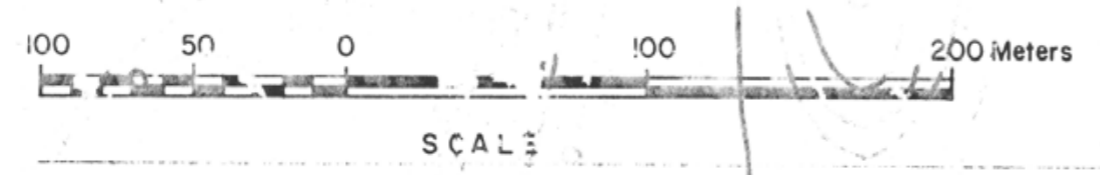
LCP F.K. 500m WEST  
F VII

LCP IRK IX 220m NORTH



N  
 DIRECTION TO TAYLOR USED (190°)  
 SEATTLE, WASH. (NPG)

FIG. 3 - old Compass Survey.



LEGEND

- INSTRUMENT - GEONICS EM-16
- STATION - SEATTLE, WASH. (NPG)
- CONTOUR INTERVAL - 10 Fraser Units
- GRAVEL ROAD
- BUSH ROAD
- CREEK
- SWAMP
- FRINGE OF SWAMP
- IRK I
- IRK II
- IRK III
- IRK IV
- IRK V
- IRK VI
- IRK VII
- IRK VIII
- IRK IX
- IRK X
- IRK XI
- IRK XII
- IRK XIII
- IRK XIV
- IRK XV
- IRK XVI
- IRK XVII
- IRK XVIII
- IRK XIX
- IRK XX
- IRK XXI
- IRK XXII
- IRK XXIII
- IRK XXIV
- IRK XXV
- IRK XXVI
- IRK XXVII
- IRK XXVIII
- IRK XXIX
- IRK XXX

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

10,949

P-1 BACKHOE  
PIT LOCATION - SUPERIMPOSED ON VLF  
OCTOBER-1982

IRCO		Vancouver		
PARROTT LAKES PROSPECT OMINECA M.D. IRK CLAIMS, I-6-VII-IX VLF SURVEY (FRASER FILTER CONTOURS)				
Drawn by	Date	R.I.S.	SCALE	FIG.
G.J.C.	MAY/82	93L/2E	1:2500	3
REVISED		R.E.C. OCT/82		

REVISED