

84-#809 -12852

Prospecting and Sampling

Report on the MEAD Claim

Nanaimo Mining Division

NTS 92-L-12

50°41'N

127°48'W

September, 1984

D. B. Petersen

Owner: E. Alionis

Operator: Daiwan Engineering Ltd.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,852

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1. Introduction

This report describes the work that was done on the area now covered by the MEAD claim prior to 1984, and the work that was performed in July and August, 1984.

The report is being submitted as an assessment report to cover 3 years of work.

2. Location and Access

The MEAD claim is located immediately South of the East end of Nahwitti Lake, 29km West of Port Hardy. NTS is 92-L-12. Geographic co-ordinates are $50^{\circ}41'N$ $127^{\circ}48'W$. See Fig. 1, "Location Map".

Access is by gravel road that leads from Port Hardy to Holberg and by logging roads and trails that branch Southwards through the property.

3. Topography and Vegetation

The claim is underlain by two moderately steep hills. Elevations vary between 200m and 550m.

Stands of cedar cover the claim except in the Western part where logging has taken place.

4. Local Geology

The Nahwitti Lake region has been mapped by Northcote (1970). The area is underlain by volcanics and sediments of the Upper Triassic to Jurassic Vancouver Group. These rocks are intruded by late Jurassic to Tertiary quartz-diorites and andesitic sills and dykes. See Fig. 2, "Preliminary Geological Map".

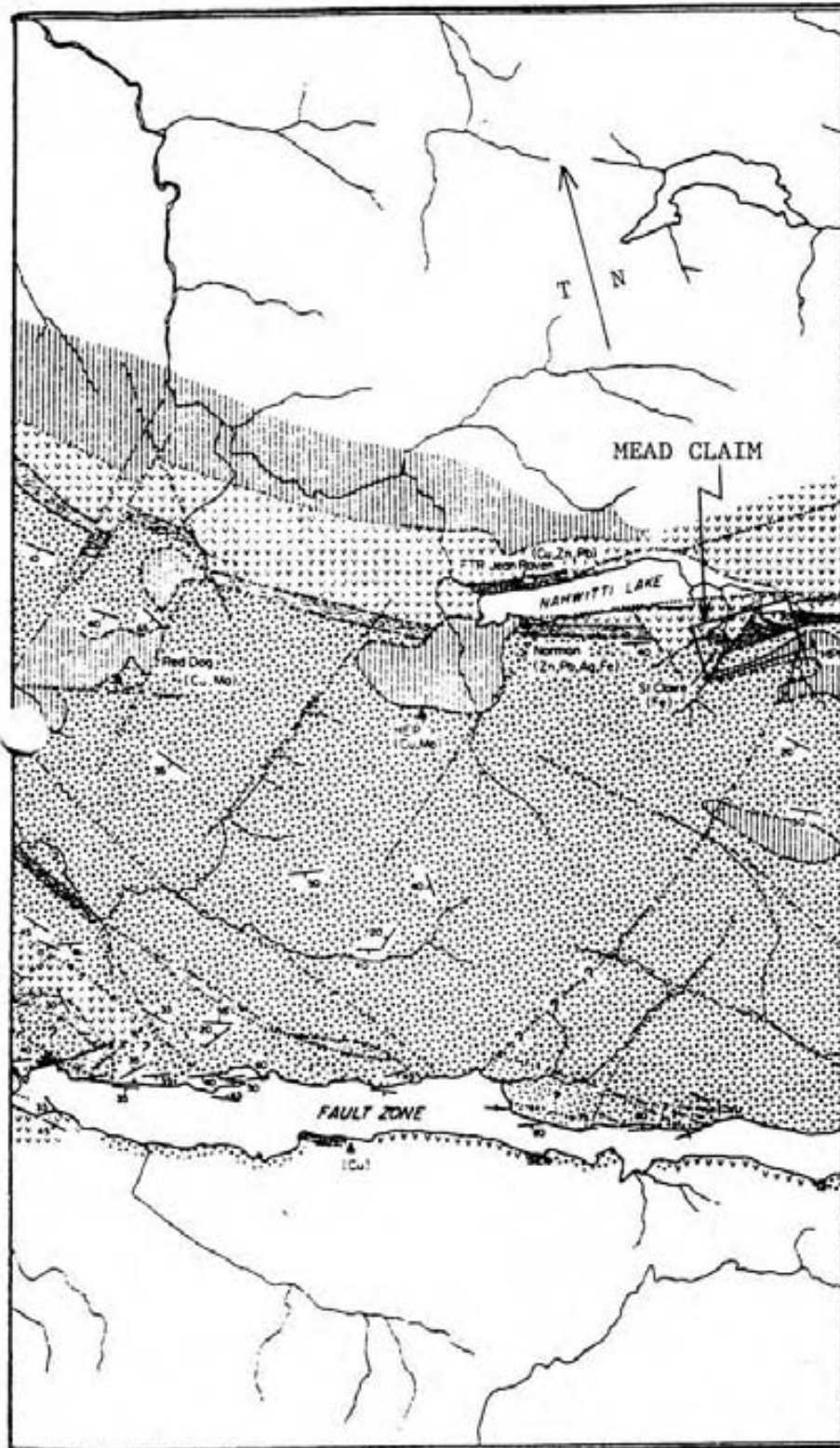






Figure 2
PRELIMINARY GEOLOGICAL MAP
RUPERT INLET - CAPE SCOTT AREA







GEOLOGY BY K.E. NORTHCOTE



LEGEND

-  **INTRUSIVE ROCKS**
 VARIED COMPOSITION FROM DIORITE TO GRANITE AND INCLUDES PORPHYRYTIC PHASES
-  **LOWER CRETACEOUS SEDIMENTARY ROCKS**
 CONGLOMERATE, SANDSTONE, SILTSTONE, SHALE, CARBONACEOUS HORIZONS
-  **BONANZA SUBGROUP**
 UPPER VOLCANIC UNIT, LARGELY PYROCLASTIC TUFF, LAPILLI TUFF AND TUFF BRECCIA OF ANDESITE AND BASALT COMPOSITION WITH SOME BASALT AND PHYODACITE FLOWS AT THE TOP OF THE UNIT
 LOWER SEDIMENTARY UNIT, THIN BEDDED ARGILLACEOUS AND CARBONACEOUS LIMESTONE, CALCAREOUS SHALE AND SILTSTONE AND GREYWACKE
-  **QUATSINO FORMATION**
 LIMESTONE, MEDIUM TO THICK BEDDED
-  **KARMUTSEN FORMATION**
 BASALTIC AMYGDALOIDAL AND MASSIVE FLOWS, INTERBEDDED TUFF, SOME PILLOW BRECCIA AND POORLY DEVELOPED PILLOWS, THIN LIMESTONE BEDS NEAR TOP OF FORMATION

SYMBOLS

- CONTACTS:**
- KNOWN 
 - APPROXIMATE 
 - ASSUMED 
-  LINEAMENTS FROM AIR PHOTOGRAPHS, SOME OF THESE ARE KNOWN TO REPRESENT FAULTS
-  BEDDING
-  MINERAL DEPOSITS

APRIL 15, 1971

4. Local Geology (Cont'd)

Northcote divides the Vancouver Group as follows:

Bonanza Sub-Group: andesitic flows and breccias, felsitic tuffs, greywacke, shale, argillaceous and calcareous shales, and argillaceous limestone.

Quatsino Formation: limestone.

Karmutsen Formation: massive to amygdaloidal flows, breccias, pillow lavas and tuffs of andesitic to basaltic composition, thin limestone beds.

There is extensive block faulting in the area, and lack of exposure of rocks makes the tracing of units difficult.

5. Claim Geology

Mapping by Rote (1973) and Philp (1980) showed that exposures are virtually confined to creek beds and cuts on logging roads.

The rocks consist of Karmutsen and Bonanza volcanics and intervening Quatsino limestones. Skarn zones which are garnet and/or magnetite bearing occur in proximity to diorite intrusives of the Coast Complex.

6. Previous Work Done

According to Morgan (1979), the earliest documented work was in the 1930's when the H.P.H. claim was staked to cover mineralization to the East of the MEAD claim. Several mining companies conducted geological mapping, shaft sinking, and Giant Explorations carried out a geochemical survey, geological mapping magnetometry, E.M. and diamond drilling over its holdings covering some 8km of strike length South of Nahwitti Lake. Results of the diamond drilling are not available.

7. Work Done in 1984

Work done in 1984 included prospecting the logging trails and the creeks for mineralization, and chip sampling the mineralized areas.

R. Philp, P. Eng., (23 July) made a technical assessment of the property, Z. Philp (23 July) and M. Mora (23 July) spent 2 man-days prospecting the claim for sulphide mineralization under the direct supervision of R. Philp. D. Petersen (13 August) and E. Alionis (13 August) spent 2 man-days chip sampling the mineralized zones.

The mineralized zones and sample locations are shown plotted on Fig. 3 "Compilation Map". The results of the sampling are shown in Section 8, below.

The chip sampling was performed by the writer and by E. Alionis, who used a chisel and hammer to take acorn-sized chips spaced 10cm apart. The numbered samples were sent to Acme Analytical Labs in Vancouver for analysis for Ag, As, Cu, Pb, and Zn by means of I.C.P. analysis. Au analysis was done by A.A.

8. Results of Work Done in 1984

The results of the chip sampling are shown below:

<u>Sample No.</u>	<u>Length m</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>	<u>As ppm</u>	<u>Au ppb</u>
8426558	Skarn float	2647	87	664	26.0	83	90
8426559	8.5	744	39	288	5.3	26	25
8426660	3.4	239	3	52	.6	2	5

8. Results of Work Done in 1984 (Cont'd)

<u>Sample No.</u>	<u>Length m</u>	<u>Cu ppm</u>	<u>Pb ppm</u>	<u>Zn ppm</u>	<u>Ag ppm</u>	<u>As ppm</u>	<u>Au ppb</u>
8426661	1.5	3459	17	4656	.9	152	5
8426662	7.7	142	1	26	.1	17	5
8426663	8.0	71	4	51	.1	21	5
8426664	0.25	2827	21	116	3.7	62	5
8426665	5.0	442	1	509	.1	14	5

9. Discussion

The results show that the highest mineral values (samples 558, 661 and 664) are present in skarns and that the latter two samples are close to the Pb and Zn geochemical anomaly outlined in the report by Rote (1973). See Fig. 3, "Compilation Map".

This survey was conducted by Giant Explorations over a grid that measured 2200 feet East-West by 1500 feet North-South. North-South lines were spaced 200 feet apart with sample spacing of 100 feet along the lines. The samples were analyzed for lead and zinc. The results show that a coincident lead and zinc anomaly is present that strikes approximately East-West and is open on both ends of the grid. Copper values over the anomaly were spotty. The lead anomaly is some 200 feet (60m) wide with values varying between 40 and 310ppm Pb. Background values appear to be less than 30ppm. A high incidence of samples outside the anomaly were not analyzed because of the presence of organic material. Magnetometry over the grid showed little to no relief. Geological mapping showed the area to be underlain by sparse, small outcrops of limestone (Rote, 1973).

10. Conclusions

As a result of the 1984 programme and study of reports, it is concluded that:

1. the best potential for mineralization on the claim appears to be in the skarn zones.
2. a previous geochemical survey outlined a consistent lead and zinc anomaly in an area of general overburden cover.

11. Recommendations

It is recommended that a detailed geochemical survey be run in the area of the lead and zinc anomaly, with extension to the West.

12. Cost Statement

The following costs were incurred in the 1984 programme:

Labour

R. Philp	23 July	1 day @ \$ 350	
Z. Philp	23 July	1 day @ \$ 115	
M. Mora	23 July	1 day @ \$ 115	
D. Petersen	13 August	1 day @ \$ 250	
E. Alionis	13 August	1 day @ <u>\$ 115</u>	\$ 945

Transport

Truck rental	2 days @ \$ 40	\$ 80	
Gasoline		28	
Travel		<u>662</u>	770

Meals and Accommodation 299

Supplies 37

Analyses 8 @ \$ 9 72

12. Cost Statement (Cont'd)

Reporting

D. Petersen	2 days @ \$ 250	\$ 500	
Typing	2 hrs. @ \$ 15	30	
Printing		<u>15</u>	<u>\$ 545</u>
			<u>\$ 2,668</u>

13. Title

Particulars of the MEAD claim are as follows:

<u>Name of Claim</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Date of Record</u>
MEAD	8	1521	17 August, 1983

ss Petersen

14. References

Morgan, D.R., 1979, A Geological Report on the BIG JOE Claim Group.

Northcote, K.E., 1970, Rupert Inlet - Cape Scott Map Area; G.E.M.

p. 254-258.

Philp, R.H.D., 1980, Geological Report on the PATO Claim (8 units).

Rote, I.S., 1973, Geophysical, Geochemical and Geological Report on the

TAXI 1 Group; B.C.D.M. Assessment Report #4472.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of the prospecting and rock sampling
survey conducted on the MEAD claim.

I, David B. Petersen,

of Daiwan Engineering Ltd., #1010 - 409 Granville Street, Vancouver, B. C. V6C 1W9
in the Province of British Columbia, do solemnly declare that the following personnel were employed
and costs incurred in conducting the survey:

PERSONNEL

R. Philp - Geologist	1 day @ \$ 350	
Z. Philp - Prospector	1 day @ \$ 115	
M. Mora - Prospector	1 day @ \$ 115	
D. Petersen - Geologist	1 day @ \$ 250	
E. Alionis - Helper	1 day @ \$ 115	\$ 945

FIELD COSTS

Truck Rental	\$. 80	
Gasoline	28	
Travel	662	
Meals and Accommodation	299	
Supplies	37	
Analyses	72	1,178

REPORTING

Labour and Drafting	\$ 500	
Typing	30	
Printing	15	545

TOTAL \$ 2,668

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of
the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 1st
day of October 1984 A.D.

DB. Petersen

[Signature]
A Commissioner for Taking Affidavits for British Columbia
A Notary Public in and for the Province of British Columbia.

APPENDIX I

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-3 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.NG.BA.TI.B.AL.NA.K.V.SI.ZR.CE.SM.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-6 SOIL P7-BOIL & ROCK

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER

DAIWAN FILE # 84-2107

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SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	AU* PPB
84-26515S	14	26	17	.1	2	-
84-26516S	48	22	54	.1	6	-
84-26517S	4	15	5	.1	2	-
84-26523S	7	25	11	.5	2	-
84-26524S	26	30	41	.1	7	-
84-26525S	6	35	15	.4	3	-
84-26527S	55	17	91	.1	14	-
84-26528S	7	17	12	.3	2	-
84-26529S	14	14	29	.3	2	-
84-26530S	8	6	11	1.0	2	-
84-26549R	64	2	79	.1	23	95
84-26550R	243	11	10929	.6	24	5
84-26551R	260	15	420	.8	35	45
84-26552R	119	11833	14002	34.1	12	10
84-26553R	88	90	289	.3	24	5
84-26554R	1595	58	612	5.2	105	5
84-26555R	35	4	49	.1	2	5
84-26556R	67	4	32	.1	2	5
84-26557R	31	3	27	.1	2	5
84-26558R	2647	87	664	26.0	83	90
84-26559R	744	39	288	5.3	26	25
84-26660R	239	3	52	.6	2	5
84-26661R	3459	17	4656	.9	152	5
84-26662R	142	1	26	.1	17	5
84-26663R	71	4	51	.1	21	5
84-26664R	2827	21	116	3.7	62	5
84-26665R	442	1	509	.1	14	5
STD S-1/AU-0.5	119	112	180	32.0	115	510

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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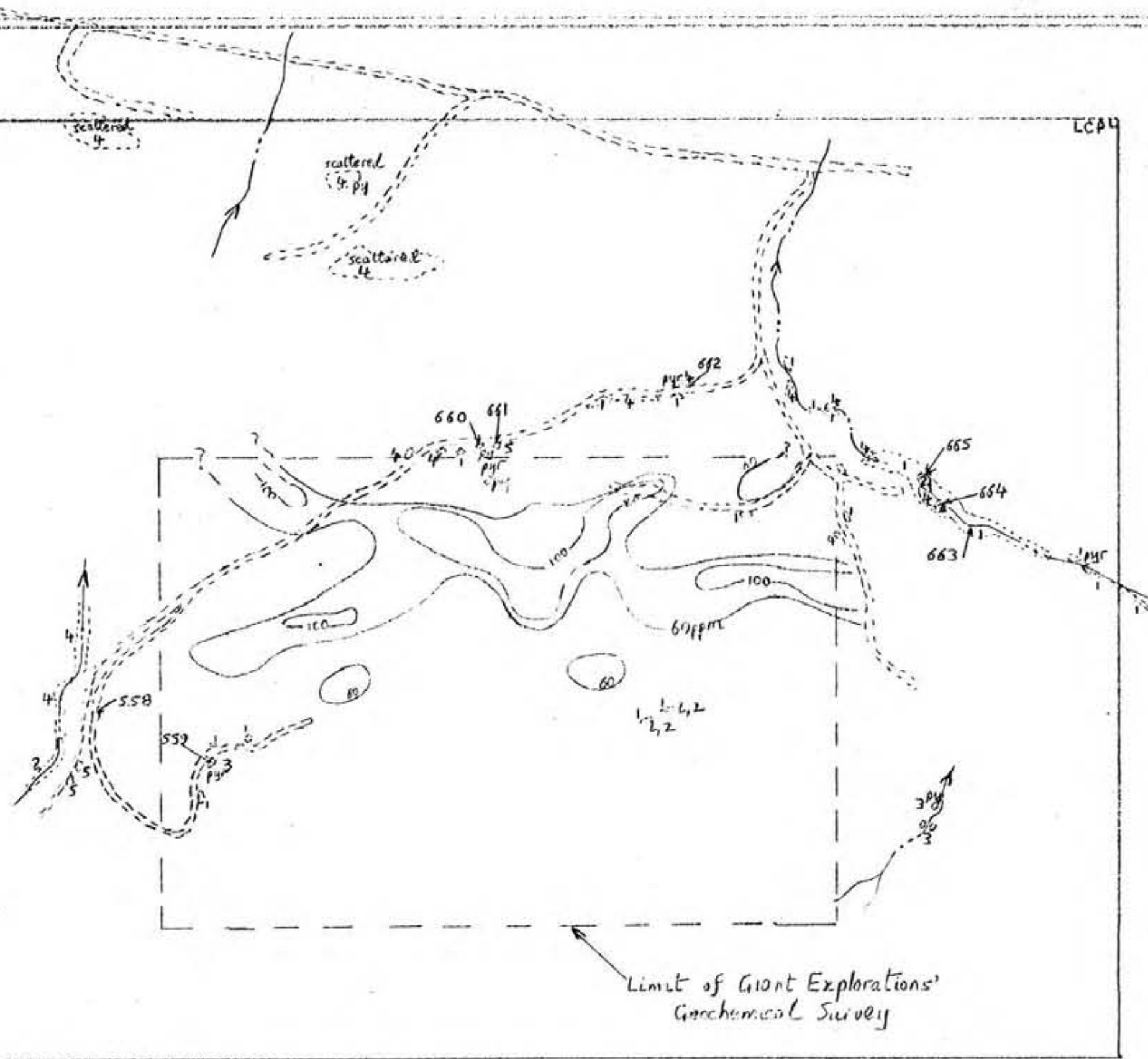
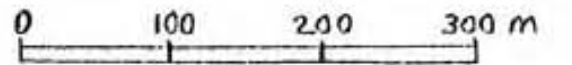


Fig 3
MEAD Claim
Compilation Map
Scale 1:5000



- 5 Intrusive Diorite
- 4 Andesite
- 3 Felsite
- 2 Skarn
- 1 Limestone
- py Pyrite
- pyr Pyrrhotite
- L Lead
- Z Zinc
- cpy Chalcopyrite
- 661 Sample Locations,
Preceded by 8, 26, ...
- 60 Soil Geochemical Anomaly
ppm Pb
- Geology after Philp (1980)
- Outcrops
- == Roads
- ~ Creeks

SB Petersen