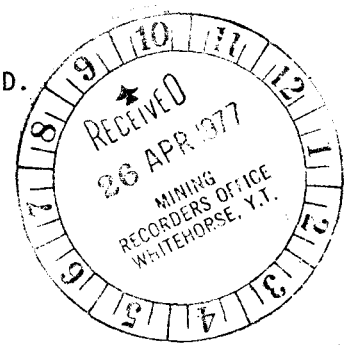
WELCOME NORTH MINES LTD. (N.P.L.)
1027-470 Granville St., Vancouver, B.C. V6C 1V5 Telephone (604) 687-1658

VANGORDA PROJECT



GRAVITY INTERPRETATION FOR WELCOME NORTH MINES LTD.

ON THE

MABEL 1-48 and EVA 40-48
CLAIM GROUPS

Latitude 62°24'N Longitude 133°34'W

N.T.S. 105K-5

WHITEHORSE MINING DISTRICT
YUKON TERRITORY

During the Period July 20 - August 10, 1976

Report submitted November, 1976

b y

Galeski Geophysical Services

070-35

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

$ 1383.00

Resident Geologist or
~~Resident Mining Engineer~~

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

B. R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

TABLE OF CONTENTS

MINERAL CLAIMS

The MABEL 1-48 and EVA 40-47 claim groups consist of the following 56 contiguous mineral claims located in the Whitehorse Mining District of the Yukon (see Fig. 1).

CLAIMS	GRANT NUMBERS	RECORDING DATE
MABEL 1-23	Y92450-Y92472	Feb. 18, 1975
MABEL 24A	Y92473	Feb. 18, 1975
MABEL 24-40	Y92474-Y92490	Feb. 18, 1975
MABEL 41-48	Y98912-Y98919	June 25, 1975
EVA 40-47	Y92442-Y92449	Feb. 17, 1975

Figure 1

VANGORDA 75 PROJECT

WELCOME NORTH/ GETTY MINING PACIFIC

MABEL 1-48 & EVA 40-47

105-K-5

LOCATION AND ACCESS

The MABEL 1-48 and EVA 40-47 claims are located in the Whitehorse Mining District of the Yukon Territory (N.T.S. 105K-5) at latitude 62°24'N, and longitude 133°34'W, 125 miles northeast of Whitehorse, Yukon Territory and 13 miles northwest of the town of Faro, Yukon Territory (see Figure 2).

Access to the property can best be gained by helicopter from Faro or by two cat trails from the Anvil mine site situated 6 miles east of the property in Rose Creek valley. These ground access routes are serviceable only by tracked vehicle or trail bike. One route traverses the northeast slope of Rose Creek valley and provides access to the northeast portion of the property which is above treeline. Both cat trails are crossed by several streams, the lower cat trail being crossed by Rose Creek, a major drainage system. There has been no bridge construction at any of the Rose Creek crossings, however they can be forded with bulldozers at low water.

The property is located at an elevation of 4,500 feet on a broad southwest trending ridge that divides Anvil Creek valley to the north from Rose Creek valley to the south. More than half the property lies above treeline and about a third of the property is vegetated with buck brush. On the south side of the ridge there are several east facing escarpments bordering a tributary of Rose Creek, which give way to less steep timber laden slopes in the valley. Several northwest facing escarpments are located on the north side of the ridge bordering the southwestern boundary of the property. These cliffs provide the best rock exposure apart from scattered outcrops at topographic highs on the ridge.

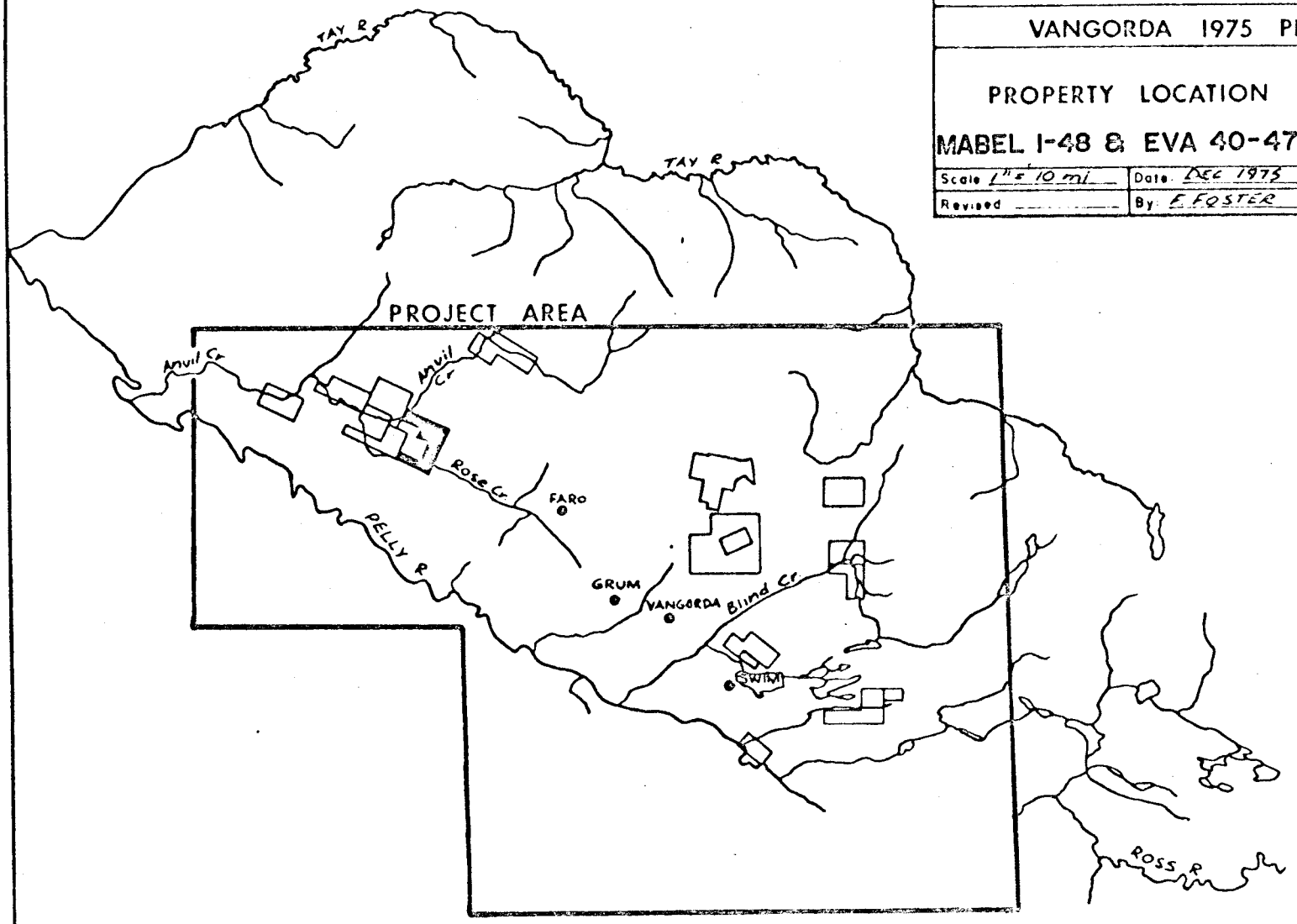
WELCOME NORTH MINES LTD.

VANGORDA 1975 PROJECT

PROPERTY LOCATION MAP

MABEL 1-48 & EVA 40-47 Claims

Scale 1" = 10 mi	Date DEC 1975	NTS 105K
Revised	By E FOSTER	Fig 2



INTRODUCTION

The Mabel Claims Group was surveyed in the summer of 1976 by Airborne Geophysical Surveys Ltd. of Calgary. It consisted of 2.75 miles of data metered on three lines 800 feet apart with station spacing at 100 feet. Approximately 146 stations were metered. The field crew consisted of three men - a gravity meter operator, surveyor and rodman. The instrument used was a LaCoste and Romberg model "G" gravity meter.

Field data were reduced using an elevation correction factor of 0.06 for a surface density of 2.7. Bouguer profiles were constructed from these data and the regional gravitational field was determined. A map of the regional gravitational surface accompanies this report.

Difference values between the regional gravitational field and anomalous Bouguer values were extracted on the profiles, plotted and contoured. The resulting residual map also accompanies this report and is the key map in this interpretation.

Terrain corrections have not been applied to this data. It is felt that these corrections would not eliminate the residual anomalies.

BOUGUER GRAVITY

Bouguer gravity generally trends eastward at a gradient of approximately 0.5 mgals per 500 feet with a nosing trend in that easterly direction.

The most significant features of the Bouguer map is a high centered at stations 15S and 16S on line 252W and a small high at station 22N on line 252W. A sharp negative gradient occurs at the top of the mountain at the northern-most stations of line 252W. This gradient has been taken to be regional in nature. These highs have been extracted from the regional gravitational field and have been contoured on the residual anomaly map.

REGIONAL GRAVITY

The regional gravitational gradient appears to decrease sharply to the northeast and southeast, resulting in a nosing effect pointing almost due east with decreasing gravity to the east. The significance of this can not be determined with the amount of data available.

Terrain corrections along with greater coverage could alter the regional picture along with those residual anomalies that have been extracted.

RESIDUAL GRAVITY

Three separate residual anomalies have been extracted from this data and have been labeled "A", "B" and "C". The extent of the three has not been determined and therefore maximum depth calculations could only be calculated on those edge gradients that can be seen. If steeper slopes on the anomalies are encountered with the addition of more data, then depth calculations could be drastically altered (shallower).

Parameters for the anomalies have been calculated to be as follows:

Anomaly "A" Maximum depth .... 520 feet

Thickness .... 130 feet

The approximate edge of the causative mass is between the 0.7 and 0.8 contours.

Anomaly "B" Maximum depth .... 60 feet

Thickness .... 70 feet

The source of this anomaly should be very near the surface.

Anomaly "C" Maximum depth .... 290 feet

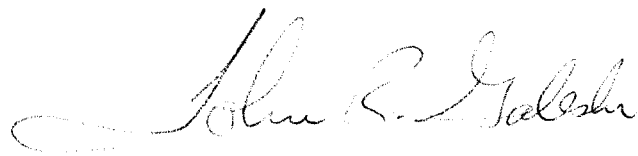
Thickness .... 60 feet

CONCLUSIONS AND RECOMMENDATIONS

This claim group has two good residual anomalies developing - anomalies "A" and "C". It is therefore recommended at this time that additional data be obtained in an effort to determine the extent of these anomalies. Additional data is also important to allow for a better determination of the regional gradients. Terrain corrections could also be important in this respect. Base lines should be metered to tie gravity lines together.

Drilling at this stage of exploration may be premature.

Respectfully submitted by,



J.R. Galeski, P. Geol.

APPENDICES

Airborne Geophysical Surveys
Calgary, Alberta.

GRAVITY COMPUTATION SHEET

Client [illegible] MINES LTD. Line No. 24400 W/ N[illegible] HALF Area MABEL [illegible]

Meter Factor 1.05931 Elevation Corr. Factor 3.060 Prospect Corr. [illegible]

Date	Sta. No.	Elevation	H.H. H.I.	Corrected Elevation	Elevation Corr.	Observed Gravity	Lat. Corr.	Terr. Corr.	Bouguer Gravity	Date	Report	Bouguer Gravity
	[illegible]	4583.55			[illegible]		+0.37		[illegible]			[illegible]
	[illegible]	[illegible]			[illegible]		+0.38		[illegible]			[illegible]
		[illegible]			275.03		0.39		[illegible]			[illegible]
		[illegible]			274.72		[illegible]		[illegible]			[illegible]
		[illegible]			276.08		+.42		788.54			[illegible]
		[illegible].93			277.67		[illegible]		788.60			[illegible]
	[illegible]	[illegible]			279.03		[illegible]		788.63			[illegible]
	[illegible]	[illegible].73			280.66		+.45		788.48			[illegible]
	[illegible]	4713.03			282.73		+.46		788.45			[illegible]
	9	[illegible].36			284.78		+.48		788.40			[illegible]
	10	[illegible].53			287.07		+.49		788.28			[illegible]
	11	[illegible].11			288.18		+.50		788.19			[illegible]
	[illegible]	4521.21			289.27		+.52		788.21			[illegible]
	13	4537.07			290.82		+.53		788.11			[illegible]
	14	[illegible]			291.65		+.54		788.08			[illegible]
	[illegible]	[illegible]			292.59		+.55		787.92			[illegible]
	16	[illegible]			294.36		+.56		787.82	[illegible]		[illegible]
	17	[illegible]			295.41		+.58		787.74			[illegible]
	18	[illegible]			295.73		+.59		787.66			[illegible]
	19	[illegible].70			296.62		+.60		787.55			[illegible]
	20	[illegible]			297.15		+.61		787.43			[illegible]
	21	[illegible]			297.84		+.62		787.27			[illegible]
	[illegible]	[illegible].19			298.57		[illegible]		787.19			[illegible]
	[illegible]	[illegible].15			299.28		+.65		787.08			[illegible]
	[illegible]	[illegible]			299.82		+.66		786.98			[illegible]
	25	[illegible].57			300.33		+.68		786.90			[illegible]
	[illegible]	[illegible].73			300.70		+.69		786.76			[illegible]
	[illegible]	[illegible]			300.88		+.70		786.73			[illegible]
	[illegible]	[illegible]			301.09		+.71		786.59			[illegible]
	[illegible]	5027.90			301.67		+.72		786.39			[illegible]
	[illegible]	5036.54			302.19		[illegible]		786.38			[illegible]
	[illegible]	5041.69			302.50		[illegible]		786.32			[illegible]
	[illegible]	[illegible]			302.88		+.76		786.18			[illegible]
	[illegible]	5057.21			303.43		[illegible]		786.07			[illegible]
	[illegible]	[illegible].06			303.96		+.78		785.91			[illegible]
	[illegible]	5073.43			304.40		+.80		785.83			[illegible]
	[illegible]	[illegible]			304.85		+.81		785.69			[illegible]
	37	[illegible].11			305.22		+.82		785.50			[illegible]

Airborne Geophysical Surveys
Calgary, Alberta.

GRAVITY COMPUTATION SHEET

ient WELCOME NORTH Line No. 244 WEST | SOUTH Area MABEL

Meter Factor 1.05531 Elevation Corr. Factor 0.066 Prospect Corr. 500.00 mgls

Date	Sta. No.	Elevation	H.H. H.I.	Corrected Elevation	Elevation Corr.	Observed Gravity	Lat. Corr.	Terr. Corr.	Bouguer Gravity	Date	Report	Bouguer Gravity
	0+00	4583.55			275.01	512.94	+.37		785.[illegible]		512.96	[illegible]
	1 SOUTH	4547.92			272.[illegible]	515.17	+.36		788.[illegible]			
	1	4557.22			[illegible]	514.51	+.35		788.[illegible]			
	2	4575.69			274.5[illegible]	513.51	+.33		788.[illegible]			
	3	4590.85			[illegible]	512.65	+.32		788.[illegible]			
	4	4602.35			276.[illegible]	511.57	+.30		788.[illegible]			
	5	4595.01			[illegible]	512.44	+.29		788.[illegible]			
	6	4573.30			275.[illegible]	513.74	+.28		788.[illegible]			
	7	4582.09			275.[illegible]	513.14	+.27		788.[illegible]			
	8	4504.61			270.[illegible]	518.21	+.26		788.[illegible]			
	9	4459.96			267.60	521.03	+.24		788.[illegible]			
	10	4420.53			265.[illegible]	523.[illegible]	+.23		788.[illegible]			
	11	4381.36			262.[illegible]	525.[illegible]	+.22		787.[illegible]			
	12	4352.04			261.[illegible]	527.[illegible]	+.21		788.[illegible]			
	13	4341.58			260.[illegible]	528.[illegible]	+.20		788.[illegible]			
	15	4437.20			[illegible]	520.[illegible]	+.18		788.[illegible]			
	16	4455.64			[illegible]	[illegible]	+.17		[illegible]			
	17	4463.33			[illegible]	[illegible]	+.16		[illegible]			
	18	4475.00			[illegible]	[illegible]	+.14		[illegible]			

Airborne Geophysical Surveys
Calgary, Alberta.

GRAVITY COMPUTATION SHEET

ent [illegible] Line No. 252 WEST Area [illegible]

Meter Factor 1.059931 Elevation Corr. Factor [illegible] Prospect Corr. _____

Date	Sta. No.	Elevation	H.H. H.I.	Corrected Elevation	Elevation Corr.	Observed Gravity	Lat. Corr.	Terr. Corr.	Bouguer Gravity	Date	Report	Bouguer Gravity
	31. North	5136.37			308.18	476.96	+.86		784.46			
	30	5163.08			309.72	473.58	+.85		784.21			
	29	5167.64			310.00	473.68	+.84		[illegible]			
	28	5168.64			310.12	473.91	+.88		24.76			
	27	5156.95			309.42	474.86	+.82		25.10			
	26	5137.34			308.24	476.54	+.80		[illegible]			
	25	5107.09			306.43	478.22	+.79		26.04			
	24	5112.66			306.76	479.16	+.78		26.70			
	23	5106.04			306.36	479.89	+.77		[illegible]			
	22	5097.42			305.84	480.41	+.75		[illegible]			
	21	5080.10			304.81	481.17	+.74		[illegible]			
	20	5064.36			303.86	482.33	+.73		[illegible]			
	19	5049.42			302.97	483.47	+.72		[illegible]			
	18	5036.40			302.19	484.15	+.75		87.05			
	17	5023.98			301.44	485.19	+.69		[illegible]			
	16	5008.72			300.52	486.12	+.68		[illegible]			
	15	4993.27			299.60	[illegible]	[illegible]		[illegible]			
	14	4972.62			[illegible]	488.72	[illegible]		[illegible]			
	13	4962.37			[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	
	12	4946.92			[illegible]	[illegible]	[illegible]		[illegible]	NV		
	11	4918.74			[illegible]	492.42	+.62		[illegible]			
	10	4905.39			[illegible]	493.35	+.61		[illegible]			
	9	4884.07			293.21	494.44	+.60		[illegible]			
	8	4875.25			292.68	495.34	+.59		[illegible]			
	7	4855.77			[illegible]	496.65	+.57		[illegible]			
	6	4845.49			[illegible]	[illegible]	[illegible]		[illegible]			
	5	4831.61			[illegible]	[illegible]	+.55		[illegible]			
	4	4819.03			[illegible]	499.03	+.54		[illegible]			
	3	4813.96			[illegible]	499.37	+.52		[illegible]			
	2	4802.26			[illegible]	[illegible]	+.51		[illegible]			
	1	4787.08			287.34	501.01	+.50		83.03			
	0+00	4773.76			[illegible]	502.01	-.09		[illegible]			
	1 S	4765.44			285.93	[illegible]	+.48		28.98			
	2	4754.18			[illegible]	503.32	+.43		[illegible]			
	3	4742.35			284.54	504.18	[illegible]		[illegible]			
	4	4728.65			[illegible]	[illegible]	[illegible]		[illegible]			
	5	4716.21			[illegible]	[illegible]	+.37		80.35			
	6	4708.56			282.51	[illegible]	+.42		[illegible]			
	7	4691.11			[illegible]	[illegible]	[illegible]		[illegible]			
	8	4679.68			280.79	[illegible]	.39		[illegible]			
	9	4667.65			[illegible]	[illegible]	+.38		[illegible]			
	10	4659.07			[illegible]	509.59	+.37		[illegible]			
	11	4651.26			[illegible]	510.09	+.35		[illegible]			
	12	4642.42			[illegible]	510.76	[illegible]		[illegible]			
	13	4633.22			[illegible]	511.37	[illegible]		[illegible]			
	[illegible]	4625.04			[illegible]	[illegible]	.32		[illegible]			
	[illegible]	4627.94			[illegible]	[illegible]	+.31		[illegible]			
	[illegible]	4626.24			[illegible]	[illegible]	-.29		[illegible]			
	[illegible]	4622.64			[illegible]	[illegible]	[illegible]		[illegible]			
	[illegible]	4623.44			[illegible]	[illegible]	[illegible]		[illegible]			
	[illegible]	[illegible]			[illegible]	511.82	[illegible]		[illegible]			

Airborne Geophysical Surveys
Calgary, Alberta.

GRAVITY COMPUTATION SHEET

ient [illegible] Line No. 259 WEST (CONT) Area [illegible]

Meter Factor [illegible] Elevation Corr. Factor 0.060 Prospect Corr. [illegible]

Date	Sta. No.	Elevation	H.H. H.I.	Corrected Elevation	Elevation Corr.	Observed Gravity	Lat. Corr.	Terr. Corr.	Bouguer Gravity	Date	Report	Bouguer Gravity
	[illegible]	4628.15			[illegible]	511.79	[illegible]		[illegible]			
	21	4626.50			[illegible]	511.89	+.23		[illegible]			
	[illegible]	4622.38			[illegible]	512.03	+.22		[illegible]			
	[illegible]	4622.00			[illegible]	[illegible]	+.21		[illegible]			

Airborne Geophysical Surveys
Calgary, Alberta.

GRAVITY COMPUTATION SHEET

ient Wilcox North Line No. 926. West Area Mabel

Meter Factor 1.052.31 Elevation Corr. Factor 0.046 Prospect Corr. 500.00

Date	Sta. No.	Elevation	H.H. H.I.	Corrected Elevation	Elevation Corr.	Observed Gravity	Lat. Corr.	Terr. Corr.	Bouguer Gravity	Date	Report	Bouguer Gravity
	17 North	4799.50			287.97	499.22	+.43		78[illegible]			
	16	4782.78			286.97	500.16	+.44		87.60			
	15	4756.34			285.39	501.78	+.43		87.59			
	14	4735.09			284.11	502.98	+.41		87.55			
	13	4729.73			283.79	503.21	+.40		87.39			
	12	4710.71			282.64	504.27	+.39		87.30			
	11	4683.96			281.04	505.98	+.38		87.40			
	10	4657.11			279.43	507.56	+.36		[illegible]			
	9	4626.01			277.56	509.[illegible]	+.35		[illegible]			
	8	4594.02			275.64	N.P.	+.34		—			
	7	4555.28			273.32	512.79	+.33		[illegible]			
	6	4515 23			270.91	514.20	+.31		87.42			
	5	4469.39			268.16	518.[illegible]	+.30		[illegible]			
	4	4422.32			265 34	521.79	+.29		[illegible]			
	3	4373.59			262.42	524.70	+.28		87.40			
	2	4321.97			259.32	527.59	+.27		87.18			
	1	4277.85			256.61	530.41	+.25		87 33			
	0+00	4245.82			254.75	533.98	+.24		[illegible]			
	1+00	4222.62			253.36	532.98	+.23		[illegible]			
	2	4194.17			251.65	534.67	+.22		87.54			
	3	4183.10			250.98	534.51	+.20		87.20			
	4	4168.13			250.08	534.35	+.19		87.05			
	5	4164.31			249.85	534.44	+.18		87.39			
	6	4148.51			248.91	533.59	+.17		87.67			
	7	4144.99			248.69	533.91	+.16		87.76			
	8	4136.00			248.16	533.85	+.14		87.75			
	9	4129.50			247.77	533.97	+.13		[illegible]			
	10	4126.67			247.60	540.34	+.12		[illegible]			
	11	4106.66			246.40	541.43	+.11		87.94			
	12	4091.15			245.47	542.30	+.09		87.86			
	13	4095.05			245.70	542.19	+.08		87.96			
	14	4065.78			243.95	543.95	+.07		87.97			
	15	4061.90			243.71	N.P.			—			
	16	4060.63			244.65	542.45	+.04		88.34			
	17	N.V.			24—	543.52 I	+.03					
	18	4110.03			246.65	N.P.						
	19	4107 51			246.45	542.07	+.01		88.53			

HECLA 236 W
HECLA 228 W
HECLA 220 W
HECLA 212 W
HECLA 204 W
4800 N
4400 N
4000 N
3600 N
3200 N
2800 N
2400 N
B/L HECLA GRID
2000 N
1600 N
1200 N
800 N
400 N
BASE LINE
400 S
800 S
1200 S
1600 S
2000 S
2400 S
2800 S
3200 S
3600 S
4000 S
4400 S
4800 S
5200 S
CAMP
ANVIL CREEK
332+00 W
324+00 W
316+00 W
308+00 W
300+00 W
292+00 W
284+00 W
276+00 W
268+00 W
260+00 W
252+00 W
244+00 W
236+00 W
228+00 W
220+00 W
212+00 W
204+00 W
JOE BASE LINE #1
JOE BASE LINE #2
JOE BASE LINE #4
JOE BASE LINE #5
GROWN 45 TIE LINE
CROWN BASE LINE
CROWN L 45E
CROWN L 46E
CROWN L 47E
CROWN L 48E
ROSE CREEK
W.P.
SCALE
1" = 400'
N
LONGITUDE
LATITUDE

LEGEND

- Claim posts, as located on gov't claim map
- Claim posts, as located in the field
- Grid lines

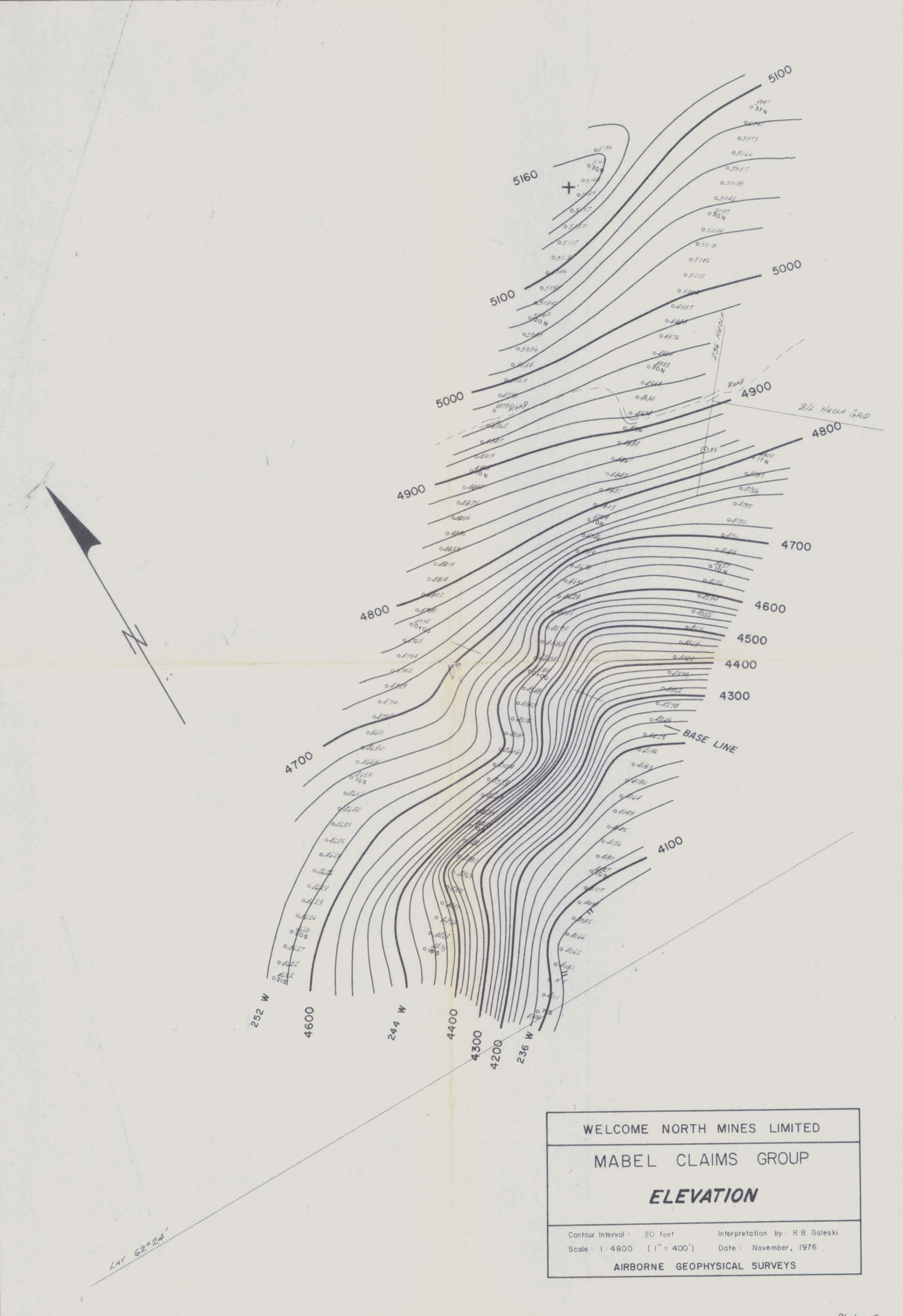
WELCOME NORTH MINES LTD.

VANGORDA 1975 PROJECT

MABEL 1-48 & EVA 40-47 CLAIMS

GRID LOCATION MAP

Scale: 1 INCH = 400 FT	Date: JUNE 1975	NTS 105K/5
Revised:	By: F. FOSTER	Plate 1



WELCOME NORTH MINES LIMITED

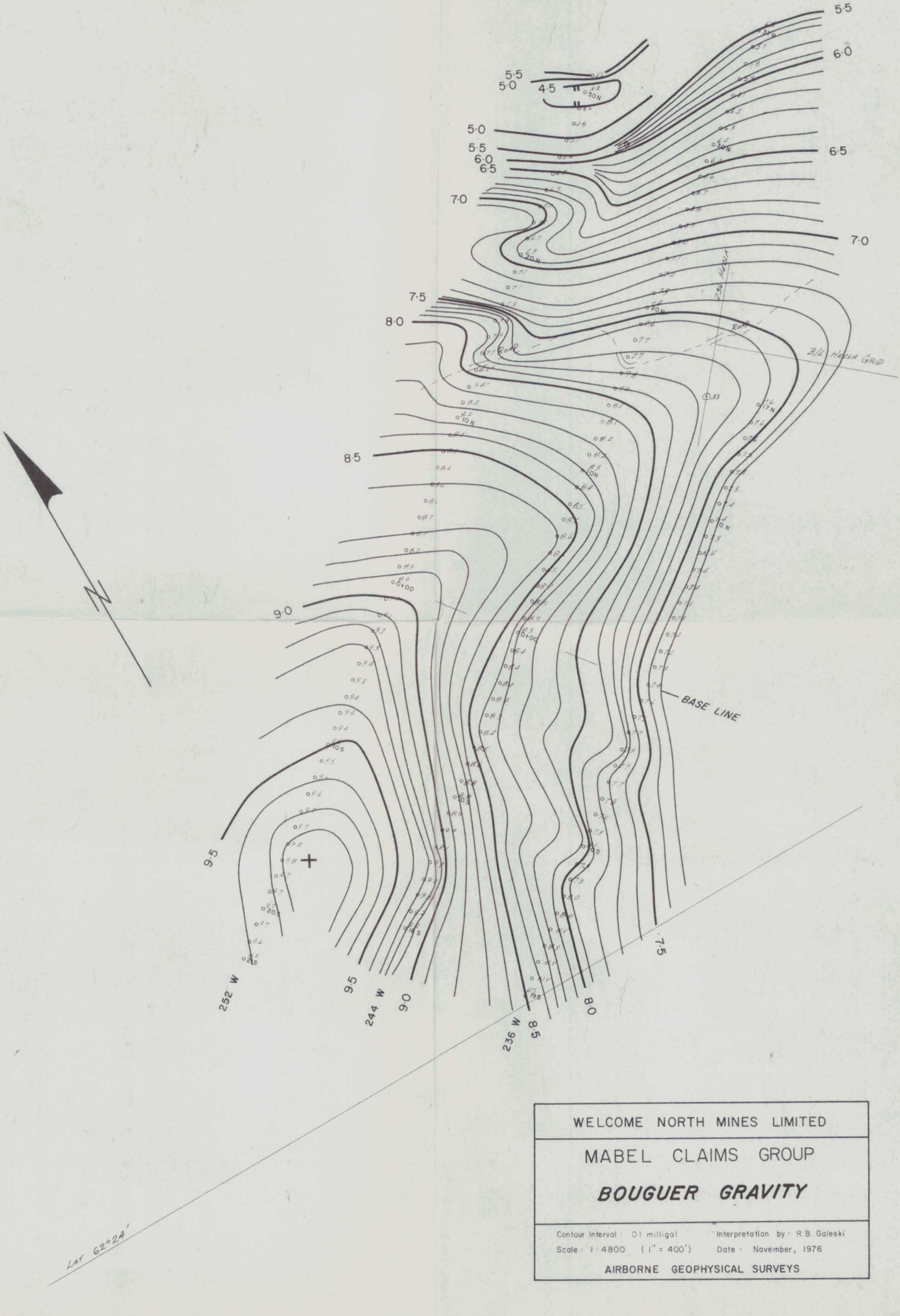
MABEL CLAIMS GROUP

ELEVATION

Contour Interval : 20 feet — Interpretation by : R.B. Galeski

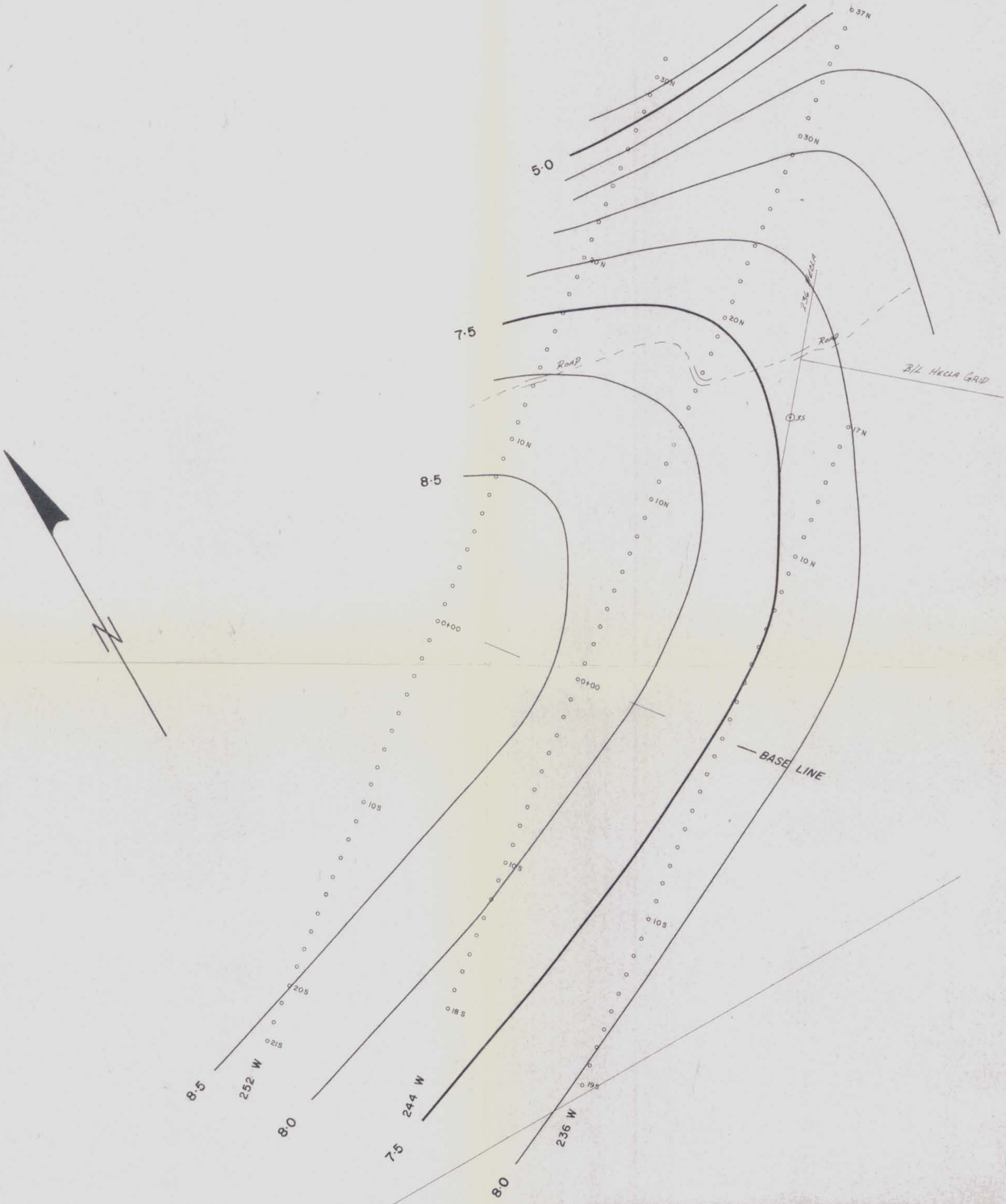
Scale : 1 : 4800 (1" = 400') — Date : November, 1976

AIRBORNE GEOPHYSICAL SURVEYS



WELCOME NORTH MINES LIMITED	
MABEL CLAIMS GROUP	
BOUGUER GRAVITY	
Contour Interval : 0.1 milligal	Interpretation by : R.B. Galeski
Scale : 1 : 4800 (1" = 400')	Date : November, 1976
AIRBORNE GEOPHYSICAL SURVEYS	

Plate 6



WELCOME NORTH MINES LIMITED	
MABEL CLAIMS GROUP	
REGIONAL GRAVITY	
Contour Interval : 0·5 milligal	Interpretation by : R.B. Galeski
Scale : 1 : 4800 (1" = 400')	Date : November, 1976
AIRBORNE GEOPHYSICAL SURVEYS	

WELCOME NORTH MINES LIMITED

MABEL CLAIMS GROUP

RESIDUAL GRAVITY

Contour Interval : 0.1 milligal — Interpretation by : R.B. Goleski

Scale : 1 : 4800 (1" = 400') — Date : November, 1976

AIRBORNE GEOPHYSICAL SURVEYS

Plate 8