

The Granby Mining Company Limited
PHOENIX COPPER DIVISION
Box 490
Grand Forks, B. C.

5356

1974 ORO DENORO PROJECT

82E/2E

A magnetometer and geological survey on part of the Oro Denoro property optioned by Granby from W. E. McArthur Jr. located near Wilgress Lake, eight miles northwest of Grand Forks, B. C. in the Greenwood Mining Division.

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 5356	MAP

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MAPS IN POCKET

#1-4 Oro Denoro Magnetometer Survey
4 sheets, scale 1" = 200'

#5 Oro Denoro Magnetometer Survey
scale 1" = 400'

#6 Claim Map
scale 1" = 400'


#7 Oro Denoro Geological Map
scale 1" = 400'

#8 Oro Denoro Sections
scale 1" = 400'

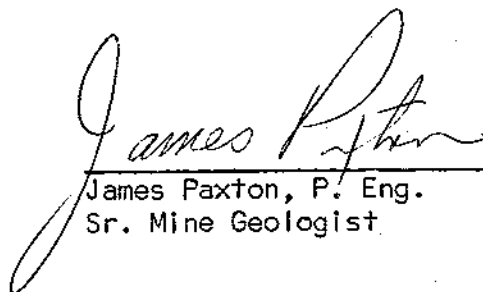
#9 Index map

1. SUMMARY

During the summer and fall of 1974 the old Noranda grid line system covering the Oro Denoro, Emma and B. C. Mines was re-cut and re-chained. A magnetometer survey was done on the lines and the geology was mapped. J. R. Lucke did the magnetometer work and supervised the grid preparation. J. Paxton did the geological mapping. Thirty-one miles of grid line were involved, spaced 400 feet apart. Total cost of the project was \$14,000.



J. R. Lucke
Assistant Geologist



James Paxton, P. Eng.
Sr. Mine Geologist

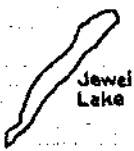
2. INTRODUCTION

The area covered in this report lies eight miles northwest of Grand Forks, B. C. and is traversed by trans-provincial highway No. 3 plus numerous trails and old railway grades. Most parts of the area are easily accessible by car or jeep during the summer months.

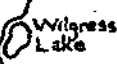
The work on the area was done intermittently during two periods, May 27th to June 26th, 1974 and September 10th to December 13th 1974.

The work consisted of re-establishing a twenty year old system of grid lines by re-cutting and re-chaining, running a ground magnetometer over the lines, and mapping the geology of the area using the lines for control.

The line cutting was done by a crew from James Forshaw Limited, Greenwood, B. C. under the supervision of J. R. Lucke, Granby Geological Assisstant. The magnetometer survey was also done by J. R. Lucke. The geological mapping was done by J. Paxton, Granby Senior Mine Geologist.

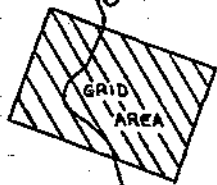


Jewel Lake



Wilgress Lake

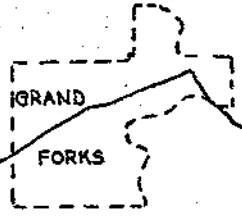
GREENWOOD



GRID AREA

Highway No. 3

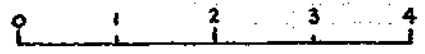
Department of
 Mines and Petroleum Resources
 TECHNICAL REPORT
 NO. 5356 MAP #9



GRAND FORKS

CANADA 1972

49° 00'



SCALE: 1 INCH = 2 MILES

118° 30'

5356

INDEX MAP

ORO DENORO PROPERTY

MAP 9

GREENWOOD MINING DIVISION

JANUARY 1975

J.R. Laska

3. Schedule of Mining Claims Covered by the Grid

<u>Crown Grants</u>		<u>Located Claims</u>	
	Minnie Moore L 593	(2)	Jumbo Fr. 37665 A
	Jumbo L 592	(2)	New Stan 1 37247 H
	Emma L 591	(2)	Eye 1 Fr. 36969 A
	Oro Denoro L 692	(2)	Eye 2 Fr. 36970 A
(1)	Matabelle Fr. L 2114	(2)	Jagged Fr. 37254 H
	Mary B L 1568	(2)	Prado 1 37058 D
	Norton Fr. L 968		Cyclops 20028 H
	Bluebell L 2136	(2)	Eye 4 Fr. 37186
(1)	Mountain View L 1533	(2)	Super Chief Fr. 37188
	Vashti L 950		Silver Chief Fr. 20029 H
(1)	B.C. L 882	(2)	Cap 1 Fr. 36972 A
(1)	London N ^o 2 L 465	(2)	Cap 2 Fr. 36973 A
	Novelty Fr. L 949	(2)	Cap 3 Fr. 36974 A
	B.C. Fr. N ^o 2 L 464		Jeep 11 Fr. 19070 E
	May L 1409		Jeep 12 Fr. 19071 E
	Daisy Fr. L 948		Brayfogle 15819 M
	Cordick L 625		Denoro Fr. 16937 M
	Erwin L 1691		Jeep 10 Fr. 19069 E
	R. Bell L 1506		Remington Fr. 15866 N
(2)	Rockland L 1493		April Fr. 15826 M
(1)	Mountain Rose L 794		Joiner Fr. 15827 M
	Duplicate L 863		Chemical Fr. 15861 N
			Jeep 18 Fr. 19077 E
			Jeep 9 Fr. 19068 E
			Jeep 8 Fr. 19067 E
		(2)	Pac 44 Fr. 22147 P
		(2)	Pac 48 Fr. 22151 P
		(2)	Pac 52 Fr. 22155 P
			Jeep 1 Fr. 19066 E
		(2)	Sac 1 Fr. 37685 A
		(2)	Sac 2 Fr. 37686 A

(1) Not included in option, not owned by Granby

(2) Not included in option, owned by Granby

4. GRID PREPARATION

Two old sets of grid lines covered the area. It was decided to clean out these old lines rather than cut new ones. Clearing these old lines was done by a slashing crew hired from James Forshaw Limited of Greenwood, B. C. Chaining and re-picketting of the lines was done by J. R. Lucke and one Forshaw man.

4-1 Line Cutting (J. R. Lucke)

The grid system utilized in the project was essentially Norand's old grid which had been cut prior to 1956. This consisted of three parallel baselines and numerous crosslines. The baselines were 3,000 feet apart (0W, 3000W, 6000W) and had a bearing of about N21°E, while the crosslines occurred at 400 foot intervals. In addition, an adjacent grid to the east (Bayland Mines Ltd.) corresponded quite well to Noranda's and it was also used.

For the most part, line cutting consisted of cleaning out new growth on the original lines. In many areas, this new brush was exceptionally thick. In addition, the 6W baseline was extended 1,200 feet to the south and new crosslines were cut in this region to the 3W baseline. A number of lines were also extended to the west of the 6W baseline and several new ones cut south of the old Bayland grid.

Cutting on the old lines was done by two men working separately with chain saws, each following the old cuttings. New lines were cut using two 2-man crews.

In this case, one man cut and placed pickets, maintaining a straight line by line of sight, while the other cleared brush with a chainsaw.

In all about 26 miles of line were cut or cleared.

4-2 Line Chaining (J. R. Lucke)

The chaining of lines was conducted with a 300 foot nylon chain. On the baseline, stations were marked at 100 foot intervals (normally the original stations) and fluorescent red pickets implanted every 400 feet. Crossline stations were established every 200 feet and a picket placed at each one. The position of each station was written on the side of the picket.

It is to be noted that the chaining was done strictly on a slope basis. That is, no correction was made for slope since it was desired to have a constant distance between all stations. However, the slope of the line was read with an inclinometer at each measurement so that the horizontal distance between any two stations could be calculated later. Hence on a plan of the grid, the distance between adjacent stations often appears to be somewhat less than 200 feet.

Total chained line amounted to just under 31 miles.

5. MAGNETOMETER SURVEY (J. R. Lucke)

The survey was done with a sharpe MF-1 Fluxgate magnetometer. This instrument has a range to $\pm 100,000$ gammas with several scale selections. The lowest scale reads to 1,000 gammas with divisions of 20 gammas. The instrument measures the vertical component of the earths magnetic field only.

Before beginning the survey an area with an essentially neutral magnetic reading was chosen and the instrument zeroed. The purpose of this was to enable most readings to be taken in the most sensitive 0 - 1,000 gamma range.

The method used for the actual survey was to traverse two lines in a figure eight fashion, starting from a baseline station. For example, a line might be started at 0W B/L and surveyed to 3W B/L. Then the next line would be started at 3W B/L and done back to 0W B/L. To complete the loop, the original station on 0W would be read again. From this point, a loop on the same two crosslines would be done to 24E and closed back to the same station on 0W.

The time of each reading was recorded and a complete loop generally took 1 to 1½ hours. Readings were generally taken at 100 foot intervals. The same type of loop system was also used from 3W to 6W and west of 6W.

Once all the readings were completed, each loop was adjusted for diurnal variation. That is, the difference in the first and last readings for each loop (same station) was distributed around the entire loop according to the relative time for each reading.

Since the survey was carried out over a considerable period

of time, correcting readings through each loop did not allow for time differences in separate loops. In order to correlate all the loops, the 0W and 6W baselines were surveyed as a loop. As usual, the first station read was also the last and all readings on these two baselines were adjusted accordingly. Then the baseline reading for each crossline loop was corrected to correspond with the baseline loop. All crossline loop readings were then corrected a second time so that they would be consistent with their baseline readings.

6. GEOLOGICAL MAPPING

6-1 General Statement

The geology of the area was mapped using traverses along the grid lines except in areas of extensive outcrop where some traversing across grid lines was done. The geology was mapped in the field and compiled in the office on a scale of 1 inch = 200 feet. This was then reduced to 1 inch = 400 feet.

No difficulty was encountered in the field recognizing and classifying rocks of the syenite and limestone groups but the pyroclastic type rocks gave a good deal of difficulty. Thus in the map no attempt was made to separate what may be pre Brooklyn Limestone conglomerates from post Brooklyn Limestone conglomerates and pyroclastics some of which were mapped by Carswell as volcanic neck breccias. Also a group of fine pyroclastic rocks which appeared to be mixtures and gradations between diorite, chert sandstone and andesite were grouped under the blanket designation "tuff".

6-2 Table of Formations

Era	Period	Formation	Lithology
Cenozoic	U. Tertiary (?)	Coryell	Syenite, pulaskite
	Intrusive Contact		
	Eocene	Kettle River	Arkosic sandstone
Unconformity			
Mesozoic	Cretaceous	Lion Creek Granodiorite	Granodiorite, Skarn
		Emma diorite	Diorite porphyry
	Intrusive Contact		
	Triassic	Eholt?	Tuff Andesite Diorite Agglomerate
		Brooklyn	Sharpstone Conglomerate Chert Sandstone Limestone Argillite Sharpstone

6-3 Description of Formations

6-3-1 Brooklyn Formation

The Brooklyn Formation was described by G. S. C. geologist O. E. LeRoy in 1911. This description was later modified by R. H. Seraphim in 1956.

A. Sharpstone Conglomerate

A mixture of angular, subangular and rounded

chert, andesite, and limestone fragments in a generally sparse fine grained green chloritic or siliceous matrix. Maximum size of fragments is generally 5 cm. Locally, faint bedding can sometimes be seen.

B. Argillite

Fine grained massive, grey to green rock. May be ash tuff rather than argillite. Local faint bedding.

C. Limestone

White to cream coloured limestone. Generally more or less recrystallized. Ranges from very well bedded to completely massive to fractured and brecciated types. Generally unfossiliferous. Locally altered to garnet skarn.

D. Chert Sandstone

Sandstone consisting of fine to coarse grained, grey to green chert fragments in a dark green siliceous matrix. Often looks like a fine grained sharpstone conglomerate.

6-3-2

Above the typical Brooklyn Formation rocks lies several distinct rock types whose age relationships are not known.

A. Agglomerate

Consists of rounded cherty, fine grained greenstone fragments 10 to 20 cm. in a greenstone matrix. This rock occurs in exposed trenches east of the Emma Mine.

B. Diorite, Andesite, Tuff

In the area mapped, these rocks appear to have indistinct contacts and be gradational with each other and with chert sandstone. They are generally medium to coarse grained and consist of varying amounts of white plagioclase, hornblende, and chert fragments in a fine grained groundmass. These rocks also contain up to 10% pyrite.

These rocks are in part, the same as the "Eholt Formation" mapped by H. T. Carswell in 1956.

6-3-3 Emma Diorite

This rock type was named by H. T. Carswell in 1956, and consists of white phenocrysts of altered plagioclase 3 to 5 mm. in a fine grained diorite groundmass made up of hornblende and white plagioclase and chlorite.

6-3-4 Lion Creek Granodiorite

This rock type was named by H. T. Carswell in 1956, and it consists of plagioclase, quartz, hornblende, biotite, orthoclase, muscovite and magnetite. It is typically medium to coarse grained and leucocratic with a typical granitoid texture. In contact with limey rocks at the Oro Denoro Mine it forms garnet skarn and most of the other skarn zones in the area are thought to be due to this intrusive.

6-3-5 Kettle River Formation

This rock occurs in only one small part of the map area and consists of medium grained cream to brown feldspar grains plus minor biotite in a fine grained brown kaolinized matrix.

6-3-6 Coryell Formation

This is a group of igneous rocks generally of syenite composition, ranging in colour from grey to pale pink to deep red orange and usually having a porphyritic texture. The phenocrysts are euhedral pink to orange orthoclase and are sometimes associated with euhedral biotite in a fine grained syenite or pulaskite groundmass. Distinct and well formed chill margins several feet wide are a feature of these rocks which occur as both intrusives and extrusives.

6-4 Structure

During the mapping very little direct evidence of structure could be observed. Fold axes are generally obliterated by metamorphism. Few contacts are well exposed and most fault zones are either buried under overburden or intruded by more recent rocks. From the evidence that is available, the following structural picture can be constructed:

The Brooklyn rocks have been tightly folded. Where bedding can be recognized it is generally dipping at more than 60°. The Brooklyn rocks are intruded by Lion Creek Granodiorite. This intrusive is an east-west trending arm extending from the Greenwood diorite batholith situated west

of the map area. The Brooklyn rocks have also been cut by a series of north-south faults which generally dip steeply to the west. In some cases the Lion Creek Granodiorite has followed these faults and created skarn zones and base metal deposits. The area has subsequently been cut by flat lying faults and intruded by Coryell rocks in the form of numerous flat lying dykes and extrusive flows.

6-5 Economic Geology

Several small mines operated in the area in the past. In 1974 the Granby Mining Company Limited optioned the old Oro Denoro Mine and began open pit mining operations on it. Most of the old mines and showings in the area have the following characteristics:

1. Chalcopyrite, pyrite, magnetite mineralization with traces of silver and gold. Bornite and chalcocite are rare.
2. The ore zones have steep dips and are elongated in a north-south direction.
3. The ore zones are located within or beside bodies of garnet skarn formed by contact metamorphism of the Brooklyn Limestone.

From the preceding it is concluded that the main ore control in the area is the intersection of north-south steep faults and contacts with the underlying Lion Creek Granodiorite.

The following old mines and showings occur in the map area:

A. Oro Denoro Mine

Consists of numerous steep dipping mineralized fractures in a large body of garnet skarn. The skarn

also contains some fine disseminated chalcopyrite. The ore zone is extremely irregular and the main ore mineral is chalcopyrite. Traces of tetrahedrite have been reported. It produced 171,000 tons of ore in the period 1903 to 1921 with a grade of 1.3% Cu., 0.03 oz./ton Au. and 0.22 oz/ton Ag. Drilling by several companies in the 1960's has outlined over a million tons of additional ore.

B. Emma Mine

Consists of an elongated lens of magnetite-chalcopyrite ore 700 feet long and 400 feet deep, dipping vertically and striking N18°E. It produced 255,000 tons of ore in the period 1901 to 1924 with a grade of 1.00% Cu., 0.03 oz/ton Au. and 0.30 oz/ton Ag.

C. B. C. Mine

Consists of a lens of chalcopyrite, pyrite pyrrhotite ore lying along the contact between garnet skarn and Brooklyn Limestone. The zone is 200 feet long and 65 feet wide, dips vertically and strikes N20°E. It is reported that below the surface the body is cut by numerous flat lying syenite dykes. Also a hole drilled from the bottom of the mine to a depth below surface of 911 feet, reportedly intersected scattered mineralization and granodiorite which is presumably Lion Creek type. The mine produced 103,476 tons of ore between 1900

and 1919 which had a grade of 4.36% Cu., 0.01 oz/ton Au. and 2.07 oz/ton Ag.

D. Mountain Rose Mine

This mine is inaccessible. Ore on the dump consists of massive pyrite with blebs of chalcopyrite. It appears to occur below a pulaskite sill in Brooklyn Limestone. There is a small intrusion of fine grained diorite (?) on the east side of the zone. Production during the period 1904 to 1910 amounted to 11,629 tons of ore having a grade of 0.21% Cu. Apparently the ore was used as a flux at the Grand Forks Smelter.

E. R. Bell Mine

Consist of several shafts and drifts. The underground workings are inaccessible. The ore apparently occurred as a small lens of chalcopyrite associated with magnetite and lying along a north-south contact of the Brooklyn Limestone and andesite. In 1901, 294 tons of ore were produced with a grade of 7.8% Cu. and 12.1 oz/ton Ag.

F. Bluebell Mine

Consists of two small shafts presently filled with water. The shafts lie in a small skarn zone at the contact of the Brooklyn Limestone. Production reported for 1938 to 1939 is 389 tons 0.1% Cu., 0.66 oz/ton Au. and 0.31 oz/ton Ag.

G. Cyclops Mine

This consists of a small lens 10 feet wide, 150 feet long striking N10°E and dipping vertically. It is composed mainly of garnet, sphalerite and magnetite with traces of galena. There is no recorded production although it appears some trial shipments were made. It was drilled in 1954 by New Jersey Zinc Corp. and this drilling outlined 5,000 tons of 8 - 10% Zn. ore.

H. Mountain View, Swallow, Jumbo, Rathmullen

These are small skarn showings with small amounts of chalcopyrite mineralization. In origin and association they appear similar to the larger deposits.

6-6 Conclusions

The Oro Denoro area has been mapped previously by Carswell, Serphim, Little, Van Houten at various times between 1950 and 1970. However, their maps were on a large scale and usually showed only the major outcrops. It was hoped in 1974 that their maps could be improved upon by finding more outcrops, especially the small insignificant ones, and locating them by means of the grid lines. This was achieved and the 1974 map gives a more accurate picture of the rock contacts than any previous map. Detailed study of lithology and stratigraphical relationships was not attempted and the numerous problems in these areas were not resolved. In his 1956 map of the area Carswell shows a "volcanic neck" northeast of the R. Bell

Mine. Although this structure may exist it is not strikingly evident. It is shown in red outline on the 1974 map.

7. BIBLIOGRAPHY

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1903: Preliminary report on the Boundary Creek District, British Columbia; Geol. Survey Can., Sum. Rept. 1902, p.p. 92A - 138A.

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1965: Report of activities; Field, 1964. Geol. Surv. Can. Paper 65-1 pp. 56-60.

Monger, J. W. H.

1968: Early tertiary stratified rocks, Greenwood Map area (82E/2) B. C. Geol. Surv. Can. paper 67-42.

Seraphim, R. H.

1956: Geology and copper deposits of Boundary District, B. C. Trans. Can. Inst. Mining Met., Vol. 59, pp. 384 - 394 (1956).

Van Houten, C.

1972: Geology Map, Phoenix Exploration Area; The Granby Mining Company Limited Map sheet No. 2 (unpublished)

8. TIME STATEMENT

8-1 Line Cutting

Cudworth (Chainsaw Operator)	Sept. 11,12,13,16
Cudworth (Chainsaw Operator)	Sept. 17,18,19,20
Stewart (Chainsaw Operator)	Sept. 24-27,30 Oct. 1-10, 11(½) 15-18,21-25,28,29
Sekal (Chainsaw Operator)	Oct. 15-18,21-25, 28,29
Total Hours = 476	

8-2 Line Chaining

J. R. Lucke (Supervisor)	Sept. 11-31,16-20, 23-27, 30 Oct. 1-4, 7-11, 15-18, 21-25, 28,29 Nov. 1,4
Total Days = 36	
Jake Giesbrecht (helper)	Sept. 30. Oct. 1-4, 7-11,15-18,21-22
Total Hours = 113	
J. Paxton (geologist)	Oct. 23-25,29
Total Days = 4	

8-3 Magnetomer Survey

J. R. Lucke (field work)	Oct. 24,25,28,29 Nov. 4,5,14,15,18
J. R. Lucke (office work)	Nov. 19-22, 25 Dec. 11-13,16-20
Total Days = 21	

8-4 Oro Denoro Geology

J. Paxton (field work)	May 27,28,29,30 June 6,7,10,14 Oct. 2-4,7-11,15-18 21-22,30-31 Nov. 1, 4-7
J. Paxton (office work)	Nov. 12-15 Dec. 2-6, 9-11
Total days =	42
J. R. Lucke (office work)	Dec. 12-13,23-27
Total days =	7

9. COST STATEMENT

9-1 Grid Preparation - Line Cutting, Chaining

J. Forshaw Ltd. Contractor

Chainsaw operators - 476 hrs @ 7.28	\$ 3,470
Helpers - 80 hrs @ 5.25	420
Chaining helper - 113 hrs @ 5.25	<u>593</u>
	\$ 4,483
Fringe benefits, Management Fees, Transportation, Gas & Oil	\$ <u>1,621</u>
Subtotal	\$ 6,104
J. R. Lucke - 39 days @ \$60 per day	\$ 2,340
J. Paxton - 4 days @ \$80 per day	320
Granby vehicle - 40 days @ \$10 per day	400
850 pickets @ \$0.20 each	<u>170</u>
Subtotal	\$ 3,060
<u>TOTAL</u>	\$ <u>9,164</u>

9-2 Magnetometer Survey

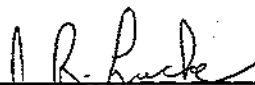
J. R. Lucke - 21 days @ \$60 per day	\$ 1,260
Sharpe MF-1 Magnetometer	N/C
Granby vehicle - 9 days @ \$10 per day	<u>90</u>
<u>TOTAL</u>	\$ <u>1,350</u>

9-3 Geological Survey

J. Paxton - 42 days @ \$80 per day	\$ 3,360
J. R. Lucke - 7 days @ \$60 per day	<u>420</u>
<u>TOTAL</u>	\$ <u>3,780</u>
 <u>GRAND TOTAL</u>	 \$ <u>14,294</u>

10. STATEMENT OF QUALIFICATIONS

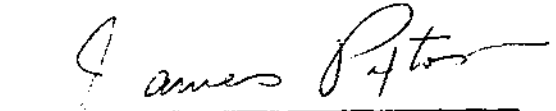
The undersigned supervised the line cutting and chaining and did the magnetometer field work, calculations and map drafting under the direct supervision of Mr. James Paxton. He graduated in Mining Technology from the British Columbia Institute of Technology in 1970 and has had several years experience working on geological and geo-physical project in B. C.



J. R. Lucke
Assistant Geologist
The Granby Mining Co. Ltd.

The undersigned supervised the Oro Denoro project and was directly involved in the geological mapping. He graduated in 1953 from the University of Sask. with a Bachelor of Arts and Science degree in geology. He has worked as a geologist for The Granby Mining Co. Ltd. for the past ten years.

The undersigned is a member C. I. M., fellow of the G. A. C.
and a member of the Association of Professional Engineers of B. C.


James Paxton, P. Eng.
Sr. Mine Geologist
The Granby Mining Co. Ltd.

lv

24-01-75

James Forshaw Ltd.

PHONE 445-6661

BOX 67
GREENWOOD, B.C.

Oct. 7, 1974.

Granby Mining Co. Ltd.,
Phoenix Division,
Grand Forks, B. C.

Re: Eholt Line Cutting:-

Men's Wages:-	\$1,339.55
Plus 20%:-	<u>267.91</u>
Transportation:-	\$1,607.46
	<u>102.00</u>
Total:-	\$1,709.46

RECEIVED OCT 1974

THE GRANBY MINING COMPANY LIMITED
 OCT 2 1974
 PHOENIX COPPER DIVISION

Inst. Goods Rec'd	Order No. 6192
Cont. Goods Rec'd	Duty
Cond. of Goods	Cash Paid
Frt. & Exp. AS SHOWN	Prices Ch'd
Dept.	Est'n Ch'd
w/o 1713 1709.46	
Ported	
Certified	

ENTERED OCT 24 1974

Horshaw Ltd.

PHONE 445-6661

BOX 67
GREENWOOD, B.C.

Nov. 7, 1974.

Granby Mining Co. Ltd.
Grand Forks, B. C.

Re: Line Cutting:

Men's Wages:-

R. Stewart	-	157 hrs & S. H.	@ \$7.28	-	1,201.20
I. Sakai	-	157 hrs.	" "	-	1,201.20
J. Geisbrecht	144	" "	\$5.25	-	798.00
B. Higashi	40	" "	" "	-	210.00
					<u>3,410.40</u>

Plus 11% (H.P., C.P.P., U.I. etc)
W.C.B.

375.14
3,785.54
757.11

Plus 20%

Total men's cost

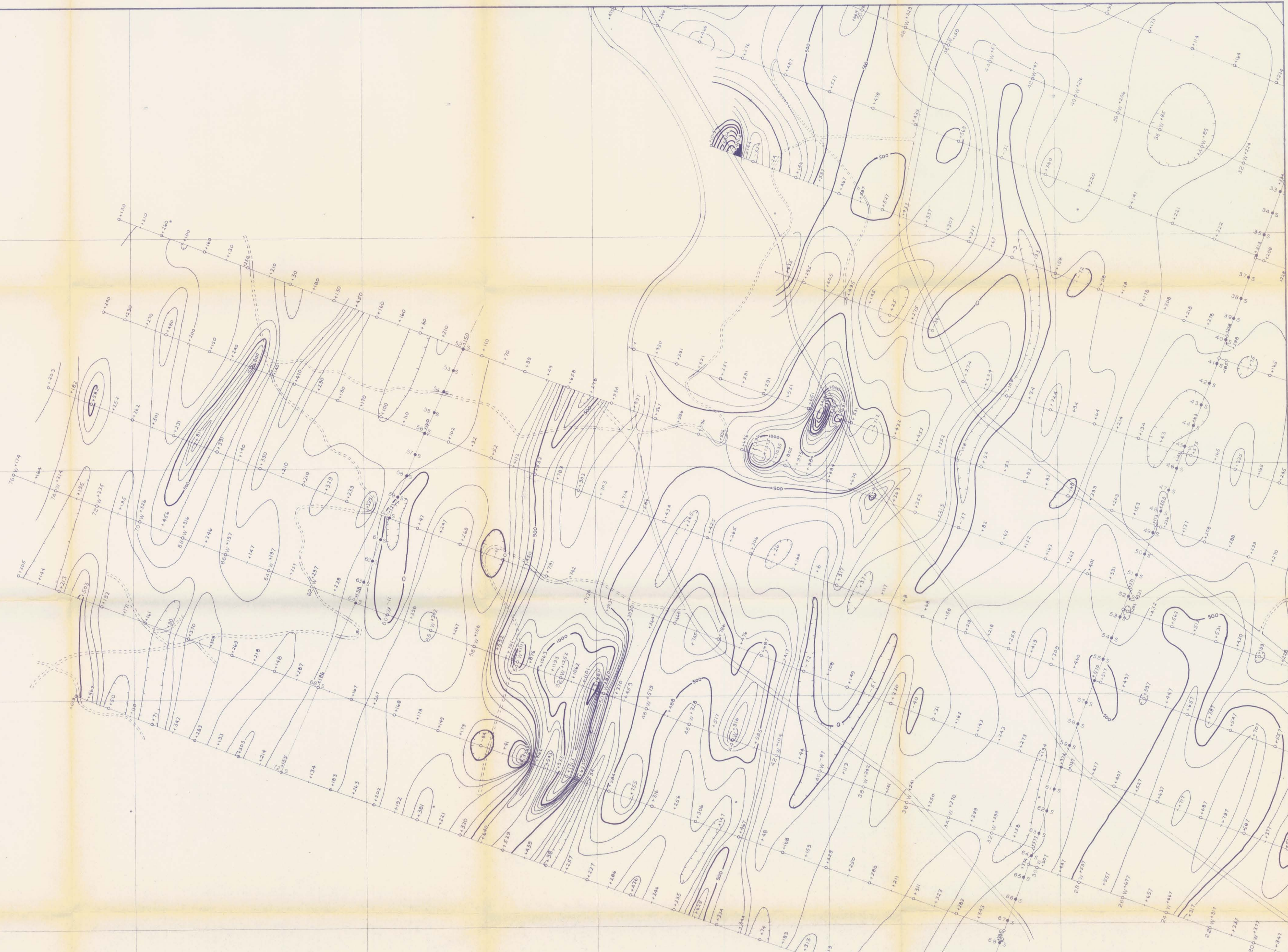
\$ 4,542.65

Transportation 20 @ \$6.00
Chainsaw gas & oils
Total

120.00
12.78
\$ 4,675.43

w/o 1713

ENTERED NOV 12 1974



**5356
MAP 3**

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5356 MAP #3

1	2
3	4

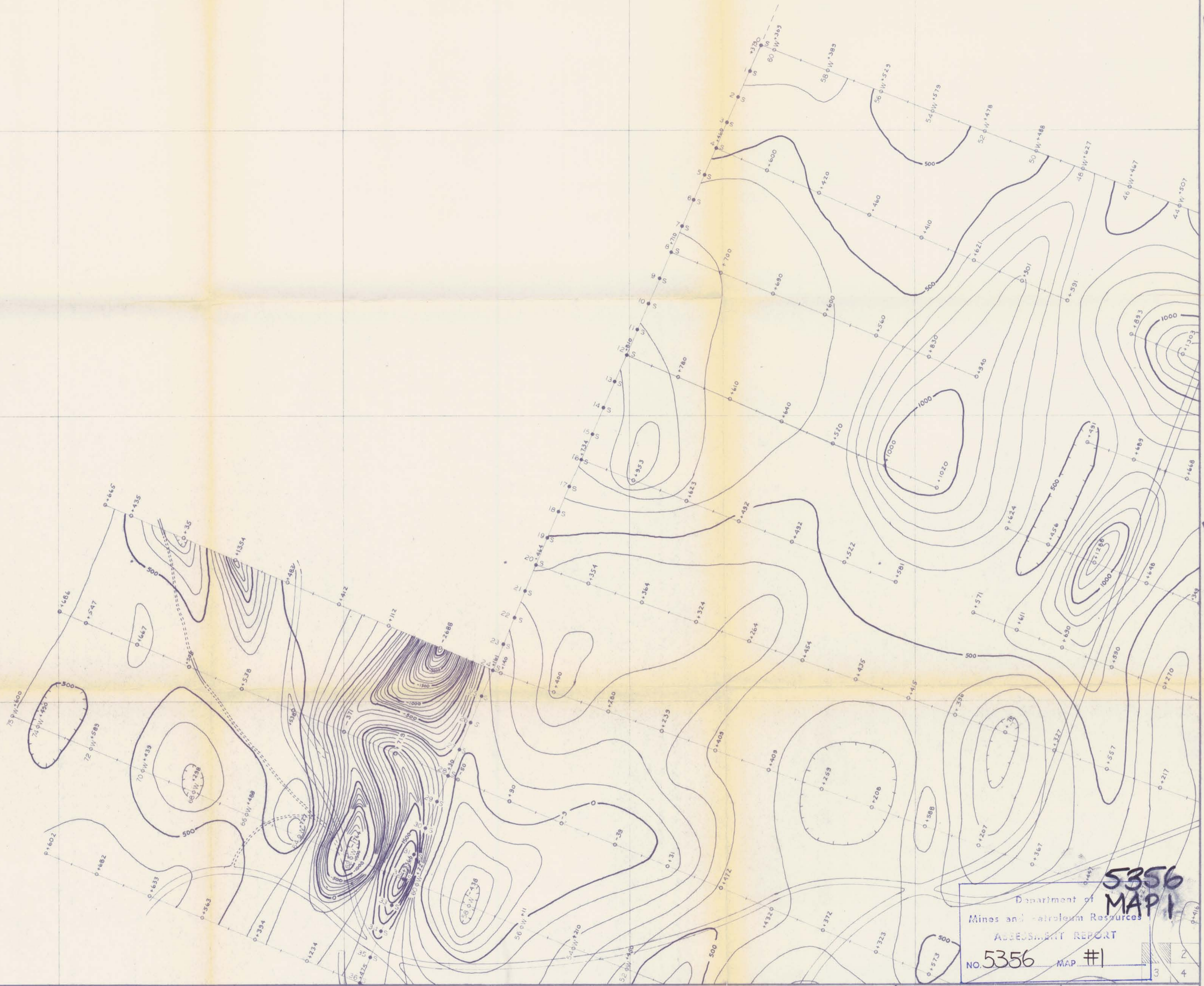
100 GAMMA INTERVALS
500 GAMMA INTERVALS

VALUES SHOWN ARE VERTICAL COMPONENT OF
EARTH'S MAGNETIC FIELD IN GAUSS RELATIVE
TO GRID STATION OS, 0W VALUE AT 2250 GAUSS.

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION
GRAND FORKS, B.C.
SCALE 1 INCH = 200 FEET

TITLE: OSO DENORA GRID
1974 MAGNETOMETER SURVEY
Dec. 1974
NO. 3/4
f. l. ...

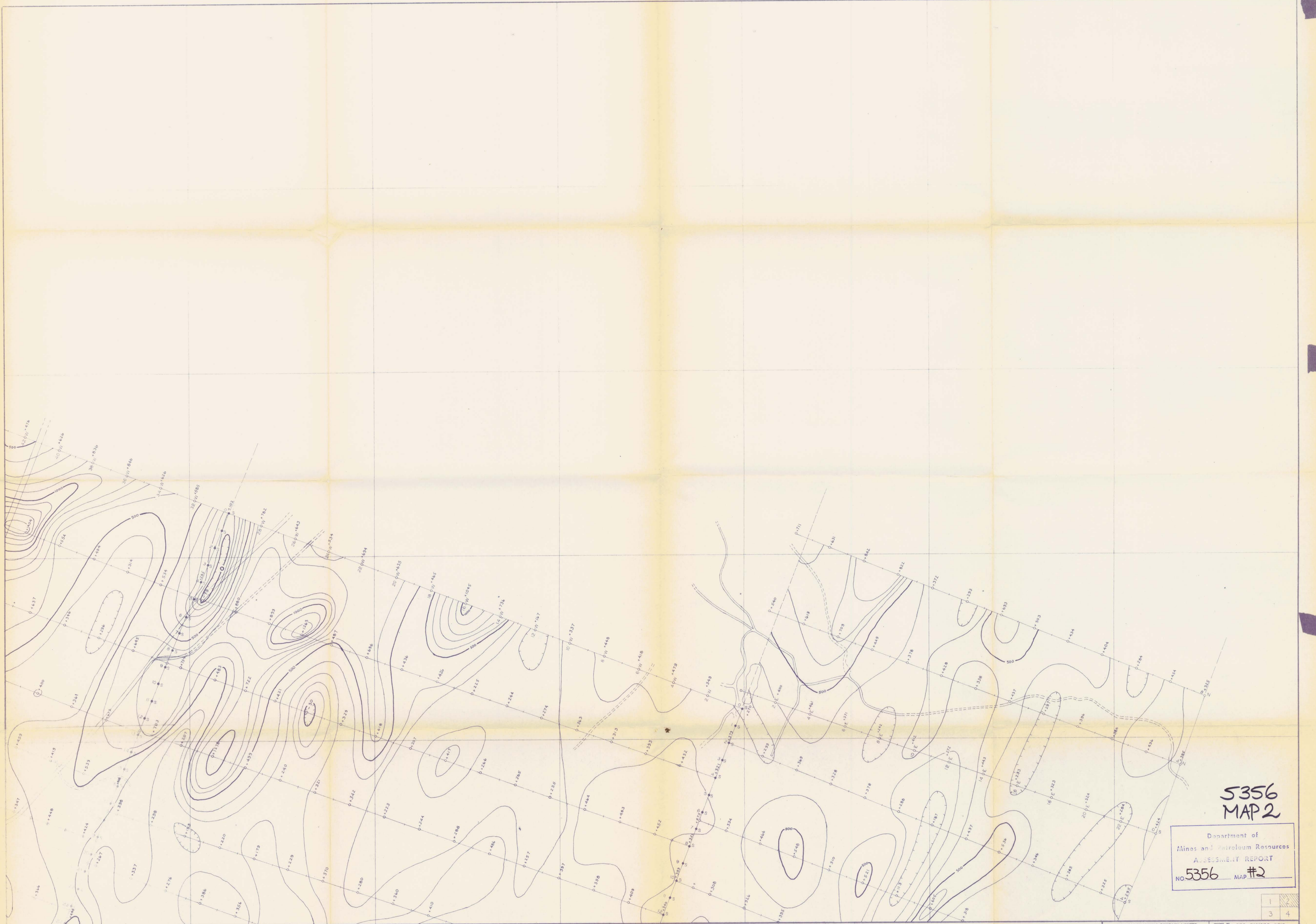
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FEET



5356
 Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5356 MAP #1

THE GRANBY MINING COMPANY LIMITED
 PHOENIX COPPER DIVISION
 GRAND FORKS, B.C.
 SCALE 1 INCH = 200 FEET

TITLE ORC DENORO GRID
 1974 MAGNETOMETER SURVEY
 NO. 1/4
 Dec. 1974
 James P. [Signature]



5356 MAP 2

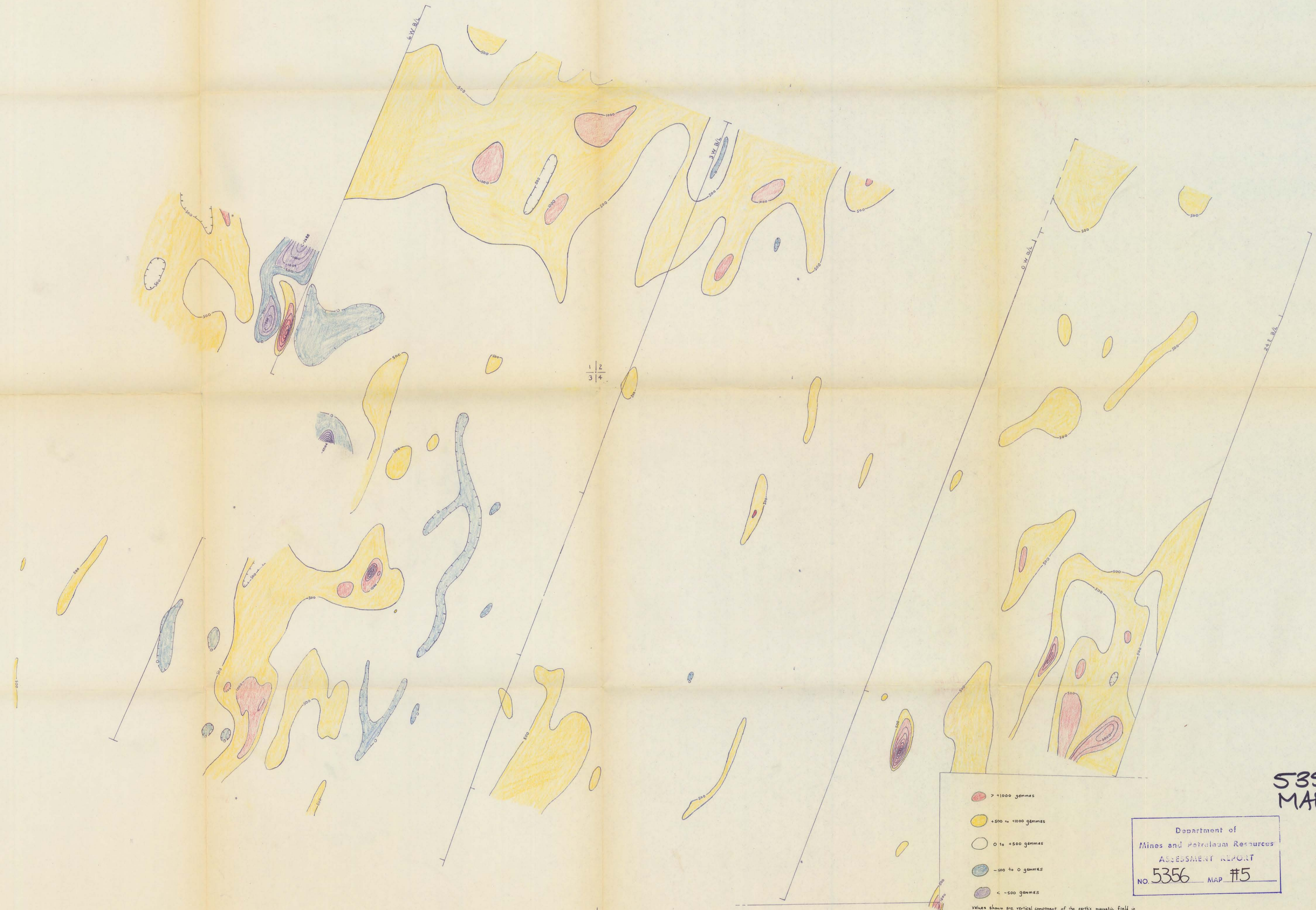
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5356 MAP #2

1	2
3	4

100 GAMMA INTERVALS
500 500 GAMMA INTERVALS
Values shown are vertical component of earth's magnetic field in gamma relative to grid station 0530W value of +270 gamma.

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION
GRAND FORK, B.C.
SCALE 1 INCH = 200 FEET
0 100 200 300 400 500
FEET

TITLE: GPO DENORO GRID
1974 MAGNETOMETER SURVEY
J.R. L...
Dec. 1974 NO. 2/4
James...



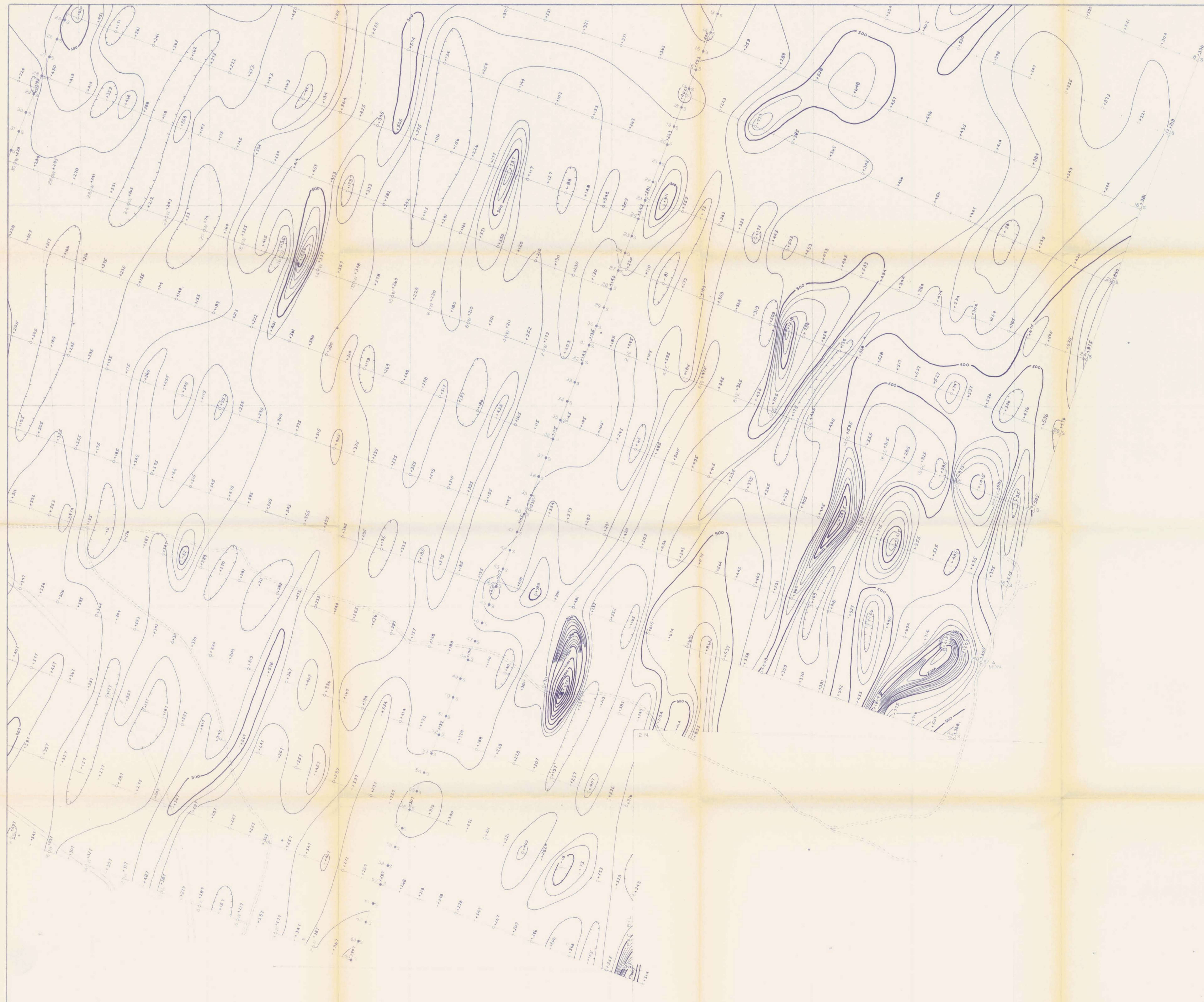
**5356
MAPS**

<ul style="list-style-type: none"> ● > +1000 gammas ● +500 to +1000 gammas ○ 0 to +500 gammas ● -500 to 0 gammas ● < -500 gammas 	<p>Department of Mines and Petroleum Resources</p> <p>ASSESSMENT REPORT NO. 5356 MAP #5</p>	<p>4 ↑ N</p>
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Values shown are vertical component of the earth's magnetic field in gammas relative to grid station ON, a W value of +270 gammas.

THE GRANBY MINING COMPANY LIMITED PHOENIX COPPER DIVISION GRAND FORKS, B.C. SCALE: 1 INCH = 400 FEET	TITLE: ORO DENORO 1974 MAGNETOMETER SURVEY J.R. Baker Dec. 1974
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0 200 400 600 800 1000
SCALE IN FEET



5356
MAP #4

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5356 MAP #4

BCIL 3088-GMPC

100 GAMMA INTERVALS 500 GAMMA INTERVALS	THE GRANBY MINING COMPANY LIMITED PHOENIX COPPER DIVISION GRAND FORKS B.C. SCALE 1 INCH = 200 FEET	TITLE 1974 MAGNETOMETER SURVEY DEC. 1974 P.K. Smith NO. 4 <i>James</i>
	Values shown are vertical component of earth's magnetic field in gammas relative to grid station G.S. 5M elev. at +270 gammas.	0 100 200 300 400 500 FEET



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5356 MAP #6



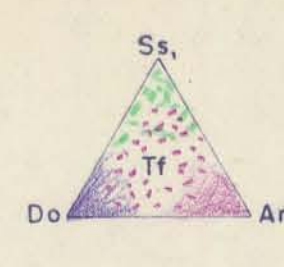
5356
MAP #6

THE GRANBY MINING COMPANY LIMITED
PHOENIX COPPER DIVISION
GRAND FORKS, B.C.
SCALE: 1 INCH = 400 FEET

TITLE: ORO DENORO AREA
GLE CROWN GRANTS
J.R. Fisher
Dec. 1974

LEGEND

- Ak Arkosic sandstone and conglomerate
- Sn Syenite group
 - Ty Trachyte
 - Lt Latite
 - R Pulaskite dykes, P₂ flows
- Gd Granodiorite
 - Gd, Lion Creek granodiorite
- Do Diorite
 - Do, Biotite diorite
 - Do₂ Hornblende diorite
 - Do₃ Fine grained Gilt Edge type
 - Do₄ Porphyritic diorite Emma type
- An Andesite
 - An, Greenstone
 - An, Hornblende andesite
 - An₂ Agglomerate
- Ls Limestone
 - Lsm, Massive white limestone
 - Lsb, Bedded
 - Lsb₃ Shaley
- Sk Skarn
 - Sg Garnet skarn
 - Se Epidote skarn
 - M Marble
- Ch Chert
 - Ag Argillite
- Sc Sandstone
 - Ss, Chert sandstone
 - Ss₂ Aeolian sandstone type
- Sc Sharpstone Conglomerate
 - 4c Cherty grey conglomerate
 - 4a3c Limestone conglomerate



- Area of outcrop and shallow overburden
- Muck pile
- Boulders
- Pit or trench
- Shaft
- Drill hole
- Claim post

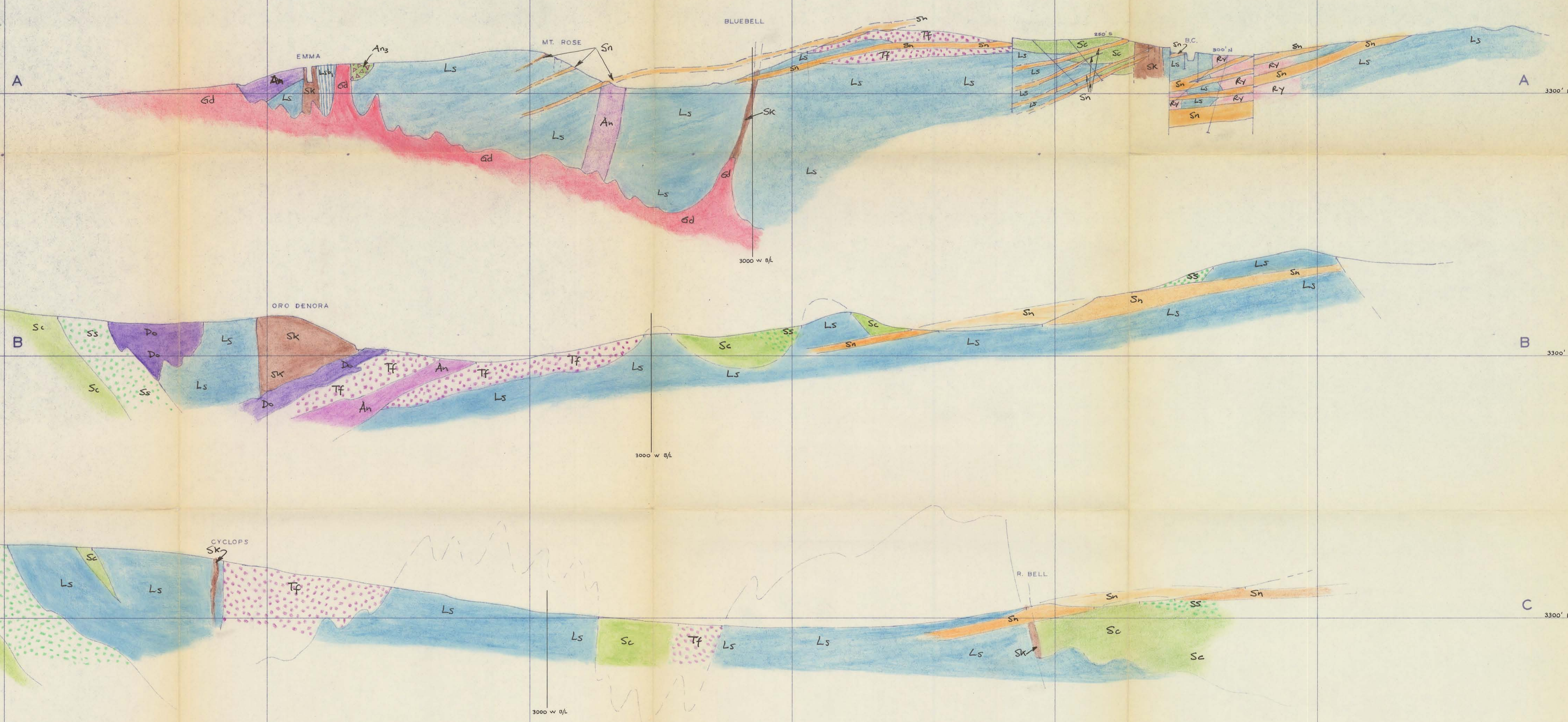


Department of
Mines and Petroleum Resources
ABSEMENT REPORT
NO. 5356 MAP #7

5356 MAP 7

THE GRANBY MINING COMPANY LIMITED PHOENIX COPPER DIVISION GRAND FORKS, B.C. SCALE: 1 INCH = 400 FEET	TITLE Geology Oro Denoro Area NO. 1974
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SCALE: 0 200 400 600 800 1000 FEET



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MAP #8

Department of
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ASSESSMENT REPORT
NO. 5356 MAP #8