85-520-13941

GEOPHYSICAL AND GEOCHEMICAL REPORT

on the

NCL 1-9 MINERAL CLAIMS

located in the

OSOYOOS MINING DIVISION

N.T.S. 82E/4E

49°13'N latitude & 119°35'W longitude

owned by

B.A. RESOURCES LTD.
#402-1755 West Broadway
Vancouver, B.C. V6J 4S5

written by

Peter Peto, Ph.D., F.G.A.C.
Consulting Geologist
125 Bassett Street
Penticton. B.C. V2A 5W1

31 July 1985

TABLE OF CONTENTS

PAGE

TEXT

ILLUSTRATIONS

APPENDICIES

SUMMARY AND CONCLUSIONS

VLF-EM and soil sampling surveys were carried out over the NCL Claims on behalf of B.A. Resources Ltd. from the 3rd to 24th of July, 1985. A total of 27.35 km of flagged grid, consisting of 100 metre line spacings and 25 station intervals, were surveyed and 167 geochemical samples collected. The claims, consisting of 14 units, are situated in the Fairview gold camp, about 5 km northwest of Oliver. They comprise some 234 hectares and are accessed by road. The claims are covered by numerous glaciated ridges, draws and escarpments which form north trending lineaments. They are wholly underlain by the Oliver pluton, composed largely of granite and syenite, which host auriferous quartz veins carrying small amounts of pyrite, galena and sphalerite. Exploration to date has largely been on the Standard mine which is a N40^{o}E-75^{o}SE quartz vein which can be traced for 167m, attains a width of 1.5 metres, and has produced 405 tons of ore grading 1.43oz/ton gold.

The property was surveyed using a Sabre model 27 VLF-EM using the Seattle transmitter at 24.8 khz. Altimetre readings were taken at survey stations in order to monitor topographic effects on tilt angle measurements. Fraser filtered VLF data indicate at least 18 apparent north trending conductors which are presumed to be due to underlying faults. None of the conductors appear to coincide with mineralized quartz veins at surface. Six distinct quartz veins were sampled and three yielded anomalous concentrations of up to 7850 ppb Au and 50.3 ppm Ag. Soil samples were collected over major conductive zones and tested for the presence of underlying precious metal mineralization. Unfortunately the results were uniformly low and it is therefore unlikely that these VLF conductors carry precious metal mineralization. The major findings of this survey are as follows. Previously explored quartz vein bearing structures, such as the Standard and Empire veins, are not discernable by VLF-EM. Other VLF-EM conductors do not appear to be underlain by precious metal bearing mineralization. Old diggings elsewhere on the property expose only narrow veins of limited strike length which yeild low precious metal values.

RECOMMENDATIONS

In view of the above, it would be difficult to recommend any further exploration expenditures on the property at this time. If further work is to be undertaken, it should be to uncover the Silver Queen vein along its full strike length in order to determine its thickness and grade. This would be best accomplished by a catipillar mounted backhoe.

INTRODUCTION

A geophysical and geochemical survey over the NCL mineral claims was carried out by the writer at the request of Mr. Norman Chamberlist, president of B.A. Resources Ltd. The work was carried out from the 3rd to 24th of July, 1985 and consisted of establishing 27.35km of flagged grid lines, which were used to make VLF-EM and topographic surveys over the property and to locate 167 geochemical samples. The above exploration program was recommended, in part, by L. Sookochoff, P. Eng. (1983) and N.C. Lenard, P. Geol. (1984) and results of the survey are reported herein.

PROPERTY

The property is comprised of 9 located mineral claims consisting of one 6 unit claim block, eight two post claims and one fractional claim. The two post claims are peripheral to the NCL 1 six unit claim which envelopes the Snowflake 2 post claim and White Swan crown grant. Property particulars are as follows:

CLAIM NAME	RECORD NUMBERS	UNITS	EXPIRY DATE
NCL 1	1296(12)	6	19 Dec. 1985
NCL 2	1339(3)	1	2 March 1986
NCL 3	1340(3)	1	"
NCL 4	1341(3)	1	"
NCL 5	1342(3)	1	"
NCL 6	1343(3)	1	"
NCL 7	1344(3)	1	"
NCL 8	1368(3)	1	"
NCL 9 FR	1996(3)	1	15 March 1986

LOCATION AND ACCESS

The claims are located five km northwest of the town of oliver (Figure 1) which is situated within the Okanagan Valley a distance of some 420 km from Vancouver by road. The claims may be accessed from the north by the White Lake road a distance of about 35 km from Penticton or from Oliver via the Fairview road a distance of 45 km from Penticton. A secondary gravel road provides access to the northern portions of the NCL 1 claim.

PHYSIOGRAPHY

The property is situated within the dry belt of the Thompson-Okanagan, interior plateau. The landscape consists of glaciated hills and terraces ranging in elevation from 1400 to 2500 feet above sea level. Forest cover consists largely of grasslands, buckbrush, and sparse stands of timber since the entire southern portion of the property is scared by an old burn. There are no permanent drainages, although there are several shallow ponds in local basins. The property is dissected by numerous ridges, bluffs and escarpments which form north trending lineaments.

A topographic survey was therefore undertaken to help interpret the effects of topography on the VLF-EM survey. The survey consisted of taking systematic altimeter readings at every VLF station along the established grid. The elevations were then contoured at 100 foot intervals as shown in figure 2.

HISTORY

The property is situated within the Fairview gold camp.

which comprised a number of producers, most noteably the Stemwinder, Morning Star and Rattler, which produced 10,681 ounces of gold between 1936 and 1939. The Snowflake property, situated 1 km southwest of the Stemwinder mine, produced 405 tons of ore grading 1.43 oz/ton gold between 1961 and 1962. The Snowflake was further explored by an adit in 1978 and by limited diamond drilling in 1984. The area of thw NCL claims was prospected for uranium by Brinco (Culbert & Beaty, 1978) and surveyed by a very limited program of VLF-EM and soil sampling (Lenard, 1981 & 1984).

GEOLOGY

The NCL claims are underlain by the Oliver Pluton which consists of several intrusive members of which the most important are the Oliver granite porphyry and Oliver syenite. These intrude the Kobau group which consists of pelitic and quartzitic schists and gniesses which host auriferous quartz veins. According to Cockfield (1935) these veins carry small amounts of pyrite, galena and sphalerite, and occupy fault fissures conforming closely to the schistosity of the Kobau schists which also parallel the Fairview granite contact. However, some veins cut across the schistosity but these are relatively small and of less importance. Some mineralized quartz veins, having erratic orientations, occur in granite rocks and tend to be fairly persistent along strike. The most important of these veins are those mined on the Susie and Snowflake properties.

The Standard vein strikes N40^{o}E, dips 65 to 85^{o} easterly and pinches and swells up to 1.52 metres in width. Gold is associated with sulphide rich ore shoots and argillic fault gouge forming the footwall of the vein. A similar north trending vein(s) occurs further east on the Empire crown grant although these were never mined. The veins are cut by barren, post-mineral, andesite porphyry dykes of probable Tertiary age. Several smaller veins were reported to occur in road-cuts and old diggings between the Standard & Empire veins (Lenard, 1984). A systematic exploration program desigend to locate additonal mineral bearing atructures, as recommended by Sookochoff (1983) and Lenard (1984) was therefore undertaken.

VLF-EM SURVEY

Since the predominant regional structure and preferred orientation of mineralized quartz veins is northerly; a flagged grid consisting of east-west cross lines, spaced 100 metres apart with 25 metre station intervals, was established over the claim block. Grid lines were also extended over the Snowflake and White Swan claims in order to provide overall continuity, to test VLF-EM over known mineralized structures and to locate possible extensions onto the NCL claims. Seattle (24.8 khz) was selected as the most favourable transmitter for the purposes stated.

The survey was conducted by means of a Sabre Model 27 VLF-EM instrument. Readings were taken at 25m intervals along survey lines with the instrument facing the transmitter direction (195 azimuth) for dip angle measurements and easterly for horizonal field strength measurements. Field strength readings were measured by turning the gain control dial such that a maximum reading of 100% is obtained on the field strength metre. Lower numbers therefore reflect higher relative field strength. Dip-angle and field strength measurements are plotted on Figure 3. A comparison of figures 2 and 3 indicates that in some cases, cross-overs or polarity changes correlate with topographic features such as ridges, draws, basins and powerlines.

The effect of topography on VLF-EM tilt angles has been discussed by Whittles (1969) wherein he suggests that topographical effects may be reduced by measuring the rate of change of tilt angle slopes. This may be readily accomplished by using a low-pass smoothing operator such as that described by Fraser (1969). Dip angle raw data have therefore been transformed, using the Fraser filter to reduce noise and minimize topographic effects, on subsurface conductors and the results are plotted on Figure 4.

The filtered data suggest a multitude of apparent conductors as delineated by amplitudes greater than 10 filtered units. As a result, correlation of conductive zones between survey lines was somewhat arbitrary and the resulting contoured configuration is somewhat biased to northerly and northeasterly direction with northwesterly orientations emphasized to a lesser degree. Nevertheless the apparent orientation of conductive zones are broadly coincident with the general grain of regional structure which is intensely block faulted in a northerly direction with off-sets along attendant E-W cross-faults. The presence of powerlines, which cross lines ON to 5N, are clearly visible as crossovers in Figure 3 but less evident in Figure 4. However, the strong conductor on line 12N-50W may in part be distorted by a nearby powerline. Many of the conductors also coincide with dry basins possibly filled with conductive clays. In the writer's opinion, many of the conductors are probably due to major fault zones carrying groundwater and clay gouge. Unfortunately, none of the apparent conductors are directly coincident with the known mineralized zones such as the Standard and Empire veins. This perhaps should not be surprising inasmuch as these veins are relatively narrow, impersistent and carry relatively low amounts of disseminated sulphide. Nevertheless many of the known veins are aligned and proximal to conductive fault zones and may represent minor fissure fillings adjacent to them.

GEOCHEMICAL SURVEY

A limited soil geochemical survey of the property was undertaken in order to test for the presence of precious metal mineralization over conductive zones delineated by the VLF-EM survey. A total of 164 soil samples were therefore collected along survey lines, at 25 metre intervals, over apparent conductors. Soils were collected by means of a mattock from depths of 4-6 inches beneath the organic horizon, placed in Kraft paper bags and shipped to Acme Analytical Laboratories for analysis of their gold and silver contents. In the case of gold, 10 grams, of the -80 mesh fraction, which was ignited overnite at 600^{o}C is digested with 30 mls of hot dilute aqua regia and 75 mls of clear solution is extracted with 5 mls of methyl isobutyl ketone and analyzed by atomic absorption. In the case of silver, a 0.5 gram sample is digested in hot dilute aqua regia, diluted to 10 mls with water and analyzed by atomic absorption methods. Six rock samples collected from quartz veins were also analyzed by similar methods. The results are plotted in Figure 5 and enumerated in the appendix.

Unfortunately none of the soil samples were anomalous in gold or silver. Soil samples collected near anomalous quartz veins yielded background values suggesting that geochem sampling is not an effective exploration method for this property. Two rock samples collected from old diggings at L10S-100W and L45-275W yielded anomalous values with the former equivalent to 0.23 oz/ton gold and 1.46 oz/ton silver. This sample was collected from an open cut on a rock face which exposed a 45 cm vein trending N50^{o}W/70NE which was obscured by rubble after a few metres. The Silver Queen shaft, located on L4S-27W is 1.5 metres wide, trends N55^{o}E/75SE and is also obscured by soil beyond a steep rock face. A chip sample of rather barren looking milky quartz yielded 0.028 oz/ton Au and 0.63 oz/ton Ag. Detailed soil sampling was not successful in tracing out the southeast projection of the vein. An open cut at L6N-50E exposed a 35 cm quartz vein, trending N5^{o}E/75^{o}E, which yielded low values and may represent the northern extension of the Standard vein. Similarly, a 30 cm wide quartz vein trending N90^{o}E/30S on L7S-250W and a 60 cm vein, trending N70^{o}E-80S near 5.5N-50W, carried trace values. Finally, a kaolinized, pyritic shear zone exposed in a road cut on L4N-325E, reported by Lenard (1984), was barren.

ITEMIZED COST STATEMENT

WAGES: Provision of P. Peto 18 days @ $400/day..........	$ 7200.00
Food & Accommodation: 13 days @ $80/day..................	1040.00
Transportation: 13 days @ $40/day......................	520.00
VLF-EM rental: 8 days @ $15/day.........................	120.00
Geochemical: 161 soils for Au & Ag@ $6.60/sample.......	1062.60
7 rocks for Au & As @ $8.75/sample........	61.25
Expendibles: (flagging, hipchain cotton, soil bags).....	114.00
Freight:..	41.60
Report preparation:(typing, drafting, photocopying).....	510.00
TOTAL COST	$10,669.45

I certify that the above statement accurately represents the costs of the assessment work reported herein.

Respectfully submitted,

Peter Peto

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

GEOLOGICAL ASSOCIATION OF CANADA
P. PETO, PH.D.
FELLOW

REFERENCES CITED

Beaty, R.J. & Culbert, R.J. (1978): Geological and Geophysical report on the Oliver property, B.C.D.M. assessment report #6949.

Cockfield, W.E. (1935): Lode gold deposits of Fairview Camp, G.S.C. Memoir 179, p1-10.

Fraser, D.C. (1969): Contouring of VLF-EM data, Geophysics, Vol. 34, p958-967.

Lenard, N.C. (1984): Geophysical and geochemical report on NCL 1, 4 and 5 claims, B.C.D.M. assessment report, 14 p.

Sookochoff, L. (1983): Geophysical report for B.A. Resources on the NCL 1-8 claim: private report in company files, 13 p.

Whittles, A.B.L. (1969): Prospecting with radio frequency EM-16 in mountainous regions, Western Miner, (February) p51-56.

CERTIFICATE OF QUALIFICATION

I, Peter S. Peto, of 125 Bassett Street, town of Penticton, Province of British Columbia, DO HEREBY CERTIFY:

That I am a consulting geologist with a business address at 125 Bassett Street, Penticton, British Columbia, V2A 5W1.

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

That I am a fellow of the Geological Association of Canada.

That I have practiced my profession actively since 1975 in the province of British Columbia.

That I have no interest in the NCL properties nor in the securities of B.A. Resources Ltd., nor do I expect to receive any.

That the information contained in this report is a result of my field investigation and from other sources made available to me and there is no material change in the status of this report as of this date.

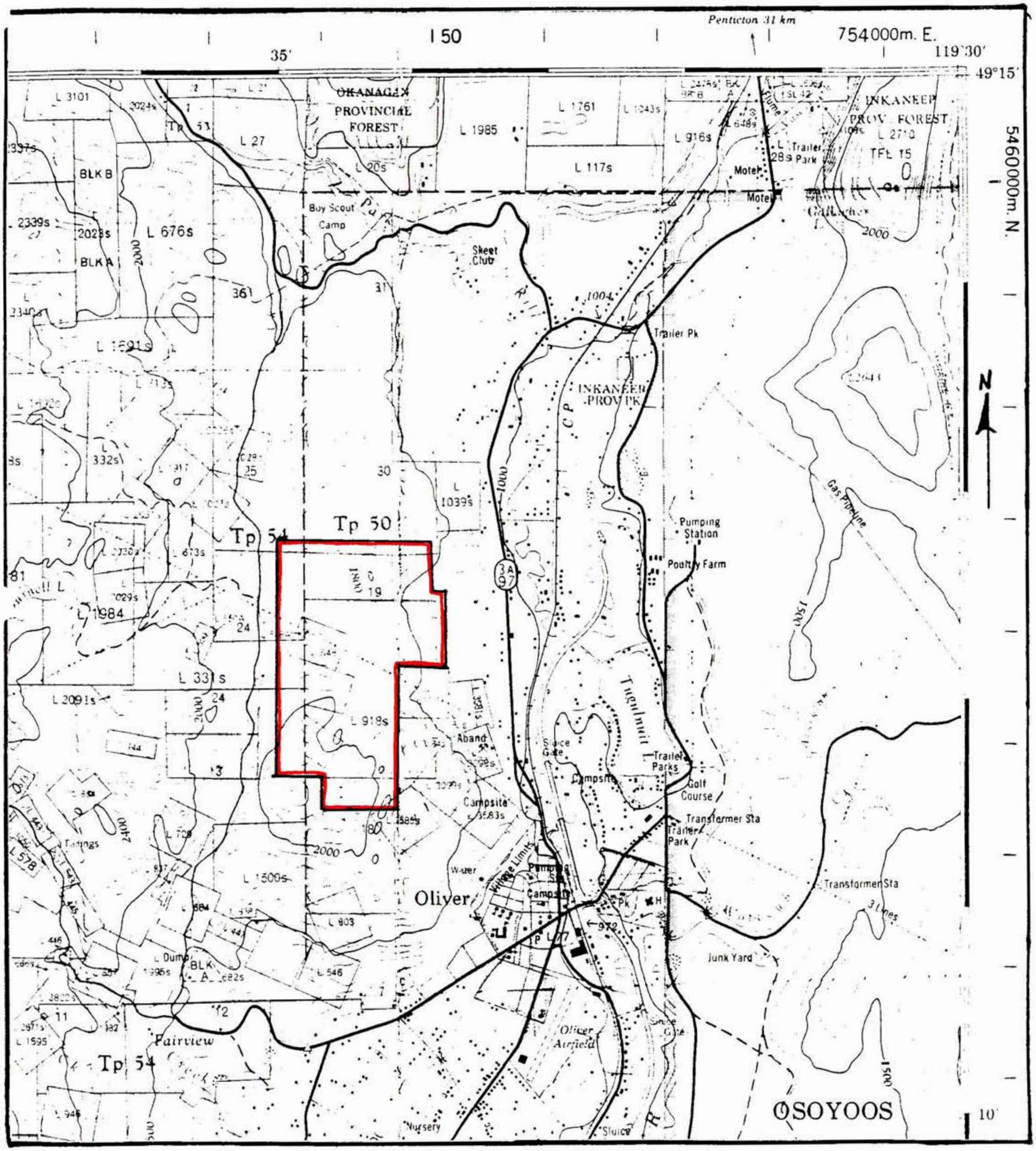
That I hereby consent to the publication of my report entitled Geophysical and Geochemical report on the NCL 1-9 mineral claims, in a prospectus or statement of material facts.

Dated this 31 day of July at Penticton, British Columbia

Peter Peto

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

FIGURE 1



CLAIM LOCATION MAP (SCALE 1:50,000)

N.T.S. 82E/4E

:ME ANALYTICAL LABORATORIES LTD.
52 .HASTINGS ST.VANCOUVER B.C. V6A 1R6
H 253-3158 DATA LINE 251-1011

DATE RECEIVED: JULY 25 1985

DATE REPORT MAILED: July 31/85

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: SOILS -80 MESH AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

PG 6 - ROCK

ASSAYER: T Saundry DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

B.A. RESOURCES PROJECT - NCL CLAIMS FILE # 85-1587 PAGE 1

SAMPLE#	Ag PPM	Au* PPB
OS 25E	.1	1
OS 50E	.2	4
OS 75E	.1	4
OS 150E	.2	1
OS 175E	.1	1
OS 200E	.2	2
OS 375E	.2	1
OS 400E	.1	1
OS 425E	.1	2
1S 250E	.1	11
1S 275E	.1	1
1S 300E	.1	3
2S 475E	.1	1
2S 500E	.1	1
2S 525E	.3	7
3S 25W	.1	3
3S 0W	.1	1
3S 25E	.1	1
4S 400W	.1	1
4S 375W	.1	11
4S 350W	.1	1
4S 325W	.1	3
4S 300W	.1	2
4S 275W	.1	2
4S 50W	.1	2
4S 25W	.1	1
4S 0W	.1	1
4S 25E	.1	1
4S 50E	.1	1
4S 250E	.1	1
4S 275E	.1	3
4S 300E	.1	9
4S 325E	.1	1
4.5S 425W	.1	1
4.5S 400W	.1	1
4.5S 325W	.1	1
STD C/AU-0.5	7.1	490

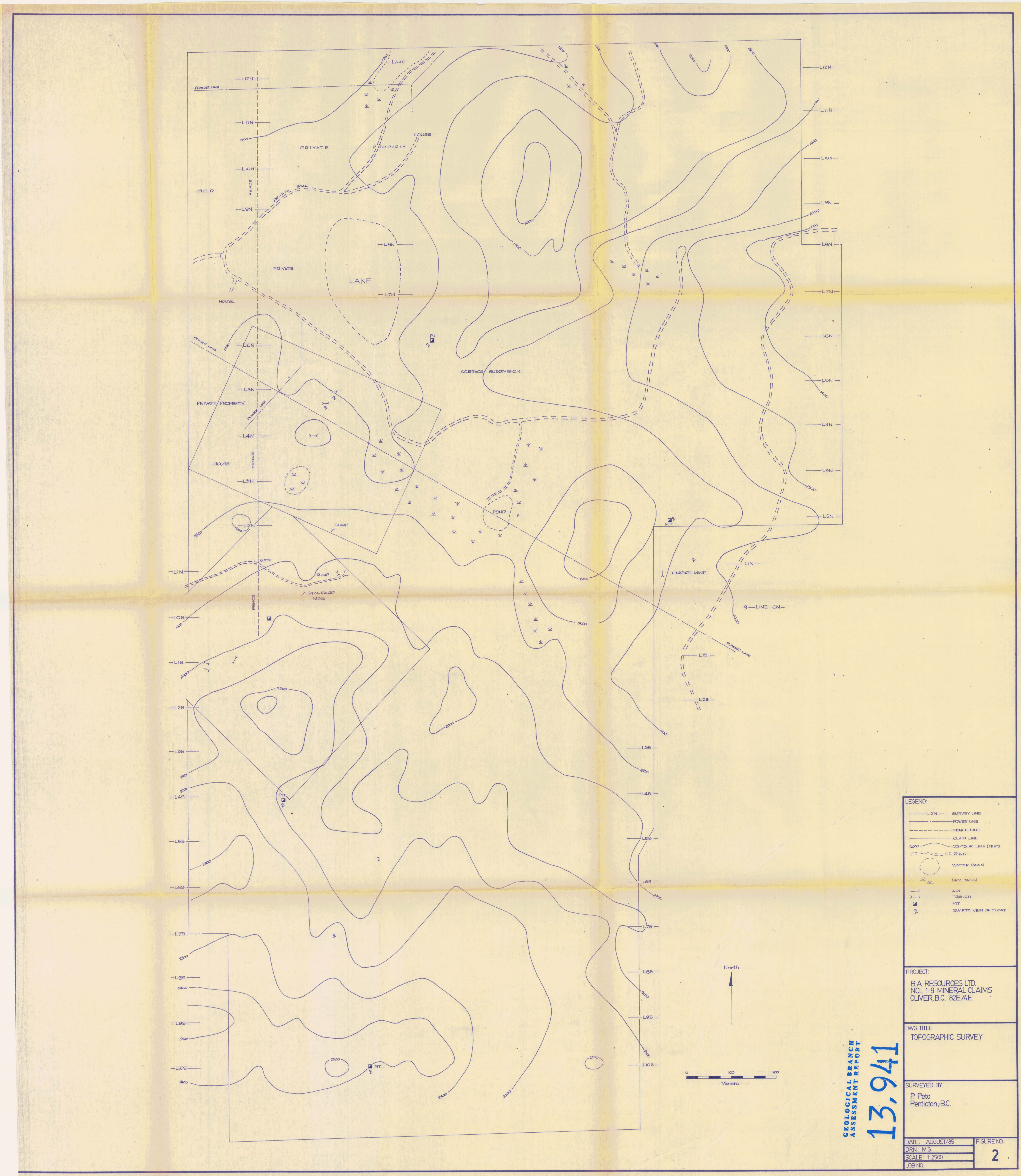
SAMPLE#	Ag PPM	Au* PPB
4.5S 375W	.2	1
4.5S 350W	.1	1
4.5S 300W	.1	1
4.5S 275W	.1	2
5S 450W	.2	2
5S 425W	.1	1
5S 400W	.1	1
5S 375W	.1	1
5S 350W	.1	1
5S 325W	.1	1
5S 125W	.2	1
5S 100W	.2	1
5S 75W	.1	1
5S 200E	.2	4
5S 225E	.2	2
5S 250E	.1	1
5S 325E	.1	1
5S 350E	.1	1
5S 375E	.1	1
5S 400E	.1	1
6S 275W	.1	5
6S 250W	.1	2
6S 225W	.1	1
6S 200W	.1	1
6S 175W	.1	1
6S 350E	.2	1
6S 375E	.1	1
6S 425E	.3	2
6S 450E	.1	1
7S 275W	.1	1
7S 250W	.1	3
7S 225W	.1	1
8S 300W	.1	1
8S 275W	.1	1
9S 350W	.1	5
9S 325W	.1	2
STD C/AU-0.5	7.1	490

SAMPLE#	Ag PPM	Au* PPB
9S 300W	.4	2
9S 275W	.3	1
9S 250W	.2	4
9S 225W	.1	7
9S 200W	.1	5
9S 75W	.1	1
9S 50W	.2	1
9S 25W	.3	3
9S 0W	.1	1
10S 125W	.2	7
10S 100W	.2	3
10S 75W	.2	1
10S 50W	.2	3
10S 25W	.2	1
8N 225E	.1	1
8N 250E	.1	1
8N 275E	.3	2
8N 300E	.1	1
7N 175E	.1	1
7N 200E	.1	1
7N 225E	.2	1
7N 250E	.1	9
7N 275E	.2	1
7N 300E	.1	1
7N 325E	.2	1
7N 350E	.1	1
7N 375E	.1	1
7N 600E	.1	2
7N 625E	.2	1
7N 650E	.2	14
7N 725E	.3	1
7N 750E	.3	1
7N 775E	.1	7
7N 800E	.2	1
6N 50E	.1	8
6N 75E	.2	6
STD C/AU-0.5	7.1	485

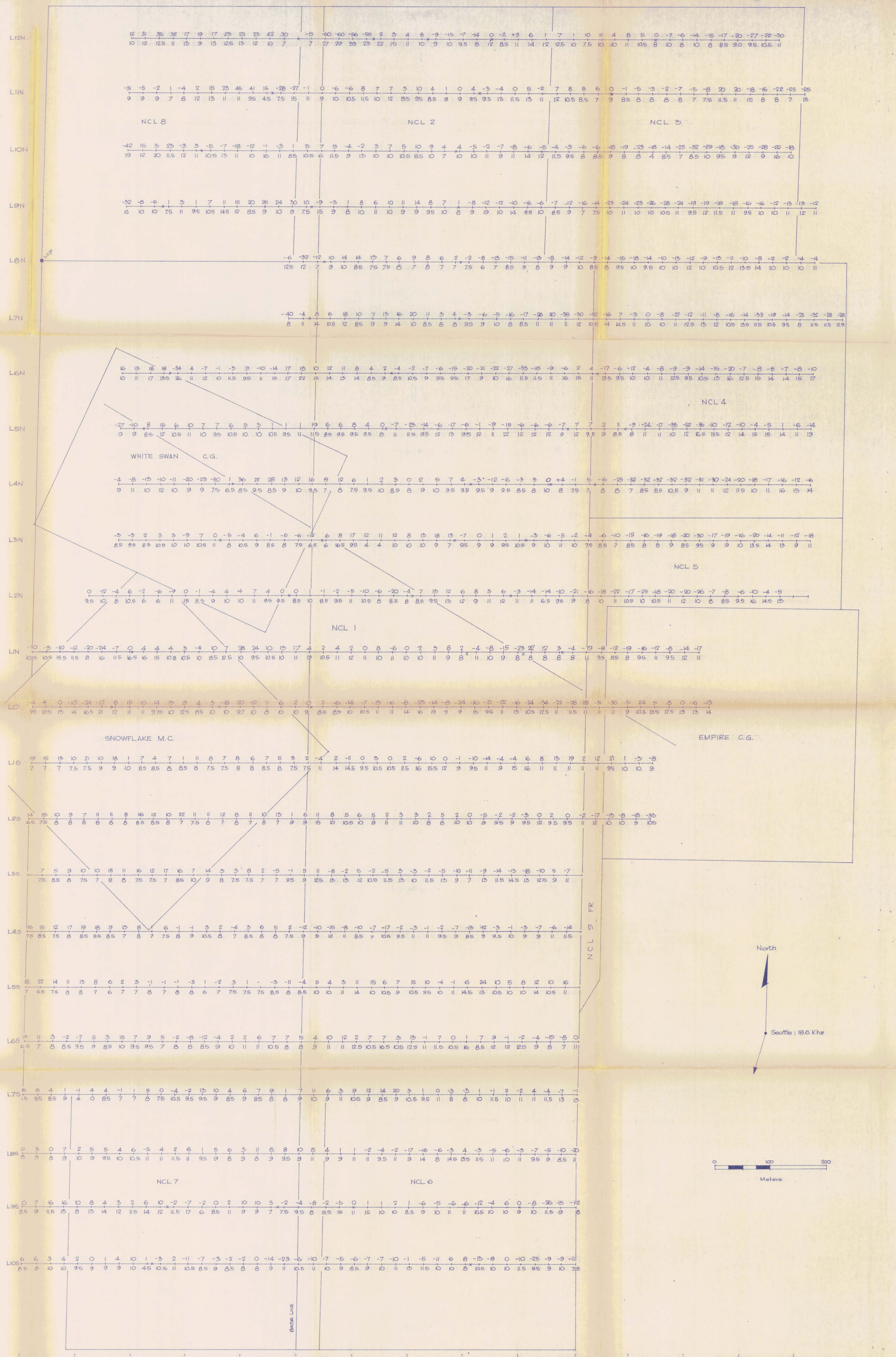
SAMPLE#	Ag PPM	Au* PPB
6N 100E	.1	4
6N 125E	.1	1
6N 200E	.1	3
6N 225E	.1	2
6N 250E	.1	1
6N 275E	.1	2
6N 500E	.2	3
6N 525E	.2	2
5N 300E	.3	1
5N 325E	.1	2
5N 350E	.2	12
5N 500E	.2	3
5N 525E	.2	1
5N 550E	.2	1
5N 575E	.1	5
5N 600E	.1	2
5N 625E	.2	1
5N 650E	.3	3
5N 675E	.1	2
4N 250E	.1	2
4N 275E	.3	3
4N 300E	.1	1
4N 325E	.1	2
4N 475E	.1	1
4N 500E	.1	12
4N 525E	.2	4
4N 550E	.1	2
4N 575E	.1	2
4N 600E	.1	1
3N 225E	.1	3
3N 250E	.1	4
3N 275E	.1	6
3N 375E	.1	2
3N 400E	.1	1
3N 500E	.1	1
3N 525E	.1	3
STD C/AU-0.5	7.2	480

SAMPLE#	Ag PPM	Au* PPB
3N 550E	.2	3
3N 575E	.3	2
3N 600E	.2	3
2N 400E	.4	2
2N 425E	.1	2
2N 450E	.2	4
2N 475E	.2	2
2N 500E	.2	4
2N 525E	.4	4
1N 225E	.2	2
1N 250E	.1	2
1N 275E	.2	1
1N 300E	.2	2
1N 325E	.1	5
1N 350E	.1	2
1N 450E	.2	3
1N 475E	.5	3
STD C/AU-0.5	7.1	500

SAMPLE	Ag ppm	Au* ppb
R6N 50E	2.8	23
R4N 325E	.2	1
R4S 275W	21.8	960
R5.5S 50W	6.1	275
R~~9S/R10~~S 250W [7]	.5	24
R10S 100W	50.3	7850



LEGEND:
L2N SURVEY LINE
POWER LINE
FENCE LINE
CLAIM LINE
2000 CONTOUR LINE (FEET)
ROAD
WATER BASIN
DRY BASIN
ADIT
TRENCH
PIT
QUARTZ VEIN OR FLOAT
PROJECT:
B.A. RESOURCES LTD.
NCL 1-9 MINERAL CLAIMS
OLIVER, B.C. 82E/4E
DWG. TITLE
TOPOGRAPHIC SURVEY
SURVEYED BY:
P. Peto
Penticton, B.C.
DATE: AUGUST/85
DRN: M.G.
SCALE: 1:2500
JOB NO.
FIGURE NO.
2
North
Meters
GEOLOGICAL BRANCH
ASSESSMENT REPORT
13,941
LAKE
POWER LINE
PRIVATE PROPERTY
HOUSE
FIELD
FENCE
PRIVATE ROAD
PRIVATE
LAKE
ACERAGE SUBDIVISION
POND
DUMP
GATE
STANDARD MINE
EMPIRE MINE
PIT
LINE ON



GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,941

LEGEND:

DIP ANGLE (DEGREES)

10 -4 -1 6 24 10 9

9.5 10 11 14.5 15 10.5 10

HORIZONTAL FIELD STRENGTH

PROJECT:

B.A. RESOURCES LTD.
NCL 1-9 MINERAL CLAIMS
OLIVER, B.C. 82E/4E

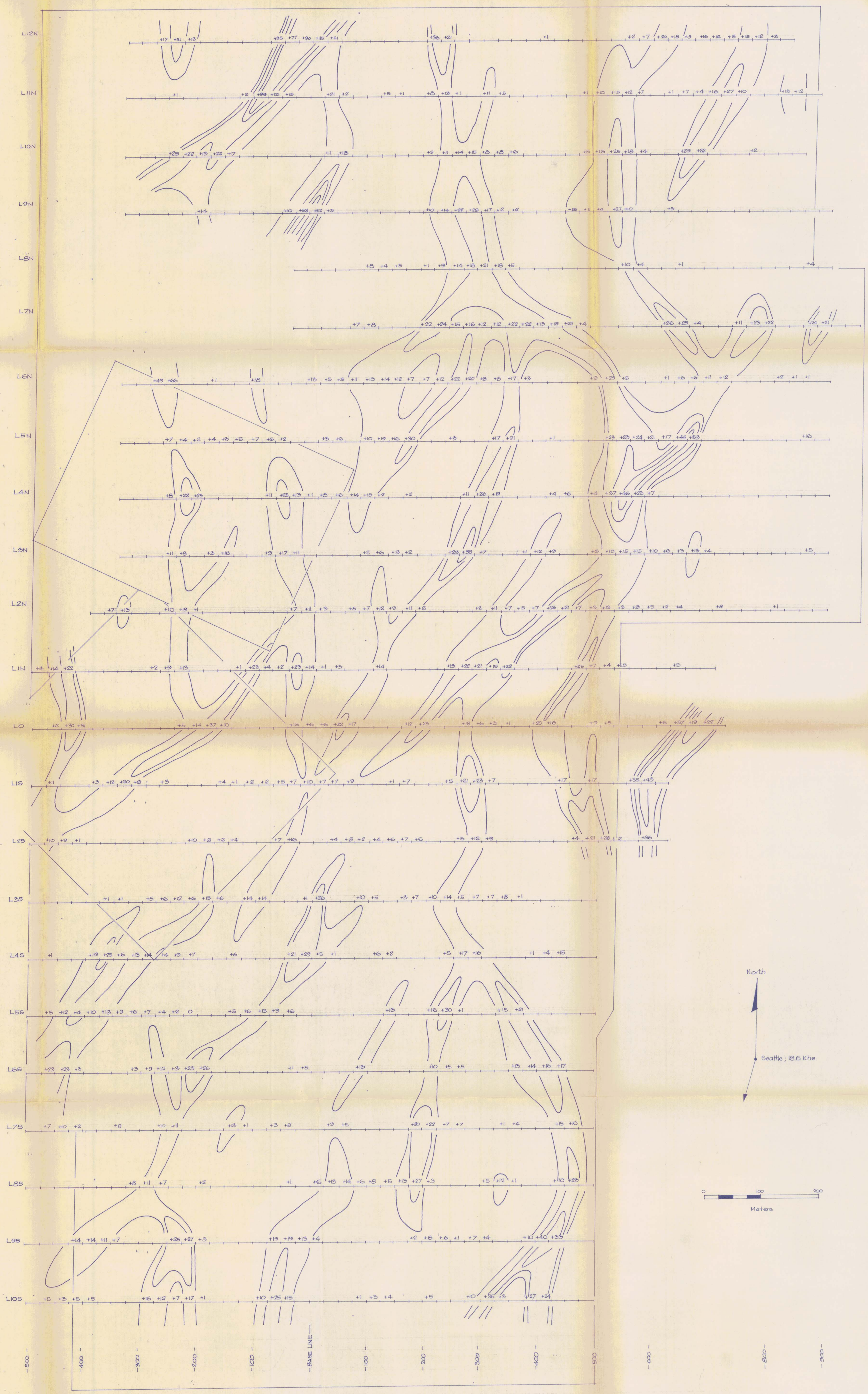
DWG. TITLE

VLF-EM SURVEY RAW DATA
Using Seattle, Wa.

SURVEYED BY:

P. Peto
Penticton, B.C.

DATE: AUGUST/85	FIGURE NO.
DRN: M.G.	3
SCALE: 1:2500	
JOB NO.	



GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,941

LEGEND:

Fraser Filtered Values
-15 -2 +5 +17 +16 -5
Survey line

PROJECT:

B.A. RESOURCES LTD.
NCL 1-9 MINERAL CLAIMS
OLIVER, B.C. 82E/4E

DWG. TITLE

VLF-EM SURVEY
FILTERED DIP ANGLE
CONTOUR MAP
Using Seattle, Wa.

SURVEYED BY:

P. Peto
Penticton, B.C.

DATE: AUGUST/85	FIGURE NO.
DRN: M.G.	4
SCALE: 1:2500	
JOB NO.	

LEGEND:

- ● SOIL
- ▲ ROCK
- 5 GOLD (ppb)
- .1 SILVER (ppm)
- // VLF-EM CONDUCTIVE ZONE

PROJECT:
B.A. RESOURCES LTD.
NCL 1-9 MINERAL CLAIMS
OLIVER, B.C. 82E/4E

DWG. TITLE
GEOCHEMICAL SURVEY

SURVEYED BY:
P. Peto
Penticton, B.C.

DATE: AUGUST/85	FIGURE NO.
DRN: P.P.	5
SCALE: 1:2500	
JOB NO.	