



41P15NE8333 2.4724 CAIRO

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MAGNETIC SURVEY

RECEIVED

APR 29 1982

MINING LANDS SECTION

ON

WEBB LAKE CLAIM GROUP

FOR

MINING CLAIMS L.532094 - 098
L.537319 - 323
L.567999 - 8019

CAIRO TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF TIMISKAMING, ONTARIO

BY

PAMOUR PORCUPINE MINES LIMITED

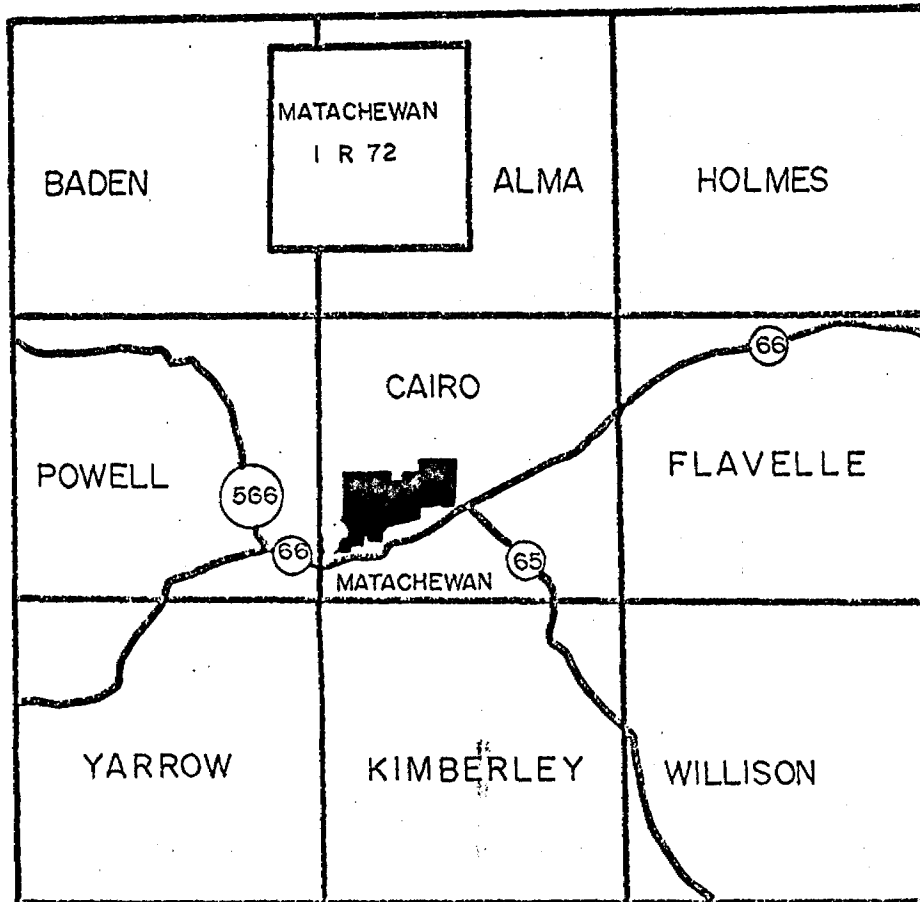
EXPLORATION DEPARTMENT

April, 1982



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LOCATION MAP

SCALE : 1" = 4 miles

INTRODUCTION

A total field magnetic survey was conducted on 31 contiguous mining claims north and northwest of the town of Matachewan, in the southwest corner of Cairo Township.

The purpose of the survey was to identify lithological units and to locate faults and possible shear zones. Also, the magnetic survey will be correlated to the VLF-EM anomalies.

The field work was conducted from March 23 to April 5, 1982 by Kian Jensen, D'Arcy Ryan and Byron Cooper, all employees of Pamour Porcupine Mines Limited, Exploration Department. The interpretation and report was done on April 16 and 19, 1982 by Kian Jensen, (Appendix A).

LOCATION AND ACCESS

The Webb Lake claim group is located north and northwest of the town of Matachewan in the southwest corner of Cairo Township, Larder Lake Mining Division, northeastern Ontario.

The eastern portion of the claim group was accessed by the gravel road to the Indian Reservation No. 72, north of the junction of Highways 66 and 65. The western portion of the claim group was accessed by a bush road about 2 miles east of Matachewan. The bush road and skidoo trails lead to Knott Lake and Webb Lake.

PROPERTY

The Webb Lake claim group comprises of 31 contiguous mining claims as follows: L.532094 to 532098 inclusively and L.537319 to 537323 inclusively which were staked during July 1979, and L.567999 to 568019 inclusively, and staked during April 1980. The claim group is indicated in Figure 1.

Pamour Porcupine Mines Limited holds a 100% interest in the Webb Lake claim group.

PREVIOUS WORK

The regional geology of the Matachewan area has been studied and described in several government reports (Burrows, 1918, Lovell, 1967). The detail geology of the claim group was mapped and filed by Mr. Tony Van Weichen, 1981, of Pamour Exploration.

During 1980, a VLF-EM survey using Cutler, Maine (17.8 KHz) was completed with the exceptions of the swampy and lake areas, being Knott Lake, Webb Lake and Moyneau Lake.

Previous work conducted in various parts of the Webb Lake claim group by other mining and exploration companies are as follows:

Canadian Rand Mining - 1920-33

- geology, trenching

Dominion Gulf Company - 1951-52

- geology, diamond drilling, mag survey

DeMarco "Central Group" - 1954

- diamond drilling

M. Ferguson - 1957

- geology, mag survey, HLEM survey.

Midrium Mining Company Limited - 1965-66

- geology, diamond drilling, mag survey, JEM

Welsh, G.S. - 1971

Newman, Roy - 1974

- diamond drilling

GENERAL GEOLOGY

"The Webb Lake Claim Group consist predominantly of Timiskaming sedimentary rocks from conglomerates to arkose and greywacke. In the east, syenitic rocks of the Cairo stock predominates, while in the west several cupolas of syenite are also exposed. The relationship between the Cairo stock and syenite cupolas is uncertain. To the southwest, massive to tuffaceous volcanic flows and fragmentals rocks are present with a composition ranging from andesitic to basaltic. North trending Matachewan diabase dikes outcrop in the western portion of the claim group. Underlying the extreme southern portion of the property are conglomerates of the Cobalt Group which unconformably overlies the Archean stratigraphy. Pleistocene lodgement tills and recent swamps and stream deposits overlies much of the bedrock." (Van Weichen, 1981).

GEOPHYSICAL SURVEY

The two fold purpose of the total field magnetic survey was to identify and delineate lithological contacts in drift covered areas, and, also, to locate the fault zones and possible mineralized shear zones. Also, the magnetic survey will help clarify the numerous VLF-EM conductors.

During the survey period a total of 1643 magnetic readings were observed to establish 1573 magnetic stations at a 100 foot intervals. A total of 29.79 line miles of magnetic surveying was done on a grid spacing of 400 feet.

SPECIFICATIONS

The specifications for the Geometrics base station magnetometer and the portable proton magnetometer are in Appendix B.

PROCEDURES

The base control magnetic station located at the Matachewan Consolidated Mine site was re-occupied and correlated during a quiet magnetic period to the previous base control station value of 60207± 1 gamma. The correlation between the present survey and the previous value is +67±1 gamma.

Before surveying began four base stations were established on the Webb Lake, these being:

- | | |
|-----------------------------|--------------|
| 1) North baseline at 22+00W | 59302 gammas |
| 2) South baseline at 62+00W | 59511 gammas |
| 3) Line 48+00W at 40+00S | 59834 gammas |
| 4) South baseline at 98+00S | 59860 gammas |

Once the base stations were established, the base lines were surveyed in a looping fashion, with the base control magnetic station supplying the drift corrections. When the data was corrected for drift and the base correlation, the data was then corrected for the instrument diurnal. Upon completion of the baselines, the north-south traverse lines were surveyed also in a looping fashion. The data was corrected for the base correlation, drift and diurnals.

The survey days and personnel are summarized in Appendix A.

DATA PRESENTATION

The corrected total field magnetic data is plotted and contoured on a 1 inch to 400 feet base map of the Webb Lake claim group. Where possible, the contour interval is at 100 gammas.

INTERPRETATION

The interpretation of the magnetic survey appears on a separate map. The areas of interest are the diabase dikes which do not outcrop in these 16 new areas. Another lithological discovery is in the vicinity of Knott Lake. It appears that the volcanic syenite contact is shifted northwards from the position interpreted by Van Weichen (1981). On the east side of the lake, the volcanics are overlain by Archean sediments.

It is the author's opinion that the area south-west, west and northwest of Webb Lake is a syenite stock overlain by a thin mantle of Archean sediments. North and South of Webb Lake, it appears that a thick sequence of Archean sedimentary rocks comprise the capping rocks.

Structurally, the claim group has numerous faults and shear zones, namely: Knott Lake Fault, McDonnell Creek Fault, Montreal River-Whiskeyjack Creek Fault. It is suspected that a NW fault bisects Webb Lake. Also, four and possibly a fifth shear zones exist in the property.

CONCLUSION AND RECOMMENDATIONS

It appears from this survey that numerous possible carbonate zones exist in the vicinity of the faults and shear zones. Also, the Archean sediments west of Webb Lake are probably thin and overlies volcanics and/or syenite stock.

It is recommended that a soil geochemical survey be conducted over the grid and detailed in areas near the shear zones, and in moderate magnetic relief in the syenite stocks. Also, detail prospecting and possibly trenching should be done in the areas mentioned above before committing a diamond drilling program.

I hereby submit that this report and accompanying maps are accurate and true to the best of my knowledge and that they were completed by myself this 19th day of April, 1982.

Kian Jensen.

Kian A. Jensen, B. Sc.,
Exploration Geophysicist-
Geologist.

KAJ/kg

CURRICULUM VITAE

NAME: JENSEN, Kian A.
ADDRESS: 374 Patricia Boulevard, Timmins, Ontario P4N 6Y6
TELEPHONE: (705) 264-5748
BIRTHDATE: September 24, 1951
SEX: Male
STATUS: Married
EDUCATION: University of Waterloo, 1971 - 1975, B.Sc. Honour Earth Science, Geology Major

RELATED EXPERIENCE

March 2 to Present PAMOUR PORCUPINE MINES LIMITED, PAMOUR NO. 1
Employed as a geologist/geophysicist in the Exploration Department, Pamour No. 1. Responsible for conducting ground geophysical surveys, interpretation and reports. Other duties include geological mapping, drill core logging, ore calculations, and property evaluation.

September 1978 to February 1981 GEOTERREX LIMITED, 2060 Walkley Road, Ottawa
Employed as a geophysicist/party chief conducting various types of ground geophysical surveys. Other responsibilities included training personnel, logistic reports, job proposals, billings, data reduction and interpretation. Clients and types of surveys involved in are as follows:
Amoco Oil Limited - gravity survey
Ontario Hydro - seismic survey
Urangeschellshaft Canada Limited - Max-Min and horizontal PEM surveys
Energy, Mines and Resources, Earth Physics Branch - inertial gravity survey
Geoterrex Limited, Calibogie test site - CEM, Max-Min, Proton magnetic and horizontal PEM surveys
Newmont Exploration of Canada Limited - drillhole PEM survey
Newmont Exploration of Canada Limited - EMP survey
E & B Exploration of Canada Limited - gravity survey

Energy, Mines and Resources, Earth Physics Branch -
inertial gravity survey

Geoterrex Limited, Calibogie test site - Elfast turam,
IP and DEEPEM surveys

Abitibi-Price Inc. - interpretation of drillhole PEM
survey

May to
September 1978

RAYROCK RESOURCES LIMITED (MINES), 1011-2200 Yonge Street,
Toronto

Employed as a field geologist conducting a reconnaissance
geochemical survey for uranium in central North West
Territories. Other responsibilities included rock sampling,
reconnaissance mapping, claim work, and assisted in
compiling airborne radiometric results.

September 1974
to
April 1975

B.Sc. Thesis, "A Geophysical Investigation for Buried
Bedrock Valleys in the Belwood Lake Area".

This involved data acquisition, computer modelling, and
interpretation of gravity and resistivity surveys.

September 1974
to
April 1975

UNIVERSITY OF WATERLOO, Waterloo, Ontario

Employed to sort and catalogue rock suites and set up
museum displays of ore suites from Canadian mines.

May to
September 1974

CANADIAN OCCIDENTAL PETROLEUM LIMITED, 311-215 Carlingview
Drive, Rexdale, Ontario

Employed as a field geologist conducting reconnaissance
and detail geochemical surveys for base metals in south-
central British Columbia. Other responsibilities included
claim work, rock sampling, and the preparation of geochemical
anomaly maps.

October to
December 1973

UNIVERSITY OF WATERLOO, Waterloo, Ontario

Employed as a geophysical assistant conducting gravity,
resistivity, and seismic surveys.

OTHER EMPLOYMENT

October 1977 to May 1978 GOLDEN TRIANGLE SECURITIES AND INVESTIGATIONS, 52A Francis Street, Kitchener, Ontario

Employed as a security guard at Pirelli Cables in Guelph, Ontario.

June 1975 to September 1977 TOWERS DEPARTMENT STORES, 1013 Ontario Street, Stratford, Ontario

Employed as a department manager responsible for staff schedules, ordering, inventory, and sales.

MEMBERSHIPS

Society of Exploration Geophysicists (1981) - Associate Member

Prospector's Licence (Individual) - A44525

REFERENCES

Lovell, H.L. 1967

Geology of the Matachewan Area; Ontario
Department of Mines, GR 51, 52p. Accompanied by Maps
2109 and 2110, scale 1 inch to 1/2 mile.

MAPS

Geological Survey of Canada

Aeromagnetic Map 287G (Rev) Matachewan, sheet 41 P/15.
Scale 1 inch to 1 mile. GSC; published 1970.

Ontario Geological Survey

No. P.273 (preliminary map) - Cairo Township. District
of Timiskaming, Ontario. Scale, 1 inch to 1/4 mile.
Geology by Lovell and assistants 1964, Published 1965.

No. P.1038 (preliminary map) - Cairo Township, District
of Timiskaming, Ontario. Kirkland Lake Data Series.
Scale 1 inch to 1/4 mile or 1:15,840. Data compiled
1972, 1973, 1975. Published 1975.

APPENDIX A

DATE	PERSONNEL	FUNCTION
March 23, 1982	Kian Jensen Byron Cooper	Data Acquisition Data Acquisition
March 24, 1982	Kian Jensen Byron Cooper D'Arcy Ryan	Data Acquisition Data Reduction Data Acquisition Data Acquisition
March 25, 1982	Kian Jensen Byron Cooper D'Arcy Ryan	Data Acquisition Data Acquisition Data Acquisition
March 26, 1982	D'Arcy Ryan	Data Acquisition
March 29, 1982	Kian Jensen	Data Reduction
April 1, 1982	Kian Jensen	Data Reduction Compilation
April 2, 1982	D'Arcy Ryan Kian Jensen	Data Acquisition Compilation
April 3, 1982	D'Arcy Ryan	Data Acquisition
April 5, 1982	Byron Cooper Kian Jensen	Data Acquisition Compilation
April 9, 1982	Byron Cooper	Compilation
April 15, 1982	D'Arcy Ryan	Compilation
April 16, 1982	D'Arcy Ryan Kian Jensen	Compilation Interpretation and Report
April 19, 1982	Kian Jensen	Report

1.0 GENERAL INFORMATION

1.1 INTRODUCTION

The Model G-816/826 Portable Proton Magnetometer is a complete system designed for man-carry field applications requiring simple operation and stable measurements of the total intensity of the earth's magnetic field. The G-816/826 is accurate and has a sensitivity of ± 1 gamma over a range from 20,000 to 90,000 gammas. Since the instrument measures total field intensity, the accuracy of each measurement is not affected by sensor orientation. The inherent simplicity of the G-816/826 Proton Magnetometer allows rapid, accurate measurements to be obtained from a rugged, compact field instrument. This is a precision instrument and reasonable attention must be given to handling, battery condition, and magnetic environment.

1.2 MAGNETIC ENVIRONMENT

It is important that the earth's magnetic field is not perturbed by allowing unwanted magnetic objects to come close to the sensor. Such objects include rings, keys, watches, belt buckles, pocket knives, metal pencils, zippers, etc. When the sensor is used on the staff, one gamma surveys are easily performed provided the sensor is kept at a distance of three feet (.9 m) from the operator. When the sensor is used in the backpack, certain articles of clothing and some types of batteries within the console will cause a five to ten gamma heading error in the readings. The G-816/826, however, still provides one gamma sensitivity and repeatability despite the presence of such a base line shift. The backpack feature is recommended for use in difficult terrain where "hands free" operation is required.

Prior to survey use, objects that are suspected to be magnetic may be checked in the following manner:

1. Attach sensor to staff and connect coiled signal cable to console. Sensor should not be moved or turned during the test, and the suspected article should be far away initially.
2. Cycle the magnetometer a few times by depressing the READ button--releasing--and waiting for a reading each cycle.
3. Observe measurement readings. Each reading should repeat to ± 1 gamma. (A slow shift may occur over several minutes due to a diurnal change in the earth's field.)
4. Place the suspected article at the distance from the sensor expected during actual survey operation.
5. Cycle magnetometer several times and note the readings.

6. Remove the article and repeat steps 2 and 3 to check for diurnal shifts in the earth's field. If a diurnal shift is present, repeat entire test.
7. If the readings obtained in step 5 differ by more than + 1 gamma (+ one count) from those obtained in steps 3 and 6, then the article is magnetic.

IF THE ARTICLE IS HIGHLY MAGNETIC, OR IF THE SENSOR IS INSIDE OR NEAR A BUILDING OR VEHICLE, THE PROTON PRECESSION SIGNAL WILL BE LOST, GIVING COMPLETELY ERRATIC READINGS AND LOSS OF + 1 COUNT REPEATABILITY.

The magnetometer should not be operated in areas that are known sources of radio frequency energy, power line noise (transformers), in buildings or near highly magnetic objects. The sensor should always be placed on the staff above the ground, or in the "backpack." The sensor will NOT operate properly when placed directly on the ground.

1.3 SPECIFICATIONS

Sensitivity:	+ 1 gamma throughout range.
Range:	20,000 to 90,000 gammas (worldwide).
Tuning:	Multiposition switch with signal amplitude indicator light on display.
Gradient Tolerance:	Exceeds 800 gammas/feet.
Sampling Rate:	Manual push button, one reading each six seconds.
Output:	Five digit numeric display with readout directly in gammas.
Power Requirements:	Twelve 1.5 volt "D" cell universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.
Temperature Range:	Console and sensor: -40° to +85° C. Battery pack: 0° to +50° C (limited use to -15° C; lower temperature battery belt operation - optional).
Accuracy (Total Field):	+ 1 gamma through 0° to +50° C temperature range.

Operating Manual
 Model G-816/826
 Portable Proton Magnetometer

Sensor: High signal, noise cancelling, mounted on staff or attached to backpack.

Size: Console: 3.5 x 7 x 11 inches
 (9 x 18 x 28 cm)
 Sensor: 3.5 x 5 inches (9 x 13 cm)
 Staff: 1 inch diameter x 8 ft. length
 (3 cm x 2.5 m)

Weight:	Lbs.	Kgs.
Console (w/batteries):	5.5	2.5
Sensor and signal cable:	4	1.8
Aluminum staff:	2	.9
	<u>11.5</u>	<u>5.2</u>

1.4 INVENTORY INSPECTION

When received from the manufacturer, the G-816/826 Magnetometer should include the following items:

- | | |
|---|---------|
| 1. G-816/826 Magnetometer console | 1 each |
| 2. Sensor | 1 each |
| 3. Collapsible sensor staff | 1 each |
| 4. Signal cable-staff (long) | 1 each |
| 5. Signal cable-backpack (short) | 1 each |
| 6. Adjustable carrying harness | 1 each |
| 7. Batteries: Type D Premium Carbon Zinc with cardboard jacket (12 each within console) | 24 each |
| 8. Applications Manual for Portable Magnetometers | 1 each |
| 9. Operator's Manual | 1 each |
| 10. Storage/Carrying Case | 1 each |

1.0 GENERAL INFORMATION

1.1 INTRODUCTION

The Model G-826A Recording Proton Magnetometer is a complete system designed for all fixed station and portable field surveys. The G-826A features a special converter/timer that provides both analog and digital outputs, time base reference oscillator and control logic. As a field portable, the G-826 Magnetometer is accurate and stable to within ± 1 gamma over a range from 20,000 to 90,000 gammas (worldwide). Since the instrument measures total field intensity, the accuracy of each measurement is based upon an atomic constant* and is therefore independent of temperature, humidity and sensor orientation.

1.2 MAGNETIC ENVIRONMENT

It is vital that measurements of the earth's magnetic field do not include unwanted magnetic sources. The sensor must be placed in an environment that is free from magnetic hardware and located fairly distant from sources of mechanical and electrical noise. If unwanted magnetic material is too close to the sensor, it will cause a severe gradient across the sensor and preclude any operation. ALL MATERIALS ARE SUSPECT UNTIL PROVEN OTHERWISE BY ACTUAL TEST. (Refer to Paragraph 1.2, of the G-826 Portable Magnetometer section of this manual.)

1.3 SENSOR INSTALLATION

There are two sensors provided with the G-826A system. The smaller sensor is for portable field applications ONLY, and is designed for use with the aluminum staff or in the back pouch provided on the canvas shoulder harness. The larger sensor is only for base station applications where long signal cables from 46 m (150 ft.) to 92 m (300 ft.) are utilized. Do NOT use the larger sensor for portable applications as damage to the G-826 Magnetometer may result.

Finding a suitable location for the base station sensor is very important. Typically, the base station site is established no further than 161 km (100 miles) from the area of the survey, and the sensor is secured to a nonferrous stand (wood post) that is at least 1.3 m (4 ft.) above ground level and 61 m (200 ft.) away from sources of manmade magnetic disturbance (i.e. automobile traffic, buildings, power lines, machinery, etc.). A special,

* Proton Gyromagnetic Ratio: $(2.67513229 [57 \times 10^8]$
Radians/Teska.

threaded aluminum stud is provided to allow easy sensor installation to a wood, or nonferrous post. To properly install the sensor stud drill a 1.6 cm (5/8") diameter hole, 5.1 cm (2") deep and "press-fit" the stud into the stand leaving the threaded portion exposed. The base station (large) sensor can now be installed on the aluminum stud by screwing it "clockwise" until snug. Do NOT excessively tighten the sensor to the aluminum stud. All materials used in the construction of the sensor stand MUST be completely nonferrous; all materials are suspect until thoroughly checked for magnetic cleanliness.

1.4 SPECIFICATIONS

Resolution: + 1 gamma throughout tuning range

Tuning Range: 20,000 to 90,000 gammas (worldwide)

Tuning Mechanism: Multiposition rotary switch with 24 overlapping positions. Peak signal (SIG) amplitude indicator light on readout display

Gradient Tolerance: Exceeds 800 gammas/foot (portable applications)

Sampling Rate: Base Station Mode:
Six (6) position rotary switch for automatic sampling every 4, 10, 30 seconds or 1, 2, or 5 minutes (time base oscillator stable within 10 second/week from 0° to 50° C)

Portable Mode:
Manual push button; new reading every six (6) seconds

Data Outputs: Visual (Base Station and Portable):
Five (5) digit illuminated incandescent display directly in gammas - visible even in bright sunlight

Operating Manual
Model G-826A
Base Station Magnetometer

Analog Base Station:

Potentiometric: Calibrated for 100 mV
full scale, load is 20 K
ohms

Galvanometric: Calibrated for 1 mA full
scale into 1500 ohms

Digital (Base Station):

Five (5) BCD characters, 1-2-4-8 code (4
line output).

"0" state = 0 to + .5 V

"1" state = 2.5 to + 5 V

Standard Full Scale
Resolution:

100 gammas (1 gamma sensitivity)
25 gammas (0.25 gamma sensitivity)

Event Marker:

Automatic, every 30 minutes (analog
recorder only)

Power Requirements:

Base Station Mode:

External 24 V to 32 Vdc or 110/220 V,
50/60 Hz ac power (maximum current drain
per measurement is 2.18 amps with Rustrak
Recorder and display on)

Portable Mode:

Internal "D" cell (12 each) universally
available flashlight batteries. Charge
state or replacement signified by flashing
indicator light (BAT)

<u>Battery Type</u>	<u>No. of Readings</u>
Alkaline:	Over 10,000
Premium Carbon Zinc:	Over 4,000
Standard Carbon Zinc:	Over 1,500

Operating Manual
 Model G-826A
 Base Station Magnetometer

- NOTE: 1) Some magnetic offset may be experienced using steel clad alkaline cells with the sensor in backpack operation.
- 2) Battery life decreases with low temperature operation.

Temperature Range: Consoles and Sensors: -40°C to $+85^{\circ}\text{C}$
 Analog Recorder (Rustrak) 0°C to $+50^{\circ}\text{C}$

Note: For portable operation at temperatures below 0°C , an optional battery belt is recommended.

Accuracy (Total Field): ± 1 gamma throughout 0° to $+50^{\circ}\text{C}$ (± 3 gamma from -40°C to $+85^{\circ}\text{C}$)

Sensors: Base Station:
 High signal, ac noise cancelling for use with long signal cables. Includes threaded aluminum mounting stud.

Portable:
 High signal, omnidirectional for use with collapsible staff or in "back pouch" attached to shoulder harness.

Galvanometric Analog Recorder: Rustrak, Model 2146. Includes 5.2 cm (2 inch) usable chart width with fixed chart speed of 10.2 cm (4 inch) or 15.2 cm (6 inch) per hour (select), event marker, and inkless writing. Style "N" chart paper (50 divisions f/s), 6.4 cm x 19.2 m (2.5 inches wide x 63 feet long).

Size and Weight:	Size	Kgs.	Lbs.
Converter/Timer Console: (w/o magnetometer or recorder)	23.5 x 41.3 x 40 cm (9-1/4 x 16-1/4 x 15-3/4")	9.5	21.0
Portable Magnetometer: (with batteries)	9.5 x 18 x 27 cm (3-3/4 x 7 x 10-1/2)	2.5	5.5

Operating Manual
 Model G-826A
 Base Station Magnetometer

Size and Weight	<u>Size</u>	<u>Kgs.</u>	<u>Lbs.</u>
Portable Accessories:*	2.5 cm diameter x 2.4 m (1" x 8 ft.)	2.8	6.0
Sensors:			
Base Station	11.4 cm diameter x 17.8 cm (4-1/2 x 7")	2.8	6.0
Portable	8.9 cm diameter x 12.7 cm (3-1/2 x 5")	1.2	2.5
Sensor Cable:	45 m length (150 ft.)	4.6	10.0
Rustrak Recorder:	13.9 x 8.9 x 11.4 cm (5-1/2 x 3-1/2 x 4-1/2")	1.6	3.5

1.5 OPTIONAL FEATURES

Increased Sensitivity: Provisions for either 1.0 or 0.25 gamma sensitivity. Includes internal switch in magnetometer.

Extended Sensor Cable: Special 92 m (300 ft.) shielded sensor signal cable for use with base station.

Potentiometric Analog Recorder: Hewlett-Packard, Model 7155B. Includes 12 cm (5 inch) chart width, event marker, multiple chart speeds, operation on 10.5 to 36 Vdc, 0.5 amp (typical), or 85 V to 130 V or 172 to 260 V, 48 to 440 Hz ac power.

Calibration: Metric (English optional)

Size: 30.5 x 19.7 x 42 cm
(12 x 7-3/4 x 16-1/2")

Weight: 13.6 kg (30 lbs.)

Operating Temp: -28° C to + 65° C

* Portable Accessories: Includes shoulder harness, batteries, sensor cables, and staff. Only the staff dimensions are shown.

Ontario
 Type of Survey(s) **Magnetic Survey (Total Field)**
 Claim Holder **Pamour Porcupine Mines Limited**



900

Survey Company **Pamour Exploration**
 Survey Dates (linecutting to office) **22 03 82 19 04 82**
 Total Miles of line Cut
 Name and Address of Author (of Geo-Technical report)
Kian A. Jensen, 374 Patricia Blvd., Timmins, Ontario

Special Provisions Credits Requested

Instructions For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	Days per Claim
	- Electromagnetic	20
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Geochemical		

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	532094	
	532095	
	532096	
	532097	
	532098	
	537319	
	537320	
	537321	
	537322	
	537323	
	567999	
	568000	
	568001	
	568002	
	568003	
	568004	
	568005	
	568006	
	568007	
	568008	
	568009	
	568010	
	568011	
	568012	
	568013	

Man Days

Instructions Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Geochemical		

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

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.

Report Completed
 Date of Report **April 19/82**
 Recorded Holder or Agent (Signature) *Kian Jensen*

For Office Use Only

Total Days Cr. Recorded **620** Date Recorded **APR 23 1982**
 Mining Recorder *[Signature]*
 Date Approved as Recorded **APR 22 1982**
 Regional Branch Director *[Signature]*

RECEIVED
MAY 19 1982
MINING LANDS SECTION

RECEIVED
APR 23 1982
AM 7:18
10:10
1314516

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
Kian A. Jensen, 374 Patricia Blvd., Timmins, Ontario. P4N 6Y6

Date Certified **April 19/82**
 Certified by (Signature) *Kian Jensen*

Mining Lands Comments

Large empty rectangular box for general comments.

To: Geophysics *Mr. Barlow.*

Comments section for Geophysics with multiple horizontal lines.

Approval checkboxes: Approved, Wish to see again with corrections

Date: *Jan 3/83* Signature: *[Handwritten Signature]*

To: Geology - Expenditures

Comments section for Geology - Expenditures with multiple horizontal lines.

Approval checkboxes: Approved, Wish to see again with corrections

Date: Signature:

To: Geochemistry

Comments section for Geochemistry with multiple horizontal lines and a large handwritten circled 'U'.

Approval checkboxes: Approved, Wish to see again with corrections

Date: Signature:

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

1982 05 12

2.4724

Mining Recorder
Ministry of Natural Resources
4 Government Road East
P.O. Box 984
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

We have received reports and maps for a Geophysical (Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims L 532094 et al in the Township of Cairo.

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

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

J. Skura/amc

cc: Pamour Porcupine Mines, Limited
Timmins, Ontario

Pamour Porcupine Mines, Limited
Administration Building
P.O. Bag 2010
Timmins, Ontario, Canada P4N 7X7

pamour

April 22, 1982

Mr. E. F. Anderson,
Director,
Land Management Branch,
Whitney Block, Room 6450,
Queen's Park,
TORONTO, Ontario.
M7A 1W3

Re: Assessment work for Mining Claims L.532094 - 98,
L.537319 - 323, and L.567999 - 8019, Cairo Township
Larder Lake Mining Division, District of Timiskaming,
Ontario

Dear Mr. Anderson:

Please find enclosed the magnetic survey filed for
assessment work for the above claims. The only claim that
presented difficulty was L.567999, which covers in part the
Montreal River. Due to the Old Woman Rapids, the water was
open and could not be surveyed.

If any problems arise pertaining to the survey, please
contact me at (705) 235-3311 Ext. 14.

RECEIVED

APR 29 1982

MINING LANDS SECTION

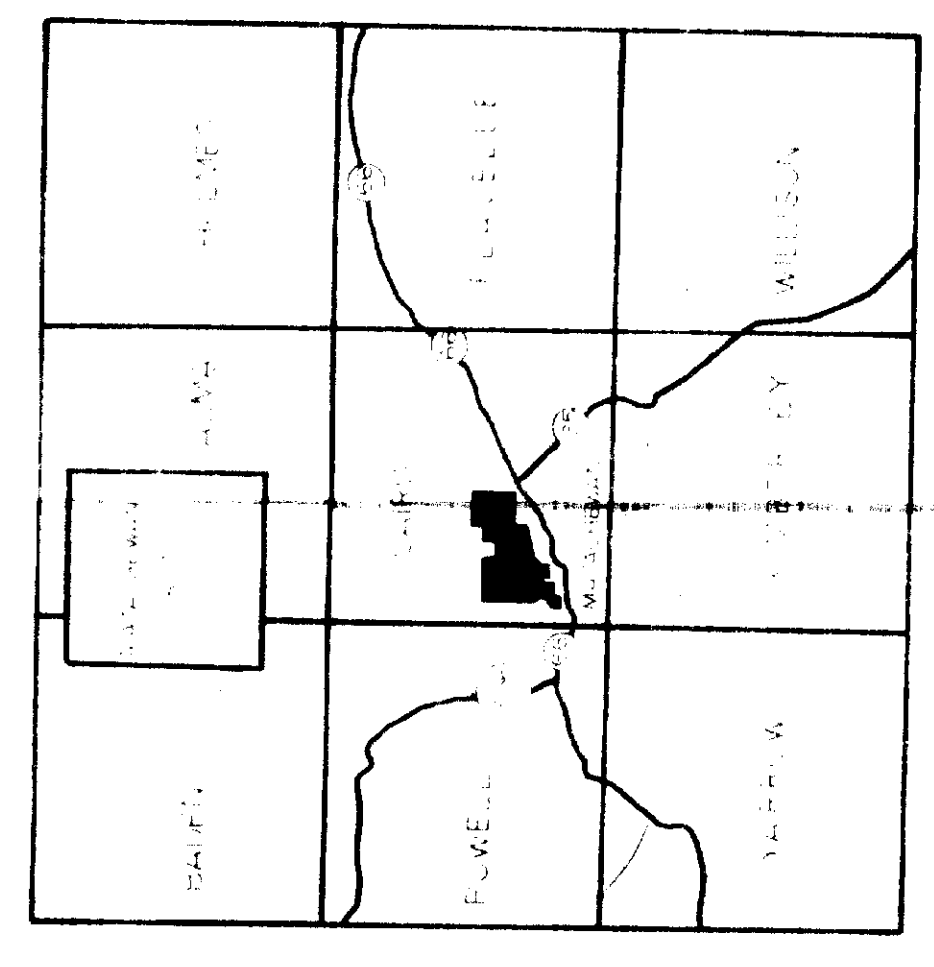
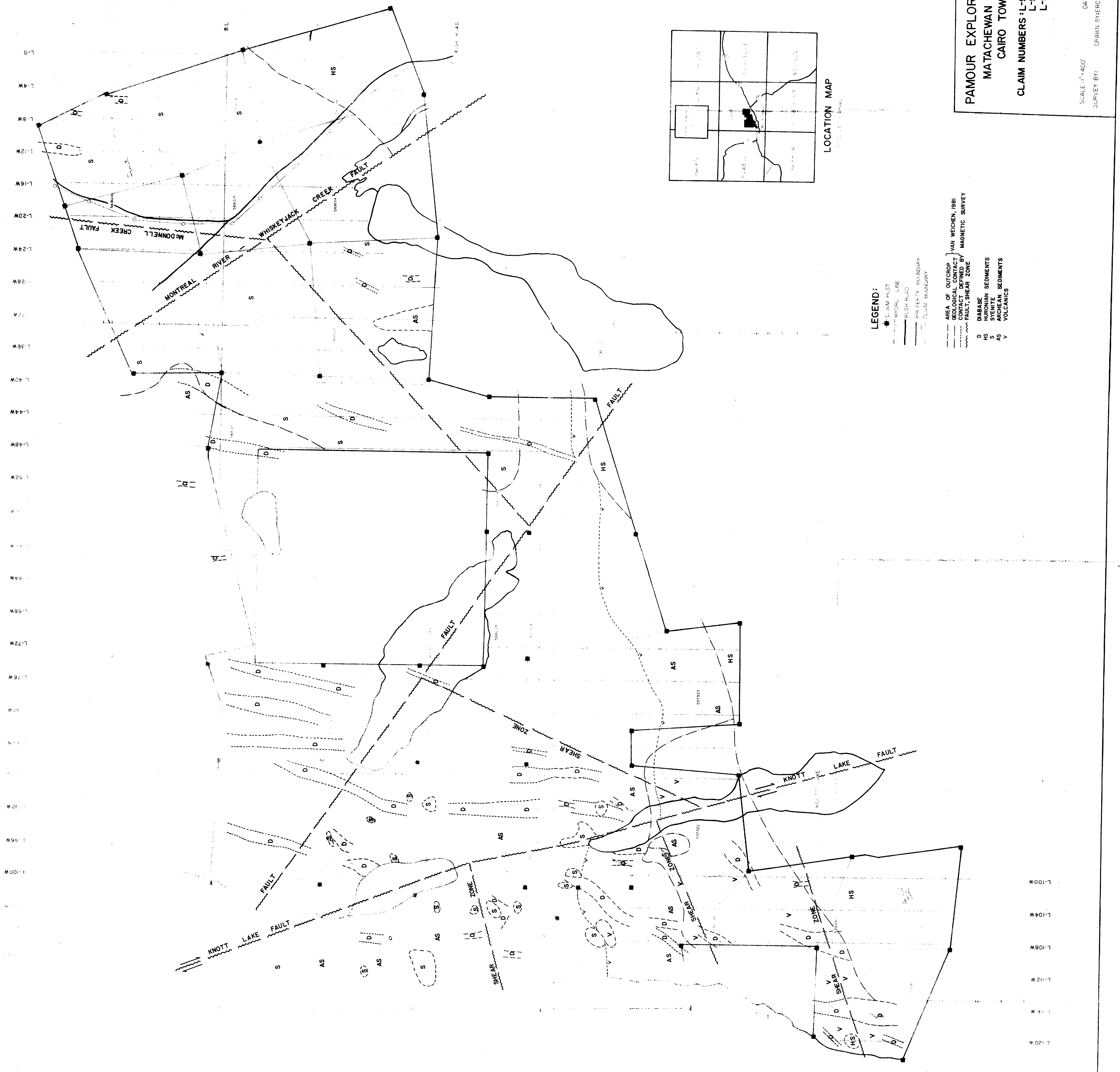
Yours truly,

Kian Jensen

Enclosure:
KAJ/kg

Kian A. Jensen,
Exploration Geophysicist-
Geologist.

L 52094	✓								
95	✓								
96	✓								
97	✓								
98	✓								
537 319	✓								
20	✓								
21	✓								
22	✓								
23	✓								
567 999	✓								
568 000	✓								
01	✓								
02	✓								
03	✓								
04	✓								
05	✓								
06	✓								
07	✓								
08	✓								
09	✓								
10	✓								
11	✓								
12	✓								
13	✓								
14	✓								
15	✓								
16	✓								
17	✓								
18	✓								
19	✓								



LOCATION MAP

LEGEND:

- CLAIM POST
- HYDRAULIC LINE
- RUSH ROAD
- PROPERTY BOUNDARY
- - - CLAIM BOUNDARY

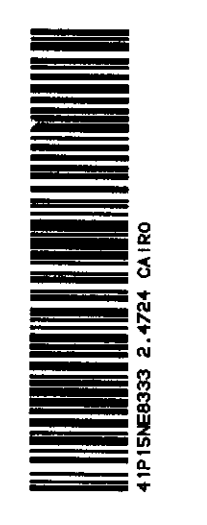
- AREA OF OUTCROP VAN WEICHERN, 1981
- GEOLOGICAL CONTACT BY MAGNETIC SURVEY
- CONTACT DEFINED BY MAGNETIC SURVEY
- FAULT, SHEAR ZONE

- D BARABE
- HS HURONIAN SEDIMENTS
- S SYENITE
- AS ARCHEAN SEDIMENTS
- V VOLCANICS

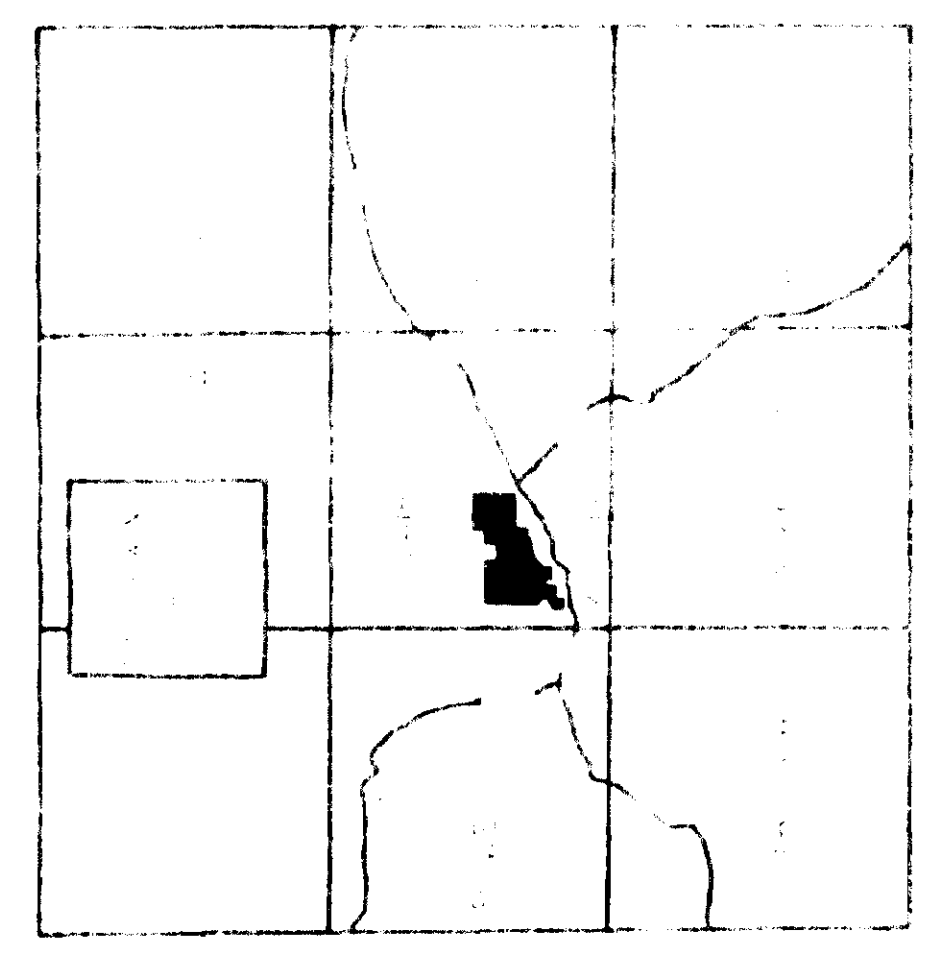
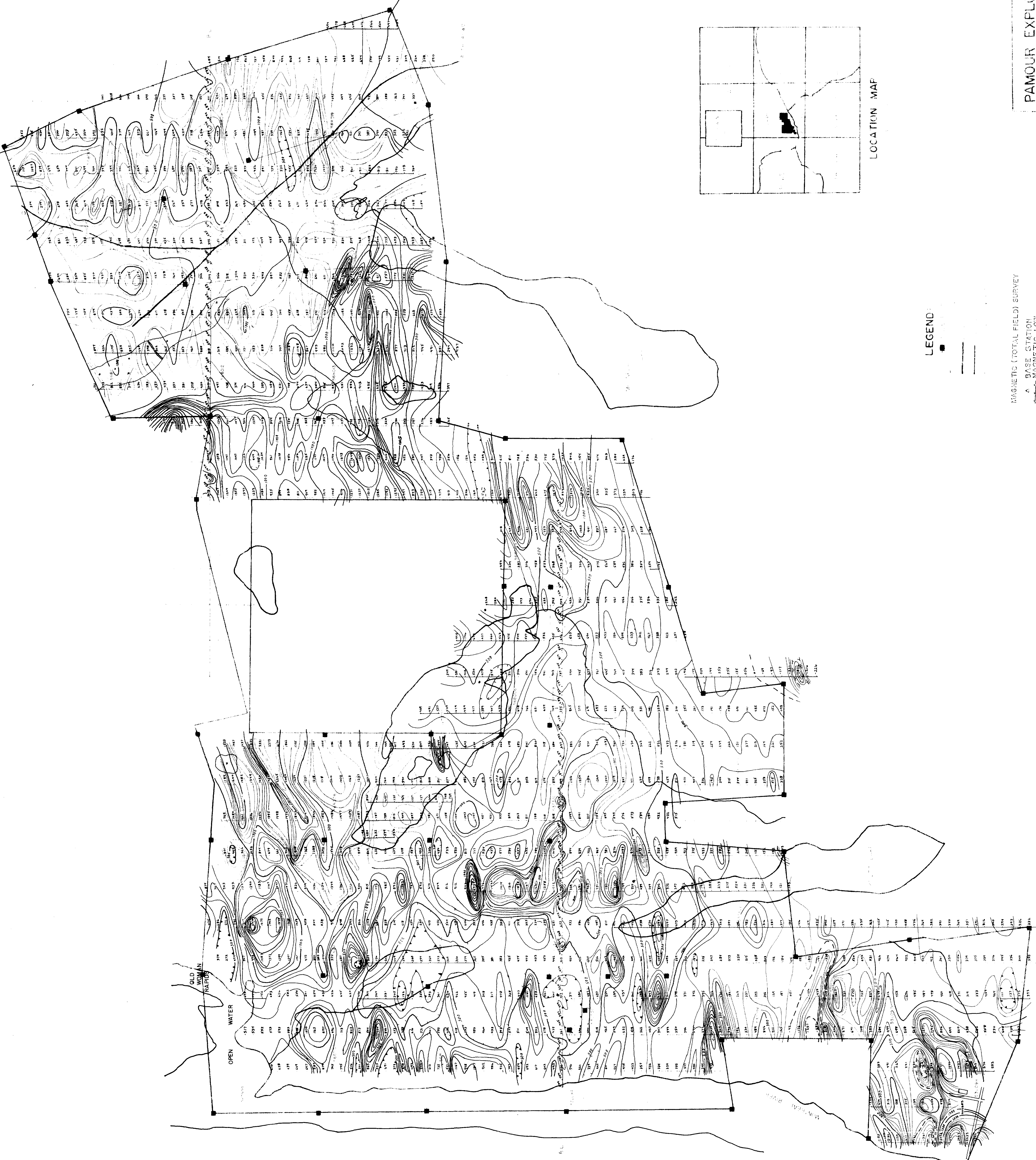
PAMOUR EXPLORATION LTD.
MATACHEWAN PROJECT
CAIRO TOWNSHIP

CLAIM NUMBERS: L-567999 - 568019
 L-537319 - 537323
 L-532094 - 532098

SCALE: 1" = 400'
 SURVEY BY: *Kim Adams*
 DATE: *April 1982*
 DRAWN BY: *Kim Adams*
 APPROVED BY: *Kim Adams*
 2424



L-0
L-4W
L-8W
L-12W
L-16W
L-20W
L-24W
L-28W
L-32W
L-36W
L-40W
L-44W
L-48W
L-52W
L-56W
L-60W
L-64W
L-68W
L-72W
L-76W
L-80W
L-84W
L-88W
L-92W
L-96W
L-100W
L-104W
L-108W
L-112W
L-116W
L-120W



LOCATION MAP

LEGEND

- ▲ BASE STATION
- MAGNETIC LOW
- CONTOUR INTERVAL 100 GAMMAS

MAGNETIC (TOTAL FIELD) SURVEY
▲ BASE STATION
— MAGNETIC LOW
— CONTOUR INTERVAL 100 GAMMAS
INSTRUMENT: E. S. B. GEOMETRICAL
PROTON MAGNETOMETER

PAMOUR EXPLORATION LTD.
MATACHEWAN PROJECT
CAIRO TOWNSHIP
CLAIM NUMBERS: L-567999-568019
L-537319-537323
L-532094-532096
MAGNETIC SURVEY
Kearney
April 1982

