

52F05SW0100 2.5668 DOGPAW LAKE

010

REPORT ON THE

MAGNETIC AND VLF-EM SURVEYS

FTM RESOURCES INC.
DOGPAW LAKE AREA

DISTRICT OF KENORA
NORTHWESTERN ONTARIO

RECEIVED

JUN 30 1983

MINING LANDS SECTION

June 22nd, 1983
Toronto, Ontario

DON B. SUTHERLAND, B.A., M.A., P. Eng.
CONSULTING GEOPHYSICIST

TABLE OF CONTENTS

	<u>PAGE</u>
Introduction	1
Location and Access	1
Property History	2
Geology and Mineralization	4
Survey Instruments and Procedures	5
Discussion of Results	5
Magnetics	5
VLF-EM	7
Summary and Recommendations	10
Plan Maps	Attached
Technical Data Statement	Attached
Magnetic Map - 1" = 400'	In Pocket
Detailed Magnetic Map - 1" = 200'	In Pocket
VLF-EM Map - 1" = 400'	In Pocket

INTRODUCTION

Magnetometer and VLF-EM surveying has been carried out over the western 17 claims of the 26 claim group held by FTM Resources Inc. near Dogpaw Lake, District of Kenora, Northwestern Ontario.

About 14.5 line miles of picket line, spaced at 400 foot intervals, and oriented at 38° were cut on the property. In addition, 1.4 line miles of baseline was established with a bearing of 308°. This was followed by magnetic and VLF-EM surveying carried out under contract by Rayan Explorations Limited of North Bay from March 13th to 17th, 1983.

LOCATION AND ACCESS

The 26 claim group straddles a peninsula and islands along the east shore of Dogpaw Lake as shown on Plan FR-83-3, while FR-83-1 and FR-83-2 show the location at larger scales.

Access to the property may be achieved by boat, a distance of 4 miles by water, along Dogpaw Lake from the Indian Reserve on Whitefish Bay.

Whitefish Bay is situated approximately 3.5 miles by all-weather road east off Highway #11 which links the Towns of Kenora and Fort Frances. Kenora is about 3.5 miles northwest of Whitefish Bay.

PROPERTY HISTORY

The following is taken from Frank P. Tagliamonte's report dated April 18th, 1983.

The Cedartree Lake Area, which encompasses a series of adjacent lakes, including Dogpaw Lake, has been the locus of considerable but sporadic gold exploration activity dating from the late 1800's. Descriptions of 25 gold showings which were discovered by prospecting and partially developed by trenching, shallow test pitting and limited diamond drilling are described in the literature.

The early periods of gold exploration activity spanned the late 1800's and 1912, and between the 1930's and 1939. When World War II broke out in 1939 exploration work ceased.

Gauthier Occurrence - FTM Resources Inc. property - (11) on Map FR-83-4.

This property was optioned to Sylvanite Gold Mines Ltd. in 1944 and abandoned after sampling in 1945. Gold bearing quartz veins localized in shear zones trending through mafic metavolcanics. Several quartz veins and vein zones, as well as carbonitized and silicified zones situated on various parts of the property. Veins mineralized with pyrite and some chalcopyrite.

New discovery made post Sylvanite option.

GEOLOGY AND MINERALIZATION

The following is an excerpt from a report by Frank P. Tagliamonte dated April 18th, 1983.

Geological reconnaissance mapping over claims now held by FTM was carried out by Kuryliw during 1973.

This work shows that most of the claim group is underlain by massive and pillowed dacitic flows. Narrow interflow bands of tuff and rhyolitic agglomerate are contained within the dacite.

Andesitic rocks were mapped in the NE portion of the property. A Sericitic quartz-porphry dike (?) was mapped at the contact between andesite and dacite in this property.

A 1,000 foot wide band of mafic rocks, mainly gabbro, underlies the Central and SE portion of the property.

The major Dogpaw-Stephen-Cameron Lakes fault and shear zone underlies the western portion of the claim group beneath Dogpaw Lake. The structure is evidenced by intense shearing on some islands and along the western shore of Dogpaw Lake.

Foliation and shearing trends in the property appear to the NW - SE.

Dips are steeply NE.

Kuryliw suggests some EW foliation and

Quartz veins occur in a 30 - 40' wide carbonate zone striking S76° with 70° - 80° North dip.

Best values were obtained in a 2.5' - 4' wide vein traced for 150' containing pyrite, chalcopryrite and fine gold.

Best values from 3 shallow drill holes by Gauthier are:

.70 oz. Au/6'

.65 oz. Au/5.5'

.85 oz. Au/5'

Best values from channel samples are:
.27, .25, .09 and .77 oz. Au. (Sample widths unknown).

Some grab samples yield up to 2.40 oz. Au.

Sylvanite reported to have traced Eastern extension of carbonate zone for 2,500' from Gauthier's main showing.

5 trenches blasted along 1,200' of zone.

Negligible gold values reported in trenches by Sylvanite.

Property geologically mapped during 1973 by C.J.Kuryliw.

Drilling of Gauthier showing recommended.
Magnetometer survey work done during 1974.

schistosity with north dips. Some tuff and agglomerate beds are reported to trend northerly. He suggests generally NS flow direction cut by generally EW shearing.

Essentially, the Gauthier showing comprises gold-bearing quartz vein systems and silicified carbonatized zones localized in shear structures cutting mafic and intermediate volcanic flows.

The veins are weakly mineralized with pyrite, some chalcopyrite, and occasionally fine native gold.

SURVEY INSTRUMENTS AND PROCEDURES

A Radem VLF unit was used for the survey with Annapolis, Maryland as the transmitting station at a frequency of 21.4 Kilohertz. Readings were taken of the in-phase component and the horizontal field amplitude. A Fraser filter has been applied to the in-phase data and the resulting values are shown as contours while the in-phase and amplitude have been profiled.

The total field magnetic survey was carried out with a Geometric G-816 proton magnetometer. Measurements were recorded to the nearest gamma and corrected for diurnal drift with a series of closed loops.

DISCUSSION OF RESULTS

MAGNETICS

Massive and pillowed dacitic flows have been mapped over the western and central part of the claims; there

is little magnetic relief in this area. The northeastern part of the claims which shows strong magnetic relief is reported to be underlain by andesites. This northeast portion of the magnetic survey has been recontoured on a detail map at a scale of 1" = 200', which is enclosed.

Nine magnetic features, numbered 1 to 9 inclusive, have been indicated on the magnetic map.

Anomalies 1, 2 and 3 are conformable with the regional NW trend and may be due to small gabbro or ultramafic sills.

Anomalies 4 and 5 suggest a narrow basic sill or sills that is offset near 28W by an inferred diabase dike.

Anomalies 6 and 7 display the characteristic highs and lows of NE trending diabase dikes.

Anomaly 8 indicates the contact between andesites to the northeast and dacites to the southwest. The contact is more easily seen on the 1" = 200' magnetic map.

Anomaly 9 has been interpreted as a NS trending diabase dike and correlates closely with a 100 foot wide diabase dike mapped in this vicinity. The contours are more complete on the 1" = 200' magnetic map.

Consideration should be given to a detailed

survey of this part of the grid on a closer line spacing and/or perpendicular lines. The relationship of the diabase with the strong VLF conductors on the NE part of the grid could be of economic interest.

VLF-EM

Fourteen conductive zones, lettered A to N inclusive, have been interpreted from the data. For convenience, the conductors have been lettered from SW to NE. None of these zones have any strong magnetic coincidence although the overall trend of the conductor system is NW, sub-parallel to the poorly developed magnetic trend.

Each conductor has been assigned a priority, either first, second or third. A first priority zone displays characteristics typical of a strong bedrock source, while a third priority target is likely due to overburden conductivity or a weak shear. A second priority zone falls between these two extremes.

ZONES A, B AND C

Zone C is a moderate amplitude conductor that extends from 12W to 64W. This long structure lies about 2,000 feet NE of the SW shore of Dogpaw Lake and could be the expression of the major Dogpaw-Cameron Lake Fault Zone. The best results occur on 52W where it

displays 20° dip angle and 30% amplitude. It is a second priority target on this line.

Zones A and B appear as weaker sub-parallel conductors and third priority anomalies.

ZONES D, E AND F

These three zones trend NW in the vicinity of the baseline. They may represent a single throughgoing horizon that is sharply folded or faulted near 48W, 32W, 12W and 4W. The response along the system is quite variable and suggests the following gradings. Zone D is a first priority target on 52W and a second priority one on 72W. Zone E is a third priority target while Zone F has first priority segments at 24W and 0. The latter two locations show amplitudes of 70% to 60% respectively. However, it should be noted that Zone F closely follows the contour of the shoreline.

ZONE G

This zone is poorly developed over most of its length but the incomplete data on 76W shows a 70% increase in field strength and warrants at least a second priority grading. The conductor axis on 76W may be either on shore or on the shoreline.

ZONE H

Zone H is a weak to moderate indication that lies in the lake but closely follows the shoreline

from 24W to 36W. Generally it lacks well developed cross-overs or sizeable amplitude. However, the best response on 24W probably warrants a second priority rating.

ZONES I AND J

These two zones are short conductors associated with separate parts of a complex bay. Both are conformable with the geologic trend. There is a suggestion of width on both conductors and their sources are uncertain. Zone I shows a 30% amplitude on 12W while Zone J displays 40% on 8W.

These conductors are difficult to classify. They are of interest but because of their short strike length, they have been downgraded to second priority targets.

ZONE K

This is an incomplete response on the north part of the claims that parallel the shore of the peninsula. It warrants a first priority grade on 28W.

ZONE L

This is the strongest and most interesting conductor found in the survey. On line 12W the response is 78° dip angle and an amplitude relief of 150%. The anomaly is plotted to lie in a narrow inlet, less than 200 feet wide. Zone L appears to be conformable with the

the northwesterly geologic trend and to lie within the andesites. Its relationship with the N5 diabase dike near 12W and 16W is not clear with present data but Zone L is definitely a first priority target on 12W and 16W.

ZONES M AND N

Both of these zones show well developed dip angle profiles and strong amplitude responses. Zone M lies mostly over water while Zone N, which may extend farther north occurs mostly on the land. Both zones occur in the andesites but their relationship to the diabase dike at 12W to 16W is uncertain with present data. Nevertheless, both zones are first priority targets, Zone M on 16W and 20W and Zone N on 12W.

SUMMARY AND RECOMMENDATIONS

Nine magnetic anomalies and fourteen VLF-EM zones have been interpreted from the results of the survey but no strong coincidence was found between the two methods. More than half of the survey grid is covered by water but on the remainder each of these features should be carefully examined in the detailed survey of the grid.

Magnetic anomalies 1, 2, 3, 4 and 5 are probably due to narrow or small mafic to ultramafic sills within the dacite.

Anomaly 8 marks the dacite-andesite contact with the andesite to the northeast.

Anomalies 6, 7 and 9 suggest NS trending diabase dikes. A mapped diabase dike, 100 feet wide, correlates with anomaly 9. Detailed magnetic surveying is recommended for the area north of 12N and east of 28W. Lines perpendicular to the present grid would be best to outline this wide diabase dike and establish its relationship to the conductive zones.

Six VLF zones warrant a first priority rating. These are strong definite responses and detailing with 50' or 100' IP (or possibly EM) is recommended to test them. Zone L is particularly strong and warrants special attention. Several IP traverses are suggested, centred on the following locations:

D	-	52W
F	-	24W, 0
K	-	28W
L	-	12W
M	-	16W and 20W
N	-	12W

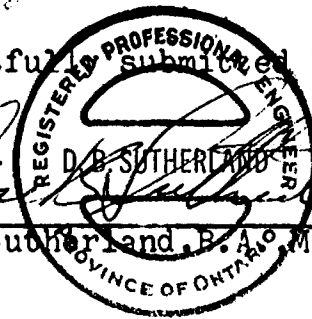
The following second priority anomalies may also be considered worthy of further work if the above program is successful:

C - 52W Dogpaw-Cameron
Lake Fault (?)
G - 16W
H - 24W
I - 12W
J - 8W

Finally, no obvious magnetic or VLF response is evident over the showing on the SW part of the peninsula. Sulphides were reported in association with the gold and consideration should be given to a detailed orientation survey with short-spaced IP over the Gauthier Showings.

Respectfully submitted by


Don B. Sutherland, B.A., M.A., P.Eng.



**GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT**

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

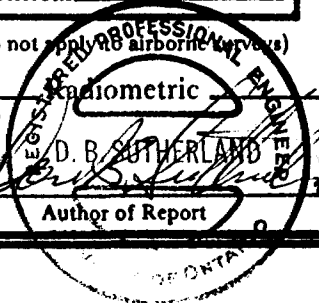
Type of Survey Geophysical - Magnetic VLF-EM
 Township or Area Cedartree Lake - Kenora
 Claim holder(s) FTM Resources Inc. 251 3rd Ave.
Suite 6, P.O. Box 250, Vermilion, P4V 7S5
 Author of Report Don B. Sutherland
 Address 975 Mount Pleasant Road, Toronto
 Covering Dates of Survey March 13th to 17th, 1983
 (linecutting to office)
 Total Miles of Line cut 15.9

MINING CLAIMS TRAVERSED	
List numerically	
K.....	589863
(prefix)	(number)
K.....	589864
K.....	589465
K.....	589466
K.....	589467
K.....	589468
K.....	590802
K.....	590803
K.....	590804
K.....	590805
K.....	590806
K.....	590807
K.....	590808
K.....	590809
K.....	590810
K.....	590811
K.....	590812
TOTAL CLAIMS <u>17</u>	

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED	DAYS per claim
Geophysical	
-Electromagnetic	<u>40</u>
-Magnetometer	<u>20</u>
-Radiometric	_____
-Other	_____
Geological	_____
Geochemical	_____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
 Magnetometer Electromagnetic Radiometric
 (enter days per claim)
 DATE: June 21, 1983 SIGNATURE: D. B. SUTHERLAND
 Author of Report



PROJECTS SECTION
 Res. Geol. _____ Qualifications _____
 Previous Surveys _____

 Checked by _____ date _____
GEOLOGICAL BRANCH

 Approved by _____ date _____
GEOLOGICAL BRANCH

 Approved by _____ date _____

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

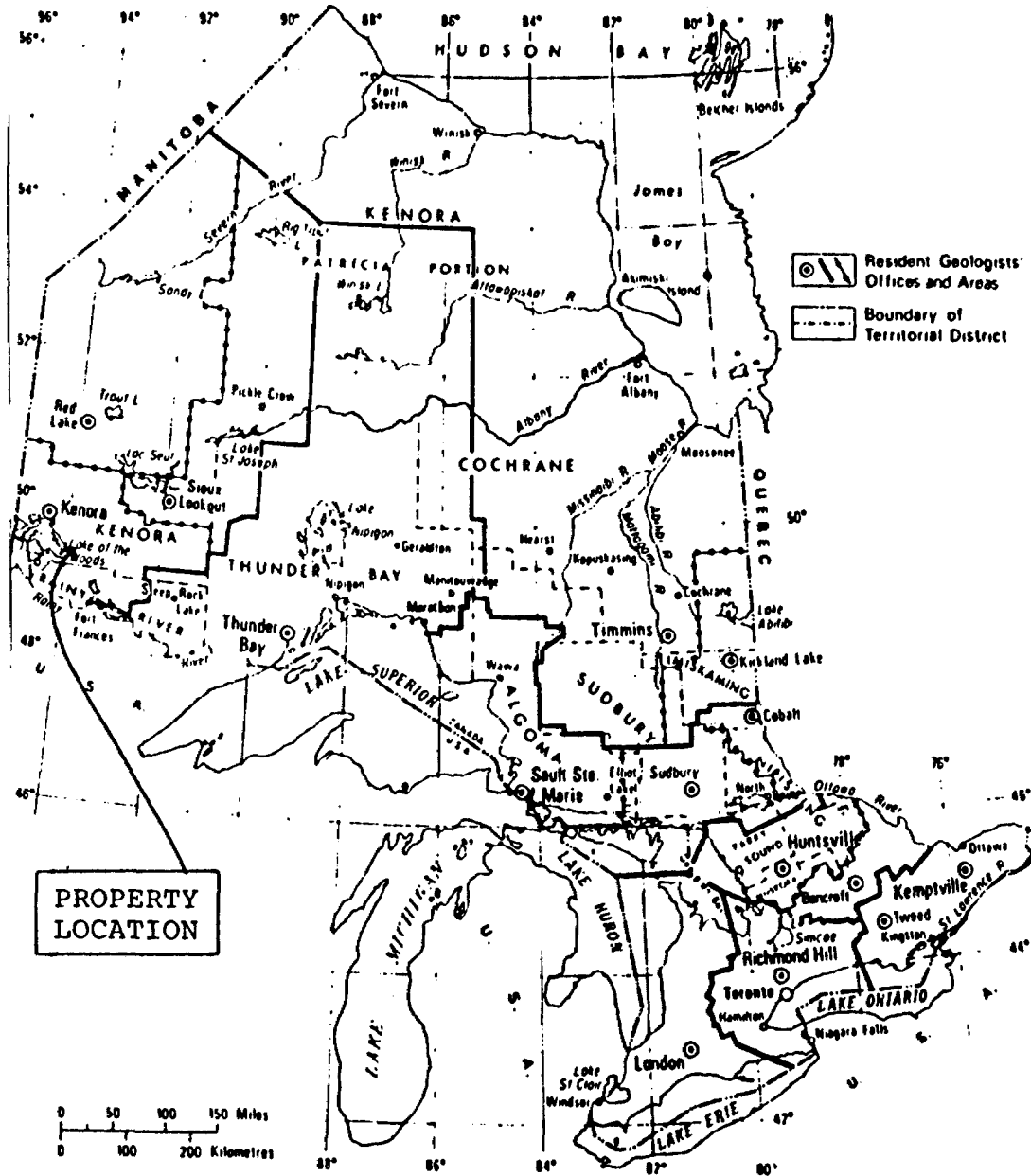
GROUND SURVEYS 839 Computer Count
Number of Stations _____ Number of Readings Mag. 1,637
VLF 764
Station interval 100' VLF; 50' or less Mag.
Line spacing 400 feet
Profile scale or Contour intervals Magnetic 50 gammas; VLF: in-phase filter contours
(specify for each type of survey) 5 units; in-phase profiles
1" = 40'; amplitude 1" = 100%

MAGNETIC
Instrument Geometric G-816 proton magnetometer
Accuracy - Scale constant ± 1 gamma
Diurnal correction method Closed loops, up to 2 hours.
Base station location _____

ELECTROMAGNETIC
Instrument Crone, Radem
Coil configuration Vertical
Coil separation Infinity
Accuracy ± 2%
Method: Fixed transmitter Shoot back In line Parallel line
Frequency 21.4 Kilohertz, Annapolis, Maryland
(specify V.L.F. station)
Parameters measured In-phase dip angles and horizontal field amplitude

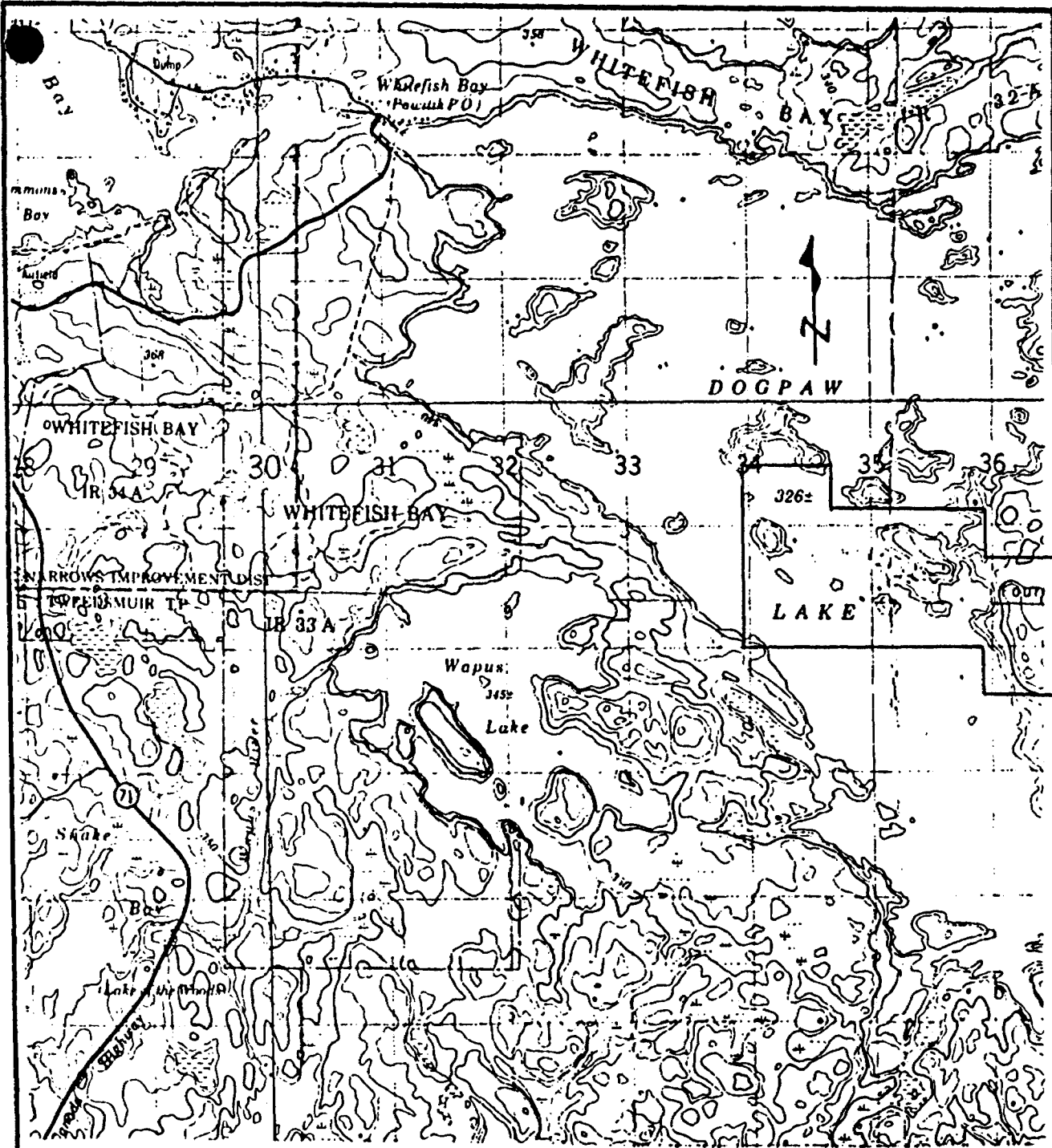
GRAVITY
Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

INDUCED POLARIZATION - RESISTIVITY
Instrument _____
Time domain _____ Frequency domain _____
Frequency _____ Range _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____



FTM RESOURCES INC.	
LOCATION MAP	
DOGPAW LAKE PROPERTY	
LAKE OF THE WOODS AREA	
DISTRICT OF KENORA, ONTARIO	
March 15, 1983	Plan No. FR-83-1

Handwritten initials



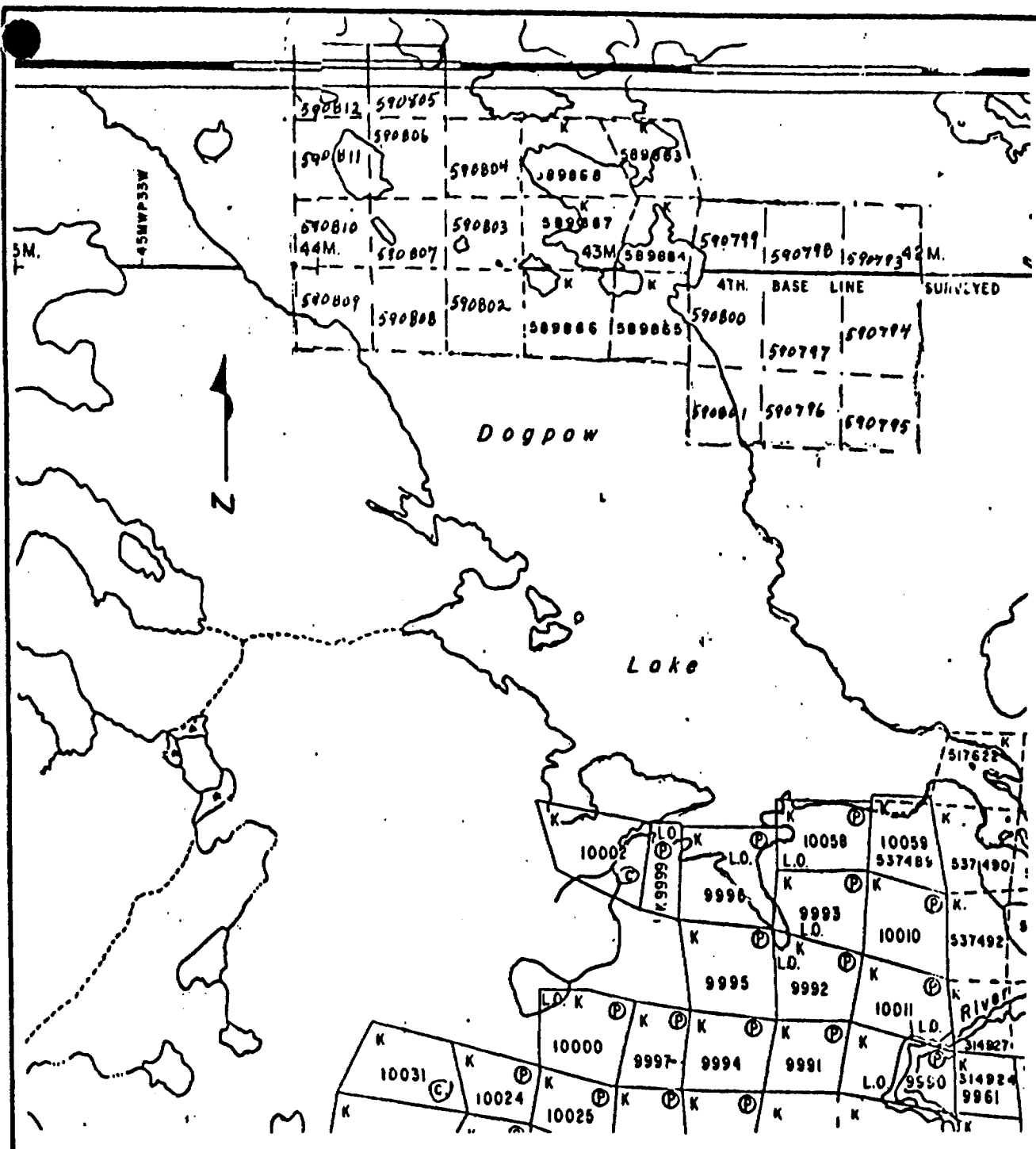
From: EMR "Caviar Lake" NTS 52F/5

Scale: 1:50,000



FTM RESOURCES LTD.	
TOPOGRAPHIC MAP	
DOGPAW LAKE PROPERTY	
DISTRICT OF KENORA, ONTARIO	
March 15, 1983	Plan No. FR-83-2

Handwritten initials/signature



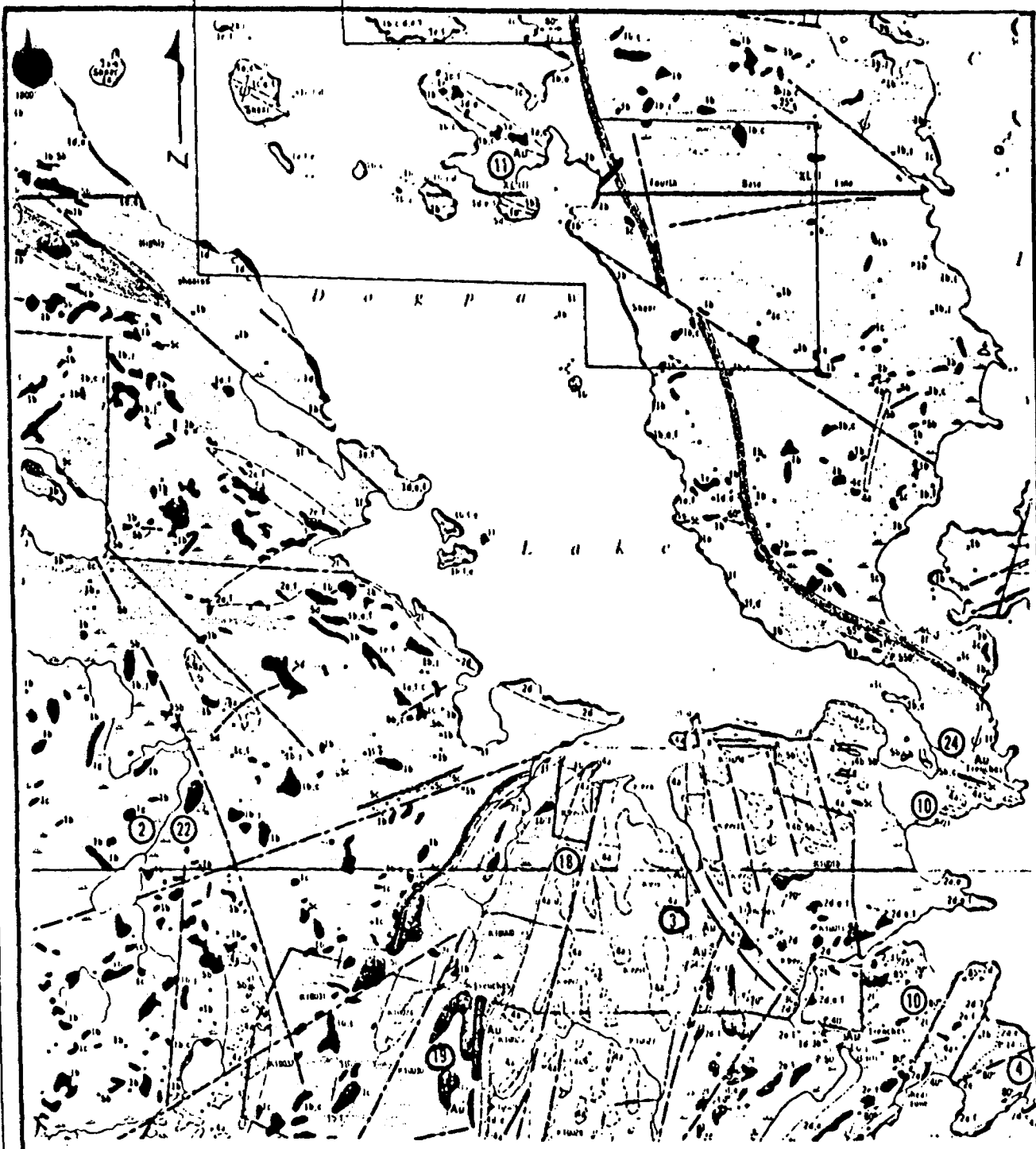
From: O.M.N.R. Plan M2585 "Dogpaw Lake"

Scale: 1 in. = 1/4 mi.








FTM RESOURCES INC.	
CLAIM MAP	
DOGPAW LAKE AREA	
DISTRICT OF KENORA, ONTARIO	
March 15, 1983	Plan No FR-83-3

Handwritten signature or initials.

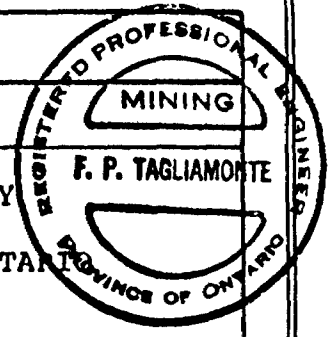


From: O.D.M. Map 2319 "Cedartree Lake"

Scale: 1 in. = 1/2 mi.

- 8  Diabase
- 5  Early felsic intrusives
- 4  Mafic & ultra mafic intrusives
- 2  Felsic to intermediate metavolcanics
- 1  Mafic to intermediate metavolcanics

FTM RESOURCES INC.	
GEOLOGICAL MAP	
DOGPAW LAKE PROPERTY	
DISTRICT OF KENORA, ONTARIO	
March 15, 1983	Plan No. FR-83-4



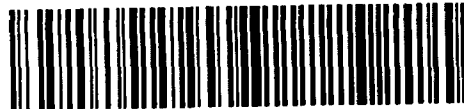
Handwritten initials



Ministry of
Natural
Resources

Report of Work
(Geophysical, Geochemical and
Geological)

DBG #326



52F055W0100 2.5668 DOGPAW LAKE

1. V. 4. 4. 4.

86-83
or print.
of mining claims traversed
on this form, attach a list.
credits calculated in the
"Credits" section may be entered
"Expend. Days Cr." columns.
shaded areas below.

900

Type of Survey(s) **Radem VLF-EM Survey and Proton Magnetic Survey** Township or Area **M-2585 M-2635 Dogpaw Lake, Lobstick Bay**

Claim Holder(s) **FTM Resources Inc.** Prospector's Licence No. **2.5668**

Address **c/o David R. Bell Geological Services Inc. P.O. Box 1250, Timmins, Ontario P4N 7J5**

Survey Company **Rayan Exploration Ltd.** Date of Survey (from & to) **13.03.83 17.03.83** Total Miles of line Cut **15.9**

Name and Address of Author (of Geo-Technical report) **Don Sutherland, 975 Mount Pleasant Rd., Toronto, Ontario M5P 2L8**

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20
	- Magnetometer	20
	- 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	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
K	589863				
	589864				
	589865				
	589866				
	589867				
	589868				
	590803				
	590804				
	590805				
	590806				
	590807				
	590808				
	590809				
	590810				
	590811				
	590812				
	590802				

RECEIVED
Geological
AUG 7 1983

RECEIVED
MINING DIV.
JUL 11 1983
PM
10 11 12 1 2 3 4 5 6

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$ ÷ 15 = Total Days Credits

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.

589863

Total number of mining claims covered by this report of work. **17**

Date **June 6, 1983** Recorded Holder or Agent (Signature) *R.A. Markov*

For Office Use Only

Total Days Cr. Recorded **680** Date Recorded **July 11/83** Mining Inspector *[Signature]*

Date Approved as Recorded **88:10:12** Branch Inspector *[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 **R. A. Markov, David R. Bell Geological Services Inc. P.O. Box 1250, Timmins, Ont. P4N 7J5**

Date Certified **June 6, 1983** Certified by (Signature) *R.A. Markov*

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey						
Technical Days		Technical Days Credits	Line-cutting Days	Total Credits	No. of Claims	Days per Claim
<input type="text"/>	X	<input type="text"/>	+ <input type="text"/>	= <input type="text"/>	+ <input type="text"/>	= <input type="text"/>

Type of Survey						
Technical Days		Technical Days Credits	Line-cutting Days	Total Credits	No. of Claims	Days per Claim
<input type="text"/>	X	<input type="text"/>	+ <input type="text"/>	= <input type="text"/>	+ <input type="text"/>	= <input type="text"/>

Type of Survey						
Technical Days		Technical Days Credits	Line-cutting Days	Total Credits	No. of Claims	Days per Claim
<input type="text"/>	X	<input type="text"/>	+ <input type="text"/>	= <input type="text"/>	+ <input type="text"/>	= <input type="text"/>

Type of Survey						
Technical Days		Technical Days Credits	Line-cutting Days	Total Credits	No. of Claims	Days per Claim
<input type="text"/>	X	<input type="text"/>	+ <input type="text"/>	= <input type="text"/>	+ <input type="text"/>	= <input type="text"/>



GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Geophysical - Magnetic VLF-EM
Township or Area Cedartree Lake - Kenora
Claim Holder(s) FTM Resources Inc. 251 3rd Ave
Unit 1 P.O. Box 1250 Timmins
P4N 2S
Survey Company Ryan Exploration
Author of Report Don B. Sutherland
Address of Author 975 Mount Pleasant Rd., Toronto
Covering Dates of Survey March 13th to 17th, 1983
(linecutting to office)
Total Miles of Line Cut 15.9

<u>SPECIAL PROVISIONS</u>		DAYS
<u>CREDITS REQUESTED</u>		per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical	
	-Electromagnetic	<u>20</u>
ENTER 20 days for each additional survey using same grid.	-Magnetometer	<u>20</u>
	-Radiometric	_____
	-Other	_____
	Geological	_____
	Geochemical	_____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: July 14/83 SIGNATURE: Don B. Sutherland
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED	
List numerically	
K	589863
K	589864
K	589865
K	589866
K	589867
K	589868
K	590802
K	590803
K	590804
K	590805
K	590806
K	590807
K	590808
K	590809
K	590810
K	590811
K	590812
TOTAL CLAIMS <u>17</u>	

If space insufficient, attach list

RECEIVED

JUL 18 1983

MINING LANDS SECTION

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations 839 Number of Readings Computer Count Mag. 1,637 VLF 764
Station interval 100' VLF; 50' or less Mag Line spacing 400'
Profile scale Magnetic 50 gammas; VLF: in-phase filter contours 5 units; in-phase
Contour interval profiles 1" = 40 degrees; amplitude 1" = 100%

MAGNETIC

Instrument Geometric G-816 proton magnetometer
Accuracy - Scale constant +/- 1 gamma
Diurnal correction method Closed loops, up to 2 hours
Base Station check-in interval (hours)
Base Station location and value

ELECTROMAGNETIC

Instrument Crone, Radem
Coil configuration Vertical
Coil separation Infinity
Accuracy +/- 2%
Method: [X] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency 21.4 Kilohertz, Annapolis, Maryland (specify V.L.F. station)
Parameters measured In-phase dip angles and horizontal field amplitude

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____



Mining Lands Comments

To: Geophysics *R. Barlow.*

Comments

*CHECKED OUT
PLEASE SIGN
Ray*

Approved Wish to see again with corrections

Date *Sept 2/83* Signature *R. Barlow*

To: Geology - Expenditures

Comments

Approved Wish to see again with corrections

Date Signature

To: Geochemistry

Comments

LD

Approved Wish to see again with corrections

Date Signature

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

DAVID R. BELL GEOLOGICAL SERVICES INC.

251 THIRD AVE., SUITE 6
BOX 1250
TIMMINS, ONTARIO
P4N 7J5
(705) 264-4286

July 21, 1983

Mr. A. Barr
Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Mr. Barr:

Re: Your file #2.5668
FTM Dogpaw Lake Area Property Geophysics

A Report of Work Form for the above property including claims K589863 et al was sent on July 6, 1983 to Kenora Mining Recorder by registered mail (receipt #59020).

I hope the above rectifies the situation with this property. Should you require any additional information do not hesitate to contact me.

Sincerely yours,



R.A. Markov
Exploration Manager

RAM/kg

File - claims (assessment 326)

RECEIVED

JUL 23 1983

MINING LANDS SECTION

1983 07 18

2.5668

Mr. Wade Mathew
Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5160
Kenora, Ontario
P9N 3X9

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic and Magnetometer) survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims K589863 et al in the Area of Dogpaw Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with you prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-1380

A. Barr:mc

cc: F.T.M. Resources Inc.
Timmins, Ontario

cc: Mr. Don B. Sutherland
Toronto, Ontario.

DON B. SUTHERLAND, B.A., M.A., P.Eng. 2-5668
Geophysical Consultant

975 MOUNT PLEASANT ROAD
TORONTO, ONTARIO M5P 2L8
(416) 482-2257

July 15th, 1983.

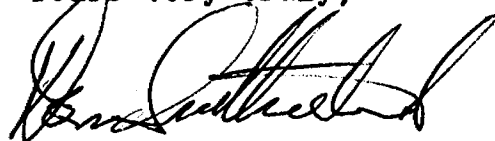
The Mining Recorder,
6th Floor, Whitney Block,
Queen's Park,
Toronto, Ontario

Dear Sir:

Enclosed please find two corrected
copies of the Technical Data Statement for FTM
Resources Inc., Dogpaw Lake Report. Please place
these with my report which was delivered June 30th,
1983.

Thank you for your assistance and
cooperation.

Yours very truly,



Don B. Sutherland

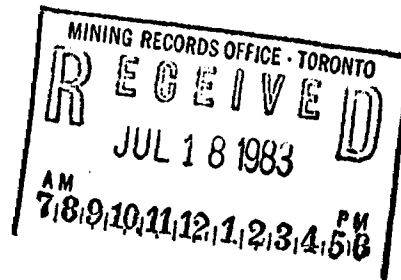
DBS*BC
Enc.

cc - R.A. Markov

RECEIVED

JUL 18 1983

MINING LANDS SECTION



may Em

File no. 2-5668

K 589863

✓ ✓

864

✓ ✓

865

✓ ✓

866

✓ ✓

867

✓ ✓

868

✓ ✓

590803

✓ ✓

804

✓ ✓

805

✓ 1/4

806

✓ ✓

807

✓ ✓

808

✓ ✓

809

✓ ✓

810

✓ ✓

811

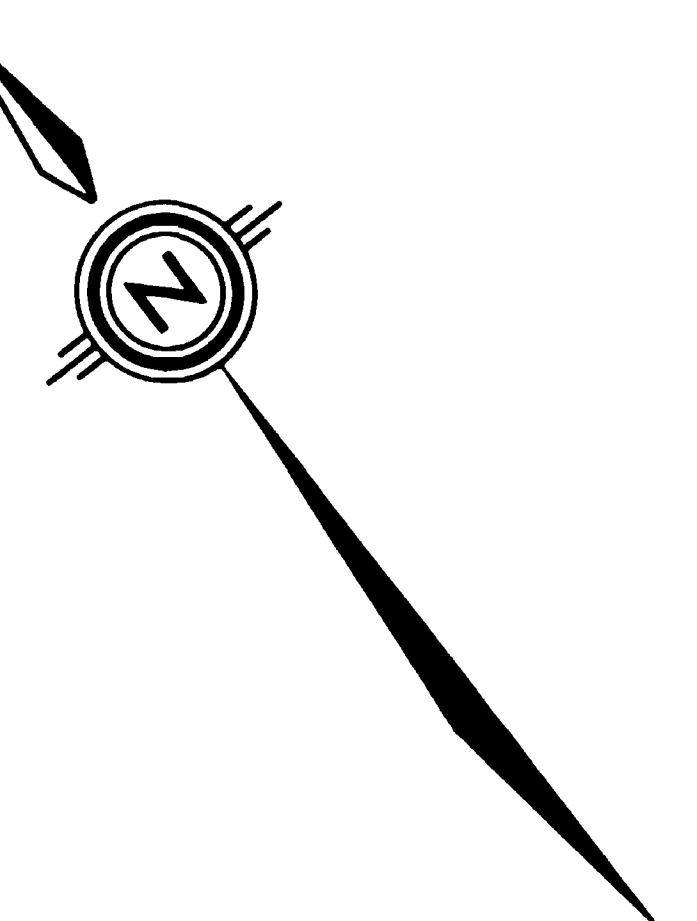
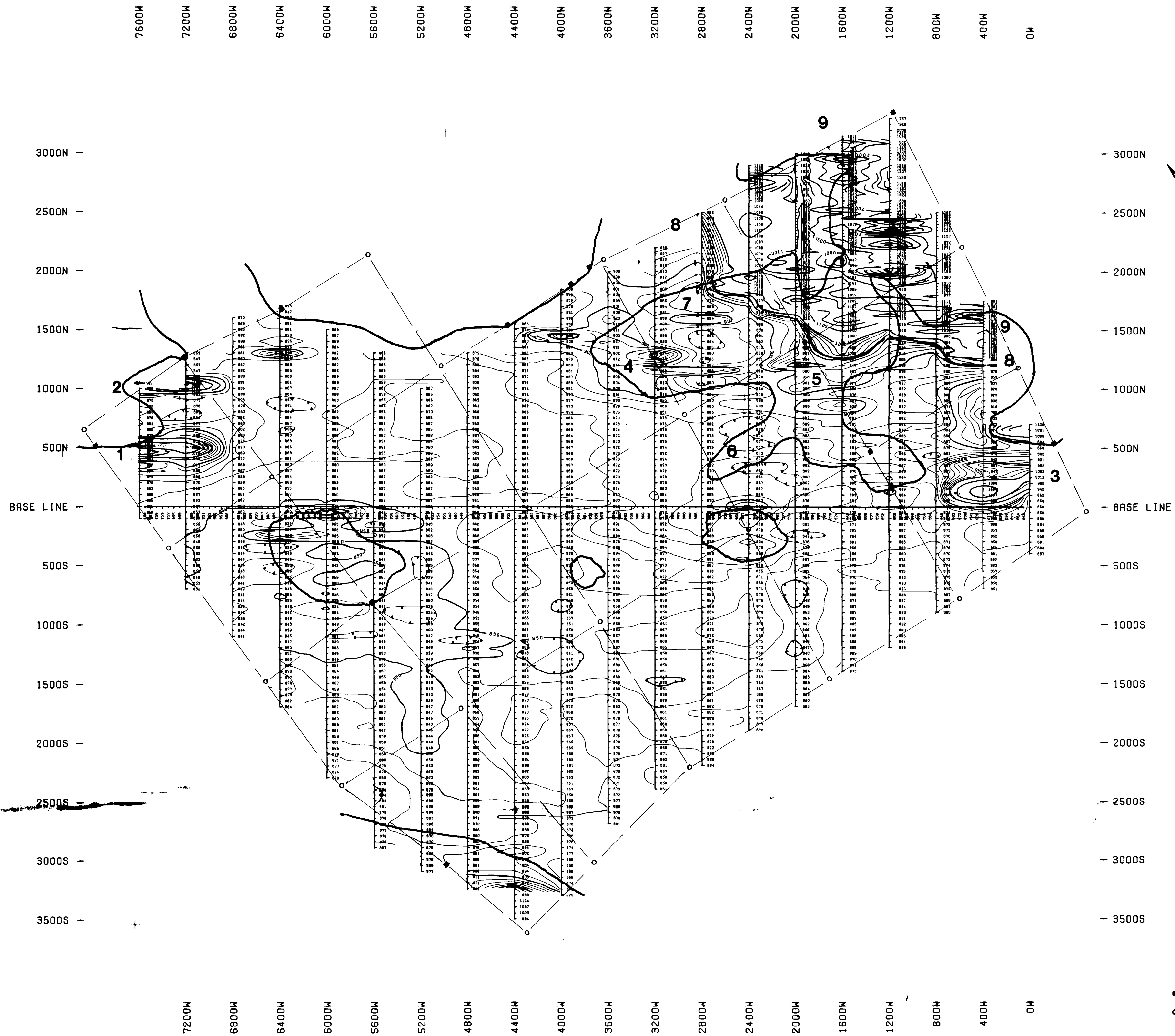
✓ ✓

812

✓ ✓

802

✓ ✓



- CONTOUR INTERVAL = 50 ORMS
- MAGNETIC DECLINATION
- CLAIM POST LOCATED
- CLAIM POST ASSUMED
- PROPERTY BOUNDARY
- DATUM OF 5600M REMOVED FROM ALL

REGISTERED PROFESSIONAL ENGINEER
 D. B. SUTHER AND
 PROVINCE OF ONTARIO

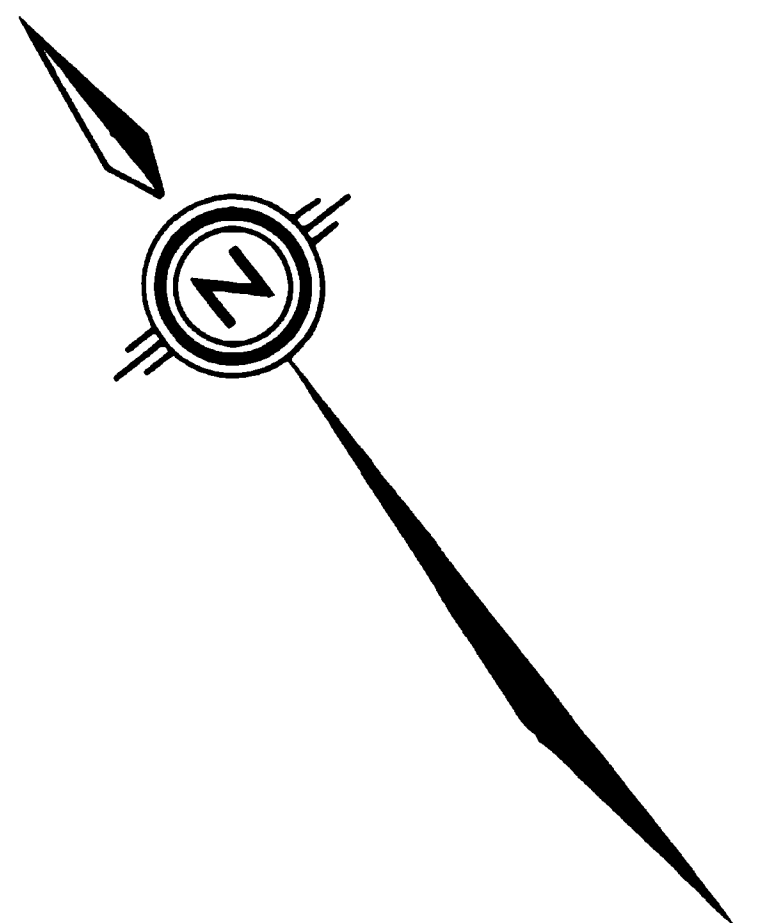
DAVID R. BELL GEOLOGICAL SERVICES INC.

MAGNETIC SURVEY
 FTM RESOURCES INC.
 DOGPAW LAKE PROPERTY
 DISTRICT OF KENORA - N.W. ONT.

SCALE: 1" = 400 FT. DATE: JUNE, 1983
 DRAWN BY: B. C. CHECKED BY: D.B.S.



7600M 7200M 6800M 6400M 6000M 5600M 5200M 4800M 4400M 4000M 3600M 3200M 2800M 2400M 2000M 1600M 1200M 800M 400M 0M



3000N -
2500N -
2000N -
1500N -
1000N -
500N -
BASE LINE -
500S -
1000S -
1500S -
2000S -
2500S -
3000S -
3500S -

7600M 7200M 6800M 6400M 6000M 5600M 5200M 4800M 4400M 4000M 3600M 3200M 2800M 2400M 2000M 1600M 1200M 800M 400M 0M

- IN PHASE CONTOUR OF FRASER FILTER
- MAGNETIC PROFILE 1"=400'
- FIELD STRENGTH 1"=1000' (LINE=1000')
- EM ZONES
- STATION - ANNAPOLIS, MARYLAND
- FREQUENCY - 81.4 MHz
- CLIN POST LOCATED
- CLIN POST ASSUMED
- PROPERTY BOUNDARY

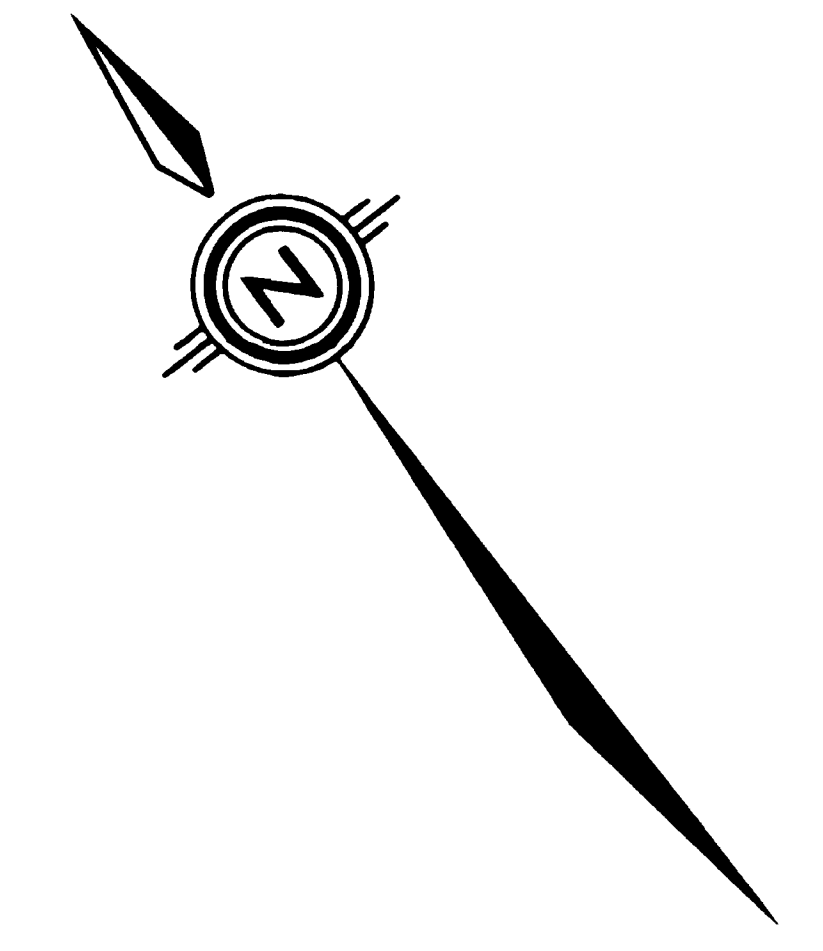
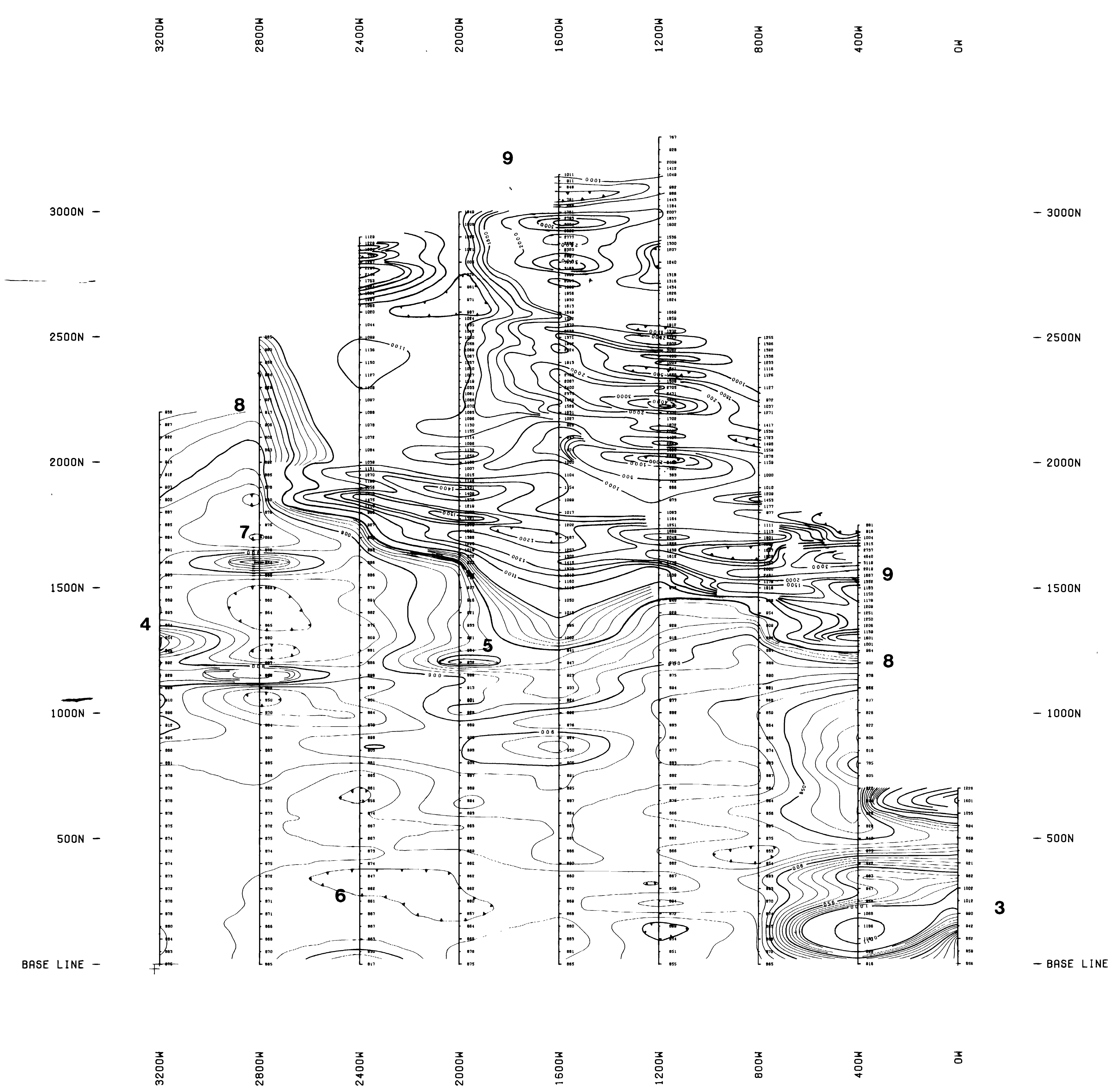


DAVID R. BELL GEOLOGICAL SERVICES INC.

RADEM VLF SURVEY
FTM RESOURCES INC.
DOGPAW LAKE PROPERTY
DISTRICT OF KENORA - N.W. ONT.

SCALE: 1" = 400 FT. DATE: JUNE, 1989
 DRAWN BY: B.C. CHECKED BY: D.B.J.





CONTOUR INTERVAL : 50 GAMMAS
 MAGNETIC LINEATION
 CLAIM POST LOCATED
 CLAIM POST ASSUMED
 PROPERTY BOUNDARY
 DATUM OF 5000 REMOVED FROM ALL READINGS



DAVID R. BELL GEOLOGICAL SERVICES INC.
 MAGNETIC SURVEY
 FTM RESOURCES INC.
 DOGPAW LAKE PROPERTY
 DISTRICT OF KENORA - N.W. ONT.
 SCALE : 1" = 200 FT. DATE : JUNE, 1983
 DRAWN BY : B C CHECKED BY : DBS

