



42D155W0114 2.8442 SYINE

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GEOLOGICAL REPORT
NO. 64 GRID, MOCAN VALLEY
GRID, FLAGGED GRID AND THE
NORTH SIVILLE SHOWING
MICHAM EXPLORATION INC.
TERRACE BAY CLAIMS
SYINE TWP. AND SANTOY LAKE AREA
DISTRICT OF THUNDER BAY, ONTARIO
PROJECT 4410, SUMMER 1984

RECEIVED
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MINING LANDS SECTION

Timmins, Ontario
August 15, 1984

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Per: David R. Bell
Geological Services Inc.
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1.0 SUMMARY

Micham Exploration Inc. which holds a contiguous block of 96 mining claims in the Terrace Bay Area mounted an exploration program in 1984 under the direction of David R. Bell Geological Services Inc.

The program as proposed in 1983 intailed line-cutting, mapping, geophysics, prospecting and rock sampling in specific areas as delineated by the previous work. A large proportion of this work could not be undertaken however due to late budget revisions.

In 1984 two grids, the Mocan Valley and No. 64 Grid, received the bulk of the work with only several days spent on both the Flagged Grid and the North Siville Showing.

All areas were found to be underlain by mafic volcanics, and mafic intrusives with minor accumulations of chert, iron formation and pyroxenite. Pervasive carbonate alteration was noted in each area but became most intense in shear zones. Silicification also occurred quite commonly throughout but was most notable on the Mocan Valley Grid adjacent to the northern chert horizon.

Sulphide mineralization in the form of pyrite was most common and recognized as disseminations or masses in most rock types. The cherts generally contained upwards of 5% sulphides as fine disseminations of pyrite and pyrrhotite, while higher concentrations occurred at some locations. Magnetite in the form of disseminated grains was recognized in the mafic volcanics and intrusives while massive forms occurred in the iron formations.

Sulphides were also erratically distributed in the numerous quartz veins and shear zones. The North Siville Showing, a quartz-shear occurrence, was the one structure found to be highly anomalous in gold with one assay being 0.395 oz Au/ton.

The curtailment of the 1984 program hampered the full investigation of the mineralized showings and accompanying geology in all areas but most particularly the original Mocan Valley and the North Siville Showings. Of the two however, the Mocan Valley occurrence received the greatest attention which included an IP survey. Results which unfortunately did not detect the anomalous structure, did however, outline the mineralized chert to the north.

Recommendations included further detailed mapping on the two grids as well as in the vicinity of the North Siville. This is to be accompanied by prospecting, and systematic rock sampling. Dependent on results especially over the chemical metasediments, induced polarization surveys between the two grids should be undertaken. Diamond drilling forms a third phase and would probably include about 7,000 feet of coring.

Recommended work over the North Siville includes mapping and prospecting but also should include magnetometer and VLF-EM surveys. These then could be followed by an induced polarization survey for further definition. Soil sampling should also be tested for its applicability. No drilling was recommended based on this years' results but could form a section of the program after these surveys.

No major work commitment has been made for the Flagged Grid.

The following summarizes the proposed costs for all areas and phases:

Phase I	\$67,180.00
Phase II	\$44,865.00
Phase III	<u>\$281,925.00</u>
	\$393,970.00

2.0 INTRODUCTION

Micham Exploration Inc. which holds a block of 96 mining claims in the Terrace Bay area undertook an exploration program over those areas recommended in 1983. All work was undertaken and supervised by David R. Bell Geological Services Inc.

Geological mapping, combined with rock sampling, trenching and prospecting were undertaken on the Mocan Valley and No. 64 Grids. The North Siville Showing received limited work while the Flagged Grid was mapped and soil sampled. An induced polarization survey was also conducted on a portion of the Mocan Valley Grid.

All data was accumulated, analyzed and formed the base for the recommended procedures for future work. Proposed costs also accompany this section.

3.0 PROPERTY AND OWNERSHIP

The Micham Exploration Inc. property consists of 95 contiguous claims in the Thunder Bay Mining Division. The entire block of claims which was staked in 1982 by Paul J. Skalesky and subsequently transferred to Micham are presently in good standing.

A patented claim, TB459728 was obtained in 1983 through a separate option agreement.

The claims are listed in Table 1 and illustrated in Figure 1.

4.0 LOCATION AND ACCESS

The Micham property is located in Syine Township and the Santoy Lake Area, 11 kilometres east-northeast of Terrace Bay and 800 kilometres northwest of Toronto (Figure 2). The ground is 6 kilometres due north of Lake Superior (Figure 3).

The southern most claims adjoin the Trans Canada Highway (Hwy. 17) and are easily accessible. Bush and logging roads provide access to the old Empress Mine, the eastern claims and the southwestern claims in favourable weather. The north and northwestern claims are most easily reached by helicopter.

In the winter use of snow machines would provide access to most of the property although rugged topography would restrict travel to some locations.

4.0 TOPOGRAPHY

The topography is primarily that of low rolling hills truncated by steep scarp slopes; the most notable being in the Margon Lake area. Hills with elevations exceeding

TABLE 1

MICHAM EXPLORATION INC. TERRACE BAY CLAIMS

<u>Claim Number</u>	<u>Recording Date</u>	<u>Township</u>
TB459728	Leased	Syine Twp.
TB603911	May 1, 1981	Syine Twp.
TB603912	May 1, 1981	Syine Twp.
TB603913	May 1, 1981	Syine Twp.
TB603914	May 1, 1981	Syine Twp.
TB603915	May 1, 1981	Syine Twp.
TB603916	May 1, 1981	Syine Twp.
TB603917	May 1, 1981	Syine Twp.
TB603918	May 1, 1981	Syine Twp.
TB603919	May 1, 1981	Syine Twp.
TB603920	May 1, 1981	Syine Twp.
TB603921	May 1, 1981	Syine Twp.
TB603922	May 1, 1981	Syine Twp.
TB603923	May 1, 1981	Syine Twp.
TB603924	May 1, 1981	Syine Twp.
TB603925	May 1, 1981	Syine Twp.
TB604041	May 20, 1981	Syine Twp.
TB604042	May 1, 1981	Syine Twp.
TB604043	May 1, 1981	Syine Twp.
TB604044	May 1, 1981	Syine Twp.
TB604045	May 1, 1981	Syine Twp.
TB604046	May 11, 1981	Syine Twp.
TB604047	May 11, 1981	Syine Twp.
TB604048	May 11, 1981	Syine Twp.
TB604049	May 11, 1981	Syine Twp.
TB604050	May 11, 1981	Syine Twp.
TB604051	May 11, 1981	Syine Twp.
TB604052	May 11, 1981	Syine Twp.

<u>Claim Number</u>	<u>Recording Date</u>	<u>Township</u>
TB604053	May 11, 1981	Syine Twp.
TB604054	May 11, 1981	Syine Twp.
TB604055	May 11, 1981	Syine Twp.
TB604056	May 11, 1981	Syine Twp.
TB604057	May 11, 1981	Syine Twp.
TB604058	May 11, 1981	Syine Twp.
TB604059	May 20, 1981	Syine Twp.
TB604060	May 25, 1981	Syine Twp.
TB613737	August 13, 1981	Syine Twp.
TB613728	September 11, 1981	Syine Twp.
TB613729	September 11, 1981	Syine Twp.
TB613842	August 13, 1981	Syine Twp.
TB613843	August 13, 1981	Syine Twp.
TB613844	September 11, 1981	Syine Twp.
TB613845	September 11, 1981	Syine Twp.
TB613846	September 11, 1981	Syine Twp.
TB613847	September 11, 1981	Syine Twp.
TB613848	September 11, 1981	Syine Twp.
TB613849	September 11, 1981	Syine Twp.
TB613852	August 13, 1981	Syine Twp.
TB613853	August 13, 1981	Syine Twp.
TB613854	August 13, 1981	Syine Twp.
TB613856	September 11, 1981	Syine Twp.
TB614674	November 6, 1981	Santoy Lake
TB614675	November 6, 1981	Santoy Lake
TB614676	November 6, 1981	Santoy Lake
TB614677	November 6, 1981	Santoy Lake
TB642185	April 16, 1982	Syine Twp.
TB642201	April 16, 1982	Syine Twp.
TB642202	April 16, 1982	Syine Twp.
TB642203	April 16, 1982	Syine Twp.
TB642204	April 16, 1982	Syine Twp.

<u>Claim Number</u>	<u>Recording Date</u>	<u>Township</u>
TB642205	April 16, 1982	Syine Twp.
TB642206	April 16, 1982	Syine Twp.
TB642207	April 16, 1982	Syine Twp.
TB642208	April 16, 1982	Syine Twp.
TB642209	April 16, 1982	Syine Twp.
TB642210	April 16, 1982	Syine Twp.
TB642211	April 16, 1982	Syine Twp.
TB642212	April 16, 1982	Syine Twp.
TB642214	April 16, 1982	Syine Twp.
TB642215	April 16, 1982	Syine Twp.
TB642216	April 16, 1982	Syine Twp.
TB642217	April 16, 1982	Syine Twp.
TB642218	April 16, 1982	Syine Twp.
TB642219	April 16, 1982	Syine Twp.
TB642220	April 16, 1982	Syine Twp.
TB660041	September 23, 1982	Syine Twp.
TB660042	September 23, 1982	Syine Twp.
TB660043	September 23, 1982	Syine Twp.
TB660044	September 23, 1982	Syine Twp.
TB660045	September 23, 1982	Syine Twp.
TB660046	September 23, 1982	Syine Twp.
TB660052	September 23, 1982	Syine Twp.
TB660053	September 23, 1982	Syine Twp.
TB660054	September 23, 1982	Syine Twp.
TB660055	September 23, 1982	Syine Twp.
TB660056	September 23, 1982	Syine Twp.
TB660057	September 23, 1982	Syine Twp.
TB660064	September 23, 1982	Syine Twp.
TB660065	September 23, 1982	Syine Twp.
TB660066	September 23, 1982	Syine Twp.
TB660067	September 23, 1982	Syine Twp. and Santoy Lake

Claim Number

Recording Date

Township

TB660068

September 23, 1982

Syine Twp.
and Santoy Lake

TB660069

September 23, 1982

Syine Twp.
and Santoy Lake

TB660076

September 23, 1982

Santoy Lake

TB660077

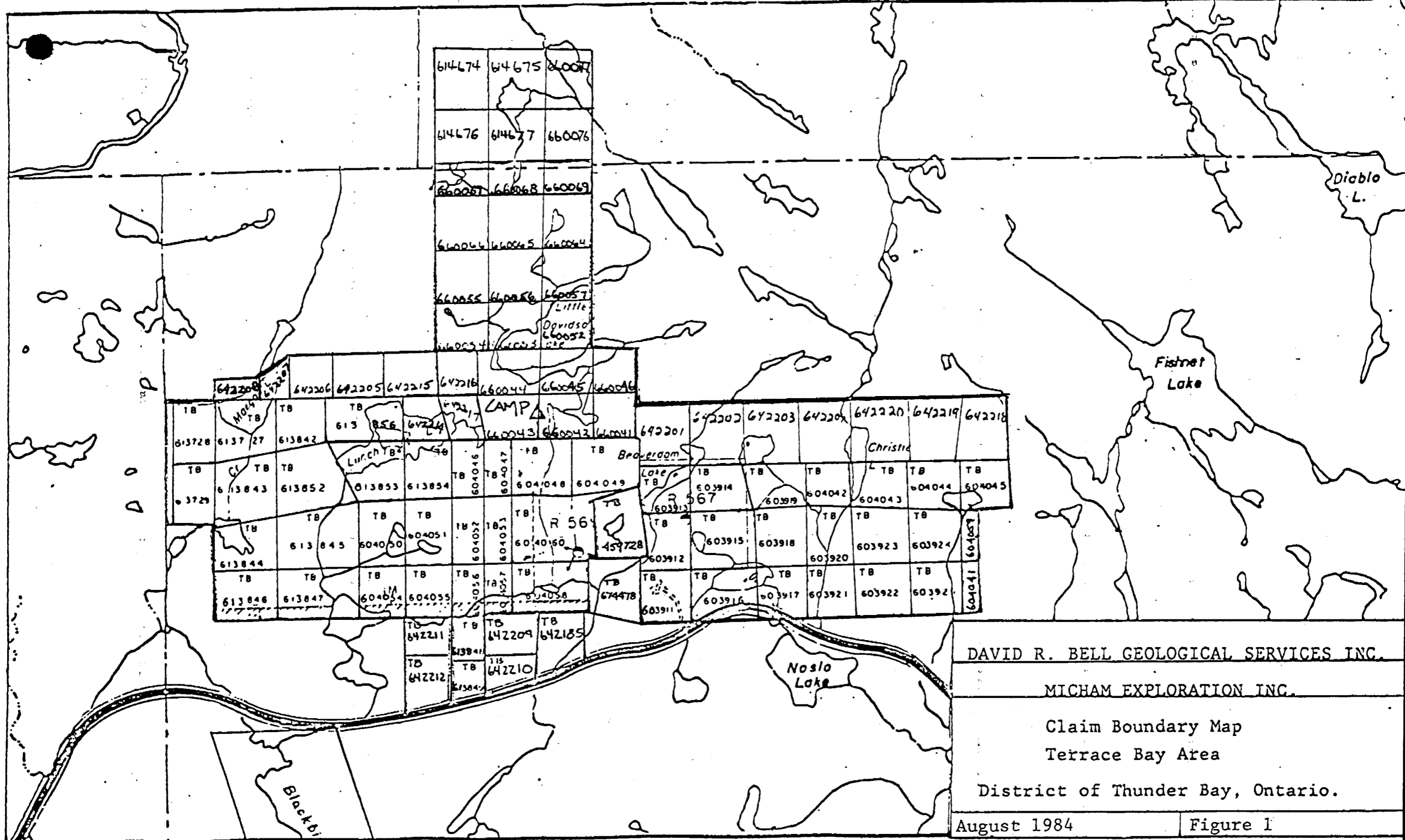
September 23, 1982

Santoy Lake

TB674478

November 26, 1982

Syine Twp.



614674	614675	660077
614676	614677	660076
660067	660068	660069
660064	660065	660064
660055	660056	660057
660054	660053	660052

Little
Davidson

642208	642206	642205	642215	642216	660044	660045	660046											
TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
613728	613727	613842	613856	613857	660043	660042	660041	642201	642202	642203	642204	642220	642219	642218				
TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
613843	613852	613853	613854	604046	604047	604048	604049	603914	603915	603916	603917	604042	604043	604044	604045			
TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
613844	613845	604050	604051	604052	604053	604054	604055	603912	603913	603914	603915	603916	603917	603918	603919	603920	603921	603922
TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
613846	613847	604054	604055	604056	604057	604058	674478	603911	603912	603913	603914	603915	603916	603917	603918	603919	603920	603921
TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
642211	642212	642209	642210	642185														

DAVID R. BELL GEOLOGICAL SERVICES INC.

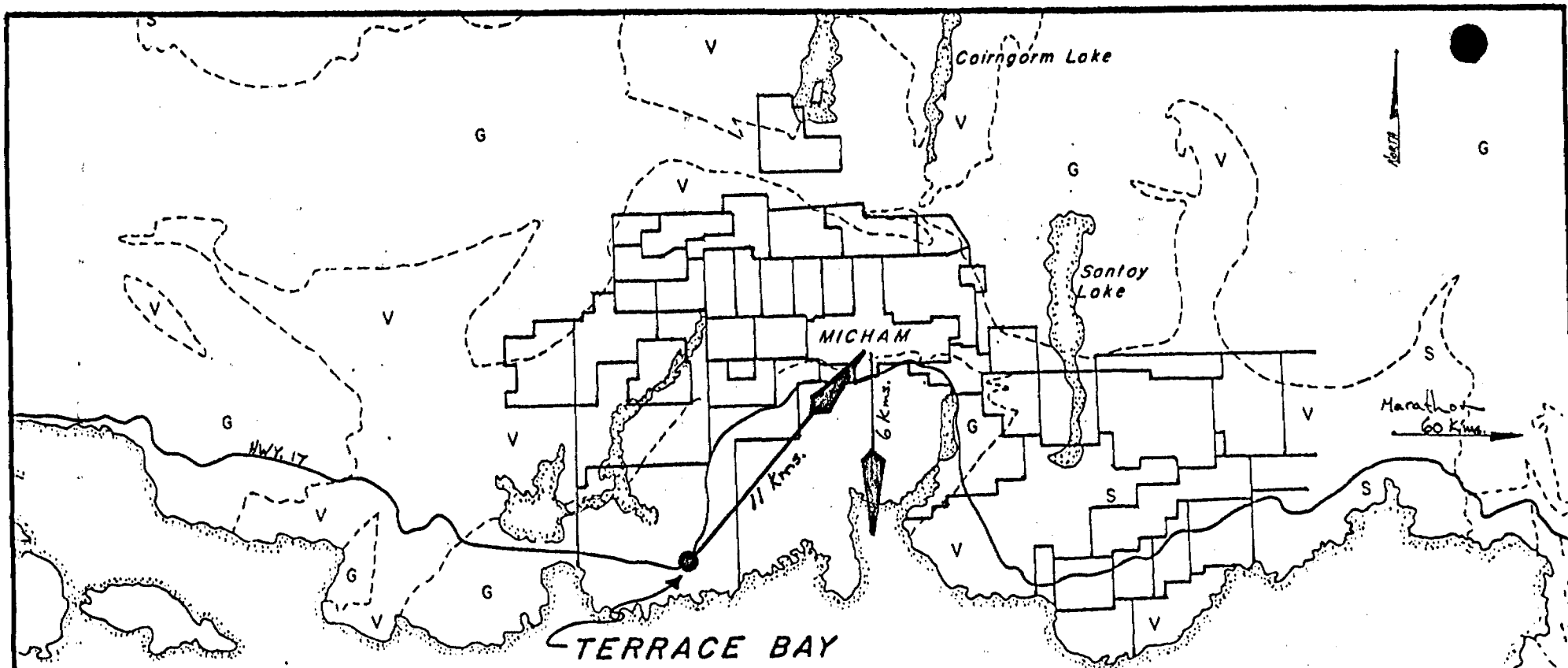
MICHAM EXPLORATION INC.

Claim Boundary Map
Terrace Bay Area

District of Thunder Bay, Ontario.

August 1984

Figure 1



DAVID R. BELL GEOLOGICAL SERVICES INC.

MICHAM EXPLORATION INC.

PROPERTY LOCATION

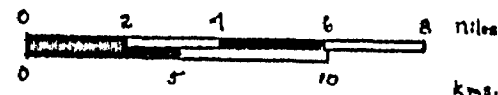
SYINE TWP. AND SANTOY LAKE AREA

TERRACE BAY AREA

DISTRICT OF THUNDER BAY, ONTARIO

August 1984

Figure 3



2,500 feet above sea level are located in the northern and eastern sections of the property. Intervening valleys are generally narrow; however a few broad and alluvium filled areas were noted.

6.0 WATER

The property contains numerous lakes, creeks and intermittent creeks adequate for exploration purposes. Mining operations could be supported by the larger lakes or from Jackfish Lake 4.0 kilometres to the southeast.

7.0 CLIMATE

Continental climatic patterns affect this area and are characterized by hot, humid summers and long cold winters. The moderating effect of Lake Superior causes substantial periods of precipitation and low lying ground fog which hampered aerial movements during the summer.

8.0 VEGETATION

Most of the claims are covered by stands of immature white birch, aspen and black spruce, while low lying swampy areas contained black spruce, alders and sphagnum moss.

9.0 ANCILLARY SERVICES

All services and supplies for exploration are obtainable in Terrace Bay or Marathon 60 kilometres distance to the east. Heavy and specialized mining machinery would have to be brought into the area.

10.0 PROPERTY HISTORY

The history of the Micham Exploration Inc. property was adequately described in Dadson's report of October 1983 and is as follows:

"The ground now held by Micham Exploration Inc. has had a long history beginning in 1895 with the discovery of mineralization at what became the Empress Mine. However at the north end of the property the Ursa-Major Mine was being developed and the Siville-Ferrier Syndicate was also active beginning in the 1930's. For this reason the history will be subdivided into three distinct units.

10.1 The Empress Mine

- 1895 - Mineralization found by an unnamed Indian and brought to the attention of the McKellar brothers in Fort William
- 1895-1897 - Development of the mine and eventual closure in early 1897
- 1897 - mine re-opened but again closed in July of that year
- 1898 (?) - mine re-opened, winze sunk and finally
1899 operations ceased at the end of 1938
and 1936 - and all metal from mill etc., was sold
1938 as scrap

1983

- Property optioned to Micham Exploration Inc. which undertook linecutting, Mag, VLF-EM, IP, geological mapping and soil sampling surveys. Prospecting and rock sampling were also completed.

10.2 Siville-Ferrier Syndicate Ltd.

1933

- Siville-Ferrier Syndicate Ltd. was incorporated in September to develop two property groups which it already held and to acquire further properties. The first or East group, was staked in June and consisted of eight claims numbered TB11060-67. In August, five more claims were added, TB11280-84, making a total area of 178 hectares (440 acres). Shortly afterwards, two more claims were added; a total of 13 claims. The second or West group lies immediately to the west of the old Empress. In July, six claims were staked by W.L. Boyde and J. Ferrier.

1934-1935

- Three claims were added to the West group making a total of nine, numbered TB11093, 11296-8, 11303-4, 11902-4 and the four claims composing the third or north group which were staked by Willian Siville. One hundred and forty days work of unrecorded nature, were performed on the west group and 40 on the north group.

- 1936 - On the West group, 3 parallel veins were uncovered for a length of about 122m (400 feet) and pit sinking was done.
- 1937 - All claims were transferred to S.J. Boyde, Secretary-treasurer and trustee for Siville-Ferrier Syndicate Limited.
- 1938 - Surface work traced the main shearing on the West group for 915m (3,000 feet) in which four veins, yielding favourable values, had been encountered. By the end of the year, diamond drilling had been planned.
- 1939 - Operations were suspended with plans to resume work in 1940.
- 1940 - Some unspecified surface work and diamond drilling were carried out on the West group. Results unknown.
- 1942 - The North group claims were cancelled.
- 1953 - The claims were cancelled, Siville-Ferrier Syndicate Ltd. having been idle since 1941.
- 1954 - Parts of the West group were restaked by E. McCowan, S. Downey and A. Spadoni. The claims were cancelled in 1955.

1974

- Three of the original West group claims and a half of another, were restaked as TB418677-80 by Lucien Lacasse and were cancelled in 1976.

1981

- Paul J. Skalesky staked the West group area. The claims are current

10.3 Ursa Major Mine

1896

- Two mining locations AL219 and AL220, (640 acres), were acquired by Jackfish Bay Syndicate Mining Company Ltd.

1898

- Work commenced in August with a labour force of between six and eight miners. A trench 72.9m (239 ft.) in length was dug through drift material down to bed-rock, across the ore body. A vertical shaft 1.22 x 2.75m (4 x 9 ft.) was sunk 16.16m (53 ft.). A new collar was constructed to a depth of 9.23m (27 ft.). In addition to the mine working, cooking and sleeping camps, a shaft-house, blacksmith shop, stable and assay office were built.

1900

- The shaft was sunk further to a depth of 35.7m (117 ft.) and timbered for a depth of 24.4m (80 ft.). The work force (miners) was enlarged to fourteen.

1901

- The main shaft was sunk to 37.6m (121½ ft.) At a depth of 36.1m (118½ ft.), a cross-cut had been driven northwards for 27m (88½ ft.). Work in the shaft was then discontinued. The cross-cut was driven to cut a series of veins outcropping north of the shaft.

On the surface, 122m (400 ft.) north-east of the main shaft, a vein was stripped for 34.16m (112 ft.). Copper and pyrite were found to be present in considerable quantities, and also galena. Assay values of gold and silver were reported to be good. Open cutting was in progress. In the latter half of the year, work ceased.

1934

- Jackfish Bay Syndicate Mining Company Limited became defunct and the property was acquired by Valora Gold Exploration Company Limited.

1936

- Valora Gold Exploration Company Limited became inactive and in the mid-forties had no assets. The property was surrendered.

1951

- William Siville restaked the property and completed 56 days work. The claims were cancelled late in 1954 and the area became known as the "Siville" property.

1956

- The property was restaked as TB76665 to 76677 by John Morris and TB76678 and 76679 by W.C. Arrowsmith, in January. On 16th of March, all interest was transferred to Monpre Uranium Exploration Limited.

1957

- On March 12th, Monpre Uranium Exploration Ltd., changes its name to Monpre Mining Company Ltd.

1958

- The claims were cancelled in February.

1960

- R.E. Lee restaked much of the property and W. Friesan staked a small part. The claims were cancelled in 1961.

1971

- Frank E. Merryth staked four claims, TB270251-4.

1973

- Early in the year a geophysical survey, consisting of an Electromagnetic survey and a magnetometer survey was performed over the four claim block. Ten anomalies meriting further exploration were delineated, but no further work was done. The claims were cancelled in December. In July, ten claims adjacent to those staked by Frank E. Merryth, were staked by Denis de Serres and Claude Darveau. The claims were transferred to Hudson's Bay Exploration and Development Co. Ltd. in August and were cancelled in 1974.

1974

- John E. Halonen staked the old "Merryth" claims as TB550790, 550797-8. The claims were cancelled in 1976.

1980

- Pat Halonen staked one claim (TB386506) on the property in March. The claim was cancelled on June 10th, 1981.

1982-1983

- Micham Exploration Inc. undertook Mag, VLF-EM, IP, rock sampling and geological mapping."

11.0 REGIONAL GEOLOGY

The Micham property is underlain by a conformable sequence of intercalated volcanic and sedimentary units of early Precambrian age. Intrusions of basic and granitic rocks have crosscut all formations with the latter being represented by the Jackfish Lake Batholith exposed along the property's southern boundary.

Regional metamorphism from greenschist to lower amphibolite facies has been recognized by Walker (1967).

Structurally the area has probably undergone several episodes of deformation with the most notable being the anticlinal and synclinal folding associated with the numerous granitic bodies. Foliations generally trending east-west with southerly dips are common in most rock types while shearing of various intensity also occurs.

Table 2 represents the regional stratigraphic sequence while Figure 4 illustrates the general geology.

TABLE 2
TABLE OF LITHOLOGICAL TYPES

PRECAMBRIAN

Late Precambrian

Keweenawan (?)

Diabase and lamprophyre dykes

intrusive contact

Early Precambrian

Granitic Rocks: granite, quartz diorite, syenite,
 granite gneiss, hybrid rocks.

intrusive contact-regional metamorphism,
 folding and shearing.

Basic Intrusives: gabbro-diorite, hornblendite,
 amphibolite.

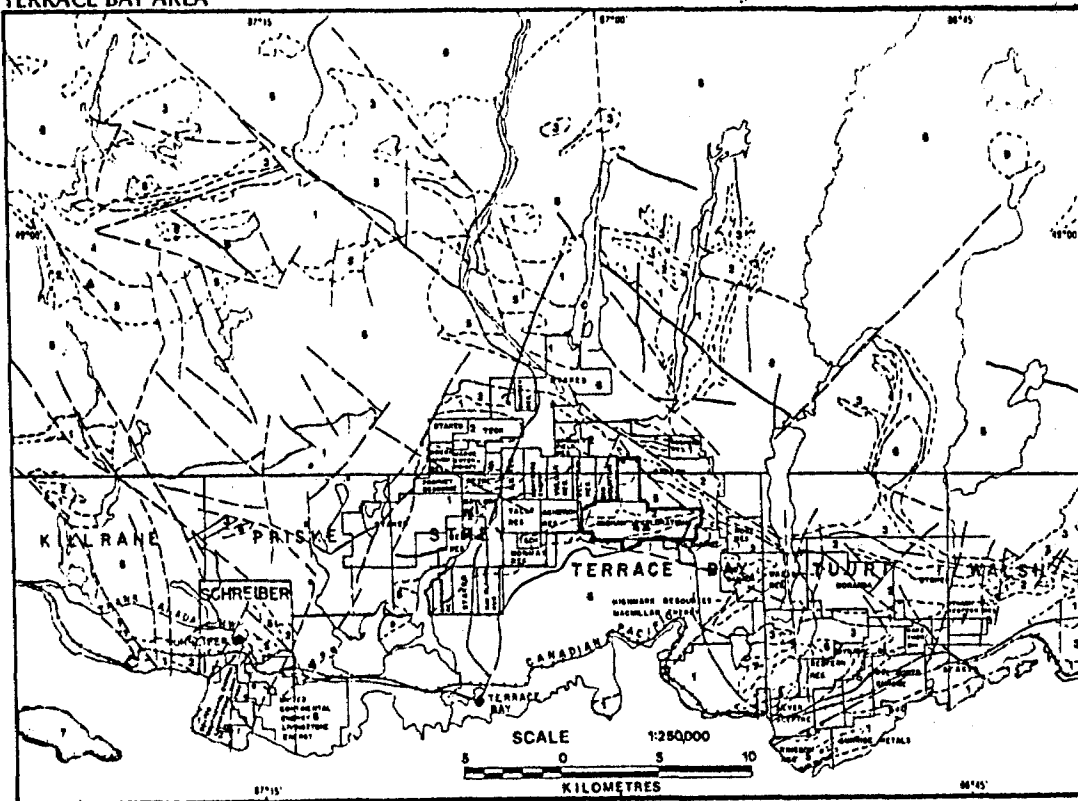
intrusive contact

Sedimentary Rocks: greywacke, slate, schists,
 iron formation

Felsic Volcanic Rocks: porphyry, agglomerate, tuff,
 schists and gneisses.

Mafic Volcanic Rocks: pillow lavas, tuffs, schists
 and amphibolite.

TERRACE BAY AREA



LEGEND

- LATE PRECAMBRIAN¹**
- 5 CARBONATITE - ALKALIC COMPLEXES
 - 5a Amphibole syenite
 - 5b Nordmarkite
 - 5c Syenodiorite
 - 5d Leucovite
 - 5e Gabbro
 - 6 Diabase dykes
 - 7 Anorthite and Oskel Groups
Sedimentary and volcanic rocks
- EARLY PRECAMBRIAN¹**
- 8 FELSIC INTRUSIVE ROCKS
 - 8a Quartz Porphyry, Quartz Feldspar Porphyry,
Monzonite - Granite
 - 8b Syenite
 - 8c Granodiorite - Monzonite
 - 8d Trondhjemite - Granodiorite
 - 8e Migmatites
 - 9 MAFIC INTRUSIVE ROCKS²
 - Gabbro, Diorite, minor Peridotite
- METAVOLCANICS AND METASEDIMENTS**
- 4 Iron Formation
 - 3 Metasedimentary rocks
 - 2 Felsic to Intermediate Metavolcanic and
Pyroclastic rocks
 - 1 Intermediate to Mafic Metavolcanic
and Pyroclastic rocks

- Geological boundary, inferred
- - - Fault, observed and assumed
- ▲ ● Past and future gold producers
- Major gold occurrences
- Township boundary
- Road
- Railroad
- - - Parks and/or Indian reserves

Geology compiled from published maps of the Ontario Dept. of Mines and Ontario Geological Survey

¹ Rocks in these groups are subdivided lithologically and the order does not necessarily imply age relationships within or among groups
² May include some ultramafic and komatiitic metavolcanic flows.



DAVID R. BELL GEOLOGICAL SERVICES INC.	
MICHAM EXPLORATION INC.	
REGIONAL GEOLOGY TERRACE BAY AREA	
ONTARIO	
August 1984	Figure 4

2.0 PROPERTY GEOLOGY

The following is a condensation of Dadson's description from his 1983 report.

A large proportion of the property is underlain by volcanic rocks of mafic composition. In the southern claims massive or foliated flows predominate the succession and were pervasively altered by carbonate and to a lesser extent by epidote and silica.

Pillowed flows, similar mineralogically to the massive flows, are exposed in the eastern claims. Selvages are well preserved and contain fine euhedral garnets. Shearing made top determinations impossible. Flows of possible pillowed origin have been noted in the west-central portion of the property but here again shearing had masked the original structures.

Mafic tuffs had been recognized throughout however were most common within the eastern claims.

Pinkish to white weathering surfaces were diagnostic colours for the felsic tuffs and crystal tuffs on the property. They occurred essentially in the north-central part of the ground but were also found as narrow lensoidal units in the mafic succession. Blue quartz-eyes were also characteristic with the crystal tuffs having a larger percentage.

The origin of these rocks had been left in doubt at the termination of the 1983 season when it was believed that the "salt and pepper" texture of these rocks and higher plagioclase and amphibole composition may represent a metasomatic alteration of a more basic volcanic.

Intercalated with these volcanics were narrow, bands of siliceous and in part pyritiferous chert. Only a few outcrops were noted however Walker's (1967) map (OGS Map 2107) illustrates the possible existence of numerous such units.

Diorite and gabbro were mapped as late but in part synvolcanic intrusives which in many cases could have represented feeder dykes or sills. Some of the diorite contained the blue quartz eyes and may represent either felsic tuff or altered mafic volcanics.

Granodiorite exposed along the southern boundary belongs to the Jackfish Lake Batholith, a late granitic intrusive which probably affected the area structurally as well as metamorphically.

13.0 1984 GEOLOGICAL MAPPING PROGRAM

The following is a general outline of the geology as encountered on the No. 64 Grid and the Mocan Valley Grid. It is presented such that duplication does not exist on the individual description for each area. Maps 4410-84-4-2 and 4410-84-4-3 clearly show the basic geology.

13.1 Mafic Volcanics

Volcanics of mafic composition comprise a major part of the two grids. The rocks are characteristically massive to foliated, have a light to dark green weathered surface and a grey-black to dark green fresh face. These surfaces are soft and from 3 to 8 millimeters in thickness.

The mafic volcanic rocks are fine to medium grained and have a phaneritic texture. Observed minerals are predominantly amphibole and plagioclase (in medium grained rocks) with minor finely disseminated pyrite. Carbonate occurs as thin stringer veins and as fracture and joint infillings. Chlorite and epidote also occurred as stringers or masses. Alteration is pervasive, of varying intensity and is most commonly carbonatization with lesser silicification, chloritization, sericitization, saussuritization and potassium enrichment.

Pillowed flows are characteristically chloritized and similar in mineralogy to the massive mafic flows. Selvages are well preserved, thick ($\frac{1}{2}$ inch to 1 inch) and dark green although some had a rusty-brown stain suggesting a high iron content.

Top directions were not obtained due to a masking effect by regional shearing.

Tuffs of mafic composition displayed a light to dark green weathered surface and a dark grey to black fresh face. A micaceous foliation and schistosity is a result of shearing.

Some of these rocks contained lithic quartz fragments, lapilli and opalescent blue quartz eyes. Silicification with minor carbonatization were the primary alteration types.

Fine grained euhedral pyrite with minor grains of chalcopyrite constitute the only sulphide mineralization noted in these rocks.

13.2 Metasediments

The only sedimentary unit observed on the grids was a bedded chert horizon. It occurred as a discontinuous band across the No. 64 Grid while it was traced across a major portion of the Mocan Valley Grid and may represent a single continuous unit. The chert, which has light coloured fresh and weathered surfaces, is in contact with a highly siliceous mafic volcanic unit both to the north and south on the Mocan Valley Grid. Texturally it is cryptocrystalline which may be due to it being deposited as a colloidal suspension in an aqueous environment. Conchoidal fracturing is noted and in some locations the chert had a high sulphide content.

Numerous boundinaged saccharoidal quartz veins were located and may represent the "sugar" quartz or "ribbon" quartz as described by Walker (1967). This texture may be the end result of metamorphic effects on the chert.

These veins which occur within the mafic volcanic pile have a gossanous weathered surface and a white to light orange-red stained fresh face.

13.3 Basic Intrusive Rocks

Gabbro and diorite intrusives are most common on both grids while diabase forms a minor proportion.

A mottled grey-green weathered surface characterizes the gabbro which is fine to medium grained, equigranular and composed of plagioclase and clinopyroxene. It appears that the gabbro may represent feeder dikes or sills and therefore syn-volcanic in age. In the southeastern section of the Mocan Valley Grid such rocks form flows or possibly the gabbroic component of a thick flow unit. A near vertical dyke is present in the Margon Creek gorge on line L108W at 21+00N and has been traced eastwards to line L102W at 23+00N.

Diorite as observed on the claims is of the blue-quartz variety; is fine to medium grained, equigranular and has a grey-white to chalky weathered surface. Compositionally it contains about 25% anhedral pyroxene, 70% anhedral plagioclase and 5% blue quartz. The pyroxenes have their long axis oriented parallel to the foliation direction.

14.0 NO. 64 GRID (Figure 5)

14.1 Geology

Foliated mafic tuffs underlie the major portion of the southern half of this grid (Map 4410-84-4-3), while foliated and massive mafic flows dominated the northern

half. Also within the northern section are intercalated tuffs and chert.

Cherts were also mapped in the southern half as were several exposures of granodiorite and mafic gneiss. The former presumably can be related to the Jackfish Lake Batholith lying a short distance to the south while the latter would be a metamorphosed equivalent of the mafic volcanics.

14.2 Structure

A well developed foliation was noted throughout trending east-west and having moderate to steep southerly dips. Fluctuations in this general trend were recognized especially in the area of line L64W at 12+00S where a marked swing occurs from about N78°E to N30°E or N48°E. It was further noted that crosscutting shearing produced parallel foliations on a local scale.

No major shears were mapped; however shearing on a grid or as determined in the 1983 program on a property wide scale was quite common and trended in an east-west direction. Those rocks heavily sheared were platy and in some exposures friable. Gossanous zones and intense carbonate alteration accompanied these shears.

Poorly developed jointing throughout the grid had east-west or north-south strikes and variable dips.

Bedding was only recognized in one exposure and indicated a strike of N70°E and a dip of 62° to the south. All other contacts have been assumed.

Evidence of folding either regionally or locally was not noted as was any indication of faulting.

14.3 Alteration

Alteration of various types and intensities occurs on the grid. Carbonatization, which is pervasive in most rocks, is most intense within shears and is generally associated with sulphide mineralization. Silicification, chloritization and potassium enrichments also occur with silicification being well developed marginal to the chert horizons. White chloritization is most common within the mafic pillowed and foliated flows. Potassium enrichments occurred at two locations only (L38W, 12+20S and L40W, 12+30S) within a brecciated chert unit containing finely disseminated sulphides.

14.4 Mineralization

Mineralization on the No. 64 Grid consisted of pyrite, chalcopyrite, pyrrhotite and magnetite.

Pyrite was noted throughout as disseminated euhedral to subhedral grains and masses. Gossanous zones contained several percent pyrite as euhedral crystals many which had weathered out completely.

Chalcopyrite and pyrrhotite occurred as minor disseminations but were most noticeable as massive concentrations in the gossanous zones located in the northwestern portion of the grid. A high concentration of magnetite accompanied this mineralization and may indicate this rock to be a sulphide-oxide iron formation.

Samples sent for assays returned variable results with the highest being 0.084 oz Au/ton from an old trench located on line L52W at 15+70S. Host rock was a sheared mafic volcanic. Other samples assayed from 2 ppb Au to 88 ppb Au and contained from 0.2 ppm Ag to 1.2 ppm Ag (Map 4410-84-3-13).

15.0 MOCAN VALLEY GRID (Figure 5)

15.1 Geology

The Mocan Valley Grid is underlain by two main rock types; mafic volcanic flows and blue quartz diorite (Map 4410-84-4-2). The latter is an intrusive within which are possible rafted blocks of crystal tuff and foliated mafic flow.

The mafic volcanic flows lie to the north of the diorite and include massive, pillowed, vesicular and gabbroic varieties. Of note are the gabbroic flows which may represent the coarser interior of a flow unit.

A sharp contact was located between the mafic volcanics and the diorite on line L106W at 7+00N.

A continuous chert horizon can be traced over a strike length of 900 feet east of Margon Creek and for 600 feet west of the creek. It occurs within the mafic flows and contains disseminated sulphide mineralization. The actual thickness of this unit could not be determined but is assumed to be at least 100 feet as mapped on line L102W at 17+00N.

South of these exposures between 8+00N and 10+00N is a series of outcrops of chert. Their lateral extent, however could not be determined.

Other rocks on the grid include a pyroxenite which extends east of the grid from line L90W at approximately 8+00N. It is medium to coarse grained, phaneritic, equigranular, has a black fresh surface and is primarily composed of hornblende, pyroxene and magnetite.

Also noted on the grid is a single outcrop of oxide facies iron formation adjacent to a chert horizon on line L104W at 18+00N. It primarily contains magnetite with traces of hematite set in a siliceous groundmass.

Two locations of crystal tuff are located within the blue quartz diorite intrusion and may represent rafted blocks. Whether these were indeed of tuffaceous origin or just sheared blue quartz diorite, could not be determined. They are foliated, have lithic fragments and contain opalescent blue quartz "eyes."

15.2 Structure

A low angle, north-south trending fault is the dominant structural feature on the Mocan Valley Grid. It is represented by a distinctive breccia and a thin ($\frac{1}{2}$ " to 1") mylonite zone located in the bed and banks of Margon Creek. A major offset however is not apparent but should the two chert units exposed on either side of the fault be correlative then there seems to be a displacement of about 100' to the south for those rocks to the west.

The other major structure is an east-west trending shear zone located at 12+00N between lines L112W and L106W. This occurs within the mafic volcanic succession and hosts the original Mocan Valley showing.

Foliation was noted over the entire grid and in all rock types. Strikes were east-west while dips although variable were to the south.

Two sets of joints are present in the volcanics and are mainly oriented north-south or east-west while in the blue quartz diorite they are well developed but have northeasterly or northwesterly strikes.

15.3 Alteration

Silicification and carbonatization are the primary types of alteration noted on the Mocan Valley grid. Silicification is most intense in mafic flows marginal to

the chert horizons. Here the rocks have an increased hardness, are fine grained and are often cut by thin quartz veinlets. Carbonatization is pervasive over the grid but is most intense within sheared mafic flows. In a few locations carbonate veins are noted in sheared mafic volcanics.

Other minor occurrences of alteration noted include; L108W+75'W at 20+00N a gossanous sericite zone in the creek gorge; and L98W and L96W at 3+50N a zone of potassium metasomatism within blue quartz diorite and gabbroic mafic flows.

15.4 Mineralization

Four locations of sulphide mineralization are located on the Mocan Valley Grid; L92W at 18+80N, L112W to L108W at 12+00N, L116W at 17+80N and the Margon Creek gorge.

On line L92W at 18+80N (Figure 6) a quartz vein ranging in thickness from 1.6 to 6 inches over a strike length of 50 feet revealed an abundance of chalcophile minerals. The vein which is hosted by a foliated mafic flow contains pyrite, chalcopyrite, bornite, malachite, azurite and a trace of chalcocite. Grab samples taken during mapping yielded 151 ppb gold and 2.4 ppm silver. After trenching, samples assayed 302 ppb gold and 2.4 ppm silver (Map 4410-84-3-13).

A shear extending across lines L112W to L108W at 12+00N was trenched in 1890 and constituted the original Mocan Valley showing. It occurs in mafic flows and contains disseminated pyrite, chalcopyrite and malachite mineralization in vuggy quartz veins. One sample taken of a quartz-carbonate veinlet just south of the shear on line L108W returned 312 ppb gold and 3.8 ppb silver.

The chert horizon on line L116W at 17+80N was mapped and later trenched. A highly mineralized section (5% sulphides) which ranged in thickness from 3 to 8 inches, assayed 27 ppb gold and 1.6 ppm silver. A second sample; however returned 116 ppb gold and 1.8 ppm silver. The mineralization was primarily euhedral pyrite with minor chalcopyrite.

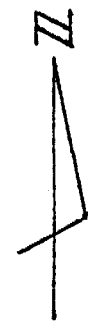
Several boulders of mineralized quartz were noted within the Margon Creek gorge. They contained chalcopyrite and pyrite with traces of bornite and malachite. The only observable quartz vein in the gorge which contained sulphides was noted 220 feet upstream from where line L110 intersects the creek. The boulders were located downstream from this location at various distances. Though a direct link between the boulders and the vein could not be made, the vein would be a possible source.

16.0 NORTH SIVILLE SHOWING (Figure 5)

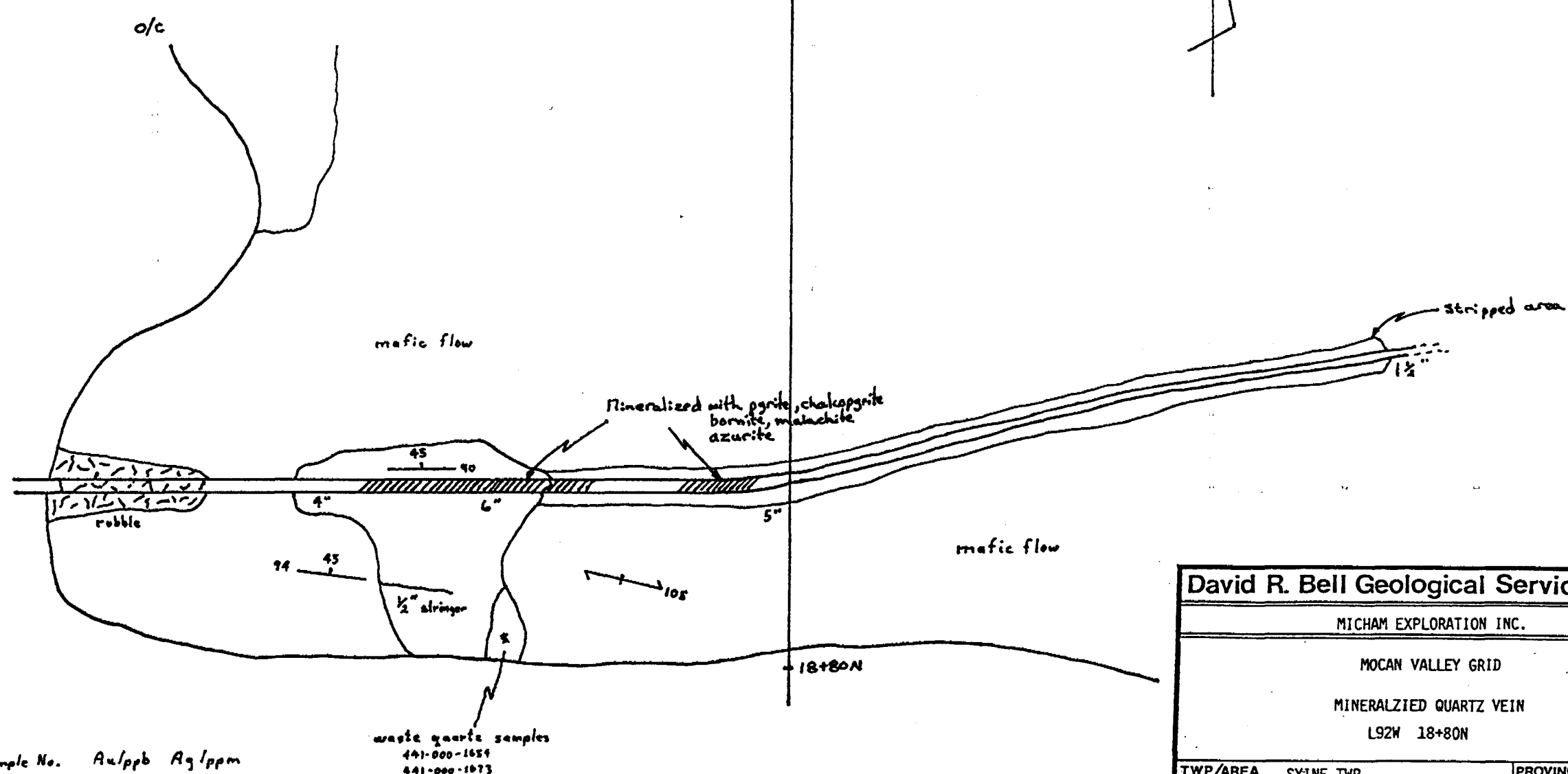
16.1 Geology

Trenching was conducted across a mafic volcanic hosted quartz vein which yielded favourable assay results (4963 ppb Au and 2886 ppb Au) during the 1983 field season (Figure 7). Prospecting conducted in the surrounding area extended the quartz vein structure 400 feet west to the opposite side of a small lake. Here several narrow, discontinuous quartz veins were found.

The quartz vein(s) was trenched at three locations; above the cliff exposure on the east side of the lake (Figure 8), on the cliff exposure (Figure 9) and on the western shore of the lake opposite the cliff (Figure 10).

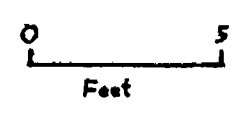


L92W

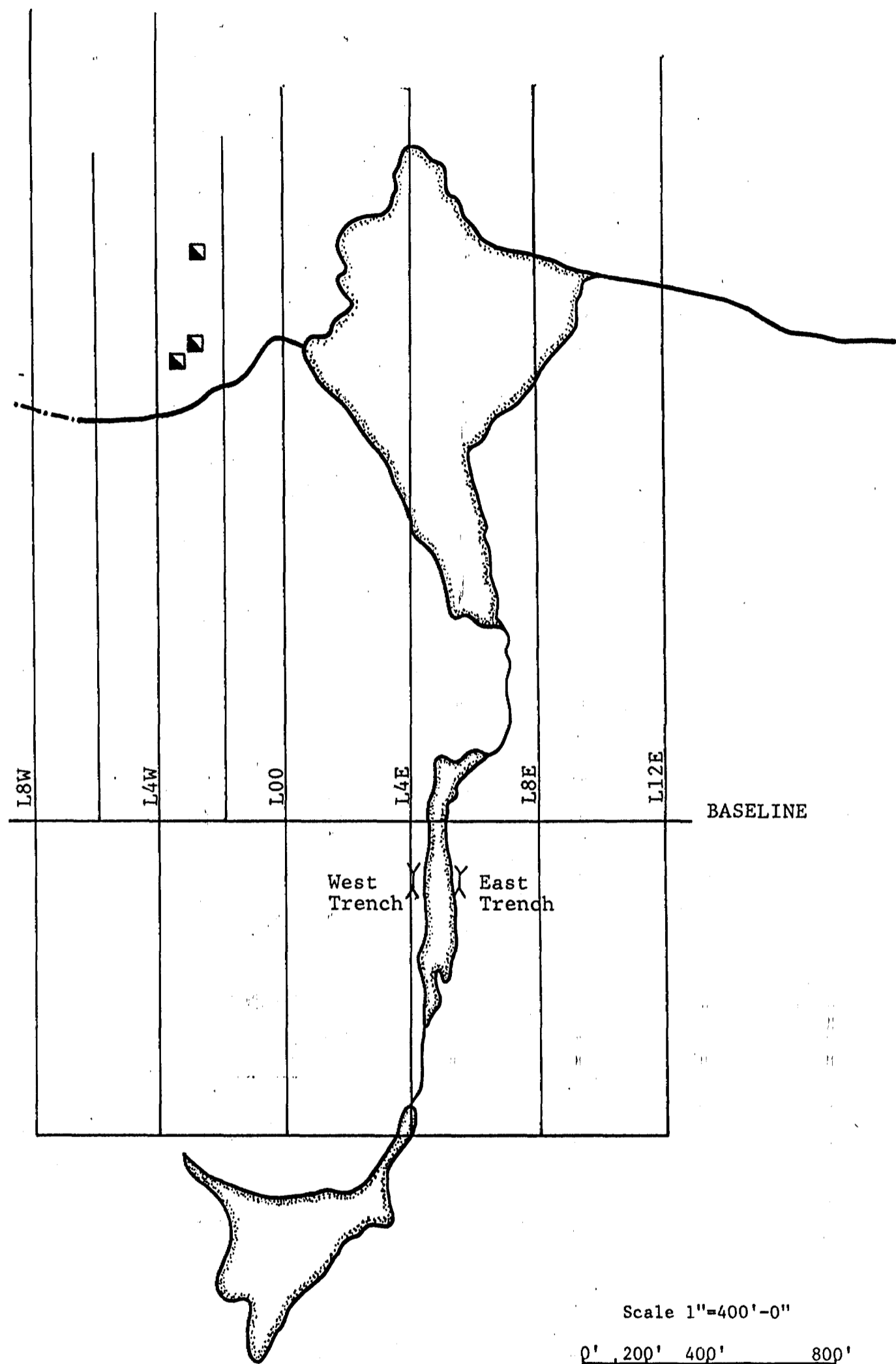


Sample No.	Au/ppb	Ag/ppm
441-000-1654	151	2.4
441-000-1673	302	2.1

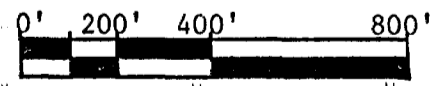
waste quartz samples
441-000-1654
441-000-1673



David R. Bell Geological Services Inc.		
MICHAM EXPLORATION INC.		
MOCAN VALLEY GRID		
MINERALIZED QUARTZ VEIN		
L92W 18+80N		
TWP/AREA	SYINE TWP.	PROVINCE, ONTARIO -
MINING DIVISION THUNDER BAY		PROJECT No. 4410
REFERENCES		N.T.S. No.
DRAWN P. HINZ	DRAFTED	CHECKED
SCALE 1"=5'	DATE Aug. 16, 1984	SHEET No. 6

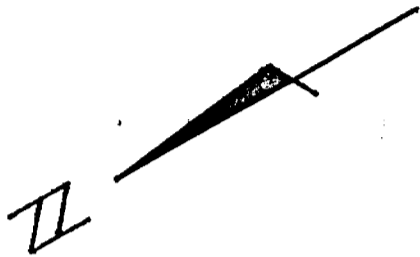


Scale 1"=400'-0"



DAVID R. BELL GEOLOGICAL SERVICES INC.	
MICHAM EXPLORATION INC.	
LOCATION MAP	
NORTH SIVILLE SHOWING	
PROJECT #4410	
MINING DIVISION: Thunder Bay	
TOWNSHIP: Syine	PROVINCE: Ontario
DATE: August 15, 1984	FIGURE: #7

Sample No.	Au/ppb	Ag/oz.	Ag/ppm	Mo/ppm	Sample length
441-000-1665		0.036	1.8	122	16"
441-000-1666	315		1.0	30	29"
441-000-1667	384		1.2	10	30"
441-000-1668		0.016	0.2	12	24"
441-000-1669		0.064	3.6	72	24"
441-000-1670		0.030	1.6	16	24"
441-000-1674		0.353	2.9	6	Grab
441-000-1675	85		0.4	-	Grab

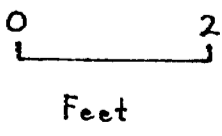


o/b

amygdaloidal flow sil., S

o/c limits

fractured quartz carb., S. (py, cpy = mo)



441-000-1675

441-000-1674

q.v.

sheared amygdaloidal flow gossion

Chip sample 441-000-1665
441-000-1666

q.v.

Chip sample 441-000-1667

rubble pile

Chip sample 441-000-1668
441-000-1669
441-000-1670

shear pot. alt. carb. S

S (py, cpy = mo)

o/c limits

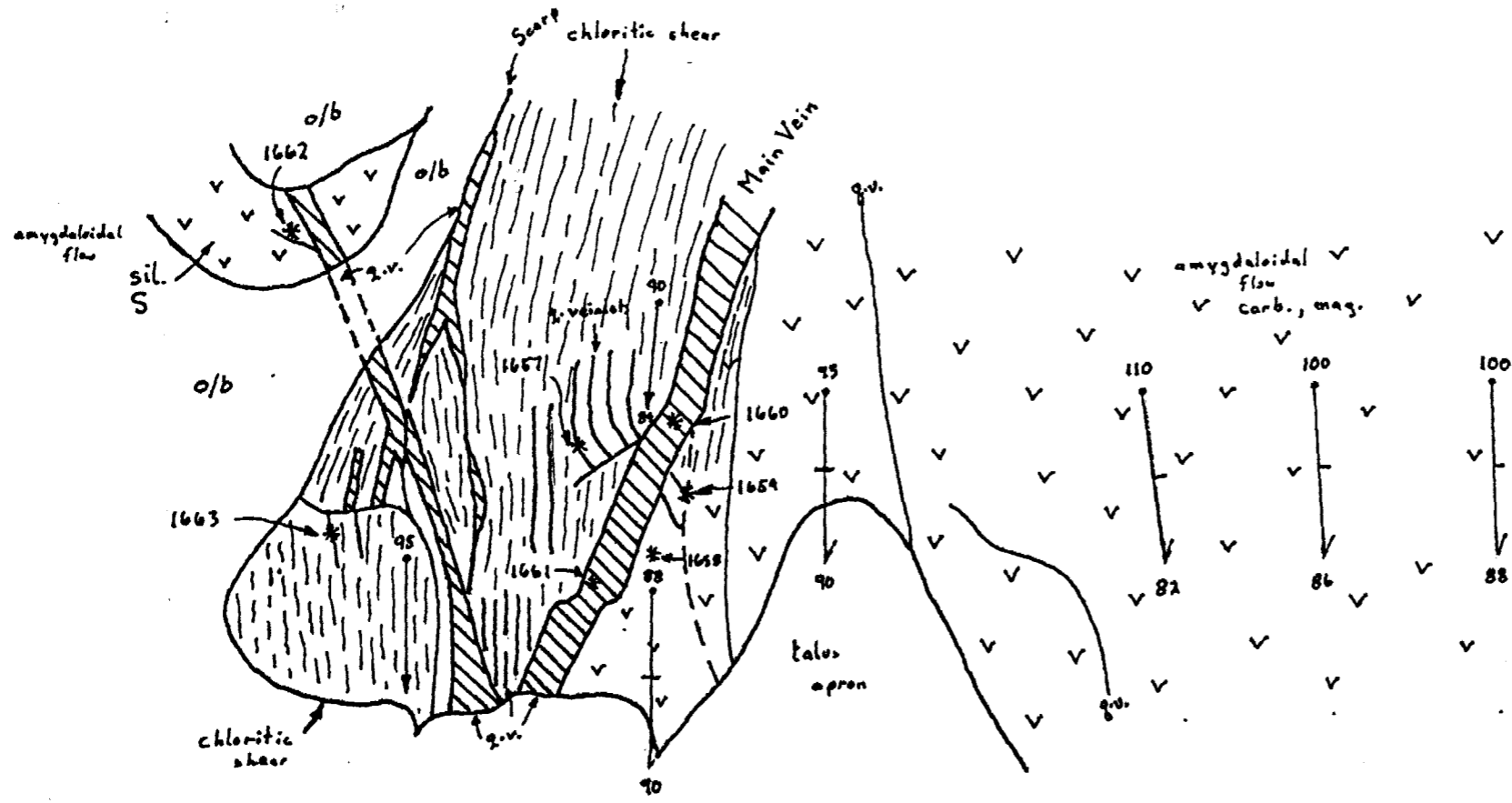
David R. Bell Geological Services Inc.

NICHAM EXPLORATION INC.

TERRACE BAY PROPERTY
NORTH SIVILLE SHOWING
GEOLOGY & ASSAY RESULTS
EAST TRENCH (above cliff exposure)

TWP/AREA: SYDNE TWP.	PROVINCE: ONTARIO
MINING DIVISION: THUNDER BAY	PROJECT No. 4410
REFERENCES	N.T.S. No.
DRAWN: H.C.S.	DRAFTED: P.A.D.
SCALE: 1" = 2'	CHECKED: P.A.D.
DATE: AUG / 84	SHEET No. 1 FIGURE 2

SAMPLE #	Au ppb	Ag ppm	Pb ppm
1657	185	1.0	2
1658	.042 oz.	1.0	6
1659	181	1.2	6
1660	.270 oz.	0.6	98
1661	.190 oz.	1.2	396
1662	968	1.2	28
1663	.092 oz.	2.6	20
1664	.128 oz.	0.8	212



* 1663 SAMPLE LOCATION AND NUMBER

AMYGDALOIDAL AND VESICULAR FLOWS

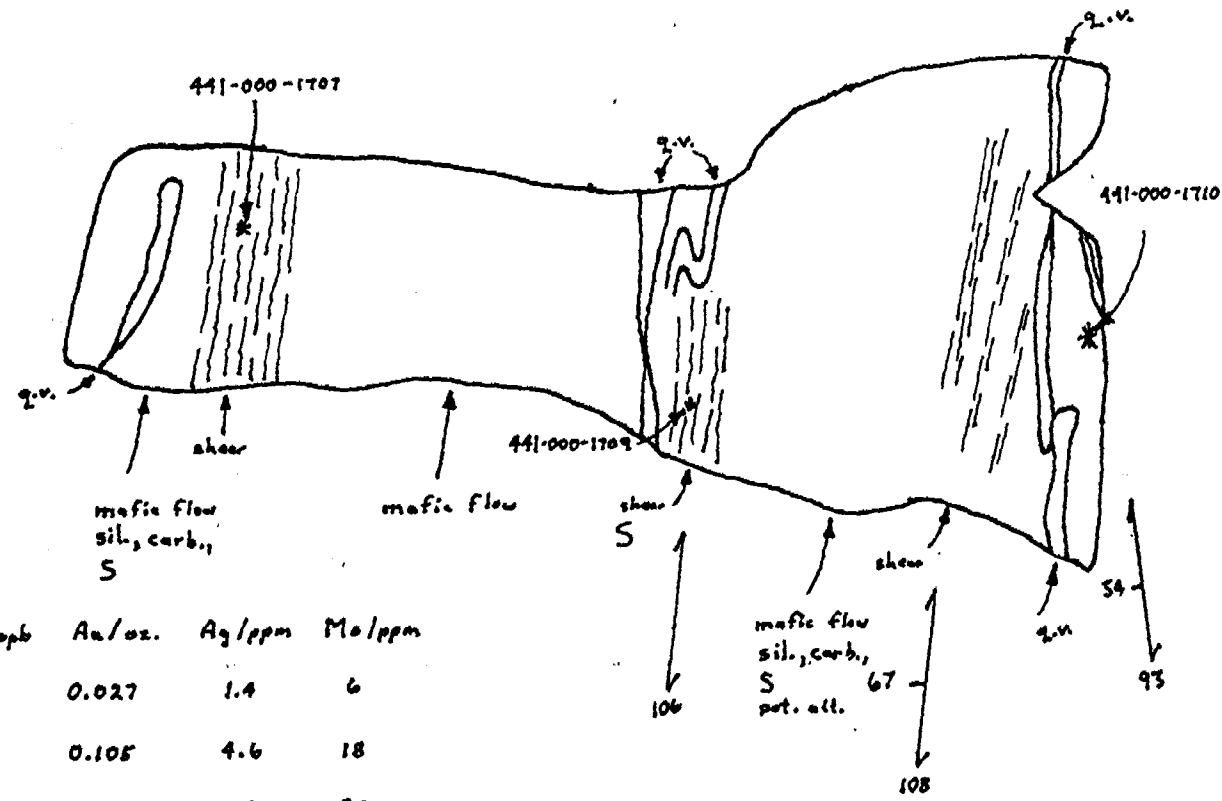
SHEAR ZONE

FOLIATION

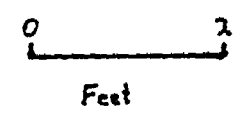
David R. Bell Geological Services Inc.	
MICHAM EXPLORATION INC.	
TERRACE BAY PROPERTY NORTH SIVILLE SHOWING GEOLOGY & ASSAY RESULTS (EAST OF LAKE)	
TWP/AREA : SYINE TWP.	PROVINCE : ONTARIO
MINING DIVISION : THUNDER BAY	PROJECT No. : 4410
REFERENCES	N.T.S. No.
DRAWN : M.C.S.	DRAFTED : P.A.D. CHECKED : P.A.D.
SCALE : 1" = 5'	DATE : AUG. / 84 SHEET No. : FIGURE 9

* 1664 Blast Recovery

0 2' 4' 6' 8' 10'



Sample No.	Au/ppb	Au/oz.	Ag/ppm	Pb/ppm
441-000-1707		0.027	1.4	6
441-000-1708		0.105	4.6	18
441-000-1709	29		0.6	29
441-000-1710	748		2.0	4



David R. Bell Geological Services Inc.	
MICHAM EXPLORATION INC.	
TERRACE BAY PROPERTY NORTH SIVILLE SHOWING GEOLOGY & ASSAY RESULTS WEST TRENCH	
TWP/AREA: SYINE TWP.	PROVINCE: ONTARIO
MINING DIVISION: THUNDER BAY	PROJECT No.: 4410
REFERENCES	N.T.S. No.
DRAWN: M.C.S.	DRAFTED: P.A.D.
SCALE: 1" = 2'	CHECKED: P.A.D.
DATE: AUG. / 84	SHEET No.: FIGURE 10

16.2 Alteration

The flows marginal to the quartz vein are sheared, silicified and carbonatized, with the sheared section being friable and deeply weathered. Further, a moderate potassium enrichment was noted and characterized by a pinkish fresh surface.

16.3 Mineralization

Mineralization observed in the flow includes disseminated pyrite and chalcopyrite which upon assay returned 85 ppb gold and 0.4 ppm silver.

After trenching, the quartz vein which ranged in thickness from 6 inches to 6 feet, was found to be full-white, fractured and strongly mineralized in some sections. It had a 120 degree strike and was folded over to form a "saddle" shape with a fold axis trending 114 degrees and plunging 22 degrees to the east. Mineralization included pyrite, chalcopyrite, magnetite, molybdenite and possibly ferri-molybdenite. All were seen as fine disseminations, thin veinlets and/or small massive patches.

Chip and grab samples taken across the quartz vein (Figure 8) yielded assays from 315 ppb Au to 0.353 oz gold; 0.2 to 3.6 ppm silver; and 6 to 122 ppm molybdenum. The highest gold assay was taken from the quartz vein at the fold axis (sample No. 1674). Samples were taken from the cliff exposure (Figure 9) but assay results have not yet been returned. Samples taken from the western trench assayed 29 ppb Au to 0.105 oz gold; 0.6 to 4.6 ppm silver; and 4 to 29 ppm molybdenum.

17.0 FLAGGED GRID (Figure 5)

Intermediate flagged lines were established between lines L26W and L44W and from 4+00S to 4+00N, to further investigate an anomalous gold soil anomaly discovered in 1983.

17.1 Geology

Mafic volcanics were the dominant rock type and included coarse grained massive and foliated flows, pillowed flows as well as foliated and massive tuffs. Also observed were outcrops of gabbro and blue quartz diorite along the northern grid boundary. The medium grained blue quartz diorite and coarse grained gabbro may be intrusive into the volcanics but this relationship could not be determined. However a transition zone did occur between the mafic flows and the diorite on lines L38W, L36W and L32W at 3+80N, which may indicate a syn-volcanic relationship (Map 4410-84-4-3).

Two other rock types noted on the grid include Late Precambrian, Keewenawen diabase and biotite lamprophyre. The fine to medium grained, dark green diabase dyke strikes northeast has a vertical dip, is associated with a carbonatized shear and had well defined contacts with the host mafic flows.

The biotite lamprophyre is medium grained phaneritic, and has a poorly developed foliation and irregular jointing. Biotite is present as a phenocryst phase and is set in a fine grained purplish black matrix of plagioclase and potassium feldspars. It is possible this rock is related to the Coldwell Syenitic Complex which outcrops 14 miles to the east.

17.2 Structure

Foliations are uniform throughout the grid and have a general strike of 90 degrees and steep southerly dips.

17.3 Alteration

Carbonatization is pervasive over the grid and is most intense in a strong northeast-southeast trending shear zone. Only minor silicification was noted.

17.4 Mineralization

The only significant mineralization on the grid was located on line L37W at the baseline. Here a carbonatized sheared mafic flow contained 5% disseminated pyrite and chalcopyrite. A trench was blasted, however, no samples were taken for assay.

18.0 CONCLUSIONS

18.1 No. 64 Grid

This grid has been shown to be underlain by a predominantly mafic volcanic succession which has intercalated chert horizons. These rocks have undergone regional metamorphism and deformation and have been intruded by the granodioritic Jackfish Lake Batholith.

Shearing with intense carbonate alteration has been noted throughout with some zones having associated sulphide mineralization. Silicification is closely related to the chert horizons while chloritization is more notable in the mafic flows and pillowed units.

Quartz veining was not prevalent but did occur in the old showings of the Siville-Ferrier Syndicate's West Group. Further, numerous old trenches were located between lines L30W and L66W and may trace the possible extension of the Empress Structure at the Empress Mine. A drill hole collar on line L50W at about 17+50S supports this theory.

The IP conductor located south of the baseline between lines L72W and L54W is caused in part by a gossanous zone with mafic volcanics either being massive or pillowed flows. The iron formation or cherty horizons to the south did not respond favourably. To the east the conductor traverses an area of poor exposure and no known showings.

The second IP conductor(s) located between lines L64W and L56W could not be adequately explained. In most cases outcrop exposure was poor and although some alteration was noted it was not extensive or well developed. On line L64W at 8+00S the conductor was strong and corresponded to a chert unit within the volcanics.

18.2 Mocan Valley Grid

Unlike the No. 64 Grid, this grid is underlain not only by mafic volcanics but intrusives of gabbro, blue quartz diorite and to a minor extent pyroxenite. Cherts are also better developed and form both laterally and vertically more extensive horizons. Associated in part is an oxide iron formation.

Structurally the north-south fault in Margon Creek is important but displacements do not seem to be great.

The original Mocan Valley Showing appears to be the only structure of economic interest. Budget restraints, which caused the summer program to be foreshortened, affected the adequate investigation of this vein-shear. It could be

traced 600 feet to the east but became progressively weaker. Its relationship to the chert or gabbroic flows to the east is still unknown and should be followed-up.

The numerous chert horizons and in one case iron formation represent an exhalative type sediment which has shown to be mineralized with sulphides and to a lesser extent gold. It is concluded that these units should be more fully tested.

18.3 North Siville Showing

A quartz vein and shear zone system was trenched during the summer in follow-up to significant gold assay results obtained in 1983.

The vein which is hosted by a carbonatized and potassium enriched mafic flow is folded about an axis trending 114 degrees and plunging 22 degrees east.

A possible extension of this zone was trenched and sampled from an outcrop on the western shore of an intervening lake.

The origin of this vein or vein shear system appears to be synvolcanic due to its folded nature; however the shearing could possibly be post volcanism and folding. Stripping although indicating a strong and wide structure also has shown the plunge direction of the vein. The possibility of continued mineralization down plunge should not be overlooked. Further the linearity of the adjacent lake and "Lizard Lake" to the north suggests a north-south structure not unlike the fault on the Mocan Valley Grid or known to exist elsewhere on the property. Its importance as a possible channel way for late mineralizing fluids is not known as is the possible affect on the pre-existing vein.

In addition it should be noted that the Ursa Major workings are located only a short distance to the north and this vein should receive further study. In support of this would be the assays received which went as high as 0.395 oz Au/ton.

18.4 Flagged Grid

Mafic volcanics altered by carbonatization and silicification underlie most of this grid. Minor expanses of gabbro, blue quartz diorite and diabase however were also mapped.

The gold soil geochemical anomaly located on line L28W at 1+00S was the prime target and it was hoped that some suitable explanation could be obtained.

From the mapping program, in the vicinity of the anomalous sample, was found outcroppings of pillowed volcanic flows, altered by carbonatization and silicification. Some pyrite mineralization was also observed.

Although mapped, soil sampled and one trench excavated the budget constraints prohibited the analysis of the soil samples or the further assaying from the trench or possible anomalous outcrop. Therefore the only conclusion that can be made is that the soil anomaly still exists and requires definition.

19.0 RECOMMENDATIONS

19.1 No. 64 Grid

The work completed on the No. 64 Grid has shown significantly more detail than that undertaken in 1983. Clearly the numerous trenches located and the one old drill collar indicate that interest in this area was considerable at one time.

The significant assays obtained in both years and the failure to determine the exact cause of the IP conductors signifies that this area should undergo further work.

As a first step in this continued program it is recommended that those trenches blasted in 1984 be refurbished and properly sampled. Second a similar set of trenches should be established over the more southerly conductors (L64W, 8+00S) and these should also undergo extensive sampling. In addition it is recommended that the chert horizons should be prospected and sampled.

In regards to the possible extension of the Empress Structure, the old trenches should undergo a re-examination in view of the more recent geophysical, geochemical and drilling data. One sample this year assayed greater than 0.08 oz Au/ton which is certainly significant even if only a grab. Although this segment of the proposed program may only include prospecting and sampling; rock definition, close attention to alteration and stratigraphy should be made if this is a possible western extension of the Empress Structure. With favourable results hydraulicking and/or back-hoe trenching can be envisaged as the next step.

Again with favourable results the various zones should be drilled. If a condensed program is planned drilling could begin on the IP conductors and would require approximately 4,000 feet of coring.

19.2 Mocan Valley Grid

The 1983 program defined the major rock units in this area and provided several encouraging assays from the original Mocan Valley Showing. Work continued this year but was foreshortened due to budget revisions. Of major importance was the eastern extension of this Showing from

L112W to L108W and it was along this length that numerous trenches were put down but not sampled.

Of further interest are the chemical sediments (cherts and iron formation) with their associated sulphide mineralization and silicification.

The data from these two seasons is considerable but still it remains that the original Showing is of greatest economic interest and has not received adequate examination to define its potential.

Recommendations include additional prospecting, mapping and systematic rock sampling of not only the Mocan Valley Showing but over the chert-iron formation to the north and southeast. Prospecting and possibly to a lesser extent trenching is required for the gold soil geochemical anomalies still unexplained.

A second phase to the program would be the continuation of the IP survey between this grid and the No. 64 Grid. This work however would be dependent on the results from both grids on the chert-iron formation units. Such a survey would require a minimum of effort and subsequent supervision and report preparation.

Diamond drilling (3,000') is recommended as a third phase and would include the testing of the Mocan Valley Showing and if necessary the chemical sediments. At this early date these sediments are sulphide bearing but cannot be shown to be highly auriferous. Phase I results would be the determining factor on the applicability of this drilling.

19.3 North Siville Showing

Essentially only preliminary work has been completed on this quartz-shear occurrence. Some cut lines exist in the area however as part of an expanded program

Intermediate lines should be cut. In preparation for a summer mapping, prospecting and trenching phase, the entire area surrounding the showing should be blanketed with winter conducted magnetometer and VLF-EM surveys. In the case of the latter survey it is recommended that two stations be read to provide full coverage of a possible north-south structure lying beneath the lake. All readings for both surveys should be taken at 50 foot intervals.

It is envisaged that the subsequent summer work could effectively trace the structure and determine its potential. However should the VLF-EM or prospecting fail then an induced polarization and resistivity survey would be recommended and based on results would be followed by diamond drilling.

Soil geochemistry has not been attempted but should be tested in conjunction with prospecting. This may be more cost effective than the IP although having reduced strength in deep overburden areas.

19.4 Flagged Grid

The work undertaken over this grid was curtailed by the budget revisions of mid-1984. Further the program of mapping and soil geochemistry was not recommended in 1983 but was performed only if time or man power permitted. It was a valid investigation of a highly anomalous gold value in soils and was warranted. In total the grid was mapped, one trench was excavated and 32 soil samples collected but not analyzed.

From this data it is difficult to recommend follow-up work; however, it seems apparent that the soil samples should be analyzed and evaluated. In addition systematic sampling of the one trench be undertaken and further prospecting of the geochemical anomaly be done to determine its cause.

It is not expected that this work program take more than several days and could easily form an important segment of a larger plan. For now a multi-phase work commitment is not to be recommended but could be initiated based on new data.

19.5 Proposed Costs

Phase I

No. 64 Grid

Geological Mapping (including prospecting,
Rock Trenching and Rock Sampling)

1 Geologist 3 weeks @ \$250./day	\$5,250.00	
2 Assistants 3 weeks @ \$160./day	<u>6,720.00</u>	
	\$11,970.00	\$11,970.00

Assays

Estimate 100 samples @ \$15./sample		1,500.00
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Lithogeochemistry

Estimate 20 samples @ \$60./sample		1,200.00
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Mocan Valley Grid

Geological Mapping (including prospecting,
Rock trenching and rock sampling)

1 Geologist 2 weeks @ \$250./day	3,500.00	
2 Assistants 2 weeks @ \$160./day/man	<u>4,480.00</u>	
	\$7,980.00	\$7,980.00

Assays

Estimate 100 samples @ \$15./sample		1,500.00
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Lithogeochemistry

Estimate 30 samples @ \$60./sample		1,800.00
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North Siville Showing

Linecutting

2 miles @ \$350./mile	700.00	
Transport-Helicopter		
2 hrs @ \$500./hr	<u>1,000.00</u>	
	\$1,700.00	1,700.00

Geological Mapping (including prospecting,
rock trenching and rock sampling)

1 Geologist 2 weeks @ \$250./day	3,500.00	
2 Assistants 2 wks @ \$160./day/man	<u>4,480.00</u>	
	\$7,980.00	\$7,980.00

Assays

Estimate 50 samples @ \$15./sample		750.00
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Lithochemistry

Estimate 10 samples @ \$60./sample		600.00
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Geophysics

Magnetometer 2 miles @ \$150./mile	300.00	
VLF-EM 2 miles (2 stations) @ \$175/mile	<u>350.00</u>	
	\$650.00	650.00

Accommodations (all grids)

Meals 3 men for 7 weeks @ \$20./ day/man	2,940.00	
Lodging estimate	<u>500.00</u>	
	\$3,440.00	3,440.00

Transportation (all grids)

Truck estimate 3,000km @ \$0.35/km	1,050.00	
Aircharter-helicopter estimate 8 hrs @ \$500./hour	4,000.00	
Air-Domestic estimate	1,400.00	
Supplies estimate	<u>800.00</u>	
	\$7,250.00	7,250.00

● Equipment & Supplies (camp supplies, explosives,
drill rental, etc.)

estimate 1,600.00

Supervision

Estimate 15 days @ \$400./day 6,000.00

Report & Map Preparation

10 days @ \$250./day 2,500.00

Sub-total \$58,420.00

+ 15% Contingency \$8,763.00 say 8,760.00

\$67,180.00

Phase II

No. 64 Grid

Geology

1 Geologist @ \$250. for 2 weeks 3,500.00

Assays

Estimate 100 samples @ \$15./sample 1,500.00 1,500.00

Hydraulicking

2 man crew @ \$160./day for 2 wks 4,480.00

Equipment rental estimate 750.00

Supplies estimated 400.00

\$4,350.00 4,350.00

Backhoe Trenching (all inclusive)

7 days @ \$900./day 6,300.00

Mocan Valley Grid

Induced Polarization Survey
 Estimate 2 miles @ ½ mile/day

Contract rate \$1,200./day \$4,800.00

Mobe & Demobe

2 days @ \$700./day

1,400.00

\$6,200.00

6,200.00

North Siville Showing

Induced Polarization Survey
 Estimate 2 miles @ ½ mile/day

Contract rate \$1,200./day 4,800.00

Camp Moves

2 days @ \$700. day

1,400.00

\$6,200.00

6,200.00

Accommodations

Meals: 14 days, 3 men @ \$20./day/man 840.00

Lodging estimate 200.00

\$1,040.00

1,040.00

Transportation

Truck 2,500km @ \$0.35/km 875.00

Air charter-Helicopter
 estimate 5 hrs @ \$500./hr 2,500.00

Air-Domestic
 estimate 500.00

Supplies
 estimate 500.00

\$4,375.00

4,375.00

Equipment & Supplies (Camp material, etc.)

estimate		350.00
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Supervision

Estimate 8 days @ \$400./day		3,200.00
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Report & Map Preparation

8 days @ \$250./day		<u>2,000.00</u>
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Sub-total		39,015.00
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+ 15% Contingency \$5,852.25	say	<u>5,850.00</u>
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		\$44,865.00
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Phase IIINo. 64 Grid and Mocan Valley Grid

<u>Diamond Drilling</u> 7,000 ft @ \$25./ft		175,000.00
---	--	------------

<u>Core Boxes</u> approx. 350 @ \$5./box		1,750.00
--	--	----------

<u>Assays</u> estimate 1,000 samples @ \$15./sample		15,000.00
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<u>Lithochemistry</u> estimate 75 samples @ \$60./sample		4,500.00
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Drill Supervision

1 Geologist, 10 weeks @ \$250./day	17,500.00	
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1 Assistant, 10 weeks @ \$160./day	<u>11,200.00</u>	
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	\$28,700.00	28,700.00
--	-------------	-----------

Accommodations

Meals two man crew @ \$20./day/man	2,800.00	
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on site visits estimate	100.00	
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Lodging

Estimate	<u>500.00</u>	
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	3,400.00	3,400.00
--	----------	----------

● Equipment & Supplies (core splitter, tools, etc.)

Estimate 750.00

Transport

Truck 4,500km @ \$0.35/km 1,575.00

Air charter-helicopter
estimate 5 hrs @ \$500./hr 2,500.00

Air Domestic

Estimate 1,500.00

Supplies 750.00

\$6,325.00 6,325.00

Supervision

15 days @ \$400./day 6,000.00

Report and Map Preparation

14 days @ \$250./day 3,500.00

Sub-total \$244,925.00

+ 15% Contingency \$36,738.75 say 37,000.00

\$281,925.00

Phase I \$ 67,180.00

Phase II \$ 44,865.00

Phase III \$281,925.00

\$393,970.00

Respectfully submitted,

Peter Hinz, B.Sc.

Supervised by:

Peter Dadson, B.Sc., F.G.A.C.
Exploration Manager

CERTIFICATE OF QUALIFICATIONS

I, Peter Hinz, hereby certify:

1. that I am a geologist employed by David R. Bell Geological Services Inc., Suite 4, 251 Third Ave., Timmins, Ontario
2. that I am a graduate of Lakehead University, Thunder Bay, Ontario, with a Bachelor of Science (B.Sc.) degree in geology, 1984
3. that I have been practising my profession as a geologist since April, 1984
4. that I am a member of the Canadian Institute of Mining and Metallurgy
5. that I do not have, nor do I expect to receive, either directly or indirectly, any interest in this property or in the securities of Micham Exploration Inc.

Timmins, Ontario
August 15, 1984

Peter Hinz, B.Sc.

CERTIFICATE OF QUALIFICATIONS

I, Peter Dadson hereby certify:

1. that I am a geologist employed by David R. Bell Geological Services Inc., Suite 4, 251 Third Ave., Timmins, Ontario
2. that I am a graduate of the Carleton University in Ottawa, holding a Bachelor of Science degree in Geology (1974)
3. that I have been practising my profession as a geologist since 1974
4. that I am a Fellow of the Geological Association of Canada
5. that I am a member in good standing of the Prospectors and Developers Association of Canada, and the CIMM
6. that I do not have nor do I expect to receive either directly or indirectly, any interest in this property of Micham Exploration Inc.

*Qual
23162*

August 15, 1984
Timmins, Ontario

Peter A. Dadson, B.Sc., F.G.A.C.

REFERENCES

Dadson, P.

"Geological Report Micham Exploration Inc. Terrace Bay claims Syine Twp. and Santoy Lake Area, District of Thunder Bay, Ontario." Oct. 24, 1983

Walker, J.W.R.

"Geology of the Jackfish-Middleton Area"; Ontario Department of Mines, GR 50, 1967

ADDENDUM
MOCAN VALLEY GRID

MOCAN VALLEY

This addendum was prepared after the 1984 field season. It includes an interpretation of this grid utilizing all of the available data including the most recently completed induced polarization survey.

The body of this report adequately describes the geology, mineralization and alteration encountered during the 1984 program and will not be repeated.

Of major interest in this area was the original Mocan Valley Showing which was briefly investigated in 1890. At that time the Canadian Mining Review described the occurrence as a "strong fissure vein" which "carries considerable auriferous pyrites." An adit was driven on the vein and although "a few colours were shown in the last blast" work ceased. Since then, there has not been any recorded work of any type.

In 1983 the adit was re-found; but it was in poor condition and had probably caved. Several shallow trenches were blasted along the structure in the immediate area and grab sampled. Assay results were very encouraging with 0.595 oz Au/ton being the highest.

The purpose of the 1984 program centered around the further investigation of this showing as well as the numerous soil geochemical anomalies in the immediate area. As part of the activities a limited induced polarization survey was also undertaken.

CONCLUSIONS

The IP survey (Maps 4410-84-5-16; 4410-84-5-17) outlined several conductors of which some had relatively low chargeabilities. However one main conductor transected the entire grid with strong to moderate responses. In comparison with the geology map the area is underlain by mafic

volcanic rocks, chert and iron formation. The axis parallels the chert-iron formation unit and probably reflects the magnetite and sulphide content of these rocks. The anomaly peaks on line L92W at 16+00N with a chargeability of 114 milliseconds. Values on L88W were considerably weaker however the conductor seems to continue to the east.

VLF-EM results (Map 4410-84-5-15) correspond directly with this anomaly and from previous plots can be shown to continue albeit weakly to the Empress Mine about 7,500 feet to the ESE. Mapping in 1983 failed to distinguish a continuous chert unit however as stated in this report work on the No. 64 Grid was successful in delineating similar units south of the baseline in the area of line L64W. Here also an induced polarization survey detected a favourable anomaly but perhaps not directly related.

The soil geochemical anomalies (Map 4410-84-3-15) could not adequately be explained by the 1984 work. However it seems apparent that this chert-iron formation unit could be the cause of two significant anomalies. One centered on line L100W at 15+00N and the other on line L108W at 17+00N. The Mocan Valley Showing had in part a weak corresponding anomaly (10-20 ppb Au) however two hundred feet to the south a moderate one sample anomaly of 82 ppb Au was obtained with no samples collected over the following 3 stations.

No explanation for the anomaly on line L112W at 5+00N could be made.

Copper and silver soil assays show an extensive anomalous zone on lines L96W, L92W and L88W at approximately 10+00N. To the north is the chargeability conductor while to the south lies a moderate VLF-EM anomaly.

Rock assays of the chert-iron formation were not that encouraging however one sample from line L116W at 18+00N did return 116 ppb Au. Additional assays are still pending from the whole rock data.

The eastern end of the copper anomaly is open, as is the silver. Both appear to possibly be related to the chemical metasediments.

The Mocan Valley Showing revealed ore grade material in the 1890's and again upon re-examination in 1983. The structure is a vuggy quartz vein in a mafic volcanic host which is mineralized with variable amounts of sulphides and associated gold. Prospecting has shown that the sheared structure continues at least 1,000 feet to the east and an unknown distance to the west. Due to budget revisions however this structure could not adequately be sampled during the 1984 summer season and therefore as at the conclusion of the 1983 season; it remains an anomalous structure with unknown limits.

Detailed mapping has shown no major differences from the 1983 program with the exception of the fault breccia, the more extensive chert as well as the iron formation. Structural information has also been enhanced as has the number and size of quartz veins and the discovery of a sericitized shear zone.

Comparisons of the exploration data from the two programs illustrate a partial explanations for the numerous gold soil anomalies with several probably being directly related to the metasediments while others remain unexplained. Of particular note is the lack of a significant anomaly related to the Mocan Valley Showing.

The strong IP chargeability conductors could be caused by the elevated magnetite content of the iron formation but most likely from the increased content of sulphides (pyrite, pyrrhotite). Gold soil geochemical anomalies could be related to this unit as could the coincident copper-silver halos on lines L96W through to L88W.

RECOMMENDATIONS

The 1984 field season was curtailed by late budget constraints; however the program did produce several anomalies of note and it is recommended that work continue in the future. In particular would be the following:

- 1) Prospecting, trenching, mapping and sampling the Mocan Valley Showing
- 2) Defining the cause of the various soil geochemical anomalies in particular:
L112W at 5+00N
L108W at 10+00N; 17+00N
L104 at 14+00N; and
L100W at 15+00N
- 3) Fully testing the economic potential of the chert-iron formation unit by trenching, rock sampling and mapping.
- 4) Continue the IP survey to the southeast between the No. 64 Grid and the Mocan Valley Grid.
- 5) Mapping between grids, with concentration on the chemical metasediments

Respectfully submitted,

Peter Dadson, B.Sc.; F.G.A.C.
Exploration Manager

APPENDICIES

APPENDIX I
ROCK ASSAY CERTIFICATES
AND
SAMPLE LOCATIONS SHEETS



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187,

HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. B707-84

Page 1 of 2

DATE: July 19, 1984

SAMPLE(S) OF: Rock (43)

RECEIVED: July, 1984

SAMPLE(S) FROM: David R. Bell Geological Services Inc. Project #4410

<u>Sample No.</u>	<u>Gold/ppb</u>	<u>Gold/oz.</u>	<u>Silver/ppm</u>
441-000-1601			
2			
3			
4			
5	71		0.2
6		0.084**	0.6
7	88		0.2
8	8		0.4
9	8		0.2
441-000-1610			
1			
2	11		0.4
3			
4			
5			
6	45		0.6
7	5		0.2
8	16		0.4
9	16		0.2
441-000-1620			
1	4		0.2
1	22		0.4
2	5		0.2

** Checked

BELL-WHITE ANALYTICAL LABORATORIES LTD.

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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HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. B707-84

Page 2 of 2

DATE: July 19, 1984

SAMPLE(S) OF: Rock (43)

RECEIVED: July, 1984

SAMPLE(S) FROM: David R. Bell Geological Services Inc. Project #4410

<u>Sample No.</u>	<u>Gold/ppb</u>	<u>Silver/ppm</u>
441-000-1623	14	0.6
441-000-1630	7	1.0
441-000-1632	8	0.2
3	18	1.2
4	15	1.2
441-000-1636	4	0.2
7	11	0.8
441-000-1639	155**	0.8
441-000-1640	20	1.6
1	10	0.2
2	8	0.4
3	7	0.8
4	14	0.2
5	15	1.0
6	12	0.8
7	10	1.2
441-000-1651	27	1.6
441-000-1653	312	3.8
4	151	2.4
5	34	1.6
6	78	1.4

** Checked

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HAILEYBURY, ONTARIO

TEL: 672-3107

Certificate of Analysis

NO. B708-84

DATE: July 19, 1984

SAMPLE(S) OF: Rock (11)

RECEIVED: July, 1984

SAMPLE(S) FROM: Mr. Peter Hinz
David R. Bell Geological Services Inc.

Project #4410

<u>Sample No.</u>	<u>Gold/ppb</u>	<u>Gold/oz.</u>	<u>Silver/ppm</u>	<u>Molybdenum/ppm</u>
441-000-1665		0.036**	1.8	122
6	315		1.0	30
7	384		1.2	10
8		0.016**	0.2	12
9		0.064**	3.6	72
441-000-1670		0.030**	1.6	16
1	116		1.8	
2		0.022**	3.8	
3	302		2.4	
4		0.353**	2.4	6
5	85		0.4	

** Checked

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HAILEYBURY, ONTARIO

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Certificate of Analysis

NO. B714-84

DATE: July 20, 1984

SAMPLE(S) OF: Rock (4)

RECEIVED: July, 1984

SAMPLE(S) FROM: Mr. Peter Hinz
David R. Bell Geological Services Inc. Project #4410

<u>Sample No.</u>	<u>Gold/ppb</u>	<u>Gold/oz.</u>	<u>Silver/ppm</u>	<u>Molybdenum/ppm</u>
441-000-1707		0.027**	1.4	6
441-000-1708		0.105**	4.6	18
441-000-1709	29		0.6	29
441-000-1710	748**		2.0	4

** Checked

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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.

DAVID R. BELL GEOLOGICAL SERVICES INC.

231 THIRD AVE., SUITE 6
 BOX 1250
 TIMMINS, ONTARIO
 P4N 7J5
 (705) 264-4286

SAMPLE LOCATION SHEET

COMPANY: Micham Exploration Inc.

PROJECT No. 4410

TWP. (AREA): Syine Township

NTS: _____

Sample No.	Location	Footage	Length	Au ppb	Ag ppm		Remarks
4410-000-1605	L52W	15+70S, 30'E	Grab	71	0.2		
4410-000-1606	L52W	15+70S, 60'E	Grab	0.084 oz	0.6		
4410-000-1607	L54W	2+75N	Grab	88	0.2		
4410-000-1608	L62W	6+50S, 45'E	Grab	8	0.4		
4410-000-1609	L62W	15+20S	Grab	8	0.2		
4410-000-1612	L28W	15+80S, 25'E	Grab	11	0.4		
4410-000-1616	L24W	10+50S, 25'W	Grab	45	0.6		
4410-000-1617	L34W	4+00N, 25'W	Grab	5	0.2		
4410-000-1618	L34W	4+00N, 25'W	Grab	16	0.4		
4410-000-1619	L74W	4+50W, 50'W	Grab	16	0.2		
4410-000-1620	L66W	4+00S, 50'E	Grab	4	0.2		
4410-000-1621	L30W	2+00S	Grab	22	0.4		
4410-000-1622	L56W	3+00S, 10'W	Grab	5	0.2		
4410-000-1623	L58W	8+50S	Grab	14	0.6		
4410-000-1630	L66W	3+60S	Grab	7	1.0		
4410-000-1632	L46W	13+10S	Grab	8	0.2		
4410-000-1633	L74W	0+00	Grab	18	1.2		
4410-000-1634	L74W	0+00	Grab	15	1.2		
4410-000-1636	L36W	0+75N	Grab	4	0.2		
4410-000-1637	L72W	3+40N	Grab	11	0.8		
4410-000-1639	L90W	14+75N	Grab	155	0.8		
4410-000-1640	L94W	18+90N, 40'E	Grab	20	1.6		
4410-000-1641	L90W	16+25N	Grab	10	0.2		
4410-000-1642	L94W	16+90N	Grab	8	0.4		
4410-000-1643	L94W	9+20N	Grab	7	0.8		
4410-000-1644	L94W	2+15N	Grab	14	0.2		
4410-000-1645	L84W	2+00N	Grab	15	1.0		
4410-000-1646	L104W	18+00N	Grab	12	0.8		
4410-000-1647	L98W	15+60N	Grab	10	1.2		
4410-000-1651	L116W	17+80N	Grab	27	1.6		
4410-000-1653	L108W	11+50N	Grab	312	2.8		

DAVID R. BELL GEOLOGICAL SERVICES INC.

251 THIRD AVE., SUITE 6
 BOX 1250
 TIMMINS, ONTARIO
 P4N 7J5
 (705) 264-4288

SAMPLE LOCATION SHEET

COMPANY: Micham Exploration Inc.

PROJECT No. 4410

TWP. (AREA): Syine Township

NTS: _____

Sample No.	Location	Footage	Length	Au ppb	Ag ppm	Mo ppm	Remarks
4410-000-1654	L92W	18+80N	Grab	151	2.4		
4410-000-1655	North Siville-Showing		Grab				Results pending
4410-000-1656	North Siville Showing		Grab				" "
4410-000-1657	"	" "	Grab				" "
4410-000-1658	"	" "	Grab				" "
4410-000-1659	"	" "	Grab				" "
4410-000-1660	"	" "	Grab				" "
4410-000-1661	"	" "	Grab				" "
4410-000-1662	"	" "	Grab				" "
4410-000-1663	"	" "	Grab				" "
4410-000-1664	"	" "	Grab				" "
4410-000-1665	"	" "	Chip	0.036 oz	1.8	122	
4410-000-1666	"	" "	Chip	315	1.0	30	
4410-000-1667	"	" "	Chip	384	1.2	10	
4410-000-1668	"	" "	Chip	0.016 oz	0.2	12	
4410-000-1669	"	" "	Chip	0.064 oz	3.6	72	
4410-000-1670	"	" "	Chip	0.030 oz	1.6	16	
4410-000-1671	L116W	17+80N	Grab	116	1.8		
4410-000-1672	L108W	12+40N	Grab	0.022 oz	3.8		
4410-000-1673	L92W	18+80N	Grab	302	2.4		
4410-000-1674	North Siville Showing		Grab	0.353 oz	2.4	6	
4410-000-1675	"	"	Grab	85	0.4		
4410-000-1707	"	"	Chip	0.027 oz	1.4	6	
4410-000-1708	"	"	Grab	0.105 oz	4.6	18	
4410-000-1709	"	"	Grab	29	0.6	29	
4410-000-1710	"	"	Grab	748	2.0	4	

APPENDIX II
SOIL SAMPLE LOCATIONS
FLAGGED GRID

NOTE:

Although the samples have not been sent;
their locations, and numbers have been
included for the record.

DAVID R. BELL GEOLOGICAL SERVICES INC.

251 THIRD AVE., SUITE 6
BOX 1250
TIMMINS, ONTARIO
P4N 7J5
17051 264-4286

SAMPLE LOCATION SHEET

COMPANY: Micham Exploration Inc.

PROJECT No. 4410

TWP. (AREA): Syine Township

NTS: _____

Sample No.	Location	Footage	Length	Au ppb				Remarks
SS-001	L42W	4+00S	Soil					
SS-002	L42W	3+50S	Soil					
SS-003	L42W	3+00S	Soil					
SS-004	L42W	2+50S	Soil					
SS-005	L42W	0+90S	Soil					
SS-006	L42W	0+50S	Soil					
SS-007	L42W	2+25N	Soil					
SS-008	L42W	3+00N	Soil					
SS-009	L42W	3+30N	Soil					
SS-010	L40W	2+00N	Soil					
SS-011	L40W	1+50N	Soil					
SS-012	L40W	1+00N	Soil					
SS-013	L40W	0+00	Soil					
SS-014	L40W	1+50S	Soil					
SS-015	L40W	2+10S, 10'W	Soil					
SS-016	L40W	3+00S	Soil					
SS-017	L40W	3+50S	Soil					
SS-018	L38W	3+00N	Soil					
SS-019	L38W	0+40N, 20'E	Soil					
SS-020	L38W	0+00	Soil					
SS-021	L38W	0+50S	Soil					
SS-022	L38W	1+00S	Soil					
SS-023	L38W	1+50S	Soil					
SS-024	L38W	1+80S	Soil					
SS-025	L36W	2+75N	Soil					
SS-026	L36W	0+00	Soil					
SS-027	L34W	4+00N	Soil					
SS-028	L34W	3+50N	Soil					
SS-029	L34W	3+00N	Soil					
SS-030	L34W	2+00N	Soil					
SS-031	L34W	1+00N	Soil					
SS-032	L34W	0+50N	Soil					

APPENDIX III
WHOLE ROCK LOCATIONS

NOTE:

These samples have been sent for analysis and the results are pending. Upon receipt an addendum to this report will be written.

DAVID R. BELL GEOLOGICAL SERVICES INC.

251 THIRD AVE., SUITE 6
 BOX 1250
 TIMMINS, ONTARIO
 P4N 7J5
 (705) 264-4286

SAMPLE LOCATION SHEET

COMPANY: Micham Exploration Inc.

PROJECT No. 4410

TWP. (AREA): Syine Township

NTS: _____

Sample No.	Location	Footage	Length	Au ppb			Remarks
4410-000-1624	L36W	11+00S					
4410-000-1625	L52W	3+00N, 20'E					
4410-000-1626	L56W	4+10S					
4410-000-1627	L62W	6+50S, 45'E					
4410-000-1628	L52W	4+20N					
4410-000-1629	L62W	16+00S					
4410-000-1631	L38W	12+20S					
4410-000-1635	L70W	6+50S					
4410-000-1638	L90W	14+75N					
4410-000-1648	L102W	2+20N, 10'E					
4410-000-1649	L102W	12+30N, 30'E					
4410-000-1650	L102W	25+30N					
4410-000-1652	L118W	18+90N					
4410-000-1676	L118W	17+10N					
4410-000-1677	L118W	18+00N					
4410-000-1678	L118W	18+50N					South side of chert
4410-000-1679	L118W	18+50N					North side of chert
4410-000-1680	L118W	19+60N					
4410-000-1681	L116W	17+50N					
4410-000-1682	L116W	17+80N					South side of chert
4410-000-1683	L116W	17+80N					North side of chert
4410-000-1684	L116W	19+10N					
4410-000-1685	L112W	11+00N					
4410-000-1686	L112W	12+10N					
4410-000-1687	L112W	12+70N					
4410-000-1688	L112W	15+00N					
4410-000-1689	L102W	14+00N					
4410-000-1690	L102W	16+00N					
4410-000-1691	L102W	17+40N					
4410-000-1692	L102W	18+00N					
4410-000-1693	L102W	19+00N					
4410-000-1694	L120W	9+50N					

LIST OF PERSONNEL

Peter Hinz
c/o David R. Bell
Geological Services Inc.
Suite 4, 251 Third Ave.
P.O. Box 1250
Timmins, Ontario

May 15-22, 31/84; June 1-30/84
July 1-13/84; Aug. 1-3/84

Mark Smyk
c/o David R. Bell
Geological Services Inc.
Suite 4, 251 Third Ave.
P.O. Box 1250
Timmins, Ontario

May 30, 31/84; June 1-30/84
July 1-6/84

Jean Meloche
c/o David R. Bell
Geological Services Inc.
Suite 4, 251 Third Ave.
P.O. Box 1250
Timmins, Ontario

May 15-22, 30, 31/84; June 1-30/84;
July 1-6/84

Hugh MacKinnon
c/o David R. Bell
Geological Services Inc.
Suite 4, 251 Third Ave.
P.O. Box 1250
Timmins, Ontario

May 30, 31/84; June 1-30/84;
July 1-7/84

Joe Horne
c/o David R. Bell
Geological Services Inc.
Suite 4, 251 Third Ave.
P.O. Box 1250
Timmins, Ontario

June 14-30/84

PERSONNEL CONT'D

Andrew Markov
c/o David R. Bell
Geological Services Inc.
251 Third Ave., Suite 4
P.O. Box 1250
Timmins, Ontario
June 14-30/84; July 1-8/84

Art Wright
c/o David R. Bell
Geological Services Inc.
251 Third Ave., Suite 4
P.O. Box 1250
Timmins, Ontario
June 14-26/84

Peter Dadson
c/o David R. Bell
Geological Services Inc.
251 Third Ave., Suite 4
P.O. Box 1250
Timmins, Ontario
May 4, 7, 9, 24, 31/84
August 10-16/84

Olga Kukal
c/o David R. Bell
Geological Services Inc.
251 Third Ave., Suite 4
P.O. Box 1250
Timmins, Ontario
June 13-22/84

Peter Whittaker
c/o David R. Bell
Geological Services Inc.
251 Third Ave., Suite 4
P.O. Box 1250
Timmins, Ontario
June 13-22/84

PERSONNEL CONT'D

Steve Conquer

June 16-18/84

c/o David R. Bell

Geological Services Inc.

251 Third Ave., Suite 4

P.O. Box 1250

Timmins, Ontario



Ministry of
Natural
Resources

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

30



42D155W0114 2.8442 SYINE

900

4410 *Pile 604051*

The Mill

Type of Survey(s): **DETAILED GEOLOGICAL** Township or Area: **Syine Twp. G-634**

Claim Holder(s): **MICHAM EXPLORATION INC.** Prospector's Licence No.: **T-1185**

Address: **40 DAVID R. BELL GEOLOGICAL SERVICES INC. P.O. BOX 1250, TIMMINS, ONTARIO. P4N 7J5.**

Survey Company: **DAVID R. BELL GEOLOGICAL SERVICES INC.** Date of Survey (from & to): **15 5 84 / 16 8 84** Total Miles of line Cut: **2.3**

Name and Address of Author (of Geo-Technical report): **Peter Hinz 40 DAVID R. BELL GEOLOGICAL SERVICES INC. P.O. BOX 1250 TIMMINS, ONT P4N 7J5**

Credits Requested per Each Claim in Columns at right

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	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	49*
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
TB	604051	20			
	604052	20			
	604053	20			
	604055	20			
	604056	20			
	604057	20			
	604058	20			
	604060	20			
	613727	20			
	613729	20			
	613842	20			
	613843	20			
	613844	20			
	613845	20			
	613852	20			
	660068	20			

RECEIVED
AUG 15 1985
MINING LANDS SECTION

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.

*Maximum credits **revised**

Total number of mining claims covered by this report of work. **16**

Date: **July 22, 1985** Recorded Holder or Agent (Signature): *Ramune Bell*

For Office Use Only

Total Days Cr. Recorded: **320** Date Recorded: **August 8/85** Mining Recorder: *Audrey M. Hayes*

See Revised statement

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: **Ramune Bell c/o David R. Bell Geological Services Inc. P.O. Box 1250, TIMMINS, ONT P4N 7J5**

Date Certified: **July 22, 1985** Certified by (Signature): *Ramune Bell*



Recorded Holder

MICHAM EXPLORATION INC

Township or Area

SYINE TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<p>Geophysical</p> <p>Electromagnetic _____ days</p> <p>Magnetometer _____ days</p> <p>Radiometric _____ days</p> <p>Induced polarization _____ days</p> <p>Other _____ days</p>	<p>TB 604051-52-53-55-56-57-58-60 613727-29 613842-43-44-45-52</p>
<p>Section 77 (19) See "Mining Claims Assessed" column</p> <p>Geological <u>40 (maximum allowed)</u> days</p> <p>Geochemical _____ days</p> <p>Man days <input type="checkbox"/> Airborne <input type="checkbox"/></p> <p>Special provision <input type="checkbox"/> Ground <input checked="" type="checkbox"/></p> <p><input type="checkbox"/> Credits have been reduced because of partial coverage of claims.</p> <p><input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.</p>	

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

TB 660068

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.



110

- 1. Type of Survey DETAILED GEOLOGICAL
- 2. Township or Area SYDNEY TOWNSHIP
- 3. Numbers of Mining Claims Traversed by Survey T.B. 604051; T.B. 604052;
T.B. 604053; T.B. 604055; T.B. 604056; T.B. 604057;
T.B. 604058; T.B. 604060; T.B. 613727; T.B. 613729;
T.B. 613842; T.B. 613843; T.B. 613844; T.B. 613845;
T.B. 613852; T.B. 610068
- 4. Number of Miles of Line Cut 23 Flown —
- *5. Number of Stations Established N/A
- *6. Make and type of Instrument Used N/A
- *7. Scale Constant or Sensitivity N/A
- *8. Frequency Used and Power Output N/A

9. Summary of Assessment Credits (details on reverse side)

Total 8 hour Technical Days (Include Consultants, Draughting etc.) _____

Total 8 hour Line-Cutting Days _____

Calculation

$$\frac{113}{\text{Technical}} \times 7 = \frac{791}{\text{Line-cutting}} + \frac{0}{\text{Line-cutting}} = \frac{791}{\text{Number of claims}} \div \frac{16}{\text{Assessment credits per claim}} = \frac{49.4}{\text{Assessment credits per claim}}$$

The dates listed on this form represent working time spent entirely within the limits of the above listed claims Check
If otherwise, please explain _____

Dated: September 3, 1985 Signed: Paul Bell

- Note: (A) * Complete only if applicable.
(B) Complete list of names, addresses and dates on reverse side.
(C) Submit separate breakdown for each type of survey.
(D) Submit in duplicate.

Details of Assessment Work Breakdown

FIELD WORK

<u>Type of Work</u>	<u>Name & Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>
Peter Huse	c/o D.S. Bell	May 15-22, 31, 1984	55
Mark Smyth	Geological Services Inc + see attached list	June 1-30, July 1-13, Aug 1-3 May 30, 31, June 1-30; July 1-6, 1984	38
Olga Kotal	list	June 13-22, 1984	10
Peter Whittaker		June 13-22, 1984	10

CONSULTANTS

<u>Name & Address</u>	<u>Dates Worked (specify in field or office)</u>	<u>Number of 8 hour days</u>

DRAUGHTSMAN, TYPING, OTHERS (specify)

<u>Name & Address</u>	<u>Type of Work</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

TOTAL 8 HOUR TECHNICAL DAYS 113

LINE-CUTTING

<u>Name</u>	<u>Address</u>	<u>Dates Worked</u>	<u>Number of 8 hour days</u>

TOTAL 8 HOUR LINE-CUTTING DAYS _____

DAVID R. BELL GEOLOGICAL SERVICES INC.

251 THIRD AVE., SUITE 4
BOX 1250
TIMMINS, ONTARIO
P4N 7J5
(705) 264-4286
TELEX - 067-81638

HAND DELIVERED

September ¹³9, 1985

Mr. F. Mathews
Lands Administration Branch
Mining Lands Section
Ministry of Natural Resources
Room 1617, Whitney Block
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Mr. Mathews:

Re: #4410 - Micham Exploration Inc. claims
Geological Reports, TB 604051 et al (16 claims)

Enclosed please find two (2) copies of the Geological Report for Micham Exploration Inc., No. 64 Grid, Mocan Valley Grid, Flagged Grid and the North Siville Showing, Terrace Bay claims, Syine Twp. and Santoy Lake area.

Enclosed also is Assessment Work Breakdown as per Man day.

Would you please acknowledge receipt of said reports, to our office and to the Vancouver office.

Yours truly,



R.A. Bell
Vice-President

RAB/tbp

encl.

File - 4410 geol. reports, corresp.

RECEIVED

SEP 11 1985

MINING LANDS SECTION

1985 10 31

Your File: #320
Our File: 2.8442

Mining Recorder
Ministry of Northern Affairs and Mines
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

RE: Notice of Intent dated October 7, 1985
Geological Survey on Mining Claims
TB 604051, et al, in Syine Township

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

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

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-4888

DK/mc

cc: Micham Exploration Inc
c/o David R. Bell Geological Services Inc
P.O. Box 1250
Timmins, Ontario
P4N 7J5

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

Resident Geologist
Thunder Bay, Ontario

Encl.

1985 09 20

File: 2.8442

Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

We received reports and maps on September 13, 1985 for a Geological Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims TB 604051, et al, in Syine Township.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with your office prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

A. Barr:mc

cc: Micham Exploration Inc
c/o David R. Bell Geological Services Inc
251 Third Avenue, Suite 4
Box 1250
Timmins, Ontario
P4N 7J5



Ministry of
Natural
Resources

Oct 22/85

1985 10 07

Your File: 320
Our File: 2.8442

Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

h.d. DK/mc

Encls.

cc: Micham Exploration Inc
c/o David R. Bell Geological Services Inc
P.O. Box 1250
Timmins, Ontario
P4N 7J5

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



Ministry of
Natural
Resources

Notice of Intent
for Technical Reports

1985 10 07

2.8442/320

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

2842

604051

✓

52

✓

53

✓

55

✓

56

✓

57

1/2

58

1/2

60

✓

613727

1/2

29

✓

613842

✓

43

✓

44

1/2

45

1/2

52

✓

660068

NS

28*00 N-

24*00 N-

20*00 N-

16*00 N-

12*00 N-

8*00 N-

4*00 N-

Baseline

L120W L118W L116W L114W L112W L110W L108W L106W L104W L102W L100W L98W L96W L94W L92W L90W

MARGON LAKE

CAMP

LAKE

TB 613728

TB 613729

TB 613727

TB 613843

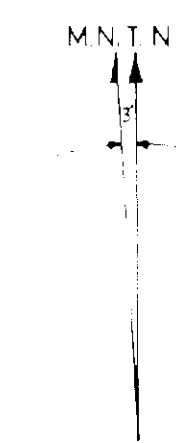
TB 613844

TB 642207

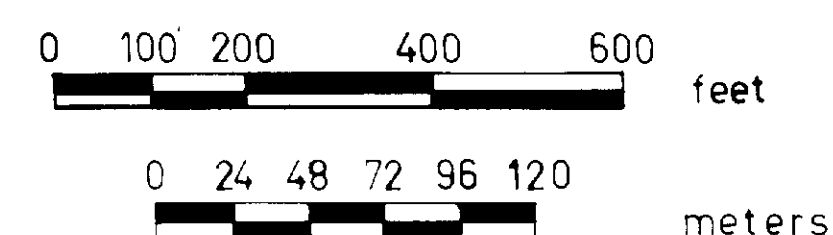
TB 613842

TB 613852

TB 613845



LEGEND	SYMBOLS
1 Mafic Metavolcanics (Unsubdivided)	TC Trench
1a Dark green flows	CR Creeks
1b Quartz diorite, dioritic flows	DS Downslope
1c Pillowed flows	SD Small Bedrock Outcrop
1d Volcanic flows	BU Bedding, top unknown
1e Amphibolitic flows	IV Inclined Vertical
1f Basaltic flows	SV Schistosity, (horizontal, inclined, vertical)
1g Basaltic flows	SH Schistosity, (horizontal, inclined, vertical)
1h Basaltic flows	SL Slickenite, (horizontal, inclined, vertical)
1i Basaltic flows	ST Stratification with plunge
1j Interflow sediments	GB Geological boundary, observed
2 Intermediate to Felsic Metavolcanics (Unsubdivided)	GS Geological boundary, position uncertain
2a Light grey or green to white flows	GF Fault, (observed, assumed)
2b Spineliferous flows	FD Fault, (observed, assumed)
2c Porphyritic breccia, tuff breccia	FD Spot indicates down throw side, arrows indicate horizontal movement
2d Basaltic tuff, tuff	LI Lineament
2e Crystalline tuff	LI Jointing, (horizontal, inclined, vertical)
2f Interflow sediments	MF Map folds with plunge
3 Metasediments may be interflow sediments (Unsubdivided)	AS Anticline, syncline, with plunge
3a Fine-grained clastics (shales, siltstones, greywackes)	DH Drill hole, (vertical, inclined, approximate)
3b Conglomerate	MS Marking or swamp
3c Chemical sediments (cherts, banded iron formation, limestone)	OR Other road
4 Mafic Intrusions (Unsubdivided)	DI Dolphidite
4a Gabbrro	MO Molybdenite
4b Diabase	PR Pyrite
4c Blue-quartz diorite	SI Silicification
5 Ultramafic Intrusions (Unsubdivided)	SC Serpentinization
5a Ultramylonite, dunite	CA Carbonatization
5b Pyroxenite	QV Quartz Vein
6 Intermediate to Felsic Intrusions (Unsubdivided)	EV Epidote Vein
6a Granite, granodiorite	PO Polished
6b Quartz-feldspar porphyry	MA Massive
6c Felsopar porphyry	
6d Mylonite	
6e Pegmatite	
7 Late Mafic Intrusions (Unsubdivided)	
7a Diabase (equigranular)	
7b Porphyritic diabase	
7c Olivine-bearing diabase	



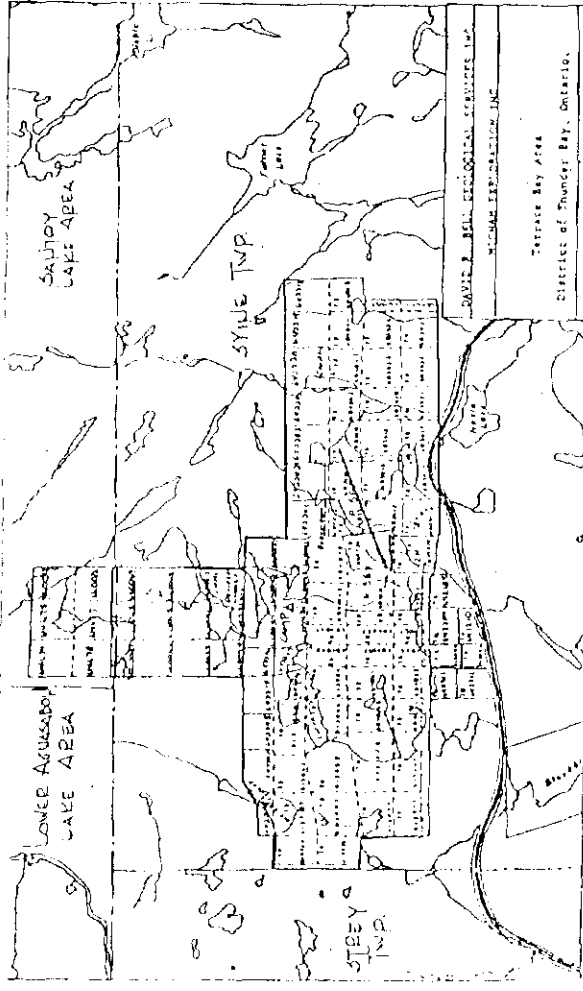
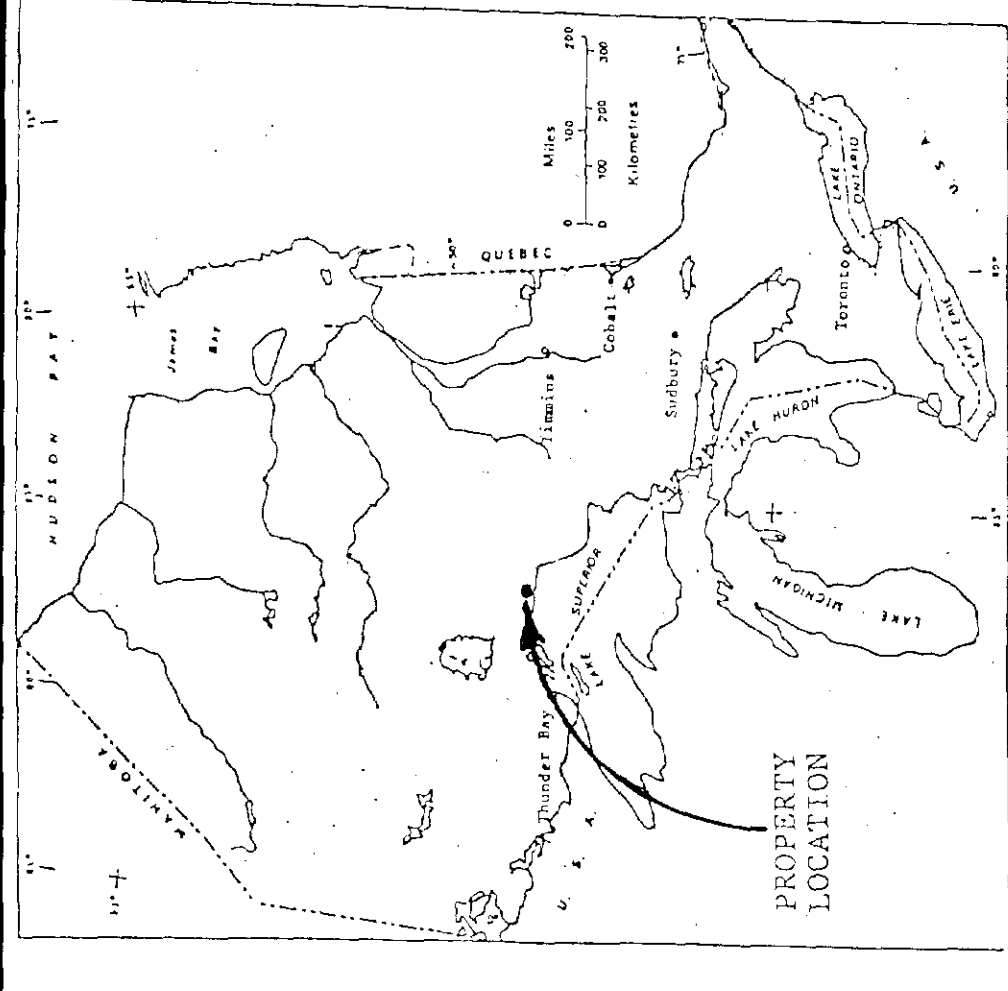
David R. Bell Geological Services Inc.

GEOLGY

28442

TWP. AREA: 53-10-10-10
 MINING DIVISION: 10-10-10-10
 REFERENCES: 10-10-10-10
 DRAWN: 10-10-10-10
 SCALE: 1" = 100'

PROVINCE: 10-10-10-10
 PROJECT No.: 10-10-10-10
 N.T.S. No.: 10-10-10-10
 CHECKED: 10-10-10-10
 SHEET No. 4410-84-4-2



LEGEND

Geological Formations

- 1. 1800' - 2000' - 2100' - 2200' - 2300' - 2400' - 2500' - 2600' - 2700' - 2800' - 2900' - 3000'
- 2. 3000' - 3100' - 3200' - 3300' - 3400' - 3500' - 3600' - 3700' - 3800' - 3900' - 4000'
- 3. 4000' - 4100' - 4200' - 4300' - 4400' - 4500' - 4600' - 4700' - 4800' - 4900' - 5000'
- 4. 5000' - 5100' - 5200' - 5300' - 5400' - 5500' - 5600' - 5700' - 5800' - 5900' - 6000'
- 5. 6000' - 6100' - 6200' - 6300' - 6400' - 6500' - 6600' - 6700' - 6800' - 6900' - 7000'
- 6. 7000' - 7100' - 7200' - 7300' - 7400' - 7500' - 7600' - 7700' - 7800' - 7900' - 8000'
- 7. 8000' - 8100' - 8200' - 8300' - 8400' - 8500' - 8600' - 8700' - 8800' - 8900' - 9000'
- 8. 9000' - 9100' - 9200' - 9300' - 9400' - 9500' - 9600' - 9700' - 9800' - 9900' - 10000'

Structural Features

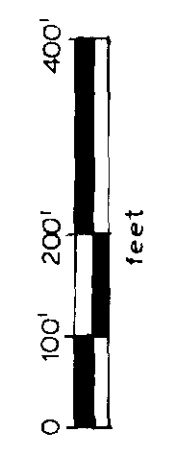
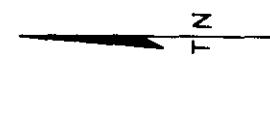
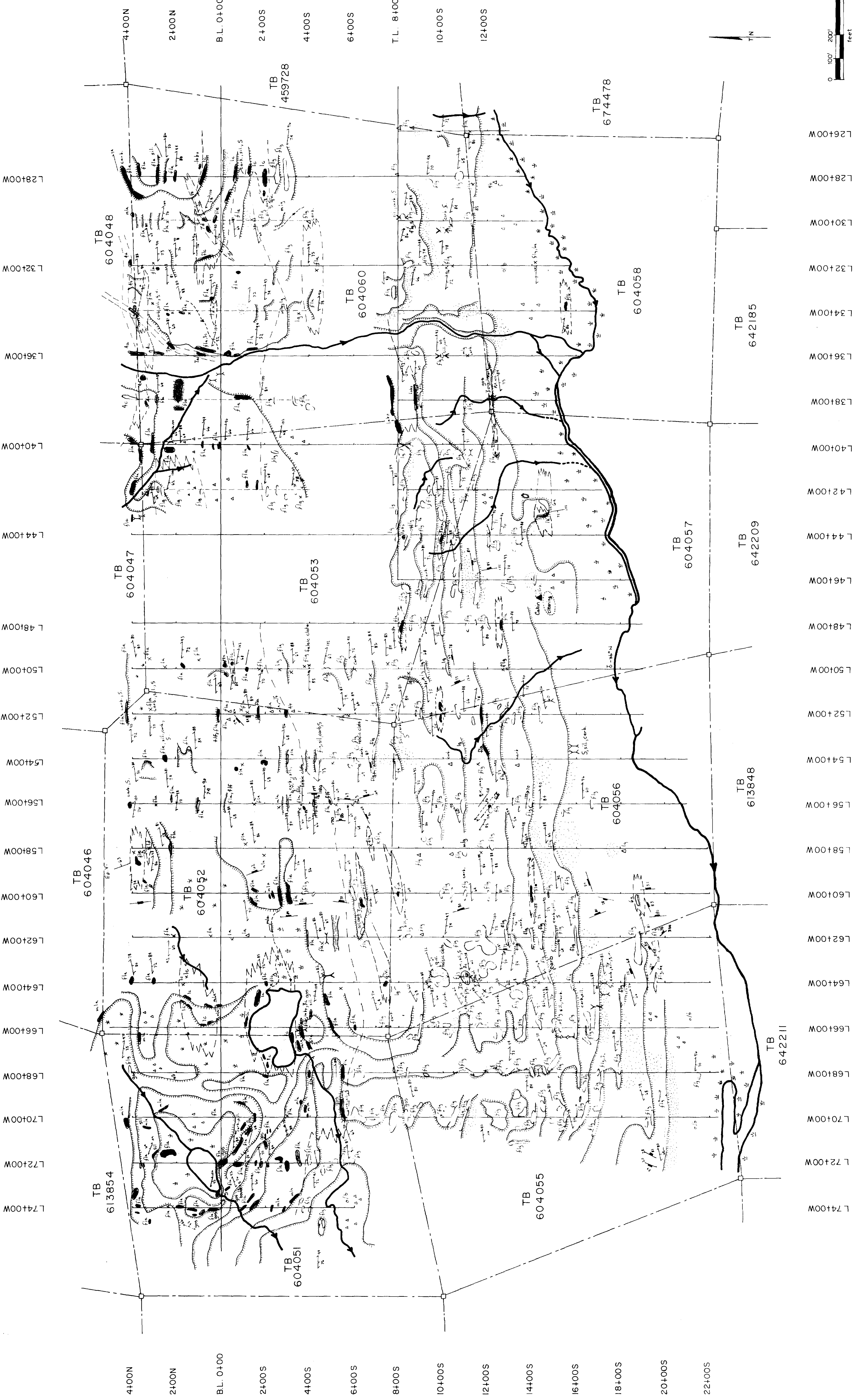
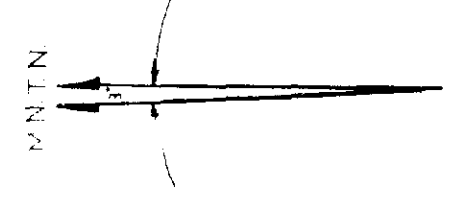
- 1. Fault
- 2. Fault Zone
- 3. Fault Zone with Strike Slip
- 4. Fault Zone with Normal
- 5. Fault Zone with Thrust
- 6. Fault Zone with Strike Slip and Normal
- 7. Fault Zone with Strike Slip and Thrust
- 8. Fault Zone with Normal and Thrust
- 9. Fault Zone with Strike Slip, Normal and Thrust
- 10. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip
- 11. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal
- 12. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust
- 13. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip
- 14. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal
- 15. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust
- 16. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip
- 17. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal
- 18. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust
- 19. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip
- 20. Fault Zone with Strike Slip, Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal and Thrust and Strike Slip and Normal

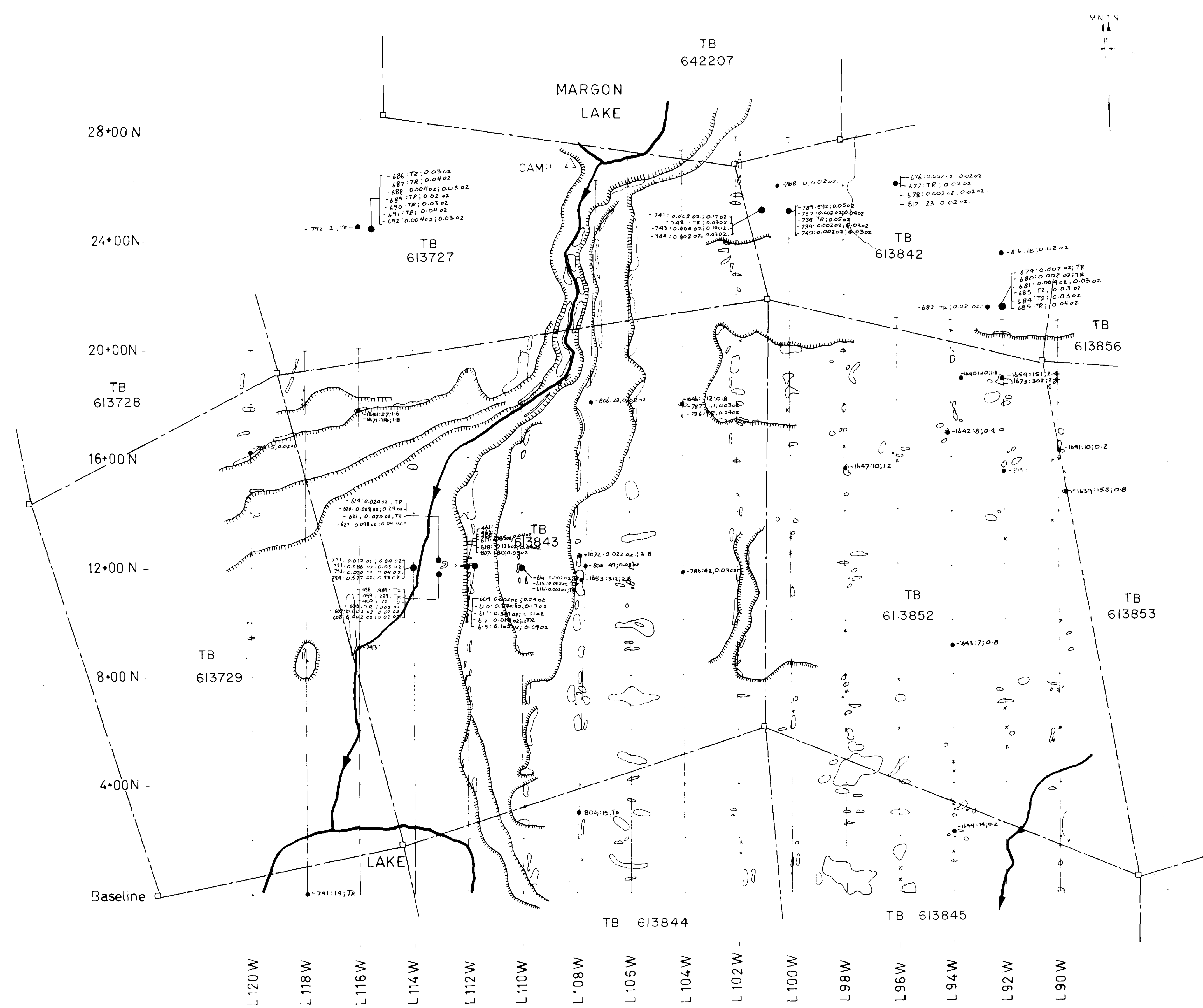
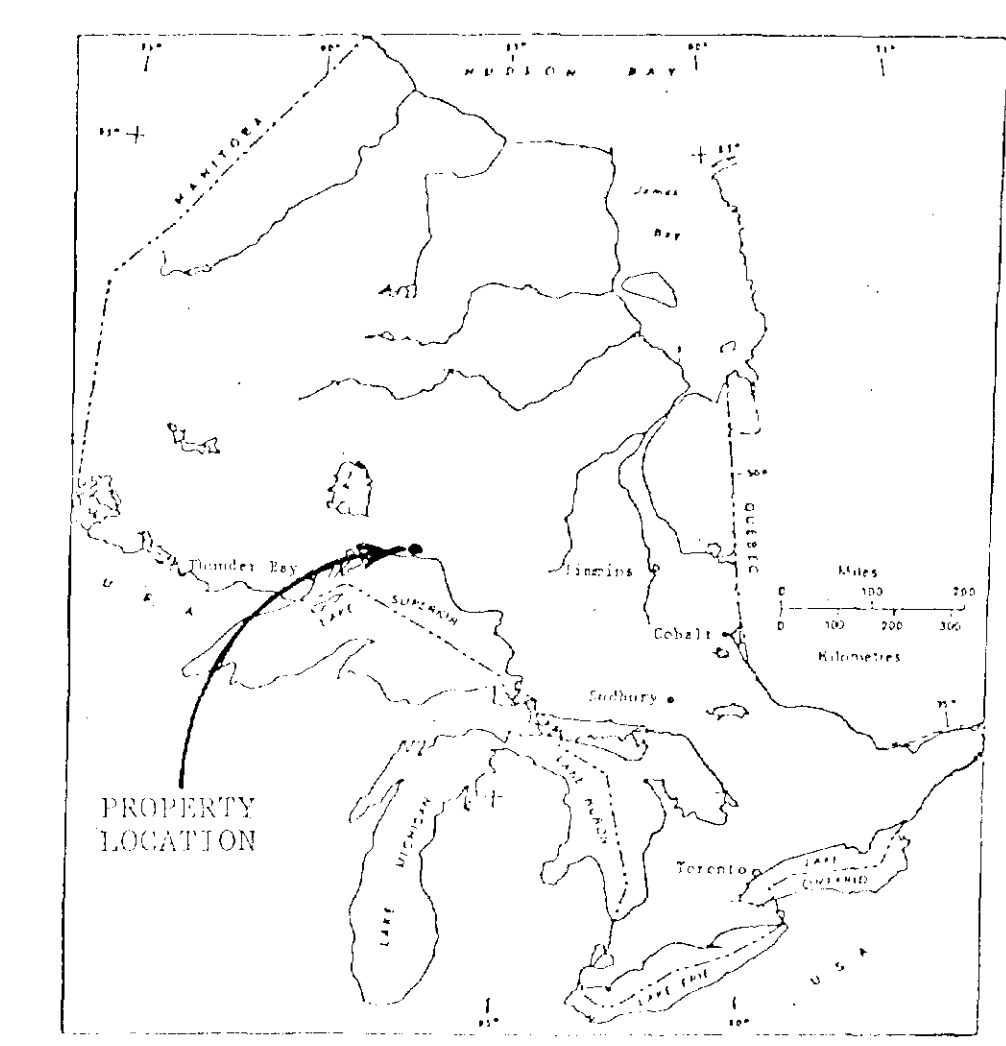
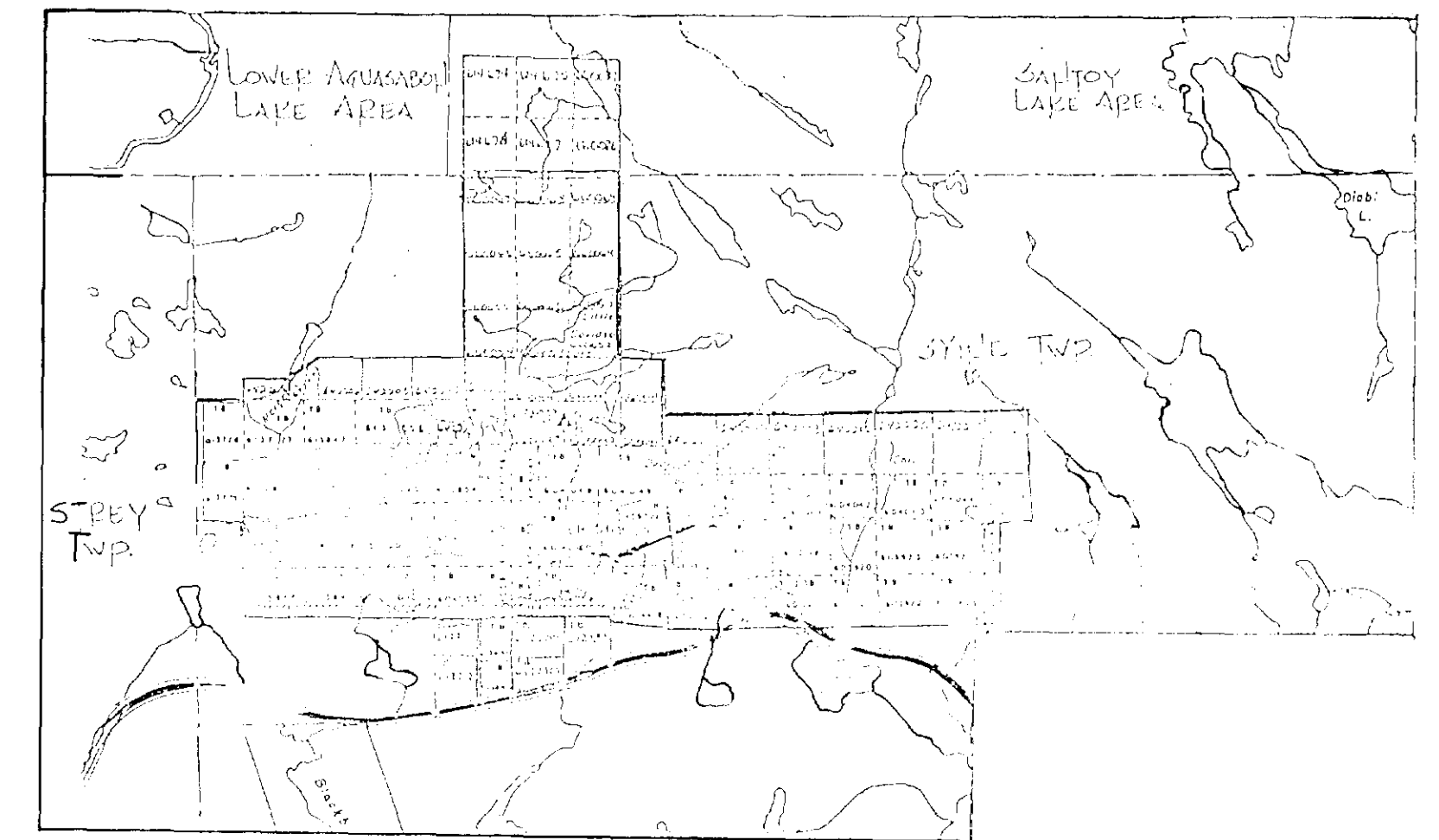
Other Features

- 1. Contour
- 2. Contour Interval
- 3. Contour Interval
- 4. Contour Interval
- 5. Contour Interval
- 6. Contour Interval
- 7. Contour Interval
- 8. Contour Interval
- 9. Contour Interval
- 10. Contour Interval
- 11. Contour Interval
- 12. Contour Interval
- 13. Contour Interval
- 14. Contour Interval
- 15. Contour Interval
- 16. Contour Interval
- 17. Contour Interval
- 18. Contour Interval
- 19. Contour Interval
- 20. Contour Interval

David R. Bell Geological Services Inc.
 MICHAEL EXPLORATION INC.
 GEOLOGY
 TERRACE BAY PROPERTY
 #64 GRID & FLAGGED GRID

TWP/AREA: Syrine Township
 MINING DIVISION: Thunder Bay
 REFERENCES: N.T.S. No.
 DRAWN: P. Duggan
 CHECKED: P. Duggan
 SCALE: 1"=200'-0"
 DATE: July 12, 1984
 SHEET No. 441C-B4-4-3



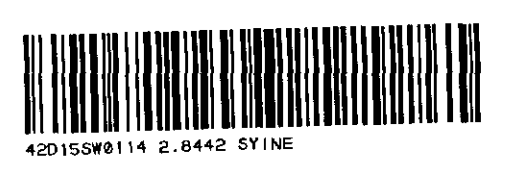
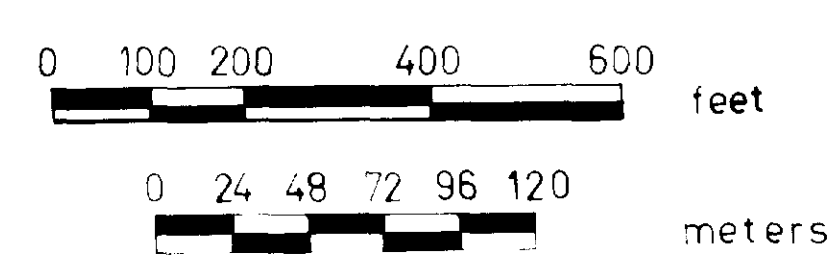


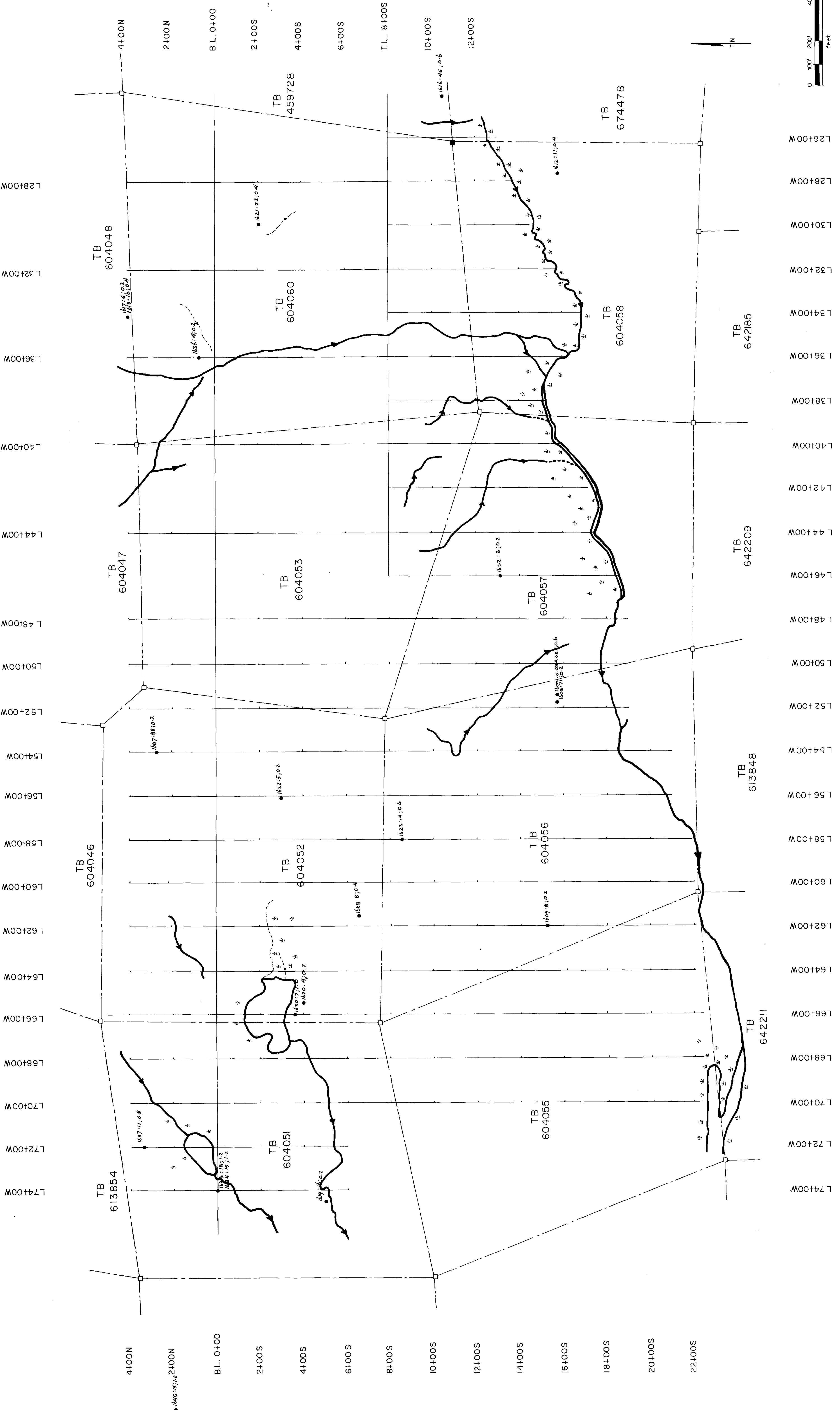
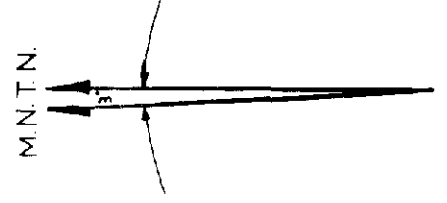
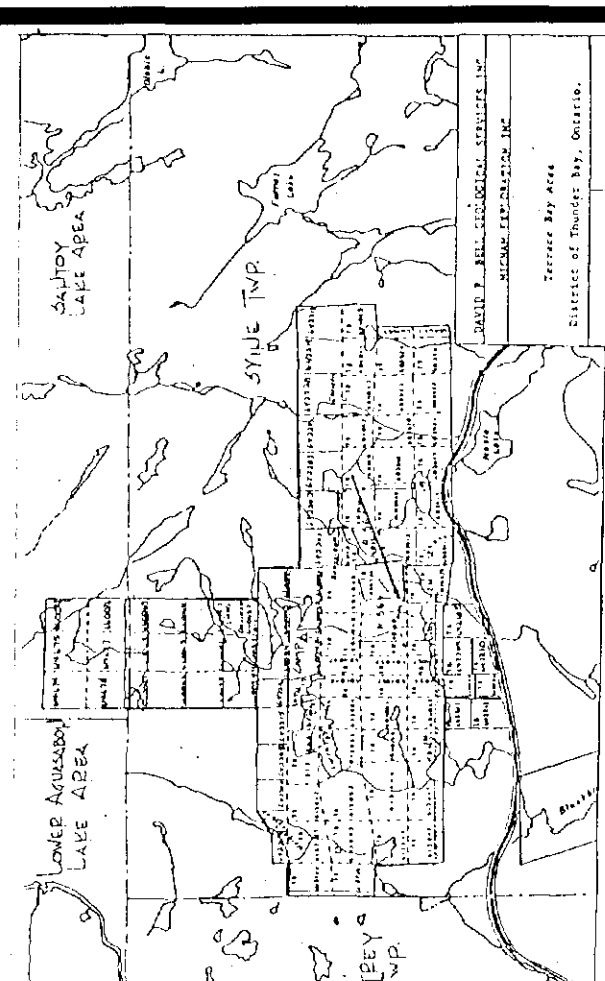
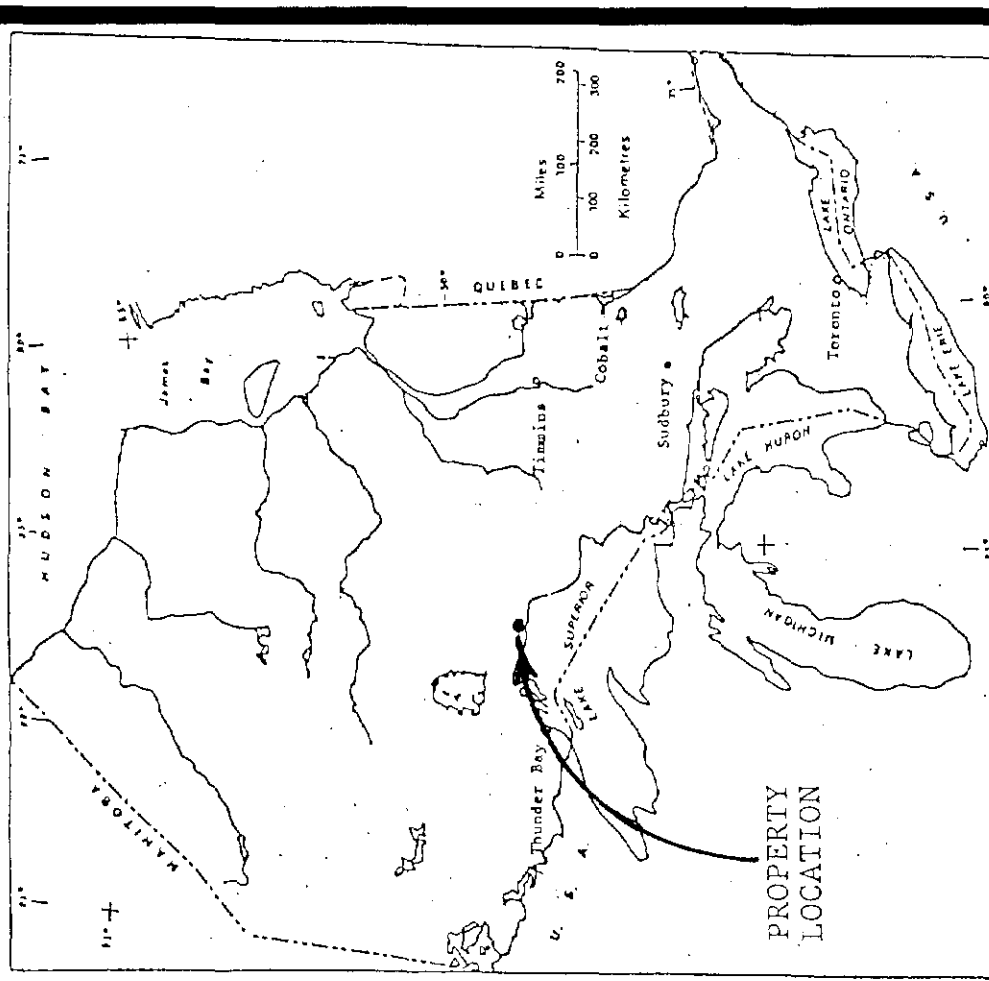
* ALL SAMPLE #'S TO BE PRECEED BY 441-000-
 * Au values in ppb; Ag values in ppm unless otherwise stated.

David R. Bell Geological Services Inc.

SAMPLE LOCATION & ASSAYS

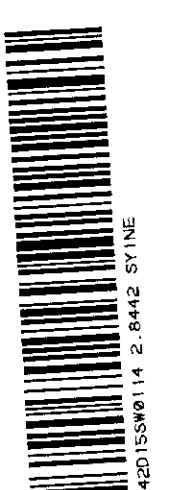
TWP. AREA	PROJECT No.	PROVINCE
MINING DIVISION	DATE	N.T.S. No.
REFERENCES	DRAWN	CHECKED
SCALE	DATE	FILE No. 4410-84-3-13





* ALL SAMPLE #'S TO BE PRECEDED BY 441-000-
 * Au values in ppb; Ag values in ppm unless otherwise stated.

David R. Bell Geological Services Inc.	
MICHAM EXPLORATION, INC.	
SAMPLE LOCATION & ASSAYS	
#64 GRID & FLAGGED GRID	
TWP/AREA	Sydney Township
MINING DIVISION	Thunder Bay
REFERENCES	N.T.S. No.
DRAWN	DRAFTED
SCALE 1"=200'-0"	DATE July 12, 1984
	CHECKED P. J. BGS/09
	SHEET NO. 4410-84-3-0



28*00 N-

24*00 N-

20*00 N-

16*00 N

12*00 N

8*00 N

4*00 N

Baseline

L 120 W - L 118 W - L 116 W - L 114 W - L 112 W - L 110 W - L 108 W - L 106 W - L 104 W - L 102 W - L 100 W - L 98 W - L 96 W - L 94 W - L 92 W - L 90 W

MARGON LAKE

CAMP

TB 613727

TB 642207

TB 613842

TB 613856

TB 613728

TB 613729

TB 613843

TB 613852

TB 613853

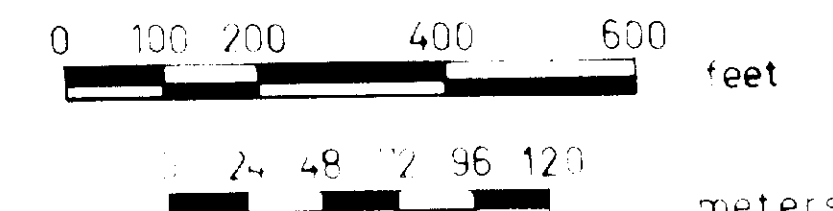
TB 613844

TB 613845

LAKE

Legend symbols for various geological features

Legend text describing geological features and symbols



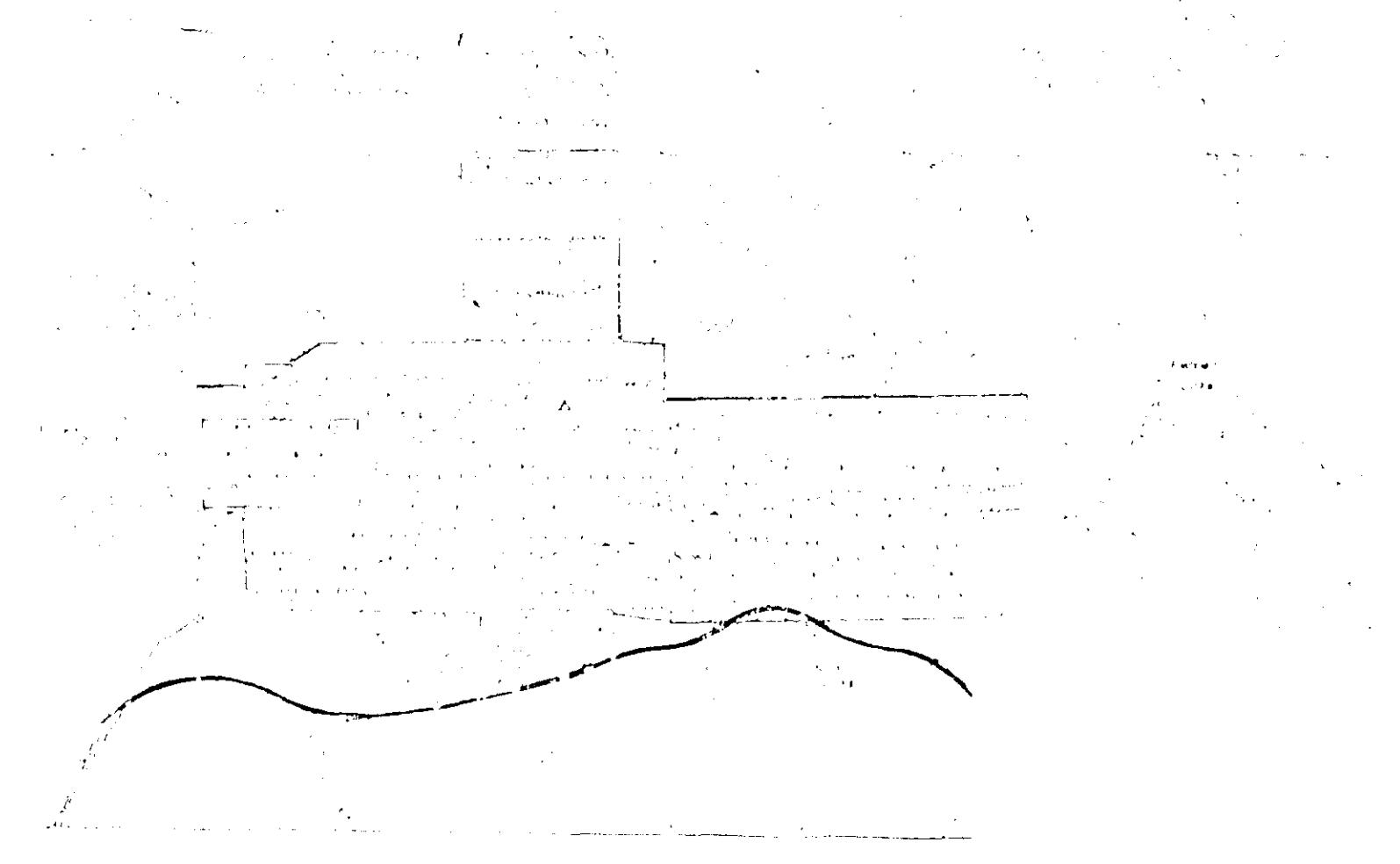
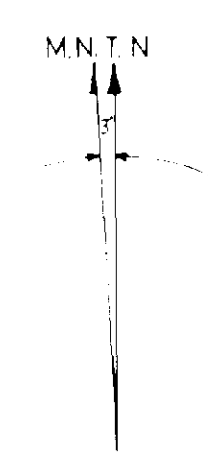
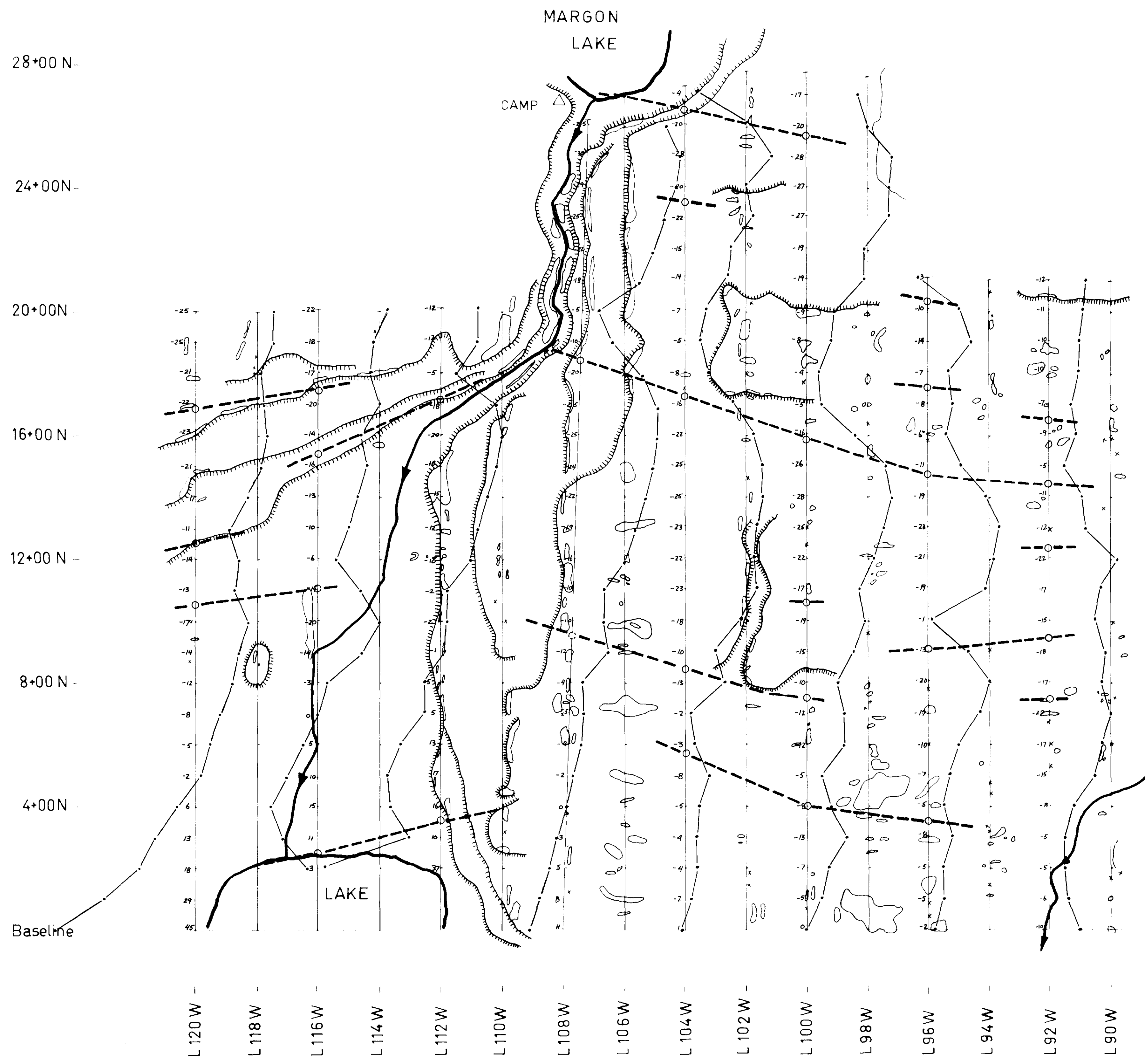
David R. Bell Geological Services Inc.

GOLD-SOIL GEOCHEMISTRY

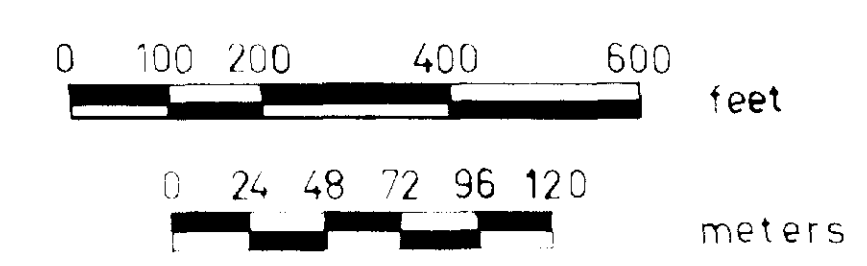
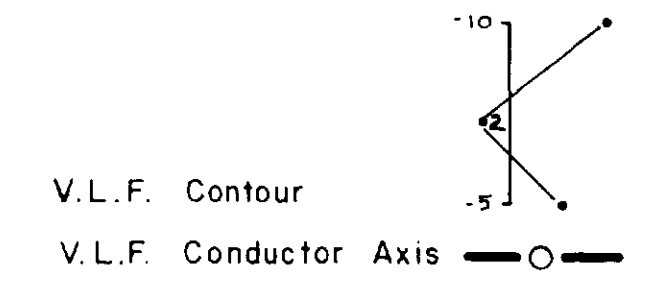
28442

Map details including date, location, and contact information





LEGEND



David R. Bell Geological Services Inc.

V.L.F. EM (INPHASE) & CONDUCTOR AXIS

PROVINCE

MINING DIVISION

NEEPTHEIS

BROWN

SCALE

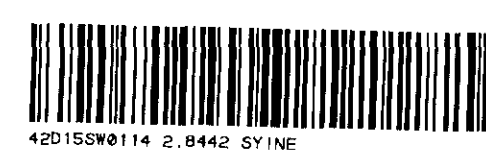
PROJECT No.

N.E.S. No.

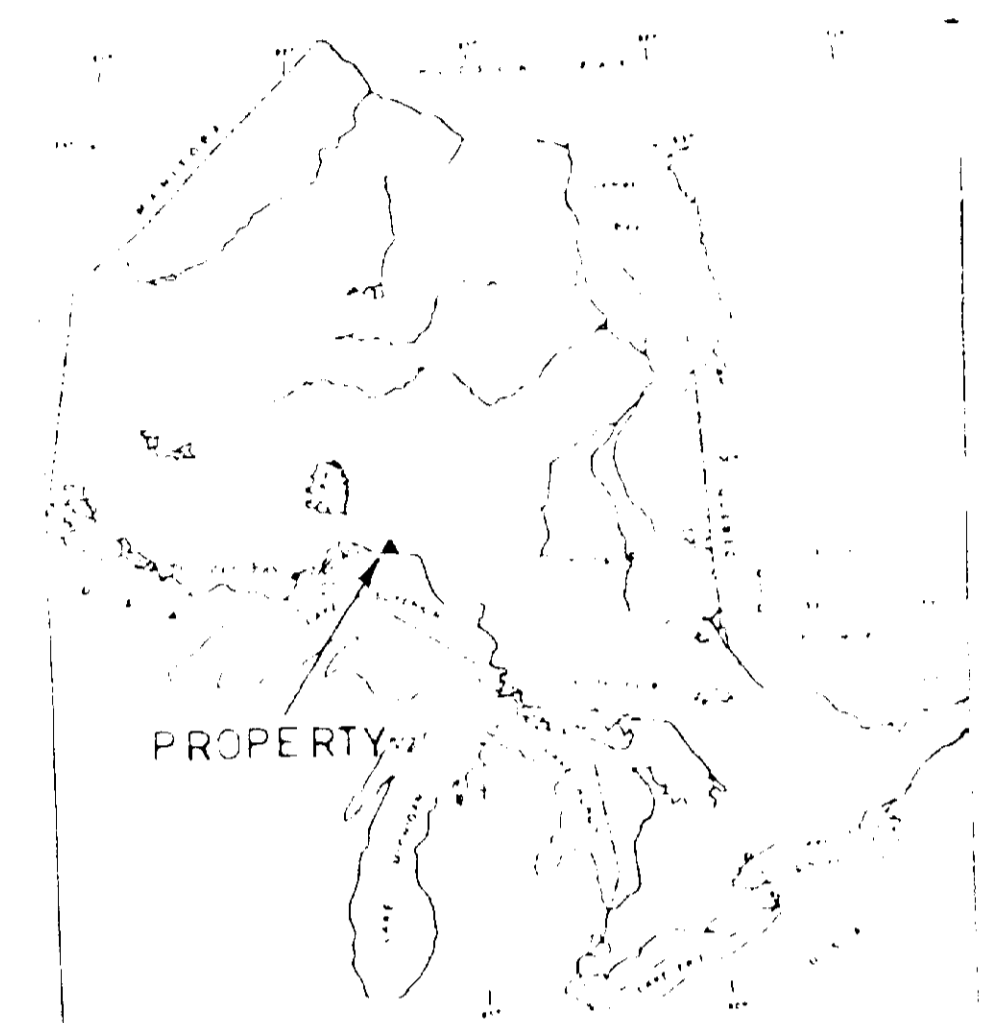
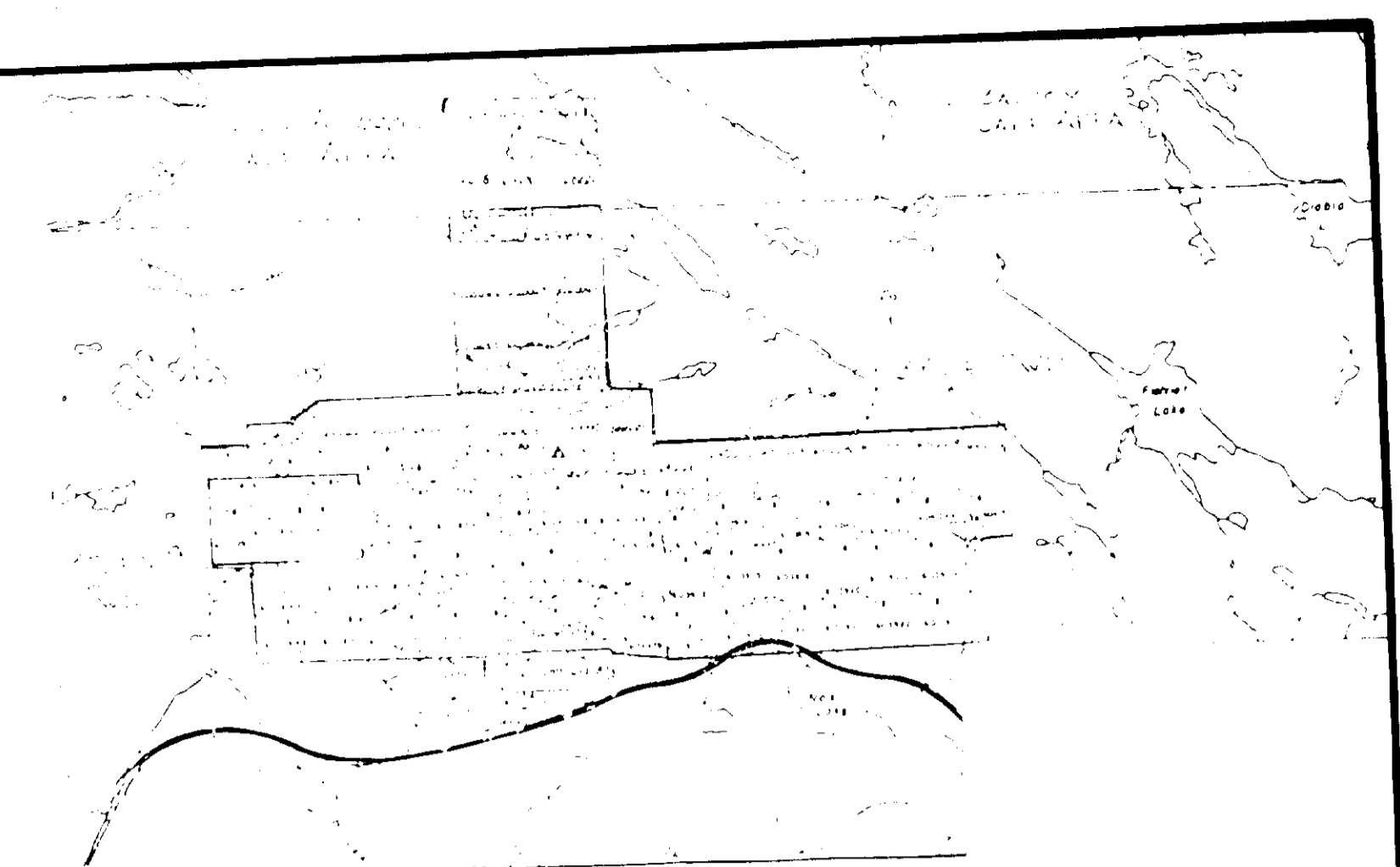
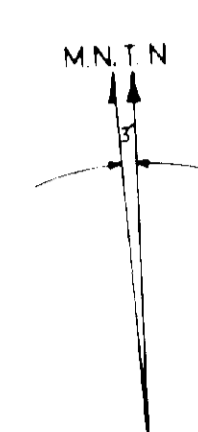
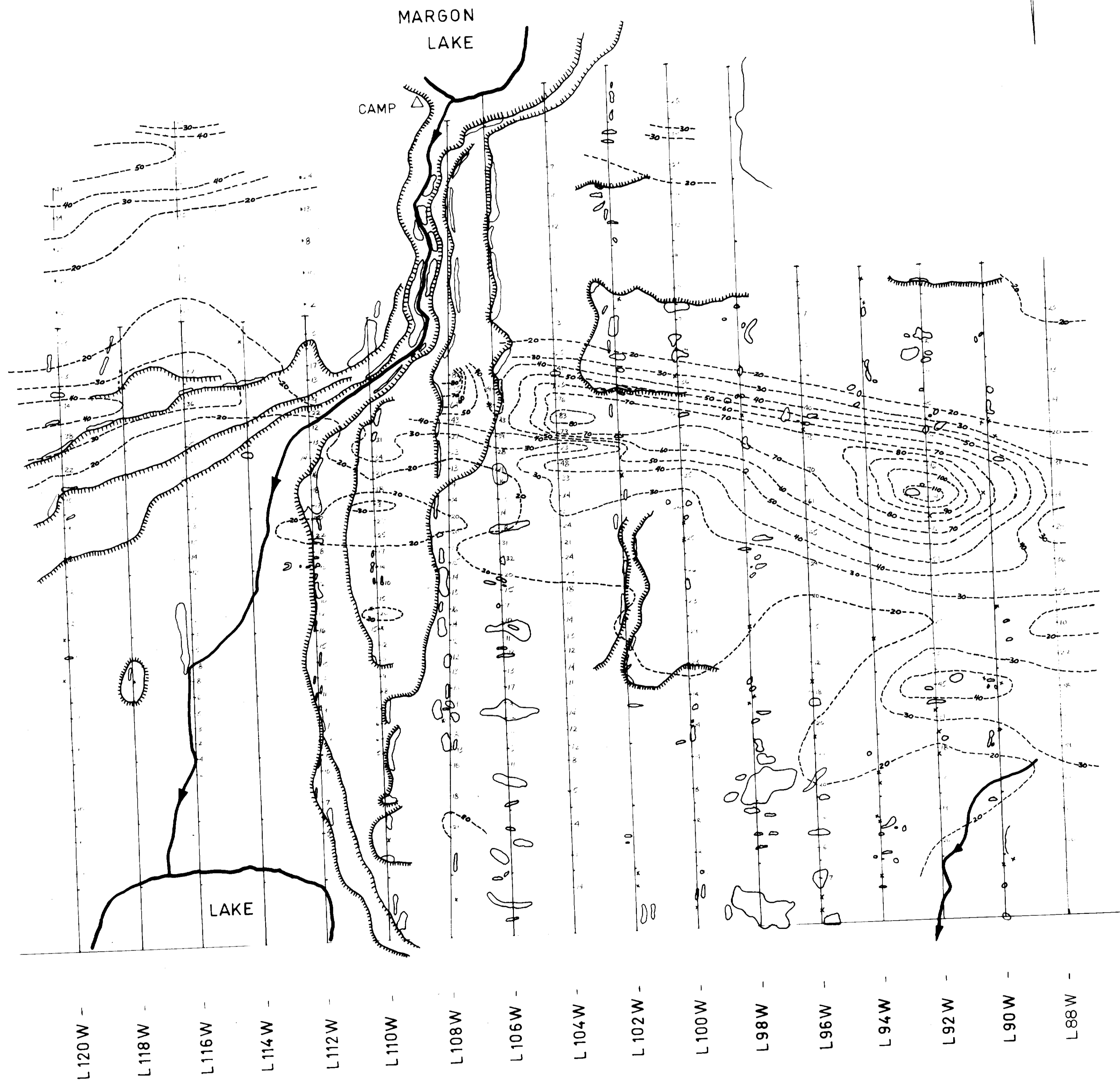
DRAWN

DATE

4410-84-5-15

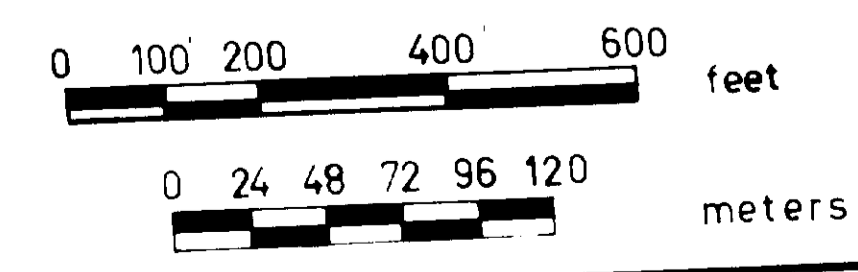


28+00 N -
 24+00 N -
 20+00 N -
 16+00 N -
 12+00 N -
 8+00 N -
 4+00 N -
 Baseline

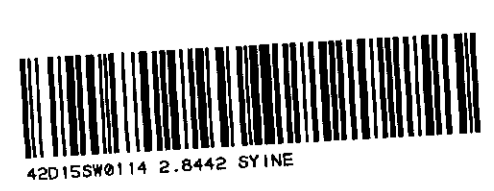


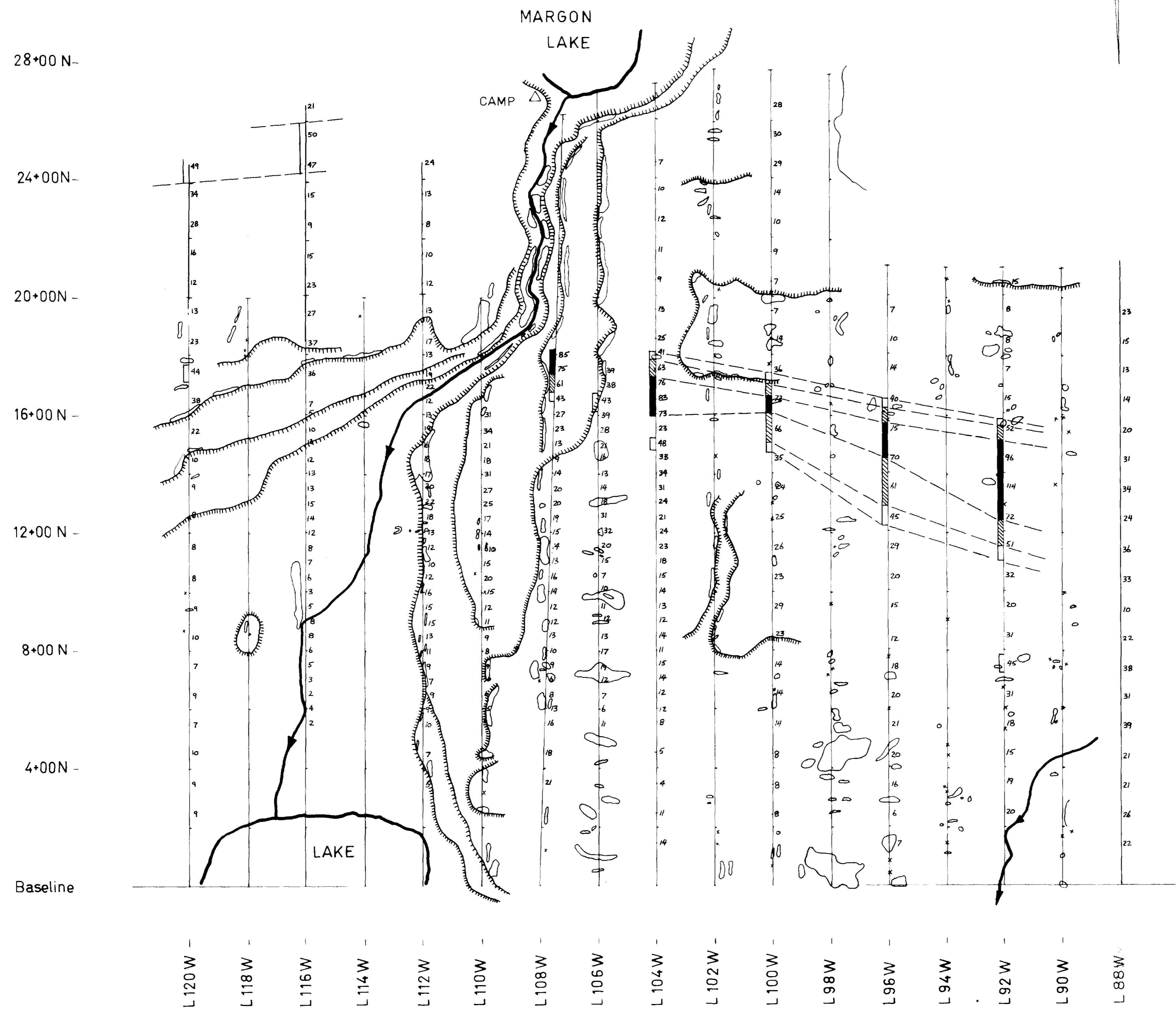
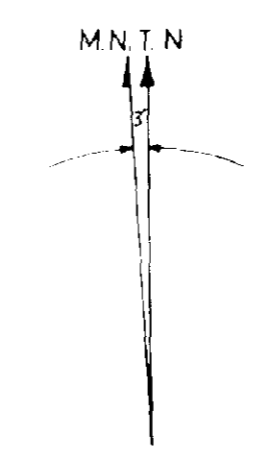
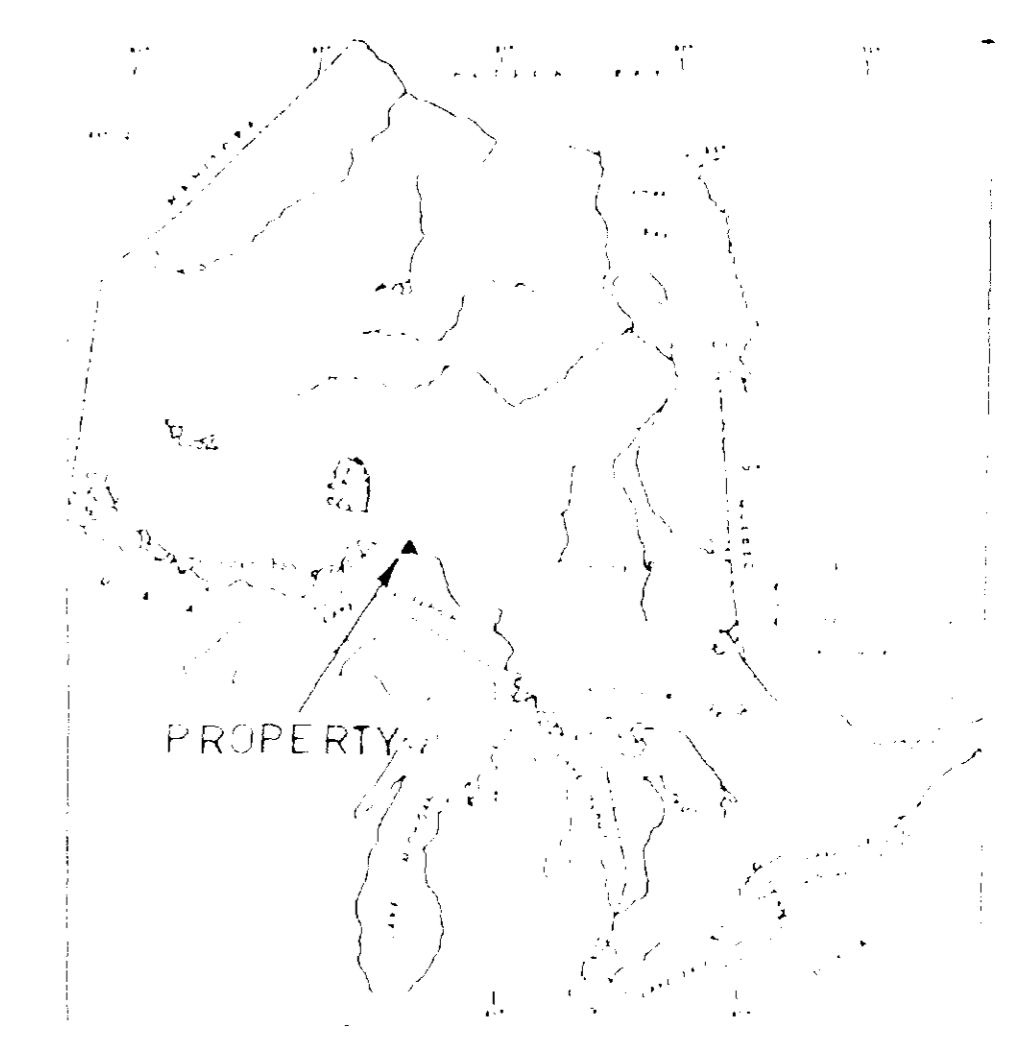
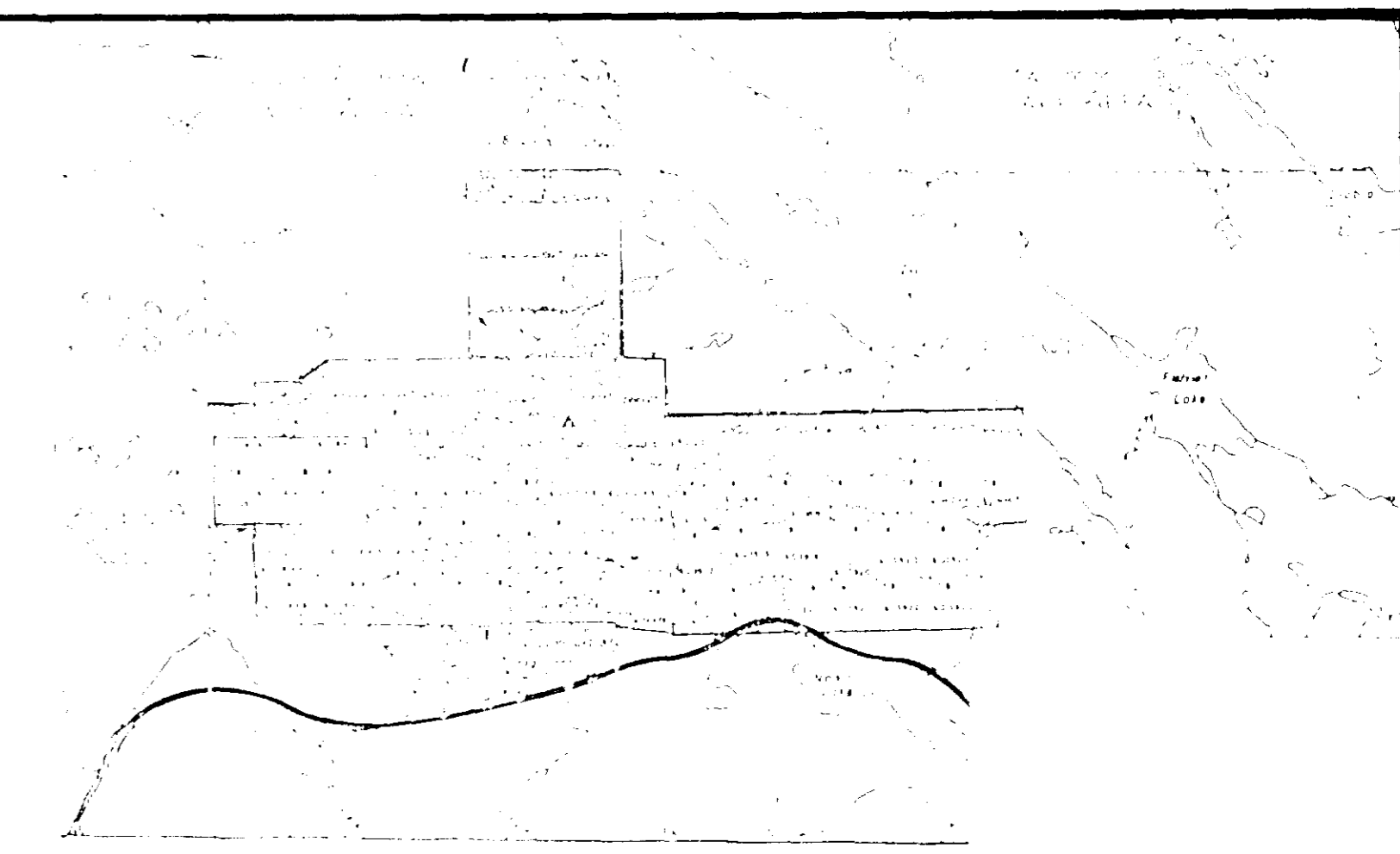
CONTOUR INTERVAL

M. SEC	
-10	-60
-20	-70
-30	-80
-40	-90
-50	-100
	-110



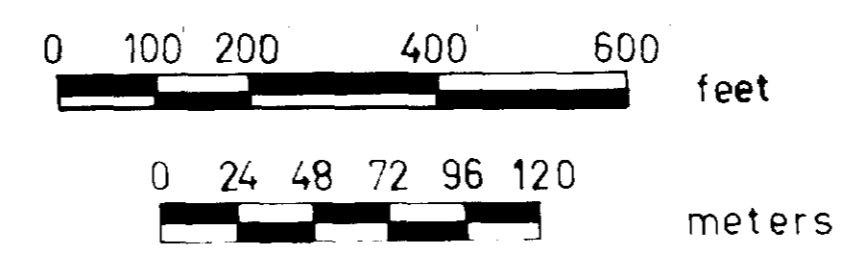
David R. Bell Geological Services Inc.		
MICHAM EXPLORATION INC.		
INDUCED POLARIZATION		
TERRACE BAY PROPERTY		
MOCAN VALLEY GRID		
(CHARGEABILITY)		
CONTOURED		
TWP/AREA	Sydney Township	PROVINCE Ontario
MINING DIVISION	Thunder Bay	PROJECT No. 4410
REFERENCES	O.D.M. Geological Report 50	N.T.S. No. 348/13
DRAWN	Peter Hinz	CHECKED P. Gordon
SCALE	1"=200'	DATE July, 1984
		SHEET No. 4410-84-5-16





LEGEND

- I.P. ANOMALY
- LR > 70 MSEC
 - IR 50-70 MSEC
 - HR 40-50 MSEC



David R. Bell Geological Services Inc.	
MICHAM EXPLORATION INC.	
INDUCED POLARIZATION	
TERRACE BAY PROPERTY	
MOCAN VALLEY GRID	
(CHARGEABILITY)	
TWP/AREA Synde Township	PROVINCE Ontario
MINING DIVISION Thunder Bay	PROJECT No 4410
REFERENCES Q.D.M., Geological Report 90	N.T.S. No. 13413
DRAWN Peter Hinz	DRAFTED Peter Hinz
SCALE 1" = 200'	DATE July, 1984
	SHEET No. 4410-84-5-17

