

GEOCHEMICAL REPORT
on the PETE claims
located about 20 miles SW of Macmillan Pass
Claim sheet 105-0-1, 63°00'N, 130°05'W
by
Clyde L. Smith, Ph.D., P.Eng.
June 17 through 30, 1976

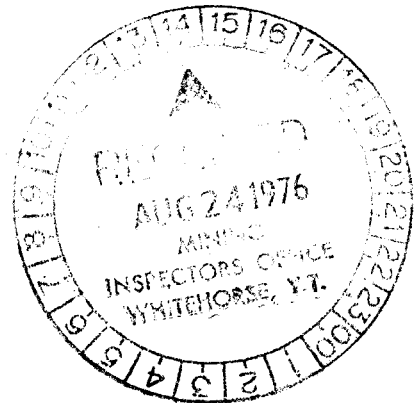


TABLE OF CONTENTS

	Page
I. Introduction and General Geology	1
II. List of Claims	1
III. Techniques Employed and Geochemical Work	1
IV. Results and Interpretations	2
V. Conclusions and Recommendations	2
VI. Personnel Employed	2
VII. Qualifications of C. L. Smith, Author	3
VIII. Expenditures	3

LIST OF ILLUSTRATIONS

	Page
Fig 1. Key Sketch, Location	Pocket
Fig 2. Geochemical Soil Sample Values Map	Pocket
Fig 3. Geochemical Soil Sample Map, Zinc Contours	Pocket
Fig 4. Geochemical Soil Sample Map, Barium Contours	Pocket

07015



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 1400

1400

W. Sinclair

~~Resident Geologist or
Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B.R. Baxter
B.R. BAXTER
Supervising Mining Recorder

[Signature]
Commissioner of Yukon Territory

I. INTRODUCTION AND GENERAL GEOLOGY

During the period June 17 through June 30, 1976, Ogilvie Joint Venture carried out a geochemical soil sampling survey on the Pete grid. The grid has a total of about 10 line miles consisting of southwest-northeast trending cross lines branching from a northwest-southeast trending base line running through the centre of the property. Soil samples were taken at 100 foot intervals. The geochemical program was conducted to test the possibility of extension from a bedded barite occurrence on the northwest corner of the claims which contain small amounts of lead and zinc. The Pete claims were staked in 1975 to cover the geological extension of the above described barite occurrence as well as anomalous geochemical values obtained by reconnaissance sampling. Outcrop is lacking on the Pete property except for a few exposures of siltstone along the southwest margin. The general geology of the region in the vicinity of the Pete property is shown on the Niddery Lake sheet of the Geological Survey of Canada.

II. LIST OF CLAIMS

<u>Claim Name</u>	<u>Holder</u>	<u>Recording Date</u>
Pete 1-32	British Newfoundland Exploration Limited - In Trust	August 7, 1975

III. TECHNIQUES EMPLOYED AND GEOCHEMICAL WORK

Samples were collected on a grid having a northwest-southeast trending baseline with crosslines at between 500 and 1000 feet running northeast-southwest. Samples were taken at 100 foot intervals along the lines. The upper B horizon was sampled using an iron madock and soil was placed in kraft paper bags. Sample drying and analysis were carried out by Barringer Research Limited of Whitehorse. After being dried and screen 250 mg of -80 mesh material was digested in 4 hours in perchloric acid, the volume diluted to a standard volume and this solution analysed on an atomic absorption spectrometer for Pb and Zn. For barium a 250 mg sample was digested for one hour in EDTA, the volume adjusted and the solution analysed by atomic absorption spectrometer.

IV. RESULTS AND INTERPRETATIONS

Figure 2 is a geochemical soil sample map showing values in the order of lead-zinc-barium. Figure 3 is a zinc contour map showing contours at 200, 400, 1000 and 5000 ppm intervals. A maximum value of 18,000 ppm was obtained along the southern portion of line 20 east in the centre of an anomaly of greater than 2000 feet in strike length which lies downslope from an exposure of bedded barite with minor lead and zinc values on the northwest end of the grid. An additional extensive anomaly occurs to the southeast of the above described and has a maximum value of in excess of 5,000 ppm. It is notable that these two zinc features correspond in a general fashion with a gravity anomaly described in an accompanying geophysical report. Figure 4 is a barium contour map with intervals of 70 and 100 ppm. Again a general correspondence of barium soil anomalies occurs with the above described zinc geochemical features and the gravity anomaly described in an accompanying report. Maximum values in excess of 100 ppm have been obtained from stations close to those giving maximum zinc values.

V. CONCLUSIONS AND RECOMMENDATIONS

The close correspondence of intense zinc and moderate barium geochemical features with a gravity anomaly believed to express the position of a bedded barite deposit outcropping on the northwest edge of the Pete claims requires that the Pete property be regarded as having good potential for lead and zinc mineralization associated with barite. It is recommended that the gravity maxima on line 90 east and perhaps one of the geochemical maxima be diamond drilled.

VI. PERSONNEL EMPLOYED

Jay Fairbank, Geochemical Sampler, General Delivery, Galiano Island
J. Russell, Geochemical Sampler, General Delivery, Ross River, Y.T.

VII. QUALIFICATIONS OF C. L. SMITH, AUTHOR

Education

Carleton College, Northfield, Minn., U.S. - B.A. received 1959
University of B.C., Vancouver, B.C. - M.Sc. received 1962
University of Idaho, Moscow, Idaho, U.S. - Ph.D. received 1966

Employment

1970 - present: Consulting geologist, Vancouver, B.C.
1968 - 1970: Director and Exploration Manager,
Spartan Explorations Limited
1966 - 1968: Chief Geologist, Atlas Explorations Limited
1965 - 1966: Senior Geologist, Kerr-Addison Mines Ltd.

Professionals

Registered Professional Engineer, Association of Professional
Engineers, Province of British Columbia.

VIII. EXPENDITURES

Salaries:		
Jay Fairbank	\$	500.00
J. Russell		500.00 <i>400.00</i>
Subsistence		400.00 <i>400.00</i>
Travel		250.00 <i>250.00</i>
Geochemical analysis:		
500 samples @ \$3.25/sample		1,625.00
Linecutting:		
½ of 10 miles @ \$180.00/mile		<u>900.00</u>
	\$	4,175.00

PAY ROLL RECORD

No. _____ Period June 15-30/76

NAME Jay Fairbank

Wages { Regular . . . \$ _____
Overtime . . . \$ _____
\$ _____

TOTAL WAGES . . . \$ 500⁰⁰~~XX~~

DEDUCTIONS FROM WAGES:

- 1. Can. Pension Plan - \$ _____
- 2. Unemployment Ins. - \$ _____
- 3. Comp. Pension Fund \$ _____
- 4. Income Tax . . . \$ _____
- 5. Hospitalization Ins. - \$ _____
- 6. Group Insurance - \$ _____
- 7. Bonds \$ _____
- 8. _____ \$ _____
- 9. _____ \$ _____

Total Deductions \$ _____

NET WAGES \$ _____

PAY ROLL RECORD

No. _____ Period June 15-30/76

NAME John Ruessel

Wages { Regular . . . \$ _____
Overtime . . . \$ _____
\$ _____

TOTAL WAGES . . . \$ 1100⁰⁰~~XX~~

DEDUCTIONS FROM WAGES:

- 1. Can. Pension Plan - \$ _____
- 2. Unemployment Ins. - \$ _____
- 3. Comp. Pension Fund \$ _____
- 4. Income Tax . . . \$ _____
- 5. Hospitalization Ins. - \$ _____
- 6. Group Insurance - \$ _____
- 7. Bonds \$ _____
- 8. _____ \$ _____
- 9. _____ \$ _____

Total Deductions \$ _____

NET WAGES \$ _____

BARRINGER RESEARCH LIMITED

JUL 23

304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-677-2491
 CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 19, 1976

PROJECT: 119.41

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT:

FED. SALES TAX:

ONT. SALES TAX:

#19-A

N/A

N/A

Ogilvie Joint Venture
 c/o Brown, Farris & Jefferson
 1860-200 Granville Street
 VANCOUVER, British Columbia.

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

217 HClO ₄ samples analyzed for lead	@1.30 each	282.10	
217 HClO ₄ samples analyzed for zinc	@ .50 each	108.50	
217 EDTA samples analyzed for barium	@1.30 each	282.10	
217 Soil sample preparation	@ .35 each	75.95	
TOTAL INVOICE			\$748.65 =====

1010 5476.25

INVOICE No 3617

BARRINGER RESEARCH LIMITED

304 CARLINGVIEW DRIVE
METROPOLITAN TORONTO
REXDALE, ONTARIO
CANADA M9W 5G2
PHONE: 416-677-2491
CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 9, 1976

PROJECT: 119.41

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: #11-A

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

- Ogilvie Joint Venture
- c/o Brown, Farris & Jefferson
- 1860 - 200 Granville Street
- VANCOUVER, British Columbia.

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

233 HClO ₄ samples analyzed for lead	@1.30 each	302.90
233 HClO ₄ samples analyzed for zinc	@ .50 each	116.50
233 EDTA samples analyzed for barium	@1.30 each	302.90
233 Soil sample preparation	@ .35 each	<u>81.55</u>

TOTAL INVOICE

\$803.85

COPY

INVOICE N^o 3590

BARRINGER RESEARCH LIMITED

304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-577-2491
 CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 19, 1976

PROJECT: 119.41

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: #16-A

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

JUL 29 1976

•• Ogilvie Joint Venture
 c/o Brown, Farris & Jefferson
 • 1860-200 Granville Street
 • VANCOUVER, British Columbia.

TERMS: NET 30 days

AUTHORITY:

TO: GEOCHEMICAL ANALYSIS

327 HClO ₄ samples analyzed for lead	@1.30 each	425.10
327 HClO ₄ samples analyzed for zinc	@ .50 each	163.50
327 EDTA ₄ samples analyzed for barium	@1.30 each	425.10
327 Soil sample preparation	@ .35 each	<u>114.45</u>

TOTAL INVOICE

\$1,128.15

Obcell
to attention
Carler
COPY

INVOICE № 3647



BARRINGER RESEARCH LIMITED

JUL 23 1976

304 CARLINGVIEW DRIVE
METROPOLITAN TORONTO
REXDALE, ONTARIO
CANADA M9W 5G2
PHONE: 416-677-2491
CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 19, 1976

PROJECT: 119.41

- Ogilvie Joint Venture
c/o Brown, Farris & Jefferson
- 1860-200 Granville Street
VANCOUVER, British Columbia.

PERIOD COVERED:

PROGRESS BILLING:
SHIPPING REPORT:
WORK REPORT: #15-A
FED. SALES TAX: N/A
ONT. SALES TAX: N/A

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

127 HClO ₄ samples analyzed for lead	@1.30 each	165.10
127 HClO ₄ samples analyzed for zinc	@ .50 each	63.50
127 EDTA samples analyzed for Barium	@1.30 each	165.10
127 Soil sample preparation	@ .35 each	44.45

TOTAL INVOICE

\$438.15
=====



304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-677-2491
 CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 31, 1976

PROJECT: 119.41

Ogilvie Joint Venture
 c/o Brown, Farris & Jefferson
 1860-200 Granville Street
 VANCOUVER, British Columbia.

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: #23-A

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

146 HClO ₄ samples analyzed for lead	@1.30 each	189.80	
146 HClO ₄ samples analyzed for zinc	@ .50 each	73.00	
146 EDTA Barium samples	@1.30 each	189.80	
146 Soil sample preparation	@ .35 each	<u>51.10</u>	
TOTAL INVOICE			<u><u>\$503.70</u></u>

COPY

INVOICE N^o 3729



304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-677-2491
 CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 30, 1976

PROJECT: 119.41

Ogilvie Joint Venture
 c/o Brown, Farris & Jefferson
 1860-200 Granville Street
 VANCOUVER, British Columbia.

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: #27-A

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

165 H2O Soluable Barium

@1.30 each

214.50

TOTAL INVOICE

\$214.50

COPY

INVOICE N° 3733



304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-677-2491
 CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 30, 1976

PROJECT: 119.41

Ogilvie Joint Venture
 c/o Brown, Farris & Jefferson
 1860-200 Granville Street
 VANCOUVER, British Columbia.

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: #25-A

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

71 HClO ₄ samples analyzed for lead	@1.30 each	92.30	
71 HClO ₄ samples analyzed for zinc	@.50 each	35.50	
71 CxHCl ₄ samples analyzed for lead	@1.30 each	92.30	
71 CxHCl ₄ samples analyzed for zinc	@.50 each	35.50	
71 EDTA Barium samples	@1.30 each	92.30	
71 H ₂ O Barium samples	@1.30 each	92.30	
71 Soil sample preparation	@.35 each	24.85	
TOTAL INVOICE			\$465.05 =====

COPY

INVOICE N^o 3731

BARRINGER RESEARCH LIMITED

304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-677-2491
 CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 31, 1976

PROJECT: 119.41

Ogilvie Joint Venture
 c/o Brown, Farris & Jefferson
 1860-200 Granville Street
 VANCOUVER, British Columbia

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: #29-A

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

63 CxHCL samples analyzed for lead	@1.30 each	81.90	
63 CxHCL samples analyzed for zinc	@ .50 each	31.50	
63 HCLO ₄ samples analyzed for lead	@1.30 each	81.90	
63 HCLO ₄ samples analyzed for zinc	@ .50 each	31.50	
63 EDTA ⁴⁻ barium samples	@1.30 each	81.90	
63 Soil sample preparation	@.35 each	22.05	
TOTAL INVOICE			\$330.75 =====

COPY

INVOICE N^o 3735



304 CARLINGVIEW DRIVE
 METROPOLITAN TORONTO
 REXDALE, ONTARIO
 CANADA M9W 5G2
 PHONE: 416-677-2491
 CABLE: BARESEARCH

ADVANCED TECHNIQUES AND INSTRUMENTATION FOR THE EARTH SCIENCES

DATE: July 30, 1976

PROJECT: 119.41

Ogilvie Joint Venture
 c/o Brown, Farris & Jefferson
 1860-200 Granville Street
 VANCOUVER, British Columbia.

PERIOD COVERED:

PROGRESS BILLING:

SHIPPING REPORT:

WORK REPORT: #21-A

FED. SALES TAX: N/A

ONT. SALES TAX: N/A

TERMS: NET 30 days

AUTHORITY: C. Smith

TO: GEOCHEMICAL ANALYSIS

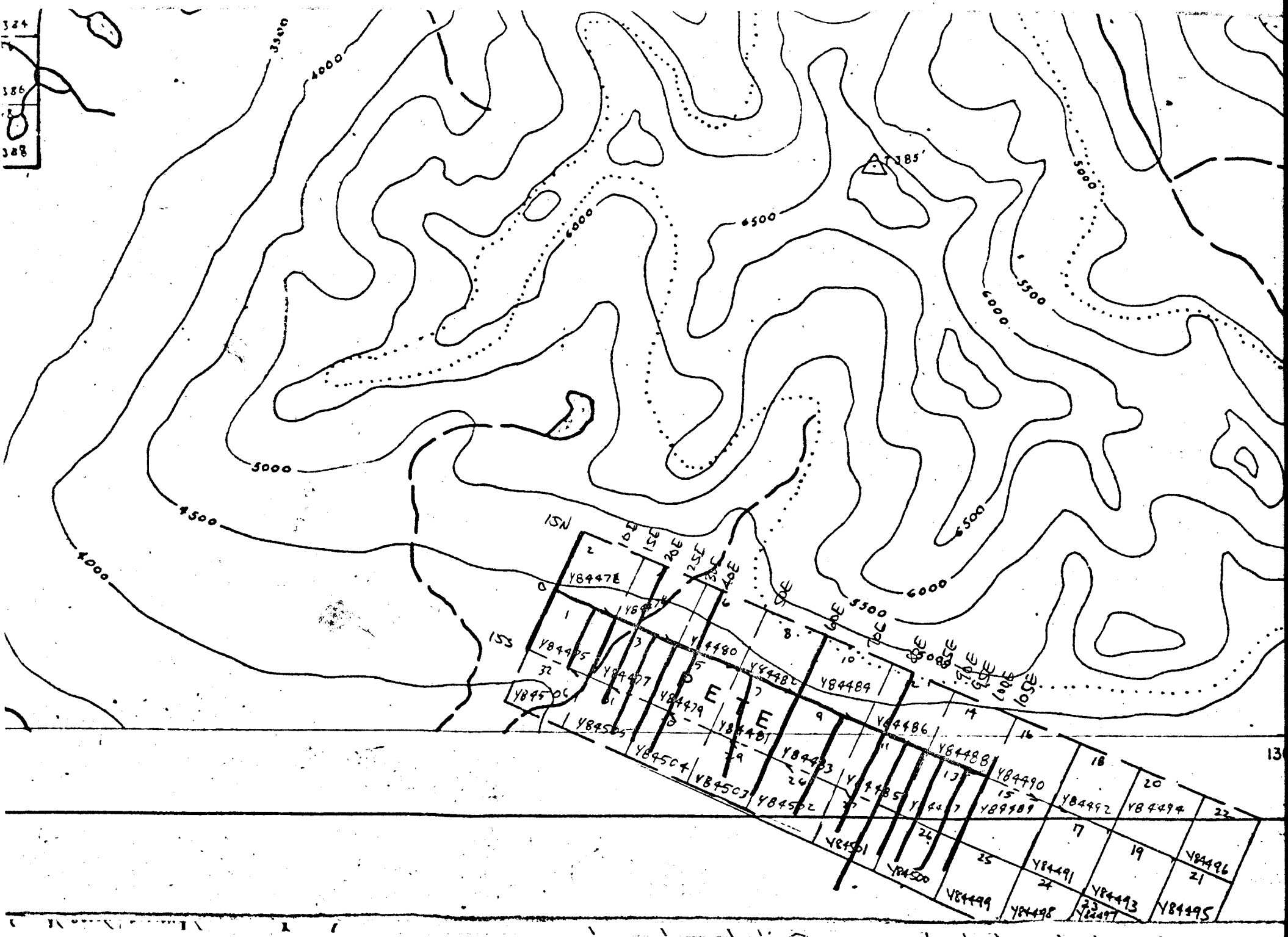
245 HClO ₄ samples analyzed for lead	@1.30 each	318.50
245 HClO ₄ samples analyzed for zinc	@ .50 each	122.50
244 EDTA Barium samples	@1.30 each	317.20
245 Soil sample preparation	@ .35 each	85.75

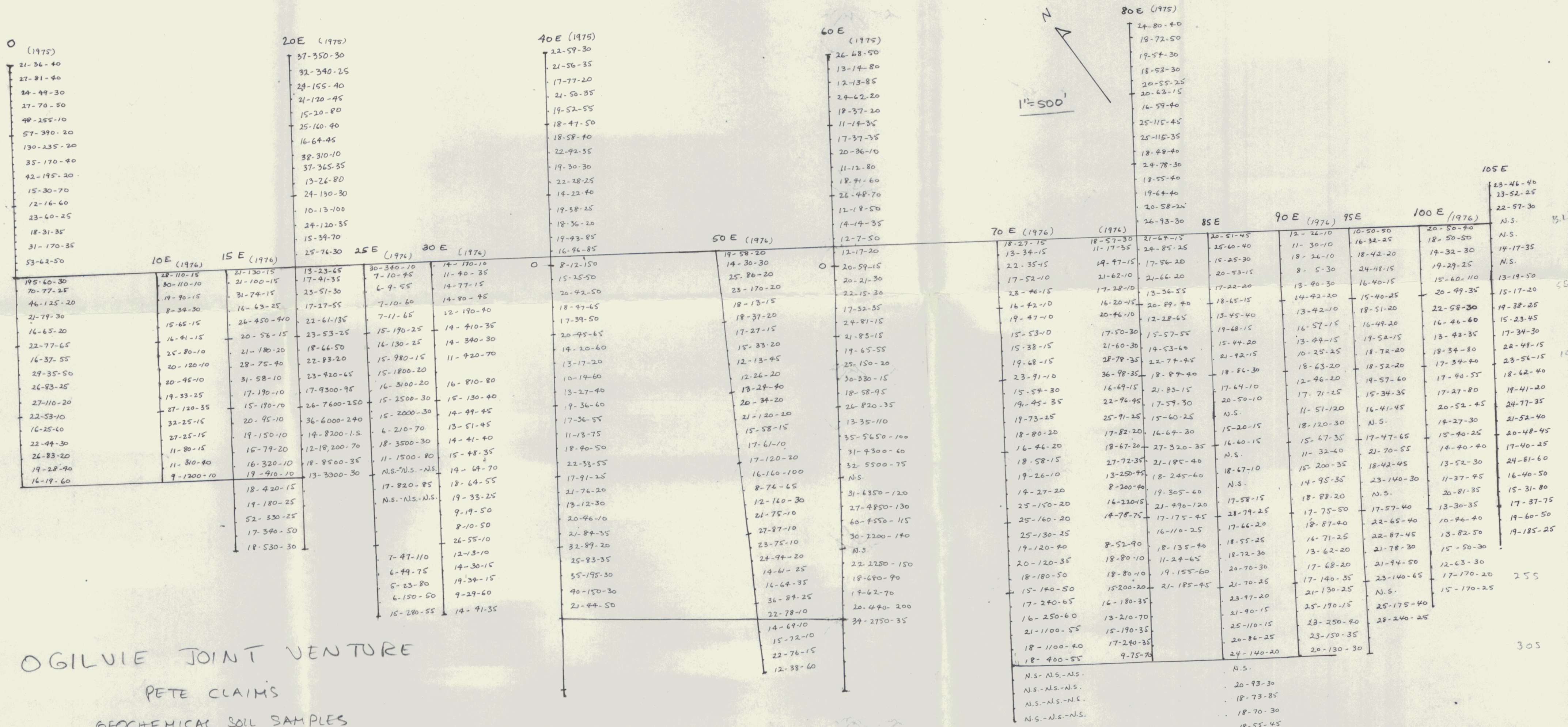
TOTAL INVOICE

\$843.95
 =====

INVOICE N^o 3727

384
386
388





OGILVIE JOINT VENTURE

PETE CLAIMS

GEOCHEMICAL SOIL SAMPLES

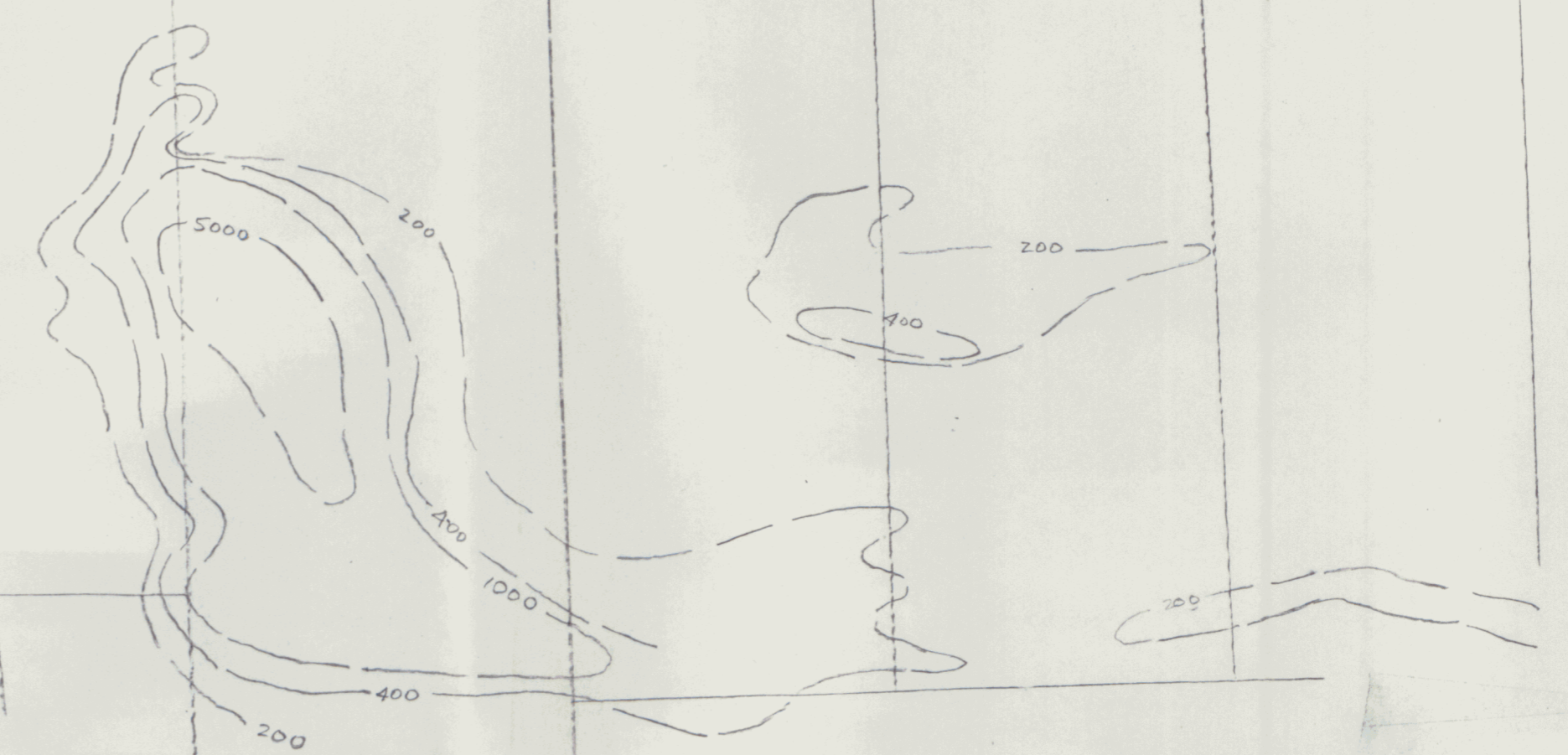
VALUES IN PPM - HOT EXTRACTION
SEQUENCE: PB-ZN-BA

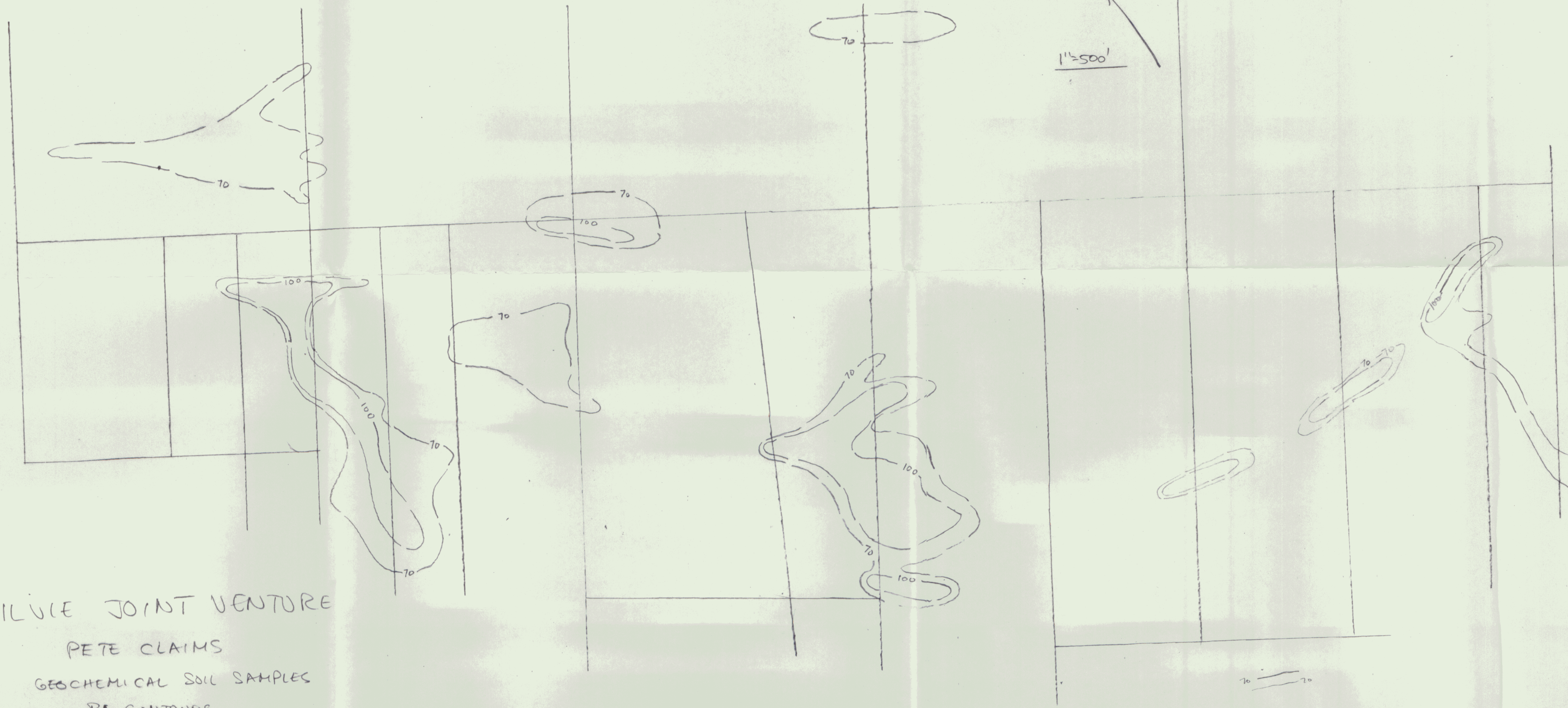
TO ACCOMPANY REPORT BY C.L.S. MITH,
AUGUST 9, 1976

- 23-46-40
- 23-52-25
- 22-57-30
- N.S.
- N.S.
- 14-17-35
- N.S.
- 13-19-50
- 15-17-20
- 19-38-25
- 15-23-45
- 17-34-30
- 22-49-15
- 23-56-15
- 18-62-40
- 19-41-20
- 24-77-35
- 21-52-40
- 20-48-45
- 17-40-25
- 17-40-25
- 14-40-40
- 17-40-25
- 24-81-60
- 16-40-50
- 15-31-80
- 17-37-75
- 19-60-50
- 19-185-25
- 255
- 305
- 20-93-30
- 18-73-85
- 18-70-30
- 18-55-45
- N.S.
- 22-43-20
- 18-39-15
- 25-110-10
- 30-72-10
- 19-66-15
- 22-44-10
- 18-49-15



OGILVIE JOINT VENTURE
 PETE CLAIMS
 GEOCHEMICAL SOIL SAMPLES
 ZN CONTOURS
 VALUES IN PPM
 CONTOUR INTERVALS: 200, 400, 1000, 5000 PPM
 TO ACCOMPANY REPORT BY C. L. SMITH,
 AUGUST, 9, 1976





OGILVIE JOINT VENTURE

PETE CLAIMS

GEOCHEMICAL SOIL SAMPLES

BA CONTOURS

VALUES IN PPM

CONTOUR INTERVALS: 70, 100

TO ACCOMPANY REPORT BY C.L. SMITH,

AUGUST-9, 1976