



42A05NE0101 2.9750 TURNBULL

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GEOPHYSICAL REPORT
on the
Turnbull Township Property
of
GOLDEN TRIO MINERALS LTD.
by
Greg Hodges

RECEIVED

FEB 19 1987

MINING LANDS SECTION

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INTRODUCTION

During the period from November 19, 1986 to February 2, 1987 a geophysical survey was completed on the Turnbull Township property of Golden Trio Minerals Ltd., by Robert S. Middleton Exploration Services Inc. The survey consisted of linecutting, magnetics, electromagnetics (Max Min) and induced polarization over the entire grid.

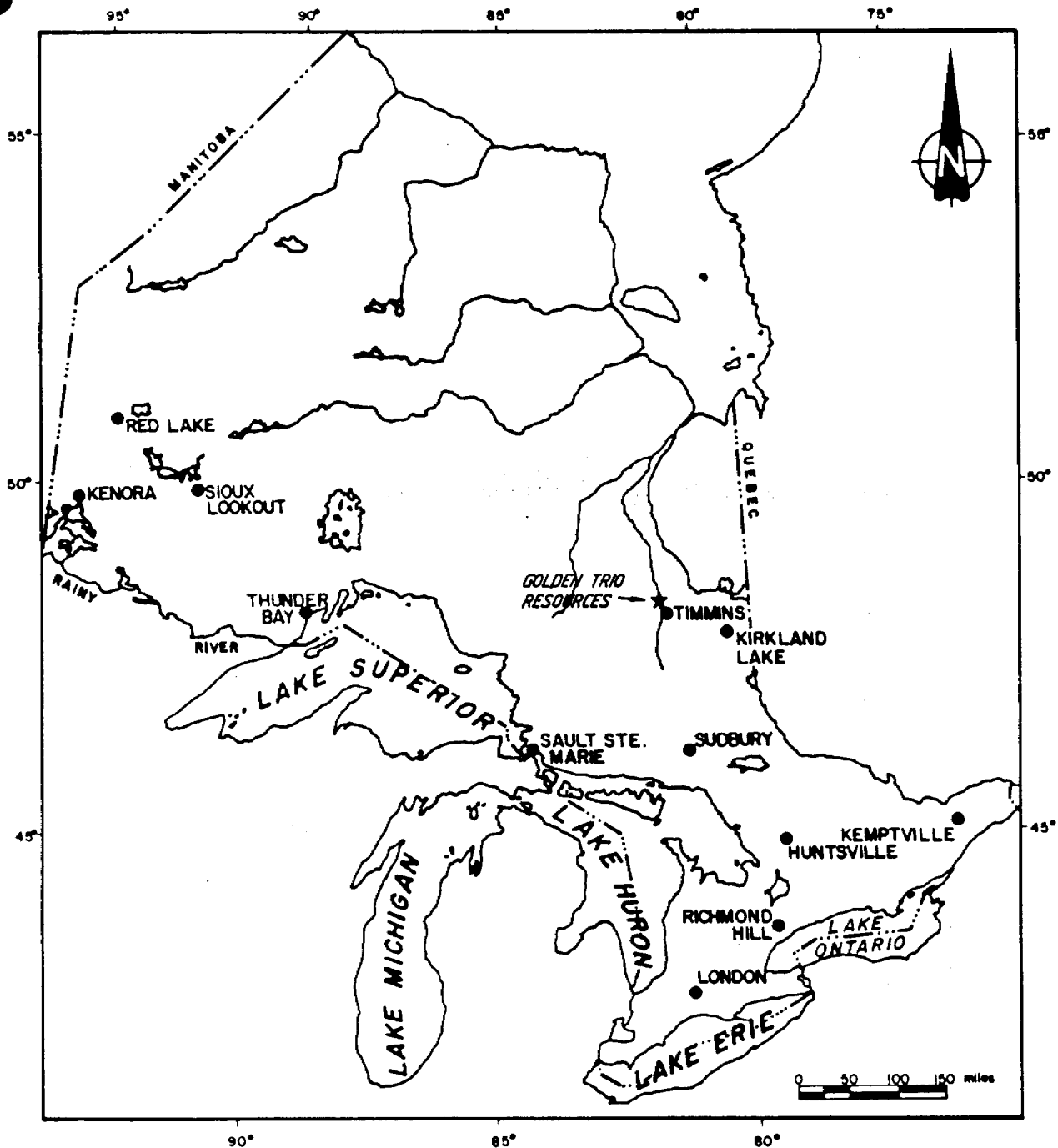
LOCATION AND ACCESS

The property is located in east-central Turnbull Township, Ontario, approximately 20 miles west of Timmins (Figures 1 and 2). The grid can be approached to within about 2km by truck on logging roads which extend west from Highway 516 ("The Kamiskota Road"). From the truck snowmobiles or all-terrain vehicles can be used to travel the network of trails which cross the grid.

CLAIM STATUS

The property consists of 26 un-patented mining claims (and five patented claims) in the Porcupine Mining Division, Ontario.

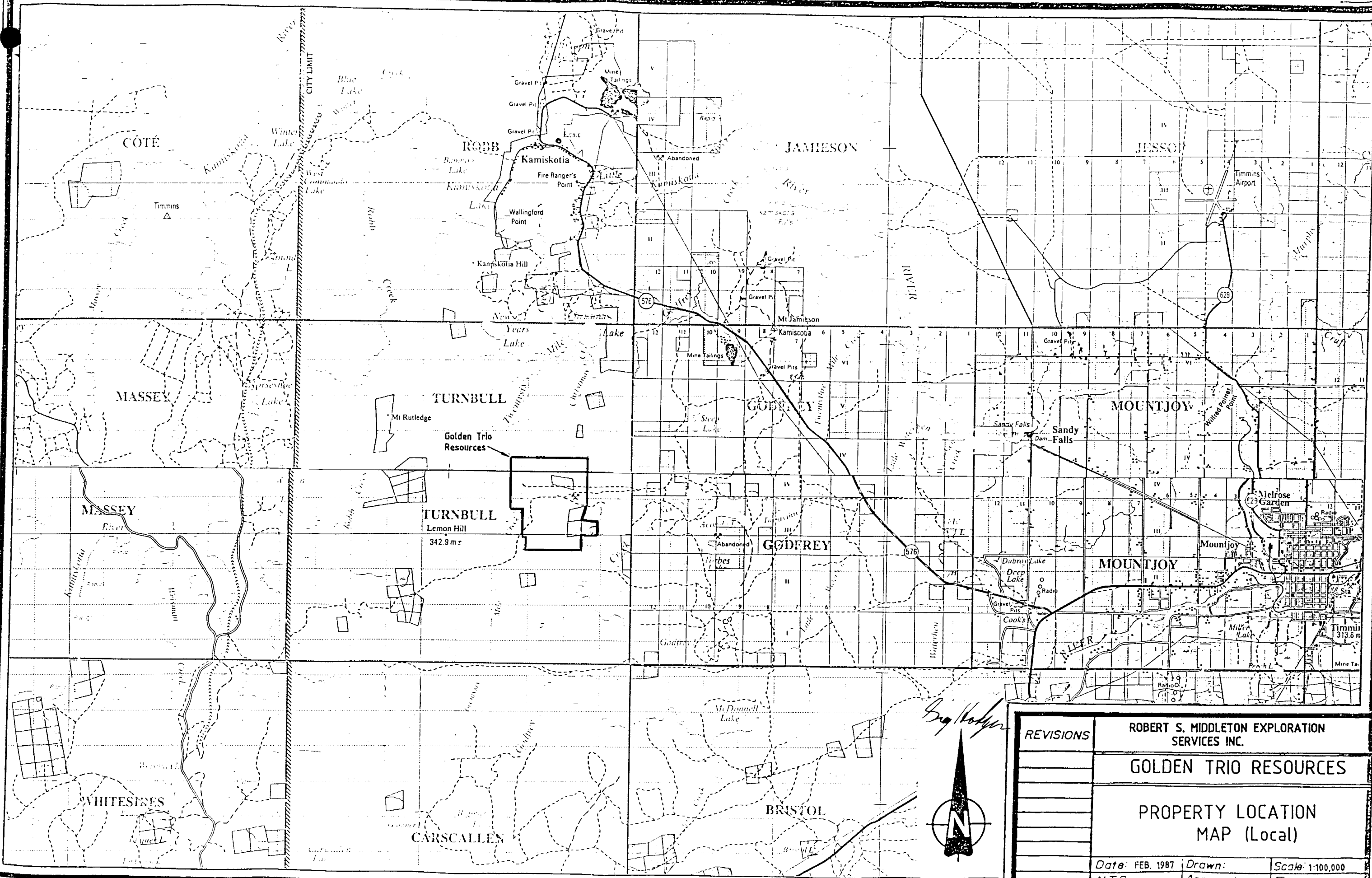
The un-patented claim numbers are:



PROVINCE OF ONTARIO

Eng. Middleton

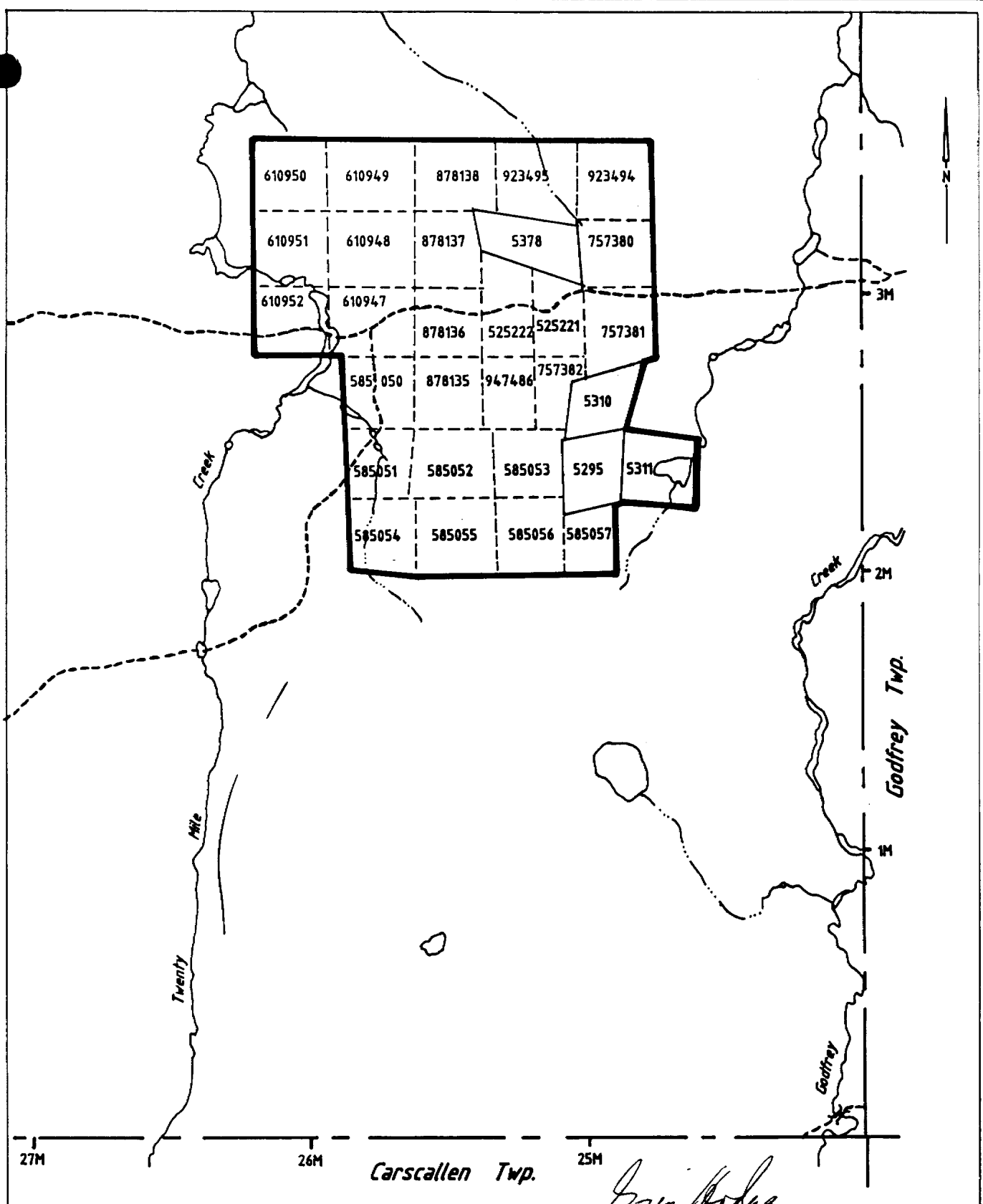
REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.	
	for	Golden Trio Resources
	Title	PROPERTY LOCATION
	Fig 1	
	Date: Feb. 1987	Scale: 1"=160mi. N.T.S.:
	Drawn: C.G.	Approved: File: M-205



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.	
	GOLDEN TRIO RESOURCES	
	PROPERTY LOCATION MAP (Local)	
	Date: FEB. 1987	Drawn:
N.T.S.: 42A	Approved:	Figure: 2

<u>Claim Number</u>	<u>Recording Date</u>
P610947	March 24, 1981
P610948	March 24, 1981
P610949	March 24, 1981
P610950	March 24, 1981
P610951	March 24, 1981
P610952	March 24, 1981
P585050	March 24, 1981
P585051	March 24, 1981
P585052	March 24, 1981
P585053	March 24, 1981
P585054	March 24, 1981
P585055	March 24, 1981
P585056	March 24, 1981
P585057	March 24, 1981
P878135	December 16, 1985
P878136	December 16, 1985
P878137	December 16, 1985
P878138	December 16, 1985
P923494	May 12, 1986
P923495	May 12, 1986
P757380	April 5, 1983
P757381	April 5, 1983
P757382	April 5, 1983
P947486	August 18, 1986
P575221	March 7, 1979
P575222	March 7, 1979

There are also four patented claims on the property, three of which are held under option from Conrad Taylor Wettlaufer and Jay F. Herrick ("The Wettlaufer Claims") and have numbers P5310, P5311, P5295. The other patented claim (P5378) and the un-patented claims are held by Golden Trio Minerals Ltd. Figure 3 illustrates the claim map.



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	GOLDEN TRIO RESOURCES	
	Title	Turnbull Township.	
	Claim Location Map.		
	Date: Feb. 1987	Scale: 1"=1/2mile	N.T.S.:
	Drawn: C.G.	Approved:	File: M-205

Fig. 3

GEOLOGY

The Golden Trio Minerals Ltd. Turnbull Township property is located in the western end of the Abitibi Greenstone Belt, just west of Timmins, Ontario. With the exception of late cross cutting diabase dikes, all bedrock in the area is of Early Precambrian age.

Metavolcanic rocks in the area are subdivided into two groups, the largely calc-alkaline Deloro Group, and the predominantly komatiitic to tholeiitic Tisdale Group. While no firm evidence exists to confirm that the calc-alkaline rocks of the Turnbull Township area are part of the Deloro Group, they are compositionally similar and appear to be overlain by tholeiitic rocks similar to the Tisdale Group.

The Archean intrusive-extrusive complex that occurs in central and eastern Turnbull Township is comprised of predominantly felsic flows and pyroclastics with lesser amounts of mafic volcanic material which have been intruded by gabbro, microdiorite, quartz porphyry and feldspar porphyry.

Geological mapping by R. Middleton in 1969 for the Ontario Division of Mines indicates that the majority of the metavolcanic rocks in the vicinity of the property are breccias and tuffs which generally become finer from the western part of the property to the eastern part of the township. Mafic volcanic rocks have been mapped in the eastern and north-central parts of

the property.

The two prominent magnetic anomalies, one in the extreme western part of the property and one in the eastern part of the property are interpreted to reflect the presence of north trending diabase dikes.

Rocks of this felsic to mafic volcanic assemblage host the former base metal massive sulfide deposits in Jamieson, Robb and Godfrey Townships to the northeast and east of the property. These copper-zinc deposits were found to be associated with the altered contact zone between mafic and felsic rocks. Middleton (1973) suggests that the base metal mineralization represents a later stage of mineralization than the pyrite mineralization with which it is intimately associated.

While numerous base metal showings have been discovered in the township, both in quartz veins and associated with rhyolitic rocks, no significant deposits have been found.

PREVIOUS WORK

The only recent work filed for assessment credit with the Ministry of Northern Development and Mines consists of a limited pulse EM survey and a six diamond drill hole program completed by Galore Gold Resources Inc. This drilling program which totaled 650 meters was based upon the results of the pulse EM survey which concentrated on a small part of the property around claim

P-525221 where Pyrotex Mining reported visible gold in three drill holes. The gold was reportedly associated with heavy pyrite mineralization. The Pyrotex work was also concentrated in the area around claim P-525222. While intense alteration heavy sulfide mineralization and visible gold were reported by consulting geologist K. Darke, assay results were disappointing and no further work was completed. John Larche completed numerous shallow backhoe trenches on claim P-525221 and claim P-528923 in 1980. He also recorded rock trenching on these two claims in 1982. No bedrock descriptions or assay results were reported.

In 1969 Norscan Mining and Services Co. Ltd., on behalf of Magar Mines Ltd., carried out magnetometer and VLF-electromagnetic surveys over a thirty three claim group that overlaps the extreme western and northern parts of the subject property. One north trending magnetic anomaly interpreted to be caused by a diabase dike was defined across the entire property and numerous VLF-EM anomalies were outlined. No further work was completed and the ground was allowed to lapse.

Mespi Mines Ltd. completed an airborne geophysical survey over the entire southeast part of Turnbull Township and in fact covered the southeastern part of the property with northeast flight lines as well as east west lines. The east west oriented airborne survey (1963) shows the presence of two significant

electromagnetic anomalies over the current holdings of Golden Trio Minerals Ltd., as well as several other conductive trends in the general area. Most of the conductive horizons were tested by diamond drilling and a geological mapping program was also completed. The geological mapping program covered part of the southeastern part of the Golden Trio Minerals Ltd. property but did not include the Wettlaufer patented claims.

The causes of the two airborne electromagnetic anomalies defined on the Golden Trio Minerals Ltd. property were not ascertained by geological mapping and the anomalies were not diamond drilled.

The airborne electromagnetic anomaly near the east boundary of the subject property remains untested while the more extensive anomaly in the west central part of the current holdings of Golden Trio Minerals Ltd. was investigated further by Noranda Exploration Co. Ltd.

In the late 1960's Noranda Exploration Co. Ltd. carried out magnetometer and vertical loop electromagnetic surveys over a group of 12 claims roughly equivalent to the west central part of the subject property. Four claims were allowed to lapse before a single drill hole was put down in 1969. The hole intersected a wide zone of altered, sericitic rhyolite breccia where considerable core was lost. Minor disseminated chalcopyrite was noted in the core along with sections containing up to 10%

pyrite. In 1970 a second drill hole was collared behind the first. Again highly altered and brecciated sericitized rhyolite was encountered over a considerable width. Pyrite and traces of disseminated chalcopyrite were also encountered over a considerable width. No further work was completed and the claims were allowed to lapse. This topographic low and corresponding electromagnetic anomaly has been shown by Noranda and Mespi to extend for a north-south length of a least 1km.

While no official record exists pertaining to work completed on the Wettlaufer patented claims, F. Scott (P.Eng.) in a report on a visit made to the property stated that:

"This property was originally staked, prospected and brought to patent prior to 1914. There is no official record of work on the property after patent was issued. From examination of the property, evidence of work both in the 1940's and subsequent to 1960 was noted."

He describes the mineralization and evidence of previous work as follows:

"Near the south boundary of the claims two overburden trenches were examined. These trenches are parallel to the regional strike and from 200 to 300 feet apart, in an echelon fashion.

Only a limited amount of bedrock is exposed in the walls of the trenches. This limited amount shows from 5 to 10% disseminated iron sulfide, and a number of pieces of massive sulfide were noted in the dump from the southeast trench.

A sketch of samples taken from these trenches dated 1941, and copied from an earlier sketch and assay list, suggests the trenches to carry a background gold

content of 0.04 oz/ton (1390 parts per billion).

Samples taken from the dump at the time of the writer's visit ranged from less than five to 39 parts per billion. This disparity from the earlier assay report suggest some earlier error in assaying procedures.

The early sketch also showed higher grade "paystreaks" in each of the trenches assaying 0.62 to 0.67 ounces per ton. The limited number of dump samples taken did not corroborate these higher assays. The location of these samples is presently under a couple of feet of water, and would require stripping and digging prior to sampling.

The attitude rocks in the vicinity of the trenches suggest a west or northwest trending structure, at variance with the regional north south strike.

Some of the dump material on both trenches would be classed as massive pyrite, with a sulfur content around 50%."

SURVEY PROCEDURE

MAGNETICS

Theory

The magnetic method is based on measuring alteration in the shape and magnitude of the earth's naturally occurring magnetic field caused by changes in the magnetization of the rocks in the earth.

These changes in magnetization are due mainly to the presence of the magnetic minerals, of which the most common is magnetite, and to a lesser extent ilmenite, pyrrhotite, and some less common minerals.

Magnetic anomalies in the earth's field are caused by

changes in two types of magnetization: induced and remanent (permanent). Induced magnetization is caused by the magnetic field being altered and enhanced by increases in the magnetic susceptibility of the rocks, which is a function of the concentration of the magnetic minerals.

Remanent magnetism is independent of the earth's magnetic field, and is the permanent magnetization of the magnetic particles (magnetite, etc.) in the rock. This is created when these particles orient themselves parallel to the ambient field when cooling. This magnetization may not be in the same direction as the present earth's field, due to changes in the orientation of the rock or the field.

The most common method of measuring the total magnetic field in ground exploration is with a proton precession magnetometer. This device measures the effect of the magnetic field on the magnetic dipole of hydrogen protons. This dipole is caused by the "spin" of the proton, and in a magnetometer these dipoles in a sample of hydrogen-rich fluid are oriented parallel to a magnetic field applied by an electric coil surrounding the sample. After this magnetic field is removed, the dipoles begin to precess (wobble) around their orientation under the influence of the ambient earth's magnetic field. The frequency of this precession is proportional to the earth's magnetic field intensity.

Field Method

The magnetics data were collected with a proton precession magnetometer, which measures the absolute value of the total magnetic field of the earth to an accuracy of ± 1 n Tesla. The magnetometer is carried down the survey line by a single operator, with the sensor mounted on a short pole to remove it from the surface geologic noise. Readings are normally taken at 25 m intervals, and at 12.5 m intervals where the operator observes a high gradient (anomaly).

The readings are corrected for changes in the earth's total field (diurnal drift) by measuring and recording the drift with a stationary (base station) magnetometer. This recorded drift is then applied to the data as a correction.

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:

$$\oint E \cdot dl = - \frac{d\Phi}{dt} \quad (\text{the Faraday Induction Principle})$$

where E is the electric field strength in volts/metre (and so

$\oint E \cdot dl$ 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 400 ft) 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.

INDUCED POLARIZATION/RESISTIVITY

Theory

The induced polarization (IP) and resistivity exploration methods are electrical methods based on measuring the response of the earth to an applied direct current.

The principle is to apply a known electric current to the earth, and measure the electric potential created by it at the survey location. The resistivity, a bulk property of the rock itself, is calculated from the difference between the applied current and the measured potential, corrected for the geometry of the current and potential electrode configuration.

The induced polarization measurement is based on the "over-voltage" effect. Most of the electric current carried by the earth is conducted by the flow of ions in the solutions filling the pore spaces in the rock. At the surface of any metallic particle in the path of current flow, the ionic flow in the solution is changed to an electronic flow in the metal. In the process of the change, an electric charge of trapped ions is built up at the surface of the metal, storing a small voltage. If the voltage increases, the apparent resistance of the rock also increases. If the applied current flow is decreased or stopped, the voltage will create a potential in the same direction to the original applied current.

In time domain induced polarization the applied current is

abruptly stopped, and the reverse potential created by the over-voltage effect is measured over time as it quickly decays.

The definition of chargeability is:

$$M = \frac{V(t = \infty) - V(t = 0)}{V(t = \infty)}$$

where $V(t = 0)$ is the voltage at turnoff, and $V(t = \infty)$ is the late-time voltage. This is usually measured over a certain time period after turn-off as an integral of voltage over time, corrected for the length of the time period, and normalised to the voltage at time 0. It is usually expressed in millivolts per volt (mV/V).

The over-voltage charge takes time to build-up or decay, so that if the applied current is caused to oscillate more and more frequently, the apparent resistance will decrease, as the over-voltage does not have time to build at higher frequencies. This effect is used to measure the IP effect in frequency domain IP surveys, wherein the current is applied at two or more frequencies, and the "percent frequency effect" (PFE) is calculated from the change in resistivities (P) between the different frequencies.

$$PFE = \frac{P(\text{low freq}) - P(\text{high freq})}{P(\text{high freq})} \times 100 \%$$

Although not identical, for most purposes the PFE is approximately equal to the chargeability.

Because the IP effect responds to effects on small metallic particles, it is particularly useful for detecting disseminated metallic minerals. Also because of this, it will respond strongly to the "membrane polarisation" created by the electric charges resident on clay particles or layered or fibrous minerals.

Field Method

The survey was conducted using a pole-dipole array with a dipole length of 100m and array spacings of $n = 1, 2, 3, 4$ dipoles. This array configuration involves having a dipole for the receiver measuring V_p , the potential and a single current transmitter electrode on the grid, separated from the receiver dipole by each 'n' interval in turn. The other current electrode, 'the infinity' is situated 2 kilometers or more from the grid.

For this survey the measurements were taken in the time domain, so the transmitted current was a bipolar on-off square wave with each on or off lasting two seconds. Measurements of resistivity and chargeability were taken.

PERSONNEL AND EQUIPMENT

Robert S. Middleton Exploration Services Inc. provided a four man crew to complete the induced polarization survey, a two man crew to complete the Max Min survey, and one man to complete

the magnetics survey.

The IP equipment used was a Crone Geophysics N-IV receiver and a Phoenix IPT-1 transmitter. The Max Min II horizontal loop electromagnetic system is built by Apex Parametrics. The magnetometers used were an EDA Omni IV field magnetometer and an EDA PPM-400 base station. Specifications for these instruments may be found in Appendix A.

Transportation for the crew was a 4x4 Jimmy and a pick up truck on the roads, and up to 3 snowmobiles on the grid.

The crew were accomodated in Timmins.

SURVEY STATISTICS

A total of 45.25km of survey line were re-chained on the grid, all of which were surveyed with magnetics and electromagnetics.

A total of 48 production days were required to complete the induced polarization survey.

There were 2 days of mobilization and de-mobilization, but no weather days, because the crew lived locally.

There were 3 "down-days" due to problems with wire damage from drillers and getting the truck stuck.

INTERPRETATION

The geophysical surveys on the Turnbull Township property outlined two zones of interest, both near-continuous from south to north across the property. These showed up on the induced polarization data list, and weakly on the Max Min data.

The east zone, from 800E on L38S to the baseline on L24N, includes the sulphides which were drilled on claim 525221 by Galore Gold Resources. On L45 at 400W is the only area which gave a strong IP, Max Min, and Magnetics response. The IP indicated that the zone extends south to 500W on L10S and north to at least L12N (at 100W). The sulphides are not as massive at these limits (as shown by the lack of Max Min response) but still show strong chargeabilities and good widths.

The southern end of the eastern zone (L24S to L38S) shows weaker chargeabilities and less distinct anomalies. There is also a poor conductivity Max Min anomaly sub-parallel to the zone about 600 feet to the east.

The western zone is continuous from L50S at 38+00W to 28+00W on line L20N. (The zone continues to L54S but is broken up). The zone is distinguished by an IP anomaly flanked on the east by a Max Min anomaly over most of its length.

In the northern part of the property the IP anomaly is wide and weak, while in the south it is narrow and stronger, reaching a peak chargeability of 26 mV/V. The Max Min anomaly indicates a

weak conductor.

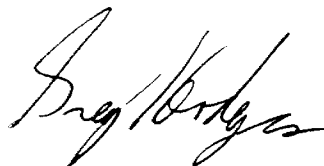
CONCLUSIONS AND RECOMMENDATIONS

Visible gold was reported in the Galore drill logs, and so in spite of poor assay results, further drilling of the anomaly north and south of the Galore work is recommended. Previous geology maps (Middleton 1973) indicate an east-west fault crossing the zone at about 10N. This may provide a good environment for gold mineralization in the sulphide, and would be a good drill target. It is in an area of strong IP response.

The southern part of the east zone should also be investigated by diamond drilling to test the source of the IP anomaly.

The western zone is largely un-tested by drilling, and should be investigated. Diamond drill holes at the south end (L50S) and at about L30S on L34S, the area of highest chargeability are recommended, with further drilling between these holes, or to the north based on favourable results from the first two holes.

Respectfully submitted



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Geophysicist

Final
25919

REFERENCES

Middleton, R.S.
1973

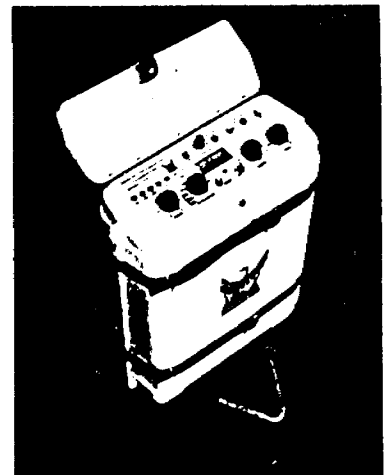
Magnetic Survey of Robb and
Jamieson Townships, District
of Cochrane; Ontario Division
of Mines, GPR1

Scott, F.
1985

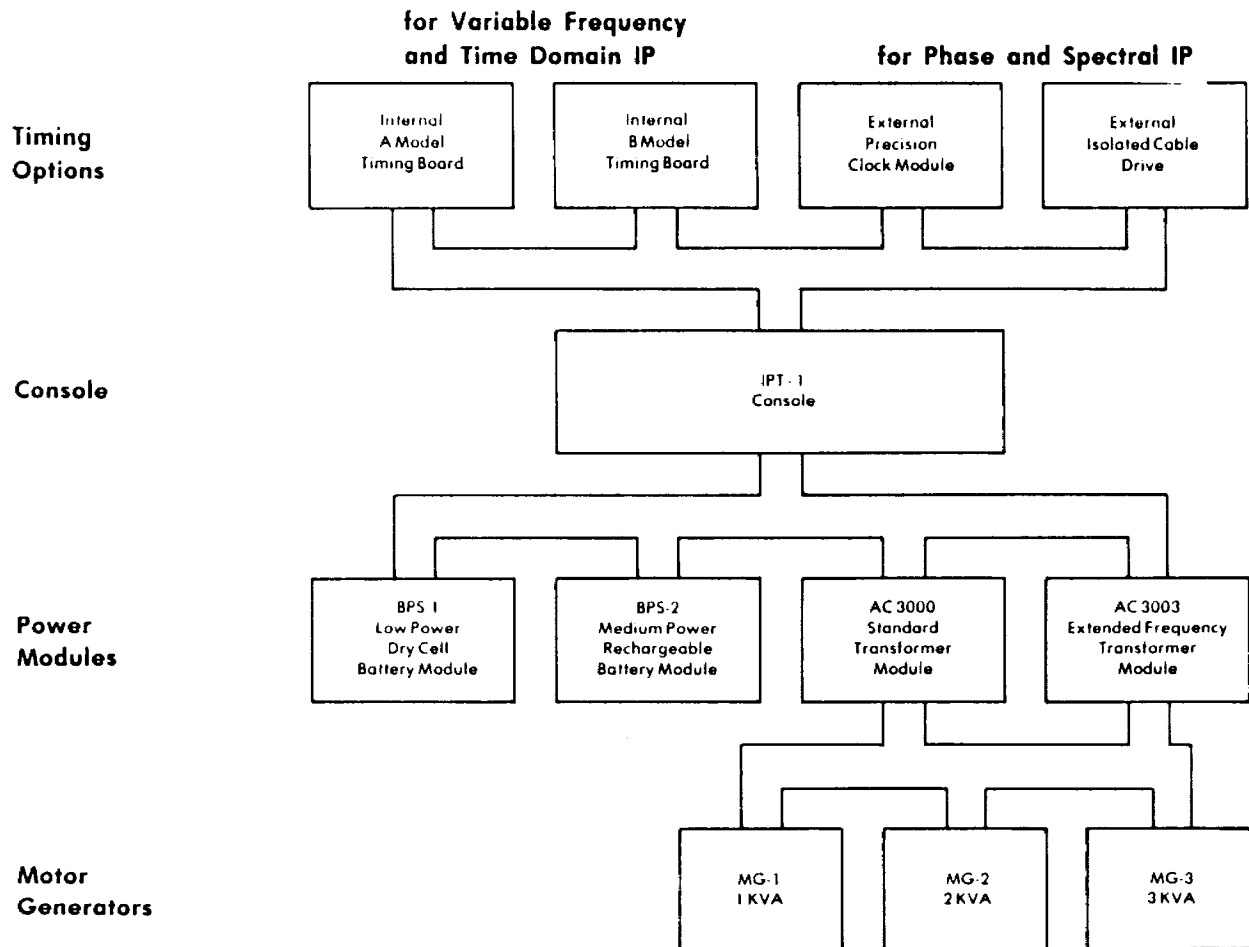
Comparison Report on Shaft
Island Project and Wettlaufer
Patents for Vista Explorations
Ltd.

A P P E N D I X A

- **Reliable:** Backed by twenty years experience in the design and worldwide operation of induced polarization and resistivity equipment
- **Versatile:** Can be used for resistivity, variable frequency IP, time domain IP or phase angle IP measurements
- **Stable:** Excellent current regulation
- **Lightweight, portable**
- **Wide selection of power sources**
- **Low cost**



Transmitter Configurations



PHOENIX GEOPHYSICS LIMITED

Geophysical Consulting and Contracting, Instrument Manufacture, Sale and Lease.

Head Office: 200 Yorkland Blvd., Willowdale, Ontario, Canada M2J 1R5
 Tel.: (416) 493-6350 Telex: 06-986856 Cable: PHEXCO TORONTO

Vancouver Office: 214 - 744 West Hastings Street, Vancouver, B.C., Canada V6C 1A6
 Tel.: (604) 669-1070

Denver Office: 4891 Independence St., Suite 270, Wheat Ridge, Colorado, 80033, U.S.A.
 Tel.: (303) 425-9393 Telex: 450690

Timing Options

INTERNAL TIMING BOARD

There are three available internal timing boards. Both have the same internally mounted crystal oscillator with a stability of 50 PPM over the temperature range -40°C to +60°C.

STANDARD FREQUENCY SERIES

Frequency domain mode
Model A : ±DC, .062, .125, .25, 1, 2 and 4 Hz.
Time domain mode
2 sec +, 2 sec off, 2 sec -, 2 sec off.
Simultaneous transmission mode
.25 and 4.0 Hz standard, other pairs available.

OPTIONAL FREQUENCY SERIES (change link on board)

Frequency domain mode
±DC, .078, .156, .313, 1.25, 2.5, and 5.0 Hz.
Time domain mode
1.6 sec +, 1.6 sec off, 1.6 sec -, 1.6 sec off.
Simultaneous transmission mode
.313 and 5.0 Hz standard, other pairs available.

The main difference between this timing board and the model A board is that the duty cycle is variable. Frequency domain operation is obtained by setting the duty cycle to 100% and selecting any of nine binary frequencies from 1/64 Hz to 4 Hz. Various time domain waveforms may be obtained by choosing any of the nine frequencies and a duty cycle of 25%, 50% or 75%. The standard 2 sec +, 2 sec off, 2 sec -, 2 sec off time domain waveform is chosen by selecting a duty cycle of 50% and a frequency of .125 Hz.

Model B : Time domain: 1, 2, 4, 8 second cycle. Frequency domain: 0.1, 0.3, 1.0, 3.0 Hz.

EXTERNAL HIGH PRECISION CRYSTAL CLOCKS

The IPT-1 may be driven by external high precision crystal clock modules such as the CL-1 and transmitter driver or CL-2 and transmitter driver. These clock modules were designed for use as a time reference between the IPT-1 or IPT-2 transmitters and the Phoenix IPV-2 phase IP receiver. The aging rate of the CL-1 clock module is 5×10^{-10} /day (0.11 mrad/hr at 1 Hz) and the stability of the CL-2 clock module is 10^{-7} /day (2.26 mrad/hr at 1 Hz). These clock modules weigh 7.5 kg., however space is provided for as much as 5 kg of additional internal batteries for operating the CL-1 oven heated clocks all day at -40°C. Clock modules produced by other manufacturers of induced polarization receivers are also compatible with the IPT-1.

EXTERNAL ISOLATED CABLE DRIVE

The isolated cable drive option allows the IPT-1 to be driven by the timing circuitry of the IPV-3 spectral IP receiver. The maximum distance allowed between transmitter and receiver is 500m. For efficient spectral IP field surveying, the distance between the transmitter and receiver is always maintained at one electrode interval. Thus the maximum convenient electrode interval, using the isolated cable drive option, is 500m. The IPV-3 measures the current plus six voltage dipoles (n=1.6) simultaneously.

Console

Ammeter Ranges : 30 mA, 100 mA, 300 mA, 1A, 3A and 10A full scale.

Meter Display : A meter function switch selects the display of current level, regulation status, input frequency, output voltage, control voltage and line voltage. An optional digital display presents all of the above, plus external circuit resistance.

Current Regulation : The change in output current is less than 0.2% for a 10% change in input voltage or electrode impedance.

Protection : The current is turned off automatically if it exceeds 150% full scale or if it is less than 5% full scale.



Internal Power Modules

BPS-1 D CELL BATTERY POWER MODULE

- Output Voltage** : 90V, 180V and 360V.
- Output Current** : 1 mA to 1A maximum.
- Output Power** : Recommended maximum output power is 30 watts. Absolute maximum output power is 100 watts.
- Power Supply** : 8x45V dry cell batteries (Eveready 482, Mallory 202 or equivalent). Normal field operation, with low output power, results in an average battery life expectancy of one month. Operation with the absolute maximum output power results in much shorter battery life.
- Control Supply** : 4 x 6V lantern batteries (Eveready 409, Mallory 908 or equivalent) connected in series/parallel are used to provide the 40 to 70 mA at 12V required for the control circuitry. Average battery life expectancy is six months.
- Operating Temperature** : 0°C to +60°C.

BPS-2 RECHARGEABLE BATTERY POWER MODULE

- Output Voltage** : 50V, 106V, 212V, 425V, and 850V.
- Output Current** : 3 mA to 3A.
- Output Power** : Maximum output power is 300 watts. Above this output power a protective cut-out is engaged to prevent battery and circuit damage.
- Batteries** : 4 x 12V rechargeable gell cell batteries connected in series/parallel have a capacity of 9 A-hr. External batteries (such as car or motorcycle batteries) may also be used. A special cord and plug are provided for this mode of operation. An adaptor cord connects the 12V batteries in parallel with the 12V charging unit.
- Operating Temperature** : -40°C to +60°C. Below 0°C the capacity of the batteries is significantly reduced (by 70% at -40°C).

AC 3000 TRANSFORMER POWER MODULE

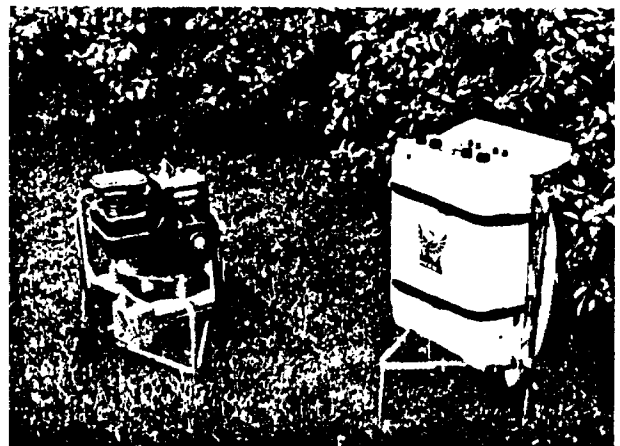
- Output Voltage** : 75V, 150V, 300V, 600V and 1200V.
- Output Current** : 3 mA to 10A.
- Output Power** : Maximum continuous output power is 3KW with MG-3 motor generator, 2KW with MG-2 motor generator and 1KW with MG-1 motor generator.
- Input Power** : Three phase, 400 Hz (350 to 1000 Hz), 60V (50V to 80V) is standard.
Three phase, 400 Hz (350 to 1000 Hz), 120V (100V to 160V) is optional.
- Current Regulation** : Achieved by feedback to the alternator of the motor generator unit.
- Operating Temperature** : -40°C to +60°C.
- Thermal Protection** : Thermostat turns off at 65°C and turns back on at 55°C internal temperature.

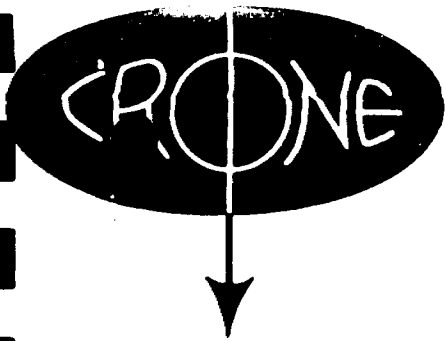
AC 3003 TRANSFORMER POWER MODULE

- Same as AC 3000 except for:
- Output Voltage** : 44V, 87V, 175V, 350V and 700V.
- Frequency Range** : DC to 3000 Hz under external drive (all other power modules have a maximum frequency of 5 Hz).
- (Note: AC 3003 is not intended for extended time domain operation)

General

- Dimensions** : 20 x 40 x 55 cm (9 x 16 x 22 in).
- Weight** : 13 kg (29 lb) with BPS-1.
13 kg (29 lb) with BPS-2.
17 kg (37 lb) with AC-3000.
18 kg (40 lb) with AC-3003.
- Standard Accessories** : Pack frame, manual. At least one of the four possible power modules is required. The transformer power modules in turn require one of the three external 1KVA, 2KVA, 3KVA, motor generators and a connecting cable

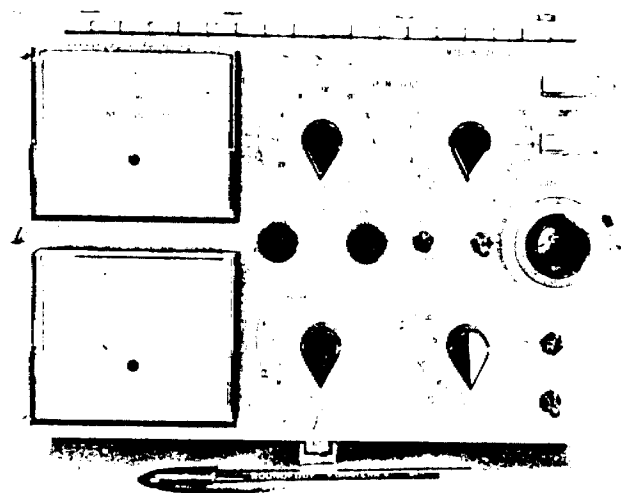




CRONE GEOPHYSICS LIMITED INDUCED POLARIZATION RECEIVER



A Newmont designed pulse type N-IV, designed for simplicity of operation and reliability in the field.

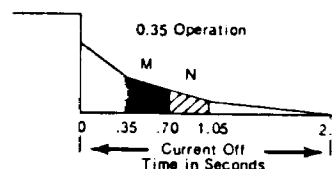
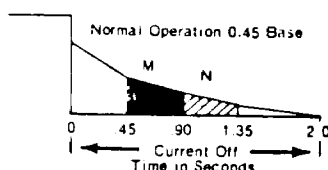


- Instrument Sales, Rental and Repair Services
- Contract Survey Services
- Consulting Services
- Computer Plotting and Processing Services

HEAD OFFICE: 3607 Wolfedale Rd.
MISSISSAUGA, Ontario
CANADA L5C 1V8
PHONE: (416) 270-0096
TELEX: 06-961260

SPECIFICATIONS*

DIMENSIONS:	28 cm x 18 cm x 27 cm (11" x 7" x 10½")
SHIPPING DIMENSIONS:	37 cm x 27 cm x 35 cm (14½" x 10" x 14")
WEIGHT:	4 kg (9 lbs)
SHIPPING WEIGHT:	11.5 kg (25 lbs)
BATTERY POWER SUPPLY:	Standard Throw Away Batteries - 5 of "C" cells, 1.5 volt each, 60MA drain Eveready types E93 or 1035 - 1 of 9 volt transistor battery for S.P. buckout, #216 Battery life—3 to 6 months
PRIMARY VOLTAGE:	"Vp": .0005 to 60 volts, accuracy ±5%
CURRENT CYCLE:	2.0 seconds on—2.0 seconds off current cycle. Off period must be greater than 1.8 seconds
CHARGEABILITY:	M and N readings directly in milliseconds



- BOTH M AND N READINGS ARE AUTOMATICALLY CORRECTED TO the Newmont 33M1 Standard. M and N readings should be the same with a normal polarization decay. Unequal readings indicate the presence of inductive coupling and then the N reading should be used.
- Both M and N readings are taken for 3 current cycles (6 samples) then they are automatically averaged and stored for direct read out.
- Self Potential: Automatic buckout effective when SP less than .6 Vp Manual buckout—0 to 1.0 volts calibrated (*1.0 volts uncalibrated) Fine SP buckout for low signal levels.
- Pot resistance Check: Check of potential contacts on millisecond meter; Green—good contact, Orange—marginal contact (M-N readings are accurate, Vp and resistivity readings have error), Red—nil or unacceptable contact.
- Input Impedance: 300,000 Ohms
- Noise Filters: 30 DB at 50 or 60 Hz (factory set)
 30 DB/Octave above 8 Hz
 6 DB/Octave above 35 Hz
- Automatic Time Lock to ground signal
- Amplifier drift correction by one control
- Temperature Range: -40°C to 50°C (-40°F to 120°F)

*Specifications subject to change without notice

OMNIMAG PPM-350 Total Field Magnetometer

EDA



The PPM-350 is the latest addition to EDA's OMNIMAG*™ series of magnetometers and gradiometers. It is engineered to provide users with the latest state-of-the-art advances in microprocessor technology, including many features that are unique in the field.

Major benefits and features include:

- Significant increase in productivity
- Lowered survey costs
- Automatic diurnal correction
- Programmable grid coordinates
- Highly reproduceable data
- Ergonomic design
- Simplified fieldwork
- Computer-compatible



Specifications

Dynamic Range	18,000 to 93,000 gammas
Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Standard Memory Capacity	1383 data blocks or readings
Absolute Accuracy	± 15 ppm at 23°C, 50 ppm over the operating temperature range
Display Resolution	0.1 gamma
Capture Range	$\pm 25\%$ relative to ambient field strength of last stored value
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from -35°C to $+55^{\circ}\text{C}$
Gradient Tolerance	5,000 gammas per meter
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy
Sensor Cable	Remains flexible in temperature range; includes low strain connector
Operating Environmental Range	-35°C to $+55^{\circ}\text{C}$; 0-100% relative humidity; weather-proof
Power Supply	Non-magnetic rechargeable sealed lead acid battery cartridge or belt; or, Disposable "C" cell battery cartridge or belt
Battery Cartridge Life	2,000 to 5,000 readings, depending upon ambient temperature and rate of readings
Weight and Dimensions	
Instrument Console only	3.4 kg, 238 x 150 x 250 mm
Lead Acid Battery Cartridge	1.9 kg
Sensor	1.2 kg, 56 mm diameter x 200 mm
System Complement	Electronics console; sensor with 3-meter cable; sensor staff; power supply; harness assembly; operation manual.

EDA is a pioneer in the development of advanced geophysical systems and has created many innovations that increase field productivity and lower survey costs.

EDA's OMNIMAG series consists of the PPM-350 Total Field Magnetometer, PPM-400 Base Station Magnetometer, and the PPM-500 Vertical Gradiometer. Contact us *now* for details.

E D A Instruments Inc.
1 Thorncliffe Park Drive
Toronto, Ontario
Canada M4H 1G9
Telex: 06 23222 EDA TOR
Cable: Instruments Toronto
(416) 425-7800

In U.S.A.
E D A Instruments Inc.
5151 Ward Road
Wheat Ridge, Colorado
U.S.A. 80033
Telex: 00 450681 DVR
(303) 422-9112

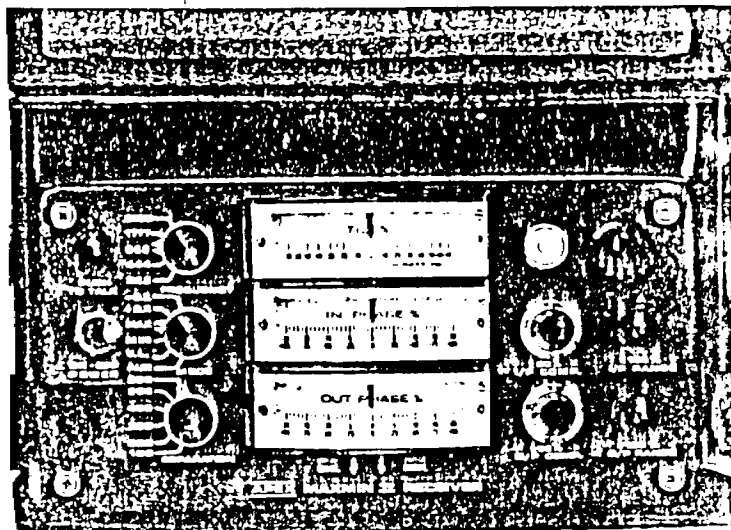
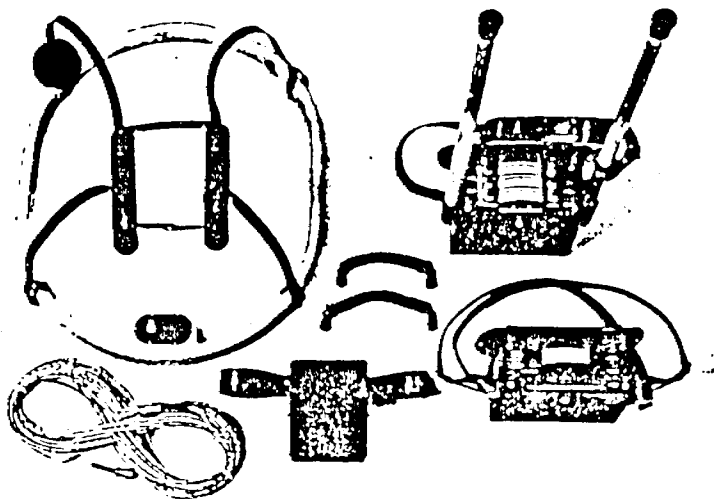
APEX

MAXMIN II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.

NOW ALSO $\pm 4\%$
QUADRATURE
FULL SCALE.





SPECIFICATIONS :

Frequencies: 222, 444, 888, 1777 and 3555 Hz.

Modes of Operation: MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference cable.

MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.

V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.

Coil Separations: 25, 50, 100, 150, 200 & 250m (MMI) or 100, 200, 300, 400, 600 and 800 ft. (MMIF). Coil separations in V.L. mode not restricted to fixed values.

Parameters Read: - In-Phase and Quadrature components of the secondary field in MAX and MIN modes.
- Tilt-angle of the total field in V.L. mode.

Readouts: - Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.
- Tilt angle and null in 90mm edgewise meters in V.L. mode.

Scale Ranges: In-Phase: $\pm 20\%$, $\pm 100\%$ by push-button switch.
Quadrature: $\pm 20\%$, $\pm 100\%$ by push-button switch.
Tilt: $\pm 75\%$ slope.
Null (V.L.): Sensitivity adjustable by separation switch.

Readability: In-Phase and Quadrature: 0.25% to 0.5% ; Tilt: 1% .

Repeatability: $\pm 0.25\%$ to $\pm 1\%$ normally, depending on conditions, frequencies and coil separation used.

Transmitter Output: - 222Hz : 220 Atm²
- 444Hz : 200 Atm²
- 888Hz : 120 Atm²
- 1777Hz : 60 Atm²
- 3555Hz : 30 Atm²

Receiver Batteries: 9V trans. radio type batteries (4) Life: approx. 35hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.

Transmitter Batteries: 12V 6Ah Gel-type rechargeable battery. (Charger supplied)

Reference Cable: Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.

Voice Link: Built-in intercom system for voice communication between receiver and transmitter operator in MAX and MIN modes, via reference cable.

Indicator Lights: Built-in signal and reference warning lights to indicate erroneous readings.

Temperature Range: -40°C to +60°C (-40°F to +140°F)

Receiver Weight: 6kg (13 lbs.)

Transmitter Weight: 13kg (29 lbs.)

Shipping Weight: Typically 60kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification.

APEX PARAMETRICS LIMITED
200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

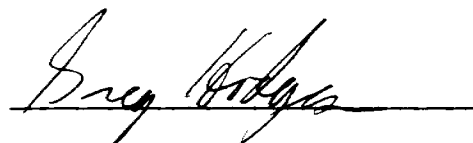
A P P E N D I X B

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 Golden Trio Minerals Ltd. property in Turnbull Township, Province of Ontario and dated February 5, 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 Golden Trio Minerals Ltd., 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 February 5, 1987
Timmins, Ontario



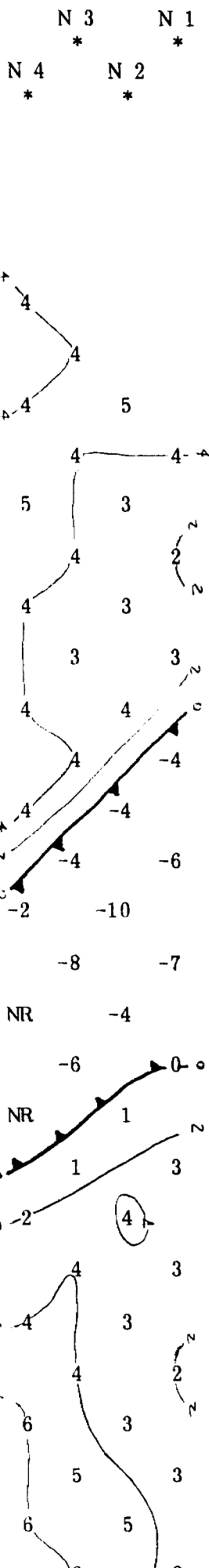
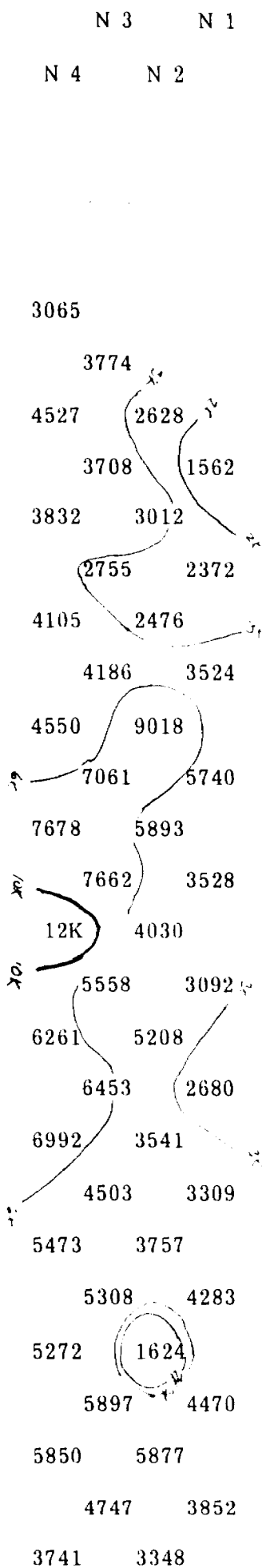
D. Greg Hodges, Geophysicist

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SCALE : 1 inch to 200 feet

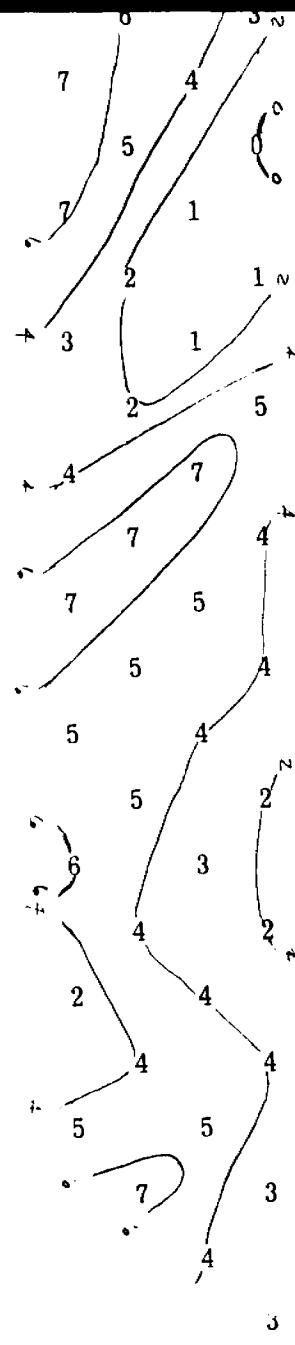
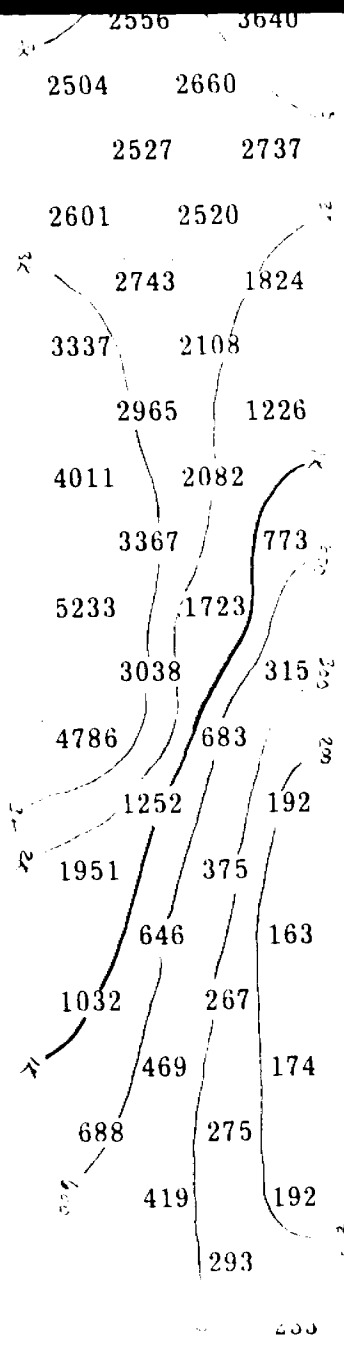
RESISTIVITY
 (ohm - metres)

CHARGEABILITY
 (milliseconds)



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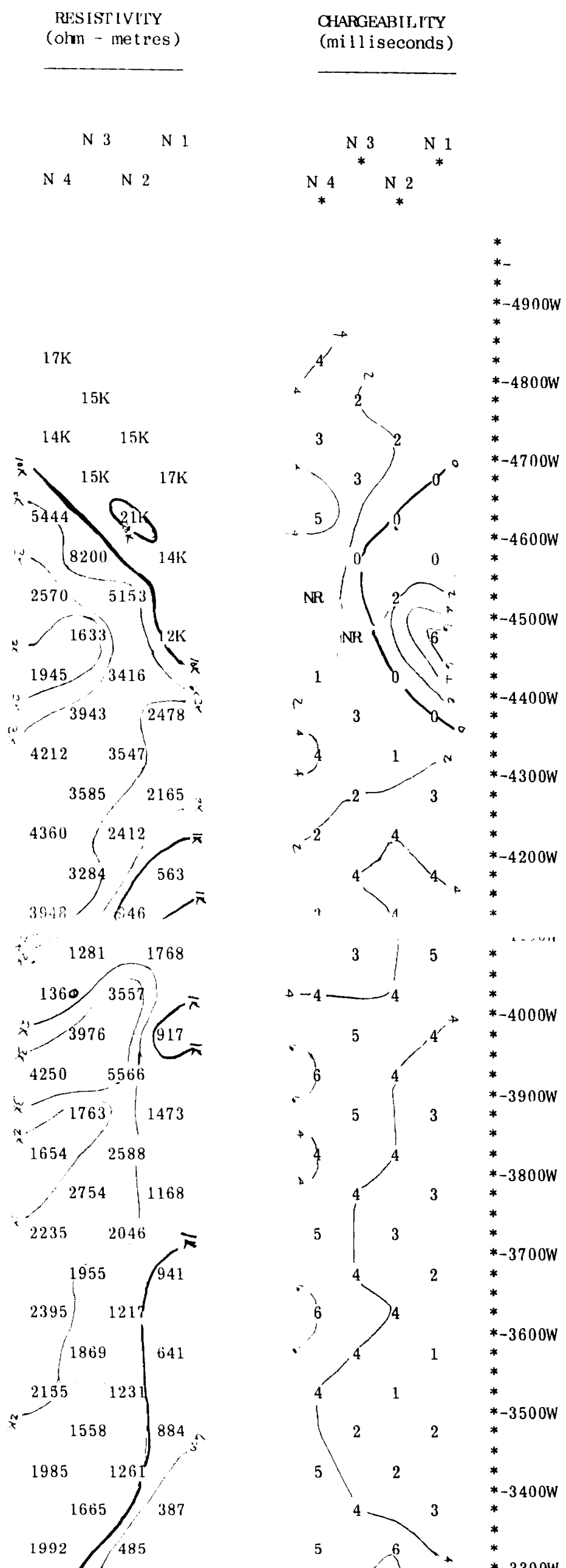
ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1007 136 CEDAR ST. SO.
TIMMINI, ONT. P4N 7W8

L 20N

Greg Bodger

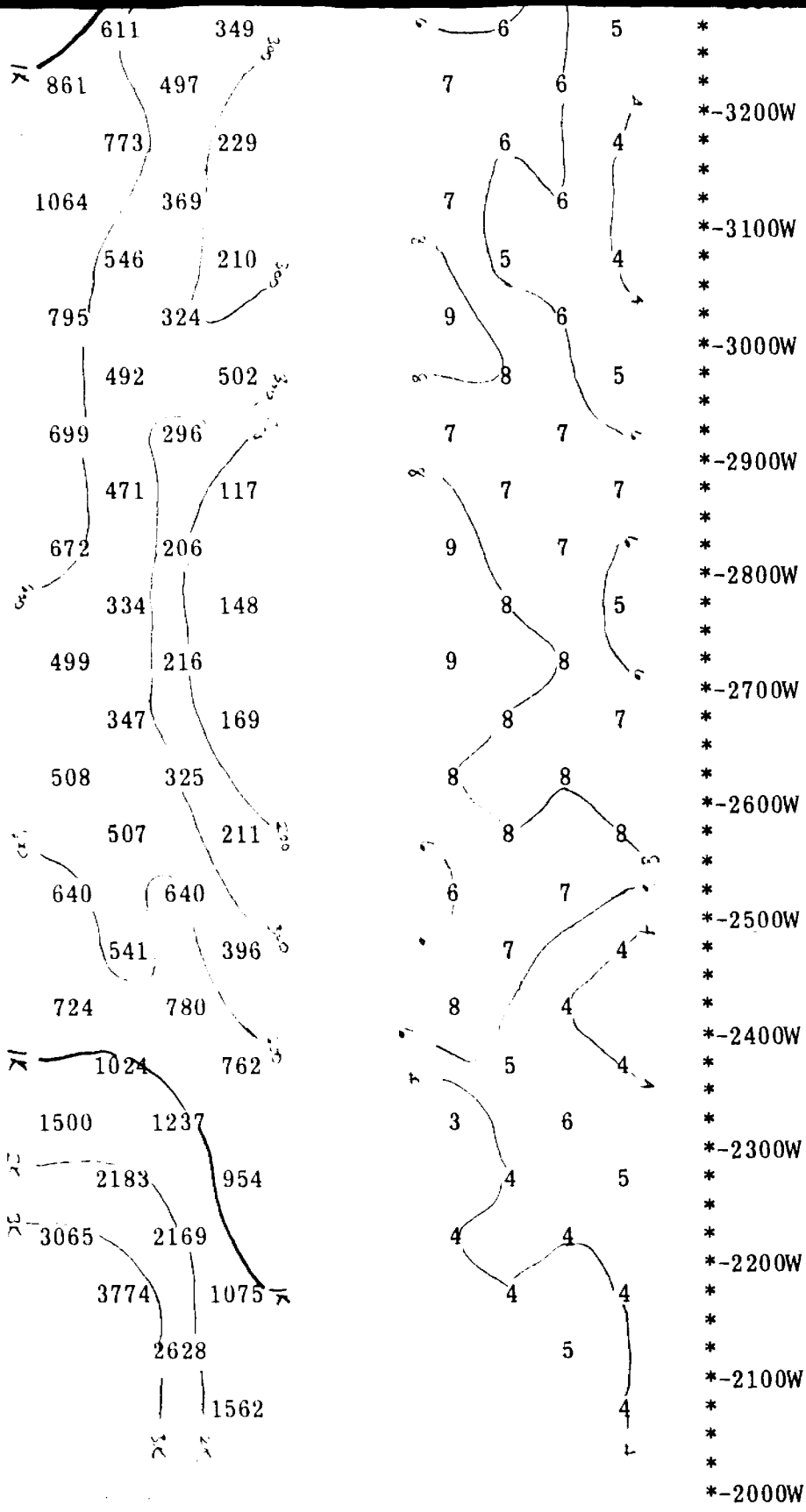
19-200
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SCALE : 1 inch to 200 feet



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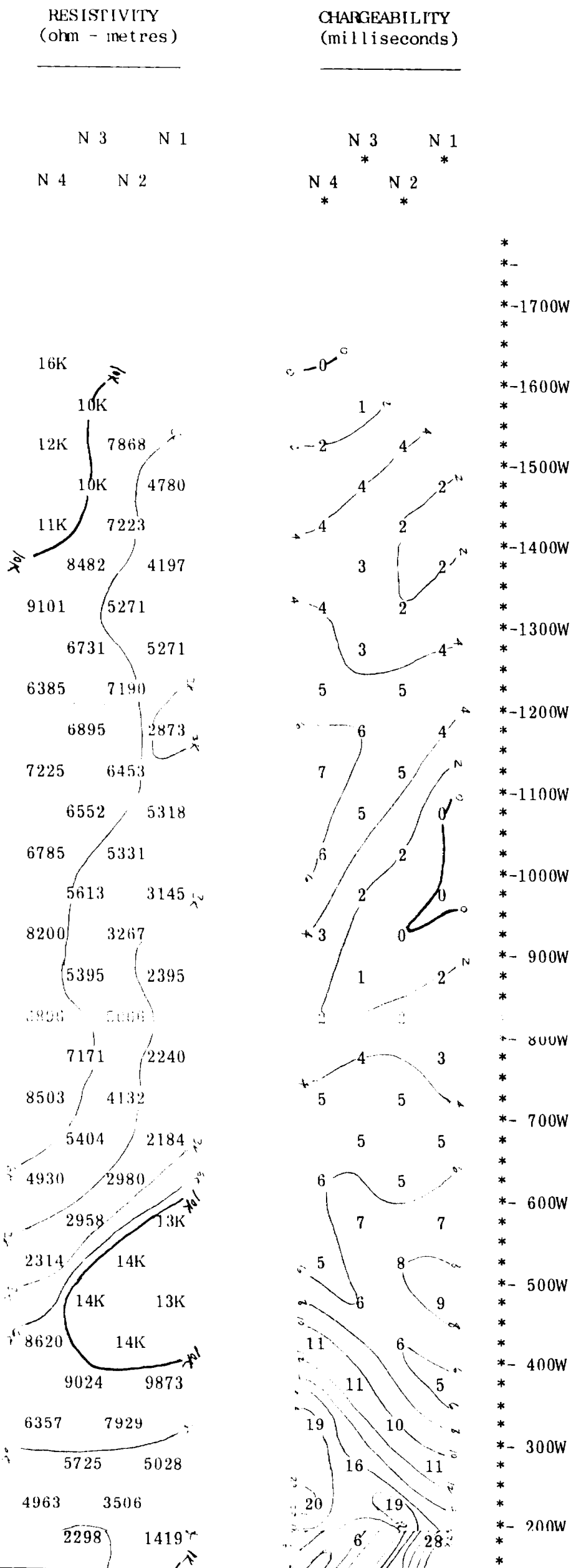
Robert S. Middleton

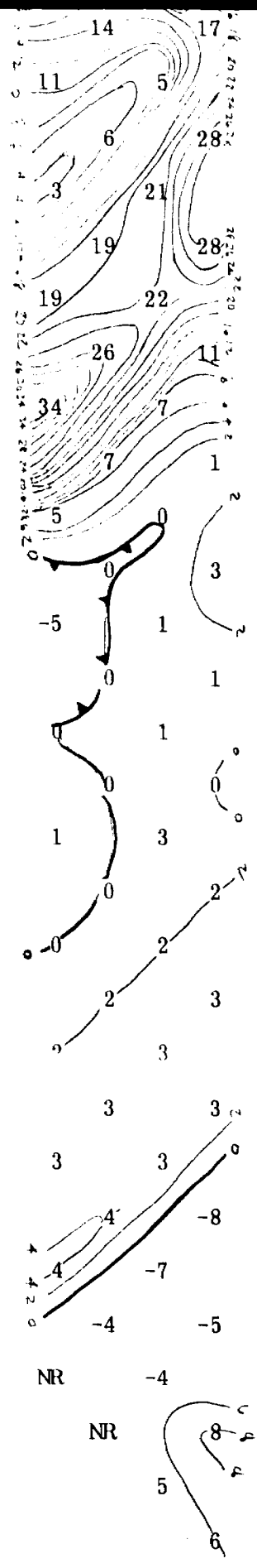
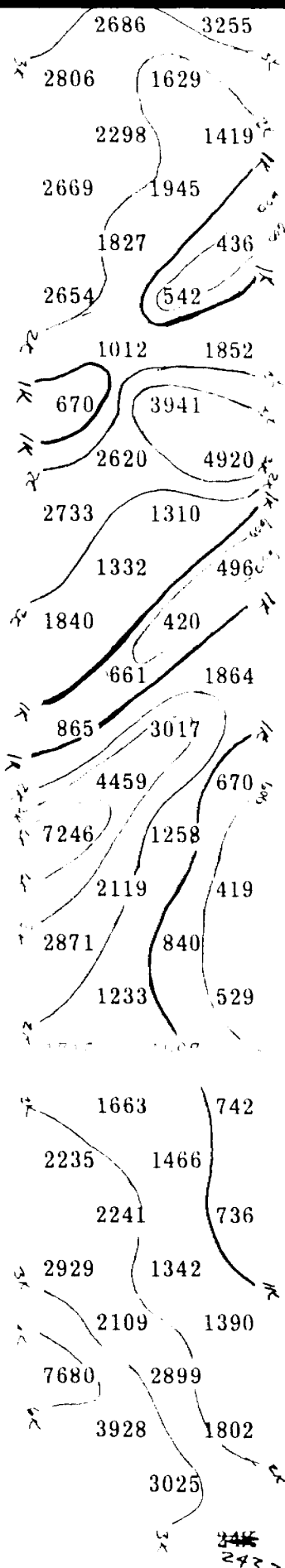
ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

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ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1637 136 CEDAR ST. SO.
TIMMINS, ONT. P4N 7W8

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Greg [Signature]

M-205

L 4+00N (WESTERN)

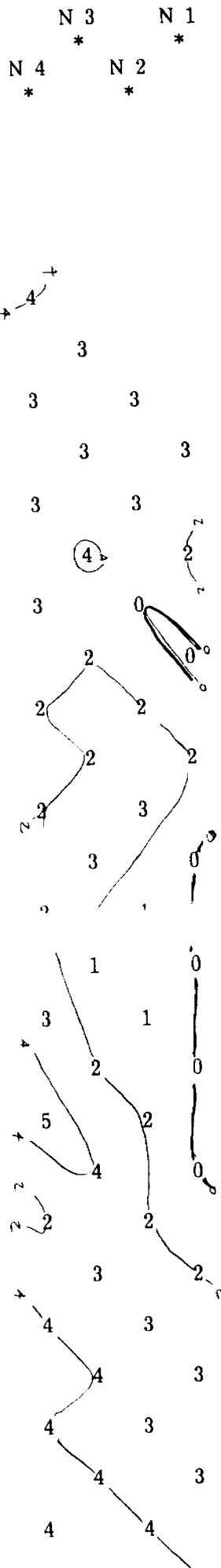
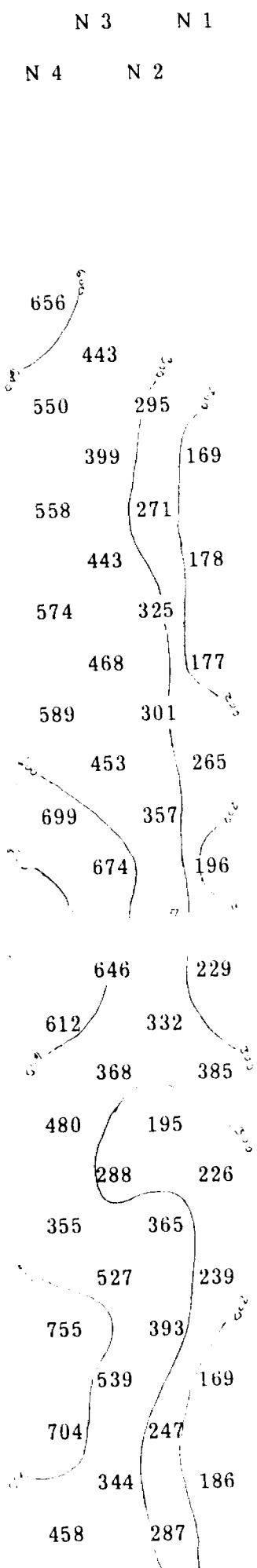
P.D.P N₁-N₄

D.I.M. CROSS P.R.-4

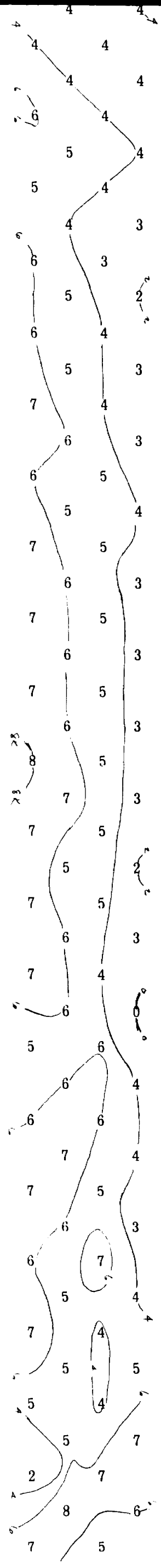
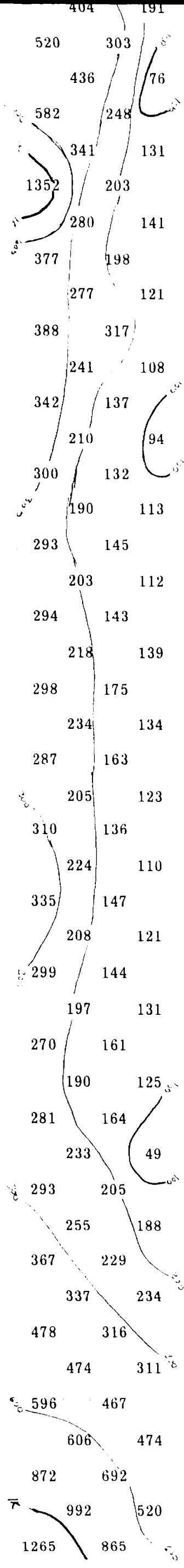
Scale: 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)

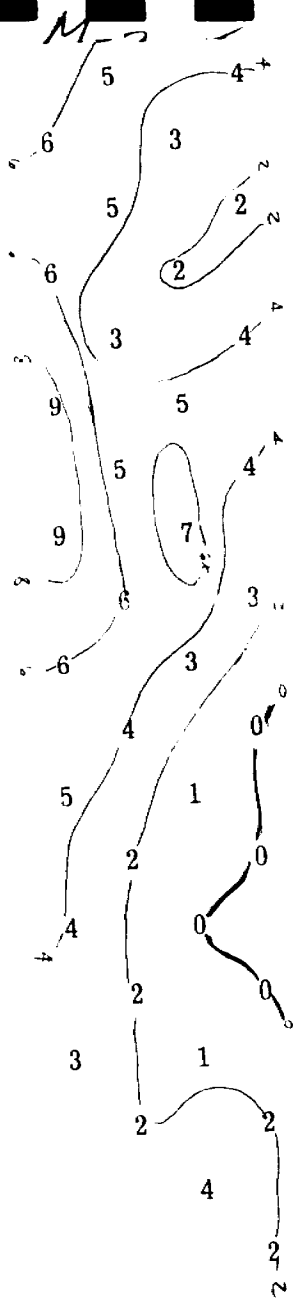
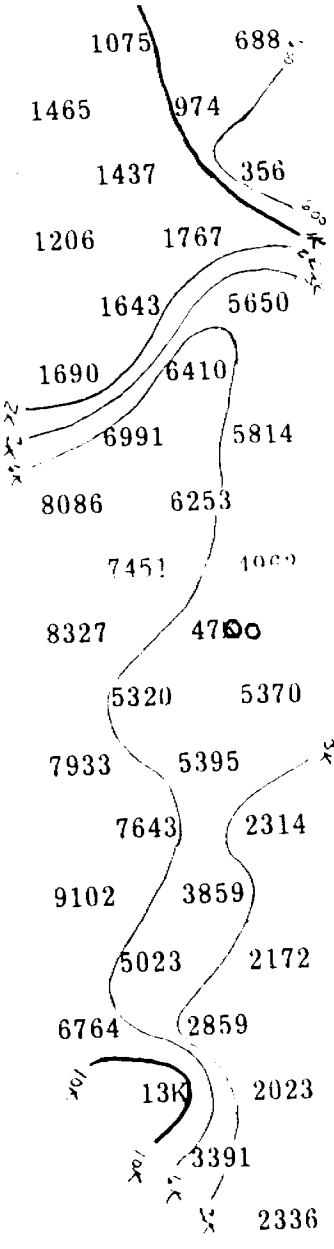


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ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1697 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

L 42

[Handwritten signature]

1-2-55
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 D.J.M. CREW I.P. - IV.

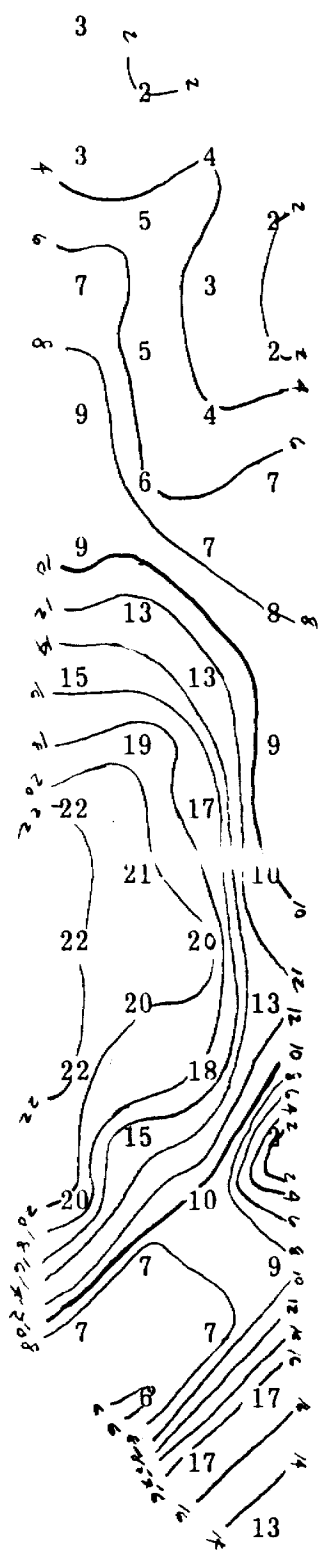
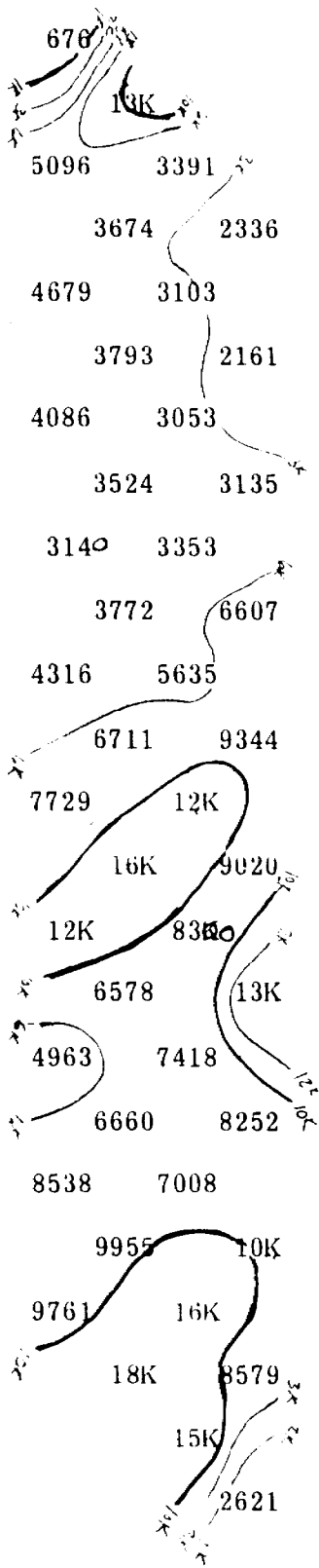
SCALE : 1 inch to 200 feet

RESISTIVITY
 (ohm - metres)

CHARGEABILITY
 (milliseconds)

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N 3 N 1
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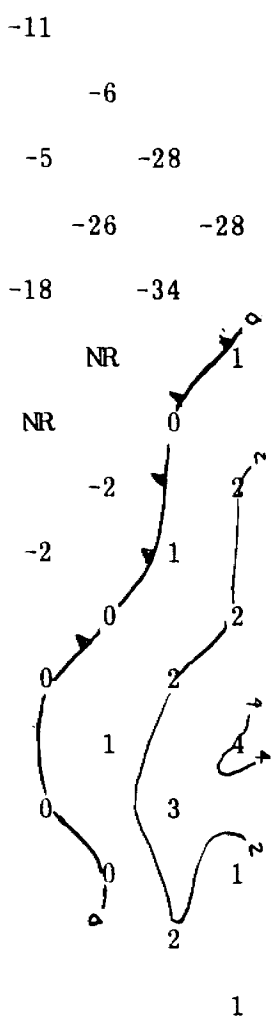
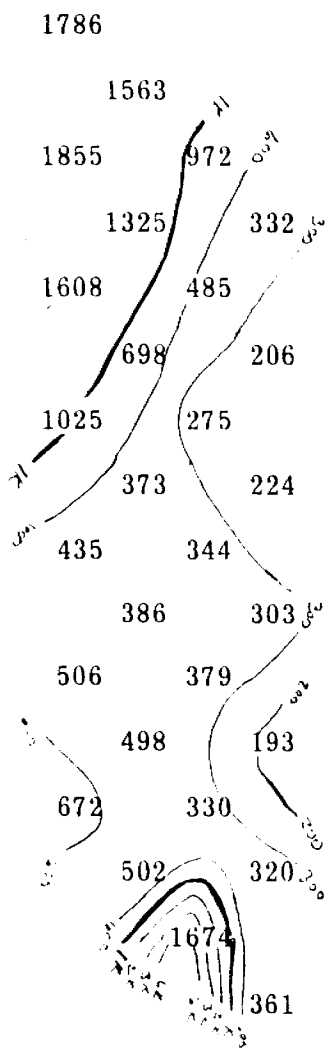


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ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1637 136 CEDAR ST. SO.
TIMMINING, ONT. P4N 7W8

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M-705

L 400s (EASTERN SECTION)

N₁ - N₄ P-D.P.

26/1/87 D.J.M.

CRONE I.P.-7

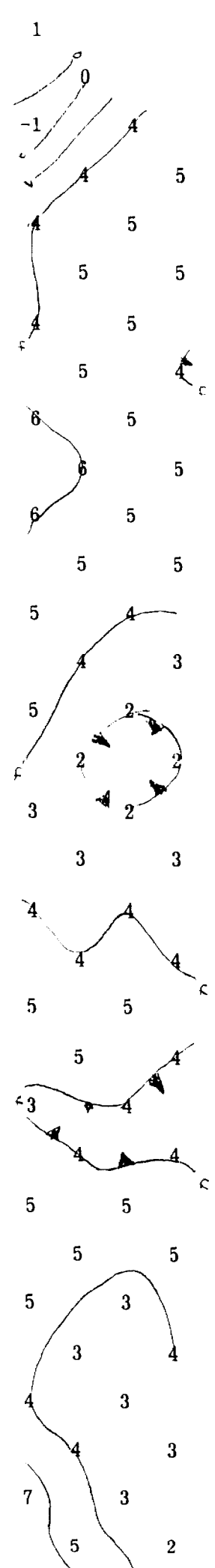
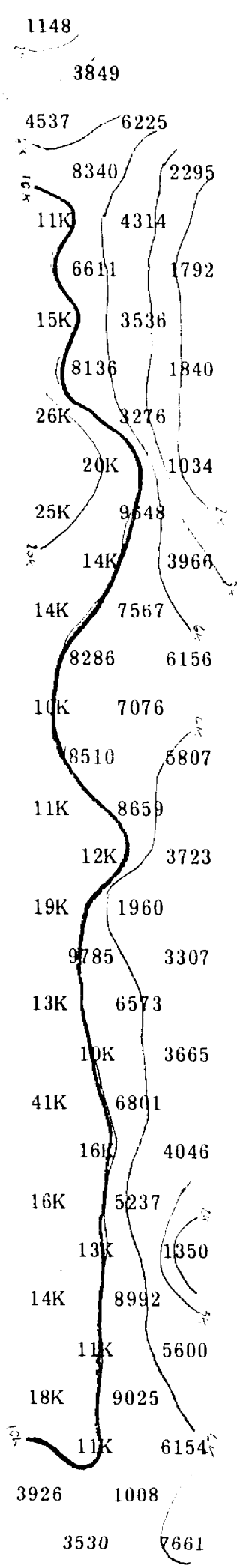
SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)

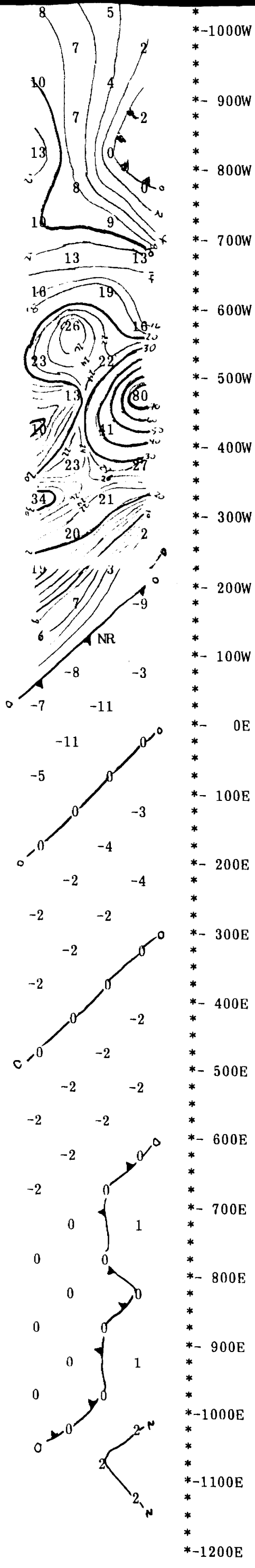
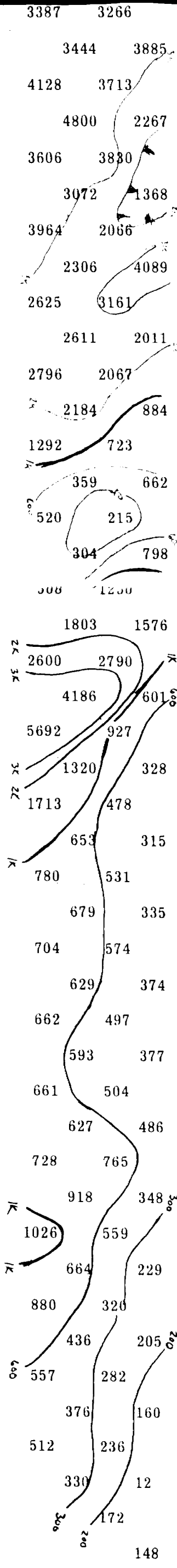
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Survey Direction
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ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

Greg Bodger

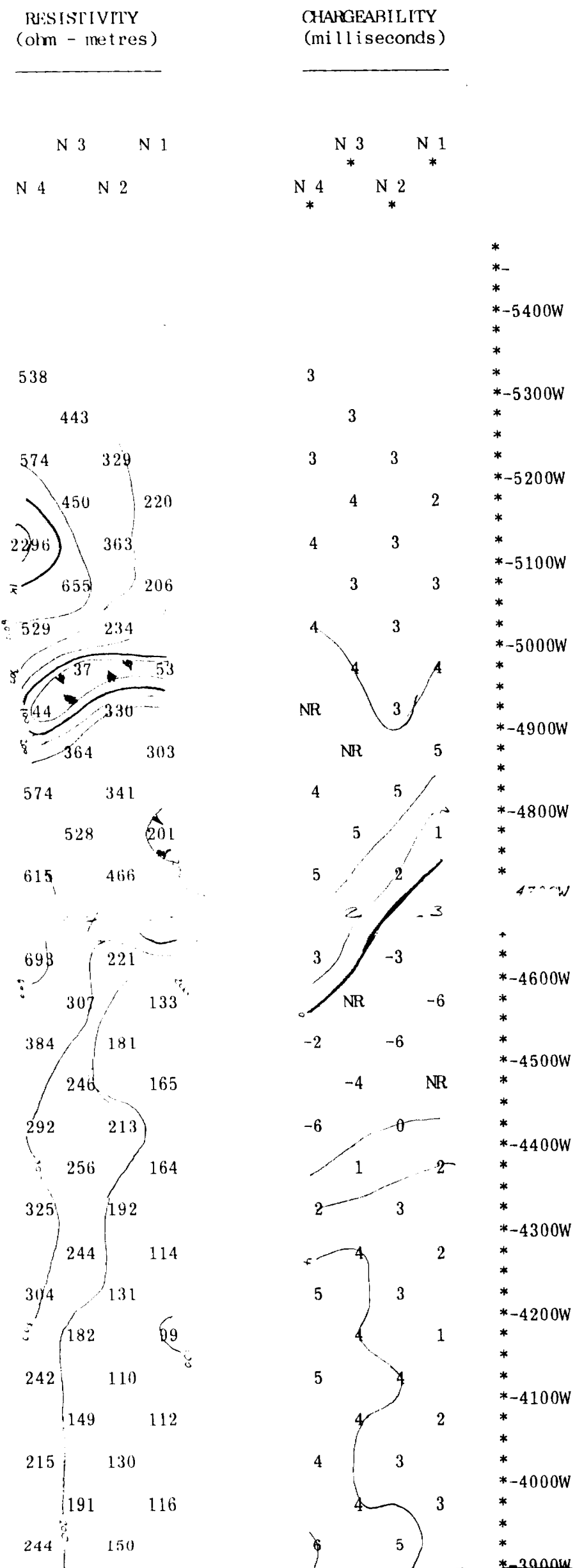
L45

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N₁-N₄ P.D.P.
26/1/87 D.J.M.
CRONE I.P.-4

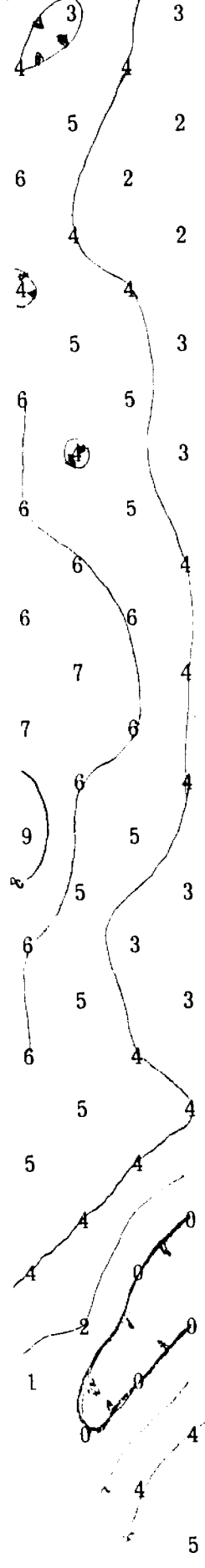
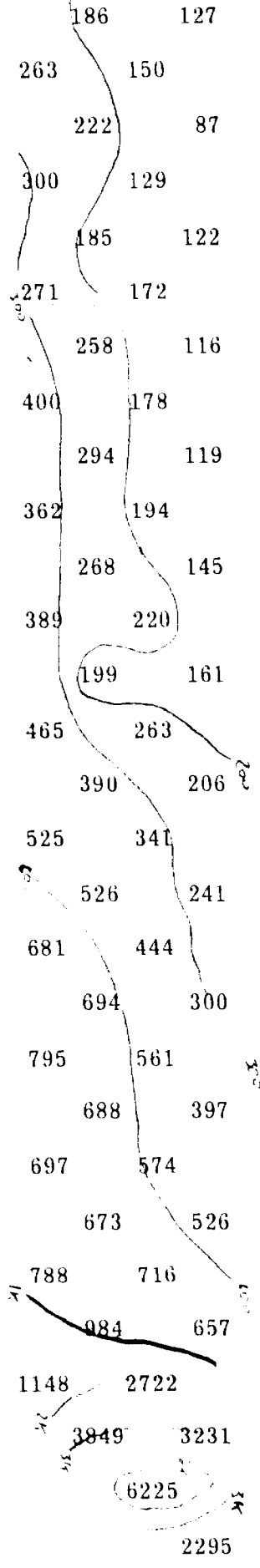
SCALE : 1 inch to 200 feet



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SURVEY
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ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1837 136 CEDAR ST. SO.
TIMMINIS, ONT. P4N 7W8

Robert Middleton

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M-205
 L 105 (EASTERN SECTION)
 N₁-N₄ P-D.P.
 19/1/87 D.J.M.

SCALE: 1 inch to 200 feet

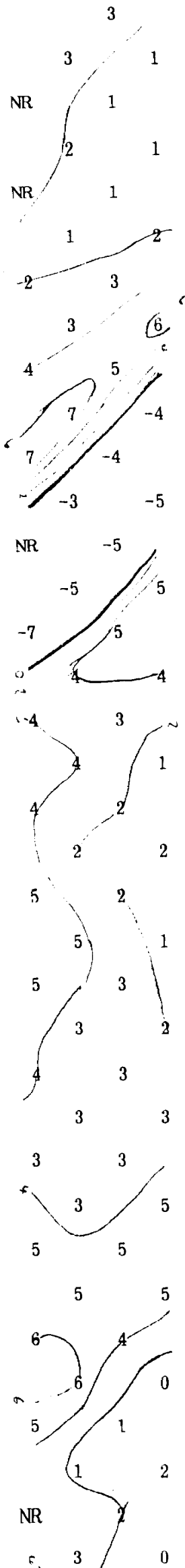
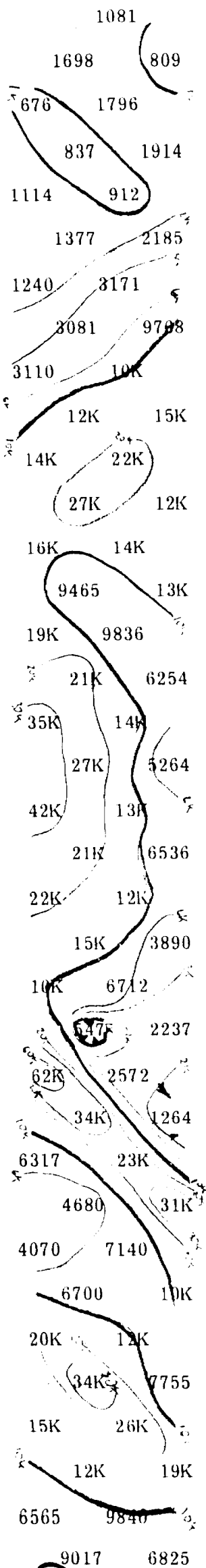
CRONE I.P. 4

RESISTIVITY
 (ohm - metres)

CHARGEABILITY
 (milliseconds)

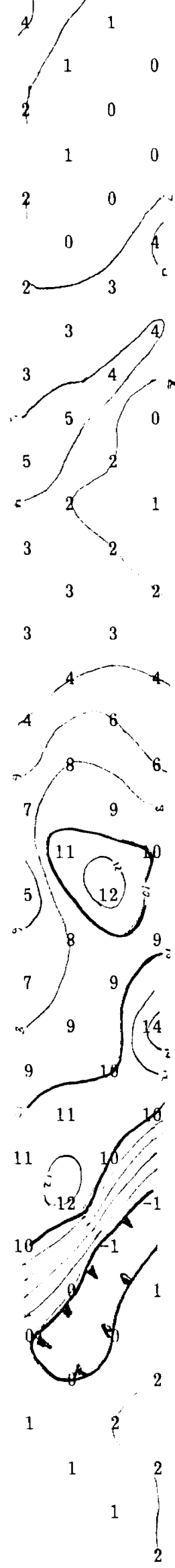
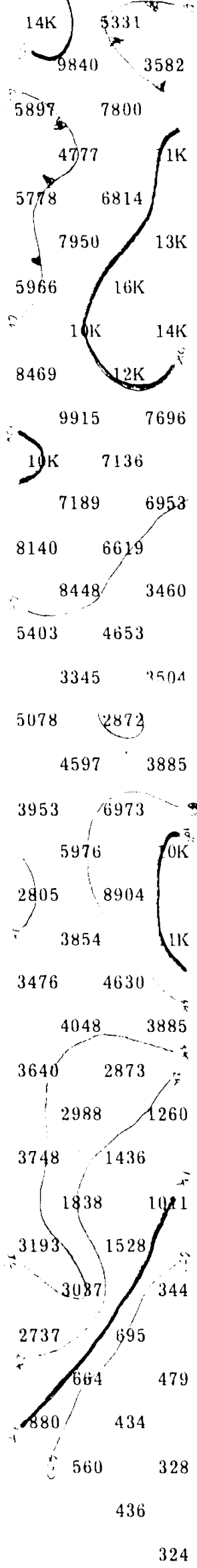
N 3 N 1
 N 4 N 2

N 3 N 1
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 N 4 N 2
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SURVEY
 DIRECTION



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 *-1500W
 *-1400W
 *-1300W
 *-1200W
 *-1100W
 *-1000W
 *-900W
 *-800W
 *-700W
 *-600W
 *-500W
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 *-300W
 *-200W
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 100E
 200E
 300E
 400E
 500E
 600E
 700E

P. 24 23 22 21 C1

ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

Robert S. Middleton

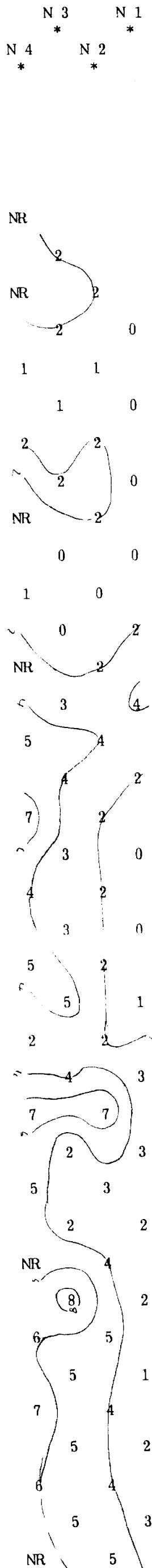
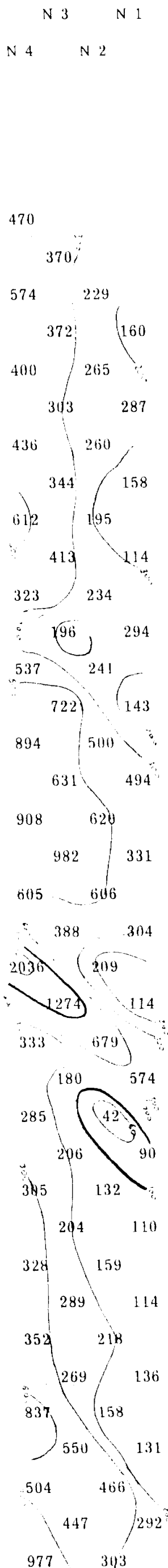
L105

SCALE : 1 inch to 200 feet

CRONE 1-P-4
L 10 (L. CRONE 1-P-4)
1972

RESISTIVITY
(ohm - metres)

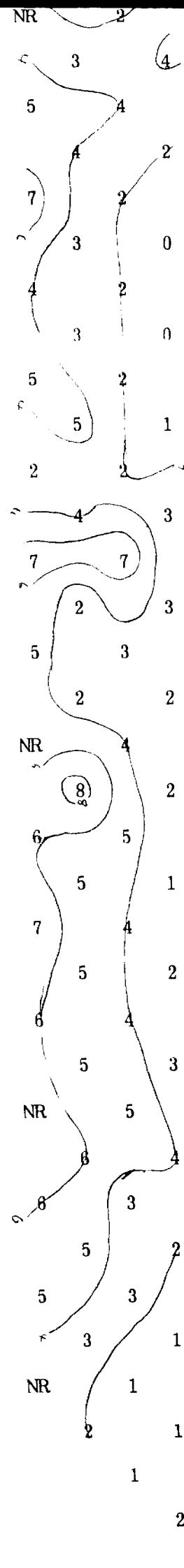
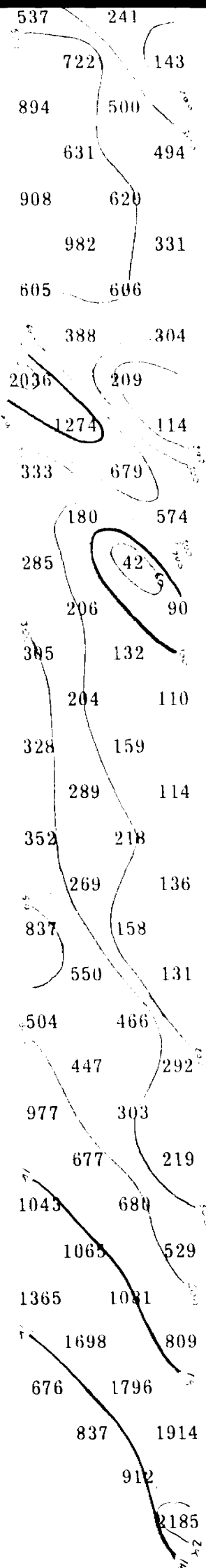
CHARGEABILITY
(milliseconds)



- * -
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SURVEY DIRECTION ←

P5 P4 P3 P2 P1 C1



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SURVEY DIRECTION
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R2
R1
C1

ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1637 130 CEDAR ST. SO.
TIMMINS, ONT. P4N 7W8

L105

Robert Middleton

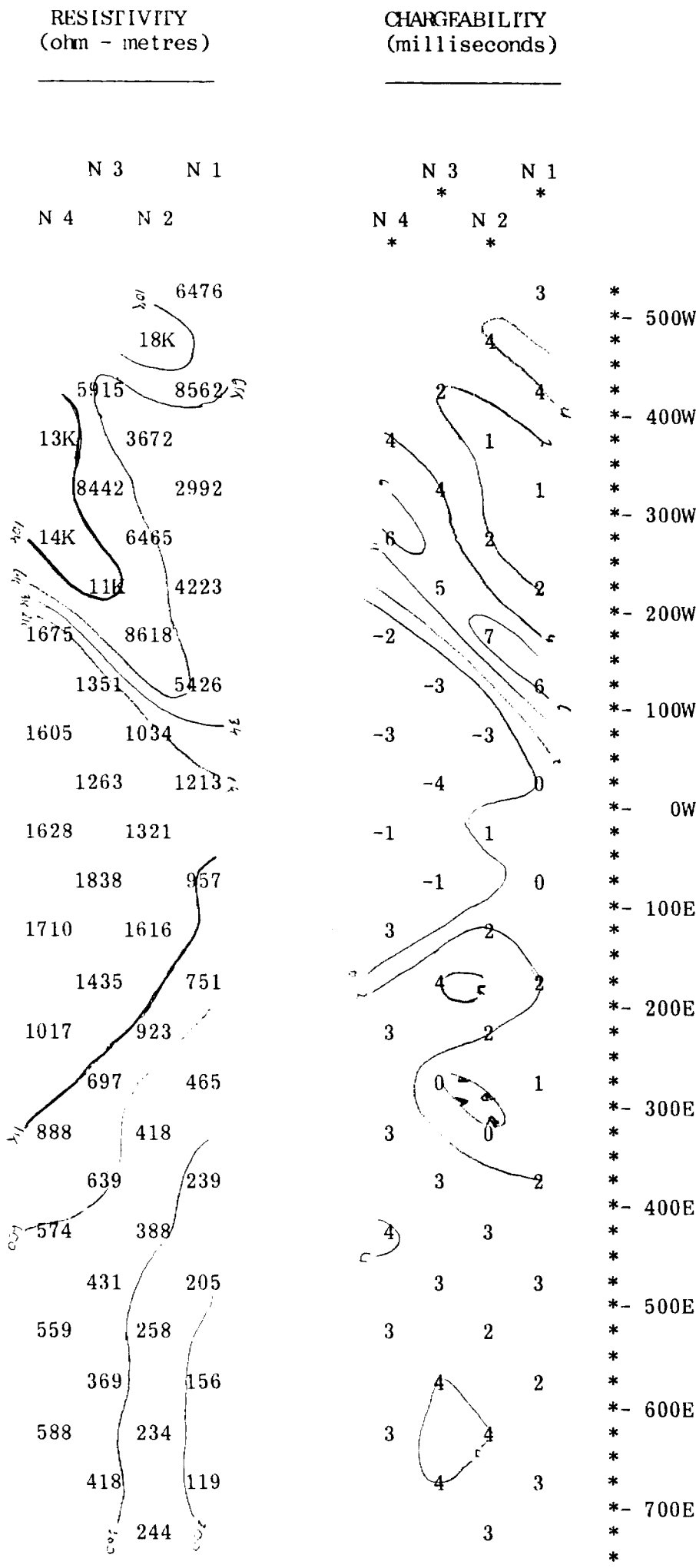
L 185

TURNBULL 11-205

GOLDEN TRIO RESOUR

CRONE N-4

SCALE : 1 inch to 200 feet



ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

L 185

Handwritten signature

Line 185

N₁ - N₄

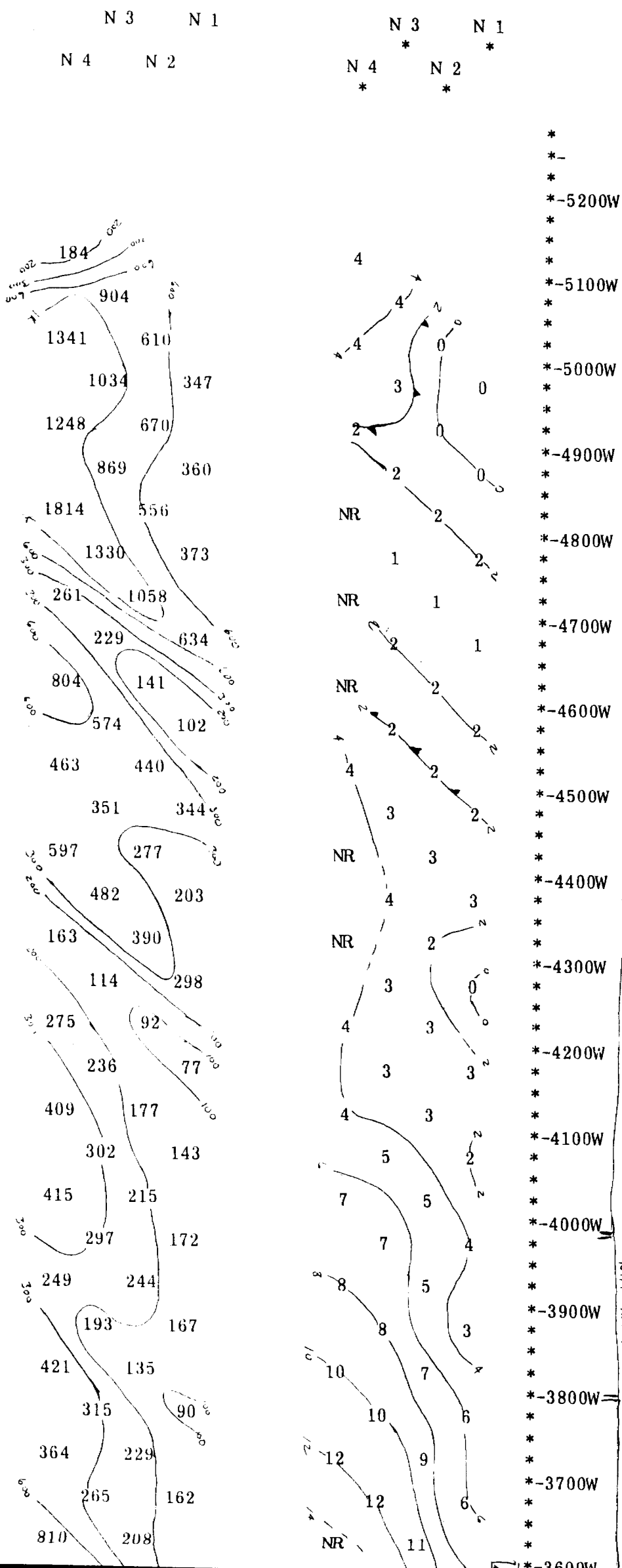
D.S.M. 17/1/87

CRONE I.P. - TV

SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

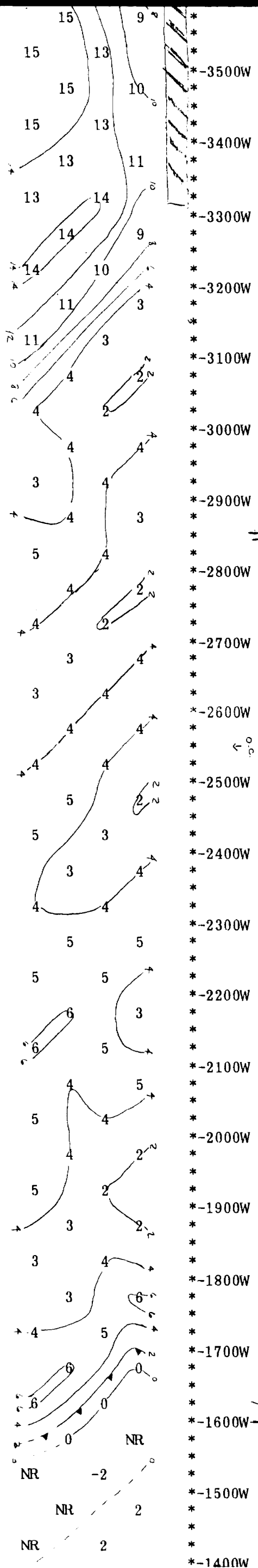
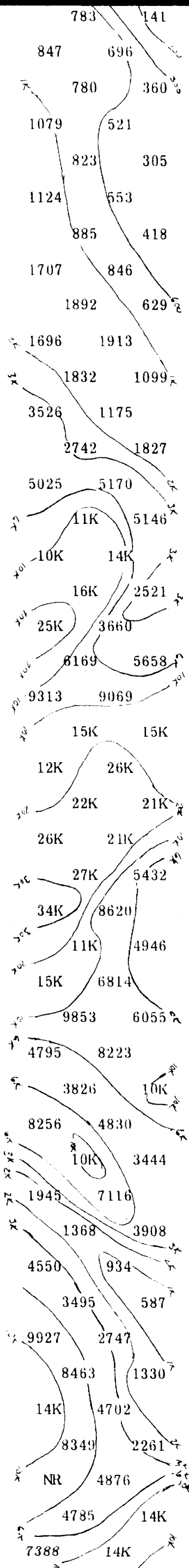
CHARGEABILITY
(milliseconds)



LOW GROUND WITH ALBERS

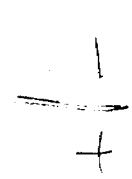
N-S DRAINAGE WITH ALBERS

SURVEY DIRECTION ↓



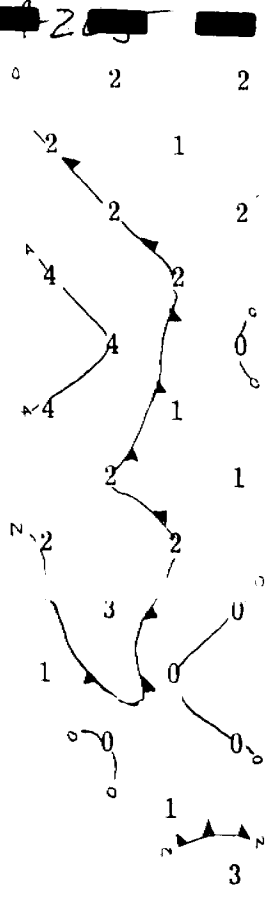
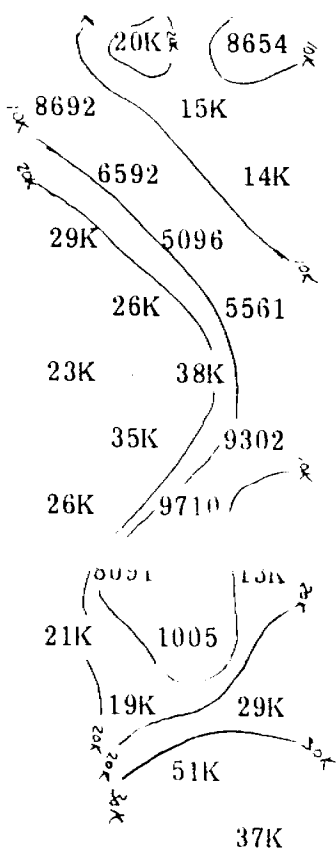
LOWER WITH AREAS
 ROLLING HILLS WITH ALTERING TILL? AND O.C.
 H.I.

75 P4 P3 P2 P1 C.



O.C.

-3500W
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OTHER GEOL. WITH SOME O.C.

O.C.

ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

Robert S. Middleton

L185

PROPERTY
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L 205

SCALE : 1 inch to 200 feet

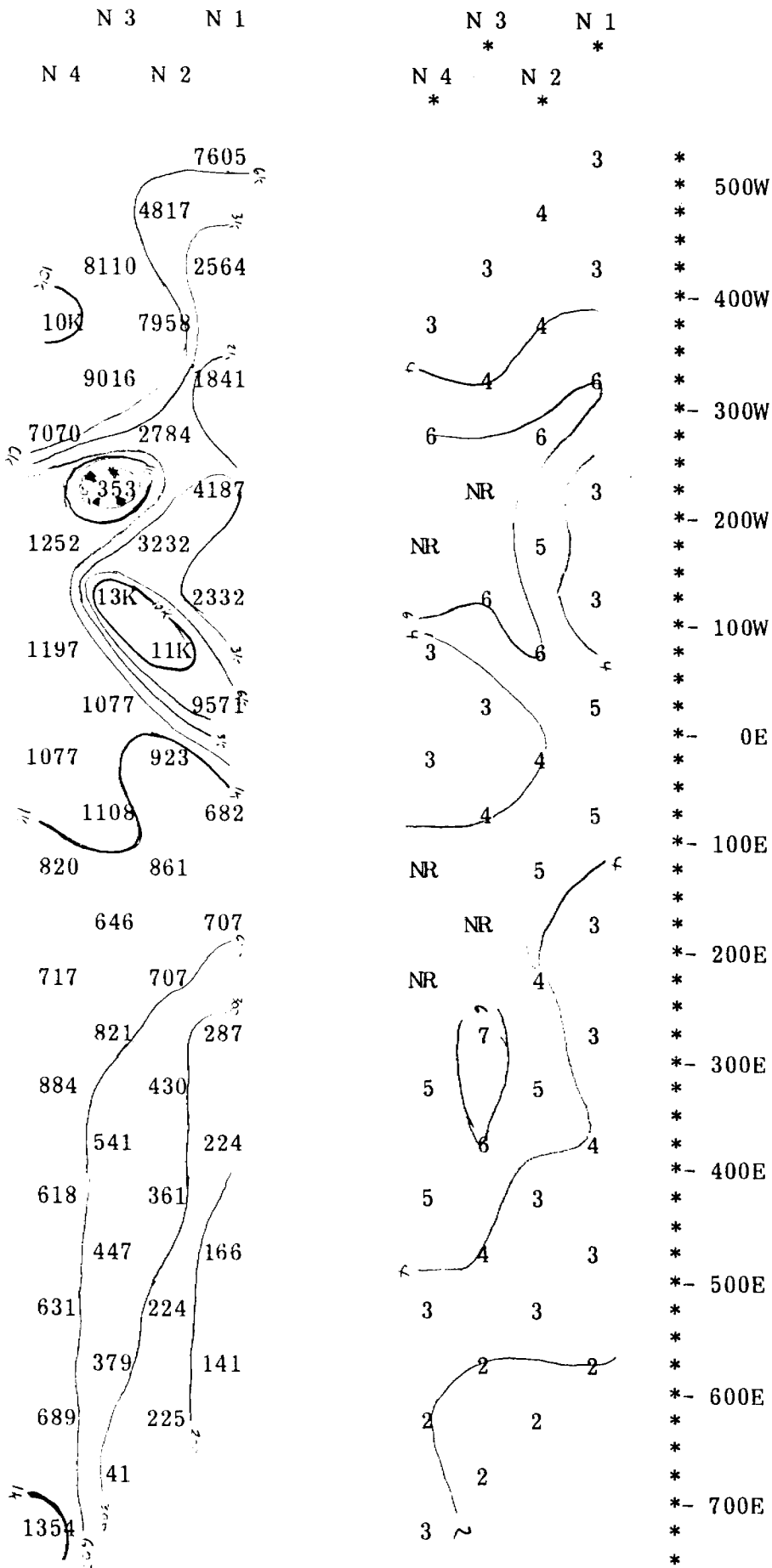
TURNBULL M-205

GOLDEN TRIO RESOURCES

CRONE N-4

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1637 136 CEDAR ST. 80.
TIMMINS, ONT. P4N 7W8

L 205

Big Boy

L 225

SCALE : 1 inch to 200 feet

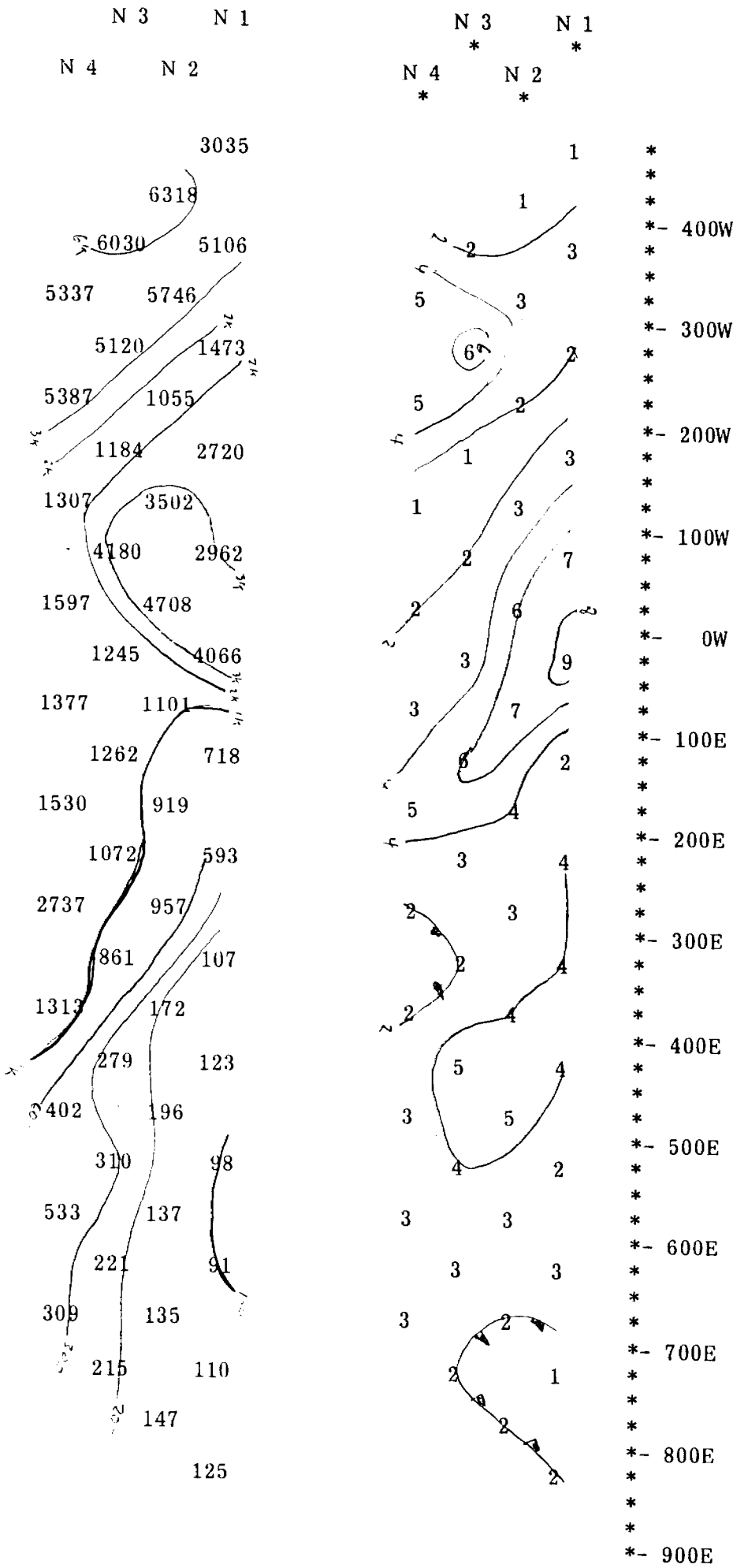
TURNBULL M-205

GOLDEN TRIO RESOURCES

CRONE N-4

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINIS, ONT. P4N 7W8

Eng. Lodge

L 225

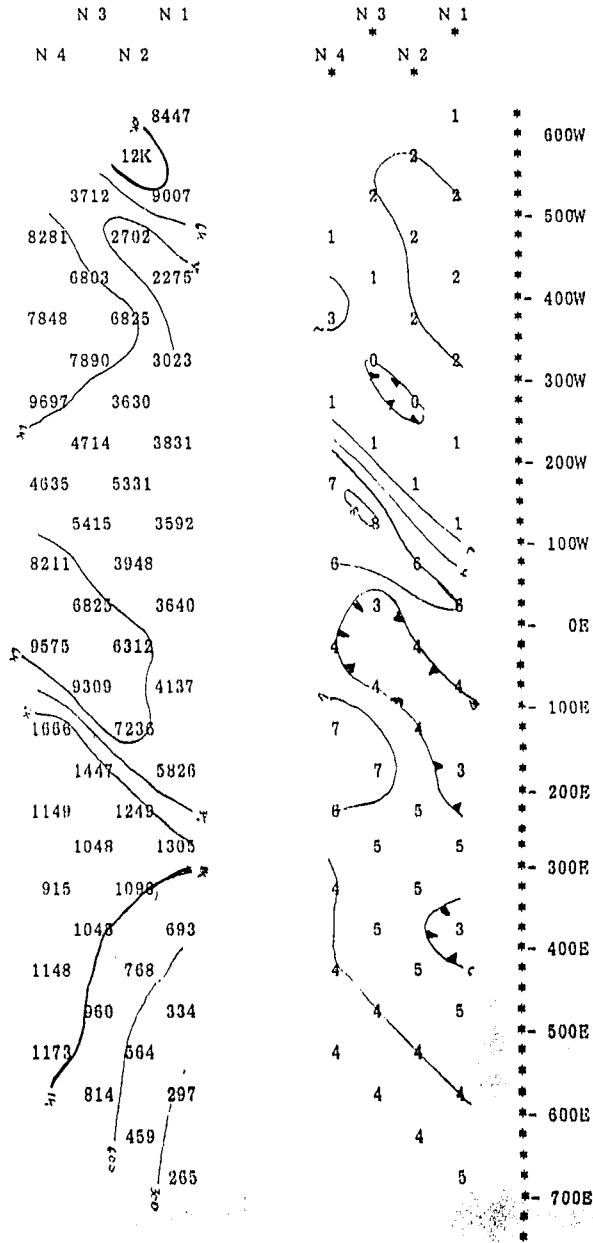
TUNNSVILLE M-205 GOLDEN TRIO RESOURCES

CROSS N-4

SCALE: 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)

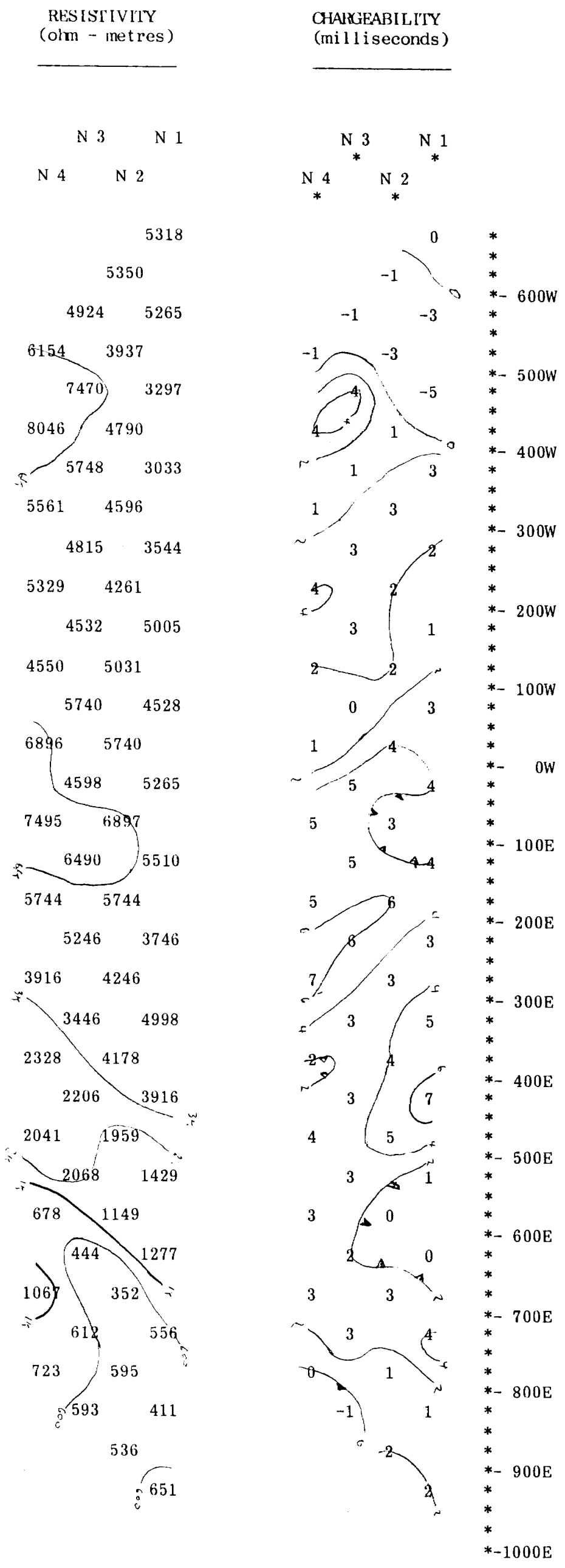


ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1827 136 CEDAR ST. S.W.
TUNNSVILLE, GNT. PAN 7708

L 245

Big Boy

Cross N-4

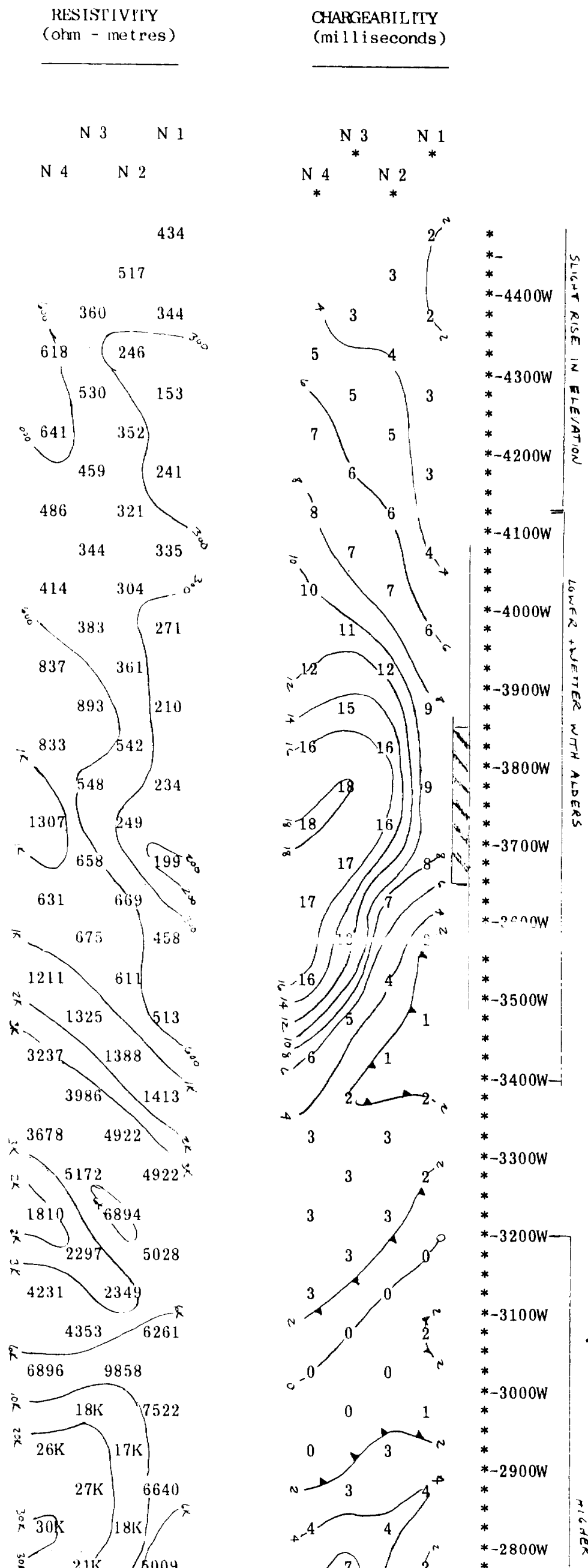


ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1637 136 CEDAR ST. 80.
TIMMINS, ONT. P4N 7W8

Bryce Bodger

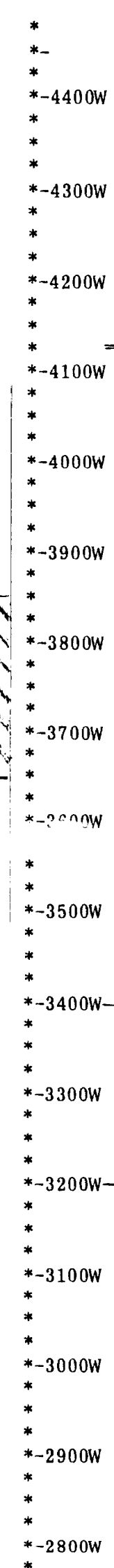
M-205
L 265
N1-N4
D.J.M. 15/1/87
CRONE IP-IV

SCALE : 1 inch to 200 feet



SLIGHT RISE IN ELEVATION

LOWER + BETTER WITH ALBERS



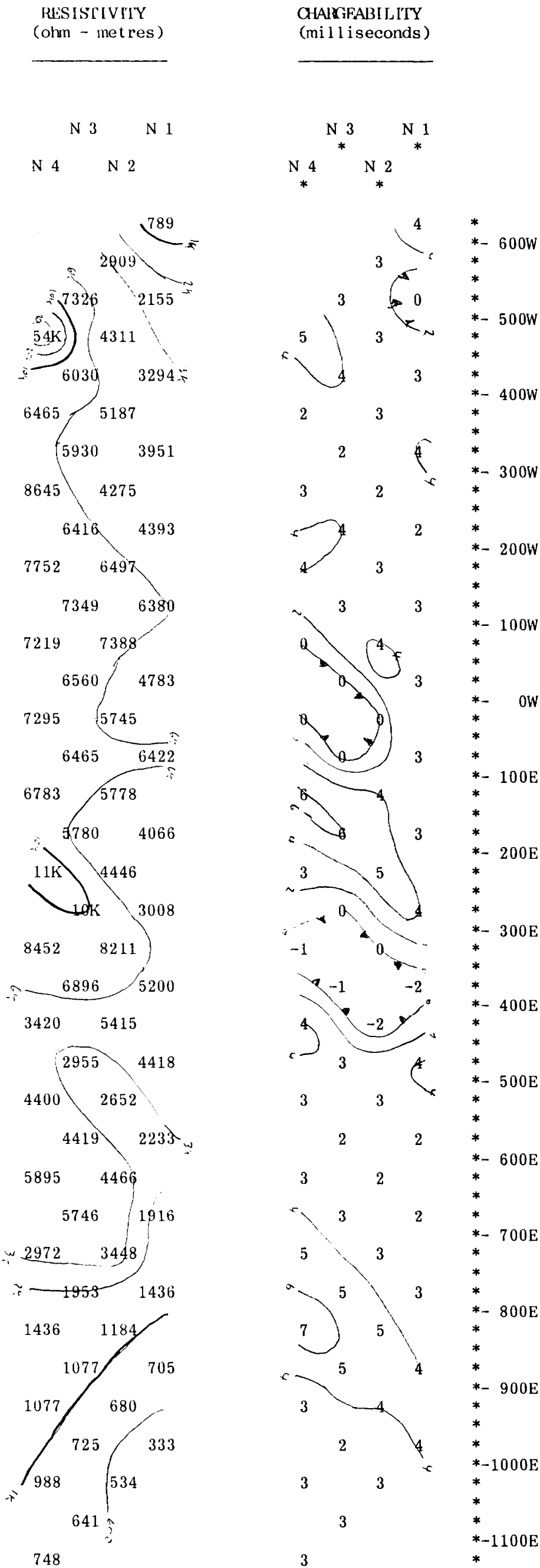
SURVEY ← W
DIRECTION
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TURNBULL M-205

GOLDEN TRAIL RESOURCES

SCALE : 1 inch to 200 feet

CRONE N-4



ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINIS, ONT. P4N 7W8

Greg Boddy

L285

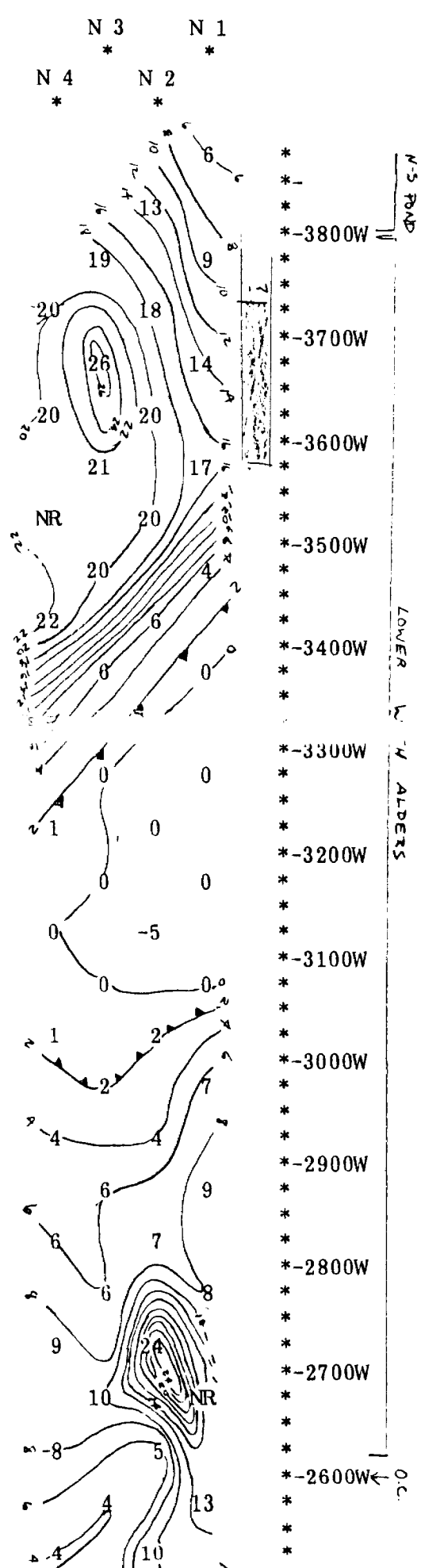
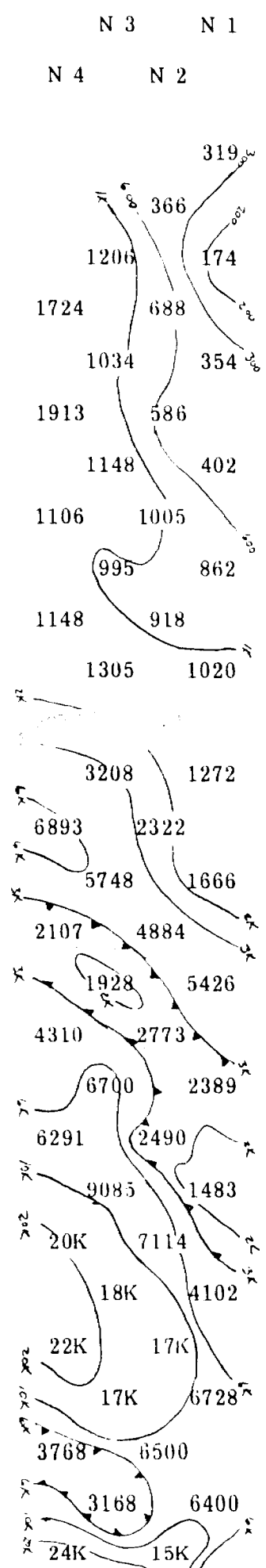
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DJM 11/1/87
CRONE I.P.-IV

SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

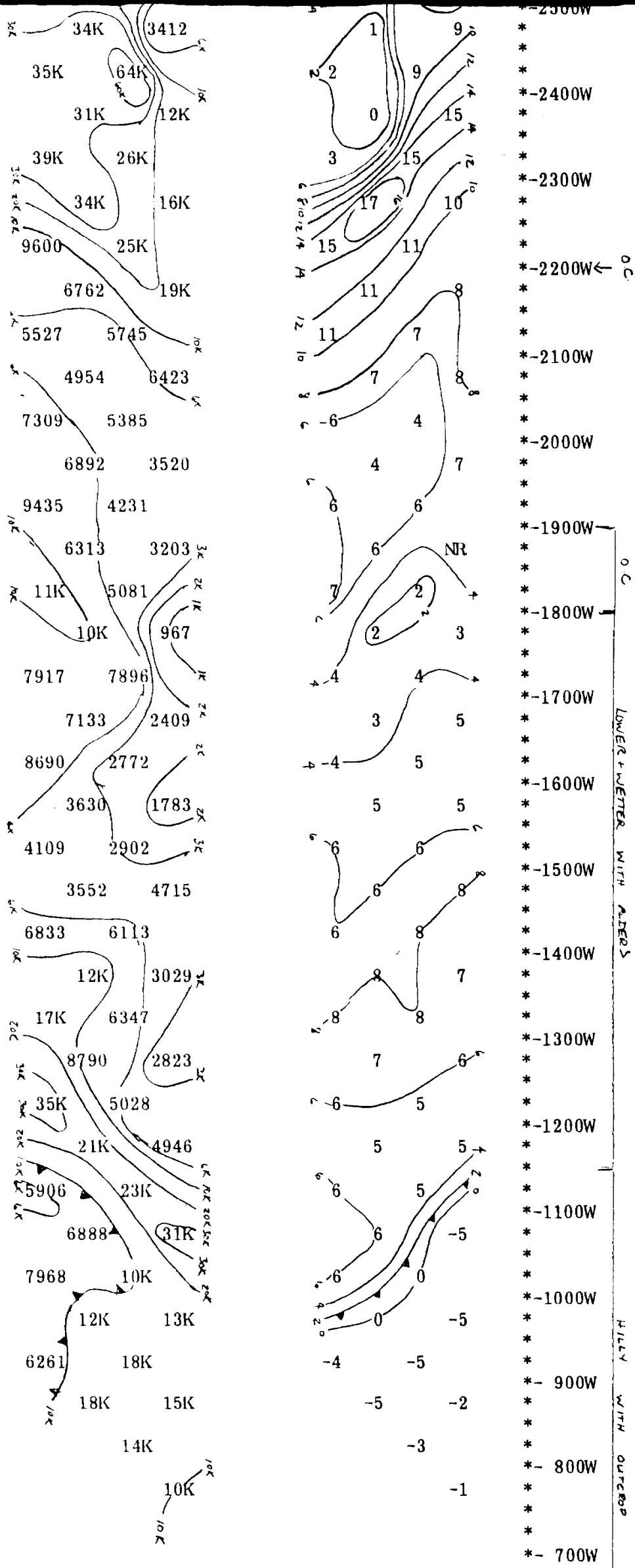
CHARGEABILITY
(milliseconds)



N-S ROAD

LOWER W. ALBERS

SURVEY
DIRECTION
← W



ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINIS, ONT. P4N 7W8

Greg Bodger

L 305

TURNBULL

L 3000 S

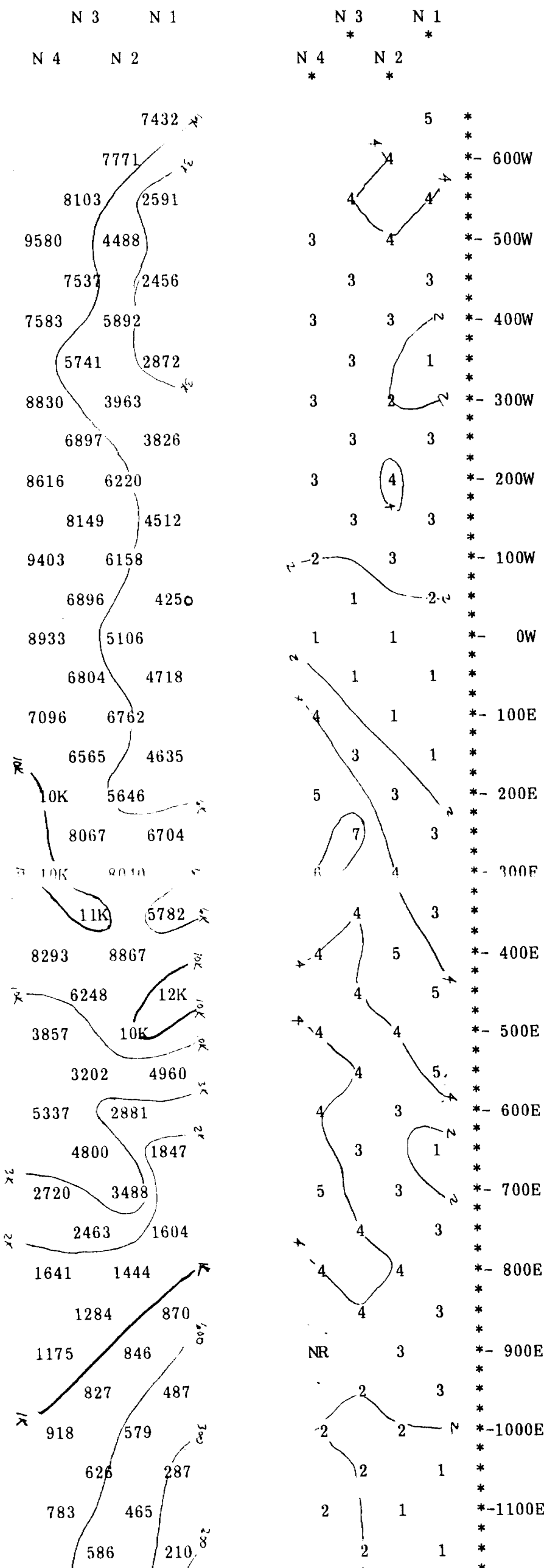
GOLDEN TRIO MINER

M-205

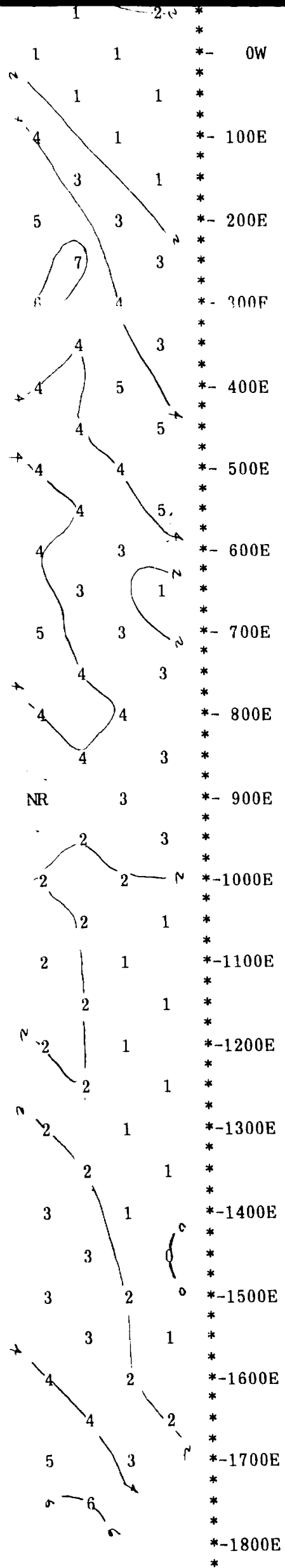
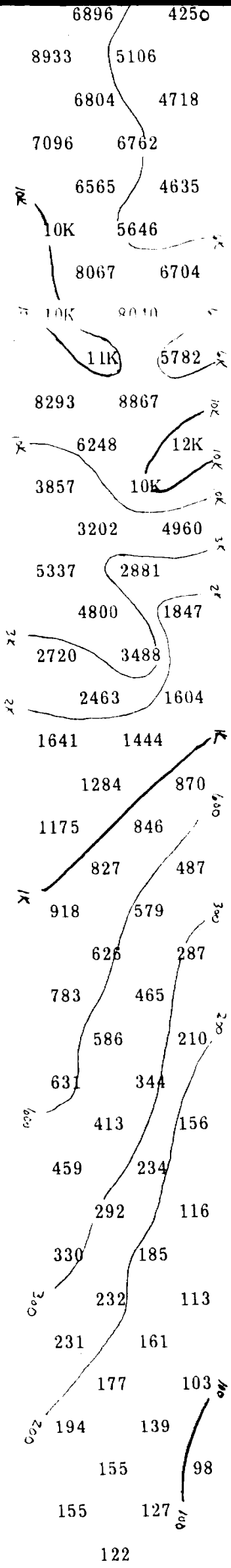
SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



ROBERT
EXPLORAT
P.O. BOX 16
TIMMIN



ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

Robert S. Middleton

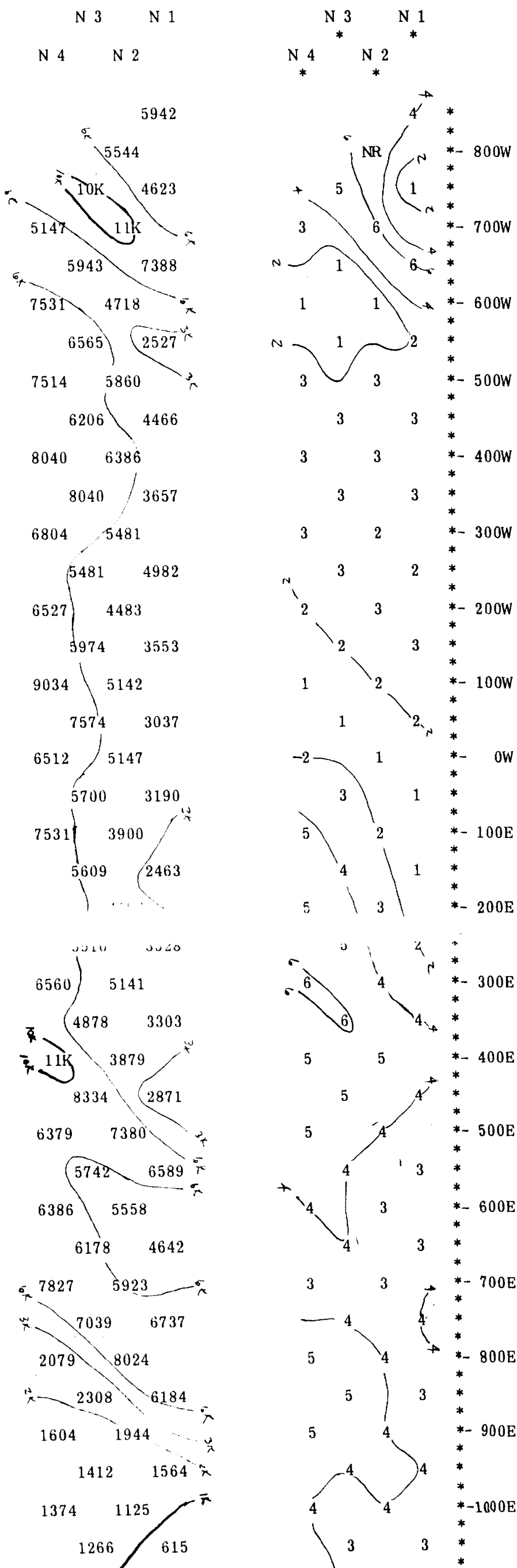
L 305

(NOT COMPLETE)

SCALE: 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

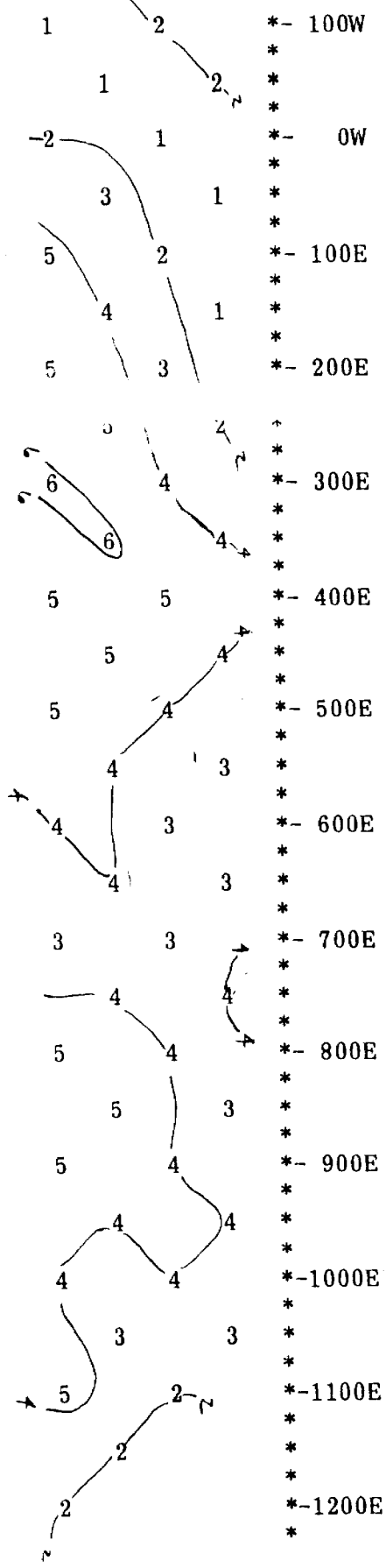
CHARGEABILITY
(milliseconds)



ROBERT S
EXPLORATION
P.O. BOX 1637
TIMMINS,

9034 5142
 7574 3037
 6512 5147
 5700 3190
 7531 3900
 5609 2463

 5510 5520
 6560 5141
 4878 3303
 11K 3879
 8334 2871
 6379 7380
 5742 6589
 6386 5558
 6178 4642
 7827 5923
 7039 6737
 2079 8024
 2308 6184
 1604 1944
 1412 1564
 1374 1125
 1266 615
 1130 872
 923
 769

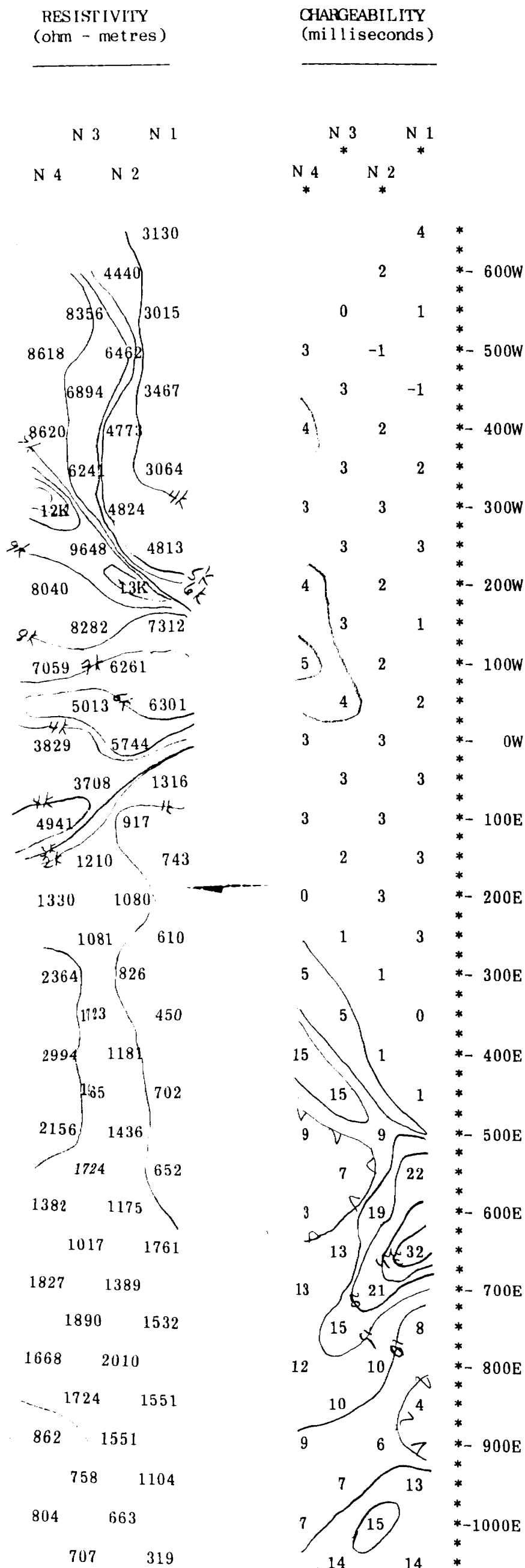


ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1837 138 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

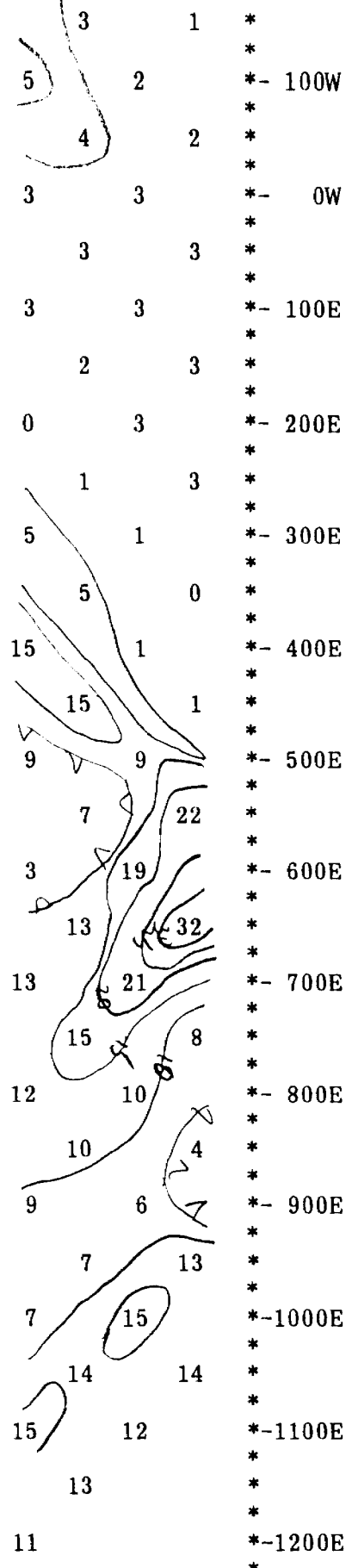
Bry Lodge

L32S

SCALE : 1 inch to 200 feet



8282 7312
 7059 6261
 5013 6301
 3829 5744
 3708 1316
 4941 917
 1210 743
 1330 1080
 1081 610
 2364 826
 1723 450
 2994 1181
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 2156 1436
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 1382 1175
 1017 1761
 1827 1389
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 1668 2010
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 758 1104
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 182

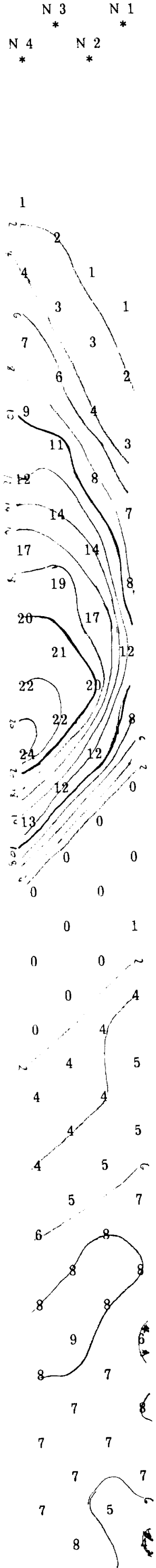
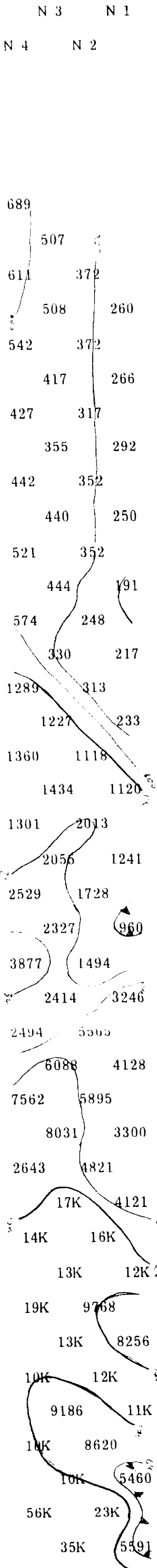


ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

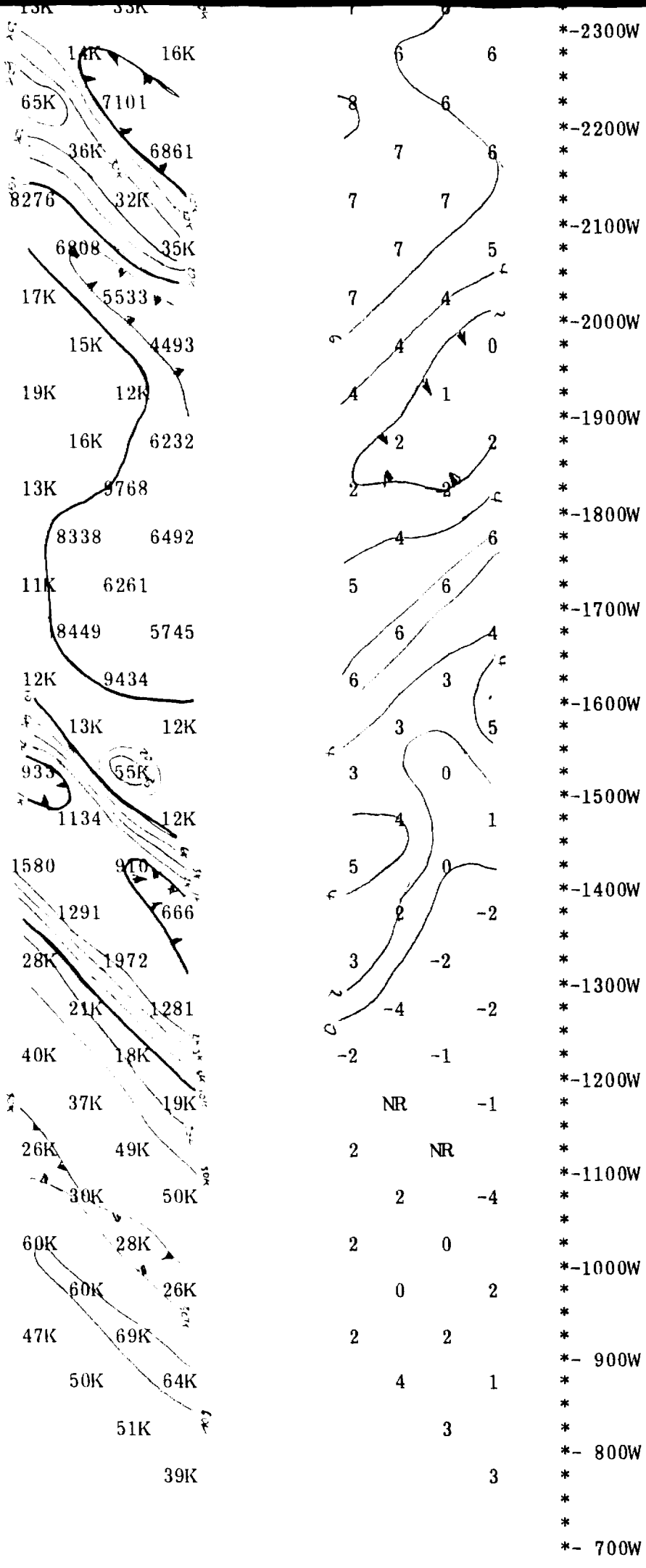
Bry Woodger

L 345

P
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- * -
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- * -2400W



SECTION
WAY
P1 P2 P3 P4 P5 P6 P7 C1

M-205

L 34s

P-D.P

N-N4

12/1/87

D.J.M.

CRONE I.R.-4

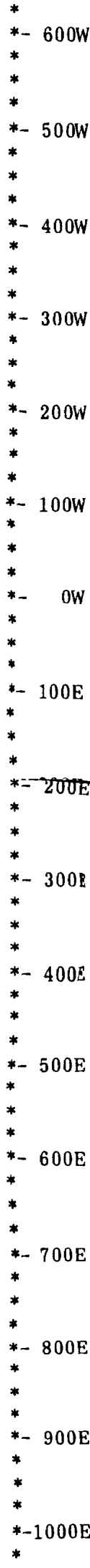
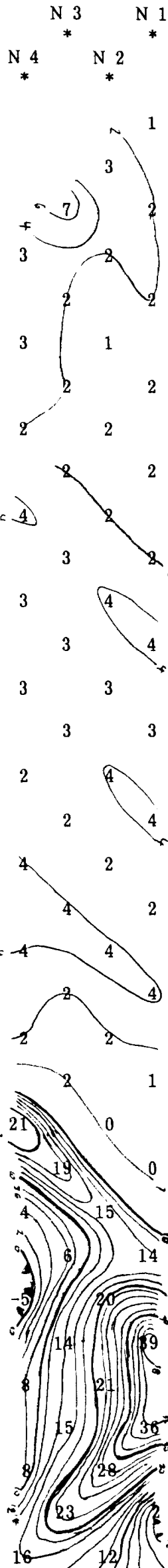
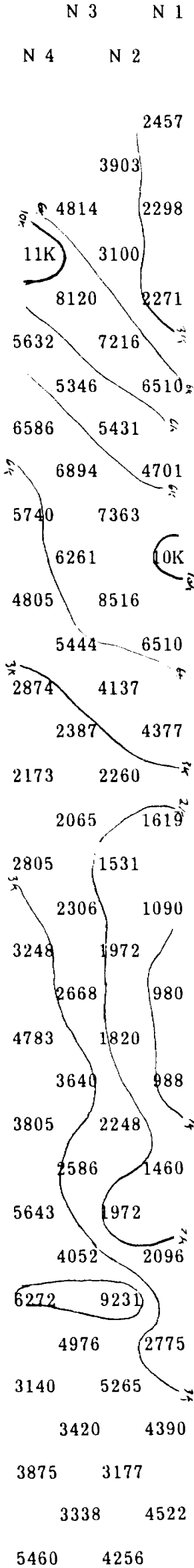
Robert S. Middleton

ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1637 136 CEDAR ST. SO.
TIMMINING, ONT. P4N 7W8

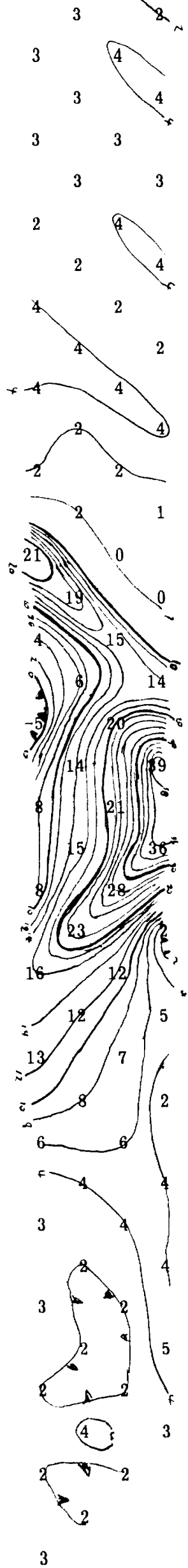
SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



6261 (10K)
 4805 8516
 5444 6510
 2874 4137
 2387 4377
 2173 2260
 2065 1619
 2805 1531
 2306 1090
 3248 1972
 2668 980
 4783 1820
 3640 988
 3805 2248
 2586 1460
 5643 1972
 4052 2096
 6272 9231
 4976 2775
 3140 5265
 3420 4390
 3875 3177
 3338 4522
 5460 4256
 6285 4598
 8208 6551
 8704 4389
 861 7622
 790 277
 382 807
 404 786
 354 415
 348 948
 423 461
 380 356
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ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINIS, ONT. P4N 7W8

Handwritten signature

L365

L 385

TURNBULL N-205

Crowden Trio

CRONE N-4

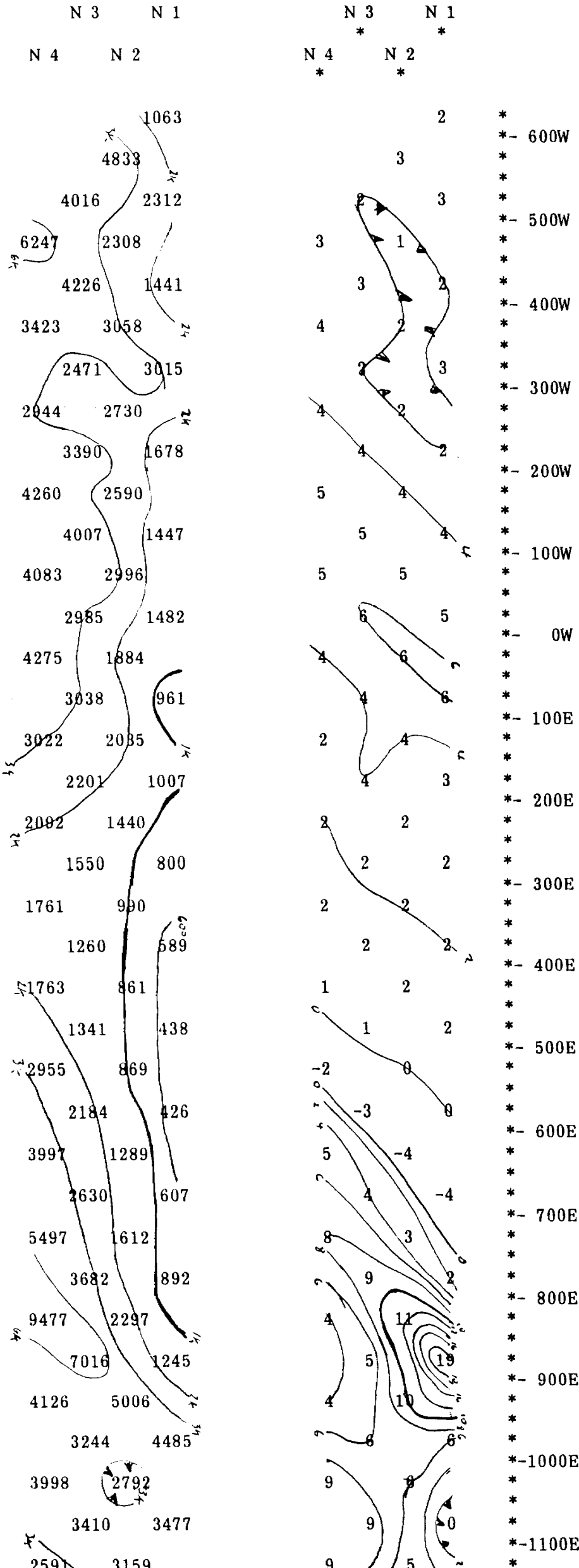
RESOURCES

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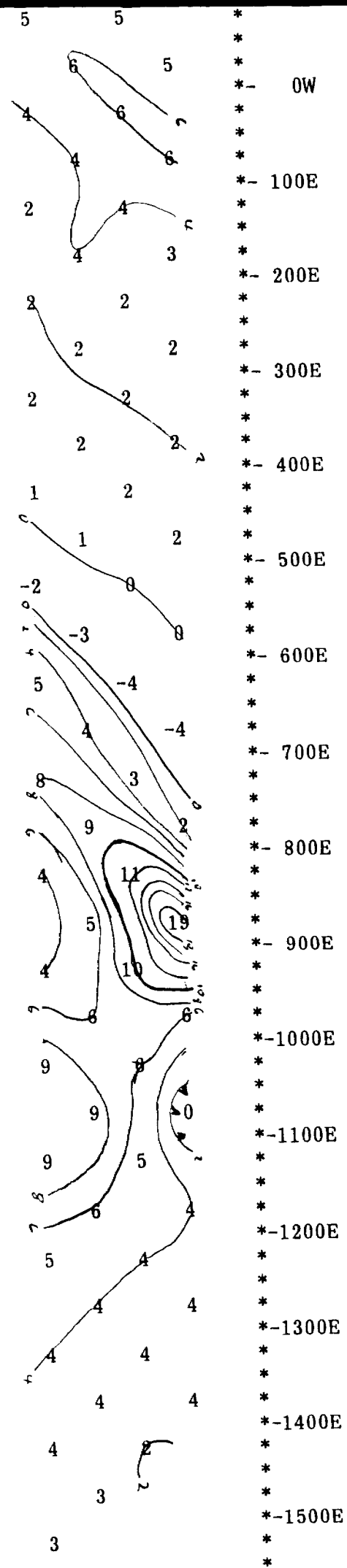
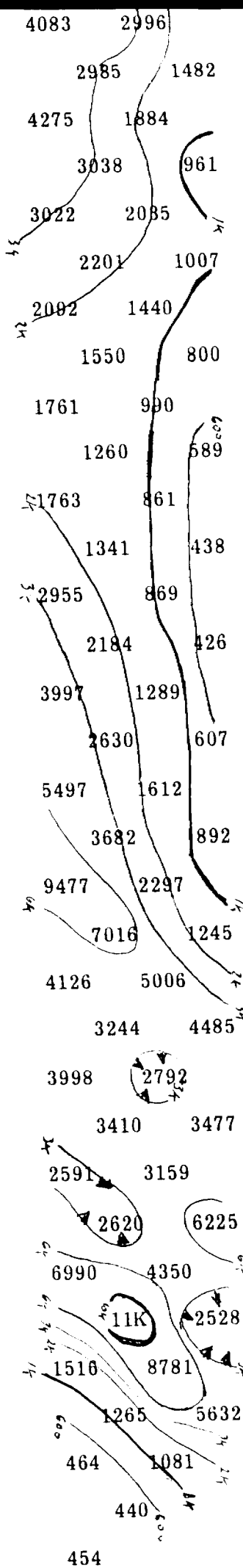
SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



ROBERT
EXPLORATION
P.O. BOX 1637
TIMMINS



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ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1637 136 CEDAR ST. SO.
TIMMINS, ONT. P4N 7W8

Robert Middleton

L 385

M-205

N₁-N₄ P-D.P.

L 385

10/1/87 D.J.M

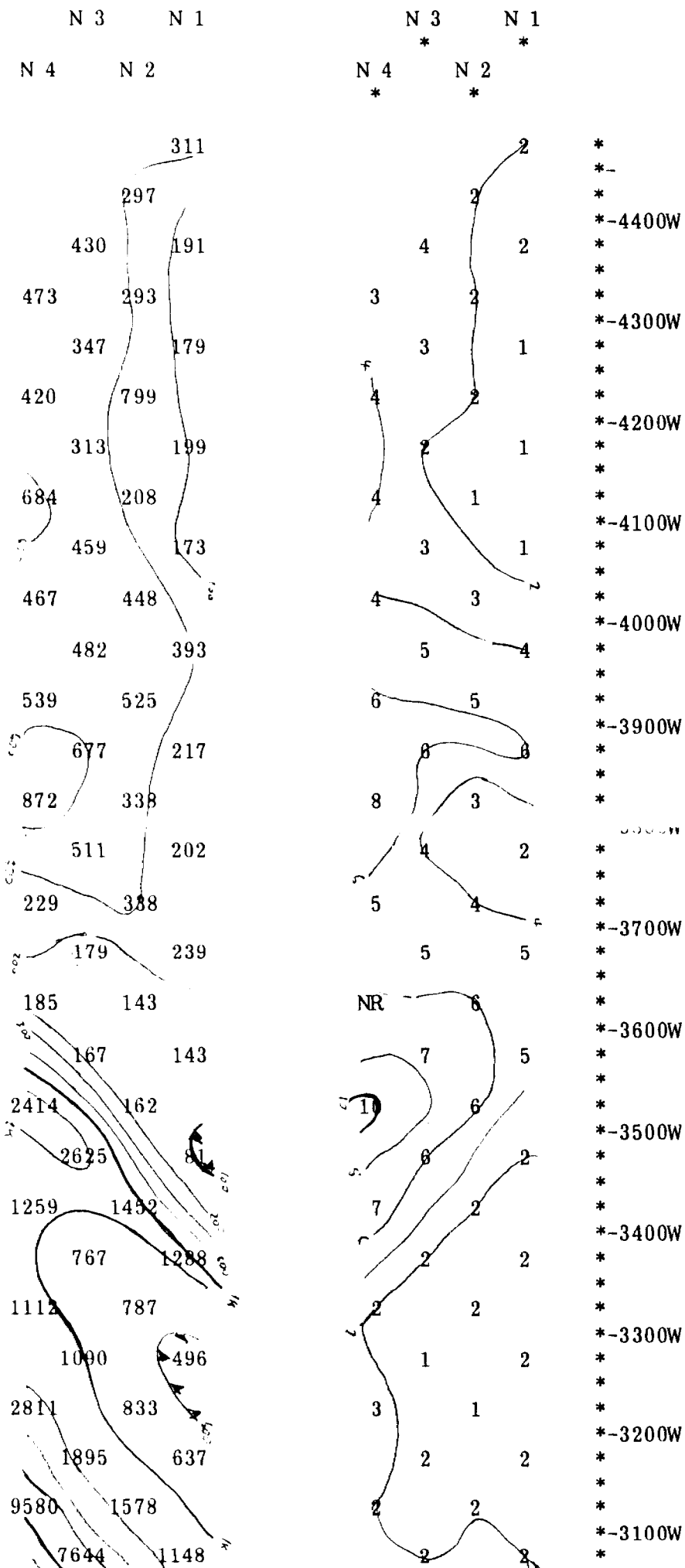
CRONE I.P -4

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SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



7644 1148
 41K 6990
 40K 3033
 904 25K
 613 9860
 6261 280
 2862 127
 425 1045
 204 696
 6382 174
 6122 182
 6606 6128
 6888 3626
 110 5286
 105 2548
 197 68
 151 32
 21K 30
 15K 51
 6291 1
 5122 7932
 9714 3546
 7909 1959
 6113 18K
 4552 8311
 12K 5826
 17K 2070
 21K 7470
 8958 4797
 5654 6849
 4697 3352
 5817 2702
 1278 2918
 6894 1652
 3619 2417
 22K 4941
 13K 7125
 6176 19K
 9447 7036
 16K 4450
 8763 2104
 1712 5632
 5138 2841
 8369 2950
 5832 1712
 4287
 2015

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SURVEY
 DIRECTION
 ←
 P1 P2 P3 P4 P5 C1

P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINI, ONT. P4N 7W8

Greg Hodges

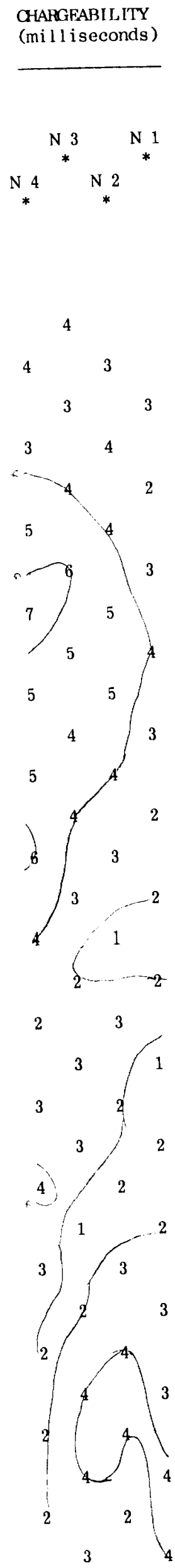
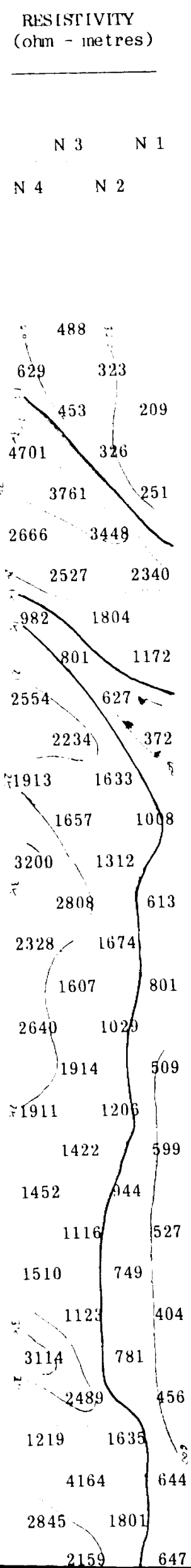
L385

M-205
 L42s
 N1-N4 F-I.P.
 8/1/87 D.J.M.

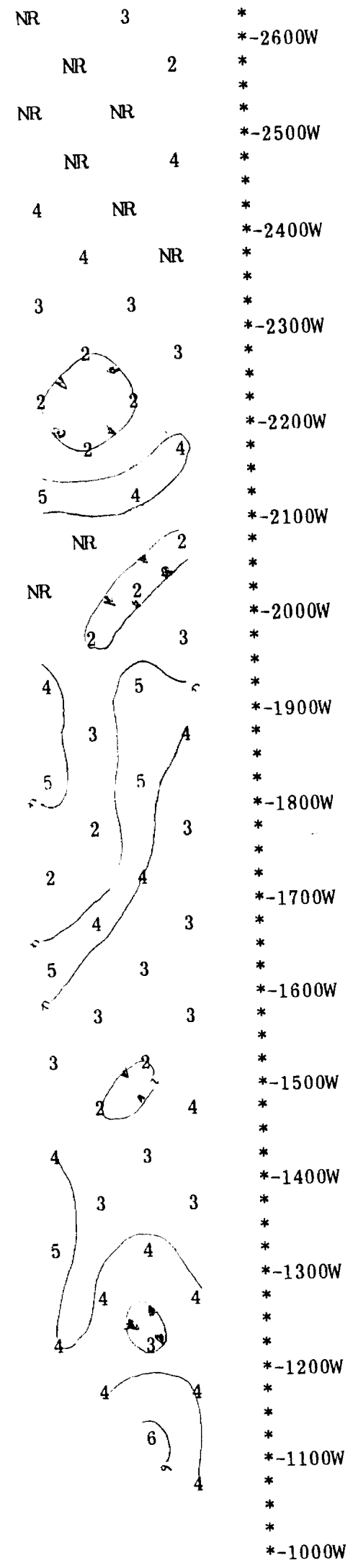
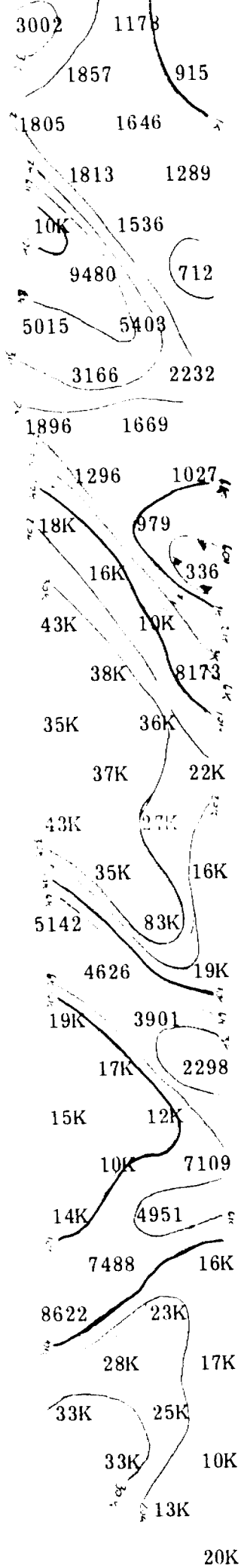
New Current
 Discard old L...

CRONE I.P.-4

SCALE : 1 inch to 200 feet



- * -
- * -4200W
- * -4100W
- * -4000W
- * -3900W
- * -3800W
- * -3700W
- * -3600W
- * -3500W
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EXPLORATION SERVICES INC.
P.O. BOX 1637 136 CEDAR ST. SO.
TIMMINS, ONT. P4N 7W8

Greg Rodger

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L 42 5

L 425
 N1-N4
 JAN/86
 D.J.M.

SCALE : 1 inch to 200 feet

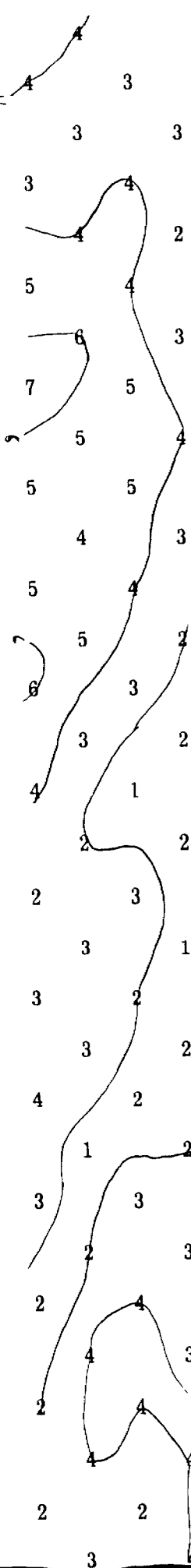
RESISTIVITY
 (ohm - metres)

CHARGEABILITY
 (milliseconds)

N 3 N 1
 N 4 N 2

N 3 N 1
 * *
 N 4 N 2
 * *

790	
1021	516
736	338
680	529
544	408
333	499
315	338
1094	225
893	146
983	699
860	415
574	629
497	388
560	393
491	183
1418	293
979	140
1597	626
1167	310
2153	743
1602	372
2314	1063
1789	594
2266	1206
1684	653
1254	1172
1002	684
1957	658
1378	259
1512	596
785	416



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- * -2700W
- * -

ALDEAS, SPURCE

ALDEAS, LOW + WEST

SURVEY
 DIRECTION
 75 74 73 72 71 70

GLACIAL TILL

565	426	NR	3	*
	350		NR	*-2600W
234	310	NR	NR	*
	235		NR	*-2500W
507	199	4	NR	*
	468		4	*-2400W
3023	263	3	3	*
	1937		2	*-2300W
729	1034	2	2	*
	493		2	*-2200W
407	368	5	4	*
	353		NR	*-2100W
629	236	NR	2	*
	573		2	*-2000W
1175	554	4	5	*
	1234		3	*-1900W
2797	906	5	5	*
	2259		2	*-1800W
5435	5368	2	4	*
	4890		4	*-1700W
1522	4124	5	3	*
	1361		3	*-1600W
3600	969	3	2	*
	2449		2	*-1500W
1207	1166	4	3	*
	655		3	*-1400W
431	1983	5	4	*
	1422		4	*-1300W
1035	1262	4	3	*
	945		4	*-1200W
	353		6	*
	5016		4	*-1100W
				*
				*-1000W

ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINS, ONT. P4N 7W8

Bray Bodge

L 42 S

Property

GOLDEN TRIO MINERAL

L 4600 S

SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)

N 3	N 1
N 4	N 2
	161
	299
349	195
390	299
444	123
533	224
295	155
394	251
383	148
452	308
391	199
438	323
460	153
547	285
378	197
420	276
345	125
472	219
320	223
367	390
471	210
310	200
382	153
540	251
370	117
532	172
287	82
1354	146
795	74
1153	417
651	311
933	457
690	302
883	498
708	420
966	631
912	510

N 3	N 1
N 4	N 2
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	5
	6
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9	10
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9	8
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5	1
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- * -4100W
- * -4000W
- * -3900W
- * -3800W
- * -3700W
- * -3600W
- * -3500W
- * -3400W
- * -3300W
- * -3200W
- * -3100W
- * -3000W
- * -2900W
- * -2800W
- * -2700W
- * -2600W
- * -2500W
- * -2400W

-10 0

1000

4500m
Az 070°
-50°
1-1-9 210

2000

1194	800
1299	412
2069	884
1360	481
2169	1005
1336	447
1749	1051
1439	785
1774	1319
1791	977
2575	1603
2478	1004
3143	2178
4209	1341
2510	
1656	

3	3	*
		*-2300W
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ROBERT S. MIDDLETON
 EXPLORATION SERVICES INC.
 P.O. BOX 1637 136 CEDAR ST. SO.
 TIMMINING, ONT. P4N 7W8

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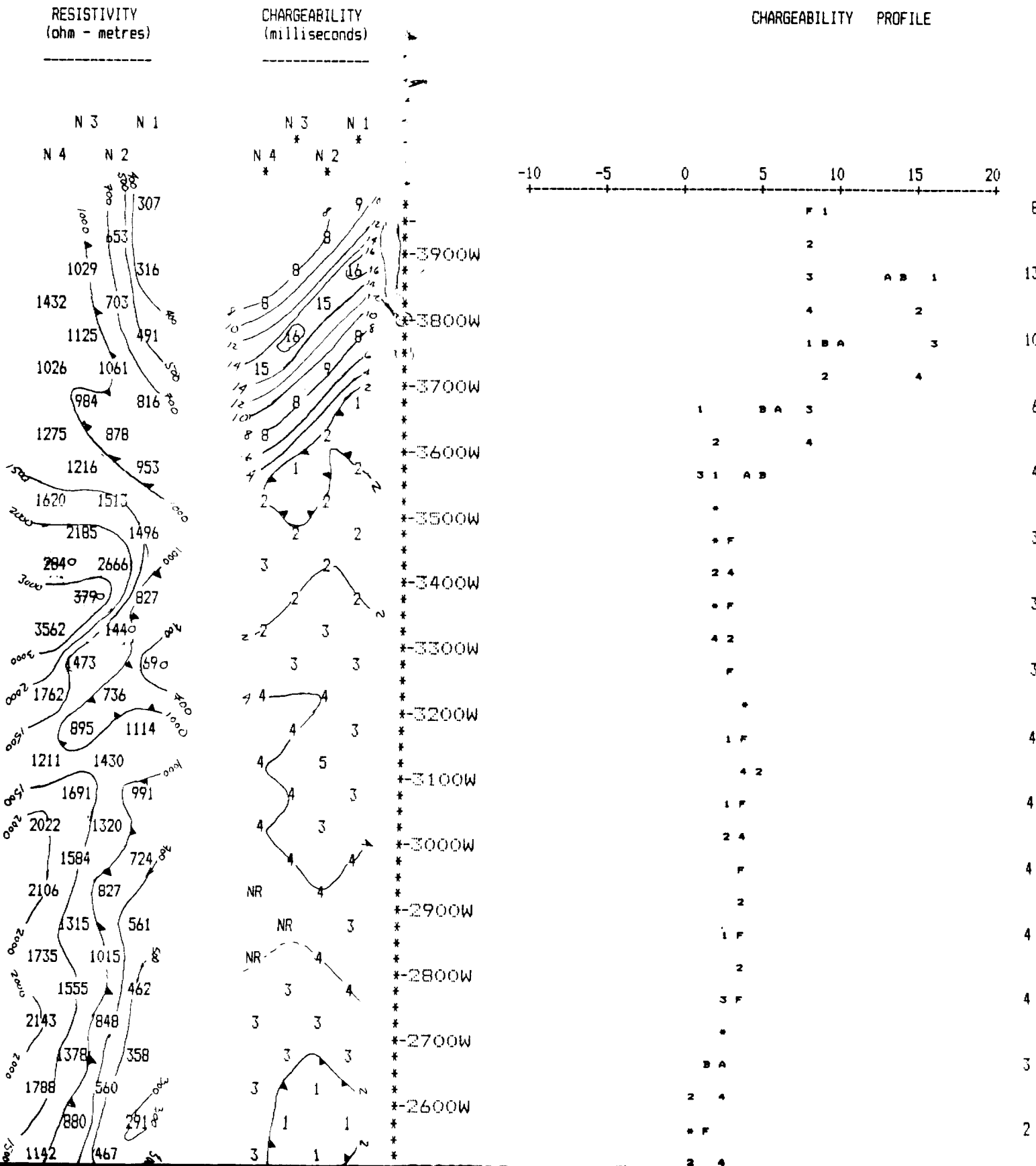
Andy Bodge

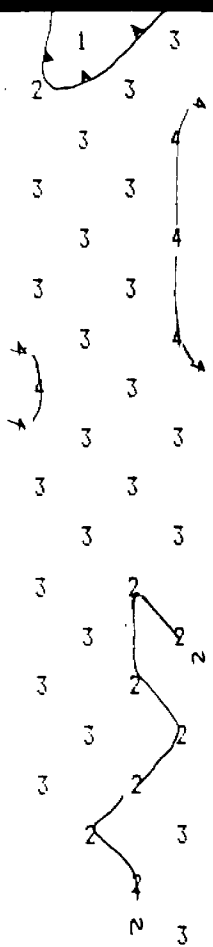
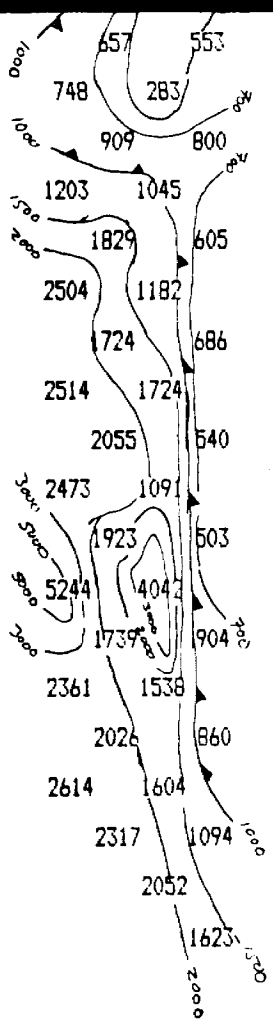
L 46 5

Contour In

Charg
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SCALE : 1 inch to 200 feet





*-2500W
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 *-2400W
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 *-1700W
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 *-1600W
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 *-1500W

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Property : TURNBULL TWP.
 Client : UNIGOLD RESOURCES

Date of Survey : 20/12/86
 Operator : DJM
 Electrode Array : POLE - DIPOLE
 Mode : TIME DOMAIN
 Receiver : SCINTREX IPR-8
 Transmitter : PHOENIX IPT-1
 Pulse Time : 2 Sec on 2 Sec off
 Delay Time : 360 ms
 Integration Time : 780 ms

 R. S. MIDDLETON EXPLORATION
 SERVICES INC.

IP Pseudosections for N = 1 to 4

'a' Spacing = 100 ft

LINE 50 S

Handwritten signature: Gary Rodgers

M-205
 20/12/86
 DJM

*-4300W

L 54s

M-205

N₁ - N₄

DEC. 186

D.J.M

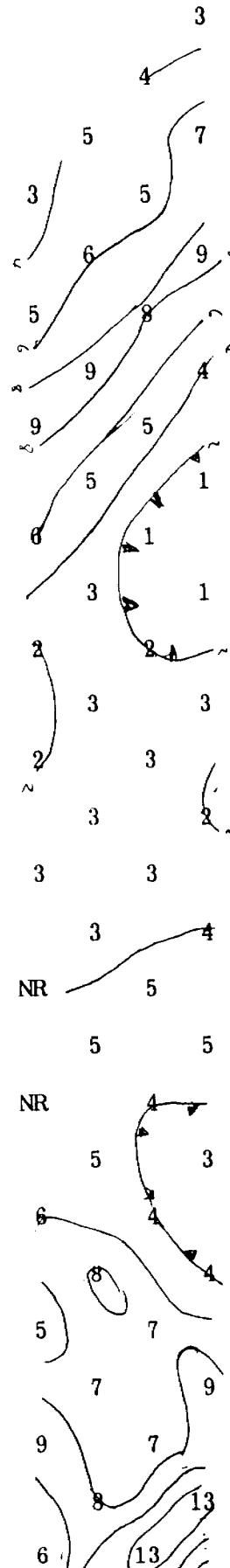
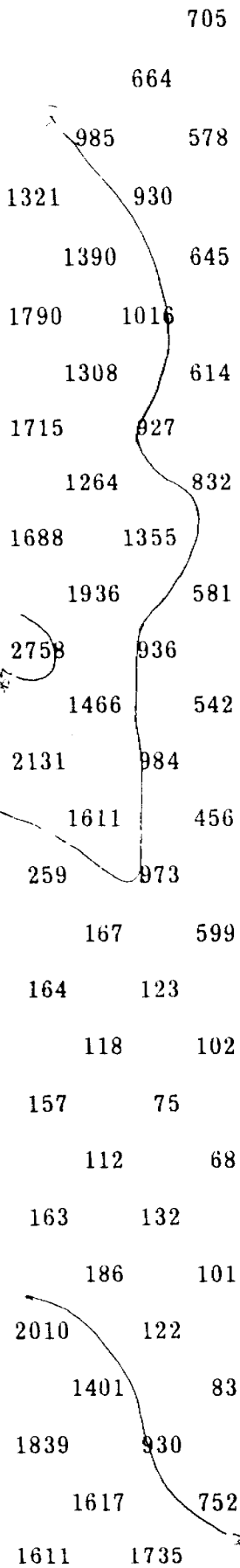
SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

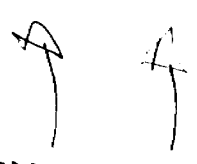
CHARGEABILITY
(milliseconds)

N 3 N 1
N 4 N 2

N 3 N 1
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N 4 N 2
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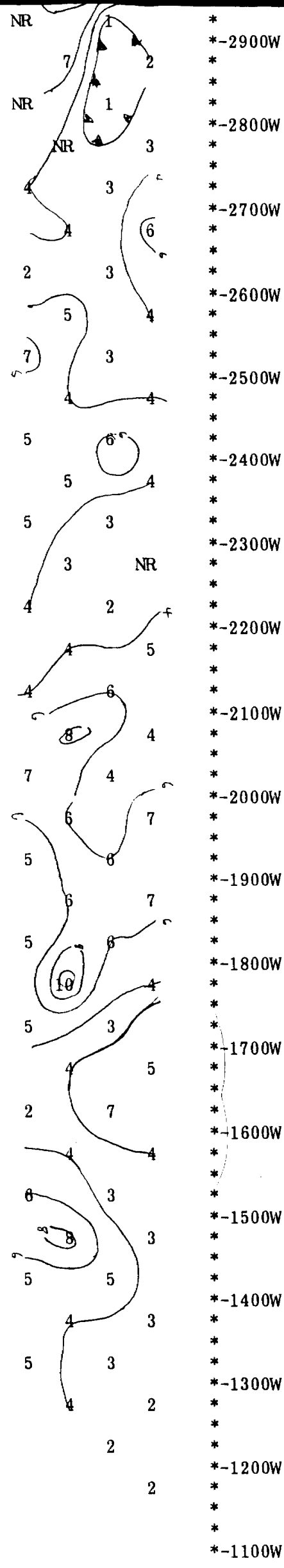


SANDS

ESKER/TILL

1822	1968
1970	2208
1904	2173
1722	1642
1349	4654
2543	5528
3366	2259
3177	2390
4488	3653
5489	2100
7592	3968
6122	924
8720	1747
2354	1092
2874	2155
2816	3447
756	5810
1684	5612
5507	2042
6808	1989
7563	7755
10K	7252
9184	12K
11K	7230
17K	7560
10K	3093
12K	6829
8120	7398
12K	13K
8863	2234
7548	14K
12K	2506
14K	2757
3769	1467
2697	
1737	

GRAVEL / TILL



P504 P2 P2 P1 C1

ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
P.O. BOX 1687 136 CEDAR ST. SO.
TIMMINS, ONT. P4N 7W8

Eng. [Signature]

L 545

Property
: TURM



2 0750

900

April 24, 1987

Your File: 392/86
Our File: 2.9750

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Notice of Intent dated March 27, 1987
Geophysical (Electromagnetic, Magnetometer &
Induced Polarization) Surveys on Mining Claims
P 525221, et al, in Turnbull Township

The assessment work credits, as listed with the above-mentioned
Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and
so indicate on your records.

Yours sincerely,

J.C. Smith, A/Manager
Mining Lands Section
Mineral Development and Lands Branch
Mines and Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

JL/mc

cc: 546577 Ontario Inc
Box 1637
Timmins, Ontario
P4N 7W8

Nadia Cairra
Box 1637
Timmins, Ontario
P4N 7W8

Greg Hodges
Box 1637
Timmins, Ontario
P4N 7W8

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Timmins, Ontario

Encl.



Recorded Holder
546577 ONTARIO INC

Township or Area
TURNBULL TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic <u>40</u> days	P 610947 610949 - 50 610952 585050 to 57 inclusive
Magnetometer _____ days	878135 - 36 878138
Radiometric _____ days	923494 - 95 757381 - 82
Induced polarization _____ days	947486 525221 - 22
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

10 DAYS ELECTROMAGNETIC

P 610948
610951
878137

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

P 757380

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.



Recorded Holder
546577 ONTARIO INC

Township or Area
TURNBULL TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ 20 _____ days	P 610947 to 52 inclusive
Radiometric _____ days	585050 to 57 inclusive
Induced polarization _____ days	878135 to 38 inclusive
Other _____ days	923494 - 95
	757380 to 82 inclusive
	947486
	525221 - 22
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

[Empty box for special credits]

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

[Empty box for no credits]



Recorded Holder
546577 ONTARIO INC

Township or Area
TURNBULL TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization <u>43</u> days	P 610947 to 52 inclusive
Other _____ days	585050 to 56 inclusive
Section 77 (19) See "Mining Claims Assessed" column	878135 to 38 inclusive
Geological _____ days	923494 - 95
Geochemical _____ days	757380 to 82 inclusive
Man days <input checked="" type="checkbox"/> Airborne <input type="checkbox"/>	947486
Special provision <input type="checkbox"/> Ground <input type="checkbox"/>	525221 - 22
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

[Empty box for special credits]

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

P 585057

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

392/86

- Instructions: - Please type or print.
- If number of mining claims traversed exceeds space on this form, attach a list.
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
- Do not use shaded areas below.

29750

Mining Act

Type of Survey(s) MAGNETOMETER AND INDUCED POLARIZATION SURVEY		Township or Area TURNBULL TOWNSHIP	
Claim Holder(s) 546577 Ontario Inc Ray Bradley M-23030 MIKE CARON M-21187		Prospector's Licence No. T-1470	
Address Box 1637 TIMMINS ONTARIO P4N7W8			
Survey Company RS. MIDDLETON EXPLORATION SERVICES		Date of Survey (from & to) 1 12 86 13 12 86 Day Mo. Yr. Day Mo. Yr.	
Name and Address of Author (of Geo-Technical report) GREG HODGES Box 1637 TIMMINS ONTARIO P4N7W8			

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical		Days per Claim
	- Electromagnetic		
For first survey: Enter 40 days. (This includes line cutting)	- Magnetometer	20	
	- Radiometric		
For each additional survey: using the same grid: Enter 20 days (for each)	- Other		
	Geological		
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim	
	- Electromagnetic		
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	- Magnetometer		
	- Radiometric		
Geological	- Other IP	20 (with 33.65)	
	Geological		
Airborne Credits	Geological		
	Geochemical		

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
P	610947			757381	
	610948			757382	
	610949			947486	
	610950			525221	
	610951			525222	
	610952				
	585050				
	585051				
	585052				
	585053				
	585054				
	585055				
	585056				
	585057				
	585058				
	878135				
	878136				
	878137				
	878138				
	923494				
	923495				
	757380				

RECEIVED
DEC 15 1986

MINING LANDS SECTION

RECORDED
DEC 15 1986

Total number of mining claims covered by this report of work.. 26

Expenditures (excludes power strapping)

Type of Survey: MAGNETOMETER AND INDUCED POLARIZATION SURVEY

Performed on Claim(s):

DEC 15 1986

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.

For Office Use Only

Total Days Cr. Recorded: 1040

Date Recorded: Dec. 15/86

Date Approved as Recorded: [Signature]

Branch Director: [Signature]

Date: Dec 15/86

Recorded Holder or Agent (Signature): Mike Caron

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: NADIA CAIRA Box 1637 TIMMINS

Date Certified: Dec 15/86

Certified by (Signature): [Signature]



Mining Act

391/86 29750

Jan 2

Type of Survey(s): **MAX-MIN, LINECUTTING** Township or Area: **TURNBULL TOWNSHIP**

Claim Holder(s): **546577 Ontario Inc. / Bay P. Bradley** Prospector's Licence No.: **T-1470 / M-23080**

Address: **101 Cedar St. South Timmins / Box 1869 Sturgeon Falls / Box 1712 Timmins**

Survey Company: **ROBERT S. MIDDLETON EXPLORATION SERVICES** Date of Survey (from & to): **1 12 86 / 10 12 86** Total Miles of line Cut: **23.58 miles**

Name and Address of Author (of Geo-Technical report): **GREG HODGES, Box 1637 TIMMINS ONTARIO P4N 7L8**

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- 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	

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

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	610947		P	757380	
	610948			757381	
	610949			757382	
	610950			757383	
	610951			447486	
	610952				
	585050				
	585051				
	585052				
	585053				
	585054				
	585055				
	585056				
	585057				
	878135				
	878136				
	878137				
	878138				
	923494				
	923495				
	525221				
	525222				

RECEIVED
DEC 11 1986

RECORDED
DEC 11 1986

Expenditures (excludes power structure) Type of Work Performed: **MAX-MIN, LINECUTTING**

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.

Total number of mining claims covered by this report of work: **26**

For Office Use Only: Total Days Cr. Recorded: **1040** Date Recorded: **Dec. 11/86** Mining Recorder: *[Signature]*

Date Approved as Recorded: **Dec 8/86** Branch Director: *[Signature]*

Date: **Dec 8/86** Recorded Holder or Agent (Signature): *Nadia Cairn*

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: **NADIA CAIRN BOX 1637 TIMMINS ONTARIO P4N 7L8**

Date Certified: **DEC 8/86** Certified by (Signature): *Nadia Cairn*

REFERENCES

AREA WITHDRAWN FROM DISPOSITION

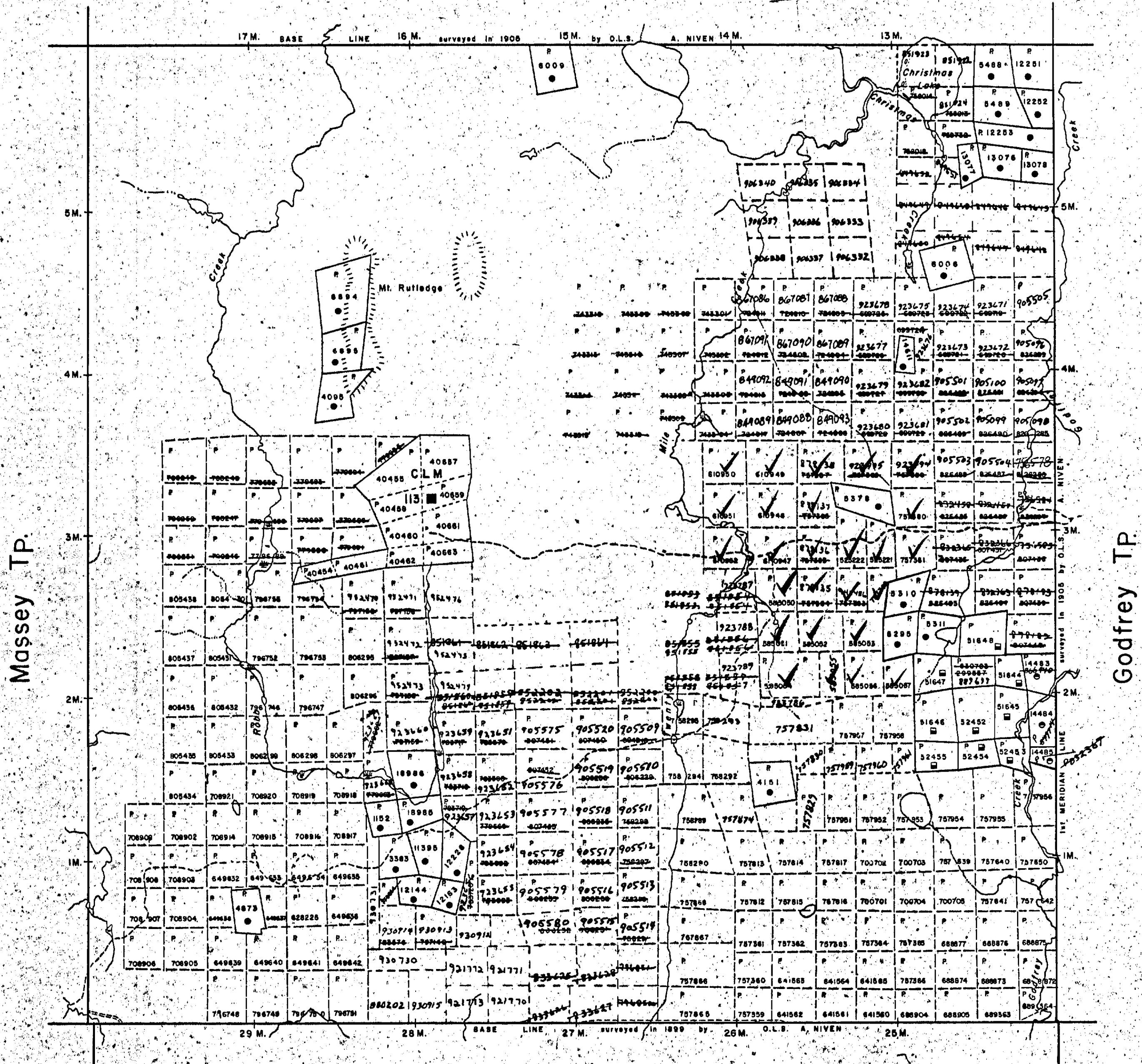
- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M+S. - MINING AND SURFACE RIGHTS

Description Order No. Date Disposition File

NOTES

THIS TOWNSHIP LIES WITHIN THE MUNICIPALITY OF THE CITY OF TIMMINS.

Robb TP



Carscallen Tp.

LEGEND

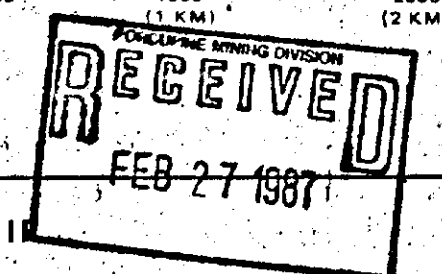
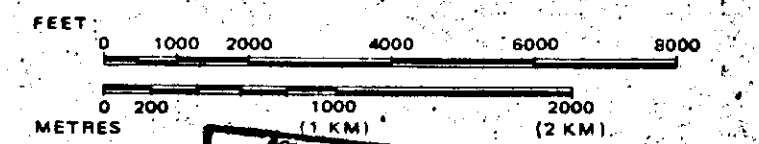
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- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- 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



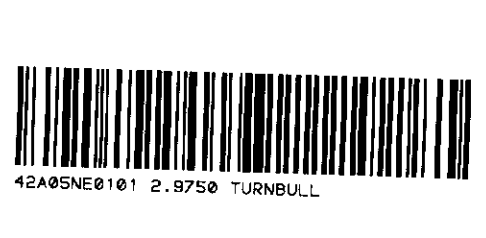
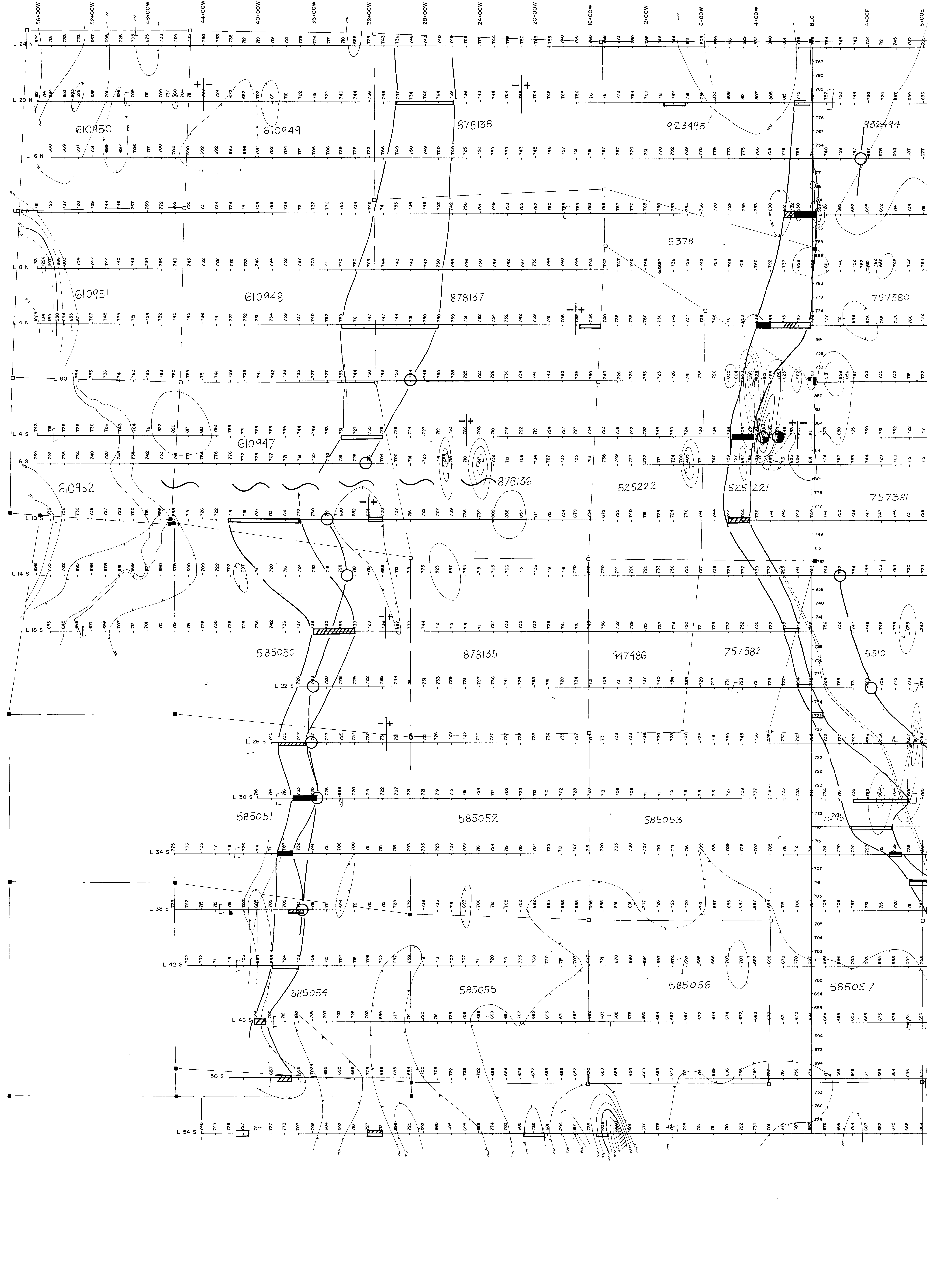
TOWNSHIP
TURNBULL
 M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS
 MINING DIVISION
PORCUPINE 2.9750
 LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario Ministry of Natural Resources Land Management Branch

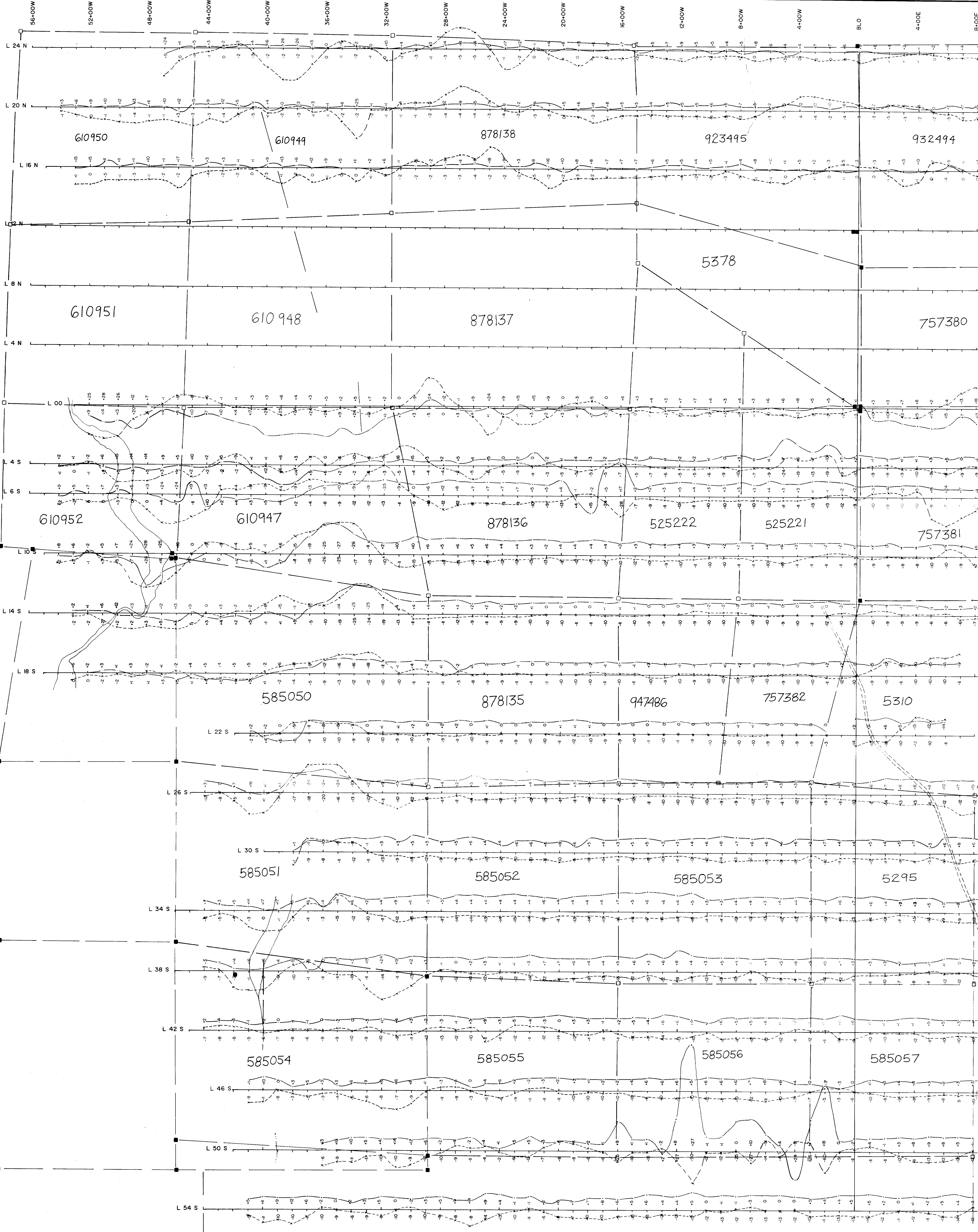
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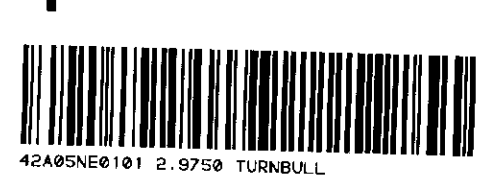
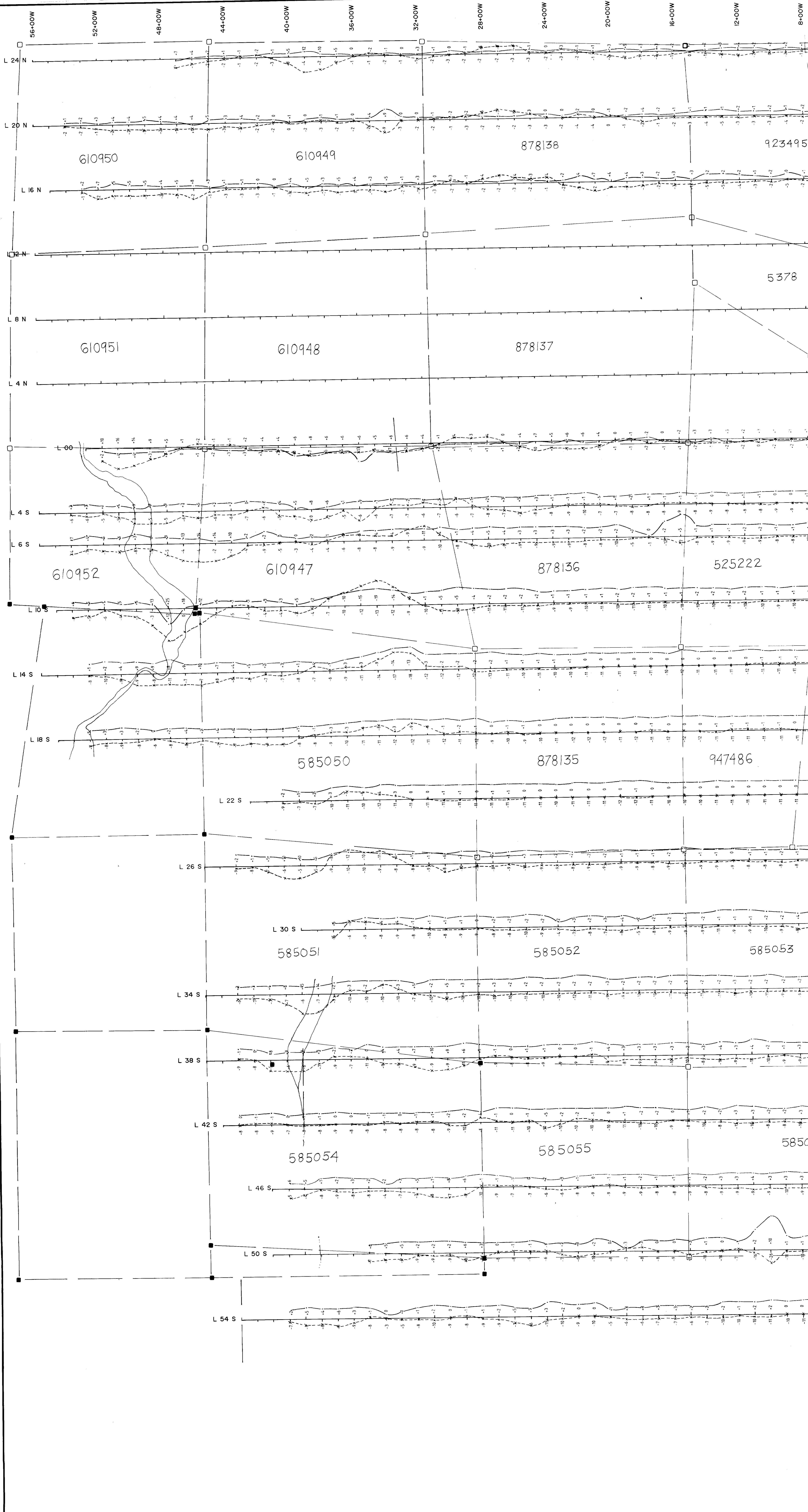


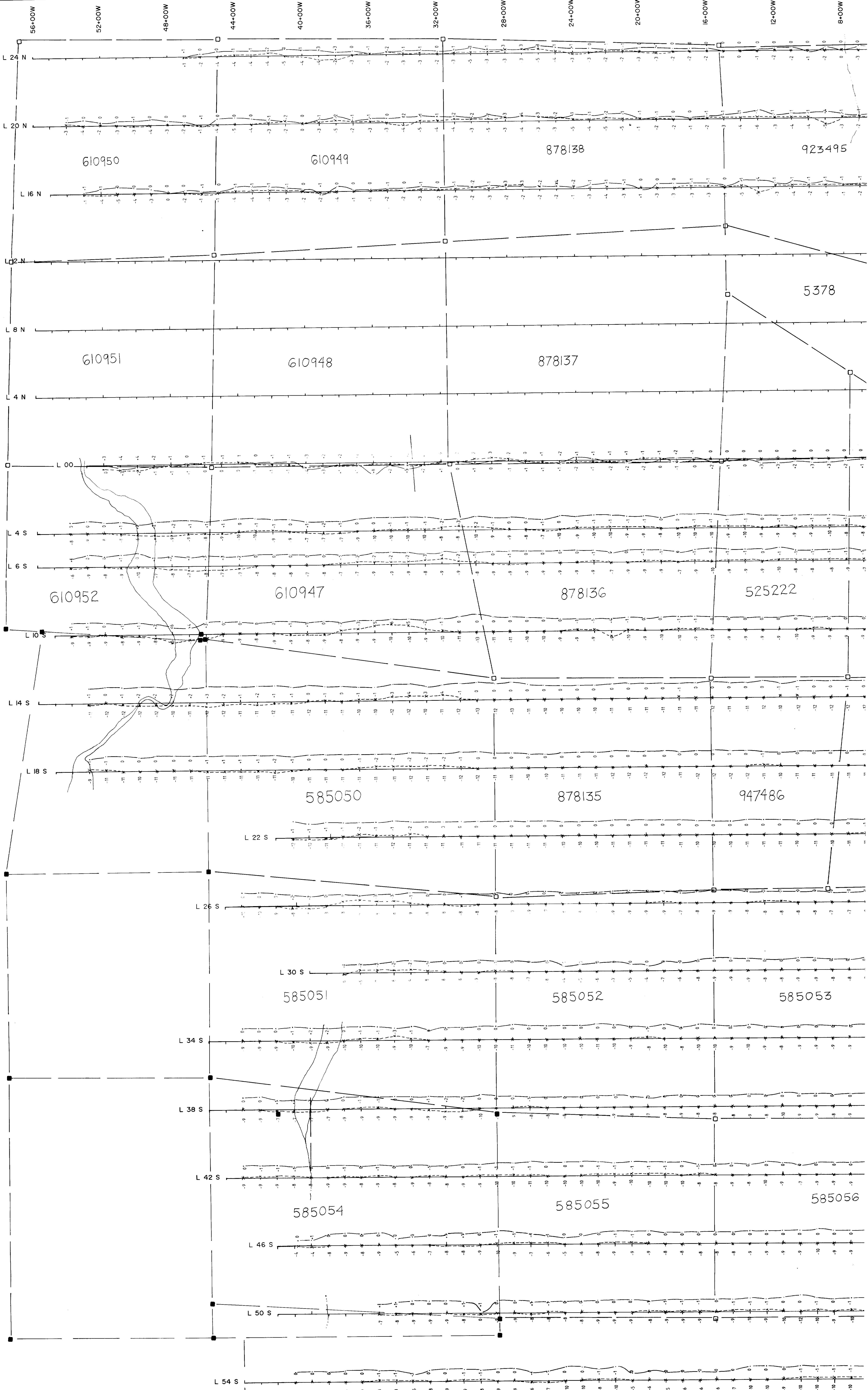
42495NE0161 2.9750 TURNBULL

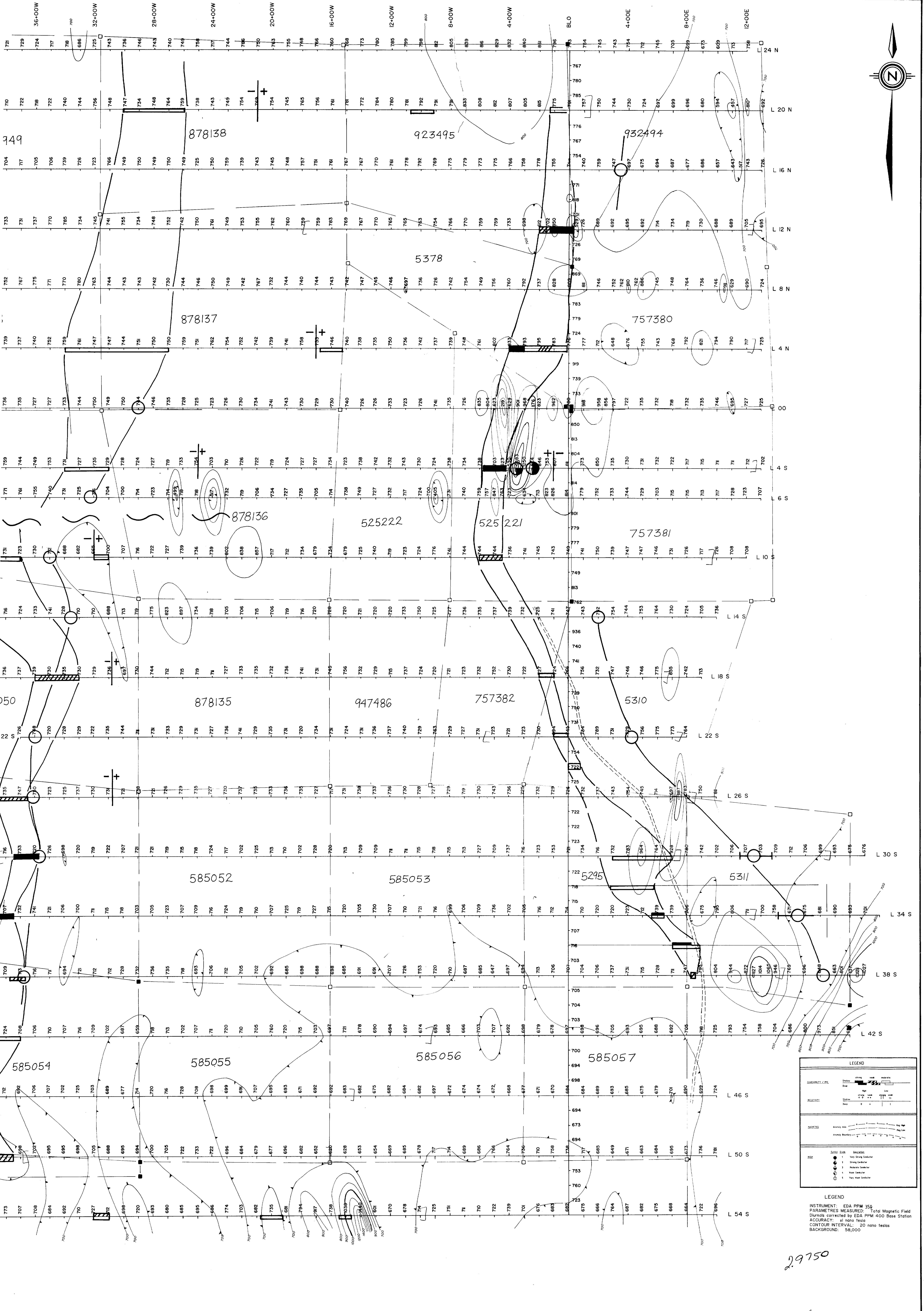
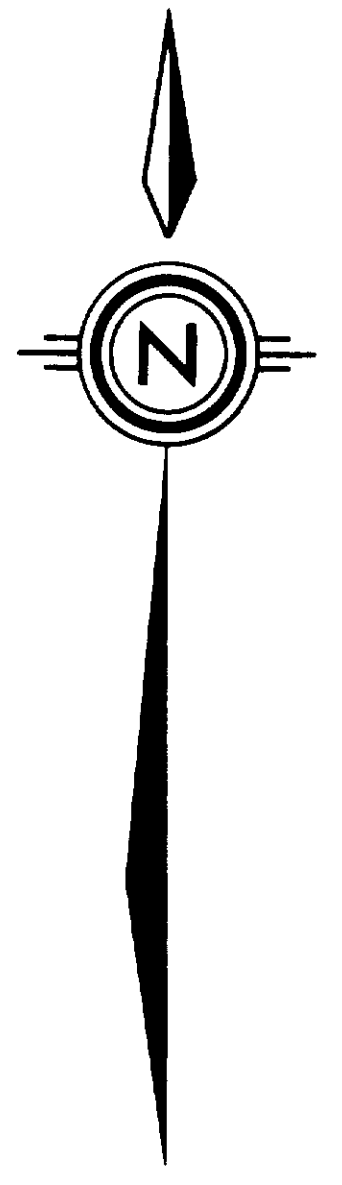


44+00W 40+00W 36+00W 32+00W 28+00W 24+00W 20+00W 16+00W 12+00W 8+00W 4+00W BLO 4+00E









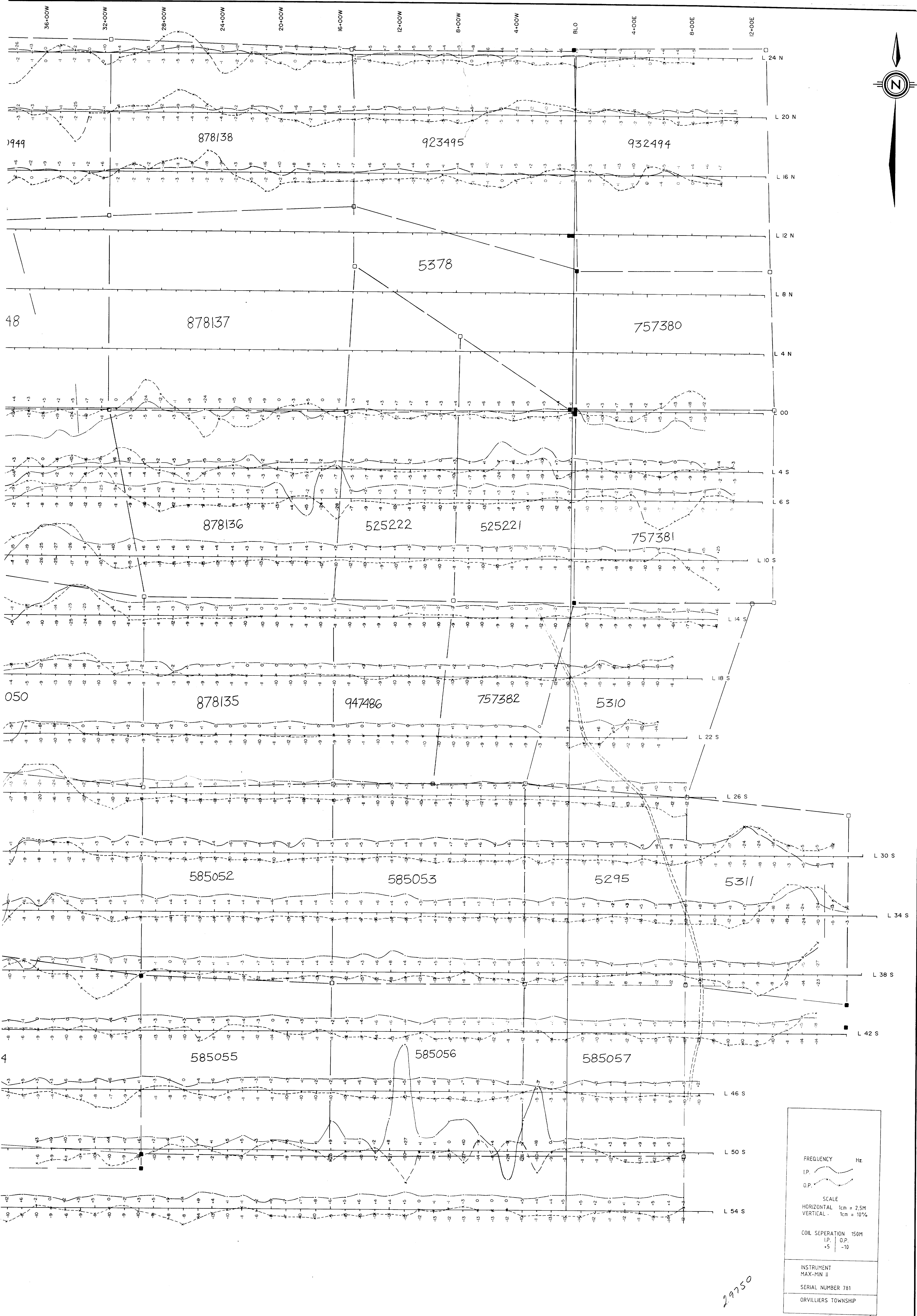
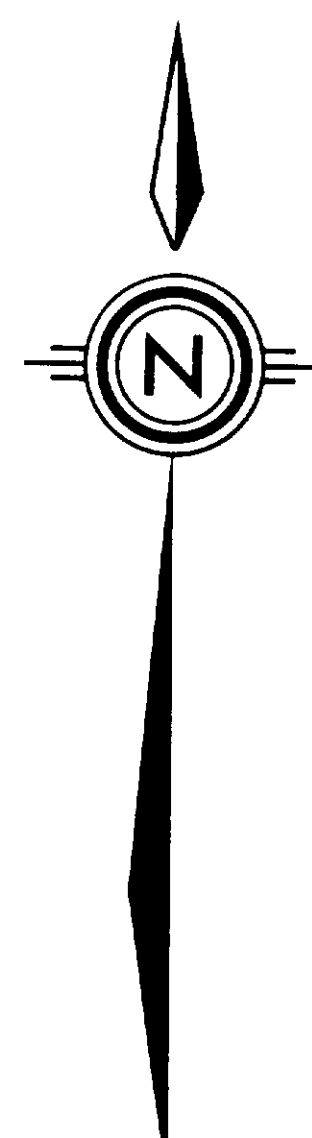
LEGEND	
Contour Interval	20 nano teslas
Structure	Symbol
Road	Symbol
Water	Symbol
Power Line	Symbol
Telephone Line	Symbol
Survey Station	Symbol
Spot Height	Symbol

LEGEND
 INSTRUMENT: EDA PPM 350
 PARAMETRES MEASURED: Total Magnetic Field
 Disturbances corrected by EDA PPM 400 Base Station
 ACCURACY: ±1 nano tesla
 CONTOUR INTERVAL: 20 nano teslas
 BACKGROUND: 38,000

29750

Prof. Walker

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	GOLDEN TRIO MINERALS LTD.	
	Title	Turnbull Township	
		MAGNETOMETER SURVEY	
	Date: Jan. 1987	Scale: 1"=200'	N.T.S.:
	Drawn: C.G.	Approved:	File: M-205



FREQUENCY Hz
 I.P.
 O.P.

SCALE
 HORIZONTAL 1cm = 2.5M
 VERTICAL 1cm = 10%

COIL SEPARATION 150M
 I.P. O.P.
 .5 -10

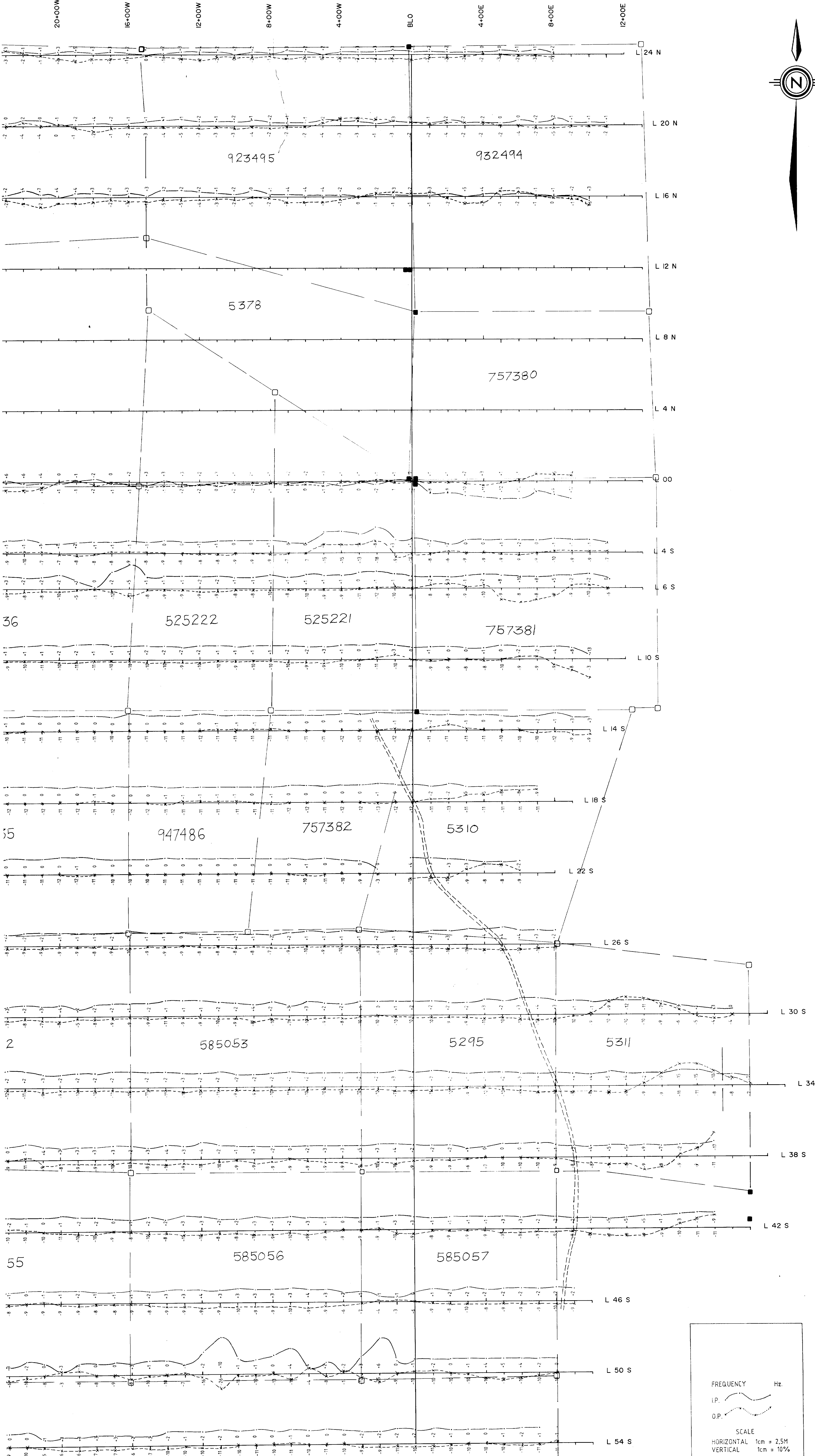
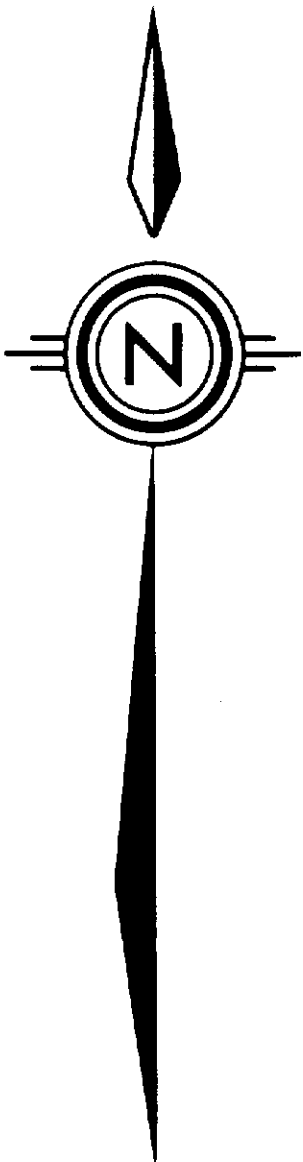
INSTRUMENT
 MAX-MIN II

SERIAL NUMBER 781

ORVILLIERS TOWNSHIP

29750

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	GOLDEN TRIO MINERALS LTD.	
	Title	Turnbull Township	
		MAX - MIN 3555Hz	
	Date: Jan. 1987	Scale: 1"=200'	N.T.S.:
	Drawn: C.G.	Approved:	File: M-205



FREQUENCY Hz.
I.P.
O.P.

SCALE
HORIZONTAL 1cm = 2.5M
VERTICAL 1cm = 10%

COIL SEPARATION 150M
I.P. O.P.
+5 -10

INSTRUMENT
MAX-MIN II

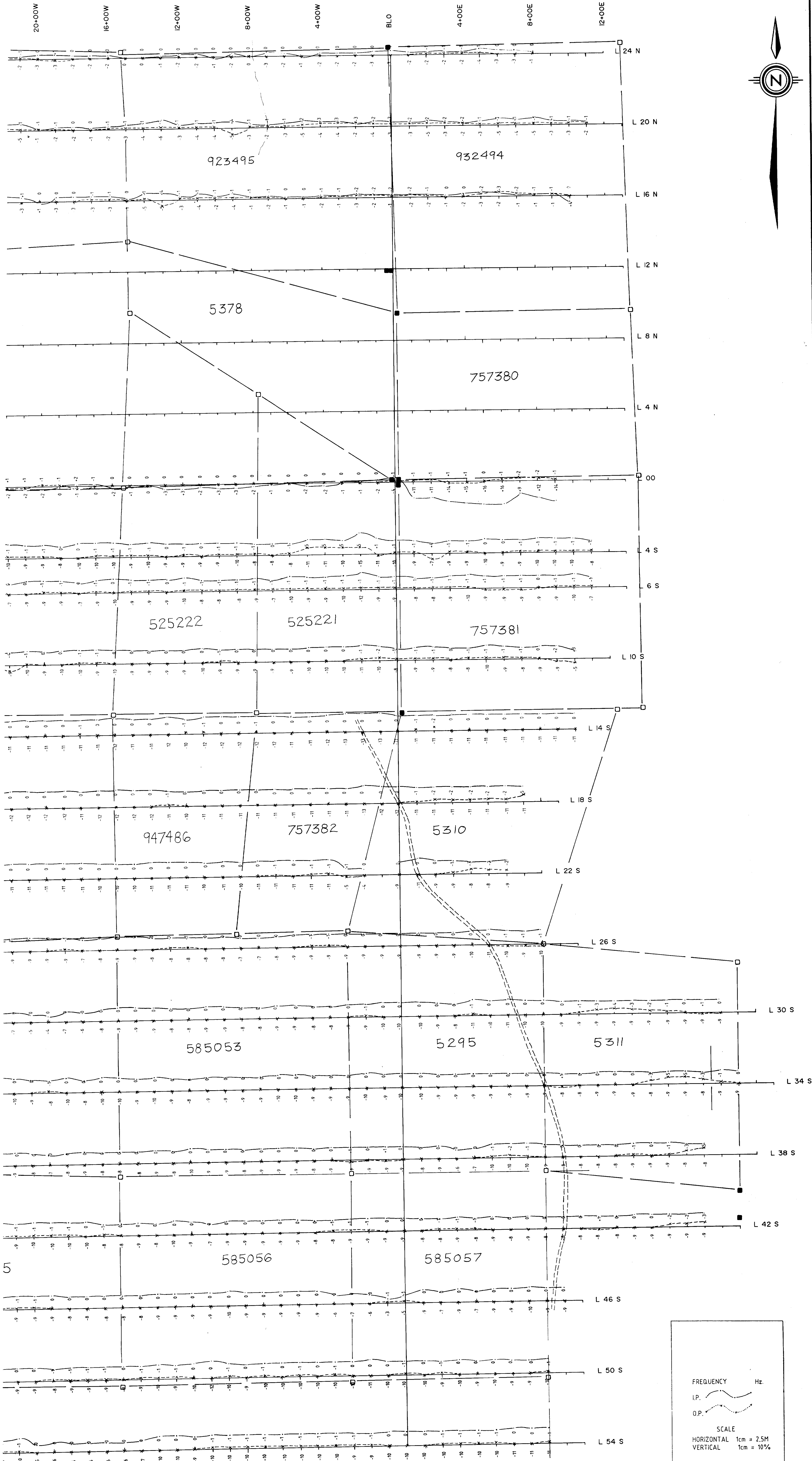
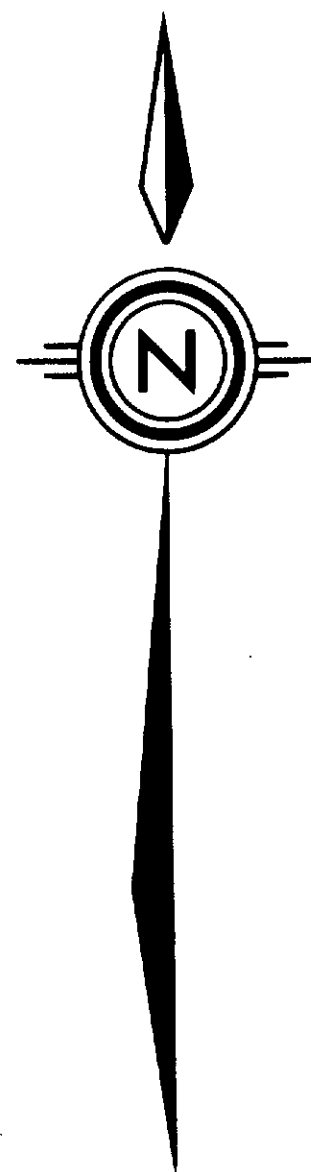
SERIAL NUMBER 781

ORVILLIERS TOWNSHIP

29750

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	GOLDEN TRIO MINERALS LTD.	
	Title	Turnbull Township	
		MAX - MIN 1777Hz	
	Date:	Jan. 1987	Scale: 1"=200'
	Drawn:	C.G.	Approved:
			N.T.S.:
			File: M-205

20+00W 16+00W 12+00W 8+00W 4+00W BLO 4+00E



FREQUENCY Hz.

I.P.

O.P.

SCALE

HORIZONTAL 1cm = 2.5M

VERTICAL 1cm = 10%

COIL SEPERATION 150M

I.P.	O.P.
+5	-10

INSTRUMENT
MAX-MIN II

SERIAL NUMBER 781

ORVILLIERS TOWNSHIP

29750

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	GOLDEN TRIO MINERALS LTD.	
	Title	Turnbull Township	
		MAX - MIN 444Hz	
	Date: Jan. 1987	Scale: 1"=200'	N.T.S.:
	Drawn: C.G.	Approved:	File: M-205

20+00W 16+00W 12+00W 8+00W 4+00W BLO 4+00E