

GEOPHYSICAL 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 29, 1976



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07055



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 \$ 4400⁰⁰

1100

A handwritten signature in cursive script, likely reading "W. Sinclair".

~~Resident Geologist or
Resident Mining Engineer~~

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

A handwritten signature in cursive script, likely reading "B.R. Baxter".

~~B.R. BAXTER
Supervising Mining Recorder~~

~~Commissioner of Yukon Territory~~

I. INTRODUCTION

During the period June 17 through 29, 1976, a gravity survey was carried out for the Ogilvie Joint Venture on the Pete property by Airborne Geophysics Surveys Limited. The grid has a total of about 10 line miles as shown on Fig 1. Spacing of the lines is either 500 or 1000 feet. Most lines proceed southwestward from a base line of 10,500 feet in length. Gravity stations are located at 100 foot intervals.

The Pete claims were staked in 1975 to cover an area of intensely anomalous zinc geochemistry associated with an outcropping of bedded barite to the west of the present claims. Minor amounts of lead and zinc mineralization occur in the outcrop of bedded barite and the associated geochemistry on strike with the outcropping bed prompted the acquisition of 32 claims in the area. Outcrop is lacking over the Pete property except for a few scattered locations along the southwest margin. The general geology of the region in the vicinity of the Pete claims is shown on the Nidderly 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

Excluding tie lines, 50,000 feet of line were cut on the Pete grid. These lines run southwest - northeast from a northwest-southeast trending baseline and are spaced either 500 or 1000 feet apart and stations are located at 100 foot intervals along the line. The level survey and gravity work were carried out by Airborne Geophysical Surveys Limited of Calgary, Alberta. The SCINTREX CG2 gravity meter used measure variations in the Earth's gravity field to an accuracy of 0.01 mgals. Corrections from meter drift were

made by tying into previously established base stations at intervals not exceeding 2 to 3 hours. Drift of over 0.10 mgals/hour was not allowable. Elevations of gravity stations were determined by rod in transit. Errors in the tying in of loops were kept to a minimum, this being dependent on the severity of the topography but was less than one foot per loop. Two gravity base stations were established. A density of 2.5 was used in calculation of the gravity results.

IV. RESULTS AND INTERPRETATION

Figure 2 is a residual contour map having intervals of 0.1 mgal/contour. The calculation of residual values has been done by subtracting regional gradients from Bouguer values. A broad southeasterly trending anomalous feature trends through the grid area and corresponds in strike with that of the bedded barite exposure on the western margin of the claims. A maximum amplitude of 1.1 mgals was located along line 90 east at 23 south. This point maxima is central within a larger portion of the general anomaly and is bounded by a particularly steep gradient on the south side.

V. CONCLUSIONS AND RECOMMENDATIONS

The above described gravity feature corresponds in general with the attitude of an exposed bedded barite occurrence on the northwestern portion of the Pete property which has minor lead and zinc values. The gravity anomaly corresponds with anomalous zinc and barium geochemical values in the soils and it is therefore believed that the body outlined by the gravity might be considered a favorable source for lead and zinc mineralization within a bedded barite occurrence. It is recommended the diamond drilling of the 1.1 mgal peak on line 90 east be undertaken.

VI. PERSONNEL EMPLOYED

Airborne Geophysical Surveys Limited,
#600, 330-9th Avenue S.W.,
Calgary, Alberta.

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

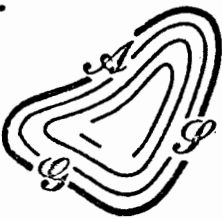
1970 - present: Consulting geologist, Vancouver, B.C.
1968 - 1970: Director and Exploration Manager,
Spartan Explorations Limited
1966 - 1968: Chief Geologist, Atlas Explorations Limited
1965 - 1966: Senior Geologist, Kerr-Addison Mines Ltd.

Professionals

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

VIII. EXPENDITURES

10 line miles of gravity surveying for 9½ days @ \$375.00/day plus travel and consulting fees	\$4,062.50
linecutting - ½ of 10 miles @ \$180.00/mile	<u>900.00</u>
	\$4,962.50



Airborne Geophysical Surveys Ltd.
Calgary ----- Alberta

#600, 330 - 9TH AVE. S.W.
CALGARY, ALBERTA T2P 1K7
PHONE 403 - 264-3434

August 4, 1976

AUG - 9 1976

Ogilvie Joint Venture
c/o Brown, Farris & Jefferson
200 Grandville Street
Vancouver, B.C.

STATEMENT - GRAVITY SURVEY

Pete Grid:

June 18-25 (Incl.)
June 28 (1/2 day)
June 30
= 9 1/2 days @ \$375. \$ 3,562.50

East Jason

June 26-27
July 17
= 3 days @ \$375. \$ 1,125.00

West Jason

June 28 (1/2 day)
June 29
July 1-7
July 10-16
July 18
= 16 1/2 days @ \$375. 6,187.50

Travel Faro-Prospect (June 17)
" Prospect-Faro (July 20)
= 2 days @ \$375 750.00

Mob.-demob. (Calgary-Faro-Calgary)
Your share 31/50 x \$2,500 1,550.00

Misc expenses (see attached)
R. Arsenault exp. \$ 89.12
Cigarettes, etc. credit (18.16) 70.96

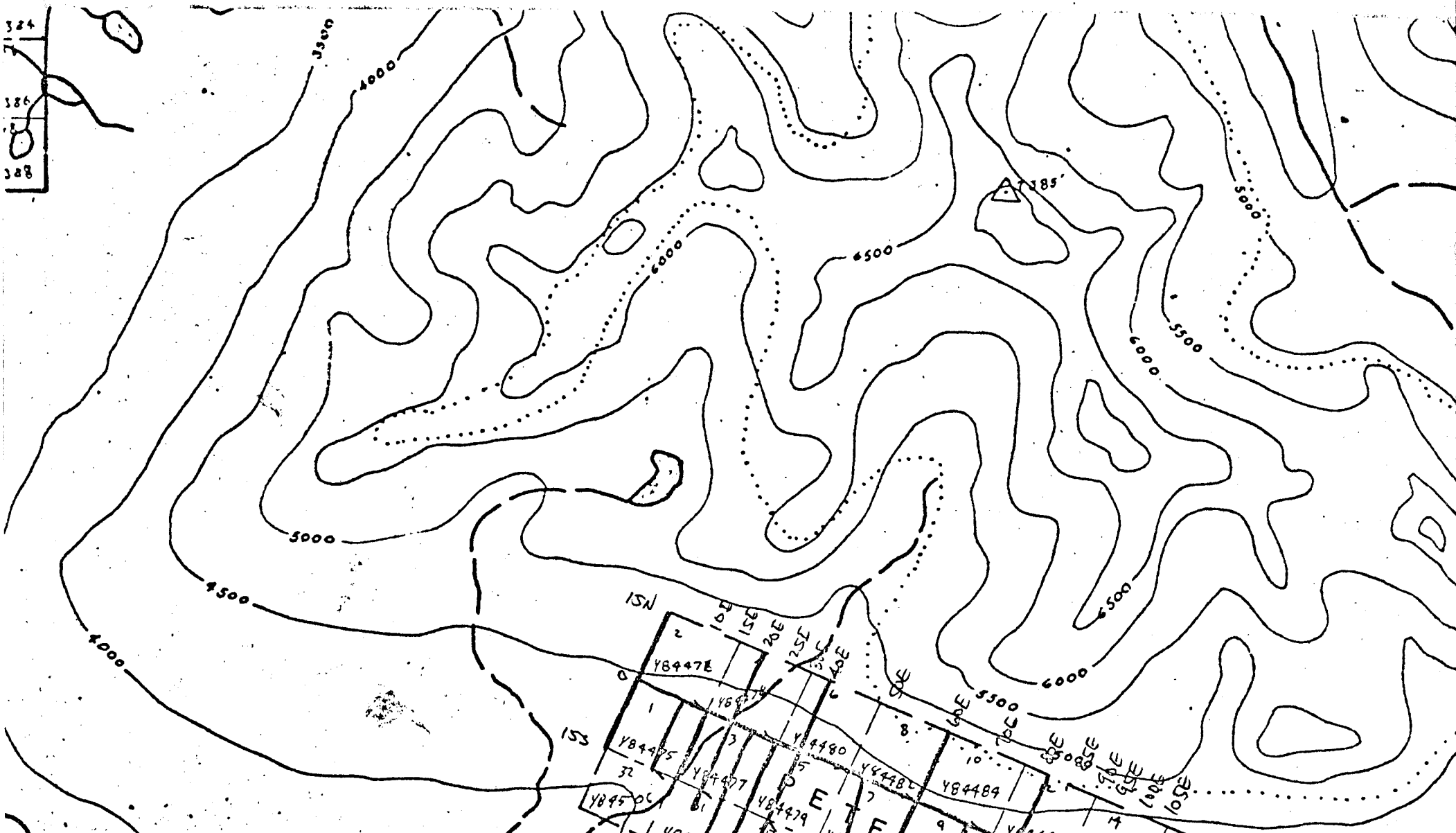
Consulting trips - RB Galeski (airfare = \$50/day expenses)
June 15-19 \$611., your share 1/3 203.67
July 19-22 \$561., your share 1/3 187.00

TOTAL \$13,636.63

Handwritten circled note: \$ 369 \$/11/76

Handwritten notes: OK, see attached, done!

324
386
388



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
YB4475	YB447E	YB4477	YB4479	YB4480	YB4481	YB4482	YB4483	YB4484	YB4486	YB4488	YB4490	YB4491	YB4492	YB4493	YB4495	YB4496	YB4497	YB4498	YB4499	YB4500	YB4501
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11

OGILVIE JOINT VENTURE

PETE CLAIMS

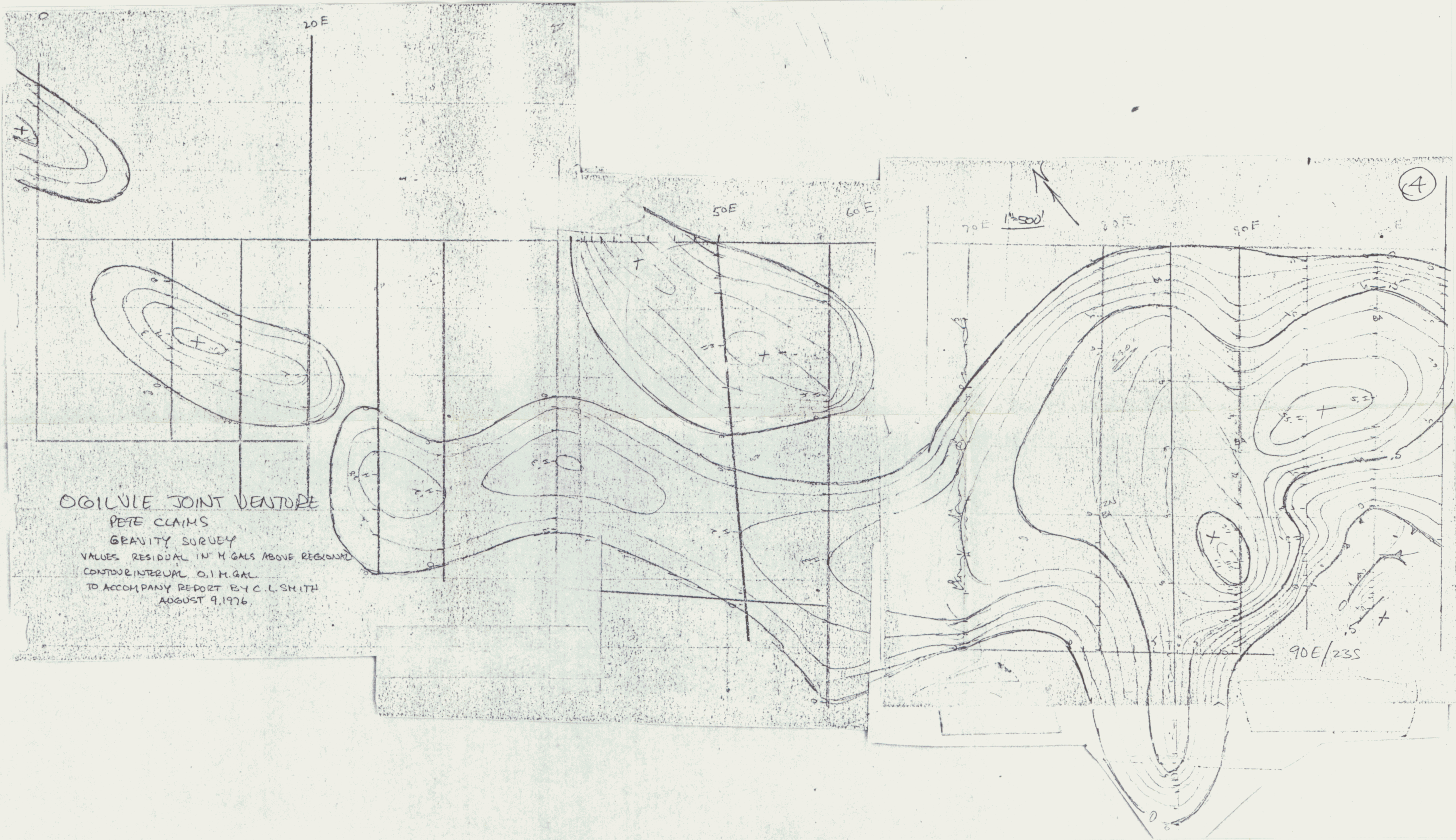
GRAVITY SURVEY

VALUES RESIDUAL IN M.GALS ABOVE REGIONAL

CONTOUR INTERVAL 0.1 M.GAL

TO ACCOMPANY REPORT BY C. L. SMITH

AUGUST 9, 1976



(A)

1"=500'

90E/23S