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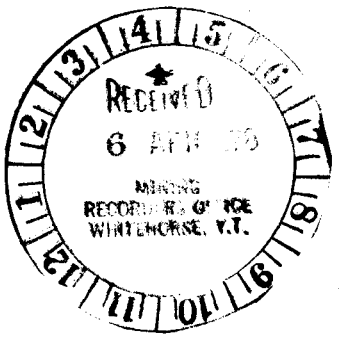
TOP CLAIMS

GRAVITY SURVEY

by

Charles A. Ager, PhD, PEng

March 1978



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

$ 800-00

Assistant Geologist or
~~Resident Mining Engineer~~

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

B. R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

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CLAIMS DATA

TOP 1-8 Claims
Jackson Lake area, Yukon Territory
Whitehorse Mining District
NTS 105D/11
L.A.Patnode, Whitehorse, YT, owner
Record date: Dec 2, 1976

INTRODUCTION

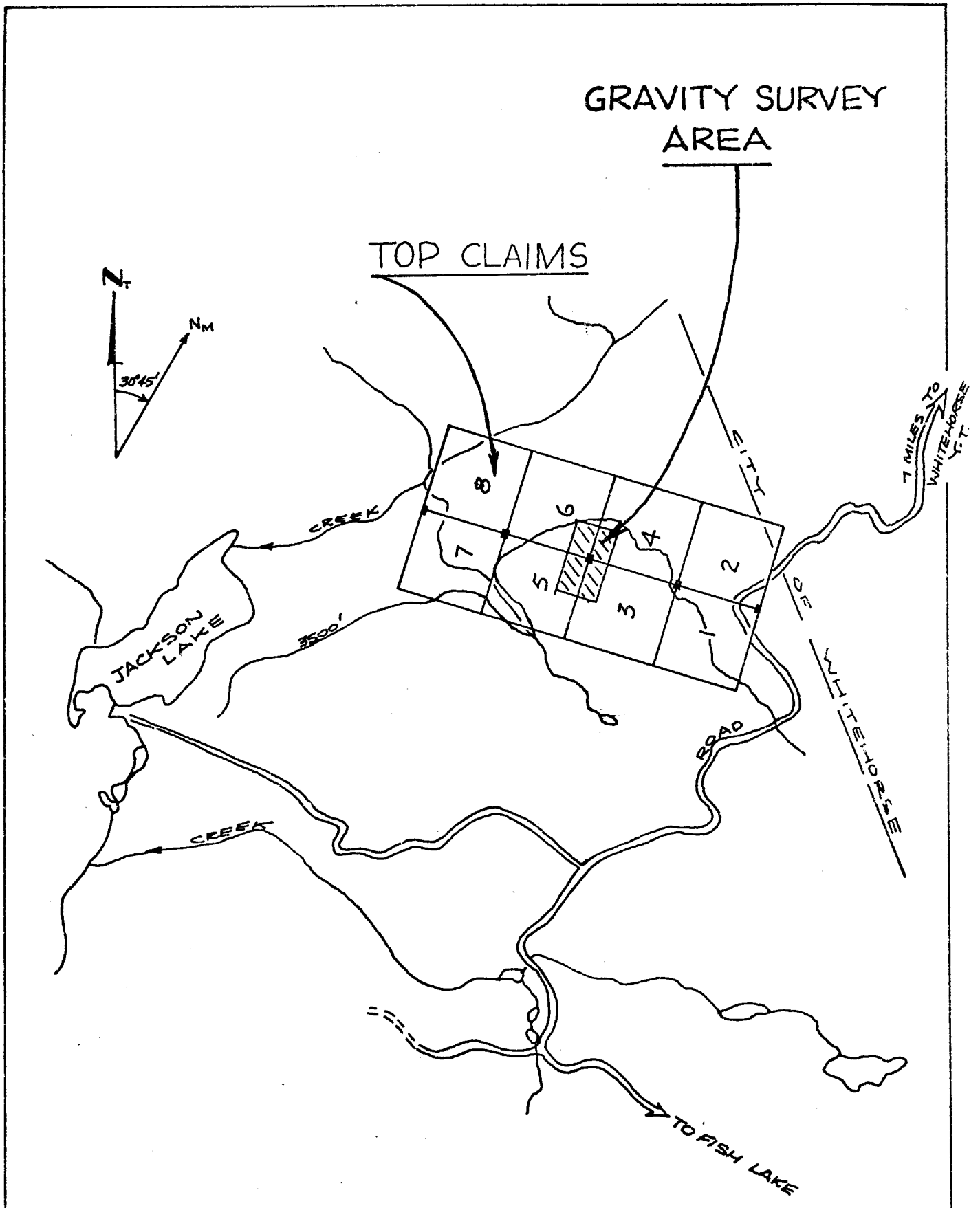
At the request of Mr Larry Patnode of Whitehorse, Y.Y., a reconnaissance gravity survey was conducted over a portion of the Top Claims 1-8 as shown on Figure 1. The intent of the work was to outline areas of excess mass which could relate to massive Ag-Pb-Zn-Cu mineralization found on the property.

SURVEY PROCEDURES & INSTRUMENTATION

Gravity observations were made using a LaCoste & Romberg Model G Gravity Meter with reading accuracy of ±0.01 mgals. A gravity base station (GB 1) was established at L0+0 and used as the base reference for the survey. Gravity values were corrected for instrumemt and diurnal drift by tying into GB1 within three hour intervals. The effects of latitude, free air, Bouguer slab were accounted for using standard reduction procedures. The elevation factor was determined using a minimum correlation technique of Ager & Associates to be 0.208012 mgal/meter.

Elevations were measured using standard spirit levelling techniques. An absolute value of 1052.00 meters was estimated for L0+0 from elevation map NTS 105D/11 and used as reference elevation datum for the survey. Relative elevations are accurate to ±0.03 meters or better. Grid lines were established by chain and compass using flagging to mark the stations and the lines.

A listing of the gravity data is given in Appendix A with a plot of the results on Figure 2.



TOP CLAIMS	
LOCATION MAP	
SCALE 1" = ½ MILE	C.A. AGER & ASSOC
DATE MAR 1978	SURREY, B.C.

FIGURE 1

INTERPRETATION OF GRAVITY RESULTS

Inspection of the Bouguer gravity map, Figure 2, indicates that the fabric of the underlying geological units strikes about true north. As well, there is an obvious gravity high feature centered at L1E+50S. This anomaly is shown in residual form on Figure 3.

The '0.00' contour outlines the areal extent of the gravity high anomaly. The source strikes about east-west and is open to the east of the area surveyed. The depth to the center of mass of the target is in the range 23-30 meters. The possibilities are good that the source could be massive Ag-Pb-Zn-Cu mineralization.

CONCLUSIONS

The gravity survey has indicated an anomaly of possible economic importance. The feature should be drilled with a vertical hole collared at L1E+50S to a depth of at least 50 meters. If the core indicates mineralization of economic grade, then the gravity work should be extended, especially to the east, so as to determine the extent of the zone.

Respectively submitted,

Charles A. Ager

March 1978.

Charles A. Ager, PhD, PEng

Geophysicist

APPENDIX A:

GRAVITY DATA SHEET

FORTRAN CODING FORM

$\Delta G_B = (E \times EF) + G_O + G_L$

Programmer JACKSON LU : TOP CLAIMS

Date MARCH '78

EF = .208012 mgal/meter

STATION COORD.	ELEVATION	G_O	G_L	ΔG_B	G_A
LINE 1 W 200 N	1042.76	68.76	-10.36	275.30	58.
150 |	1046.38	68.04	-10.32	275.38	57.
100 |	1051.16	67.05	-10.29	275.41	56.
50 N	1052.95	66.65	-10.26	275.42	56.
0	1054.04	66.34	-10.22	275.37	56.
50 S	1056.69	65.78	-10.19	275.39	55.
100 |	1061.52	64.69	-10.16	275.34	54.
150 |	1064.64	63.96	-10.12	275.30	53.
LINE 1 W 200 S	1067.26	63.38	-10.09	275.29	53.
LINE 1 E 175 N	1044.55	67.13	-10.29	274.12	56.
150 |	1048.77	66.30	-10.27	274.19	56.
100 |	1047.79	66.73	-10.24	274.44	56.
50 N	1047.97	66.75	-10.21	274.53	56.
0	1050.42	66.24	-10.18	274.56	56.
50 S	1053.83	65.79	-10.14	274.86	55.
100 |	1053.76	65.55	-10.11	274.63	55.
150 |	1054.93	65.32	-10.07	274.69	55.
LINE 1 E 200 S	1057.10	64.77	-10.04	274.62	54.

$\Delta GB = (E \times EF) + Go + GL$

Programmer Jackson Lu : Top Climbs. FORTRAN CODING FORM Date MARCH '78 Page 2 of 2

EF = .208012 mgal/meter

STATEMENT NO.	STATION COORD	ELEVATION (meters)	Go (mgal)	GL (mgal)	ΔGB (mgal)	IDENTIFICATION GA
LINE 0.	200N	1046.71	67.36	-10.33	274.76	57.03
	175	1046.25	67.46	-10.31	274.78	57.15
	150	1046.99	67.34	-10.30	274.83	57.04
	125	1048.99	66.87	-10.28	274.79	56.59
	100	1049.18	66.89	-10.26	274.87	56.63
	75	1048.79	67.05	-10.25	274.96	56.80
	50	1049.80	66.84	-10.23	274.98	56.61
	25N	1050.55	66.65	-10.21	274.97	56.44
	0	1052.00	66.28	-10.20	274.91	56.08
	25S	1054.46	65.77	-10.19	274.92	55.58
	50	1055.39	65.56	-10.17	274.92	55.39
	75	1056.14	65.45	-10.15	274.98	55.30
	100	1056.68	65.35	-10.13	274.99	55.22
	125	1057.52	65.19	-10.11	275.06	55.08
	150	1058.62	64.87	-10.10	274.98	54.77
	175	1059.95	64.59	-10.08	274.99	54.51
LINE 0.	200S	1062.12	64.08	-10.07	274.94	54.01
GB1.		1052.27	66.22	-10.19	274.91	56.03

LIW

LO

LIE

200N — 5·30 | 4·76

4·78 | 4·12

150N — 5·38 | 4·83 | 4·19

4·79

TOP 6

100N — 5·41 | 4·87

4·96

TOP 4

50N — 5·42 | 4·98 | 4·53

4·97

0 — 5·37 | 4·91 | 4·56

CLAIM POST & GRAVITY BASE STATION NO. 1

4·92

50S — 5·39 | 4·92 | 4·86

4·98

TOP 5

TOP 3

100S — 5·34 | 4·99 | 4·63

5·06

150S — 5·30 | 4·98 | 4·69

4·99

200S — 5·29 | 4·94 | 4·62

5·00

4·50

5·00

N_T

N_M

30°45'

Charles A Ager

TOP CLAIMS

BOUGUER GRAVITY

CONTOUR INTERVAL = 0·10 MGAL·

SCALE 1cm = 10m	C·A·AGER & ASSOC·
DATE MARCH 1978	SURREY, B·C·

FIGURE 2

LIW

LO

LIE

200N

150N

100N

50N

0

50S

100S

150S

200S

TOP 6

TOP 4

TOP 5

TOP 3

T

N_M

30°45'

CLAIM POST
&
GRAVITY BASE
STATION NO.1

0·20

0·10

0·00

TOP CLAIMS

RESIDUAL GRAVITY

CONTOUR INTERVAL = 0.05 MGAL

SCALE 1CM = 10M	C.A. AGER & ASSOC.
DATE MARCH 1978	SURREY, B.C.

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FIGURE 3