92H/15E

GEOPHYSICAL REPORT
DAGO — OPEN CLAIMS

Dago 5-9; Open 23, 25, 29
1mi South Aspen Grove BC

49°55'N 120°37'W

Chas A. Ager, Geophysicist
for
White River Mines Ltd NPL

May 24-27/72 — June 30-July 3/72

3788

3788

TELEPHONE (604)-278-6047

CHARLES A. AGER GEOPHYSICIST

815-B Lambie Road
Richmond, B.C.
Canada

ABSTRACT

An exploratory gravity survey over selected traverses of the DAGO-OPEN claims has revealed several gravity anomalies. The importance of these anomalies to ore search can only be determined after careful follow up investigations as to the economic nature of their sources.

Should the enclosed interpretations prove to be valid parameters for locating ore zones, then further gravity surveys are recommended in order to help assess the full value of the property.

May 29, 1972

Charles A. Ager

Charles A. Ager, M.Sc.

Geophysicist

TABLE OF CONTENTS

LIST OF FIGURES

LOCATION & DATE OF SURVEY

Location: White River Mines Ltd. (n.p.l.) Mineral Claims (Dago-open Claims), Aspen Grove, B.C.
49°55.5' N Lat by 120°38' W Long; NTS map sheet 92H/15.

Date: May 24-27, 1972

SURVEY PROCEEDURE

Observations were taken at 100 foot intervals along the E-W lines 64N, 68N, 72N and 84N as defined by the Dago-Open Claims Grid (refer to report by Charles A.R. Lammle, P. Eng. for precise details of grid location).
Elevation and gravity control points were occupied within two hour intervals. All elevations were double run and corrected for diurnal variations to yield a relative elevation accuracy within ± 5 feet for each station.
A Base Station for the survey was established at 83.5N+23.0W which served as the arbitrary datum for the survey. The gravity value at this base was taken to be 0.0 gu, and the elevation was picked from map sheet 92H/15 to be 3450'. Figure 1 shows the elevation plan for the surveyed area.

INSTRUMENTATION

The vertical component of the gravitational field was observed using a Worden Gravity Meter with a reading accuracy of ± 0.8 gu.

Elevation control was maintained using a Thommen Type 3B4 Barometric Altimeter for the detail stations, and a Kollsman Altimeter for the Base Station. Reading accuracy for both instruments is better than ± 1.0 feet.

BOUGUER GRAVITY

The Bouguer gravity map (Figure 2) represents the relative gravity field corrected for the effects of drift, latitude, free air and Bouguer slab (ρ = 2,67 gm/cm^3). No terrain corrections were applied. Hence, The Bouguer gravity map contains topographic distortions. However, careful scrutiny of the elevation plan reveals that these effects are easily recognizable and will not appreciably change the general gravity information. Of coarse, these corrections should be applied if detailed interpretation is desirable at a later date.

INTERPRETATION

Relative Bouguer gravity values as well as elevation sections are plotted in profile for each traverse (see Figures 3-6 incl). Density measurements were made on 6 rock samples collected in the survey area and the results are listed in the Appendix. (The sample number corresponds to the grid station location).
At the time of writing of this report, the authour was unable to study the geology map in any great detail. Therefore, the

following interpretation is based largely on knowledge of the area gained through personal communication with the geologist, Charles A.R.Lammle, P.Eng.

Gravity Lows

A gravity "low" region occurs in the western section of the surveyed area. There are no outcrops in the region. The feature strikes about N20°W as indicated by the purple dashed line on Figure 2. It is very indicative of either:

1) a FAULT ZONE,

2) a change in overburden thickness, or

3) a burried less dense unit dipping steeply to the east.

As indicated by the coloring of Figure 2, it is enclosed by gravity highs but is open to the north and to the south.

Another impressive feature in this area is the strong lineation striking N29°E. It is a more confined low, but could well indicate a fault that is crosscutting the geologic fabric.

Gravity Highs

A large gravity "high" occurs on line 68N, centered at station 8E. Profile analysis indicates a depth to center of mass to the source to be about 125 feet. Terrain corrections will probably suppress the peripheral lows (on the flanks). Density measurements in the area (trench 64-68, $\rho = 2.75$) indicate a

on the east and the west and probably indicates a major FAULT ZONE striking to theNNW.

2) MAGNETIC LINEATIONS. These features are plotted on Figure 3 as red dashed lines. Interpretation of these lineations probably indicates block faulting associated with the above mentioned fault zone. The isolated magnetic low (block B) could therefore indicate a down dropped block. Similarily, the magnetic high (block C) could indicate an up lifted block.

3) MAGNETIC LOWS & HIGHS. As mentioned above, the isolated magnetic lows and highs can be attributed to block faulting. Another possibility for the low of block B is a buried intrusive of negative susceptibility contrast. However, the absence of a peripheral dipolar effect (in this case, a halo of magnetic highs) seems to make this choice less likely, but, nevertheless, still possible.

4) LINEATION INTERSECTIONS. The region marked by the red circle encompasses the intersection of several magnetic lineations. Since there exists copper mineralization in outcrops and diamond drill core in the area, this feature may indicate an important regional structural ore control. Careful scrutiny of the ground magnetics in this area reveals part of this feature. However, high frequency errors due to measurement, terrain and near surface effects obscure the remainder of this important regional feature. This area should be investigated further by computer analysis as recommended under section "Recommendations and Conclusions".

DRILL CORE MAGNETICS

Drill core magnetic measurements were made in an attempt to establish a relationship between the magnetics and the mineralization. With proper interpretation and comparison, it is conceivable that the core magnetic data will sufficiently explain the ground magnetometer survey results (see reference).

An attempt was made to measure magnetic susceptibilities using a susceptibility bridge. However, the BQ core size was too large for the sensing receptical of the instrument, and any analysis would require complete grinding up of the core. This proceedure was impossible to follow at the time and was therefore abandoned.

A McPhar M700 vertical fluxgate magnetometer was used to log the relative magnetic properties of the drill core. Sections of the core were analysed at ten foot intervals for DDH 72-1 to 10. Core specimens were placed in a specially prepared holder at a fixed distance (about 2") below the sensor of the magnetometer. Each piece of core was about 3" long. The reading recorded was the maximum field value found by rotating the core under the sensor.

The core magnetic sections together with the ground magnetic profiles are plotted in Figures 4, 5, 6, 7 and 8. These sections

a denser unit underlying or being capped by a lighter unit. However, the gravity anomaly is so bold on profile 68N that it could imply a more abrupt change in density than a capping unit, and for that reason should be investigated further.

Not to be overlooked as well are the other gravity highs peripheral to the "low" region. (Highs are caused by an excess of mass.)

Profile 84N exhibits considerable character, and it's value can only be determined after close scrutiny of the geological maps.

SUMMARY & CONCLUSIONS

The gravity highs and lows should be investigated further using the foregoing interpretations as a guideline. As more knowledge is gained, these interpretations should be refined until the economic nature of their causes are known. It is important to determine if there exists a clear relationship between the ore controls and the gravity results. Noteworthy parameters to be alert for are the following:

1) any DENSITY CONTRAST between ore bearing and baren rocks, and

2) any structural control to the mineralization (faults, breccia zones, etc.)

If the current drilling program indicates economic grades of mineralization, and if gravity and ore are correlated, then it is my recommendation that a detailed grid (100 ft by 100 ft) be established over the interesting areas and gravity measurements observed. This

APPENDIX

CREST LABORATORIES (B.C.) LTD.

1068 HOMER STREET
VANCOUVER 3, B.C.
PHONE 688-8586

CREST LABORATORIES LTD.
7911 ARGYLL ROAD
EDMONTON 82, ALBERTA
PHONE 469-2391

CERTIFICATE OF ASSAY

TO Mr. Charles A. Ager

815 B Cambie Road,

RICHMOND, B.C.

May 30, 1972

Lab 3814

I hereby certify THAT THE FOLLOWING ARE THE RESULTS OF ASSAYS MADE BY US UPON THE HEREIN DESCRIBED SAMPLES.

MARKED	SPECIFIC GRAVITY	MARKED		MARKED		MARKED	
			PERCENT		PERCENT		PERCENT
TRENCH 64 - 68	2.80						
64 N + 11 E	2.70						
68 N + 6 E	2.75						
84 N + 2 E	2.82						
84 N + 4 W - 1	2.81						
84 N + 4 W -2	2.96						

NOTE:
Rejects Retained One Month
Pulps Retained Three Months
Unless Otherwise Arranged.

C. F. O. Peterson

Registered Assayer; Province of British Columbia

CREST LABORATORIES (B.C.) LTD.

1068 HOWE STREET
VANCOUVER 3, B.C.
PHONE 688-8586

CREST LABORATORIES LTD.
11 ARGYLL ROAD
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68 N + 6 E	2.75						
84 N + 2 E	2.82						
84 N + 4 W - 1	2.81						
84 N + 4 W -2	2.96						

NOTE:
Rejects Retained One Month
Pulps Retained Three Months
Unless Otherwise Arranged.

C. F. Beckham

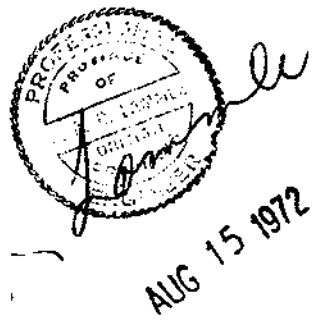
Registered Assayer; Province of British Columbia

information coupled with further interpretation will prove valuable to assessing the full potential of the property.

May 29, 1972

Charles A. Ager, M.Sc.

Geophysicist



REFERENCES

Grant, F.S. and West, G.F., Interpretation theory in applied geophysics, McGraw - Hill, 1965.

Lammle, Charles A.R., P.Eng., geologist, personal communication.

C. A. AGER & ASSOCIATES LTD.

Telephone: (604) 278-6047

CONSULTING
GEOPHYSICISTS

815-B Cambie Road
Richmond, B.C.
Canada.

CONFIDENTIAL

ABSTRACT

An aeromagnetic survey over the Dago-Open Claims has indicated an anomolous magnetic low over the property. Interpretation of magnetic lineations show that an important intersection occurs near the south-east corner of Kidd Lake. Since there exists copper mineralization in outcrops and diamond drill core from the area, this feature may indicate an important regional structural ore control. It should be investigated further.

To this end, magnetic measurements were made on drill core from drill holes 72-1 to 72-10 inclusive.(Total footage in excess of 3765 feet). When the geological core logs are available, every attempt should be made to correlate magnetics with the mineralization.

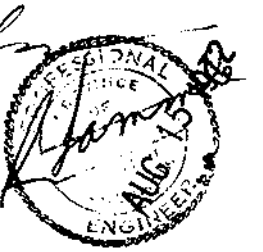
It is recommended that computer filtering of the ground magnetics be carried out in order to help delineate the ore controls.

July 16, 1972

C.A.AGER & ASSOCIATES LTD.

Charles A. Ager, M.Sc.

Geophysicist



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49°55.5' N Lat by 120°38' W Long; NTS map sheet 92H/15

Date: June 30 - July 3, 1972

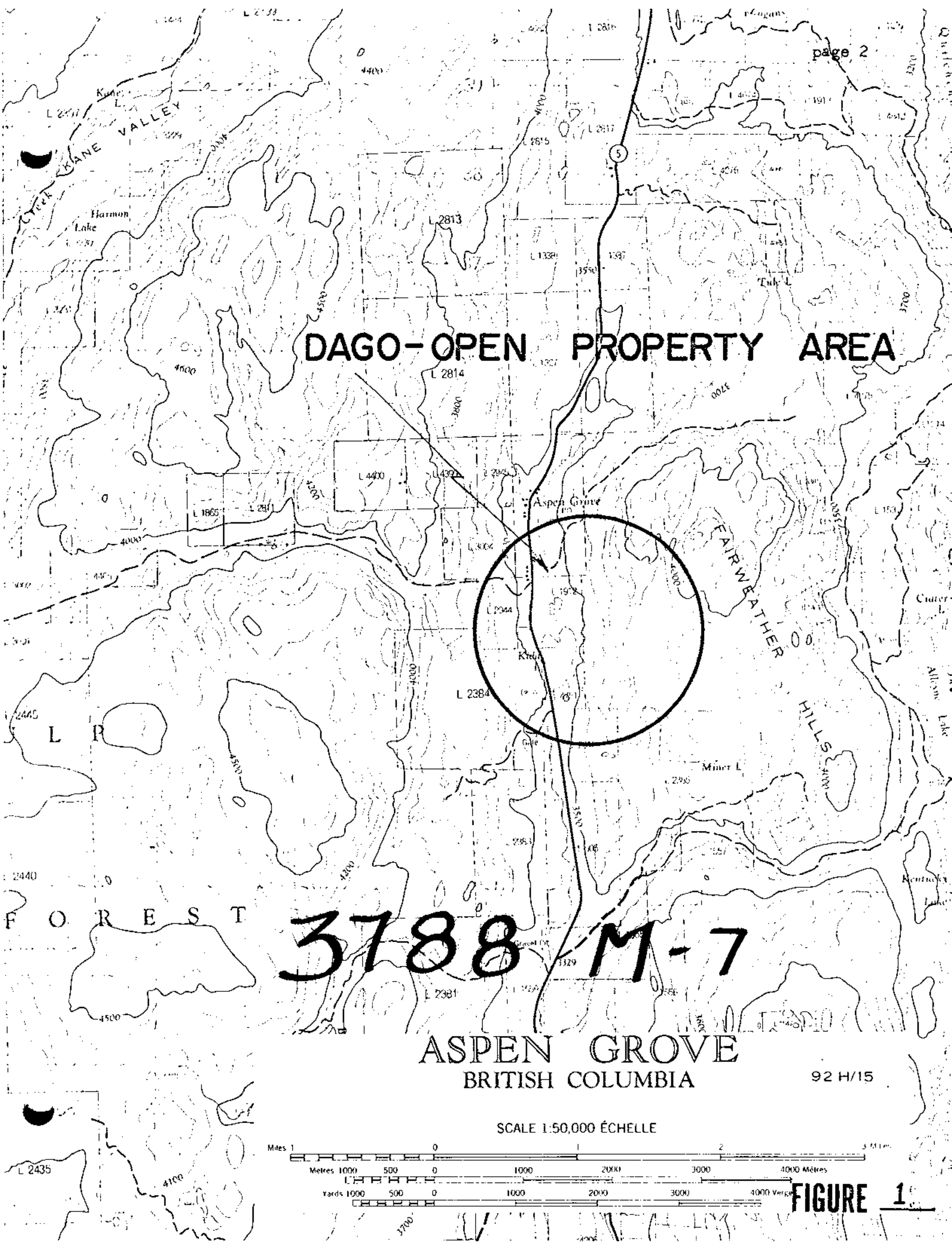
AEROMAGNETICS

A confidential copy of the Aeromagnetics covering the Dago-Open Property was obtained. A tracing of the results are shown in Figure 2 at a scale of 1:50,000. This map represents a preview of the Amax/Government Aeromagnetic Map 92H/15 scheduled to be published in October 1972. Flight line interval is ½ mile with average terrain clearance about 1000 feet. The field lines represent the total intensity of the field vector relative to some datum. (The datum is unknown to the author).

Local terrain clearance fluctuations are not known, but the topography (Figure 1) is moderate enough to have only a minor effect on the aeromagnetic field.

Qualitative interpretation of the aeromagnetic map, Figure 2, reveals the following prominent features:

1) MAGNETIC LOW TROUGH, striking N12°W, centered along highway #5. This feature is marked by steep magnetic gradients


DAGO-OPEN PROPERTY AREA
KANE VALLEY
Harmon Lake
Aspen Grove
FAIRWEATHER HILLS
Miner L
FOREST
3788 M-7
ASPEN GROVE
BRITISH COLUMBIA
92 H/15
SCALE 1:50,000 ÉCHELLE
FIGURE 1

3788

exhibit the combined effects of remanence and induced field where the remanent component has been maximized.

At the date of writing of this report, no drill core geological logs have been seen by the author. It is therefore impossible at this time to speculate on a full interpretation of the core magnetics. This data represents phase I of the two phases necessary for understanding the relationship between magnetics and copper mineralization. Phase II should consist of establishing a definite (indefinite) correlation between the magnetics and the economic mineralization as outlined in the section "Recommendations and Conclusions".

The locations and orientations of the drill holes were obtained from Bill Smith, a field man with the project. All observations and measurements were taken by the author.

RECOMMENDATIONS & CONCLUSIONS

It is recommended that the following proceedures be undertaken in order to squeeze the last drop of economic data out of the existing magnetic records:

1) Correlate the core magnetics with the core geology and attempt to explain the observed ground magnetic field.

2) Complete the ground magnetometer survey over the west part of the property and Kidd Lake, and then contour the map by computer to free it of contouring bias. Apply north pole, regional, residual and second derivitive filters to the ground magnetic map. With the aid of these maps, the important structure visible in the aeromagnetics can be tracked down and any buried features will be delimited.

As mentioned before, this proceedure will make full use of the available magnetics and may shed a complete new light onto the reasons and the whereabouts of economic minerals in the area.

July 16, 1972

C.A.AGER & ASSOCIATES LTD.

Charles A. Ager, M.Sc.

Geophysicist

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AUG 17 1972

REFERENCES

Domzalski, W., 1966, Importance of aeromagnetics in the evaluation of structural control of mineralization, Geophysical Prospecting v.14, p 273-291.

Grant, F.S. and West, G.F., Interpretation theory in applied geophysics, McGraw - Hill, 1965.

Lammle, C.A.R., Ground Magnetics, Dago-Open Property, White River Mines Ltd. (n.p.l.) report, 1972.

ITEMIZED STATEMENT OF WORKMEN'S TIME DISTRIBUTION AND EXPENDITURES INCURRED

C.A.R LAMMLE P.ENG. DAGO–OPEN PROPERTY 1972

		DATES	TIME DAYS	COSTS	GROUD SUBTOTAL	DAGO GP PRORATED LINE MI 60%	OPEN GP PRORATED LINE MI 40%
TECHNICAL WORK				$	$	$	$
Linecutting	Lammle R.	May 4-9 '72	5½ @ 75	413			
	Tancowny D.	May 4-9 '72	6 @ 35	210			
	Tancowny E.	May 4-9 '72	6 @ 35	210			
	Anderson R.	May 5-9 '72	5 @ 40	200			
	Brock L	May 5-9 72	5 @ 40	200			
	Krause H.	May 5-9 '72	5 @ 40	200	1433	860	573
Geology	Lammle R.	May	16 @ 75	1200	1200	720	480
Geochem	Lammle R.	May 10-13/72	4 @ 75	300			
	Tancowny D.	May 10-15/72	6 @ 35	210			
	Tancowny E.	May 10-15/72	6 @ 35	210			
	Chemex Analyses	—	—	970	1690	1013	677
Magnetom	Lammle R.	May 17-21/72	5 @ 75	375			
	Tancowny D.	May 23-30/72	8 @ 35	280			
	Rental.	2 weeks		170	825	495	330
I.P.	Seigel Assoc.	May 13-23/72		4877			
	Tancowny D.	May 13-23 72	10 @ 35	350			
	Lammle R	May 13-16 '72	4 @ 75	300	5527	3320	2207
Gravity	C.A. Agar.	May 24-29-72 / June 29-July 3/72	11 @ 150	1650			
	Rentals.			856			
	Lammle R	May 26-25-72	2 @ 75	150	2656	1590	1066
Transport	Rentals.	3 mo.		1200			
	Gas, Oil	3 mo.		252	1452	872	580
Meals etc	Groceries	3 mo.		1217	1217	730	487
	TECHNICAL WORK TOTAL				16000	9600	6400
PHYSICAL WORK							
Bulldozing	Nesbitt D.7	Intermittent	40 hr @ 10	400			
	Pooley Bros. D.7	June 6-7 72	20 hr @ 25	500			
	Lammle R.	June 6 & intermit.	3 dy @ 75	225	1125	580	540
D. Drilling	HAW Hagworth	(1963')		12012			
	Connors D.D.	(4355')		27392			
	Walley & Sons Box	(Core boxes)		630			
	Lammle	June July 72	34 dy @ 75	2550			
	Tancowny D.	May 29 - June 15		690			
	Smith W.T.	May 29 - June 9	3 wk @ 300	900			
	Assays	Chemex - Crest Labs	—	606	44,780	24,400	22,500
	PHYSICAL WORK TOTAL				46905		
	PHYSICAL + TECHNICAL TOTAL				$ 62905		

Declared before me at the city of Vancouver, in the province of British Columbia, this ____ day of August 1972, A.D.

See over

Declared before me at the City
of Nanaimo, in the
Province of British Columbia, this 17th
day of August 1972, A.D.

Chas. L. R. Lammle

G. Phillips

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

SUB-MINING RECORDER

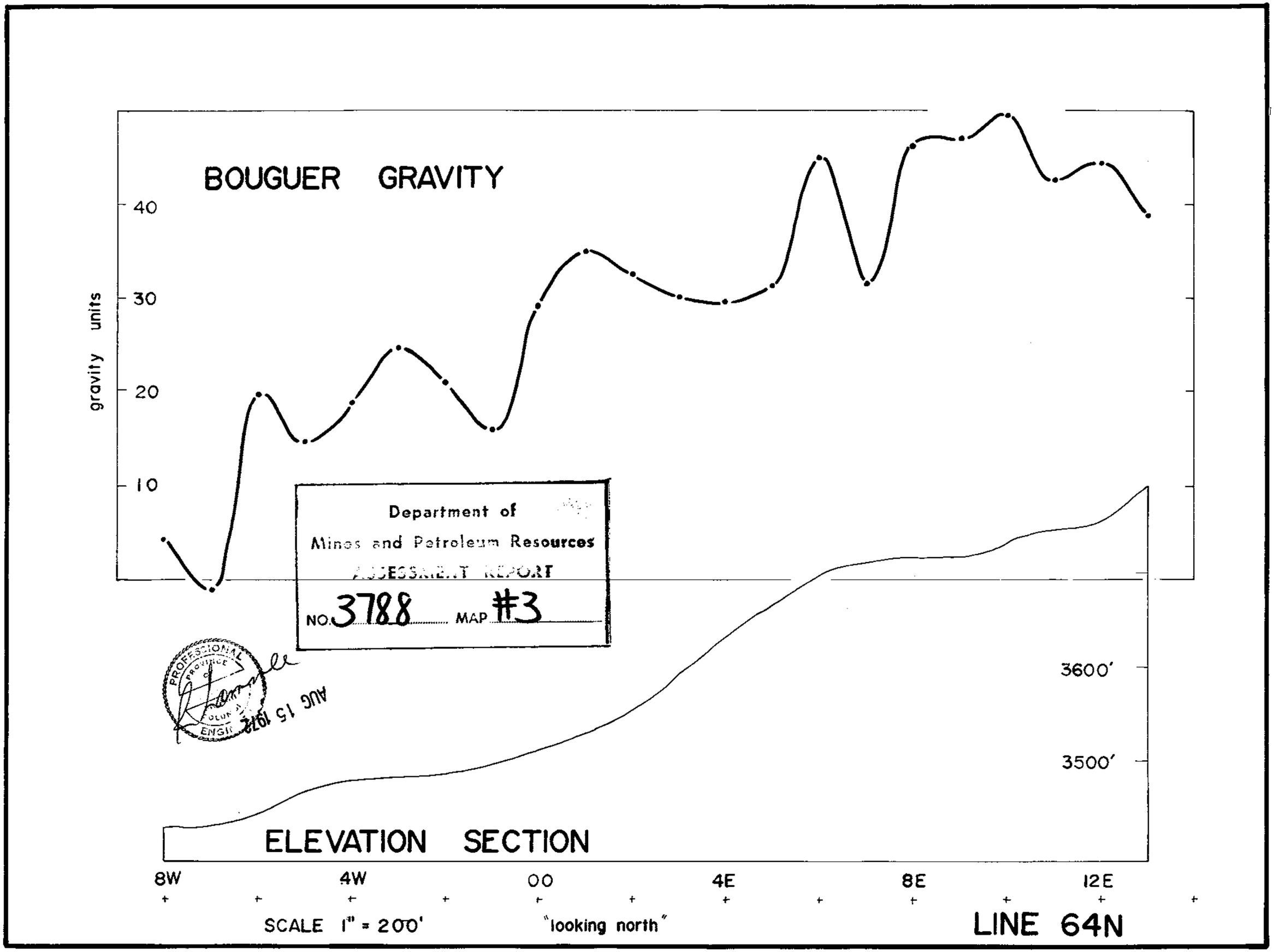

BOUGUER GRAVITY
gravity units
40
30
20
10
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3788 MAP #3
PROFESSIONAL ENGINEER
AUG 15 1972
3600'
3500'
ELEVATION SECTION
8W
4W
00
4E
8E
12E
SCALE 1" = 200'
"looking north"
LINE 64N

Figure 3

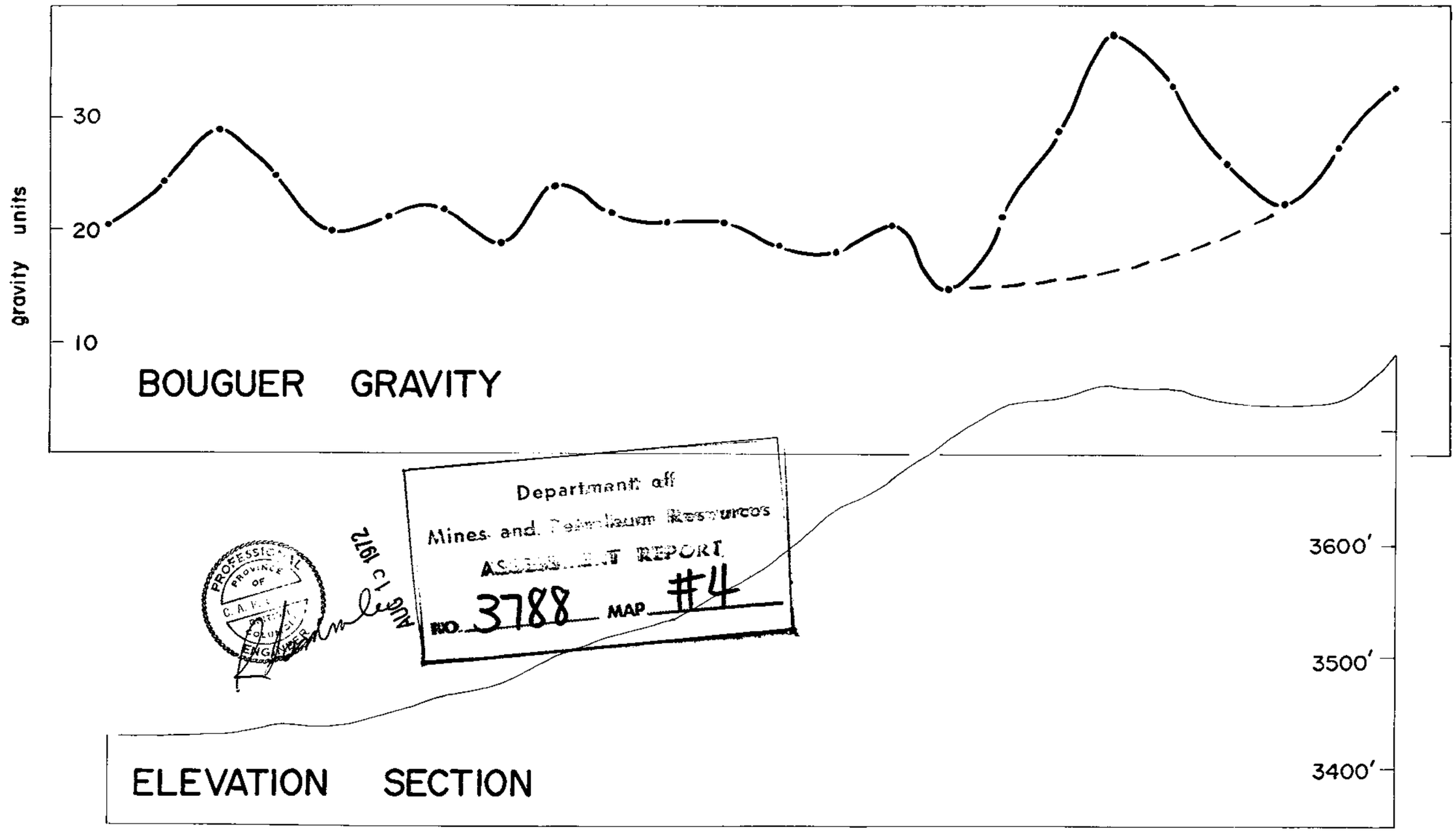


Figure 4.

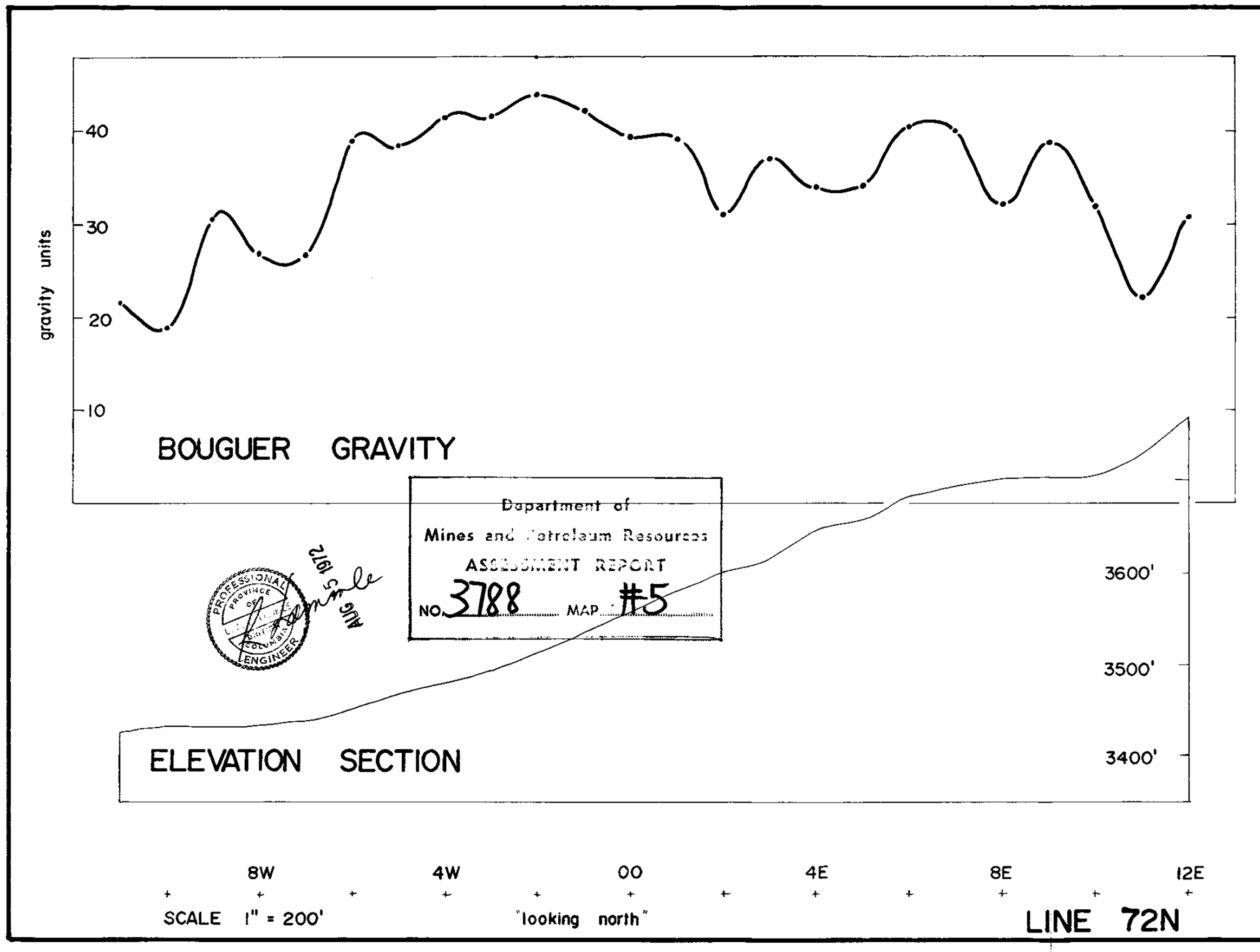


Figure 5

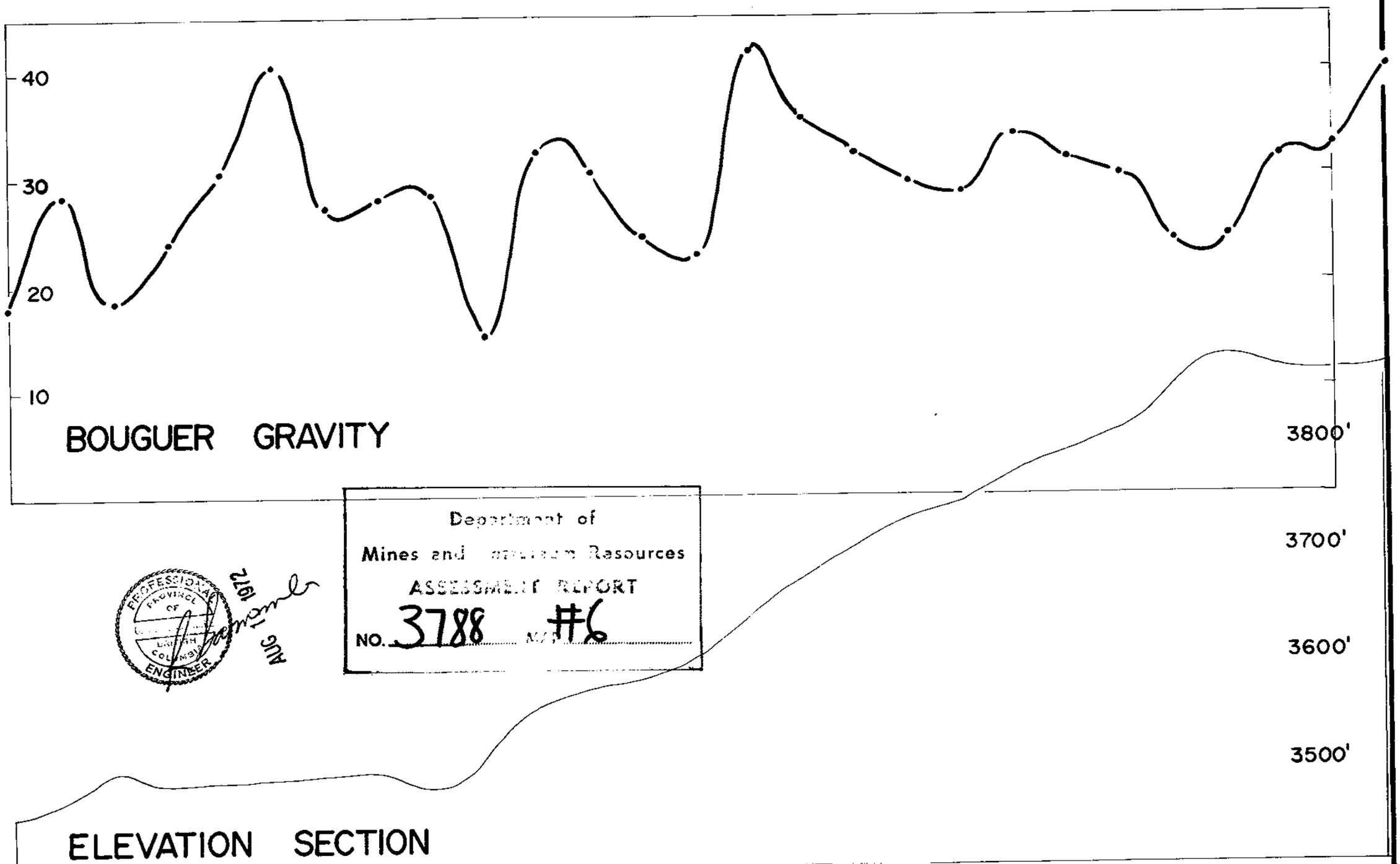
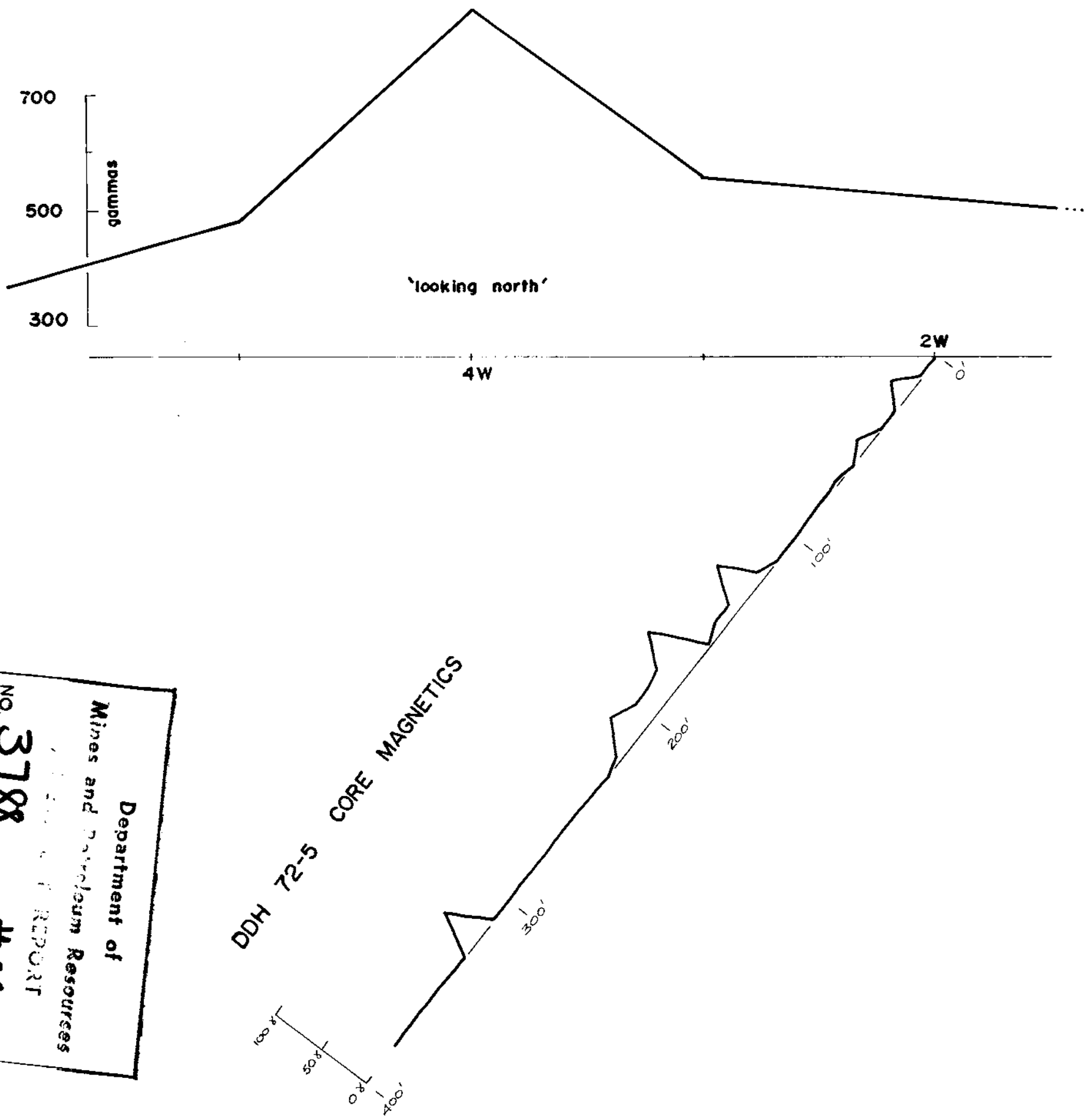


Figure 6

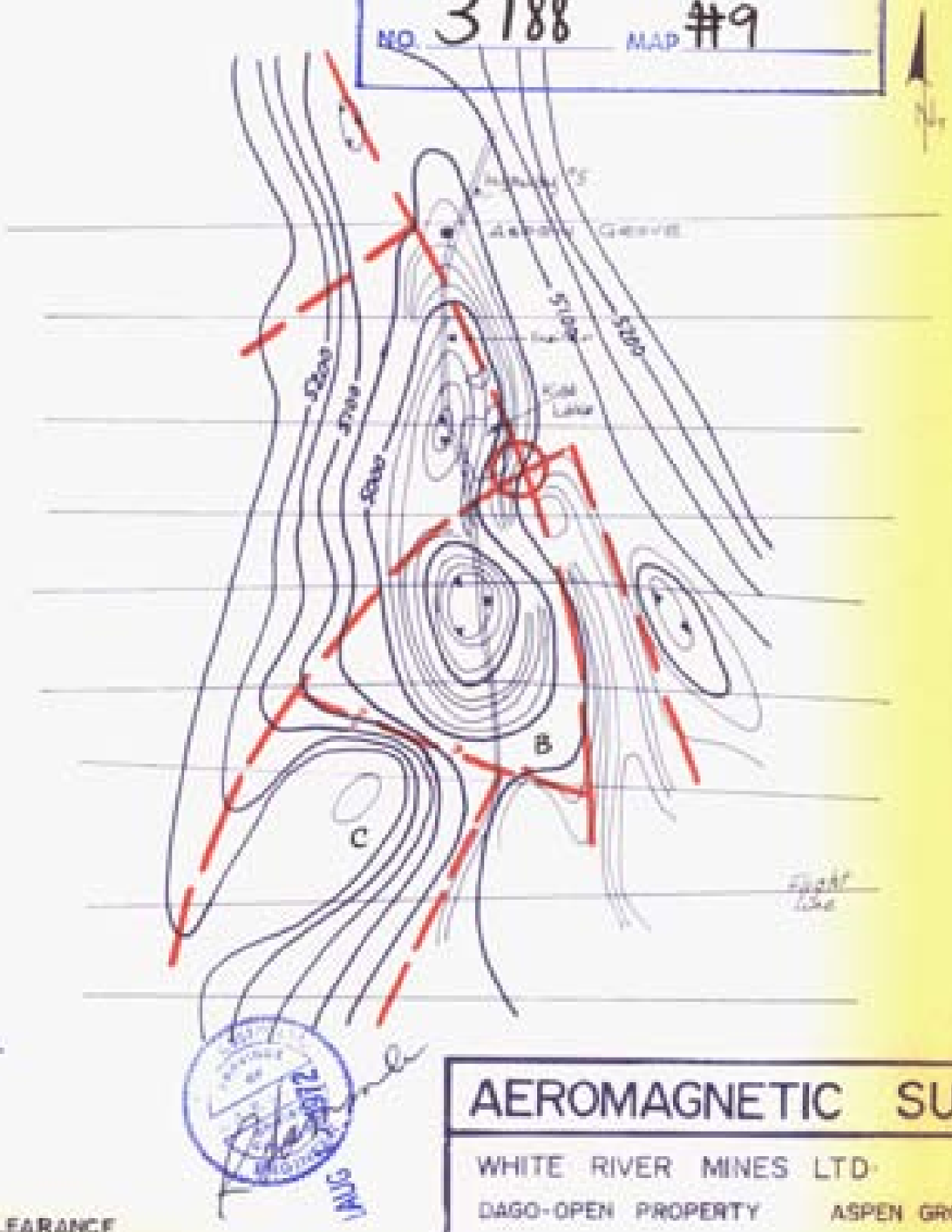
GROUND MAGNETICS LINE 76N



PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
G 15 1972

FIGURE 4

MAGNETIC SECTION DDH 72-5	
WHITE RIVER MINES LTD. DAGO-OPEN PROPERTY ASPEN GROVE B.C.	
SCALE 1" = 50' DATE July, 72	C. A. AGER & ASSOCIATES LTD. 8158 Cambie Rd., Richmond, B.C., Canada



CONTOUR INTERVAL
— 10 gammas
— 50 gammas

TOTAL FIELD

1000' TERRAIN CLEARANCE

AEROMAGNETIC SURVEY

WHITE RIVER MINES LTD.

DAGO-OPEN PROPERTY ASPEN GROVE B.C.

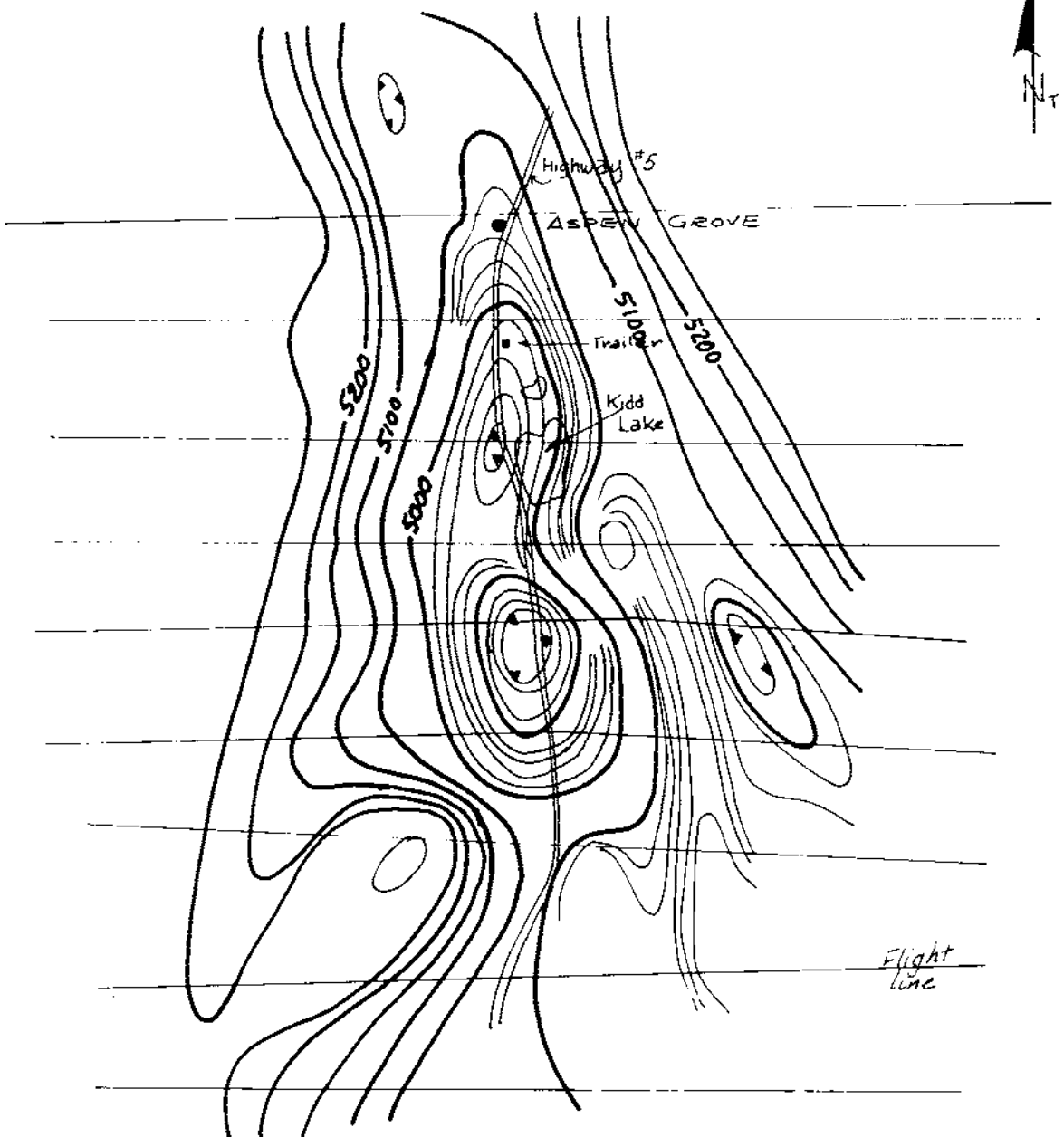
NTS 92H 15

SCALE 1:50,000

DATE

C. A. AGER & ASSOCIATES LTD.
8158 Gamble Rd., Richmond, B.C., Canada

FIGURE 3



CONTOUR INTERVAL

— 10 gammas

— 50 gammas

TOTAL FIELD

1000' TERRAIN CLEARANCE

PROFESSIONAL ENGINEER
BRITISH COLUMBIA
AUG 15 1972

FIGURE 2

AEROMAGNETIC SURVEY

WHITE RIVER MINES LTD.

DAGO-OPEN PROPERTY ASPEN GROVE B.C.

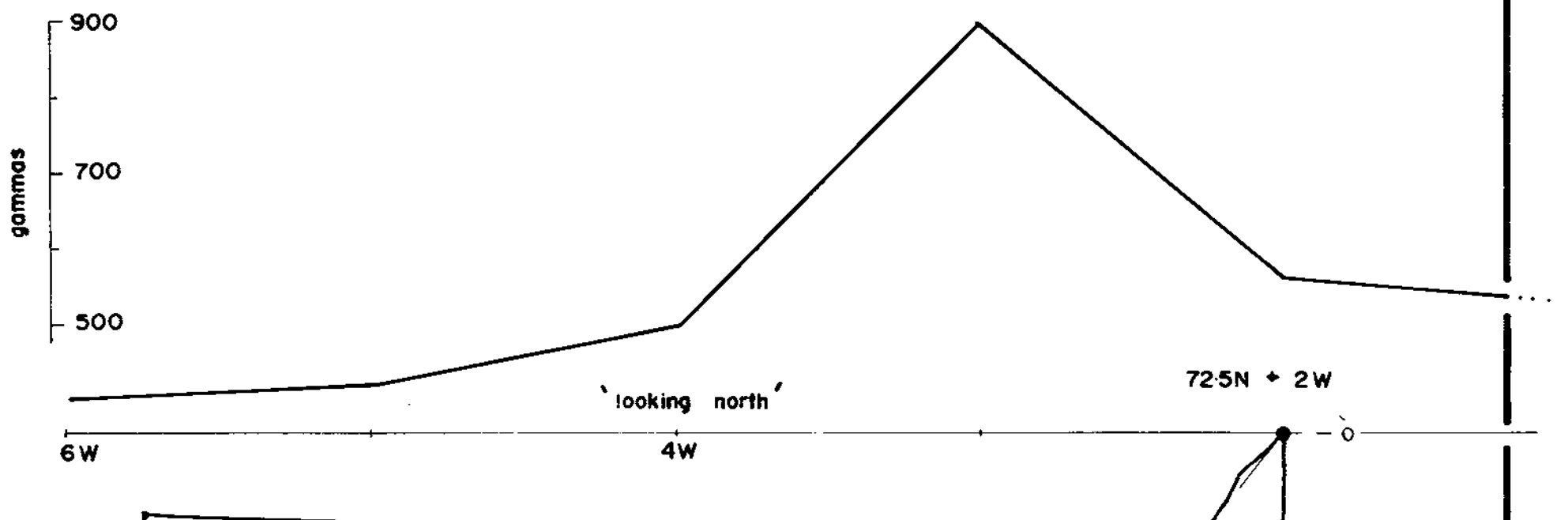
NTS 92H 15

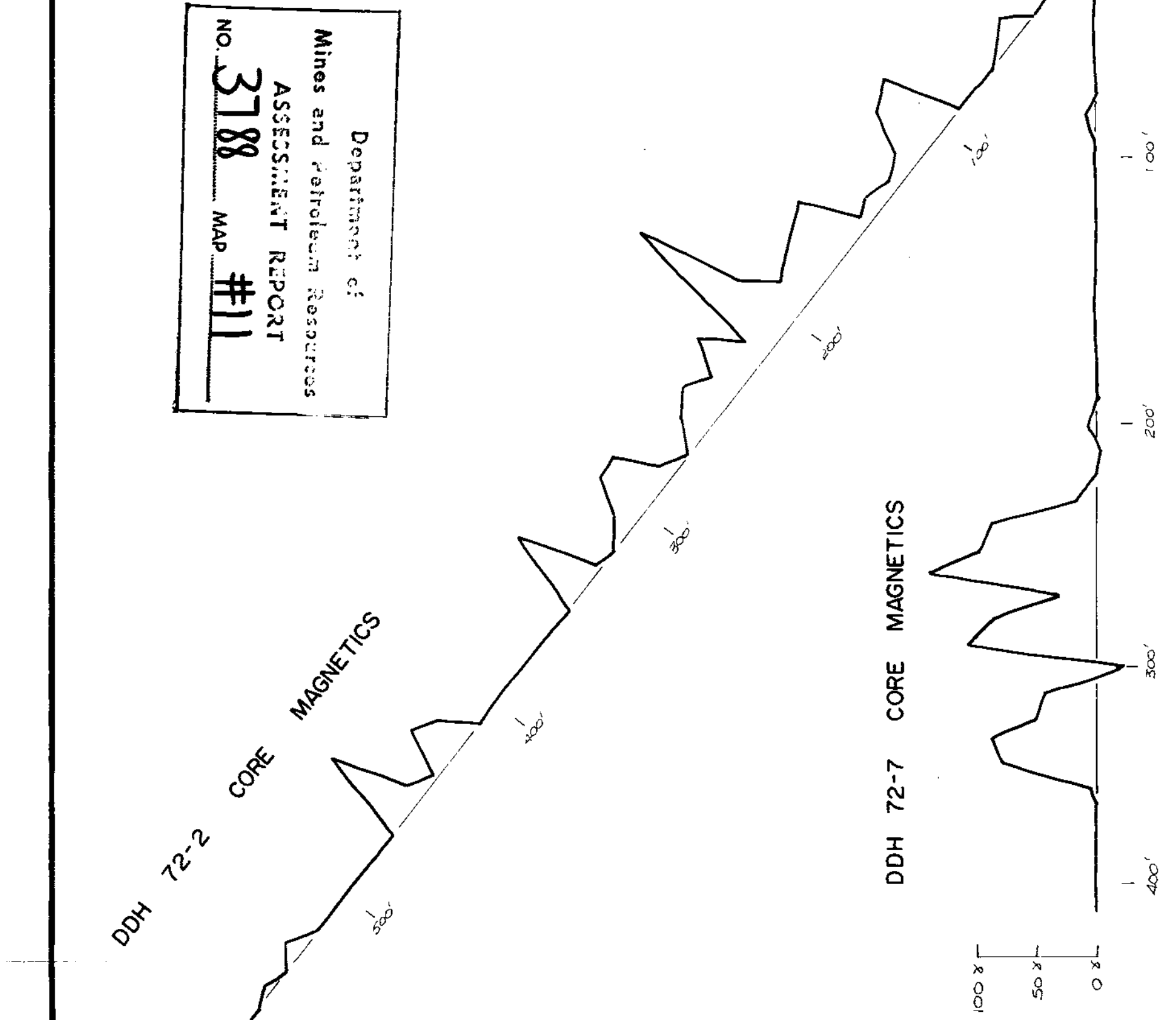
SCALE 1: 50,000

DATE August, 72

C. A. AGER & ASSOCIATES LTD.
8158 Gamble Rd., Richmond, B.C., Canada

GROUND MAGNETICS LINE 72N





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AUG 15 1972

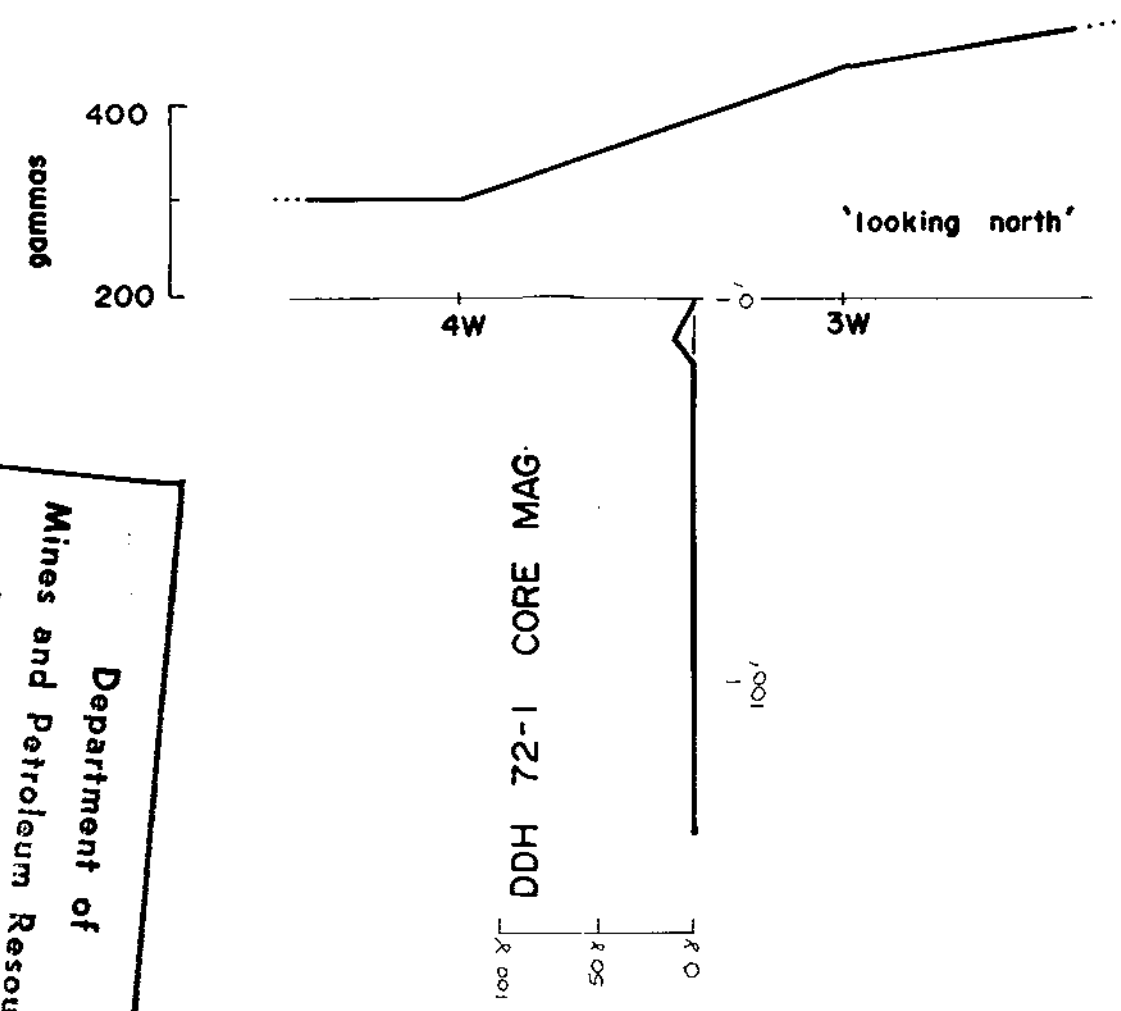
FIGURE 5

MAGNETIC SECTIONS DDH 72-2, 72-7

WHITE RIVER MINES LTD.
DAGO-OPEN PROPERTY ASPEN GROVE B.C.

SCALE 1" = 50'
DATE July, 72

C. A. AGER & ASSOCIATES LTD.
815B Cambie Rd., Richmond, B.C., Canada



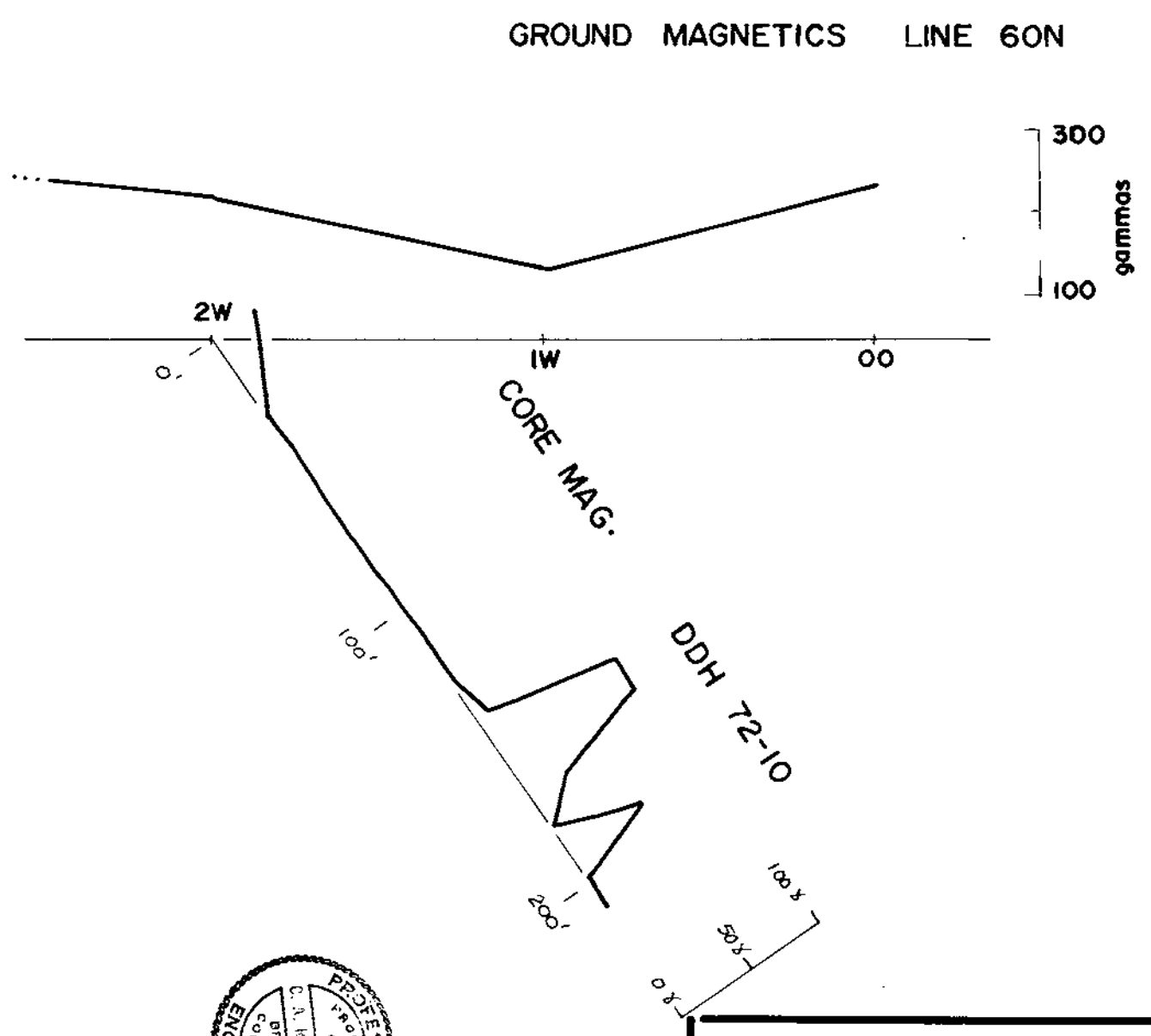


FIGURE 7

MAGNETIC SECTIONS DDH 72-1, 72-10

WHITE RIVER MINES LTD.

DAGO-OPEN PROPERTY ASPEN GROVE B.C.

SCALE 1" = 50'

DATE July /72

C. A. AGER & ASSOCIATES LTD.
8158 Cambie Rd., Richmond, B.C., Canada

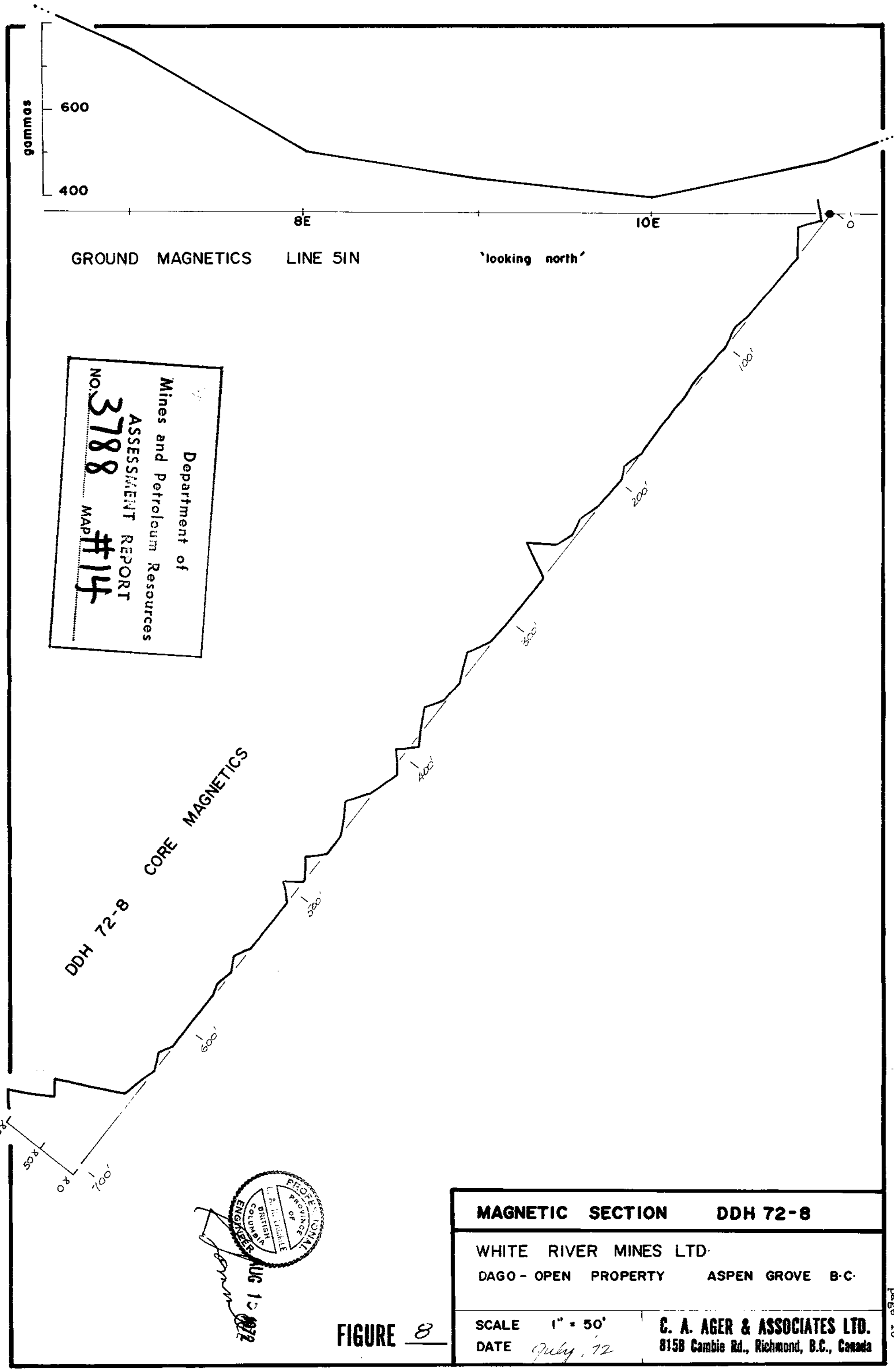


FIGURE 8

MAGNETIC SECTION DDH 72-8

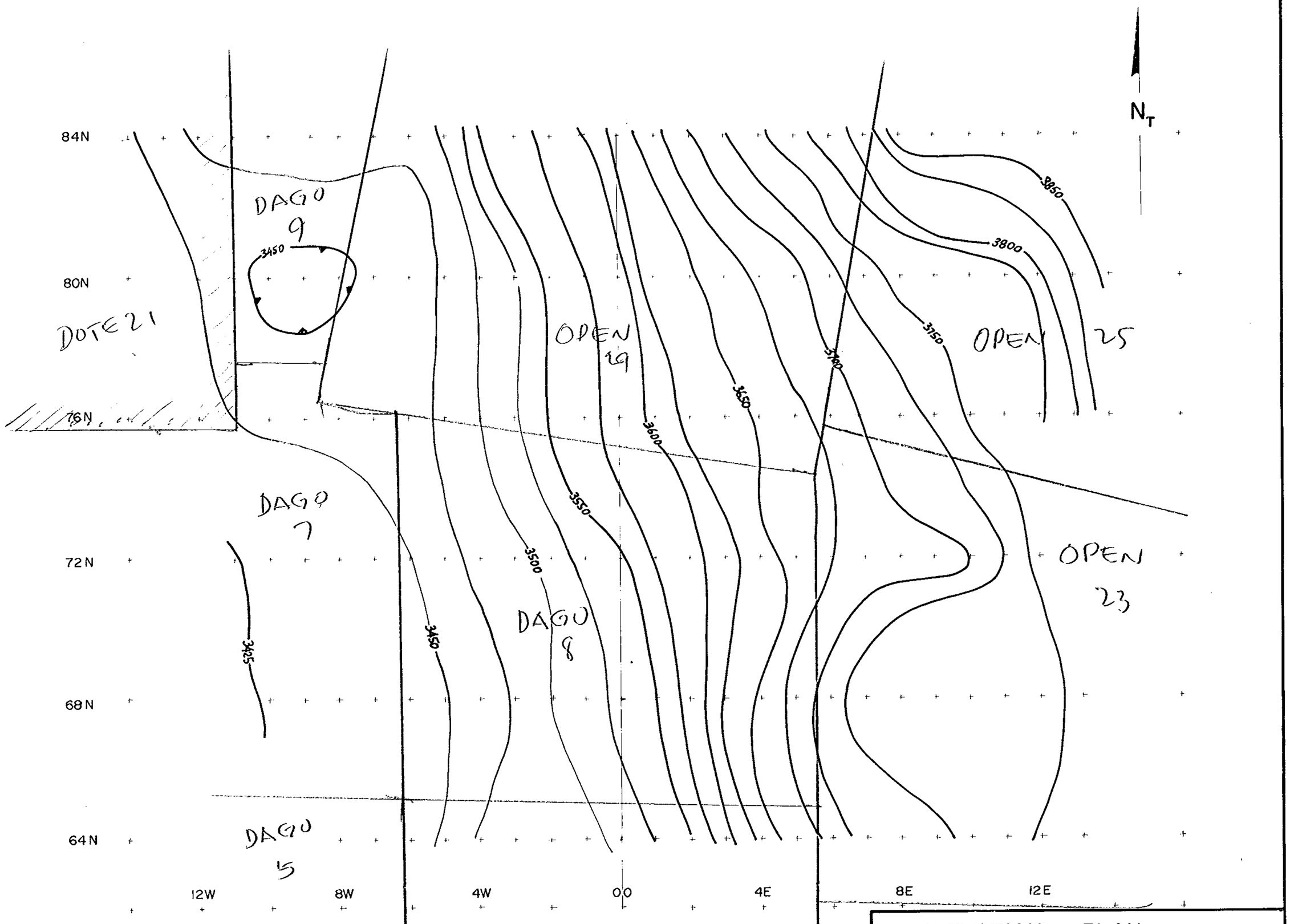
WHITE RIVER MINES LTD.

DAGO - OPEN PROPERTY ASPEN GROVE B.C.

SCALE 1" = 50'

DATE July, 72

C. A. AGER & ASSOCIATES LTD.
815B Cambie Rd., Richmond, B.C., Canada



CONTOUR INTERVAL 25 FEET

ELEVATION PLAN

WHITE RIVER MINES LTD. (N.P.L.)

DAGO-OPEN CLAIMS

ASPEN GROVE, B.C. NTS SHEET 92H/15

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

AUG 1, 1972

AUG 1, 1972

SCALE 1" = 200'	GEOPHYSICIST Charles A. Ager
DATE MAY 1972	

3788 M-1

FIGURE 1

DOPE 21

DAGO 9

OPEN 29

OPEN 25

N_T

DAGO 7

DAGO 8

>130 ppm Cu

OPEN 23

72N

68N

64N

DAGO 5

OPEN 21

12W 8W 4W 0 0 4E 8E 12E

DAGO 6

CONTOUR INTERVAL 5 GRAVITY UNITS (GU)

BOUGUER GRAVITY

WHITE RIVER MINES LTD. (N.P.L.)

DAGO-OPEN CLAIMS

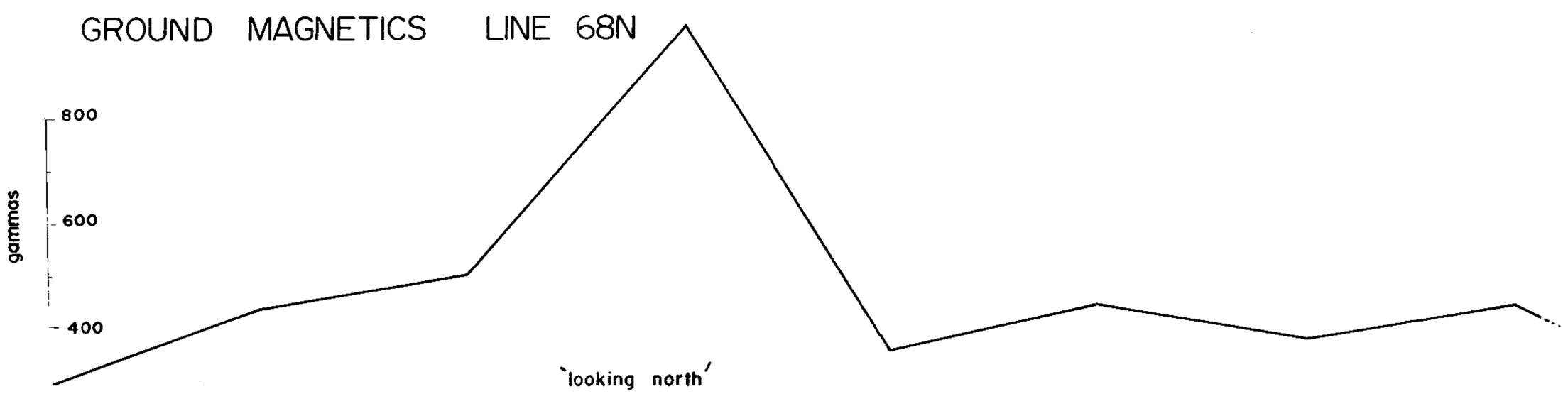
ASPEN GROVE, B.C. NTS SHEET 92H 15

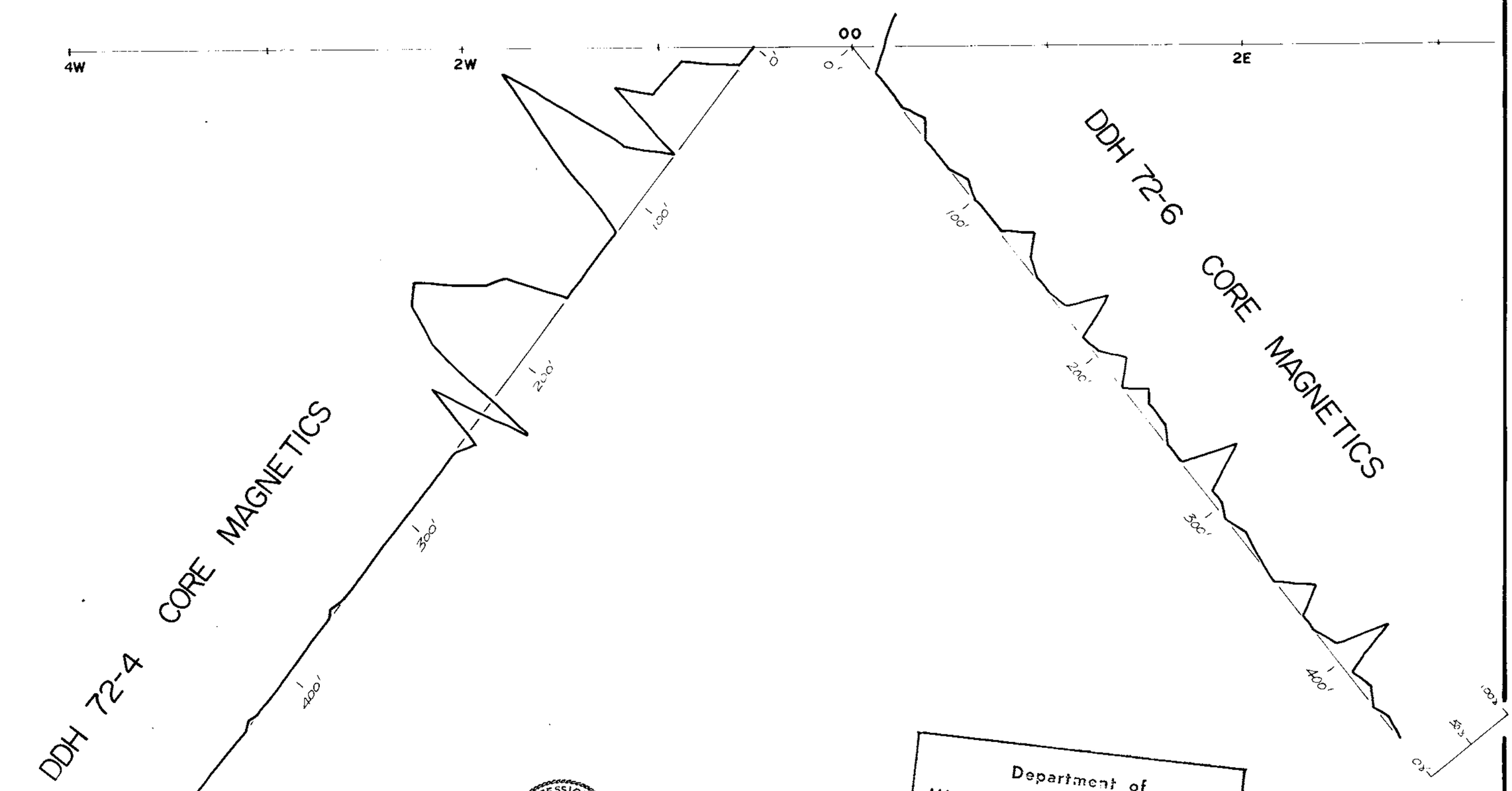
AUG 1, 1972

SCALE	1" = 200'	GEOPHYSICIST
DATE	MAY 1972	Charles A. Ager

3788 M-2

FIGURE 2





TO ACCOMPANY REPORT TITLED
Aeromagnetics & Drill Core Magnetics
BY C.A. Ager M.Sc.
DATED July 16 1972 PROJECT # —

FIGURE 6

MAGNETIC SECTIONS 72-4,6

WHITE RIVER MINES LTD.
DAGO-OPEN PROPERTY ASPEN GROVE B.C.

SCALE 1" = 50'
DATE July '72

C. A. AGER & ASSOCIATES LTD.
8158 Cambie Rd., Richmond, B.C., Canada