

EXPLORATION  
NTS 93 K/11,12

COMINCO LTD.

LOG NO:	NOV 17 1992	RD.
ACTION:		
FILE NO:	WESTERN DISTRICT	

ASSESSMENT REPORT  
GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS

OWL PROPERTY

FORT ST. JAMES AREA, B.C.

OMINECA MINING DIVISION

Lat. 54°35'N  
Long. 125°30'W

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,610**

OCTOBER 17, 1992

IAN NEILL

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT  
NTS 93 K/11,12

ASSESSMENT REPORT  
GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS

OWL CLAIMS

1.0 SUMMARY

The Owl claims lie in a belt of Upper Triassic volcanic and volcanoclastic rocks with little exploration history. Copper mineralization is present in augite-plagioclase porphyry flow rocks and in massive andesitic and dacitic rocks. A previously identified Cu soil anomaly is possibly explained by a combination of concentration of metals in organic rich soils and down-slope transport of weak copper mineralization. The main Owl showing contains chalcopyrite, bornite, pyrite, magnetite, secondary K-spar and sericite hosted in fragmental volcanics. Poor soil geochemistry response in this area is possibly due to glacial till cover. I.P. and magnetics surveys detected a small anomaly (500m x 200m) which may be explained by fine-grained magnetite seen in outcrop.

2.0 LOCATION, PHYSIOGRAPHY AND ACCESS

The Owl property is located in central British Columbia (plate 1.) at the western end of Cunningham Lake, 80 km west of Fort St. James. Relief is generally low with a northwest - southeast trending ridge bisecting the property. Vegetation consists of spruce, fir, alder and thick undergrowth of devils club. A clear-cut approximately 2 km<sup>2</sup> in area is located in the northern portion of the property.

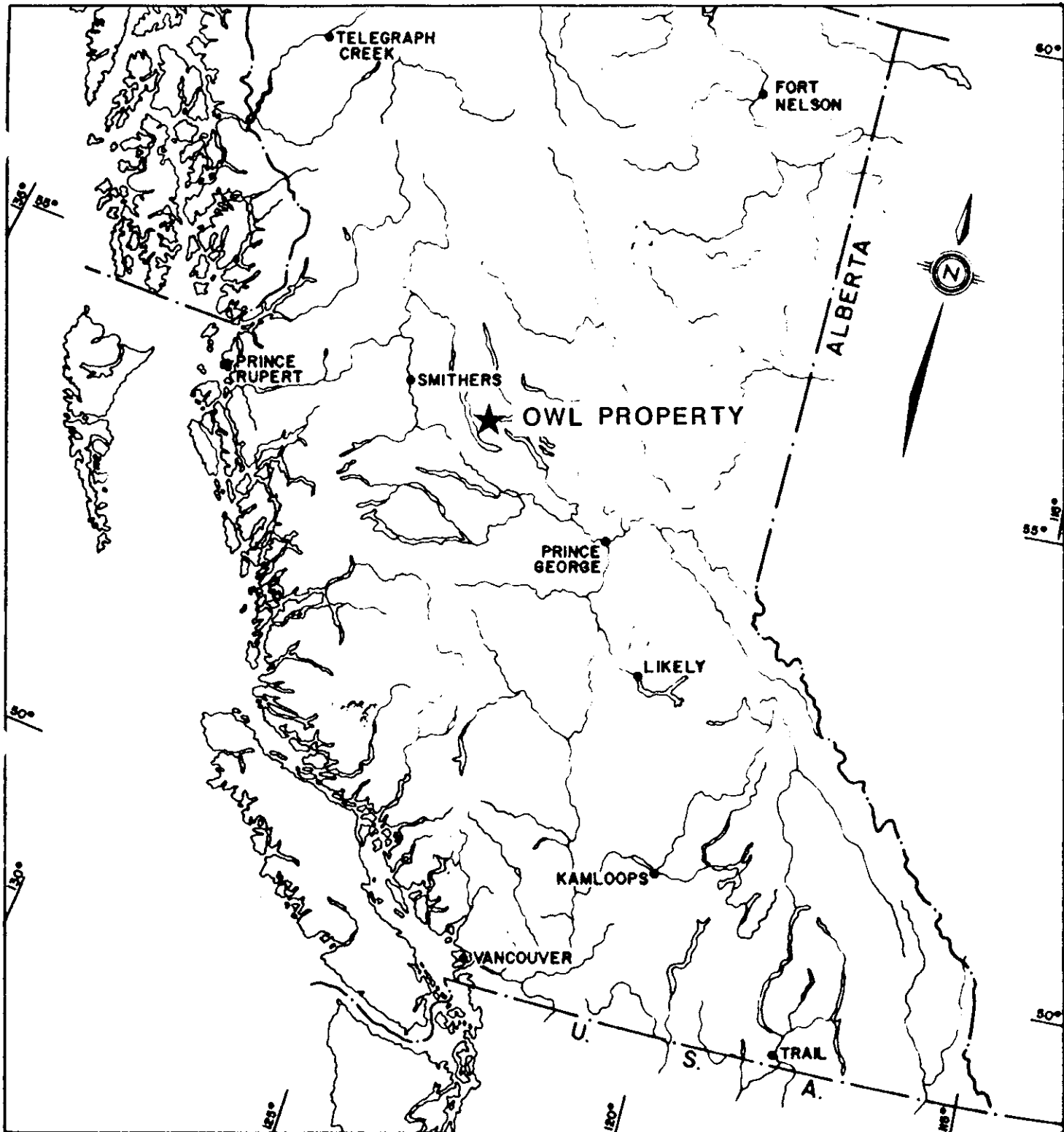
The northern part of the claim block is accessible from Fort St. James via 100 km of gravel logging road. Butterfield lake facilitates float plane access to the southern portion of the claim block. Both float planes and helicopters are based in Fort St. James. Helicopters are also available in Burns Lake.

Outcrop at lower elevations is poor due to glacial till cover, with better exposure occurring in roadcuts and in the clear-cut area.

3.0 PROPERTY

The Owl property consists of 66 units on eleven claims (plate 2.) as detailed below. The claims are under option to Cominco, with one years option completed. Upon completion of the five year option deal the claims will be 100% owned by Cominco.

<u>Claims</u>	<u>Record No.</u>	<u>Units</u>	<u>Date Recorded</u>
Owl 1	241067	1	Aug 04/89
Owl 2	241068	1	Aug 04/89
Owl 3	241069	1	Aug 04/89
Owl 4	241070	1	Aug 04/89
Owl 5	241071	1	Aug 04/89
Owl 6	241072	1	Aug 04/89
Owl 7	241073	1	Aug 04/89
Owl 8	241074	1	Aug 04/89
Owl 9	241949	20	May 05/90
Owl 10	241950	20	May 05/90
Owl 11	242558	18	Aug 13/90

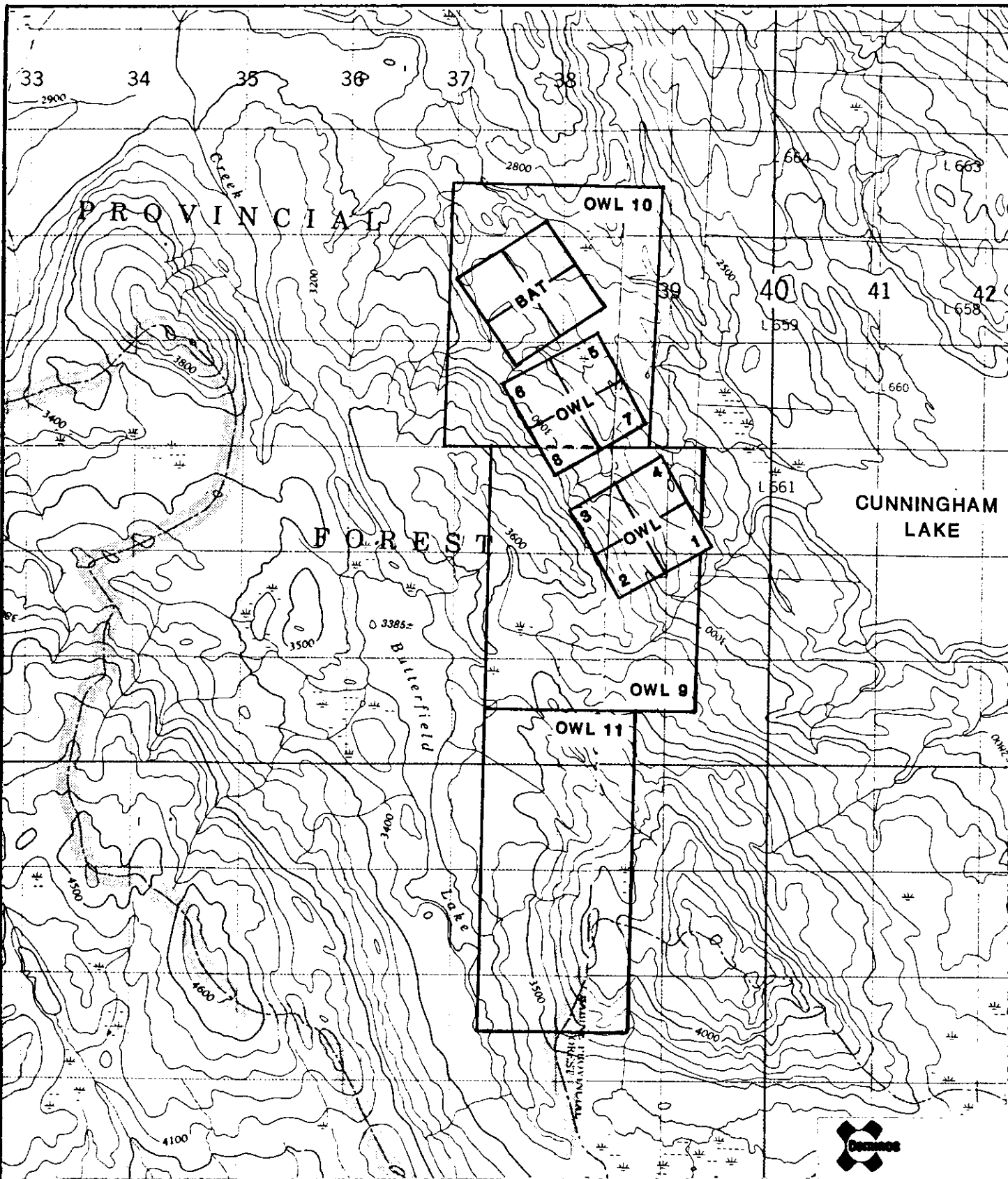


Drawn by: \_\_\_\_\_ Traced by: e. m. b.

Revised by	Date	Revised by	Date

# LOCATION MAP

Scale: 1 : 6,370,000 Date: OCT. 1992 Plate: 1



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

# CLAIM MAP

Scale: 1:50,000      Date: OCT. 92      Plate: 2

#### **4.0 PREVIOUS WORK**

The Owl claims lie in a package of volcanic and sedimentary rocks that have seen little exploration attention. A summary of exploration work in the region is as follows:

- 1969 BL claims staked over large magnetic anomaly (ultramafic complex) west of Butterfield Lake. Geophysical and geochemical surveys located moderate EM anomalies with coincident copper values.
- 1983 SMJ claims staked on south end of Butterfield Lake. Geochemical survey locates copper anomaly east of lake but work was not followed up.
- 1987 Butter claims staked on ground previously covered by SMJ and BL claims. Soil and EM anomalies confirmed.
- 1990 Owl claims staked to cover copper anomaly east of Butterfield Lake and copper mineralization exposed by extension of forest service road to the north. Prospecting along the road locates disseminated chalcopyrite in dacitic and andesitic volcanics, and massive sulphide in float.
- 1991 Cunningham Lake Reconnaissance program carried out by Cominco and Owl claims optioned.

#### **5.0 SUMMARY OF WORK 1992**

The 1992 program consisted of geophysical surveys (I.P. and magnetometer), geochemical sampling, geological mapping and prospecting. The work was carried out in two parts, the first being conducted from Butterfield Lake and the second from the Cunningham forest road.

Geophysical and geochemical surveys of the first phase were conducted on a 2km x1.5km grid over the previously defined Cu soil anomaly immediately east of Butterfield Lake. The geophysical survey totalled 9.3 line km. A total of 162 grid soil samples at 50m spacings and 31 contour soil samples were taken. Fifteen rock samples were also taken for geochemical analysis. The work was carried out from July 20<sup>th</sup> to July 6<sup>th</sup>, 1992.

The second phase of work consisted of three lines of geophysical survey totalling 5.5 line km to the northeast of Butterfield Lake. Two of the lines were also geochemically sampled at 100m spacings, for a total of 37 samples. The work was carried out over the period October 10<sup>th</sup> to October 14<sup>th</sup>, 1992.

#### **6.0 GEOLOGY**

The geology of the area is dominated by a belt of southeasterly striking, moderately to steeply southwesterly dipping sedimentary and volcanic rocks. The region was first mapped by Armstrong (1949) as belonging to the Cache Creek Group, however, they are atypical of Cache Creek rocks due to the absence of bedded chert and limestone units and lithologically may correlate best with the Late Triassic to Early Jurassic Takla Group.

Underlying the eastern portion of the property are massive greywackes and fissile argillites, all slightly metamorphosed. These rocks are overlain to the west by a sequence

of andesitic and dacitic fragmental volcanics which are themselves overlain by intermediate augite porphyry and augite-plagioclase porphyritic volcanics(plate 3). The volcanic units are variably foliated, are weakly to strongly magnetic and have been locally epidotized and pyritized.

Medium grained, weakly pyritic, equigranular leucocratic monzonite is poorly exposed on the ridge east of Butterfield Lake.

To the west of Butterfield Lake an ultramafic complex is well defined by a prominent magnetic high. It is composed of serpentinized peridotite and pyroxenite, and a sheared mafic tuff containing minor copper mineralization (INO-92-1,2,3).

## **7.0 MINERALIZATION**

Disseminated pyrite with traces of chalcopyrite and malachite occur sporadically throughout the porphyritic volcanic units. Copper values from this rock type vary from 200 to 500 ppm. Samples of the fragmental and massive volcanics also contain disseminated pyrite and pyrite concentrated along fractures, but these generally returned lower values. One sample of epidotised augite-plagioclase porphyry returned 60 ppb Au. Rock sample lithologies, mineralization and results are tabulated in appendix B.

At the northern Owl showing, disseminated and fracture controlled copper mineralization occurs in tuffaceous andesites. Chalcopyrite, bornite, pyrite and magnetite mineralized samples of these rocks give grades up to 0.69% Cu. The tuffaceous andesites also contain secondary K-feldspar and sericite. A second occurrence, 600m north of the main showing, with chalcopyrite, bornite and secondary K-feldspar returned lower values in grab samples. Quartz-carbonate veins in the region of the main showing with trace chalcopyrite and colloform manganese returned 0.46% Cu and 0.063% Au.

## **8.0 GEOCHEMISTRY**

A total of 230 grid and contour soil samples were taken on the property. Where possible they were taken from "B" horizon. All samples were placed in paper envelopes, air-dried, and submitted to Cominco Exploration Research Laboratory in Vancouver for Cu, Pb, Zn, Ag and Au analysis by AAS. In addition, fifteen rock samples were submitted for the same analysis. Sample locations and results are shown on plate 4. Analytical results are tabulated in appendix B. Threshold values established in 1991 by the Cunningham Lake recce program were used for anomaly definition and are as follows: Cu - 60ppm, Pb - 10ppm, Zn - 100ppm.

Geochemical sampling verifies the presence of a copper-in-soil anomaly east of Butterfield Lake. Anomalous samples taken this year correlate well with the previously identified anomaly. This limits the extent of the anomaly to immediately east of Butterfield Lake at the base of slope. The anomaly is apparently caused by downslope transport of the weak copper mineralization along the ridge. The higher values along the lake-shore are attributed to concentration of metals in organic rich soils, and may reflect the difficulty in obtaining "B" horizon material in swampy areas at the lower elevations.

Copper-in-soil is also slightly anomalous near the small outcrops of leucocratic monzonite at the eastern end of line 500N. Relatively abundant outcrop of volcanics in this area shows little evidence of copper mineralization.

A soil geochemistry grid was also constructed over the northern copper showing in an attempt to determine the extent of mineralization. The survey was hampered by glacial till cover and Cu analyses were generally low. Concentration of copper in organic soils was evident again, with soils taken from "A" horizon returning elevated values.

## 9.0 GEOPHYSICS

I.P. and magnetometer surveys were carried out by Scott Geophysics of Vancouver, B.C.. The southern survey grid was located so as to cover the previously defined soil anomaly and the weak upslope, in-situ copper mineralization along the ridge. Encouraging I.P. responses in the northeastern part of the survey area led to 3 additional recce I.P. lines being run further to the northeast. These additional lines failed to detect any additional anomalies. Geophysical reports are presented in appendix A.

## 10.0 CONCLUSIONS AND RECOMMENDATIONS

The styles of mineralization and alteration observed in outcrop on the Owl property show affinities to porphyry type mineralization. The geological setting of the mineralization is also favorable for a porphyry system. Wide spread grid and recce type I.P. surveys failed, however, to define an anomaly of sufficient size to indicate the presence of a significant porphyry related alteration system close to surface. Soil geochemistry confirmed the previously defined Cu anomaly at the south end of the property, but failed to identify anomalous Cu associated with the small coincident I.P./Mag. response noted in the central portion of the surveyed area. Outcrop in the area of the I.P. anomaly was devoid of alteration or mineralization suggesting proximity to a porphyry system. Likewise I.P. and geochemistry over the main owl showing were unsuccessful in delineating any anomalies which would suggest mineralization beyond that exposed in the main showing. Further work is not recommended.

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APPENDIX A

GEOPHYSICAL REPORTS



COMINCO LTD.

EXPLORATION

WESTERN CANADA

24 July 1992

FILE: 811-45c

FILE NOTE

**SUBJECT:** OWL Property  
Fort St. James Area

Five lines, some 500 m apart, were covered with a recce I.P./Res. and magnetometer survey during July 1-6, 1992 (9.3 line kms). A pole-dipole array with spacing  $a=75$  m and separations  $n=1-4$  was used. The Scintrex IPC7-2.5 kW transmitter/IPR-12 receiver combination was used in the 2 sec. ON/OFF mode with the readings registered between 690 and 1050 msec. after current cut-off. Scintrex MP-4 base and line magnetometers were used with station interval of 25 m.

Background chargeabilities are in the 2-4 mV/V range. Relatively sharp, well defined, sometimes multiple-zoned anomalies occur in the eastern part of the grid and also near the west end of Line ON (possibly 500N also). The former anomalies are open to Grid North and South, and possibly East, and the western one to the West, North and South. Their character changes somewhat from line to line, but sources come close to surface on Line 2000N: 950-1050E and 2250 to 1400E (there's also a not fully developed feature near 1600E). The anomalies are weaker on 1500N (1150-1200E) and 1000N (1425E), but again slightly stronger on 500N (1575E). The "zone" is deeper along Line ON. The anomalies are of the single pantleg type which makes them more difficult to pinpoint. The zone near the west end of Line ON shows a steadily increasing amplitude. This may have a different type of source than the main chargeability zone.

Resistivities vary along the lines but do not show much difference between areas of background or anomalous chargeabilities. The pattern near the east end of Line ON suggests, however, that there is a thicker cover (= lower res. values) supporting the deeper I.P. source. This is supported by topography.

The magnetic profiles show more relief and higher amplitudes over the chargeable zones with strongest response near the west end of Line ON. This combination (I.P. & Mag.) suggests that the source of the I.P. is most likely pyrrhotite or magnetite rather than graphite.

Owl Property  
July 24, 1992

cont'd

..... 2 ...

Correlation with the geology/geochem suggests that the western anomaly is caused by a serpentized UM mapped on the west side of Butterfield Lake. The source is most likely fine-grained magnetite but minor sulphides cannot be excluded.

The eastern anomaly may be caused by sulphides (+ magnetite) in an augite porphyry mapped near 800-1100E along 1000N and again beyond 1700E. This rock gives up to 500 ppm Cu. The first location, however, has low I.P., the second one falls outside the grid. This is not a deterrent. No outcrops were seen near the strongest I.P. (Line 2000N). (A minor monzonite plug is seen beyond the east end of Line 1500N.) Soils show several hundred ppm Cu in the valley, but not over the I.P. high. (This may be caused by special Eh-pH conditions.) Considering the openness of the I.P. anomaly, it is recommended to extend the grid to North and East after staking extra claims, and continue the I.P./Res./Mag. survey.



JK/jel

c.c. N.J. Callan 

COMINCO LTD.

EXPLORATION

WESTERN CANADA

22 October 1992

FILE: 811-45c

FILE NOTE

**SUBJECT:** OWL PROPERTY

Three additional lines, 2500N, 3500N and one labelled 400N (= approx. 5000N) were covered with recce I.P./Res. and magnetics during the period Oct. 11-15/92. The electrode spacing was increased from 75 to 100 m. A total of 5.5 km of I.P./Res. and magnetics each was collected (see File Note, July 24/92).

The eastern anomaly appears to continue to Line 2500N where it is approx. 200 m wide. It is at or comes close to surface between 1700 and 1800W, and correlates with a weak drop in resistivity (to 600 ohmm). It is flanked by a complex magnetic high (3,000 nT relief) on the east side. It should be noted that Line 2000N terminates directly east of the anomaly and Line 2500N directly to its west. This does not permit a full assessment of the anomaly. However, it can be safely said that the magnetite seen in outcrop is the most likely source of the chargeability high.

Line 3500N shows only weakly, varying chargeabilities: 4-7 mV/V, and resistivities are moderately high throughout.

Line 400N, centered over a mineralized outcrop did not show any appreciable chargeability in that vicinity. A weak high, up to 15 mV/V is seen at 400E. Resistivities are in the 600-1,500 ohmm range.

No new anomalies of merit were detected.



JK/jel

c.c. N.J. Callan ✓

APPENDIX B

GEOCHEMICAL ANALYSES

## ROCK SAMPLE DESCRIPTIONS AND RESULTS

<u>Sample</u>	<u>Host Lithology</u>	<u>Mineralization</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Au</u>
INO-92-1	pxn./hbl. porphyry	1% disseminated pyrite	49	<4	18	.9	<10
INO-92-2	pxn./hbl. porphyry	.5% py., trace cpy., minor mal.	289	<4	9	.5	<10
INO-92-3	foliated mafic schist, carb. vugs	1% disseminated cpy., py., minor mal.	203	<4	32	<.4	<10
INO-92-4	porphyritic pxn./plag. mafic volc.	trace of dissem. cpy., .5% py., minor mal.	482	<4	32	<.4	<10
INO-92-5	plag./pxn. porphyry	1% disseminated pyrite	479	<4	68	<.4	<10
INO-92-6	plag./pxn. porphyry	1% pyrite, trace chalcopyrite	270	<4	72	<.4	<10
INO-92-7	fine grained int. volcanic	trace pyrite	253	<4	90	<.4	<10
INO-92-8	leucocratic hbl. monzonite	trace pyrite	4	<4	16	<.4	<10
INO-92-9	pxn./plag. porphyry, epidotized	1% pyrite blebs to 2 mm	101	<4	49	<.4	60
INO-92-10	pxn./plag. porphyry	trace cpy. and py. along fractures	264	<4	43	<.4	<10
INO-92-11	plag./pxn. porphyry, epidotized	1% cpy., py., and mal. staining	308	<4	56	<.4	<10
INO-92-12	andesitic volc., silicified	2% disseminated pyrite	353	5	82	<.4	<10
INO-92-13	silicified andesite (float)	5% pyrite, trace chalcopyrite	60	<4	23	<.4	<10
INO-92-14	felsic (vein?) with iron oxide	3% py. ~ dissem. and cubic	4	<4	<1	<.4	<10
INO-92-15	andesitic plag. porphyry flow	3% dissem. py., conc. in fractures	78	<4	43	<.4	<10

OWL-MID

JOB 92-03355  
 REPORT DATE 19 JUL 1992

LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	±	M	O	S	DEL	SZ	OR	W	CM	S	H	P	PH	CU PPM	Pb PPM	IN PPM	AG PPM	AU PPM	WT AU GRAM
89213331	174301		+0	+0	6	1	2	2	6B	25	1	1	20	2	C			30	4	51	.4	<10	10
89213332	174302		+50	+0	6	1	2	2	3B	24	1	2	10	2	B			30	4	56	<.4	<10	10
89213333	174303		+100	+0	6	1	2	2	6B	24	1	2	15	2	B			28	4	48	<.4	<10	10
89213334	174304		+150	+0	6	1	2	2	1B	24	1	2	15	2	B			27	4	54	<.4	<10	10
89213335	174305		+200	+0	6	1	2	2	2B	24	1	2	20	3	B			16	4	105	<.4	<10	10
89213336	174306		+250	+0	6	1	2	2	1B	24	1	2	20	3	B			55	5	62	<.4	<10	10
89213337	174307		+300	+0	6	1	2	2	2B	24	1	2	30	2	B			54	4	70	<.4	<10	10
89213338	174308		+350	+0	6	1	2	2	6B	24	1	1	25	3	B			24	5	67	.4	<10	10
89213339	174309		+400	+0	6	1	2	2	1B	24	1	1	30	3	B			16	4	59	<.4	<10	10
89213340	174310		+450	+0	6	1	2	2	2B	24	1	1	15	2	B			12	4	55	<.4	<10	10
89213341	174311		+500	+0	6	1	2	2	2B	24	1	1	15	2	B			15	4	82	<.4	<10	10
89213342	174495		+550	+0	6	1	2	2	2B	24	1	1	15	2	B			18	4	53	<.4	<10	10
89213343	174312		+600	+0	6	1	2	2	2B	24	1	1	20	3	B			5	4	117	<.4	<10	10
89213344	174313		+650	+0	6	1	2	2	RB	34	1	1	30	4	B			71	4	94	<.4	<10	10
89213345	174314		+700	+0	6	1	2	2	2B	34	1	1	20	4	B			32	4	82	<.4	<10	10
89213346	174315		+750	+0	6	1	2	2	2B	34	1	1	20	2	B			11	4	32	<.4	<10	10
89213347	174316		+800	+0	6	1	2	2	2B	24	1	1	25	2	B			15	4	66	<.4	<10	10
89213348	174317		+850	+0	6	1	2	2	2B	24	1	2	25	2	B			18	4	58	.4	<10	10
89213349	174318		+900	+0	6	1	2	2	6B	14	1	2	30	3	B			12	4	73	<.4	<10	10
89213350	174319		+950	+0	6	1	2	2	2B	14	1	2	30	3	B			28	4	61	<.4	<10	10
89213351	174320		+1000	+0	6	1	2	2	2B	14	1	2	20	2	B			15	4	60	<.4	<10	10
89213352	174321		+1050	+0	6	1	2	2	2B	24	1	2	30	3	B			31	4	103	<.4	<10	10
89213353	174322		+1100	+0	6	1	2	2	2B	24	1	2	30	3	B			54	4	64	<.4	<10	10
89213354	174323		+1150	+0	6	1	2	2	2B	14	1	2	30	4	B			35	4	85	<.4	<10	10
89213355	174324		+1200	+0	6	1	2	2	2B	24	1	1	30	4	B			40	4	80	<.4	<10	10
89213356	174325		+1250	+0	6	1	2	2	2B	14	1	1	25	4	B			29	4	72	.4	<10	10
89213357	174326		+1300	+0	6	1	2	2	2B	14	1	1	15	4	B			87	4	69	<.4	<10	10
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89213360	174329		+1450	+0	6	1	2	2	2B	24	1	2	15	2	B			39	4	39	<.4	<10	10
89213361	174330		+1500	+0	6	1	2	2	2B	14	1	1	10	2	B			24	4	57	.4	<10	10
89213362	174331		+0	+500	6	1	2	2	6B	24	1	1	25	2	B			10	4	68	<.4	<10	10
89213363	174332		+50	+500	6	1	2	3	KB	14	3	3	40	2	B			441	8	56	.6	<10	10

LAB	FIELD												CU	PB	ZN	AG	AU	WT AU						
NUMBER	NO	MAP	ZONE	EAST	NORTH	#	M	D	S	COL	SZ	DR	W	CM	S	H	P	PH	PPM	PPM	PPM	PPM	PPM	GRAM
99213364	174333			+100	+500	6	1	2	3	2B	24	1	2	30	2	B			316	5	55	4.4	110	10
99213365	174334			+150	+500	6	1	2	2	2B	24	1	1	25	3	B			10	4	67	4.4	110	10
99213366	174335			+200	+500	6	1	2	2	1B	14	1	1	15	3	B			18	4	57	.4	110	10
99213367	174336			+250	+500	6	1	2	2	2B	14	1	1	20	3	B			27	4	131	4.4	110	10
99213368	174337			+300	+500	6	1	2	2	2B	14	1	1	20	3	B			66	4	66	.4	110	10
99213369	174338			+350	+500	6	1	2	2	2B	14	1	1	15	3	B			40	4	103	4.4	110	10
99213370	174339			+400	+500	6	1	2	2	RB	24	1	1	20	3	B			16	4	90	4.4	110	10
99213371	174340			+450	+500	6	1	2	2	2B	14	1	1	30	3	B			11	4	57	.7	110	10
99213372	174341			+500	+500	6	1	2	2	2B	24	1	1	25	3	B			28	4	60	4.4	110	10
99213373	174342			+550	+500	6	1	2	2	2B	14	1	1	15	3	B			2	7	21	.4	110	10
99213374	174343			+600	+500	6	1	2	2	2B	14	1	1	20	3	B			19	4	63	.4	110	10
99213375	174344			+650	+500	6	1	2	2	RB	14	1	1	30	4	B			15	4	79	4.4	110	10
99213376	174345			+700	+500	6	1	2	2	RB	14	1	1	25	3	B			20	4	84	.7	110	10
99213377	174346			+750	+500	6	1	2	2	RB	14	1	1	15	2	B			19	4	61	4.4	110	10
99213378	174347			+800	+500	6	1	2	2	2B	14	1	1	30	3	B			10	4	54	4.4	110	10
99213379	174348			+850	+500	6	1	2	2	RB	14	1	2	20	2	B			5	12	46	.6	110	10
99213380	174349			+900	+500	6	1	2	2	RB	24	1	1	20	3	B			37	4	53	4.4	110	10
99213381	174350			+950	+500	6	1	2	2	2B	24	1	1	15	3	B			16	5	51	.4	110	10
99213382	174351			+1000	+500	6	1	2	2	RB	24	1	2	15	2	B			16	6	73	4.4	110	10
99213383	174352			+1050	+500	6	1	2	2		14	1	2	20	3	B			5	7	43	.5	110	10
99213384	174353			+1100	+500	6	1	2	2	1B	24	1	2	40	2	B			89	11	100	.9	110	10
99213385	174354			+1150	+500	6	1	2	2	3B	24	2	2	40	2	B			578	9	99	4.4	110	10
99213386	174355			+1200	+500	6	1	2	2	1B	14	1	1	15	3	B			44	4	73	.4	110	10
99213387	174356			+1250	+500	6	1	2	2	2B	24	1	2	20	2	B			73	4	96	4.4	110	10
99213388	174357			+1300	+500	6	1	2	2	2B	14	2	2	20	2	B			143	4	65	.7	110	10
99213389	174358			+1350	+500	6	1	5	3	NB	45	2	3	45	2	B			261	4	52	.4	110	10
99213390	174359			+1400	+500	6	1	2	3	3B	14	3	2	35	3	A			588	7	56	4.4	110	10
99213391	174360			+1450	+500	6	1	2	2	2B	14	1	1	20	4	B			16	4	33	.4	110	10
99213392	174361			+1500	+500	6	1	4	2	RB	14	2	1	15	4	B			16	4	44	.6	110	10
99213393	174362			+0	+1000	6	1	2	2	NB	15	1	2	40	3	B			154	10	87	.3	110	10
99213394	174363			+50	+1000	6	1	5	2	K	15	2	2	40	2	A			536	12	100	4.4	110	10
99213395	174364			+100	+1000	6	1	5	2	K	15	3	2	40	2	A			650	12	106	.3	110	10
99213396	174365			+150	+1000	6	1	5	3	NB	15	2	3	45	2	B			218	5	83	.5	110	10
99213397	174366			+200	+1000	6	1	2	2	3B	15	1	2	35	2	B			165	5	39	4.4	110	10
99213398	174367			+250	+1000	6	1	5	2	3B	15	2	2	40	2	B			235	5	89	.6	110	10
99213399	174368			+300	+1000	6	1	2	2	3B	14	1	1	20	3	B			138	3	105	.4	110	10

LAB	FIELD														Cu	Pb	Zn	Ag	Au	WT. AU			
NUMBER	NO	MAP ZONE	EAST	NORTH	#	M	O	S	COL	SZ	OR	W	CM	S	H	P	PH	PPM	PPM	PPM	PPM	PPB	GRAM
89213400	174369		+350	+1000	6	1	2	2	2B	24	1	2	20	3	B			27	4	89	.7	<10	10
89213401	174370		+400	+1000	6	1	2	2	1B	24	1	1	15	4	B			23	4	59	.7	<10	10
89213402	174371		+450	+1000	6	1	2	2	2B	24	1	1	15	3	B			16	8	60	.4	<10	10
89213403	174372		+500	+1000	6	1	2	2	RB	24	1	1	20	3	B			24	4	84	.7	<10	10
89213404	174373		+550	+1000	6	1	2	2	2B	14	1	1	25	3	B			26	4	53	1.4	<10	10
89213405	174374		+600	+1000	6	1	5	2	3B	15	2	2	40	3	B		349	4	94	.4	<10	10	
89213406	174375		+650	+1000	6	1	2	2	2B	24	1	1	20	4	B			37	4	65	.4	<10	10
89213407	174376		+700	+1000	6	1	2	2	2B	24	1	1	20	4	B			15	4	55	.7	<10	10
89213408	174377		+750	+1000	6	1	2	2	2B	24	1	1	15	3	B			13	4	59	.5	<10	10
89213409	174378		+800	+1000	6	1	2	2	RB	24	1	1	20	3	B			14	5	80	.4	<10	10
89213410	174379		+850	+1000	6	1	2	2	RB	24	1	1	20	4	B			31	4	59	1.4	<10	10
89213411	174380		+900	+1000	6	1	2	2	RB	24	1	1	15	3	B			14	4	59	1.4	<10	10
89213412	174381		+950	+1000	6	1	2	2	1B	14	1	1	20	4	B			55	4	81	1.4	<10	10
89213413	174382		+1000	+1000	6	1	2	2	RB	25	1	2	20	2	B			14	4	70	1.4	<10	10
89213414	174384		+1100	+1000	6	1	2	2	RB	24	1	2	15	2	B			11	4	69	1.4	<10	10
89213415	174385		+1150	+1000	6	1	2	2	2B	24	1	2	15	2	B			20	4	64	1.4	<10	10
89213416	174386		+1200	+1000	6	1	2	2	2B	14	2	2	15	4	B			21	4	42	.4	<10	10
89213417	174387		+1250	+1000	6	1	2	2	2B	24	1	2	15	4	B			22	4	55	1.4	<10	10
89213418	174388		+1300	+1000	6	1	2	2	2B	14	2	2	20	3	B			83	4	62	1.4	<10	10
89213419	174389		+1350	+1000	6	1	2	2	2B	14	1	2	15	3	B			49	4	79	.4	<10	10
89213420	174390		+1400	+1000	6	1	2	2	NB	14	1	2	15	2	B			49	4	77	1.4	<10	10
89213421	174391		+1450	+1000	6	1	2	2	2B	14	2	2	15	2	B			48	4	87	1.4	<10	10
89213422	174392		+1500	+1000	6	1	2	2	RB	14	1	2	20	2	B			26	4	73	1.4	<10	10
89213423	174393		+1550	+1000	6	1	2	2	2B	24	1	1	15	2	B			3	4	38	1.4	<10	10
89213424	174394		+1600	+1000	6	1	5	3	3B	14	2	3	30	2	B			59	7	76	1.4	<10	10
89213425	174395		+1650	+1000	6	1	2	2	RB	14	1	1	20	3	B			18	4	54	1.4	<10	10
89213426	174396		+1700	+1000	6	1	2	2	RB	24	1	1	20	3	B			26	4	48	1.4	<10	10
89213427	174397		+1750	+1000	6	1	2	2	2B	24	1	1	15	4	B			23	4	41	1.4	<10	10
89213428	174398		+1800	+1000	6	1	2	2	2B	24	1	1	15	4	B			13	4	36	1.4	<10	10
89213429	174399		+1850	+1000	6	1	2	2	RB	24	1	2	15	1	B			43	4	50	1.4	<10	10
89213430	174400		+1900	+1000	6	1	4	2	RB	24	1	2	15	2	B			8	5	28	1.4	<10	10
89213431	174401		+1950	+1000	6	1	2	2	2B	24	1	2	15	3	B			29	4	84	1.4	<10	10
89213432	174402		+2000	+1000	6	1	2	2	2B	24	1	1	15	3	B			14	4	51	1.4	<10	10
89213433	174403		+0	+1500	6	1	2	2	3B	14	1	2	15	2	B			10	4	51	1.4	<10	10
89213434	174404		+50	+1500	6	1	2	2	3B	25	1	2	25	2	B			39	4	81	1.4	<10	10
89213435	174405		+100	+1500	6	1	5	3	2B	25	1	2	40	2	B			65	4	52	1.4	<10	10



LAB	FIELD												Cu	Pb	Zn	Ag	Au	WT Au						
NUMBER	NO	MAP	ZONE	EAST	NORTH	+	M	D	S	DOL	SZ	OR	M	CM	S	H	P	PH	PPM	PPM	PPM	PPM	PPB	GRAM
S9213436	174407			+200	+1500	6	1	2	2	RB	14	1	1	15	3	B			24	5	98	<.4	<10	10
S9213437	174408			+250	+1500	6	1	2	2	RB	24	1	1	20	2	B			7	5	92	.4	<10	10
S9213438	174409			+300	+1500	6	1	2	2	BG	24	1	1	20	2	B			8	<4	45	<.4	<10	10
S9213439	174410			+350	+1500	6	1	2	2	2B	25	1	2	30	2	B			38	4	67	<.4	<10	10
S9213440	174411			+400	+1500	6	1	2	2	2B	24	1	2	25	3	B			21	5	79	.4	28	10
S9213441	174412			+450	+1500	6	1	2	2	2B	14	1	1	25	2	B			26	<4	58	<.4	<10	10
S9213442	174413			+500	+1500	6	1	2	2	RB	24	1	1	15	2	B			13	6	76	.5	<10	10
S9213443	174414			+550	+1500	6	1	2	2	RB	24	1	2	25	3	B			10	6	74	<.4	<10	10
S9213444	174415			+600	+1500	6	1	2	2	GB	34	1	2	30	3	B			213	<4	78	<.4	<10	10
S9213445	174416			+650	+1500	6	1	2	2	RB	24	1	1	25	3	B			121	6	79	<.4	<10	10
S9213446	174417			+700	+1500	6	1	2	2	RB	14	1	1	20	3	B			22	<4	76	<.4	<10	10
S9213447	174418			+750	+1500	6	1	2	2	BG	24	2	3	20	4			9	<4	32	<.4	<10	10	
S9213448	174419			+800	+1500	6	1	2	2	BG	24	1	2	25	4	B			16	<4	70	<.4	<10	10
S9213449	174420			+850	+1500	6	1	2	2	1B	14	1	1	20	4	B			24	<4	85	<.4	<10	10
S9213450	174421			+900	+1500	6	1	2	2	2B	24	1	2	20	4	B			84	<4	75	<.4	<10	10
S9213451	174422			+950	+1500	6	1	2	2	2B	14	1	2	20	2	B			9	7	57	.5	<10	10
S9213452	174423			+1000	+1500	6	1	2	2	2B	14	1	2	20	2	B			15	6	73	<.4	<10	10
S9213453	174424			+1050	+1500	6	1	2	2	2B	14	1	2	20	2	B			44	6	66	<.4	<10	10
S9213454	174425			+1100	+1500	6	1	4	2	1B	14	1	1	10	4	B			70	<4	54	<.4	<10	10
S9213455	174426			+1150	+1500	6	1	2	2	2B	14	1	1	20	4	B			17	4	68	<.4	<10	10
S9213456	174427			+1200	+1500	6	1	2	2	RB	13	1	2	25	3	B			14	<4	75	<.4	<10	10
S9213457	174428			+1250	+1500	6	1	5	2	3B	25	1	2	40	2	B			46	<4	61	<.4	<10	10
S9213458	174430			+1350	+1500	6	1	5	2	RB	25	1	2	20	2	B			15	<4	50	<.4	<10	10
S9213459	174431			+1400	+1500	6	1	2	2	2B	24	1	1	20	3	B			21	5	56	<.4	<10	10
S9213460	174432			+1450	+1500	6	1	2	2	2B	25	1	2	30	2	B			20	6	59	<.4	<10	10
S9213461	174433			+1500	+1500	6	1	2	2	3B	4	1	1	25	2	B			66	<4	58	<.4	<10	10
S9213462	174434			+0	+2000	6	1	2	2	2B	14	1	2	15	2	B			20	4	59	<.4	<10	10
S9213463	174435			+50	+2000	6	1	2	2	2B	14	1	2	20	2	B			13	4	44	<.4	<10	10
S9213464	174436			+100	+2000	6	1	2	2	GB	24	1	1	20	2	B			5	<4	33	<.4	<10	10
S9213465	174437			+150	+2000	6	1	2	2	2B	24	1	2	25	2	B			18	<4	69	<.4	<10	10
S9213466	174438			+200	+2000	6	1	2	2	2B	24	1	2	20	2	B			10	<4	59	<.4	<10	10
S9213467	174439			+250	+2000	6	1	2	2	2B	14	1	1	20	2	B			17	<4	73	<.4	<10	10
S9213468	174440			+300	+2000	6	1	2	2	RB		1	1	20	2	B			10	4	89	<.4	<10	10
S9213469	174441			+350	+2000	6	1	2	2	RB	24	1	1	20	2	B			3	<4	96	<.4	<10	10
S9213470	174442			+400	+2000	6	1	2	2	BG	24	1	2	35	2	B			32	<4	53	<.4	<10	10
S9213471	174443			+450	+2000	6	1	2	2	2B	14	1	2	20	2	B			27	5	75	<.4	<10	10

LAB NUMBER	FIELD NO MAP ZONE	EAST	NORTH	#	M	O	S	COL	SZ	OR	D	M	F	P	PH	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB	WT Au GRAM
S9213472	174444	+500	+2000	6	1	2	2	RB	24	1	1	20	2	B		12	5	81	(.4	(10	10
S9213473	174445	+550	+2000	6	1	2	2	3B	15	2	2	40	1	B		28	8	51	(.4	(10	10
S9213474	174446	+600	+2000	6	1	2	2	3B	15	1	2	30	1	B		29	(4	73	(.4	(10	10
S9213475	174447	+650	+2000	6	1	2	2	2B	14	1	2	20	2	B		13	(4	61	.6	(10	10
S9213476	174448	+700	+2000	6	1	2	2	2B	24	1	2	25	2	B		25	5	71	(.4	(10	10
S9213477	174449	+750	+2000	6	1	2	2	2B	24	1	1	25	2	B		11	(4	63	(.4	(10	10
S9213478	174450	+800	+2000	6	1	2	2	2B	24	1	1	20	4	B		11	(4	47	(.4	(10	10
S9213479	174451	+850	+2000	6	1	2	2	2B	24	1	2	20	3	B		14	4	57	(.4	(10	10
S9213480	174452	+900	+2000	6	1	2	2	2B	24	1	1	20	2	B		18	8	70	(.4	(10	10
S9213481	174453	+950	+2000	6	1	5	2	2B	15	2	2	40	2	B		131	8	68	.4	(10	10
S9213482	174454	+1000	+2000	6	1	2	2	BR	24	1	2	15	3	B		12	5	94	.4	(10	10
S9213483	174455	+1050	+2000	6	1	2	2	RB	24	1	2	20	3	B		8	(4	61	(.4	(10	10
S9213484	174456	+1100	+2000	6	1	2	2	2B	24	1	2	20	3	B		7	4	48	(.4	(10	10
S9213485	174457	+1150	+2000	6	1	2	2	RB	24	1	2	25	2	B		17	5	102	(.4	(10	10
S9213486	174458	+1200	+2000	6	1	2	2	RB	24	1	1	20	2	B		8	4	80	(.4	(10	10
S9213487	174459	+1250	+2000	6	1	5	2	2B	25	1	2	15	1	B		20	(4	58	(.4	(10	10
S9213488	174460	+1300	+2000	6	1	2	2	RB	24	1	1	25	3	B		14	6	56	(.4	(10	10
S9213489	174461	+1350	+2000	6	1	2	2	RB	24	1	2	25	2	B		7	6	80	(.4	(10	10
S9213490	174462	+1400	+2000	6	1	2	2	6B	24	1	2	20	2	B		11	(4	48	.4	(10	10
S9213491	174463	+1450	+2000	6	1	5	2	2B	15	2	2	35	2	B		94	7	66	(.4	(10	10
S9213492	174464	+1500	+2000	6	1	2	2	2B	14	1	2	15	2	B		29	(4	60	.4	(10	10
S9213493	174465	BUTTER	+0	6	1	4	2	YB	24	1	1	15	3	B		23	6	72	(.4	(10	10
S9213494	174466	BUTTER	-50	1	1	2	2	2B	24	2	2	15	2	B		169	(4	75	(.4	(10	10
S9213495	174467	BUTTER	-100	6	1	2	2	2B	14	2	2	15	4	B		319	7	205	(.4	(10	10
S9213496	174468	BUTTER	-150	6	1	2	2	2B	24	2	2	10	4	B		244	9	52	(.4	(10	10
S9213497	174469	BUTTER	-200	6	1	2	2	3B	24	2	2	20	4	B		422	6	97	(.4	(10	10
S9213498	174470	BUTTER	-250	6	1	2	2	2B	24	1	2	15	4	B		23	8	56	(.4	(10	10
S9213499	174471	BUTTER	-300	6	1	2	2	2B	42	1	2	15	4	B		26	7	59	.5	(10	10
S9213500	174472	BUTTER	-350	6	1	2	2	2B	14	2	2	20	3	B		56	8	95	.9	(10	10
S9213501	174473	BUTTER	-400	6	1	2	2	2B	14	2	2	20	4	B		21	12	54	(.4	(10	10
S9213502	174474	BUTTER	-450	6	1	2	2	2B	14	2	2	20	4	B		173	(4	61	.6	(10	10
S9213503	174475	BUTTER	-500	6	1	2	2	2B	14	2	2	20	4	B		28	4	64	(.4	(10	10

I=INSUFFICIENT SAMPLE X=SMALL SAMPLE E=EXCEEDS CALIBRATION C=BEING CHECKED R=REVISED

IF REQUESTED ANALYSES ARE NOT SHOWN RESULTS ARE TO FOLLOW

## ANALYTICAL METHODS

Cu 20% HNO3 DECOMPOSITION / AAS

Pb 20% HNO3 DECOMPOSITION / AAS

CIVIL - A.I.

JOB # 92-08388  
 REPORT DATE 22 JUN 1992

DATA

LINE	FIELD																							
NUMBER	NO	MAP ZONE	EAST	NORTH	E	M	D	S	COL	SZ	OR	M	CM	S	M	P	PH	PPM	%	EN	AG	AS	AT	AJ
																								GRAM
59237894	148900		+0	+2500	6	1	5	2	26	13	1	2	40	2	3			49	19	203	.4	(1)		10
59237895	148901		-100	+2500	1	1	5	2	3K	45	3	2	50	2	4			255	14	325	(.4)	(1)		10
59237896	148902		-200	+2500	6	1	5	2	25	13	2	2	30	3	3			52	24	123	.5	(1)		10
59237897	148903		-300	+2500	1	1	5	2	23	14	1	2	50	2	3			77	3	156	(.4)	(1)		10
59237898	148904		-400	+2500	6	1	2	2	2E	14	2	2	30	2	3			20	10	99	(.4)	(1)		10
59237899	148905		-500	+2500	1	1	5	2	33	25	1	2	40	2	3			65	13	152	.9	(1)		10
59237900	148906		-600	+2500	6	1	2	2	23	24	2	1	25	2	3			15	7	156	.4	(1)		10
59237901	148907		-700	+2500	1	1	5	2	23	25	1	2	40	2	3			49	29	119	.3	(1)		10
59237902	148908		-800	+2500	6	1	2	2	23	24	1	2	25	2	3			9	4	166	.5	(1)		10
59237903	148909		-900	+2500	1	1	2	2	23	24	1	1	30	2	3			3	(.4)	71	(.4)	(1)		10
59237904	148910		-1000	+2500	6	1	2	2	23	24	2	2	15	2	3			22	10	193	.5	(1)		10
59237905	148911		-1100	+2500	1	1	4	2	23	24	1	1	20	3	3			19	12	79	.5	(1)		10
59237906	148912		-1200	+2500	6	1	2	2	2B	14	2	1	20	3	3			21	10	86	.4	(1)		10
59237907	148913		-1300	+2500	1	1	2	2	32	24	2	1	35	2	3			114	15	115	1.2	(1)		10
59237908	148914		-1400	+2500	6	1	3	2	2B	14	3	2	25	2	3			9	5	73	(.4)	(1)		10
59237909	148915		-1500	+2500	1	1	4	2	19	41	1	1	15	1	3			5	6	55	.4	(1)		10
59237910	148916		-1600	+2500	6	1	2	2	36	24	2	2	25	2	3			11	(.4)	122	(.4)	(1)		10
59237911	148917		-1700	+2500	1	1	4	2	33	24	1	1	30	2	3			14	(.4)	49	(.4)	(1)		10
59237912	148918		-1800	+2500	6	1	2	2	36	34	1	2	20	2	3			34	(.4)	83	(.4)	(1)		10
59237913	148919		-1900	+2500	1	1	2	2	33	4	1	2	35	2	3			61	(.4)	58	(.4)	(1)		10
59237914	148920		-2000	+2500	6	1	2	3	3B	35	3	2	45	1	3			114	(.4)	52	.5	(1)		10
59237915	148921		0	+3500	6	1	5	2	36	25	2	2	25	1	3			333	9	143	.6	(1)		10
59237916	148922		-100	+3500	1	1	2	2	23	24	1	2	35	2	3			36	5	200	.6	(1)		10
59237917	148923		-200	+3500	6	1	2	2	2B	24	2	2	25	2	3			20	4	119	.4	(1)		10
59237918	148924		-300	+3500	1	1	4	2	25	24	1	2	25	2	3			22	(.4)	141	(.4)	(1)		10
59237919	148925		-400	+3500	6	1	2	2	2E	24	2	2	20	3	3			18	(.4)	263	(.4)	(1)		10
59237920	148926		-500	+3500	1	1	4	2	23	24	1	2	30	3	3			21	8	139	(.4)	(1)		10
59237921	148927		-600	+3500	6	1	2	2	23	24	1	2	20	3	3			21	14	288	(.4)	(1)		10
59237922	148928		-700	+3500	1	1	4	2	2B	14	2	1	35	4	3			139	30	750	1	(1)		10
59237923	148929		-800	+3500	6	1	4	2	13	24	1	1	20	3	3			13	4	247	.4	(1)		10
59237924	148930		-900	+3500	1	1	4	2	Y3	14	1	1	30	2	3			19	4	195	(.4)	(1)		10
59237925	148931		-1000	+3500	6	1	4	2	2B	24	1	2	20	3	3			12	4	207	.5	(1)		10
59237926	148932		-1100	+3500	1	1	4	2	23	24	1	1	30	2	3			11	8	139	(.4)	(1)		10

LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	E	N	O	S	COL	SZ	OR	Cu		Pb		Zn		Ag		AU WT	
												PPM	PPM	PPM	PPM	PPM	PPM				
89237927	148933		-1200	+3500	6	1	4	2	28	24	1	1	20	2	B	18	4	104	1.4	(1)	1)
89237928	148934		-1300	+3500	1	1	4	2	19	24	1	1	10	2	B	15	3	109	1.4	(1)	1)
89237929	148935		-1400	+3500	5	1	4	2	28	24	1	2	15	2	B	21	4	83	1.4	(1)	1)
89237730	148936		-1500	+3500	1	1	1	2	28	3	1	1	20	2	B	14	4	113	1.4	(1)	1)

I=INSUFFICIENT SAMPLE    X=SMALL SAMPLE    E=EXCEEDS CALIBRATION    C=BEING CHECKED    R=REVISED  
 IF REQUESTED ANALYSES ARE NOT SHOWN RESULTS ARE TO FOLLOW

## ANALYTICAL METHODS

Cu 20% HNO3 DECOMPOSITION / AAS  
 Pb 20% HNO3 DECOMPOSITION / AAS  
 Zn 20% HNO3 DECOMPOSITION / AAS  
 Ag 20% HNO3 DECOMPOSITION / AAS  
 Au AGUA REGIA DECOMPOSITION / SOLVENT EXTRACTION / AAS  
 WT AU (THE WEIGHT OF SAMPLE TAKEN TO ANALYSE FOR GOLD (GEOCHEM))

**APPENDIX C**

**Statement of Qualifications**

I, IAN NEILL hereby certify that:

- 1) I obtained a Bachelor of Science degree in Geology from the University of British Columbia in 1992;
- 2) I have been involved in mineral exploration in British Columbia and the Yukon since 1990;
- 3) I was personally engaged in fieldwork on the OWL Property and am responsible for the interpretation of data, and the writing of this report;
- 4) My home address is:

5015 Bear Lane  
West Vancouver, B.C.  
V7W 1L2

October 7, 1992

  
\_\_\_\_\_  
Ian Neill  
Geologist

APPENDIX D

STATEMENT OF EXPENDITURES

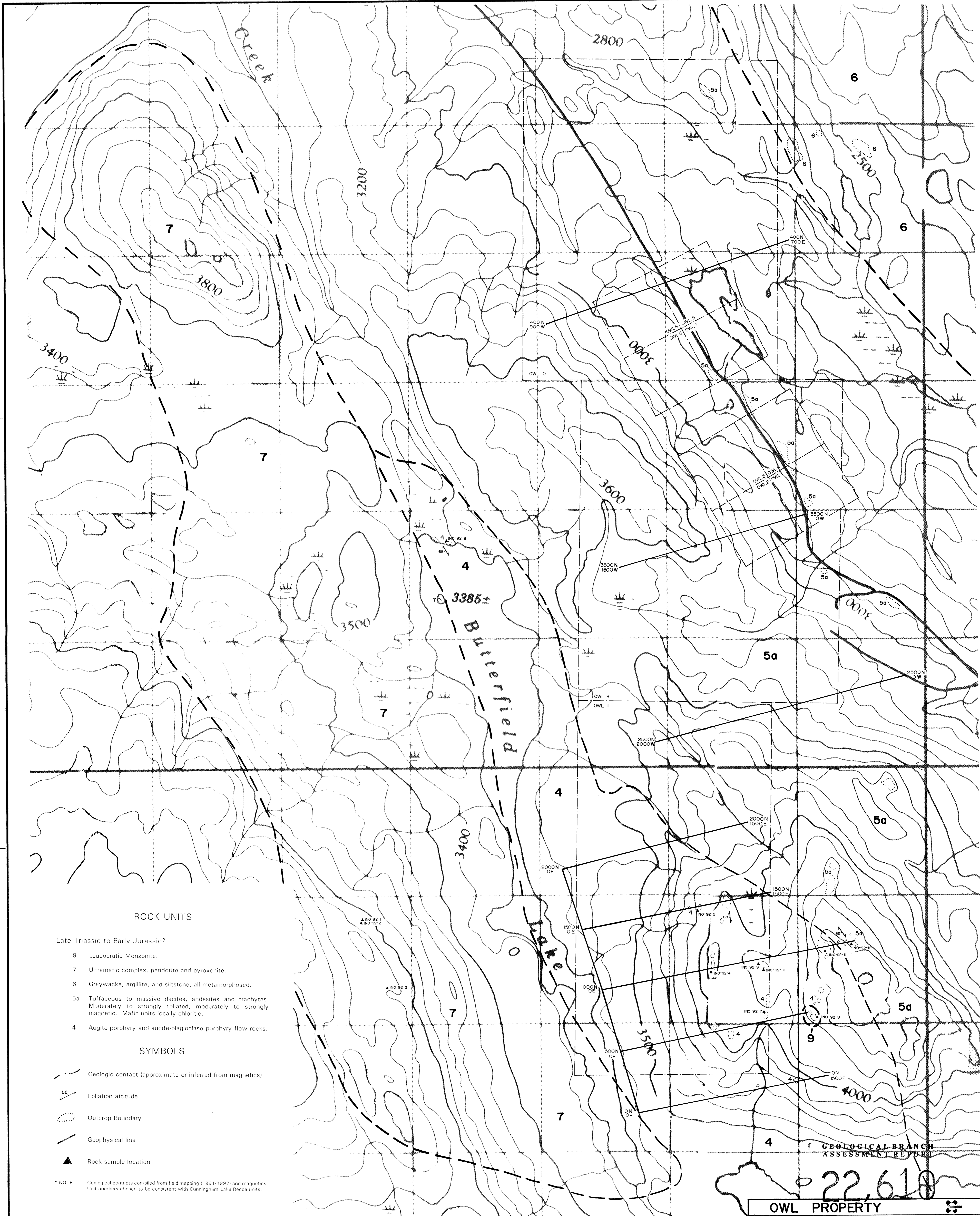
PART 1: June 20<sup>th</sup> - July 6<sup>th</sup>

Salaries:	Temp.	Ian Neill	14 days @ \$210/day	\$2940
		Dirk Van Ulden	14 days @ \$160/day	\$2240
	Perm.	Nick Callan	5 days @ \$310/day	\$1550
Geochemistry:				\$2650
Geophysics:				\$10750
Fixed Wing:				\$3350
Boat Rental:				\$700
Domicile/Equipment:				\$1200
Office/Drafting:				<u>\$1100</u>
				<u>Total: \$26480</u>

PART 2: October 10<sup>th</sup> - October 14<sup>th</sup>

Salaries:	Temp.	Ian Neill	4 days @ \$210/day	\$840
	Perm.	Nick Callan	4 days @ \$310/day	\$1240
Geochemistry:				\$740
Geophysics:				\$9800
Air Travel:				\$1700
Truck Rental:				\$500
Domicile:				\$850
Office/Drafting:				<u>\$250</u>
				<u>Total: \$15920</u>

TOTAL: \$42400



ROCK UNITS

- Late Triassic to Early Jurassic?
- 9 Leucocratic Monzonite.
- 7 Ultramafic complex, peridotite and pyroxenite.
- 6 Greywacke, argillite, and siltstone, all metamorphosed.
- 5a Tuffaceous to massive dacites, andesites and trachytes. Moderately to strongly foliated, moderately to strongly magnetic. Mafic units locally chloritic.
- 4 Augite porphyry and augite-plagioclase porphyry flow rocks.

SYMBOLS

- Geologic contact (approximate or inferred from magnetics)
- 52° Foliation attitude
- Outcrop Boundary
- Geophysical line
- ▲ Rock sample location

\* NOTE - Geological contacts compiled from field mapping (1991-1992) and magnetics. Unit numbers chosen to be consistent with Cunningham Lake Recce units.

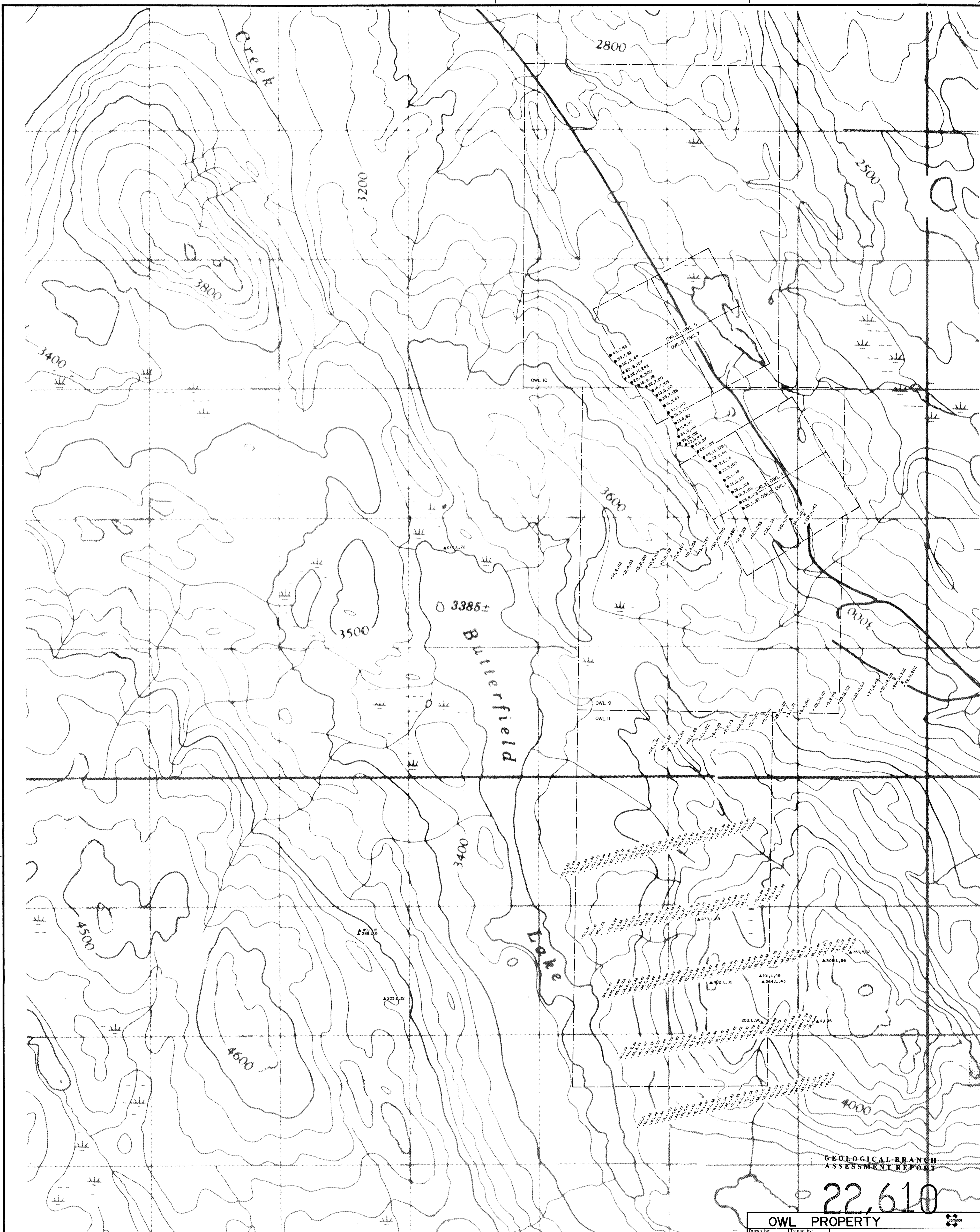
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

22,610

OWL PROPERTY

Drawn by:		Traced by:	
Checked by:	Date:	Checked by:	Date:
GEOLOGY			
Scale: 1:10,000		Date: OCT. 92	Page: 3

FORM 210 (040)



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

22,610

OWL PROPERTY

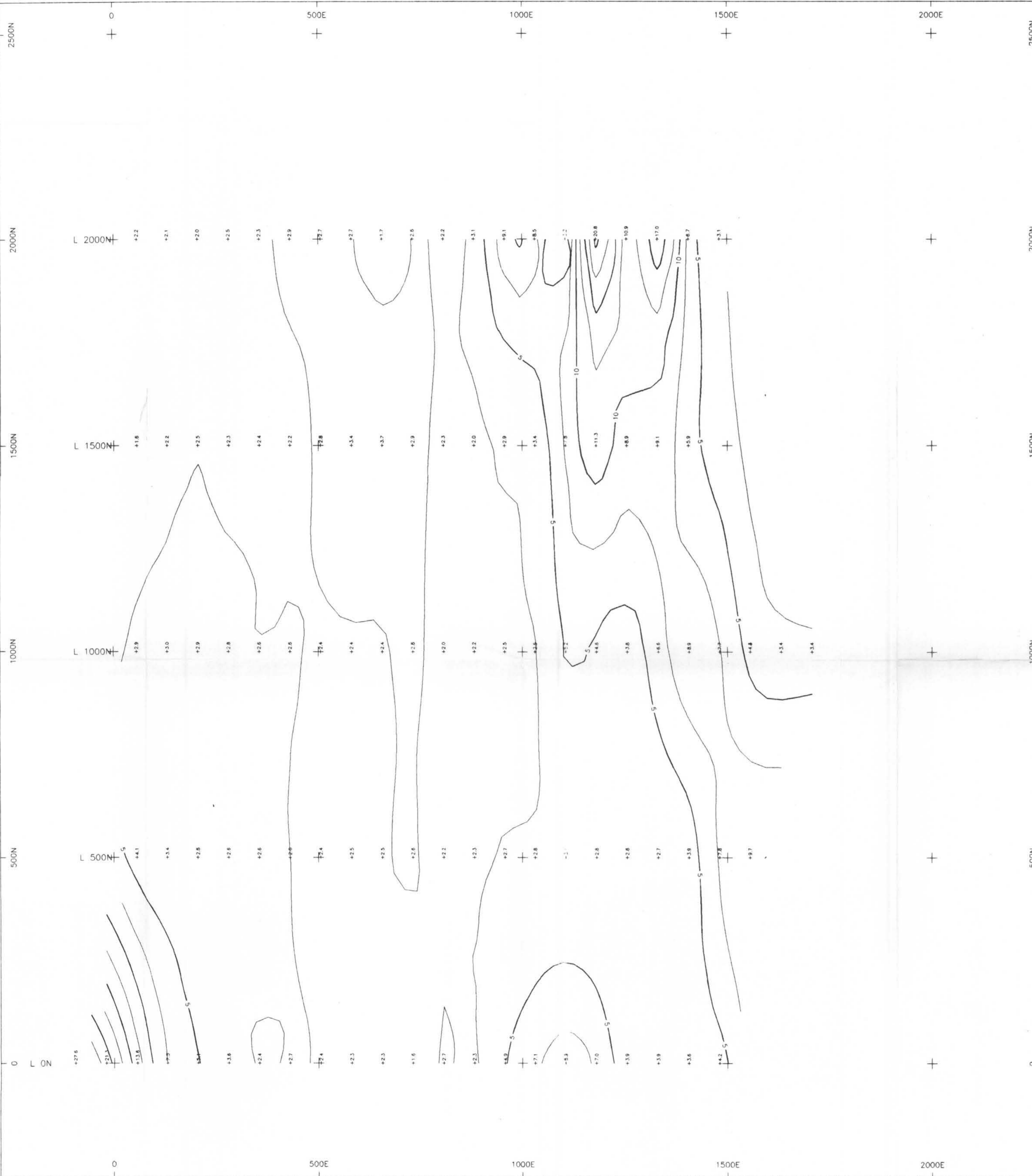
- - SOIL SAMPLE
- ▲ - ROCK SAMPLE

Drawn by	Traced by

GEOCHEMISTRY  
Cu, Pb, Zn (ppm)

Scale 1:10,000 Date OCT. 92 Plate 4



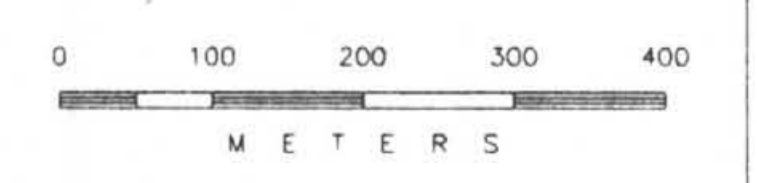
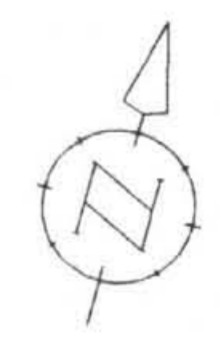


SURVEY SPECIFICATIONS

receiver	Scintrex IPR12
transmitter	Scintrex IPC7
pulse time	2 seconds
Mx receive window	690-1050 msec
mid point	870 msec
array	pole dipole
a spacing	75 meters
n separations	1, 2, 3, 4
current electrode is located west of receiving electrodes	
contoured value	a=75 n=1
contour interval	2.5 mV/V

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

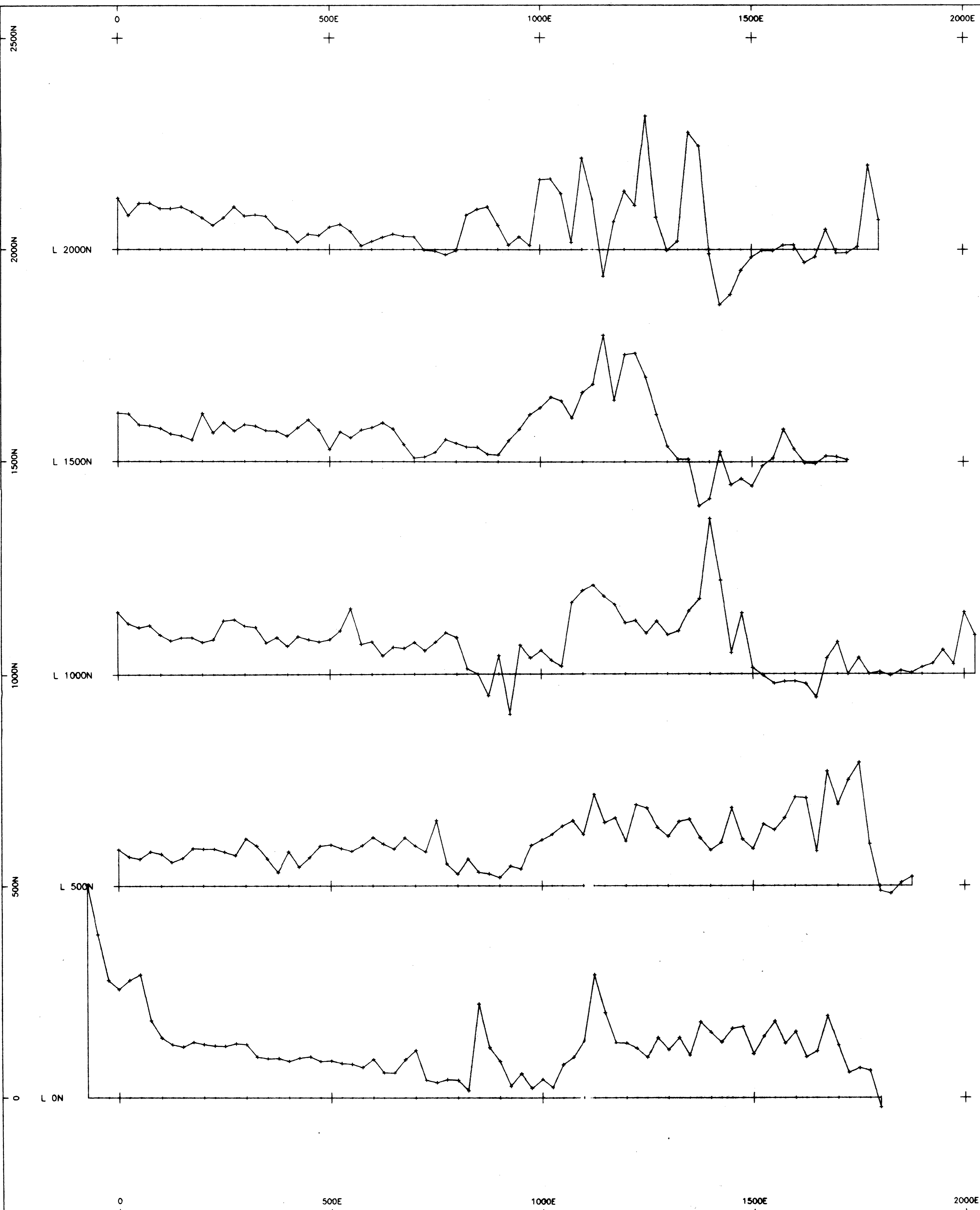
**22,610**



**COMINCO LTD.**

**OWL CLAIMS**  
FORT ST. JAMES AREA, B.C.  
CHARGEABILITY CONTOUR PLAN  
a=75 meters/n=1  
contour interval = 2.5 mV/V

DRAWN BY: ars      DATE: July/92  
SCOTT GEOPHYSICS LTD.



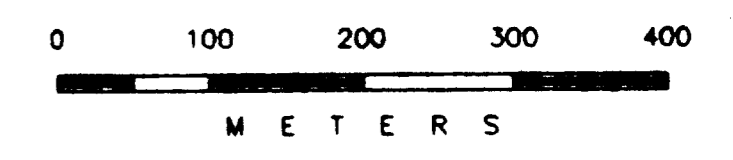
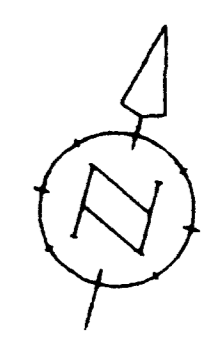
**SURVEY SPECIFICATIONS**

survey magnetometer	Scintrex MP4
base magnetometer	Scintrex MP4
type	proton
measurement units	total field gammas
drift corrections by	base mag
cycle time	30 secs

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,610**

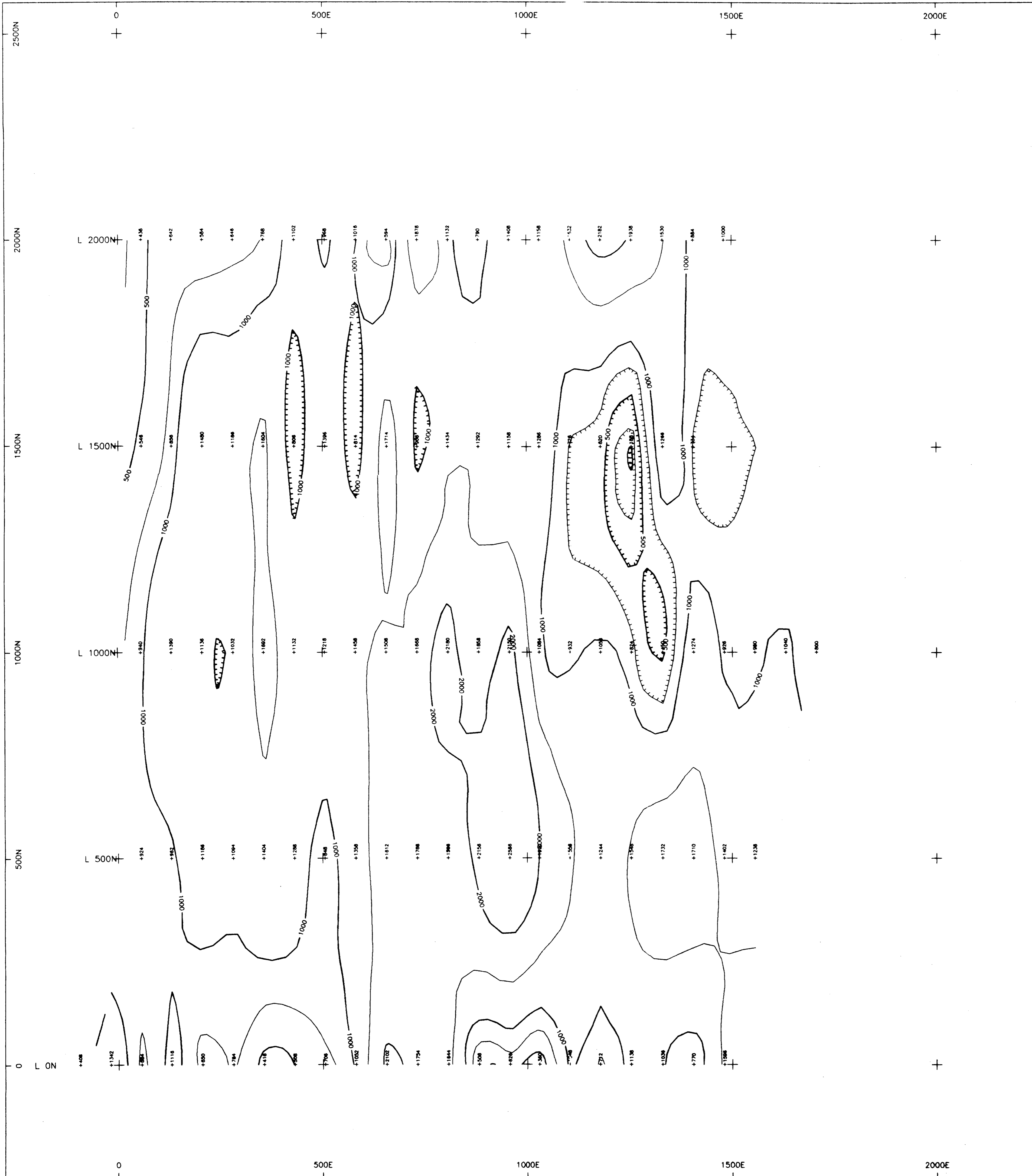
KEY                      BASE UNITS/cm  
 +- MAG                      57000    500



COMINCO LTD.

OWL CLAIMS  
 FORT ST. JAMES AREA, B.C.  
 MAGNETOMETER PROFILES  
 profile scale - 1 cm : 500 gammas

DRAWN BY: ars                      DATE: July/92  
 SCOTT GEOPHYSICS LTD.



**SURVEY SPECIFICATIONS**

receiver Scintrex IPR12  
 transmitter Scintrex IPC7  
 pulse time 2 seconds  
 M7 receive window 690-1050 msec  
 mid point 870 msec

array pole dipole  
 a spacing 75 meters  
 n separations 1, 2, 3, 4

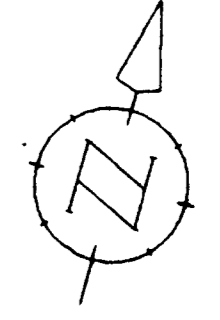
current electrode is located west  
 of receiving electrodes

contoured value a=75 n=1

log contour intervals (ohm-meters)  
 100, 150, 200, 300, 500, 750  
 1000, 1500, 2000, 3000, 5000, 7500

**GEOLOGICAL BRANCH  
 ASSESSMENT REPORT**

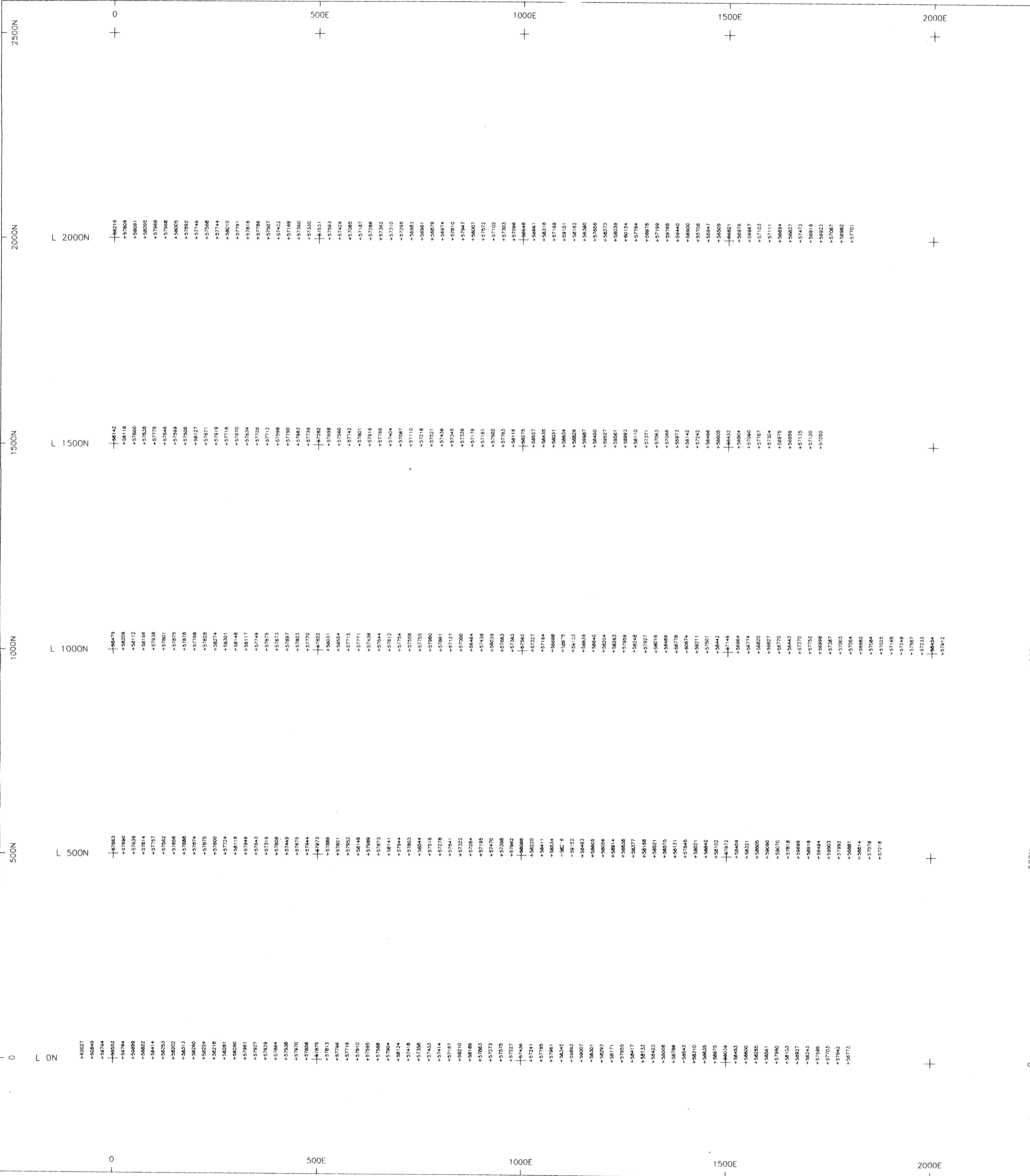
**22,610**



**COMINCO LTD.**

OWL CLAIMS  
 FORT ST. JAMES AREA, B.C.  
 RESISTIVITY CONTOUR PLAN  
 a=75 meters/n=1  
 log contour interval

DRAWN BY: ars DATE: July/92  
 SCOTT GEOPHYSICS LTD.

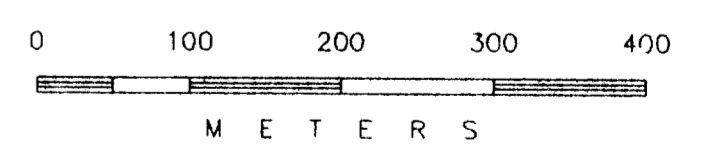
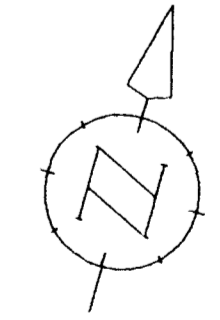


**SURVEY SPECIFICATIONS**

survey magnetometer	Scintrex MP4
base magnetometer	Scintrex MP4
type measurement units	proton total field gammas
drift corrections by cycle time	base mag 30 secs

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,610**

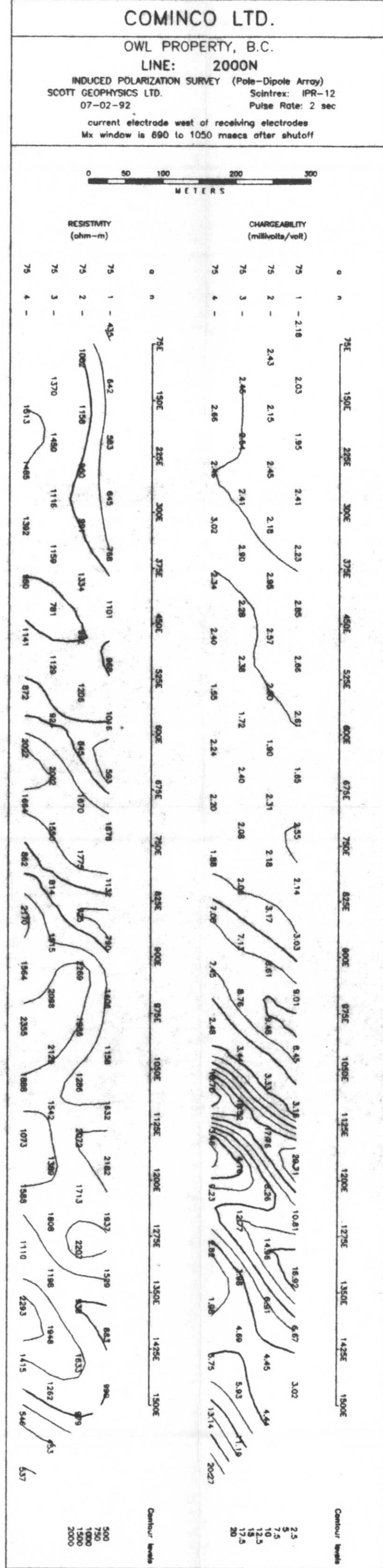
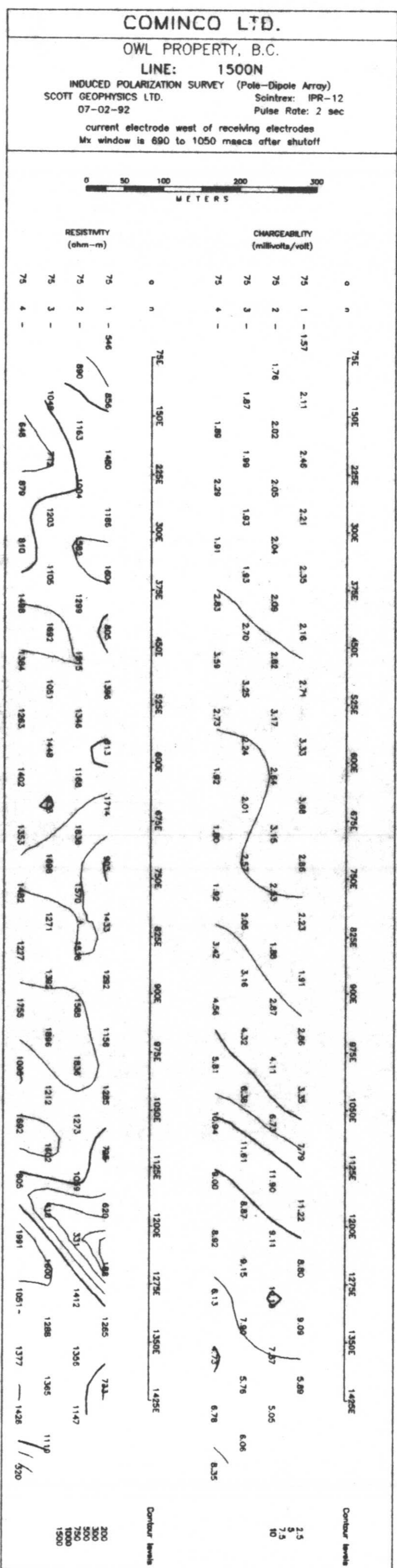
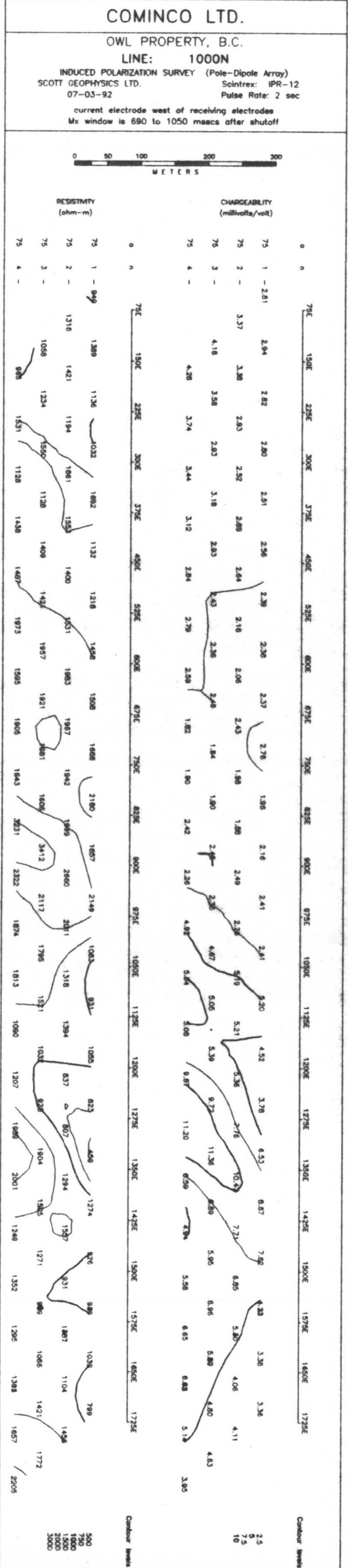
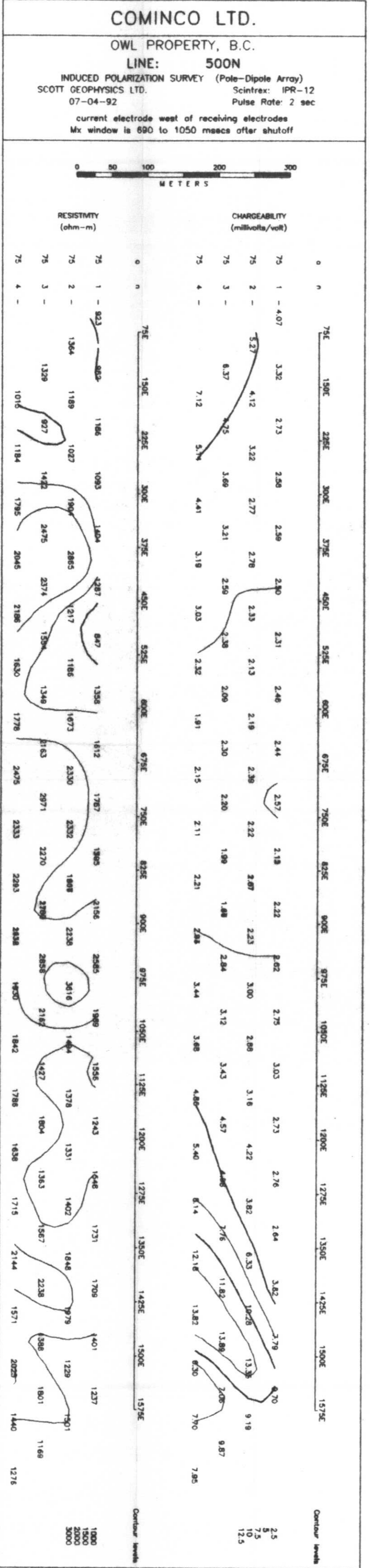
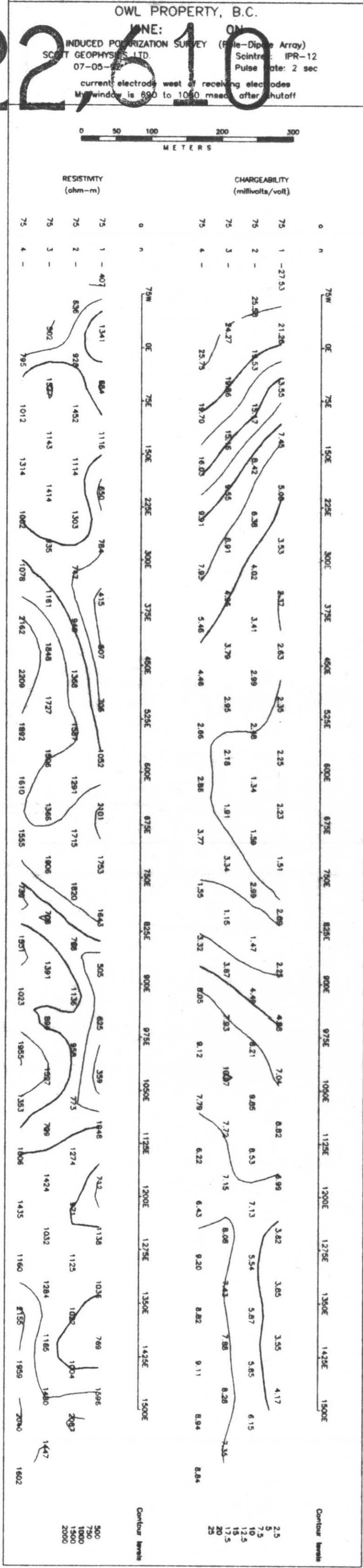


COMINCO LTD.

OWL CLAIMS  
FORT ST. JAMES AREA, B.C.  
MAGNETOMETER VALUES

DRAWN BY: ars	DATE: July/92
SCOTT GEOPHYSICS LTD.	

22, 10





COMINCO LTD.

OWL PROPERTY - LINE 400N

MAGNETOMETER PROFILE

profile scale = 500 gammas/cm

profile base = 57000 gammas

DRAWN BY: ars

DATE: Oct/92

SCOTT GEOPHYSICS LTD.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,610**

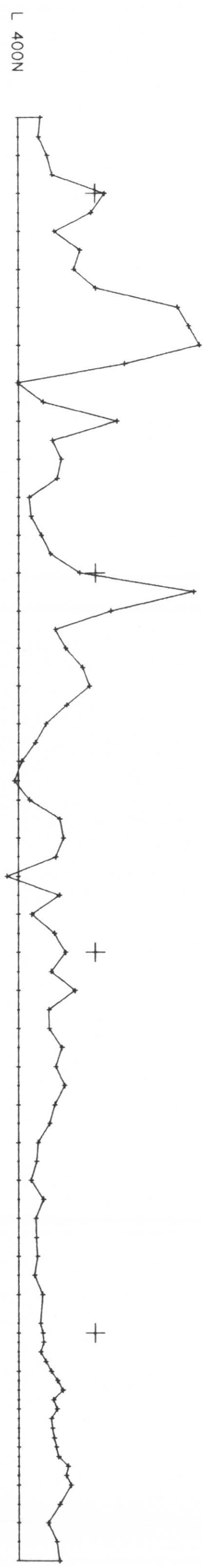
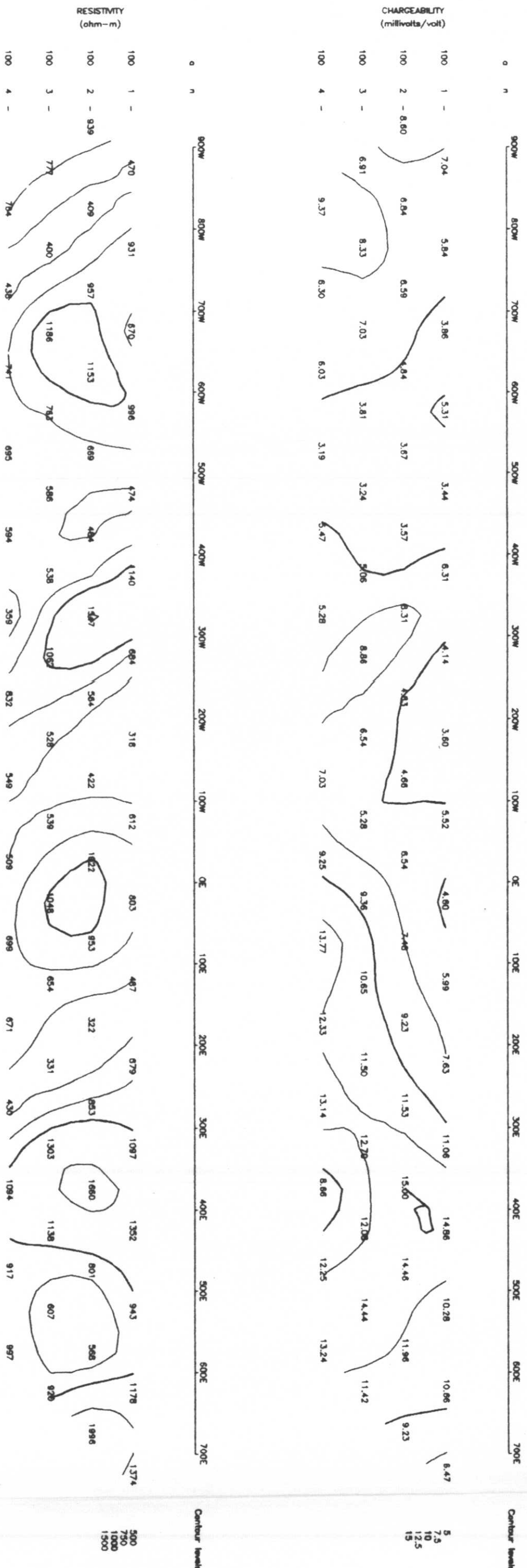
COMINCO LTD.

OWL PROPERTY, FORT ST. JAMES AREA, B.C.

LINE: 400N

INDUCED POLARIZATION SURVEY (Pole-Dipole Array)  
SCOTT GEOPHYSICS LTD. Scintrex: IPR-12  
Oct/92 Pulse Rate: 2 sec

current electrode is east of receiving electrodes  
Mx Chargeability is for interval 690 to 1050 msecs after shutoff



LINE: 400N

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

COMINCO LTD.

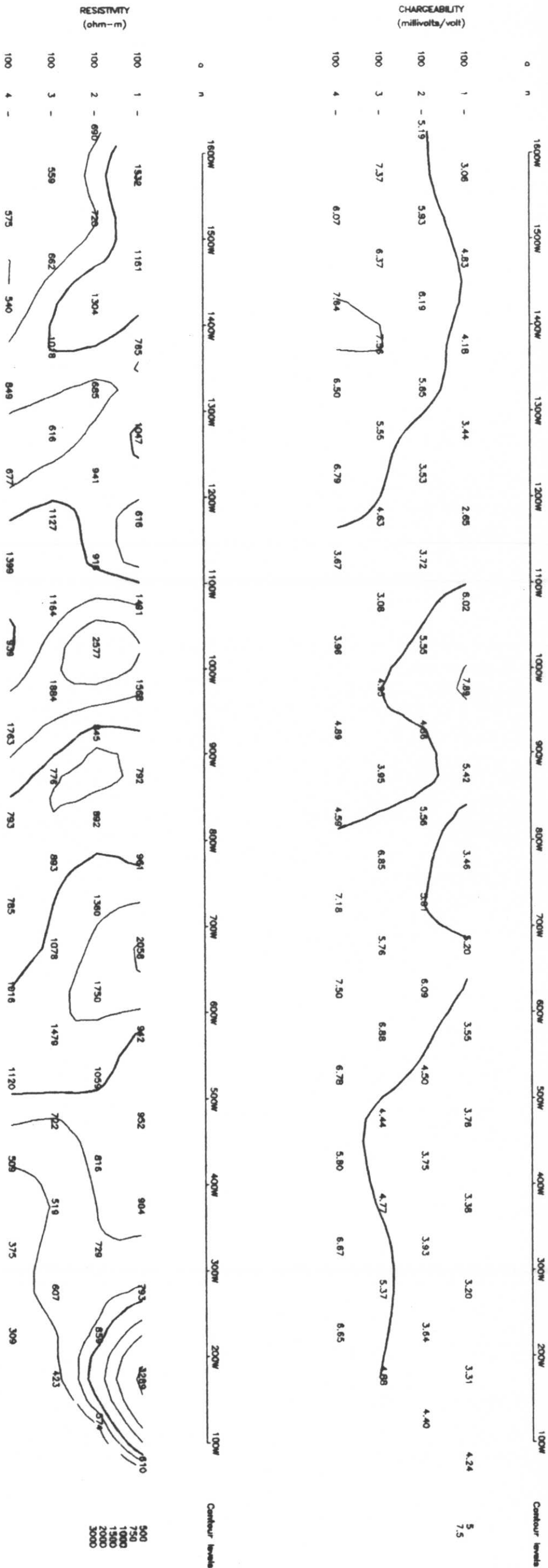
OWL PROPERTY FORT ST. JAMES AREA, B.C.

LINE: 3500N

INDUCED POLARIZATION SURVEY (Pole-Dipole Array)  
SCOTT GEOPHYSICS LTD. Scintrex: IPR-12  
Oct/92 Pulse Rate: 2 sec

current electrode is east of receiving electrodes  
Chargeability is for interval 690 to 1050 msec after shutoff

22,610



LINE: 3500N

COMINCO LTD.

OWL PROPERTY - LINE 3500N

MAGNETOMETER PROFILE

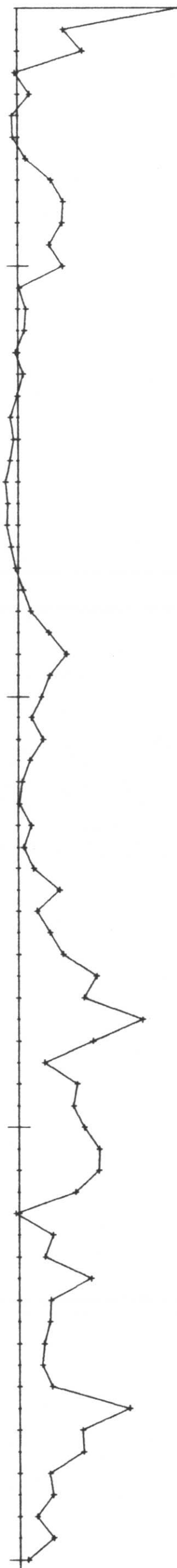
profile scale = 500 gammas/cm

profile base = 57000 gammas

DRAWN BY: ars      DATE: Oct/92

SCOTT GEOPHYSICS LTD.

L 3500N



1500W

1000W

500W

0