

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,904

GEOPHYSICAL REPORT
OVB GROUP OF MINERAL CLAIMS
PLACER DEVELOPMENT LIMITED
ENDAKO MINES DIVISION
OMINECA MINING DIVISION
TCHENTLO LAKE, B.C.
93N3E

(LATITUDE 55 13 LONGITUDE 125 03)

(Field Work Undertaken 7 August 82 and 16 August 82)

A.J. Peters
P. Buckley P.Eng

December 1982

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1. INTRODUCTION

VLF EM and vertical intensity magnetometer surveys were conducted over the OVB group of mineral claims during period of 7 August 1982 to 16 August 1982. The work was undertaken as part of commitments for assessment work on the OVB claims which are owned by Placer Development Limited, Endako Mines Division; and are located near the midpoint of the north shore of Tchentlo Lake

2. SUMMARY

VLF EM computed Fraser Filter results revealed numerous positive zones within the claim blocks which are ninety-nine percent drift covered. However, field strength readings depict a somewhat northerly trending zone that may be structurally controlled and/or sulfide related.

Ground magnetics depict a northwest trending linear feature that is 2500 metres long and 200 metres wide. This feature is expressed by low magnetic values. Zones of magnetic highs lie at right angles to the low zone.

In general field strength highs are associated with magnetic lows.

3. PROPERTY

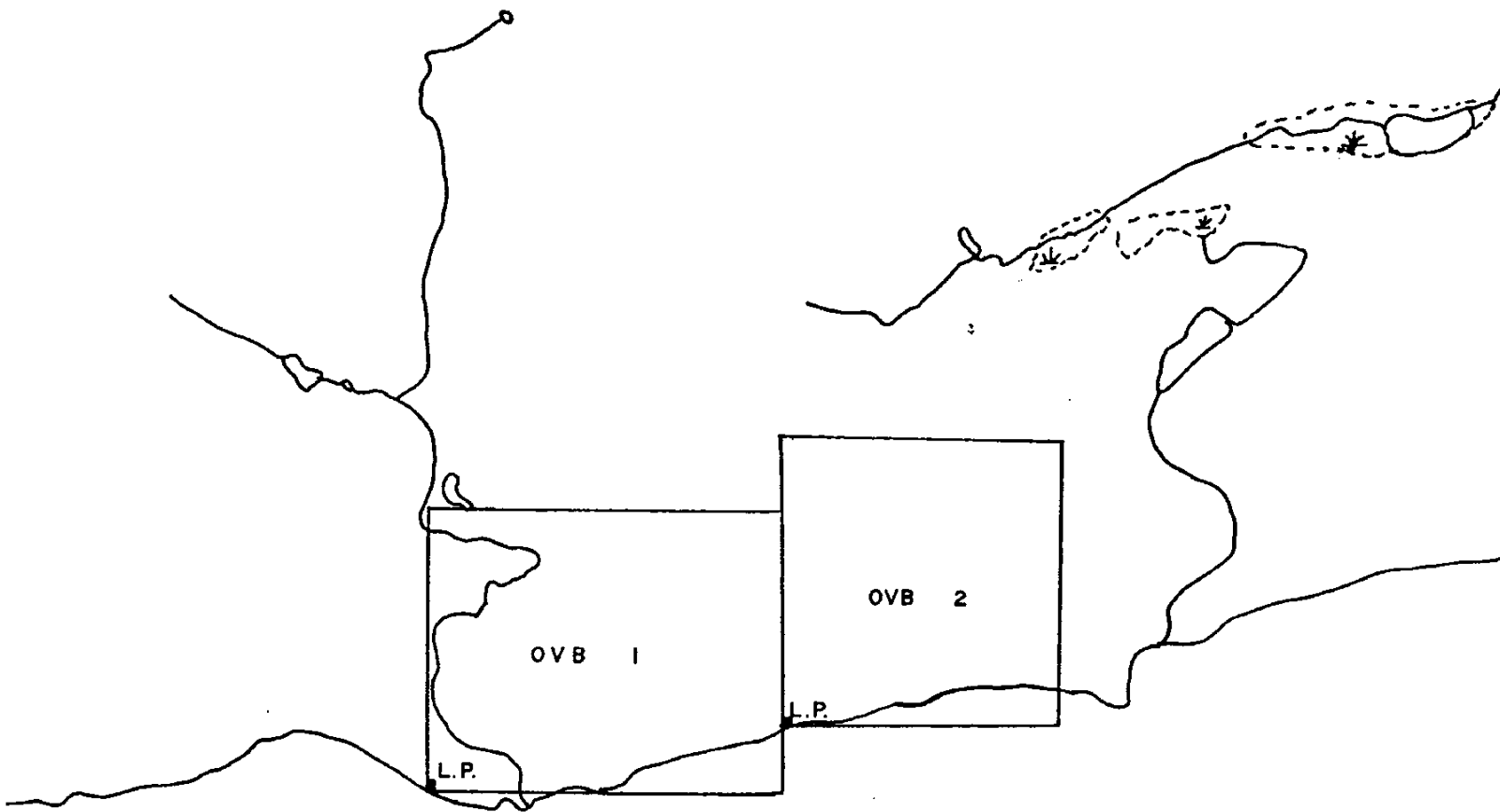
3.1 MINERAL CLAIMS

The OVB claims are located near the mid point on the north shore of Tchentlo Lake. They were staked between 29 June 1981 and 1 July 1981. The claims are geographically located at Latitude 55 13 and Longitude 125 03 in the Omineca Mining Division. They are grouped as the OVB group of mineral claims and total 36 units.

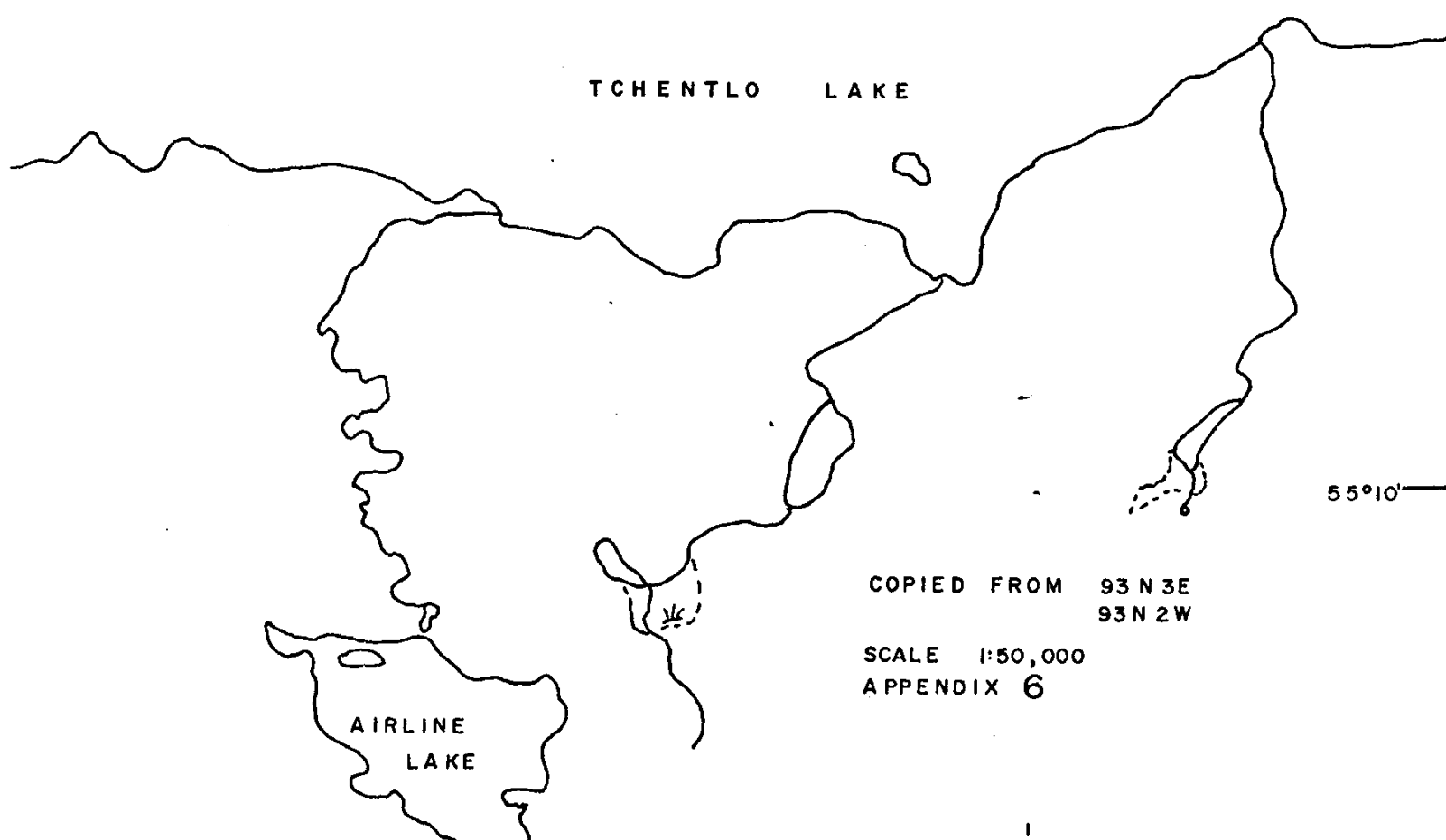
MINERAL CLAIM	RECORD NO.	DATE RECORDED
OVB 1 (20 units)	3881	July 9, 1981
OVB 2 (16 units)	3882	July 9, 1981

All field work covered by this report was conducted on these claims.

125° 00'



TCHENTLO LAKE



COPIED FROM 93 N 3E
93 N 2W

SCALE 1:50,000
APPENDIX 6

The claims were located by hip chain and compass method with the aid of air photographs and topographic maps.

3.2 ACCESS

Access is via float plane or helicopter bases located at Fort St. James or Burns Lake. A possible water route is via Chuchi and Tchentlo lakes.

3.3 TOPOGRAPHY AND VEGETATION

The OVB claims are centred over an area of relatively flat terrain. Elevation of Tchentlo Lake surface is approximately 800 metre above mean sea level. From here the ground gently slopes to 950 metre a.m.s.l. near the northern boundary of the claim block.

The westerly portion of the claim block is treed by open second growth pine forest. The central portion features typical forest fire burn resulting in much deadfall and second growth vegetation. Easterly sector of the claim block features mature stands of balsam, pine and spruce with some blowdown.

3.4 PREVIOUS WORK

The most westerly portion of the claim block was formerly held by Tchentlo Lake Mines and consisted of a portion of Bal 10 and PJ 1-20 mineral claims. This work is covered by assessment report nos. 2617 and 2729. The balance of the OVB claim block was held by Marc Explorations as the NSZ claims in the early nineteen seventies. To the best of the writers knowledge no work was performed on the NSZ claims. An assessment report entitled "GEOCHEMICAL AND GEOPHYSICAL REPORT OVB GROUP OF MINERAL CLAIMS" was filed by Placer Development Limited, Endako Mines Division during January 1982.

4. GENERAL GEOLOGY

The drift covered claim block is presumed to be underlain by the Hogem Batholith presumably of Upper Jurassic to Lower Cretaceous age. "Armstrong, G.S.C. Memoir 252"

4.1 PROPERTY GEOLOGY

Only one area of rock exposure was observed within the OVB group of mineral claims. It is situated within a major stream channel near the westerly claim boundary. The exposure is an intermediate to mafic intrusive; most likely dioritic in composition. Pyrite, chalcopyrite, magnetite and pyrrhotite were observed in this exposure. Magnetite and pyrrhotite account for approximately 20 percent of the exposed rock. In addition, large pieces of carbonaceous vein like material were noted near the exposure.

5. ECONOMIC ASSESSMENT

Possible economic potential for sulfide skarn mineralization exists if the magnetics indeed depict a carbonaceous unit in contact with an intrusive unit.

6. SURVEY CONTROL

An east-west oriented baseline was established utilizing hip chain and compass method. Stations at 25 metre intervals were established along the baseline. North-south oriented lines were run at 200 metre separation with stations every 15 metres. All stations were demarked by flagging tape and given an identity. Overall control for the surveys were air photographs B.C. 7157-174, 175 and 175.

7. GEOPHYSICAL SURVEYS

Seventeen point seven kilometres of VLF EM and 17.7 kilometres of magnetometer survey were conducted on the OVB claim block. Survey crew consisted of one compass man, one VLF EM operator and one magnetometer operator. VLF EM and magnetometer surveys were conducted on a simultaneous basis.

7.1 MAGNETOMETER SURVEY

A magnetometer survey base station was

established at the point noted on Appendix 3. From this point a magnetometer baseline was established along the existing baseline at 25 metre intervals with initial loop stations at 200 metre intervals. This baseline was closed at the base station. Loops were run from this baseline and tied into previously established stations on the baseline. Spacing within the loops was 15 metres. All readings were taken with the operator facing east.

7.1.1 INSTRUMENTATION

The survey was conducted with a Jaiander, Type 46-66 magnetometer. The instrument is a vertical field, fluxgate magnetometer. The magnetometer was calibrated so that the majority of the readings would fall within the first two sensitivity ranges. Sensitivity for the instrument is as follows:

SENSITIVITY RANGE NO.	FULL SCALE 0-1000 GAMMAS	GAMMAS/UNIT =COEFFICIENT	SENSITIVITY GAMMAS PER PAR 1 PAR = 1/4 DIVISION = 5 UNITS
..... 1 1000 1.00 5.0
2	2490	2.49	12.5
3	9600	9.60	48.0
4	24600	24.60	123.0
5	104600	104.60	523.0

7.1.2 DATA TREATMENT

All data was corrected for diurnal variation. Variation was assumed to be linear in nature. The baseline stations were first corrected to the base station on a gamma per minute basis. Loop readings were then diurnally corrected to the baseline stations which were previously corrected to the base station. These corrected readings are shown in Appendix 5. Further these readings were plotted, their coordinates scaled, and coded for computer contouring. Computer program is assigned an adequate search radius to fill in between survey lines. Contours of this data are shown in Appendix 5.

7.1.3 INTERPRETATION

Higher gamma values are associated with the known magnetite pyrrhotite rich intermediate intrusive. This criterion would tend to suggest that similar rock is underlying areas which exhibit higher gamma values where there is no known rock exposure.

The presence of carbonaceous vein like material in the immediate vicinity of the intermediate intrusive would tend to suggest that a rock unit of lesser magnetic susceptibility may be present within the claim block. Therefore, the 2500 metre long magnetic low may be due to carbonate rock. However, the linear nature of the low may suggest a structural feature such as a fault zone.

7.2 VLF EM SURVEY

7.2.1 INSTRUMENTATION

A CRONE RADEM VLF EM receiver was utilized for this survey. Transmitting station was NPM Lualualei, Hawaii at 23.4 kHz. Tilt angle readings were recorded as positive or negative tilt in the direction of travel. Readings were recorded at 15 metre intervals. In addition, percent field strength readings were recorded in the horizontal plane in an attempt to define the shape of conductive bodies or zones. The base field strength was set at 260 percent; since this setting resulted in a good null when the instrument was rotated in the horizontal plane before being placed in the vertical plane to record tilt angles.

7.2.2 DATA TREATMENT

All field strength readings were corrected for drift in the same manner as the magnetometer readings were corrected for drift. Contoured results are shown in Appendix 4.

Tilt angle readings and corresponding Fraser Filter values are shown in Appendix 3. Fraser Filter values were computed in the direction of travel so that positive results were obtained when tilt angles change from

positive to negative tilt. computations were performed as follows: $(R1 + R2) - (R3 + R4) =$ a plot point midway between R2 and R3.

7.2.3 INTERPRETATION

Numerous positive Fraser Filter vales exist. These values tend to lie at the edges of field strength highs and to a lesser degree within field strength highs.

Two sets of profiles were prepared to determine if the field strength highs had corresponding positive filter values as well as corresponding crossovers. The first set was over the area of the pyrrhotite rich rock. All three parameters correlated well over the rock exposure although the field strength over the exposure appears as a low. This would tend to indicate that the field strength base station was established on an already anomalous area.

The second set was prepared over the highest field strength high. Again a good correlation exists between crossover pattern, positive filter values and high field strength. This anomaly has the characteristic extended crossover pattern or that of a conductive horizontal slab. The area is completely drift covered and not of a boggy nature; consequently the conductor is most probably sulfide related.

These profiles are not included in this report.

It would appear that the trend of the field strength highs is north to northeast which is approximately at right angles to the major northwest trending magnetometer low zone. Further, it would appear that generally the field strength highs are at or near the edge of magnetometer lows or within the magnetometer lows themselves. This phenomenon may be suggestive of mineralization occurring at the contact of magnetometer highs and lows or within the lows themselves.

.....7

8. STATEMENT OF EXPENDITURES

The following expenses were incurred by Placer Development Limited, Endako Mines Division for conducting the surveys on the OVB group of mineral claims. To facilitate field work magnetometer and VLF EM surveys were run on a simultaneous basis; as a result the personnel costs are lumped together.

8.1 PERSONNEL COSTS

PERSONNEL	PERIOD	RATE	CJST
A.J.PETERS	6 AUG 82	11 days	
	18 AUG 82	@\$220.00/day	\$ 2420.00
T. EAST	7 AUG 82	10 days	
	16 AUG 82	@\$110.00/day	\$ 1100.00
D.ALLEN	7 AUG 82	10 days	
	16 AUG 82	@\$110.00/day	\$ 1100.00

N.B. OFFICE OVERHEAD AT 45% INCLUDED
IN SALARIES

TOTAL PERSONNEL COSTS... \$ 4620.00
.....

8.2 CAMP OPERATIONS

Total of 30 man days @ \$25.00
per day per man \$ 750.00
.....

8.3 TRANSPORTATION

One 3/4 ton two wheel drive truck
for two days at \$25.00/day \$ 50.00
LAKES DISTRICT AIR SERVICES LTD
INVOICE NO. 491 \$ 614.00
.....
TOTAL TRANSPORTATION..... \$ 664.00
.....

8.4 EQUIPMENT

Total of 24 rolls of flagging tape
and 12 spools of hip chain string. \$ 50.00

CARRIED FORWARD

3.5 DRAFTING AND REPORT PREPARATION

PERSONNEL	RATE	COST
A.J. Peters	7 days @ \$220.00/day	\$ 1540.00
P. Buckley	3days @ \$280.00/day	\$ 840.00
SALARIES INCLUDE 45% OFFICE OVERHEAD		
	
		\$ 2380.00
	
GRAND TOTAL OF OV3 CLAIMS SURVEY		\$ 8454.00

9. CONCLUSIONS

Ground magnetics and VLF EM surveys have outlined areas that may have potential for mineralization. This potential may be structurally controlled or be a skarn type of mineralization.

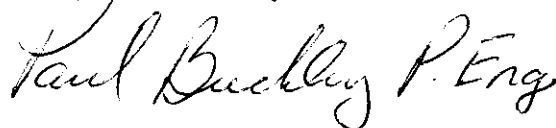
Submitted,

PLACER DEVELOPMENT LIMITED
ENDAKO MINES DIVISION

A.J. Peters
Geological Technician



P. Buckley, P. Eng
Senior Geologist



APPENDIX 1

CERTIFICATION
P. Buckley - P.Eng

I, Paul Buckley, of Placer Development Limited, Endako Mines Division, Endako, B.C., do hereby certify that:

1. I am a Geological Engineer and a member of the Association of Professional Engineers of the Province of British Columbia.
2. I am a graduate of the University of British Columbia with a B.A. Sc. in Geological Engineering in 1973.
3. From 1973 until the present I have been engaged in open pit operations and exploration geology in British Columbia.
4. I did participate in the planning and interpretation of the geophysical surveys.
5. I did personally execute and produce the computerized magnetics and VLF EM maps.
6. To the best of my knowledge, the Statement of Expenditures is correct.

P. Buckley, P.Eng

Paul Buckley P. Eng

APPENDIX 2
CERTIFICATION
A.J. Peters

I, A.J. Peters, of Placer Development Limited, Endako Mines Division, Endako, B.C., do hereby certify that:

1. I am a Geological Technician.

2. I graduated from Nechako Valley Secondary School in 1966 on University Entrance Program with electives in Mathematics, Science and Social Studies.

3. My practical training from 1967 to the present has included the following:

- a) Sampling and surveying in open pit mine;
- b) Diamond and percussion drill sampling;
- c) Plan, recommend, perform relevant field work and supervise actual drilling projects;
- d) Plan, conduct field work and interpret results on regional and detailed geochemical surveys;
- e) Assist with planning, conduct field work and make preliminary interpretations on regional geological mapping programs.
- f) Assist and conduct geophysical surveys; magnetometer; VLF EM; and make interpretations thereon;

All of the above experience has been obtained under the guidance of geologists and geophysicists.

4. I was personally involved in planning the OVB geophysical surveys.

5. I did personally conduct and supervise the geophysical work on the OVB claim block.

6. I was involved in the interpretation of the geophysical data and prepared the report thereon.


A.J. Peters



55° 12'

LUALUAEI, HAWAII 23.4 kHz



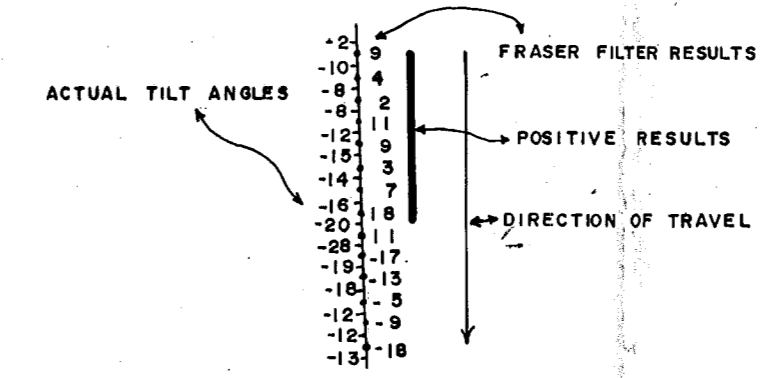
LEGAL POST OVB 1 - LOCATED BY AIR PHOTO, TOPOGRAPHIC MAP, HIP CHAIN AND COMPASS.

LEGAL POST OVB 2 - LOCATED BY AIR PHOTO, TOPOGRAPHIC MAP, HIP CHAIN AND COMPASS.

TCHENTLO LAKE

125° 02' 30"

EXPLANATION

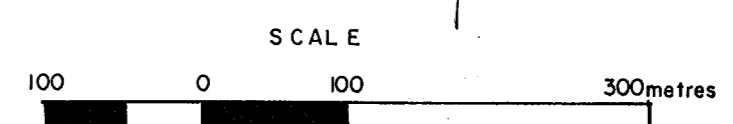
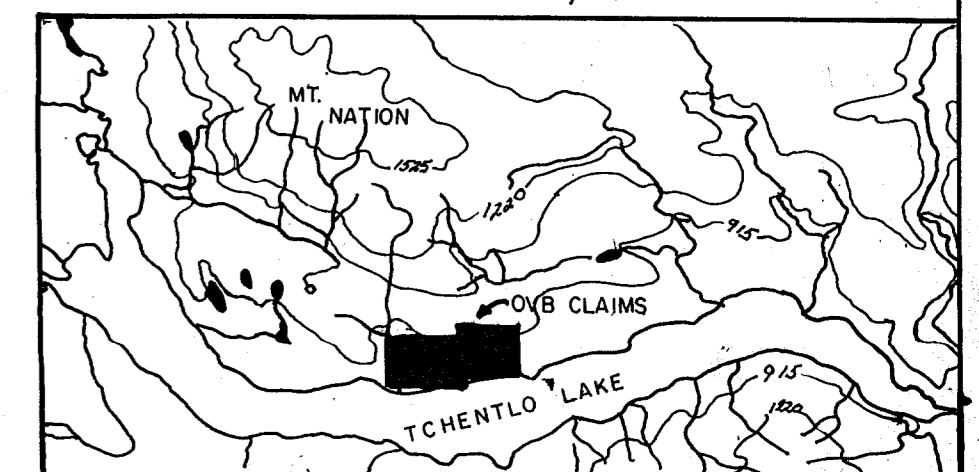


GEOLOGICAL BRANCH ASSESSMENT REPORT

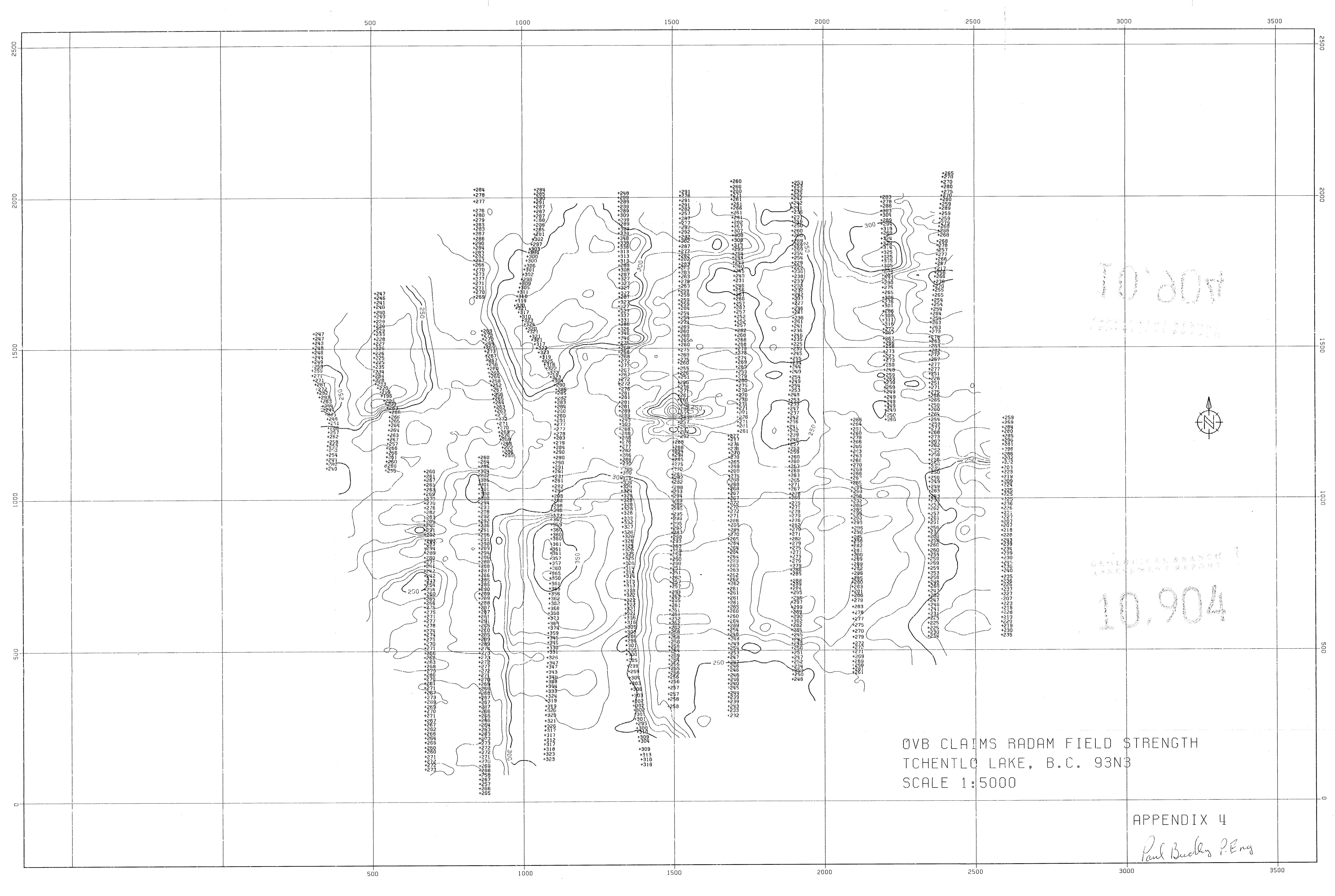
10,904

Paul Buckley P. Eng

KEY MAP SCALE = 1:250,000



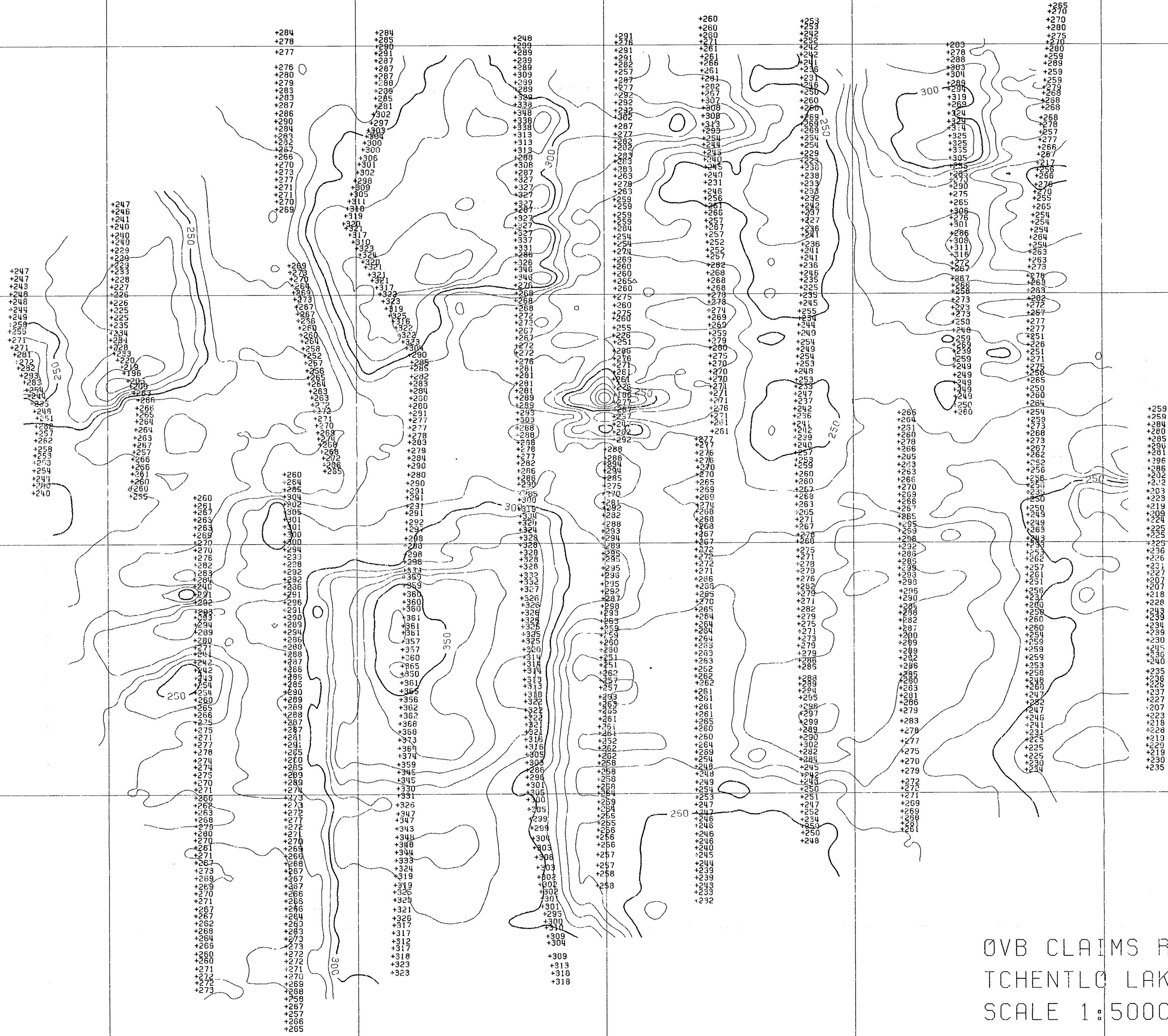
DRAWN: J.J. PETERS	SCALE: 1:15,000	ENDAKO MINES DIVISION	VLF EM SURVEY
DATE:		OVB CLAIMS	APPENDIX 3



500 1000 1500 2000 2500 3000 3500

2500 2000 1500 1000 500 0

2500 2000 1500 1000 500 0



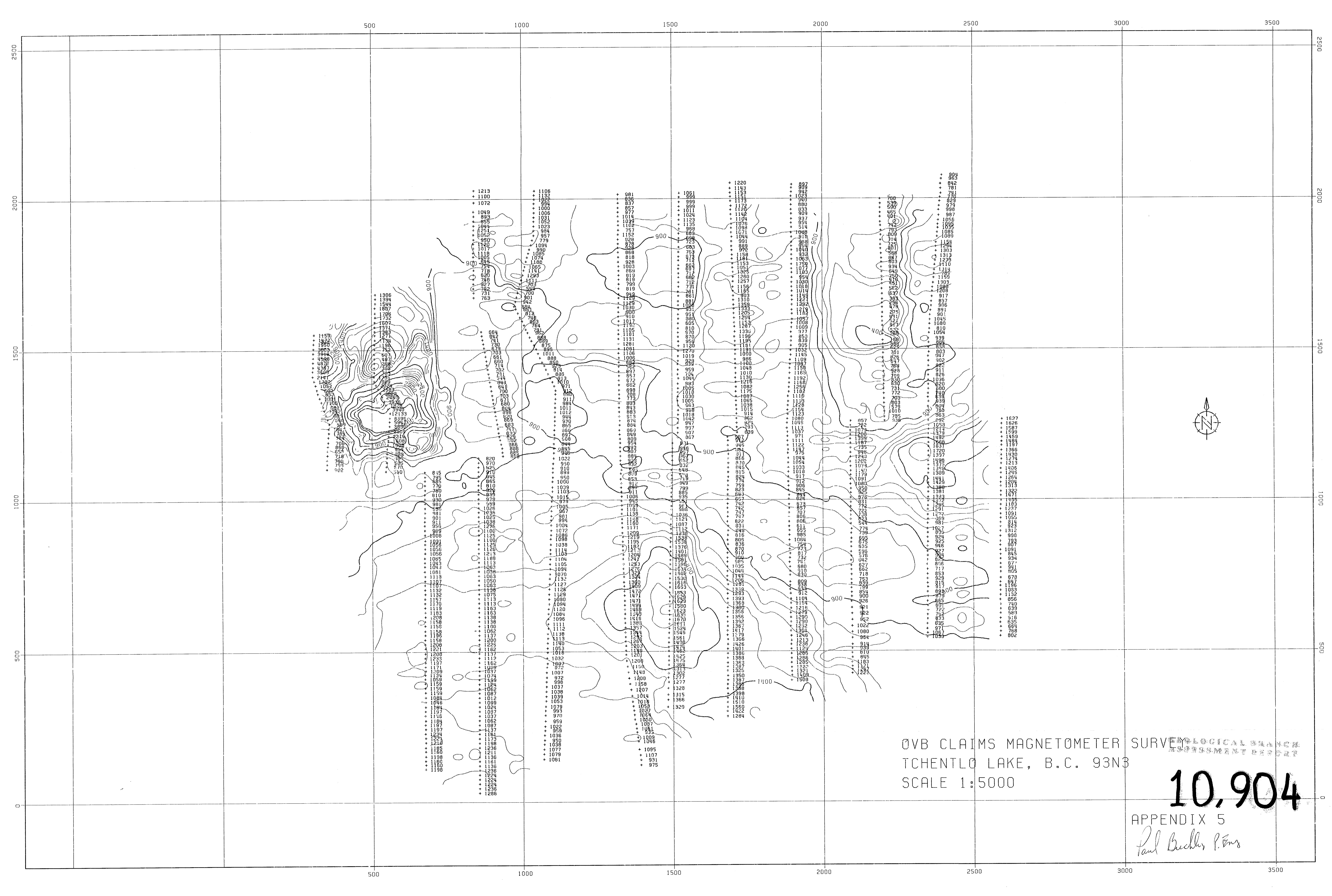
10.804

10.904

OVb CLAIMS RADAM FIELD STRENGTH
TCHENTLO LAKE, B.C. 93N3
SCALE 1:5000

APPENDIX 4
Paul Buckley P.Eng

500 1000 1500 2000 2500 3000 3500



OVB CLAIMS MAGNETOMETER SURVEY GEOLOGICAL SURVEY
TCHENTLO LAKE, B.C. 93N3
SCALE 1:5000

10,904

APPENDIX 5
Paul Buckley P.Eng