

DM 85-234

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52F 05SW0027 63.4830 DOGPAW LAKE

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Gold Zones and  
Potential Gold Zones  
at the Bag Lake Property, Kenora District, of  
Dunfrazier Gold Exploration Inc.

by Michael Ogden, B.A.Sc., P. Eng.

September 30, 1986

OM 85-3-C-2311

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

- (1) Report on Geological Survey, - > See Report # 2.9611, Report of  
Dunfries Gold Exploration Inc, Work # 8 for 1987  
M. Ogden, December/86
- (2) Report on Biogeochemical Survey - > See Report # 2.9592,  
for Gold, Dunfries Gold Exploration Inc, Report of Work # 159 for 1986  
M. Ogden, October/86
- (3) Report on Magnetometer Survey, - > See Report # <sup>2.9575</sup> ~~2.9575~~, Report of  
Dunfries Gold Exploration Inc, Work # 153 for 1986  
M. Ogden, November/86
- (4) Summary of W.D. Paleo 11-18, - > See Dogpaw Lake W.D. #153,  
Dunfries Gold Exploration Inc, July/86 Report of Work # 511 for 1987

## SUMMARY

Two drill programs involving 5,000 feet in 18 holes and 20 miles of very detailed geophysics have found two pods of  $0.2 \pm .05$  ounces of gold over 1 to 3 feet in the "Gulf Zone" and six other clearly defined zones of potential gold mineralization. The two gold mineralized pods of the Gulf zone should be drilled in depth where they are intersected by recently recognized cross structures. Of the six magnetically anomalous zones - three of them can be partly examined in outcrop and should be seen and tested with the aid of hand-held electromagnetic gear to ascertain the probability and attitude of sulphide mineralization prior to drilling. The other three are in swamp, covered with clay, and will have to be tested by direct drilling.

A drilling program of about 5,000 feet in 15 holes is envisaged with associated costs as follows:

Examination and electromagnetic check	\$ 3,500
Drilling and moving 5,000 ft. @ \$22	100,000
Engineering and assaying 5,000 ft. x 3.00	15,000
	\$ 118,000

Allowing 15% for exigencies would require \$135,000 for the program which will take 5 to 6 weeks to complete.

**THE GULF ZONE (See Map #4 and Contours West Grid)**

Gulf Minerals Canada Limited drilled the gold mineralization at Bag Lake along a strike of length of 1200 feet in 1980. It seemed discontinuous but they did get 0.2 ounces of gold over 3 feet toward the east end and Dunfrazier duplicated that with a 0.2 over 2 1/2 feet some 100 feet west in 1985. The latter holes (85 - 7 & 8) were drilled because of a suspected north trending fault between the Dunfrazier and the Gulf (80 - 4 & 5) holes.

The new detailed magnetics clearly indicate a major northeast trending normal fault through this area, probably with north side down but that is still in some doubt. As this fault cuts between some of the best mineralization it should be drilled by a couple of short holes (a 75 & 150 foot) to establish a dip and detailed location. Then a couple of deep holes (400 to 500 feet) should probe the main zone in depth, near the fault.

The other good Gulf hole (No. 9 with 0.15 ounces over 4 feet) was at the western edge of their drilling, under the creek flowing into Bag Lake. Dunfrazier got the extension of this zone 200 feet further west in the hole 85-6 with 31 feet of low grade breccia. But holes 85-6 and 85-9 also seem to display the down dip extension of a rusty carbonated zone that outcrops on the shore of Bag Lake. The junction of this latter zone with Gulf zone should be drilled by at least one 500 foot hole to cut around 400 feet in depth about half way between the intersection of the Gulf hole and the Dunfrazier hole.

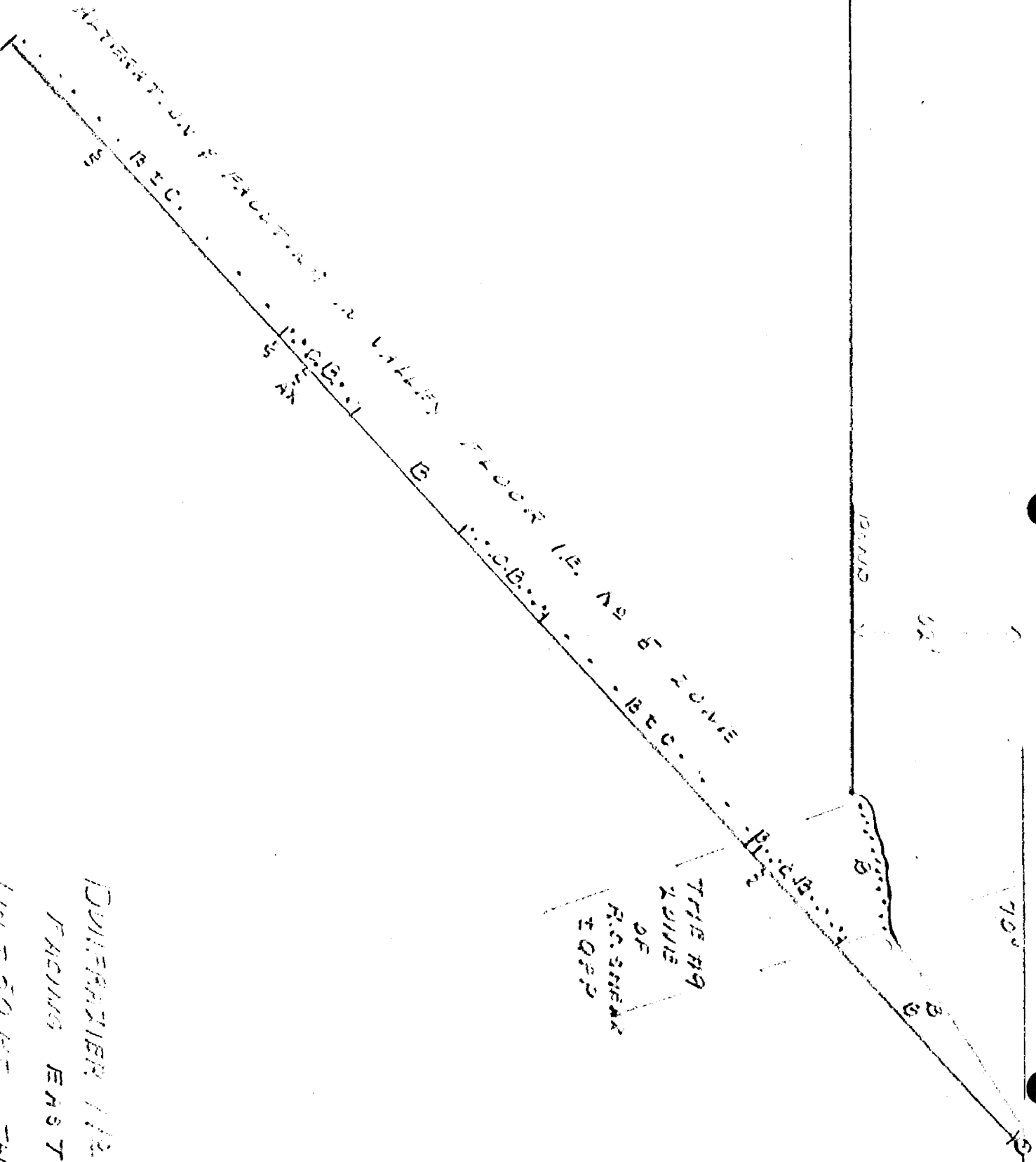
N 2 4

70°

PLUMB

OR

THE R9  
ZONE  
OF  
R.C. SHEAR  
TOPP



ALTERATION & FRACTURE IN LITHEN

FLOOR (E. NS 6 ZONE)

OM 55-234

DOG RISE W. ADDRESS

DUNFRAZIER 112.4

FACING EAST

1 IN. = 50 FT THN 86

OGDEN

## EXPLORATION OF THE PROPERTY

The drilling program of last December investigated seven different zones of rusty carbonatization that had been found by prospecting and geological survey. Most of them had some gold when panned.

Ten holes were drilled with almost 4,000 feet into these zones which varied in length from a quarter mile to many miles in length.

Most of the carbonate zones proved to be just that, 20 or 30 feet of intense carbonatization and iron carbonate with quartz stringers and veins and a little gold (60 to 160 parts per billion).

The East Valley fault zone proved to be a major structure. It crosses the road at kilometre 4.2 and extends northeast for a mile within the property, then trends easterly for another mile where it blends into the main Cameron-Pipestone fault system. Toward the south it extends for a mile within the property and a mile or so beyond that. It is clearly seen on the ground by a variable width valley with the occasional exposure of very rusty carbonate shearing along the edges. The odd exposure of an agglomerate or fragmental in the valley may indicate stratification but the parallel glaciation direction has certainly enhanced the valley.

A very detailed magnetometer survey (150 ft. line interval and 10 ft. readings) was done during the winter over the main east valley and over the north arm of Bag Lake and the valley beyond, to the north. Its purpose was to detect minor magnetic lows which might reflect the diminished magnetite content of the basic lavas due to carbonatization and pyritization.

Another 2,000 feet has just been drilled (July) in 8 holes. The long zones of low magnetics as drilled by 11, 12, 13, 15 and 16 reflect quartz or feldspar porphyry dykes. The small intense lows of various orientation reflect highly carbonated and brecciated zones of near mineralization, like those drilled by holes 2, 3, 4, 10, 14, 17 and 18.

The detailed magnetics and drilling was examined by the writer in consultation with Dr. Norman Paterson of Paterson Grant & Watson, who have been the geophysical consultants from the start. See map "Carbonate Shear at Road" on a scale of 1 inch to 50 feet, and magnetic contour maps "Southeast Grid", at 1 inch = 100 feet.

#### **Anomaly No. 1 at Road and Valley Intersection**

This intense breccia drilled now by holes 2, 3, 14 and 18 shows clearly by the magnetics. The drilling indicates a dip into the quartz porphyry dyke. A couple of steep holes alongside the dyke a hundred feet apart should probe this near mineralization in depth. (400 feet each)

#### **Anomaly No. 2 on Line 150 North of the Northeast Grid at 300 to 400 feet West**

This low of 800 to 1,000 gammas (2,000 to 2,200 versus the norm of 3,000 or higher) overlies a highly sheared and rusty carbonate zone of quartz veins and stringers in felsitic rock striking about  $135^{\circ}$  and dipping steeply south at about  $85^{\circ}$ . The surface exposure is limited due to a lot of rubble on the side hill. Assays were low (65 PPB).

Anomaly No. 2 (Cont'd)

The magnetics, which corroborate the plunge to the southwest, have a couple of high readings within the lows (13,000 and 11,000) which could indicate pyrrhotite mineralization. These seem close enough to the surface that a hand-held electromagnetic instrument could easily get a strike and perhaps a dip, prior to drilling. A hole of at least 150 feet will be required here.

**Anomaly No. 3 lying 100 to 200 feet northwest of the northwest base line, between 500 and 800 north**

The south end of this zone was probed by hole No. 10 last December. A zone of intense iron carbonate alterations and intermittent breccia was found. The next line, 150 feet north shows a pronounced double low (one of about 1,000 gammas and the other of almost 2,000) with a high in between (1,500 to 2,500 above the norm of 3,000) that again may reflect pyrrhotite mineralization.

This zone may outcrop and should therefore be checked on the ground visually and by a hand-held electromagnetic before laying out a drill hole. The beaver pond alongside this zone would necessitate a 250 foot hole.

**Anomaly No. 4** is weak (200 gammas from normal) and it overlies an exposed rusty carbonate zone of 30 to 40 feet in width, which is not as strong visually or magnetically as the others. It may, however, be the continuation of the No. 3 zone across the valley. No further work is recommended for now.



**Anomaly No. 5 is 500 feet South on the Southeast Base Line**

It lies alongside the north edge of a porphyry dyke, in the middle of the fault zone, making it a prime target for a hole or two. The holes should be drilled from the east to the west at a steep angle. (At least a 300 foot hole at 60°)


**Anomaly No. 6 (See "Contours, Southeast Grid")**

It lies on 900 south between 50 and 250 east and may well outcrop. A ground check with electromagnetic gear should be done. The intriguing thing about this one is that a sharp low exists on each side of the apparent continuation of the quartz porphyry dyke. Then between these lows is a mild high possibly reflecting some pyrrhotite. It is a structural situation that would be conducive to mineralization. To probe both lows would require a 350 to 400 foot hole.

**Anomaly No. 7** is an unusually low, (1,500 gamma) large (300 x 100 foot) anomaly lying a couple of hundred feet east of the southeast base line, between 1,350 and 1,650 feet south. It lies alongside the main fault-carbonate zone adjacent to a cross fault lineament that is parallel to the Cameron-Pipestone fault and from which gold was panned 2,500 feet along strike last summer. It is under a swamp and cannot be examined, but a rusty carbonated basalt outcrops just north of the anomaly.

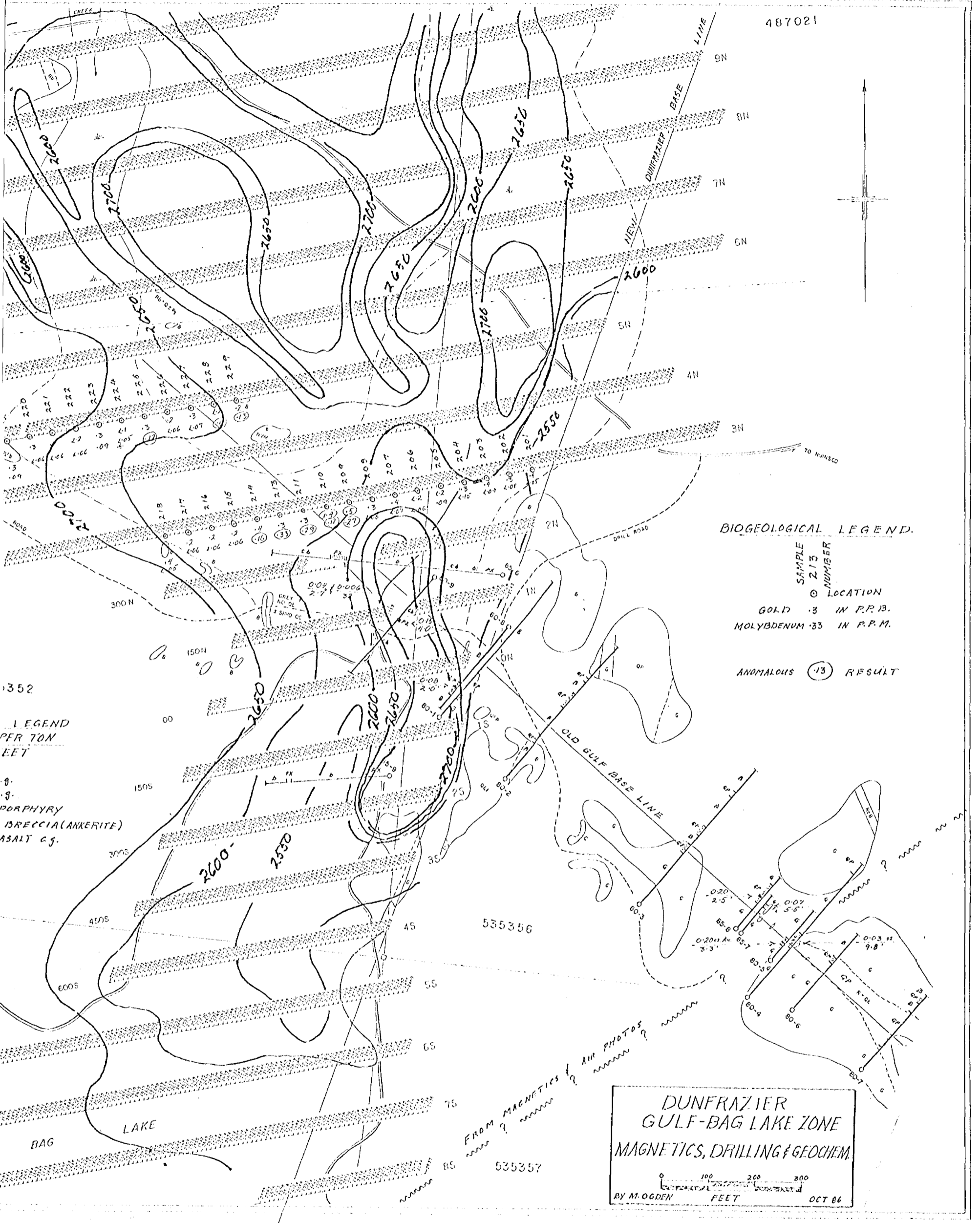
The magnetics imply a dip to the east, so a couple of holes of 300 - 400 feet drilled toward the west would provide an initial probe of this zone.

Respectfully submitted,



Michael Ogden, B.A.Sc., P.Eng.

487021



**BIOGEOLOGICAL LEGEND.**

○ SAMPLE LOCATION  
 ○ 215 NUMBER

○ 3 GOLD IN P.P.B.  
 ○ 33 MOLYBDENUM IN P.P.M.

○ 13 ANOMALOUS RESULT

**LEGEND**  
 PER 10N  
 FEET

○ PORPHYRY  
 BRECCIA (ANKERITE)  
 ASALT G.S.

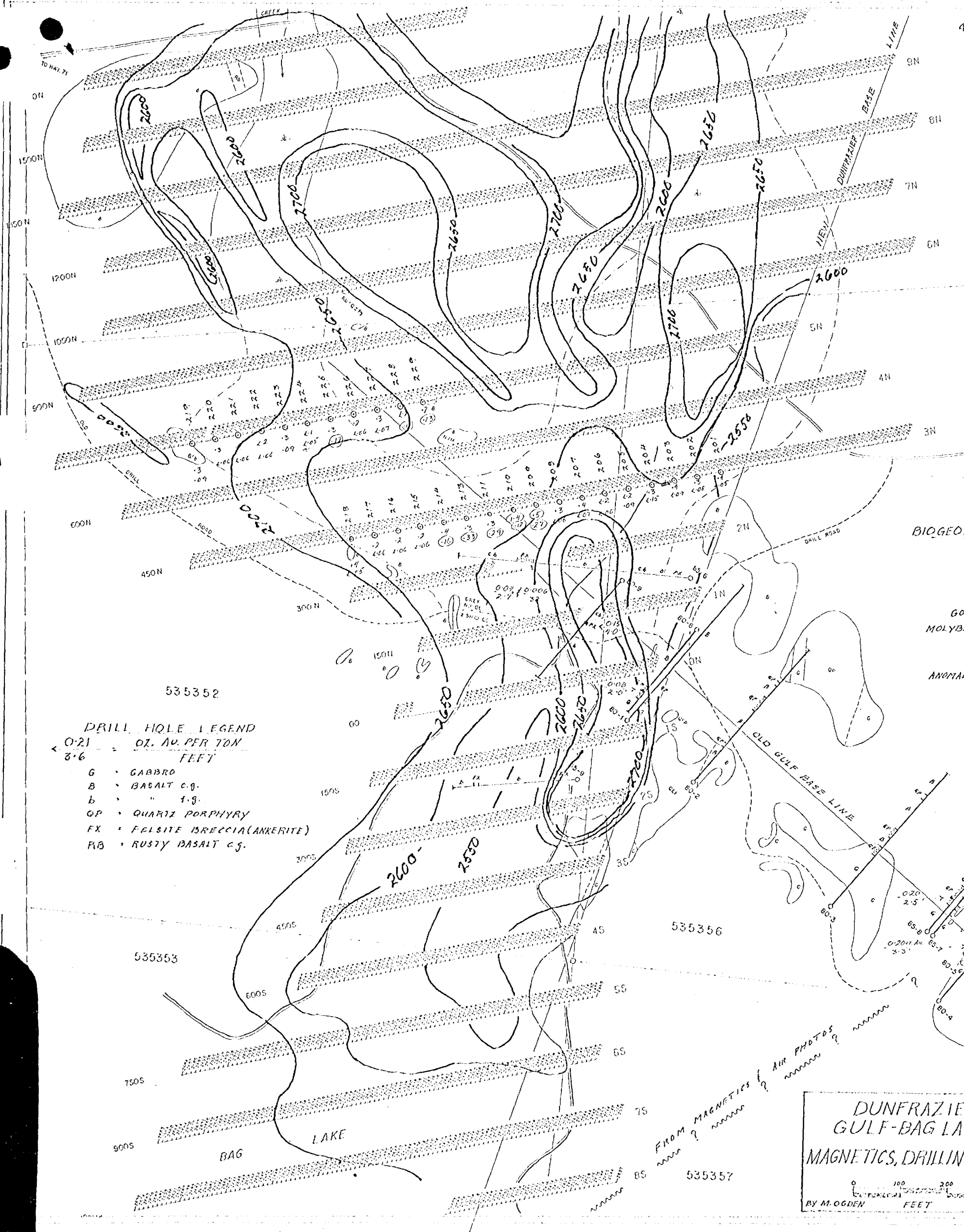
**DUNFRAZIER  
 GULF-BAG LAKE ZONE  
 MAGNETICS, DRILLING & GEOCHEM.**

BY M. OGDEN OCT 86

USED DEC 86 FOR MAG CONTOURS BASED ON GEOLOGY.

□ MAG LOW      □ MAG HIGH

BY M. OGDEN



535352

**DRILL HOLE LEGEND**

0.21 - OZ. AU. PER TON  
 3.6 - FEET

G - GABBRO  
 B - BASALT c.g.  
 b - " 1.g.  
 QP - QUARTZ PORPHYRY  
 FX - FELSITE ISRECCIA (ANKERITE)  
 RB - RUSTY BASALT c.g.

DUNFRAZIE  
 GULF-BAG LA  
 MAGNETICS, DRILLIN

BY M. OGDEN

100 200  
 FEET

REVISED DEC 86 FOR MAG CONTOURS BASED ON GEOLOGY.

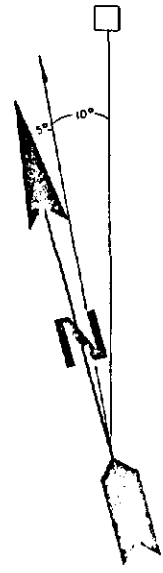
☐ MAG LOW      ☐ MAG HIGH

BY M. OGDEN

863545

TREND OF MAG LOW IS RCBZ: PY

747339



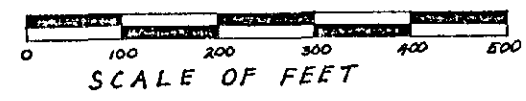
LEGEND

- = WEAK GOLD MINERALIZATION IN DDH.
- No 6** = ANOMALY NUMBER (SEE REPORT)
- R** = RUSTY
- C** = CARBONATED
- A** = ANKERITIC
- X** = BRECCIA
- F** = FELSITE
- B** = BASALT (RICE SIZE GRAIN)
- b** = " (SUGAR " " )
- G** = GABBRO
- F** = FELSITE

63.4830

DUNFRAZIER GOLD EXPLORATION INC.  
BAG LAKE PROPERTY, KENORA DIST. ONT.

CARBONATE SHEAR AT ROAD  
MAGNETIC ANOMALIES & DRILL HOLES.

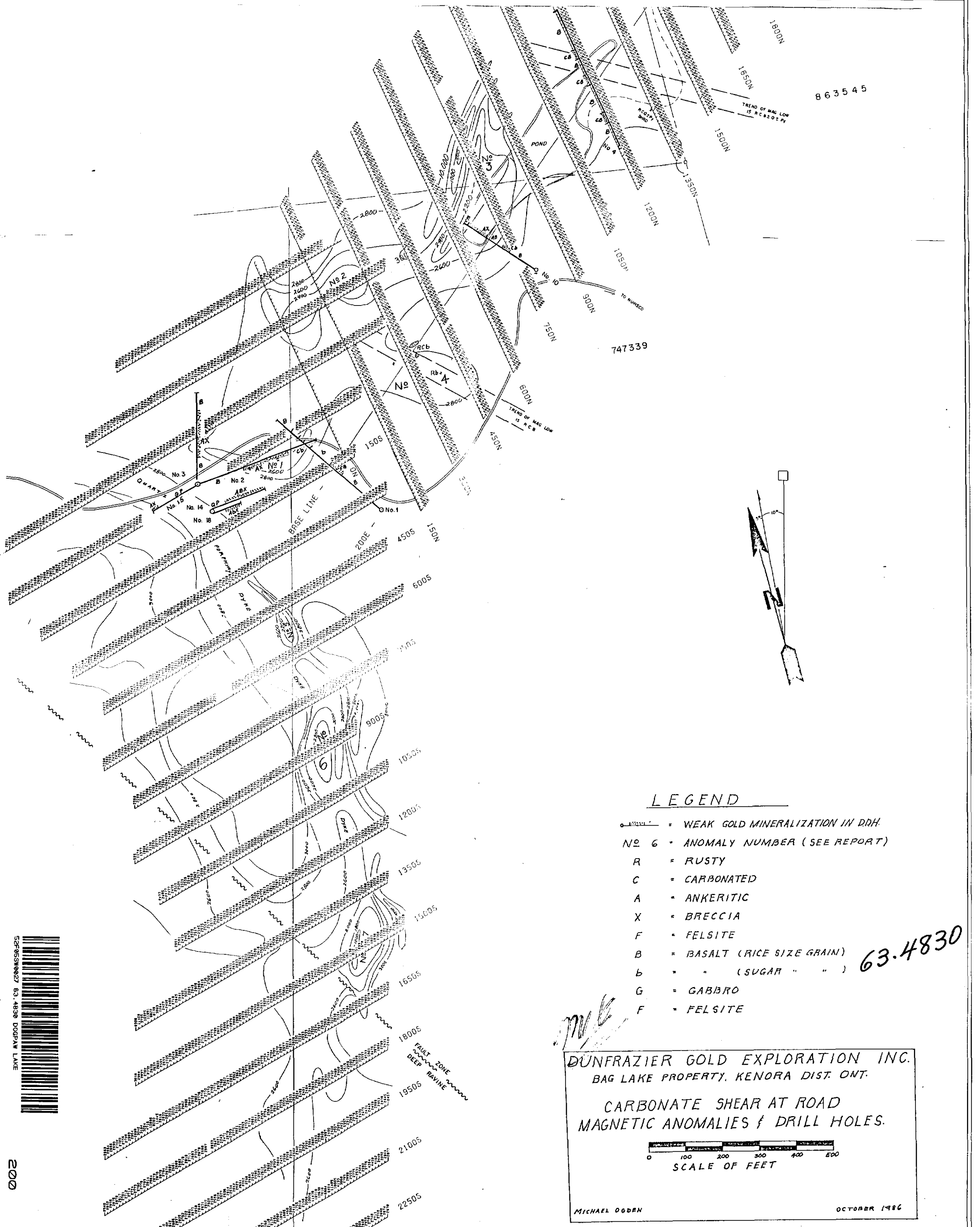


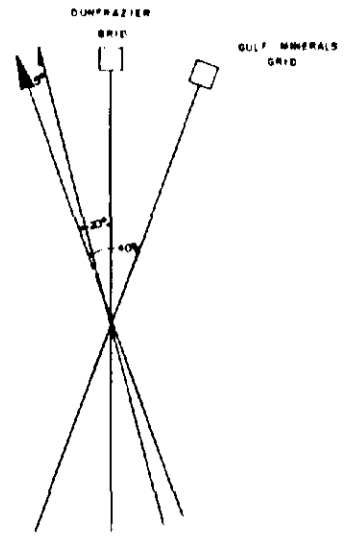
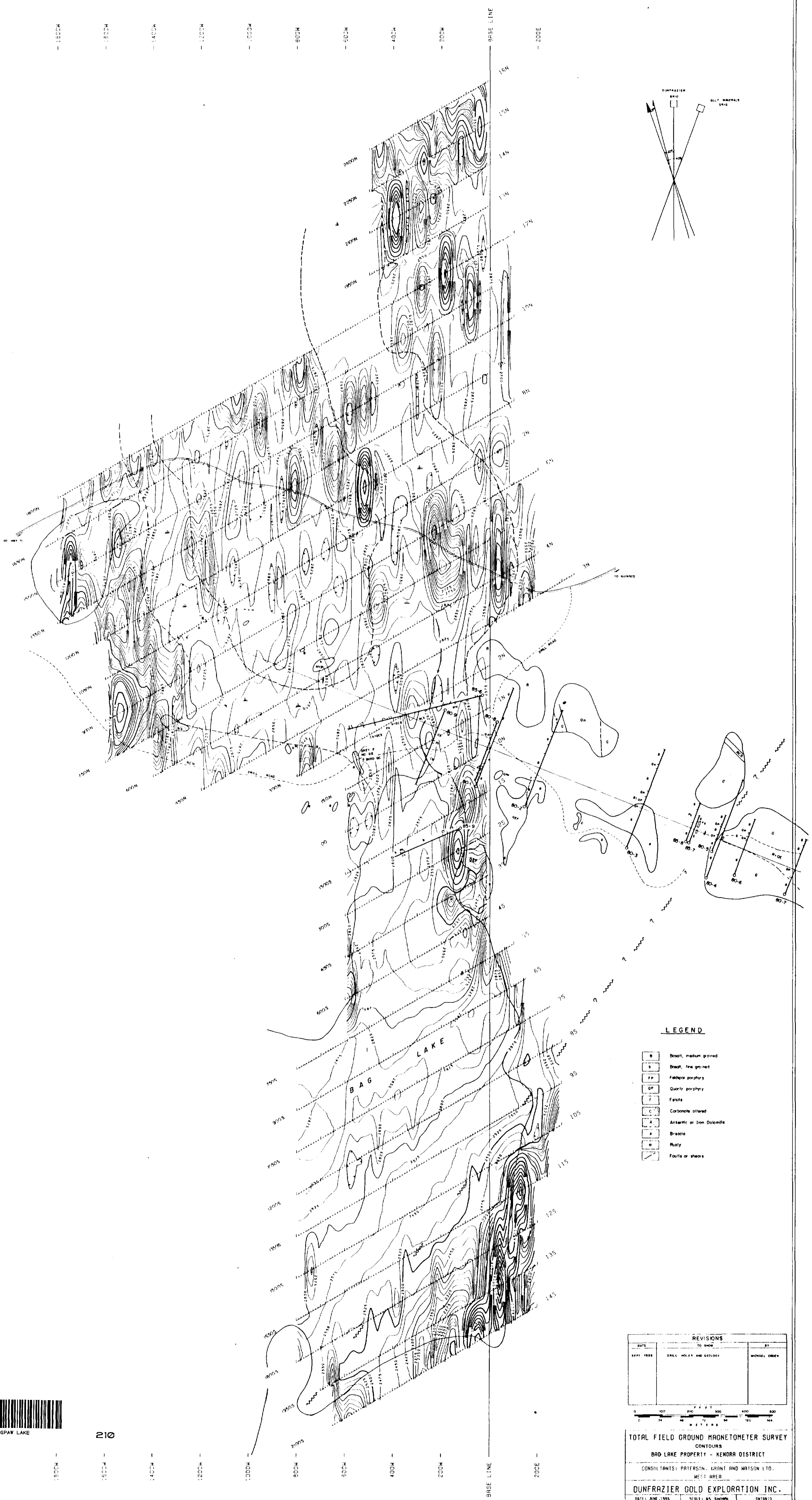
MICHAEL DODEN

OCTOBER 1986



200

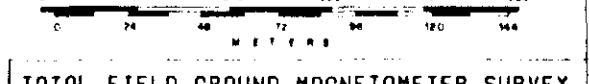




**LEGEND**

- B Basalt, medium grained
- D Basalt, fine grained
- FP Feldspar porphyry
- QP Quartz porphyry
- F Felsite
- C Carbonate altered
- A Ankeritic or iron Dolomite
- X Breccia
- R Rusty
- / Faults or shears

REVISIONS		
DATE	TO	BY
SEPT 1988	DRAWN, MOVED AND RECORDED	MICHAEL OGDEN

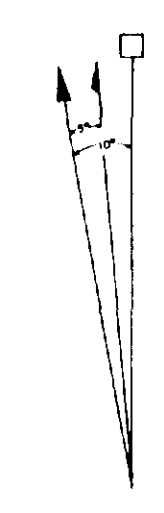
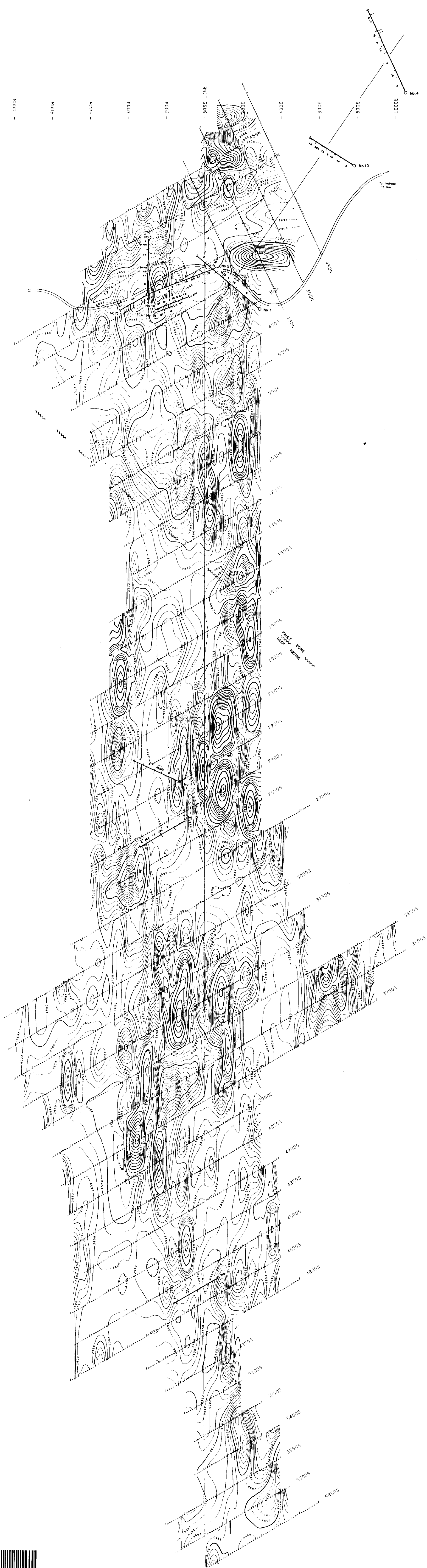


TOTAL FIELD GROUND MAGNETOMETER SURVEY  
 CONTOURS  
 BAG LAKE PROPERTY - KENORA DISTRICT  
 CONSULTANTS: PATTERSON, GRANT AND HAYSON LTD.  
 WEST ABER  
**DUNFRAZIER GOLD EXPLORATION INC.**  
 DATE: JUNE 1985 SERIAL: AS SHOWN ON MAP DATED:  
 PROCESSED AND PLOTTED BY DATA PLOTTING SERVICES INC.



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**LEGEND**

- B Shale, medium grained
- S Sandstone, fine grained
- FP Feldspar porphyry
- QP Quartz porphyry
- F Felsite
- C Carbonate altered
- A Anoxic or iron dolomite
- B Breccia
- R Rubble
- F Faults or shear

REVISIONS		
DATE	BY	REVISIONS
1981	EM	INITIALS AND THEIR DESIGN



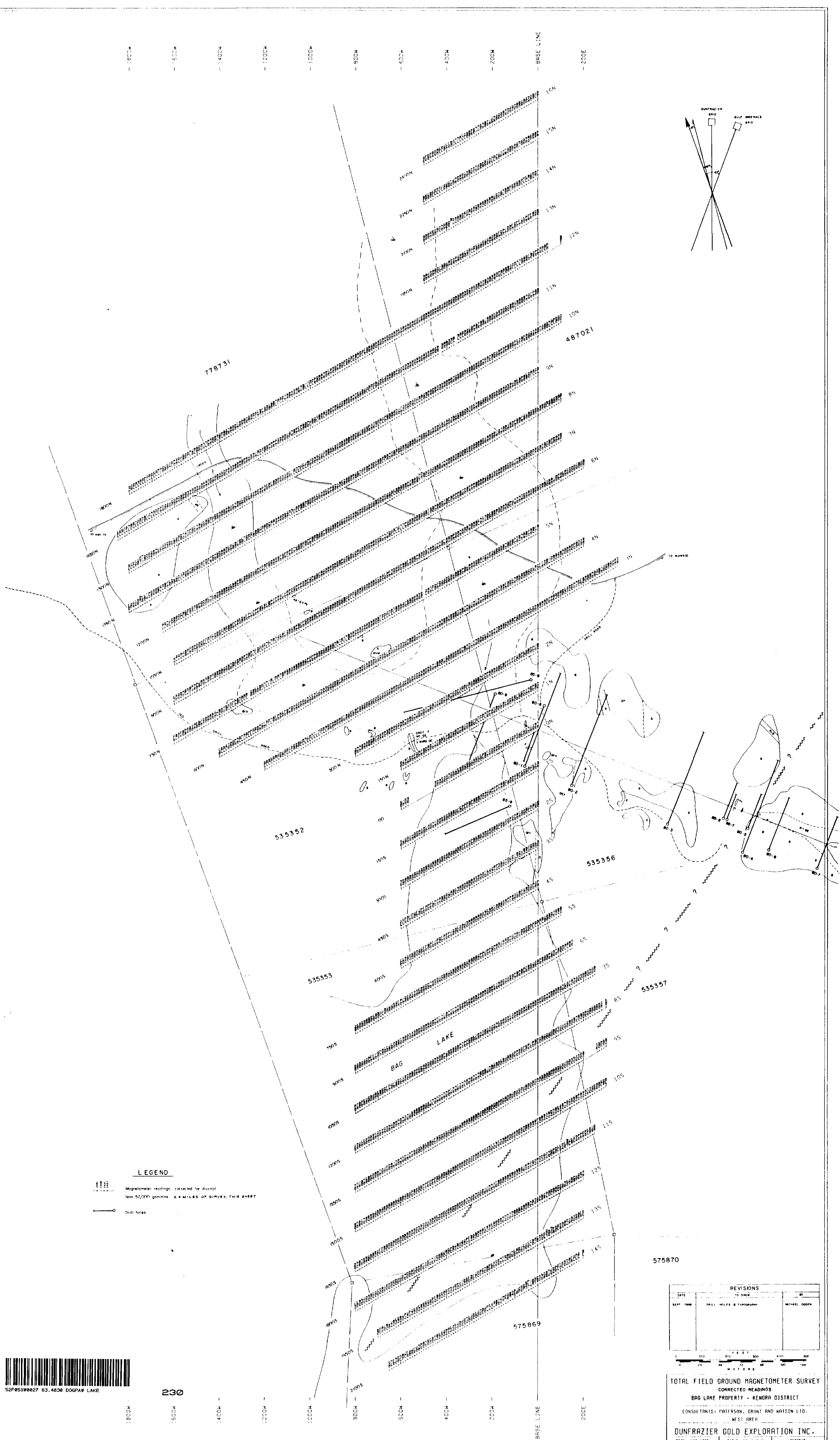
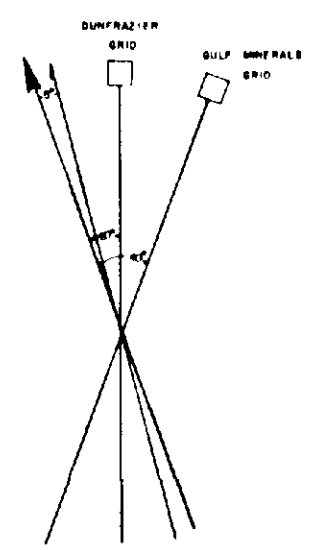
**TOTAL FIELD GROUND MAGNETOMETER SURVEY**  
**CONTOURS**  
 BAD LAKE PROPERTY - KENORA DISTRICT  
 CONSULTANTS: PATERSON, GRANT AND WATSON LTD.  
 SOUTH EAST GRID  
**DUNFRAZIER GOLD EXPLORATION INC.**  
 DATE: JAN. 1981 SCALE: AS SHOWN DRAWN BY: [ ]  
 PROCESSED AND PLOTTED BY: DATAPLOTTING SERVICES INC.





220

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 0M85-234

1800M  
1600M  
1400M  
1200M  
1000M  
900M  
800M  
700M  
600M  
500M  
400M  
300M  
BASE LINE  
200M  
100E



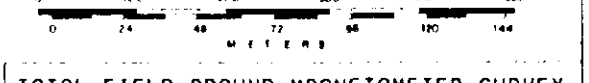
**LEGEND**  
 Magnetometer readings, corrected for diurnal less 57,000 gamma. 6.4 MILES OF SURVEY, THIS SHEET  
 Drill holes



230

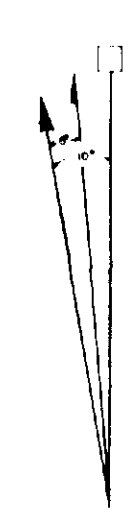
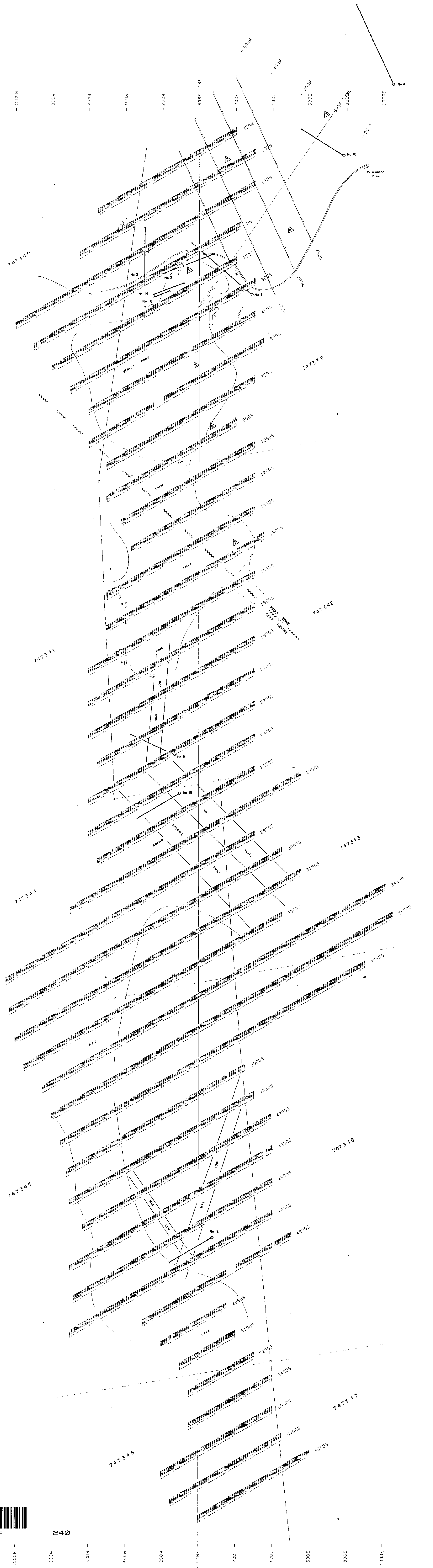
1800M  
1600M  
1400M  
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500M  
400M  
300M  
BASE LINE  
200M  
100E

REVISIONS			
DATE	TO SHOW	BY	
SEPT 1986	DRILL HOLES & TOPOGRAPHY	MICHAEL OGDEN	



TOTAL FIELD GROUND MAGNETOMETER SURVEY  
 CORRECTED READINGS  
 BAG LAKE PROPERTY - KENORA DISTRICT  
 CONSULTANTS: PATTERSON, GRANT AND WATSON LTD.  
 WEST BERRA  
 DUNFRAZIER GOLD EXPLORATION INC.  
 DATE: JUNE 1986 SCALE: AS SHOWN ON THIS SHEET  
 PROCESSED AND PLOTTED BY: DRAFTER/PLOTTING SERVICES INC.

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 DM 85-234



**LEGEND**

- Magnetometer readings, corrected for diurnal less 57,000 gammas, this grid has 7.8 miles of survey
- Drill holes
- Road
- Magnetic anomaly number

REVISIONS		
DATE	TO	BY
SEPT 1988	DRAWN, CHECKED & APPROVED	MICHAEL DODD

TOTAL FIELD GROUND MAGNETOMETER SURVEY  
 CORRECTED READINGS  
 BAG LAKE PROPERTY - KEMORA DISTRICT  
 CONSULTANTS: PATERSON, GRANT AND WATSON LTD.  
 SOUTH EAST GRID  
 DUNFRAZIER GOLD EXPLORATION INC.  
 DATE: JUNE 1988 | SCALE: AS SHOWN | SHEET NO. 240/110  
 PROCESSED AND PLOTTED BY: DATA PLOTTING SERVICES INC.

