GM 56139

REPORT ON THE MANIC PROPERTY, HART-JAUNE RIVER AREA

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M A N I C P R O P E R T Y

Hart-Jaune River Area, Manicouagan

Saguenay County

PROVINCE of QUEBEC

N.T.S. 22 N/9, 22 N/16, 22 O/12, and 22 O/13

f o r

HARVEST-SPRING NUTRITIONAL SYSTEMS (1981) CORPORATION

MRN-GÉOINFORMATION 1999

GM 56139

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T A B L E o f C O N T E N T S

L I S T o f F I G U R E S

L I S T o f T A B L E S

L I S T o f M A P S

S U M M A R Y

As a result of the spectacular NICKEL/COPPER/COBALT discovery by Diamond Fields at VOISEY'S BAY in Northeastern Labrador in late 1994, a new appreciation for the potential of finding BASE METAL DEPOSITS in ANORTHOSITIC TERRAINS has emerged. To this end, the principals of 1075297 ONTARIO Inc. choose the RAUDOT LAKE ANORTHOSITE INTRUSIVE COMPLEX in Northeast Quebec to launch an exploration program to search for Voisey's Bay type base metal mineralization.

The region area of interest is in the Hart-Jaune River Area of Manicouagan 200 kilometers north-northwest of Sept Iles. The project area is covered by N.T.S. Sheets 22 N/9, 22 N/16, 22 O/12 and 22 O/13.

The Raudot Lake Intrusion forms the boundary between the Manicouagan Uplands, which is rugged topographic terrain, and the Great Interior Plain laying to the north. The body is a layered mafic intrusion rich in iron and poor in silica having anorthositic affinities. It consists of a basal layer of fine grained gabbro, grading into gabbro layers having high magnetite content, which blend into troctolitic sections with lower magnetite composition. The upper unit is non-magnetic and, therefore, very siliceous. The Intrusion is bounded on the north and south by major easterly trending fault structures that are likely related to the Boundary Thrust Fault separating two principal geological regimes, and through which the molten parent magma migrated to the sub-surface.

Copper/Nickel/Cobalt mineralization occurs in gneissic rocks adjacent to the southern border of the Anorthosites. One sample ran 1.09 % Cu, 1.53 % Ni, and 0.15 % Co. Magnetite containing up to 6 % Titanium was uncovered in the layered sequences along the southern edge of the Intrusion. NO DETAILED EXPLORATION HAS BE DONE WITHIN THE ANORTHOSITE INTRUSIVE COMPLEX.

An Airborne Survey conducted over the Intrusion outlined the magnetic units in detail as well as showing the decrease in magnetite from the southern layers towards the center or upper troctolitic sequences. The AEM results indicated three types of anomalies: negative inphase responses which coincide with the strong magnetite layers containing titanium in the south, and positive inphase responses within and adjacent to negative reactions that suggest sulfide conduction with magnetite in the troctolitic sequences. 382 claims were staked over the most attractive EM and Magnetic Zones.

A comprehensive three phase exploration program involving geophysics, prospecting and geological mapping and sampling, and drilling has been recommended which will entail an overall expenditure of $ 629, 200.

1.0 INTRODUCTION

A program was inaugurated by the principals of 1075297 ONTARIO INC. in the fall of 1995 to investigate the possibility of Nickel/Copper mineralization in the Anorthosite complex within the Manicouagan Uplands of Northeastern Quebec. Initial studies involved researching known literature and government files to gather information on the subject of the Manicouagan Mafic Intrusion. After deciding the area had high potential for the discovery of Nickel/Copper Deposits similar to those recently uncovered at VOISEY'S BAY in Northeastern Labrador, the company embarked on a comprehensive Airborne Survey Program.

Because of the Voisey's Bay discovery in the Fall of 1994, much more significance has been placed on the importance of anorthositic terrains in hosting base metal deposits of the Nickel/Copper/Cobalt variety. After analyzing the Airborne Survey results, the company proceeded to acquire strategic ground in the area.

At the request of HARVEST-SPRING NUTRITIONAL SYSTEMS (1981) CORPORATION, the writer was commissioned to assess the data and compose a qualifying report in order for the company to acquire the property. The following dissertation describes the known geology and physiography of the Area, and discusses the outcome of the Airborne Survey.

The author was on the ground while the airborne survey was taking place.

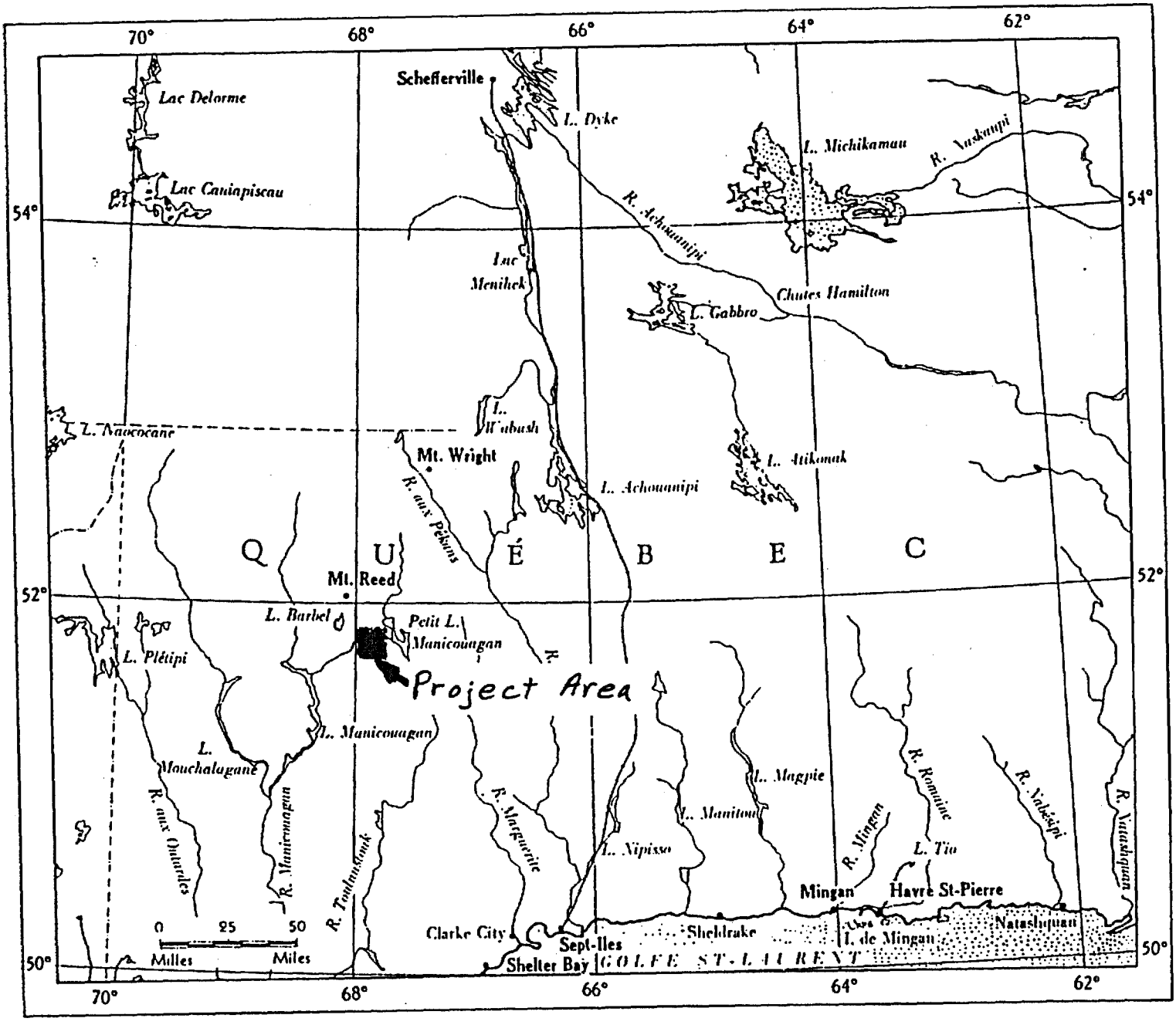
2.0 GENERAL

2.1 Location

The area of interest is situated in the rugged terrain just east of the Manicouagan Crater in Northeastern Quebec. The locale is referred to in the geological literature as the HART-JAUNE RIVER AREA. It is located in Saguenay County approximately 200 kilometers north-northwest of Sept-Iles, and 300 kilometers north-northeast of Baie Comeau, both of which are deep sea ports on the north shore of the St. Lawrence River (Figure 1). Labrador City lies 130 kilometers to the north. The Manicouagan Reservoir, part of Hydro Quebec's huge hydro electric power generating system, is adjacent to the region being investigated. The area is bounded by Longitudes 67° 32 ' and 68° 7 ' West, and latitudes 51° 40 ' and 51° 50 ' North. Magnetic declination for the sector is 25 degrees west.

Location Map.

Figure 1



Project Area

Figure 2

2.2 Access

The project area can easily be reached by road from Baie Comeau. Provincial Highway 389 is the main access route to the hydro dams along the Manicouagan River as well as connecting Quebec's North Shore with the mining communities of Fremont, Wabush, Labrador City, and Schefferville.

The distance to the site from Baie Comeau is about 570 kilometers which takes over 5 hours to drive by car. The highway is paved to Manic 5. One and a half hour drive and 110 kilometers further on via a good gravel road is Relais Gabriel, a service center with accommodation and meals. This place is the closest, 30 kilometers by the main highway, for habitation while working on the property.

2.3 Physiography

The project area is located within a highland plateau 2000 to 2500 feet above sea level known as the MANICOUAGAN UPLANDS. It is situated on the boundary between the Uplands, to the south, and the Great Interior Plain, to the north. The high areas present gentle rolling topography with elevation differences of several hundred feet. The highest peak in the area is 3512 feet. In contrast, steep scarps are encountered where large streams and rivers, which occupy linear trends caused by structural activity, have eroded the softer rock formations. Some rivers occupy steep-sided canyons. Traversing by foot is not easy. Boat or canoe can be used to a limited extent along the water ways.

The Manicouagan Impact Crater is an impressive structure which occurs immediately west of the study area. It is now mostly covered with water, since the construction of a hydro electric power dam at Manic 5 in the early 1970's has raised the water level 1250 feet. Many lakes, streams, and rivers are scattered throughout the land. One of the main river systems in the region, the HART-JAUNE RIVER, travelling from Petit Lac Manicouagan to the Manicouagan Reservoir, runs along the north boundary of the area. Another large drainage system, Beaupin Brook, lies to the south. Besides the ground covered by the Manicouagan Reservoir, the waters of Petit Lac Manicouagan have also been elevated, flooding a large area to the east and northeast of the property. Two lakes are prominent within the region under study. Lac Raudot, situated in the south part of the area, is a long narrow waterway occupying a structural lineament on the southern edge of the Anorthosite Complex.
A smaller body of water, Lac Jorian, is located in the central part of the area.

The forest on the slopes and in the valleys is densely populated with primeval Black Pine. The low ground around swamps and lakes and some streams sustain low brushy vegetation such as alders and willows. A wide variety of fish abound in the lakes and streams. Wildlife such as moose and bear are plentiful including an assortment of smaller creatures inhabiting the forest.

2.4 Infrastructure

Despite the remoteness of the area, it is conveniently serviced by a main road that crosses the southwest corner of the territory. This road is the main artery for transporting goods to the north from Baie Comeau, especially the communities established at power stations along the Manicouagan and Outardes Rivers. It also serves for transporting forestry products collected from operations further south.

A rail line, which was used in the past to haul ore from an operating iron mine at Gagnon 15 kilometers to the northwest, forms the northern boundary of the survey area. Gagnon no longer exists, since the company operating the mine closed down and demolished all the buildings. Although the tracks are still in place, it is not known at this point if the railroad is serviceable. The rail line connects Gagnon with the town of Port Cartier on the St. Lawrence River.

The closest town to the property is Fremont, Quebec, 220 kilometers distant. It is a mining community with limited services, as is Wabush and Lab City on the Labrador side east of Fremont. The biggest supply center is Baie Comeau 600 kilometers away. It services Hydro Quebec's many power generating stations along the Manicouagan and Outardes Rivers. Port facilities are available at Baie Comeau for ocean going vessels. Quebec City is 415 kilometers from Baie Comeau along Provincial Highway 138 which services all the communities along the North Shore. Montreal is a further 250 kilometers. Regular daily air flights come and go from Quebec City and Montreal to Baie Comeau. Servicing can also be done out of Sept Iles further east along the North Shore but only by charter float/ski planes or the more expensive helicopter charters.

Transportation within the area can be achieved by float/ski plane, and to a limited extent by water. Travelling overland is very arduous, if not impossible. The services of a helicopter are required to carry out work efficiently on the property.

There is ample water supply in the area. Hydro electric power is readily available. An electric power generating station lies just north of the property near the rail line from which the town of Gagnon received their power. There are no forestry operations being conducted north of Manic 3. Consequently, no bush roads penetrate into the hinterland.

3.0 GEOLOGY

3.1 Regional Geology

The Anorthosite Complex of interest, known as the RAUDOT LAKE MASSIF (after Kish 1962), is situated in the northeast section of the Grenville Province adjacent to the Manicouagan Astrobleme. The mafic body was formed as part of wide spread intrusive activity which took place in the late Precambrian and which resulted in the deposition of the spectacular Nickel/ Copper Ore Body at VOISEY'S BAY in the Nain Plutonic Suite in Labrador (Figure 3). The Raudot Lake Intrusion is 100 kms south of the Grenville Front and occurs along a thrust boundary (ABT on Figure 4) between the Gneissic Terrain to the north and Charnokitic Gneisses containing orthopyroxene, horneblend and biotite on the south. This feature is defined by regional magnetic data and has been noted during mapping in the Manicouagan Reservoir Region. The thrust is dipping to the southeast. Lithoprobe data collected in the vicinity supports this hypothesis.

3.2 Property Geology

The rocks in the immediate area of interest are Precambrian Granulites of low metamorphic grade. Generally, rocks north of the major HART-JAUNE RIVER FAULT, roughly coincident with the Hart-Jaune River hence its name, consist mainly of interlayered gneisses of various affinities (Figure 5 and Map No. 1). The geological terrain immediately south of the Raudot Lake Intrusive Complex consists mainly of amphibolitic gneisses, large sections of sillimenite gneiss, pyroxene felsics, Quartz pyroxene andesine gneiss, and some quartzites with the odd lens of granulitic gabbro. Further south, the granulitic gabbros become more predominant. The area is cut by northerly trending diabase dykes.

Earlier mapping by Kish in the late 1960's defines the Raudot Lake Intrusive Complex as an Anorthosite/Gabbro Intrusion containing anorthosite, troctolite, and dunite. The southern edge is well layered with abundant olivine and magnetite. The northern part is metamorphosed and intruded by pink granite. The central portion contains calcic Labradorite and mafic rocks with abundant olivine. The intrusion is also invaded by diabase dykes.

A more recent examination of the Raudot Lake Intrusion by Panneton in 1991 indicates that the rocks are extremely rich in iron. He indicates the complex consists of " cumular dunite, melatroctolite, troctolite, and ulvosspinel-troctolite " (Panneton 1991) in a layered sequence. The base of the intrusion, termed the "Chilled Marginal Border (CMB)" by Panneton, is a fine grained gabbro with clinopyroxene rather than olivine. Although their mineralogy is different, the

b)

FIGURE 1 – En a) carte tectonique du Québec avec terrains limitrophes; en b) carte géologique.

Failles: ABT: zone de faille de charriage de l'Allochtone; FB: faille Bergeron; FCB: faille de Casa-Berardi; FCL: faille de Cadillac-Larder Lake; FDP: faille de Destor-Porcupine; FG: front de Grenville; FGP: faille du Grand-Pabos; FK: faille Kapunapotagen; FL: faille Logan; FLG: faille de la Guadeloupe; FLK: faille du lac Keato; FRF: faille de la rivière Ferrum; FV: faille Victoria; LBVB: ligne Baie Verte-Brompton; MBBZ: zone de faille de l'Allochtone monocyclique; ZCA: zone de cisaillement d'Abloviak; ZCK: zone de cisaillement de Komaktorvik; ZCLT: zone de cisaillement du lac Tudor; ZCMB: zone de cisaillement de Moonbase; ZCRG: zone de cisaillement de la rivière George; KFZ: zone de faille Keynion; ZFLK: zone de faille Labelle-Kinonge.

Structures: AK: antiforme de Kovik; ALSJ: anorthosite du lac Saint-Jean; AM: allochtone monocyclique; AP: allochtone polycyclique; BDP: batholite de De Pas; BM: bassin de Mistassini; BMT: batholite de Mistastin; BO: bassin d'Otish; BVFE: bande volcanique de Frotet-Evans; Fc: Formation de Chibougamau; LR: terrain de Long Range; MQ: groupe de Maquereau; NRG: groupes de Nastapoka et de Richmond Gulf; PFA: plate-forme d'Anticosti; PFB: plate-forme des Basses-Terres du Saint-Laurent; SCVG: Synclinorium de Connecticut Valley-Gaspé; SH: Supergroupe du Huronien; SPB: suite plutonique de Bienville; TCL: terrain de Chain Lakes; TLB: batholite Trans-Labrador; TN: terrane de Narsajuaq; ZD: zone de Dunnage; ZH: zone de Humber.

Astroblèmes: 1: Charlevoix (360 Ma); 2: Mancouagan (210 Ma); 3: île Rouleau (<300 Ma); 4: lac à l'Eau-Claire (290 Ma); 5: lac La Moinerie (400 Ma); 6: lac Couture (425 Ma); 7: Nouveau-Québec (1.6 Ma); 8: lac Mistastin (T-N; 38 Ma).

Figure 3. Regional Geology

PROVINCE DES APPALACHES ET PLATES-FORMES

PALÉOZOÏQUE

- Permo-Carbonifere
- Siluro-Devonien: terrains acadiens
- Cambro-Ordovicien: terrains taconiens
- Ordovicien-Silurien: plates-formes de la baie d'Hudson, de la baie d'Ungava et autres (P)
- Cambrien-Silurien: plate-forme du Saint-Laurent

PRÉCAMBRIEN

- Proterozoïque: Ma: LR: TCL

BOUCLIER CANADIEN

PROVINCE DE GRENVILLE (Archeen superieur a Proterozoïque superieur)

- Granitoïde (batholite Trans-Labrador)
- Suite charnockitique (jotunite, mangerite, charnockite)
- Suite anorthositique (anorthosite, gabbro norite), ultramafites (U)
- Paragneiss, marbres etc, roches sedimentaires et volcanites peu metamorphisées (S)
- Roches métamorphiques equivalentes de celles du Supergroupe de Kaniapiskau (Fosse du Labrador) et gabbros associes
- Orthogneiss, paragneiss, amphibolites et intrusions non subdivises

FOSSE DE L'UNGAVA (Archeen superieur, Proterozoïque inferieur)

- Fosse de l'Ungava (volcanites, roches sedimentaires)
- Terrane de Narsajuaq (gneiss)
- Archeen

OROGÈNE DU NOUVEAU-QUÉBEC (Fosse du Labrador)

- Roches sedimentaires
- Roches volcaniques
- Paragneiss, micaschistes
- Orthogneiss

PROVINCE DE RAE (Archeen, Proterozoïque inferieur a moyen)

- Couverture de roches sedimentaires
- Batholite de De Pas
- Gneiss et granitoïdes non subdivises

OROGÈNE TORNGAT: DOMAINE DE BURWELL (Archeen et Protérozoïque inferieur)

- Paragneiss, amphibolites
- Orthogneiss, paragneiss et intrusions non subdivises

SUITES PROTÉROZOÏQUES (moyen et superieur)

- Granitoïde
- Anorthosite

OROGÈNE MAKKOVIK (Proterozoïque moyen)

- Orthogneiss, paragneiss et intrusions non subdivises

PROVINCE DU SUPÉRIEUR (Archeen superieur)

- Couvertures de roches sedimentaires et filons-couches (Proterozoïque inferieur)
- Granitoïdes (a biotite hornblende, a biotite muscovite)
- Granitoïdes a orthopyroxene
- Anorthosite
- Bandes de roches volcaniques et sedimentaires (non subdivisees)
- Roches sedimentaires, paragneiss (facies des amphibolites des granulites)
- Orthogneiss, paragneiss et intrusions non subdivises (au faciès des amphibolites, sauf dans Minto et Ashuanipi ou au facies des granulites)

PROVINCE DE NAIN (Archeen inferieur et moyen)

- Paragneiss, orthogneiss et granitoïdes non subdivises

★ Astroblèmes (1 a 8)

Frontière

Legend for Figure 3

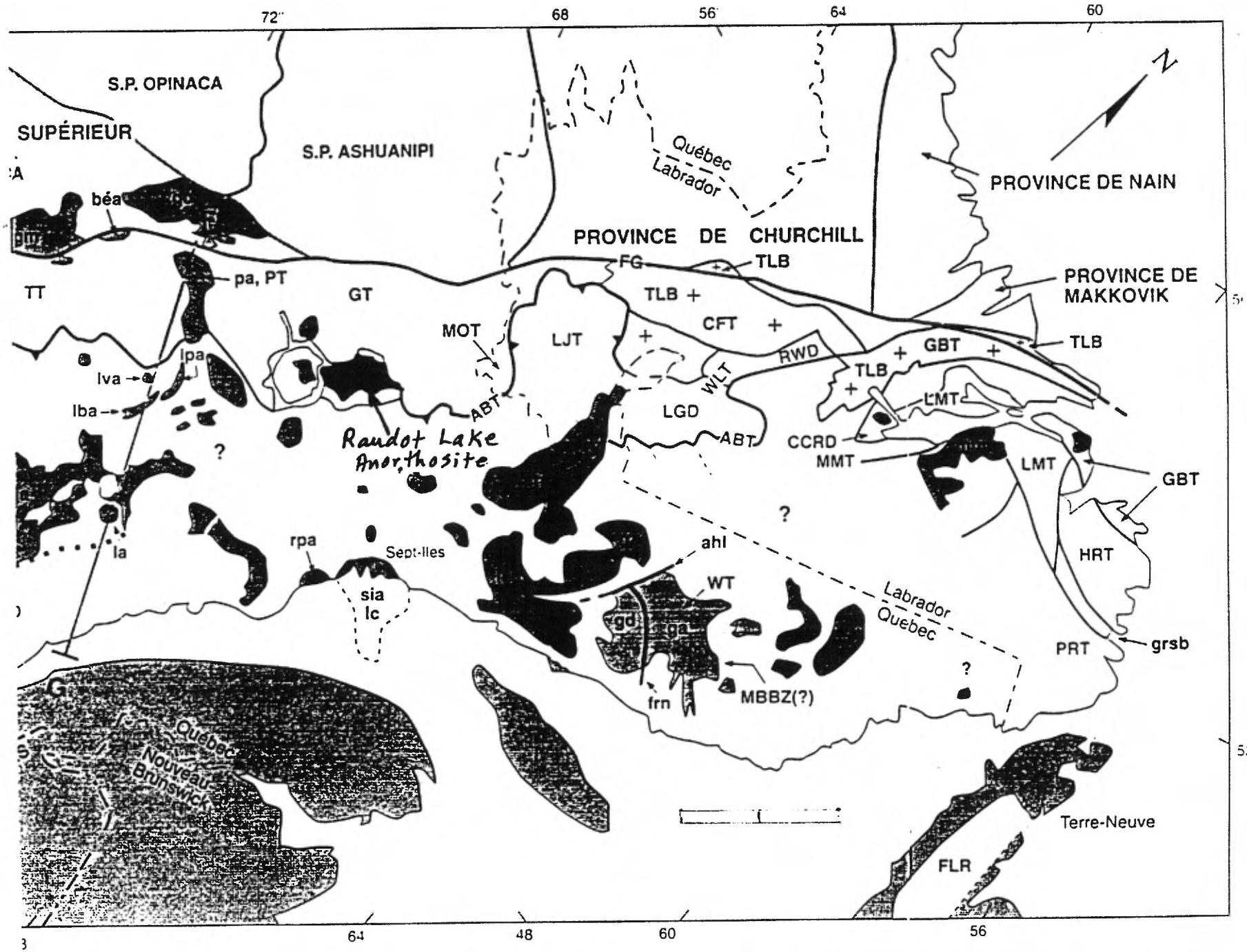
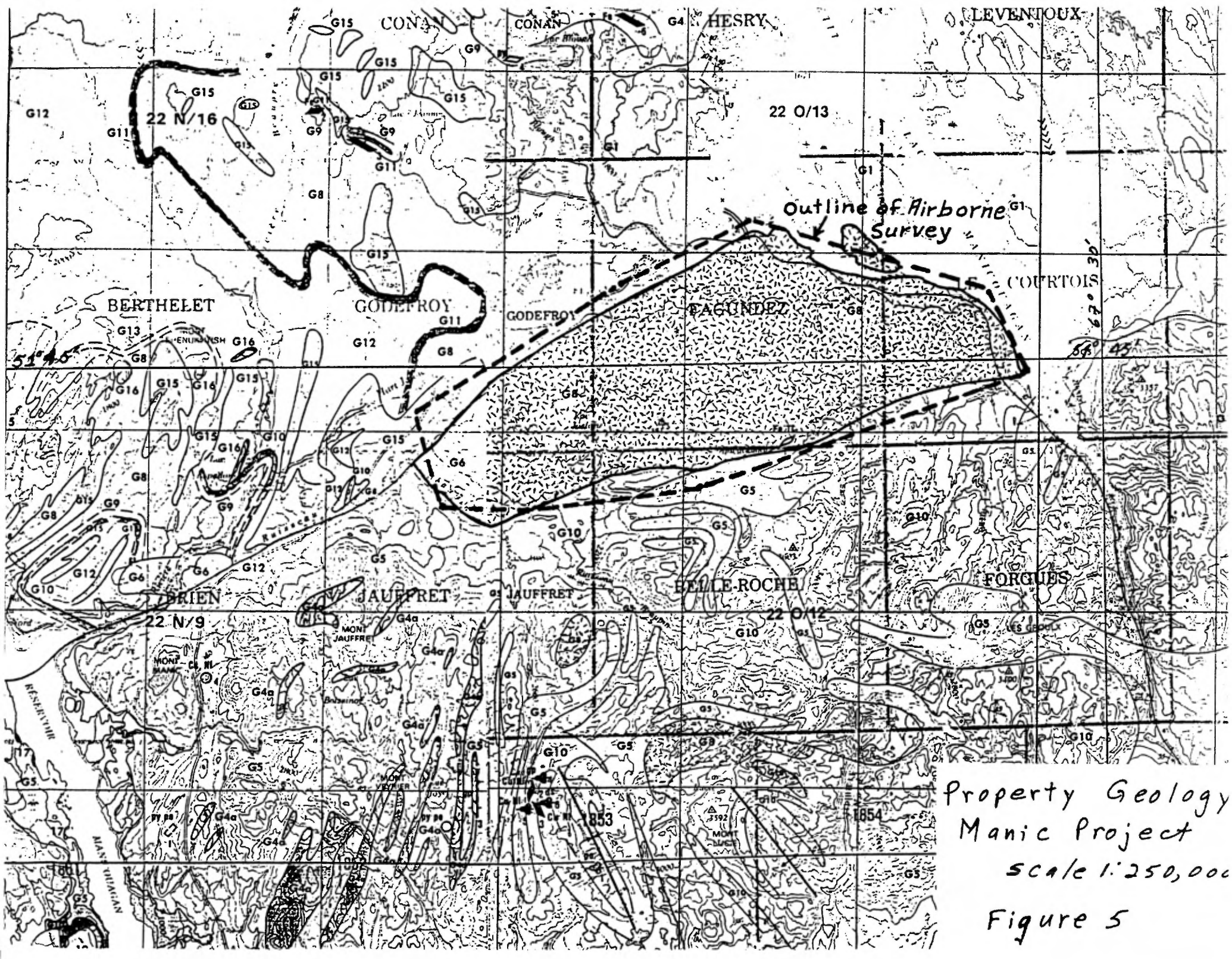


Figure 4. Raudot Lake Anorthosite



Property Geology
Manic Project
scale 1:250,000

Figure 5

GRENVILLE

ROTÉROZOÏQUE

HÉLIKIEN

- Granite avec pegmatite, non déformé
- Mangérite
- Gabbro, amphibolite
- Anorthosite, anorthosite gabbroïque

APHÉBIEN

GROUPE DE GAGNON

- Formation de fer
- Formation de Wapussakatoo, quartzite, quartzite feldspathique, schiste à quartz-muscovite-fuschite
- Formation de Duley: marbre calcitique et dolomitique, schiste à chlorite
- Paragneiss mixtes, amphibolite

ARCHÉEN et/ou PROTÉROZOÏQUE

- Migmatites
- Gneiss charnockitiques (équivalents, dans le faciès des granulites, de G1, G2 et G5) et roches intrusives déformées pour être assignées à la série charnockitique
- Gneiss granitiques

ARCHÉEN

- Complexe gneissique comprenant des gneiss gris à quartz-plagioclase-biotite et/ou hornblende, homogènes ou bien rubanés; des gneiss associés riches en hornblende et/ou biotite, des amphibolites

- Affleurement
- Contour géologique
- Direction de la stratification ou litage ( ) et de la foliation ( ) avec pendage incliné (a), vertical (b), non déterminé (c), horizontal (d)
- Axe de micropli
- Direction des diaclases, avec pendage incliné
- Synclinal normal
- Anticlinal normal (a), renversé (b)
- Faille ou zone de cisaillement
- Esker
- Numéro de la fiche de gîte minéral par découpage SNRC de niveau III

MINÉRALISATION

SUBSTANCES MÉTALLIQUES

Cu	Cuivre	po	Pyrrhotine	Fe	Fer
py	Pyrite	Fe Ti	Fer titane	Ni	Nickel

MINÉRAUX INDUSTRIELS

gp	Graphite	ds	Disthène

ATTITUDE ET FORME DES GÎTES

LENTILLE
- direction connue
- direction, avec pendage incliné
- AMAS
- direction, avec pendage vertical

STRATE (couche ou lit)
- direction connue
- direction, avec pendage incliné

TAILLE DES GÎTES

SUBSTANCES MÉTALLIQUES

PETITE
MOYENNE
GRANDE
TRÈS GRANDE

MINÉRAUX INDUSTRIELS

PETITE
MOYENNE
GRANDE
TRÈS GRANDE

MATÉRIAUX DE CONSTRUCTION

PETITE
MOYENNE
GRANDE
TRÈS GRANDE

Les gîtes présents sur la carte sont tramés

M-358

Legend for Figure 5

Layered Series and the CMB are co-magmatic, the difference between them being related to variations of the oxidation state during solidification.

3.3 Structural Geology

The main tectonic event in the area is the Boundary Trust Fault (BTF) which separates two major geological regimes; the paragneisses in the north and the orthogneisses on the south. This structural feature appears to coincide with the north-easterly striking Hart-Jaune River Fault. Current theory stipulates that the Raudot Mafic Intrusive Complex, the prime target for base metal exploration under the present program, formed from crustal magmas travelling up this major fault structure. The Anorthosite body also appears to be truncated on its west side by a Northwest-Southeast fault structure parallel to the Beaupin River. Other major fault directions in the area are East-Northeast coincident with the southern edge of the Anorthosite, west-northwest and north-northwest.

3.4 Economic Geology

Information on the extent of mineralization in the area comes from geological mapping done by the Geological Surveys of Canada and the Province of Quebec. Only scant exploration for minerals has taken place in the region. The focus of the exploration efforts has been in an area surrounding Mora and Joyel Lakes which lies 20 kilometers south-southwest of the Anorthosites. Copper and nickel sulfides with some indications of Cobalt values have been found in disseminated and weakly massive mineralization within the granulitic gabbros.

Massive magnetite occurs in association with magnetite gabbros and olivine-bearing rocks occur along the southern edge of the Raudot Lake Intrusion. Over 6 % Titanium, and 50 % Iron, were returned from one sample of Magnetite collected from the Raudot Lake Area (See Map No 1).

Rusty brown surfaces can be seen in many of the orthogneisses exposed on surface, likely caused by oxidation of disseminated sulfides, and limonitic staining. Also, many rusty zones are noticeable around the Mora - Joyel Lakes area where sulfides are abundant.

More recently, Copper/Nickel mineralization has been discovered in a paragneiss block within the orthogneissic sequences south and east of Petit Lac Manicouagan. These showings all occur within several kilometers of the railroad right-of-way. Most values for copper and nickel are in the 0.1 % range. One sample in noritic gneisses ran 1.53 % Ni, 1.09 % Cu, and 0.15 % Co. During a limited exploration effort in 1985, Platinum Group Minerals were indicated in low quantities.

4.0 PROPERTY DESCRIPTION

The property acquired by 1075297 Ontario Inc. is spread over five Cantons (townships). A total of 382 claims were staked in February 1996 to cover the most promising AEM and Magnetic Anomalies indicated by the Airborne Survey. The claims occupy 16 groups in Jauffret, Godefroy, Fagundez, Belle Roche, and Le Courtois Cantons. A total of 6112 Hectares, or 61.12 square kilometers are involved. A list of the claims with their license numbers is tabulated in TABLE 1 on page 7. The location of the claim groups are illustrated on Map No. 2.

5.0 EXPLORATION HISTORY

5.1 Previous Work

Prospecting began in the early 1950's when the search for iron ore was in full swing. All of this focused on the Copper mineralization in the Mora and Joyel Lakes area. During this surge of exploration, Titanium mineral in the form of ilmenite was discovered in bands of magnetite along the southern edge of the Anorthosite Intrusion in the vicinity of Raudot Lake. More recently, in the late 1980's, Copper/Nickel /Cobalt minerals have been uncovered around the south end of Petit Lac Manicouagan. Kish shows a mineralized outcrop on his Preliminary Map 1512 of 1962 located in the western portion of the Anorthosite Intrusion but there is no mention of this in the text.

THERE HAS BEEN VERY LIMITED EXPLORATION FOR BASE MINERAL DEPOSITS WITHIN THE ANORTHOSITE COMPLEX. The majority of exploration has been carried out only around the edges of the Intrusion. Detailed mapping of the area between Lac Joyel and Lac Raudot took place during an exploration surge in 1985.

5.2 Current Program

During January/February 1996, an Airborne Geophysical Survey was conducted by High Sense Geophysics on behalf of 1075297 ONTARIO INC. over the Anorthosite Intrusive Complex in the Manicouagan Area. A total of 2200 line kilometers of Magnetic and Electromagnetic (EM) data was collected. Analysis of the preliminary geophysical information produced during the survey was carried out in the field by the author. Following this, a ground acquisition plan was drawn up to cover the most attractive EM and Magnetic anomalies. A total of 382 claims were staked in the latter part of February and subsequently recorded and legally transferred to the company. After a more thorough interpretation of the geophysical results, a comprehensive ground follow-up program was designed and presented to the company for consideration.

T A B L E 1

CLAIMS LIST

BLOCK A	GODEFROY CTN	LIC.	5159 360 to 5159 374 incl.	15 claims
BLOCK B	GODEFROY "	"	5159 375 to 5159 401 incl.	27 "
BLOCK C	GODEFROY & FAGUNDEZ CTN	"	5159 402 to 5159 436 incl.	35 "
BLOCK D	JANUFFRET, BELLE ROCHE, & FAGUNDEZ	"	5159 437 to 5159 462 incl.	26 "
BLOCK E	FAGUNDEZ CTN	"	5159 463 to 5159 471 incl.	9 "
BLOCK F	FAGUNDEZ CTN	"	5159 472 to 5159 485 incl.	14 "
BLOCK G	FAGUNDEZ CTN	"	5159 486 to 5159 507 incl.	22 "
BLOCK H	FAGUNDEZ CTN	"	5159 508 to 5159 555 incl.	48 "
BLOCK I	FAGUNDEZ & BELLE ROCHE	"	5159 556 to 5159 669 incl.	114 "
BLOCK J	FAGUNDEZ & LE COURTOIS	"	5159 670 to 5159 675 incl.	6 "
BLOCK K	FAGUNDEZ & COURTOIS	"	5159 676 to 5159 680 incl. 5159 682 to 5159 686 incl. 5159 688 to 5159 692 incl.	LE 15 "
BLOCK L	LE COURTOIS	"	5159 694 to 5159 702 incl.	9 "
BLOCK M	LE COURTOIS	"	5159 703 to 5159 711 incl.	9 "
BLOCK N	LE COURTOIS	"	5159 712 to 5159 720 incl.	9 "
BLOCK O	LE COURTOIS	"	5159 721 to 5159 729 incl.	9 "
BLOCK P	LE COURTOIS	"	5159 730 to 5159 744 incl.	15 "

TOTAL 382 claims

6.0 DISCUSSION

A large number of EM anomalies were identified during the Airborne Geophysical Survey. In addition, the magnetics has presented a clear picture of the complexity of the geology of the mafic intrusion. Structural information such as faults and folding has also been disclose by both magnetics and EM.

The magnetics shows strong, linear anomalous trends over the southern two thirds of the Anorthosite Complex. These suggest a layering or zonation within the lower section of the intrusion. Indications from the magnetic suggest the sources of the magnetic zones are dipping north. In contrast, the northern third of the survey area is conspicuous by its lack of magnetic activity. This signifies the upper layers of the intrusion is highly siliceous. It seems the intrusion is cut off on its northern side by a prominent east-west structure which starts at that part of the Hart-Jaune River where it runs east-west and progresses eastward to Petit Lac Manicouagan. North of this fault the magnetic expressions resemble gneissic terrain.

Five types of EM responses have been encountered on the property. Two of these are attractive in the search for massive sulfides, while the third can be targets for titanium ore.

Strong responses having high conductivity occur in the extreme southeast part of the survey area where the lines were extended outside the planned boundary. At first these were thought to be reflecting graphite concentrations in the ortho-gneisses. However, since they coincided very nicely with the three Copper/Nickel showings that line up on the west side of the railway line, it is now believed the source of the EM conduction is likely a combination of graphite and sulfides. These conductors extend 7 kilometers to the west where they terminate against the faulted contact at the southern edge of the Mafic Intrusion. They do not follow the trend of the paragneiss unit, 8 a, as shown on the geology map (Map No. 1).

The second most prolific EM anomalies evident in the survey area are negative inphase responses that depict high concentrations of magnetite. The majority of these type are found in the southern portion of the intensely magnetized area where abundant magnetite has been found on the ground. They also appear in the other layered magnetic features to the north but are not so strong suggesting less magnetite content.

The third type of EM anomalies are positive inphase responses appearing within the negative inphase anomalies, and/or, conductive responses occurring at the edge of these negative inphase anomalies. These occur mostly in the northern magnetic

environment where they coincide with the more troctolitic bands of the anorthosite. It is the opinion of this writer that these EM anomalies correspond to sulfide materials within, or adjacent, to the magnetite bands.

The fourth style of EM responses are those having low or weak conductivity and appear singularly or in isolated groups. These are scattered throughout the survey area and likely reflect poor mineralization or alteration zones.

Strong surface EM responses showing high conductivity represent the fifth category. These are cultural anomalies which coincide with the railway line in the north and east. These are of no interest.

7.0 CONCLUSIONS

The numbered company, 1075297 Ontario Inc., has selected a mafic intrusive area, THE RAUDOT LAKE ANORTHOSITIC COMPLEX, in northeastern Quebec in which to exploration for base metal deposits similar to that found by Diamond Fields at VOISEY'S BAY in Northeastern Labrador. The Raudot Lake Anorthosites has comparable ingredients to those of the anorthosites comprising the Nain Plutonic Suite.

The Anorthosite Complex itself has not been thoroughly explored for base metal mineralization. Copper/Nickel/Cobalt minerals has been found in gneissic rocks outside the Intrusion near its southern boundary on the east side. One sample ran 1.53 % Ni, 1.09 % Cu, and 0.15 % Co. High titanium has also been discovered in a magnetite band in the lower mafic sequences of the Intrusion. One sample showed 50.27 % Fe and 6.37 % Ti. Other Copper and Nickel occurrences have been unearthed somewhat further south in the granulitic gabbros. Values for Platinum and palladium have also been recorded.

The Airborne Geophysical Survey has identified a large number of EM conductors within strongly magnetic terrain occupying two thirds of the Anorthosite Complex. The magnetics and EM indicate multiple zones of layered mafic material with bands of magnetite. The concentration of magnetite is very high in the south but falls off towards the north. EM responses suggest anomalous sources increase in sulfide content in the northern conductors which are associated with mapped troctolites. Northern dips are suggested by the magnetics. The upper part of the Intrusion is highly siliceous.

The Anorthosite Intrusion is bounded on the north and south by major fault structures. These are likely related to Allocthon Boundary Thrust (ABT) which separates two different geological regimes. The Raudot Lake Intrusive Complex is unusually rich in iron and poor in silica and represents an extreme example of an Fe-rich magma approaching the composition of Lunar basalts.

The potential for locating base metal deposits associated with the Raudot Lake Anorthosite Intrusion is considered to be very high.

7.0 RECOMMENDATIONS

A comprehensive exploration program is highly recommended for the company's claims in the Manicouagan Area. A three phase agenda is suggested which would involve detailed geophysical surveys, prospecting and geological mapping, geochemical sampling, and eventually an adequate drill program to test the most favorable anomalous situations. The prescribed program is outlined below.

RECOMMENDED EXPLORATION PROGRAM

PHASE I

This part of the program would include laying out grid lines on the various claim groups in order to carry out geophysical surveys. Magnetic and Horizontal Loop EM employing the MAXMIN I system should be done on grid lines spaced 200 meters apart. Magnetic reading should be taken every 12.5 meters. Coil spacing for the HLEM should be 100 meters with readings every 25 meters. Total kilometers involved would be 200.

Some of the jobs can be done from fly camps. Others would require the services of a helicopter. These situations would have to be co-ordinated to conserve costs.

PHASE II

The second stage of the campaign would involve prospecting and geological mapping. Sampling and Geochemical analysis would also be included in this phase. A good seasoned prospector would be worthwhile in this task supervised by a competent geologist. Forty crew days are envisioned for this work.

PHASE III

This aspect of the exploration effort encompasses the drilling stage, and, logging, sampling and analysis of core. Eight holes at 100 to 150 meters length total approximately 1000 meters that is being allowed for exploration drilling in this phase.

Respectfully submitted,

Garth B. Burton, BSc, FGAC, P.Geo.
Geophysical Consultant

REGISTERED PROFESSIONAL GEOSCIENTIST
PROVINCE OF NEWFOUNDLAND
GARTH B. BURTON
P. GEO.
LICENSEE
Toronto, Ontario
20 March 1996

SCHEDULE of ESTIMATED COSTS for EXPLORATION PROGRAM

PHASE I-GEOPHYSICS		
MOBILIZATION		$ 12,000
LINE CUTTING	200 kilometers	60,000
GEOPHYSICS	Magnetics + HLEM	85,000
TRANSPORTATION	Helicopter + Float Plane	25,000
ADMINISTRATION/REPORTS/SUPPLIES		15,000
CONTINGENCIES	10 %	19,700
TOTAL COST PHASE I		$ 216,700
PHASE II-GEOLOGY		
MOBILIZATION		$ 8,000
PROSPECTING and GEOLOGICAL MAPPING	40 crew days	56,000
GEOCHEMICAL ANALYSIS		40,000
TRANSPORTATION	Helicopter + float plane	30,000
ADMINISTRATION/REPORTS/SUPPLIES		10,000
CONTINGENCIES	10 %	14,400
TOTAL COST for PHASE II		$ 158,400
PHASE III - DRILLING		
MOBILIZATION		$ 15,000
DRILLING	1000 meters	95,000
GEOLOGIST	30 dyas	18,000
SAMPLING and ANALYSIS		80,000
TRANSPORTATION	Helicopter + float plane	75,000
ADMINISTRATION/REPORTS/ETC.		8,000
CONTINGENCIES 10 %		29,100
TOTAL COST for PHASE III		$ 320,100
TOTAL OVERALL COST FOR 3 PHASE EXPLORATION PROGRAM		$ 695,200

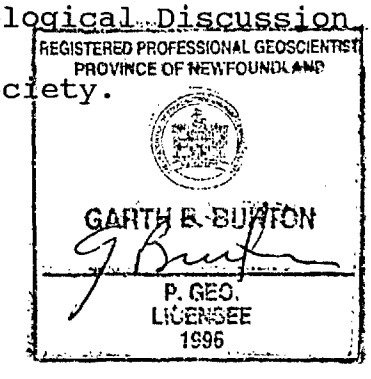
Q U A L I F I C A T I O N S

GARTH B. BURTON, BSc, FGAC, P.Geo

Geophysical Consultant

This is to certify that I, GARTH B. BURTON,

1. am a Canadian citizen residing at 1-2234 Upper Middle Road in the city of Burlington in the Province of Ontario,
2. maintain a consulting office at Suite 2550, 55 King Street West in Toronto, Ontario,
3. graduated with an Honours Bachelor of Science degree, Second Class, from Carleton University, Ottawa, in 1970,
4. have been working in the mining exploration industry since 1956, and as a professional geoscientist for the past 25 years,
5. have been practicing as an independent geophysical consultant for 17 years,
6. am registered as a Professional Geoscientist in the Province of Newfoundland,
7. am a Fellow of the Geological Association of Canada, and a member of the Society of Exploration Geophysicists,
8. belong to the Toronto branch of Canadian Institute of Mining, the Prospectors Association of Canada, the Toronto Geological Discussion Group, and the Canadian Exploration geophysical Society.



Garth B. Burton, BSc, FGAC, P.Geo.

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REPORT ON SURFACE EXPLORATION
MANIC JOINT VENTURE PROJECT
EASTERN HALF (GRIDS M11 TO M20)

INTRODUCTION

A geological mapping and prospecting program was carried out from Sept. 26th to Oct. 8th, 1996, by T.S.J. Consultants Ltd. of Toronto, on the eastern half of the Manic Project Area of joint venture partners Greenshield Resources Inc. and Xemac Resources Inc. The project area is a mountainous region (Les Groulx) about 225km north-northwest of the town of Sept-Iles, east of Manicougagan Lake and Highway 389 (inset, Figure 1).

The aim of the work was to investigate HLEM anomalies on grids M11 to M20, shown on Figure 1.. This report is a description of the exploration program and results.

EXPLORATION PROGRAM

The exploration program consisted of geological mapping, prospecting and lithogeochemical sampling over previously delineated HLEM anomalies (Lavoie, 1996) on the cut and picketed grids in the eastern half of the Manic Project Area.

Inclement weather due to the lateness of the season made increasing portions of the more elevated grid areas inaccessible after October 1st, with the result that grids M13 to M15 could not be examined and coverage of grids M11, M12 and M16 to M20 was abbreviated.

Personnel involved in the work were as follows:

NAME	JOB	ADDRESS
T.S. Jolliffe	Geologist	Toronto, Ont.
F. Recoskie	Prospector	Val d'Or, Québec
D. Buckle	Field Assistant	Forteau, Labrador
D. Hancock	Field Assistant	Forteau, Labrador

The field crew was based at a truck stop (Relais Gabriel) along Highway 389. A Bell 206B, provided by Heli-Ungava Inc. of Val d'Or, Québec, was used for access to the grid areas.

Grab samples were collected from outcrops and boulders to test features of potential economic interest: in particular, gossans and sulphide concentrations. In total, 38 grab samples were shipped to Bondar-Clegg & Company Ltd., Ottawa, Ontario for analysis. The analytical certificates listing methods of sample preparation and analysis as well as the results are compiled in Appendix C.

The geology, surface features and sampling locations are shown on Figures 3 to 9. (See Figure 2 for the Legend.) Grab sample descriptions and results are given in Appendix B.

DISCUSSION OF RESULTS

GRID M11

Prospecting coverage of grid M11 is shown on Figure 3.

The HLEM anomaly areas are predominantly overburden-covered (muskeg, swamp, open grass and open spruce forest) with minor outcrops of fine- to coarse-grained magnetite-bearing troctolite and leuco-troctolite / anorthosite. A grab sample (#535277) from outcrop in the northwest corner of the grid contained 2315ppm copper.

GRID M12

Prospecting and partial geological mapping (northeastern part) are shown on Figure 4.

Minor outcrops adjacent to the overburden-covered conductors on the grid are predominantly massive, medium- to coarse-grained, magnetite-bearing troctolite but range to leuco-troctolite and anorthosite. Only minor pyrite was observed but several rusted outcrop areas to the southwest could have sulphides below the weathered zone. Slightly elevated copper ± nickel values were obtained from grab samples.

GRID M16

Prospecting coverage of grid M16 is shown on Figure 5.

The HLEM anomaly areas are located along forested, predominantly overburden-covered hillside. Outcrops to the west on the conductor are composed of fine- to medium-grained, massive, magnetite-bearing melagabbro (troctolite?) with minor pyrrhotite and pyrite. Grab samples showed elevated copper ± nickel values.

GRID M17

Prospecting and geological mapping are shown on Figure 6.

The area is forested and hilly with outcrops of massive, coarse- to medium-grained, magnetite-bearing troctolite ranging to leuco-troctolite. Very minor pyrite and chalcopyrite were observed. Slightly elevated copper ± nickel values were obtained from a grab sample.

GRID M18

Prospecting and geological mapping are shown on Figure 7.

The area along the conductor is forested hillside with several exposures of massive, coarse- to medium-grained, magnetite-bearing troctolite and leuco-troctolite and occasional minor disseminated pyrite and chalcopyrite. Grab samples from outcrops and boulders in the west part of the grid contained anomalous copper and nickel (#535274: 4498ppm Cu, 312ppm Ni).

GRID M19

Prospecting and geological mapping are shown on Figure 8.

Numerous sulphide-bearing (pyrite ± pyrrhotite ± chalcopyrite) outcrops of quartzo-feldspathic paragneiss (±garnet, biotite) are exposed along the river banks in the northwestern part of the grid, particularly between lines 0 and 2E. Several grab samples from outcrop were anomalous, ranging up to 8386ppm Cu and 4587ppm Ni (#535267) and 3038ppm Zn (#535262). Anomalous results were also obtained from paragneiss boulders which are probably locally derived. The sample from an ultramafic boulder which may have undergone significant transport contained 12387ppm Zn (#535251).

In the river in the southwest corner of the grid are exposures of a mafic intrusive with disseminated and stringer pyrrhotite + pyrite ± chalcopyrite. Grab samples contained up to 1784ppm Ni and 981ppm Cu (#535270). A sample from a boulder of paragneiss, possibly frost-heaved, was anomalous in copper and nickel.

In addition, a sample (#535271) from an angular boulder of mela-troctolite or dunite in the river contained 10471ppm Cu and 9839ppm Ni.

GRID M20

Prospecting and geological mapping are shown on Figure 9.

The conductor areas are overburden-covered swampy to sandy lowlands, open to forested with spruce. A large angular boulder of magnetite-bearing troctolite in the southeast part of the grid could be locally derived.

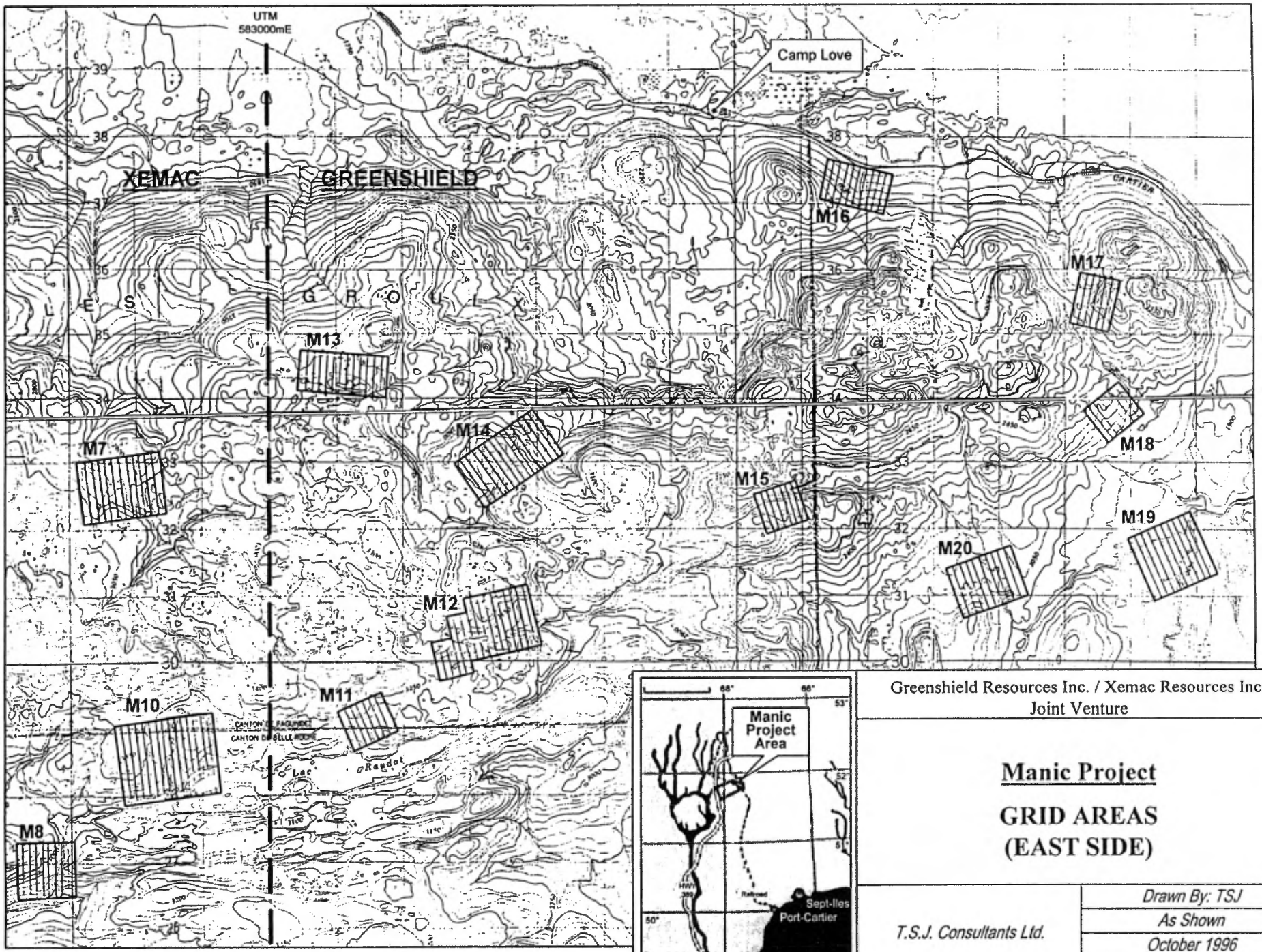
CONCLUSIONS

The Fall 1996 prospecting and mapping work, although curtailed by weather, confirmed the presence of anomalous copper and nickel mineralization spatially associated with conductors in the Lac Rouleau Anorthosite Complex as well as in the adjacent gneissic terrain to the southeast.

Respectfully submitted,

T. S. Jolliffe, B.Sc.(Eng.)

Geologist



Greenshield Resources Inc. / Xemac Resources Inc.
Joint Venture

Manic Project

GRID AREAS (EAST SIDE)

T.S.J. Consultants Ltd.	Drawn By: TSJ
	As Shown
	October 1996
	Figure No. 1

SYMBOLS

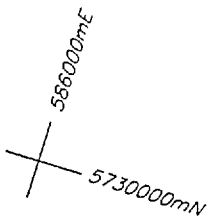

Break-in-slope


Surface feature boundary


Swamp


Water


Creek



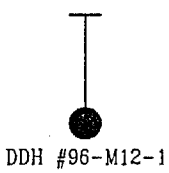
UTM co-ordinates


Cut lines, stations


Outcrop area, small outcrop


Boulder


Sample location:
(outcrop, boulder)



Diamond drillhole


Bearing, declination

ROCK TYPES

1 Quartzo-feldspathic paragneiss
2 Gabbro
3 Troctolite
4 Leuco-troctolite
5 Anorthosite

ABBREVIATIONS

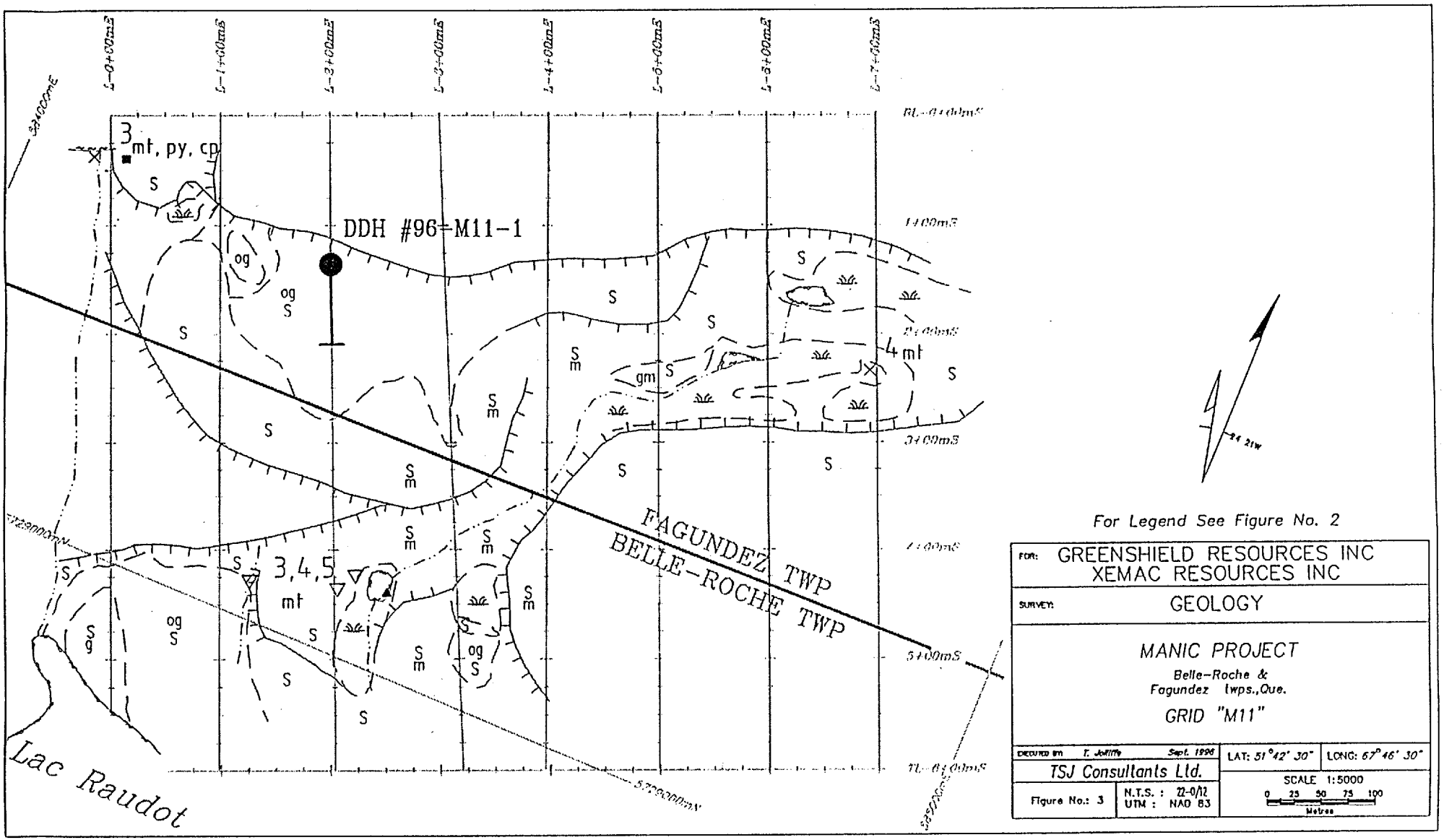
mt	magnetite
cp	chalcopyrite
py	pyrite
po	pyrrhotite
sul	sulphides
S	spruce
B	balsam
sd	sand
m	muskeg
g	grass
o	open
bldr	boulders

Greenshield Resources Inc. / Xemac Resources Inc.
Joint Venture

Manic Project

LEGEND

T.S.J. Consultants Ltd.	*Drawn By: TSJ*
	As Shown
	June 1997
	Figure No. 2



For Legend See Figure No. 2

FOR:	GREENSHIELD RESOURCES INC XEMAC RESOURCES INC
SURVEY:	GEOLOGY
	MANIC PROJECT Belle-Roche & Fagundez twps.,Que. GRID "M11"
Executed on T. Joliffe Sept. 1996	LAT: 51°42' 30" LONG: 67°46' 30"
TSJ Consultants Ltd.	SCALE 1:5000
Figure No.: 3	N.T.S. : 22-0/12 UTM : NAD 83
	0 25 50 75 100 Metres

APPENDIX A

CERTIFICATE OF QUALIFICATION

CERTIFICATE OF QUALIFICATION

I, THOMAS S. JOLLIFFE, OF 2302 - 7 CONCORDE PLACE, DON MILLS, ONTARIO, CERTIFY THAT:

1. I am a graduate of Queen's University with the degree of Bachelor of Science (Geological Engineering) in 1971.

2. I have worked as an exploration and mine geologist since 1971.

3. I supervised exploration activities on the Manic Project from September 26th to October 8th, 1996.

4. The statements contained in this report, and the conclusions reached, are based upon the field work and a comprehensive study of all relevant assessment work records, as well as geological reports and maps published by the government of Quebec.

DATED THIS 20th DAY OF June , 1997

T. S. Jolliffe, B.Sc.(Eng.)

Geologist

APPENDIX B

GRAB SAMPLE DESCRIPTIONS

GRAB SAMPLE DESCRIPTIONS

SAMPLE NO.	LOCATION Grid Co-ordinates		DESCRIPTION	ASSAYS Au ppb	Ag ppm	Ni ppm	Cu ppm	Zn ppm	Pt ppb	Pd ppb	Ti %	Co ppm	Cr ppm
	GRID M19												
535251	5+80E	2+00S	Ultramafite - sub-rounded to rounded boulder (9"x6"x5") - gossaned, greenish-black, coarse-grained, massive pyroxenite; non-magnetic - with 5-10% disseminated coarse-grained aggregates of pyrite; possible trace chalcopyrite	<5	0.9	154	729	12387				44	
535252	6+15E	1+85S	Paragneiss - sub-rounded boulder (12"x8"x6") - pink and white coarse-grained feldspathic bands - white band with 5-10% coarse-grained pyrrhotite, common chalcopyrite aggregates	<5	<0.5	137	963	63				76	
535253	6+15E	1+85S	Biotite Schist - sub-rounded boulder (8"x6"x4") - fine-grained; streaked with white feldspar (+quartz?) lenses - magnetic; with >10% fine-grained metallic minerals (probable pyrite + pyrrhotite + chalcopyrite) - minor dimethyl reaction (nickel)	13	0.7	269	698	1450				43	
535254	6+05E	1+85S	Amphibolite - sub-angular boulder (1.5'x1'x0.5') - fine-grained, foliated - weakly magnetic; about 10% fine-grained disseminated metallic minerals (sulphides at least in part)	9	<0.5	121	558	137				46	
535255	5+58E	2+07S	Anorthosite / Leucogabbro - sub-angular (2'x1'x0.8') - grey, foliated, medium-grained - 3-6% disseminations and lenses of fine-grained metallic minerals (probably magnetite and pyrite - minor dimethyl reaction (nickel)	13	1.1	945	1009	235				86	
535256	5+70E	1+98S	Paragneiss - probable outcrop - rusty weathering, fine-grained, grey to buff white banded; ; with purple garnet – metawacke? - 1-3% disseminated pyrite	<5	<0.5	26	211	104				34	
535257	4+70E	1+90S	Paragneiss - fine-grained; thin, medium to dark grey and lighter feldspathic bands; slightly garnetiferous – probable metawacke ± arenite, i.e. semi-pelitic - minor gossaned beds, 10-20cm wide, with 1-5% fine-grained sulphides – probable pyrite + pyrrhotite (with trace chalcopyrite); weakly magnetic	<5	<0.5	80	206	249				28	
535258	5+15E	2+02S	Diabase Dyke - dark grey, medium-grained, massive; weakly magnetic - locally with disseminated and minor stringer sulphides – ~3% pyrrhotite + trace chalcopyrite	<5	<0.5	399	177	60				45	
535259	3+20E	1+45S	Paragneiss - sub-rounded boulder (12"x8"x4") - semi-pelitic (metawacke?), garnetiferous - 5-10% disseminated pyrite ± chalcopyrite	15	1.1	1050	590	320				75	

SAMPLE NO.	LOCATION Grid Co-ordinates		DESCRIPTION	ASSAYS									
				Au ppb	Ag ppm	Ni ppm	Cu ppm	Zn ppm	Pt ppb	Pd ppb	Ti %	Co ppm	Cr ppm
535260	3+15E	1+40S	Paragneiss - gossaned sub-angular boulder (10'x8'x4') - semi-pelitic (metawacke?), garnetiferous, banded feldspar (+quartz) + amphibole(?) gneiss - 5-10% disseminated pyrite ± chalcopyrite	7 (11)	<0.5 (<0.5)	737 (739)	249 (281)	323 (351)				69 (73)	
535261	3+20E	1+25S	Paragneiss - outcrop or frost-heaved - semi-pelitic (metawacke?), garnetiferous; weakly magnetic - with gossaned bands (up to 5% fine-grained disseminated pyrite ± pyrrhotite + trace chalcopyrite?)	<5	<0.5	434	298	203				73	
535262	1+75E	0+85S	Paragneiss - semi-pelitic (metawacke?), with quartzite and pelitic bands, garnetiferous - fine-grained gossaned bands with common (>10%) disseminated pyrite (+ pyrrhotite?)	9	1.1	169	872	3038				74	
535263	1+40E	0+82S	Paragneiss - semi-pelitic (metawacke?), to psammitic bands, ± garnetiferous - includes ~5' strongly gossaned band (darkish grey, more pelitic?); footwall portion with common (10-25%) pyrrhotite (+0.5-1% chalcopyrite) aggregates / stringers particularly along foliation planes	13	0.6	146	1122	1793				39	
535264	2+75E	1+37S	Paragneiss - small boulder - medium-grained to fine-grained, semi-pelitic (metawacke?), with quartzite and pelitic bands - possible fine-grained graphite; 1-3% pyrite + chalcopyrite	<5	<0.5	62	74	142				17	
535265	1+75E	1+00S	Paragneiss - small boulder - medium-grained to fine-grained, semi-pelitic (metawacke?); weakly magnetic - 1-3% pyrite +pyrrhotite + chalcopyrite	<5	<0.5	344	291	5229				40	
535266	1+40E	0+92S	Paragneiss -- medium- to fine-grained, semi-pelitic, with quartzite and pelitic bands; slightly garnetiferous - ~5% pyrite +pyrrhotite + chalcopyrite	13	1.6	1396	3218	193				135	
535267	0+17E	0+70S	Paragneiss - medium- to fine-grained, semi-pelitic (metawacke?), with massive pelitic (mafic volcaniclastic?) bands; slightly garnetiferous - several strongly gossaned bands with up to 15% pyrrhotite +pyrite + chalcopyrite	36	2.7	4587	8386	125				503	
535268	1+45E	9+47S	Paragneiss - large boulder (possible frost-heaved outcrop) -- medium-grained, semi-pelitic (metawacke?) - gossaned with up to 10% pyrrhotite + pyrite + chalcopyrite	<5	<0.5	960	1013	71				80	
535269	1+82E	9+55S	Mafic (Ultramafic?) Dyke or Sill - medium-grained, massive, magnetic - approximately 5% disseminated and stringer pyrrhotite + pyrite + trace chalcopyrite	4 (4)	<0.5 (0.6)	1753 (1765)	953 (955)		<5 (<5)	2 (2)		126 (127)	351 (373)
535270	1+77E	9+52S	Mafic (Ultramafic?) Dyke or Sill - outcrop in river - medium-grained, massive, magnetic - wide gossaned zone; up to 5% disseminated pyrrhotite + pyrite (+ chalcopyrite?)	4	<0.5	1784	981		<5	2		118	369

SAMPLE NO.	LOCATION Grid Co-ordinates		DESCRIPTION	ASSAYS									
				Au ppb	Ag ppm	Ni ppm	Cu ppm	Zn ppm	Pt ppb	Pd ppb	Tl %	Co ppm	Cr ppm
535271	1+86E	9+36S	Mela-troctolite / Dunite - angular boulder 2'x1.5'x1.5' - medium-grained, massive, magnetic - with 10 - 20% aggregates of pyrrhotite + chalcopyrite	21	<0.5	9839	10471		<5	13		648	348
	GRID M18												
535272	0+44E	2+85S	Troctolite - coarse-grained, massive; magnetiferous - 0.5-2% disseminated pyrite + chalcopyrite	2		334	3471		<5	<1	3.73	134	75
535273	0+44E	2+90S	Troctolite - possible boulder - coarse-grained, massive; magnetiferous - 0.5-1% disseminated pyrite + chalcopyrite (+ speck native copper?)	2 (<1)		178 (181)	1852 (1839)		<5 (<5)	<1 (<1)	1.88 (2.47)	84 (80)	176 (193)
535274	0+03E	2+70S	Troctolite - coarse-grained, massive; magnetiferous - 0.5-1% disseminated pyrite + chalcopyrite	4		312	4498		<5	<1	2.11	128	117
535275	1+85E	3+19S	Troctolite - large boulder - coarse-grained, massive; trace pyrite	5		111	879		<5	<1	1.26	47	184
535276	1+50E	3+25S	Troctolite - coarse-grained, massive; magnetiferous - trace-0.5% disseminated pyrite (+chalcopyrite?)	3		238	2399		<5	<1	2.18	98	130
	GRID M11												
535277	0+15E	0+40S	Troctolite - coarse-grained, massive; magnetiferous - <1% pyrite ± chalcopyrite disseminated and along fractures	16		138	2315		6	14	1.35	37	295
535278	2+50E	4+40S	Leuco-troctolite - large rounded boulder - very coarse-grained, massive; magnetiferous; with trace fine-grained disseminated sulphide	<1		80	940		<5	<1	1.29	76	157
	GRID M20												
535279	10+00E	6+00S	Troctolite - angular large boulder - coarse-grained, massive; magnetiferous	<1		118	23		<5	<1	1.02	51	253
	GRID M1												
535280	1+75E	1+18S	Mela-troctolite (dunite?) - fine-grained, massive; magnetiferous - representative — on conductor	12		588	15		<5	<1	0.97	182	1541

SAMPLE NO.	LOCATION Grid Co-ordinates		DESCRIPTION	ASSAYS									
				Au ppb	Ag ppm	Ni ppm	Cu ppm	Zn ppm	Pt ppb	Pd ppb	Ti %	Co ppm	Cr ppm
	GRID M17												
535281	4+10E	3+40S	Troctolite - coarse-grained, massive; very magnetiferous (>30%) including massive magnetite bands - trace fine-grained sulphide	1		133	564		<5	1	1.71	129	57
	GRID M16												
535282	2+52E	0+98S	Mela-troctolite - fine-grained to medium-grained, massive; very magnetiferous - trace pyrrhotite + pyrite	1		142	555		<5	<1	2.37	100	151
535283	1+77E	0+85S	Mela-troctolite - fine-grained to medium-grained, massive; magnetiferous - trace fine-grained sulphide	1		81	481		<5	<1	2.57	67	69
535284	1+65E	0+80S	Mela-troctolite - fine-grained, massive; magnetiferous - trace fine-grained sulphide	<1		85	266		<5	<1	1.97	67	54
	GRID M12												
535285	0+00E	7+50S	Leuco-troctolite - coarse-grained, massive, magnetiferous - rusty-weathered	2		112	171		<5	<1	1.22	50	162
535286	4+00E	5+75S	Troctolite - medium-grained, massive, magnetiferous - trace sulphide	2		56	264		<5	<1	2.05	30	78
535287	4+00E	3+75S	Troctolite - coarse-grained, massive, magnetiferous - rusty-weathered; 0.5% pyrite (+ chalcopyrite?)	1		135	412		<5	3	1.57	56	154
535288	7+00E	4+25S	Troctolite - coarse-grained, massive, magnetiferous - rusty-weathered	<1		27	277		<5	<1	1.01	38	84

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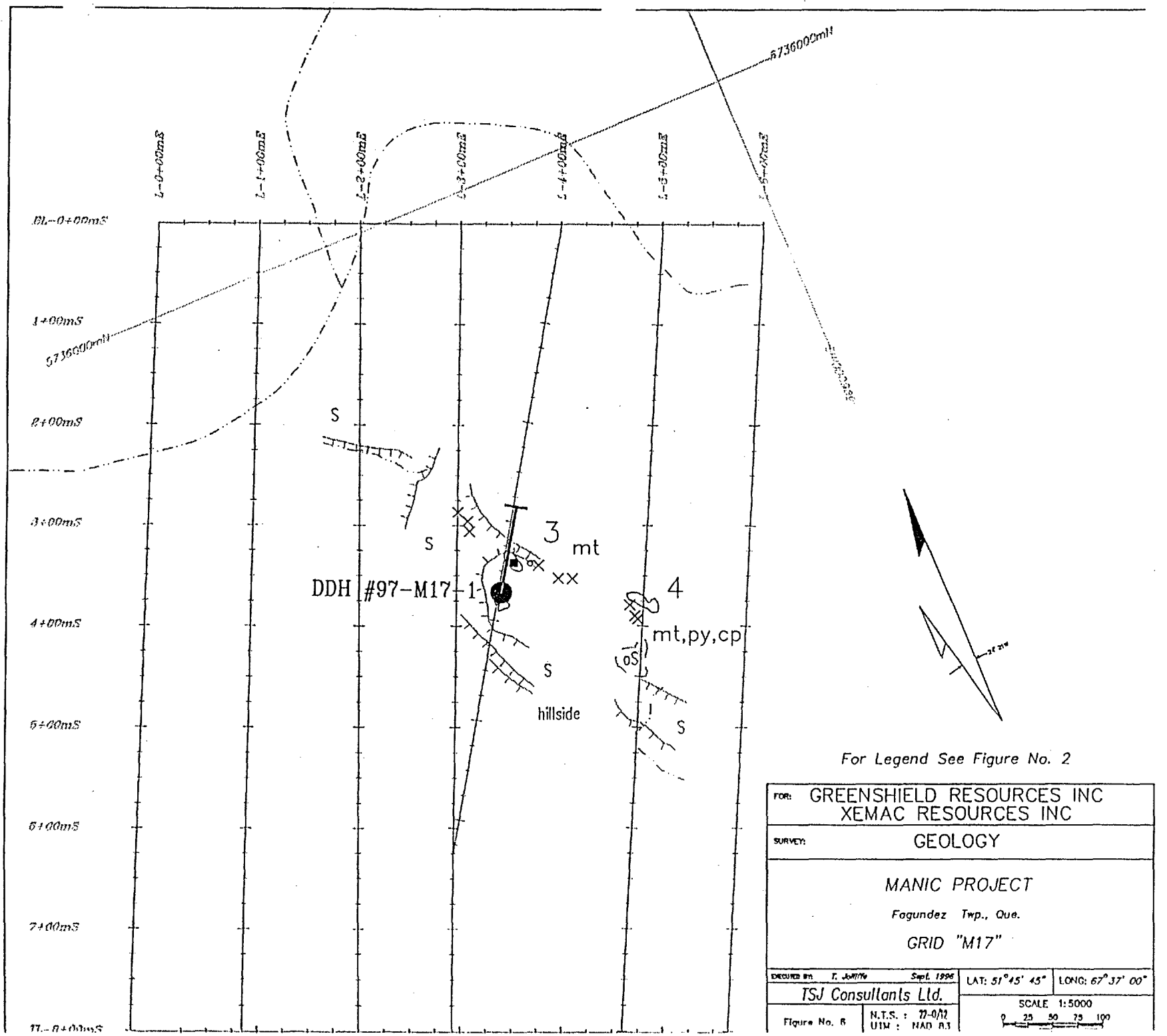
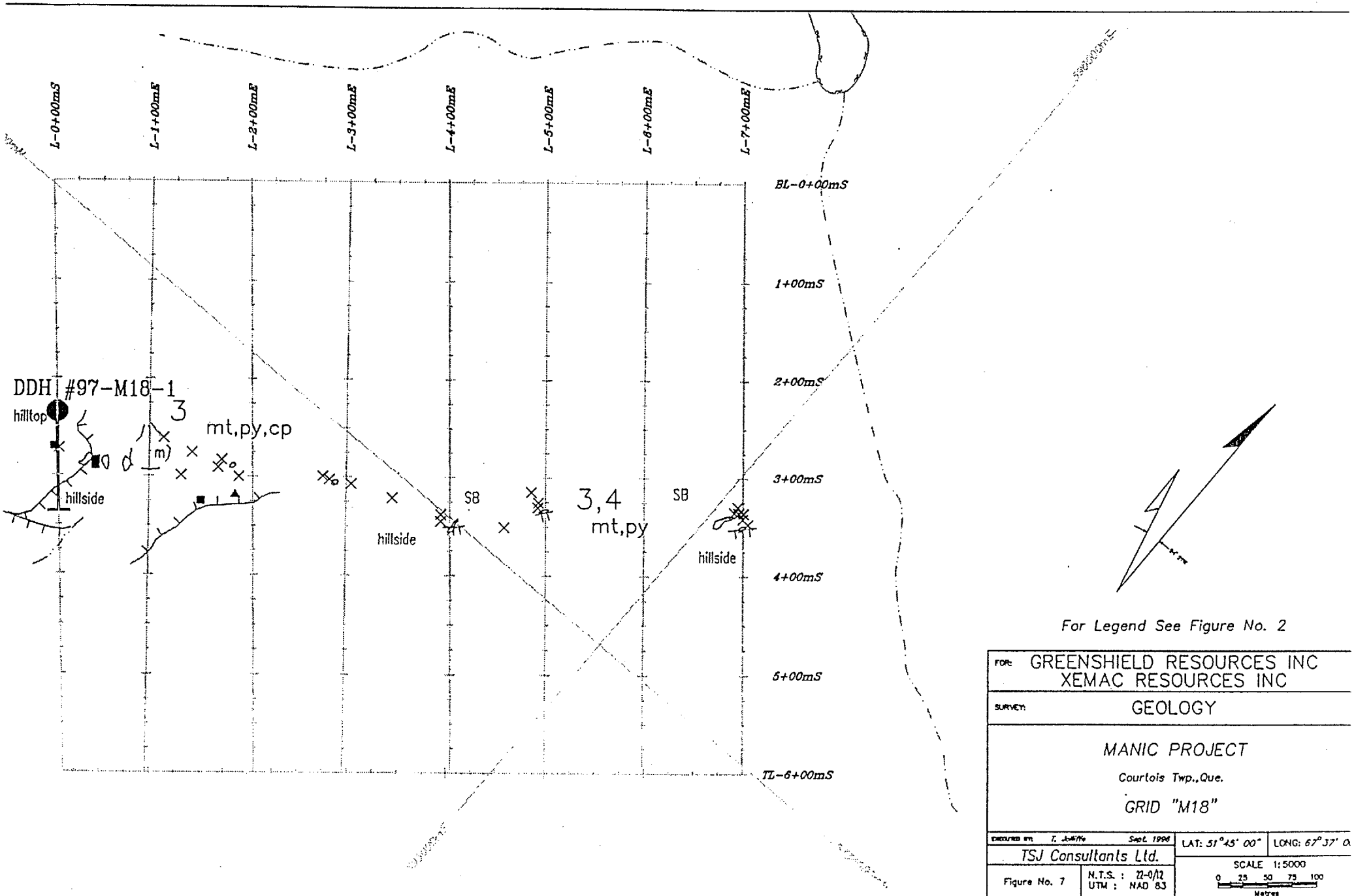


For Legend See Figure No. 2

FOR:	GREENSHIELD RESOURCES INC XEMAC RESOURCES INC
SURVEY:	GEOLOGY
	MANIC PROJECT Fagundez Twp., Que. GRID "M17"
EXECUTED BY: T. Jolliffe Sept. 1996	LAT: 51°45' 45" LONG: 67°37' 00"
TSJ Consultants Ltd.	SCALE 1:5000
Figure No. 6	N.T.S. : 11-0/12 UTM : NAD 83



For Legend See Figure No. 2

FOR:	GREENSHIELD RESOURCES INC XEMAC RESOURCES INC
SURVEY:	GEOLOGY
	MANIC PROJECT Courtois Twp., Que. GRID "M18"
Digitized by: T. Jolliffe	Sept. 1998
TSJ Consultants Ltd.	
Figure No. 7	N.T.S. : 22-0/12 UTM : NAD 83
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SCALE 1:5000	0 25 50 75 100 Metres

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APPENDIX C

ANALYTICAL CERTIFICATES

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Fax: (819) 825-0256

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CERTIFICAT D'ANALYSE

REPORT: C96-64029.0 (COMPLETE) REFERENCE:

CLIENT: T.S.I. CONSULTANT LTD SUBMITTED BY: T.JOLLIFFE
PROJECT: AUCUN DATE PRINTED: 28-OCT-96

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au50	Gold	18	5 PPB	Fire Assay of 50g	50g Fire Assay - AA
2	Ag	Silver	18	0.5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
3	Ni	Nickel	18	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
4	Zn	Zinc	18	2 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
5	Cu	Copper	18	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
6	Co	Cobalt	18	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	18	-150	18	CRUSH/SPLIT & PULV.	18

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MR. FRANK RECOSKIE

INVOICE TO: MR. TOM JOLLIFFE

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CERTIFICAT D'ANALYSE

CLIENT: T.S.I. CONSULTANT LTD — PROJECT: AUCUN

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SAMPLE NUMBER	ELEMENT UNITS	Au50 PPB	Ag PPM	Ni PPM	Zn PPM	Cu PPM	Co PPM
535251		<5	0.9	154	12387	729	44
535252		<5	<0.5	137	63	963	76
535253		13	0.7	269	1450	698	43
535254		9	<0.5	121	137	558	46
535255		13	1.1	945	235	1009	86
535256		<5	<0.5	26	104	211	34
535257		<5	<0.5	80	249	206	28
535258		<5	<0.5	399	60	177	45
535259		15	1.1	1050	320	590	75
535260		7	<0.5	737	323	249	69
535261		<5	<0.5	434	203	298	73
535262		9	1.1	169	3038	872	74
535263		13	0.6	146	1793	1122	39
535264		<5	<0.5	62	142	74	17
535265		<5	<0.5	344	5229	291	40
535266		13	1.6	1396	193	3218	135
535267		36	2.7	4587	125	8386	503
535268		<5	<0.5	960	71	1013	80

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CERTIFICAT D'ANALYSE

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STANDARD NAME	ELEMENT UNITS	Au50 PPB	Ag PPM	Ni PPM	Zn PPM	Cu PPM	Co PPM
ANALYTICAL BLANK		<5	<0.5	<1	<2	1	<1
Number of Analyses		1	1	1	1	1	1
Mean Value		2.5	0.25	0.5	1.0	1.0	0.5
Standard Deviation		-	-	-	-	-	-
Accepted Value		5	0.2	1	1	1	1
Gannet Standard		375	-	-	-	-	-
Number of Analyses		1	-	-	-	-	-
Mean Value		374.7	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		410	-	-	-	-	-
BCC GEOCHEM STD 4		-	0.5	48	221	287	9
Number of Analyses		-	1	1	1	1	1
Mean Value		-	0.53	48.3	220.7	287.0	8.6
Standard Deviation		-	-	-	-	-	-
Accepted Value		-	0.5	42	255	290	9

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CERTIFICAT
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CLIENT: T.S.I. CONSULTANT LTD
REPORT: C96-64029.0 (COMPLETE)

PROJECT: AUCUN
DATE PRINTED: 28-OCT-96 PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	Au50 PPB	Ag PPM	Ni PPM	Zn PPM	Cu PPM	Co PPM
535260		7	<0.5	737	323	249	69
Duplicate		11	<0.5	789	351	281	73

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CERTIFICAT D'ANALYSE

REPORT: C96-64030.0 (COMPLETE) REFERENCE:

CLIENT: T.S.I. CONSULTANT LTD SUBMITTED BY: T.JOLLIFFE
PROJECT: AUCUN DATE PRINTED: 25-OCT-96

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	AU50	Gold	3	1 PPB	FIRE ASSAY	FIRE ASSAY-DCP
2	Pt	Platinum	3	5 PPB	FIRE ASSAY	FIRE ASSAY-DCP
3	Pd	Palladium	3	1 PPB	FIRE ASSAY	FIRE ASSAY-DCP
4	Ag	Silver	3	0.5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
5	Ni	Nickel	3	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
6	Cu	Copper	3	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
7	Co	Cobalt	3	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
8	Cr	Chrome	3	2 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	3	-150	3	CRUSH/SPLIT & PULV.	3

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PROJECT: AUCUN
DATE PRINTED: 25-OCT-96 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	AU50 PPB	Pt PPB	Pd PPB	Ag PPM	Ni PPM	Cu PPM	Co PPM	Cr PPM
535269		4	<5	2	<0.5	1753	953	126	351
535270		4	<5	2	<0.5	1784	981	118	369
535271		21	<5	13	1.5	9839	10471	648	348

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CLIENT: T.S.I. CONSULTANT LTD — PROJECT: AUCUN
REPORT: C96-64030.0 (COMPLETE) — DATE PRINTED: 25-OCT-96 — PAGE 2

STANDARD NAME	ELEMENT UNITS	AU50 PPB	Pt PPB	Pd PPB	Ag PPM	Ni PPM	Cu PPM	Co PPM	Cr PPM
UMT-1 CANMET STD		43	109	92	-	-	-	-	-
Number of Analyses		1	1	1	-	-	-	-	-
Mean Value		42.8	109.3	92.4	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		48	128	104	-	-	-	-	-
BCC GEOCHEM STD 4		-	-	-	1.0	70	327	11	129
Number of Analyses		-	-	-	1	1	1	1	1
Mean Value		-	-	-	1.00	69.6	327.0	11.5	128.6
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	0.5	42	290	9	136
ANALYTICAL BLANK		-	-	-	<0.5	5	11	<1	3
Number of Analyses		-	-	-	1	1	1	1	1
Mean Value		-	-	-	0.25	5.0	11.0	0.5	2.7
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		1	5	5	0.2	1	1	1	1

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DATE PRINTED: 25-OCT-96

SAMPLE NUMBER	ELEMENT UNITS	AU50 PPB	Pt PPB	Pd PPB	Ag PPM	Ni PPM	Cu PPM	Co PPM	Cr PPM
535269		4	<5	2	<0.5	1753	953	126	351
Duplicate		4	<5	2	0.6	1765	955	127	373

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REPORT: C96-64031.0 (COMPLETE) REFERENCE:

CLIENT: T.S.I. CONSULTANT LTD SUBMITTED BY: T.JOLLIFFE
PROJECT: AUCUN DATE PRINTED: 28-OCT-96

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	AU50	Gold	17	1 PPB	FIRE ASSAY	FIRE ASSAY-DCP
2	Pt	Platinum	17	5 PPB	FIRE ASSAY	FIRE ASSAY-DCP
3	Pd	Palladium	17	1 PPB	FIRE ASSAY	FIRE ASSAY-DCP
4	Cu	Copper	17	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
5	Ni	Nickel	17	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
6	Ti	Titanium	17	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
7	Co	Cobalt	17	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
8	Cr	Chrome	17	2 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ROCK	17	-150	17	CRUSH/SPLIT & PULV.	17

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SAMPLE NUMBER	ELEMENT UNITS	AU50 PPB	Pt PPB	Pd PPB	Cu PPM	Ni PPM	Ti PCT	Co PPM	Cr PPM
535272		2	<5	<1	3471	334	3.73	134	75
535273		2	<5	<1	1852	178	1.88	84	176
535274		4	<5	<1	4498	312	2.11	128	117
535275		5	<5	<1	879	111	1.26	47	184
535276		3	<5	<1	2399	238	2.18	98	130
535277		16	6	14	2315	138	1.35	37	295
535278		<1	<5	<1	940	80	1.29	76	157
535279		<1	<5	<1	23	118	1.02	51	253
535280		12	<5	<1	15	588	0.97	182	1541
535281		1	<5	1	564	133	1.71	129	57
535282		1	<5	<1	555	142	2.37	100	151
535283		1	<5	<1	481	81	2.57	67	69
535284		<1	<5	<1	266	85	1.97	67	54
535285		2	<5	<1	171	112	1.22	50	162
535286		2	<5	<1	264	56	2.05	30	78
535287		1	<5	3	412	135	1.57	56	154
535288		<1	<5	<1	277	27	1.01	38	84

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STANDARD NAME	ELEMENT UNITS	AU50 PPB	Pt PPB	Pd PPB	Cu PPM	Ni PPM	Ti PCT	Co PPM	Cr PPM
ANALYTICAL BLANK		<1	<5	<1	2	<1	<0.01	<1	<2
Number of Analyses		1	1	1	1	1	1	1	1
Mean Value		0.5	2.5	0.5	2.4	0.5	0.005	0.5	1.0
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		1	5	5	1	1	<0.01	1	1
BCC GEOCHEM STD 6		-	-	-	155	140	0.10	33	276
Number of Analyses		-	-	-	1	1	1	1	1
Mean Value		-	-	-	155.3	140.2	0.104	33.3	276.0
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	140	155	0.18	38	300

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CLIENT: T.S.I. CONSULTANT LTD
REPORT: C96-64031.0 (COMPLETE)

PROJECT: AUCUN
DATE PRINTED: 28-OCT-96

SAMPLE NUMBER	ELEMENT UNITS	AU50 PPB	Pt PPB	Pd PPB	Cu PPM	Ni PPM	Ti PCT	Co PPM	Cr PPM
535273		2	<5	<1	1852	178	1.88	84	176
Duplicate		<1	<5	<1	1839	181	2.47	80	193

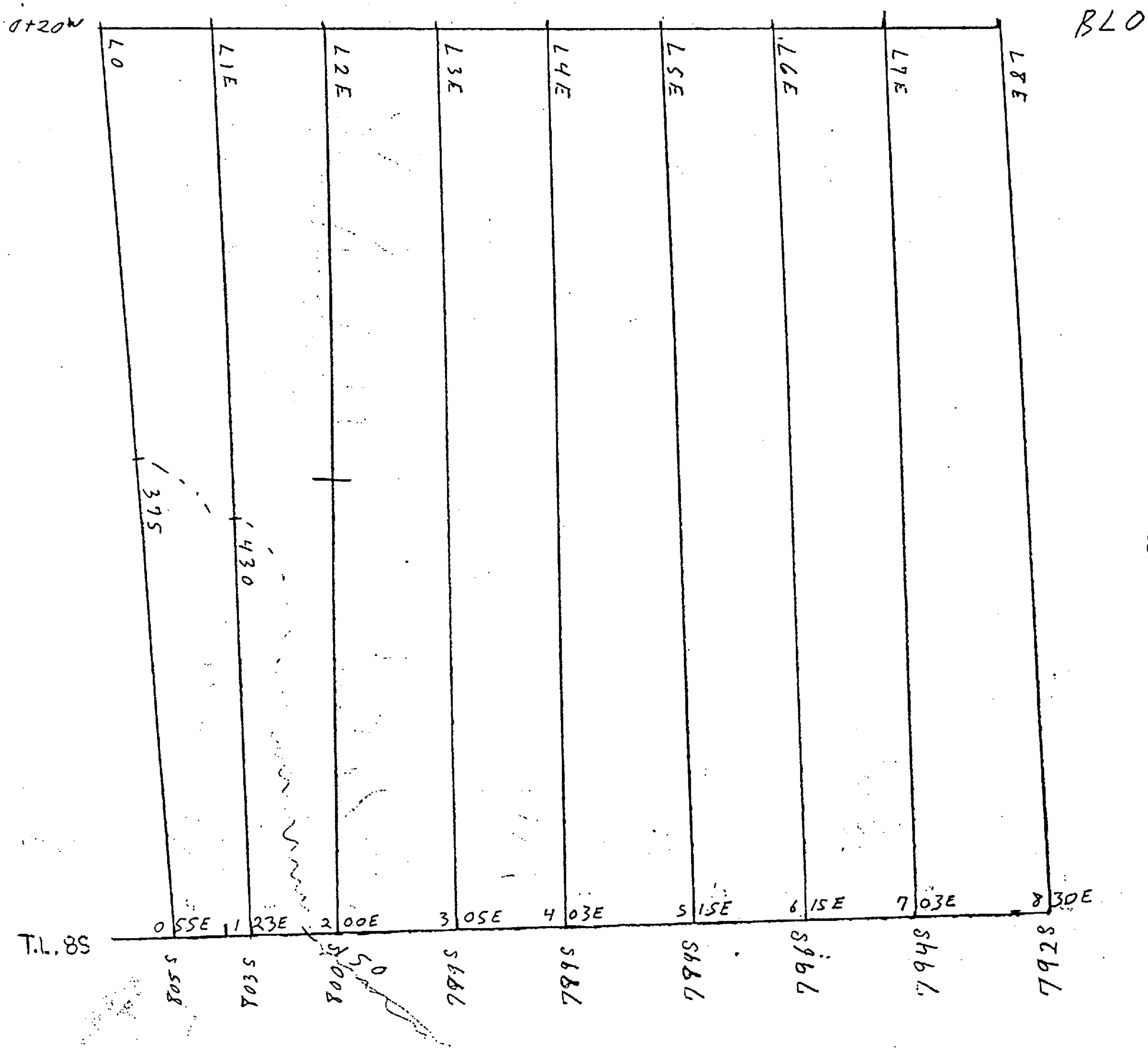
GREENSHIELD RESOURCES INC.
&
XEMAC RESOURCES INC.

LINE CUTTING SKETCHES

MANIC AREA

JULY & AUGUST 1996

M-1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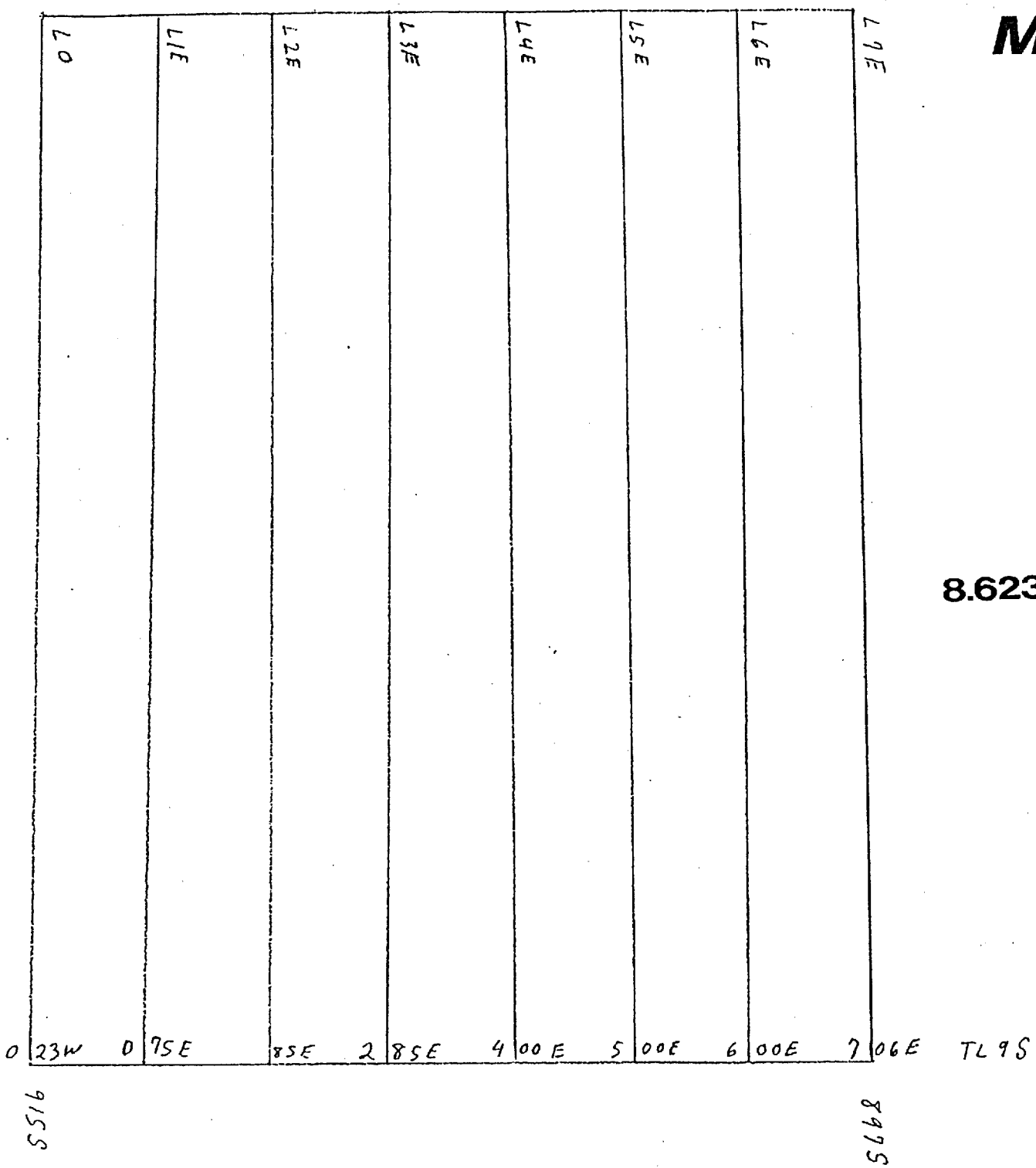
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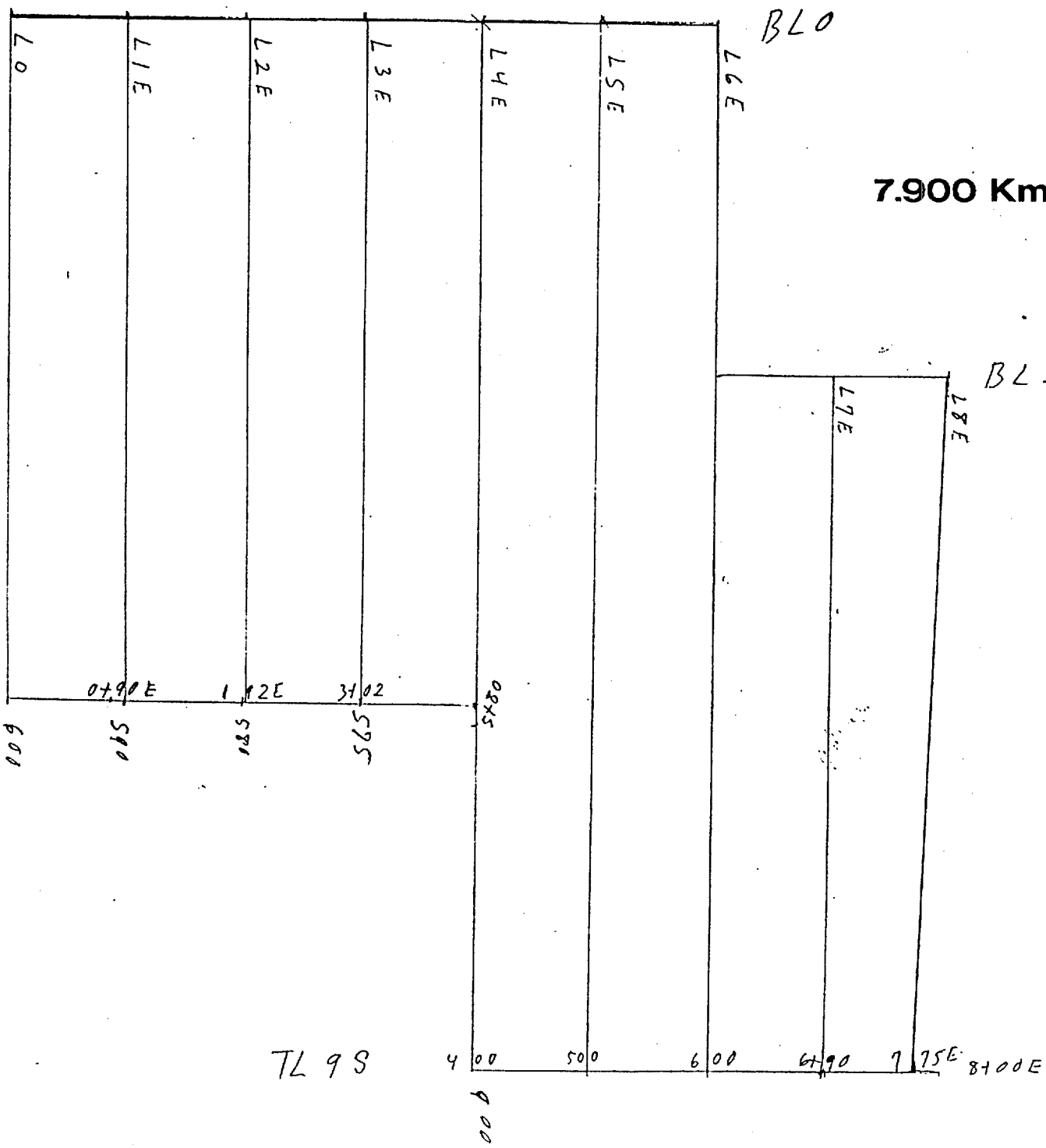
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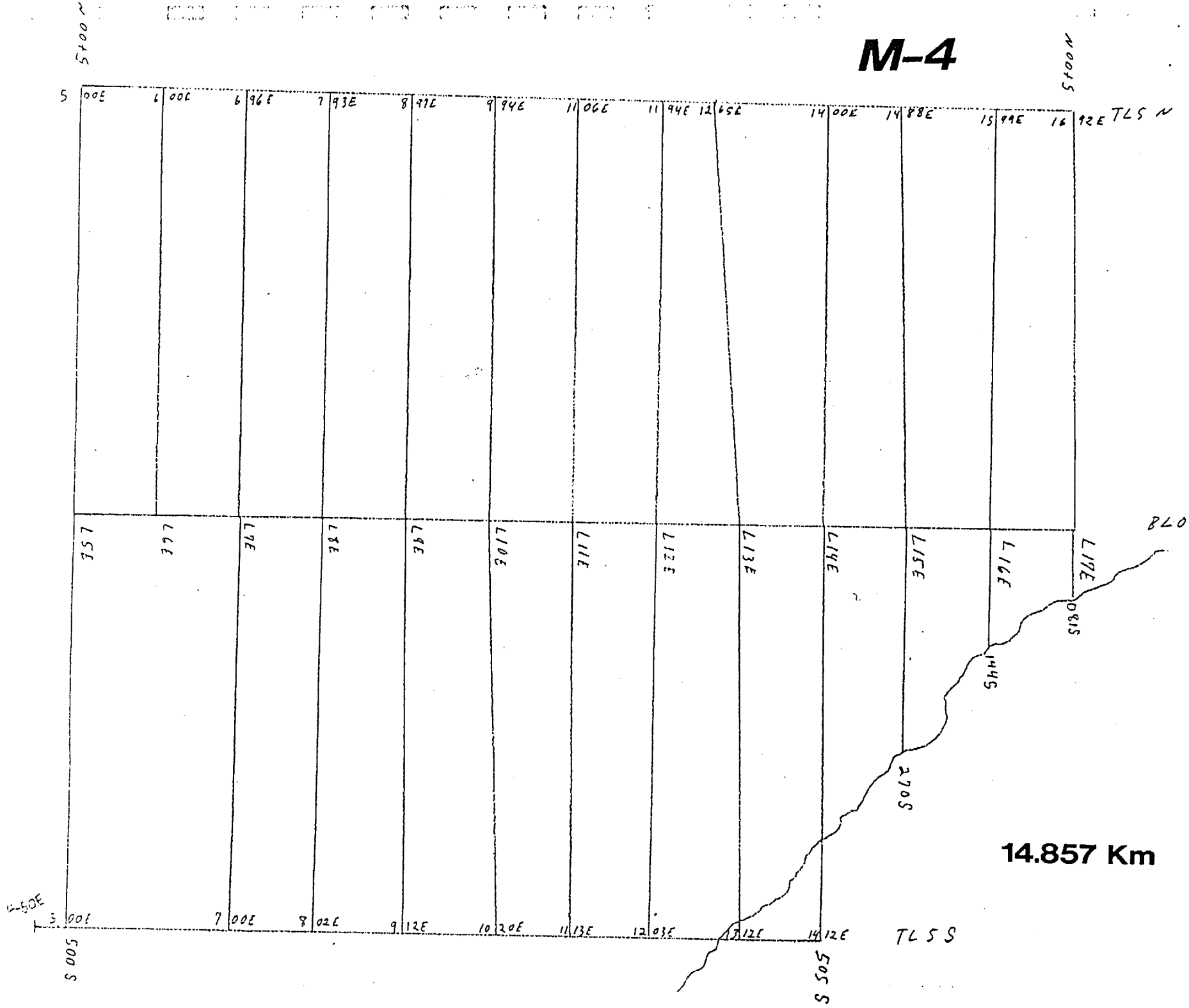
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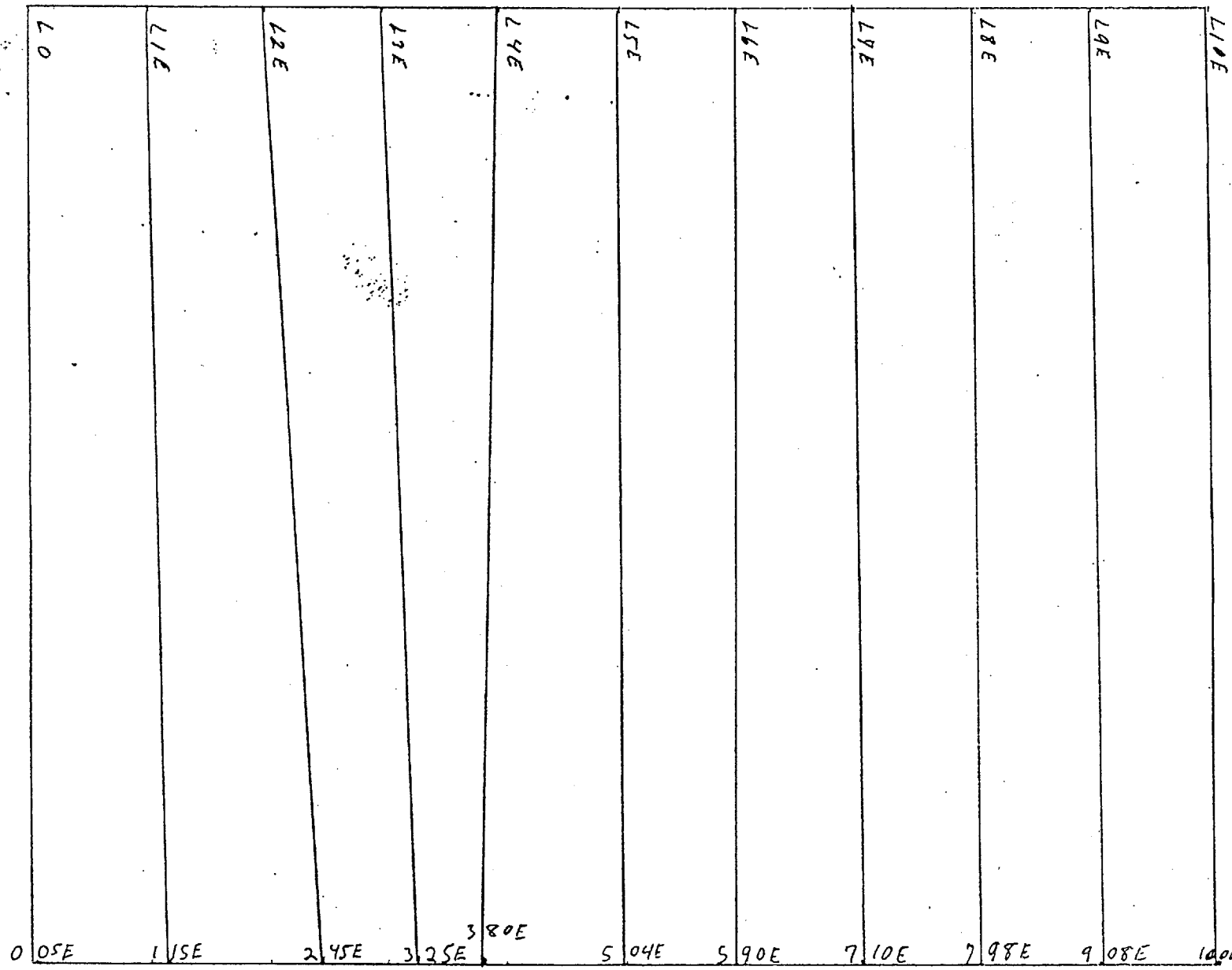
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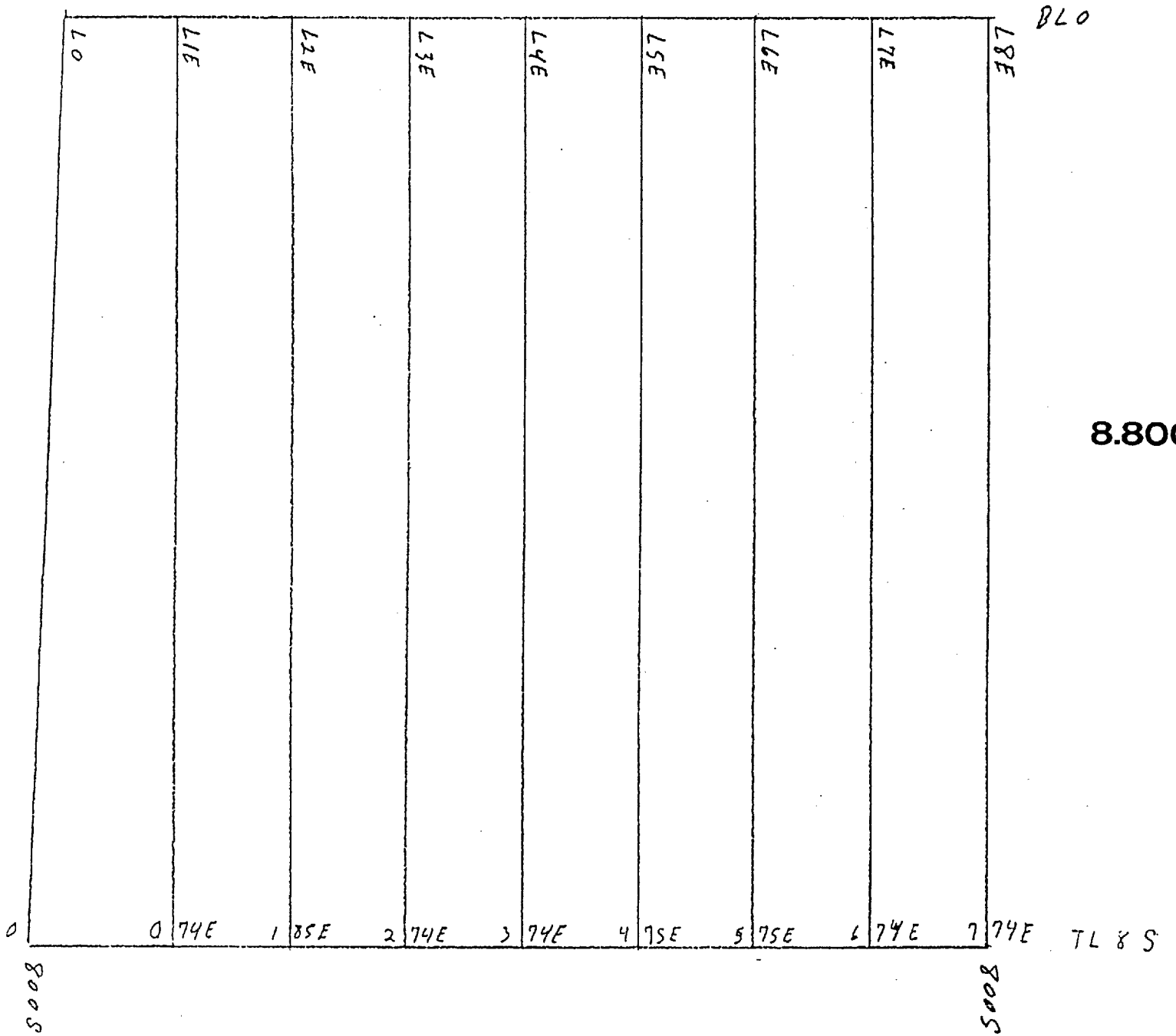

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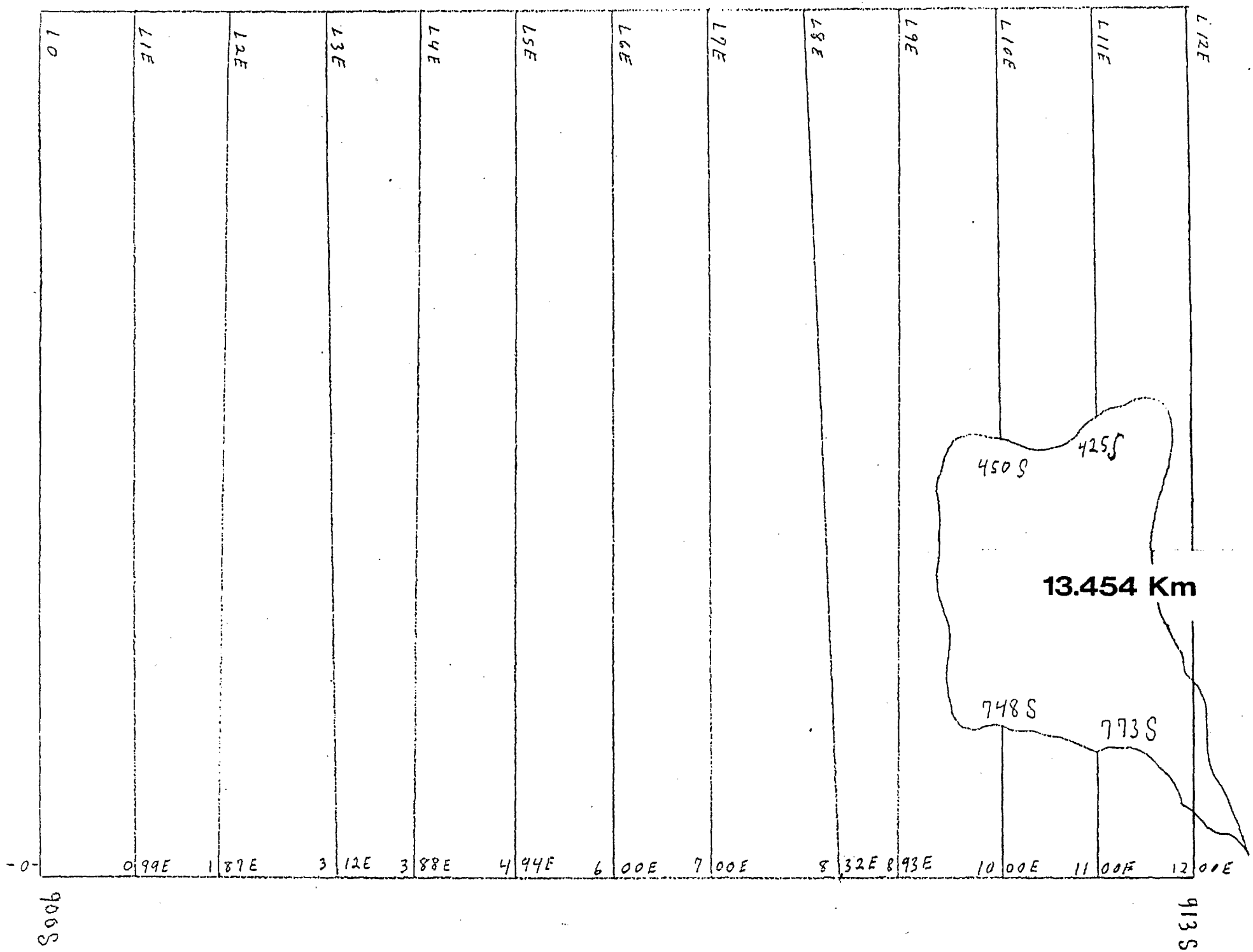
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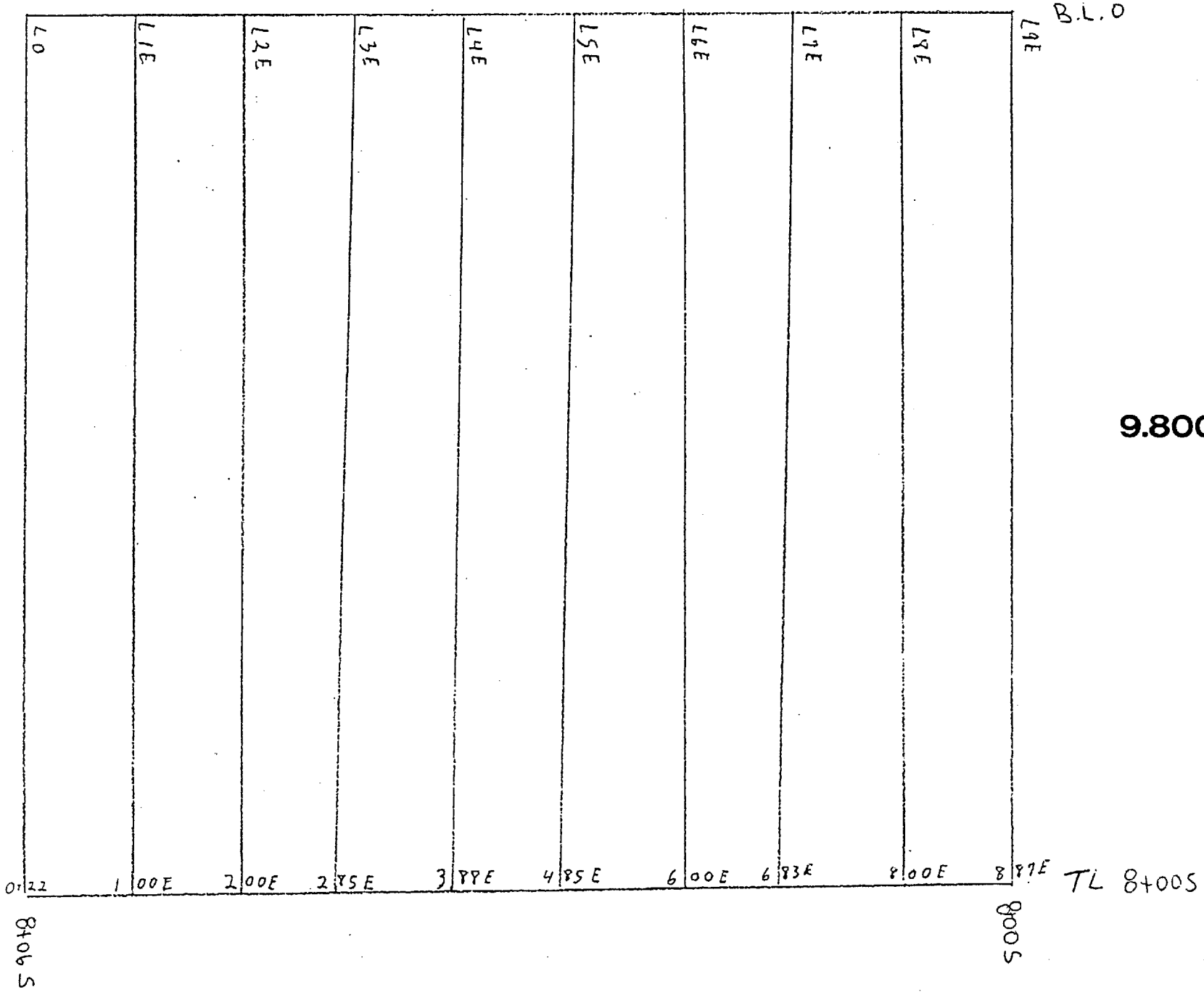
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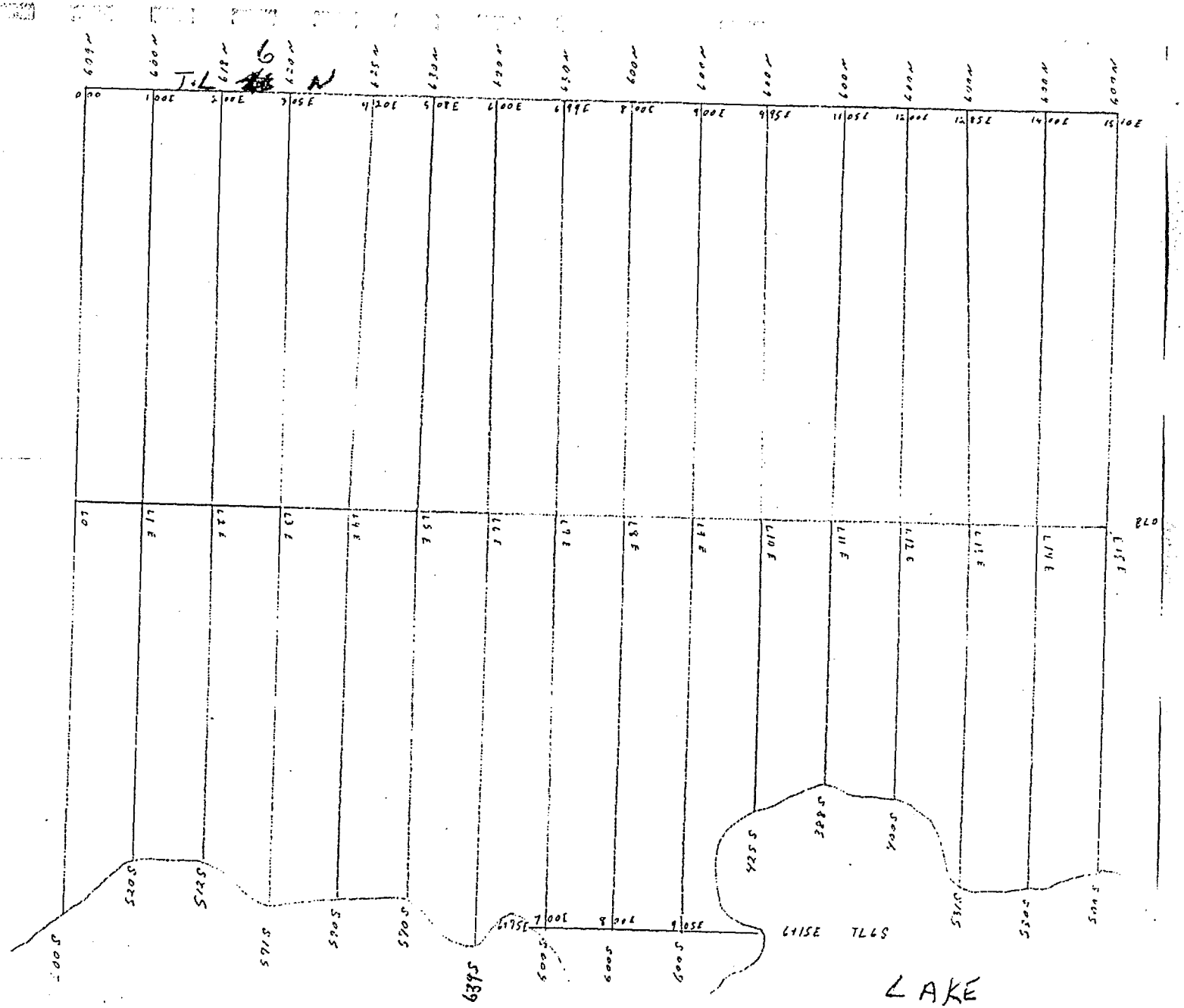
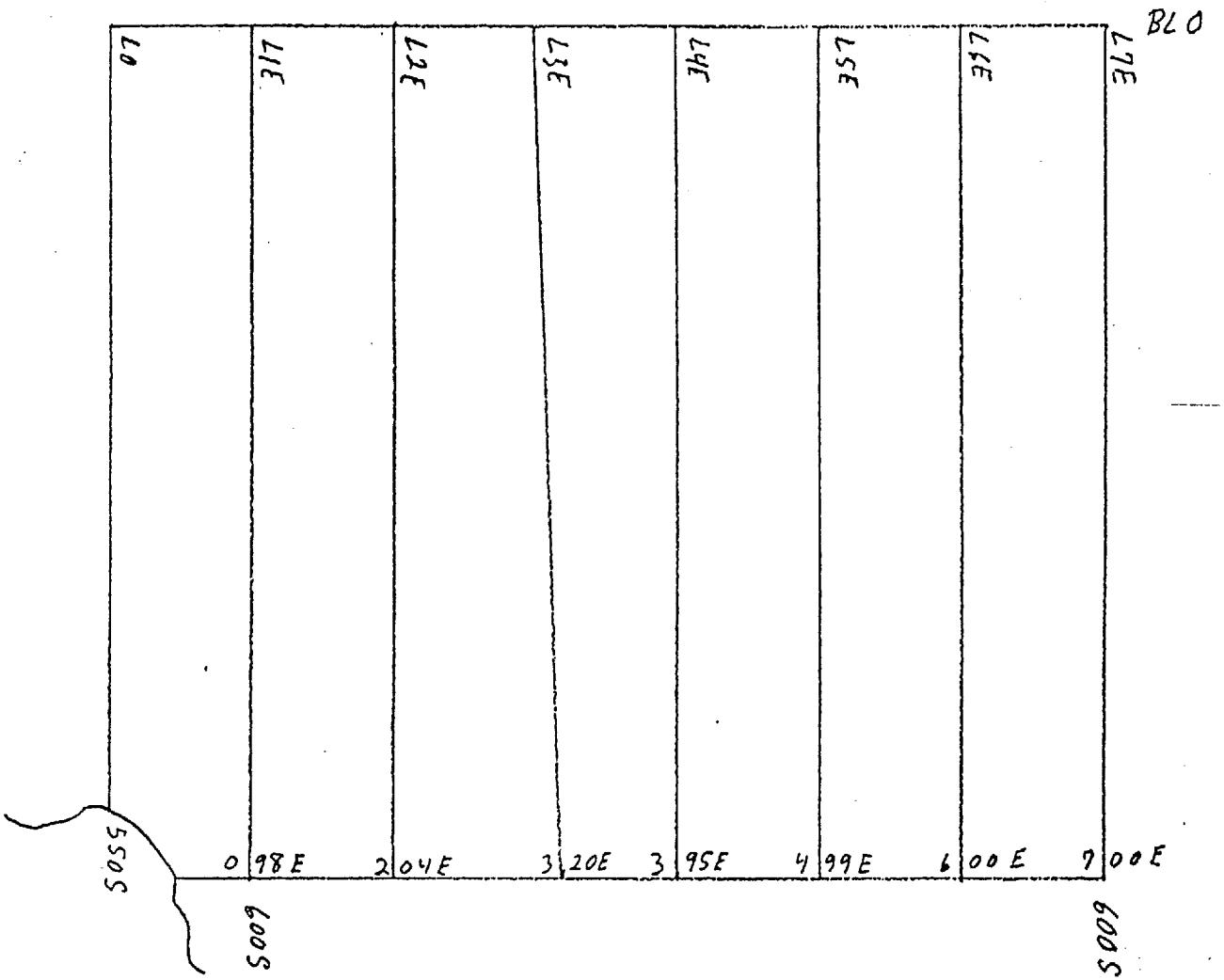
2 85E
3 88E
4 85E
6 00E
6 83E
8 00E
8 87E

M-10

21.658 Km



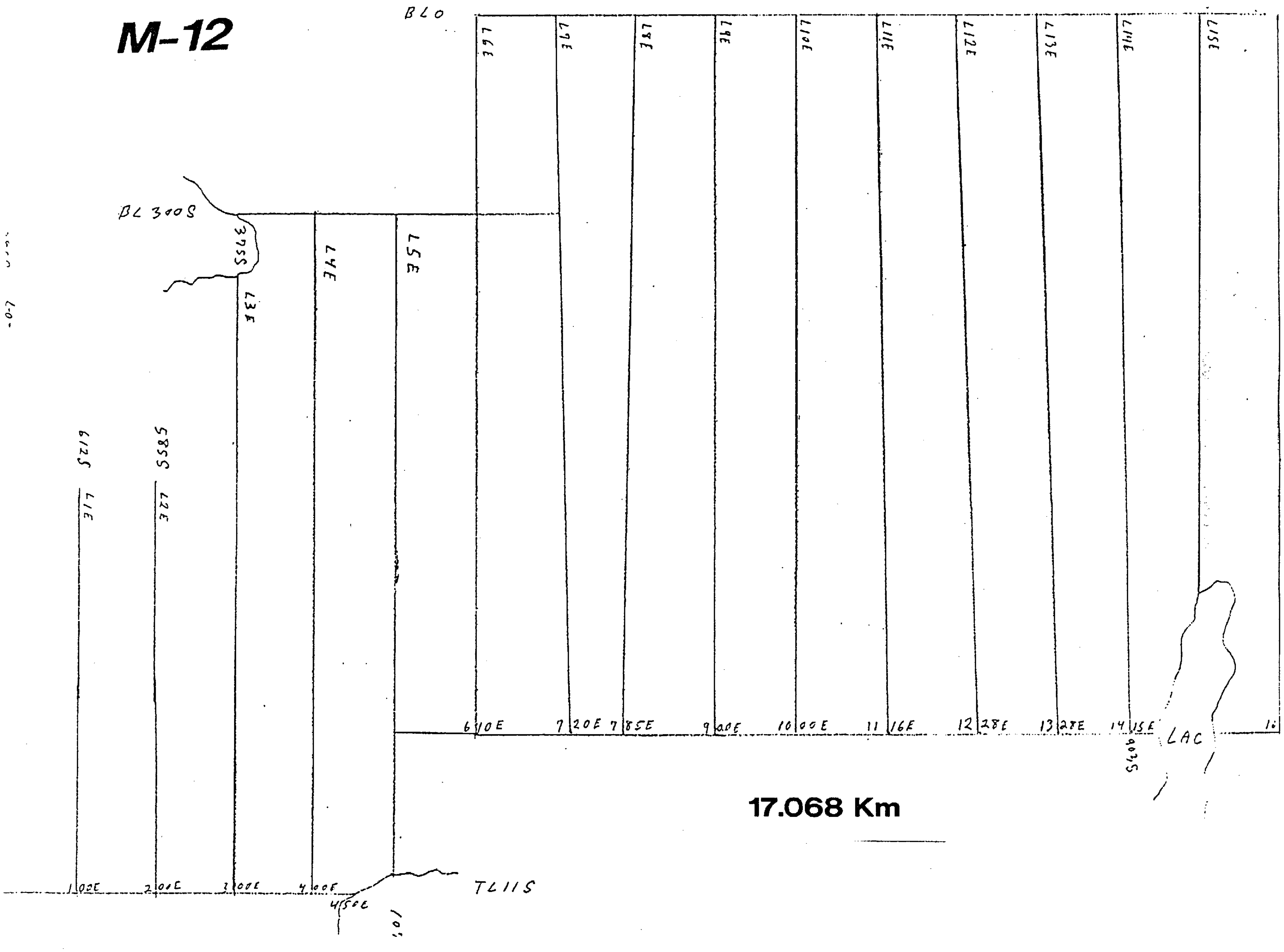
M-11



6.105 Km

TL 6S

M-12

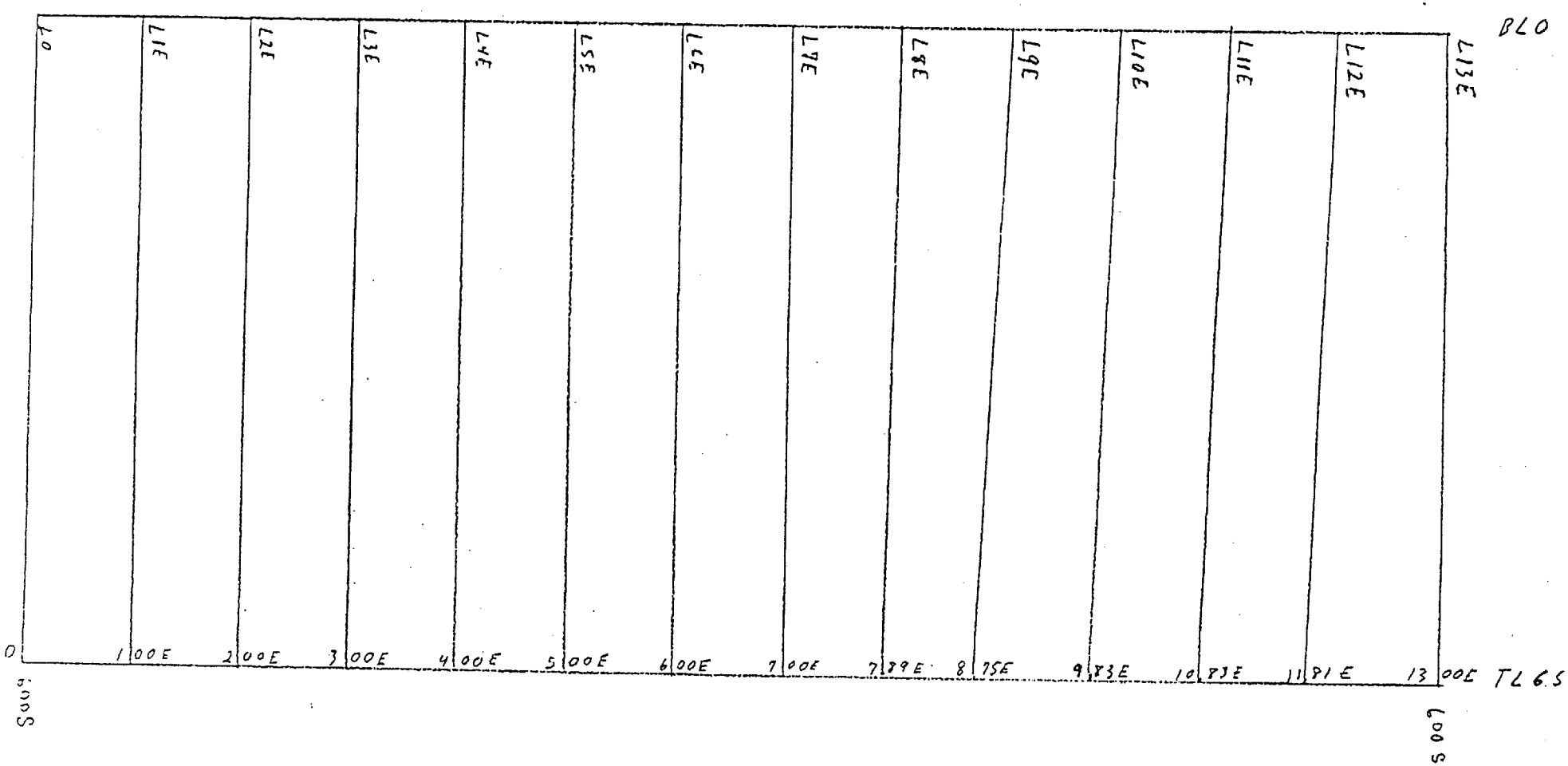


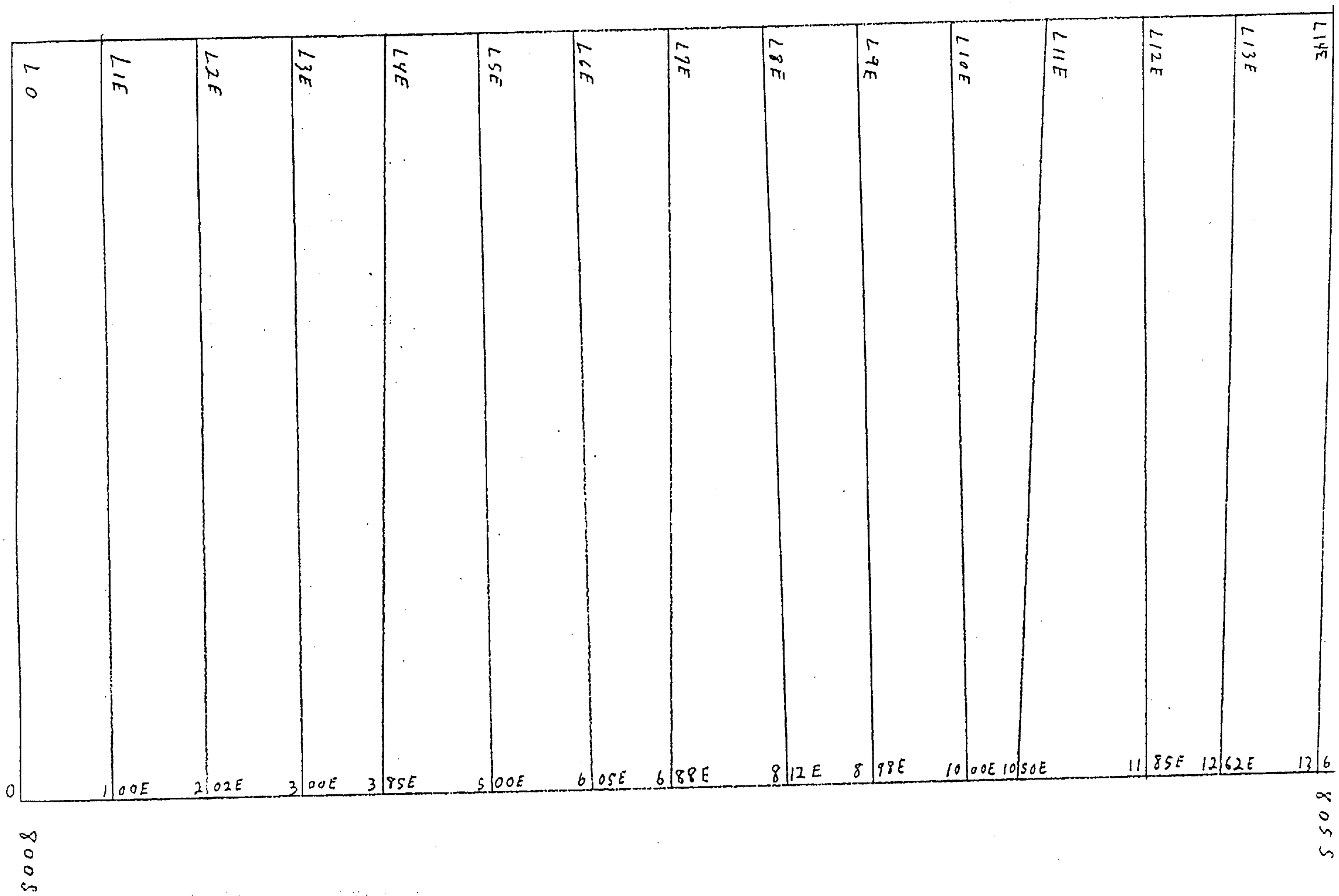
BLO
BL 300S
TL 11S
LAC
L3E
L4E
L5E
375S
612S
585S
L1E
L2E
6+10E
7+20E
7+85E
9+00E
10+00E
11+16E
12+28E
13+28E
14+15E
4+50E
1+00E
2+00E
3+00E
4+00E

17.068 Km

M-13

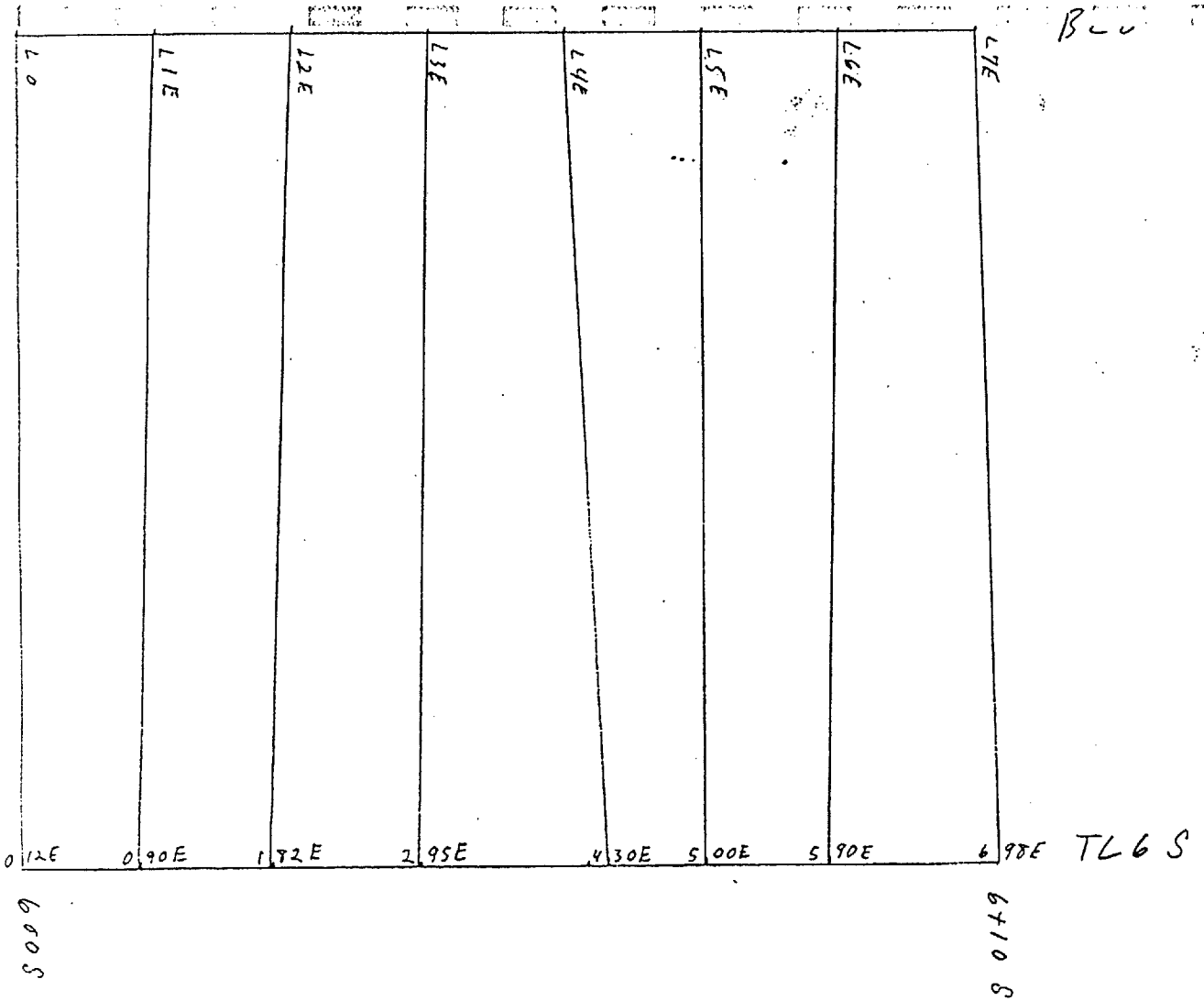
11.000 Km


BLO
0
1 00E
2 00E
3 00E
4 00E
5 00E
6 00E
7 00E
7 89E
8 75E
9 83E
10 83E
11 91E
13 00E
TL 6.5
S 00?


0
1 00E
2 02E
3 00E
3 85E
5 00E
6 05E
6 88E
8 12E
8 98E
10 00E
10 50E
11 85E
12 62E
13 6

M-14

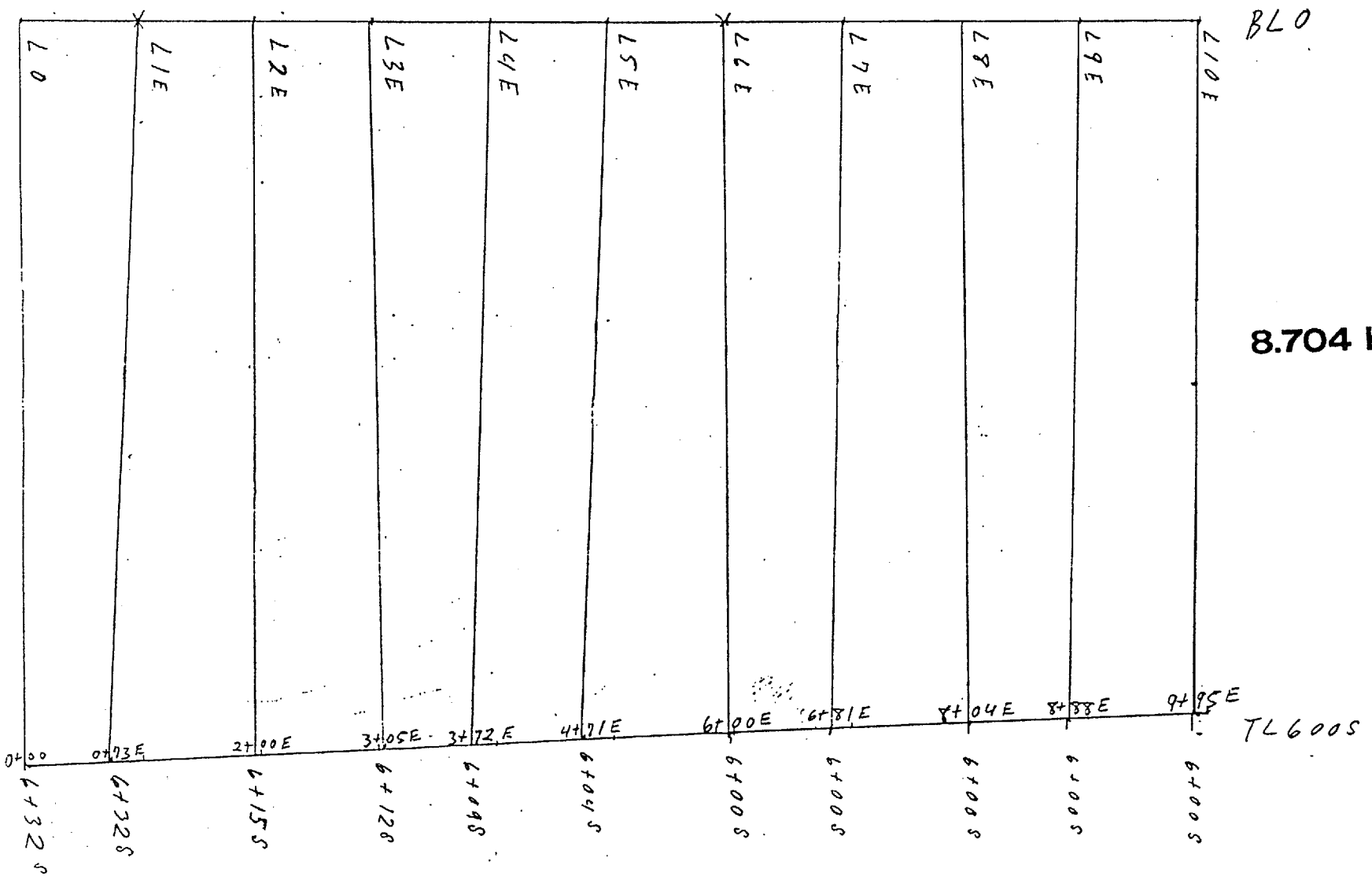
14.800 Km


0 7
3 1 7
3 2 7
3 3 7
3 4 7
3 5 7
3 6 7
3 7 7
0 12E
0 90E
1 82E
2 95E
4 30E
5 00E
5 90E
6 98E
TL 6 S
S 009
S 0149

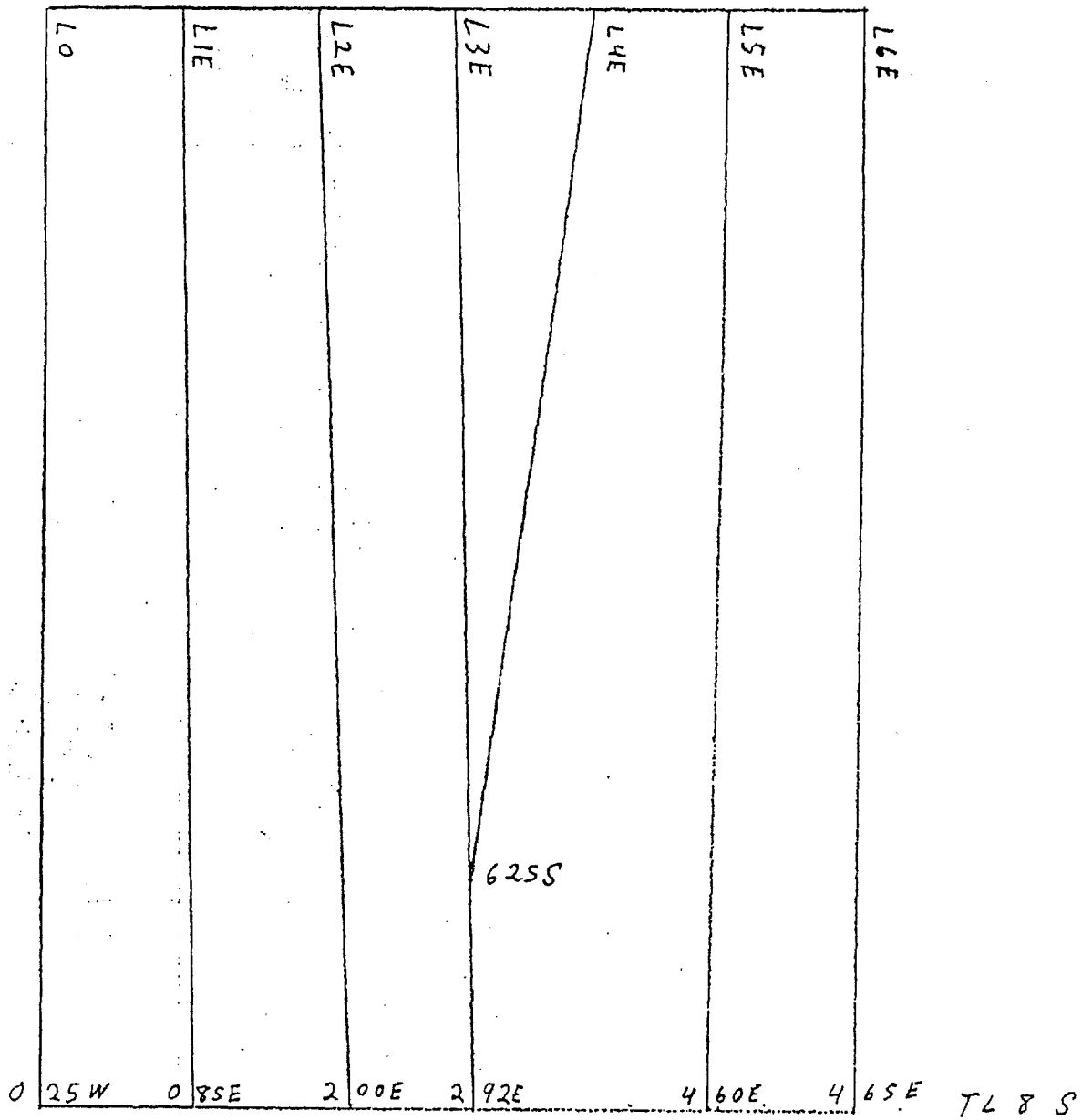
M-15

6.210 Km

M-16


L0
L1E
L2E
L3E
L4E
L5E
L6E
L7E
L8E
L9E
L10E
BLO
8.704 Km
0+00
0+93E
2+00E
3+05E
3+72E
4+71E
6+00E
6+81E
7+04E
8+88E
9+95E
TL600S
6+325
6+155
6+120
6+045
5+004
5+004
5+004
5+004
5+004

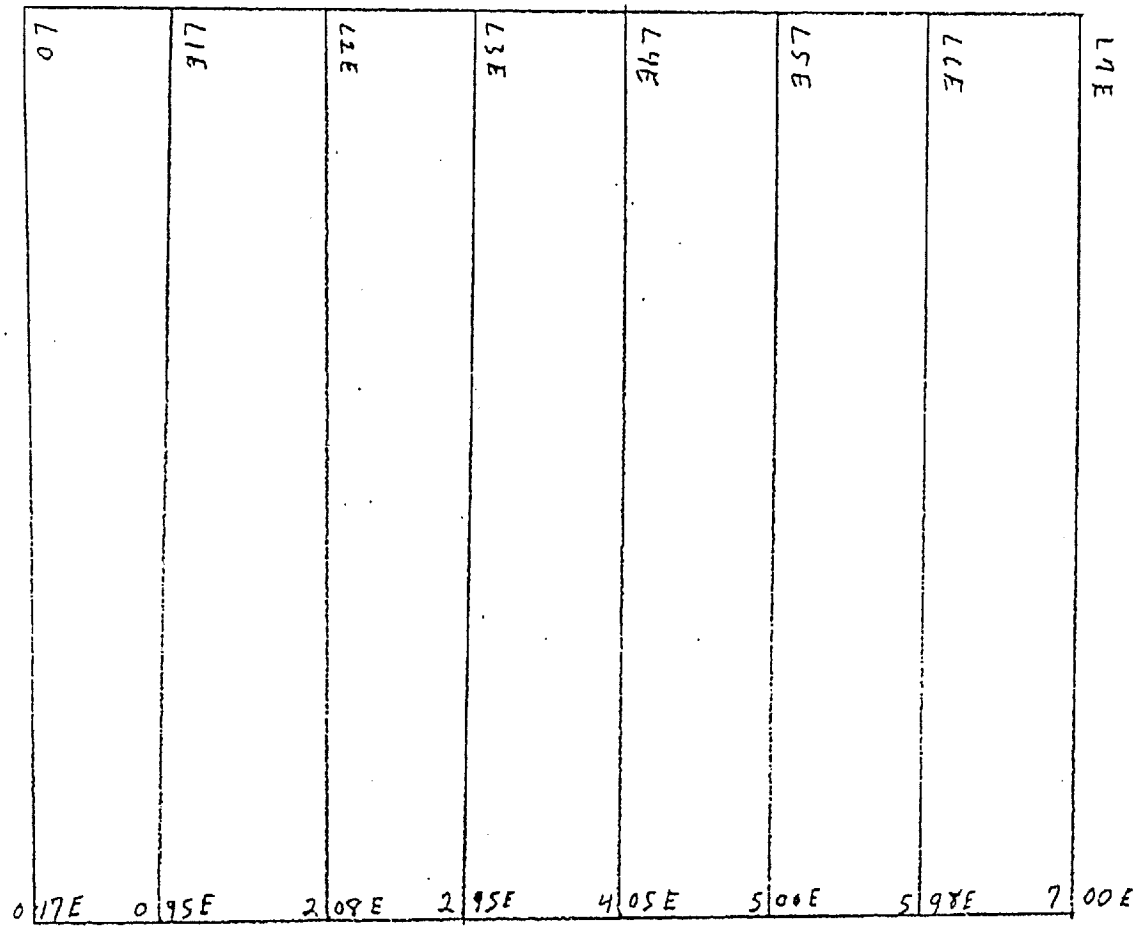
M-17



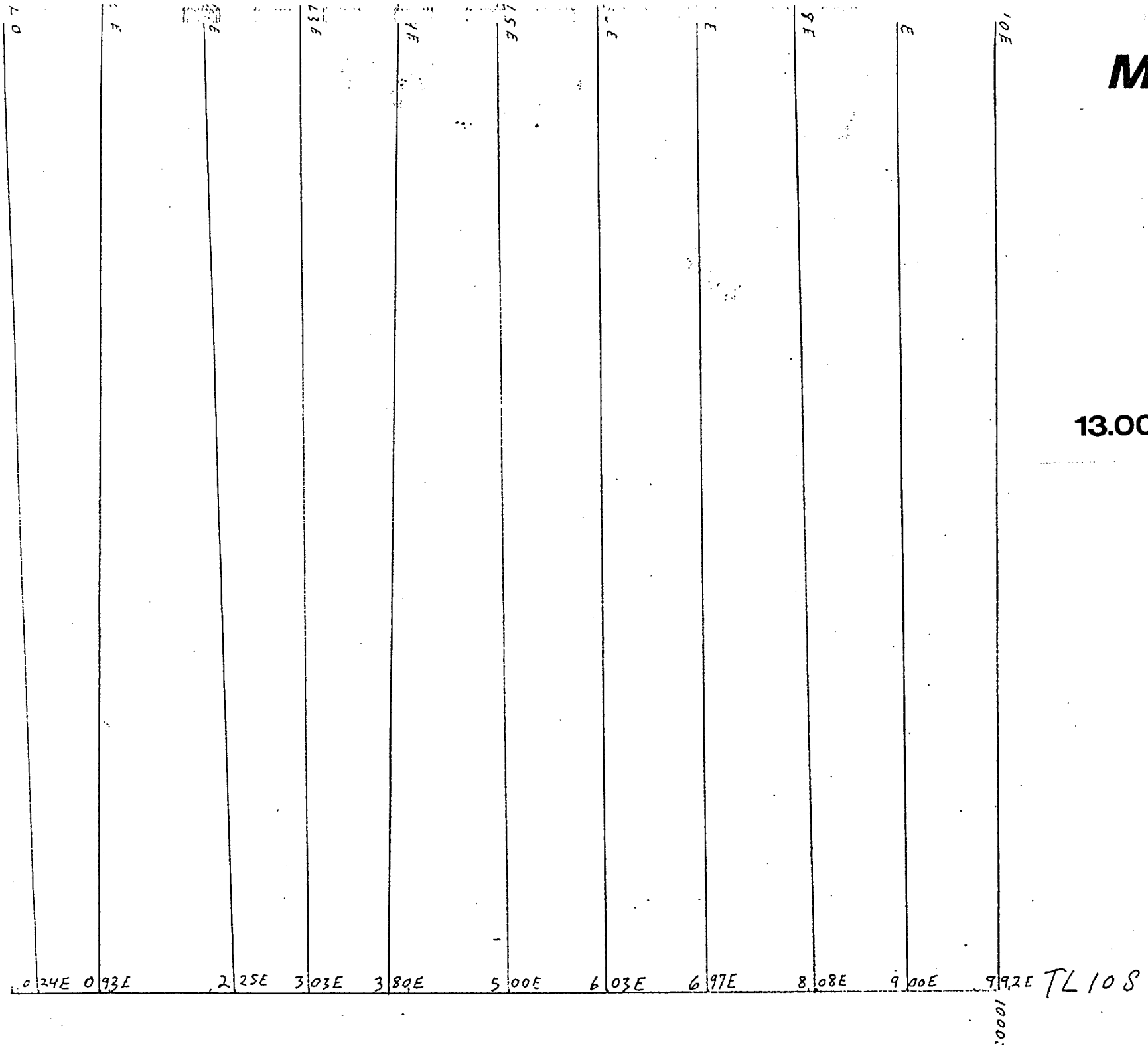
6.000 Km

L4E 6+40m
pas changé
(N/C)

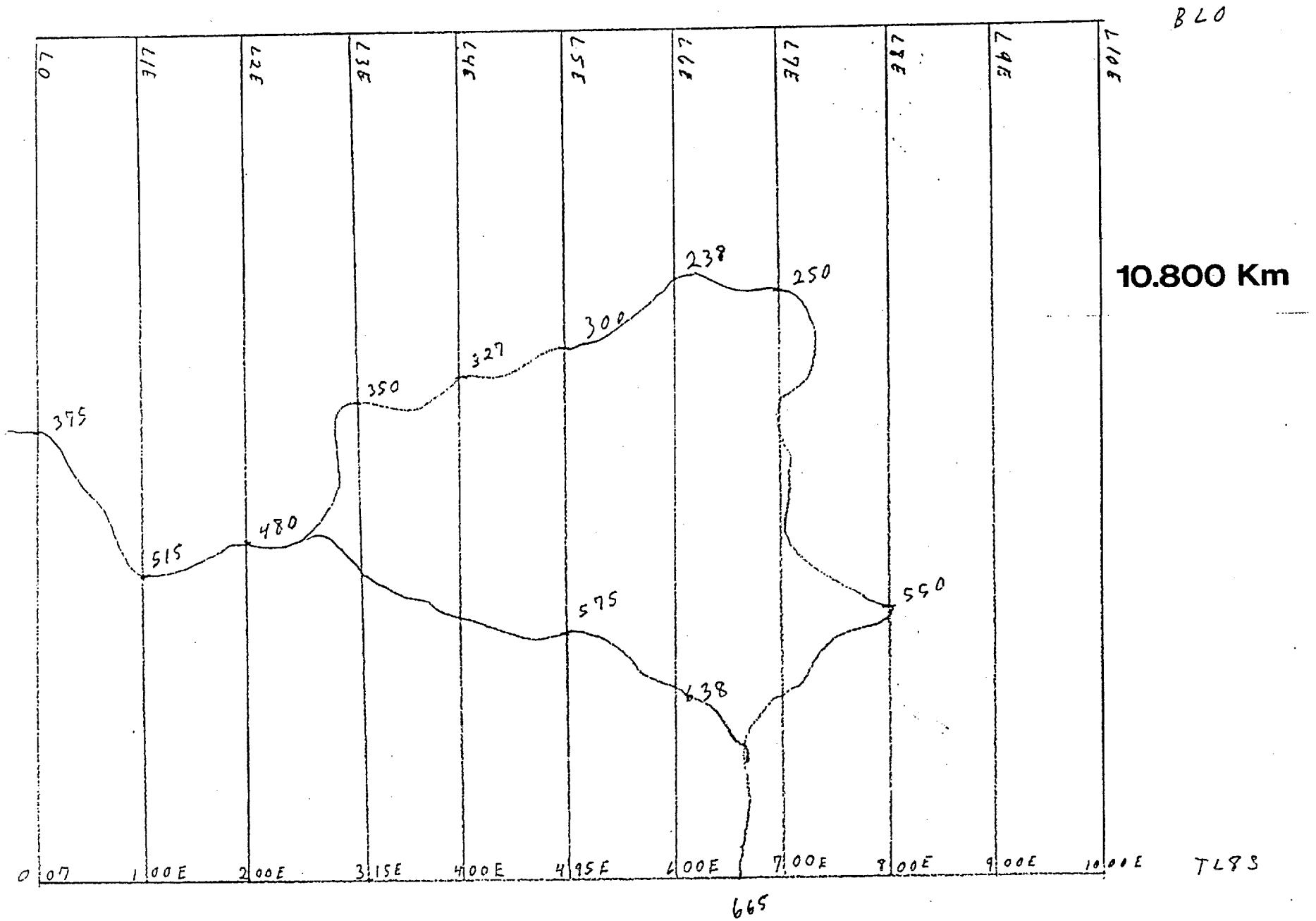
M-18


07
317
327
337
347
357
377
LAE
0 17E
0 95E
2 09E
2 95E
4 05E
5 01E
5 98E
7 00E

6.200 Km


M-19
13.000 Km
0 24E 0 93E 2 25E 3 03E 3 89E 5 00E 6 03E 6 97E 8 08E 9 00E 9 92E
TL 10 S

M-20


BLO
10.800 Km
07
317
327
337
347
357
367
377
387
397
3017
375
515
480
350
327
300
238
250
550
575
638
665
0 07
1 00E
2 00E
3 15E
4 00E
4 95E
6 00E
7 00E
8 00E
9 00E
10 00E
TLBS

TÉLÉPHONE: (819) 797-0853
1-800-567-6053
FAX: (819) 797-1848
1-800-661-1848

SERVICES EXPLORATION SERVICES Enrg. Reg'd

765, BOUL. QUÉBEC
C.P. 428
ROUYN-NORANDA, P.Q.
J9X 5C4

Levés géophysiques	Geophysical Surveys
Levés géologiques	Geological Surveys
Jalonnement de claims	Claim staking
Dessin et reproduction	Drafting and Reproduction
Coupage de lignes	Line Cutting
Programmes d'exploration	Exploration Programmes
Ventes d'articles d'exploration minière	Sales of mining exploration articles

En compte avec:
In account with:

XEMAC RESOURCES INC.
450 3e Ave.
Apt. 201
Vald'Or,QC
J9P 1S2

FACTURE / INVOICE 8338

DATE: August 12, 1996

NUMÉRO DU CLIENT / CUSTOMER NO.

N° COMMANDE / PURCHASE ORDER NO.

Projet: / Project: Manic

DESCRIPTION		PRIX UNITAIRE / UNIT PRICE	TOTAL
Line Cutting:	102.330 Km	$325.00/Km	$ 33,257.25
	Mob-demob.		$ 3,000.00
			$ 36,257.25
	less previous invoice # 8313	-	$ 12,500.00
			$ 23,757.25
	GST 7%		$ 1,663.00
	TVQ 6.5%		$ 1,652.32
	Thank-you!		
		TOTAL	$ 27,072.57

T.P.S./G.S.T.: R105801906
T.V.P./P.S.T.: Q-10-0169-9225 TV 0001

LF-2132

Code: 5-I-96

TERME: NET 30 JOURS
TERMS: NET 30 DAYS

COPIE DU CLIENT

SERVICES EXPLORATION SERVICES Enrg. Reg'd

765, BOUL. QUÉBEC
C.P. 428
ROUYN-NORANDA, P.Q.
J9X 5C4

TÉLÉPHONE: (819) 797-0853
1-800-567-6053

FAX: (819) 797-1848
1-800-661-1848

Levés géophysiques	Geophysical Surveys
Levés géologiques	Geological Surveys
Jalonnement de claims	Claim staking
Dessin et reproduction	Drafting and Reproduction
Coupage de lignes	Line Cutting
Programmes d'exploration	Exploration Programmes
Ventes d'articles d'exploration minière	Sales of mining exploration articles

En compte avec:
In account with: GREENSHIELD RESOURCES INC.
Suite 400
2 Toronto St.
Toronto, Ont.
M5C 2B6

FACTURE / INVOICE 8339

DATE	NUMÉRO DU CLIENT / CUSTOMER NO.
August 12,1996	
Nº COMMANDE / PURCHASE ORDER NO.	

Projet: / Project: Manic

DESCRIPTION	PRIX UNITAIRE / UNIT PRICE	TOTAL
Line Cutting: 102.330 Km	$325.00/Km	$ 33,257.25
mob-demob		$ 3,000.00
less previous invoice #8313	-	$ 12,500.00
		$ 23,757.25
GST 7%		$ 1,663.00
TVQ 6.5%		$ 1,652.32
Thank-you!		
	TOTAL	$ 27,072.57

T.P.S./G.S.T.: R105801906
T.V.P./P.S.T.: Q-10-0169-9225 TV 0001

LF-2132

Code: 5-I-96

TERME: NET 30 JOURS
TERMS: NET 30 DAYS

COPIE DU CLIENT

GREENSHIELD RESOURCES
&
XEMAC RESOURCES

MANIC AREA PROJECT

GRID SKETCHES

Grid M-6:

Base Line 800m | Tie Line 800m | Cross Lines 9 @ 800m
Total Line Cutting 8.8 Km | Total Survey 7.2 Km

Grid M-7:

Base Line 1200m | Tie Line 1200m | Cross Lines 13 @ 900m
Total Line Cutting 14.1 Km | Total Survey 11.7 Km

Grid M-8:

Base Line 900m | Tie Line 900m | Cross Lines 10 @ 800m
Total Line Cutting 9.8 Km | Total Survey 8 Km

Grid M-9:

cancelled

Grid M-10:

Base Line 1500m | Tie Line #1 1500m, #2 1100m | Cross Lines 16 @ 1200m, - minus lake ± 1700m
Total Line Cutting 21.6 Km | Total Survey 17.5 Km

Grid M-11:

Base Line 700m | Tie Line 700m | Cross Lines 8 @ 600m
Total Line Cutting 6.2 Km | Total Survey 4.8 Km

Grid M-12:

Base Line #1 1000m, #2 350m | Tie Line #1 900m, #2 500m | Cross Lines 6 @ 800m, 11 @ 900m, - minus lake ± 700m
Total Line Cutting 16.75 Km | Total Survey 14.0 Km

Grid M-13:

Base Line 1300m	Tie Line 1300m	Cross Lines 14 @ 600m
Total Line Cutting 11 Km		Total Survey 8.4 Km

Grid M-14:

Base Line 1400m	Tie Line 1400m	Cross Lines 15 @ 800m
Total Line Cutting 14.8 Km		Total Survey 12 Km

Grid M-15:

Base Line 700m	Tie Line 700m	Cross Lines 8 @ 600m
Total Line Cutting 6.2 Km		Total Survey 4.8 Km

Grid M-16:

Base Line 1000m	Tie Line 1000m	Cross Lines 11 @ 600m
Total Line Cutting 8.6 Km		Total Survey 6.6 Km

Grid M-17:

Base Line 600m	Tie Line 600m	Cross Lines 7 @ 800m
Total Line Cutting 6.8 Km		Total Survey 5.6 Km

Grid M-18:

Base Line 700m	Tie Line 700m	Cross Lines 8 @ 600m
Total Line Cutting 6.2 Km		Total Survey 4.8 Km

Grid M-19:

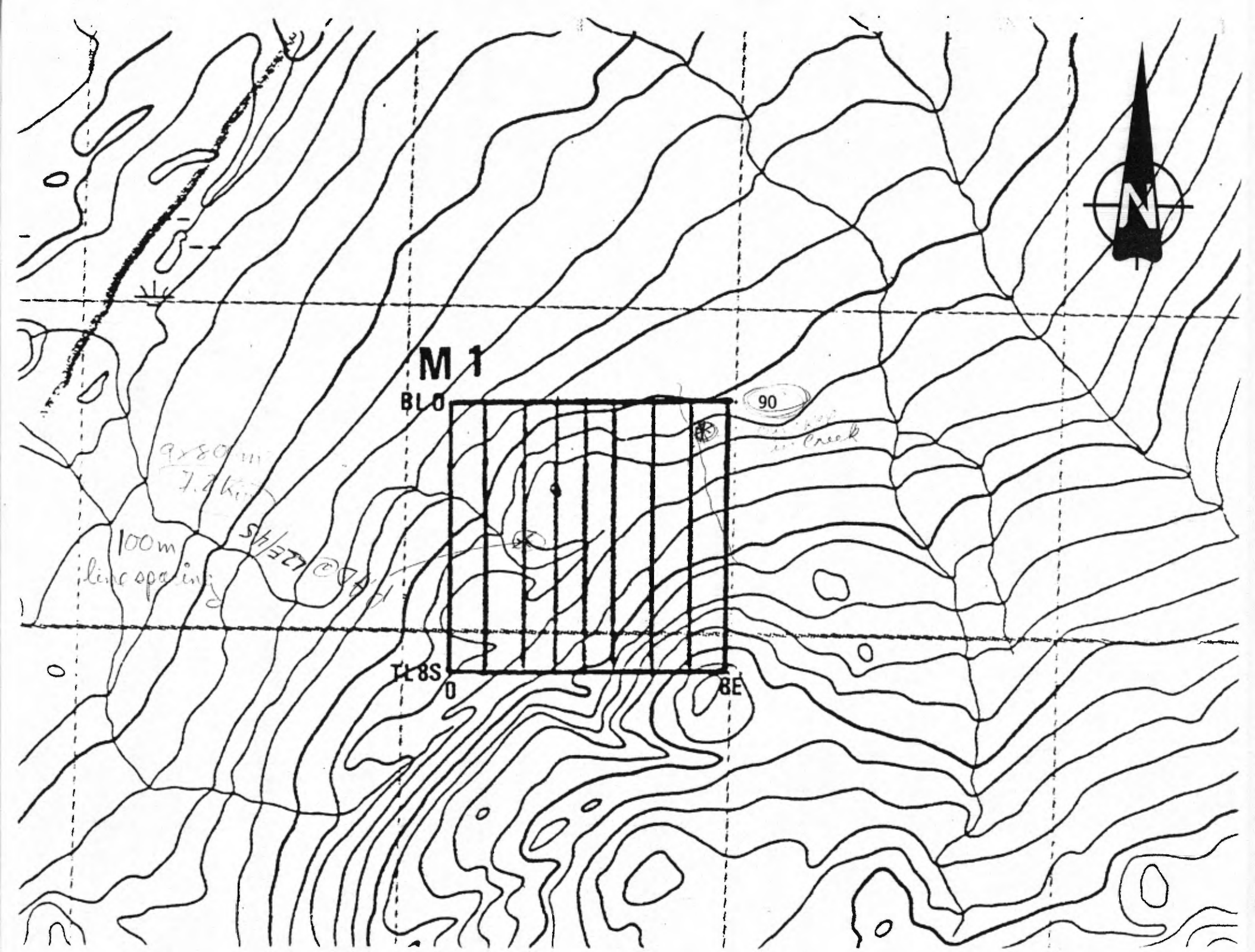
Base Line 1000m	Tie Line 1000m	Cross Lines 11 @ 1000m
Total Line Cutting 13 Km		Total Survey 11 Km

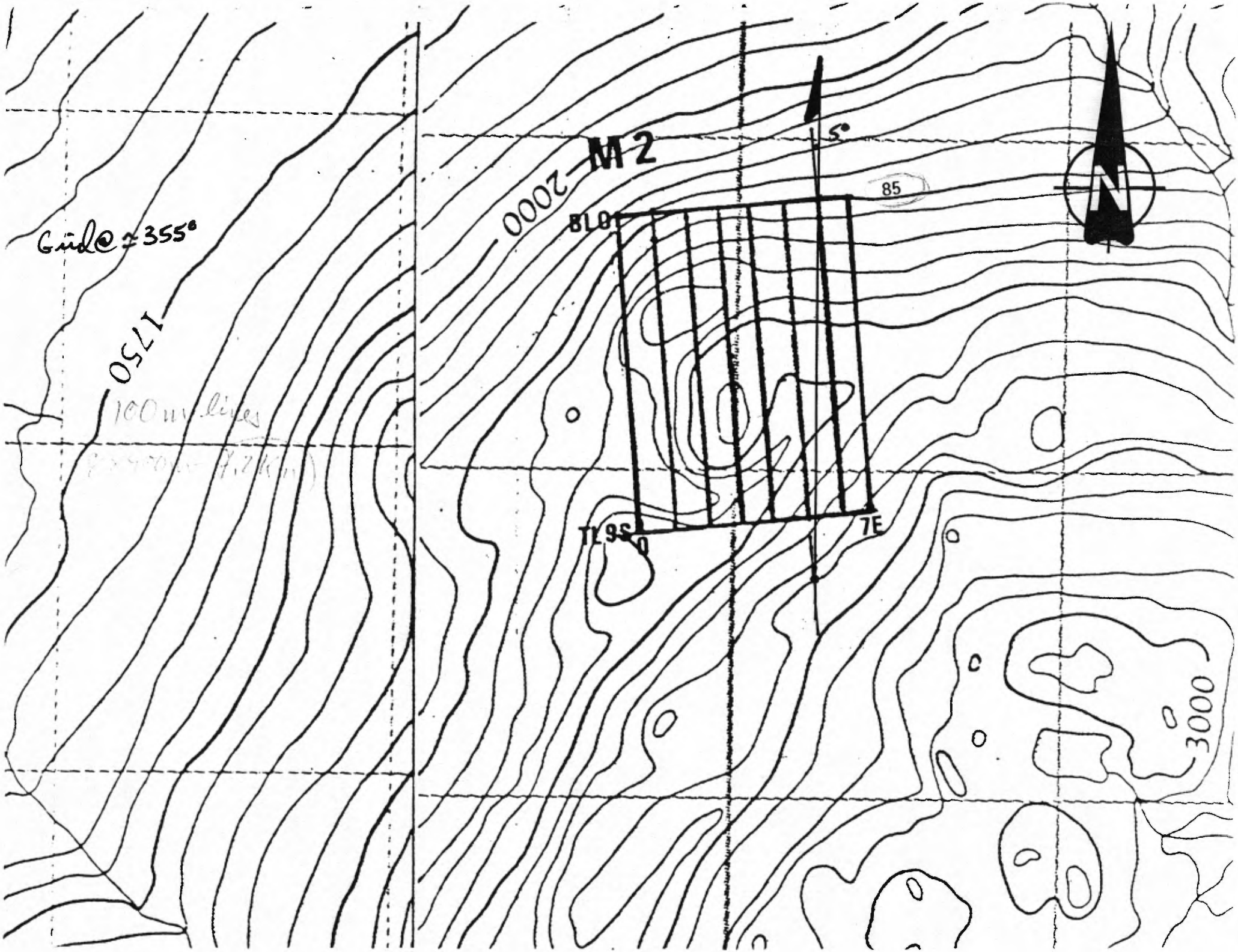
Grid M-20:

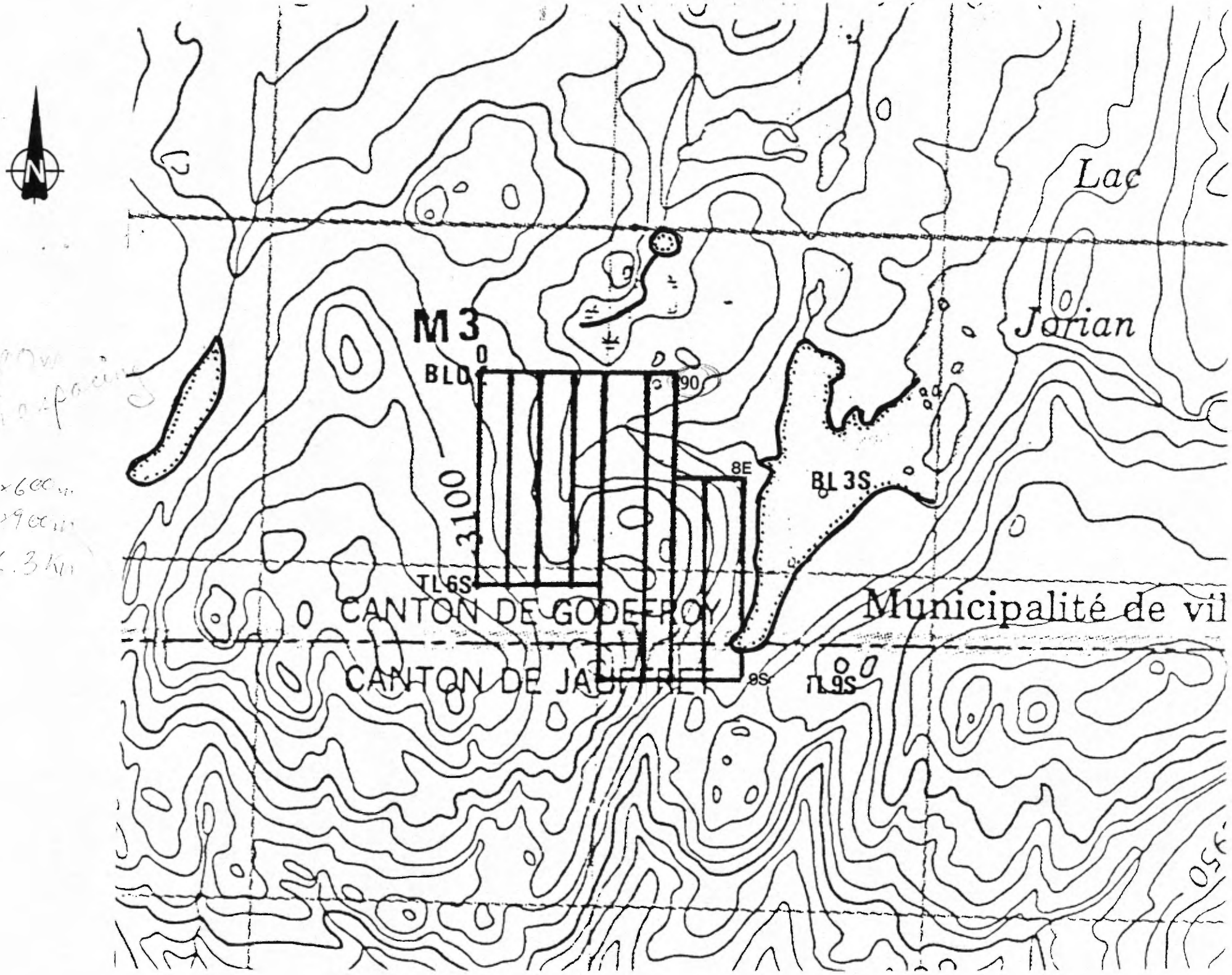
Base Line 1000m	**Tie Line 1000m**	**Cross Lines 11 @ 800m**
Total Line Cutting 10.8 Km		**Total Survey 8.8 Km**

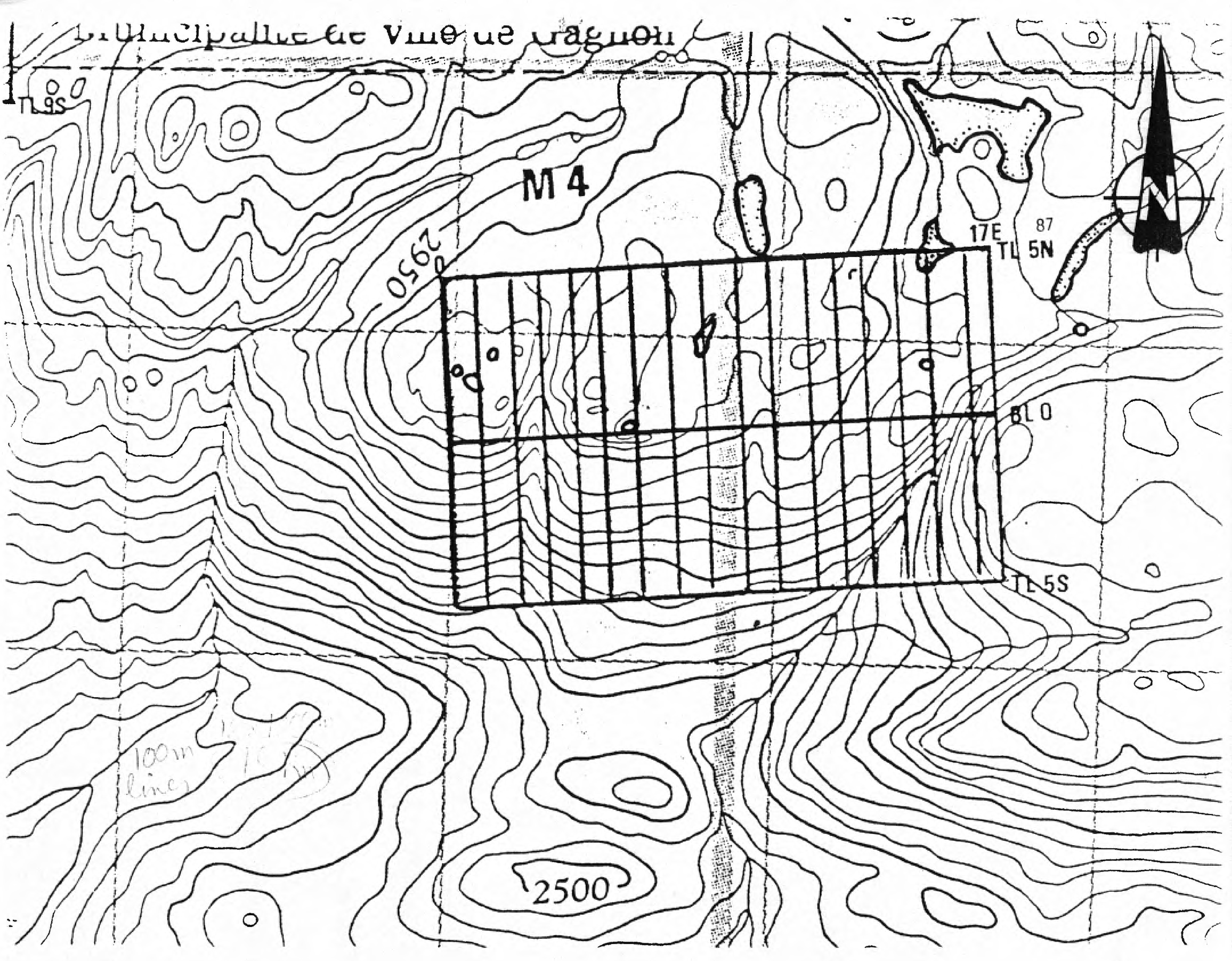
LINE CUTTING 213.85 Km

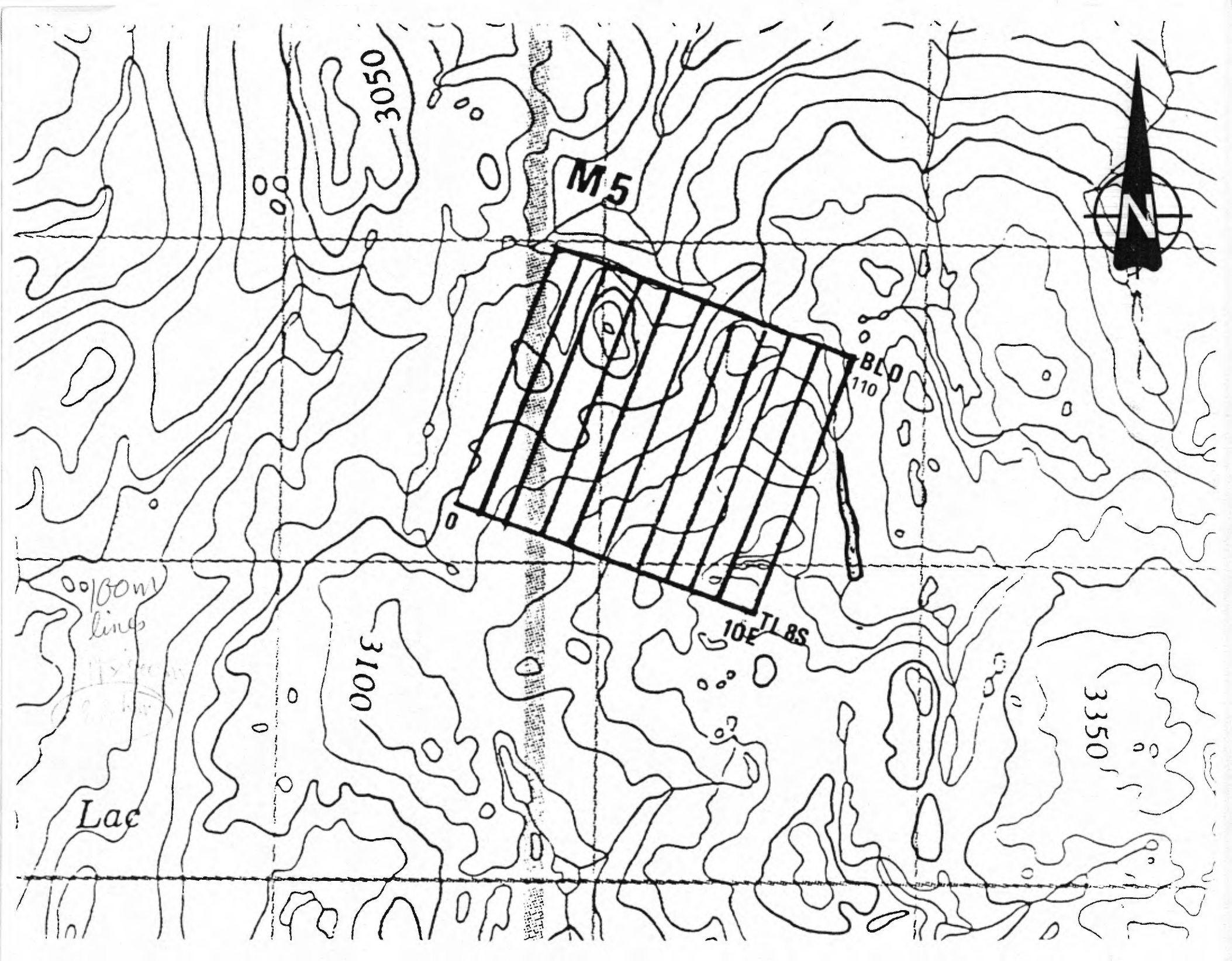
SURVEY DISTANCE 172.7 Km

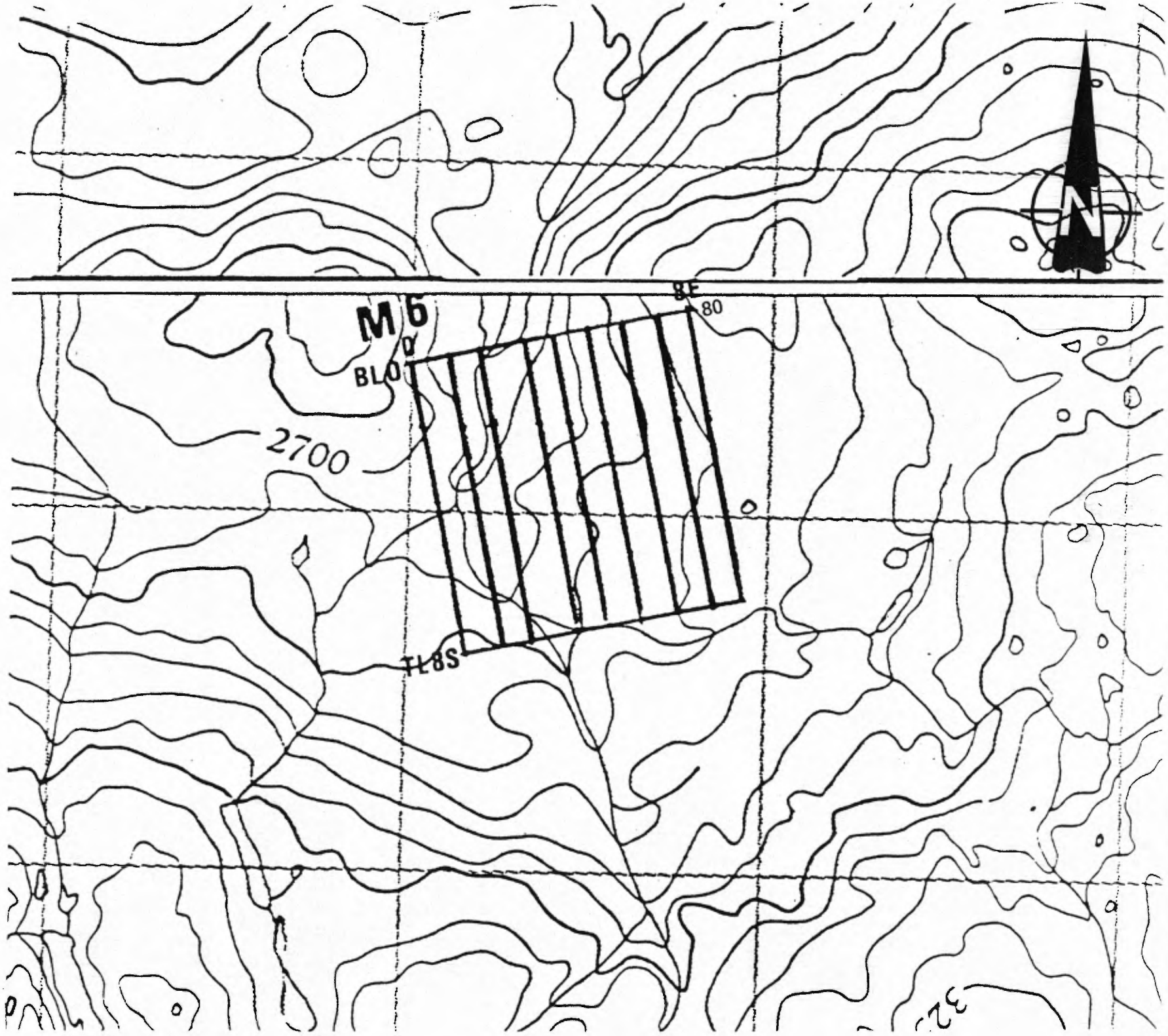

M 1
BLO
TL8S
0
BE
90
N

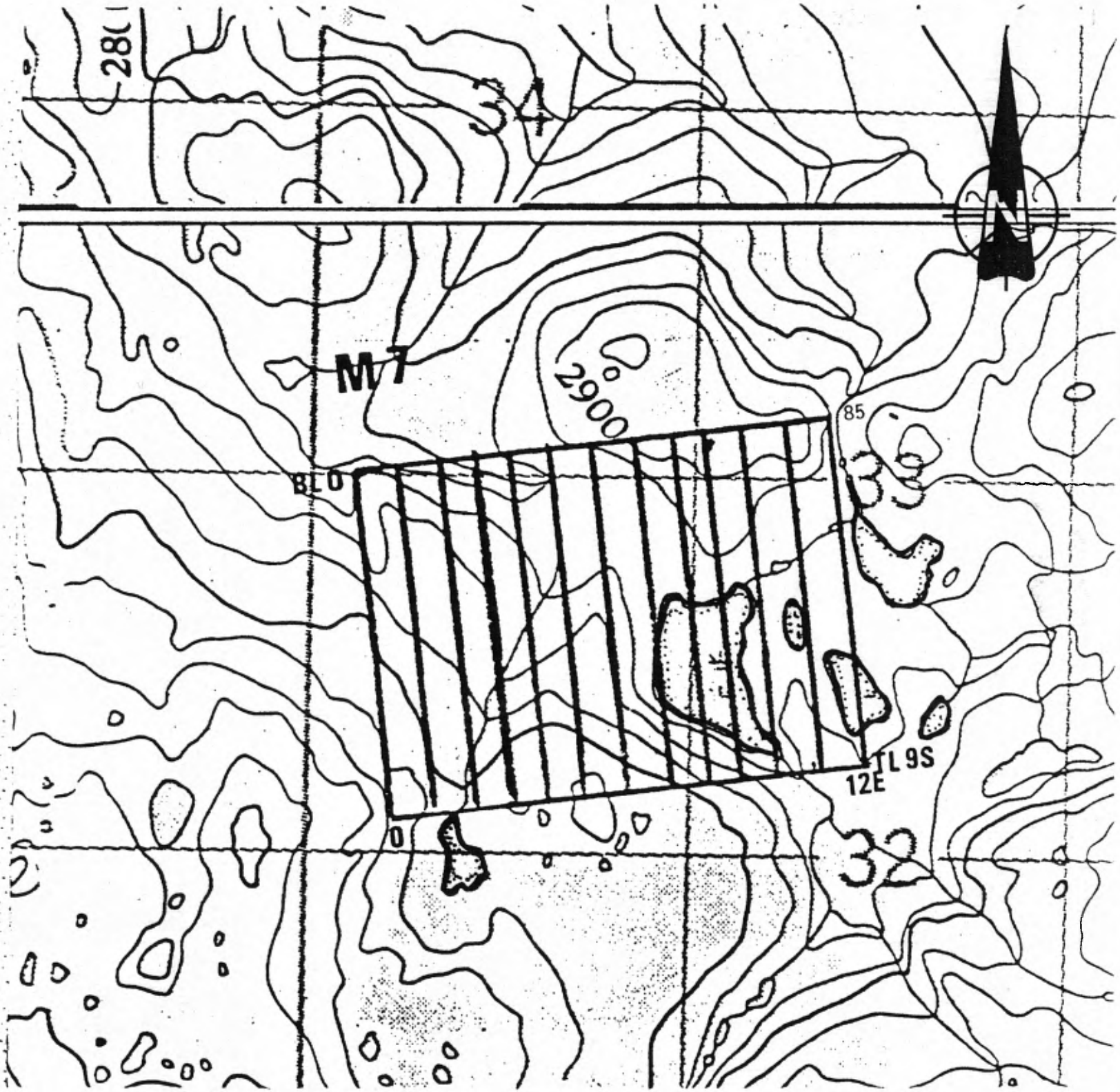

Grid @ 355°
1750
100 nT/div
2000
M2
5°
85
8L0
7E
TL9S
3000
N

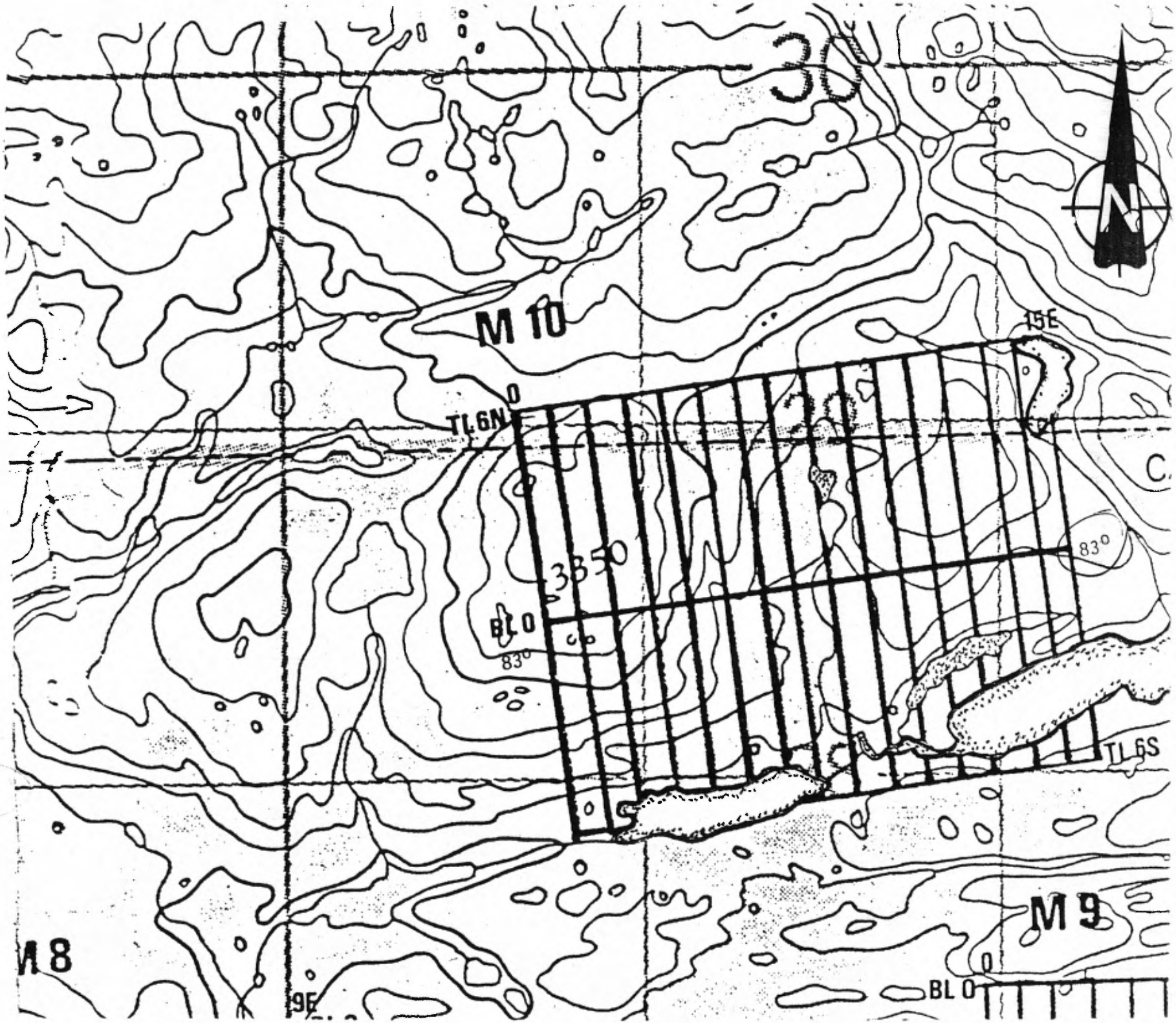

N
Lac
Jorian
M3
0
BLO
90
8E
BL 3S
3100
TL 6S
CANTON DE GODEFROY
Municipalité de vil
CANTON DE JA
9S
TL 9S


M 4
2950
17E
87
TL 5N
BL 0
TL 5S
TL9S
2500


3050
M5
N
BLO
110
10E
TL 8S
3100
3350
Lac

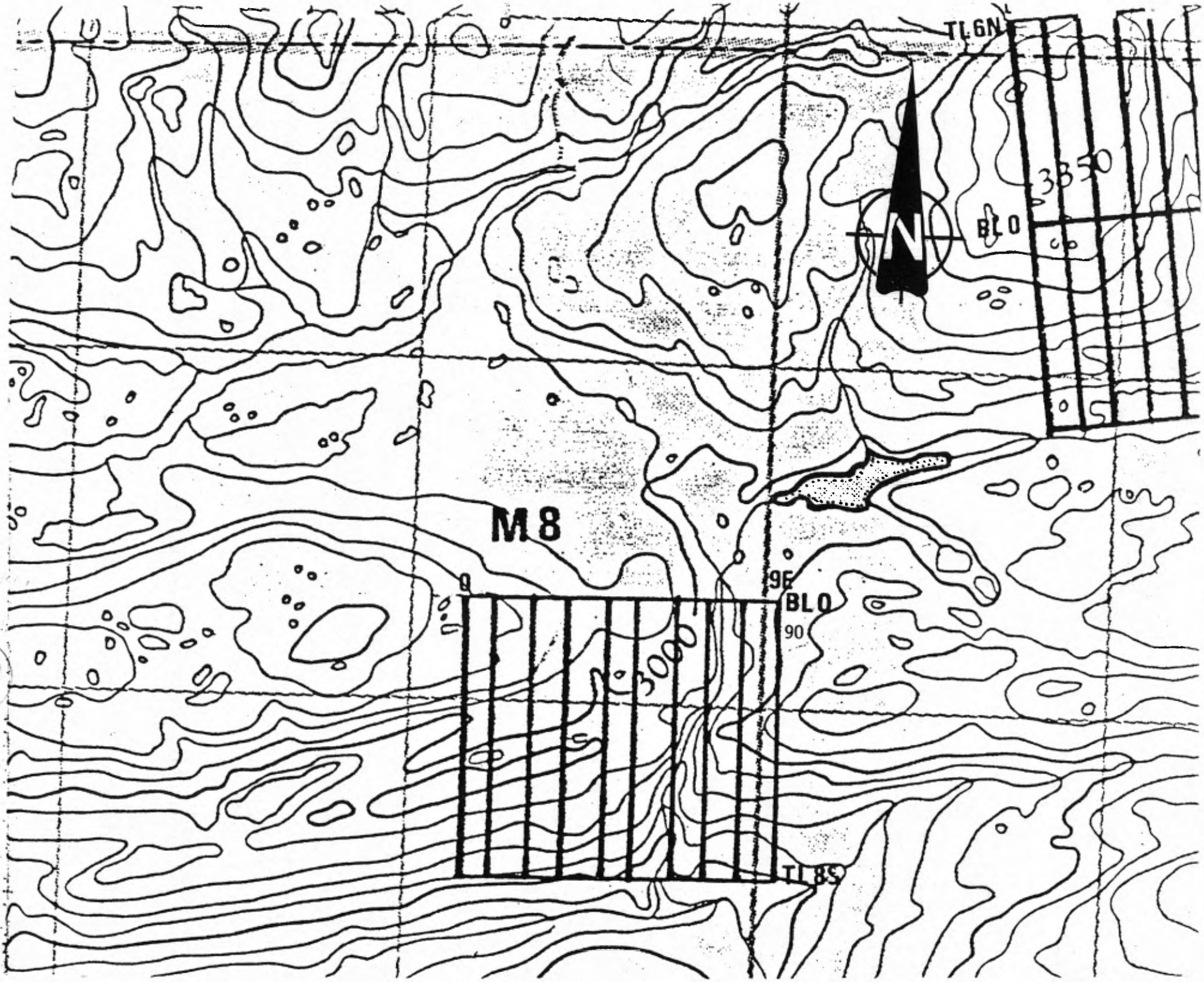

N
SE
80
M 6
BLO
2700
TL8S

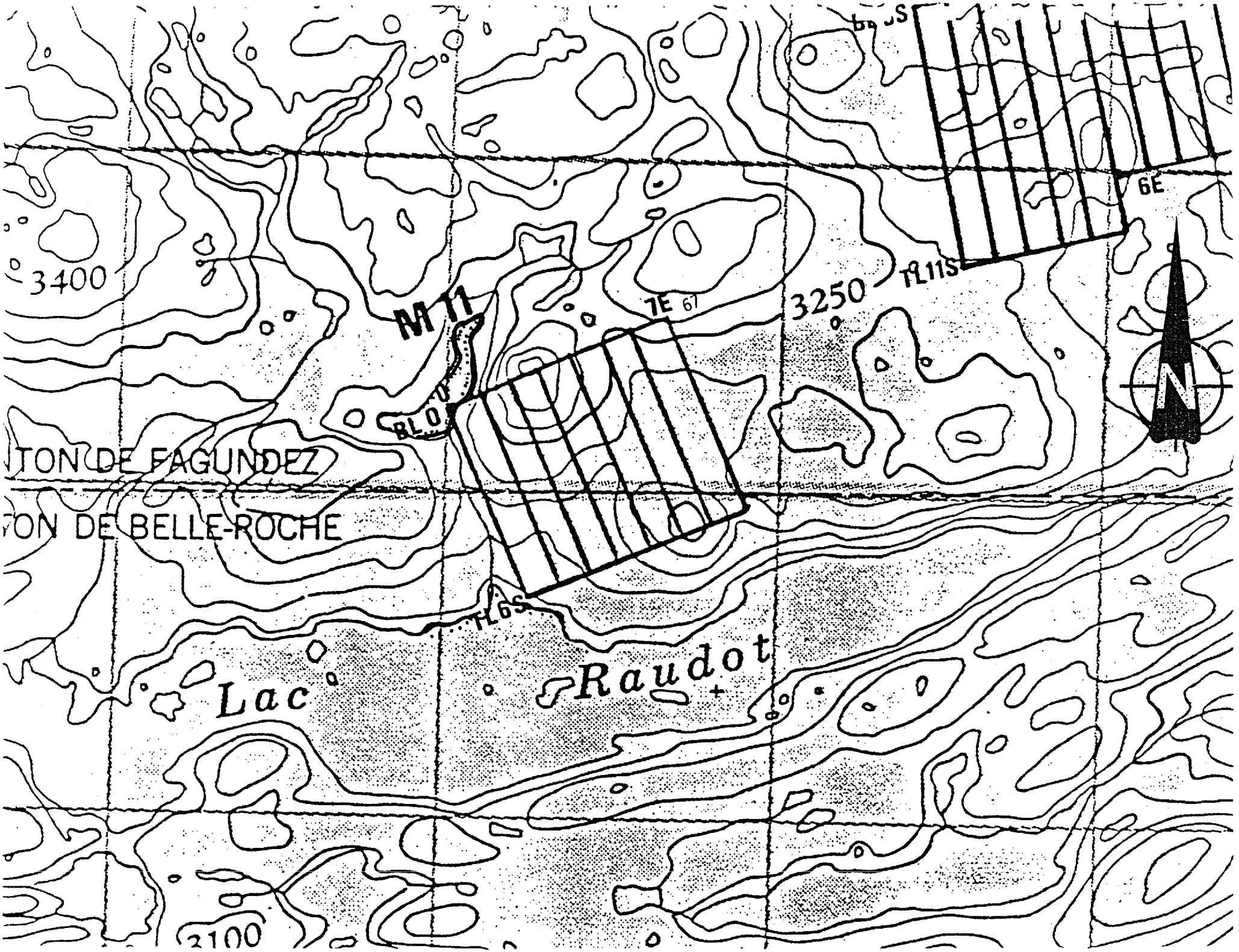

M7
2900
85
BLO
12E
L 9S
0
34
33
32

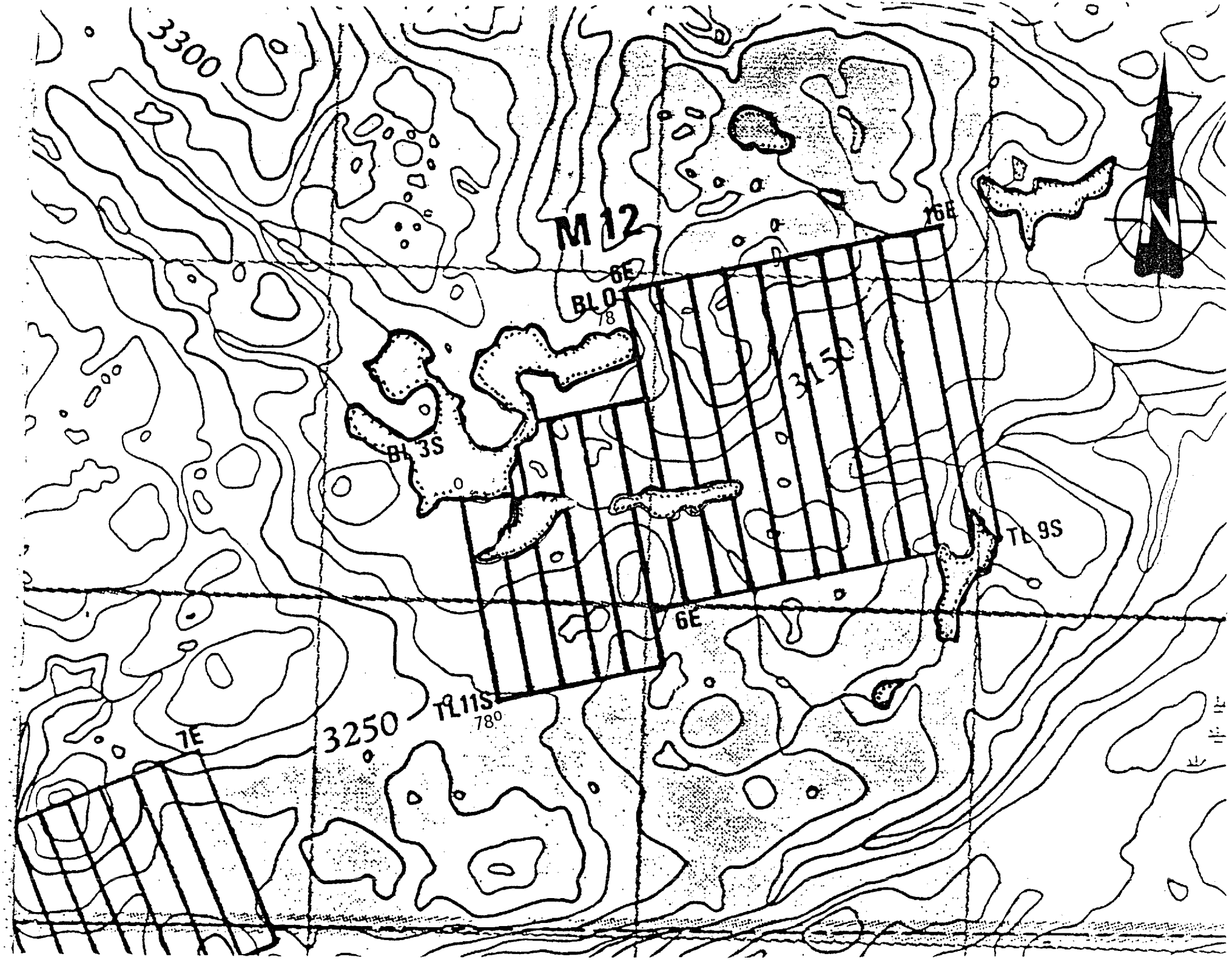


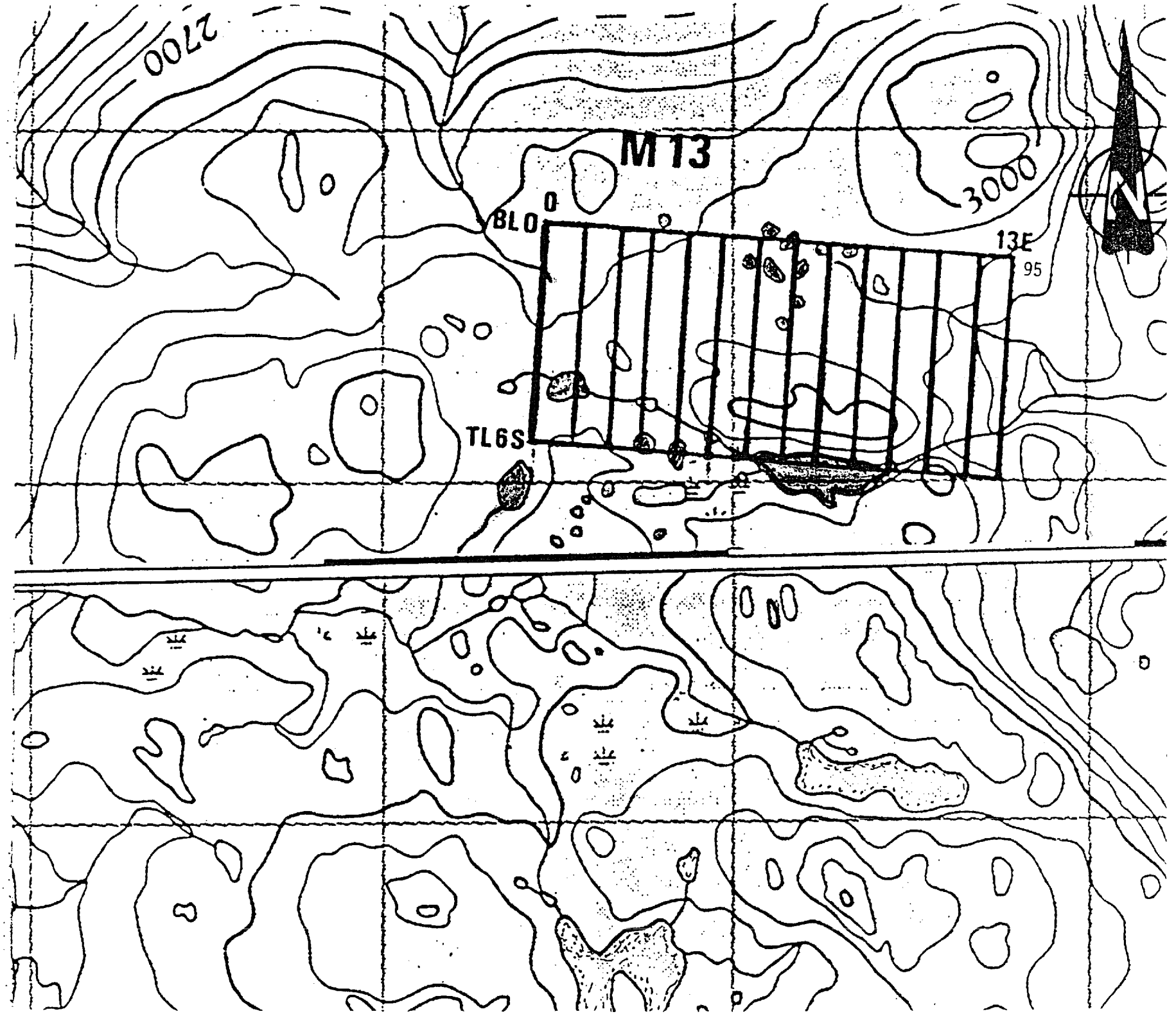
100m lines
16×10cm
- lake
17.5 km

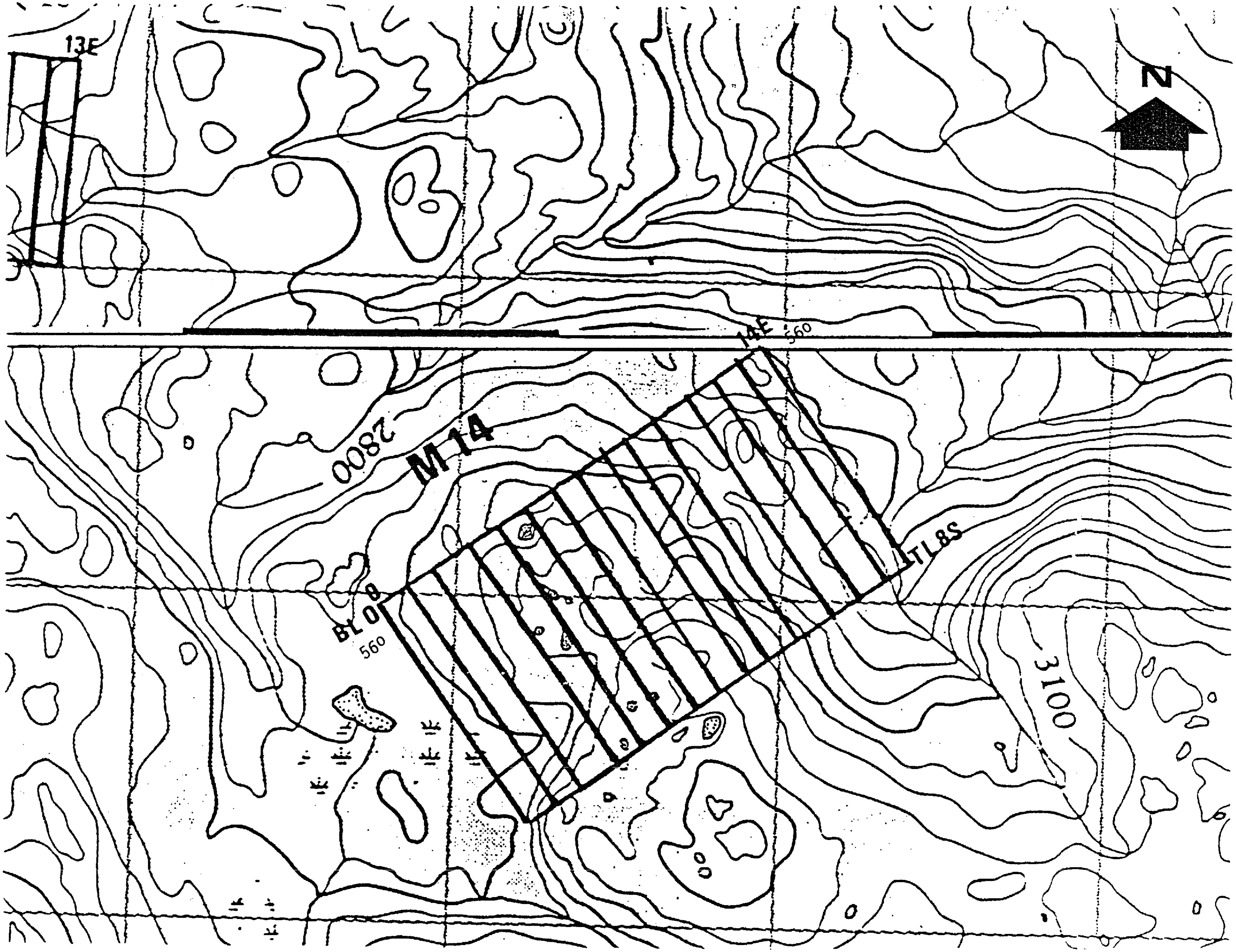
M 10


TL6N
N
BLO
330
M8
9E
BLO
90
3000
TL8S

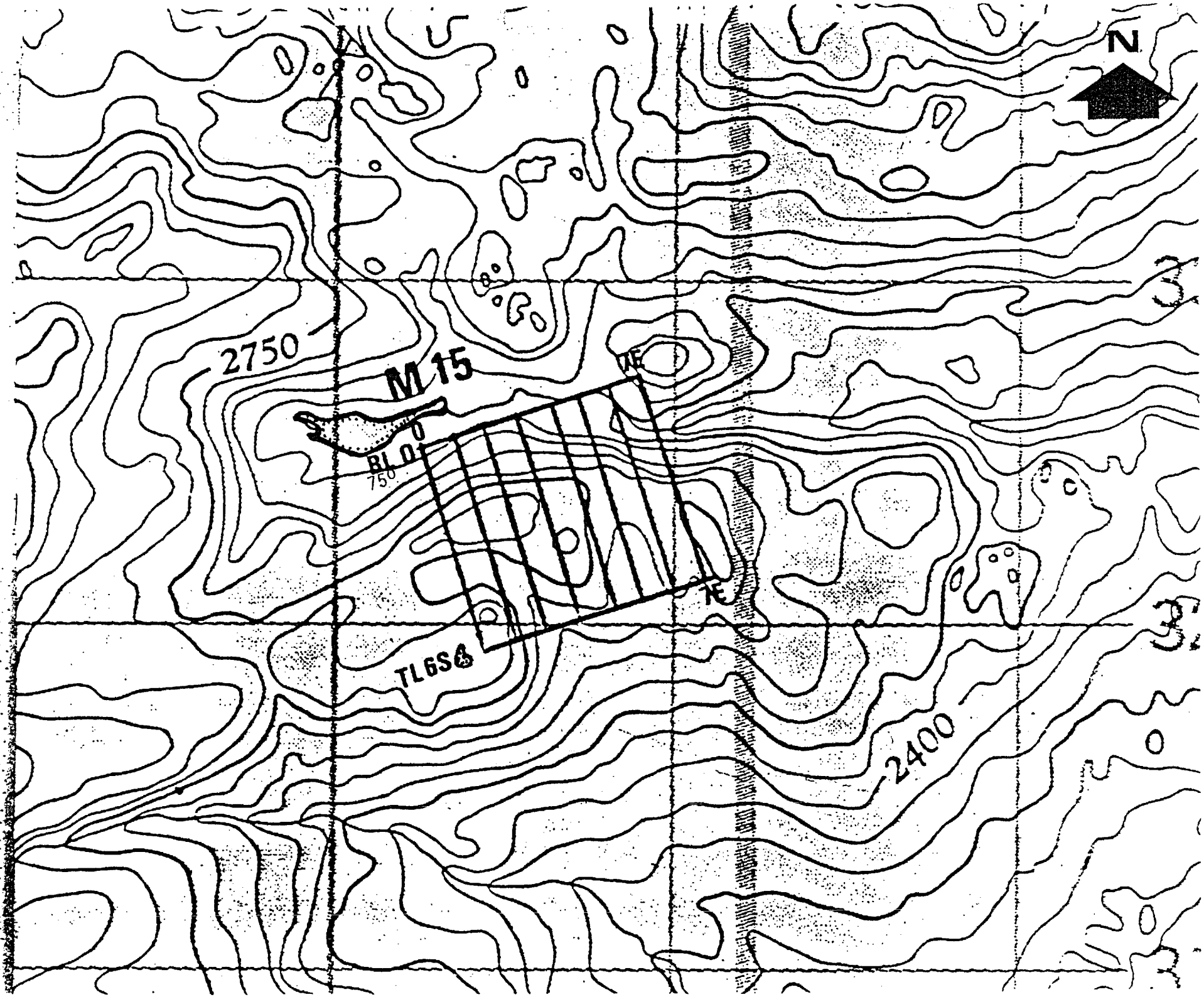

6E
3400
M 11
7E 67
3250
TL11S
BLO
TON DE FAGUNDEZ
TON DE BELLE-ROCHE
TL6S
Lac
Raudot
3100
N

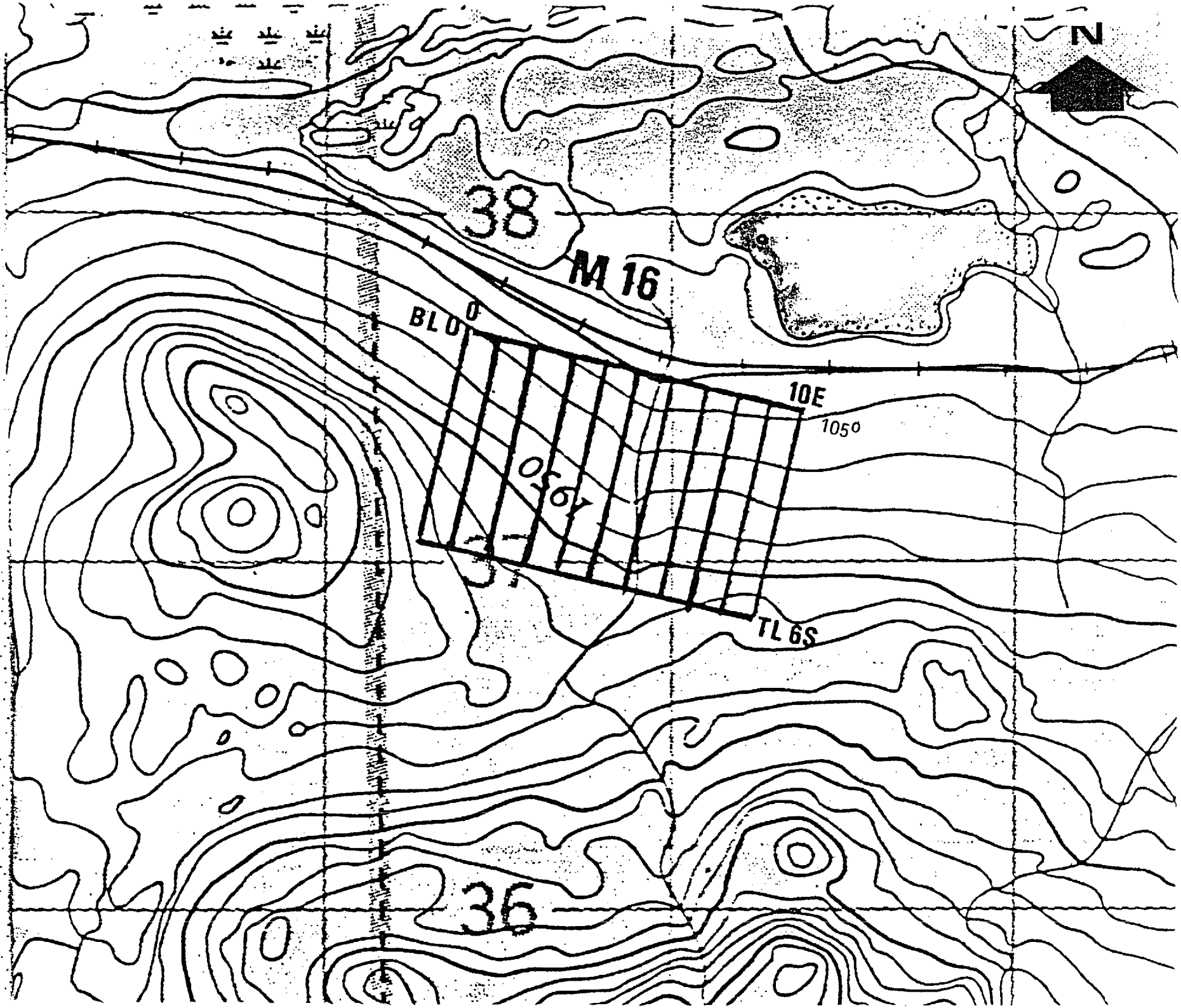

3300
M12
6E
BL0
78
BL 3S
TL 9S
6E
TL11S
78°
3250
7E

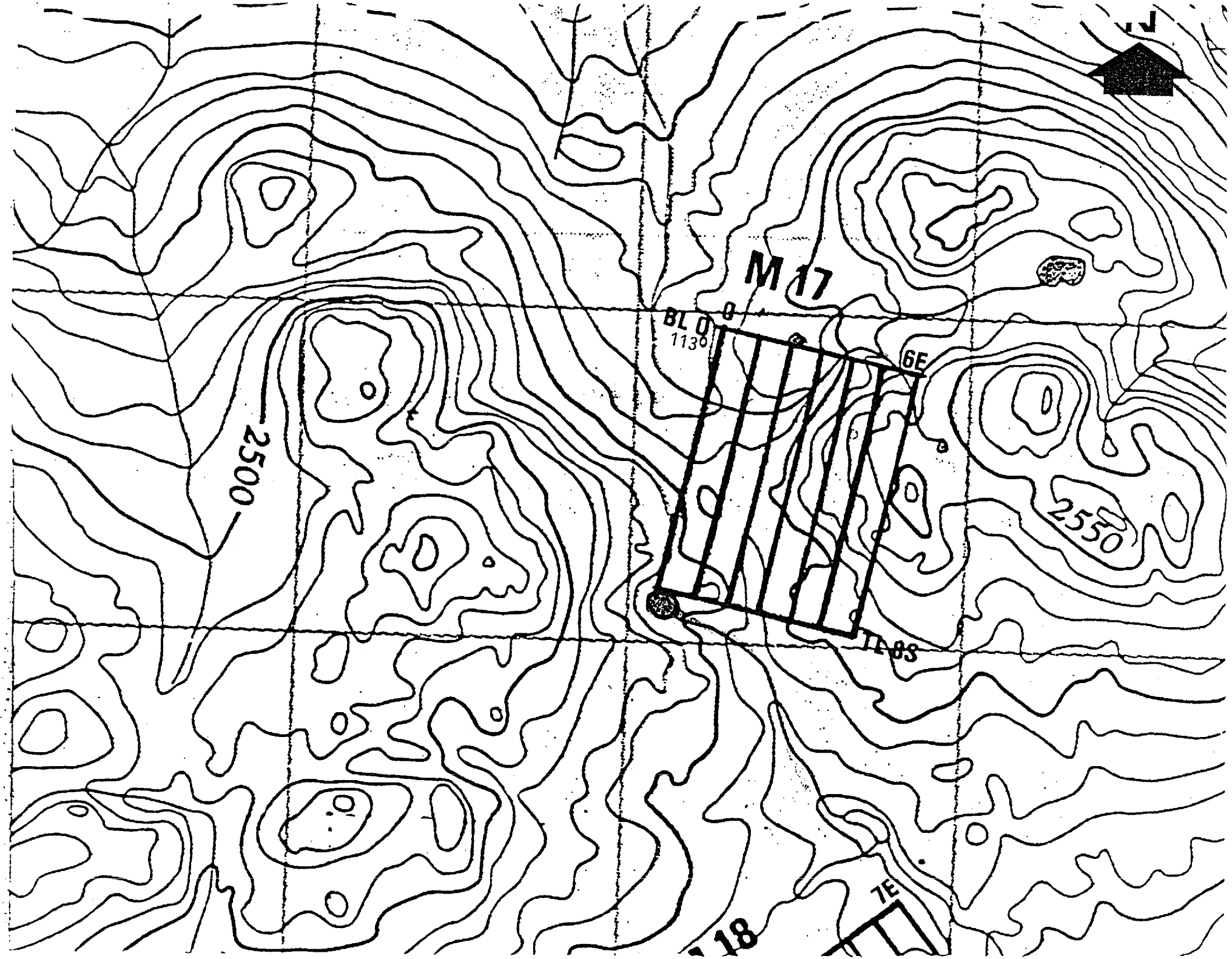

2700
M13
3000
BLO
13E
95
TL6S

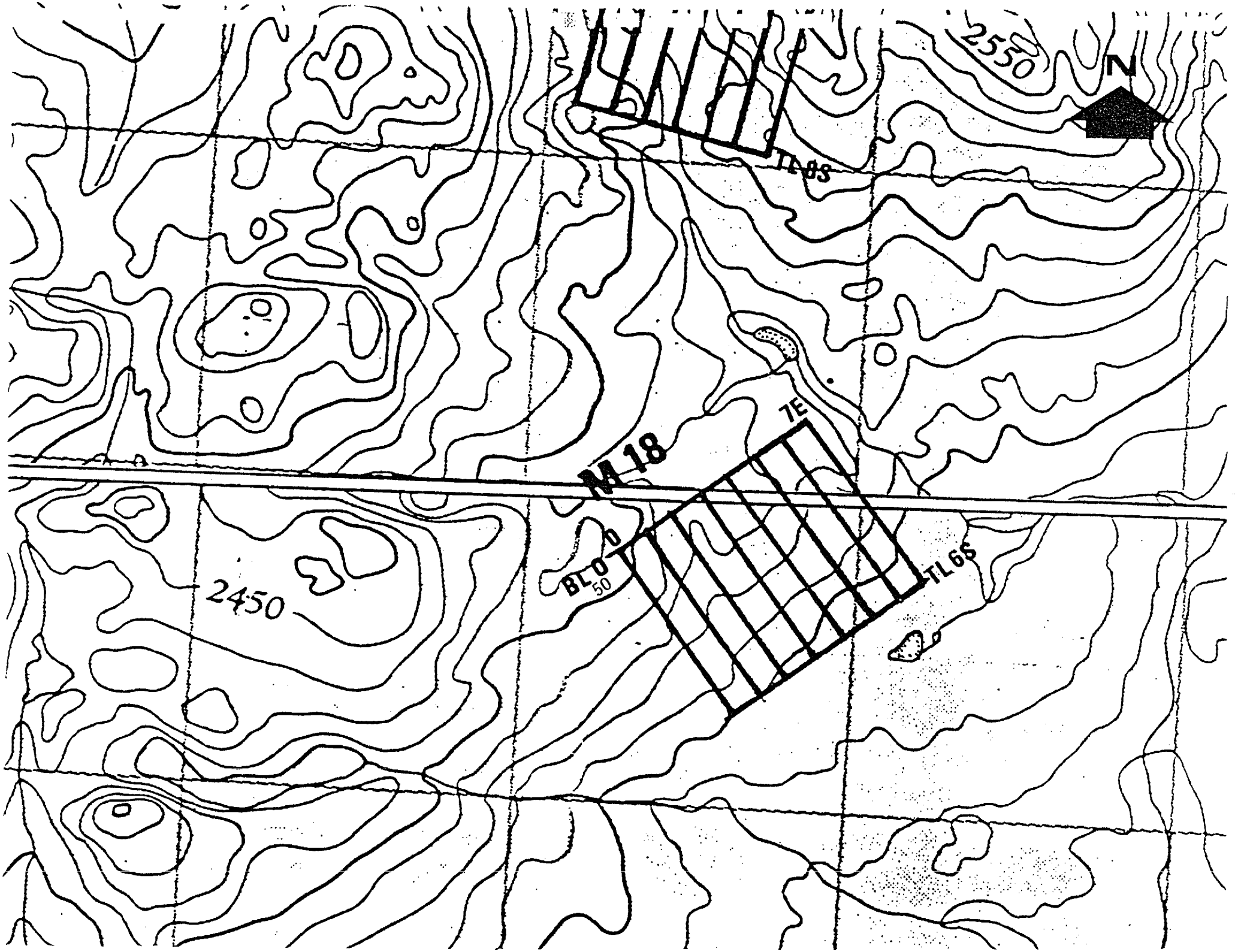


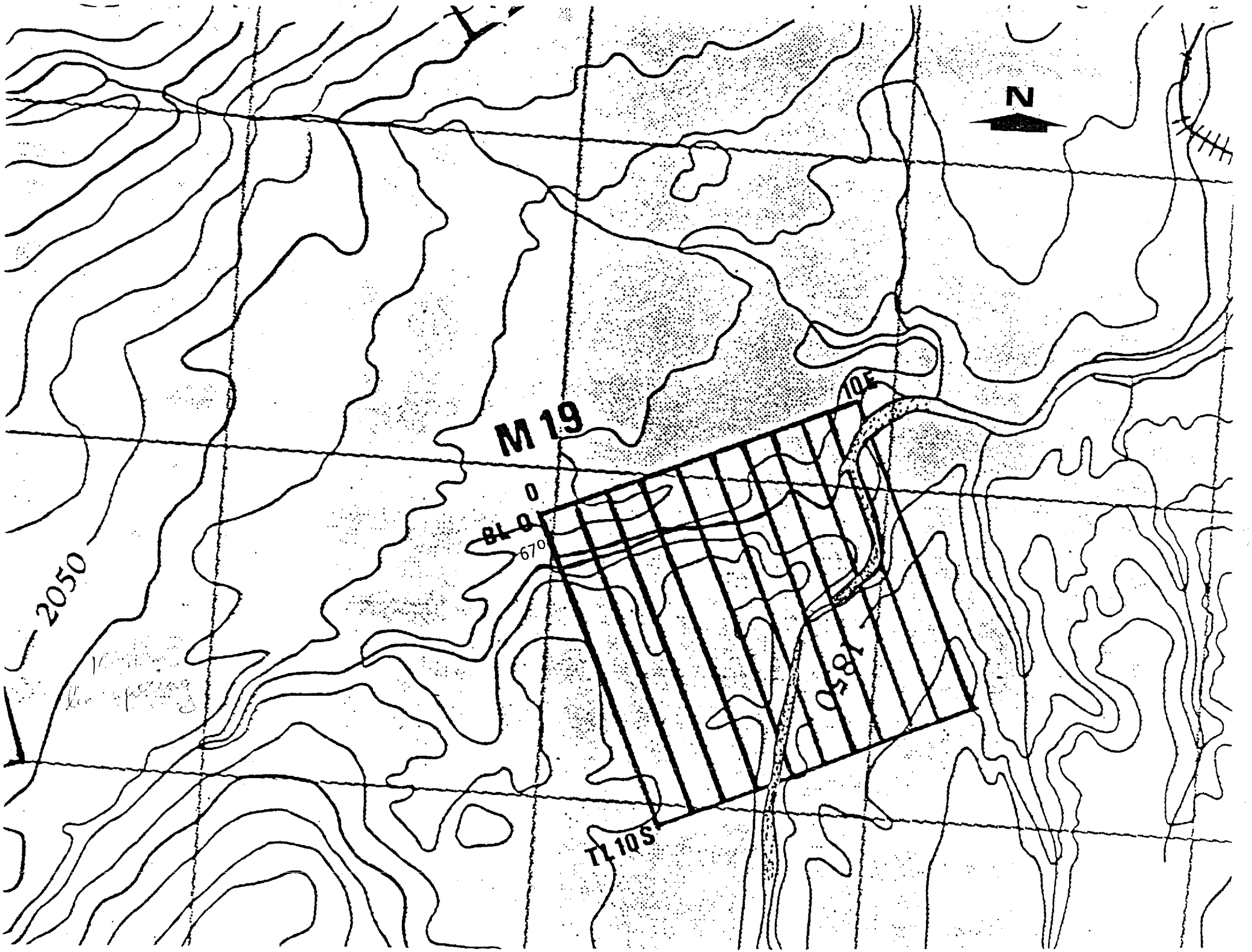
13E
N
14E
560
2800
M 14
TL 8S
BL 0
8
560
3100

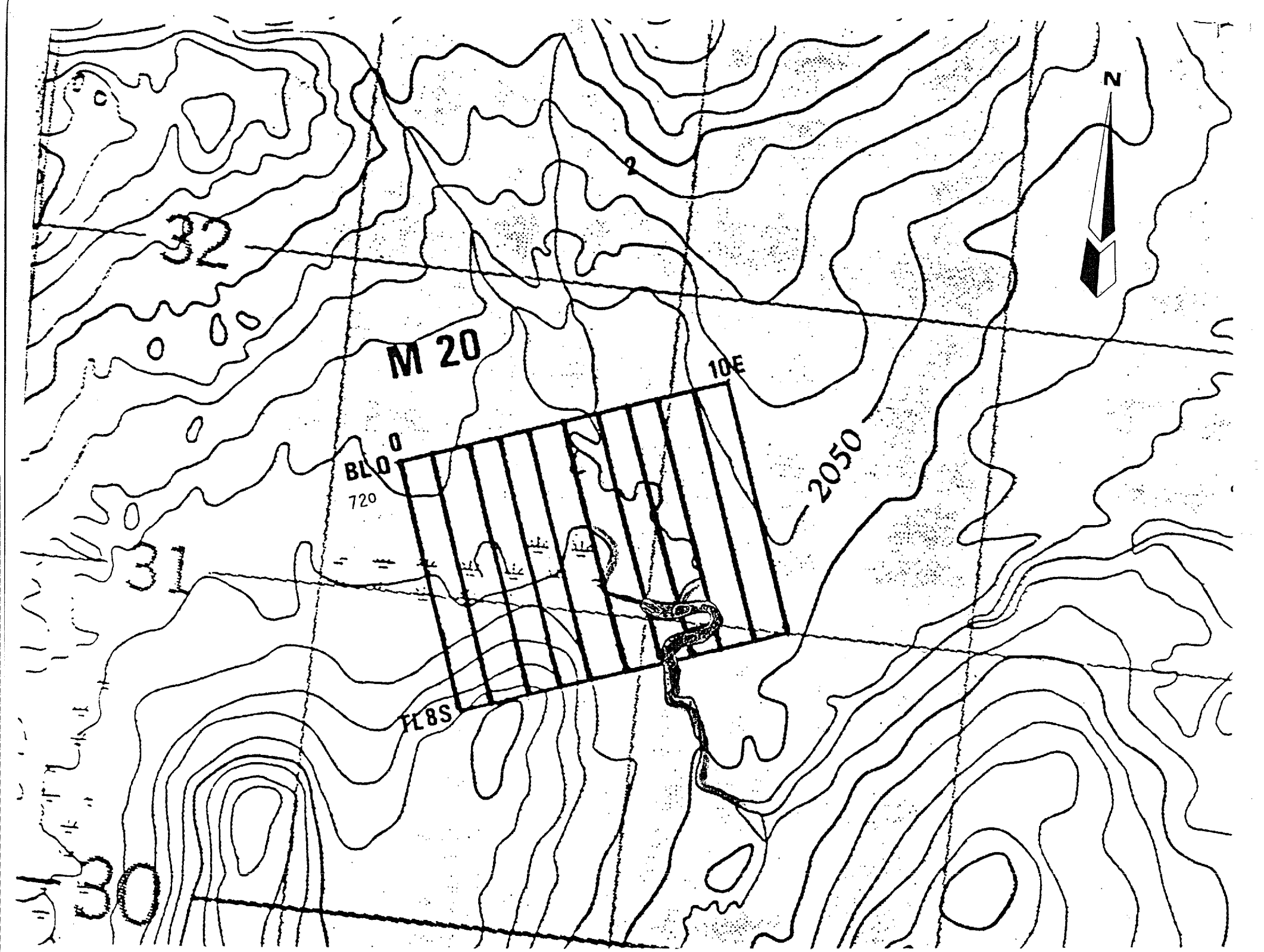

N
2750
M 15
RL 0
750
TL6S
2400


N
38
M 16
BLO
10E
1050
056
TL 6S
36


M 17
BL 0
1130
6E
2500
2550
11 83
7E
18


2550
N
TL 83
7E
M-18
BLO 0
50
2450
TL 65


N
M 19
0
BL 0
670
2050
10E
T1 10S


N
M 20
10E
0
BL 0
720
2050
32
31
30
TL8S

Microfilm

PAGE DE DIMENSION HORS STANDARD

MICROFILMÉE SUR 35 MM ET

POSITIONNÉE À LA SUITE DES

PRÉSENTES PAGES STANDARDS

Numérique

PAGE DE DIMENSION HORS STANDARD

NUMÉRISÉE ET POSITIONNÉE À LA

SUITE DES PRÉSENTES PAGES STANDARDS