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REPORT ON THE GEOPHYSICAL SURVEYS

MIKWAM RIVER PROPERTY,
NEWMAN AND TOMLINSON TOWNSHIPS, ONTARIO

NTS 42 H/8

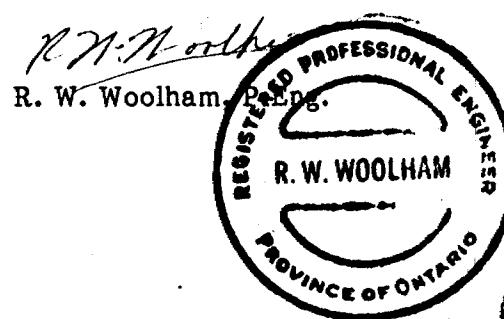
FOR CHESBAR RESOURCES INC.

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MINING LANDS SECTION

DERRY, MICHENER, BOOTH & WAHL



Ref: 87-15

February 25, 1987
Toronto, Canada

*Just
V3/17/87*

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87-15-15 to 17	Claims and Survey Line Coverage, Sheets 1E, 2E, 3E

(i)

SUMMARY

Geophysical surveys, consisting of 142 line km of magnetometer survey and 124 line km of electromagnetic survey, have been performed on the Mikwam River property. The work was designed to identify a possibly auriferous volcano-sedimentary iron formation/conductive horizon, which has a strike length of 4.5 km within the property boundaries.

The surveys identified two probable iron formation horizons (Zones E and F) trending east-west across the south portion of the property. Paralleling Zone E at the east end, approximately 300 m to the north, is a magnetic-conductive horizon (Zones D and DD). Other shorter, less continuous, conductive horizons, with paralleling or coincident magnetic associations, occur north of the main conductive trend (A, B and C). Two of the conductive zones were tested previously in 1967 and 1976 in three diamond drill holes at the extreme east end of the property.

There are three crosscutting magnetic anomalies on the west third of the property thought to represent diabase dyke sources, which are ubiquitous throughout the Shield greenstone belts. Numerous magnetic and electromagnetic trend displacements and interruptions have been interpreted to indicate fold/fault breaks. A total of 14 such structures have been identified on an interpretation compilation map. Four of these structures represent major crosscutting features.

It is recommended that the main through-going conductor thought to mark the volcano-sedimentary transition zone be investigated further, especially where major crosscutting fold/fault breaks are present. At the present time, a major program of reverse circulation overburden drilling designed to sample the basal till layer, down-ice from this horizon is in progress.

Zone D and DD at the east end of the property are also recommended for investigation as well as the remaining conductive-magnetic zones which all have potential for base and precious metal mineralization.

INTRODUCTION

This report, prepared by Derry, Michener, Booth & Wahl for Chesbar Resources Inc., describes the results of geophysical surveys completed on the Mikwam River property, Newman and Tomlinson townships, Province of Ontario. A volcano-sedimentary contact horizon having potential for gold mineralization was identified from regional geological and airborne geophysical information, as well as local ground surveys and drilling results performed in previous years. The horizon trends through the claim group. The ground geophysical survey program was designed to delineate the horizon of interest more accurately and to facilitate the planning of a bedrock sediment sampling program.

The surveys utilized the magnetic and electromagnetic method. The magnetic and electromagnetic surveys were performed by Walker Exploration Ltd. Mr. F. Sharpley, a geological consultant, was in charge of the overall exploration program and consulted with the author regarding survey specifications prior to the beginning of the survey. The surveys were conducted during the period December 8th to December 21st, 1986.

PROPERTY, LOCATION AND ACCESS

The property is located 80 km northeast of Cochrane, Ontario and straddles the Newman-Tomlinson township line. It is 48 km north of Lake Abitibi and 30 km west of the Ontario-Quebec border. The Cochrane-Detour highway passes the area approximately 20 km to the northwest. The area is accessible by helicopter from Cochrane. A location map is shown on the claim and survey line maps (87-15-15 to 17).

PROPERTY DESCRIPTION

The property consists of 71 contiguous claims held by Grandad Resources Ltd. and Seal River Explorations Ltd. as shown in Figure 1 and numbered as follows:

<u>Claim Number</u>	<u>No. of Claims</u>
L800080 to L800103 inclusive	24
L801915 to L801920 inclusive	6
L801922 to L801927 inclusive	6
L801929 to L801934 inclusive	6
L858240 to L858268 inclusive	<u>29</u>
Total	<u>71</u>

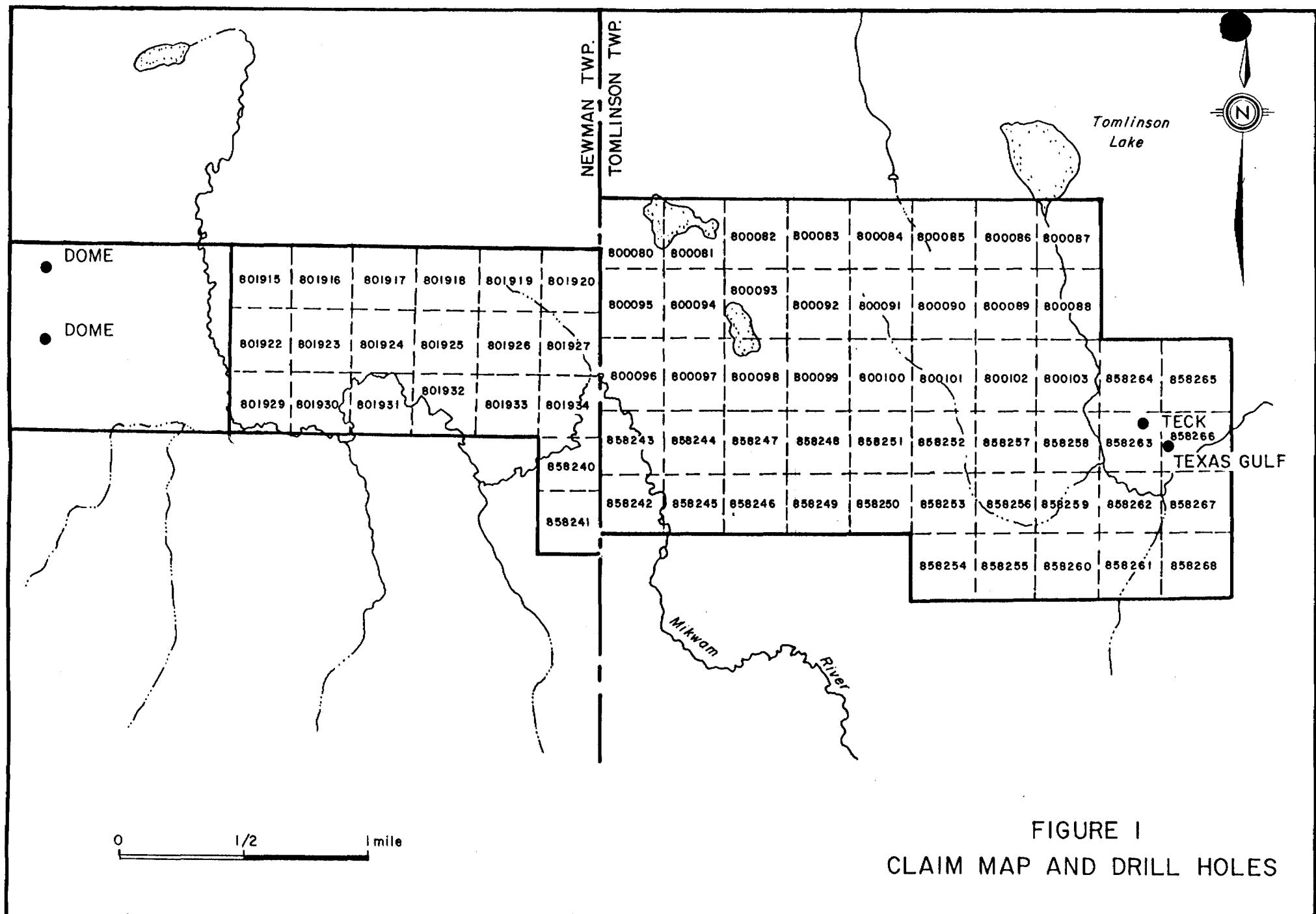
The claims form the east part of a larger group totalling 136 contiguous claims. The property was optioned to Chesbar Resources Inc. who can earn an interest by incurring exploration expenditures on the claims.

The claims lie in the James Bay Lowlands which are characterized by low-lying swampy spruce-covered areas. There is very little outcrop exposure in the area.

EXPLORATION HISTORY

Geophysical surveys and drilling were completed by Texas Gulf, 1967 (2 holes for 181 m), Dome Exploration Ltd., 1975 (2 holes for 209 m) and Teck Corporation, 1976 (1 hole for 107 m). The Texas Gulf and Teck drill holes tested two separate conductive horizons on the extreme eastern part of the claim group while the Dome drill holes tested similiar targets just west of the western boundary of the property (Figure 1). These exploration programs were designed to explore for massive base metal sulphide deposits.

In 1985 Grandad Resources Inc. contracted for an airborne, electromagnetic and magnetic survey by Terraquest Ltd. This survey covered the claim area and environs.



GEOLOGY AND MINERALIZATION

The property lies within the central Abitibi Greenstone Belt, which stretches from Chibougamau, Quebec to Timmins, Ontario, a distance of 500 m. The belt is a major feature of the Superior structural Province of the Canadian Shield. The rocks consist of volcanics, volcano-sedimentary assemblages and basic and felsic intrusives, all cut by diabase dykes.

The claim group is located within a volcano/sedimentary contact zone. Outcrop is sparse to nonexistent, but the boreholes in the area provide some information on the underlying bedrock. Just west of the west boundary of the property, one hole intersected 35 m of pyritic dacite tuff containing trace to .005 oz. Au per ton. This section was at the interface between intermediate to basic volcanics and graphitic sediments. A second hole to the north intersected felsic to intermediate tuff. These two holes were drilled by Dome Exploration Ltd. On the eastern end of the property, the Teck and Texas Gulf diamond drill holes intersected felsic to intermediate tuff with disseminated to massive pyrite and some pyrrhotite. The Texas Gulf holes which are south of the Teck hole also intersected graphitic tuff and graphitic argillites intercalated with the volcanics.

SURVEY PARAMETERS AND PRESENTATION

Magnetic Survey

EDA PPM 300 and 500 total field proton magnetometers were used for the survey. These instruments are microprocessor controlled and can be programmed to automatically record the station location, time and magnetic value. Magnetic diurnal variations were monitored by a EDA PPM 400 magnetic base station. Instrument specifications are contained in Appendix I. Readings were taken along grid lines spaced 100 m apart at 12.5 m station intervals. In all 142 line km of data were recorded and stored automatically for a total of 11,412 readings.

Diurnal corrections to the magnetic field values recorded were automatically calculated by the microprocessor controlled base station recorder

prior to storing the field data into a data storage device at the end of each day's data collection.

Subsequently, office compilation by Walker Exploration Ltd. consisted of editing of the data and loading of the data values into an automatic plotting device. A regional value of 58,000 nanotesla (nT) was subtracted from all the corrected magnetic values. Using modified software by GEOSOFT, survey maps of magnetic values and contour maps, at an interval of 25 nT, were generated at a scale of 1:5,000 with appropriate title and legend (see maps 87-15-1 to 6 inclusive).

Electromagnetic Survey

The electromagnetic instrument was an Apex Parametrics Ltd. Max-Min II unit modified with the RAUTARUUKKI OY Model KTP-84 microprocessor controlled automatic data collection system. Similar to the magnetic survey unit, this data collection instrument is microprocessor controlled and can be programmed to automatically record the station location in addition to the in-phase and quadrature components in tenths of a percent. Instrument specifications are contained in Appendix I. A coil spacing of 150 m was used for the survey with a station reading interval of 25 m. Survey lines were 100 m apart. Accurate leveling of the coils was monitored at each station and correct coil distance was maintained using the picket line chainages. The in-phase and quadrature readings at frequencies of 888 Hz and 3555 Hz were recorded at each station. A total of 124 line km of two frequency data or about 20,000 total readings were collected on the property.

Subsequently, office compilation by Walker Exploration Ltd. consisted of editing of the data and automatic entry of the data values into their plotting system. Using modified software by GEOSOFT, survey maps of in-phase and quadrature values and profiles, at a scale of 1 cm = 20% were generated at a map scale of 1:5,000 with appropriate title and legend (see maps 87-15-7 to 12 inclusive).

RESULTS

Magnetic Survey (Maps 87-15-4 to 6 inclusive)

The regional magnetic background is approximately 58,950 nT being lower, by about 100 nT, in the extreme western part of the grid. The major magnetic features of the area are two sinuous, consistent, narrow magnetic linear anomalies having amplitudes ranging from a few hundred nT to as high as 14,000 nT above background. These horizons trend east-west across the southern quarter of the eastern two-thirds of the survey grid. The most southern horizon, which has the highest amplitude response and is not completely delineated by the grid coverage, is about 400 m south of the northern anomaly. The contour patterns pinch and swell along the length of the anomalies as the amplitude response of the horizons decreases and increases. Both horizons are associated with major conductive zones as will be discussed in the next section on the electromagnetic results.

The second type of obvious magnetic features are two north-south linear zones located at approximately line 47E and line 65E. They are from about 100 nT to 400 nT above background.

The rest of the survey area is characterized by short 200 to 800 m narrow linears trending in a general east-west direction. They tend to be erratically distributed throughout the area, being most prominent in the east and west parts of the grid. In spite of the apparent discontinuity of the linear trends because of anomaly interruptions and displacements, some of the linears when traced along strike form a zone or horizon up to 2 km long. In four locations these magnetic linears are associated or coincident with short conductive zones as discussed in the next section.

Electromagnetic Survey (Maps 87-15-7 to 12 inclusive)

The horizontal loop responses from conductive sources on the property all have common properties of narrow width, medium to good conductivity width values of 10 to over 70 mhos, and east-west linear trend directions across the grid. Estimated depth to source values are slightly higher for the lower frequency

data than the higher frequency data indicating possible conductor width effects. Table 1 lists the depth estimates using a Phasor diagram for conductors on alternate lines. Note that the extreme eastern end of the survey area, from about 95E has a thin overburden cover. The background quadrature value is generally zero throughout the area for the lower frequency data. Conducting overburden effects make it difficult to determine the background for the higher frequency data. The background in-phase value varies from area to area between +1 and -3 for the lower frequencies and 0 to +6 for the higher frequencies.

The main conductors are two major horizons in the south part of the grid which are coincident, or flank, the two major magnetic horizons discussed previously. The widths of the conductors are variable with the wider conductor indications occurring in the east part of the zones. Characteristics of these wide response areas suggest that several conductive parallel sources are present. Small anomaly trend displacements are present in a few locations along their strike length.

In addition to the main conductive zones, there are several good conductivity, narrow conductors which occur as either one line anomalies or have line to line continuity over several hundred meters. All but one of the conductive zones have associated magnetic responses. Two of these conductors occur in the east part of the grid east of line 94E parallel to and about 300 m north of the main conductive horizon described previously. The remaining conductors occur in the west third of the narrower part of the grid.

Table 1
Depth Estimates Using Phasor Diagram

<u>Line</u>	<u>Station</u>	<u>Depth to Conductive Source (Meters)</u>		<u>Estimated Depth Maximum Meters</u>
		<u>888 Hz</u>	<u>3555 Hz</u>	
45E	325N	40	20	35
45E	510N	55	40	50
47E	330N	40	40	40
65E	530S	75	60	70
69E	540S	70	45	60
71E	475S	35	20	30
73E	525S	40	40	40
75E	575S	35	35	35
77E	615S	50	45	50
79E	650S	40	35	40
81E	670S	30	25	30
83E	720S	25	15	25
85E	725S	20	15	20
87E	750S	30	25	30
89E	700S	20	20	20
91E	725S	20	15	20
93E	725S	20	20	20
95E	725S	15	less than 15	15
97E	725S	20	less than 15	20
99E	675S	less than 15	less than 15	less than 15
101E	700S	less than 15	less than 15	less than 15
103E	720S	less than 15	less than 15	less than 15
105E	700S	25	less than 15	25
106E	675S	15	less than 15	15

CONCLUSIONS

In order to more easily assimilate and discuss the geophysical results, the magnetic and conductive trends have been assembled into an interpretative geophysical compilation as shown on maps 87-15-13 and 14. These maps show the geophysical trends and their interpreted source, where applicable, as well as fold/fault breaks. The latter structures represent an axis along which either folding or faulting may have occurred based on anomaly trend inflections and displacements. The fold/fault structures have been given a number designation prefixed by the letter F and the conductive trends given letter only designations.

The most obvious features on the interpretation map are the two long formational magnetic-conductive zones E and F on the south part of the area.

The western part of Zone F is discontinuous mainly because the zone trends off the south boundary of the claim group and both magnetic and electromagnetic coverage was incomplete. Zones E and F are probably sulphide-bearing iron formation, probably pyrrhotite, as the peak of the magnetic anomaly is generally coincident with the conductive zones. The eastern area of Zones E and F are the most significant as they contain several crosscutting fold/fault structures, F-5, F-6, F-7, F-8 and F-9, as well as a secondary magnetic-conductive horizon designated as Zones D and DD about 300 m north of Zone E. These conductors were no doubt the targets tested by the old Teck and Texas Gulf diamond drill holes. Unfortunately, the exact location of the holes is not known but assessment information suggests that they were drilled in the area of line 103E. The Teck hole appears to have tested conductor DD while the Texas Gulf holes may have cross-sectioned conductor Zone E.

On the west side of the property, conductive zones A, B and C are all associated with fold/fault structures. Just to the north of conductor A, there are three local conductive responses which form a staggered north-south pattern which are cut by structure F-1. These conductors may represent responses from a single, structurely complex, source that cannot be resolved by the geophysics. The magnetic associations suggest that the source of the conductor is pyrrhotite. The Dome diamond drill holes just to the west of this area tested similar geophysical features. Conductor A is approximately on strike with the most southern Dome hole which intersected the transitional volcanic-sedimentary contact.

Conductors B and C were single line, low amplitude conductors, possibly under 60 to 70 m of overburden cover. They may be more extensive because their depths are near the limit of detection of the 150 m coil separation used in the electromagnetic survey. A very weak response on the line to the east of conductor B suggests a longer strike length is probable. Conductor C is associated with a longer low amplitude magnetic horizon just to the south. The location and characteristics of Conductors A and C suggest that they may be on the same horizon as the conductor zones D and DD to the east.

The remaining east-west trending magnetic linears throughout the area are probably related to magnetite and/or pyrrhotite-bearing mafic flows and tuffs. Based on the cross-cutting anomaly characteristics of the ground magnetic patterns as well as the previous, more extensive, aeromagnetic survey results, three features have been interpreted to indicate northerly trending diabase dykes, as shown at the west end of the survey area.

RECOMMENDATIONS

The favourable volcano-sedimentary contact horizon is probably demarcated by conductive-magnetic Zone E. A basal till sampling reverse circulation drilling program testing the down-ice portion of this horizon is recommended and is presently in progress. The most favourable portion of the horizon is thought to be at the east end of the zone where slightly more complex structures are present.

Although the results of the previous drilling of conductor DD were not encouraging, further testing of this horizon, interpreted to be reflected in conductors A, C and D is recommended. These conductors have base and precious metal potential.

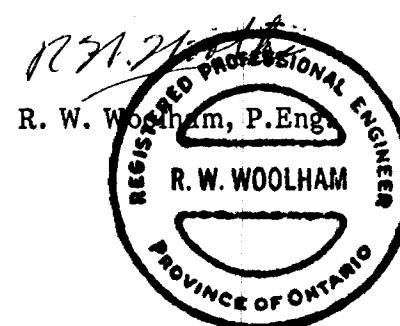
At the east end of the conductive Zone E, overburden thicknesses are interpreted to be shallow. A geochemical sampling program in this area may indicate local areas of gold mineralization.

CERTIFICATE OF QUALIFICATION

I, Roderick W. Woolham of the town of Pickering, Province of Ontario, do hereby certify that:-

1. I am a geophysicist and reside at 1463 Fieldlight Blvd., Pickering, Ontario, L1V 2S3.
2. I graduated from the University of Toronto in 1961 with a degree of Bachelor of Applied Science, Engineering Physics, Geophysics Option.
3. I am a member in good standing of the following organizations: The Association of Professional Engineers of the Province of Ontario (Mining Branch); Society of Exploration Geophysicists; South African Geophysical Association.
4. I have been practising my profession for a period of more than 25 years.
5. I am an Associate with Derry, Michener, Booth & Wahl, Consulting Geologists and Engineers.
6. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the properties or securities of Chesbar Resources Inc. or any affiliate.
7. I personally was involved with the technical supervision of the survey and wrote the report.
8. I consent to the use of this report in submissions for assessment credits and for similar regulatory requirements.

Toronto, Ontario
February 25, 1987



APPENDIX I
INSTRUMENT SPECIFICATIONS

PPM SERIES Portable Magnetometers

EDA

General Description

The portable PPM Series magnetometers consist of three standard field units which have a number of common features and specifications. They represent the most advanced application of microprocessor technology, sophisticated software and system design available to date.

Standard features of all units include:

- Improved accuracy.
- Enhanced data reliability and validity.
- Automatic diurnal and reference field correction capability.
- Data recall of stored readings easily accesses total field, time, line, position and error of any previously recorded reading.
- Automatic fine tuning.
- Programmable 24 hour clock.
- 5000nT per metre gradient tolerance.
- Interchangeable sensors.
- Only two simple controls, a keypad and mode switch.
- Custom-designed low temperature LCD which displays field reading, error, time, signal strength and decay rate, battery status and descriptors.
- In-line configuration option eliminates all cables.
- Patent pending signal processing technique.
- Statistical error analysis of signal.
- Keypad with audio feedback.
- Switch selectable test mode to verify subsystem status and system performance.
- Internal lithium battery back-up system to protect status tables, programs and data.
- Constant energy polarization.
- Convenient snap-in power cartridges containing any disposable "C" cells or rechargeable sealed lead acid batteries.
- Operating temperature -35°C to + 50°C.
- Rugged custom designed aluminum investment cast case offering complete protection against rain and dust.

PPM-300 Total Field Magnetometer

This model is the most advanced field magnetometer in the world. The PPM-300 measures the earth's magnetic field to sensitivities of 0.1nT and displays the resulting data on the high visibility LCD. The automatic power-off capability prevents the unnecessary consumption of power.

In addition to providing the total field magnitude and time, it also records on its internal solid state memory, the grid co-ordinates (line and station) and reading error. The non-volatile memory can store 1384 data blocks, eliminating any need to record data manually. Should the operator wish to recall and interrogate the memory for previously stored parameters in any one data block such as the total field, the time the reading was taken, the line and position number and/or the error, he may do so with the data recall feature incorporated into the software. Accumulated data is regularly transferred into either the DCU-400 Thermal Printer or the DCU-200 Magnetic Cassette Recorder. Data may also be fed directly into small desk top computers for other interpretative uses.

Two sensor configurations, as shown here, are available. The in-line sensor attached directly to the electronics console leaves the operator with complete freedom from cables. The remote sensor is recommended for use in dense bush or rugged terrain.

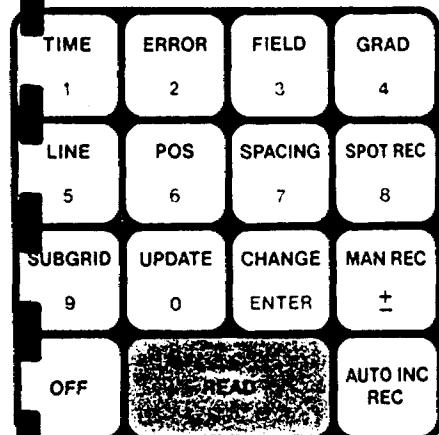
PPM-400 Base Station Magnetometer

This integral sensor and console package is the first magnetometer specifically designed for base station applications, which include airborne data verification and ground survey corrections. Its unique in-line configuration allows it to be set up above the ground and away from hazards and local magnetic interferences. As with the PPM-300, a remote sensor configuration is also available. Unlike other base station magnetometers which have limited versatility, the PPM-400 is completely programmable through its keypad, and has the ability to perform diurnal and reference field corrections to data collected by the PPM-300. All data is stored internally in a high capacity 2779 data block non-volatile memory which is then either transferred into the DCU-400 or DCU-200. Also unique to this instrument is a "snooze" alarm used to conserve power. In simple terms, the microprocessor acts as an alarm clock and turns power-draining circuits off following each reading and automatically powers up just prior to taking a subsequent reading.



EDA

UTER



NOT ACTUAL SIZE

STANDARD SYSTEMS COMPLEMENT

M-300

- Console with 1384 data block memory
- Rechargeable Battery Pack
- Battery Charger
- Remote Sensor and cable
- Back Pack

M-400

- Console with 2779 data block memory
- Rechargeable Battery Pack
- Battery Charger
- In-line Sensor
- Tripod
- 30 m cable

M-500

- Console with 1140 data block memory
- Two Rechargeable Battery Packs
- Battery Charger
- Battery Charging Tray
- Dual In-line Sensor
- Back Pole
- Back Pack

OPTIONS AND ACCESSORIES

- Additional memory capacity
- Disposable 'C' cell battery pack
- Software interfacing for various small computers

EDA Instruments Inc., Head Office: 1 Thorncliffe Park Drive, Toronto, Canada M4H 1G9
Telephone: (416) 425 7800, Telex: 06 23222 EDA TOR, Cables: INSTRUMENTS TORONTO

USA, EDA Instruments Inc., 5151 Ward Road, Wheat Ridge, Colorado 80033
Telephone: (303) 422 9112

TECHNICAL SPECIFICATION

Size:	24x9x4 cm	Standard software:	* General sophisticated form programs
Weight:	0,9 kg		* Data collection and scan programs
Temperature range:	-30°C - +60°C		* Communication programs for data and form transfer
Construction:	Waterproof and shock-resisting aluminium case		* Computer terminal functions
Operational time:	With one accumulator charge: — normal measuring 10-80 h — automatic measurement controlled by an intern clock as long as 4 months (battery-operated more than one year) — 7 days of memory maintenance with rundown accumulators	Application programs:	* Real time programs * Optimization of power consumption
Technology:	CMOS (processor, RAM, ROM, logics)		* Programs for various ore prospecting equipment (MaxMin sligram, Barringer proton magnetometer, Jalander magnetometer)
RAM memory:	48 kbytes		* Interface programs for customer-specified analog and digital measuring equipment
Display:	32 alphanumerical characters		
Keyboard:	39 keys, waterproof		
Connectors:	Bayonet type designed to MIL-C-26482 (19 contacts)		
Standard interfaces:	<ul style="list-style-type: none"> * 1 RS-232 C serial (modem, computer, optional printer etc.) * 1 TTL serial (cassette recorder, optional additional memory) * 1 fast 5 decade pulse counter * 4 analog channels * 2 TTL registers for serial data transfer * 8 TTL-inputs * 4 TTL-outputs * 1 recharge connection 		



RAUTARUUKKI OY

DEVELOPMENT, INSTRUMENTS

P.O. Box 217

SF-90101 OULU

FINLAND

Phone +358 81 227570

Telex 32109 steel sf

APPENDIX II
TECHNICAL DATA STATEMENT



Ministry of Natural Resources

File _____

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) Electromagnetic and Magnetic
 Township or Area Newman and Tomlinson townships
 Claim Holder(s) Grandad Resources Ltd./Seal River Expl. Ltd.
1104 - 55 Yonge St. Toronto
 Survey Company Walker Exploration Ltd.
 Author of Report R. W. Woolham
 Address of Author 410 - 20 Richmond St. E., Toronto
 Covering Dates of Survey October 1 to December 21, 1986
(linecutting to office)
 Total ^{km} ~~Line~~ ^{Line} Cut 142

MINING CLAIMS TRAVESED
List numerically

See attached list

 (prefix) (number)

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

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

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: Feb. 25/87 SIGNATURE: _____

Res. Geol. Qualifications

Previous Surveys

File No.	Type	Date	Claim Holder
.....
.....
.....
.....
.....

TOTAL CLAIMS _____

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations	Magnetic HLEM	11,412 5,012	Number of Readings	Magnetic HLEM	11,412 20,048
Station interval	Magnetic 12.5 m/EM 25 m		Line spacing	100 m	
Profile scale	EM 1 cm - 20%				
Contour interval	Magnetic 25 nT				

MAGNETIC

Instrument EDA PPM 300 and 500
 Accuracy — Scale constant See Appendix I
 Diurnal correction method Base Station Recorder
 Base Station check-in interval (hours) N.A.
 Base Station location and value N.A.

ELECTROMAGNETIC

Instrument APEX MAX-MIN II Horizontal Loop
 Coil configuration coplanar
 Coil separation 150 m
 Accuracy See Appendix I
 Method: Fixed transmitter Shoot back In line Parallel line
 Frequency 888 Hz and 3555 Hz
(specify V.L.F. station)
 Parameters measured in phase and quadrature

GRAVITY

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

INDUCED POLARIZATION

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 _____

CLAIM SUMMARY-MIRKAM-9/30/86

PAGE 1

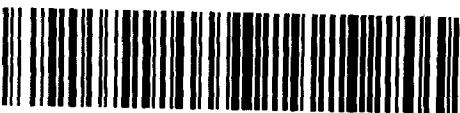
PROJ	CLAIM	OWNER	COM	TWP	REC'D	ASS'D	D-RD	APPR.
	L-800080	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800081	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800082	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800083	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800084	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800085	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800086	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800087	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800088	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800089	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800090	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800091	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800092	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800093	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800094	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800095	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800096	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800097	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800098	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800099	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800100	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800101	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800102	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-800103	GR'DAO	AU	TOMLINSON	07/06/84	07/06/87	20	80
	L-801915	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801916	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801917	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801918	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801919	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801920	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801922	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801923	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801924	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801925	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801926	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801927	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801929	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801930	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801931	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801932	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801933	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-801934	GR'DAO	AU	NEWMAN	06/04/84	06/04/87	20	80
	L-858240	B.J.FASKEN	AU	NEWMAN	09/19/85	09/19/87	60	
	L-858241	B.J.FASKEN	AU	NEWMAN	09/19/85	07/31/87	20	
	L-858242	B.J. FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858243	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858244	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	

CLAIM SUMMARY-MIKWAM-9/30/86

PROJ	CLAIM	OWNER	COM	TWP	REC'D	ASS'D	D-RQD	APPR.
	L-858245	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858246	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858247	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858248	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858249	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858250	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858251	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858252	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858253	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858254	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858255	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858256	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858257	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858258	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858259	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858260	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	
	L-858261	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858262	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858263	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858264	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858265	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858266	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858267	B.J.FASKEN	AU	TOMLINSON	09/19/85	09/19/87	60	
	L-858268	B.J.FASKEN	AU	TOMLINSON	09/19/85	07/31/87	20	

8708.111

M



42H08NE0051 2.9878 NEWMAN

900

Type of Survey(s)

Electromagnetic and Magnetic

Claim Holder(s)

Seal River Explorations Limited

Address

2372 Sinclair Circle, Burlington, Ontario L7P 3C3

Survey Company

Walker Exploration Limited

Date of Survey (from & to)

01 Day	10 Mo.	86 Yr.	21 Day	12 Mo.	86 Yr.
--------	--------	--------	--------	--------	--------

Total Miles of line Cut

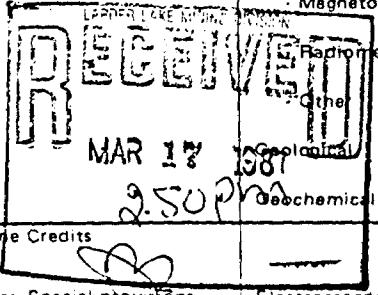
142 km

Name and Address of Author (of Geo-Technical report)

R. W. Woolham, 20 Richmond St. W., Suite 410, Toronto, Ontario, M5C 2R9

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



250 PMS

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures		Total Days Credits
S	÷ 15	=

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.

Date	Recorded Holder or Agent (Signature)
March 16 1987	F. J. Sharpley

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

F. J. Sharpley, 2372 Sinclair Circle, Burlington, Ontario L7P 3C3

Date Certified
March 16, 1987

Certified by (Signature)

F. J. Sharpley

Mining Claims Traversed (List in numerical sequence)

Mining Claim	Expend. Days Cr.	Mining Claim	Expend. Days Cr.
Prefix	Number	Prefix	Number
L	858240	L	858263
	858241		64
	42		65
	43		66
	44		67
	45		68
	46		
	47		
	48		
	49		
	50		
	51		
	52		
	53		
	54		
	55		
	56		
	57		
	58		
	59		
	60		
	61		
	62		

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

29

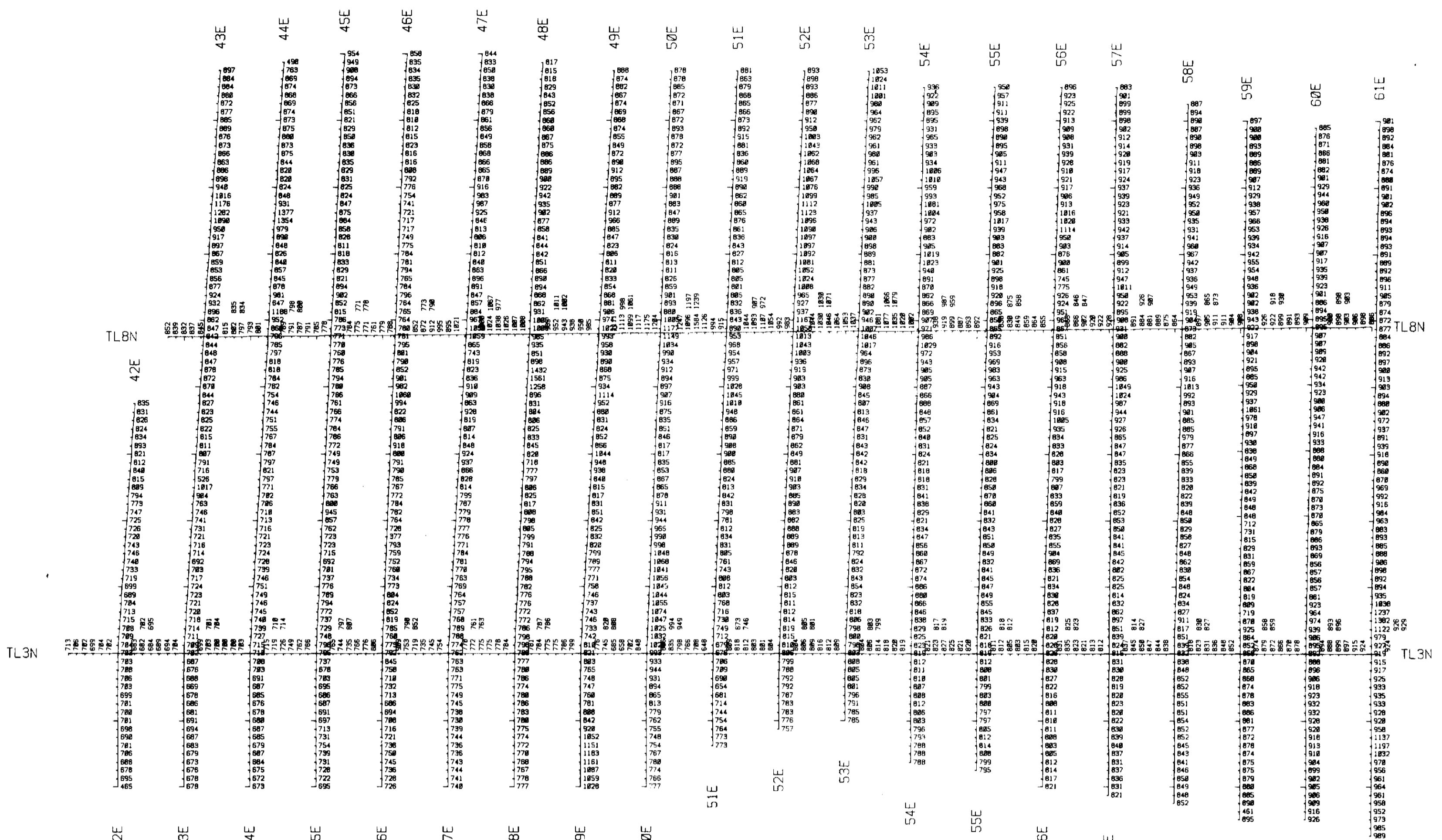
For Office Use Only	
Total Days Cr.	Date Recorded
Recorded	MAR 17 1987
Date Approved as Recorded	
6 May 87	

Mining Recorder

M. G. Warmer

Bench Director

J. Sharpley



CHESBAR RESOURCES INC.

MIKWAM RIVER PROPERTY

NEWMAN AND TOMLINSON TWP. ONTARIO

LARDER LAKE MINING DIVISION

TOTAL FIELD MAGNETIC VALUES

Scale 1 : 5000

Compilation and Plotting
by

WALKER EXPLORATION LTD

Mississauga Ontario

DECEMBER 1986

LEGEND

Base Level = 50000 nT

229878
FEB 15 1987



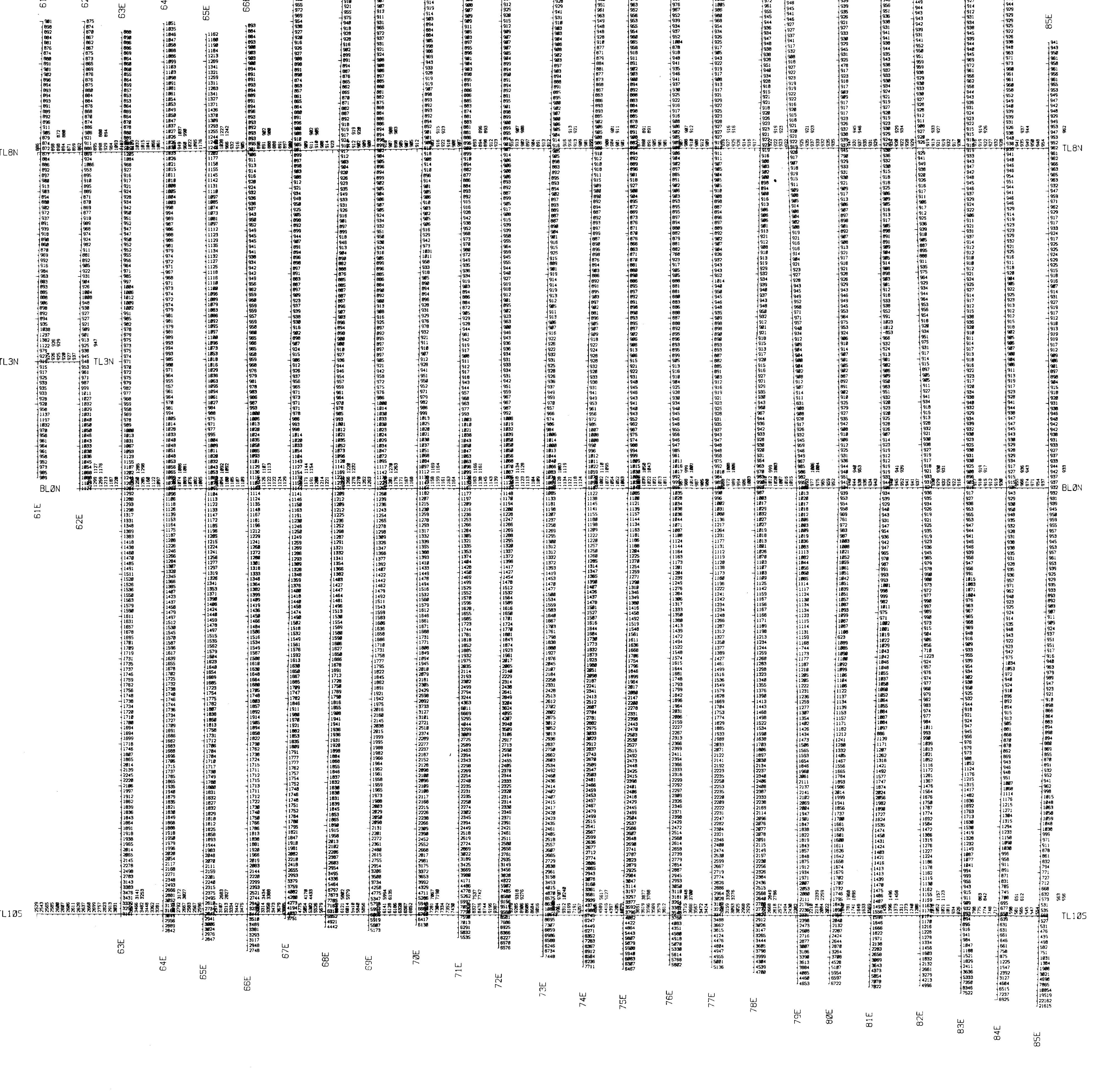
200

42-600NE0051 2-9878 NEWMAN

NTS - 42 - H - 8

Sheet # 1A

MIKWAM RIVER PROPERTY



SURVEY DATA

Contractor - Walker Exploration Ltd.
Instrumentation - EDA PPM-500
Base Station - EDA PPM 400



210

NTS - 42 - H - B

Base Level = 560000 ft

Sheet # 2B

MIKWAM RIVER PROPERTY

WALKER EXPLORATION LTD.

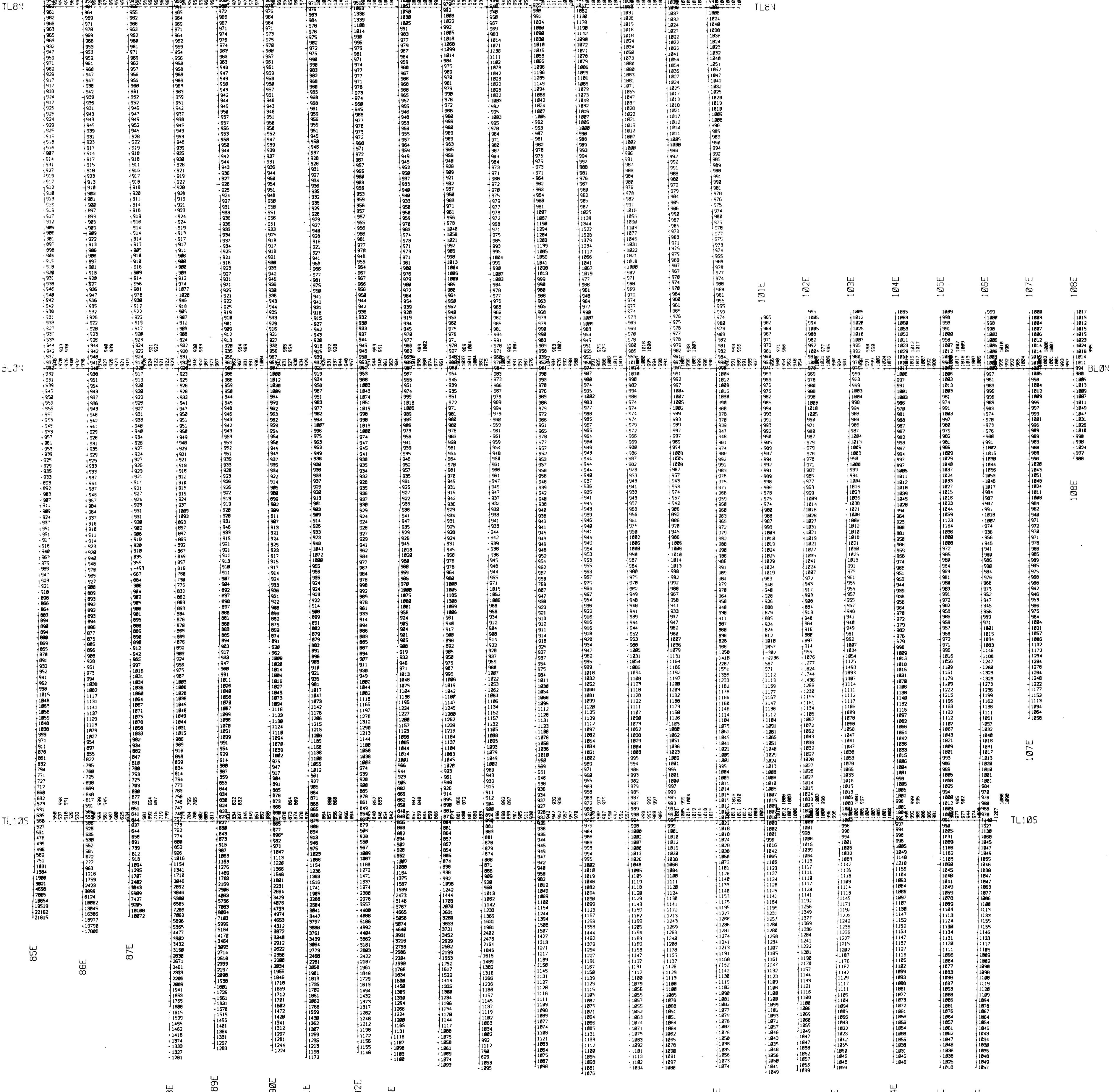
Mississauga Ontario.

DECEMBER 1986

Map No. 87-15-02

FEB 25 1987

TL8N



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85C

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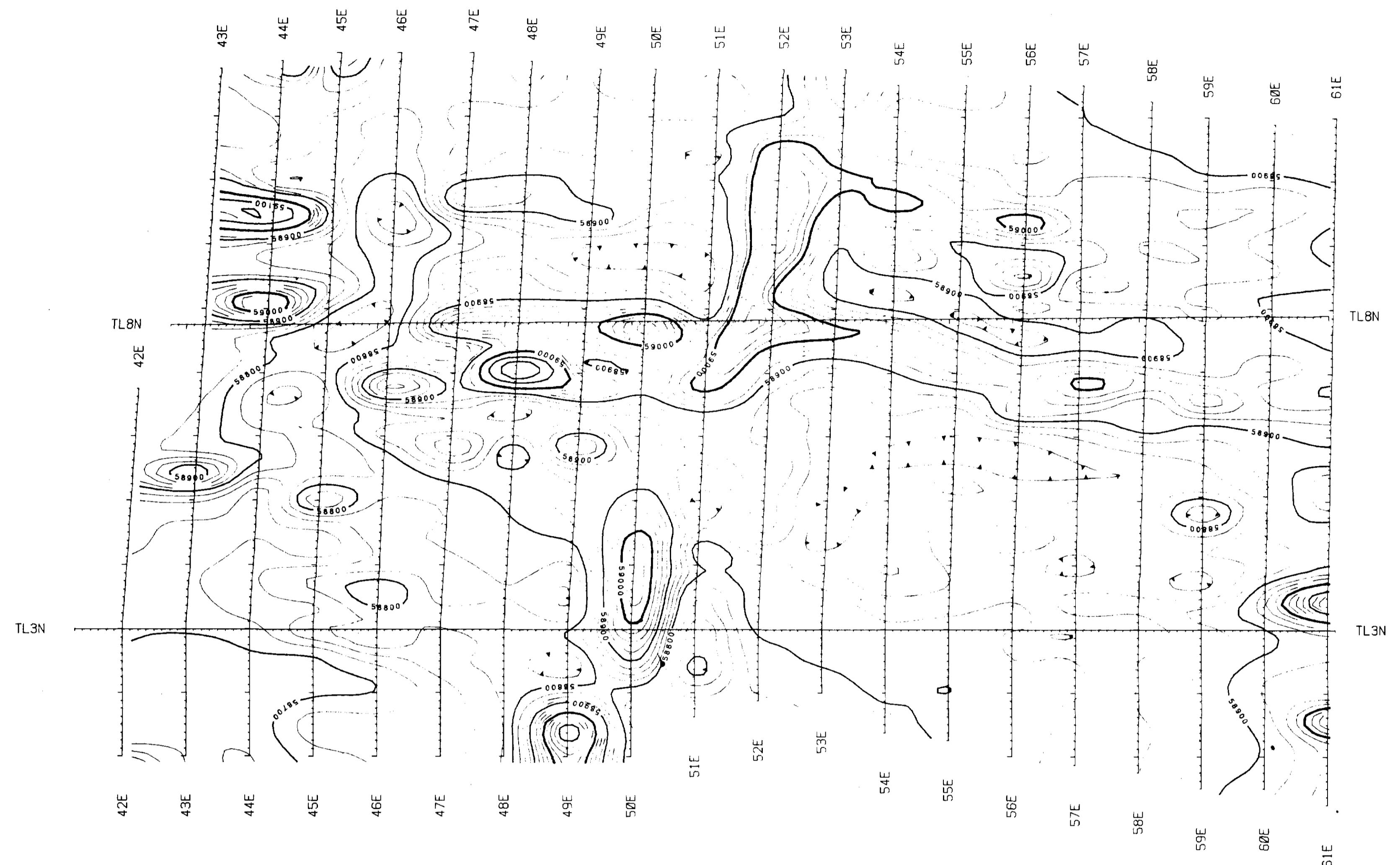
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2987⁰

CHESBAR RESOURCES INC.
MIKWAM RIVER PROPERTY
NEWMAN AND TOMLINSON TWP. ONTARIO
LARDER LAKE MINING DIVISION
TOTAL FIELD MAGNETIC CONTOURS

Scale 1 : 5000
Compilation and Plotting
by
VOLKNER EXPLOSION LTD

Sheet # 1B
MIKWAM RIVER PROPERTY



2.9878 NEWMAN

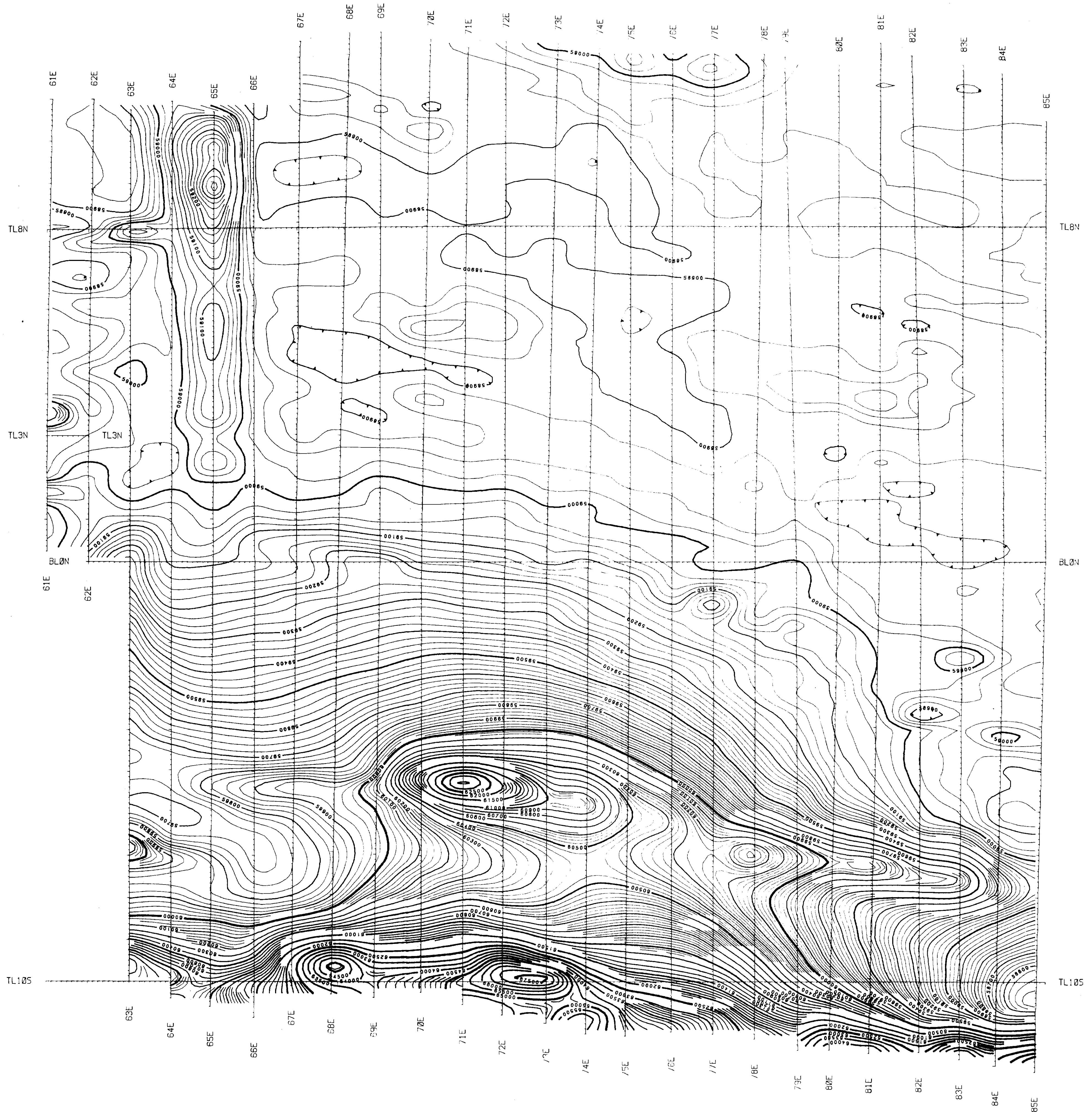
230

NTS - 42 - H - 8

LEADER

LEGEND

R.D. Mark



CHESSON RESOURCES INC

CHESBAR RESOURCES INC.
MIKWOM RIVER PROPERTY

MIRKWHM RIVER PROPERTY
NEWMON AND TOM LINCOLN TWP. ONTARIO

AND TOMLINSON TWP.
UPPER LAKE MINING DIVISION

LARDER LAKE MINING DIVISION
FIELD MAGNETIC

LARDER LAKE MINING DIVISION
TOTAL FIELD MAGNETIC SENSITIVITY

FIGURE

250T

100nT

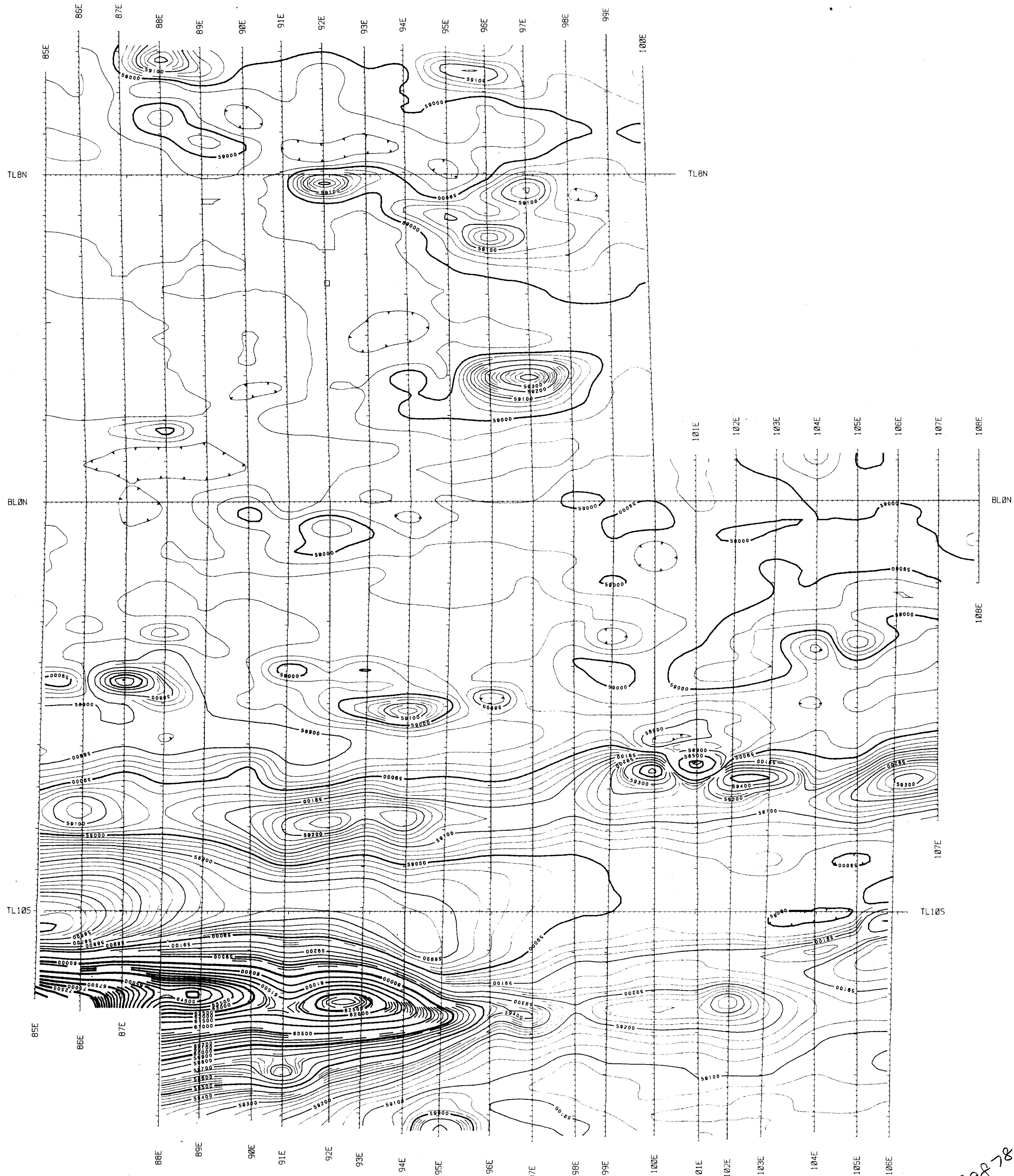
500nT

Next m^o

V FEB 25 1987

Sheet # 2B
MIKWAM RIVER PROPERTY





CHESBAR RESOURCES INC.
MIKWAM RIVER PROPERTY
NEWMAN AND TOMLINSON TWP. ONTARIO
LARDER LAKE MINING DIVISION
TOTAL FIELD MAGNETIC CONTOURS

Scale 1 : 75000
Compilation and Plotting
by

WALKER EXPLORATION LTD

Mississauga Ontario.

DECEMBER 1986

Map No. 87-15-06

Legend

- 25-T
— 100-T
— 100-T
— 200-T

R. McNeely

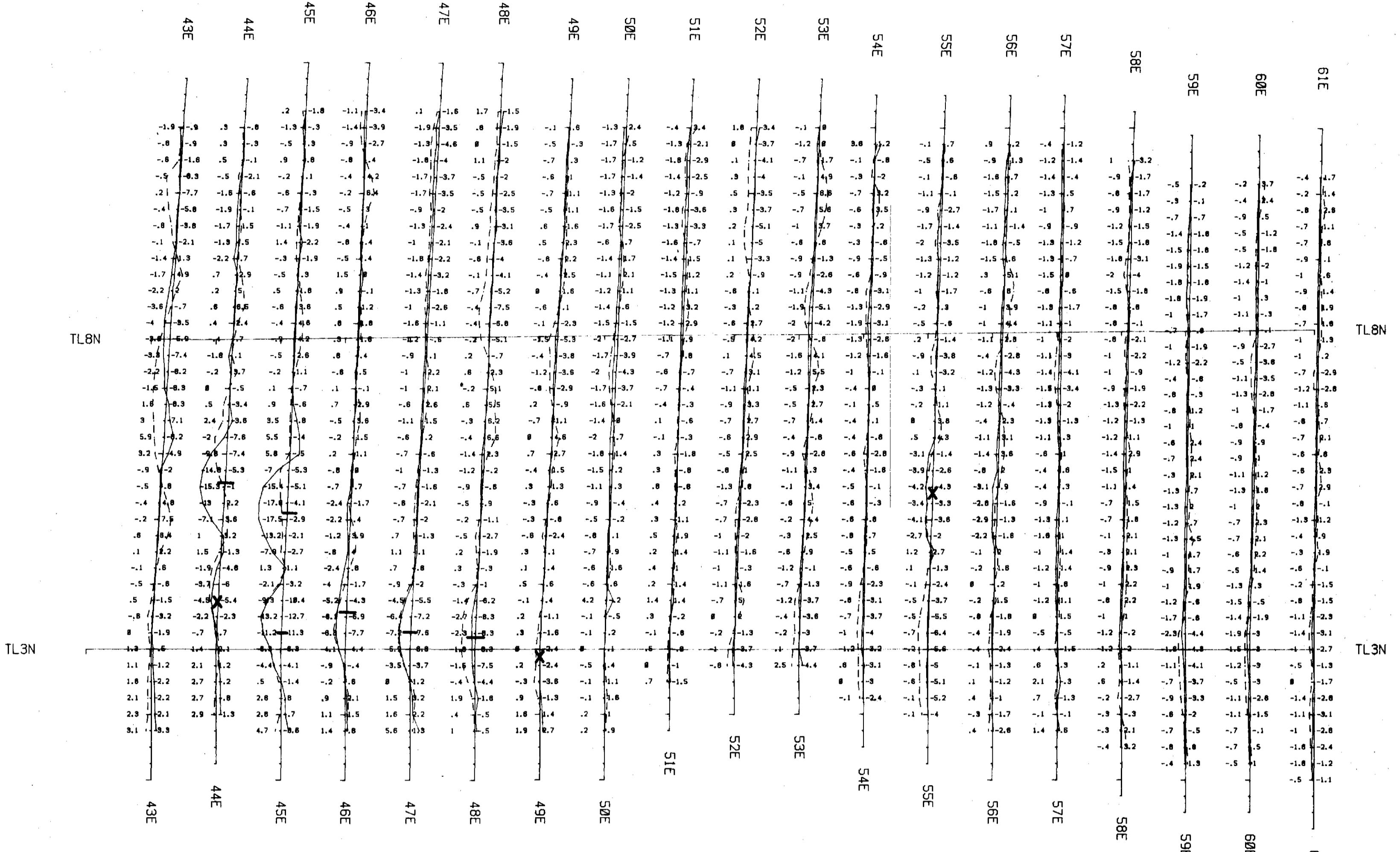
128 25 382



250

ITS - 42 - H - 8

Sheet # 3B
MIKWAM RIVER PROPERTY



260

SURVEY DATA

Contractor - Walker Exploration Ltd.
Instrumentation - Apex Parametrics MAXMIN II
Coil separation - 150 meters

INTERPRETATION

Conductor Axis
Conductor Width

X Poor Conductivity and/or questionable bedrock source

CHESBAR RESOURCES INC.
MIKWAM RIVER PROJECT
NEWMAN AND TOMLINSON TWP. ONTARIO
LARDER LAKE MINING DIVISION
HORIZONTAL LOOP EM (888 Hz)

Scale 1 : 5000

Compilation and Plotting
by

WALKER EXPLORATION LTD

Mississauga Ontario.

DECEMBER 1986

Map No.: 87-15-07

LEGEND

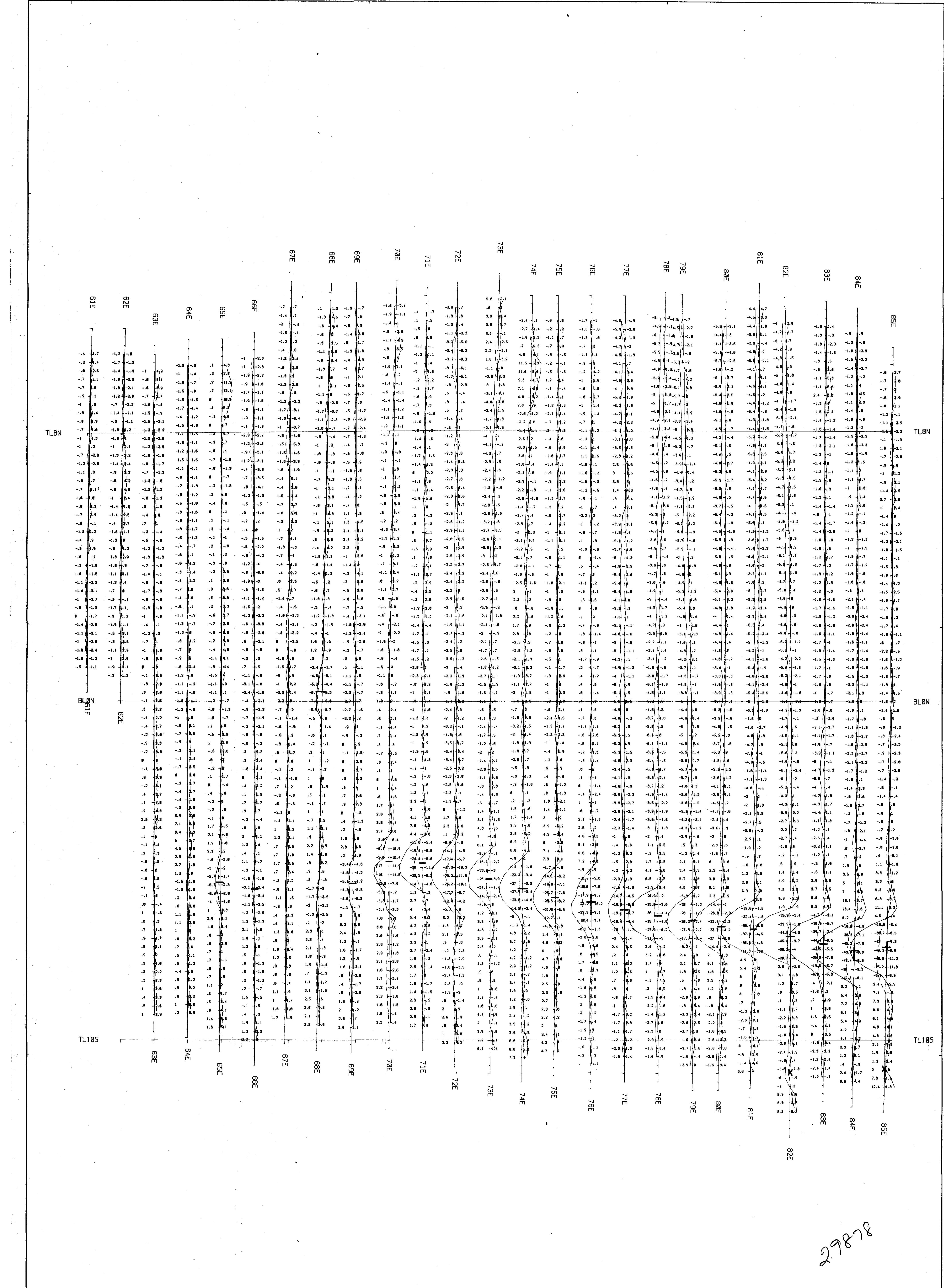
INPHASE values plotted to the left
of the line.QUADRATURE values to the right
of the line.= Inphase Profile
----- = Quadrature Profile

FEB 25 1987

Profile scale = 20 %/cm

Sheet # 1C

MIKWAM RIVER PROJECT



CHESBAR RESOURCES INC.

MIKWAM RIVER PROPERTY

NEWMAN AND TOMLINSON TWP. ONTARIO

LARDER LAKE MINING DIVISION

HORIZONTAL LOOP EM (888 Hz)

Scale 1 : 5000

Compilation and Plotting

by

WALKER EXPLORATION LTD

Mississauga Ontario.

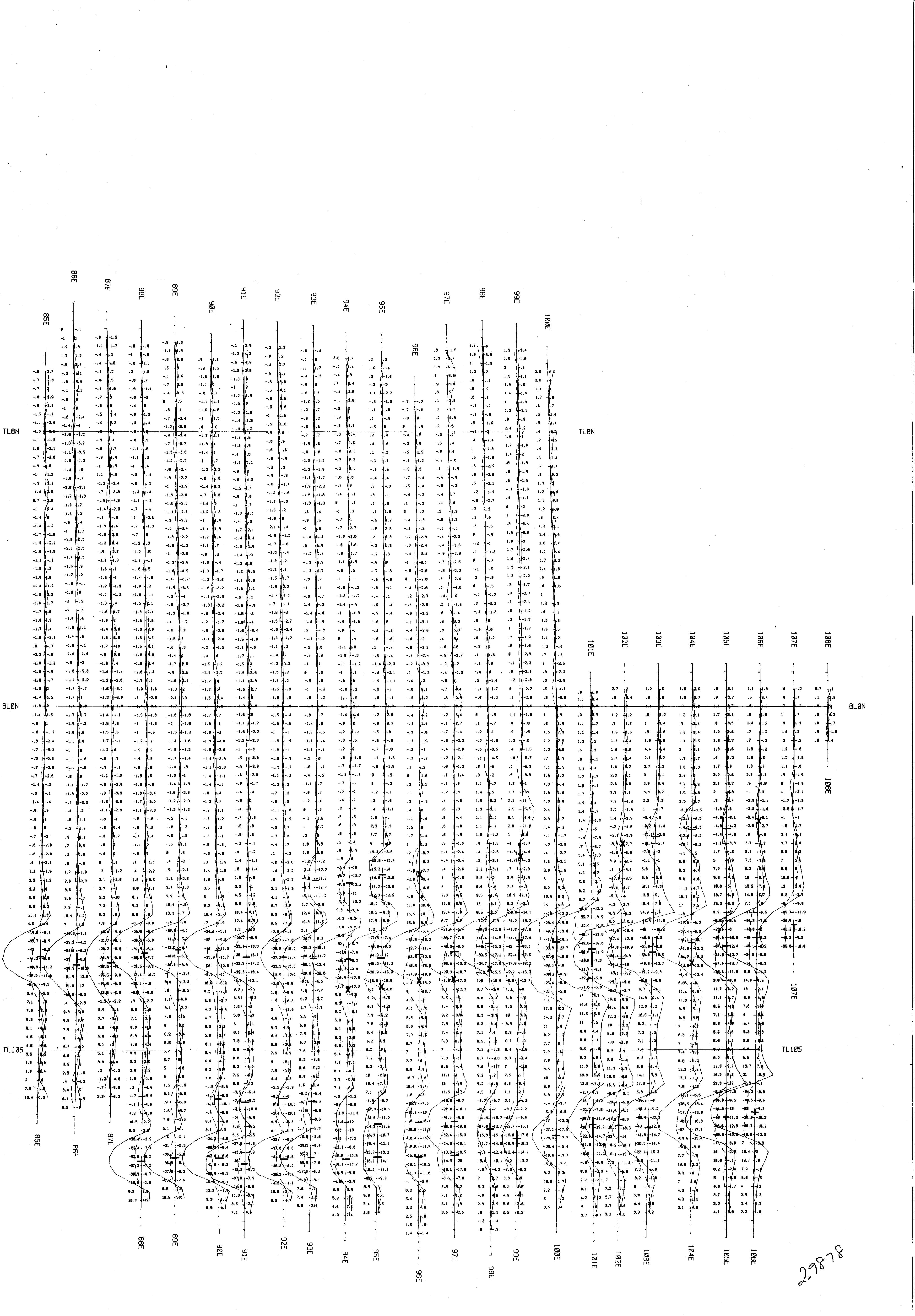
DECEMBER 1986

Map No. 87-15-08

Sheet # 2C
MIKWAM RIVER PROPERTY

LEGEND
INPHASE values plotted to the left
of the line.
QUADRATURE values to the right
of the line.
— = Inphase Profile
- - - - = Quadrature Profile
Profile scale = 20 %/cm

FEB 25 1987



CHESBAR RESOURCES INC.

MIKWAM RIVER PROPERTY

NEWMAN AND TOMLINSON TWP. ONTARIO

LARDER LAKE MINING DIVISION

HORIZONTAL LOOP EM (888 Hz)

Scale 1 : 5000

Compilation and Plotting

by

WALKER EXPLORATION LTD

Mississippi Ontario.

DECEMBER 1986

Map No. 87-15-09

Sheet # 3C

MIKWAM RIVER PROPERTY

LEGEND

INPHASE values plotted to the left
of the line.

QUADRATURE values to the right
of the line.

= Inphase Profile

----- = Quadrature Profile

Profile scale = 20 % cm

ED 25 1987

42008NE0051 2.9678 NEWMAN

280

SURVEY DATA

Contractor - Walker Exploration Ltd.
Instrumentation - Apex Parametrics MAXMIN II

Coil separation - 150 meters

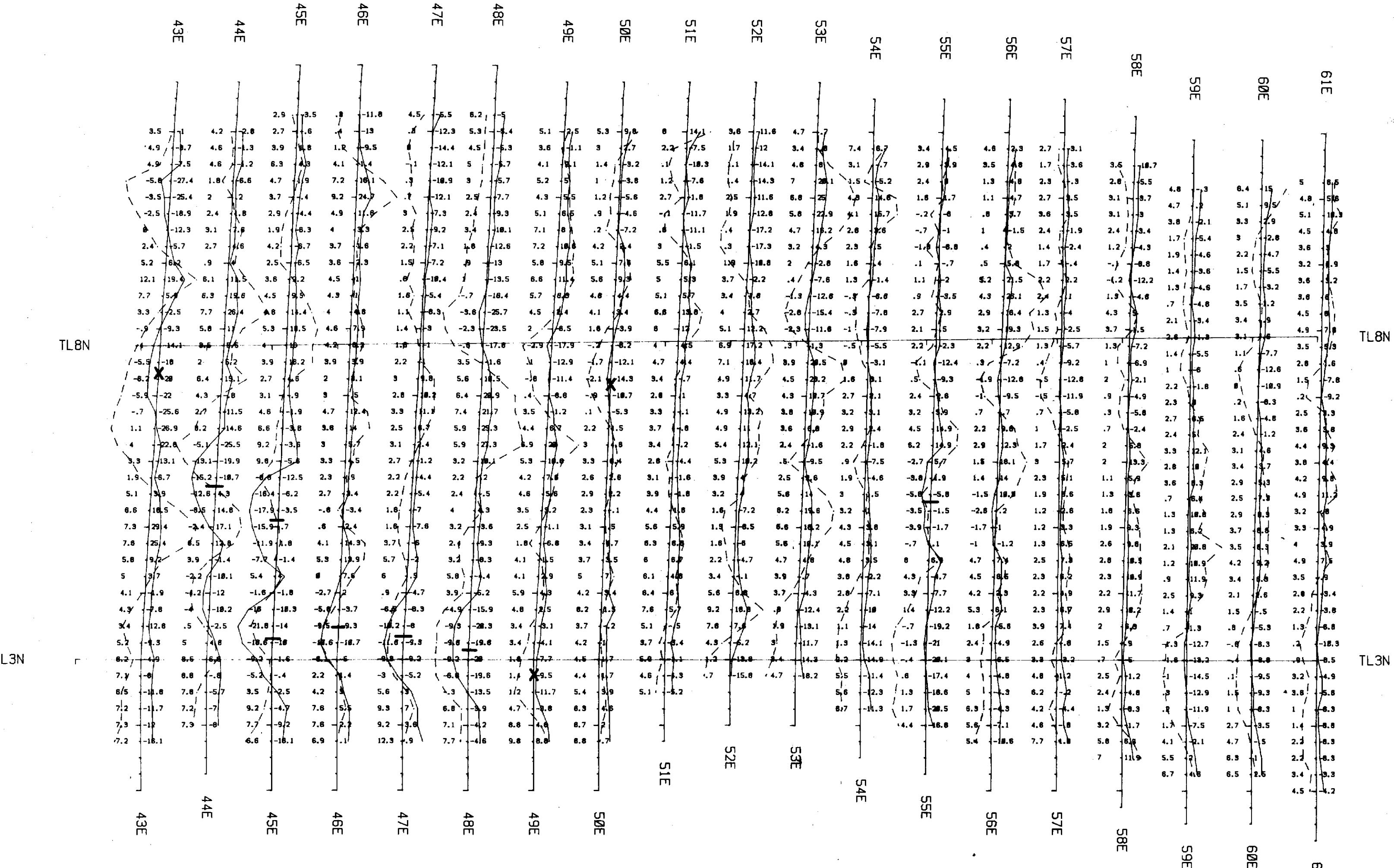
INTERPRETATION

Conductor Axis

Conductor Width

X Poor Conductivity and/or questionable bedrock source

NTS - 42 - H - 8



CHESBAR RESOURCES INC.
MIKWAM RIVER PROJECT
NEWMAN AND TOMLINSON TWP. ONTARIO
LARDER LAKE MINING DIVISION
HORIZONTAL LOOP EM (3555 Hz)

Scale 1 : 5000
 Compilation and Plotting
 by
WALKER EXPLORATION LTD
 Mississauga Ontario.
 DECEMBER 1986
 Map No. 87-15-10

SURVEY DATA

Contractor - Walker Exploration Ltd.
 Instrumentation - Apex Parametrics MAXMIN II
 Coil separation - 150 meters

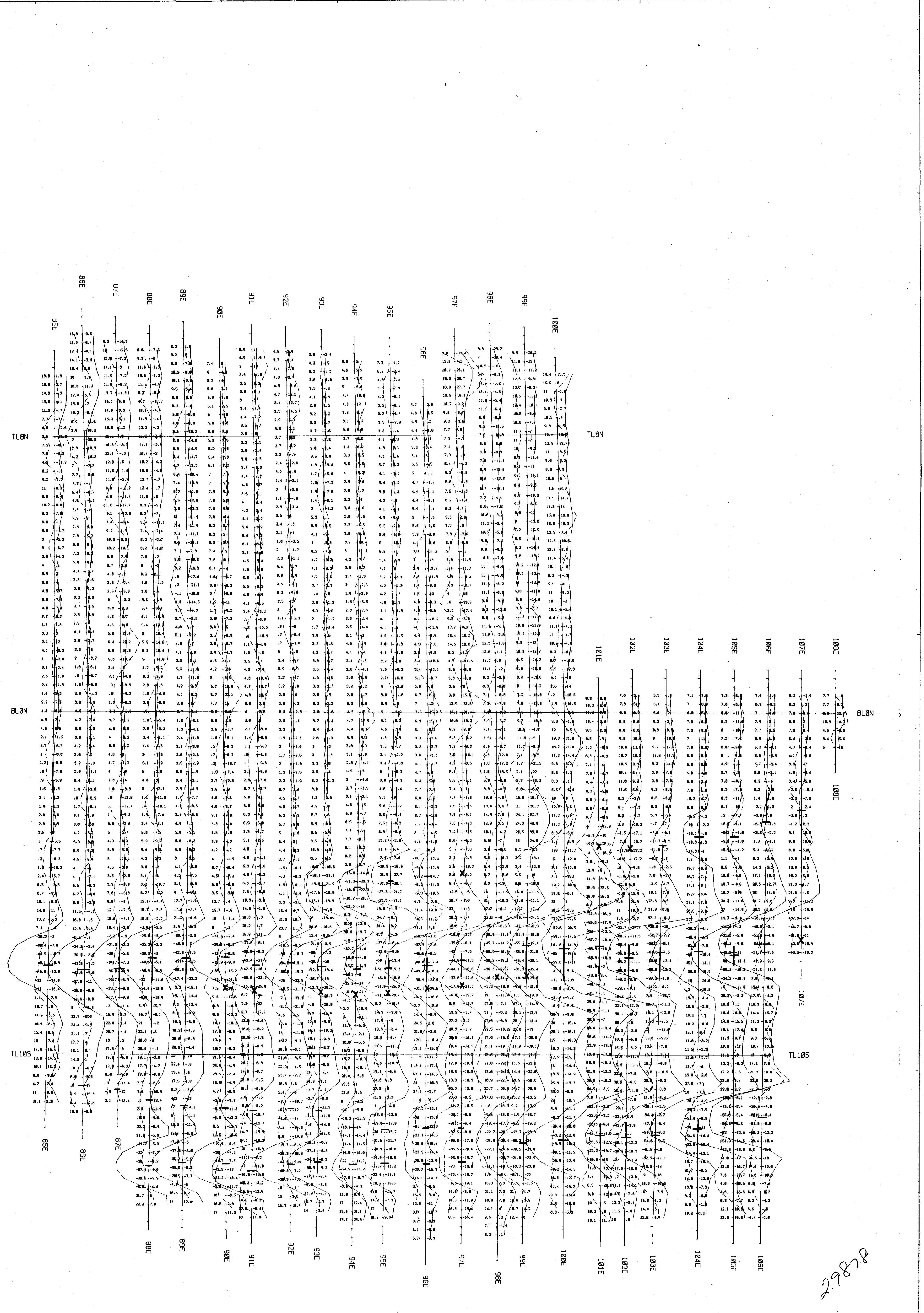
INTERPRETATION

Conductor Axis
 Conductor Width
 Poor Conductivity and/or questionable bedrock source.

LEGEND

INPHASE values plotted to the left
 of the line.
 QUADRATURE values to the right
 of the line.
 = Inphase Profile
 = Quadrature Profile
 Profile scale = 28 %/cm

FEB 25 1987



CHESBAR RESOURCES INC.

MIKWAM RIVER PROPERTY

NEWMAN AND TOMLINSON TWP. ONTARIO

LARDER LAKE MINING DIVISION

HORIZONTAL LOOP EM (3555 Hz)

Scale 1 : 5000

Compilation and Plotting

by

WALKER EXPLORATION LTD

Mississauga Ontario,

DECEMBER 1986

Map No. 87-15-12

Sheet # 30
MIKWAM RIVER PROPERTY

298

310

SURVEY DATA

Contractor - Walker Exploration Ltd.

Instrumentation - Apex Parametrics MAXMIN II

Coil separation = 150 meters

INTERPRETATION

Conductor Axis

Conductor Width

Poor Conductivity and/or questionable bedrock source

NTS - 42 - H - 8

LEGEND

INPHASE values plotted to the left
of the line.

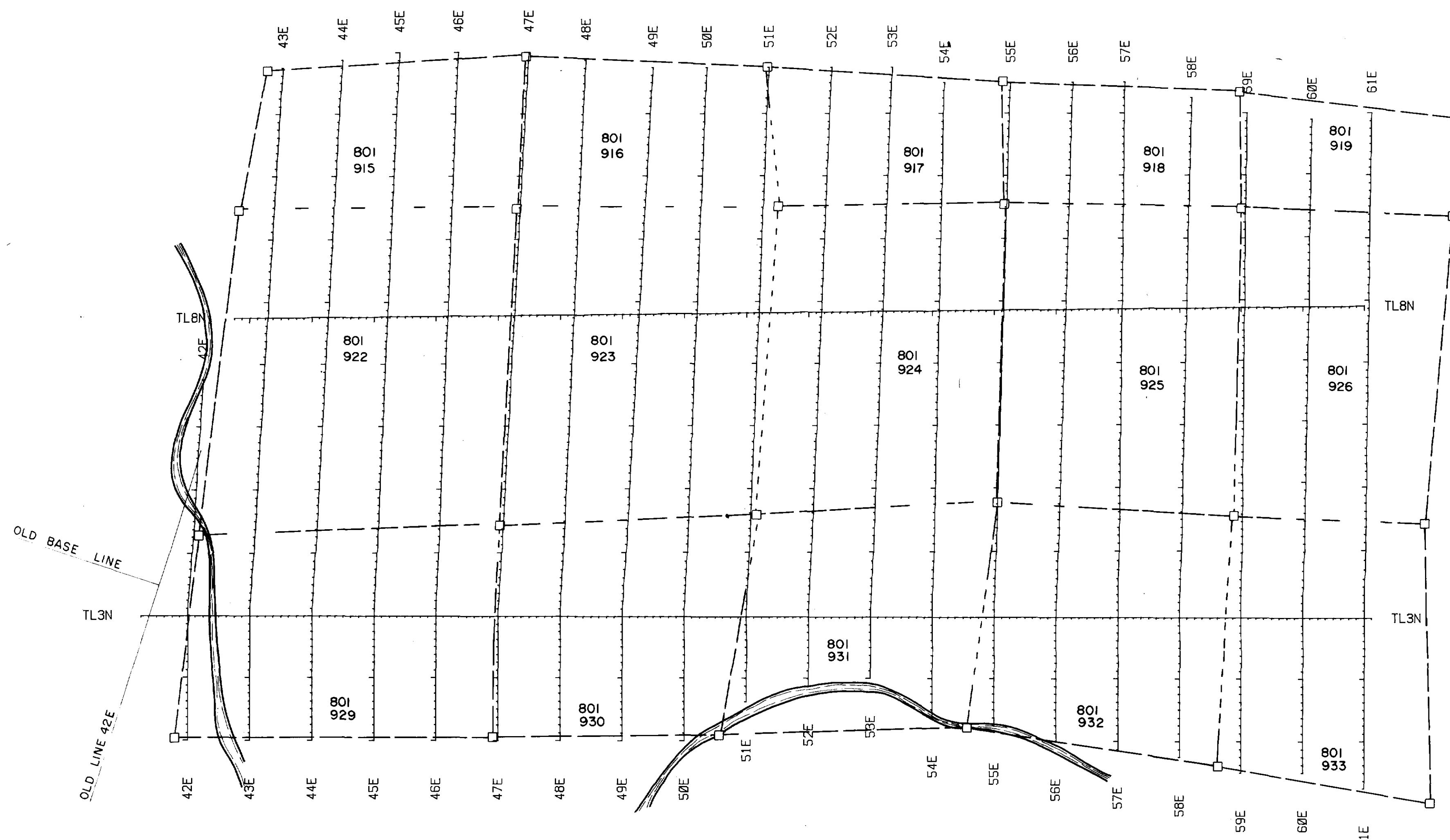
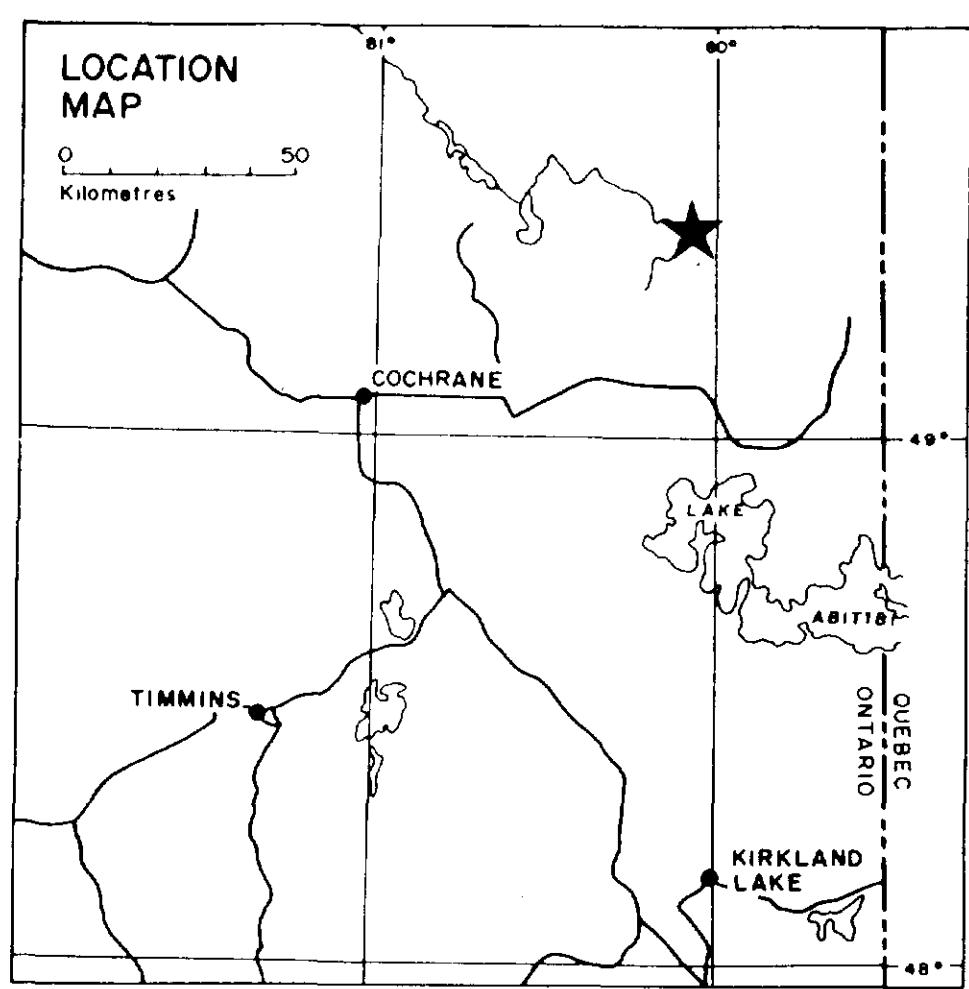
QUADRATURE values to the right
of the line.

- - - - = Inphase Profile

- - - - = Quadrature Profile

Profile scale = 20 %/cm

FEB 25 1987

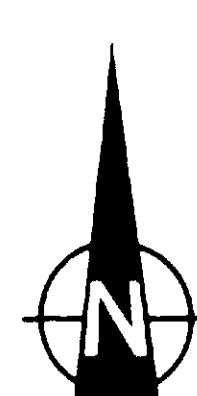


TOPOGRAPHIC LEGEND

Claim post and line —□—
Creek, lakeshore ——○—

1	2	3
---	---	---

0 250 500 m

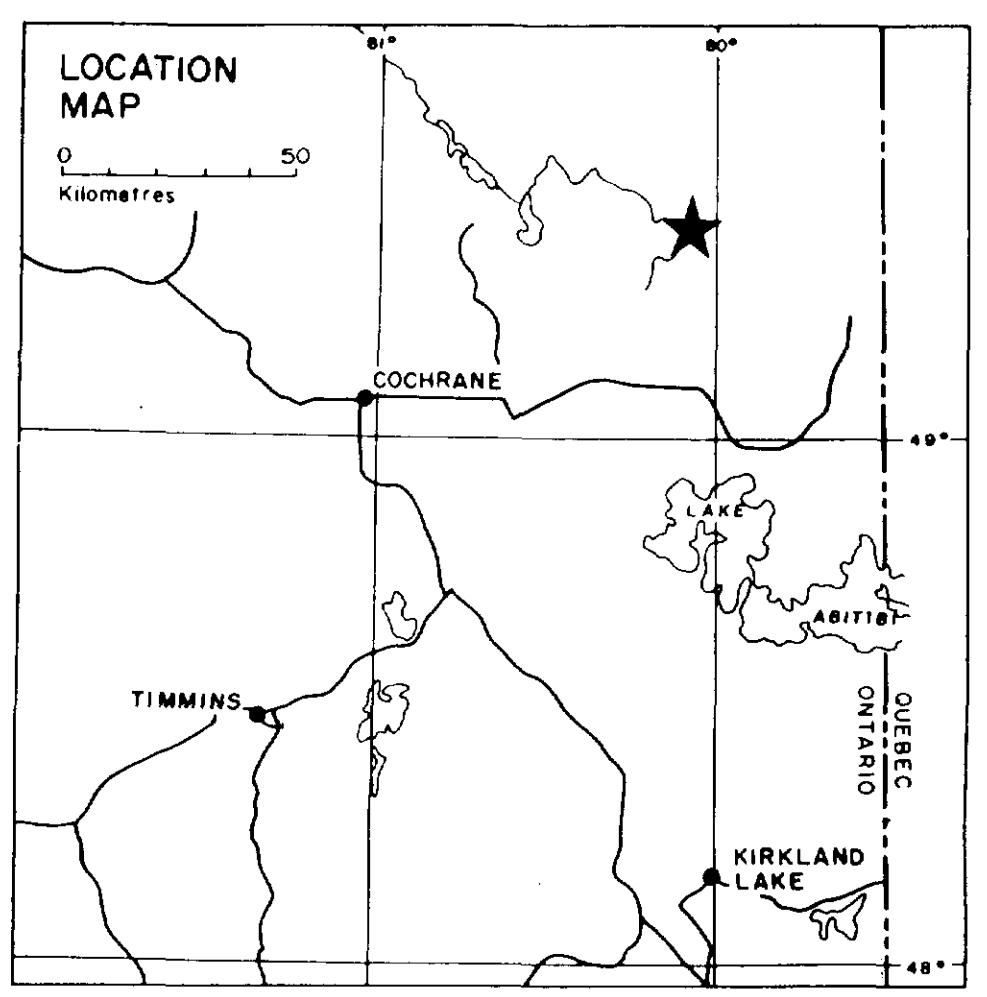


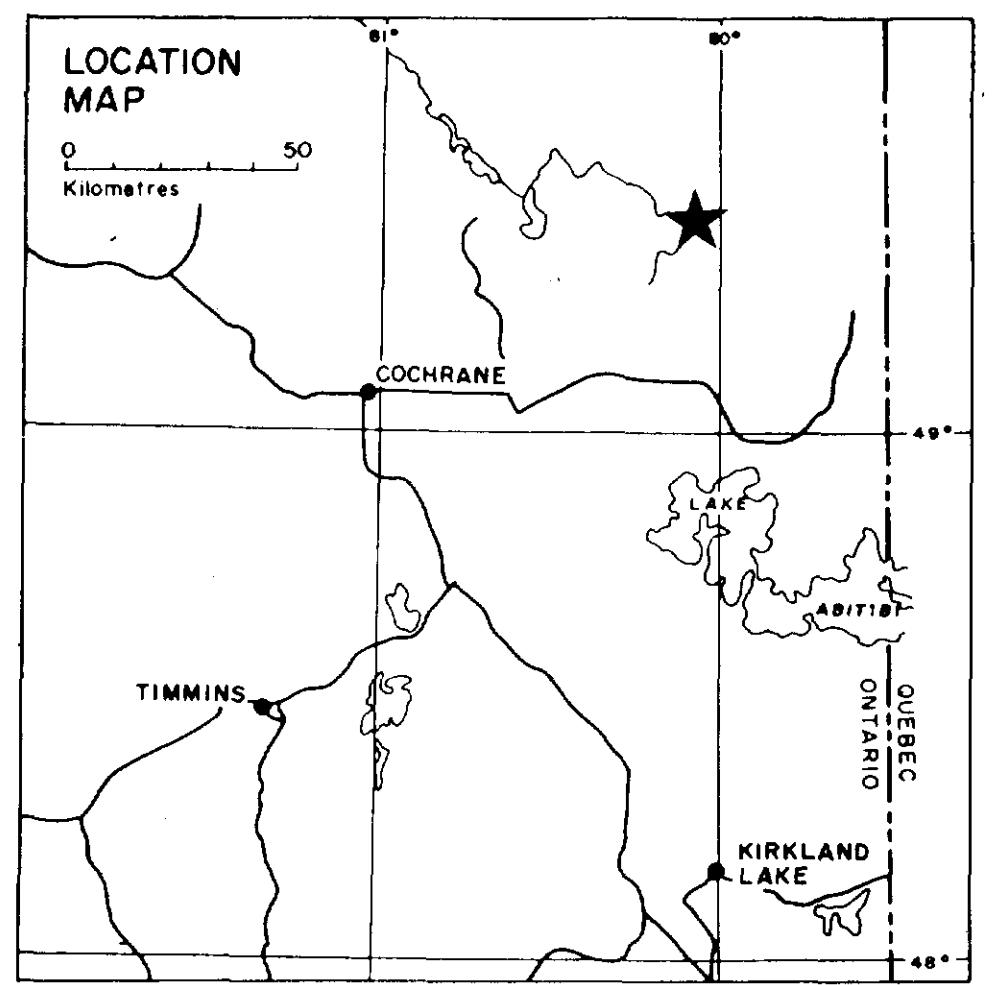
CHESBAR RESOURCES INC.
MIKWAM RIVER PROPERTY
NEWMAN AND TOMLINSON TWP ONTARIO
LARDER LAKE MINING DIVISION
CLAIMS AND SURVEY
LINE COVERAGE
Scale 1:5000

29878
FEB 25 1987

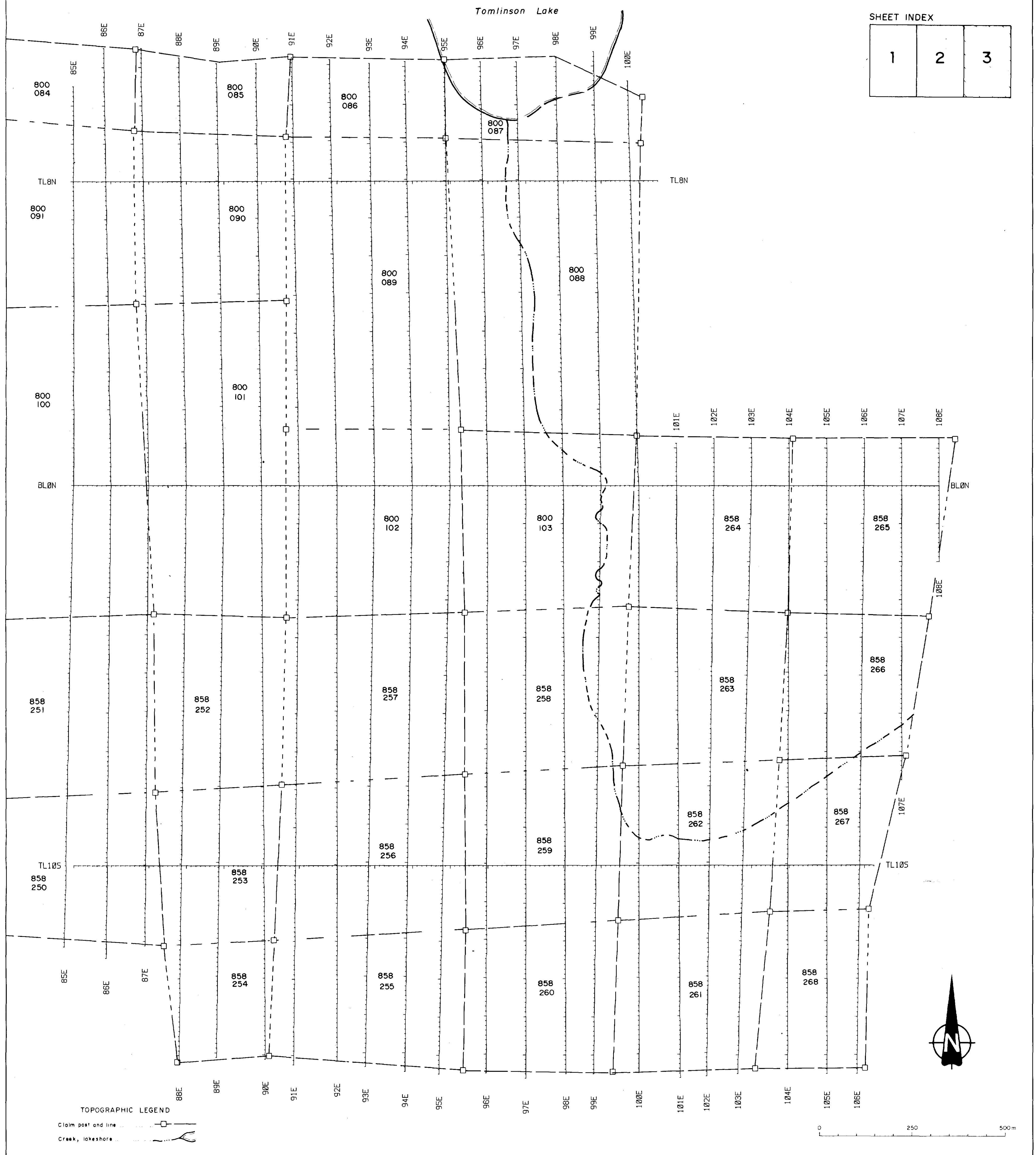
Sheet # 1E

Map No. 87-15-15





SHEET INDEX		
1	2	3



CHESBAR RESOURCES INC.
MIKWAM RIVER PROPERTY
NEWMAN AND TOMLINSON TWP. ONTARIO
LARGER LAKE MINING DIVISION
CLAIMS AND SURVEY
LINE COVERAGE
Scale 1: 5000

Sheet # 3E

29878

FEB 25 1987



LEGEND

- | | |
|------------------------|---|
| MAGNETIC TRENDS | Peak Amplitude Trace of Probable Iron Formation |
| | Other Magnetic Trends (Mafic Volcanics, Lean Iron Formation with Magnetite/Pyrrhotite.) |
| ELECTROMAGNETIC TRENDS | Multiple Conductor Zone |
| | Single Conductor |
| | Poor Conductivity and/or Questionable Bedrock Source |
| Diabase Dyke | |
| Fold/Fault Structure | |
| Claim Post | |

CHESBAR RESOURCES INC.	
MIKWAM RIVER PROJECT	
INTERPRETIVE GEOPHYSICAL COMPILATION WEST SHEET	
DERRY, MICHENER, BOOTH & WAHL	
Scale 1:5000	Date Feb 18/87
Drawn By PRH	Map No. 87-15-13

