Report
on the

GEOLOGICAL MAPPING
and
MAGNETIC AND INDUCED POLARIZATION SURVEYS

Sesekinika Lake Property
Grenfell Township
Larder Lake Mining Division, Ontario

for

GLEN AUDEN RESOURCES LIMITED
and
ADOLA MINING CORPORATION

by

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SUMMARY

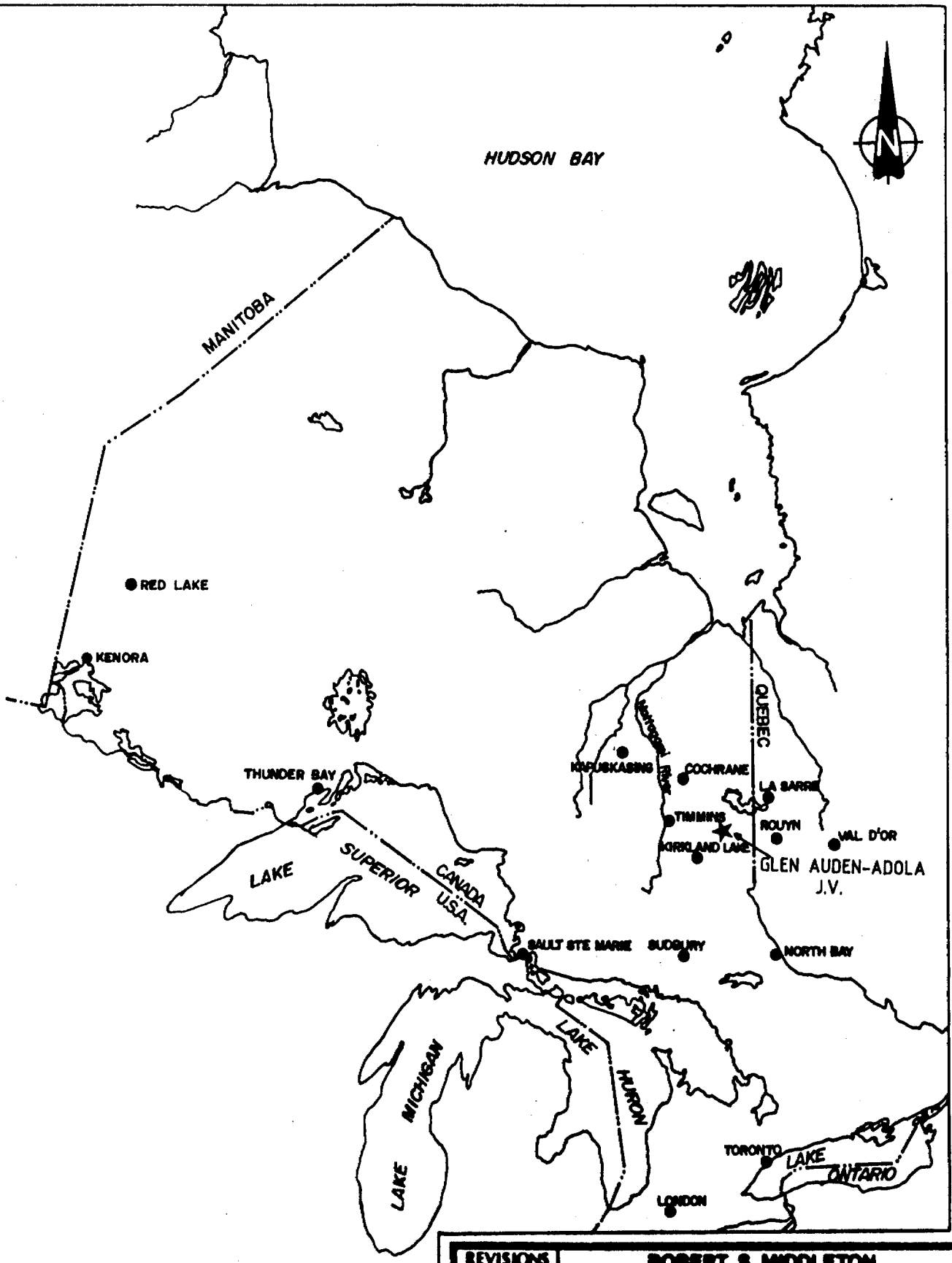
The Sesekinika Lake property is underlain by an Archean mafic metavolcanic sequence of iron rich and magnesium rich tholeiitic basalts and possibly gabbro sills of the Kenojevis group. These rocks are intruded by minor mafic, and porphyritic syenite bodies. The entire sequence is cut by late, north-trending diabase dikes and overlain by the Proterozoic Cobalt group sedimentary rocks.

Within a 170m wide and 350m long zone straddling the boundary between Maisonville and Grenfell Townships, largely mafic iron-rich coarse-grained flows or gabbro sills are locally fractured and impregnated with silica carbonate and disseminated sulfides. They host structurally controlled auriferous mineralization consisting of quartz-carbonate veins, stringers and irregular silicified zones. The anomalous gold values were obtained from these alteration zones. The best of those are 0.170 and 0.111 oz/t Au (Trench 4N).

Induced polarization has shown that the mineralized zones produce anomalously high chargeability values. These mineralized zones are hosted preferentially by iron-rich coarse-grained gabbroic rocks which are associated with high resistivity and high magnetic gradients.

Several induced polarization anomalies were delineated on the property outside of the main alteration areas. These may be

further explored by more detailed geological mapping and lithogeochemical sampling. It is also recommended that additional IP surveying be carried out over the large magnetic anomaly associated with mafic iron-rich rocks in the northwestern part of the property. Further geological and geophysical surveys are proposed for the area in the southern part of the Grenfell Township. The reconnaissance mapping and prospecting in the southern part of the property revealed that an area of sheared and altered mafic to rich flows carried locally up to 773 ppb in gold.



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GLEN AUDEN RESOURCES LTD.- ADOLA MINING CORPORATION J.V.
	Title PROVINCE OF ONTARIO Location Map
	FIG. 1
	Date: JULY Scale: 1:1140 000 000 N.T.S.:
	Drawn: P.G. Approved: File: M-68

1.0 INTRODUCTION

Approximately 5400 acres of mining land were geologically and geophysically surveyed from October to December, 1985 and from May 7th to June 15th, 1985 for Glen Auden Resources Limited and Adola Mining Corporation in the townships of Bompas, Grenfell, Lee and Maisonville, Larder Lake Mining Division, Kirkland Lake Gold Area, Ontario.

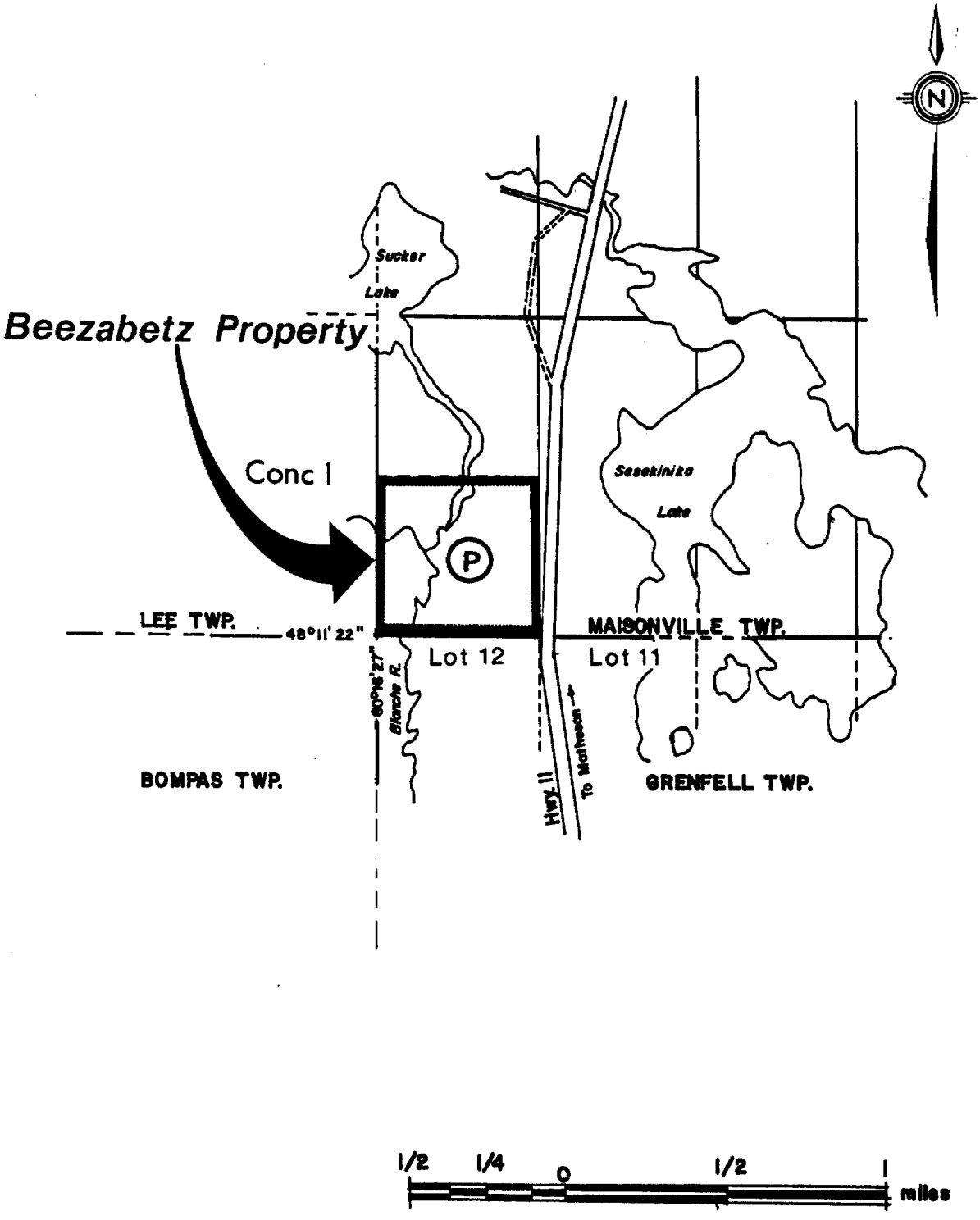
The claim group comprises of 128 staked, contiguous unpatented claims and 2 patented 1/2 lots. It is situated about 25km by road (Hwy. #11) northwest of Kirkland Lake and immediately west of Lake Sesekinika. The individual claim blocks are identified as follows:

1. Rousseau et al claims - 128 claims
   737 307 - 737 331
   753 160 - 753 178
   780 483 - 780 487
   783 221 - 783 241
   780 757 - 780 806
   767 509 - 767 512
   825 753, 825 754
   825 759, 825 760

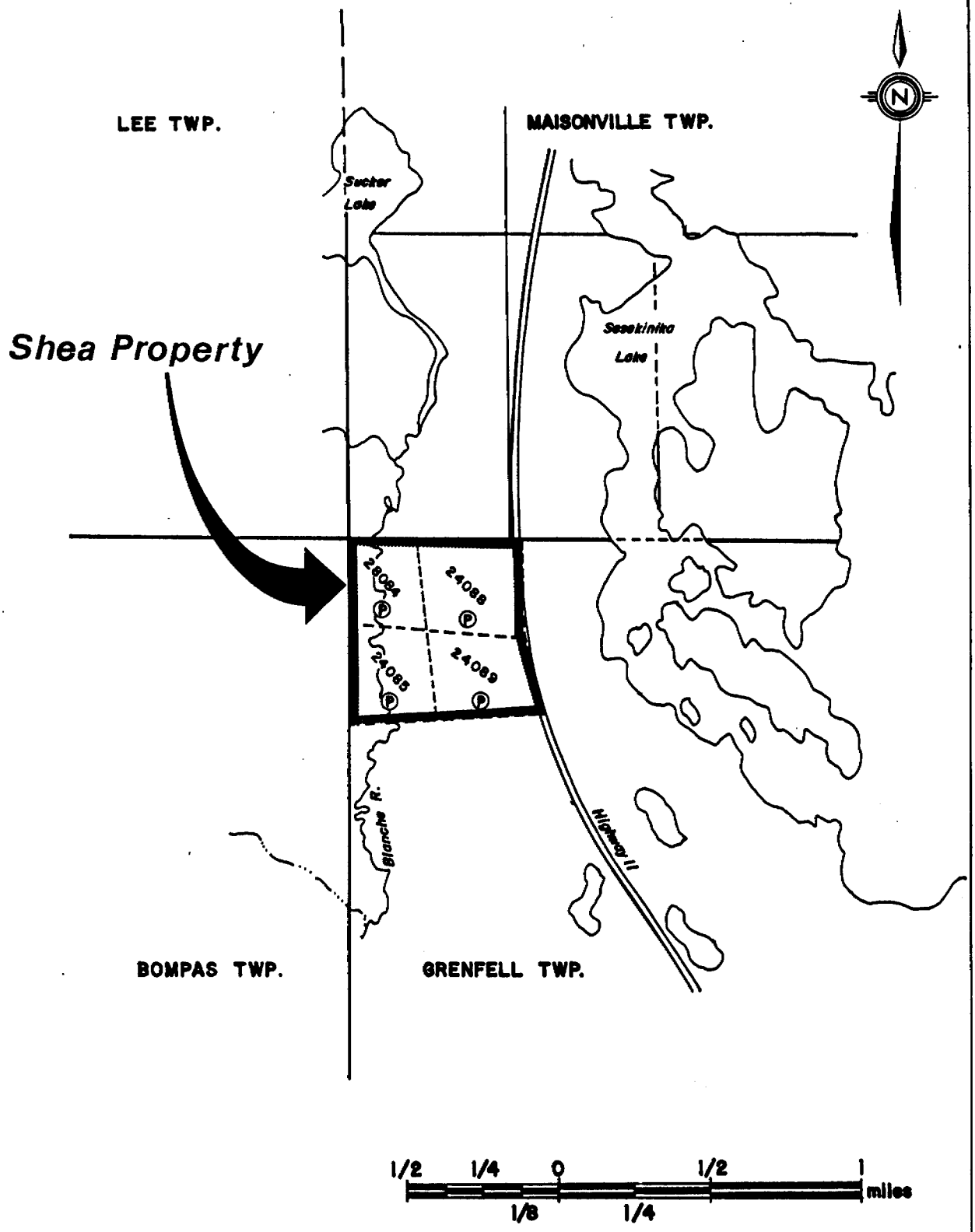
2. Shea Property - 4 claims, unpatented
   24084, 24085, 24088, 24089

3. Bezzabetz Property - 1/2 Lot, patented
   S 1/2 Lot 12, Con.1, Maisonville Twp.

In late fall 1984, backhoe trenching was undertaken to enlarge the four old trenches and pits inorder to expose more of the known mineralized areas. These were mapped and sampled in detail by John Scott of R.S. Middleton Exploration Services Inc. A small metric grid (15.2 km) with north-south trending lines was



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for BEEZABETZ PROPERTY		
	Title LARDER LAKE MINING DIVISION MAISONVILLE TWP. CLAIM LOCATION		
	Date: Aug 21, 1984	Scale: 1"=1/2 mi	N.T.S.:
	Drawn: A.W	Approved:	File:



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for SHEA PROPERTY		
	Title CLAIM LOCATION		
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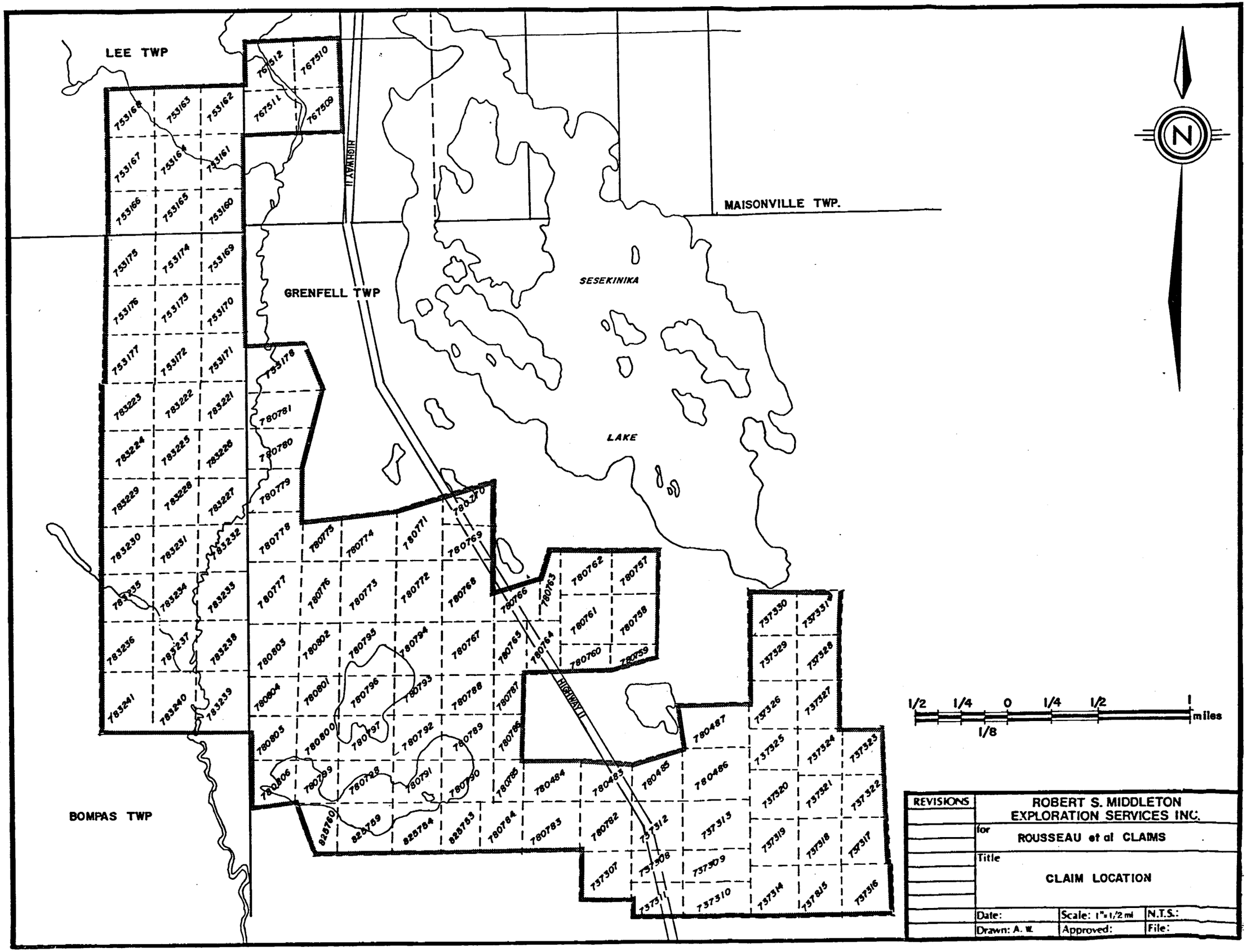
	Drawn: A.W	Approved:	File:



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for ROUSSEAU et al CLAIMS		
	Title CLAIM LOCATION		
	Date:	Scale: 1"=1/2 mi	N.T.S.:
	Drawn: A. W.	Approved:	File:

cut at 50m intervals in the vicinity of the gold showings and at 100m intervals on part of the patent claims. The lines were picketed at 20m spacings. The total of 2.8 km of induced polarization survey was carried out over the known mineralized zones.

In the summer 1985, the grid was significantly enlarged to cover extensions of stratigraphic units known to host gold mineralization in the area. The total of 48.5 km of lines were cut on the property. More north-south trending lines were cut at 100m intervals and additionally, east-west trending lines were cut at 100 and 200m spacings. All lines were picketed every 20m.

The regional and detailed mapping, prospecting and lithogeochemical sampling were undertaken by Daria Duba and Stephen Jenner of R.S. Middleton Exploration Services Inc. Geophysical surveys which consisted of induced polarization (10.8km) and magnetics (33.0km) were carried out over selected areas on the property.

2.0 LOCATION, ACCESS AND TOPOGRAPHY

Sesekinika Lake property is situated in Bompas, Grenfell, Lee and Maisonville Townships in the Larder Lake Mining Division of Ontario. It is located west of Lake Sesekinika, about 25 km northwest of the town of Kirkland Lake.

The property is readily accessible by highway 11 which

traverses the southern part and runs along the eastern boundary of the northern part of the claim group.

The western part of the area is traversed by the north-south trending, meandering Blanche River. Bush and cottage access roads provide easy access to the property on both sides of the Blanche River. The Ontario Northland railroad passes 4.4 km east of the northern corner of the property as well as the Northern Ontario Central Gas Pipeline.

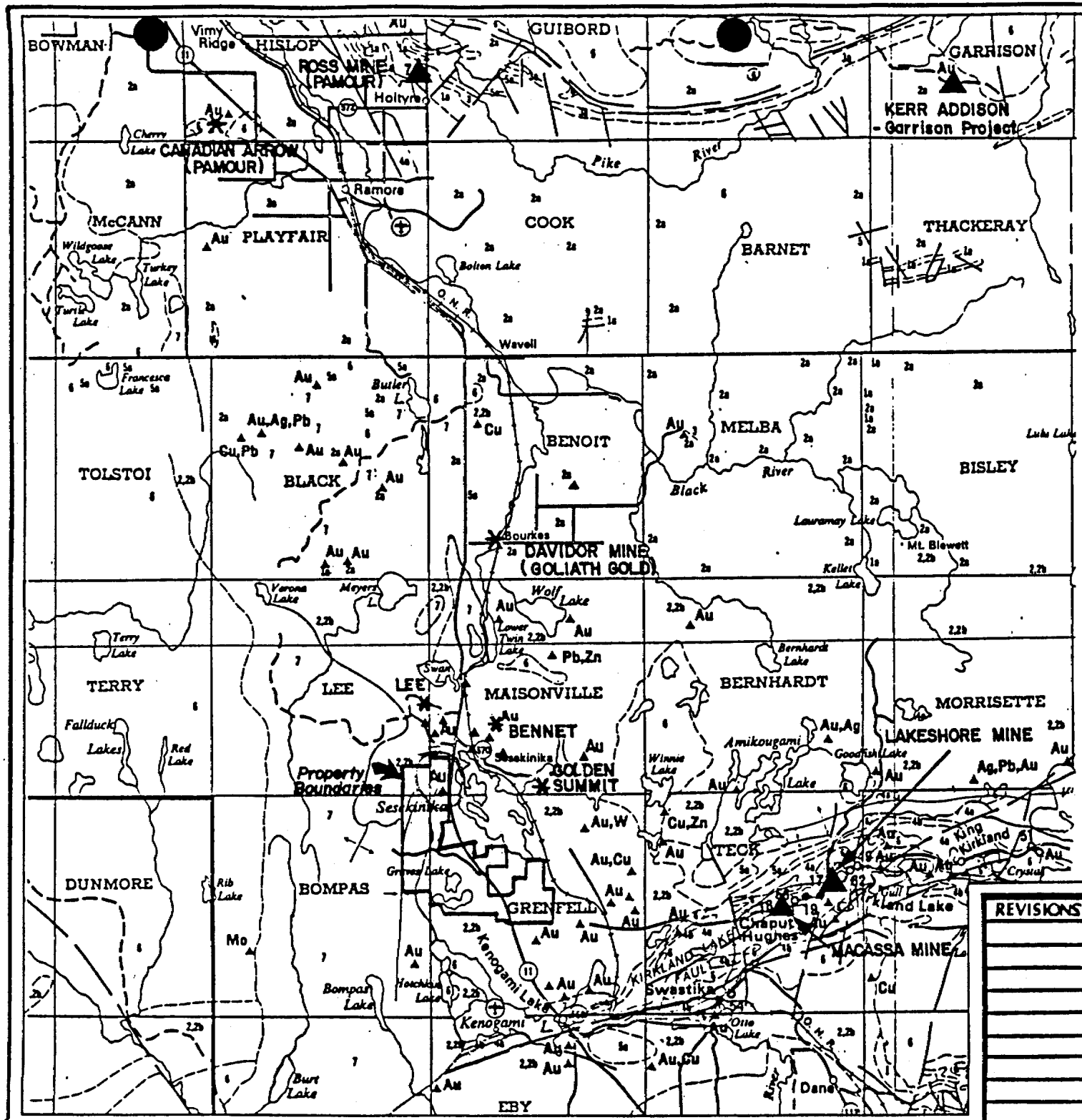
The terrain is typically quite flat with elevation differences not exceeding 50 feet. The outcrop is locally very abundant especially in the northern portion of the area at the boundary of Maisonville and Grenfell Townships. Outcrop underlies approximately 10% of the property.

3.0 REGIONAL GEOLOGY

The Sesekinika Lake property is situated in the Kirkland Lake mining camp which is part of the Abitibi Greenstone Belt of the Superior Province.

The Kirkland Lake area is underlain by Archean volcanic, intrusive and locally derived sedimentary rocks. The Archean rocks are unconformably overlain by Proterozoic sedimentary rocks of the Cobalt group. A few diabase dikes of Keweenawan age cut the entire sequence.

The metavolcanic-sedimentary rocks are folded into a large,



LEGEND

7 — *7 Conglomerate, arkose, greywacke, slate.*

UNCONFORMITY

ARCHEAN

ACID INTRUSIVE ROCKS[d]

6 — *6 Granite, syenite, and associated porphyritic types.*

BASIC AND ULTRABASIC INTRUSIVE ROCKS[c]

5 — *5 Undifferentiated.*
5a Gabbro, diorite.
5b Peridotite, dunite, pyroxenite and altered equivalents.

INTRUSIVE CONTACT

SEDIMENTARY ROCKS[b]

4 — *4a Conglomerate, greywacke, argillite, slate.*
4b Trachytic volcanic rocks.

UNCONFORMITY

SEDIMENTARY ROCKS[a]

3 — *3 Undifferentiated.*
3a Conglomerate, greywacke.
3b Tuff.
3c Amphibolite, schist, and gneiss derived from sediments and, possibly, basic intrusive and extrusive rocks.

BASIC VOLCANIC ROCKS[a]

2 — *2 Undifferentiated.*
2a Andesite, basalt, basic pyroclastic rocks.
2b Interflow sedimentary rocks.

ACID AND INTERMEDIATE VOLCANIC ROCKS[a]

1 — *1 Undifferentiated.*
1a Rhyolite, trachyte, and acid pyroclastic rocks.
1b Dacite.

Ag - Silver Au - Gold Pb - Lead
Cu - Copper Mo - Molybdenum
Zn - Zinc W - Tungsten

▲ Producing mines
✱ Past producing mine

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for GRENFELL PROPERTY		
	Title REGIONAL GEOLOGY MAP		
	Date: Sept. 1984	Scale: 1"=4 mi.	N.T.S.:
	Drawn: C.G.	Approved:	File: M-68

east plunging synclinorium located between the Lake Abitibi Batholith in the north and the Round Lake Batholith in the south. The north and south limbs of the synclinorium are cut by two major east striking fault zones: the Porcupine-Destor Fault and the Kirkland Lake - Larder Fault, respectively. Many of the gold mines in the district are spatially associated with these two fault structures.

4.0 PREVIOUS WORK

Numerous gold and base metal showings have been investigated for the past 80 years in both Grenfell and Maisonville Townships. Significant gold values have been obtained in numerous quartz veins associated with carbonate alteration and disseminated sulfides. These veins usually occur in shear zones within the mafic and ultramafic intrusives or coarse-grained mafic flows throughout the area.

Only one exploration program near the property has been documented in the assessment files of the Kirkland Lake Resident Geologist's office. The program consisted of VLF and magnetic surveys over a 4 claim block held by Falconbridge in 1980 and the claims were subsequently allowed to lapse. The survey was performed southwest of Lake Sesekinika. No significant anomalies were detected.

Several trenches, presumably excavated in late 1920's and

1930's exposed quartz veins, stringers and pods associated with sulfide mineralization and carbonate alteration within fractured gabbro on the Shea and Bezzubetz patented claim blocks in the northeast corner of the Grenfell Township an the southwest corner of the Maisonville Township. There is no record of this work on file in the Resident Geologist's office in Kirkland Lake.

5.0 EXPLORATION RESULTS

5.1 General

The total of 48.5 km of lines were cut in the northern portion of the Seseskinika Lake property in Bompas, Lee, Grenfell, and Maisonville Townships covering an area of about 25 mining claims. This part of the property, which includes all the known mineralized areas, was mapped at a scale of 1:2000 (map 1 in the pocket) in order to define the main geological and structural relationships. More detailed investigation was carried out on trenched and stripped gold showings (1:200; Maps 4-7).

Regional geological mapping and prospecting was undertaken on the rest of the Grenfell property. Most of the effort was concentrated in Grenfell Township. East-west traverses were run at several hundred meter intervals using pace and compass methods. The results were plotted at a scale of 1:5000 on enlarged aerial photographs (Map 2).

5.2 Property Geology

The Grenfell property is underlain by Archean subaqueous mafic metavolcanic massive and pillowed flows of the Kinojevis Group. These rocks are intruded by several north-northwest trending mafic syenite bodies and north-trending Matachewan diabase dikes. The Archean sequence is uncomformably overlain by the Proterozoic Cobalt Group which consist of conglomerate, greywacke, arkose, sandstone, and argillite. Table 1 lists the lithological units in chronological order except for the metavolcanic rocks. These were grouped lithologically and their relative positions in the table do not imply age relations.

TABLE 1 TABLE OF FORMATIONS

CENOZOIC
Recent
Swamp and Stream Deposits

Pleistocene
Glacial drift, boulders, gravel, sand

UNCONFORMITY

PROTEROZOIC
Cobalt Group
Conglomerate, conglomeratic greywacke, greywacke, Arkosic, sandstone, argillite

UNCONFORMITY

ARCHEAN
Mafic intrusive rocks (Matachewan)
Diabase

INTRUSIVE CONTACT

Felsic intrusive rocks
Mafic syenite porphyry, syenite porphyry

INTRUSIVE CONTACT

UPPER SUPER GROUP
Kinojevis Group
Iron poor and iron rich (magnesium tholeiite and iron tholeiite) mafic metavolcanic rocks: pillowed basalt, massive basalt, coarse-grained massive basalt or gabbro, amygdaloidal, porphyritic and variolitic flows, granophyric dikelets.

Mafic Metavolcanic Rocks - Unit 1 and 2

The mafic metavolcanic rocks form a north to northwest and northeast trending sequence of interlayered iron-rich and iron poor mafic flows. Mafic flows are exposed throughout the Grenfell property. The iron rich type (Unit 1) is dark green to black on the fresh surface, weather to rusty brown and is strongly magnetic. The magnetic signature is very high in the order of 59000 to 62000 grammas. The iron-poor variety (Unit 2) is by comparison lighter green to grey or dark green to grey, both on weathered and fresh surfaces and is weakly to non-magnetic. Jensen (1983) classifies the former type as iron-rich tholeiitic basalt and the latter type as magnesium-rich tholeiitic basalt.

The tholeiitic basalts occur as pillowed and tabular massive flows. The pillowed flows (1a, 2a) form units 10 to several hundred meters thick. The pillows are closely packed and occassionally are separated from one another by hyaloclastite. Locally pillow-breccia consisting of angular fragments of fractured pillows was observed. The pillows are an average 30 to 100cm long. They have dark green, weathered, 1-3cm thick selvages.

The tabular flows (1b, 2b) are from 5 to more than 100 meters thick. The rocks within the individual flows range in grain size from aphanitic to coarse-grained. This great grain

size variation makes it often difficult to differentiate between coarse-grained flows and gabbroic intrusive bodies. Some of the coarse-grained units (1c, 2c) could possibly be comagmatic gabbroic sills. These coarse-grained flows or gabbroic sills are the most abundant lithology in the eastern portion of the property.

The iron-rich coarse-grained flows or gabbros consist of 40-60% augite, 30-40% plagioclase, 5-10% magnetite and minor ilmenite (leucoxene) and pyrite. The iron-poor lavas are generally lighter in colour due to a a lower content of mafic minerals (30-40% augite and 50-60% plagioclase). The magnetite, ilmenite and pyrite form less than 5% of these rocks. In the thick, massive flows, dark green to grey augite grains (1-4mm in length) enclose many of the plagioclase laths to give the rocks an ophitic texture typical of gabbros. Rocks are generally weakly metamorphosed, with the mafic minerals being chloritized and feldspars being locally saussuritized.

Porphyritic mafic flows (1d, 2d) were observed in several outcrops near L4+00N, 14+00W and L8+00N, 13+50W. The flows consist of yellowish green to white spherulitic phenocrysts of plagioclase set in an aphanitic mafic groundmass. Phenocrysts are on the average 0.5 to 2.0cm in diameter and may form up to 20% of the rock.

Variolitic flows (1e, 2e) which occur very rarely (L3+00S,

9+00 to 9+50W) are characterized by 0.1 to 0.5cm in diameter feldspar variolites. Amygduloidal flows are also rarely observed. The amygdules consist of quartz, calcite and less commonly chlorite.

In several localities near Trench 4, the coarse-grained flows or gabbroic sills are intruded by thin, 2cm to 5cm wide, fine-grained granophyric dikelets (1g, 2g). In Trench 3, the granophyric dike is 1.5m wide, medium grey on the fresh surface and weathers to buff. It is intermediate in composition with traces of pyrite. All granophyric dikes which were observed appear to be late injections of the differentiated material evolved from the same magma chamber as the host volcanic rocks.

Felsic Intrusive Rocks - Unit 3

Isolated occurrences of mafic syenite porphyries intruding the mafic volcanic rocks were observed in the extreme northern portion of the property (Maisonville Township) and at several localities in the southern portion of the property (Grenfell Township). The syenite bodies are north to northwest trending, approximately parallel to the regional stratigraphy, and up to 20m wide. They are dark green to grey on the fresh surface. Two varieties of syenites were observed; one consisting of 20-30% pink k-feldspar, 25% biotite ad 2-5% quartz phenocrysts set in a fine-grained mafic matrix of pyroxene, plagioclase, biotite,

epidote and chlorite. K-feldspar phenocrysts are 1-3m in diameter and are strongly saussuritized to sericite and epidote.

Diabase Dikes - Unit 4

The youngest Archean rocks on the property are diabases generally occurring as 20-30m wide, northerly trending and steeply dipping dikes. The diabase is dark green to black on the fresh surface and weathers to rusty brown. It is typically fine-grained, equigranular, strongly magnetic and exhibits diabasic texture. Diabase dikes have well developed closely spaced jointing patterns. The intrusive contacts and chilled margins were not recognized on the weathered surfaces of the outcrops on the property.

Cobalt Group Sedimentary Rocks - Unit 5

The Proterozoic Cobalt group unconformably overlies the Archean metavolcanic-sedimentary sequence. This unit is exposed predominantly in the north trending belt in the western part of the property west of the Blanche River.

This unit is comprised of interbedded conglomerate, conglomeratic greywacke, arkose, and argillite. They are fresh, resistant clastic rocks and therefore typically form high, flat-topped ridges. The dominant lithotypes are conglomerate and conglomeratic greywacke (5a). They consist of boulders and

pebbles from less than 1cm to a meter in diameter. Clasts which comprise from 10 to 70% of the rock are mostly granitic in composition. Occassionally clasts of mafic to felsic volcanic rocks (gabbro, basalt and rhyolite), milky quartz and jasper iron formation were observed. The matrix is fine to medium-grained, greenish-grey greywacke, conglomerate and conglomeratic greywacke are typically poorly sorted with subangular to subrounded clasts of low sphericity, indicating a fairly short distance of transport. General consensus of opinion is that the Cobalt group conglomerate is tillite.

Arkosic sandstone (5b) is typically pink to pinkish grey, massive with subangular to angular fragments of largely quartz (30-40%), K-feldspars (50-70%) and a few percent of mafic minerals. Greywacke (5c) is greenish, grey, massive, poorly sorted with subangular fragments of quartz (30-50%), feldspar (30%), 5% mafic minerals and 20-35% matrix (carbonate, chlorite, opaque minerals, etc.) The argillite (5d) is a finely laminated, grey-green aphanitic rock.

Cenozoic: Pleistocene

Straie and plucking features indicate that the ice motion was 170° to 175°.

The extensive sand and gravel deposits of glacial origin cover much of the area.

Structure and Metamorphism

The mafic volcanic sequence shows changes in the general trend from northeasterly in the northern part of the area (Maisonville and Lee Townships) through northerly to northwesterly in the southern part of the area (Grenfell Township). This is indicated by the magnetic patterns on the regional aeromagnetic map produced by OGS in 1979.

The orientation of pillowed lavas is approximately coincident with the airborne magnetic trends. They generally trend northerly in the northeastern part of the area and northwesterly in the southern part of the area. Stratigraphic tops as indicated by the direction of the pillows are always to the east. The Cobalt group sedimentary rocks also strike northerly to northwesterly with gentle dips of 15° to 35° to the east.

The rocks on the property show little or no penetrative deformation. Pillows, amygdules, variolites, and hyaloclastic textures are largely undeformed. Foliation is very rarely developed and wherever it occurs, it is possibly related to isolated shears or fractures. The trend is generally 140° - 160° in the south and changes to 170° - 180° in the north. Dips are steep (80° east) to the subvertical.

The metamorphic grade of the rocks on the property appears

to be largely lower greenschist facies.

5.3 Economic Geology

Four trenches have been backhoe stripped in the fall of 1984 to enlarge the exposure of the known gold showings. The four main showings occur at the boundary of the patented claims between Maisonville and Grenfell Townships (Map .....). The object of the exploration program was to determine if a large area of low grade gold mineralization would be created by the stockwork of quartz-pyrite carbonate alteration zones.

The gold-pyrite mineralization occurs in the form of quartz veins, stockworks, and irregular silicified zones hosted by coarse-grained mafic volcanics or gabbroic sills. The quartz veins trend in two directions east to east-southeast (90-110°) and northwesterly (140°). They are from 5cm to 40cm wide and consist of milky quartz, pods of silicified and carbonatized host gabbro, minor carbonate and 1-3% disseminated pyrite, quartz stringers and irregular silicified zones are associated with 2-5% pyrite, as disseminations and along micofractures. The host gabbro is extensively fractured and flooded with mainly silica, iron carbonate and pyrite (2-10%).

Trench 1

Trench 1 consists of a 2-5m wide zone of intensely silicified, iron carbonatized and locally chloritized massive

mafic volcanics or gabbroic sill. The altered zone trends 100-120° and is exposed over 20 meters. The host rocks are strongly magnetic and locally are extensively fractured and sporadically impregnated with silica, minor iron carbonate an up to 10% pyrite as disseminations and along microfractures (Photo 2). Very sharp contacts at 90° - 100°, were observed between altered and relatively unaltered rocks (Photo 3).

The best assays from the altered zone are 0.052 oz/t Au over 2.35m and 0.077 oz/t Au (grab sample). The values from apparently unaltered, dark green gabbro from a 1.2 m wide zone at the contact in altered rocks yield significant gold concentrations; i.e. 970 ppb Au.

Trench 3

The mineralization in Trench 3 is hosted by the weakly magnetic mafic volcanic rocks or gabbros (2c). These are cut by a fine-grained northeast trending dike of intermediate composition.

The quartz vein trends 90° - 115° with 80° dip to the north to subvertical. It is on average 5 to 10cm wide and has a pinch and swell character. At the western extremity of the trench, the quartz stringer zone (40cm to 115cm wide) is developed (Photo 4). The vein and stringer zone has associated minor iron carbonate and 1-3% disseminated pyrite. The host gabbro at the contact is slightly to very intensely altered with almost complete

replacement by silica, minor carbonate and 1-2% pyrite.

The best assays from the mineralized quartz vein and quartz stringer zones are 729 ppb Au/0.39m and 875 ppb Au/1.15m. The intensely altered host gabbro does not carry significant gold contents (i.e. 243 ppb Au).

Trench 4

Two types of mineralization were observed in Trench 4; one which is associated with quartz-pyrite vein (Photo 5) and the other with irregular silicified and ± carbonatized zones cut by 1-2cm wide quartz stringers (Photos 6 and 7).

The quartz vein is 20 to 40cm wide and is discontinuously exposed over 9 meters (western part of the trench). It strikes at 105° with a 80° dip to the north. The strike changes to 145° in the western extremity of the vein. It consists of milky to grey quartz, locally fragmental, containing pods of silicified gabbro and 2-5% pyrite as disseminations and along microfractures. The host gabbros at the southern contact of the quartz vein are strongly sheared parallel to the vein (i.e. 105°/subvertical within a 0.5m wide zone. Saussuritization of feldspars to epidote, sericite and carbonate and epidote veining along fractures were locally observed within the gabbroic rocks.

The best gold value from the quartz vein is located at the western extremity; i.e. 0.042 oz/t Au over 0.70m. In the other localities the silicified, iron carbonatized and pyritized gabbro

from 0.5-0.7m wide zone at the contact with the quartz vein carries 0.040 and and 0.056 oz/t Au. The best assays from irregular silicified zones are obtained from the eastern part of the trench. These are 0.104 oz/t Au over 1.2m and 0.082 oz/t Au over 2.0m, respectively.

Trench 4N

Trench 4N consists of pinch and swell type quartz vein from 0.4 to 0.7m wide (Photo 8). It is exposed over the length of about 5.0m and then disappears under the overburden cover to the northwest.

A small quartz stringer, up to 10cm wide, is observed in the southern part of the trench. It could possibly be an extension of the quartz vein exposed in the northwest. The quartz vein trending 145° - 150°, consists of milky quartz, iron carbonate and 2-5% disseminated pyrite. The host gabbro is generally unaltered except in the southern part where it exhibits silicification, iron carbonatization and pyritization of a similar type as that observed in the other three trenches.

The best gold assays from all four trenches are obtained from Trench 4N. These are 0.170 oz/t Au over 0.75m an 0.092 oz/t Au over 0.70m.

Other Mineralized Areas

Significant gold values were obtained from several other

areas outside of the four trenched zones. These are as follows:

Location	ppb Au	oz/t Au
L 3+50W, 0+60S	798	
L 3+50W, 0+60S	858	
BL, 3+25W	672	
0+90W, 0+80S	680	
BL, 1+12W (PIT #5)		0.057
PIT #2	439	
PIT #2	743	
Southern part of Grenfell Twp. east of Grenfell Lake	773	

TABLE 2

SAMPLE #	ROCK TYPE	LENGTH (meters)	Au ppb	Au oz/t
	TRENCH 1			
G67613	strongly silicified, iron carbonatized and chloritized gabbro with quartz stringers, up to 10% disseminated pyrite.	3.45		0.041
G67614	strongly silicified and iron carbonatized gabbro with quartz stringers and up to 10% disseminated pyrite.	2.35		0.052
G67615	massive, dark green gabbro at the contact with the mineralized alteration zone (G67614).	1.2	970	
G67616	extremely altered (silicified, chloritized and iron carbonatized) gabbro with 10% pyrite as disseminations and along microfractures.	2.0		0.046
G67617	siliceous, grey rock with quartz stringers, up to 5% disseminated quartz.	1.85		0.058
G67618	dark green, slightly silicified gabbro and 20cm wide zone of strongly silicified gabbro with 2% disseminated pyrite.	1.10	185	
G67619	extremely silicified and iron-carbonatized gabbro, 3-5% pyrite.	1.16		0.048
	TRENCH 3			
G67620	silicified gabbro with quartz stringers, <1% disseminated pyrite.	0.98	243	0.007
G67621	dark green gabbro with quartz stringers and 50cm wide silicified zone with 1% disseminated pyrite.	1.25	126	0.004
G67622	dark green gabbro, slightly chloritized and epidotized at the contact with quartz vein.	0.5	10	

SAMPLE #	ROCK TYPE	LENGTH (meters)	Au ppb	Au oz/t
G67623	quartz vein with up to 3% pyrite (about 10cm wide and silicified gabbro.	0.37	729	0.021
G67624	milky quartz vein with fragments of silicified gabbro, 1-2% pyrite.	1.15	875	0.025
G67625	milky quartz with 1% disseminated pyrite.	0.4	326	0.01
	TRENCH #4			
G67626	milky quartz vein and strongly silicified, grey gabbro with 2-3% disseminated pyrite.	0.7		0.042
G67627	milky quartz vein and strongly silicified, grey gabbro with 2-3% disseminated pyrite.	0.42	864	0.025
G67628	slightly silicified, dark green gabbro with up to about 5% disseminated pyrite (at the contact with quartz vein; G67627).	0.7		0.040
G67629	fragmental milky quartz vein with pods of grey extremely silicified host gabbro, up to 5% pyrite.	0.4	771	0.022
G67630	slightly silicified gabbro, dark green, at the contact with the quartz vein (G67629); up to 5% disseminated pyrite.	0.5		0.056
G67631	fragmental milky quartz vein with pods of silicified gabbro; 2-5% pyrite as disseminations and along fractures and cavities in quartz.	0.2	664	0.019
G67632	slightly silicified, dark green gabbro with up to 5% disseminated pyrite at the contact with quartz vein (G67631).	0.4	639	0.019
G67633	slightly silicified gabbro with quartz stringers, up to 3% disseminated pyrite.	0.5	836	0.024
G67634	slightly silicified, dark green gabbro with up to 2% disseminated pyrite.	0.95	221	0.006
G67635	silicified and iron-carbonatized gabbro with quartz stringers and 2-5% dis-	1.45		0.052

seminated pyrite.

SAMPLE #	ROCK TYPE	LENGTH (meters)	Au ppb	Au oz/t
G67636	strongly silicified and iron-carbonatized gabbro with about up to 10% disseminated pyrite.	2.0		0.048
G67637	strongly silicified gabbro with up to 10% disseminated pyrite.	2.9	754	0.022
G67638	extrememly altered gabbro (silicified, chloritized and iron-carbonatized) and pods of slightly altered gabbro, 5-8% disseminated pyrite.	1.2		0.104
	TRENCH # 4N			
G67639	quartz vein with fragments of silicified and iron-carbonatized gabbro, 2-5% disseminated pyrite.	0.7		0.092
G67640	milky quartz vein with up to 5% disseminated pyrite.	0.45		0.040
G67641	slightly silicified gabbro with pods of unaltered gabbro, 1% disseminated pyrite.	1.1	431	0.013
	PIT #2			
G67642	slightly silicified and foliated, fine grained basalt, traces of pyrite.	0.7	439	0.013
G67643	slightly silicified and foliated basalt with minor quartz stringers, traces of pyrite.	0.65	743	0.022
	TRENCH 4N			
G31101	quartz-minor carbonate with up to 10% disseminated pyrite.	0.75		0.108
G31102	the same as 31101	grab sample		0.170
G31103	the same as 31101	0.90		0.111
G31104	dark green medium grained gabbro, minor quartz veinlets; 1% disseminated pyrite.	grab sample	121	

G31105	dark green medium grained gabbro, 4% disseminated pyrite.	grab sample	22	
SAMPLE #	ROCK TYPE	LENGTH (meters)	Au ppb	Au oz/t
	TRENCH 4			
G31106	extremely silicified and iron-carbonatized gabbro with quartz stringers; 5-8% pyrite.	2.0		0.082
G31107	quartz vein (30cm wide) with fragments of silicified and carbonate altered gabbro.	1.6	823	
G31108	silicified gabbro with some quartz stringers.	1.5	960	
G31109	silicified and chloritized gabbro with 1-2% disseminated pyrite.	grab sample	334	
G31110	fragmental milky quartz vein with pods of silicified gabbro, 3-8% disseminated pyrite.	grab sample		0.042
G31111	milky quartz vein with pods of silicified gabbro, 1-3% pyrite.	grab sample		0.035
TRENCH 3				
G31112	milky quartz vein with fragments of silicified gabbro, 1% disseminated pyrite.	grab sample	504	
G31113	silicified gabbro, fine grained, 1-2% pyrite.	grab sample	280	
	TRENCH 1			
G31115	strongly silicified, light grey gabbro with up to 10% disseminated pyrite.	grab sample		0.077
G31116	silicified and iron-carbonatized gabbro with up to 10% pyrite.	grab sample	891	
G31117	weakly altered (silicified) gabbro with 2-3% disseminated pyrite.	grab sample	480	
G31118	strongly silicified and iron-	grab	891	

carbonatized (minor gabbro, 1-2% disseminated pyrite.)

SAMPLE #	ROCK TYPE	LOCATION	Au ppb	Au oz
G67601	milky quartz with enclosed silicified and carbonatized basalt; basalt contains <1% disseminated pyrite.	SW Grenfell Twp.	773	0.022
G67602	light grey-green, silicified basalt (northern side of the trench).	SW Grenfell Twp.	49	
G67603	foliated basalt with calcite veinlets (10m south of the pit; G67602)	SW Grenfell Twp.	32	
G67604	hyaloclastite composed of light grey dacitic fragments set in more mafic matrix altered to calcite, chlorite and epidote.	SW Grenfell Twp.	15	
G67605	hyaloclastite composed of dacitic and cherty fragments; trace pyrite.	SW Grenfell Twp.	12	
G67606	milky quartz with fragments of silicified gabbro; 1-2% pyrite.	3+60W, 1+00S	159	0.005
G67607	milky quartz with fragments of carbonatized and silicified gabbro; trace pyrite.	3+50W, 0+60S	798	0.023
G67608	silicified gabbro with quartz veinlets; 1% pyrite.	3+50, 0+60S	858	0.024
G67609	silicified gabbro with cross-cutting calcite and quartz stringers; 1% pyrite.	BL,3+25W	672	0.020
G67610	light grey, siliceous rock composed of milky quartz, minor chlorite, calcite, epidote and 2-3% pyrite (boulder from the trench).	0+90W, 0+80S	680	0.020
G67611	siliceous rock composed of smoky quartz and minor calcite; 1% pyrite (boulder).	BL,1+12W		0.057
	PIT #5			
G67612	slightly silicified and epidotized gabbro (3m west of G67611)	BL,1+15W	58	

6.0 GEOPHYSICAL SURVEYS

6.1 Magnetics

A Geometrics G-816 proton precession magnetometer was used to carry out the total field magnetic survey over the northeastern part of the Sesekinika Lake property. The total of 33.0 km of the magnetic survey was conducted from June 7 to June 16, 1985 by Daria Duba. A total of 1650 readings were taken at 20m intervals along all lines and tie lines between L0+0 and L8+00W and between 12+00N and 16+00S. The survey was conducted along selected lines west of L8+00W.

A common base station was established at BL0 on L0 and was assigned a value of 58915 gammas.

Duirnal corrections were done assuming a linear change with time and the corrected data was plotted on the accompanying plan at a scale of 1:2000 and contoured at a 100 gamma intervals (Map 3).

Results

Four major areas of anomalously high magnetic gradient were deliniated by the survey. These are referred to as anomaly A, A , B, and C (Map 3).

Anomaly A which trends northerly is delineated from 1+90N to 5+00S. Steep magnetic gradients occur on both the eastern and western sides, at 0+50W and 1+75W respectively, which reflects a

contact.

This anomaly widens in the southern portion, where it reaches a minimum width of about 350m. The area covered by the anomaly is underlain by iron rich coarse grained flows or gabbroic sills. The magnetic intensity is in the order of 59,000 to 62,000 gammas.

Anomaly A just 200m north of anomaly A (from 4+00N to 6+00N) is also coincident with outcropping iron rich coarse grained flows. This horizon is very significant since it hosts most of the known auriferous mineralization on the property.

Anomaly B which is northeast trending, is delineated northwest of anomalies A and A from 6+00N to 12+00N, over the 200m width. Only one small outcrop of iron rich gabbroic rocks was found in the area of the anomaly. This anomaly is interpreted as another iron rich flow unit. The steep gradient on the western side of this anomalous zone is thought to be related to the cummulative magnetite concentrated at the bottom of the flow unit. The magnetic intensity is 58600 - 60600 gammas.

Anomaly C is delineated in the southern part of the area, from 8+00S to 16+00S, and from 4+00W to 7+00W. It is displaced several hundred meters westerly with respect to Anomaly A. These two anomalies are partly separated by an approximately east-west trending zone of anomalously low magnetic gradient. Anomaly C is

less intense than anomalies A and B. It is in the order of 58600 - 59200 gammas.

The magnetic patterns change trend from northeasterly in the northern part of the area to northerly in the central and southern part of the area as shown by anomalies A, A , B, and C. This suggests that the property is situated within a hinge zone of a large fold, which makes it a favourable area for finding structure-related auriferous mineralization associated with fractures and shear zones.

6.2 Induced Polarization

An induced polarization survey was carried out over selected areas of the property in order to further delineate the known mineralized zones and to trace out other potential areas of mineralization.

The total of 2.8 km and 10.8 km were surveyed during November, 1985 and May 29 to June 8, 1985 respectively by personnel of R.S. Middleton Exploration Services Inc. The IP survey which was carried out in summer 1985 was in co-operation with Rayan Exploration Ltd. Surveys were conducted by Chris Jones, Wayne Pearson, Dave Strain, Robert Boyce and Robert Marvin, Steve Anderson, Wayne Pearson, Chris Jones, respectively.

The time domain induced polarization survey was carried out using a Scintrex IPR-8 receiver and Phoenix IPT-1 transmitter (2.0 KVA). An "a" spacing of 20m was used with three dipoles

(n=1,2,3) arranged in a pole-dipole configuration. This gave theoretical survey depths of up to 30 meters. A 2 second "on" 2 second "off" square wave pulse was transmitted into a ground via stainless steel electrodes and voltage was read using porous pots filled with copper sulphate solution. The time window over which the voltage was recorded was 650 milliseconds to 1170 milliseconds after the shut off of the pulse. The mean of the M232 time "window" is 900 milliseconds after the shut off of the pulse.

A full description and specifications for the Scintrex IPR-8 receiver ad the Phoenix IPT-1 transmitter is given in Appendix B.

The chargeability resistivity data (n=1,2,3) were plotted on the pseudosections attached to the back of this report (Fig. 8 to 30). The chargeabilities and resistivities read at dipole n=2 were plotted on the accompanying plans at a scale of 1:2000 (Maps 4 and 5).

The total of 1959 readings were taken at 253 stations.

Results

Four major zones of anomalously high chargeability referred to as anomalies E, E , F and G were delineated in the area (Map 4).

Anomaly E located in the northeastern part of the property from 1+30N to 1+60S and from 0+0 to 3+25 W trends northerly. It is underlain by iron rich coarse grained flows or gabbro sills

which locally host auriferous mineralization.

Anomaly E covers an area just south of Anomaly E from 1+90S to 3+00S. It appears to be an extension of Anomaly E along strike.

Anomaly F delineated north of Anomaly E, from 4+20N to 6+60N and from 0+00 to 1+50W is underlain by iron rich coarse grained lavas or gabbro. This anomaly could be the possible extension of anomalies E and E . All three chargeability anomalies are coincident with anomalously high resistivities. High resistivities are due to the recrystallization of rocks which occurred during the late hydrothermal events associated with the emplacement of gold-pyrite mineralization. Also this particular are area of high chargeability/resistivity is coincident with a zone of very high magnetic gradient, in the order of 59000 - 62000 gammas.

Anomaly G, the strongest anomalous zone, trends northeasterly and occurs just west of the major anomalies A, A , and B.

It is coincident with a topographic depression which is interpreted as a contact zone between iron poor coarse grained flows or gabbros and pillowed flows. The area of anomalously high chargeability is slightly shifted to the north with suspect to the zone of anomalously high resistivity. Anomaly G is not coincident with the high magnetic gradient as is the case of

anomalies E, E , and F but on the contrary is coincident with an area of low magnetic gradient, probably indicating the presence of sheared, iron poor metavolcanic rocks or interflow metasediments containing sulfides and/or graphite mineralization (i.e.) this IP anomaly appears to be in an exhalitive setting.

7.0 CONCLUSIONS AND RECOMMENDATIONS

1. A wide zone of structurally controlled gold sulfide mineralization occur primarily within fractured iron rich mafic metavolcanic rocks of the Kinojevis group.

2. Mineralized areas are characterized by auriferous quartz-carbonate veins, stringers and irregular silicified zones. Pyrite, 2-10%, occurs as dissemination or along microfractures in silicified, iron carbonatized, chloritized and locally epidotized host rocks which are almost exclusively coarse grained mafic flows or gabbroic sills.

3. Anomalous gold values were obtained from all four trenched zones. The best assays are from Trenches 4N and 4 which include 0.170 oz/t Au and 0.104 oz/t Au respectively. Significantly anomalous gold values were also obtained from other parts of the property.

4. The mineralized zone is traceable by induced polarization method (high chargeability and high resistivity) and on a smaller scale by chargeability peaks within areas of high background chargeability and resistivity.

5. Several magnetic anomalies were delineated. The most intense north-trending anomaly is related to the iron rich mafic metavolcanics or gabbros which host most of the auriferous mineralization and these should be followed with IP coverage.

6. The possibility of exhalitive mineralization occurs on the property as indicated by IP anomaly G which could have important implications for larger tonnage gold deposits in the vicinities of the stockwork type that occur nearby in the iron rich basalts.

It is recommended that the following work by undertaken at Stage II of the exploration program:

1. Additional IP surveying over the northeast trending magnetic anomaly in the northeastern part of the property in order to locate other possible pyritic zones in the iron rich tholeiitic flows and gabbroic sills.

2. Additional line cutting followed by IP survey to test the airborne Input (3 Channel) anomaly on the southwest corner of the Shea property. An east-west trending line should be cut at 6+00S and then surveyed from 3+00W to 6+00W.

3. Additional exploration over IP anomalies (E, E , F and G) delineated in the northeastern part of the property; stripping using a combination of bulldozing and backhoeing followed by detailed geological mapping and sampling.

4. Further geological surveying in the southern part of the Grenfell Township in the area of sheared, silicified and carbonatized iron rich flows. A selected grab sample taken during the geological mapping program contained 773 ppb Au.

5. Initial drilling program of 1000m to test the lateral and depth extensions of the known areas of gold mineralization including IP anomaly G.

Respectfully Submitted,

Daira Duba, B.Sc., M.Sc.

R.Bruce Durham, B.Sc.

8.0 REFERENCES

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1979 Airborne Electromagnetic and Total Intensity Magnetic Survey, Kirkland Area, Grenfell Twp., District of Timiskaming, by Questor Surveys Ltd. for O.G.S., Preliminary Map 2262A, Geophysical Survey Scale 1:20,000. Survey 8 Compilation 1979.

O.G.S.
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CERTIFICATION

I, R.Bruce Durham of Timmins, Ontario certify regarding the Glen Auden Limited - Adola Mining Corporation property, Grenfell Township that:

1. I am a graduate of the University of Western Ontario having obtained a Bachelor of Science degree in Geology in 1976.

2. I am a Fellow of the Geological Association of Canada.

3. I have been practising my profession primarily in Canada since 1976.

Dated this July 31, 1985, at Timmins, Ontario.

R.Bruce Durham, B.Sc.

A P P E N D I X A

BELL-WHITE ANALYTICAL LABORATORIES LTD.
P.O. BOX 187. HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. B365-85 **DATE:** June 18, 1985

SAMPLE(S) OF: Rock (43) **RECEIVED:** June 13, 1985

SAMPLE(S) FROM: R. S. Middleton Exploration Services

Sample No.	Au ppb	Au oz.	Sample No.	Au ppb	Au oz.
G67601	773		G67622	10	
2	49		3	729	
3	32		4	875	
4	15		5	326	
5	12		6		0.042**
6	159		7	864	
7	798		8		0.040**
8	858		9	771	
9	672		G67630		0.056**
G67610	680		1	664	
1		0.057**	2	639	
2	58		3	836	
3		0.041**	4	221	
4		0.052**	5		0.052**
5	970**		6		0.048**
6		0.046**	7	754**	
7		0.058**	8		0.104**
8	185		9		0.092**
9		0.048**	G67640		0.040**
G67620	243		1	431	
1	126		2	439	
			3	743	

** Checked

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PER:

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Certificate of Analysis

NO. B1454-84 DATE: December 14, 1984

SAMPLE(S) OF: Rock (18) RECEIVED: December, 1984

SAMPLE(S) FROM: Mr. John Scott
R. S. Middleton Exploration Services Project #M-68

Sample No.	Gold ppb	Gold oz.
G31101		0.108**
2		0.170**
3		0.111**
4	121	
5	22	
6		0.082**
7	823	
8	960	
9	334	
G31110		0.042**
1		0.035**
2	504	
3	280	
4		0.041**
5		0.077**
6	891	
7	480	
8	891	

** Checked

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS

BELL-WHITE ANALYTICAL LABORATORIES LTD.

PER

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Certificate of Analysis

NO. B952-84 DATE: August 29, 1984

SAMPLE(S) OF: Rock (17) RECEIVED: August, 1984

SAMPLE(S) FROM: Mr. B. Durham
R. S. Middleton Exploration Services

Sample No.	Gold/ppb	Gold/oz.
G31456	15	
7		0.045**
8		0.056**
9	511	
G31460	189	
1	200	
2	298	
3	288	
4		0.047**
5	902	
6		0.063**
7		0.050**
8		0.050**
9	68	
G31470		0.051**
1		0.103**
2*		
3		0.058**

* Sample Missing
** Checked

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

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APPENDIX B

IPR-8

Induced Polarization
Time Domain Receiver

The basic equipment required for an Induced Polarization survey consists of a transmitter, a receiver, wire and electrodes.

Most time domain induced polarization transmitters transmit square waves with equal "on" and "off" times. Polarity is automatically changed between the pulses. The waveform shown in Figure 1 indicates how the current is usually transmitted. The pulse times usually range from T = 1 to 8 seconds.

The transmitter is powered by batteries (portable type units) or a motor driven generator. Scintrex manufactures various time domain induced polarization transmitters ranging in power from 250 watts to 15 kw. The choice of a transmitter depends on various factors such as: the electrode spacings to be employed, contact resistance and the resistivity of the sub-surface. The IPR-8 receiver is designed for use with any time domain induced polarization transmitter.

The IPR-8 time domain induced polarization receiver is packaged in a rugged and portable manner. Using integration and automatic normalization, it measures the characteristics of an induced polarization decay curve set up by overvoltage and other effects occurring in rocks. When induced polarization effects (such as due to metallic-nonmetallic interfaces in rocks) occur, the waveform received at the receiver is not the same square wave as transmitted by the transmitter. The waveform shown in Figure 2 indicates the sort of wave distortion which is caused by the induced polarization phenomena.

2. Specifications

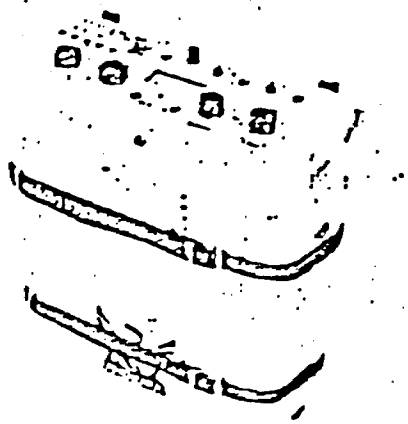
The IPR-8 has the following specifications:

Input Impedance	3 megohms
Primary Voltage (Vp) Range	300 microvolts full scale to 40 volts full scale in 10 ranges
Accuracy of Vp Measurement	±3% of full scale
Vs/Vp Ranges	20 and 100 mV/V full scale
Vs/Vp Accuracy	±3% of full scale
Primary SP Buckout Range	±1 volt
Accuracy of SP Measurement	±3%, ±5 mV
Automatic SP Tracking Range	6 x Vp, maximum ±1 volt
Continuity Meter Reading	0 - 500 k ohms
50 or 60 Hz Powerline Rejection	-50 db (300x)*
Low Pass Filter	6 db/octave with fc = 20 Hz and 12 db/octave with fc = 36 Hz
Required Stability of Transmitter Timing	Need only exceed measuring program selected (1 or 2 seconds)
Operating Temperature Range	-30°C to +60°C
Dimensions	320 mm x 135 mm x 160 mm
Weight, Complete with Lid and Batteries	3.6 kg
Power Supply	4 D cells - Eveready No. 1050 or equivalent; estimated battery life 2 months intermittent duty at 25°C. 1 alkaline cell Eveready No. E91 or equivalent; estimated life 1 year

IPT-1

Variable Frequency, Time Dom... and Phase IP Transmitter

- 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



Specifications

Power Sources	: Internal DC power module containing 8 45V dry cell batteries, or internal AC power module with external 1 KVA, 2 KVA or 3 KVA motor generator.
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 battery voltage or line voltage.
Current Regulation	: The change in output current is less than 0.2% for a 10% change in input voltage or electrode impedance.
Output Waveform	: Either DC, single frequency, two frequencies simultaneously, or time domain (50% duty cycle). Frequencies of 0.078, 0.156, 0.313, 1.25, 2.5, and 5.0 Hz are standard, whereas 0.062, 0.125, 0.25, 1.0, 2.0, and 4.0 Hz are optionally available. The simultaneous transmission mode has 0.313 and 5.0 Hz as standard, whereas 0.156 and 2.5 Hz are optional.
Frequency Stability	: ± 1% from -40° to + 60°C is standard. A precision time base is optionally available for coherent detection and phase IP measurements.
Protection	: Current is turned off automatically if it exceeds 150% full scale or is less than 5% full scale.
Case	: Non-conductive, high impact resistant plastic.
Dimensions	: 20 x 40 x 55 cm (9 x 16 x 22 inches).
Weight	: 14 kg (31 lb) with DC power module. 16 kg (35 lb) with AC power module.
Standard Accessories	: Pack frame, manual. At least one of the two possible power modules is required. The AC power module in turn requires one of the external 1 KVA, 2 KVA or 3 KVA motor generators and a connecting cable.

DC POWER MODULE (BPS-1)

Output Voltage	: 8 x 45V dry cell batteries (Eveready 482, Mallory 202 or equivalent) are switched in series or parallel to provide output voltag of 90V, 180V, and 360V.
Output Power	: Recommended maximum output power is 30 watts. Absolute maximum output pow is 100 watts.
Battery Life	: Normal field operation, with low output pow results in an average battery life expectancy one month. Operation with the absolute maximum output power results in much shor battery life.
Control Supply	: 4 x 6V lantern batteries (Eveready 409, Moll 908 or equivalent) connected in series/paral are used to provide the 40 to 70 mA required the control circuitry. Average battery life expectancy is six months.
Operating Temperature	: 0°C to + 60°C.

AC POWER MODULE (AC-3)

Output Voltage	: 0V, 75V, 150V, 300V, 600V and 1200V.
Output Power	: Maximum continuous output power is 3 k This requires the 3KVA motor generator.
Input Power	: 350 to 1000 Hz, 60V (45V to 78V) 3 phase is standard. 120V (90V to 156V) and/or single phase may be link selected inside the module
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 o at 55°C internal temperature.

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APPENDIX C

geoMetrics

Instrument Division

PORTABLE PROTON MAGNETOMETER
MODEL G-816

- ★ 1 gamma sensitivity and repeatability
- ★ Very small size and weight: less than 12 lbs complete with batteries and sensor
- ★ Over 10,000 readings per set of alkaline "D" cell (flashlight) batteries
- ★ Provision to attach sensor to carrying harness for use without staff
- ★ Pushbutton operation—numeric display directly in gammas
- ★ Total field measurements—independent of orientation—no calibration—no leveling

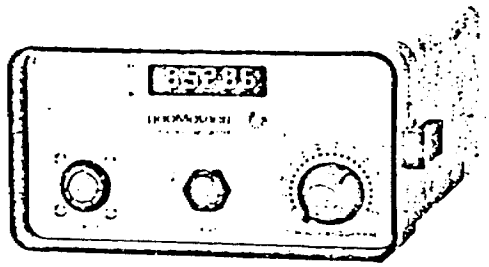
The Model G-816 is a complete portable magnetometer for all man-carry field applications. As an accurate yet simple to operate instrument, it features an outstanding combination of one gamma sensitivity and repeatability, compact size and weight, operation on standard universally available flashlight batteries, ruggedized packaging and very low price.

The G-816 magnetometer allows precise mapping of very small or large amplitude anomalies for ground geophysical surveys, or for detail follow-up to aeromagnetic reconnaissance surveys. It is a rugged, lightweight, and versatile instrument, equally well suited for field studies in geophysics, research programs or other magnetic mapping application where low cost, dependable operation and accurate measurements are required.

For marine, airborne or ground recording systems consider GeoMetrics Models G-801, G-803, and G-826A.

"Hands-free" Back Pack Sensor

Based upon the principle of nuclear precession (proton) the G-816 offers absolute drift-free measurements of the total field directly in gammas. (The proton precession method is the officially recognized standard for measurement of the earth's magnetic field.) Operation is worldwide with one gamma sensitivity and repeatability maintained throughout the range. There is no temperature drift, no set-up or leveling required, and no adjustment for orientation, field polarity, or arbitrary reference levels. Operation is very simple with no prior training required. Only 6 seconds are required to obtain a measurement which is always correct to one gamma, regardless of operator experience. Only the Proton Magnetometer offers such repeatability—an important consideration even for 10 gamma survey resolution.



Complete Field Portable System

The Model G-816 comes complete, ready for portable field operation and consists of:

1. Electronics console with internally mounted and easily replaced "D" cell battery pack.
2. Proton sensor and signal cable for attachment to carrying harness or staff.
3. Adjustable carrying harness.
4. 8 foot collapsible aluminum staff.
5. Instruction manual, complete set of spare batteries, applications manual, and rugged field suitcase.

Price and lease rates on the G-816 magnetometer are available upon request.

SPECIFICATIONS

Sensitivity: ±1 gamma throughout range

Range: 20,000 to 100,000 gammas (worldwide)

Tuning: Multi-position switch with signal amplitude indicator light on display

Gradient Tolerance: Exceeds 800 gammas/ft

Sampling Rate: Manual push-button, one reading each 6 seconds

Output: 5 digit numeric display with readout directly in gammas

Power Requirements: Twelve self-contained 1.5 volt "D" cell, universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.

Battery Type	Number of Readings
Alkaline	over 10,000
Premium Carbon Zinc	over 4,000
Standard Flashlight	over 1,500

NOTE: Battery life decreases with low temperature operation.

Temperature Range: Console and sensor: −40° to +85°C

Battery Pack: 0° to +50°C (limited use to −15°C; lower temperature battery belt operation—optional)

Accuracy (Total Field): ±1 gamma through 0° to +50°C temperature range

Sensor: High signal, noise cancelling, interchangeably mounted on separate staff or attached to carrying harness

Size:
Console: 3.5 x 7 x 10.5 inches (9 x 18 x 27 cm)
Sensor: 3.5 x 5 inches (9 x 13 cm)
Staff: 1 inch diameter x 8 ft length (3 cm x 2.44 m)

Weight:

	Lbs.	Kgs.
Console (w/batteries):	5.5	2.5
Sensor & signal cable:	4	1.8
Aluminum staff:	2	0.9
Total:	11.5	5.2

All magnetometers and parts are covered by a one year warranty beginning with the date of receipt but not to exceed fifteen months from the shipping date.

geoMetrics, INC. A SUBSIDIARY OF EG&G
395 JAVA DRIVE
SUNNYVALE CA 94086 U.S.A.
TEL (408) 734-4616
CABLE "GEOMETRICS"
TELEX NO 357-435

geoMetrics SERVICES (CANADA) LTD.
4361 LIMESTONE CRESCENT
DOWNSVIEW (TORONTO)
ONTARIO CANADA
TEL (416) 661-1966
TELEX NO 06-22694

geoMetrics INTERNATIONAL CORP.
80 ALFRED ST
MILSON'S POINT
SYDNEY NSW 2061
AUSTRALIA
TEL 929 9942
TELEX NO 790 22624

WORLD-WIDE AGENTS: EUROPE • SCANDINAVIA • UNITED KINGDOM • JAPAN • SO. AFRICA • SO. AMERICA

****
RAYAN EXPLORATION LTD.
****

LINE 0 W

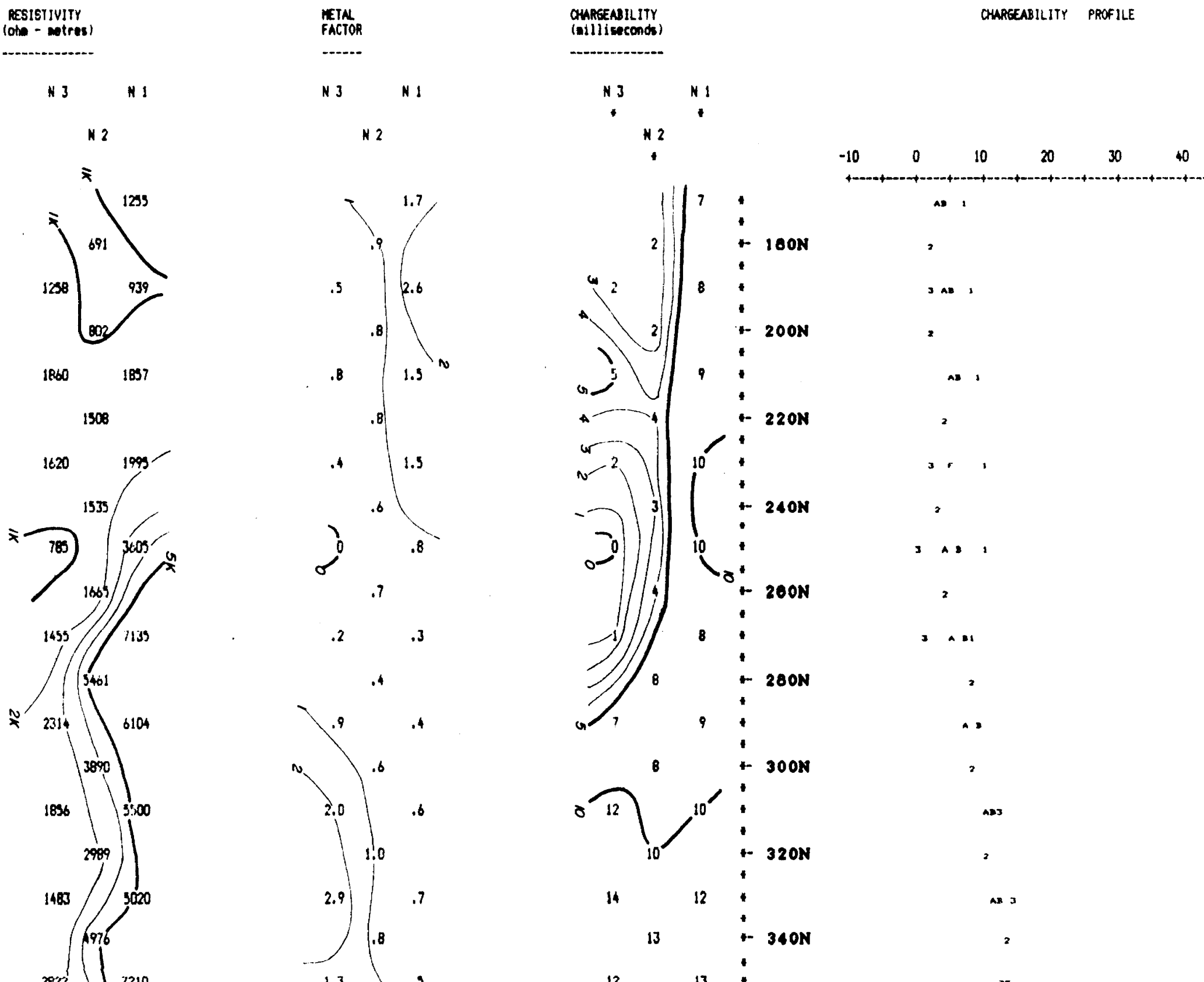
IP Pseudosections for N = 1 to 3

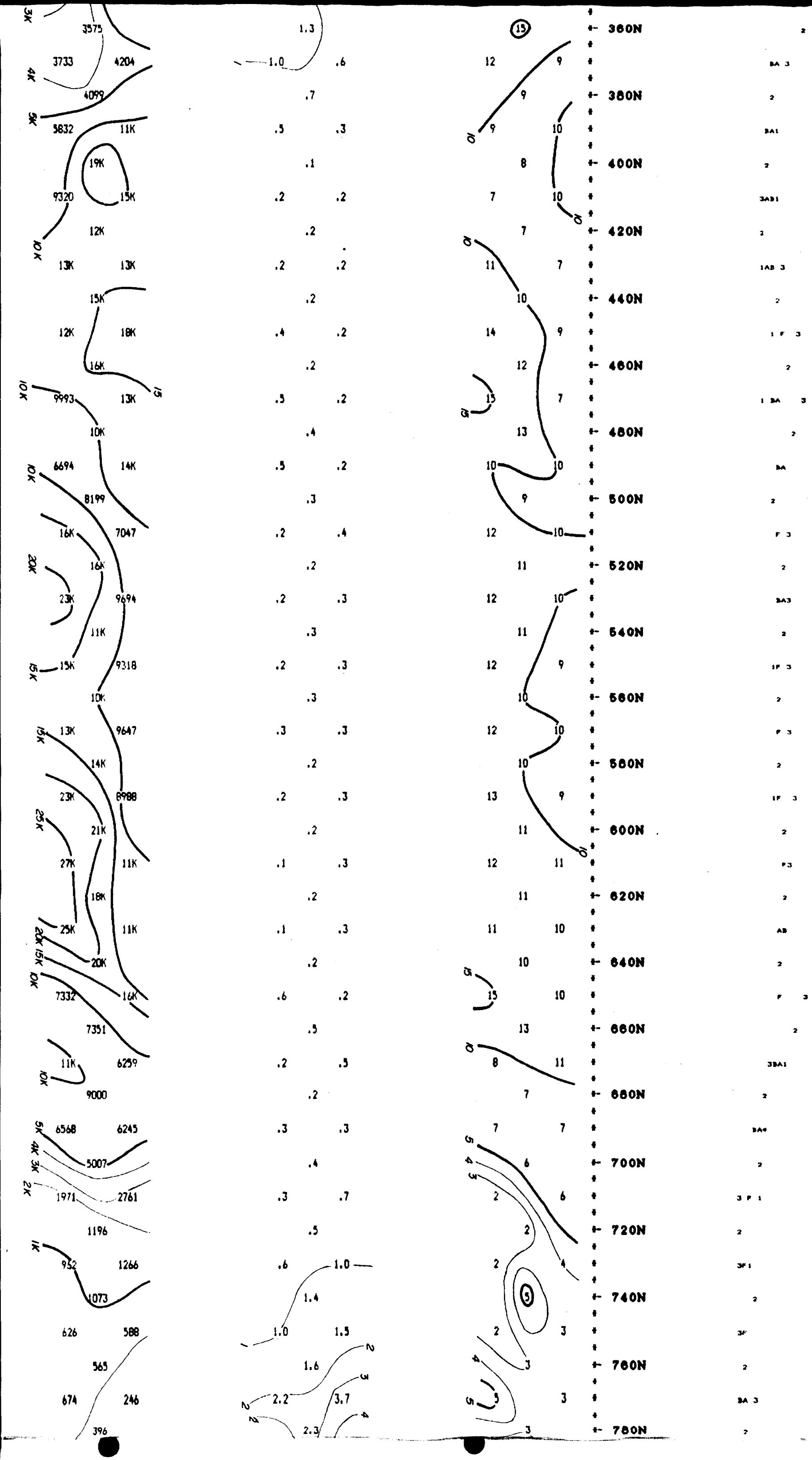
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
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 : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

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8199
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9647
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8988
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16K
7351
11K
6259
9000
6568
6245
5007
1971
2761
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952
1266
1073
626
588
565
674
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1F 3
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F 3
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1F 3
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F3
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AB
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BA 3
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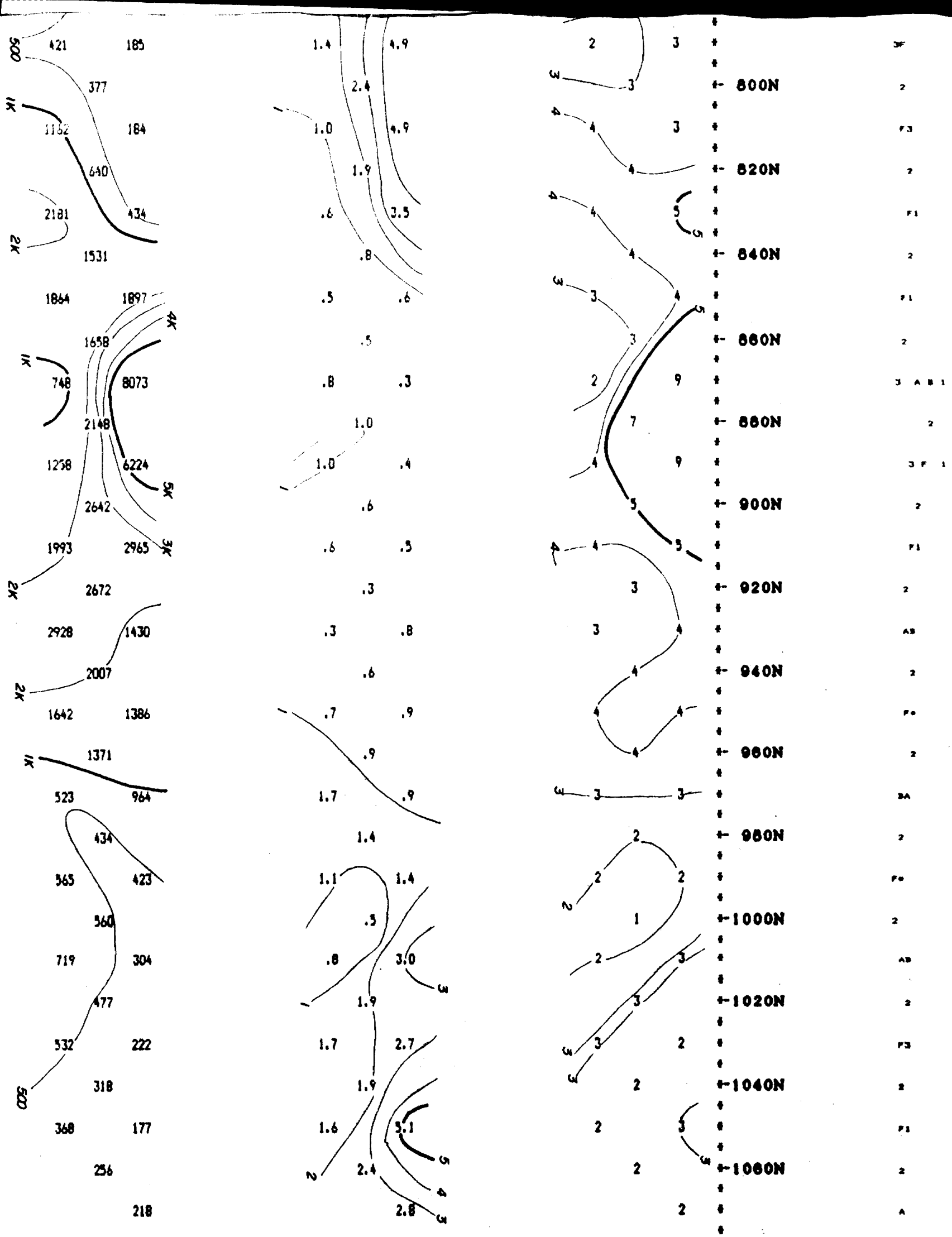

800N
820N
840N
860N
880N
900N
920N
940N
960N
980N
1000N
1020N
1040N
1060N

****

RAYAN EXPLORATION LTD.

****

LINE 50 W

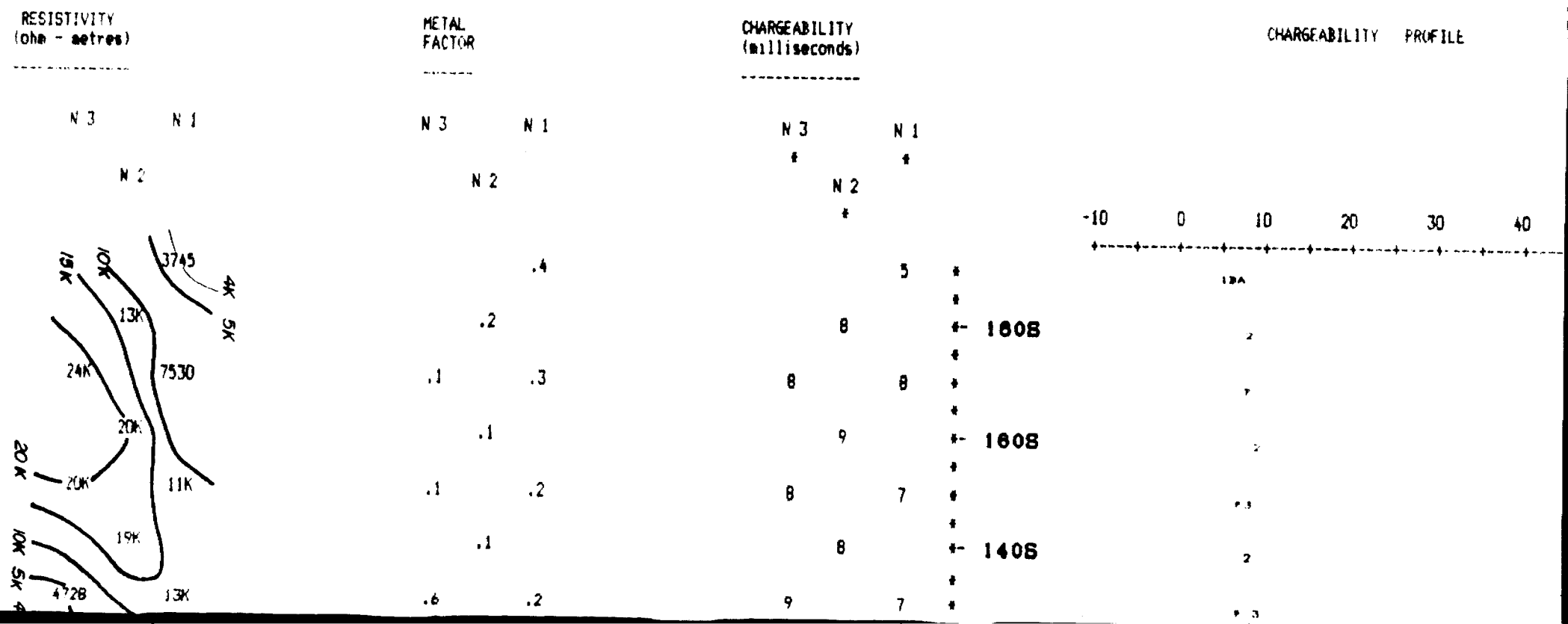
IP Pseudosections for N = 1 to 3

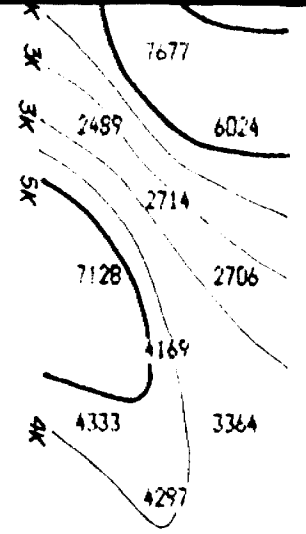
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
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 : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

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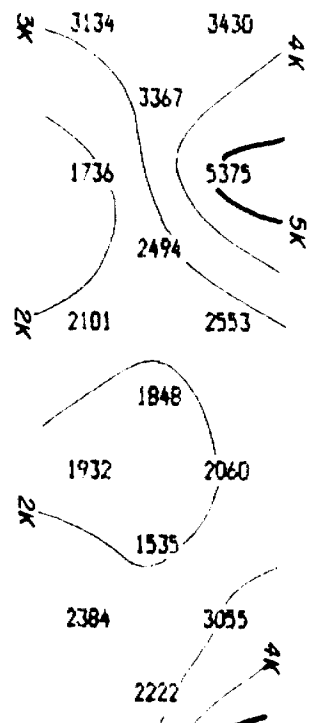
3K
4K
5K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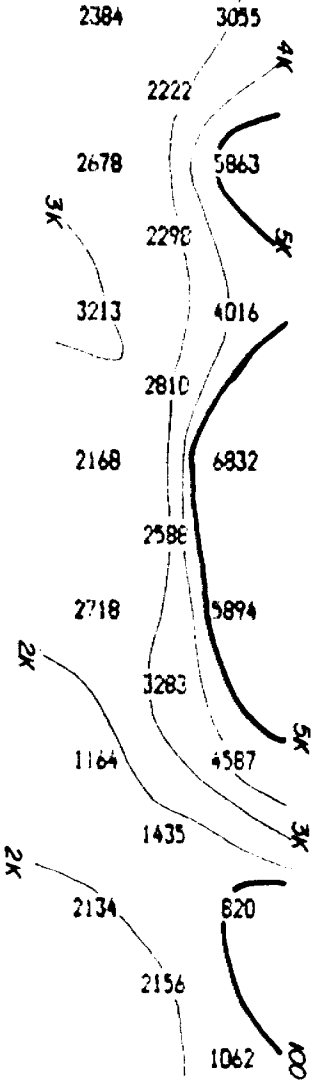
5K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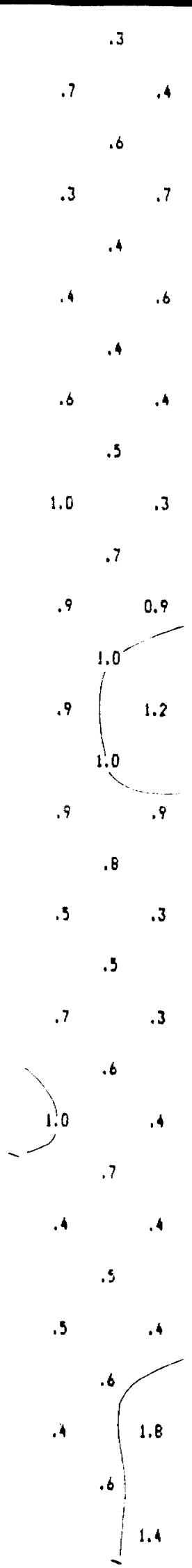
4K
5K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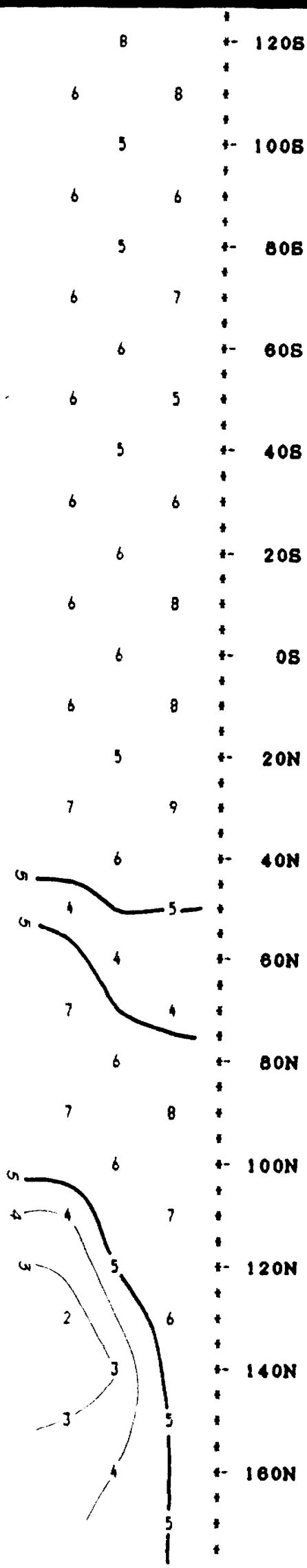
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305
405
505
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705
805
905
1005
1105
1205
1305
1405
1505
1605
1705
1805

****

RAYAN EXPLORATION LTD.

****

LINE 1 W

IP Pseudosections for N = 1 to 3

'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
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 : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

RESISTIVITY
(ohm - metres)

N 3 N 1

N 2

METAL
FACTOR

N 3 N 1

N 2

CHARGEABILITY
(milliseconds)

N 3 N 1

N 2

CHARGEABILITY PROFILE

-10 0 10 20 30 40

**********RAYAN EXPLORATION LTD.**********
IP Pseudosections for N = 1 to 3

****

RAYAN EXPLORATION LTD.

****

LINE 150 W

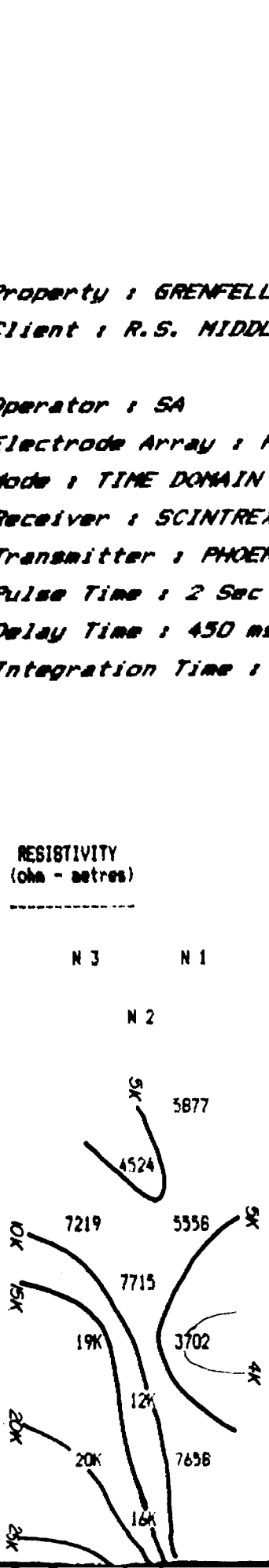
IP Pseudosections for N = 1 to 3

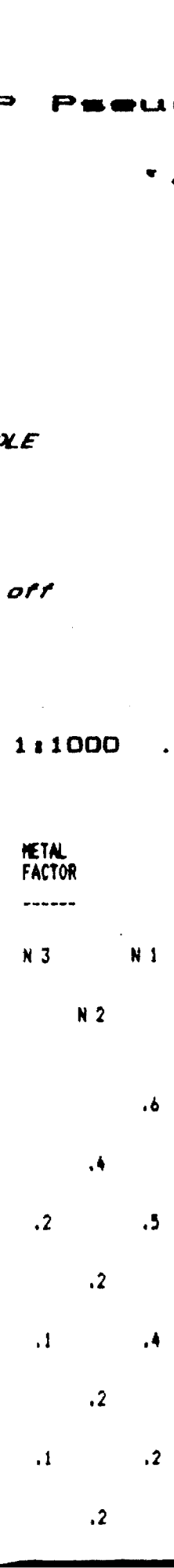
'a' Spacing = 20 M

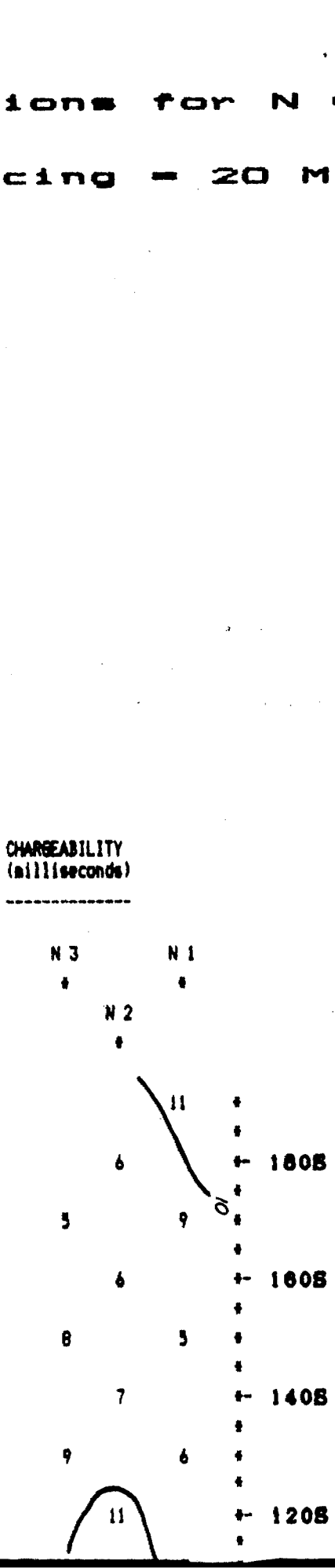
Property : GRENFELL
Client : R.S. MIDDLETON

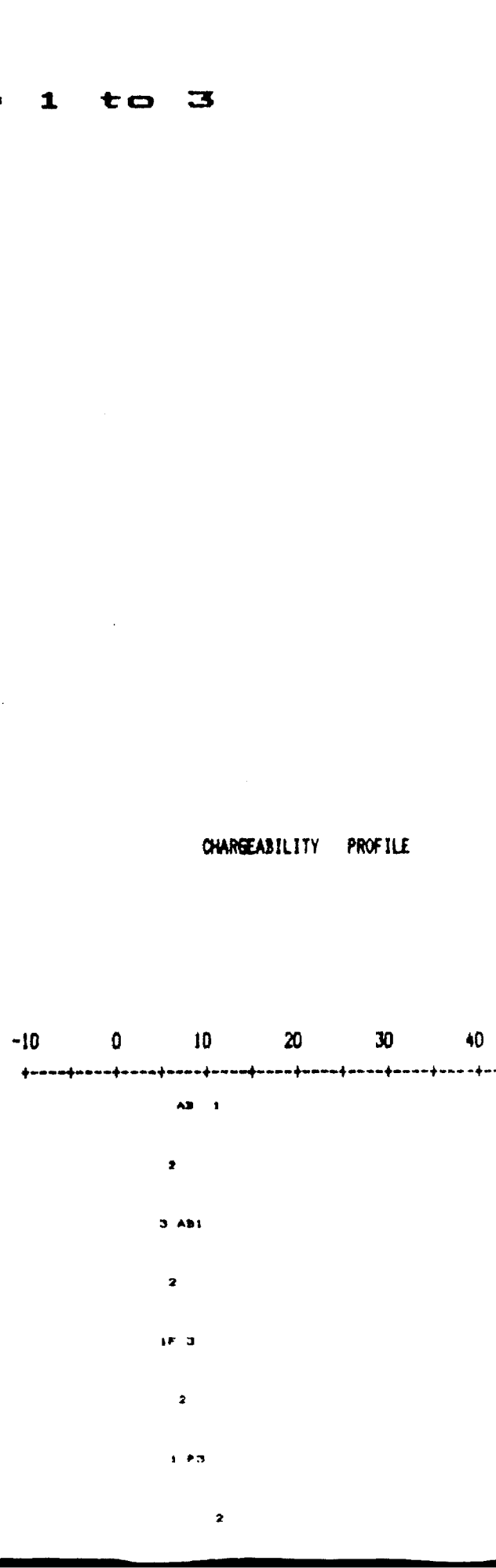
Operator : SA
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-8
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

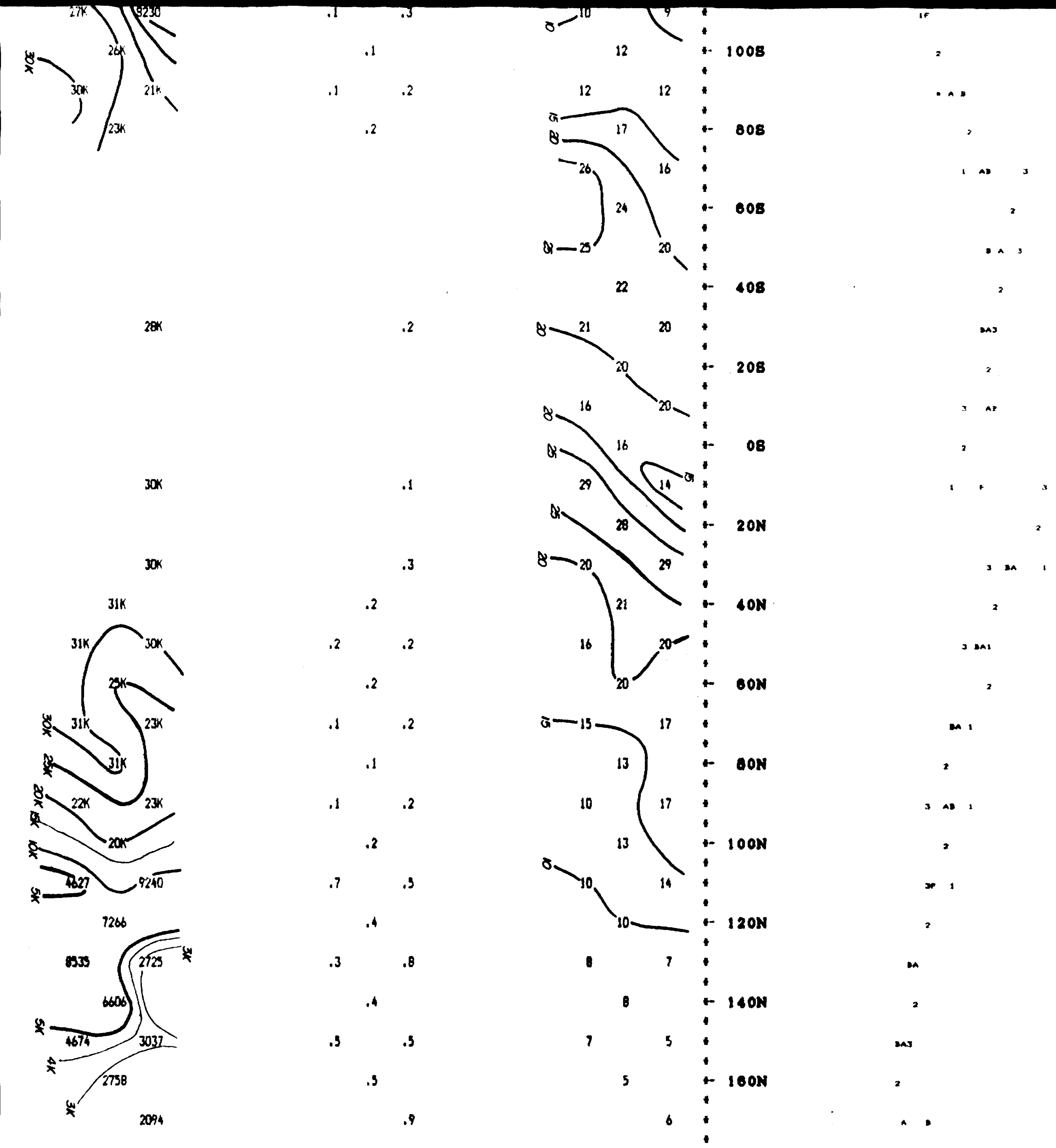
SCALE : 1:1000 .











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.1 12 100S
30K 26K
30K 21K .1 .2 12 12
23K .2 17 80S
26 16
24 60S
25 20
22 40S
28K .2 21 20
20 20S
16 20
16 0S
30K .1 29 14
28 20N
30K .3 20 29
31K .2 21 40N
31K 30K .2 .2 16 20
25K .2 20 60N
30K 31K 23K .1 .2 15 17
25K 31K .1 13 80N
20K 22K 23K .1 .2 10 17
15K 20K .2 13 100N
10K
5K 4627 9240 .7 .5 10 14
7266 .4 10 120N
8535 2725 3K .3 .8 8 7
6606 .4 8 140N
5K 4674 3037 .5 .5 7 5
4K 2758 .5 5 160N
3K 2094 .9 6

****

RAYAN EXPLORATION LTD.

****

LINE 2 W

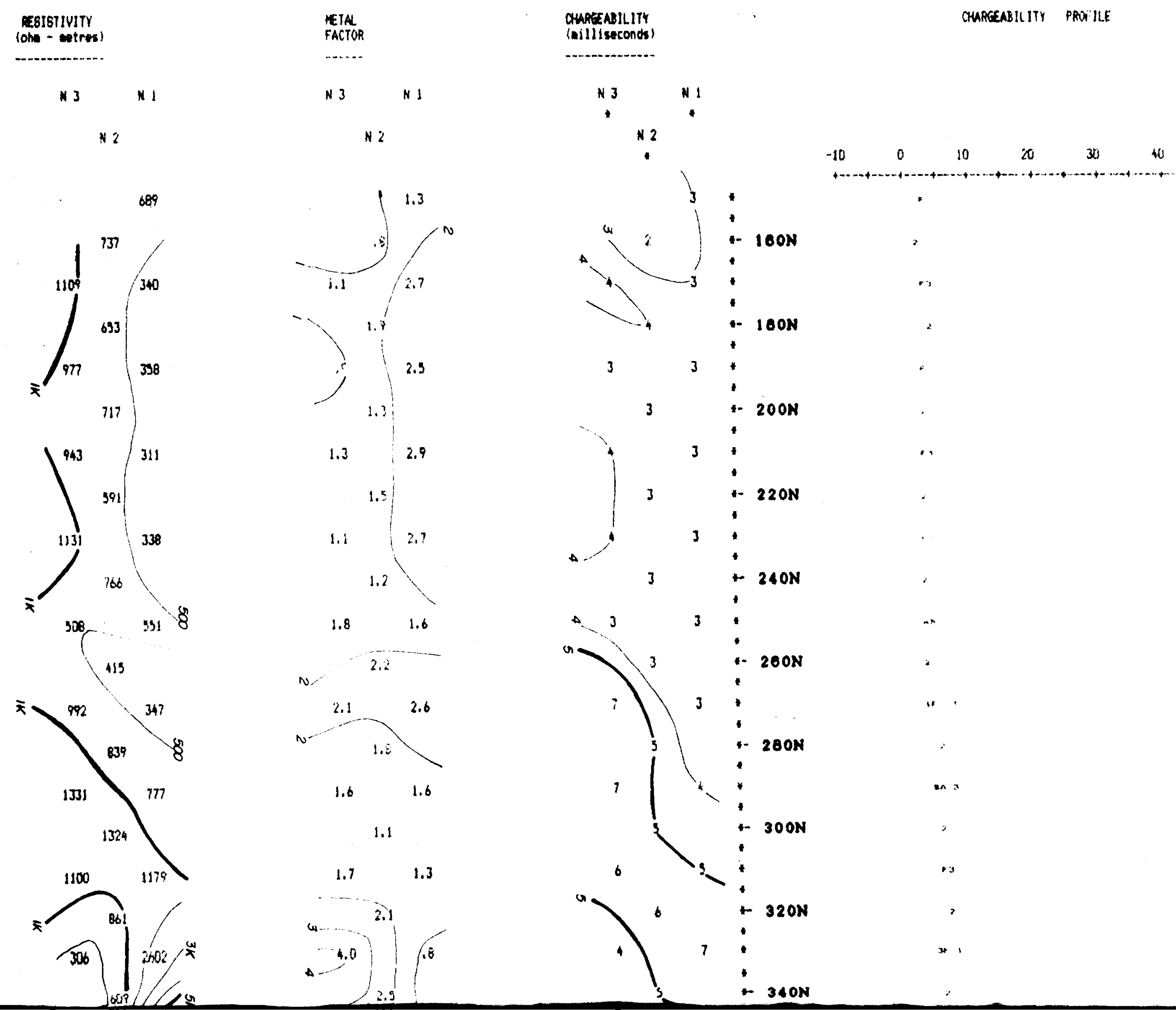
IP Pseudosections for N = 1 to 3

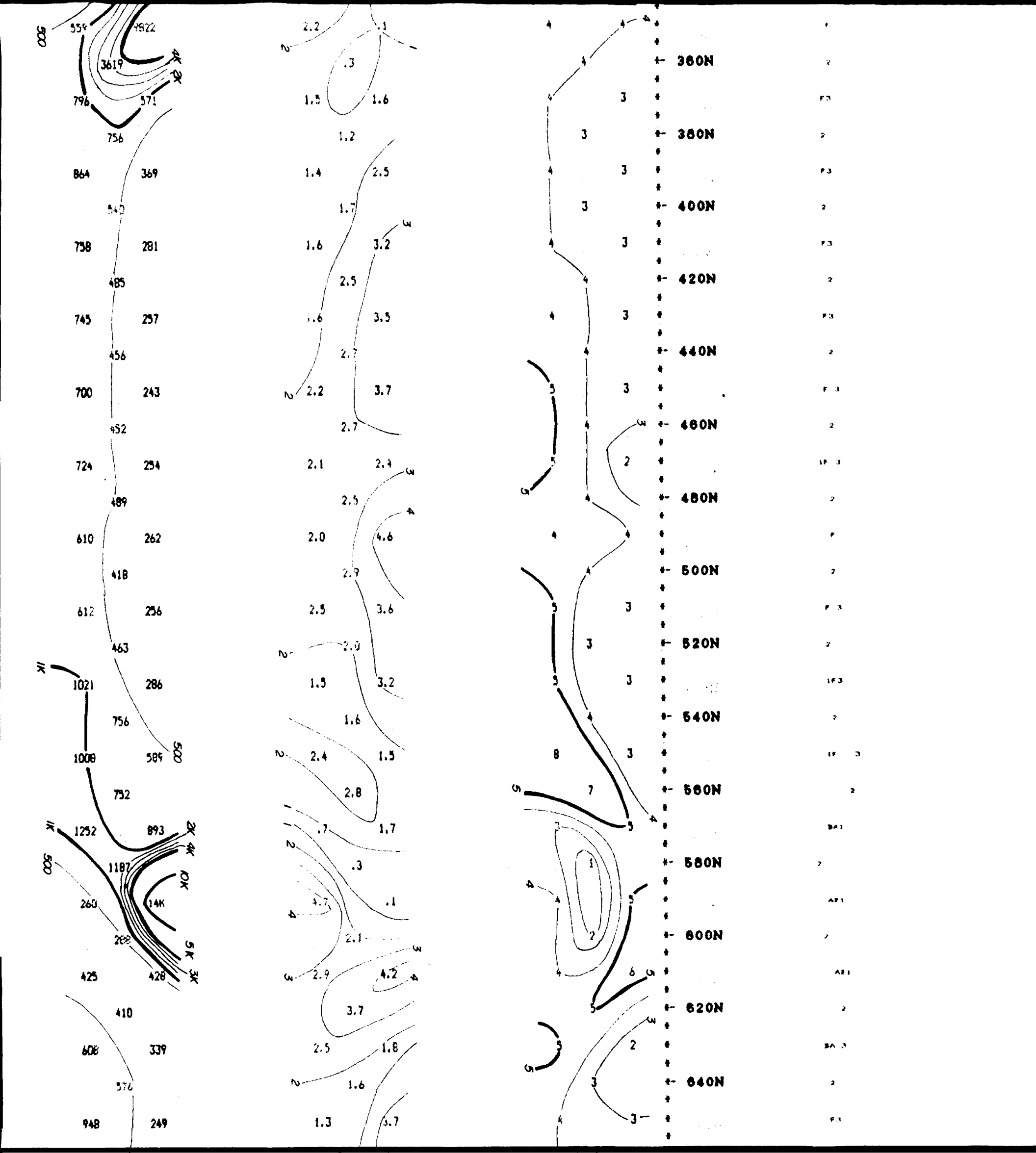
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : WAY
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 : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

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418
612
256
463
1021
286
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1008
589
752
1252
893
1187
260
14K
425
428
410
608
339
576
948
249
2.2
1.8
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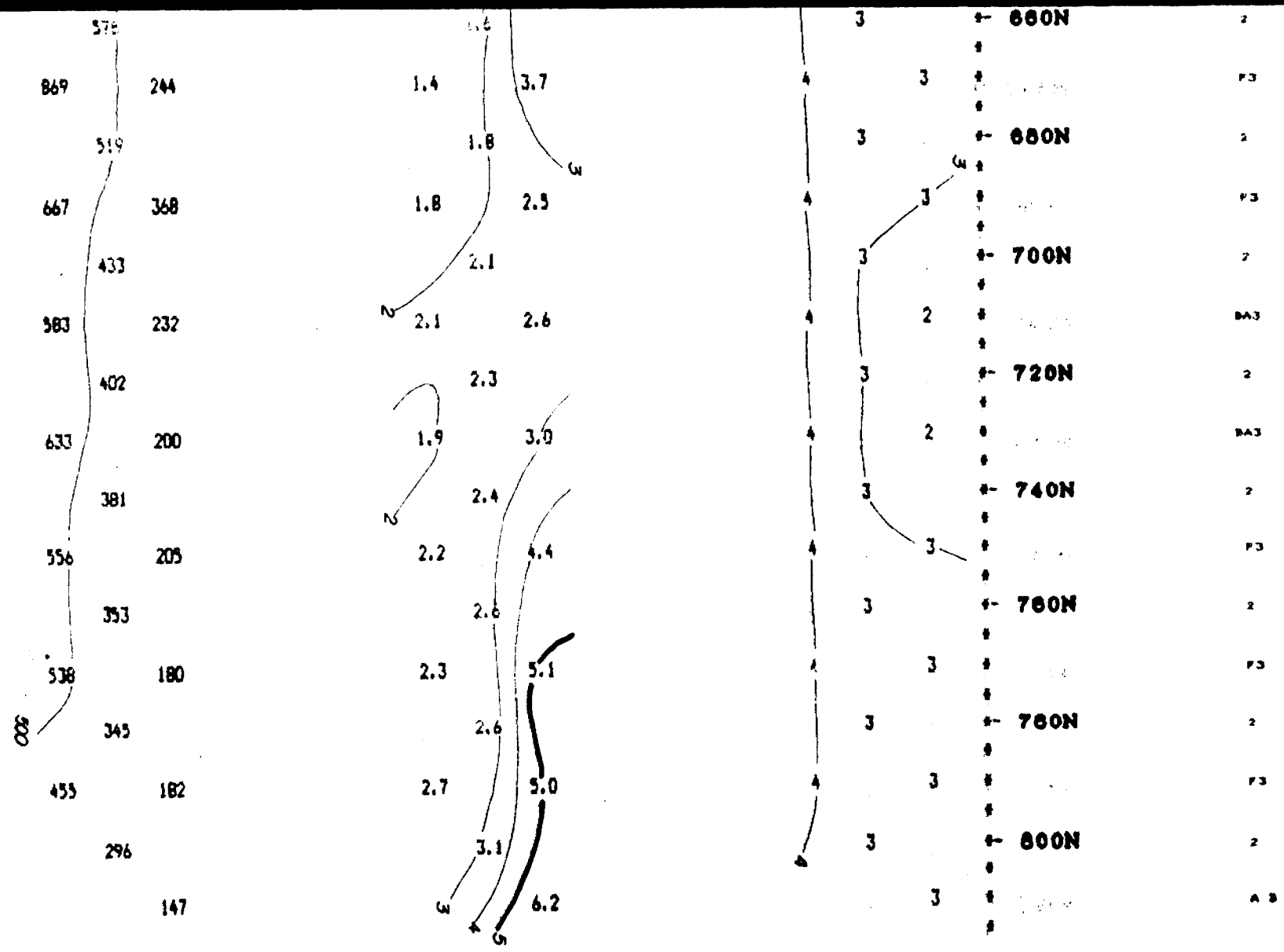
640N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1.4
3.7
1.8
1.8
2.5
2.1
2.1
2.6
2.3
1.9
3.0
2.4
2.2
4.4
2.6
2.3
5.1
2.6
2.7
5.0
3.1
6.2
660N
680N
700N
720N
740N
760N
780N
800N

****

RAYAN EXPLORATION LTD.

****

LINE 250 W

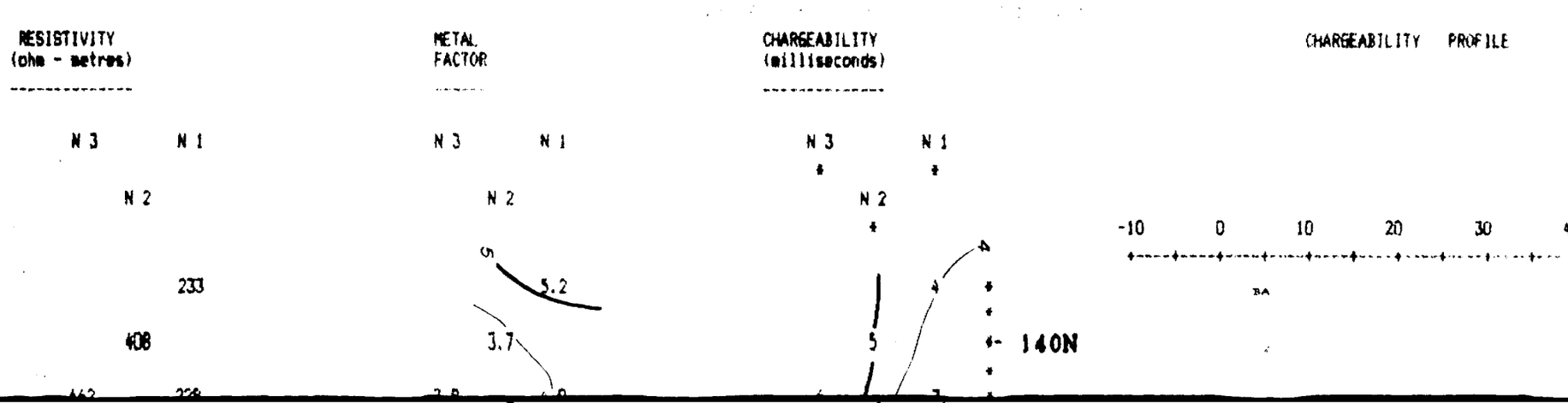
IP Pseudosections for N = 1 to 3

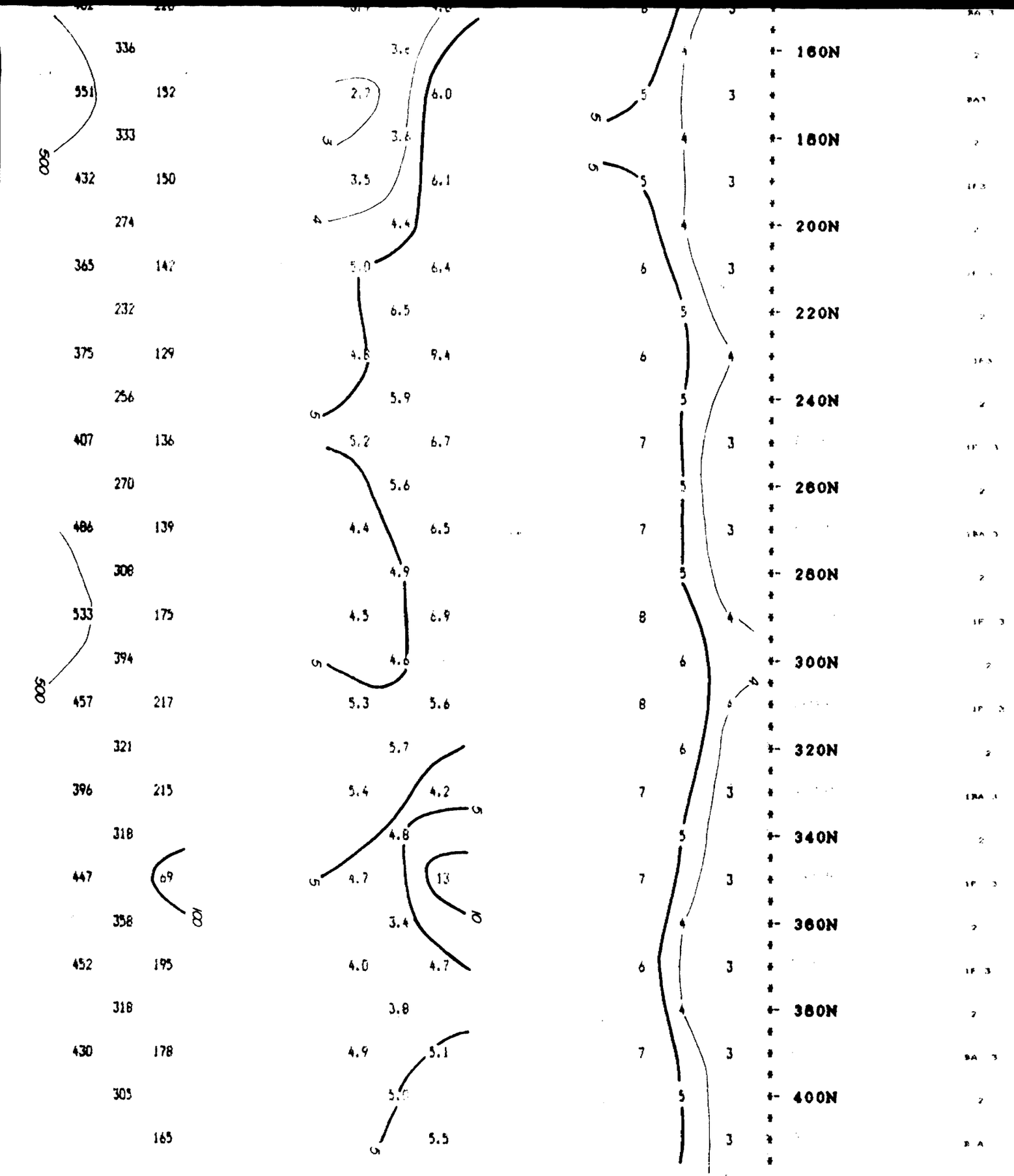
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : MAY
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 : 450 ms
Integration Time : 900 ms

SCALE : 1:1000




160N
180N
200N
220N
240N
260N
280N
300N
320N
340N
360N
380N
400N

****
RAYAN EXPLORATION LTD.
****

LINE 3 W

IP Pseudosections for N = 1 to 3

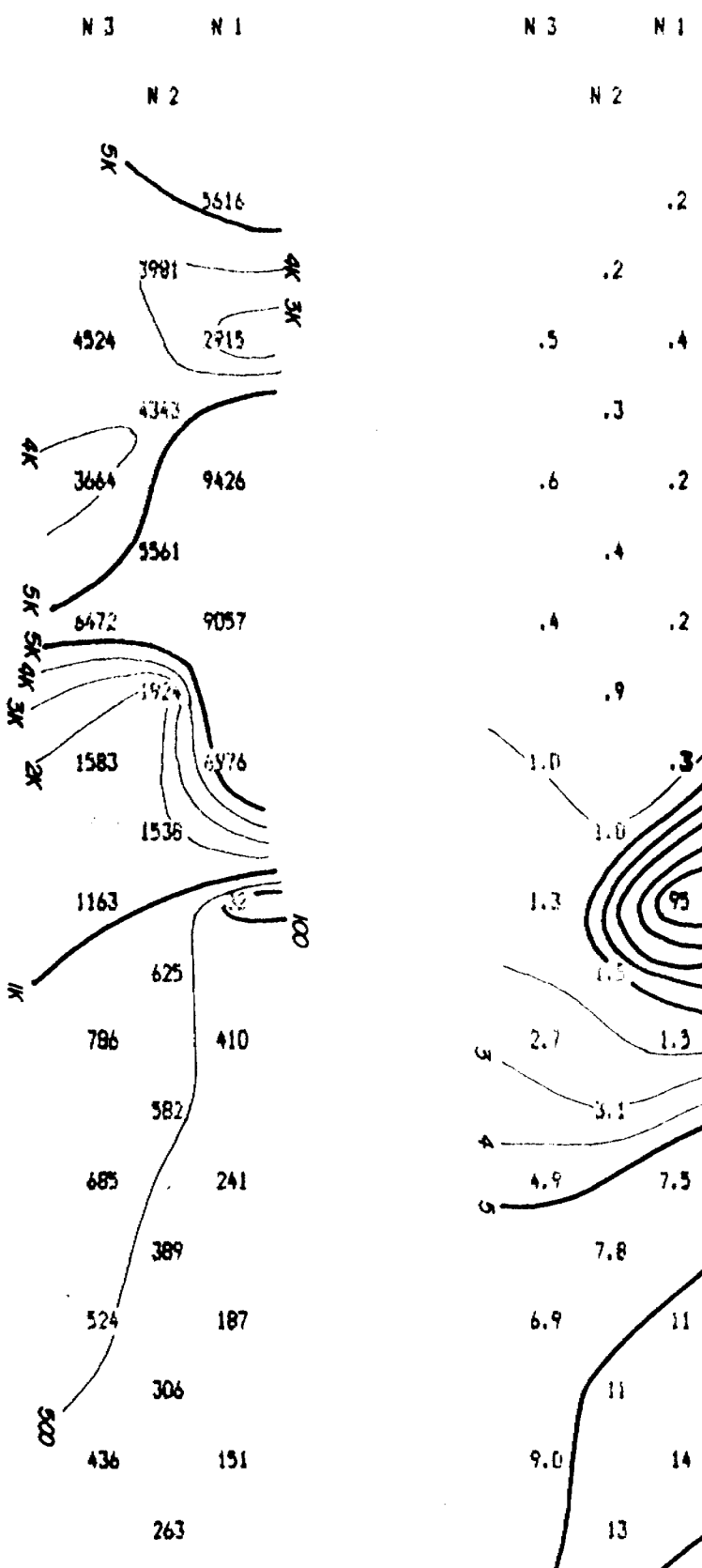
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
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 : 450 ms
Integration Time : 900 ms

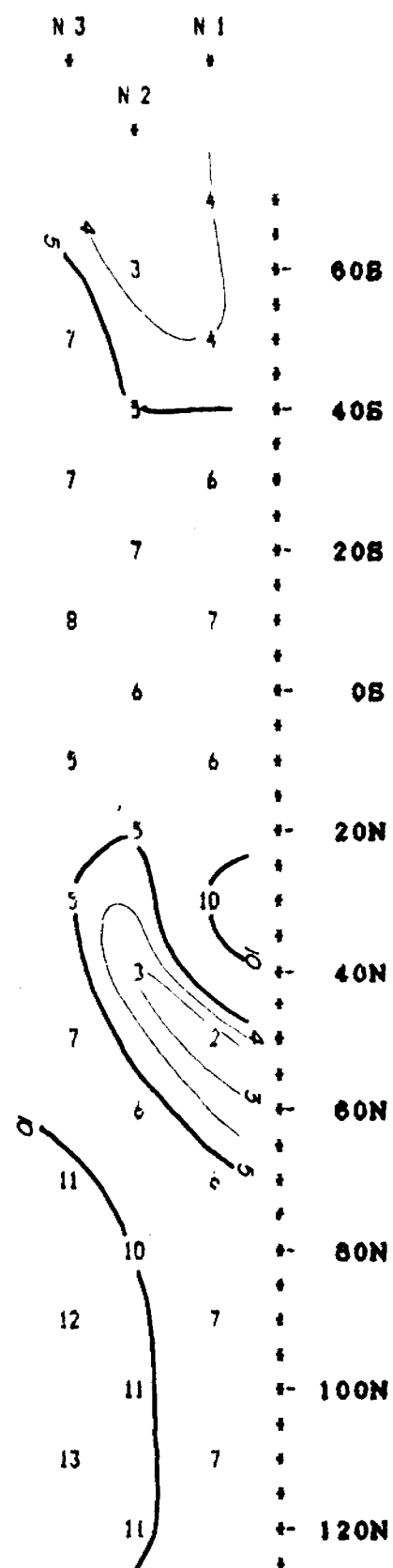
SCALE : 1:1000

RESISTIVITY
(ohm - metres)

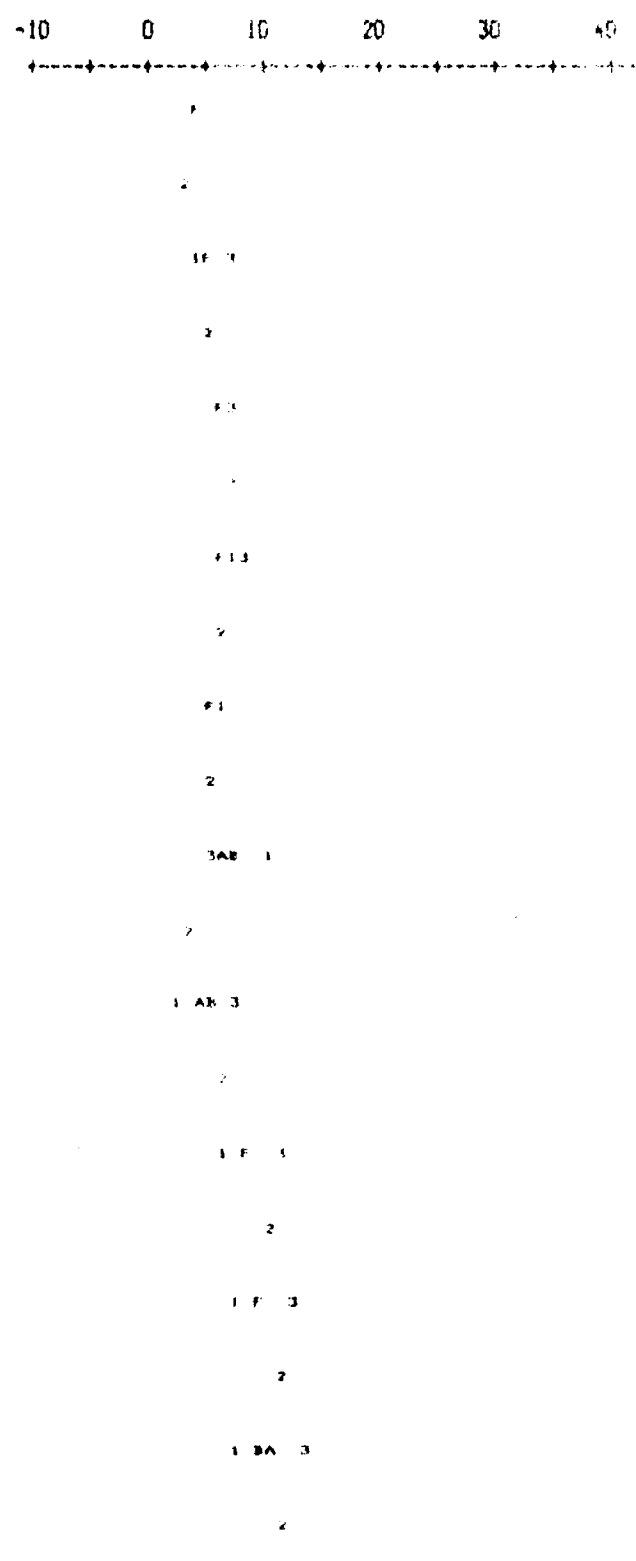


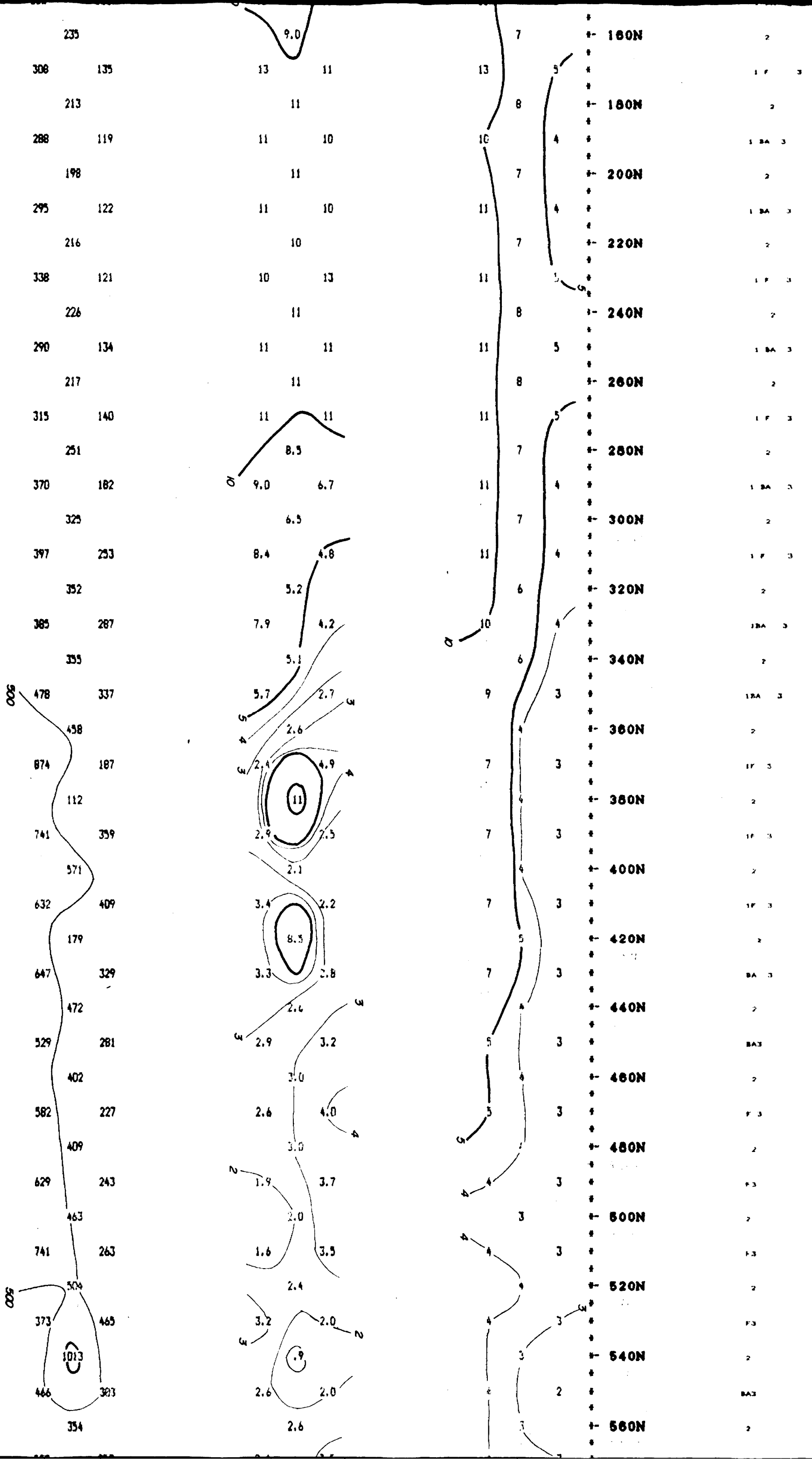
METAL
FACTOR

CHARGEABILITY
(milliseconds)



CHARGEABILITY PROFILE




160N
180N
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220N
240N
260N
280N
300N
320N
340N
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380N
400N
420N
440N
460N
480N
500N
520N
540N
560N

307	238	2.4	3.5				
408		2.2			3	580N	2
505	232	2.4	3.9		3		F3
385		2.4			3	600N	2
479	206	2.5	4.4		3		F3
307		3.6			3	620N	2
417	177	3.6	5.1		3		F 3
295		4.1			4	640N	2
452	173	2.7	5.3		3		F3
308		3.9			4	660N	2
433	168	2.8	5.4		3		F3
281		4.3			4	680N	2
380	157	4.0	5.8		3		1F3
265		4.6			4	700N	2
334	148	5.4	6.1		3		1F 3
231		6.6			5	720N	2
325	140	6.3	8.7		4		1F 3
227		8.0			6	740N	2
317	146	6.7	12		6		F3
253		7.2			6	760N	2
340	151	6.2	8.0		4		3A 3
249		6.1			5	780N	2
361	152	5.0	6.0		3		3A 3
243		5.0			4	800N	2
	163		5.6		3		1A 3

****

RAYAN EXPLORATION LTD.

****

LINE 350 W

IP Pseudosections for N = 1 to 3

'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : MAY
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 : 450 ms
Integration Time : 900 ms

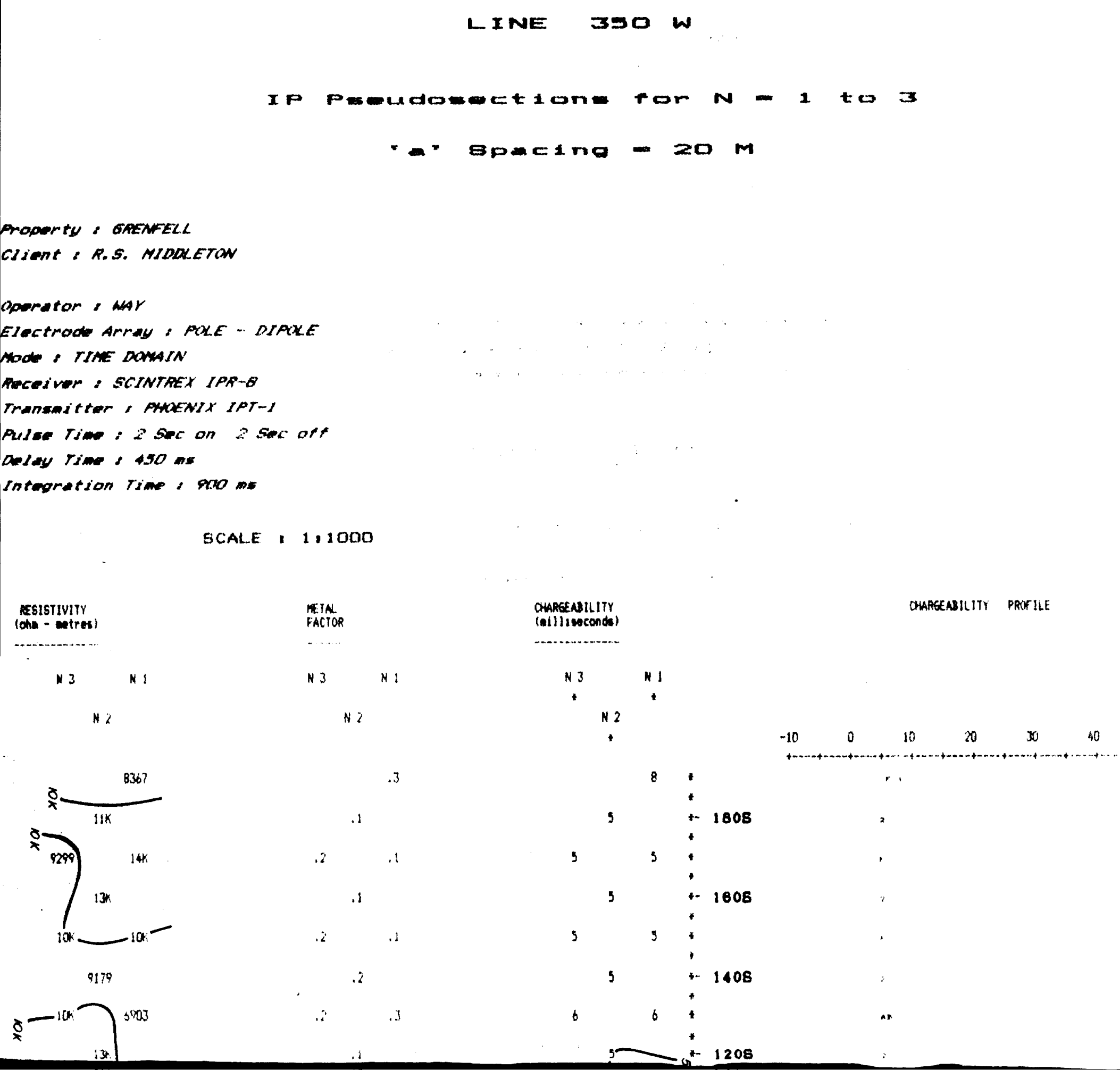
SCALE : 1:1000

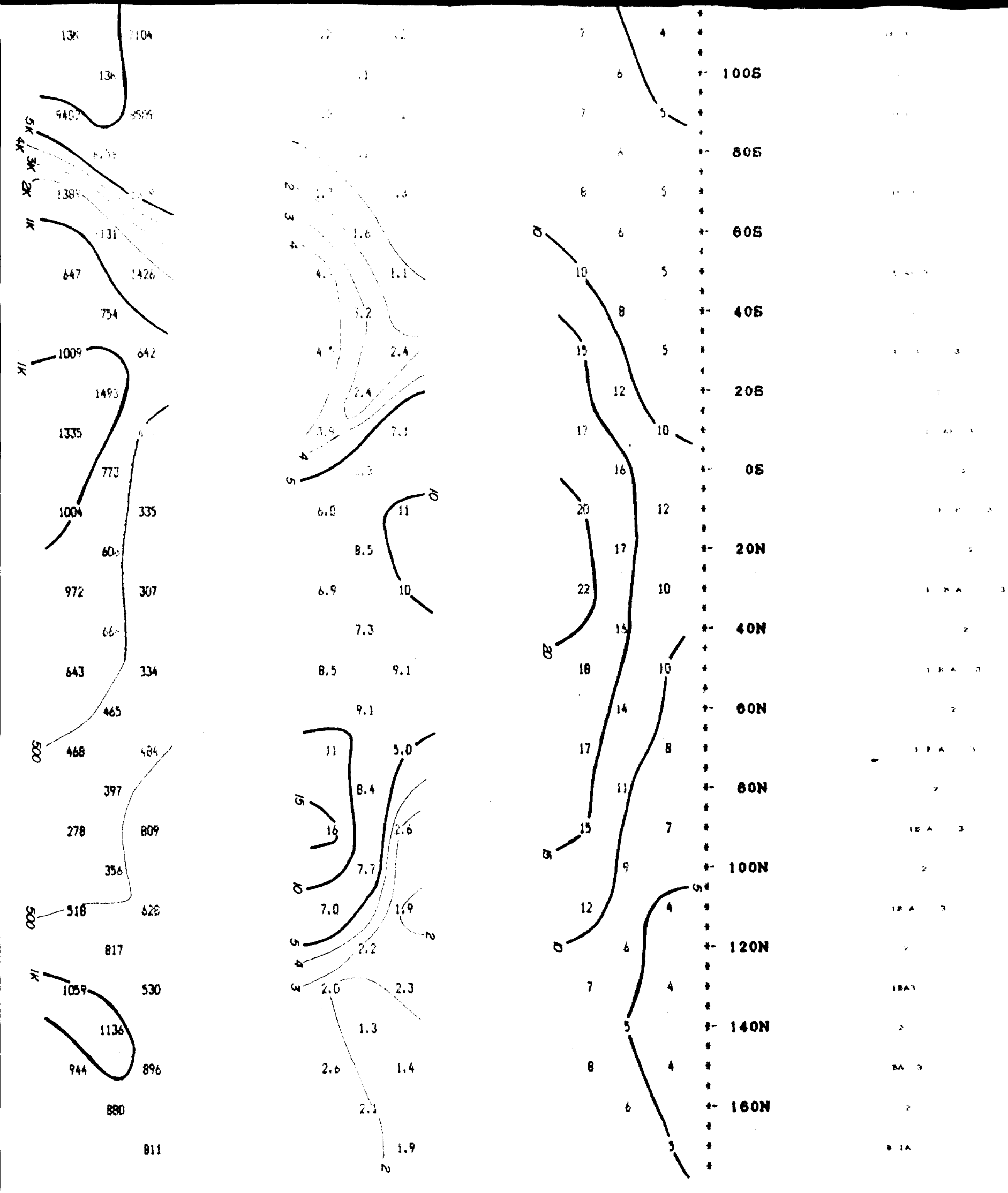
RESISTIVITY
(ohm - metres)

METAL
FACTOR

CHARGEABILITY
(milliseconds)

CHARGEABILITY PROFILE




100S
80S
60S
40S
20S
0S
20N
40N
60N
80N
100N
120N
140N
160N

****

RAYAN EXPLORATION LTD.

****

LINE 4 W

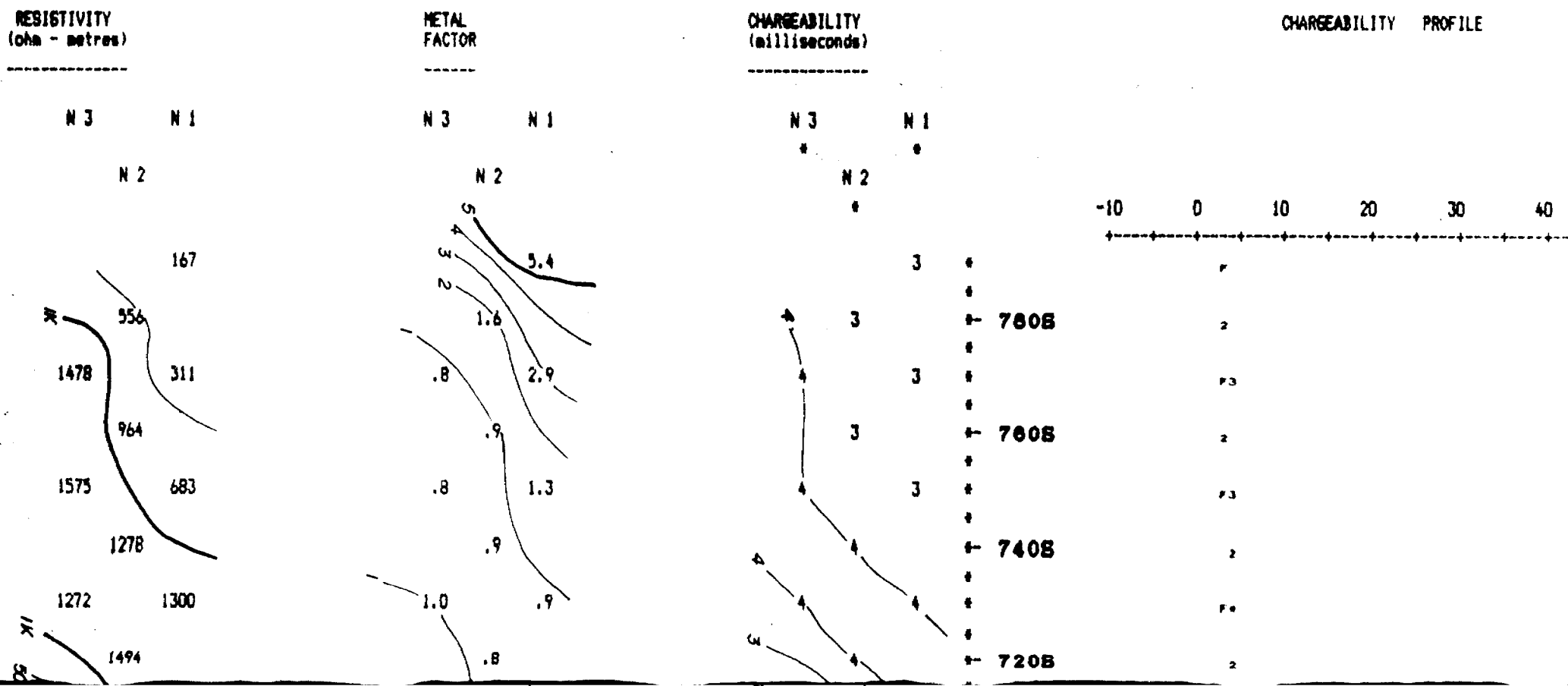
IP Pseudosections for N = 1 to 3

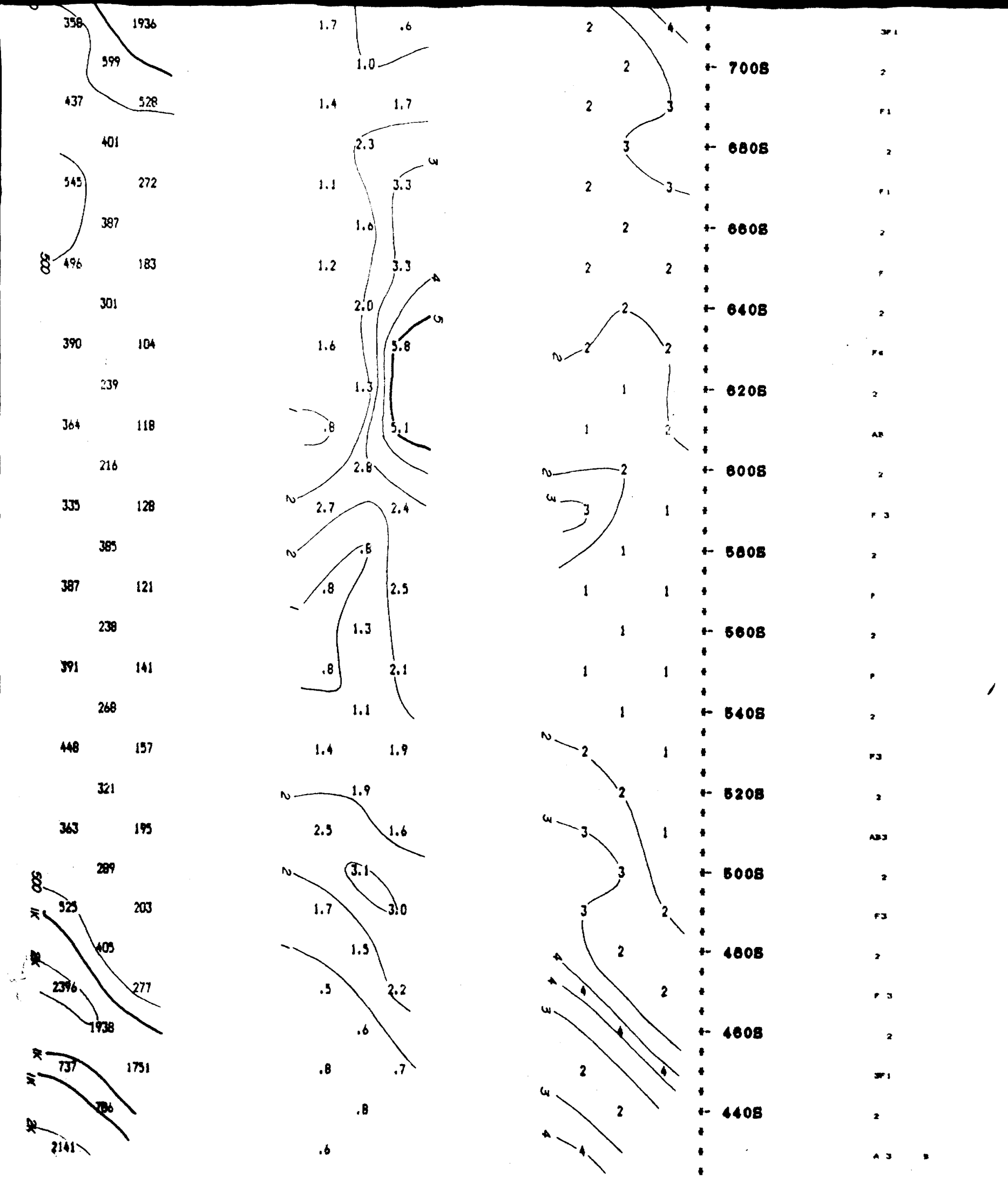
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-B
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000




700S
680S
660S
640S
620S
600S
580S
560S
540S
520S
500S
480S
460S
440S

****

RAYAN EXPLORATION LTD.

****

LINE 2 S

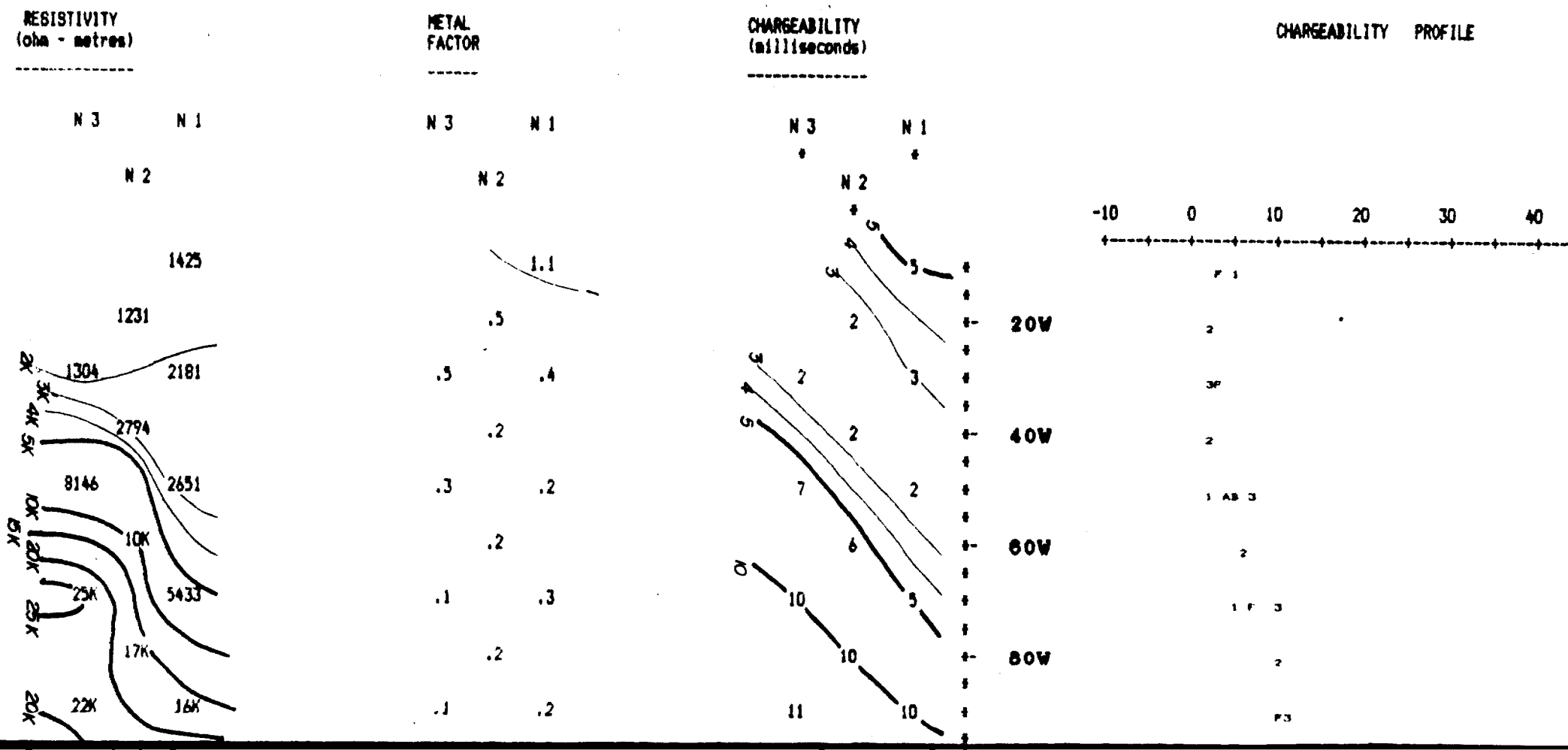
IP Pseudosections for N = 1 to 3

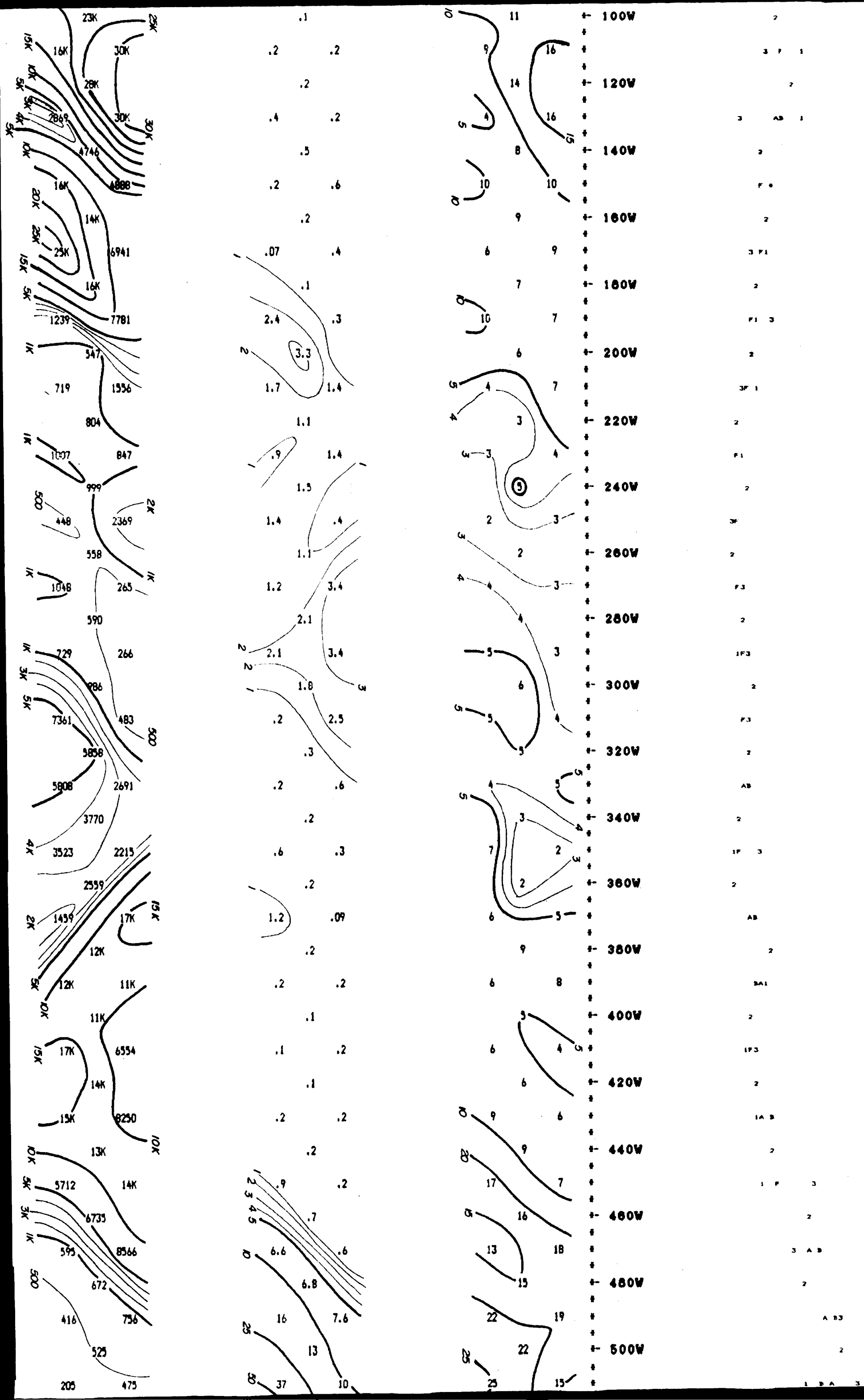
'a' Spacing = 20 M

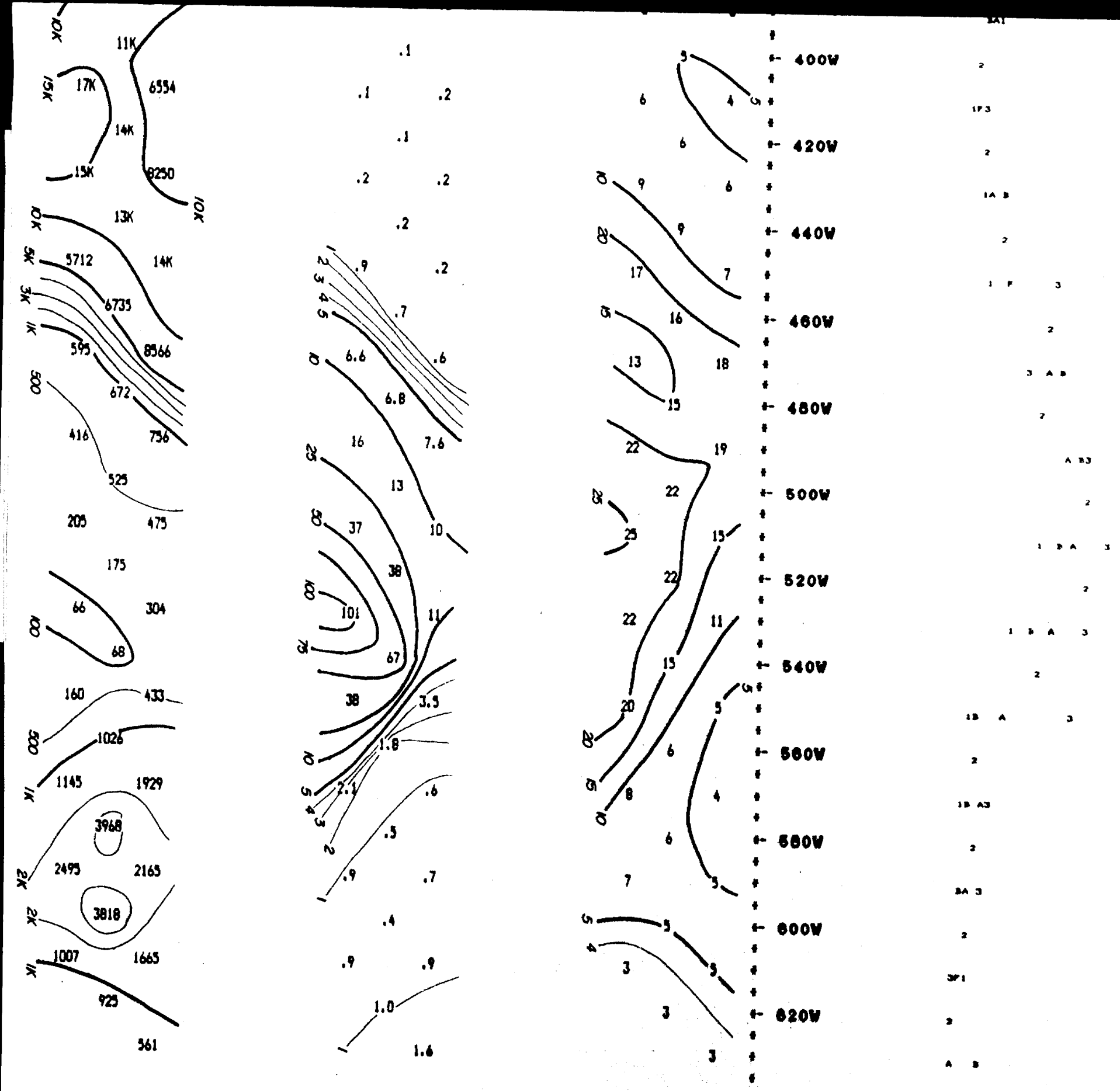
Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-B
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000




100W
120W
140W
160W
180W
200W
220W
240W
260W
280W
300W
320W
340W
360W
380W
400W
420W
440W
460W
480W
500W


400W
420W
440W
460W
480W
500W
520W
540W
560W
580W
600W
620W

****

RAYAN EXPLORATION LTD.

****

LINE 3 S

IP Pseudosections for N = 1 to 3

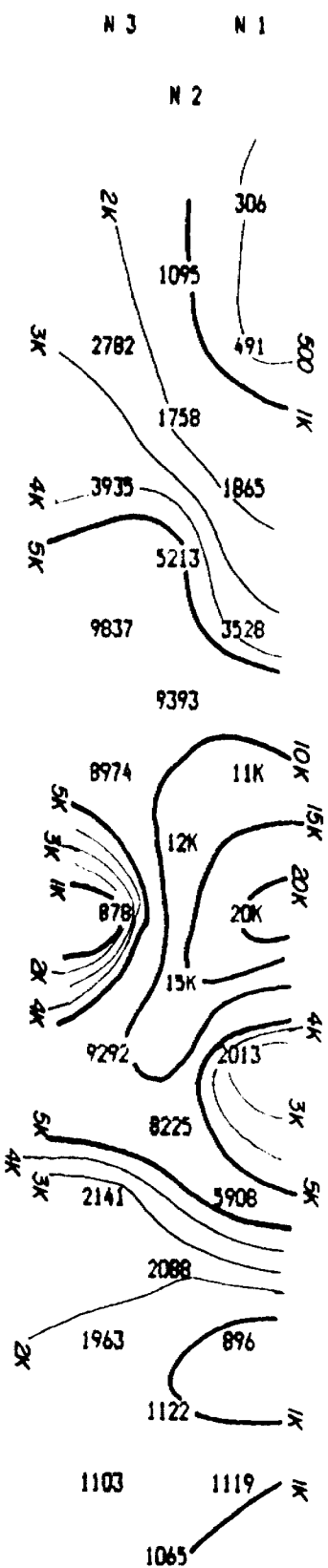
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

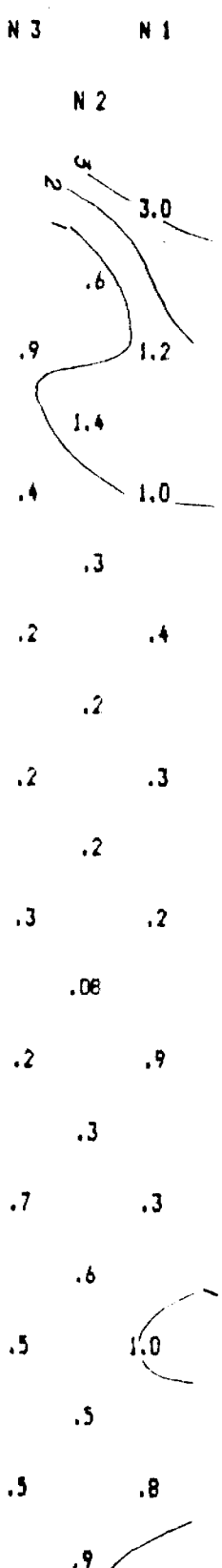
Operator : SA
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-B
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

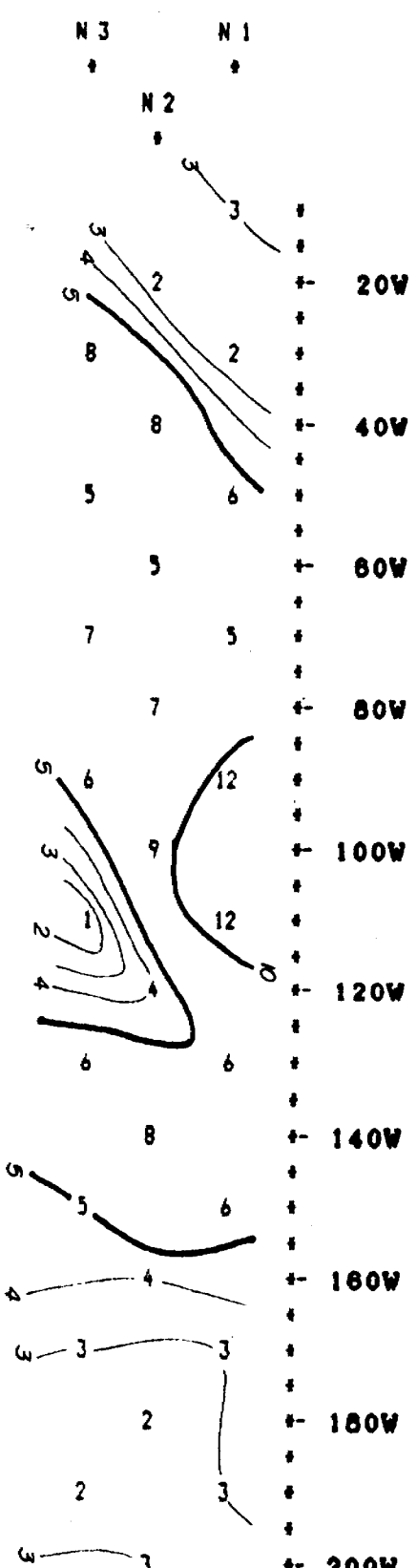
RESISTIVITY
(ohm - metres)



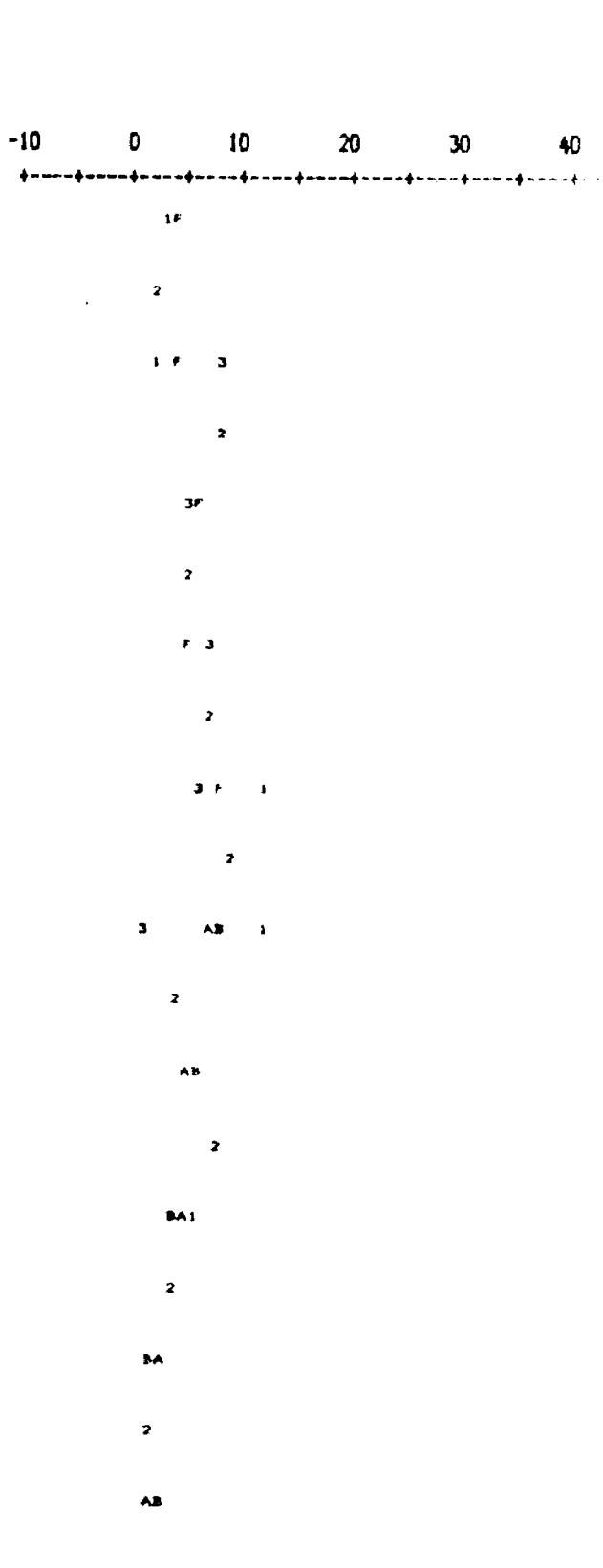
METAL
FACTOR

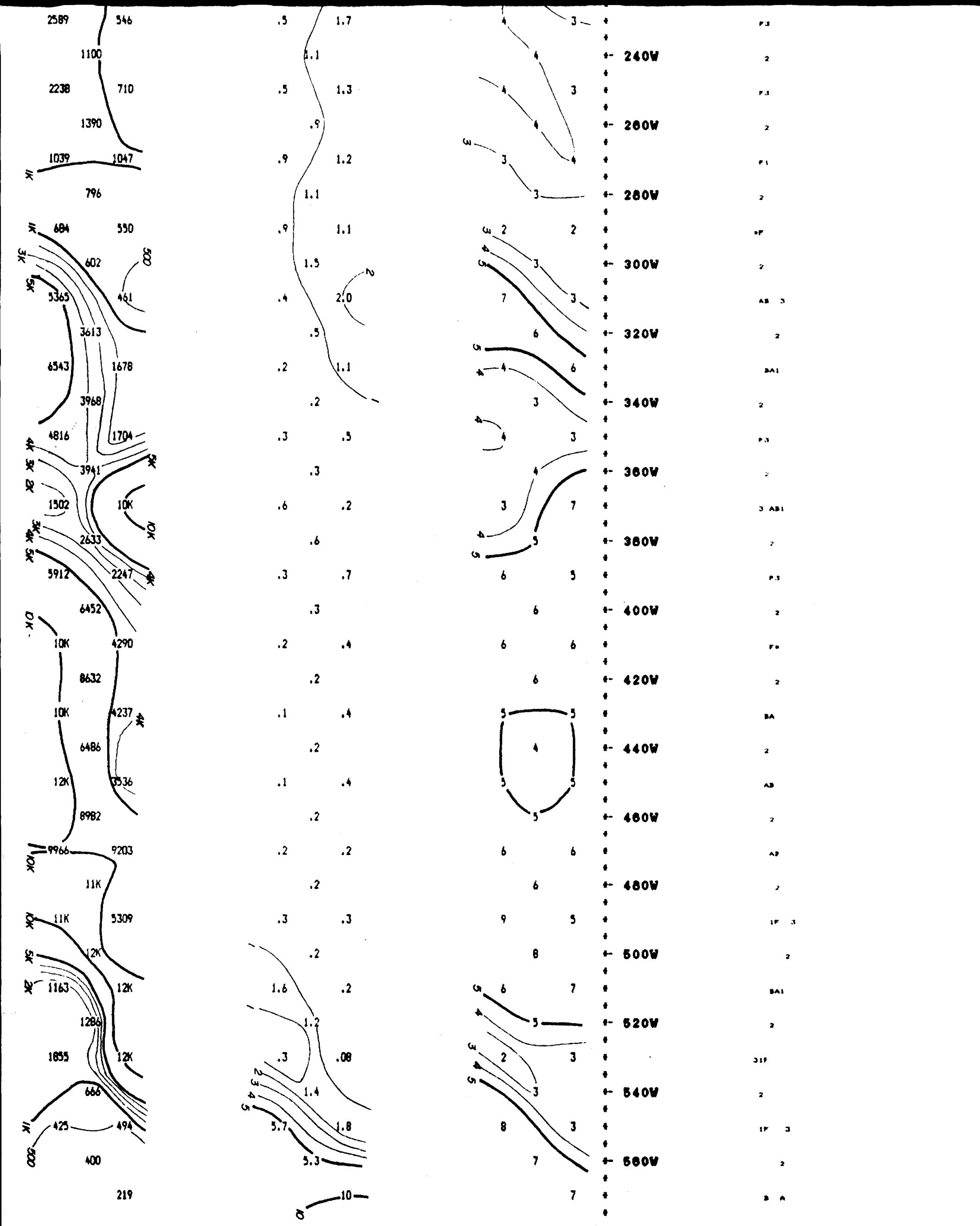


CHARGEABILITY
(milliseconds)



CHARGEABILITY PROFILE




240W
260W
280W
300W
320W
340W
360W
380W
400W
420W
440W
460W
480W
500W
520W
540W
560W

****

RAYAN EXPLORATION LTD.

****

LINE 4 S

IP Pseudosections for N = 1 to 3

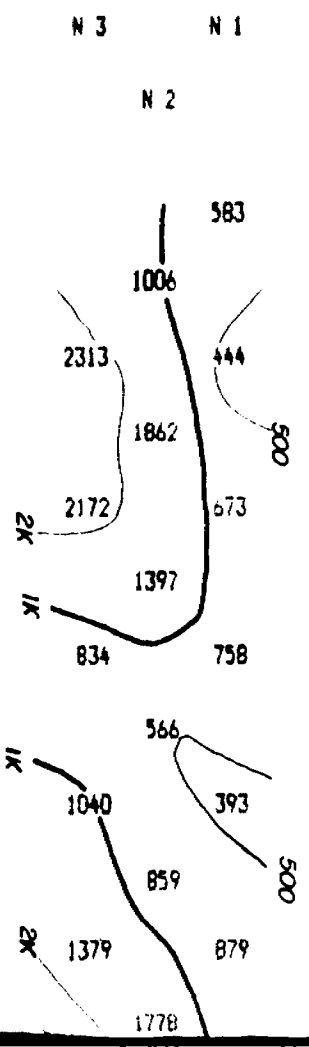
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

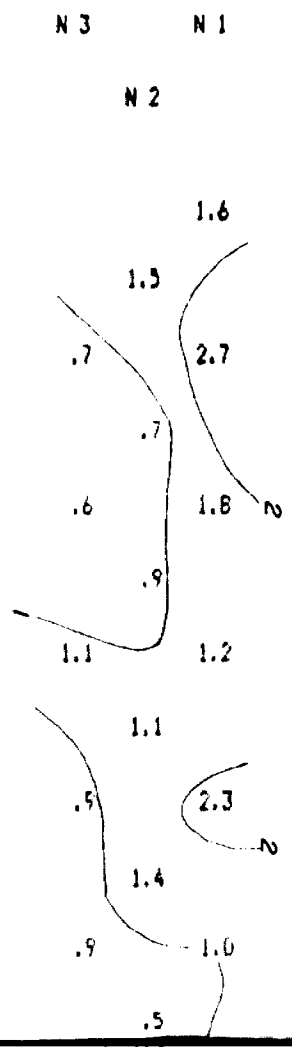
Operator : RAM
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-B
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

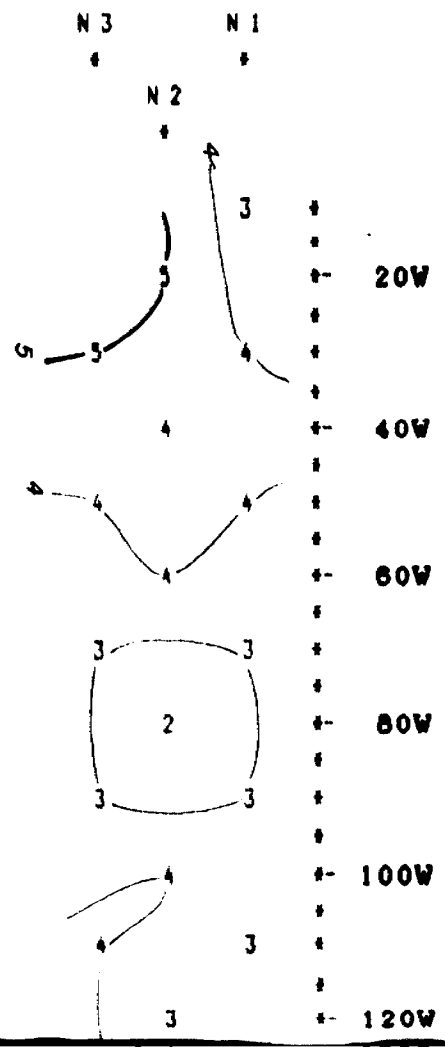
RESISTIVITY
(ohm - metres)



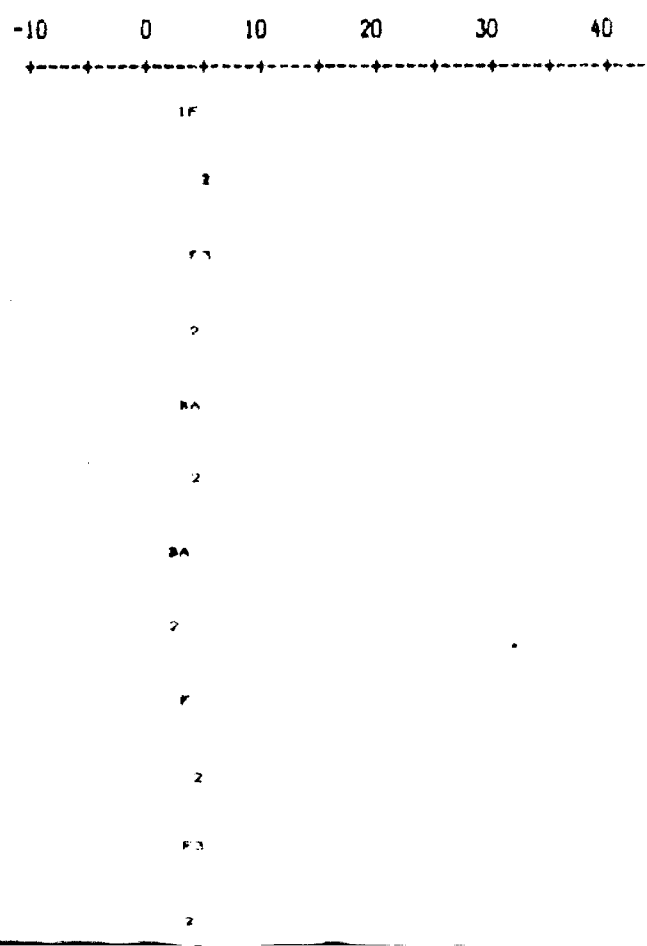
METAL
FACTOR

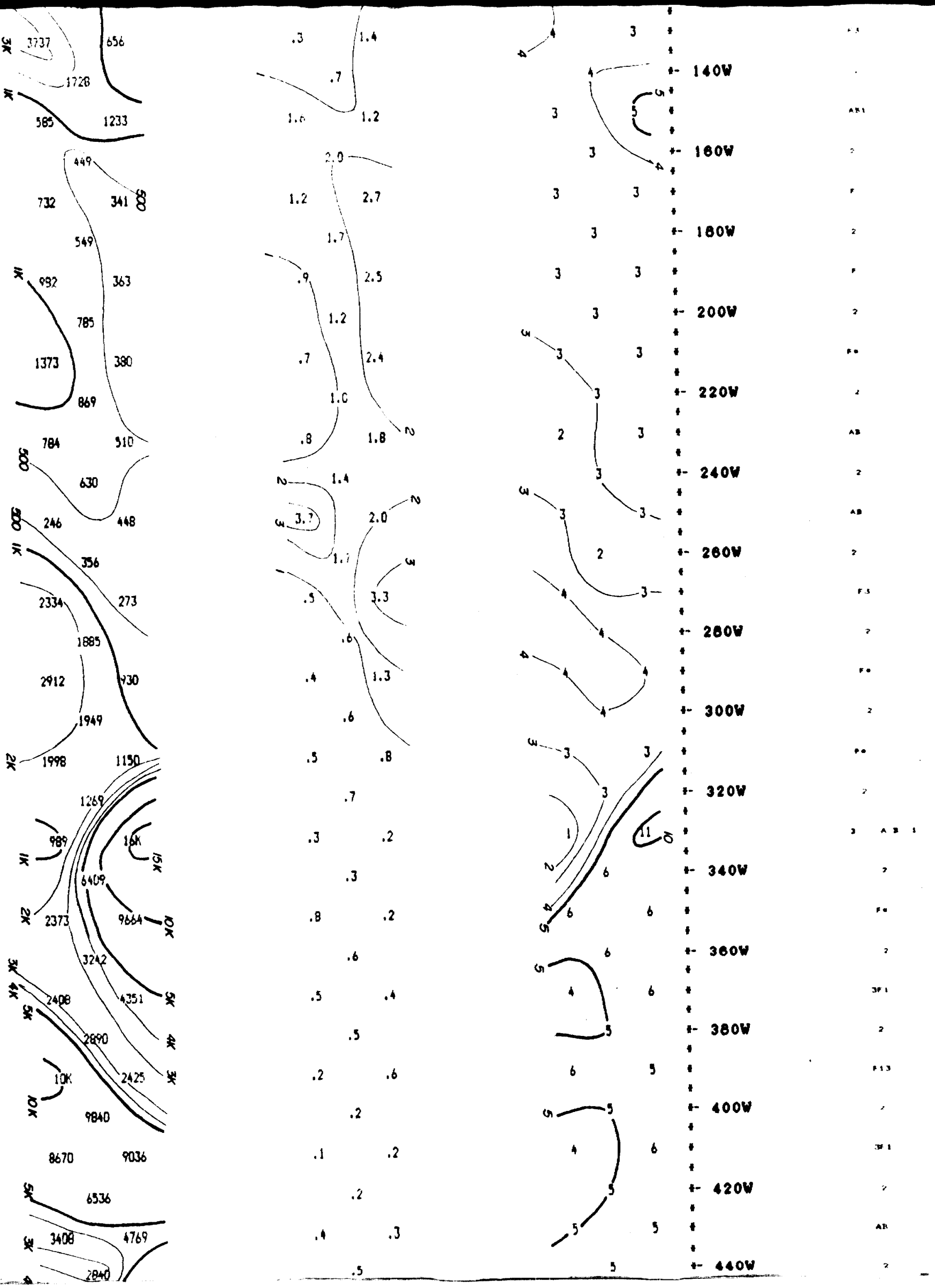


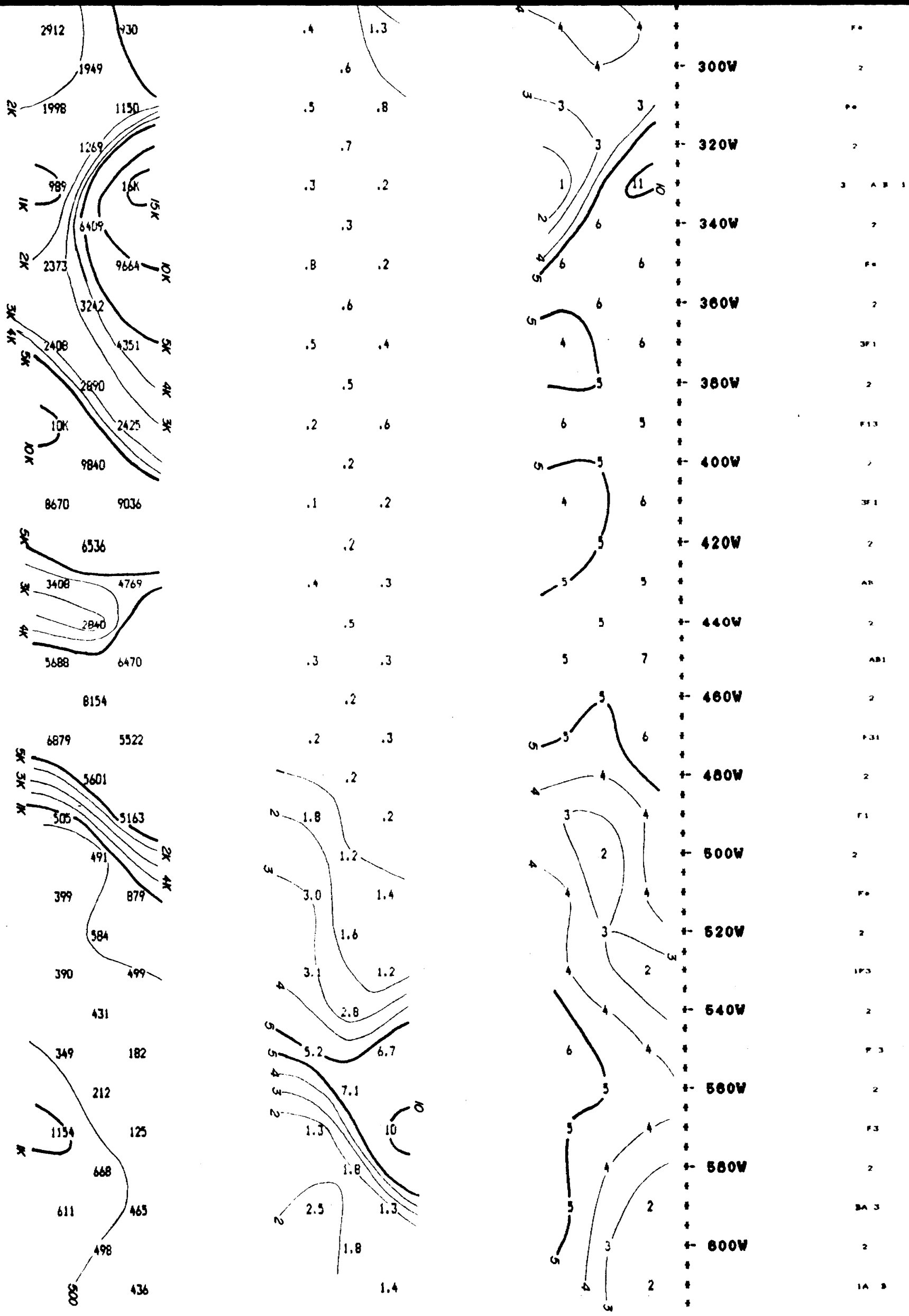
CHARGEABILITY
(milliseconds)



CHARGEABILITY PROFILE




140W
160W
180W
200W
220W
240W
260W
280W
300W
320W
340W
360W
380W
400W
420W
440W


300W
320W
340W
360W
380W
400W
420W
440W
460W
480W
500W
520W
540W
560W
580W
600W

****

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****

LINE 5 S

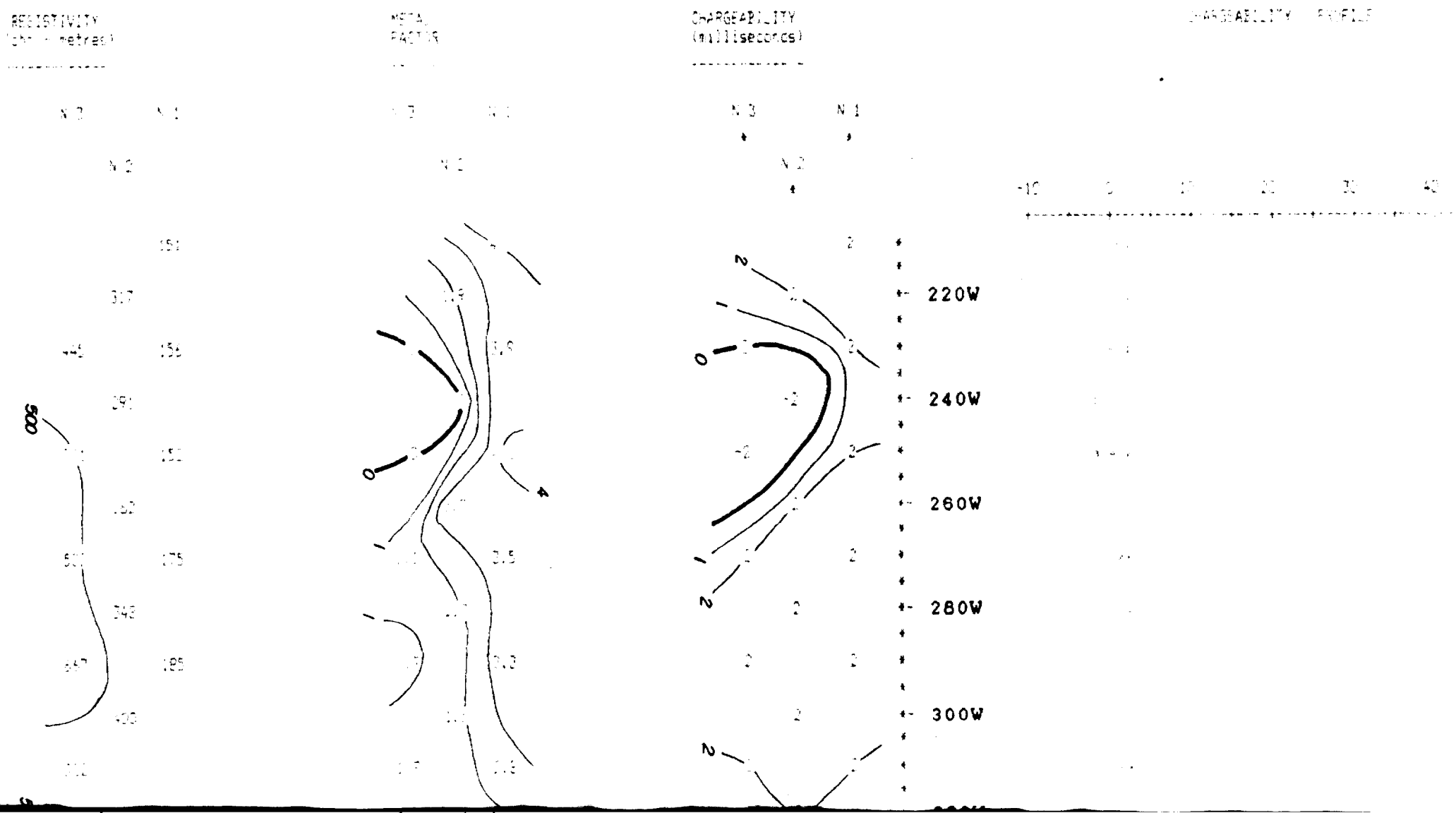
IP Pseudosections for N = 1 to 3

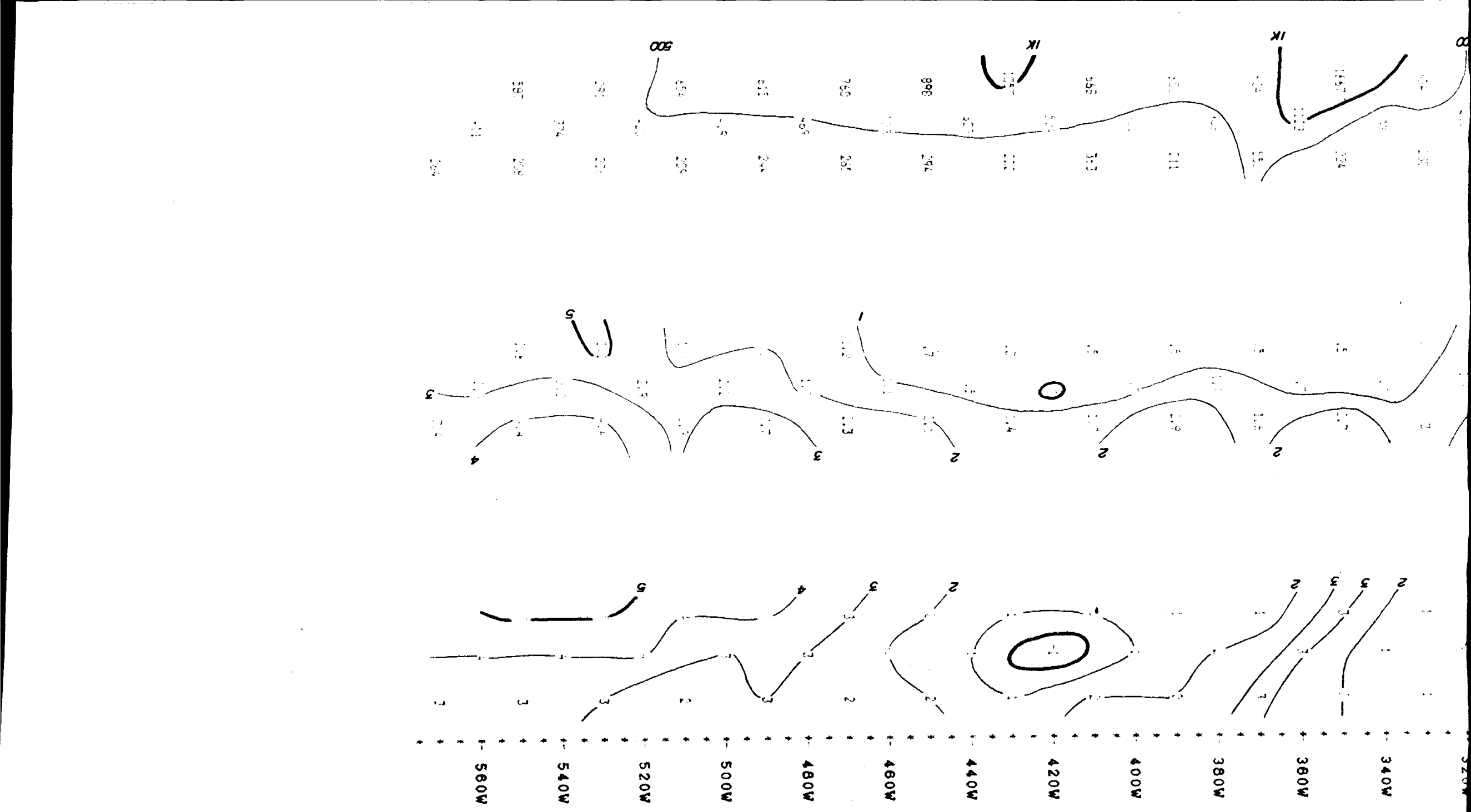
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : RAM
Electrode Arrau : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-6
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delau Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000




340W
360W
380W
400W
420W
440W
460W
480W
500W
520W
540W
560W

****
RAYAN EXPLORATION LTD.
****

LINE 600 W

IP Pseudosections for N = 1 to 3

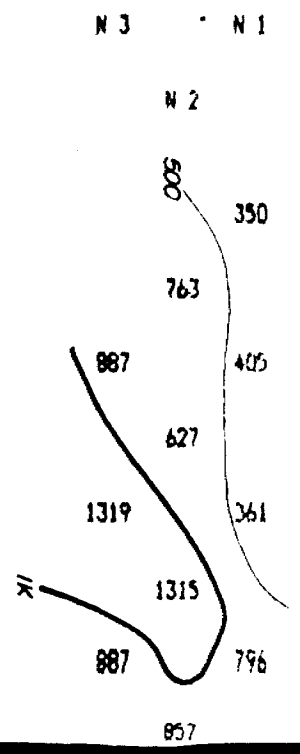
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

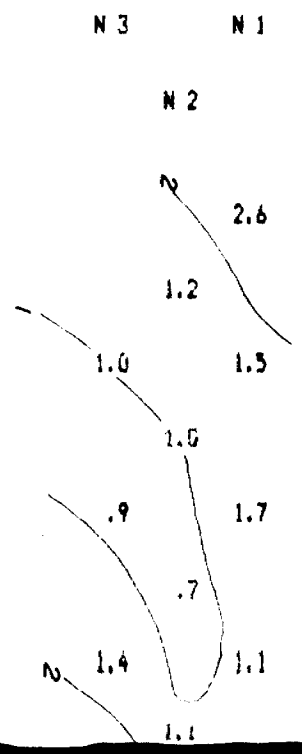
Operator : MAY
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-8
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

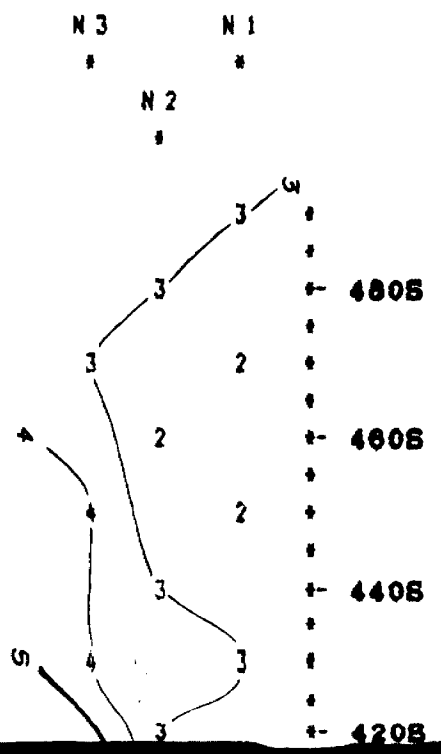
RESISTIVITY
(ohm - metres)



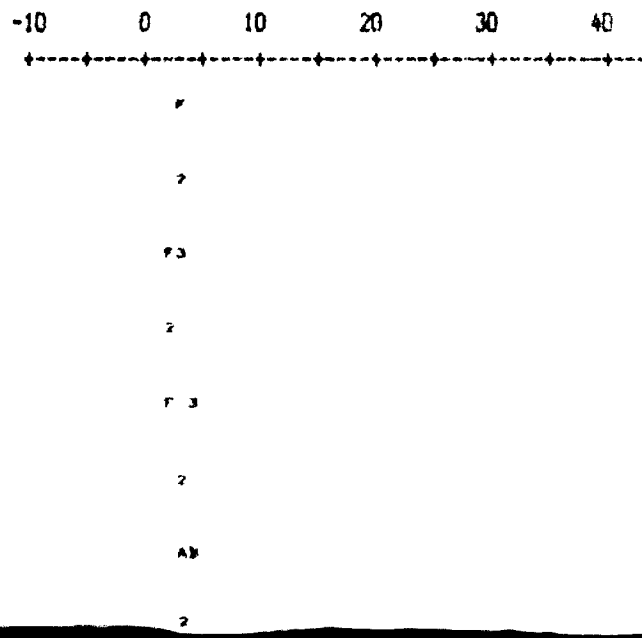
METAL
FACTOR

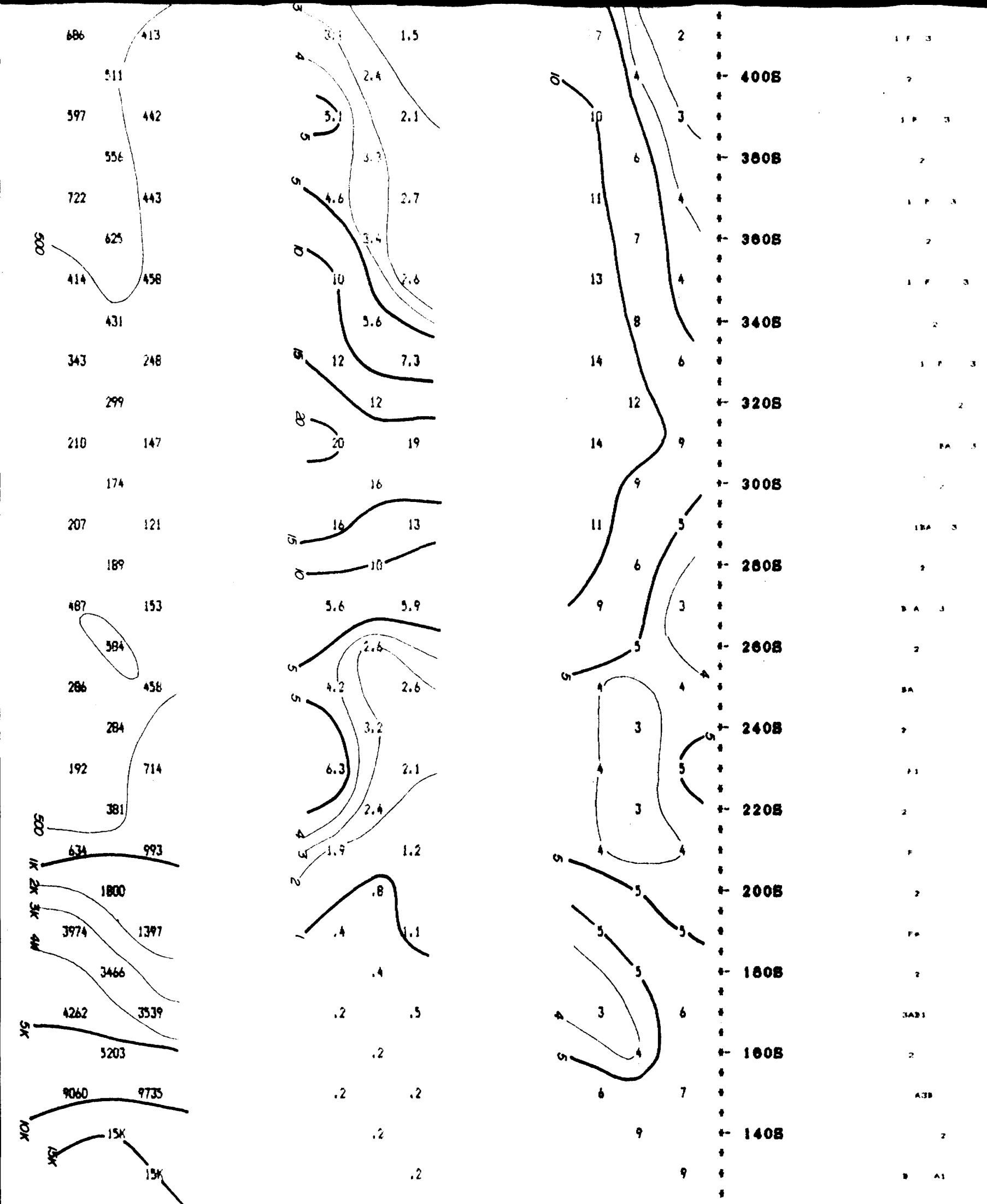


CHARGEABILITY
(milliseconds)



CHARGEABILITY PROFILE




400S
380S
360S
340S
320S
300S
280S
260S
240S
220S
200S
180S
160S
140S
500
1K
2K
3K
4K
5K
10K
15K
20K
686
413
511
597
442
556
722
443
625
414
458
431
343
248
299
210
147
174
207
121
189
487
153
584
286
458
284
192
714
381
634
993
1800
3974
1397
3466
4262
3539
5203
9060
9735
15K
15K
1.5
2.4
2.1
2.7
2.6
5.6
7.3
12
20
19
16
16
13
10
5.6
5.9
2.6
4.2
2.6
3.2
6.3
2.1
2.4
1.9
1.2
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1.1
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4
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5
5
3
6
4
6
7
9
9

****

RAYAN EXPLORATION LTD.

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LINE 4 N

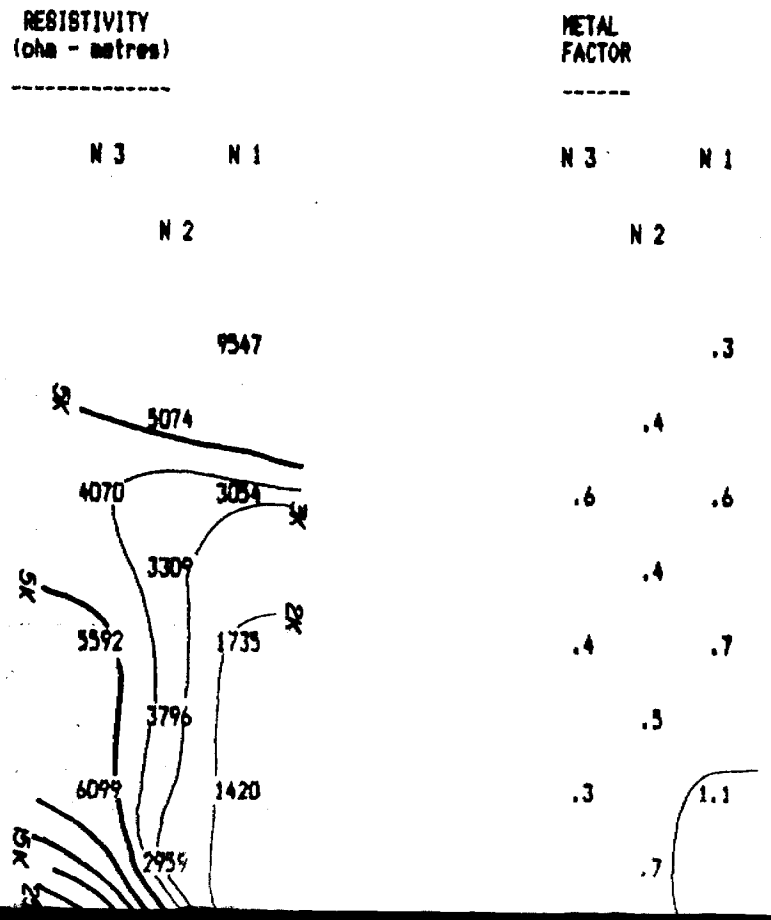
IP Pseudosections for N = 1 to 3

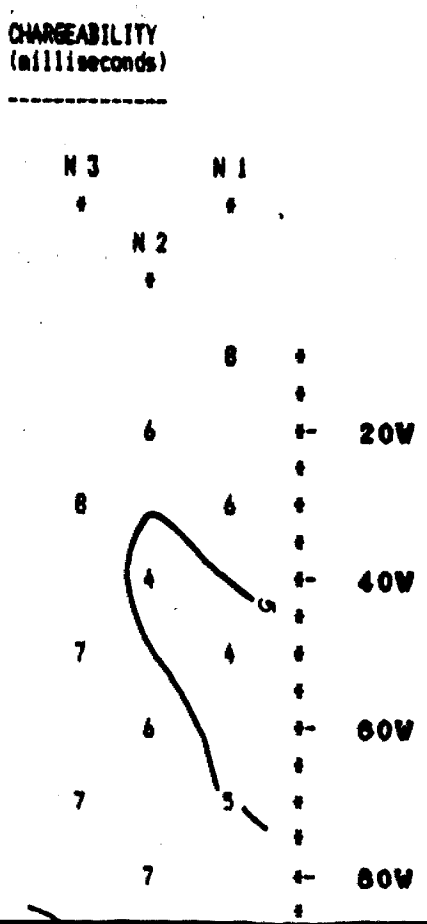
'a' Spacing = 20 M

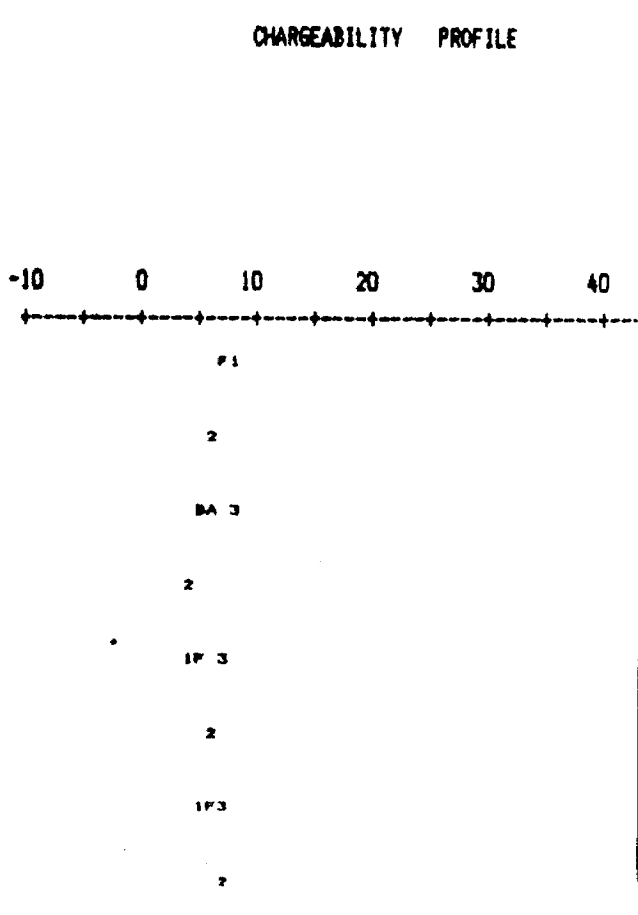
Property : GRENFELL
Client : R.S. MIDDLETON

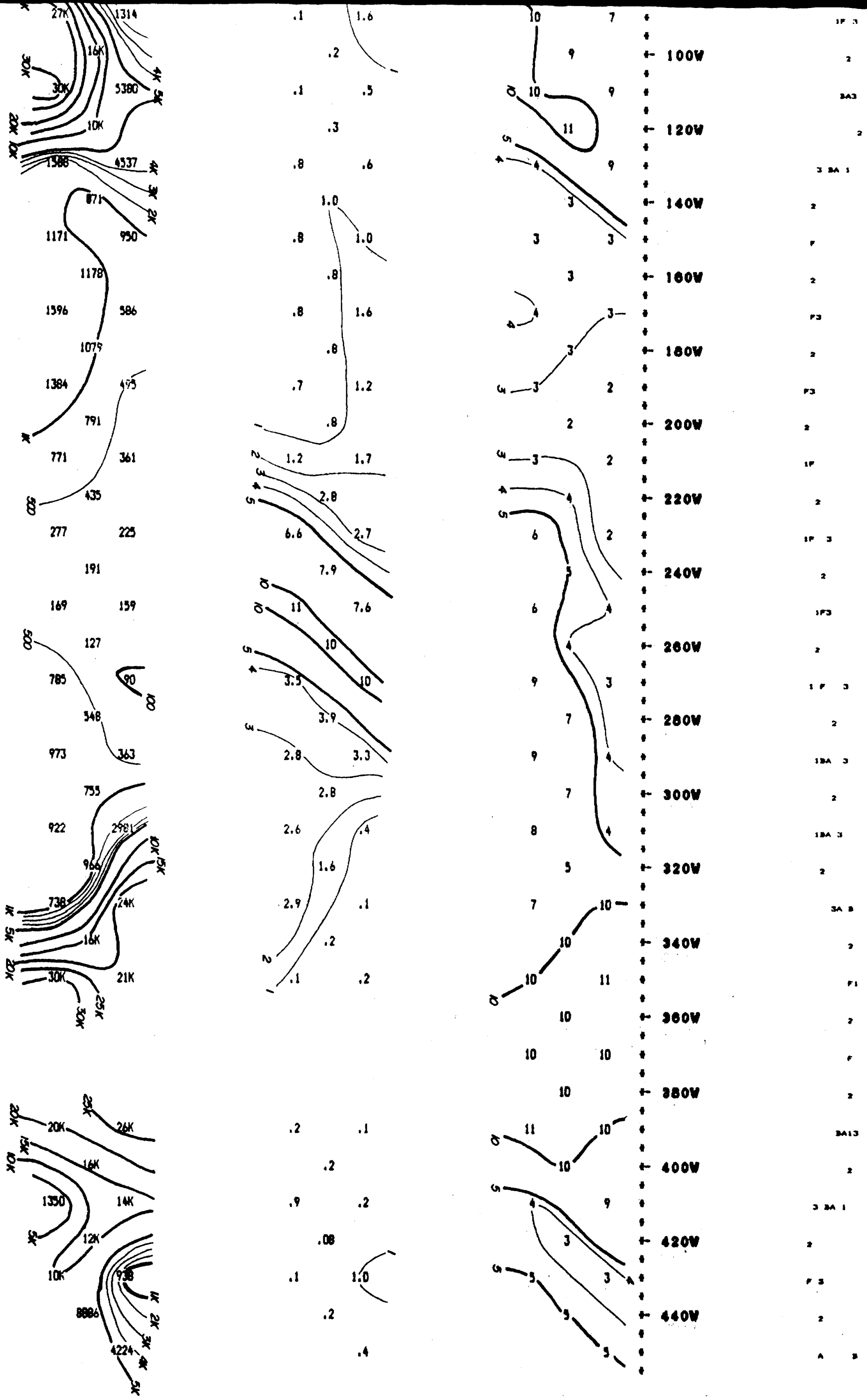
Operator : SA
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-8
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000








100W
120W
140W
160W
180W
200W
220W
240W
260W
280W
300W
320W
340W
360W
380W
400W
420W
440W

****

RAYAN EXPLORATION LTD.

****

LINE 6 N

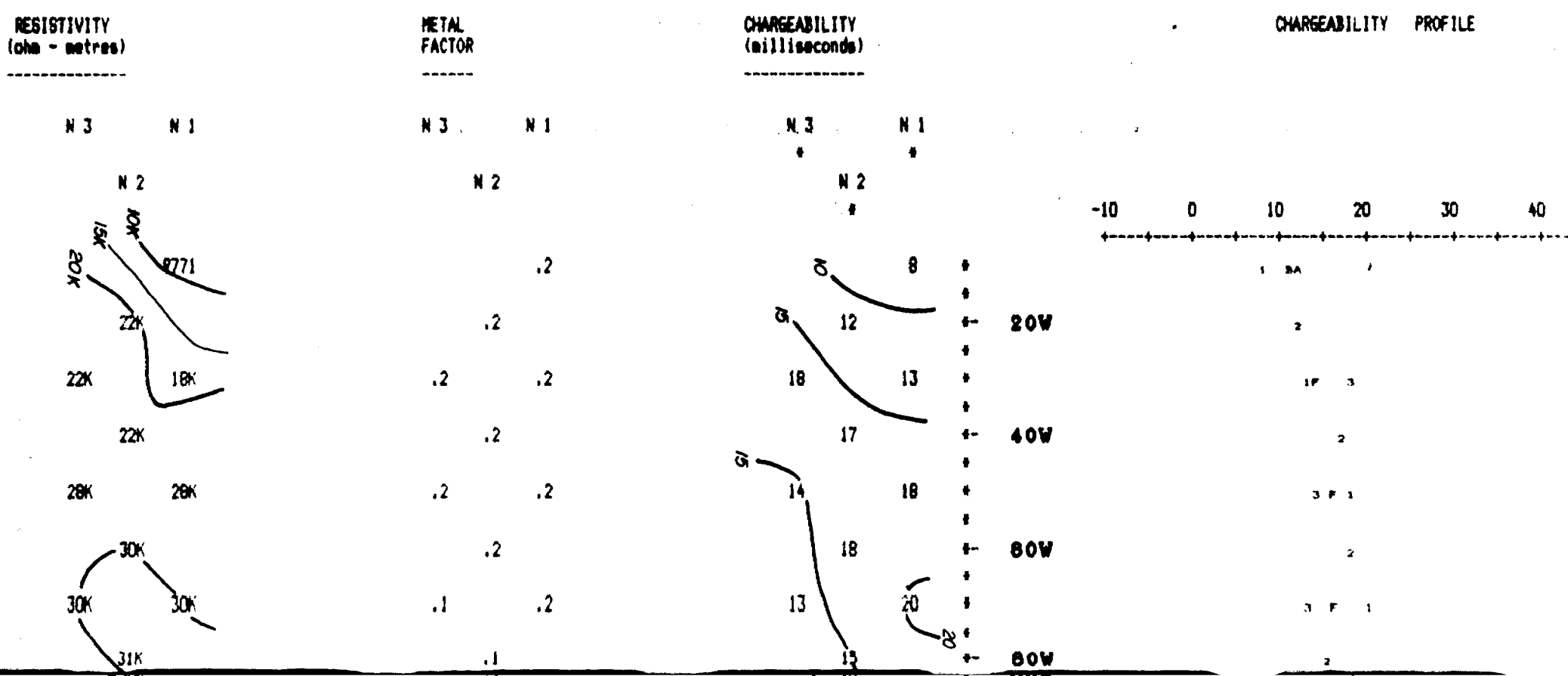
IP Pseudosections for N = 1 to 3

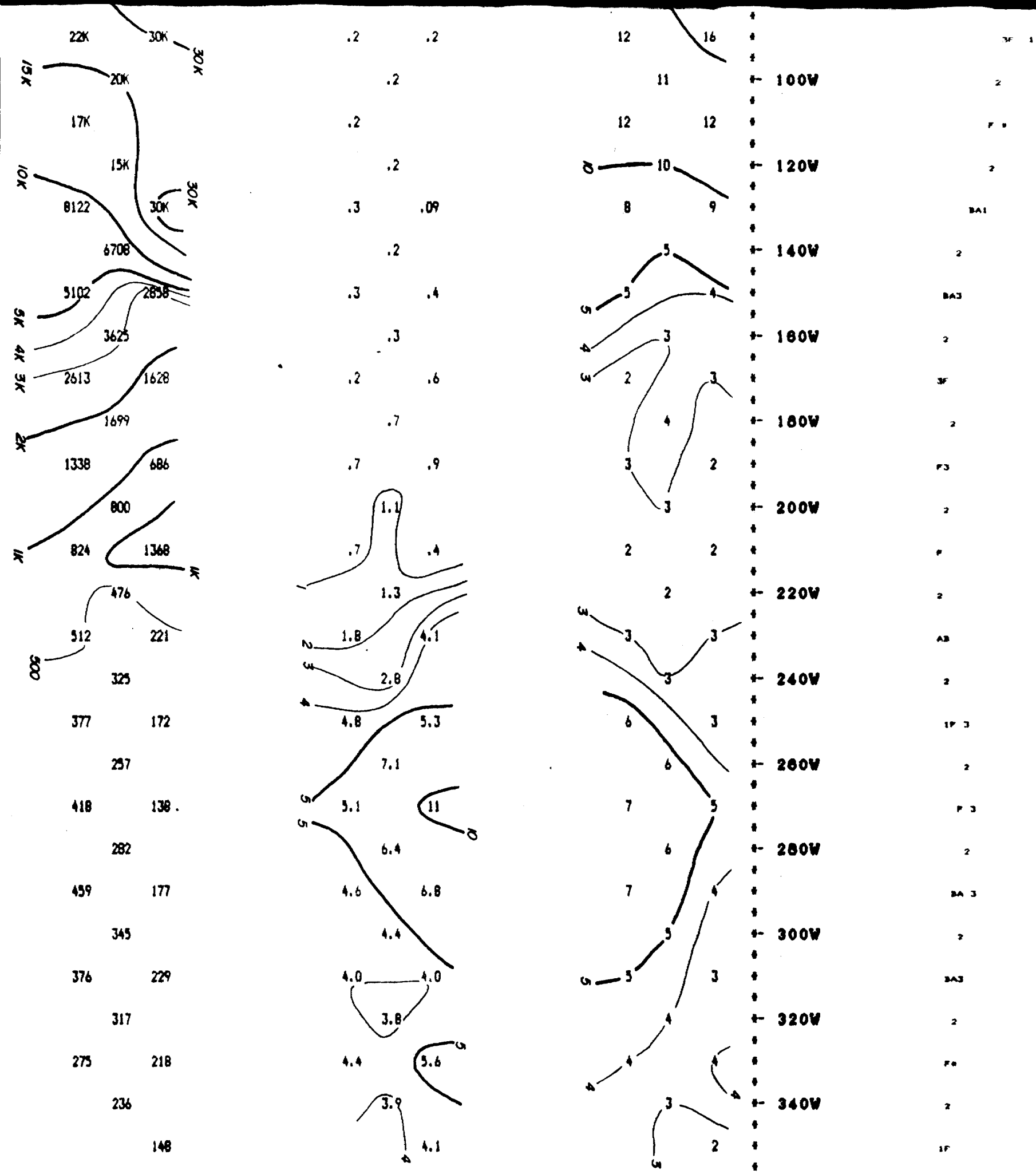
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
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 : 450 ms
Integration Time : 900 ms

SCALE : 1:1000




100W
120W
140W
160W
180W
200W
220W
240W
260W
280W
300W
320W
340W
22K
30K
15K
20K
17K
15K
10K
8122
30K
6708
5102
2858
5K
4K
3K
3625
2613
1628
2K
1699
1338
686
800
1K
824
1368
476
512
221
500
325
377
172
257
418
138
282
459
177
345
376
229
317
275
218
236
148
.2
.2
.2
.2
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4.1
2.8
4.8
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7.1
5.1
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4.6
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4.0
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4.1
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4
5
5
3
4
4
4
3
2

****

RAYAN EXPLORATION LTD.

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LINE 8 N

IP Pseudosections for N = 1 to 3

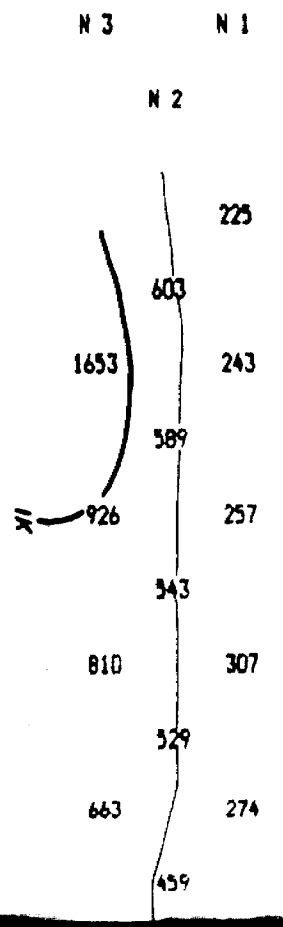
'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

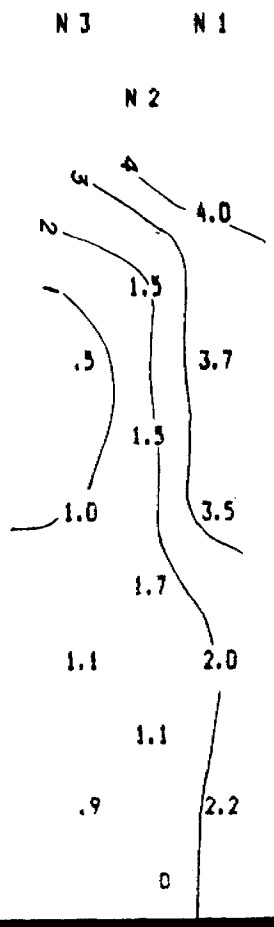
Operator : SA
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-8
Transmitter : PHOENIX IPT-1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

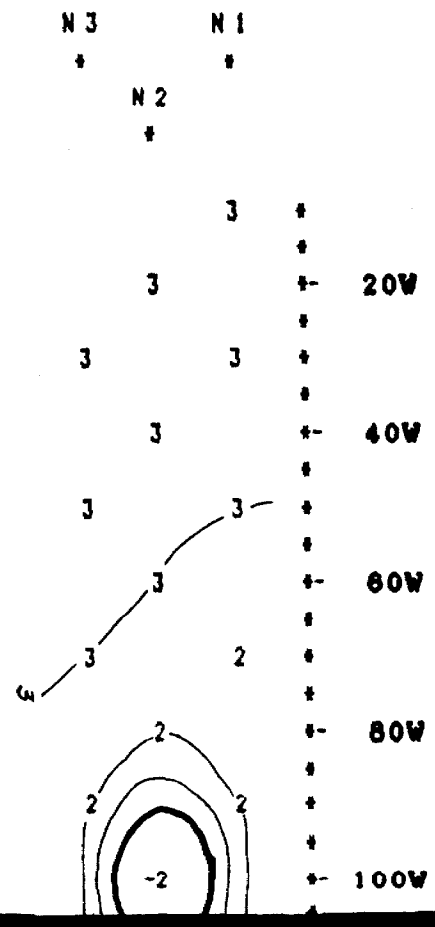
RESISTIVITY
(ohm - metres)



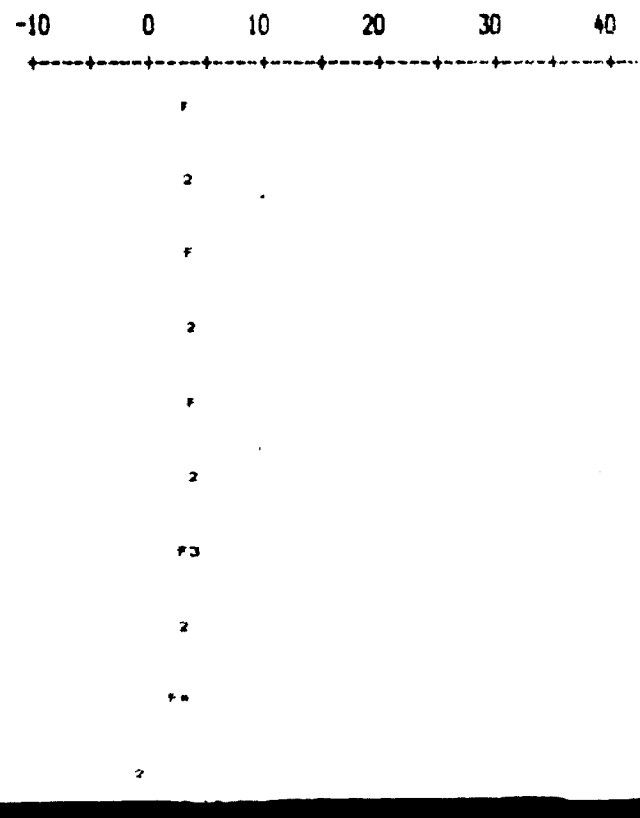
METAL
FACTOR



CHARGEABILITY
(milliseconds)

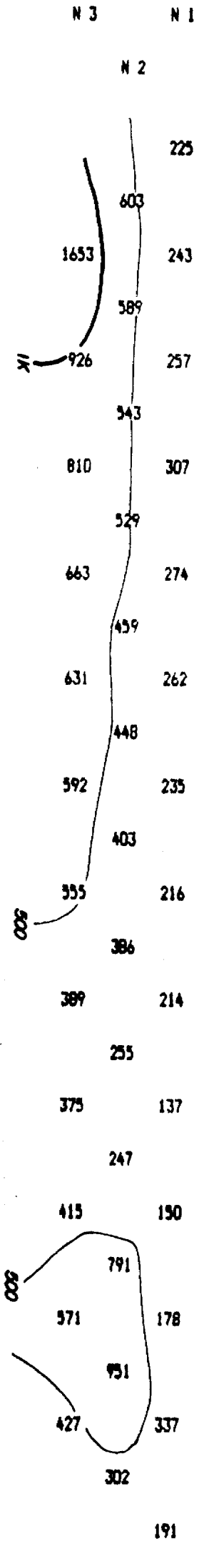


CHARGEABILITY PROFILE

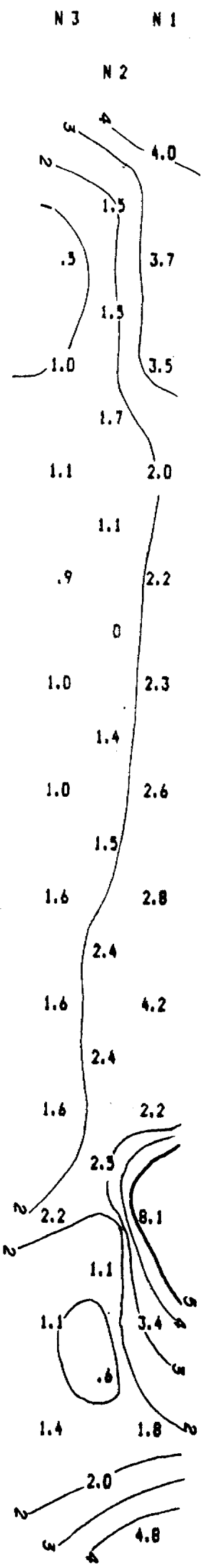


SCALE : 1:1000

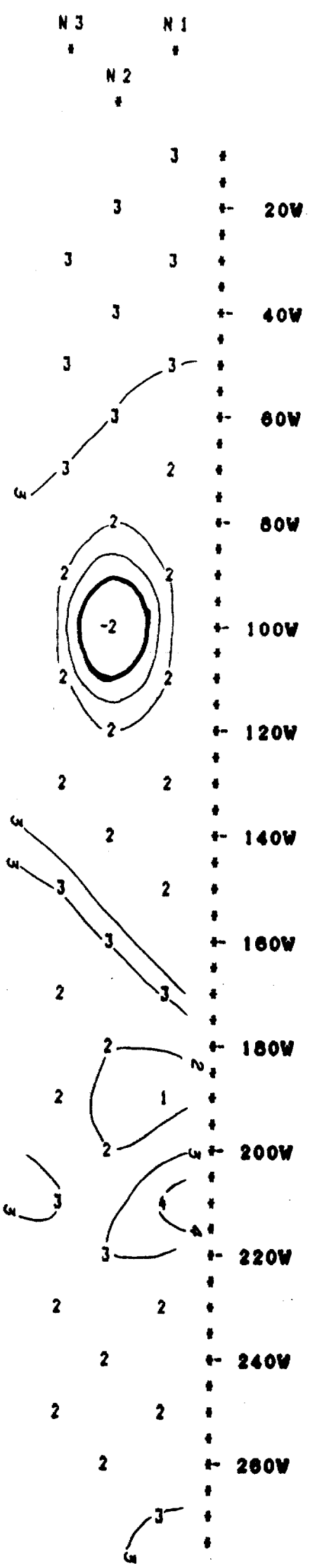
RESISTIVITY
(ohm - metres)



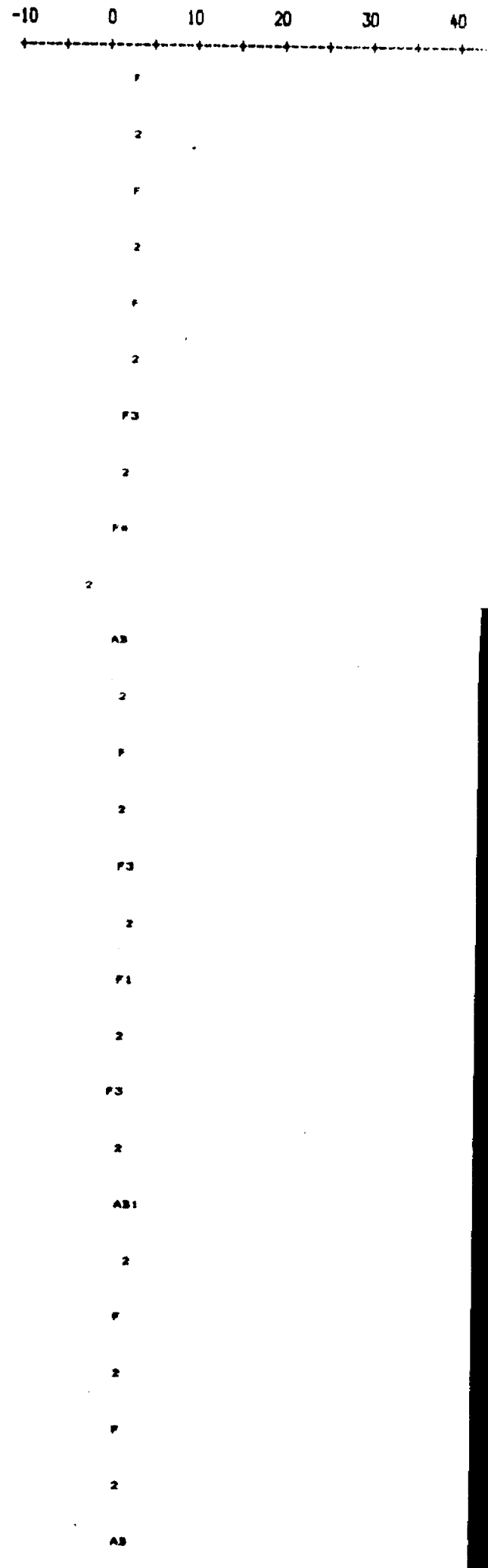
METAL
FACTOR



CHARGEABILITY
(milliseconds)



CHARGEABILITY PROFILE



****

RAYAN EXPLORATION LTD.

****

LINE 12 N

IP Pseudosections for N = 1 to 3

'a' Spacing = 20 M

Property : GRENFELL
Client : R.S. MIDDLETON

Operator : SA
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 : 450 ms
Integration Time : 900 ms

SCALE : 1:1000

RESISTIVITY
(ohm - metres)

N 3 N 1
N 2
112
182
252 113
174
234 120
165
218 107

METAL
FACTOR

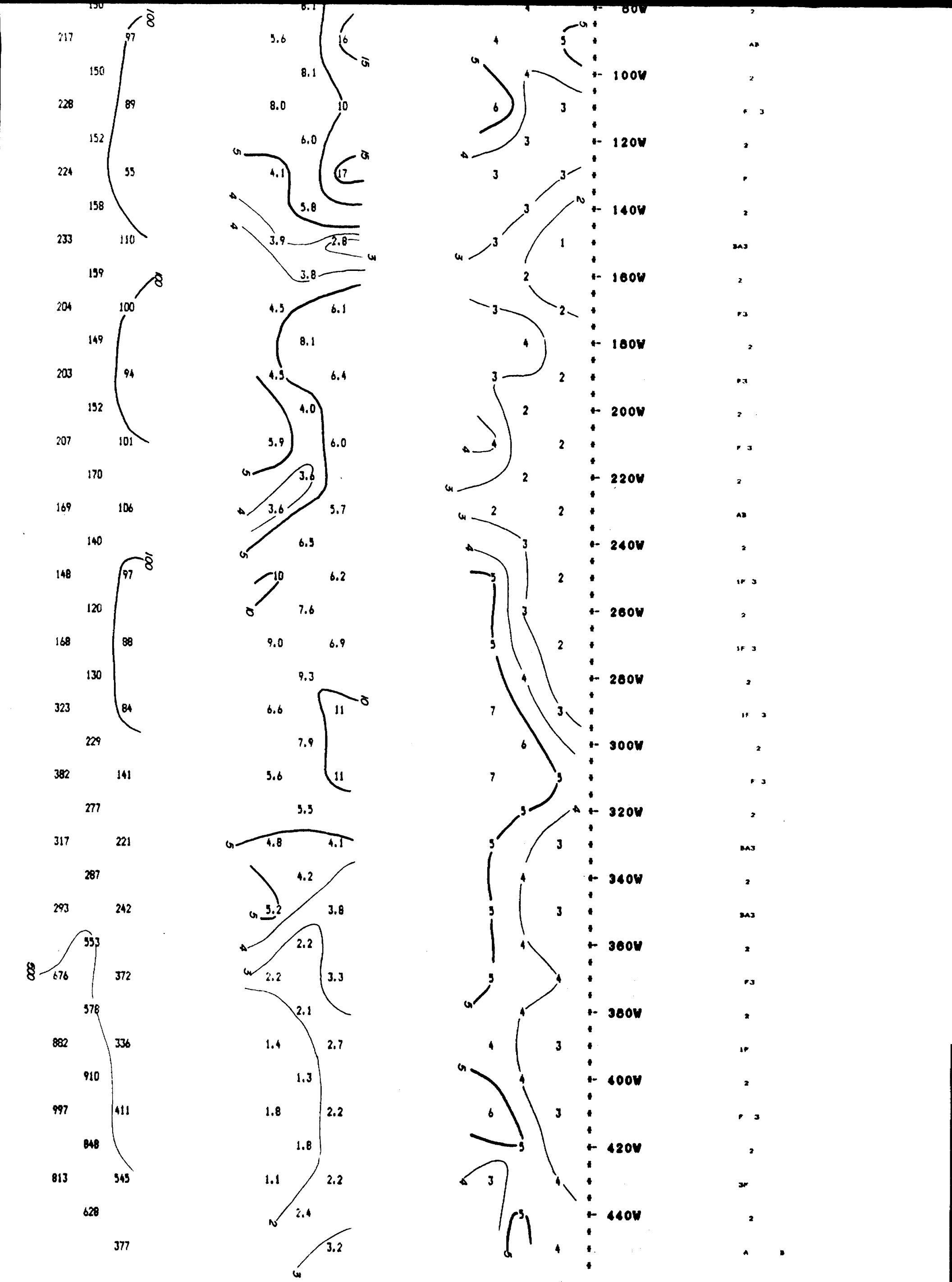
N 3 N 1
N 2
11
12
7.2 8.0
8.7
5.2 7.6
7.3
7.0 11

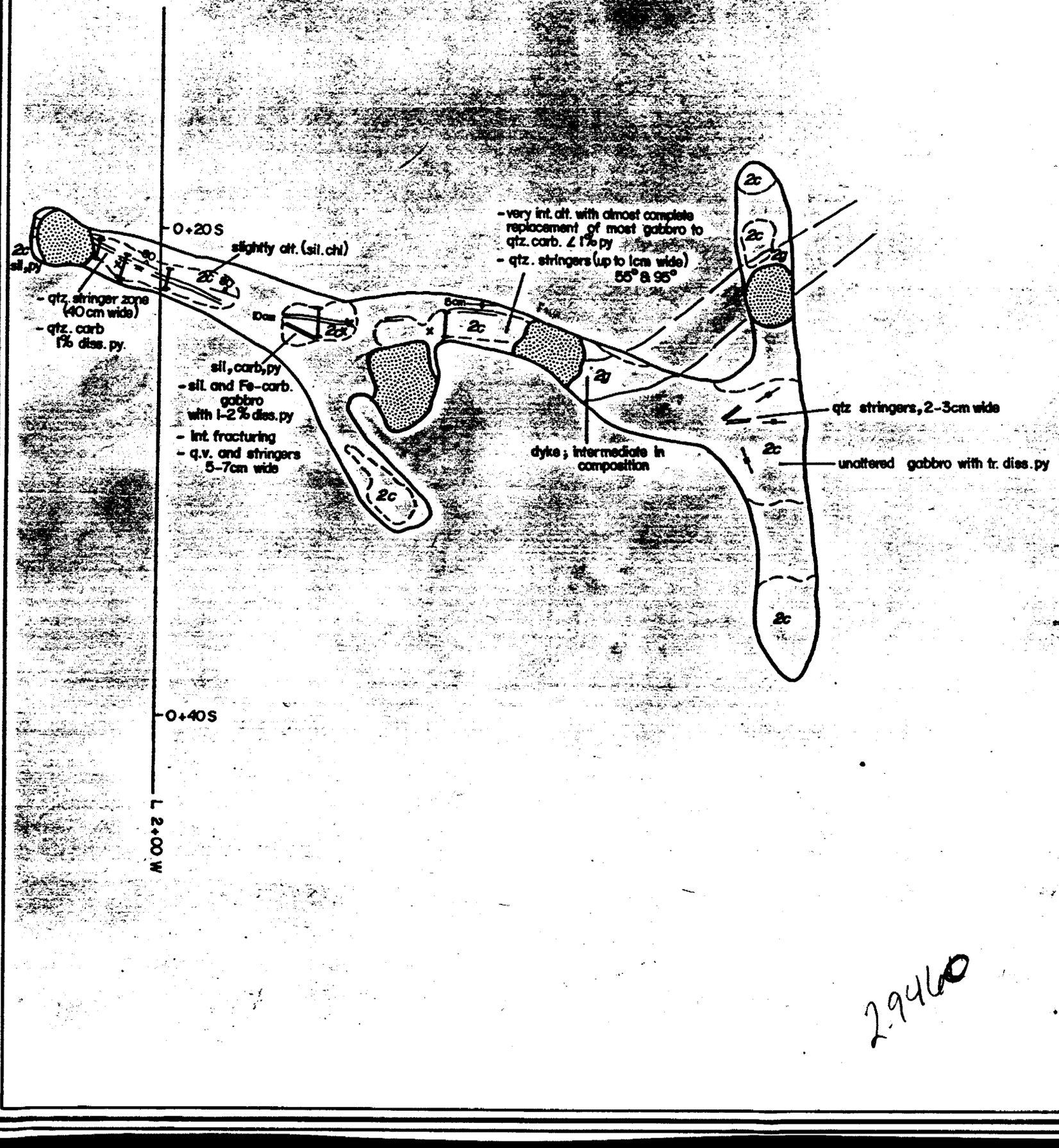
CHARGEABILITY
(milliseconds)

N 3 N 1
N 2
7
6 3
5
4 3
4
5 4
20W
40W
60W

CHARGEABILITY PROFILE

-10 0 10 20 30 40


80W
100W
120W
140W
160W
180W
200W
220W
240W
260W
280W
300W
320W
340W
360W
380W
400W
420W
440W



LEGEND

2c	Fe-poor gabbro or coarse grained Mafic Volcanics
2g	Granophyric dykes
1c	Fe-rich gabbro or coarse grained Mafic Volcanics
1g	Granophyric dykes

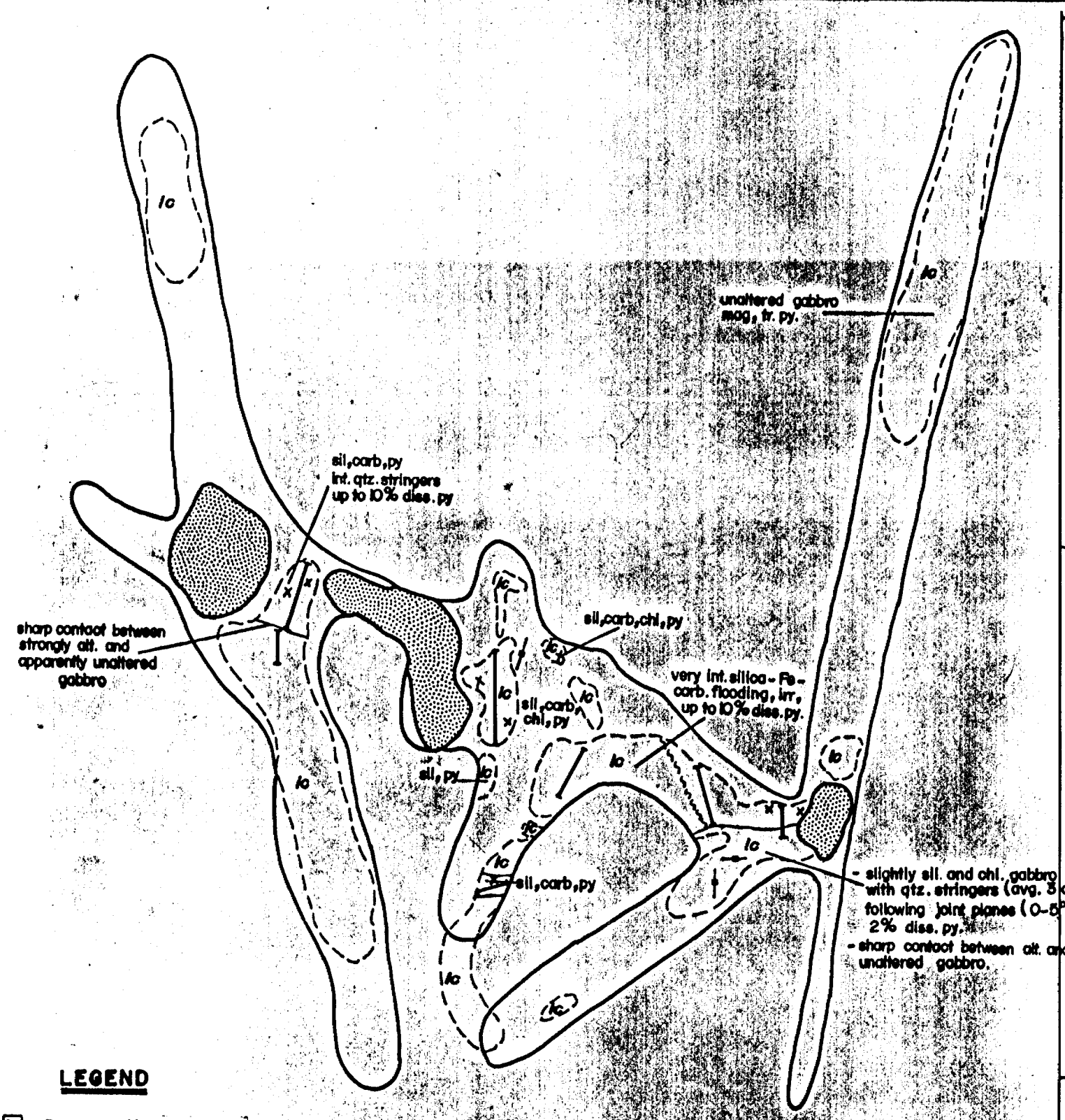
alt	alteration
as	associated
carb	carbonatized
chl	chloritized
diss	disseminated
ep	epidote
Fe	iron
frag	fragmental
mag	magnetic
py	pyrite
qtz	quartz
q.v.	quartz vein
sil	silicification

avg	average
cm	centimetre
int	intense
irr	irregular
tr	trace
wk	weak

- strike or dip of vein
- foliation
- joints a)vertical b)inclined
- shear or fracture
- vein or stringer
- water
- channel sample
- grab sample
- contact

29460

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for Glen Auden Resources Limited & Adola Mining Carporation		
	Title Lee, Bompas, Maisonville & Grenfell Townships Seasekinika Lake Property		
	GEOLOGY Trench - 3		
	Date: July 1985	Scale: 1:200	N.T.S.:
	Drawn: C.G.	Approved:	File: M-68



LEGEND

- 2c Fe-poor gabbro or coarse grained Mafic Volcanics
- 2g Granophyric dykes
- 1c Fe-rich gabbro or coarse grained Mafic Volcanics
- 1g Granophyric dykes

alt	alteration
as	associated
carb	carbonatized
chl	chloritized
diss	disseminated
ep	epidote
Fe	iron
frag	fragmental
mag	magnetic
py	pyrite
qtz	quartz
q.v.	quartz vein
sil	silicification

avg	average
cm	centimetre
int	intense
irr	irregular
tr	trace
wk	weak

- strike or dip of vein
- foliation
- joints a) vertical b) inclined
- shear or fracture
- vein or stringer
- water
- channel sample
- grab sample
- contact

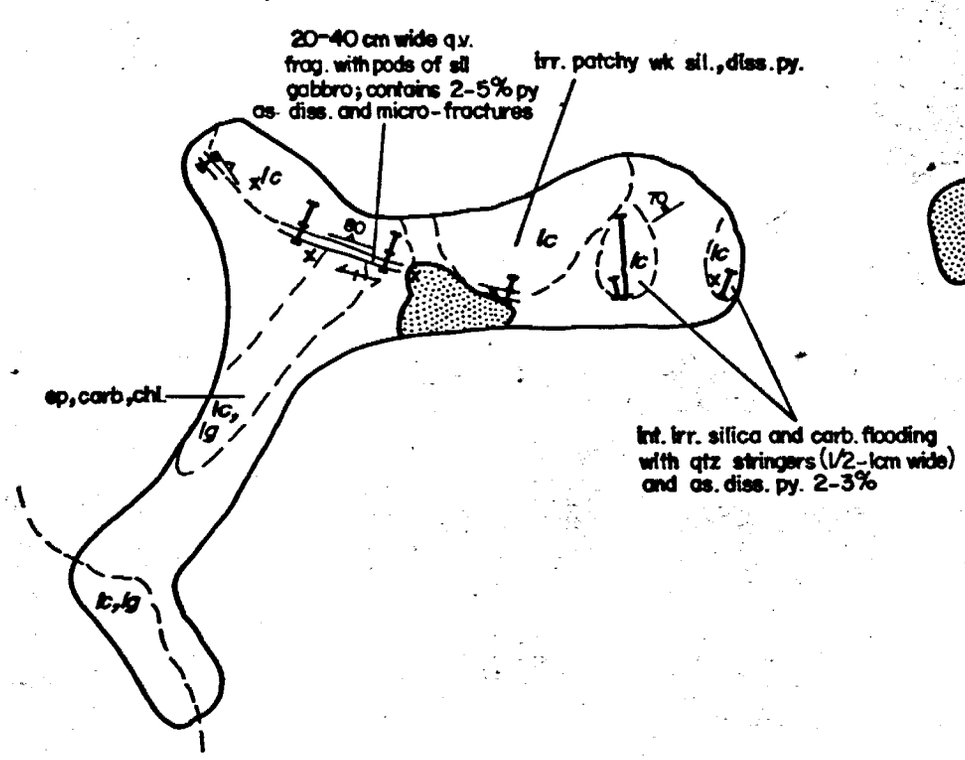
1c tr. py.

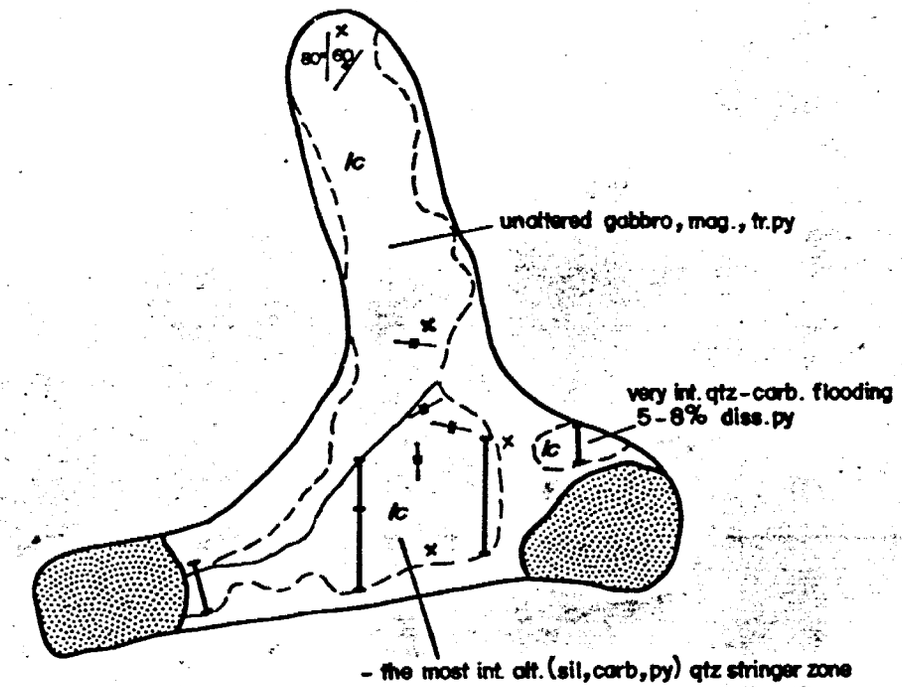
1c sil, py

29460

Bruce Middleton

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for: Glen Auden Resources Limited & Adola Mining Corporation		
	Title: Lee, Bompas, Malsonville & Grenfell Townships Seekinika Lake Property GEOLOGY Trench 1		
	Date: July 1985	Scale: 1:200	N.T.S.:
	Drawn: C.G.	Approved:	File: M-68





LEGEND

2c	Fe-poor gabbro or coarse grained Mafic Volcanics
2g	Granophyric dykes
1c	Fe-rich gabbro or coarse grained Mafic Volcanics
1g	Granophyric dykes

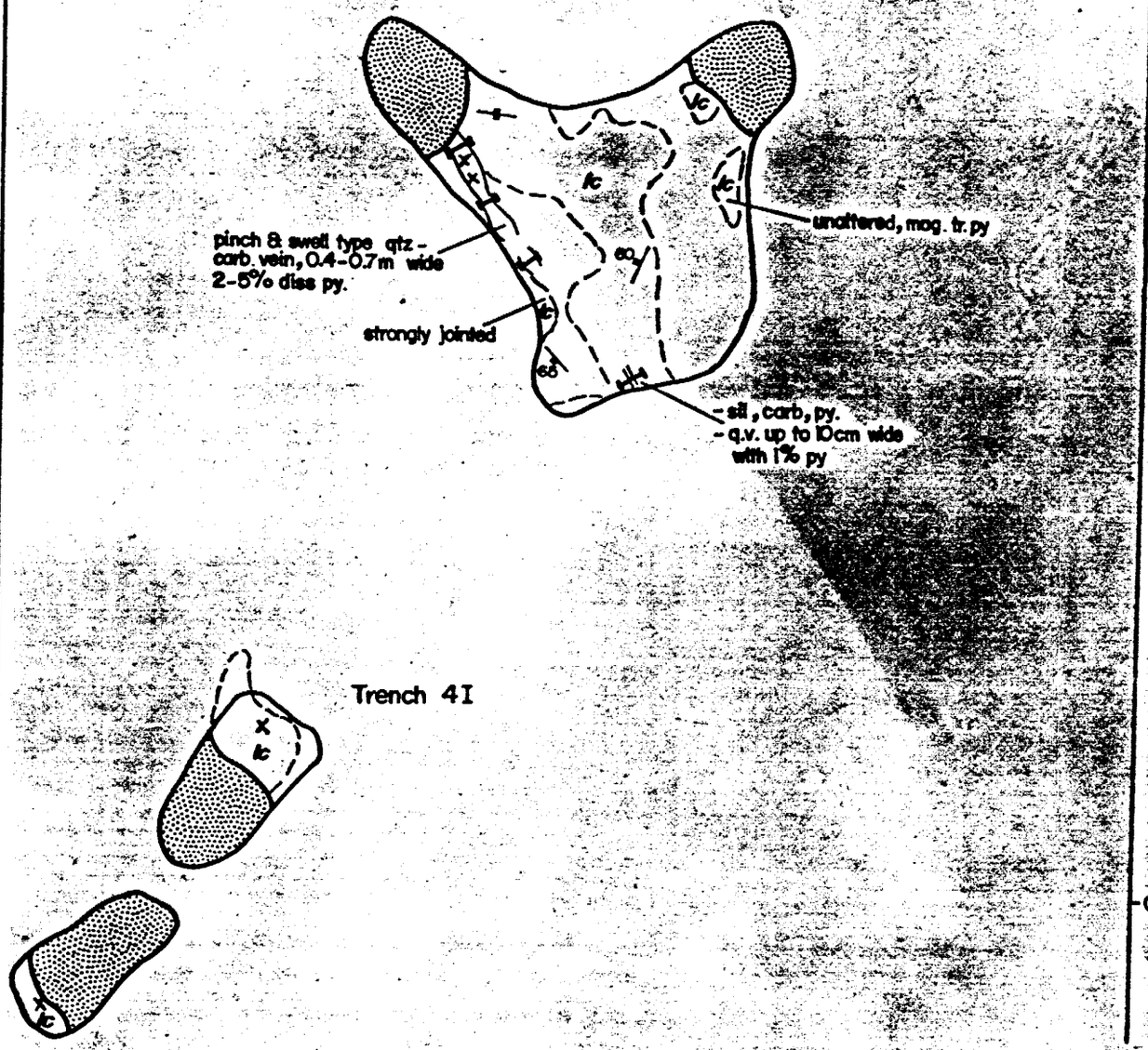
alt	alteration
ass	associated
carb	carbonatized
chl	chloritized
diss	disseminated
ep	epidote
Fe	iron
frag	fragmental
mag	magnetic
py	pyrite
qtz	quartz
q.v.	quartz vein
sil	silicification
avg	average
cm	centimetre
int	intense
irr	irregular
tr	trace
wk	weak

- strike or dip of vein
- foliation
- joints a) vertical b) inclined
- shear or fracture
- vein or stringer
- water
- channel sample
- grab sample
- contact

Bruce Middleton 10/1

1+60 W — 1+40 W — B.L.O

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for Glen Auden Resources Limited & Adola Mining Corporation		
	Title Lee, Bompas, Maisonville & Grenfell Townships Seasekinika Lake Property GEOLOGY Trench 4		
	Date: July 1985	Scale: 1:200	N.T.S.:
	Drawn: C.G.	Approved:	File: M-68



LEGEND

- 2c Fe-poor gabbro or coarse grained Mafic Volcanics
- 2g Granophyric dykes
- 1c Fe-rich gabbro or coarse grained Mafic Volcanics
- 1g Granophyric dykes

alt	alteration
as	associated
carb	carbonatized
chl	chloritized
diss	disseminated
ep	epidote
fe	iron
frag	fragmental
mag	magnetic
py	pyrite
qtz	quartz
q.v.	quartz vein
sil	silicification
avg	average
cm	centimetre
int	intense
irr	irregular
tr	trace
wk	weak

- strike & dip of vein
- foliation
- joints a)vertical b)inclined
- shear or fracture
- vein or stringer
- water
- channel sample
- grab sample
- contact

29460

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
for	Glen Auden Resources Limited & Adola Mining Corporation
Title	Lee, Bompas, Malcolmite & Grenfell Townships Sesekinika Lake Property
	GEOLOGY Trench 4N & 4I
Date: July 1985	Scale: 1:200 N.T.S.:
Drawn: C.G.	Approved: File: M-68

February 17, 1987

Your File Nos.428/86,429/86
Our File: 2.9460

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

RE: Notice of Intent dated January 30, 1987
Geological Survey on Mining Claims
L 737307, et al, in Bompas and Lee Townships

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

DK/mc
cc: Glen Auden Resources Limited
Charles Morgan
P.O. Box 1637
Timmins, Ontario
P4N 7W8

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

Encl.

Bruce Durham
P.O. Box 1637
Timmins, Ontario
P4N 7W8

Daria Duba
P.O. Box 1637
Timmins, Ontario
P4N 7W8

Resident Geologist
Kirkland Lake, Ontario

Ontario and Mines

(Geophysical, Geological, Geochemical and Expenditures) 428/86

Mining Act

Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

L.M. (File 2.9460)

Type of Survey(s): Geological

Township or Area: Grenfell Township

Claim Holder(s): Glen Auden Resources Limited, Charles Magee, Adrian Beaudoin 111832

Prospector's Licence No.: K145 T-1915

Address: P.O. Box 1637, Timmins, Ontario P4N 7W8

Survey Company: Robert S. Middleton Exploration Services Inc.

Date of Survey (from & to): Day 10 Mo. 5 Yr. 85 — Day 15 Mo. 6 Yr. 85

Total Miles of line Cut: N/A

Name and Address of Author (of Geo-Technical report): Daria Duba & Bruce Durham, P.O. Box 1637, Timmins, Ontario P4N 7W8

Credits Requested per Each Claim in Columns at right

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

RECEIVED
OCT 16 1986
MINING LANDS SECTION

RECEIVED
OCT 14 1986
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM
LAND DEPT. LAKE MINING DIV.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	737307	
	737308	
	737309	
	737310	
	737311	
	737312	
	737313	
	737314	
	737315	
	737316	
	737317	
	737318	
	737319	
	737320	
	737321	
	737322	
	737323	
	737324	
	737325	
	737326	
	737327	
	737328	
	737329	
L	737330	
	737331	
	780483	
	780484	
	780485	
	780486	
	780487	
	780757	
	780758	
	780759	
	780760	
	780761	
	780762	
	780763	
	780764	
	780765	
	780766	
	780767	
	780768	
	780769	
	780770	
	780771	
	780772	

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: $ + 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work: 84

For Office Use Only

Total Days Cr. Recorded: 1680

Date Recorded: OCT 14 1986

Date Approved as Recorded:

Mining Recorder:

Branch Director:

Date: Oct. 3, 1986

Recorded Holder or Agent (Signature): Bruce Durham

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: Bruce Durham, P.O. Box 1637, Timmins, Ont. P4N 7W8

Date Certified: Oct 3/86

Certified by (Signature): Bruce Durham

1362 (85/9)

MINING CLAIMS TRAVERSED CONT'D

PREFIX	NUMBER
L	780773
	780774
	780775
	780776
	780777
	780778
	780779
	780780
	780781
	780782
	780783
	780784
	780785
	780786
	780787
	780788
	780789
	780790
	780791
	780792
	780793
	780794
	780795
	780796
	780797
	780798
	780799
	780800
	780801
	780802
	780803
	780804
	780805
	780806
	825753
	825754
	825759
	825760

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File: 2.9460

Date: January 30,1987

Mining Recorder's Report of Work No.: 428/86

Recorded Holder: GLEN AUDEN RESOURCES LIMITED/CHARLES MORGAN

Township or Area: BOMPAS AND LEE TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	L 737307 to 31 inclusive 780483 to 87 inclusive 780757 to 74 inclusive 780777 - 78 780780 to 89 inclusive 780792 to 94 inclusive 780796 to 805 inclusive 825753 - 54 825759 - 60
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 16 days	
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☒ Credits have been reduced because of partial coverage of claims.	
☐ 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

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☐ Insufficient technical data filed

L 780775-76
780779
780790-91
780795
780806

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; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

Ontario Ministry of Northern Development and Mines

(Geophysical, Geological, Geochemical and Expenditures) Mining Act

429/86

2.9460

Note: If space on this form exceeds space on this form, attach a list. Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." column. Do not use shaded areas below.

Type of Survey(s): Geological

Township or Area: Lee & Bompas Twps.

Claim Holder(s): Glen Auden Resources Limited, Charles Magan K 14751

Prospector's Licence No.: T-1915

Address: P.O. Box 1637, Timmins, Ontario P4N 7W8

Survey Company: Robert S. Middleton Exploration Services Inc.

Date of Survey (from & to): 7 5 85 / 10 10 85 — 15 6 85 / 12 12 85

Total Miles of line Cut: 48.5

Name and Address of Author (of Geo-Technical report): Daria Duba & Bruce Durham, P.O. Box 1637, Timmins, Ontario P4N 7W8

Credits Requested per Each Claim in Columns at right

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

RECEIVED
OCT 14 1986
MINING LANDS SECTION

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	753160	
	753161	
	753162	
	753163	
	753164	
	753165	
	753166	
	753167	
	753168	
	753169	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

LARDER LAKE MINING DIV. RECEIVED OCT 14 1986 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: $ ____ + 15 = Total Days Credits: ____

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work: 10

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
400	OCT 14 1986	
	Date Approved as Recorded	Branch Director

Date: October 3, 1986

Recorded Holder or Agent (Signature): K. Bruce Durham

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: Bruce Durham, P.O. Box 1637 Timmins, Ont. P4N 7W8

Date Certified: Oct 3/86

Certified by (Signature): K. Bruce Durham

1362 (85/12)

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File: 2.9460

Date: January 30, 1987

Mining Recorder's Report of Work No.: 429/86

Recorded Holder: GLEN AUDEN RESOURCES LIMITED/CHARLES MORGAN

Township or Area: BOMPAS AND LEE TOWNSHIPS

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 33 days	L 753160 to 69 inclusive
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☒ Credits have been reduced because of partial coverage of claims.	
☐ 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

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

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.

ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

TELEPHONE (705) 264-4246
(705) 264-4247

P.O. BOX 1637
TIMMINS, ONTARIO
P4N 7W8

October 2, 1986

Mining Recorder's Office
Ministry of Natural Resources
4 Government Road East
KIRKLAND LAKE
Ontario
P2N 1A2

Dear Madam:

We have conducted a geological survey in the Grenfell area on behalf of our client Glen Auden Resources Limited. Enclosed please find a report of work for 40 days geology and another for 20 days geology.

Would you kindly return to us a stamped "Received" copy of the two reports of work to our office.

The two copies of the geological report have already been forwarded to the Mining Recorder at Queen's Park.

Sincerely

Sylvia David

SD/lm

Sylvia David

cc Mining Recorder, Queen's Park

Ministry of Northern Affairs and Mines
Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Mining Act

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.

Type of Survey(s)	Township or Area
Geological	Grenfell Township

Claim Holder(s)	Prospector's Licence No.
Glen Auden Resources Limited	T-1915

Address: P.O. Box 1637, Timmins, Ontario P4N 7W8

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
Robert S. Middleton Exploration Services Inc.	Day 10 Mo. 85 / Day 12 Mo. 85 (7 5 85 / 15 6 85)	N/A

Name and Address of Author (of Geo-Technical report): Daria Duba & Bruce Durham, P.O. Box 1637, Timmins, Ontario P4N 7W8

Credits Requested per Each Claim in Columns at right

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

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

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

Expenditures (excludes power stripping)

Type of Work Performed	
Performed on Claim(s)	

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	737307	
	737308	
	737309	
	737310	
	737311	
	737312	
	737313	
	737314	
	737315	
	737316	
	737317	
	737318	
	737319	
	737320	
	737321	
	737322	
	737323	
	737324	
	737325	
	737326	
	737327	
	737328	
	737329	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	737330	
	737331	
	780483	
	780484	
	780485	
	780486	
	780487	
	780757	
	780758	
	780759	
	780760	
	780761	
	780762	
	780763	
	780764	
	780765	
	780766	
	780767	
	780768	
	780769	
	780770	
	780771	
	780772	

Total number of mining claims covered by this report of work: 84

For Office Use Only		
Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

Date	Recorded Holder or Agent (Signature)
Oct. 3, 1986	Bruce Durham

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	Date Certified	Certified by (Signature)
Bruce Durham P.O. Box 1637, Timmins, Ont. P4N 7W8		Bruce Durham

1362 (85/9)

MINING CLAIMS TRAVERSED CONT'D

PREFIX	NUMBER
L	780773
	780774
	780775
	780776
	780777
	780778
	780779
	780780
	780781
	780782
	780783
	780784
	780785
	780786
	780787
	780788
	780789
	780790
	780791
	780792
	780793
	780794
	780795
	780796
	780797
	780798
	780799
	780800
	780801
	780802
	780803
	780804
	780805
	780806
	825753
	825754
	825759
	825760

Ministry of Northern Development and Mines
Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Mining Act

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.

Type of Survey(s): Geological

Township or Area: Lee & Bompas Twps.

Claim Holder(s): Glen Auden Resources Limited

Prospector's Licence No.: T-1915

Address: P.O. Box 1637, Timmins, Ontario P4N 7W8

Survey Company: Robert S. Middleton Exploration Services Inc.

Date of Survey (from & to): 7 5 85 / 10 10 85 — 15 6 85 / 12 12 85

Total Miles of line Cut: 48.5

Name and Address of Author (of Geo-Technical report): Daria Duba & Bruce Durham, P.O. Box 1637, Timmins, Ontario P4N 7W8

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	753160				
	753161				
	753162				
	753163				
	753164				
	753165				
	753166				
	753167				
	753168				
	753169				

Total number of mining claims covered by this report of work: 10

Expenditures (excludes power stripping)

Type of Work Performed:

Performed on Claim(s):

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only		
Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

Date: October 3, 1986

Recorded Holder or Agent (Signature): R. Bruce Durham

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

Bruce Durham

P.O. Box 1637 Timmins, Ont. P4N 7W8

Date Certified:

Certified by (Signature): R. Bruce Durham

1362 (85/12)

- The report states (pg 5) that E-W Traverses were run at "several hundred metre intervals". Hence the overall 1/4 cutback.

GL

787307	1/4
8	1/4
9	1/4
10	1/4
11	1/4
12	1/4
13	1/4
14	1/4
15	1/4
16	1/4
17	1/4
18	1/4
19	1/4
20	1/4
21	1/4
22	1/4
23	1/4
24	1/4
25	1/4
26	1/4
27	1/4
28	✓
29	✓
30	✓
31	✓
780483	1/4
84	1/4
85	1/4
86	1/4
87	1/4
780158	1/4
58	1/4
	29/4

GL

780759	1/4 ?
60	1/4 } dubious, but let's accept.
61	1/4
62	1/4
63	1/4
64	1/4
65	1/4
66	1/4
67	1/4
68	1/4
69	1/4
70	1/4
71	1/4
72	1/4
73	1/4
74	1/4 → dubious, but we'll accept.
75	0
76	0
77	1/4
78	1/4
79	0
80	1/2
81	1/2
82	1/4
83	1/4
84	1/4
85	1/4
86	1/4
87	1/4
88	1/4
89	1/4
90	0
	30/4

PRORATE: (80×77) ÷ (77+80) = 15.67 ≈ 16 days

2.9460 GL

780191	0
92	1/4
93	1/4
94	1/4
95	0
96	3/4
97	1/4
98	1/2
99	1/2
800	1/4
1	1/4
2	1/4
3	1/4
4	1/4
5	1/4
6	0
805753	1/4
54	1/4
59	1/2
60	1/4
753160	1/2
61	1/4
62	1/4
63	✓
64	1/4
65	1/4
66	1/4
67	1/4
68	1/4
69	✓
	9/4

includes Line cutback

PRORATE:
(40×10) ÷ (10+9/4) = 30.65

33

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

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

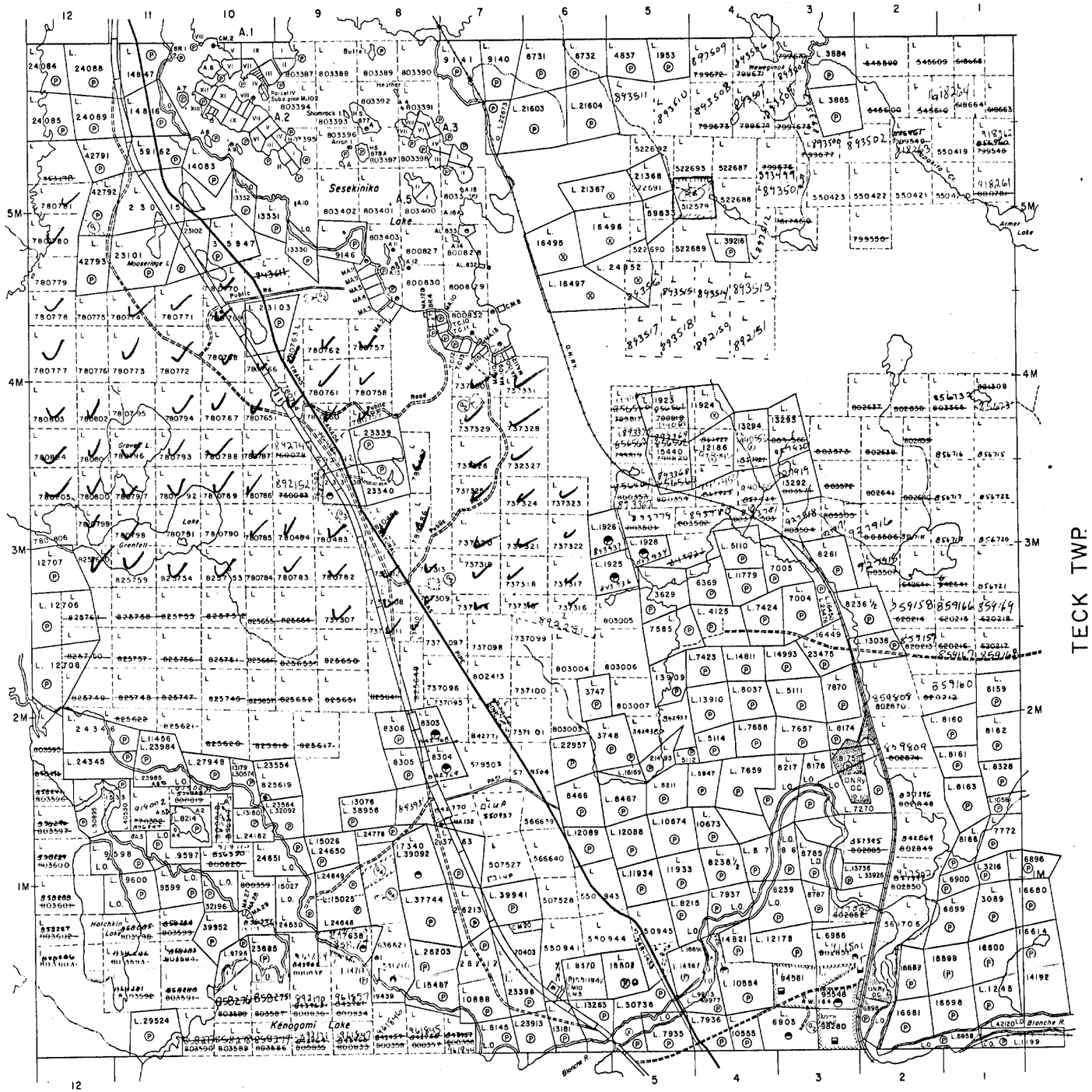
	Description	Order No.	Date	Disposition	File
(A)				S.R.O.	27993
(B)	SEC. 36/80	W. 48/81	11/6/81	S.R.O.	27993
(C)	SEC. 36/80	W.101/81	27/10/81	S.R. & M.R.	
(D)	SEC. 36/80	W 102/81	6/11/81	M.R.O.	
(E)	SEC. 36/80	W. 103/81	6/11/81	S.R. & M.R.	
(86)	Sec 36/80	W 57/86	29/10/86	S.R.+M.R.	

SAND AND GRAVEL

(91)	GRAVEL	FILE	127536
(92)	GRAVEL	FILE	127784
(93)	M.T.C.	GRAVEL	PIT
(94)	GRAVEL	FILE	64647

NOTES

ALL ISLANDS IN SESEKINIKA LAKE ARE WITHDRAWN FROM STAKING BY ORDER-IN-COUNCIL DATED DEC. 7, 1921



LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	(P) or ●
" , SURFACE RIGHTS ONLY	◓
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	▣
" , MINING RIGHTS ONLY	▬
LICENCE OF OCCUPATION	L.O. or ▼
ORDER-IN-COUNCIL	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(S)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 400 (1 KM) 2000

DATE OF ISSUE
FEB 10 1987
LARDER LAKE MINING RECORDER'S OFFICE

TOWNSHIP

GRENFELL

M.N.R. ADMINISTRATIVE DISTRICT
KIRKLAND LAKE
MINING DIVISION
LARDER LAKE
LAND TITLES / REGISTRY DIVISION
TIMISKAMING

Ministry of Natural Resources — Land Management Branch
Ontario

Date JANUARY, 1985

Number G-3212

42A01NE0265 2.9460 GRENFELL

NOTES

400' [illegible] rights r[illegible]rvation along the shores of all [illegible] and rivers.

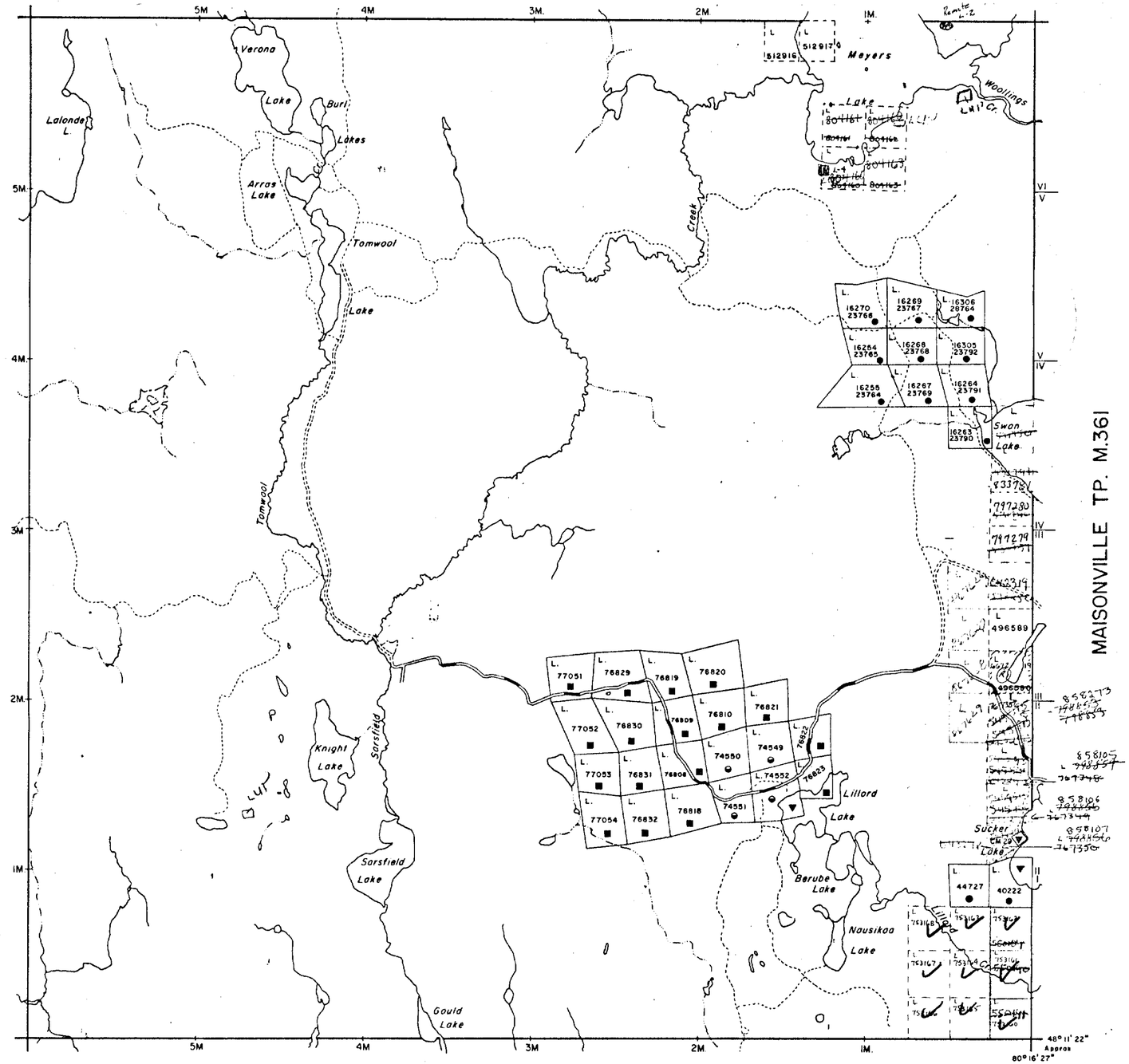
(R1) Sec 36/80 W-8/86 20/01/86 mts

BLACK TP. M.329

TERRY TP. M.393

MAISONVILLE TP. M.361

BOMPAS TP. M.330



LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

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	
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	
CANCELLED	
SAND & GRAVEL	

SCALE : 1 INCH 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000

METRES 0 200 400 600 800 1 KM 2 KM

ACRES	HECTARES
40	16

TOWNSHIP

LEE

FEB 19 1986

DISTRICT

TIMISKAMING

MINING DIVISION

LARDER LAKE

Ministry of Natural Resources

Ontario Surveys and Mapping Branch

Date FEB. 11, 75.

Whitney Block
Queen's Park, Toronto

Plan No.

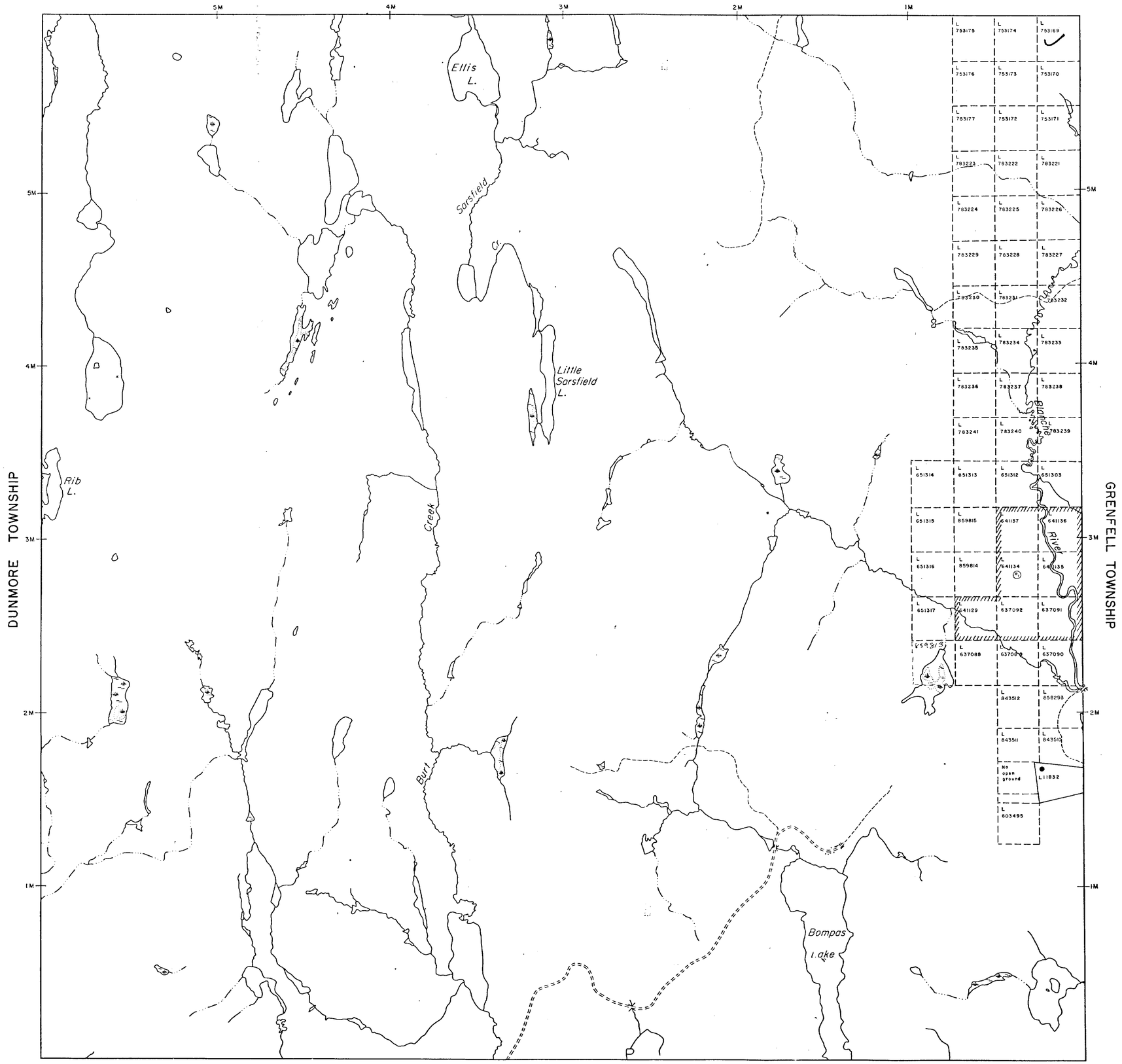
M.360

AREAS WITHDRAWN FROM DISPOSITION

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

Description	Order No.	Date	Disposition	File
(R) SEC. 36/80	W9/86	24/01/86	M+S	

LEE TOWNSHIP



DUNMORE TOWNSHIP

GRENFELL TOWNSHIP

BURT TOWNSHIP

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" , SURFACE RIGHTS ONLY	
" , MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER IN COUNCIL	OC
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913 VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1

500 0 1000 Metres
10 0 10 20 30 40 50 60 70 Chains
500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000

TOWNSHIP

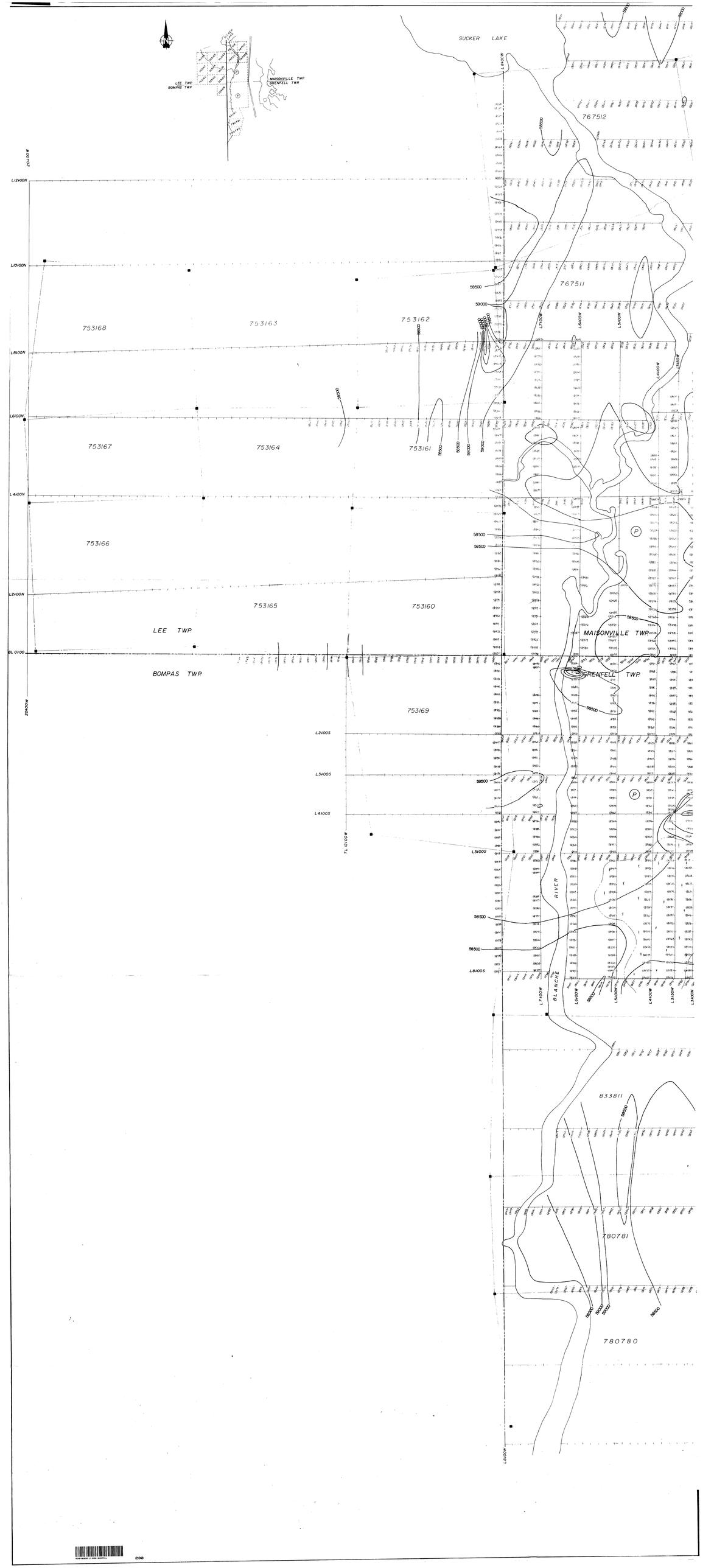
BOMPAS

M.N.R. ADMINISTRATIVE DISTRICT
KIRKLAND LAKE
MINING DIVISION
LARDER LAKE
LAND TITLES / REGISTRY DIVISION
TIMISKAMING

SEP 17 1986

Ontario Ministry of Natural Resources
Ministry of Northern Development and Mines

Date AUGUST, 1986
Number G-3605


LEE TWP
BOMPAS TWP
MAISONVILLE TWP
GRENFELL TWP
SUCKER LAKE
767512
767511
753168
753163
753162
753167
753164
753161
753166
753165
753160
753169
LEE TWP
BOMPAS TWP
MAISONVILLE TWP
GRENFELL TWP
BLANCHE RIVER
833811
780781
780780
L12400N
L10400N
L8400N
L6400N
L4400N
L2400N
BL 0100
L2400S
L3400S
L4400S
L5400S
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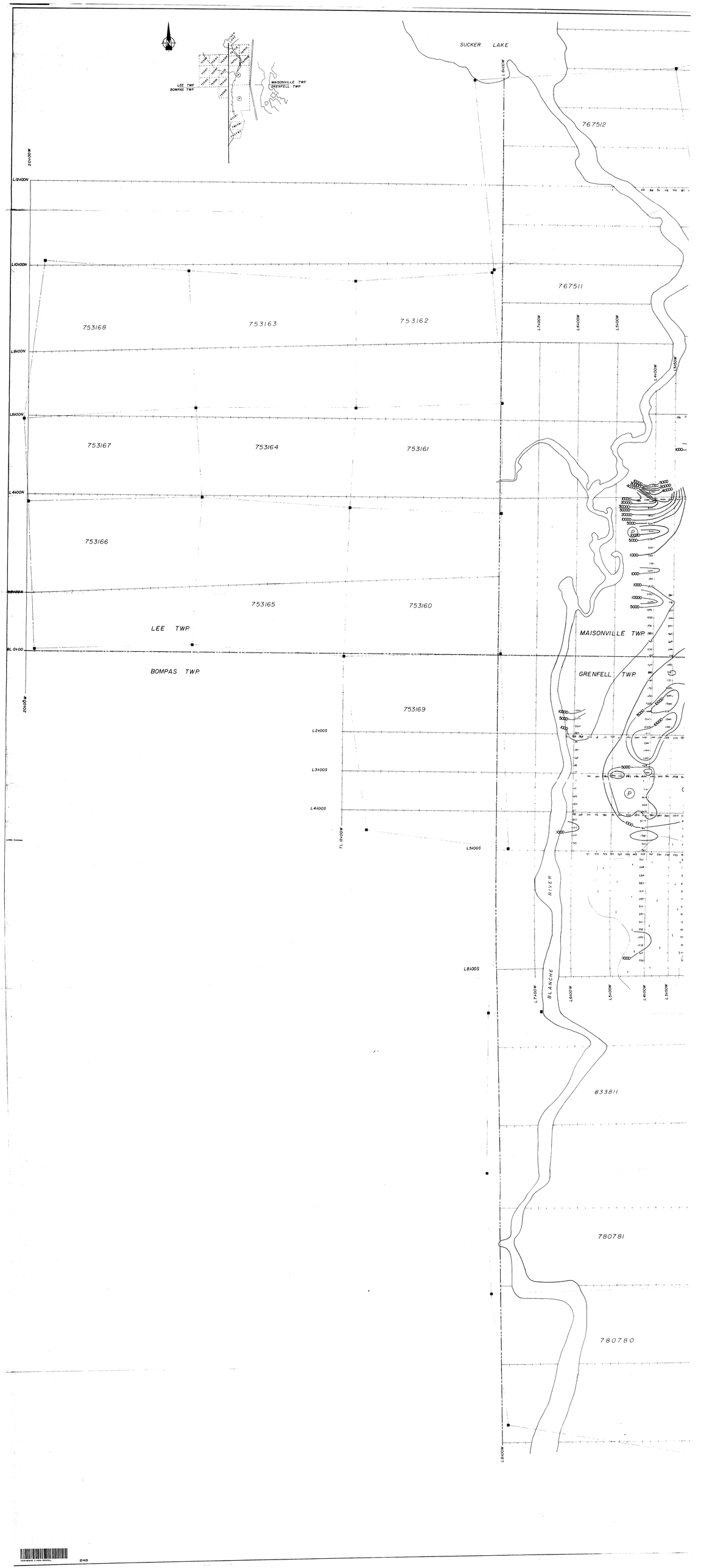
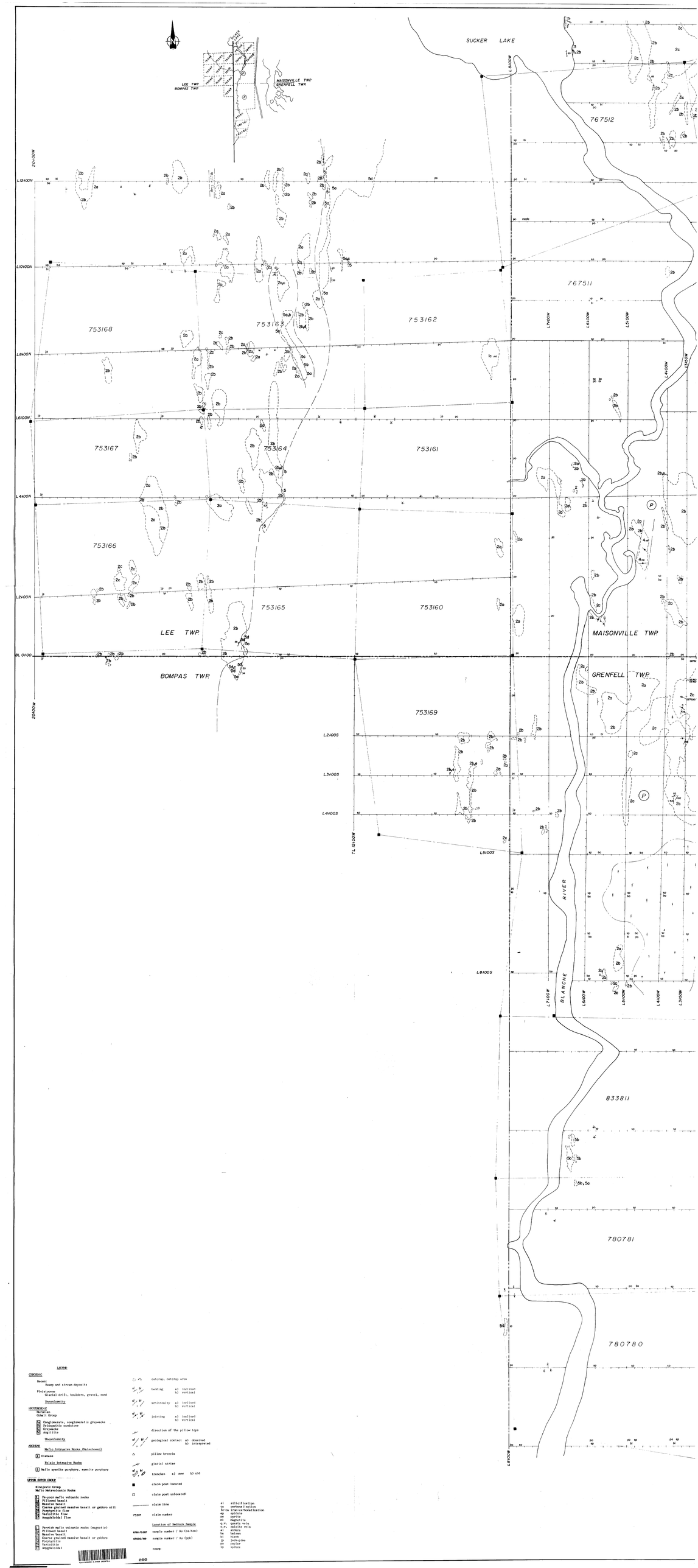
20400W
TL 12400W
58500
59000
59500


SUCKER LAKE
767512
767511
753168
753163
753162
753167
753164
753161
753166
753165
753160
753169
LEE TWP.
BOMPAS TWP.
MAISONVILLE TWP.
GRENFELL TWP.
833811
780781
780780
BLANCHE RIVER
L8100W
L7400W
L6600W
L5400W
L4100W
L3500W
L12400N
L10000N
L8100N
L6100N
L4400N
L2000N
BL 0100
L2400S
L3400S
L4400S
L5400S
L8100S
TL 0100W
20100W
20000W


SUCKER LAKE
767512
767511
753168
753163
753162
753167
753164
753161
753166
753165
753160
LEE TWP.
BOMPAS TWP.
753169
MAISONVILLE TWP.
GRENFELL TWP.
RIVER
BLANCHE
833811
780781
780780
L12+00N
L10+00N
L8+00N
L6+00N
L4+00N
L2+00N
BL 0+00
20+00W
L2+00S
L3+00S
L4+00S
L5+00S
L8+00S
TL 12+00W
L8+00W
L7+00W
L6+00W
L5+00W
L4+00W
L3+50W
LEE TWP
BOMPAS TWP
MAISONVILLE TWP
GRENFELL TWP



LEGEND

CENOZOIC
Recent
Swamp and stream deposits
Pleistocene
Glacial drift, boulders, gravel, sand
Unconformity

PROTEROZOIC
Huronian
Cobalt Group
Conglomerate, conglomeratic greywacke
Feldspathic sandstone
Greywacke
Argillite
Unconformity

ARCHEAN
Mafic Intrusive Rocks (Matachewan)
4 Diabase
Felsic Intrusive Rocks
3 Mafic syenite porphyry, syenite porphyry

UPPER SUPER GROUP
Kinojevis Group
Mafic Metavolcanic Rocks
Pervasive mafic volcanic rocks
Pillowed basalt
Massive basalt
Coarse grained massive basalt or gabbro sill
Porphyritic flow
Variolitic flow
Amygdaloidal flow
Patchy mafic volcanic rocks (magnetic)
Pillowed basalt
Massive basalt
Coarse grained massive basalt or gabbro
Porphyritic
Variolitic
Amygdaloidal

outcrop, outcrop area
bedding a) inclined b) vertical
schistosity a) inclined b) vertical
jointing a) inclined b) vertical
direction of the pillow tops
geological contact a) observed b) interpreted
pillow breccia
glacial striae
trenches a) new b) old
claim post located
claim post unlocated
claim line
753171 claim number

Location of Bedrock Sample
sample number / Au (ozs/ton)
sample number / Au (ppb)
swamp

al silicification
ca carbonatization
ferca iron-carbonatization
ep epidote
hb hornblende
mt magnetite
q,v. quartz vein
c,v. calcite vein
ch chlorite
fe felsite
bl hrnph
jp jack-pine
po poplar
sp spruce

780780
780779
780778
780775
780774
780771
780770
780769
780777
780776
780773
780772
780768
780762
780757
780766
780763
780761
780758
780765
780764
780760
780759
780803
780802
780795
780794
780767
780804
780801
780796
780793
780788
780787
780805
780800
780797
780792
780789
780786
780806
780799
780798
780791
780790
780785
780484
780483
780485
825760
825759
825754
825753
780784
780783
780782
737312
737308
737307
737311

GRAVES LAKE

GRENFELL LAKE

BOMPAS TWP.

GRENFELL TWP.

TRAIL

SESE

G67604/15
G67605/12

G67601/773
G67602/49
G67603/32

LEGEND

MAFIC INTRUSIVE ROCKS

[4] Diabase

FELSIC INTRUSIVE ROCKS

[3] Mafic Syenite Porphyry

MAFIC METAVOLCANIC ROCKS

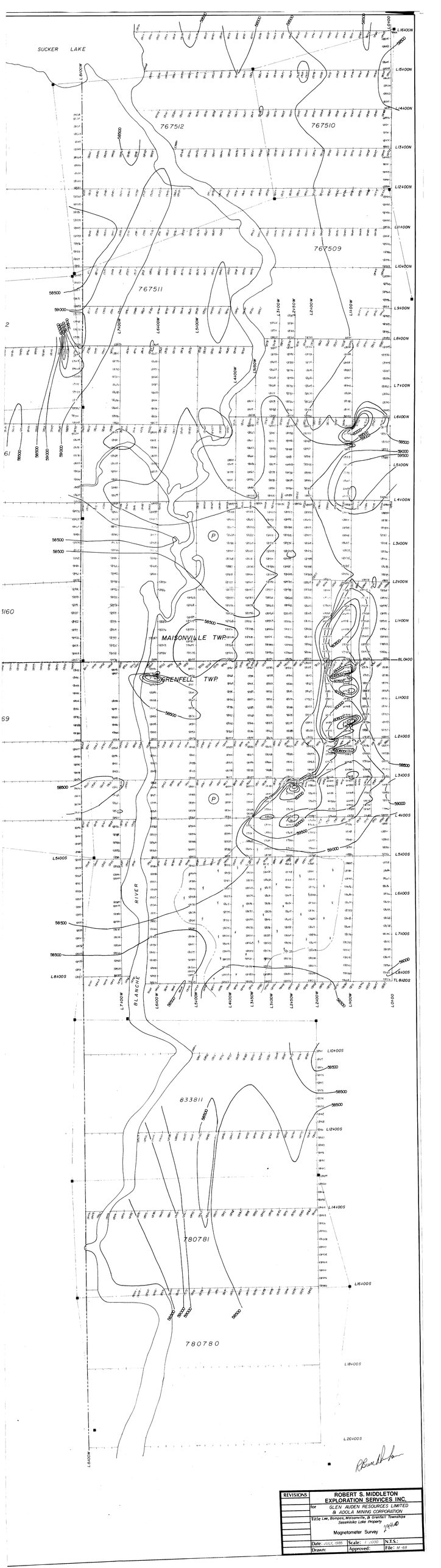
[2] Fe-poor Mafic Volcanics
- 2a Pillowed flow
- 2b Massive flow
- 2c Coarse grained massive flow or gabbro
- 2d Porphyritic flow
- 2e Amygdaloidal flow

[1] Fe-rich Metavolcanic Rocks
- 1a Pillowed flow
- 1b Massive flow
- 1c Coarse grained massive flow or gabbro
- 1d Porphyritic flow
- 1e Amygdaloidal flow

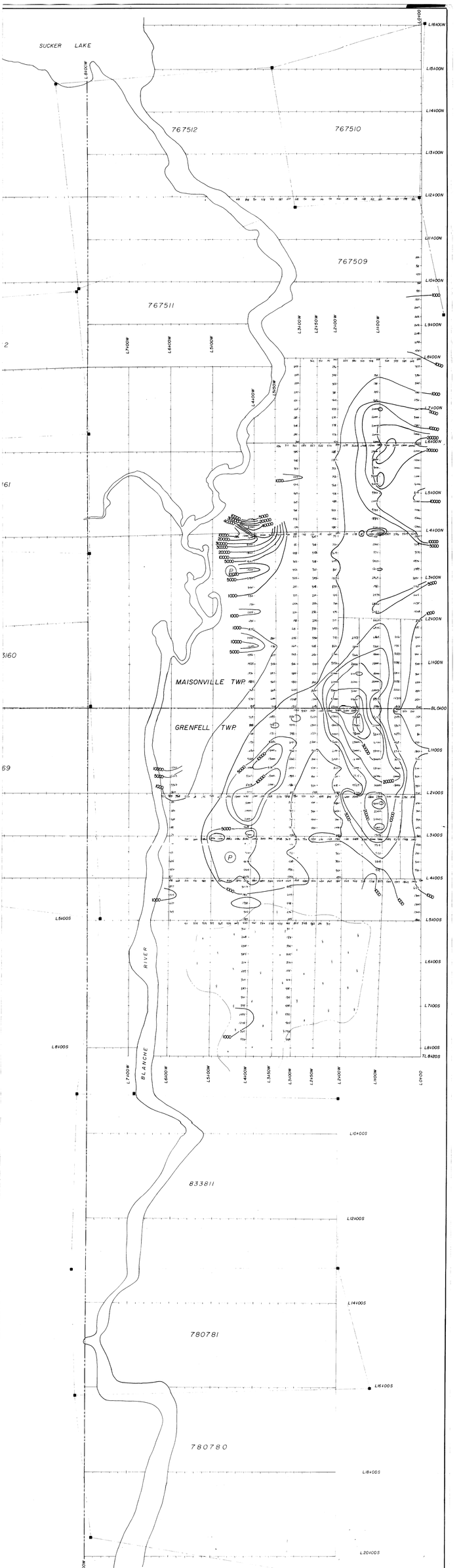
SYMBOLS

- outcrop area
- orientation of pillowed flows
- foliation inclined, vertical
- glacial striae
- claim post
- 780789 claim number
- hyaloclastite
- pillow breccia
- sample location
- G67601/773 sample number / Au (ppb)

- ca carbonatization
- ep epidote
- chl chlorite
- py pyrite
- si silicification
- q.v. quartz - vein

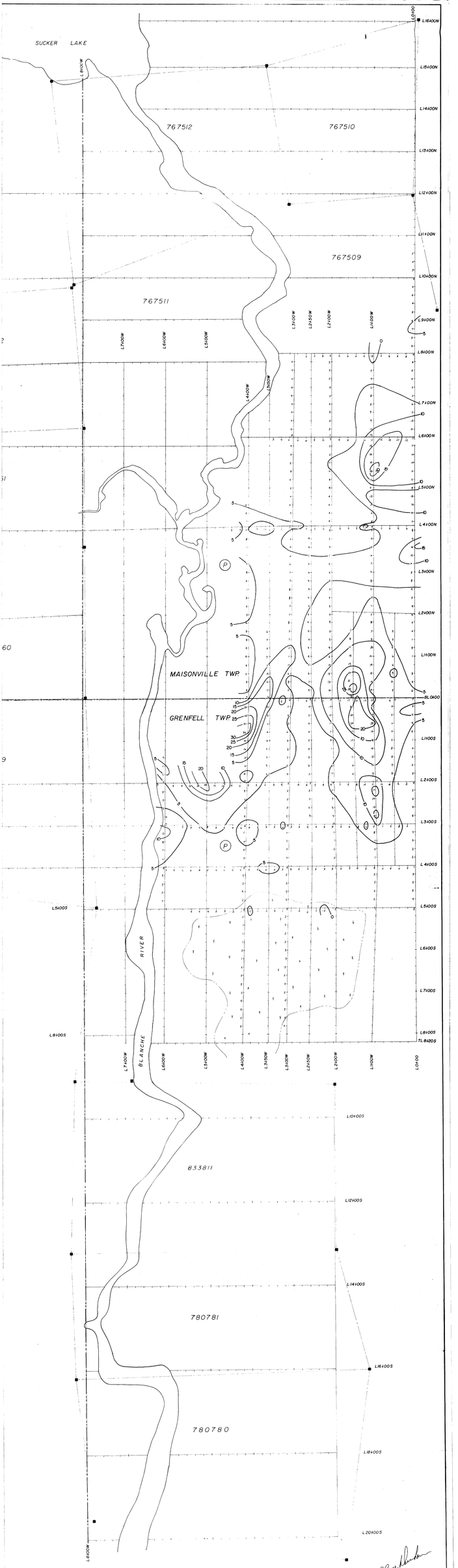


REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GLEN ALDEN RESOURCES LIMITED & ADOLA MINING CORPORATION
	Title Lee, Bompas, Maisonville, & Grenfell Townships Sesekinika Lake Property
	Magnetometer Survey 1990
	Date: JULY, 1990 Scale: 1:5000 N.T.S.:
	Drawn: Approved: File: M-69

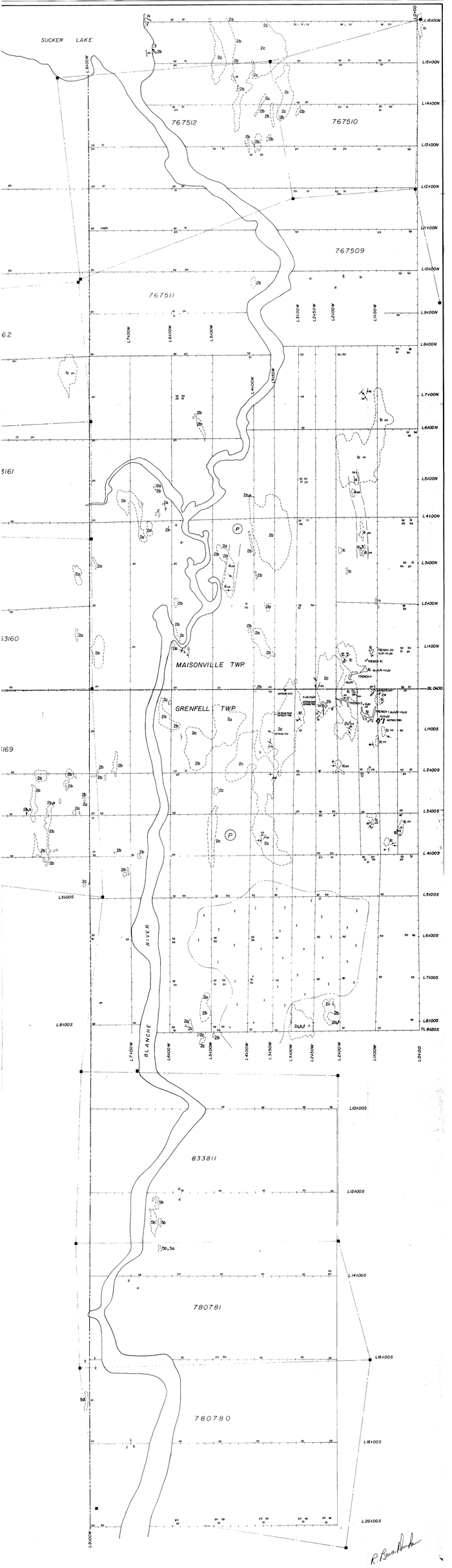


REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GLEN AUDEN RESOURCES LIMITED & ADOLA MINING CORPORATION
	Title Law, Bompas, Maisonville, & Grenfell Townships Sesekinika Lake Property
	Induced Polarization Resistivity (ohm-meters) n=2
	Date: JULY, 1985 Scale: 1" = 400' N.T.S.
	Drawn: Approved: File: M-68

29410



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GLEN ALDEN RESOURCES LIMITED & ADOLA MINING CORPORATION
	Title: Low, Bompas, Maisonville, & Grenfell Townships Sasakinika Lake Property
	Induced Polarization Chargeability (msec)
	Date: JULY, 1985 | Scale: 1:2000 | N.T.S.:
	Drawn: | Approved: | File: M-68



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GLEN AUDEN RESOURCES LIMITED & ADOLA MINING CORPORATION
	Title Lay, Blanche, Maisonville, & Grenfell Townships Sasekinka Lake Property
	GEOLOGY 2 of 10
	Date: JULY, 1985 Scale: 1:2000 N.T.S.:
	Drawn: Approved: File: M-68

SESEKINIKA LAKE

780762 780757 780761 780758 780760 780759

780487 780486 780485 780483 780782 780307

737330 737331 737329 737328 737326 737327 737325 737324 737323 737320 737321 737322 737319 737318 737317 737316 737312 737313 737308 737309 737314 737315 737310 737311

N

29460 dwp

R Bruce Thurlow

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for Glen Auden Resources Limited and Adola Mining Corporation		
	Title GEOLOGY MAP		
	Date: AUG 1985	Scale: 1:5000	N.T.S.:
	Drawn: CG	Approved:	File: M-68