REPORT ON THE
Electromagnetic Survey
on the
Raney Township Property (Grid 2)
of
GOLDROCK RESOURCES INC.

by
D.Greg Hodges, B.Sc.
July 6, 1987

2.5919

RECEIVED
JUL 31 1987
MINING LANDS SECTION

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LIST OF FIGURES

INTRODUCTION

During the first part of 1987, an electromagnetic survey was completed on 18 claims of the 72 claim Raney Township property of Goldrock Resources Inc.

The survey, conducted by Robert S. Middleton Exploration Services Inc., was used to define conductors and structure on the western area of the property, extending the coverage of previous surveys.

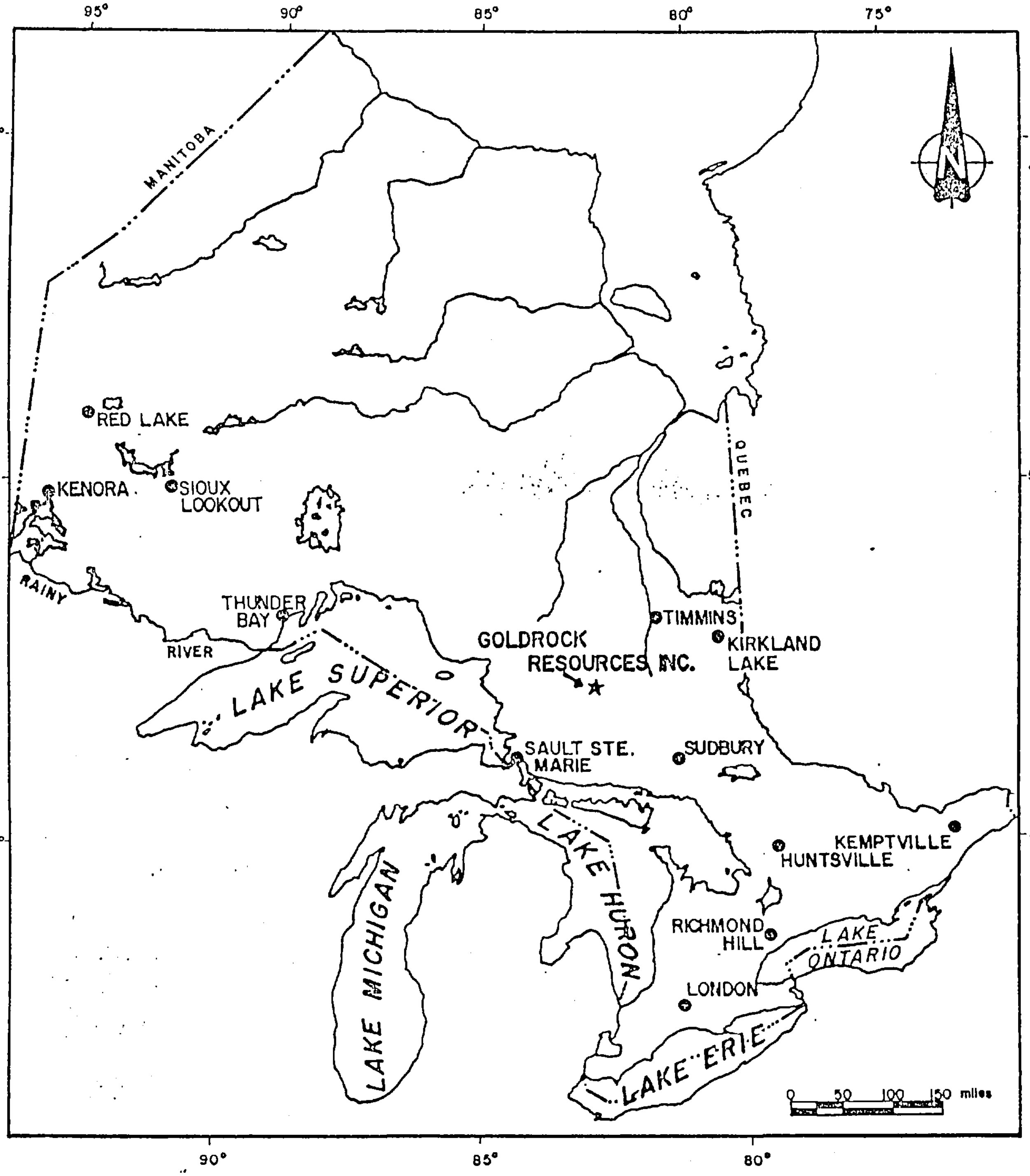
LOCATION AND ACCESS

The property is located east of Raney Lake and north of Denyes Lake in Raney Township, Ontario, approximately 50km south west of Foleyet, Ontario. (Figure 1 and 2). Access is by fixed wing aircraft (available in Foleyet or Timmins) to either lake.

CLAIM STATUS

The area surveyed consists of 18 un-patented mining claims in the Porcupine Mining District, all of which are held by Goldrock Resources Inc. of 1300-33 Yonge Street, Toronto, Ontario.

The claims are:



PROVINCE OF ONTARIO

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for GOLDROCK RESOURCES INC.		
	Title RANEY LAKE PROPERTY LOCATION Fig. 1		
	Date:	Scale: 1" = 160 mi.	N.T.S.:
	Drawn:	Approved:	File:

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GOLDROCK RESOURCES INC.
	Title PROPERTY LOCATION LOCAL
	From OGS MAP 2221 Fig. 2
	Date: | Scale: 1"=4miles | N.T.S.:

Claims	Recording Date
P-756783	June 12, 1980
P-756784	June 12, 1980
P-756785	June 12, 1980
P-756786	June 12, 1980
P-756787	June 12, 1980
P-756788	June 12, 1980
P-756789	June 12, 1980
P-756790	June 12, 1980
P-756791	June 12, 1980
P-756792	June 12, 1980
P-756793	June 12, 1980
P-~~769416~~	August 2, 1984
P-946116	July 21, 1986
P-946117	July 21, 1986
P-946118	July 21, 1986
P-946119	July 21, 1986
P-946120	July 21, 1986
P-946121	July 21, 1986

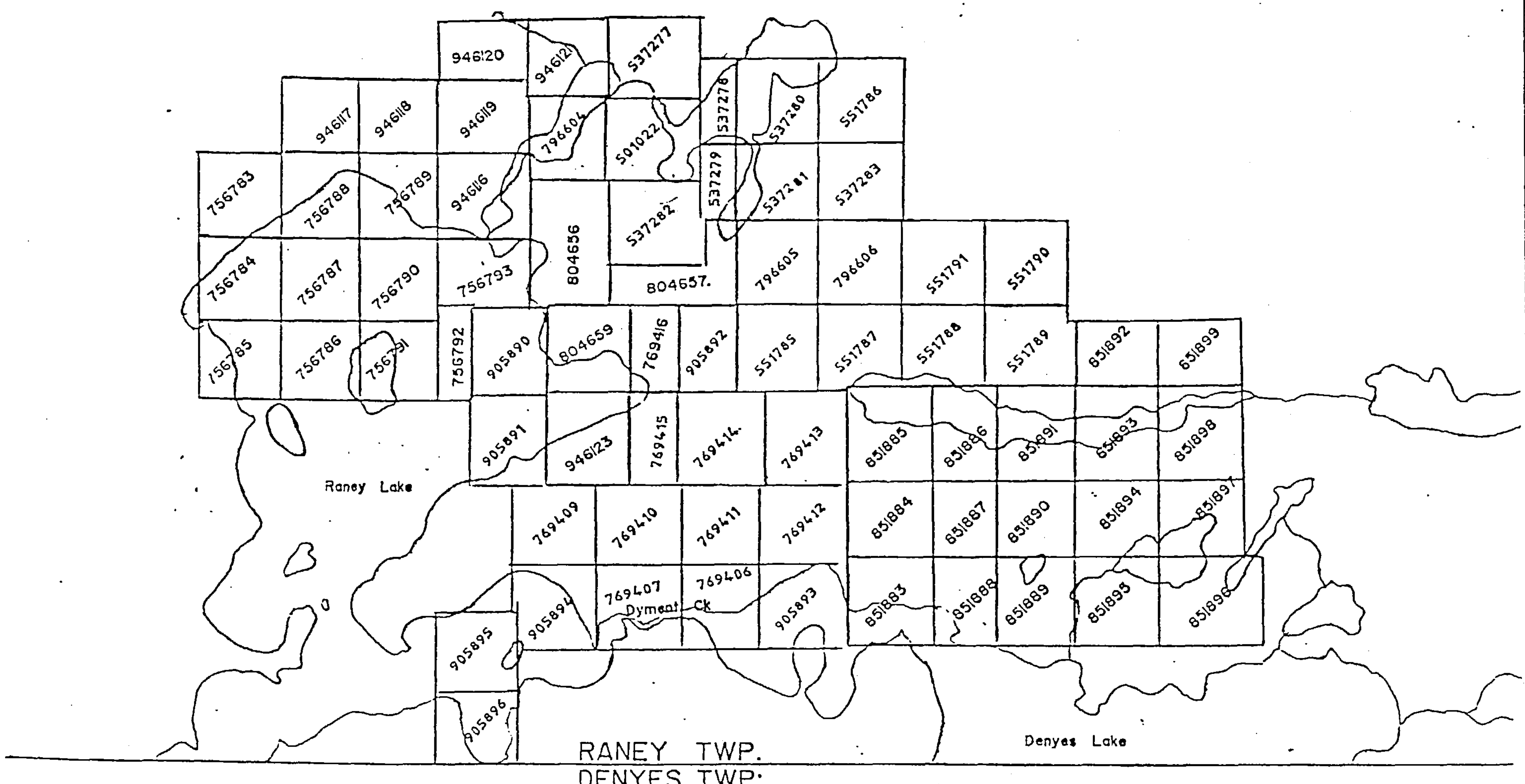
GEOLOGY

The following is quoted from Caira and Coster, 1984:

Regional Geology

"Raney Township is situated in the western end of the Abitibi greenstone belt and is underlain by Early Precambrian (Archean) supracrustal rocks of volcanic and sedimentary origin. The supracrustal rocks have been intruded by Archean felsic and mafic intrusives. The plutonic rocks occupy the southwestern corner and the northwestern portion of the township.

The youngest rocks are lamprophyre dikes, that may possibly occupy pre-existing faults. The dikes are



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GOLDROCK RESOURCES INC.
	Title CLAIM MAP
	Fig. 3
	Date: Scale: 1"=1/2 mile N.T.S.:

believed to be Late Jurassic to Early Cretaceous in age. The next youngest rocks are believed to be the felsic intrusives. These rocks have been interpreted by Thurston, Siragusa and Sage[1] to be Early Precambrian in age, and include massive to weakly foliated biotite and hornblende trondhjemite, granodiorite and minor quartz diorite. These rocks were not encountered on the J-dex Raney property. The next youngest rocks are the felsic to intermediate metavolcanics including felsic porphyritic and pyroclastic rocks with thin cherty interflow metasediments. These rocks occurred throughout a large portion of the J-dex Raney property.

The oldest rocks in Raney Township are mafic to intermediate metavolcanics including basaltic to andesitic flows, pillow lavas, and gabbroic coarse-grained flows or intrusions. Among these the andesitic flows are predominant. The J-dex Raney property is thought, by the authors, to lie within the Swayze - Deloro metavolcanic - metasedimentary belt, which is part of the Abitibi Subprovince.

The rocks of the Swayze - Deloro metavolcanic - metasedimentary belt generally have foliations and schistosities parallel or at low angles to the bedding

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1. 1977: Geology of the Chapleau Area, Districts of Algoma, Sudbury and Cochrane: Geoscience Report 157

and banding. Well foliated rocks occurred sporadically throughout the J-dex Raney property. The foliation was not discernable in the more massive varieties of the mafic metavolcanics.

Secondary lineations are relatively common in the metavolcanic - metasedimentary belts in the map area including elongated pyroclastic fragments, small scale crenulations and elongated clasts in detrital rocks. Several of these secondary lineations were seen on the J-dex Raney property.

A lack of outcrop throughout most of the Swayze Deloro map area makes the positive defining of faults a difficult process. Strike-slip faults exist throughout the map area together with east-trending shear zones. More major north-northwest to northwest striking faults are conspicuous throughout the metavolcanic - metasedimentary belt. Throughout the Swayze - Deloro belt, the faulting is indicated by abrupt discontinuities in the felsic metavolcanic units, similar to that on the J-dex Raney property.

Property Geology

The 21 claim J-dex, Raney Township property is underlain by metavolcanic and metasedimentary rocks of the Swayze - Volcanic belt. The metavolcanic sequence includes predominantly calc-alkalic basaltic to andesitic massive flows, pillowed flows and tholeiitic coarser grained massive flows, as well as predominantly rhyodacitic ash tuffs and crystal tuffs related to a felsic to intermediate volcanic center and possible shallow water volcanogenic sedimentation.

In the northern part of the property sheared felsic to intermediate tuffs occur that are greater than 400 metres in thickness. Along the lower contact, basaltic to andesitic massive flows, pillowed flows and intermittent tholeiitic basalts occur that are silicified and somewhat brecciated along the mafic-felsic contact.

Towards the centre of the claim group the basaltic to andesitic massive flows and pillowed flows predominate. Pillow top directions were difficult to determine although south facing tops were seen in one locality. Numerous zones of felsic pyroclastic rocks composed of rhyodacitic crystal tuffs and ash tuffs are indiscriminantly scattered throughout the sequence and indicates that intermittent felsic explosive activity continued during the accumulation of the predominantly mafic metavolcanic sequence. In the southern part of the property, a thicker sequence of felsic pyroclastic rock occurs, including waterlain rhyodacitic crystal lapilli tuffs and fine ash tuffs."

PREVIOUS WORK

The following is quoted from Caira and Coster, 1984:

"The Swayze gold belt has been intermittently explored over a time span of about 80 years. Most of the interest has centered on gold but base metals have been searched for as well.

Current exploration activity has been directed to the search of gold mineralization. Some of the more prominent gold exploration activity has been by; Orofino east of Raney township; Quinterra Resources in Tooms and Greenlaw townships southwest of Raney township; and by Carlson Mines in Rollo township. This activity has discovered significant gold values within chert and quartz-carbonate zones within basalts. These occurrences coupled with many known gold occurrences in the Swayze Gold Belt implies a good environment to search for gold deposits.

The following summary of the previous work in the area has been abstracted from assessment work files and reports from others who have worked in the area. Figure No. 2 shows the location of the J-dex Raney township claim group relative to neighbouring townships along the Swayze gold belt.

A review of the assessment work files in the Timmins Resident Geologist's office reveals that sporadic exploration has been carried out on the J-dex property in the northeast corner of Raney Lake. It is as follows:

1984

Hole No. 84-15EA

245' of winkie drilling encountered visible gold in quartz stringers with disseminated pyrite, molybdenite, sphalerite, chalcopyrite and associated apple green mineral (fuchsite?), tourmaline within an east-west trending fault zone.

Hole No. 84-15EB

216' of winkie drilling encountered visible gold in quartz stringers with disseminated pyrite and associated fuchsite?, tourmaline, fault zone.

Hole No. 84-15WA

213' of winkie drilling encountered visible gold, disseminated pyrite, pyrrhotite, sphalerite, chalcopyrite associated with quartz floodings, fault zone.

Hole No. 84-15WB

197' of winkie drilling encountered visible gold, with disseminated pyrrhotite, pyrite, molybdenite associated with quartz floodings, fault zone.

Hole No. 84-30EA

186' of winkie drilling encountered visible gold, with disseminated pyrrhotite, pyrite, molybdenite associated with quartz-carbonate veining, within an east-west fault zone.

Hole No. 84-30EB

199' of winkie drilling with visible gold, and disseminated molybdenite and pyrite within quartz-carbonate veins in tuffs.

Hole No. 84-30EC

181' of winkie drilling with visible gold, and disseminated molybdenite pyrite and sphalerite within quartz -carbonate veins in tuffs.

Hole No. 84-450NA

185' of winkie drilling encountered disseminated pyrite and pyrrhotite within Dacitic tuffs.

Hole No. 84-450NB

163' of winkie drilling encountered disseminated pyrite, pyrrhotite and chalcopyrite within Dacitic tuffs.

Hole No. 84-450NC

123' of winkie drilling encountered disseminated pyrite within Dacitic tuffs.

Hole No. 84-450ND

110' of winkie drilling enountered disseminated pyrite within tuffs.

1983 218' of winkie drilling in one hole. Visible gold with disseminated galena, pyrite, tourmaline within an east-west trending fault zone with associated quartz-carbonate veins.

1982 Magnetic and VLF surveys by J-dex Mining and Exploration Ltd. and Ingamar Resources.

Sporadic exploration has been carried out on properties in the immediate vicinity located east and southeast of the J-dex Raney Township claim group. This work is briefly summarized as follows:

1932 & 1935 Throne - Greaser Gold Showing

Reported on by Furse G.D. (1932) and Rickaby H.C. (1935).
Located on the south shore of a small pond north of Raney Lake.
2' wide quartz vein traced for 100' in arkose and impure quartzite.
Veins strikes Az 080° and dips steeply to the north.
Vein contains pyrite, carbonate and trace native gold.
Smaller 6" quartz vein in feldspar porphyry 500' south of larger vein; strikes Az 060° and traced for 100'.
At one location native gold, pyrite, chalcopyrite, galena and tourmaline was reported.

1972 Claw Lake Molybdenite Mines Ltd.

Located over part of Raney Lake and beyond to the east.
Aeromagnetic survey:
Ground Magnetic Survey - 52 miles.
Magnetics reported to be flat.

1972 - 1982 J-dex Mining and Exploration

Claim blocks on southwest end of Raney Lake.
1972
345' of winkie drilling in 3 holes.
Rhyolite with some disseminated pyrite interesected.
1973
I.P., Magnetic and Geochemical Surveys Produced:
9 zones of anomalous chargeabilities.
Magnetic distortions.
Highest geochemical - copper 65ppm, Zn - 205ppm.
110' of winkie drilling done.

1975 - 1979
5 winkie drill holes totalling 1,568'.

1976 Umex

Airborne survey southwest end of Raney Lake. Part of a larger program over parts of the Swayze Gold Belt.

1982 Ontario Geological Survey

® Input aeromagnetic survey over the Swayze Belt Magnetic and Electromagnetic surveys flown.

® Registered trade mark of Barringer Research Ltd.

1983 Lacana Mining

Geological survey work on west boundary of Raney Township west of J-dex claim group. Carbonatite - alkalic complex. Rock types associated with Kapuskasing structural zone mapped."

During the summer of 1986 induced polarization, magnetics and VLF-EM surveys were conducted by Goldrock Resources. The IP survey covered the north central area of the claim block, and the mag/VLF survey covered the south-central area. Several interesting IP anomalies were detected, some of which extend west into the current claim block.

Concurrent with this survey, a magnetics survey was completed on the same area of the property, and an electromagnetic and magnetic survey was conducted on the eastern 17 claims (Grid 3) of the group.

SURVEY PROCEDURE

MAX-MIN II

Theory

The Max-Min II is a frequency domain, horizontal loop electromagnetic (HLEM) system, based on measuring the response of conductors to a transmitted, time varying electromagnetic field.

The transmitted, or primary EM field is a sinusoidally varying field at any of five different frequencies. This field induces an electromotive force, (emf), or voltage, in any conductor through which the field passes. This is defined by:

$$\oint E.dl = \frac{-\partial \phi}{\partial t} \quad \text{(the Faraday Induction Principle)}$$

where E is the electric field strength in volts/metre (and so $\oint E.dl$ is the emf around a closed loop) and ϕ is the magnetic flux through the conductor loop. This emf causes a "secondary" current to flow in the conductor in turn generating a secondary electromagnetic field.

This changing secondary field induces an emf in the receiver coil (by the Faraday law) at the same frequency, but which differs from the primary field in magnitude and phase. The difference in phase (the phase angle) is a function of the conductance of the conductor(s), both the target and the overburden and host rock. The magnitude of the secondary is also dependant on the conductance, and also on the dimensions, depth, and geometry of the target, as well as on the interference from overburden and the host rock.

These two parameters (phase angle and magnitude) are measured by measuring the strength of the secondary field in two components: the real field or that part "in-phase" with the primary field; and the imaginary field, or that part in "quadrature" or 90° out of phase from the primary field.

The magnitude and phase angle of the response is also a function of the frequency of the primary field. A higher frequency field generates a stronger response to weaker conductors, but a lower frequency tends to pass through weak conductors and penetrate to a greater depth. The lower frequency also tends to energise the full thickness of a conductor, and gives a better measure of its true conductivity-thickness product (conductance).

For these reasons two or more frequencies are usually used; the lower for penetration and accurate measure of good conductors, and the higher frequency for strong response to weak conductors.

Distinction between conductive targets, overburden, and host rock responses are made by studying the shape of the secondary field, and the difference in the frequency responses.

The transmitted primary field also creates an emf in the receiver coil, which is much stronger than the secondary, and which must be corrected for by the receiver. This is done by electronically creating an emf in the receiver, whose magnitude is determined by the distance from receiver to transmitter as set on the receiver, and whose phase is derived from the receiver via an interconnecting wire.

Field Method

The Max-Min II survey was carried out in the "maximum coupled" mode (horizontal co-planar). The transmitter and receiver are carried in-line down the survey line separated by a constant distance (in this case 150 m) with the receiver leading. Three transmitter frequencies were used: 444 Hz, 1777 Hz and 3555 Hz. The transmitter and receiver are connected by a cable, for phase reference and operator communication.

PERSONNEL AND EQUIPMENT

The survey was conducted by Guy Thibeault Exploration Services of P.O. Box 1670, Timmins, Ontario, who provided 3 men to complete the survey. The line-cutting was done by Henry T. Gonzalez.

The electromagnetic survey instrument was an Apex Parametrics Max Min II horizontal loop (Slingram style system). Specifications for this instrument may be found in Appendix A.

INTERPRETATION

A major anomalous zone was detected in the south east corner of the grid, consisting of sub-parallel conductors of varying weak to moderate conductivity. These have trends ranging from roughly northeasterly to easterly. The anomalies suggest that there is also considerable disseminated mineralization in the area. Another moderate anomaly was detected at 225S on Line 20W, trending ENE and WSW, 100 metres in each direction.

There is a series of anomalies at 500S on Line 25W, 26W, and

A follow-up program of diamond drilling is recommended, the details of which would be decided based on the results of the IP and geology. An estimate of the diamond drilling required would be 1200 feet to 1500 feet, at $30./foot ($36,000. to $45,000.) plus mobilization, logistics, assaying etc.

Respectfully submitted

D. Greg Hodges, B.Sc.
Geophysicist

27W, but all are weak and may be due to lake bottom clays. There are many other irregular anomalies which are almost certainly due to lake sediments.

CONCLUSIONS AND RECOMMENDATIONS

The electromagnetic anomalies detected are not conclusive enough to warrant immediate diamond drilling, but they do suggest areas of interest for further work. Induced polarization surveying of the grid is recommended, with particular attention given to the electromagnetic anomalies and the magnetic anomaly between 450S on L11W and 500N on L23W.

Concurrently with the IP should be a geologic mapping program on the land claims.

The proposed budget is:

Induced Polarization Surveying 20 days @ $1,400./day	$28,000.00
Mobilization-Demobilization (includes air transportation)	5,000.00
Interpretation and report preparation	1,500.00
Geologic Mapping 12 days @ $250./day	3,000.00
Subsistence 12 days @ $75./day	900.00
Sample preparation and assaying	500.00
Report preparation and drafting	1,000.00
SUB TOTAL	$39,900.00
Contingency 10%	4,000.00
TOTAL	$43,900.00

REFERENCES

CAIRA, NADIA and COSTER, IAN
1984 — Geological Report of the 21 claim property for J-Dex Mining and Exploration

HODGES, D. GREG
1987 — Report on the Magnetometer Survey on the Raney Township Property of Goldrock Resources Inc.

CERTIFICATION

I, D. Greg Hodges, of 136 Cedar Street South, in the city of Timmins, Province of Ontario, certify as follows concerning my report on the Goldrock Resources Inc. property in Raney Township, Province of Ontario and dated July 6, 1987:

1. I am a member in good standing of the Society of Exploration Geophysicists

2. I am a graduate of Queen's University at Kingston, Ontario, with a B.Sc. (Hons.) Geological Sciences with Physics, obtained in 1980.

3. I have been practising in Canada, and occasionally in the United States, Europe, and Australia for the past seven years.

4. I have no direct interest in the properties, leases, or securities of Goldrock Resources Inc., nor do I expect to receive any.

5. The attached report is a product of:

   a) Examination of data included in the report which was collected on the property concerned.

Dated this July 6, 1987
Timmins, Ontario

D. Greg Hodges, Geophysicist

A P P E N D I X   A

EQUIPMENT SPECIFICATIONS

II

SPECIFICATIONS

The MP-2 has the following specifications:

Resolution	1 Gamma
Total Field Accuracy	±1 Gamma over full operating range
Range	20,000 to 100,000 gammas in 25 overlapping steps.
Internal Measuring Programme	Single reading - 3.7 seconds. Recycling feature permits automatic repetitive readings at 3.7 seconds intervals.
External Trigger	External trigger input permits use of sampling intervals longer than 3.7 seconds.
Display	5 digit LED (Light Emitting Diode) readout displaying total magnetic field in gammas or normalized battery voltage.
Data Output	Multiplied precession frequency and gate time outputs for basestation recording using interfacing optionally available from Scintrex.
Gradient Tolerance	Up to 5000 gammas/metre
Power Source	8 alkaline "D" cells provide up to 25,000 readings at 25°C under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number.
Sensor	Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.
Harness	Complete for operation with staff or back pack sensor.
Operating Temperature Range	-35°C to +60°C
Size	Console, with batteries: 80 x 160 x 250 mm. Sensor: 80 x 150 mm. Staff : 30 x 1550 mm. (extended) 30 x 600 mm. (collapsed)
Weights	Console, with batteries: 1.8kg. Sensor: 1.3kg Staff : 0.6kg

Ministry of Northern Development and Mines
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

21

41015SW0007 2.10250 RANEY

900

W8706-113

Mini...

Type of Survey(s)	Township or Area
Electro-Magnetic	Raney

Claim Holder(s)	Prospector's Licence No.
Goldrock Resources Inc.	T-4715

Address: Box 1637, Timmins, Ont.

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
Robert S Middleton Exploration Services Inc	19 (Day) 2 (Mo.) 87 (Yr.) – 23 (Day) 2 (Mo.) 87 (Yr.)	32.3 km

Name and Address of Author (of Geo-Technical report): D. Greg Hodges P.O. Box 1637 Timmins Ontario

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	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

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JUN 29 1987
MINING LANDS SECTION

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

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

PORCUPINE MINING DIVISION
RECEIVED
JUN 11 1987

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.

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.
P	756783	
	756784	
	756785	
	756786	
	756787	
	756788	
	756789	
	756790	
	756791	
	756792	
	756793	
	946116	
	946117	
	946118	
	946119	
	946120	
	946121	

RECORDED
JUN 11 1987

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

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
340	June 11/87	[signature]
	Date Approved as Recorded: 1987.10.29	Branch Director: [signature]

Date	Recorded Holder or Agent (Signature)
11/6/87	[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: D. Greg Hodges P.O. Box 1637, Timmins Ont.

Date Certified	Certified by (Signature)
11/6/87	[signature]

1362 (85/12)

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

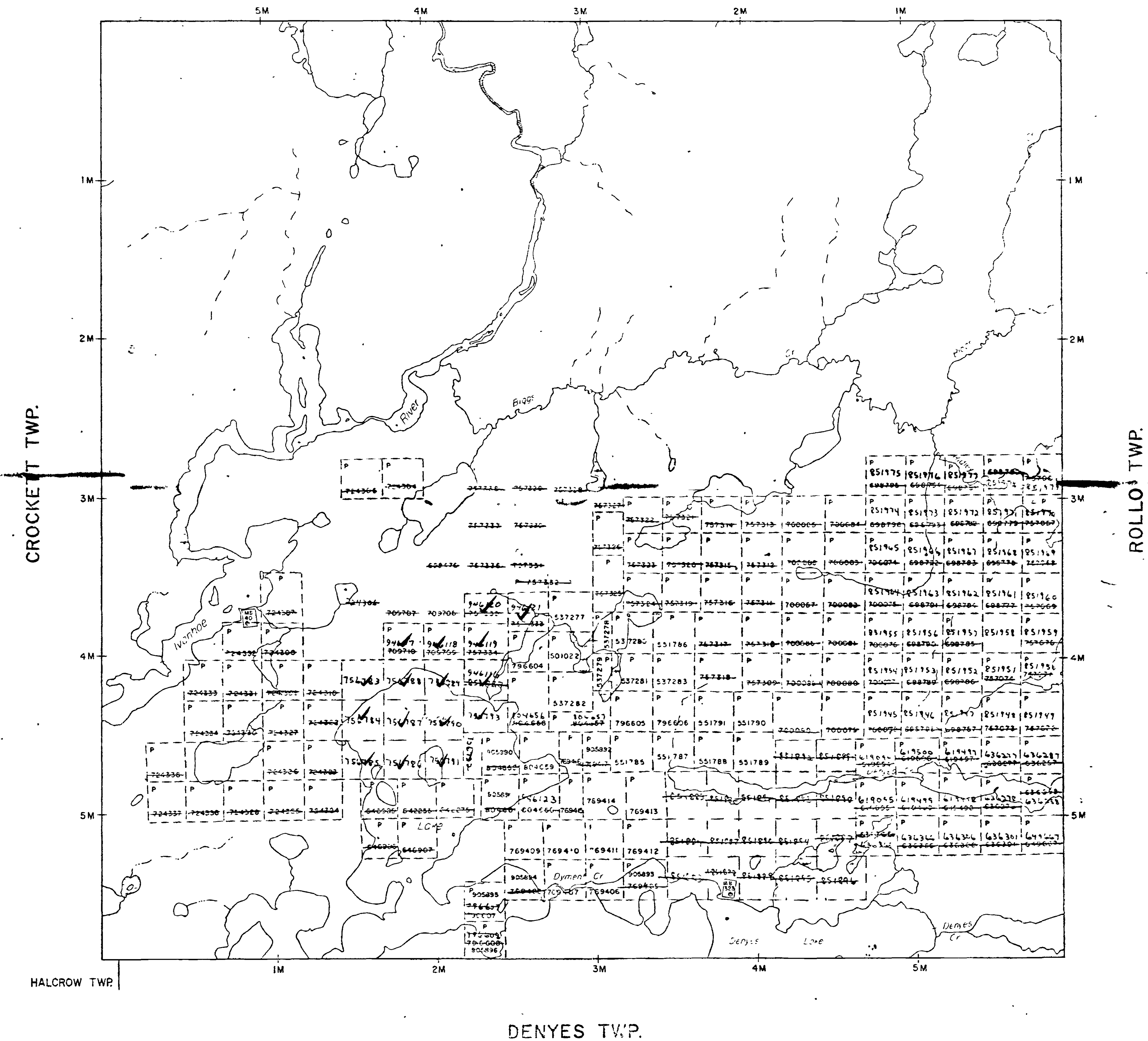
M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

SMR
~~SR+MR withdrawn from staking~~
~~[illegible] 18/86~~ Cancelled

410156W0007 2.10250 RANEY

200



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	OC
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. 63 SUBSEC. 1

SCALE 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

TOWNSHIP

RANEY

M.N.R. ADMINISTRATIVE DISTRICT

CHAPLEAU

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

SUDBURY

Ontario
Ministry of Natural Resources
Land Management Branch

Date MARCH, 1985

Number G-3245

N
1200-N
1100-N
1000-N
900-N
800-N
700-N
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500-N
400-N
300-N
200-N
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R A N E Y
L A K E
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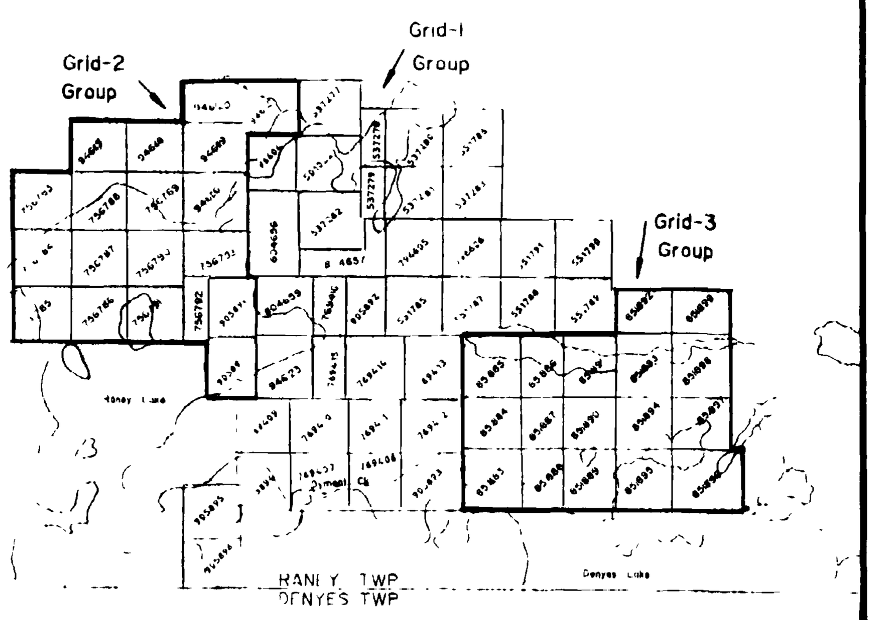
LOCATION MAP



TOPOGRAPHIC

- Trail portage
- Bush road
- Good driving road, Highway
- Rail road
- Claim post located
- Claim post assumed location
- Witness post
- Creek, River
- Lake shore
- Swamp, Bog
- Property boundry line

MAGNETIC SURVEY

Add 58,000 Gammas to all readings for total field values

500 / 100 / 50 — Contours — Contour intervals: 100 Gammas, 500 Gammas

Depression Contour

▲ 59422 Base Station location: L-11 W / 0+00

2.10250 dup

ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.

GOLDROCK RESOURCES INC.

RANEY Twp PROPERTEY Grid 2

Survey by: *Guy Thibault Exploration Services*
Operators: Dennis Crowley

Instrument: Scintrex Proton MP-2	DATE: April 1987
Drafted by: G. Thibault & M.Caron	SCALE: 1 :2500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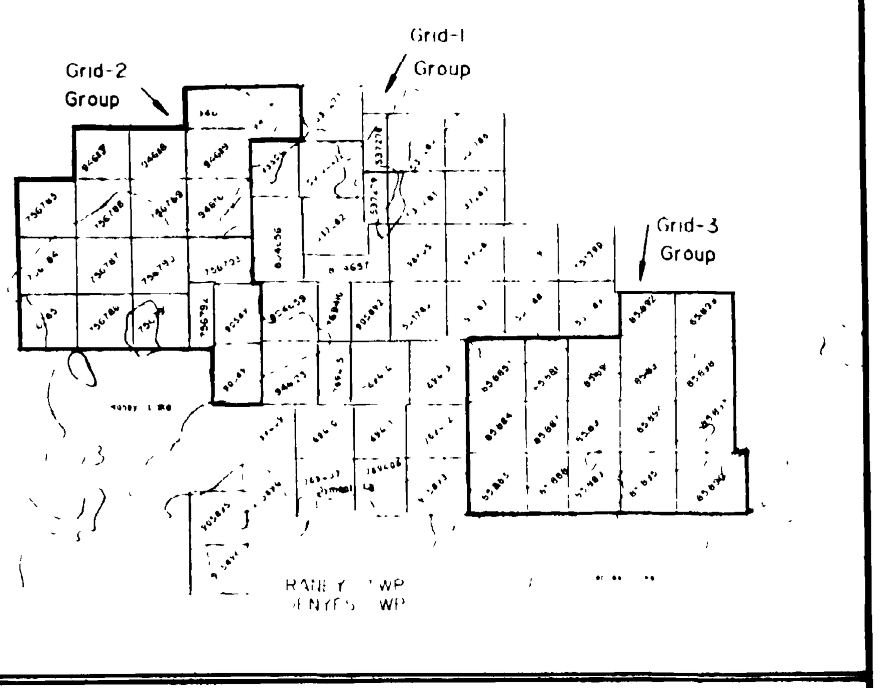
300-N
200-N
100-N
BL-0+00
100-S
200-S
300-S
400-S
500-N
600-S
700-S
800-S
TL-825 S
L-24 W
L-23 W
L-22 W
L-21 W
L-20 W
L-19 W
L-18 W
L-17 W
L-16 W
L-15 W
L-14 W
220

Key

Symbol	Grade	Description
	1	Very Good Conductor
	2	Good Conductor
	3	Fair Conductor
	4	Weak Conductor
	5	Very Weak Conductor

LOCATION MAP



TOPOGRAPHIC

- Trail portage
- Bush road
- Good driving road, Highway
- Rail road
- Claim post located
- Claim post assumed location
- Witness post
- Creek, River
- Lake shore
- Swamp, Bog
- Property boundry line

MAX-MIN II H.E.M. SURVEY

Profile
In Phase
Out Phase

Coil Separation: 150 Meters

Frequency 444 Hz

ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.

GOLDROCK RESOURCES INC.

RANEY Twp PROPERTEY Grid 2

Survey by: *Guy Thibault Exploration Services*
Operators : B. Mc Allister & T. Mc Allister

Instrument: Apex Parametrics Max-Min II | DATE: April 1987

Drafted by: G. Thibault & M.Caron | SCALE: Vertical 1cm = 10% Horizontal 1 : ...


1200-N
1100-N
1000-N
900-N
800-N
700-N
600-N
500-N
400-N
300-N
200-N
100-N
BL-0+00
100-S
200-S
300-S
400-S
500-N
600-S
700-S
800-S
TL-825-S
N
946117
946118
946119
946120
756783
756788
756789
946116
756784
756787
756790
756785
756786
756791
756792
L A K E
R A N E Y
L A K E
230
L-28 W
L-27 W
L-26 W
L-25 W
L-24 W
L-23 W
L-22 W
L-21 W
L-20 W
L-19 W
L-18 W
L-17 W
L-16 W
L-15 W
L-14 W

LOCATION MAP

Grid-2 Group

Grid-1 Group

Grid-3 Group

TOPOGRAPHIC

Trail portage
Bush road
Good driving road, Highway
Rail road
Claim post located
Claim post assumed location
Witness post
Creek, River
Lake shore
Swamp, Bog
Property boundry line

MAX-MIN II H.E.M. SURVEY

Profile
In Phase
Out Phase

Coil Separation: 150 Meters

Frequency 1777 Hz

In Phase
Out Phase

210250 dup

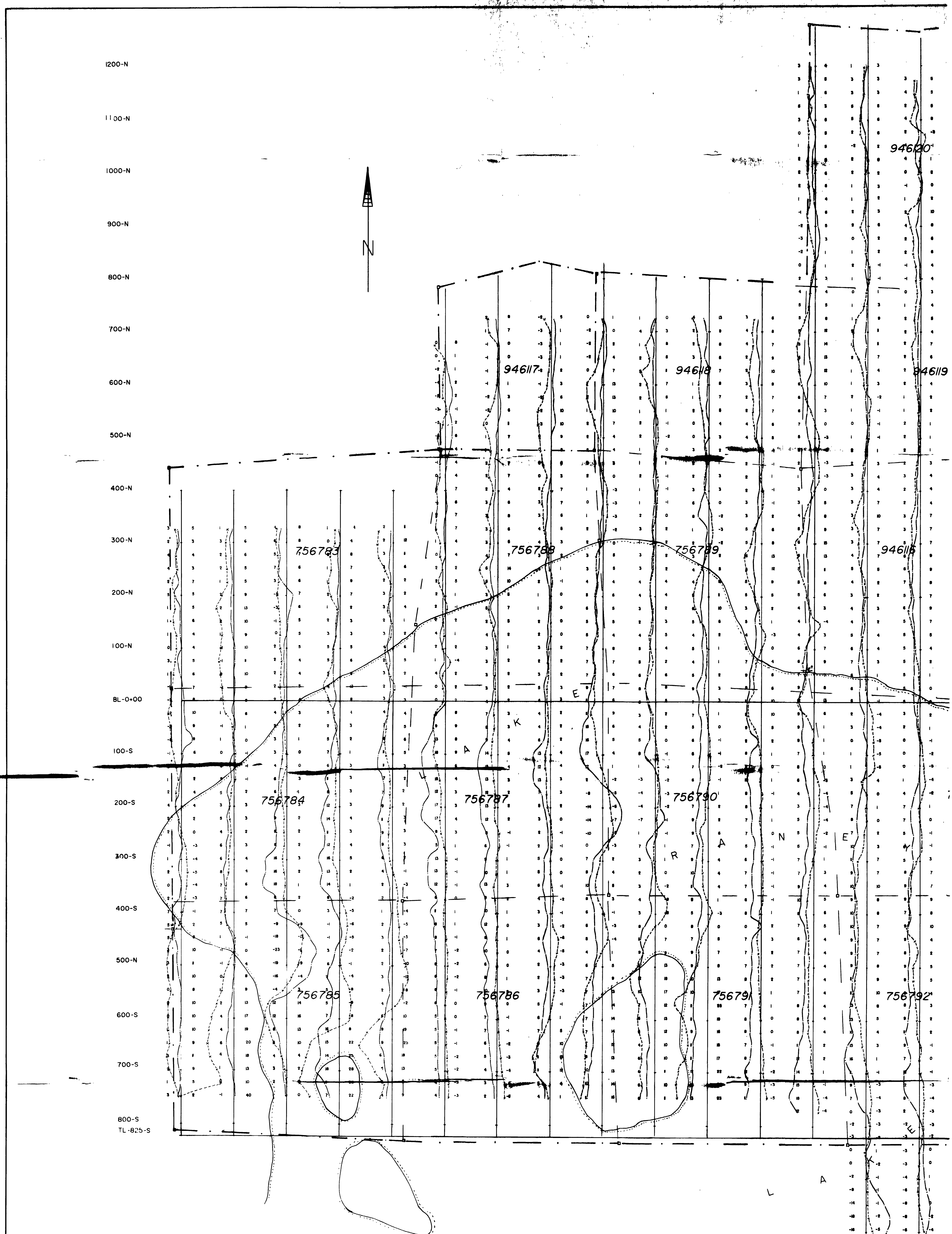
ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.

GOLDROCK RESOURCES INC.

RANEY Twp PROPERTEY Grid 2

Survey by: *Guy Thibault Exploration Services*
Operators : B. Mc Allister & T. Mc Allister

Instrument: Apex Parametrics Max-Min II	DATE April 1987
Drafted by: G. Thibault & M.Caron	SCALE



1200-N
1100-N
1000-N
900-N
800-N
700-N
600-N
500-N
400-N
300-N
200-N
100-N
BL-0+00
100-S
200-S
300-S
400-S
500-N
600-S
700-S
800-S
TL-825-S
N
946120
946117
946118
946119
756783
756788
756789
946116
756784
756787
756790
756785
756786
756791
756792
L A K E
R A N E
L A K E
240
L-28 W
L-27 W
L-26 W
L-25 W
L-24 W
L-23 W
L-22 W
L-21 W
L-20 W
L-19 W
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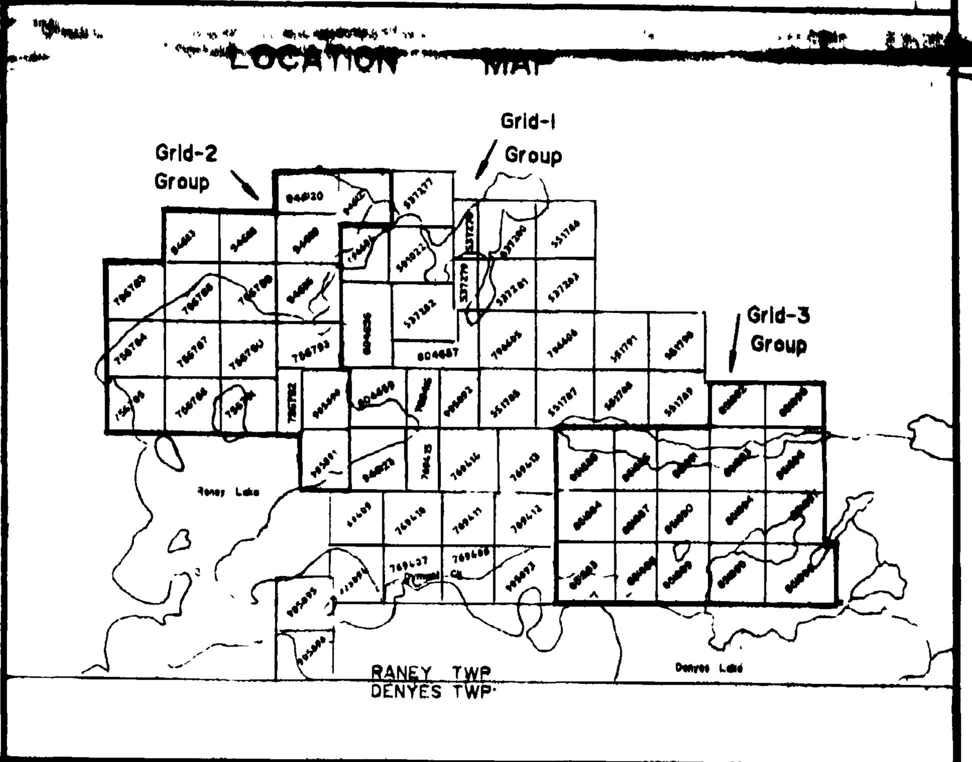
L-17 W
L-16 W
L-15 W
L-14 W



TOPOGRAPHIC

- Trail portage
- Bush road
- Good driving road, Highway
- Rail road
- Claim post located
- Claim post assumed location
- Witness post
- Creek, River
- Lake shore
- Swamp, Bog
- Property boundry line

MAX-MIN II H.E.M. SURVEY

Profile:
- In Phase
- Out Phase

Coil Separation: 150 Meters

Frequency 3555 Hz

2 10250 dup

ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

GOLDROCK RESOURCES INC.

RANEY Twp PROPERTEY Grid 2

Survey by: *Guy Thibault Exploration Services*
Operators : B. Mc Allister & T. Mc Allister

Instrument: Apex Parametrics Max-Min II

DATE: April 1987

Drafted by: G. Thibault & M.Caron

SCALE: Vertical: 1cm= 10% Horizontal: 1:2500