

52F05SW0047 2.9592 DOGPAW LAKE

010

**BIOGEOCHEMICAL ORIENTATION SURVEY FOR GOLD**

**On the extension of the Gulf Gold Zone**

**at Bag Lake.**

**Dunfrazier Gold Exploration Inc.**

**Suite 310, 67 Richmond Street West**

**Toronto M5H 1Z5**

**RECEIVED**

**DEC - 2 1986**

**MINING LANDS SECTION**

**by**

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

**October 1986**

## BACKGROUND AND SUMMARY

Gulf Minerals Canada Limited drilled a series of 9 holes along some 1400 feet of intermittent gold mineralization within an irregular quartz feldspar porphyry in 1980. This zone called the "Gulf Zone" strikes northwest toward the adjoining Jenson-Johnston showings half a mile away. It's dip as shown by drilling is almost vertical. The zone is covered to the northwest by a flat tag alder swamp for some 1200 feet. It has not been found on the Dunfrazier ground beyond that, which is the boundary area anyway.

Because of the consistent tag alder cover, a limited biogeochemical survey was conducted over the extension of the Gulf Zone to ascertain: 1) if the gold mineralization was detectable in alder leaves and 2) if so, was the zone continuous.

As the accompanying map "Dunfrazier Gulf - Bag Lake Zone etc." shows, the method worked beautifully, with anomalous results in gold and/or molybdenum over widths of 50 to 200 feet.

## REFERENCES

1. Geological Survey of the Bag Lake Property, Dogpaw Lake Area, Kenora District, of Dunfrazier Gold Exploration Inc., by Michael Ogden, October 1985 (in assessment files of M of ND & M).
2. Diamond Drilling Program, November and December 1985 like 1 above (in same files).
3. Magnetometer Survey, November 1986 like 1 above (to be filed).

## THE SURVEY

On September the 1st a series of 28 samples of alder leaves were collected at 50 foot intervals along lines 3N and 5N in the swamp. i.e. lines 450 ft. and 750 ft. north of the zero under holes 1 and 8.

These were sent to Nuclear Activation Services Limited of 1230 Main Street, Hamilton, for drying, blending, irradiation and multi element analysis.

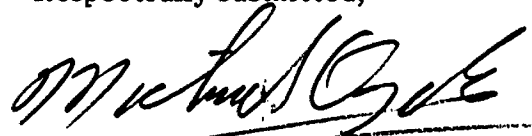
The gold zone was detected directly in samples 209 and 210 with 0.5 and 1.4 PPB gold whereas normal was .4 PPB or less. Molybdenum also showed up in 209, 210, 211, and 213 (there is no 212). It ran 0.27, 0.12, 0.29 and 0.33, respectively, whereas the usual results were all less than 0.1 PPM. These results were from line 3N on either side of the old base line which was cut to follow the trend of the mineralization. The results from the next line (5N some 300 feet to the northwest) were weaker, with only molybdenum being anomalous near the old base line.

The detection limits for these elements were gold to 0.1 PPB and molybdenum to 0.05 PPM.

## CONCLUSION

The method works surprisingly well in a situation like this of - even cover of one plant, and overburden depth of about 10 feet (3 meters) or less.

Respectfully submitted,



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



RP

W86 01 154

Mir

Type of Survey(s) **BIOGEOCHEMICAL (ALIBER LEAVES)** Township or Area **DOGPAW LAKE**

Claim Holder(s) **DUNFRAZIER GOLD EXPLORATION INC.** Prospector's Licence No. **T-1921**

Address **SUITE 310, 67 RICHMOND ST. WEST, TORONTO M5M 1Z5**

Survey Company **H.B. & O. ENGINEERING LTD.** Date of Survey (from & to) **1 9 86 25 10 86** Total Miles of line Cut **NIL**

Name and Address of Author (of Geo-Technical report) **MICHAEL OGDEN, RR-4 STOUFFVILLE ONT. L4A 7X5**

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Electromagnetic	
	Magnetometer	
	Radiometric	
	Other	
For each additional survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days  Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	
	Other	
Airborne Credits  Note: Special provisions credits do not apply to Airborne Surveys.	Geological	
	Geochemical	
Airborne Credits	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
K	535352	70			
K	535356				
RECEIVED					
DEC 1 1986					
MINING LANDS SECTION					

Expenditures (excludes power stripping)

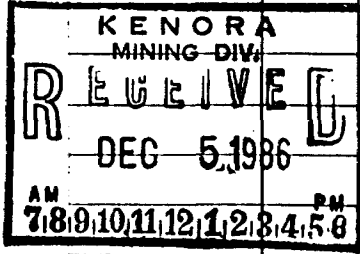
Type of Work Performed **BIOGEOCHEMICAL**

Performed on Claim(s) **K 535352 + K 535356**

Calculation of Expenditure Days Credits

Total Expenditures **\$ 1050.70** ÷ Total Days Credits **15** = **70**

Instructions  
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.



535352

Total number of mining claims covered by this report of work. **2**

Date **OCT 25/86** Recorded Holder or Agent (Signature) *Michael Ogden*

For Office Use Only

Total Days Cr. Recorded **70** Date Recorded **DEC. 5/86** Mining Recorder *[Signature]*

Date Approved as Recorded **87.1.23** Branch Director *[Signature]*

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying **MICHAEL OGDEN, RR-4 STOUFFVILLE, ONT. L4A 7X5**

Date Certified **OCT 25/86** Certified by (Signature) *Michael Ogden*

# H. B. & O. ENGINEERING LIMITED

R. A. HALET, PH.D., P.ENG.

R.R. 1, CAMPBELLVILLE, ONT. L0P 1B0 416-854-9881

P. S. BROADHURST, B.Sc., P.ENG.

4000 YONGE ST., APT. 411, TORONTO, ONT. M4N 2N9 416-482-2388

MICHAEL OGDEN, B.A.Sc., P.ENG.

R.R. 4, STOUFFVILLE, ONT. L0H 1L0 416-888-1106

Dunfrazier Gold Exploration Inc.  
Suite 310  
67 Richmond Street West  
Toronto, Ontario  
M5H 1Z5

In account with: H.B. & O. Engineering Limited

To professional services re a biogeochemical test survey  
over portions of claims K 535352 and K 535356 on September 1,  
1986 and subsequent analyses of results, map and report  
preparation: \$ 550.00

To expenses re above:


28 Analyses by Nuclear Activation Services Limited 369.60  
invoice #6781

4 x 4 car rental - one day 53.92

Lodging and meals at Red Indian Lodge - one day 77.18

\$1,050.70

Note: This is not a new invoice, but a proper distribution of the costs involved in  
doing the biogeochemical survey of September and October. All the above  
amounts were included in our invoices of September 30 and October 29 and  
have been paid in full.

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

NUCLEAR ACTIVATION SERVICES LIMITED

1280 MAIN STREET WEST, HAMILTON, ONTARIO, L8S 4K1

PHONE (416) 522-5666

TELEX 06-986947

INVOICE 6781

REF. FILE 8429-

03-OCT-86

TO: HBO ENGINEERING  
ATTN: M. ODGEN  
RR #4  
STOUFFVILLE, ONTARIO  
LOH 1LO

CUSTOMER NO. 566/01/01

DATE SUBMITTED  
18-SEP-86

28 UNPREPARED SAMPLES WERE ANALYZED

DESCRIPTION		AMOUNT
28	MULTI-ELEMENT VEGETATION	\$12.50/SAMPLE
28	BLENDING	\$ 0.70/SAMPLE
		350.00
		19.60
		<hr/>
TOTAL:		\$ 369.60

*Pumpkin  
Stems*  
*Paid by POC # 139  
Oct 20 1986*

TERMS NET 30 DAYS  
INTEREST AT 1.5% PER MONTH WILL BE CHARGED ON ALL OVERDUE ACCOUNTS.

NUCLEAR ACTIVATION SERVICES LIMITED

1280 MAIN STREET WEST, HAMILTON, ONTARIO, L8S 4K1

PHONE (416) 522-5666

TELEX 06-986947

CERTIFICATE OF ANALYSIS

TO: HBO ENGINEERING  
ATTN: M. ODGEN  
RR #4  
STOUFFVILLE, ONTARIO  
LOH 1LO

CUSTOMER NO. 566/01/01

DATE SUBMITTED  
18-SEP-86

REPORT: 6781

FILE NUMBER: 8429

28 UNPREPARED SAMPLES

WERE ANALYZED AS FOLLOWS:

ELEMENTS	DETECTION LIMIT	UNITS	METHOD	ELEMENTS	DETECTION LIMIT	UNITS	METHOD
AG	0.3000	PPM	HMNA	MO	0.0500	PPM	HMNA
AS	0.0100	PPM	HMNA	SB	0.0100	PPM	HMNA
AU	0.1000	PPB	HMNA	SE	0.5000	PPM	HMNA
BA	20.0000	PPM	HMNA	TA	0.2000	PPM	HMNA
BR	0.0100	PPM	HMNA	TH	0.1000	PPM	HMNA
CO	0.3000	PPM	HMNA	U	0.0200	PPM	HMNA
CR	0.3000	PPM	HMNA	W	0.0500	PPM	HMNA
FE	0.0050	%	HMNA	ZN	2.0000	PPM	HMNA

*GOLD & MOLY SHOW THE ZONE*

DATE 03-OCT-86

NUCLEAR ACTIVATION SERVICES LIMITED

CERTIFIED BY *R. Blackwood*

\*\*\* UNLESS INSTRUCTED OTHERWISE WE WILL DISCARD ALL SAMPLES \*\*\*  
IRRADIATED SAMPLES AFTER 30 DAYS. ANY OTHER MATERIAL AFTER 120 DAYS.

NUCLEAR ACTIVATION SERVICES LIMITED

DATE: 01-20-66

REPORT: 0701

FILE NUMBER: 0489

PAGE: 1

SAMPLE NO. 10010000

ELEMENT	UNITS	** 201**	** 202**	** 203**	** 204**	** 205**	** 206
Ag	PPM	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
As	PPM	0.04	0.05	<0.01	0.06	0.05	0.06
Co	PPM	0.4	0.3	0.4	0.3	<0.2	<0.2
Ca	PPM	20	<20	<20	<20	<20	<20
Ce	PPM	3.9	3.6	5.2	4.2	4.1	5.2
Cu	PPM	0.6	0.4	0.6	0.4	0.6	0.3
Cr	PPM	0.6	0.4	1.2	0.3	<0.3	0.3
Fe	PPM	0.019	0.019	0.016	0.026	0.016	0.017
Ga	PPM	<0.02	<0.02	<0.02	0.12	0.02	<0.02
Ge	PPM	0.62	0.61	0.72	0.61	0.61	0.61
Li	PPM	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Mn	PPM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ni	PPM	0.1	0.4	0.4	0.2	0.3	0.2
P	PPM	<0.03	<0.02	<0.02	<0.02	<0.03	<0.02
S	PPM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Zn	PPM	27	36	24	52	37	46



NUCLEAR ACTIVATION SERVICES LIMITED

DATE: 02-107-65

REPORT: 8701

FILE NUMBER: 0429

PAGE: 2

SAMPLE NO. 000000

ELEMENT :		**	**	**	**	**	**
C UNITS :		207**	208**	209**	210**	211**	212
AG	PPM	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
AS	PPM	0.03	0.04	0.04	0.04	0.03	0.06
AC	PPB	0.4	0.3	0.5	1.4	0.3	0.3
BA	PPM	<20	<20	<20	<20	<20	<20
BR	PPM	4.1	4.9	4.2	2.7	3.3	3.0
BU	PPM	0.5	0.6	0.7	0.3	0.4	0.3
BK	PPM	<0.3	<0.4	<0.4	0.4	<0.3	0.3
BL	PPM	0.024	0.014	0.013	0.009	0.013	0.010
BO	PPM	<0.07	<0.06	0.07	0.12	0.09	0.08
BS	PPM	0.01	0.01	0.01	0.01	0.01	0.01
BT	PPM	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
TA	PPM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TR	PPM	0.2	0.3	0.4	0.3	0.2	0.2
U	PPM	<0.03	<0.03	<0.02	<0.02	<0.02	<0.02
W	PPM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ZN	PPM	52	46	57	45	38	41

NUCLEAR ACTIVATION SERVICES LIMITED

DATE: 02-007-00

REPORT: CTC1

FILE NUMBER: 3409

PAGE: 2

SAMPLE 2 - 10070110

ELEMENT	UNITS	** 214**	** 215**	** 216**	** 217**	** 218**	** 219
AG	PPM	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
AS	PPM	0.03	0.03	0.03	0.04	0.03	0.05
AV	PPB	0.4	0.2	0.2	0.2	0.4	0.3
BA	PPM	<20	<20	<20	<20	<20	20
BR	PPM	2.8	0.88	1.3	2.6	1.2	2.6
BU	PPM	0.3	<0.3	<0.3	0.4	1.1	1.2
CN	PPM	0.3	<0.3	<0.3	<0.3	0.2	0.3
FC	%	0.007	0.017	0.011	0.009	0.015	0.019
GO	PPM	0.10	<0.20	<0.20	<0.20	<0.20	0.20
IS	PPM	0.01	0.01	0.01	0.01	0.01	0.01
JE	PPM	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
JA	PPM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TH	PPM	0.3	0.4	0.2	0.3	0.1	0.1
U	PPM	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
W	PPM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ZV	PPM	50	41	37	47	34	32

NUCLEAR ACTIVATION SERVICES LIMITED

DATE: 02-20-76

REPORT: 8781

FILE NUMBER: 1409

PROJECT: 4

COMPARISON OF RESULTS

ELEMENT		**	**	**	**	**	**
UNITS		220**	221**	222**	223**	224**	225
AG	PPM	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
AS	PPM	0.04	0.05	0.04	0.04	0.04	0.05
AO	PPS	0.3	<0.2	<0.2	0.3	<0.1	0.3
BA	PPM	20	<20	20	<20	20	<20
BR	PPM	4.7	3.5	2.3	3.3	2.0	2.3
BS	PPM	0.4	0.3	0.3	0.3	<0.3	0.3
BR	PPM	0.4	<0.3	0.3	<0.3	0.3	0.4
BL	PPM	0.010	0.014	0.014	0.012	0.012	0.010
BU	PPM	<0.05	<0.06	<0.06	0.09	<0.05	0.12
BU	PPM	0.01	0.01	0.01	0.02	0.01	0.01
BE	PPM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TA	PPM	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TH	PPM	0.2	0.3	0.2	0.2	0.1	0.1
U	PPM	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
W	PPM	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
ZN	PPM	45	58	50	36	43	54

NUCLEAR ACTIVATION SERVICES LIMITED

DATE: 02-06-66

REPORT: 3731

FILE NUMBER: 3419

PAGE: 3

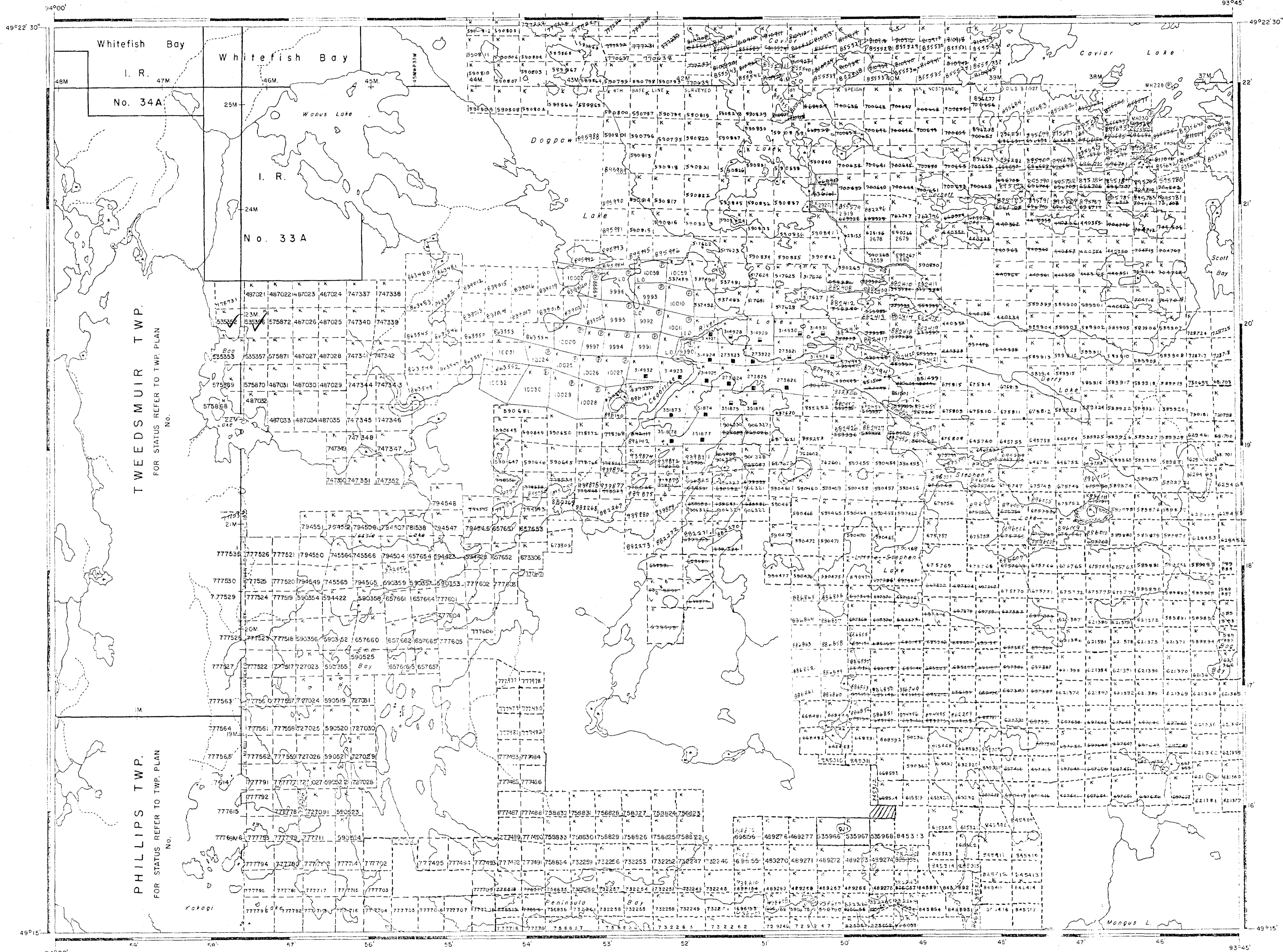
SAMPLE RESULTS

ELEMENT	UNITS	** 226**	** 227**	** 228**	** 229**
AG	PPM	<0.3	<0.3	<0.3	<0.3
AS	PPM	0.06	0.06	0.05	0.09
AU	PPB	<0.2	0.3	<0.2	0.2
BA	PPM	<20	<20	<20	20
BR	PPM	3.0	4.0	3.7	1.7
CB	PPM	<0.3	0.4	0.4	1.1
CR	PPM	<0.3	0.6	0.3	0.3
CE	B	0.009	0.014	0.013	0.016
CO	PPM	<0.06	<0.07	0.16	0.13
CU	PPM	0.01	0.02	0.01	0.01
CL	PPM	<0.3	<0.3	<0.3	<0.3
TA	PPM	<0.2	<0.2	<0.2	<0.2
TH	PPM	0.1	0.1	0.2	0.1
U	PPM	<0.02	<0.02	<0.03	0.02
W	PPM	<0.05	<0.05	<0.05	<0.05
ZN	PPM	47	53	55	26

EXPLANATION OF CODES

VARIABLE DETECTION LIMITS DUE TO SAMPLE COMPOSITION

LOBSTICK BAY G-2627



**LEGEND**

HIGHWAY AND ROUTE No.	
OTHER ROADS	
TRAILS	
SURVEYED LINES:	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES:	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

**DISPOSITION OF CROWN LANDS**

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

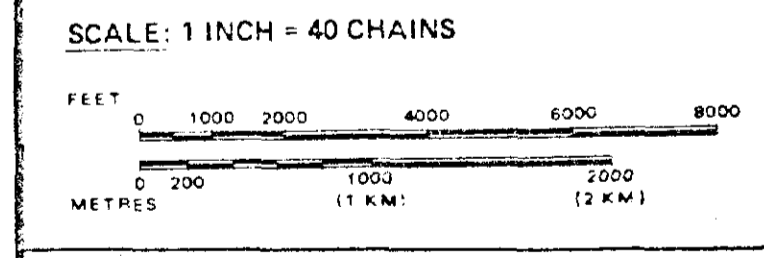
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 62, SUBSEC 1

**REFERENCES**

AREAS WITHDRAWN FROM DISPOSITION

Description	Order No.	Date	Disposition	File
M.R.O. - MINING RIGHTS ONLY				
S.R.O. - SURFACE RIGHTS ONLY				
M.+S. - MINING AND SURFACE RIGHTS				

Stamp: KENORA MINING DIV. RECEIVED NOV 5 1986



AREA  
**DOGPAW LAKE**

M.N.R. ADMINISTRATIVE DISTRICT  
**KENORA**  
MINING DIVISION  
**KENORA**  
LAND TITLES / REGISTRY DIVISION  
**KENORA**

Ministry of Natural Resources  
Land Management Branch  
Ontario

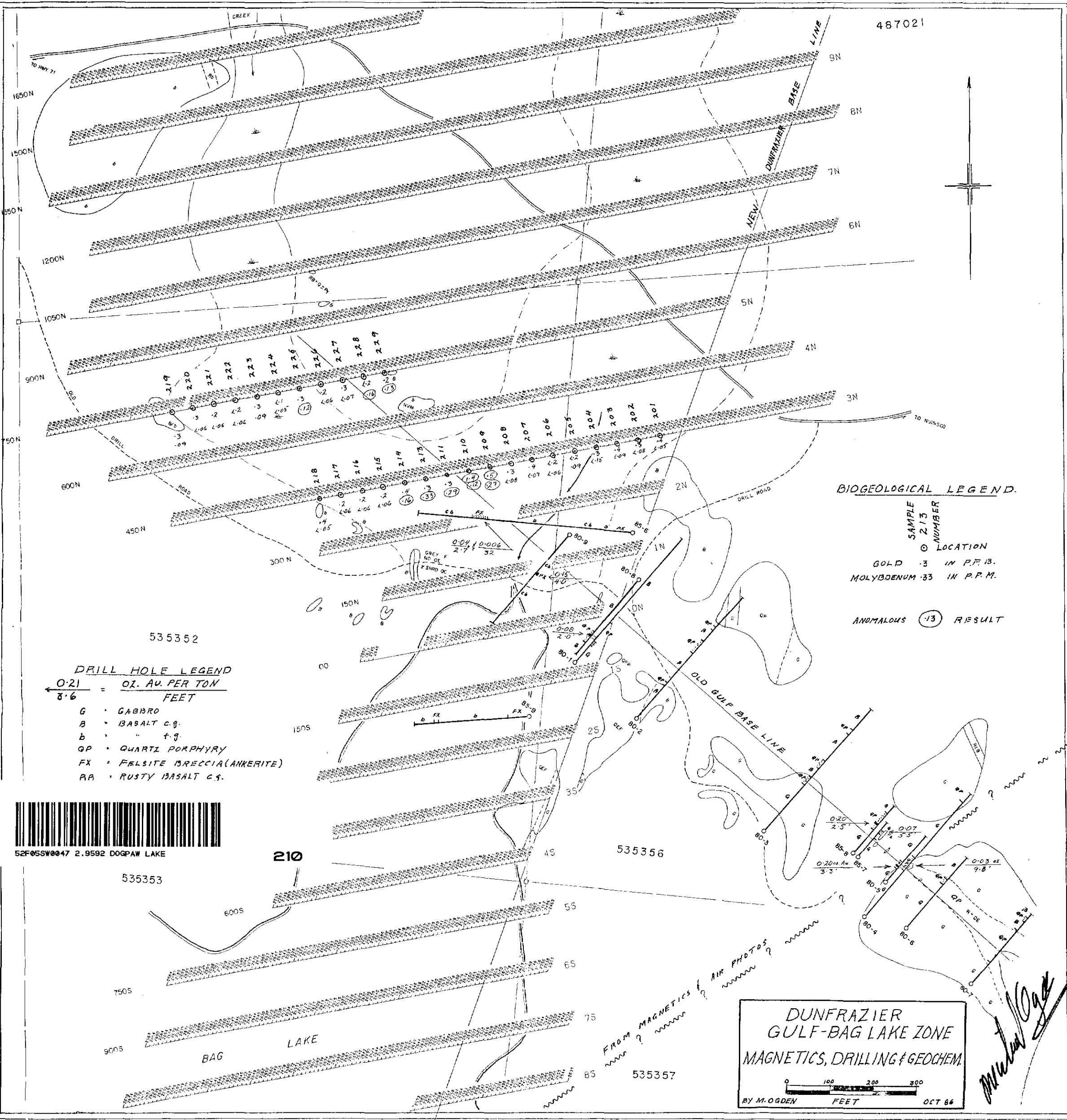
Date JANUARY, 1984 Number **G-2613**



HERONRY LAKE G-2621

ROWAN LAKE G-2639

487021



BIOGEOLOGICAL LEGEND.

- SAMPLE NUMBER
- LOCATION
- GOLD .3 IN P.P.M.
- MOLYBDENUM .33 IN P.P.M.
- ANOMALOUS RESULT

DRILL HOLE LEGEND

$$\frac{0.21}{3.6} = \frac{\text{OZ. AU. PER TON}}{\text{FEET}}$$

- G - GABBRO
- B - BASALT C.G.
- b - " f.g.
- QP - QUARTZ PORPHYRY
- FX - FELSITE BRECCIA (ANKERITE)
- RA - RUSTY BASALT C.G.



52F055W0047 2.9592 DOGPAW LAKE

535353

210

535356

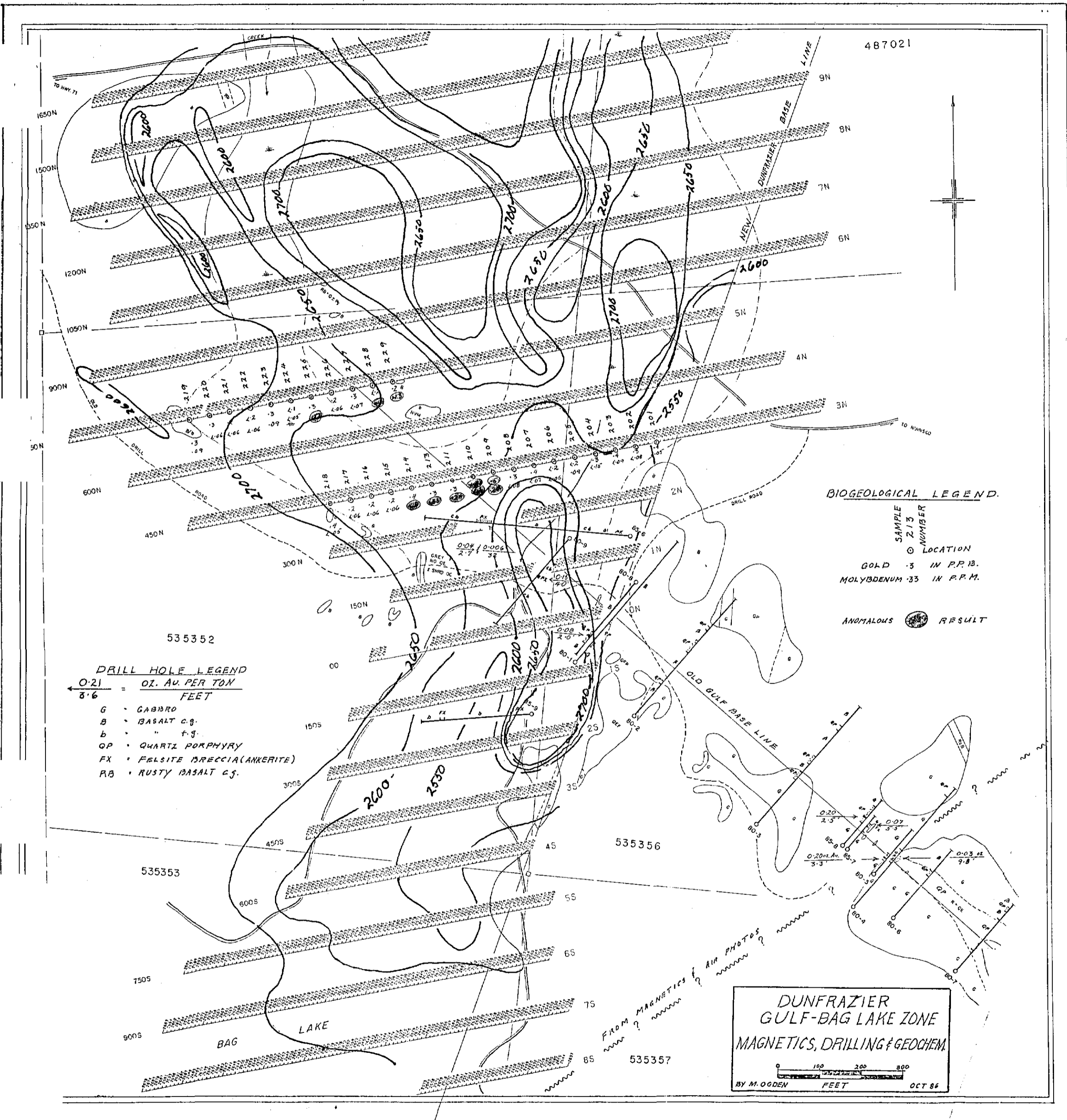
600S  
750S  
900S  
BAG LAKE

FROM MAGNETICS & AIR PHOTOS?

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

BY M. OGDEN      FEET      OCT 86

*M. Ogden*



REVISED DEC 86 FOR MAG CONTOURS BASED ON GEOLOGY.

□ MAG LOW

□ MAG HIGH

M. OGDEN



52F055W0047 2.9592 DOGPAW LAKE