

PELLE CLAIMS GRAVITY SURVEY

Oct 9/78 by *D.R. MacQuarrie, BSc*
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PEL LY C L A I M S
G R A V I T Y S U R V E Y

SUMMARY

The results of the preliminary and follow up gravity survey work over the Pelly Claims, Big Campbell Creek area, Yukon Territory, are given in this report. The intent of the work was to further qualify previously detected ground electromagnetic and geochemical anomalies. Two areas of gravity high residuals are outlined. Resistivity depth sounding followed by diamond drilling, if warranted, are recommended in order to test the economic nature of the gravity anomalies.

Respectfully submitted,

D.R. MacQuarrie

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Geophysicist

October 9, 1978

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LOCATION, DATE OF WORK, CREWLocation: Pelly Claims

Watson Lake Mining District

Big Campbell Creek Area, Yukon Territory

NTS 105G/14

61°47' N Latitude by 131°05' W Longitude

Date of Work:

Field Work: Aug 25/78, Sept 18-22, 1978

Office Work: September 28 - October 9, 1978

Crew: D.R. MacQuarrie, BSc, party chief/data interpreter

P.A. Macy, BA, gravity observer

J.M. Travis, field assistant

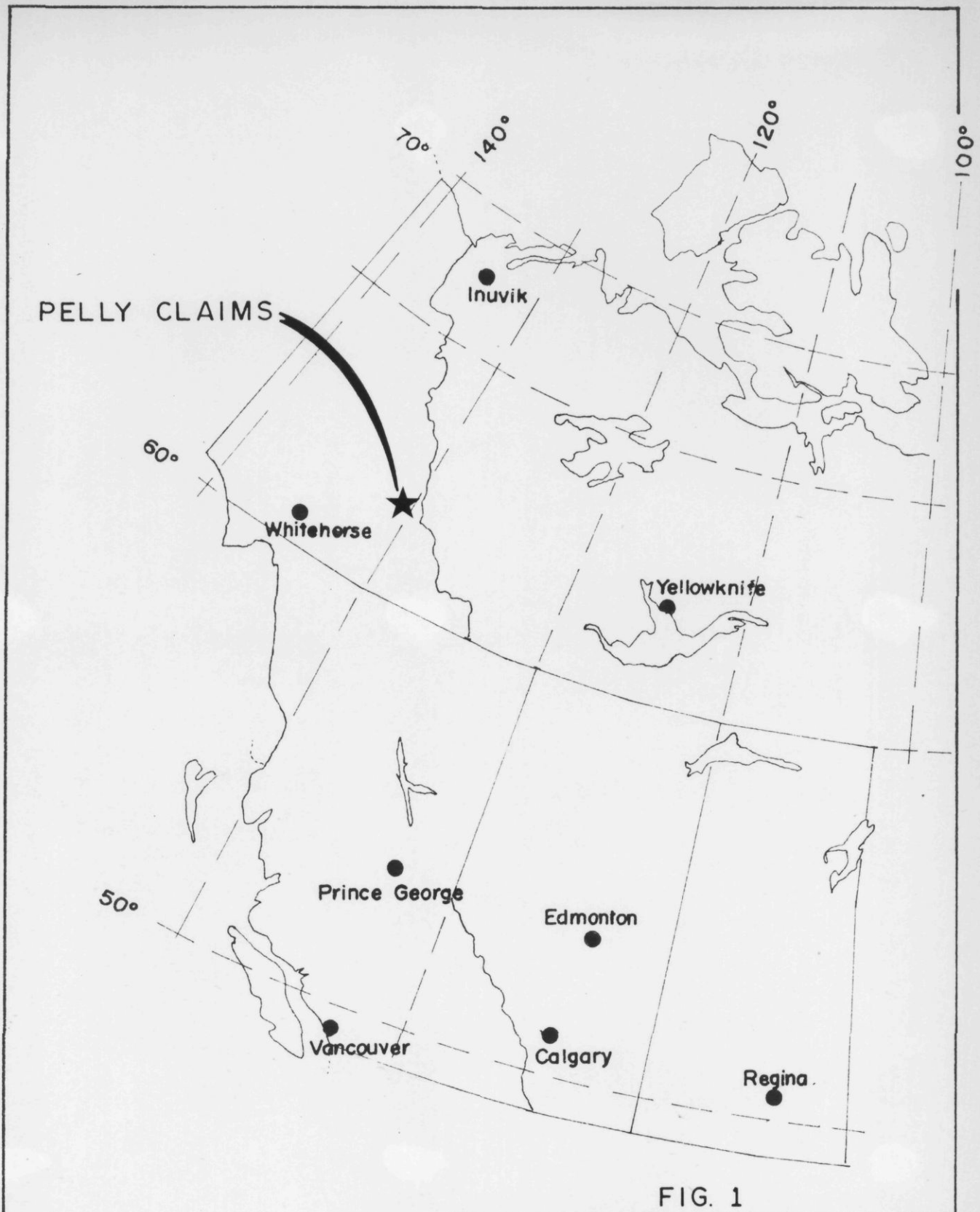
C.A. Ager, PhD, PEng, data interpreter

INTRODUCTION

At the request of Mr Bill Sirola, Kerr Addison Mines Ltd, a preliminary gravity survey was conducted over a portion of the companies' Pelly claims group, Big Campbell Creek area, Yukon Territory, on August 25, 1978. Based on the results of this initial work, on L500E, further work was completed during September 1978. The intent of the gravity work was to outline areas of excess mass within or near EM conductors with the idea of detecting massive Pb-Zn mineralization within the underlying phyllitic units. This report summarizes the results of the gravity work and provides some recommendations regarding further work.

GRAVITY

Gravity observations were made using a LaCoste & Romberg Model G gravity meter (serial number G199) with reading accuracy of ± 0.01 mgal. Most elevations were measured using an electronic level developed by Ager & Associates Ltd and are considered accurate to ± 0.03 meters between stations. Elevations on lines 300E and 700E were determined using standard spirit levelling techniques. The Bouguer gravity and elevation profiles are presented as Figures 4 through 9 inclusive. The gravity



PELLY CLAIMS

Inuvik

Whitehorse

Yellowknife

Prince George

Edmonton

Vancouver

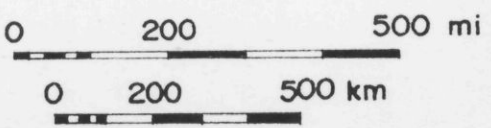
Calgary

Regina

FIG. 1

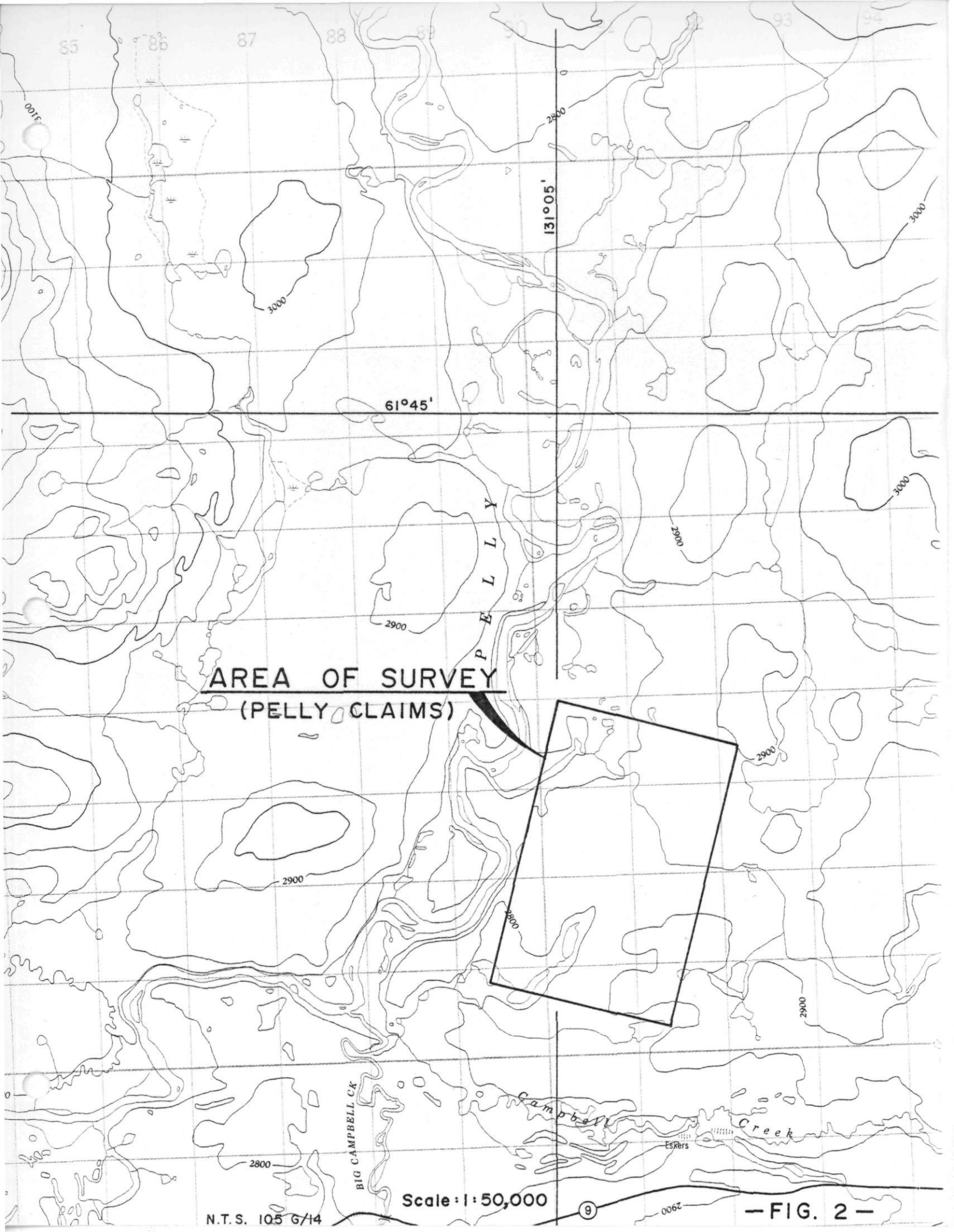
LOCATION MAP

GENERAL LOCATION



DATE OCT. 1978

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AREA OF SURVEY
(PELLEY CLAIMS)

P
E
L
L
E
Y

61°45'

131°05'

data has been corrected for the effects of latitude, free air, Bouguer slab and drift. No terrain corrections were applied to the data as the survey area is for the most part very flat.

The elevation factor used for data reduction was based on a density of 2.80 g/cc (0.19128 mgal/meter) which is the average density of the phyllitic and andesitic rock types found in the area. Due to the swampy and/or mossy conditions encountered over most of the survey area, approximately 20% of the gravity observations were subject to a ± 0.05 mgal observation noise factor. This noise factor is not considered important when it is noted that a residual gravity anomaly in excess of +0.50 mgal would be expected from a massive Pb-Zn deposit within 500 feet of the surface.

INTERPRETATION

The interpretation is based solely on the gravity data presented in this report. Further refinements to this interpretation may be warranted with the addition of other data. The interpretation is as follows:

L300E, L500E, L700E, L250W

Two areas of possible economic importance have been outlined by the gravity survey. The first area, Anomaly A, occurs on

L300E and 500E at 150N (Figure 4 and 5). The second zone, Anomaly B, is centered at 2400N on L250W (Figure 8).

Although these anomalies are some distance apart, they appear to be caused by a similar source. We note that if the smoothed gravity profile on L700E (Figure 6) is taken to be the regional for Anomaly A on L300E and L500E, then the residual gravity anomaly is similar in shape and amplitude to the Anomaly B on L250W. This correlation indicates that the probable source rock may be identical for each of the anomalous areas. Two possible geological solutions for the residual anomalies A and B are given below:

1. GRAPHITIC PHYLLITE

A lens shaped body of graphitic phyllite striking east-west and dipping gently to the south. It has a cross-sectional width of approximately 500 meters and a thickness on the order of 100 meters. These model parameters were determined using a density contrast of +0.10 g/cc for the phyllitic model v.s. its surrounding host rock. Because of the limited nature of the gravity work, no estimate of strike length can be made.

* 2. MASSIVE Pb-Zn BODY

The second model is a thin sheet-like massive Pb-Zn body of density contrast +1.00 g/cc. It is approximately 500 meters in width, about 10 meters thick, dips gently to the south and is buried within 170 meters of the surface.

(3.57.60')

Of these two models, the first appears to be the most probable. However, without firm 'ground truth' information to the contrary, the massive model should be considered as well.

* From the equation $0.65 \frac{\Delta g_{max}}{\Delta g'_{max}}$ where Δg_{max} = max amplitude of anomaly + $\Delta g'_{max}$ = 1.5 maximum horizontal gradient, we have: $0.65 \times \frac{0.4}{\frac{0.5}{100}} = 520'$ to Source.
 Max. Vert. depth of drill hole was 465'.

L1250W

The apparent gravity high feature located on L1250W at 2610N (Figure 7) is interpreted to be caused by overburden in the Pelly River valley and by an offset in the gravity traverse at 2640N in a gravity gradient area. This can be clearly seen on Figure 7 where the apparent anomaly is effectively removed by using a Bouguer density of 2.00 g/cc for overburden. Simply stated, the feature is an overburden effect.

L300N and L500E (N part)

The gravity profile on L300N and L500E (N part), Figures 9 and 10, is very flat and of no economic interest.

RECOMMENDATIONS

In order to help judge the economic potential of the two gravity anomalies, Anomaly A and B in this report, the following work is recommended:

- 1) An expanding Wenner array resistivity survey should be conducted over the anomalies A and B to a sounding depth of at least 200 meters. This survey will yield valuable information as to overburden thickness, depth to top of conductive horizon and position of lateral contact zones. An induced polarization survey should also be attempted at the same time as the additional cost would be negligible.

2) If the results of (1) above donot rule out a massive source, then diamond drilling should be done with holes collared at the center of each anomaly and drilled to depths of at least 200 meters.

October 9, 1978

Respectively submitted,

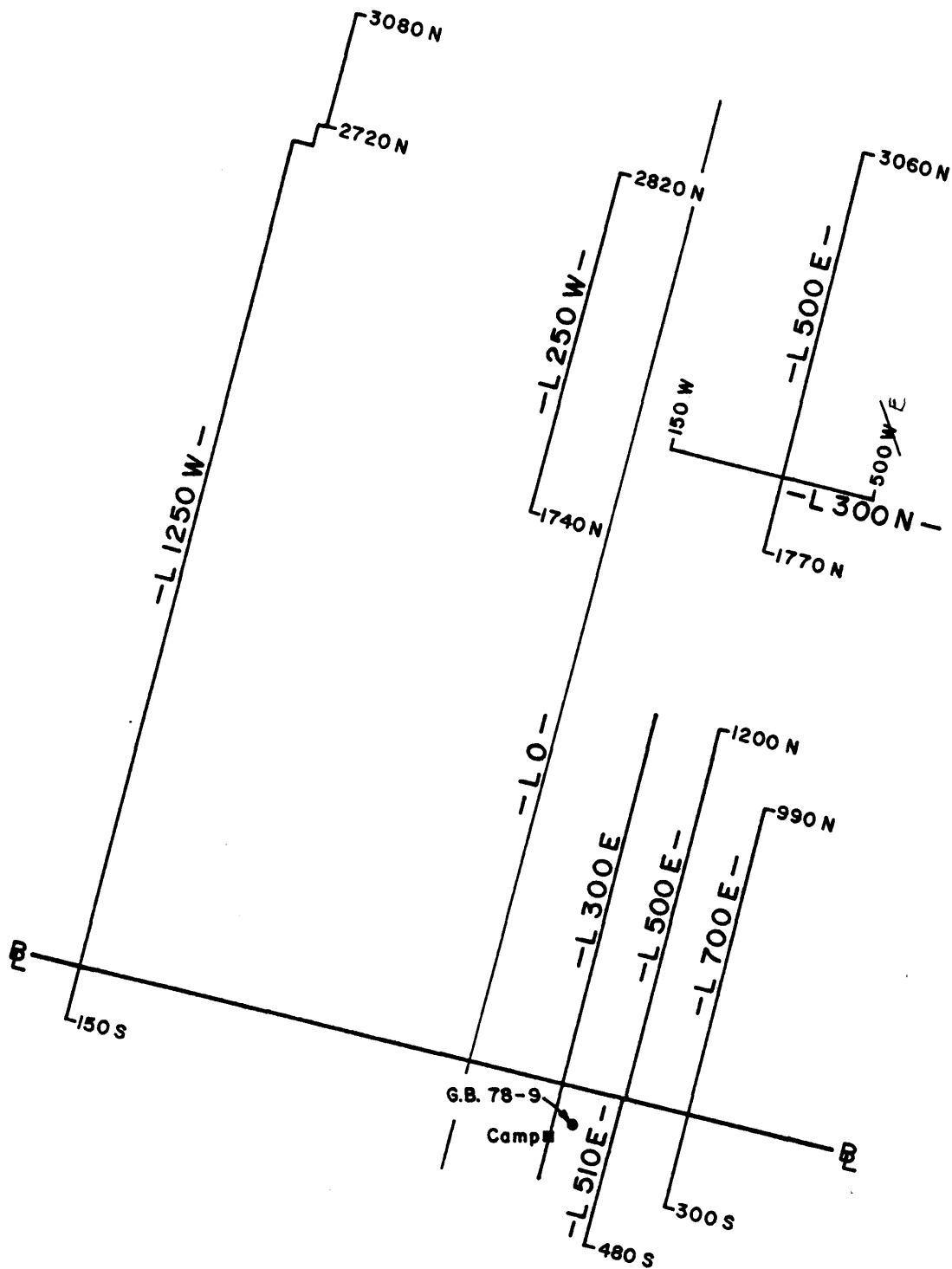
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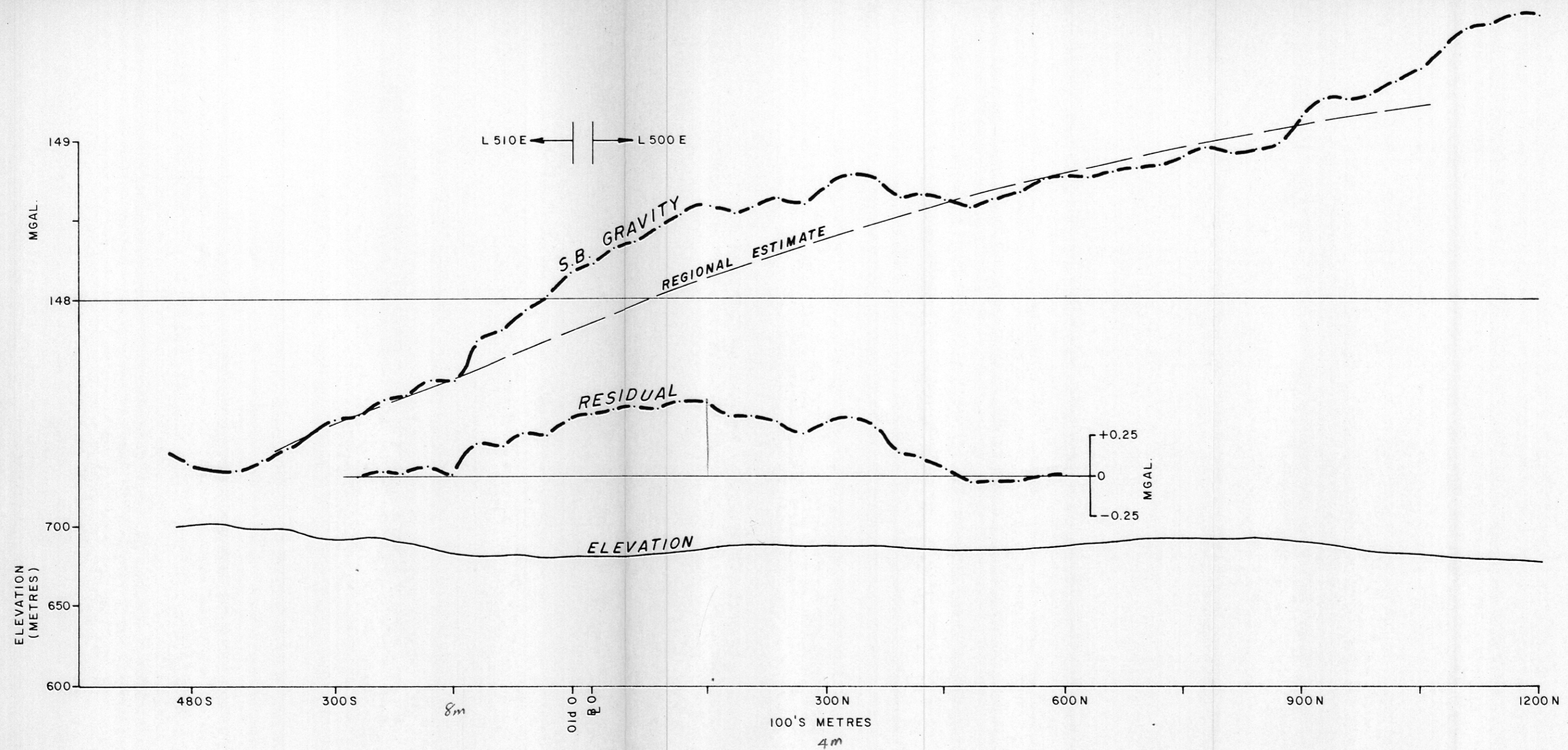


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PELLEY CLAIMS

- GRID MAP -

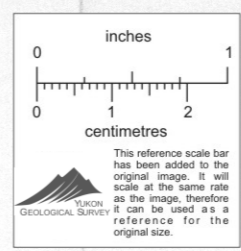
FIG. 3

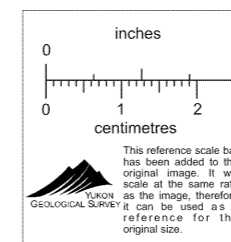
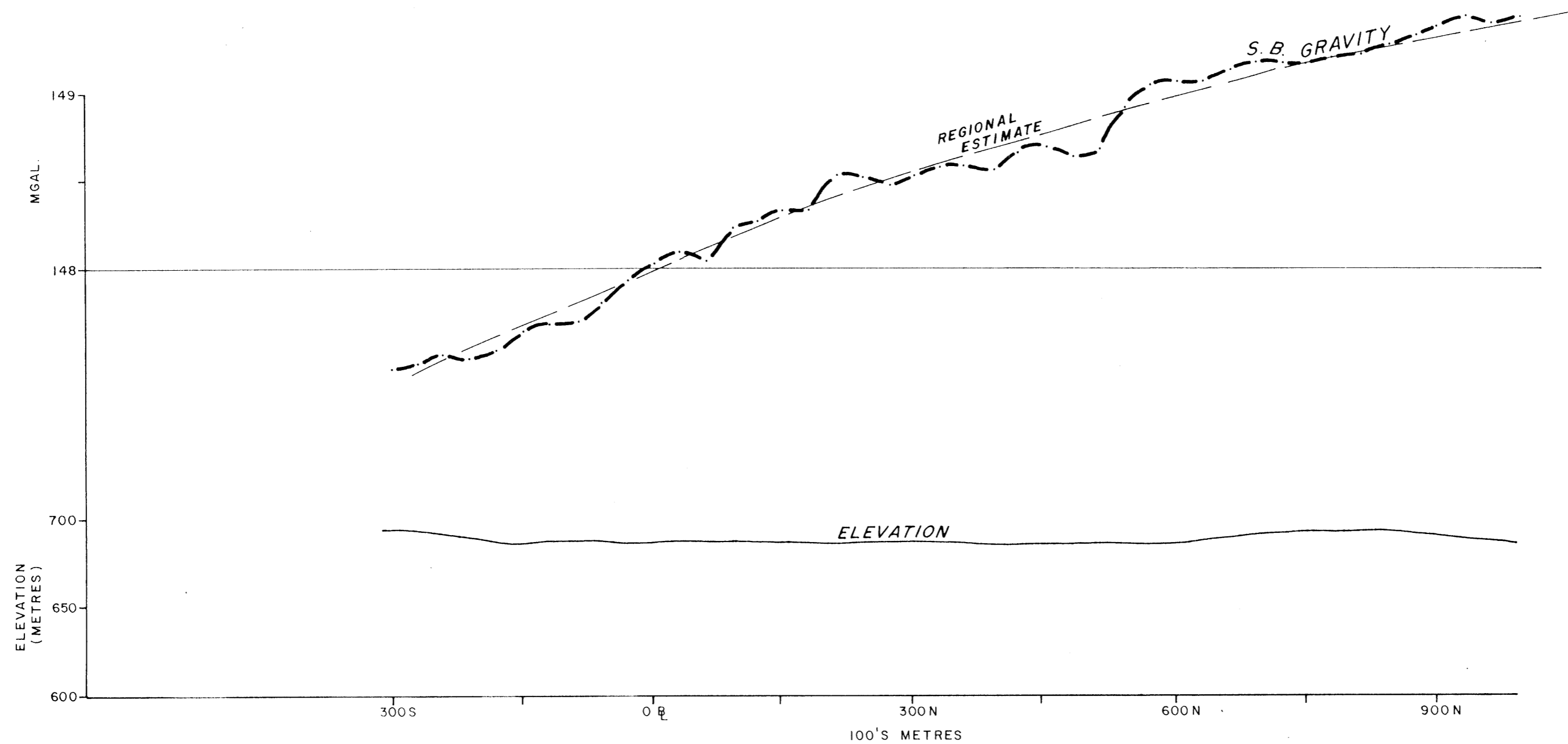


Horiz. Scale = 1 : 5000

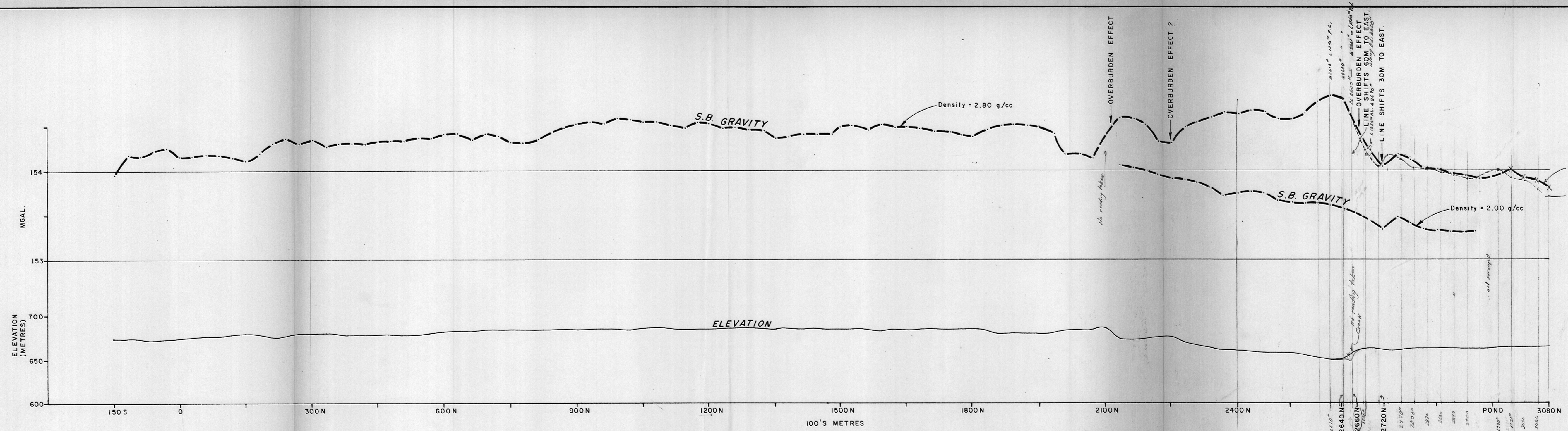
KERR ADDISON MINES LTD.
 — PELY CLAIMS —
 SIMPLE BOUGUER GRAVITY
 &
 ELEVATION PROFILES
 L 510 & L 500 E

FIG. 5

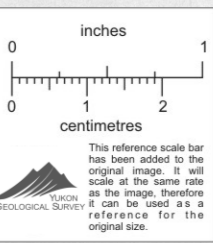


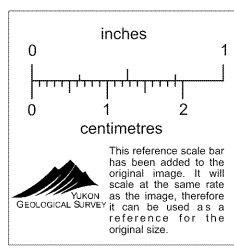
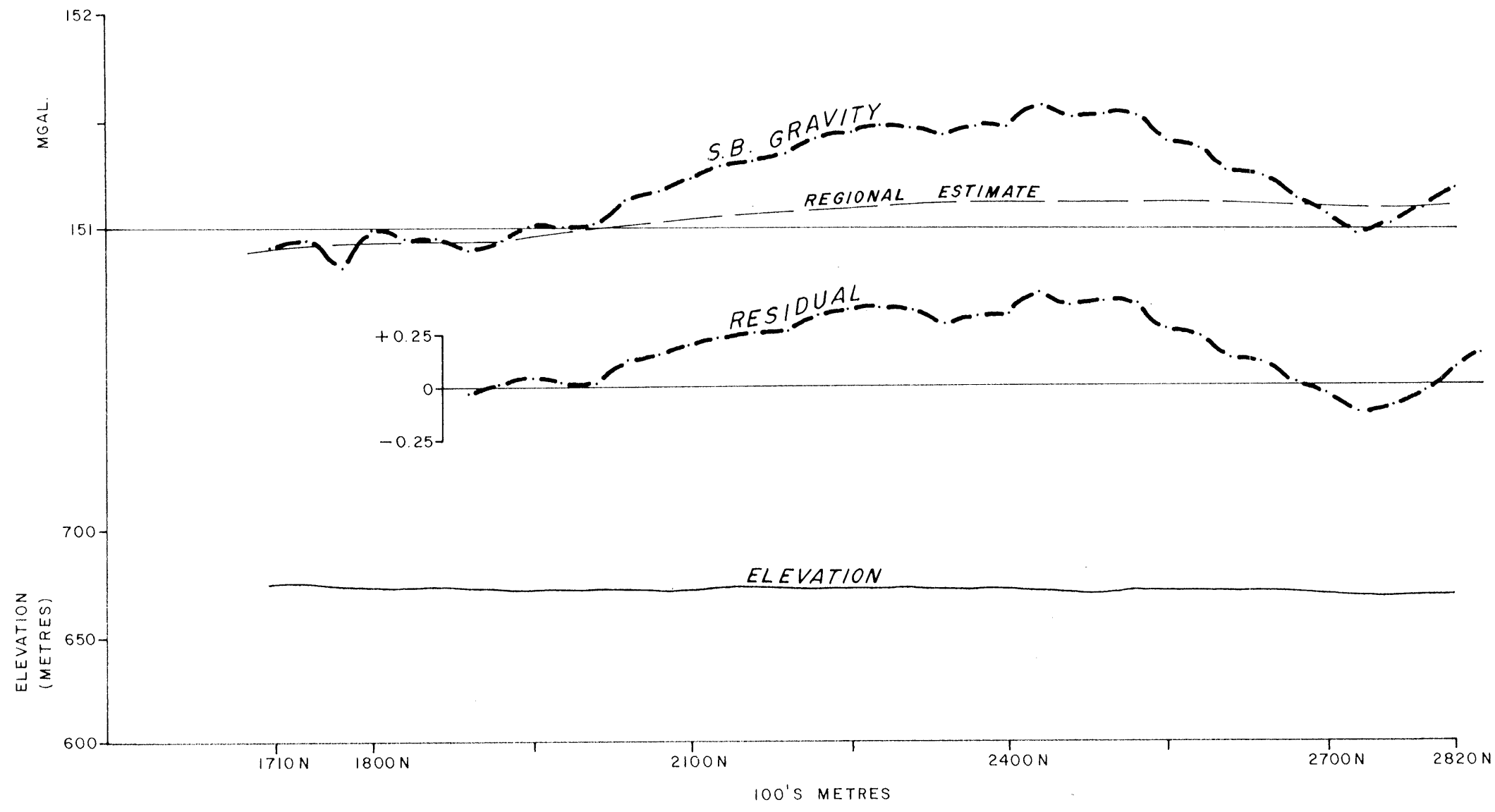


KERR ADDISON MINES LTD.
 — PELY CLAIMS —
 SIMPLE BOUGUER GRAVITY
 &
 ELEVATION PROFILES
 — L 700 E —
 FIG. 6



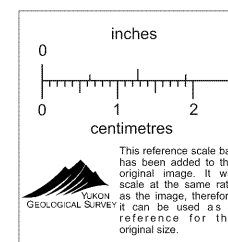
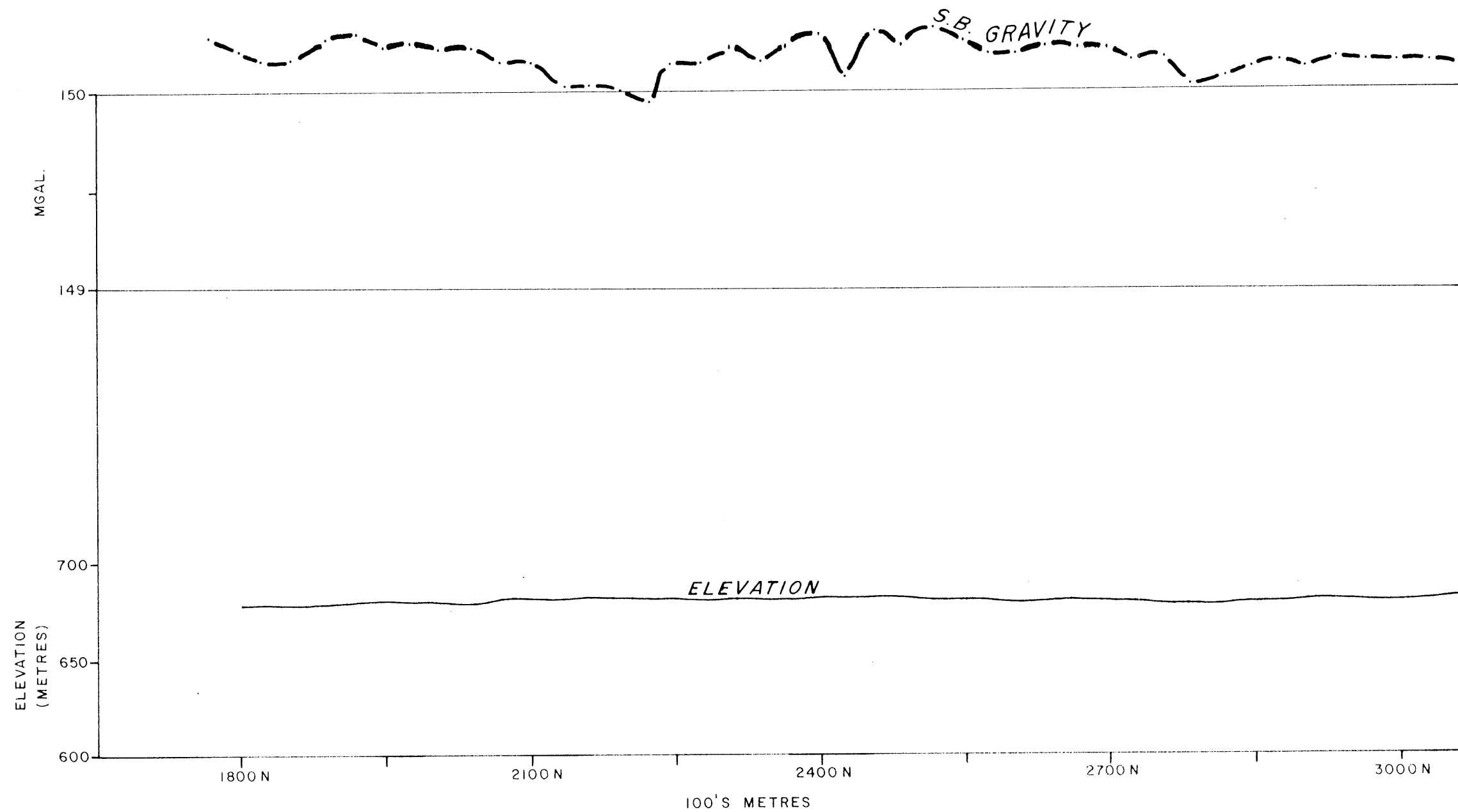
SCALE: Horiz. 1:500
 KERR ADDISON MINES LTD.
 - Pelly Claims -
 SIMPLE BOUGUER GRAVITY
 &
 ELEVATION PROFILES
 - L 1250 W -
 FIG. 7





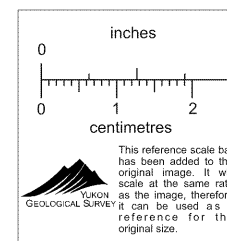
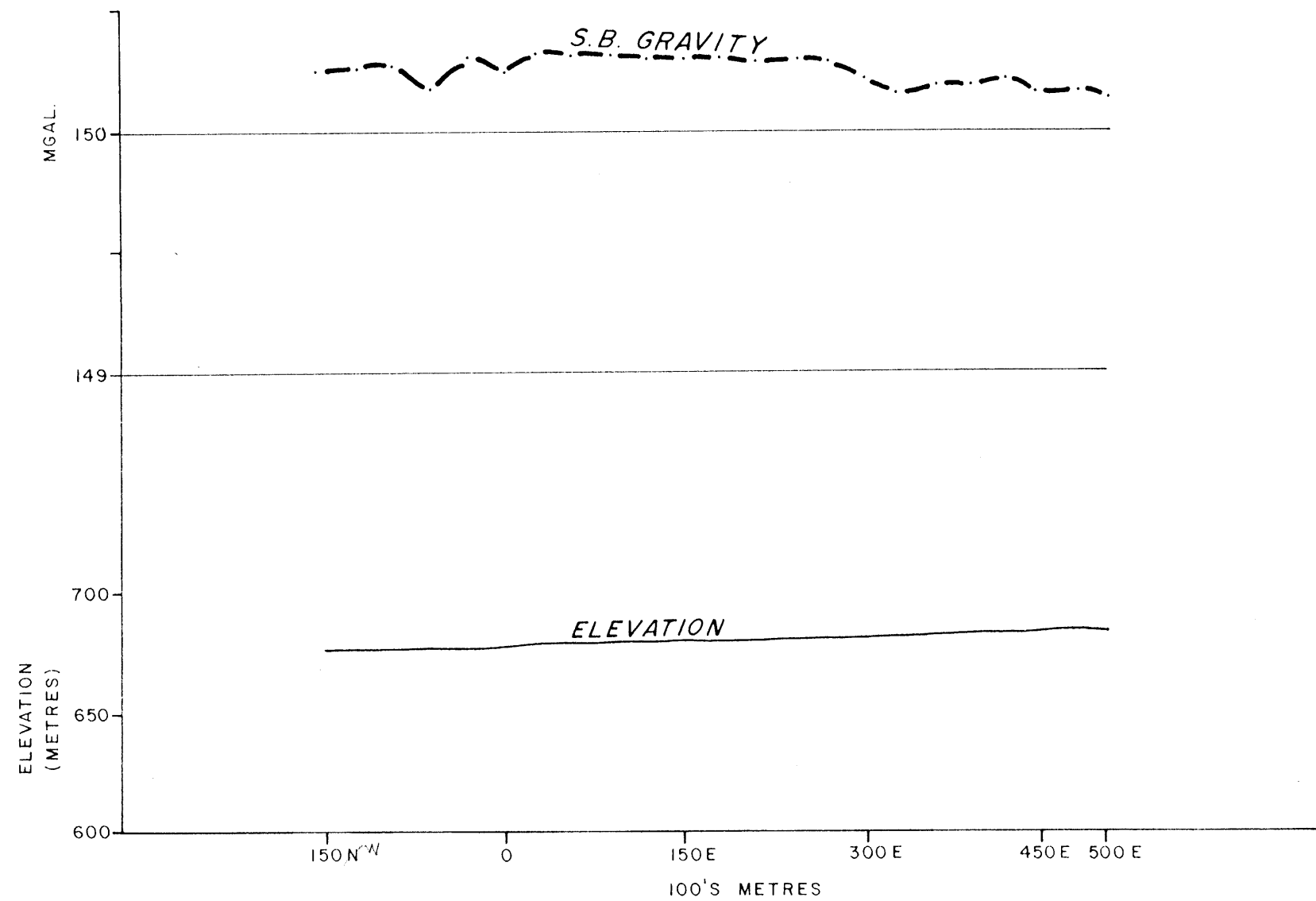
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 — PELLY CLAIMS —
 SIMPLE BOUGUER GRAVITY
 &
 ELEVATION PROFILES
 L 250 W

FIG. 8



KERR ADDISON MINES LTD.
 — PELLY CLAIMS —
 SIMPLE BOUGUER GRAVITY
 &
 ELEVATION PROFILES
 — L 500 E —

FIG. 9



KERR ADDISON MINES LTD.
 — PELY CLAIMS —
 SIMPLE BOUGUER GRAVITY
 &
 ELEVATION PROFILES
 — L 300 N —

FIG. 10

APPENDIX A: Pelly Claims Gravity Data

GB 78-9: GB78-9 is located 60 meters at bearing 062° (true) up a small hill from the road intersection in the 1978 Kerr Addison camp. The station is marked by an orange post located 2 meters south-east of the station. The station is 10 cm below ground level.

Observed G = 981,778.04 mgal (absolute) = 19.02 mgal (relative)

	STATION COORD.		ELEVATION	OBS.GRAV.	B.GRAVITY	TERRAIN
	(meters)		(meters)	(mgal)	(mgal)	(mgal)
L	300E	200S	686.74	17.81	147.35	0.0
L	300E	270S	682.39	18.53	147.22	0.0
L	300E	240S	679.63	19.36	147.50	0.0
L	300E	210S	676.99	20.00	147.62	0.0
L	300E	180S	676.21	20.18	147.63	0.0
L	300E	150S	677.60	20.02	147.71	0.0
L	300E	120S	677.98	20.08	147.83	0.0
L	300E	90S	678.47	20.02	147.84	0.0
L	300E	60S	678.80	20.08	147.94	0.0
L	300E	30S	679.90	20.06	148.11	0.0
L	300E	00S	680.79	20.08	148.28	0.0
L	300E	30N	681.38	20.21	148.51	0.0
L	300E	60N	682.43	20.12	148.60	0.0
L	300E	90N	683.30	19.99	148.61	0.0
L	300E	120N	684.39	19.84	148.65	0.0
L	300E	150N	684.87	19.77	148.65	0.0
L	300E	180N	684.92	19.90	148.77	0.0
L	300E	210N	685.31	19.85	148.78	0.0
L	300E	240N	685.37	19.88	148.80	0.0
L	300E	270N	686.09	19.76	148.80	0.0
L	300E	300N	686.15	19.78	148.82	0.0
L	300E	330N	686.20	19.83	148.86	0.0
L	300E	360N	686.35	19.73	148.77	0.0
L	300E	390N	0.0	0.0		0.0
L	300E	420N	686.05	0.0		0.0
L	300E	450N	686.52	20.00	149.01	0.0
L	300E	480N	687.54	19.83	149.01	0.0
L	300E	510N	687.13	19.98	149.07	0.0
L	300E	540N	687.37	19.95	149.06	0.0
L	300E	570N	688.17	19.81	149.06	0.0
L	300E	600N	689.43	19.66	149.14	0.0
L	300E	630N	690.63	19.44	149.13	0.0
L	300E	660N	691.37	19.33	149.14	0.0
L	300E	690N	691.15	19.40	149.15	0.0
L	300E	720N	691.68	19.30	149.13	0.0
L	300E	750N	691.60	19.44	149.23	0.0
L	300E	780N	690.67	19.72	149.31	0.0
L	300E	810N	690.54	19.74	149.30	0.0
L	300E	840N	690.22	19.76	149.25	0.0
L	300E	870N	689.47	19.90	149.22	0.0
L	300E	900N	688.88	20.02	149.22	0.0
L	300E	930N	687.97	20.25	149.26	0.0
L	300E	960N	686.72	20.57	149.33	0.0
L	300E	990N	686.13	20.68	149.31	0.0
L	300E	1020N	684.80	21.03	149.38	0.0
L	300E	1050N	683.71	21.28	149.38	0.0

Pelly

L	300F	1030N	681.94	21.75	149.49	0.0
L	300F	1110N	680.63	22.07	149.54	0.0
L	300F	1140N	678.51	22.57	149.62	0.0
L	300F	1170N	675.96	23.07	149.60	0.0
L	300F	1200N	673.65	23.55	149.61	0.0
L	510F	480S	703.45	14.09	146.97	0.0
L	510F	450S	703.39	0.0		0.0
L	510F	420S	701.75	14.39	146.90	0.0
L	510F	390S	700.00	0.0		0.0
L	510F	360S	698.41	15.24	147.07	0.0
L	510F	330S	696.67	0.0		0.0
L	510F	300S	695.14	16.07	147.25	0.0
L	510F	270S	694.54	16.23	147.27	0.0
L	510F	240S	693.48	16.55	147.37	0.0
L	510F	210S	691.48	16.97	147.39	0.0
L	510F	180S	688.20	17.74	147.51	0.0
L	510F	150S	684.53	18.43	147.48	0.0
L	510F	120S	683.24	18.96	147.75	0.0
L	510F	90S	682.69	19.13	147.80	0.0
L	510F	60S	682.56	19.31	147.93	0.0
L	510F	30S	682.44	19.45	148.03	0.0
L	510F	BL0S	682.65	19.58	148.18	0.0
L	500F	BL0N	683.35	19.50	148.21	0.0
L	500F	30N	683.93	19.52	148.32	0.0
L	500F	60N	684.07	19.55	148.36	0.0
L	500F	90N	684.84	19.51	148.45	0.0
L	500F	120N	685.65	19.45	148.53	0.0
L	500F	150N	687.02	19.26	148.58	0.0
L	500F	180N	689.60	18.72	148.53	0.0
L	500F	210N	689.80	18.76	148.59	0.0
L	500F	240N	688.93	19.01	148.63	0.0
L	500F	270N	688.42	19.07	148.60	0.0
L	500F	300N	687.90	19.31	148.71	0.0
L	500F	330N	687.51	19.47	148.78	0.0
L	500F	360N	687.41	19.48	148.75	0.0
L	500F	390N	687.53	19.37	148.64	0.0
L	500F	420N	687.39	19.43	148.66	0.0
L	500F	450N	687.76	19.35	148.63	0.0
L	500F	480N	687.51	19.37	148.58	0.0
L	500F	510N	687.72	19.41	148.64	0.0
L	500F	540N	687.64	19.48	148.67	0.0
L	500F	570N	688.32	19.43	148.75	0.0
L	500F	600N	689.16	19.31	148.77	0.0
L	500F	630N	690.80	19.01	148.76	0.0
L	500F	660N	692.45	18.75	148.79	0.0
L	500F	690N	693.92	18.51	148.82	0.0
L	500F	720N	694.35	18.47	148.84	0.0
L	500F	750N	694.52	18.50	148.88	0.0
L	500F	780N	694.29	18.62	148.94	0.0
L	500F	810N	693.42	18.79	148.92	0.0
L	500F	840N	692.84	18.95	148.95	0.0
L	500F	870N	692.34	19.11	148.99	0.0
L	500F	900N	692.03	19.34	149.14	0.0
L	500F	930N	691.31	19.60	149.25	0.0
L	500F	960N	690.14	19.85	149.25	0.0
L	500F	990N	688.38	20.24	149.29	0.0
L	500F	1020N	686.72	20.66	149.37	0.0
L	500F	1050N	685.12	21.07	149.45	0.0
L	500F	1080N	683.70	21.48	149.58	0.0
L	500F	1110N	681.96	21.95	149.70	0.0

L	500E	1140N	680.79	22.22	149.72	C.0
L	500E	1170N	679.84	22.48	149.78	C.0
L	500F	1200N	678.59	22.73	149.77	0.0
L	500E	1770N	675.00	24.28	150.27	C.0
L	500E	1800N	676.51	23.94	150.20	0.0
L	500F	1830N	676.97	23.84	150.16	0.0
L	500E	1860N	677.44	23.77	150.16	C.0
L	500E	1890N	677.25	23.91	150.25	0.0
L	500E	1920N	677.55	23.91	150.28	0.0
L	500E	1950N	677.96	23.79	150.22	C.0
L	500E	1980N	678.55	23.73	150.25	0.0
L	500E	2010N	678.65	23.69	150.21	C.0
L	500E	2035N	678.90	23.66	150.21	C.0
L	500E	2070N	679.51	23.52	150.17	0.0
L	500F	2100N	679.65	23.50	150.16	C.0
L	500E	2130N	679.77	23.38	150.04	C.0
L	500E	2160N	679.88	23.38	150.04	0.0
L	500E	2190N	679.69	23.41	150.01	C.0
L	500E	2220N	679.97	23.32	149.96	C.0
L	500E	2250N	679.94	23.54	150.15	0.0
L	500E	2280N	680.00	23.55	150.15	C.0
L	500E	2310N	679.87	23.66	150.22	0.0
L	500E	2340N	679.72	23.63	150.15	C.0
L	500E	2370N	679.84	23.71	150.23	C.0
L	500E	2400N	680.12	23.71	150.28	0.0
L	500E	2430N	680.33	23.49	150.08	C.0
L	500E	2460N	680.36	23.71	150.28	C.0
L	500E	2490N	680.55	23.63	150.23	0.0
L	500E	2520N	680.02	23.83	150.31	C.0
L	500E	2550N	679.52	23.89	150.25	C.0
L	500E	2580N	679.06	23.95	150.20	0.0
L	500E	2610N	678.45	24.08	150.20	C.0
L	500E	2640N	678.63	24.09	150.22	0.0
L	500E	2670N	678.88	24.04	150.20	C.0
L	500E	2700N	678.94	24.07	150.21	C.0
L	500E	2730N	678.76	24.08	150.17	C.0
L	500E	2760N	678.19	24.23	150.19	C.0
L	500E	2790N	677.80	24.18	150.04	C.0
L	500E	2820N	677.91	24.24	150.10	0.0
L	500E	2850N	679.14	24.04	150.12	C.0
L	500E	2880N	680.32	23.88	150.16	0.0
L	500E	2910N	680.83	23.77	150.13	0.0
L	500E	2940N	681.69	23.66	150.18	0.0
L	500E	2970N	682.27	23.54	150.16	0.0
L	500E	3000N	681.98	23.60	150.15	0.0
L	500E	3030N	682.96	23.42	150.14	C.0
L	500E	3060N	683.97	23.22	150.11	0.0
L	300N	150W	675.13	24.45	150.24	C.0
L	300N	120W	675.38	24.42	150.26	C.0
L	300N	90W	675.61	24.38	150.27	0.0
L	300N	60W	676.30	24.12	150.15	C.0
L	300N	30W	676.47	24.23	150.30	0.0
L	300N	00E	677.25	24.01	150.23	0.0
L	300N	30E	677.95	23.96	150.32	0.0
L	300N	60E	678.05	23.93	150.31	0.0
L	300N	90E	678.12	23.91	150.31	C.0
L	300N	120E	678.28	23.85	150.29	C.0
L	300N	150E	678.44	23.80	150.27	0.0
L	300N	180E	678.75	23.76	150.30	0.0
L	300N	240E	679.09	23.67	150.28	0.0

L	300N	270E	679.19	23.63	150.27	0.0
L	300N	300E	679.64	23.49	150.21	0.0
L	300N	330E	680.13	23.32	150.15	0.0
L	300N	360E	680.57	23.26	150.17	0.0
L	300N	390E	680.95	23.18	150.17	0.0
L	300N	420E	681.55	23.10	150.21	0.0
L	300N	450E	682.31	22.89	150.15	0.0
L	300N	480E	682.50	22.85	150.15	0.0
L	300N	500E	682.57	22.80	150.12	0.0
L	700E	300S	695.64	16.13	147.43	0.0
L	700E	270S	693.64	16.55	147.45	0.0
L	700E	240S	691.98	16.95	147.51	0.0
L	700E	210S	690.43	17.24	147.49	0.0
L	700E	180S	688.68	17.64	147.53	0.0
L	700E	150S	687.45	17.99	147.63	0.0
L	700E	120S	687.52	18.06	147.69	0.0
L	700E	90S	687.65	18.06	147.70	0.0
L	700E	60S	687.78	18.15	147.79	0.0
L	700E	30S	687.17	18.44	147.94	0.0
L	700E	00S	688.21	18.33	148.01	0.0
L	700E	30N	687.57	18.55	148.09	0.0
L	700E	60N	688.03	18.42	148.03	0.0
L	700E	90N	688.56	18.56	148.25	0.0
L	700E	120N	688.50	18.60	148.26	0.0
L	700E	150N	688.11	18.78	148.34	0.0
L	700E	180N	688.21	18.76	148.32	0.0
L	700E	210N	688.06	19.02	148.54	0.0
L	700E	240N	687.91	19.04	148.52	0.0
L	700E	270N	687.98	19.01	148.48	0.0
L	700E	300N	687.79	19.12	148.54	0.0
L	700E	330N	687.49	19.25	148.60	0.0
L	700E	360N	686.57	19.46	148.61	0.0
L	700E	390N	686.12	19.53	148.57	0.0
L	700E	420N	686.02	19.69	148.69	0.0
L	700E	450N	685.77	19.76	148.70	0.0
L	700E	480N	685.62	19.74	148.63	0.0
L	700E	510N	685.81	19.79	148.68	0.0
L	700E	540N	685.88	20.05	148.94	0.0
L	700E	570N	686.33	20.09	149.04	0.0
L	700E	600N	687.03	19.99	149.06	0.0
L	700E	630N	688.26	19.78	149.06	0.0
L	700E	660N	689.03	19.72	149.13	0.0
L	700E	690N	689.73	19.66	149.18	0.0
L	700E	720N	690.98	19.44	149.18	0.0
L	700E	750N	692.59	19.15	149.18	0.0
L	700E	780N	693.18	19.09	149.21	0.0
L	700E	810N	693.30	19.10	149.23	0.0
L	700E	840N	692.98	19.24	149.29	0.0
L	700E	870N	691.85	19.52	149.34	0.0
L	700E	900N	690.97	19.74	149.38	0.0
L	700E	930N	689.69	20.06	149.44	0.0
L	700E	960N	688.84	20.21	149.40	0.0
L	700E	990N	688.22	20.50	149.55	0.0
L	250W	1710N	673.83	25.24	150.92	0.0
L	250W	1740N	674.00	25.24	150.94	0.0
L	250W	1770N	673.77	25.18	150.81	0.0
L	250W	1800N	672.92	25.52	150.97	0.0
L	250W	1830N	672.71	25.55	150.94	0.0
L	250W	1860N	672.77	25.56	150.94	0.0
L	250W	1890N	672.23	25.62	150.88	0.0

L 250W 1920N	672.49	25.63	150.92	0.0
L 250W 1950N	672.20	25.79	151.00	0.0
L 250W 1980N	672.55	25.72	150.98	0.0
L 250W 2010N	672.72	25.75	151.02	0.0
L 250W 2040N	673.03	25.80	151.11	0.0
L 250W 2070N	673.00	25.89	151.17	0.0
L 250W 2100N	672.98	25.96	151.22	0.0
L 250W 2130N	672.88	26.05	151.27	0.0
L 250W 2160N	673.23	26.02	151.29	0.0
L 250W 2190N	673.13	26.10	151.33	0.0
L 250W 2220N	672.96	26.22	151.40	0.0
L 250W 2250N	672.69	26.33	151.43	0.0
L 250W 2280N	672.32	26.46	151.47	0.0
L 250W 2310N	672.10	26.51	151.46	0.0
L 250W 2340N	671.80	26.52	151.40	0.0
L 250W 2370N	671.69	26.62	151.46	0.0
L 250W 2400N	671.27	26.71	151.45	0.0
L 250W 2430N	670.89	26.90	151.55	0.0
L 250W 2460N	670.48	26.95	151.50	0.0
L 250W 2490N	669.84	27.10	151.51	0.0
L 250W 2520N	669.41	27.19	151.50	0.0
L 250W 2550N	670.65	26.85	151.37	0.0
L 250W 2580N	670.71	26.83	151.35	0.0
L 250W 2610N	670.79	26.73	151.24	0.0
L 250W 2640N	670.00	26.87	151.21	0.0
L 250W 2670N	670.44	26.71	151.11	0.0
L 250W 2700N	670.01	26.74	151.05	0.0
L 250W 2730N	669.08	26.85	150.96	0.0
L 250W 2760N	667.98	27.14	151.02	0.0
L 250W 2790N	668.05	27.19	151.07	0.0
L 250W 2820N	667.54	27.42	151.18	0.0
L 1250W 150S	673.96	27.22	153.97	0.0
L 1250W 120S	673.69	27.50	154.18	0.0
L 1250W 90S	673.81	27.48	154.16	0.0
L 1250W 60S	672.45	27.83	154.23	0.0
L 1250W 30S	673.42	27.68	154.24	0.0
L 1250W 00S	675.00	27.30	154.15	0.0
L 1250W 30N	676.59	27.02	154.15	0.0
L 1250W 60N	676.86	27.03	154.19	0.0
L 1250W 90N	678.48	26.72	154.17	0.0
L 1250W 120N	678.54	26.70	154.14	0.0
L 1250W 150N	679.08	26.58	154.11	0.0
L 1250W 180N	677.85	26.92	154.19	0.0
L 1250W 210N	675.46	27.52	154.31	0.0
L 1250W 240N	676.32	27.43	154.37	0.0
L 1250W 270N	678.82	26.89	154.30	0.0
L 1250W 300N	679.34	26.84	154.33	0.0
L 1250W 330N	680.27	26.61	154.25	0.0
L 1250W 360N	679.85	26.77	154.21	0.0
L 1250W 390N	678.49	27.03	154.29	0.0
L 1250W 420N	677.89	27.17	154.30	0.0
L 1250W 450N	676.91	27.41	154.33	0.0
L 1250W 480N	676.75	27.46	154.33	0.0
L 1250W 510N	677.10	27.42	154.23	0.0
L 1250W 540N	678.48	27.22	154.37	0.0
L 1250W 570N	681.00	26.75	154.37	0.0
L 1250W 600N	683.19	26.40	154.41	0.0
L 1250W 630N	683.87	26.30	154.42	0.0
L 1250W 660N	684.42	26.15	154.36	0.0
L 1250W 690N	684.74	26.17	154.42	0.0

L 1250W	720N	684.55	26.21	154.40	0.0
L 1250W	750N	685.28	26.01	154.32	0.0
L 1250W	780N	685.29	26.03	154.32	0.0
L 1250W	810N	685.21	26.10	154.36	0.0
L 1250W	840N	685.23	26.18	154.43	0.0
L 1250W	870N	685.02	26.29	154.48	0.0
L 1250W	900N	684.77	26.39	154.53	0.0
L 1250W	930N	684.96	26.41	154.56	0.0
L 1250W	960N	684.94	26.39	154.52	0.0
L 1250W	990N	684.67	26.52	154.58	0.0
L 1250W	1020N	685.12	26.45	154.57	0.0
L 1250W	1050N	685.00	26.46	154.54	0.0
L 1250W	1080N	685.22	26.43	154.53	0.0
L 1250W	1110N	685.35	26.41	154.52	0.0
L 1250W	1140N	684.40	26.58	154.48	0.0
L 1250W	1170N	683.55	26.84	154.56	0.0
L 1250W	1200N	685.21	26.50	154.53	0.0
L 1250W	1230N	685.42	26.42	154.47	0.0
L 1250W	1260N	685.49	26.44	154.48	0.0
L 1250W	1290N	685.55	26.42	154.46	0.0
L 1250W	1320N	685.41	26.46	154.45	0.0
L 1250W	1350N	685.39	26.40	154.36	0.0
L 1250W	1380N	684.99	26.51	154.38	0.0
L 1250W	1410N	685.00	26.57	154.42	0.0
L 1250W	1440N	684.55	26.66	154.40	0.0
L 1250W	1470N	684.96	26.59	154.39	0.0
L 1250W	1500N	684.79	26.74	154.49	0.0
L 1250W	1530N	684.90	26.74	154.51	0.0
L 1250W	1560N	685.19	26.65	154.45	0.0
L 1250W	1590N	684.40	26.90	154.54	0.0
L 1250W	1620N	685.01	26.75	154.48	0.0
L 1250W	1650N	684.88	26.81	154.50	0.0
L 1250W	1680N	684.82	26.84	154.48	0.0
L 1250W	1710N	685.05	26.78	154.45	0.0
L 1250W	1740N	685.22	26.78	154.45	0.0
L 1250W	1770N	685.02	26.81	154.42	0.0
L 1250W	1800N	684.97	26.86	154.44	0.0
L 1250W	1830N	683.61	27.18	154.48	0.0
L 1250W	1860N	681.19	27.69	154.51	0.0
L 1250W	1890N	681.01	27.76	154.53	0.0
L 1250W	1920N	680.76	27.80	154.50	0.0
L 1250W	1950N	679.47	28.08	154.52	0.0
L 1250W	1980N	679.41	28.02	154.43	0.0
L 1250W	2010N	684.28	26.86	154.18	0.0
L 1250W	2040N	683.88	26.97	154.20	0.0
L 1250W	2070N	684.04	26.91	154.15	0.0
L 1250W	2100N	676.39	0.0		0.0
L 1250W	2130N	673.53	29.41	154.61	0.0
L 1250W	2160N	673.73	29.36	154.57	0.0
L 1250W	2190N	674.43	29.18	154.51	0.0
L 1250W	2220N	677.47	28.44	154.33	0.0
L 1250W	2250N	675.92	28.76	154.33	0.0
L 1250W	2280N	671.21	29.83	154.48	0.0
L 1250W	2310N	668.13	30.49	154.53	0.0
L 1250W	2340N	664.61	31.25	154.60	0.0
L 1250W	2370N	659.73	32.26	154.65	0.0
L 1250W	2400N	659.84	32.25	154.65	0.0
L 1250W	2430N	659.08	32.45	154.68	0.0
L 1250W	2460N	658.86	32.49	154.66	0.0
L 1250W	2490N	658.97	32.42	154.59	0.0

L 1250W	2520N	658.37	32.54	154.58	0.0
L 1250W	2550N	654.97	33.28	154.64	0.0
L 1250W	2580N	651.22	34.14	154.77	0.0
L 1250W	2610N	648.80	34.69	154.84	0.0
L 1250W	2640N	647.69	34.89	154.80	0.0
L 1250W	2660N	659.21	0.0	-	0.0
L 1250W	2690N	661.47	31.69	154.22	0.0
L 1250W	2720N	661.26	31.58	154.04	0.0
L 1250W	2710N	662.11	0.0	-	0.0
L 1250W	2740N	661.87	31.63	154.18	0.0
L 1250W	2770N	661.92	31.58	154.12	0.0
L 1250W	2800N	662.30	31.42	154.02	0.0
L 1250W	2830N	661.80	31.53	154.01	0.0
L 1250W	2860N	662.40	31.39	153.97	0.0
L 1250W	2890N	661.78	31.50	153.94	0.0
L 1250W	2920N	662.71	31.30	153.90	0.0
L 1250W	2990N	663.15	31.35	154.00	0.0
L 1250W	3020N	663.57	31.20	153.91	0.0
L 1250W	3050N	663.38	31.24	153.89	0.0
L 1250W	3080N	663.63	31.10	153.78	0.0

BL 2600"

EXECUTION TERMINATED

CERTIFICATE OF QUALIFICATIONS

I, Douglas R. MacQuarrie, do hereby certify that:

- (1) I am a practising geophysicist with office and residence at Number 5 - 10391 Number 3 Road, Richmond, B.C., Canada.
- (2) I have received the following university degree:
1974 B.Sc. (Combined Honours Geology/Geophysics)
University of British Columbia,
Vancouver, B.C.
- (3) I am a member in good standing of the following professional organizations:
 - (a) B.C. Geophysical Society
 - (b) Canadian Institute of Mining & Metallurgy
- (4) Since 1971 I have been engaged in various exploration and mining geophysics projects throughout Canada.
- (5) The geophysical field work, data reduction and interpretation presented in this report were done under my direct supervision.

DR MacQuarrie

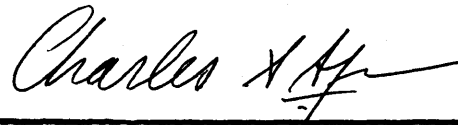
Douglas R. MacQuarrie, BSc

Geophysicist

CERTIFICATE OF QUALIFICATIONS

I, Charles A. Ager, do hereby certify that:

- (1) I am a practising geophysicist with offices and residence at 15423 34th Avenue, Surrey, B.C., Canada.
- (2) I have received the following university degrees:
 - (a) 1968 B.A. (Honours Math/Physics)
California State University, Sacramento, Calif.
 - (b) 1972 M.Sc. (Applied Geophysics)
University of B.C., Vancouver, B.C.
 - (c) 1975 Ph.D. (Applied Geophysics)
University of B.C., Vancouver, B.C.
- (3) I am a member in good standing of the following professional organizations:
 - (a) B.C. Geophysical Society
 - (b) Society of Exploration Geophysicists
 - (c) Association of Professional Engineers
of the Province of British Columbia
- (4) Since 1968 I have been engaged in exploration and mining geophysics over numerous projects in western North America and eastern Canada.
- (5) The geophysical field work and the interpretation of the results in this report were done under my direct supervision.



Charles A. Ager, PhD, PEng
Geophysicist