

SUMMARY EXPLORATION REPORT
on the
BUDD LAKE GOLD PROPERTY
SOTHMAN TOWNSHIP, ONTARIO
Porcupine Mining Division
District of Sudbury
for
QUOTE RESOURCES INC.

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MINING LANDS SECTION

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K.H. Darke, P.Eng.
KENNETH H. DARKE CONSULTANTS LIMITED
October 30, 1987

Qual.
G. 2388



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CERTIFICATE

MAPS IN ATTACHED POCKET

1. General Location Map 1 in. = 135 mi.
2. Regional Location Map 1 in. = 32 mi.
3. Township Location Map 1: 600 000
4. Claim Location Map M-1121 1 in. = 2640 ft.
5. ODM Geological Map 1953-3 1 in. = 1000 ft.
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Sample Location Plan 1 in. = 50 ft.

SUMMARY EXPLORATION REPORT

on the

BUDD LAKE GOLD PROPERTY

SOTHMAN TOWNSHIP, ONTARIO

Porcupine Mining Division
District of Sudbury

for

QUOTE RESOURCES INC.

INTRODUCTION:

The Budd Lake Gold Property described in this summary report consists of 11, contiguous, unpatented mining claims all located in Sothman Township in the Porcupine Mining Division of Northeastern Ontario. The subject property is located 39 airmiles due south of the city of Timmins, Ontario which is the major settlement & distribution centre in the region. Access to the property is readily gained from Timmins via a good gravel road that extends to Reading Lake in Sothman Township, and thence via a bush road that extends westward to the claim group.

Sothman Township is situated within the extensive Precambrian-age "Abitibi Greenstone Belt" that hosts a large number of major gold mines. The regional geology within such Greenstone Belts can be generalized as consisting of a group of contemporaneous volcanic piles and related sediments all of which have been intensely folded, faulted, eroded and intruded by rocks of mafic to felsic composition.

Bedrock in the general Sothman Township Area consists essentially of Early to Middle Precambrian (Archean-age) metamorphosed volcanic & sedimentary rocks that have been intruded by felsic plutons and mafic/ultramafic stocks & plugs. All the aforementioned rock types have been cut by younger (Proterozoic-age) mafic dikes (diabase, quartz diabase). Overlying the aforementioned older, highly folded, basement complex in places are local areas of younger, flat-lying Cobalt Group Sediments of Middle Precambrian-age.

Much of the bedrock in the region is masked by a pervasive cover of younger Pleistocene-age glaciofluvial/lacustrine deposits (sand & gravel). The low-lying areas are covered further by recent alder & muskeg swamp.

Gold mineralization is widely distributed throughout the general Sothman Township Region including significant gold-bearing zones on the subject Budd Lake Property itself. Ore zones at the gold mines located in the adjacent, geologically comparable areas of the Abitibi Greenstone Belt in many cases consist of gold-bearing quartz-carbonate veins & complex stringer zones associated with shear and/or fracture zones within highly altered (carbonatized, chloritized, albitized, variously silicified) metavolcanic and/or metagabbro host rocks. Sulphide mineralization associated with the gold zones consists of disseminated pyrite, lesser amounts of chalcopyrite, and minor galena & sphalerite. Other common accessory minerals are tourmaline and fuchsite (green, chrome mica).

Geological exploration has been conducted throughout the general area now encompassed by the current Budd Lake Property since the initial discovery of gold in the area in 1926. This initial and sporadic exploration of the area consisted essentially of reconnaissance geological mapping, trenching, and limited diamond drilling. Although of limited extent, this previous work was encouraging in that it detected a number of gold-bearing quartz-

carbonate stringer vein zones hosted by highly altered metavolcanics.

The subject 11-Claim Budd Lake Property was staked in 1983 by Manville Canada Inc. who undertook part of the first phase of a recommended exploration program that currently is being managed & continued by Quote Resources. All exploration costs incurred to date on the Budd Lake Property have been reimbursed by Quote Resources per an option agreement with Manville Canada.

The initial exploration on the subject property has consisted of linecutting, geological mapping, geophysical surveys, trenching and limited diamond drilling. Much of this preliminary work was concentrated in an area located southwest of Budd Lake on current Mining Claim No. 714624 in the vicinity of known gold showings.

Geological mapping has shown that the Budd Lake Property is underlain primarily by mafic metavolcanics (flows, tuffs, agglomerate) with minor intercalated felsic metavolcanics (flows, pyroclastics). The metavolcanics trend from northeast to easterly, and are schistose & highly carbonatized in places. Intruded into the volcanics is a 200 to 300-foot-wide Serpentinized Peridotite/Dunite plug that strikes Due North through the center of the claim group. A regional granitic/dioritic stock underlies portions of the northwestern claims. Younger, flat-lying, Cobalt Group Sediments (greywacke, argillite, conglomerate) cover a large portion of the northwestern claims & part of the southeastern claims. In the vicinity of the Ultramafic Intrusive located west of Budd Lake these overlying sediments have a maximum thickness of 100 feet.

Geophysical surveys (Electromagnetic, Magnetic, Radiometric) covering the entire property were completed during November, 1985. The Electromagnetic Survey (McPhar V.E.M. Unit) detected a large number of scattered, very weak, single line crossovers that trend parallel to the local schistosity --- said weak crossovers have no

economic significance. The Magnetic Survey (MF-1 Fluxgate Magnetometer) delineated the aforementioned Ultramafic Intrusive as an area of general magnetic highs that ranged from 1,000 to 6,000 gammas above the magnetic intensities of the adjacent meta-volcanics. The 400-foot line-spacing of the control grid used in the magnetic survey was too wide to adequately define the carbonate alteration zones (magnetic lows) present on Claim Nos. 714623 & 24. The Radiometric Survey, conducted with a Sharpe GIS-2 Gamma Ray Integrating Spectrometer, detected nothing of economic significance.

During the period June-August, 1983 Manville Canada completed five shallow holes utilizing a small "Winkie-type" diamond drilling rig. These five holes varied in length from 102 - 114 ft. for an aggregate total of 538 feet. All the holes were drilled on Claim No. 714624 in a preliminary, near-surface evaluation of an area containing gold showings within highly carbonatized metavolcanics. Of particular interest was the general area where a hole previously drilled in 1946 by Buffalo Ankerite Gold Mines (DDH #2) intersected an 8.5-foot core interval that averaged 0.20 oz. gold per ton at a vertical depth of 185 feet ... Buffalo Ankerite did not undertake any follow-up evaluation of this gold intersection.

The aforementioned limited drilling and follow-up trenching & sampling in the immediate area has shown that over a strike length of 200 ft. and width of 170 ft. on Claim No. 714624 there are four gold-bearing quartz-carbonate vein systems. These gold-bearing horizons have been designated as "A", "B", "C" & "D" and contain gold values ranging from 0.12 to 0.20 oz. gold per ton in drill hole intersections (Zones "C" & "B" respectively) and 0.14 to 0.18 oz. gold per ton in surface grab samples (Zones "D" & "A" respectively). There also are five parallel ancillary horizons containing lesser gold values (0.01 to 0.06 oz. gold per ton). The gold-bearing quartz stringer veins contain associated disseminated pyrite, and in places also tourmaline & abundant fuchsite ("green carbonate zones").

These gold-bearing vein systems trend parallel to the local schistosity and are hosted by altered (carbonatized) metavolcanic rock types that are lithologically similar to rock types that elsewhere in the region are the host rocks for major gold deposits.

The aforementioned four gold-bearing horizons located in the northern part of Claim No. 714624 are of potential economic significance and represent prime target areas for additional detailed evaluation both along their possible strike extensions and at depth.

Other areas of carbonatized metavolcanics located to the north on Claim Nos. 714623, 772582 & 714617 also contain gold mineralization. These geologically-favourable areas remain virtually untested to date and warrant additional evaluation as secondary but important target areas.

A continuation & expansion of the work program commenced on the Budd Lake Property by Manville Canada Inc./Quote Resources Inc. in an exploratory search for gold deposits is definitely warranted and is hereby recommended.

PURPOSE & SCOPE:

The purpose of this report is to provide a summary evaluation of the Budd Lake Property with respect to its gold potential; and to provide recommendations to the management of Quote Resources Inc.

The scope of this Summary Exploration Report will include a brief description of the regional & economic geology of the Sothman Township Area; will discuss the previous work completed in the area encompassed by the current claim group; and will contain recommendations for substantial additional detailed work on the Budd Lake Property in an exploratory search for gold deposits.

SOURCES OF INFORMATION:

This Summary Exploration Report is based upon a study of published Regional Geological Maps & data contained in ODM Assessment Work Reports on file at the Resident Geologist's office at Timmins, Ontario; upon a personal knowledge of the Sothman Township Region gained while conducting exploration programs throughout the adjacent regions; and upon three personal examinations of the current Budd Lake Property, including the sampling of bedrock outcrops, conducted during the period Aug. 14th to Oct. 23rd, 1987.

PROPERTY DESCRIPTION:

The property described in this report consists of 11, contiguous, unpatented, 40-acre mining claims all located in Sothman Township, Porcupine Mining Division, District of Sudbury, Ontario and further described as follows: ...

<u>Claim Nos.:</u>	<u>No. of Claims:</u>	<u>Date Recorded:</u>	<u>Work Filed: (days/claim)</u>
L. 714610 & 11	2	Apr. 7, 1983	161
714616 & 17	2	Apr. 7, 1983	161
714622-25 incl.	4	Apr. 7, 1983	161
772582	1	Apr. 7, 1983	161
772588 & 89	2	Apr. 7, 1983	161
	11	claims	

The aforementioned 11 mining claims are currently registered in the name of Manville Canada Inc.; P.O. Box 610; Matheson, Ontario P0K 1N0 (Prospector's License No. T-1330).

Current controlling interest of the aforementioned 11-Claim Budd Lake Gold Property has been attested to by the management of Quote Resources Inc. and was not independently so ascertained by the writer.

GENERAL GEOLOGY:

The general geology of Sothman Township is described in the Sixty-Second Annual Report of the Ontario Department of Mines being Vol. LXII, Part 6, 1953; Geology of Sothman Township by E.M. Abraham; accompanied by Map No.1953-3 at a scale of 1 inch to 1,000 feet. The following text is taken directly from said report: ...

The bedrock formations of the area consist mainly of early Precambrian volcanics cut by basic and ultrabasic rocks of Haileyburian age. More acidic intrusives of Algonian age outcrop in the northern part of the township. Cobalt sediments rest unconformably on the older rocks in the western and southern parts of the township. Two late diabase dikes, classified as Keweenawan in age, cut the early Precambrian volcanics. Cenozoic deposits of sand, gravel, and swamp conceal most of the bedrock, and it is estimated that less than 5 percent of the area is outcrop. The sand deposits have been partly modified since their deposition by wind action, and now occur as dunes in some parts of the township.

The volcanics are the oldest rocks in the area and, on the basis of lithological character, are classified as Keewatin in age. They include basic, intermediate, and acidic flows, fragmental volcanics, and thin tuffaceous bands.

The basic and ultrabasic rocks range in composition from altered dunite and peridotite, to pyroxenite, hornblendite, diabase, gabbro, diorite, gabbro and diorite porphyry, quartz gabbro and diorite, and lamprophyre. They cut the volcanics in a number of localities and are believed to be Haileyburian in age.

The Algonian intrusives are not widespread and include granite, feldspar and quartz-feldspar porphyry, and diorite. In the northwest corner of the township a hybrid zone occurs at the volcanic-intrusive contact.

Prior to deposition of the Huronian series, the Keewatin and Haileyburian rocks underwent intense folding and faulting during the Algonian orogenic period. This was followed by a long interval of erosion during which mountains were worn down to yield a peneplaned surface. Sediments of the Huronian series were subsequently deposited on this surface.

The rock formations are summarized in the following table. Within each group, the rocks are not necessarily arranged in chronological order:

Table of Formations

CENOZOIC	
RECENT:	Windblown sand (dunes); organic accumulations; stream deposits.
PLEISTOCENE:	Sand, gravel, and boulders; windblown sand (dunes).
<i>Great unconformity</i>	
PRECAMBRIAN	
KEWEENAWAN:	Olivine diabase and porphyritic diabase.
<i>Intrusive contact</i>	
HURONIAN:	Conglomerate, greywacke, and argillite.
<i>Great unconformity</i>	
ALGOMAN:	Granite; feldspar and quartz-feldspar porphyry; diorite.
<i>Intrusive contact</i>	
HAILEYBURIAN:	Diorite and quartz diorite; gabbro and diorite porphyry; gabbro, granophyre gabbro and diabase; pyroxenite; serpentized dunite and peridotite; steatitized dunite and peridotite; hornblendite; lamprophyre.
<i>Intrusive contact</i>	
KEEWATIN:	Basic volcanics: andesite, basalt, pillow lava and dioritic lava; fragmental lava; talc-chlorite and carbonate-chlorite schist; chloritized-actinolitized and chloritized-carbonatized volcanics; amphibolitized volcanics. Acidic to intermediate volcanics: amygdaloidal, porphyritic and massive lava; pillow lava; fragmental lava; agglomerate and black slate; sericite schist; cherty tuff; chloritized-actinolitized and chloritized-carbonatized volcanics.

PROPERTY GEOLOGY:

OGS MDC18

GEOLOGY: The border phase of a large batholith is exposed northwest of Edlestone Lake. The rock types consist of granite, diorite, and hybrid granite gneiss. Mafic to intermediate metavolcanics occur southeast of the batholith. These have been altered to talc-chlorite schists, and in some cases completely converted to a green carbonate rock impregnated with quartz and carbonate stringers and containing disseminated pyrite. These rocks are overlain by gently dipping Cobalt Group metasediments.

The geology of the Budd Lake Property is described in detail in a report dated March 24th, 1986 by F.J. Evelegh, Exploration Manager; Manville Canada Inc. ... said report is accompanied by a Geological Map at a scale of 1 inch to 200 feet.

The aforementioned report by Mr. Evelegh also describes Geophysical Surveys completed on the Budd Lake Property, and contains an interpretation of the survey results with respect to the bedrock geology.

A summary of the property geology as described by Mr. Evelegh and as shown on his geological map is incorporated in the "Introduction" to this report and will not be further considered herein.

ECONOMIC GEOLOGY:

The subject Budd Lake Claim Group encompasses a number of gold showings located west & southwest of Budd Lake. The initial gold discovery was made in 1944 by R. Edleston, and subsequently was investigated by Buffalo Ankerite Mines (Buffalo Prospect). A number of other gold occurrences in the adjacent area were initially investigated by Preston East Dome Mines (1953). The following description of said showings is taken from the aforementioned ODM Report by E.M. Abraham: ...

Minerals of economic interest that have been found to date in Sothman township are, gold, argentiferous galena, sphalerite, pyrrhotite, pentlandite, and asbestos; other minerals that have been recognized are, pyrite, specularite, millerite, and chalcopyrite. Early prospecting in the area was for gold, but since the inception of the airborne magnetometer and its application, prospecting has been mainly for nickel and asbestos associated with ultrabasic bodies. There are no producing mines or shafts in the area, and exploration has been confined to surface-trenching and stripping, diamond-drilling, and geophysical surveys.

Gold

In 1944, R. Edleston of Timmins uncovered a gold showing in the northwestern part of the township. As a result, interest in the area became acute, and eventually other gold showings were discovered. The gold is associated with quartz in or near sheared, fractured, or faulted zones.

On the property of Sherwood Gold Mines, Limited, the gold is associated with fine-grained pyrite and sphalerite in or adjacent to veins, lenses, and stringers of quartz. These quartz masses lie in sheared zones, the most important of which is along the south contact of diorite porphyry with andesite.

On the Preston East Dome Mines, Limited, property in Sothman township, the main gold showing is in carbonatized and sheared agglomerate cut by a stockwork of quartz and calcite stringers. The sulphides present are pyrite with minor chalcopyrite, pyrrhotite, millerite, sphalerite, and galena. Again gold is associated with quartz stringers and veins. Low gold values were obtained in an outcrop of green carbonate cut by a plexus of quartz and carbonate stringers and veins and intruded by feldspar porphyry. Pyrite mineralization is abundant.

Argentiferous Galena and Sphalerite

On the Preston East Dome property in the northwestern part of the township, four narrow bands of sphalerite and galena occur in a mineralized zone of volcanics several hundred feet wide. The four bands are only a few inches wide, and the associated minerals are pyrite and calcite. The sphalerite and galena occur as stringers, platings, and disseminations. The host rock is a carbonatized and mineralized agglomerate containing light and dark fragments in a basic matrix.

Results of subsequent exploration programs in the Budd Lake Area are summarized in Ont. Geol. Survey, Mineral Deposits Circular 18, Gold Deposits of Ontario, Part 2, 1972, P.84 as follows: ...

Trenching west of Budd Lake has revealed several sheared and carbonatized zones striking N80°W and dipping south in a volcanic fragmental. These zones contain galena and sphalerite, and have yielded low gold and silver values. Gold values of up to 0.18 ounce per ton have been obtained from several zones of quartz stringers elsewhere on the property. An 8.5-foot section of diamond-drill core assayed 0.20 ounce of Au per ton. Other assays were: 2.92 percent Pb, 1.68 percent Zn, and 0.08 ounce of Ag per ton from a channel sample; 0.22 percent Pb, 1.08 percent Zn and 0.39 ounce of Ag per ton from a 9.8-foot section of diamond-drill core.

HISTORY:

The general area encompassed by the current Budd Lake Claim Group has had a history of sporadic exploration prior to the staking in 1983 by Manville Canada Inc. The following description is taken from the aforementioned OGS MDC 18: ...

HISTORY: Circa 1914-1918: Gold reportedly found by an Indian trapper.
1944: Gold found by R. Edleston.
1944-1947: Stripping, trenching, and 12 diamond-drill holes (3,050 feet) by Buffalo Ankerite Mines Limited.
1951: Geological survey, stripping, trenching, and seven diamond-drill holes (2,269 feet) by Preston East Dome Mines Limited.
1965: Magnetic and electromagnetic surveys by The Consolidated Mining and Smelting Company of Canada Limited.
1973: Geological, magnetic, and electromagnetic surveys, and two diamond-drill holes (964 feet) by Dowa Mining Company Limited.

PRELIMINARY EXPLORATION PROGRAM:

Following the staking of the Budd Lake Claim Group in 1983, Manville Canada, as part of a preliminary exploration program, completed five shallow drill holes in a local area on Claim No. 714624 in the vicinity of a known gold occurrence. Said holes were drilled with a "Winkie" rig that has a very limited depth capability and produces a small diameter core. For ease in drilling all holes were collared on bedrock outcrops. Despite the severe limitations imposed by the equipment used, this preliminary drilling program was highly encouraging in that it did indicate the presence of a number of steeply-dipping to vertical gold-bearing horizons that warranted detailed follow-up evaluation. Unfortunately, only a small portion of the drill cores were assayed by Manville and a number of other known gold-bearing zones that should have been intersected by said drilling were not reported by Manville. For details of the location of these drill holes, core intervals sampled, and assay results refer to the "Diamond Drill Hole & Sample Location Plan" in the attached Map Pocket.

Because of the highly encouraging results attained in the one local area investigated, Manville in 1985 established a control grid of north-south-bearing picket lines at a 400-foot line spacing over the entire property, and completed Geological & Geophysical Surveys thereupon. General results of said surveys are summarized in the "Introduction" section of this report, and are further commented on in the text that follows.

In the vicinity of the aforementioned "Winkie" drill holes located on the northern part of Claim No. 714624, the geological survey & subsequent more detailed follow-up mapping confirmed the presence of a number of parallel, east-west-bearing, quartz-carbonate stringer vein zones associated with steeply dipping (80° - 90°) schistose metavolcanic (flows, agglomerates/pyroclastics, cherty-carbonaceous tuffs) host rocks. The metavolcanics are chloritized & highly carbonatized in places with abundant fuchsite & disseminated

pyrite ... the quartz-carbonate veins & stringers themselves in places contain disseminated pyrite & tourmaline. The highly altered host rocks containing abundant fuchsite mineralization were designated as "green carbonate zones". Said geological mapping outlined three other zones of highly carbonatized metavolcanics elsewhere on the property ... these latter areas remain virtually untested to date even though two zones are known to contain associated gold mineralization.

The magnetometer survey because of the widespread presence of disseminated magnetite mineralization and the wide spacing of the control grid lines did not adequately define the geologically-favourable "highly carbonatized" zones (expected magnetic lows) in the metavolcanic stratigraphy.

The electromagnetic survey (V.E.M.) did not detect any zones of massive sulphides and/or conductive graphitic horizons on the property. A number of single-line crossovers detected could be due to disseminated sulphide mineralization associated with shear zones; however, their economic significance if any has not been determined. Because of the disseminated nature of the sulphide mineralization associated with the known gold-bearing zones said V.E.M. survey was not able to detect these zones. A detailed Induced Polarization (I.P.) Survey conducted on a closely-spaced grid covering the known gold-bearing zones & their possible strike extensions appears to be the most feasible method of tracing said gold-bearing schistose zones through the areas of overburden cover present.

During August 1987, Quote Resources completed a detailed control grid of picket lines covering the known gold-bearing areas located on both Claim No. 714624 and to the north on adjacent Claim No. 714623. Said detailed grid consists of both north-south-bearing and east-west-bearing lines each at a 200-foot spacing with pickets (stations) at 100-foot intervals thereon. Purpose of this grid was to facilitate detailed geological mapping & sampling; as a control

for recommended detailed I.P. surveys; and as a control for anticipated extensive follow-up diamond drilling.

During the period August-October 1987, the writer located the old (1946) Buffalo Ankerite control grid & drill holes (DDH Nos. 1 & 2) on Claim No. 714624; correlated the Manville drill hole sites with the new grid; took representative grab samples from a number of old pits & trenches; and wherever possible took samples from bedrock outcrops in the vicinity of the drill holes. Purpose of this work was to locate and where possible to correlate surface gold showings with drill hole intersections assuming a near vertical dip of said gold-bearing zones.

The aforementioned grab samples taken confirmed the presence on surface of gold-bearing quartz-carbonate stringer veins in two zones that were intersected in Manville's drill holes but unfortunately not sampled by them. A representative, large grab sample of extensive quartz-carbonate vein material taken from a trench subsequently determined to be on Zone "A" assayed 0.18 oz. gold per ton ... in DDH #M1 this zone was logged as consisting of "smoky quartz-calcite veining" intersected over a 14-foot core interval. Host rock for the veining was termed a carbonatized felsic fragmental with disseminated pyrite throughout the core interval.

Two grab samples of quartz-carbonate vein material taken from an outcrop located 130 ft. south of Zone "A" were also found to contain significant gold values. Said outcrop consisted of a highly schistose metavolcanic containing disseminated pyrite and abundant fuchsite (green carbonate zone) as well as the quartz-carbonate veining. The two samples of vein material assayed 0.06 & 0.14 oz. gold per ton. This gold-bearing zone, subsequently designated as Zone "D", apparently should have been intersected by DDH Nos. M3 & M5; however, no core samples were assayed by Manville over the pertinent core intervals.

Gold-bearing Zone "B" (located 35 ft. south of Zone "A" and apparently a separate, parallel horizon) was intersected in Buffalo Ankerite's DDH #2 where an 8.5-foot core interval averaged 0.20 oz. gold per ton at a vertical depth of 185 feet. This drill hole intersection is located 160 ft. southeast of the aforementioned gold-bearing trench on Zone "A", and is situated in an area covered by a cedar swamp where there are no adjacent bedrock outcrops. DDH #M4 located 55 ft. to the west (projected extension) should have intersected this zone; however, the pertinent core interval was not assayed by Manville.

Gold-bearing Zone "C" was intersected in Manville's DDH Nos. M5 & M3. DDH #M5 intersected a 4-foot core interval that assayed 0.12 oz. gold per ton ... the adjacent core intervals were not assayed. The host rock for the gold mineralization was logged as a "green carbonated volcanic" containing considerable quartz veining (1/8" to 6") with finely disseminated pyrite. The same zone was intersected 100 ft. to the east in DDH #M3 but only partially sampled ... a 3.0-foot sample and a 1.5-foot sample assayed 0.06 & 0.08 oz. gold per ton respectively; the intervening 5.0-foot core interval between the two samples taken was not assayed.

The Table that follows on Page 16 summarizes the pertinent data on the gold occurrences on Claim No. 714624 described in the preceding text.

TABLE 1:- SUMMARY OF GOLD OCCURRENCES
ON MINING CLAIM NO. 714624.

<u>Gold Zone:</u>	<u>Grab Sample No.:</u>	<u>DDH No.:</u>	<u>Core Interval:</u> (ft.)	<u>Assay:</u> (oz.Au/Ton)	<u>Not Sampled:</u>
A	53	--	---	0.18	
A	--	M1	---	----	X
A1	67	--	---	0.01	
A1	--	M2	---	----	X
B	--	B2	8.5	0.20	
B	--	M4	---	----	X
B1	--	M4	5.0	0.01	
B2	--	M4	4.0	0.02	
C	--	M5	4.0	0.12	
C	--	M3	1.5	0.08	(partial)
C1	--	M3	3.0	0.06	(partial)
C2	--	M3	2.0	0.03	
D	56	--	---	0.06	
D	57	--	---	0.14	
D	58	--	---	0.01	
D	--	M5	---	----	X
D	--	M3	---	----	X

NOTE:- In almost every instance the only core intervals assayed are those shown; that is, the adjacent core intervals unfortunately were not sampled.

- It also should be noted that the M-Series holes were drilled with a "Winkie" rig; that is, these holes are shallow and the core sample obtained is small. The principal value of this preliminary drilling is that it indicated a gold-bearing area of potential economic significance that warrants extensive follow-up evaluation. It is also significant that the best gold intersection obtained (DDH #B2) came from the deepest intersection reported ... a vertical depth of 185 feet.

CONCLUSIONS & RECOMMENDATIONS:

The widespread presence of gold mineralization on the Budd Lake Property is geologically encouraging in view of the limited amount of bedrock outcrop present. The fact that significant gold values have been found in the one area subjected to more detailed evaluation (Claim No. 714624) enhances the overall exploration potential of the property.

It is also significant that the host rocks for the gold-bearing quartz-carbonate vein systems on the property are carbonatized metavolcanics that are lithologically comparable to the host rocks present at gold mines located in the adjacent regions.

A continuation of the exploration program commenced on the property by Manville Canada Inc./Quote Resources Inc. is definitely warranted and is hereby recommended.

The gold-bearing zones located on Claim No. 714624 represent first priority exploration targets that warrant detailed evaluation by means of an Induced Polarization Survey and extensive follow-up diamond drilling.

Other known gold-bearing but virtually intested areas of carbonatized metavolcanics present on the property represent important secondary exploration targets that also should be further evaluated.

* * * * *

Respectfully submitted,

October 30, 1987
Timmins, Ontario

K.H. Darke



K.H. Darke, P.Eng.
Consulting Geological Engineer

BUDD LAKE GOLD PROPERTY;
SOTHMAN TOWNSHIP, ONTARIO:

COSTS OF PRELIMINARY EXPLORATION
PROGRAM RECOMMENDED & COMPLETED:

PHASE I:- The initial work program has been completed
as per expenditures summarized below: ...

(a) Reconnaissance Geological Mapping; Prospecting; Trenching; Sampling & Assaying; and Preliminary Diamond Drilling (Winkie):	\$31,660
(b) Linecutting of Control Grid:	4,195
(c) Geological Survey; Geophysical Surveys (E.M., Magnetometer); Interpretation Reports & Maps; Supervision & Expenses:	13,300
(d) Evaluation & Preparation of Geological Report containing additional work recommendations:	2,651
(e) Linecutting of Detailed Grid System:	4,784
(f) Location of old Trenches, Drill Holes, etc.; Detailed Geological Mapping; Sampling & Assaying; Preparation of Summary Report & Maps:	8,309
<u>Total PHASE I: ...</u>	<u>\$64,899</u>

PHASE II:- I.P. Surveys & Diamond Drilling.

It has been recommended herein that Quote Resources Inc. at the earliest convenience undertake Phase II of the previously recommended exploration program. The Cost of the recommended I.P. Surveys & 3,000 ft. of Diamond Drilling is Estimated to be approximately \$165,000 as detailed on the following Page 19.

K. H. Darke

K.H. Darke, P.Eng.
Consulting Geological Engineer



ESTIMATED COSTS continued: ...PHASE II:1. Detailed I.P. Survey:

(a) Surveys: 10 days @ \$1400/day ...	\$14,000	
(b) Transportation & Expenses	3,000	
(c) Evaluation Report & Maps	<u>3,000</u>	
Sub Total: ...	\$20,000 \$ 20,000

2. Preliminary Diamond Drilling Program:

(a) Mobilization to Campsite; Camp Erection including Core Tent; Set-up at first Drill Hole; and Demobilization	\$ 11,000	
(b) Coring (NQ); Moving-Between-Holes; Acid Tests; & Core Boxes: 3,000 ft. @ \$25/foot	75,000	
(c) Spotting of Drill Holes; Detailed Core Logging & Sampling:		
(i) Jr.Geol.; 40 days @ \$150/day	6,000	
(ii) Consult.; 40 days @ \$400/day	16,000	
(iii) Transportation & Expenses	<u>3,500</u>	
(d) Assaying of Core Samples: 400 samples @ \$25 each	10,000	
(e) Geological Evaluation of Diamond Drilling Results: Preparation of Technical Data and Summary Report by Consultant	<u>8,500</u>	
Sub Total: ...	\$130,000	... 130,000
	Sub Total: ...	\$150,000
	Contingencies @ 10%: ...	<u>15,000</u>
	<u>Total PHASE II: ...</u>	<u>\$165,000</u>

... continued on Page 20.

ESTIMATED COSTS continued: ...

PHASE III:- Follow-up Diamond Drilling:

(Contingent upon Engineer's Recommendation)

Coring (NQ); Core Logging, Sampling & Assaying;
Preparation of Technical Data & Consulting
Engineer's Summary Report:

4500 ft. @ \$39/foot \$175,500 (Total)

Summary of Estimated Costs:

PHASE I: \$ 64,900 (Completed)

PHASE II: 165,000 (Recommended)

PHASE III: ... 175,500 (Contingent)

Total: ... \$405,400

* * * * *



K.H. Darke

K.H. Darke, P.Eng.
Consulting Geological Engineer

KENNETH H. DARKE CONSULTANTS LIMITED

338 SPRUCE STREET NORTH
TIMMINS, ONTARIO
P4N 6N5
TELEPHONE (705) 264-1910
RESIDENCE 264-7403

The Management
QUOTE RESOURCES INC.
5900 - One First Canadian Place
TORONTO, Ontario
M5X 1K2

C E R T I F I C A T E

With reference to my Summary Exploration Report on the Budd Lake Gold Property dated October 30, 1987 ...

I, KENNETH H. DARKE, of the city of Timmins, Ontario do hereby certify that:

1. I am a graduate of the University of British Columbia in Geological Engineering and have practised my profession in this capacity continuously for the past 31 years;
2. I am and have been an independent Consulting Geological Engineer (Exploration) with an office situated in Timmins, Ontario for the past 23 years;
3. I am a registered Professional Engineer in the Province of Ontario;
4. I have no interest direct or indirect in the Budd Lake Gold Property, Sothman Township, Ontario described in this report or in the shares of Quote Resources Inc. nor do I expect to receive any; and
5. This Summary Exploration Report is based upon a study of published Regional Geological Maps & data contained in ODM Assessment Work Reports on file at the Resident Geologist's office at Timmins, Ontario; upon a personal knowledge of the Sothman Township Region gained while conducting exploration programs throughout the adjacent regions; and upon three personal examinations of the current Budd Lake Property, including the sampling of bedrock outcrops, conducted during the period August 14th to October 23, 1987.

Dated this 30th day of October 1987
Timmins, Ontario

K. H. Darke

K.H. Darke, P.Eng.
Consulting Geological Engineer



KENNETH H. DARKE CONSULTANTS LIMITED

338 SPRUCE STREET NORTH
TIMMINS, ONTARIO
P4N 6N5
TELEPHONE (705) 264-1910
RESIDENCE 264-7403

October 30, 1987

The Management
QUOTE RESOURCES INC.
5900 - One First Canadian Place
TORONTO, Ontario M5X 1K2

Gentlemen:

BUDD LAKE GOLD PROPERTY;
SOTHMAN TOWNSHIP, ONTARIO:

Letter of Consent to use my
Summary Exploration Report
dated October 30, 1987.

This letter is your authority to use my Summary Exploration Report on the Budd Lake Gold Property; Sothman Township, Ontario dated October 30, 1987 for any corporate purpose you deem necessary including its submittal to the pertinent regulatory authorities and its inclusion in whole or in part in any company prospectus.

Yours truly,

K. H. Darke

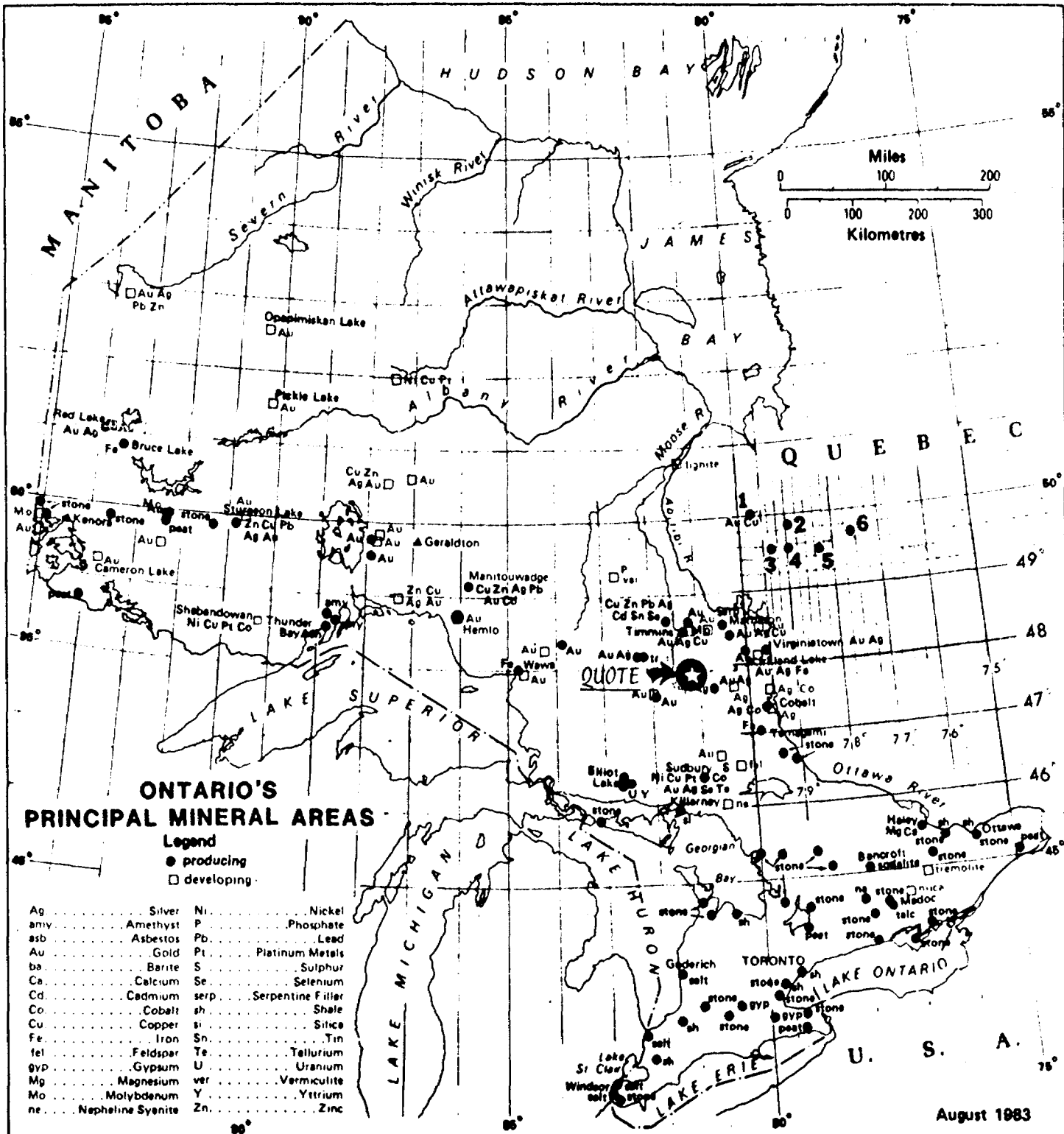


K.H. Darke, P.Eng.
Consulting Geological Engineer

1. Detour Lake
2. Les Mines Selbaie
3. Inco-Golden Knight
4. Teck-Golden Hope
5. Joutel
6. Matagami Lake

General Location Map
QUOTE RESOURCES INC.
BUDD LAKE GOLD PROPERTY
SOTHMAN TOWNSHIP, ONTARIO
 Porcupine Mining Division
 District of Sudbury

Scale: 1 inch = 135 miles



Regional Location Map

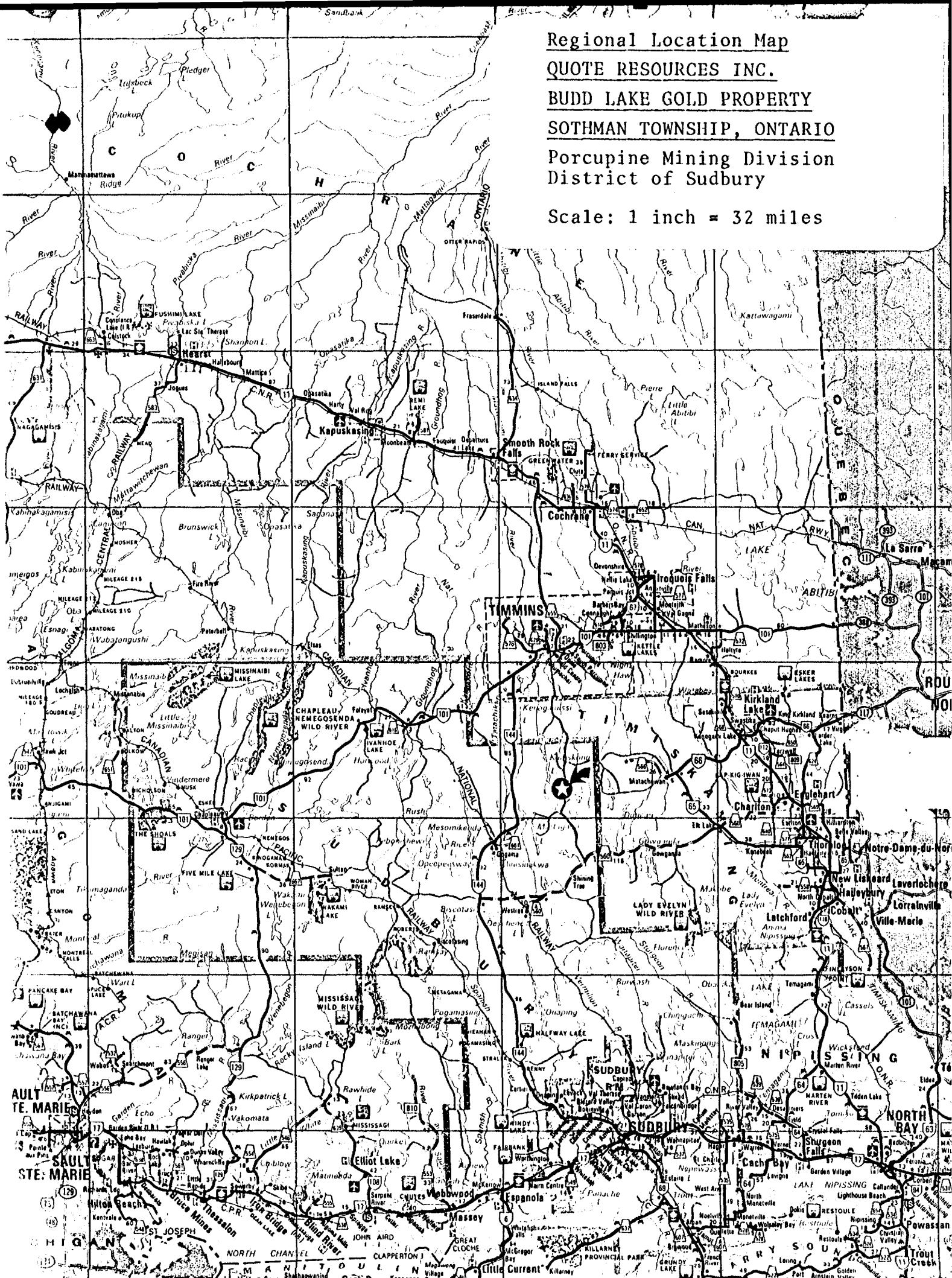
QUOTE RESOURCES INC.

BUDD LAKE GOLD PROPERTY

SOTHMAN TOWNSHIP, ONTARIO

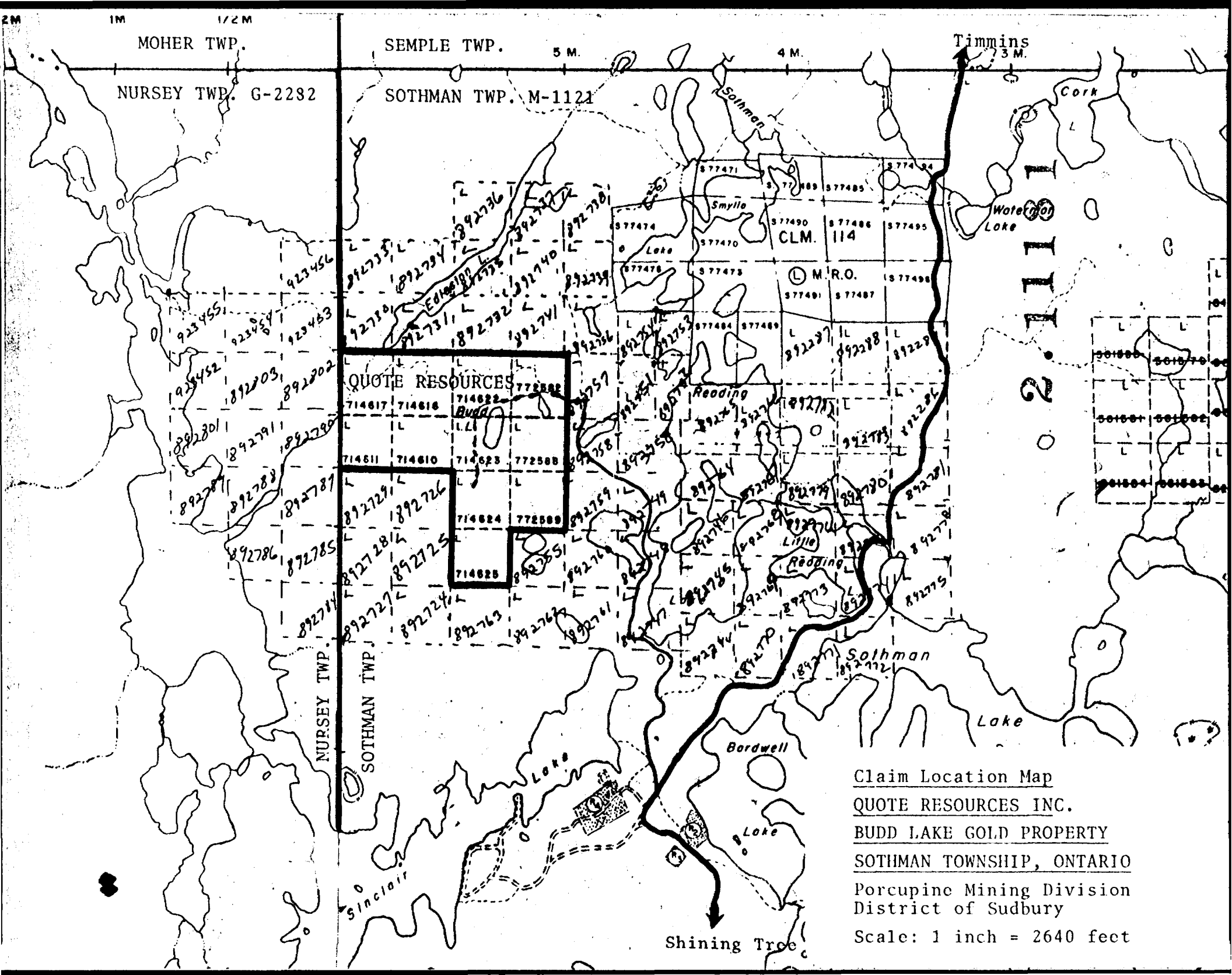
Porcupine Mining Division
District of Sudbury

Scale: 1 inch = 32 miles

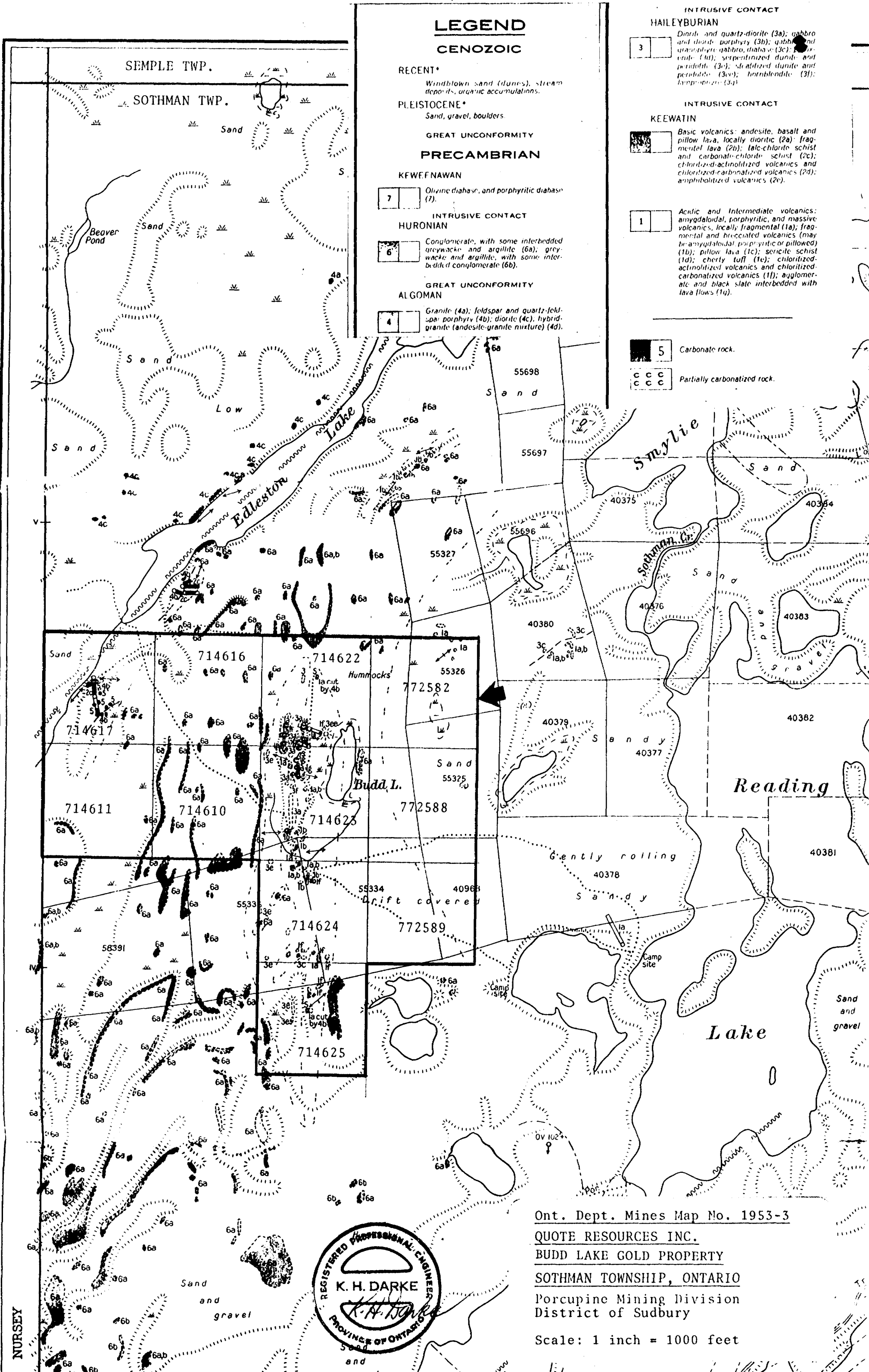




Township Location Map
 QUOTE RESOURCES INC.
 BUDD LAKE GOLD PROPERTY
 SOTHMAN TOWNSHIP, ONTARIO
 Porcupine Mining Division
 District of Sudbury
 Scale: 1: 600 000



Claim Location Map
 QUOTE RESOURCES INC.
 BUDD LAKE GOLD PROPERTY
 SOTHRMAN TOWNSHIP, ONTARIO
 Porcupine Mining Division
 District of Sudbury
 Scale: 1 inch = 2640 feet



LEGEND

CENOZOIC

- RECENT*
Windblown sand (dunes), stream deposits, organic accumulations.
- PLEISTOCENE*
Sand, gravel, boulders.

GREAT UNCONFORMITY
PRECAMBRIAN

- KWEEFNAWAN
7 Olivine diabase, and porphyritic diabase (7).
- INTRUSIVE CONTACT
- HURONIAN
6 Conglomerate, with some interbedded greywacke and argillite (6a); greywacke and argillite, with some interbedded conglomerate (6b).
- GREAT UNCONFORMITY
- ALGOMAN
4 Granite (4a); feldspar and quartz-feldspar porphyry (4b); diorite (4c); hybrid-granite (andesite-granite mixture) (4d).

INTRUSIVE CONTACT

HAILEYBURIAN

- 3 Diorite and quartz-diorite (3a); gabbro and diorite porphyry (3b); gabbro and quartzite (3c); serpentized dunite and peridotite (3d); stabilized dunite and peridotite (3e); hornblende (3f); amphibolite (3g).

INTRUSIVE CONTACT

KEEWATIN

- Basic volcanics: andesite, basalt and pillow lava, locally dioritic (2a); fragmental lava (2b); talc-chlorite schist and carbonate-chlorite schist (2c); chloritized-actinolitized volcanics and chloritized-carbonatized volcanics (2d); amphibolitized volcanics (2e).

- 1 Acidic and Intermediate volcanics: amygdaloidal, porphyritic, and massive volcanics, locally fragmental (1a); fragmental and brecciated volcanics (may be amygdaloidal, porphyritic or pillowed) (1b); pillow lava (1c); sericite schist (1d); cherty tuff (1e); chloritized-actinolitized volcanics and chloritized-carbonatized volcanics (1f); agglomeratic and black slate interbedded with lava flows (1g).

- 5 Carbonate rock.

- ccc Partially carbonatized rock.

Ont. Dept. Mines Map No. 1953-3

QUOTE RESOURCES INC.

BUDD LAKE GOLD PROPERTY

SOTHRMAN TOWNSHIP, ONTARIO

Porcupine Mining Division
District of Sudbury

Scale: 1 inch = 1000 feet



NURSEY

*NOTE:- Locations Shown are approximate only and were established by Brunton Compass & Chaining.

KHD

BL-0+00

714623

714624

LEGEND

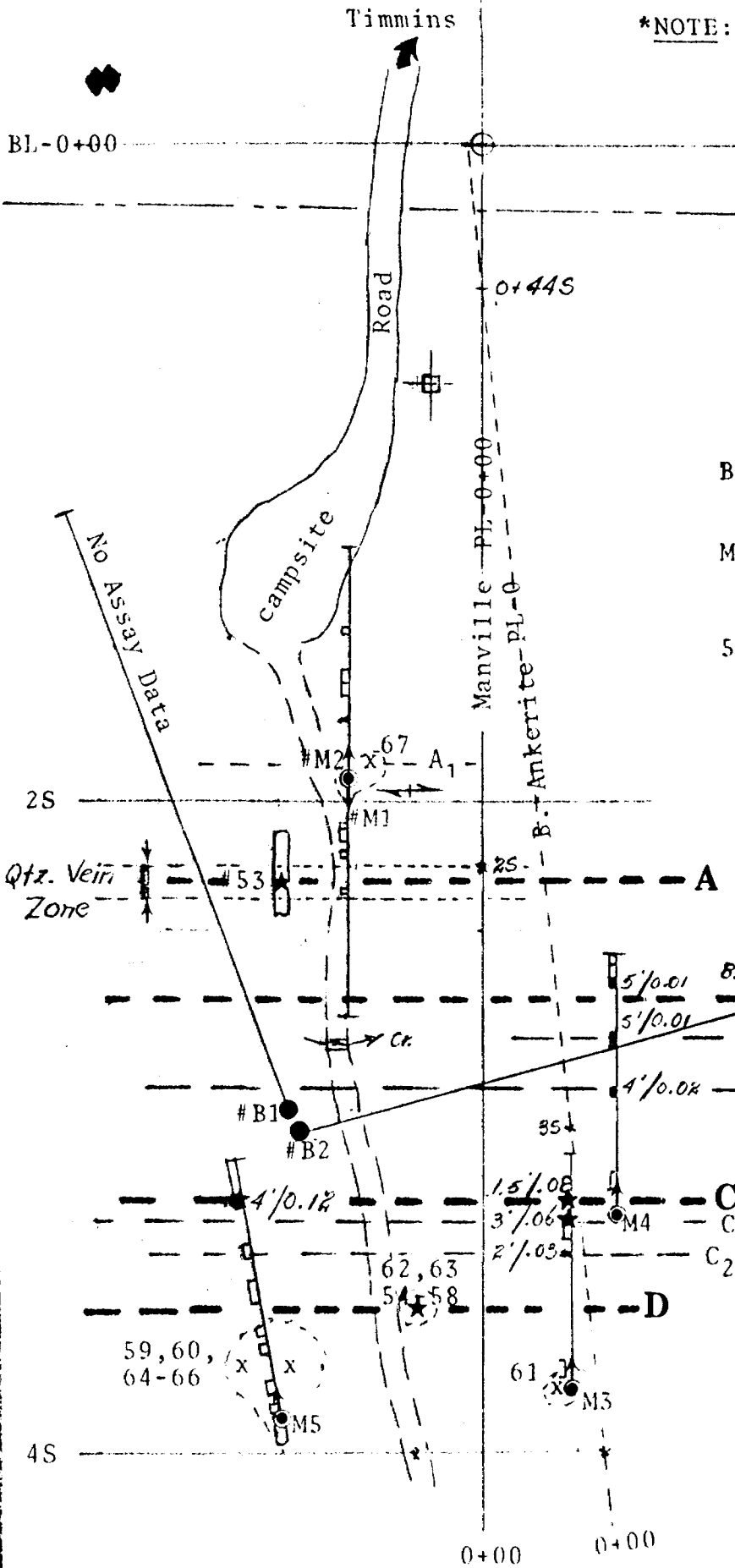
Diamond Drill Holes:

- B ● Buffalo Ankerite (1946)
- M ● Manville Canada (1983)
(Hole Series S83-1 to 5)

Sample Locations (1987):

53_x (Nos. 9853-67 inclusive)

#53:	0.18	oz. Au/ton
56:	0.06	"
57:	0.14	"
58:	0.01	"
67:	0.01	"



2.11181



Diamond Drill Hole & Sample Location Plan*

QUOTE RESOURCES INC.
BUDD LAKE GOLD PROPERTY
SOTHMAN TOWNSHIP, ONTARIO
Porcupine Mining Division

Scale: 1 inch = 50 feet
K.H. Darke, P.Eng.
Oct. 31, 1987



REPORT ON GEOPHYSICAL SURVEYS
(I.P. & Magnetometer)
on the
BUDD LAKE GOLD PROPERTY
SOTHMAN TOWNSHIP, ONTARIO
Porcupine Mining Division
District of Sudbury
for
QUOTE RESOURCES INC.

RECEIVED

MAY 12 1988

MINING LANDS SECTION

K.H. Darke, P.Eng.
KENNETH H. DARKE CONSULTANTS LIMITED
February 5, 1988



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(a) Instruments Used & Procedures	8.
(b) Survey Results & Interpretation:	
(i) Magnetometer Survey	8.
(ii) I.P. Survey	9.
CONCLUSIONS & RECOMMENDATIONS	10.
<u>I.P. Pseudosections: 2W, 0+00, 2E, 6E & 8E</u>	
<u>ADDENDA:</u>	
1. Geophysical Interpretation Report by G. Hodges, B.Sc., Geophysicist; p. 1-3.	
2. Geophysical Instruments/Technical Data:	
(i) Proton Precession Magnetometer.	
(ii) EDA OMNI IV Tie-Line Magnetometer.	
(iii) Phoenix IPT-1/I.P. Transmitter.	
(iv) Scintrex IPR-8/I.P. Time Domain Receiver.	
<u>MAPS IN ATTACHED POCKET:</u>	
1. General Location Map	1 in. = 135 mi.
2. Regional Location Map	1 in. = 32 mi.
3. Township Location Map	1: 600 000
4. Claim Location Map M-1121 ...	1 in. = 2640 ft.
5. Diamond Drill Hole & Sample Location Plan	1 in. = 50 ft.
6. I.P. Compilation Plan	1 in. = 200 ft.
7. Magnetometer Survey Plan	1 in. = 200 ft.

REPORT ON GEOPHYSICAL SURVEYS

(I.P. & Magnetometer)

on the

BUDD LAKE GOLD PROPERTY

SOTHMAN TOWNSHIP, ONTARIO

Porcupine Mining Division

District of Sudbury

for

QUOTE RESOURCES INC.

INTRODUCTION:

During the period Dec. 12-20, 1987 Induced Polarization (I.P.) and Magnetometer Surveys were conducted over a detailed grid system of picket lines established on Mining Claim Nos. P.714623 & 24 in the vicinity of Budd Lake; Sothman Township, Ontario. Said control grid consists of both north-south & east-west-bearing picket lines at a 200-foot line-spacing with stations (pickets) at 100-foot intervals thereon.

Previous geological mapping has shown that the area covered by the aforementioned geophysical surveys is underlain primarily by mafic metavolcanics (flows, tuffs, agglomerate) with minor intercalated felsic metavolcanics (flows, pyroclastics). The metavolcanics trend from northeasterly to easterly, and are schistose & highly carbonatized in places. Intruded (?) into the volcanics is a 200 to 300-foot-wide Serpentinized Peridotite/Dunite plug that strikes Due North through the western part of the grid surveyed. Other mafic intrusives/flows occur immediately west of Budd lake. Younger, flat-lying, Cobalt Group Sediments (greywacke, argillite, conglomerate) cover a portion of the area surveyed.

In 1983 Manville Canada drilled five shallow holes on Claim No.

714624 in a preliminary, near-surface evaluation of an area containing gold showings within highly carbonatized metavolcanics. Of particular interest was the general area where a hole previously drilled in 1946 by Buffalo Ankerite Gold Mines (DDH #2) intersected an 8.5-foot core interval that averaged 0.20 oz. gold per ton at a vertical depth of 185 feet.

The aforementioned limited diamond drilling and follow-up trenching & sampling in the immediate area has shown that over a strike length of 200 ft. and width of 170 ft. on Claim No. 714624 there are four gold-bearing quartz-carbonate vein systems and parallel ancillary gold zones. The gold-bearing quartz stringer vein zones contain associated disseminated pyrite, and in places also tourmaline & abundant fuchsite ("green carbonate zones"). These gold-bearing vein systems trend east-west parallel to the local schistosity and are hosted by altered (carbonatized) metavolcanic rock types that are lithologically similar to rock types that elsewhere in the region are the host rocks for major gold deposits.

The location of the aforementioned gold-bearing zones & diamond drill holes on Claim No. 714624 with respect to the detailed control grid covered by the subject I.P. & Magnetometer Surveys is shown on a Location Plan that accompanies this report.

The I.P. Survey (Time Domain Mode) discussed herein was conducted on the north-south-bearing picket lines (PL 2+00W to 8+00E) from Stations 6+00N to 10+00S. The purpose of this I.P. Survey was to further test the general area containing the known east-west-trending gold-bearing vein systems and their possible strike extensions. As previously stated, these gold-bearing zones are hosted by schistose metavolcanics that in places contain associated disseminated pyrite mineralization.

The I.P. Survey detected a scattering of anomalies of varying strength and extent. Said anomalies were coincident in part with

known gold-bearing alteration zones (Picket Lines 2+00W & 0+00 from 2+00S to 4+00S) and along the indicated strike direction on PL 8+00E which was the eastern margin of the area surveyed. The strongest anomaly occurs on PL 0+00 from 2+00S to 5+00N ... the cause of this I.P. anomaly is currently unknown. Other scattered I.P. anomalies occur in areas not previously tested and their cause also remains unknown at this time. A "Compilation Map" showing the location of the I.P. Anomalies, I.P. Pseudosections along each picket line surveyed, and a brief Interpretation Report all by Greg Hodges, Geophysicist, Robert S. Middleton Exploration Services Inc. accompany and form an integral part of this report.

Because the known principal magnetic features (ultramafic intrusives/sills, mafic flows, diabase dikes) in the general area surveyed trend north-south, the Magnetometer Survey was conducted on east-west-bearing picket lines (PL 6+00N to 10+00S) from 6+00W to 6+00E. This Magnetic Survey outlined the aforementioned north-south-trending Peridotite/Dunite sill that extends through the southwestern & northwestern parts of the survey area. Two other linear-shaped areas of magnetic highs located immediately west of Budd Lake probably represent mafic flows containing disseminated magnetite mineralization. A number of areas of magnetic lows detected, particularly those located immediately adjacent to the ultramafic sill, probably represent areas of intense alteration (steatite) within said sill. The remainder of the area surveyed was of relatively uniform magnetic intensities and did not reflect the known east-west-trending schistosity/green carbonate alteration zones.

PROPERTY DESCRIPTION:

The geophysical surveys that form the subject matter of this report were conducted on Claim Nos. P.714623 & 24 which constitute part of the Budd Lake Gold Property that consists of 11, contiguous, unpatented, 40-acre mining claims all located in Sothman Township, Porcupine Mining Division, District of Sudbury, Ontario and is further described as follows: ...

<u>Claim Nos.:</u>	<u>No. of Claims:</u>	<u>Date Recorded:</u>	<u>Work Filed:</u> (days/claim)
714610 & 11	2	Apr. 7, 1983	161
714616 & 17	2	" " "	161
714622-25 incl.	4	" " "	161
772582	1	" " "	161
772588 & 89	2	" " "	161
	11 claims		

The aforementioned 11 mining claims are currently registered in the name of Manville Canada Inc. Current controlling interest in said claims has been attested to by the management of Quote Resources Inc.

LOCATION & ACCESS:

The Budd Lake Property is located in the northwestern part of Sothman Township approximately one-half mile west of Reading Lake at Longitude 81°19'W / Latitude 47°55'N. The city of Timmins, Ontario which is the major settlement in the region is situated 39 airmiles Due North of the property; and the village of Shining Tree is located 25 airmiles Due South of the property. Timmins & Shining Tree are connected by a good, gravelled, tourist-access road that extends past the east side of Reading Lake.

Access to the Budd Lake Property is readily gained from either Timmins and/or Shining Tree via the aforementioned tourist-access road to Reading Lake in Sothman Township, and thence via a dirt bush road that extends westward onto the claim group itself.

REGIONAL GEOLOGY:

Sothman Township is situated within the extensive Precambrian-age "Abitibi Greenstone Belt" that hosts a large number of major gold mines. The regional geology within such Greenstone Belts can be generalized as consisting of a group of contemporaneous volcanic piles and related sediments all of which have been intensely folded, faulted, eroded and intruded by rocks of mafic to felsic composition.

Bedrock in the general Sothman Township Area consists essentially of Early to Middle Precambrian (Archean-age) metamorphosed volcanic & sedimentary rocks that have been intruded by felsic plutons and mafic/ultramafic stocks & plugs. All the aforementioned rock types have been cut by younger (Proterzoic-age) mafic dikes (diabase, quartz diabase). Overlying the aforementioned older, highly folded, basement complex in places are local areas of younger, flat-lying Cobalt Group Sediments of Middle Precambrian-age.

Much of the bedrock in the region is masked by a pervasive cover of younger Pleistocene-age glaciofluvial/lacustrine deposits (sand & gravel). The low-lying areas are covered further by recent alder & muskeg swamp.

ECONOMIC GEOLOGY:

Gold mineralization is widely distributed throughout the general Sothman Township Region including significant gold-bearing zones on the subject Budd Lake Property itself. Ore zones at the gold mines located in the adjacent, geologically comparable areas of the Abitibi Greenstone Belt in many cases consist of gold-bearing quartz-carbonate veins & complex stringer zones associated with shear and/or fracture zones within highly altered (carbonatized, chloritized, albitized, variously silicified) metavolcanic and/or metagabbro host rocks. Sulphide mineralization associated with the gold zones consists of disseminated pyrite, lesser amounts of chalcopyrite, and minor galena & sphalerite. Other common accessory minerals are tourmaline and fuchsite (green, chrome mica).

Geological exploration has been conducted throughout the general area now encompassed by the current Budd Lake Property since the initial discovery of gold in the area in 1926. This initial and sporadic exploration of the area consisted essentially of reconnaissance geological mapping, trenching, and limited diamond drilling. Although of limited extent, this previous work was encouraging in that it detected a number of gold-bearing quartz-carbonate stringer-vein zones hosted by highly altered & schistose metavolcanics. Associated with these gold zones on the Budd Lake Property were pyrite, tourmaline & fuchsite ("green carbonate zones").

PREVIOUS WORK:

The subject 11-Claim Budd Lake Property was staked in 1983 by Manville Canada Inc. who undertook part of the first phase of a recommended exploration program that currently is being managed & continued by Quote Resources. All exploration costs incurred to date on the Budd Lake Property have been reimbursed by Quote Resources per an option agreement with Manville Canada.

The initial exploration on the subject property has consisted of linecutting, geological mapping, geophysical surveys, trenching and limited diamond drilling. Much of this preliminary work was concentrated in an area located southwest of Budd Lake on current Mining Claim No. 714624 in the vicinity of known gold showings.

Geophysical surveys (Electromagnetic, Magnetic, Radiometric) covering the entire property were completed during November, 1985. The Electromagnetic Survey (McPhar V.E.M. Unit) detected a large number of scattered, very weak, single line crossovers that trend parallel to the local schistosity --- said weak crossovers have no economic significance. The Magnetic Survey (MF-1 Fluxgate Magnetometer) delineated the aforementioned Ultramafic Intrusive as an area of general magnetic highs that ranged from 1,000 to 6,000 gammas above the magnetic intensities of the adjacent meta-volcanics. The 400-foot line-spacing of the control grid used in the magnetic survey was too wide to adequately define the carbonate alteration zones (magnetic lows) present on Claim Nos. 714623 & 24. Also, since this magnetic survey was conducted on north-south lines which parallel the known ultramafic sill/flows in the area said survey did not adequately define the boundaries of said magnetic formations (mag highs due to contained disseminated magnetite). The Radiometric Survey, conducted with a Sharpe GIS-2 Gamma Ray Integrating Spectrometer, detected nothing of economic significance.

GEOPHYSICAL SURVEYS:(a) Instruments Used & Procedures:

A Total Field Magnetic Survey was completed on Dec. 12, 1987 utilizing a Proton Precession Magnetometer/EDA Omni IV "Tie-Line" Magnetometer. Said survey was conducted on east-west-bearing Picket Line Nos. 6+00N to 10+00S / Stations 6+00W to 6+00E with readings taken at 100-foot intervals thereon.

An I.P. Survey (Time Domain Mode) was completed during the period Dec. 15-20, 1987 utilizing a Phoenix IPT-1 Transmitter & Scintrex IPR-8 Receiver; Electrode Array: Pole-Dipole; "a" spacing: 100 feet; Pulse Time: 2 seconds on 2 seconds off; Delay Time: 450 milliseconds; & Integration Time: 900 msec. Said I.P. survey was conducted on five north-south-bearing Picket Lines (2W, 0+00, 2E, 6E & 8E) / Stations 6+00N to 10+00S.

Additional technical details describing the equipment used in the aforementioned geophysical surveys is given in the Addendum to this report.

(b) Survey Results & Interpretation:(i) Magnetometer Survey:

Magnetic intensities over most of the area surveyed were rather uniform from 58,700 to 58,900 gammas (a 200-gamma range) that reflected the general mafic/intermediate metavolcanic rock types present. An extensive, generally linear-shaped, belt of magnetic highs ranging from 59,000 to 60,800 gammas (1,800-gamma spread) extends north-south through the western portion of the area surveyed and is considered to represent a Peridotite/Dunite sill that outcrops in places. Two other linear-shaped magnetic highs (59,400 to 61,000 gammas) located on the northwestern margins of the area covered

(Lines 4N & 6N / Stations 0+00 to 2+00W) are considered to represent other ultramafic sills/ mafic flows. Local areas of magnetic lows located adjacent to and/or within the aforementioned Peridotite/Dunite sill probably represent local areas of more intense alteration (steatite) of said ultramafic.

The results of the Magnetometer Survey are shown on a contoured plan map, at a scale of one inch to 200 feet, that accompanies this report. For purposes of simplification in draughting & interpretation said map presents the magnetic readings after subtracting 58,000 gammas from all "Total Field" values recorded.

(ii) I.P. Survey:

The I.P. survey detected a scattering of anomalies of varying strength on each line surveyed; and at least one semicontinuous zone that extended from 2+00W/3+00S to 8+00E/3+00S. The strongest anomaly (roughly 20 mV/V) occurs on Line 0+00 from 2+00S to 5+00N ... said anomaly is very homogeneous in chargeability; while the resistivity is variable. The cause of this strong anomaly is currently unknown although zones of intense alteration (carbonatization & associated disseminated sulphides) are known to occur in the general area of said anomaly. Anomalies detected on two lines (2+00W & 0+00 from 2+00S to 4+00S) are coincident in part with known alteration zones containing disseminated sulphides & gold-bearing quartz vein systems.

The I.P. Survey results are presented on Pseudosections showing the Chargeability (milliseconds) & Resistivity (ohm-metres) along each line surveyed. A "Compilation Map" showing the location of the I.P. Anomalies and a brief geophysical interpretation report by Greg Hodges, Geophysicist, Robert S. Middleton Exploration Services Inc. accompany this report.

CONCLUSIONS & RECOMMENDATIONS:

The detailed Magnetometer Survey traced the location of a number of north-south-trending ultramafic sills and/or mafic flows (magnetic highs) through areas of overburden cover and thus will aid in the further resolution of the complex bedrock stratigraphy present in the area surveyed.

A number of local areas of magnetic lows detected could represent zones of intense alteration within ultramafic sills/flows (zones of steatite) and/or within adjacent metavolcanics (areas of carbonatization). Known zones of carbonatization in the area have associated gold mineralization; therefore, these areas of mag lows within metavolcanics could have economic significance and thus should be further investigated to determine their cause.

The I.P. anomalies detected are of potential economic interest since the gold-bearing zones in the area often have associated disseminated sulphide mineralization within the highly altered, schistose host rocks. Of particular economic interest at this time is the I.P. Anomalous Zone that extends east-west intermittently from 2+00W/3+00S to at least 8+00E ... this zone constitutes a first priority exploration target area since it is coincident with known gold-bearing zones at its western end. It is recommended that each of the I.P. anomalies detected be further investigated by stripping & trenching where feasible; detailed geological mapping & sampling; and follow-up diamond drilling where indicated.

* * * * *

Respectfully submitted,

K. H. Darke

February 5, 1988
Timmins, Ontario

K.H. Darke, P.Eng.
Consulting Geological Engineer

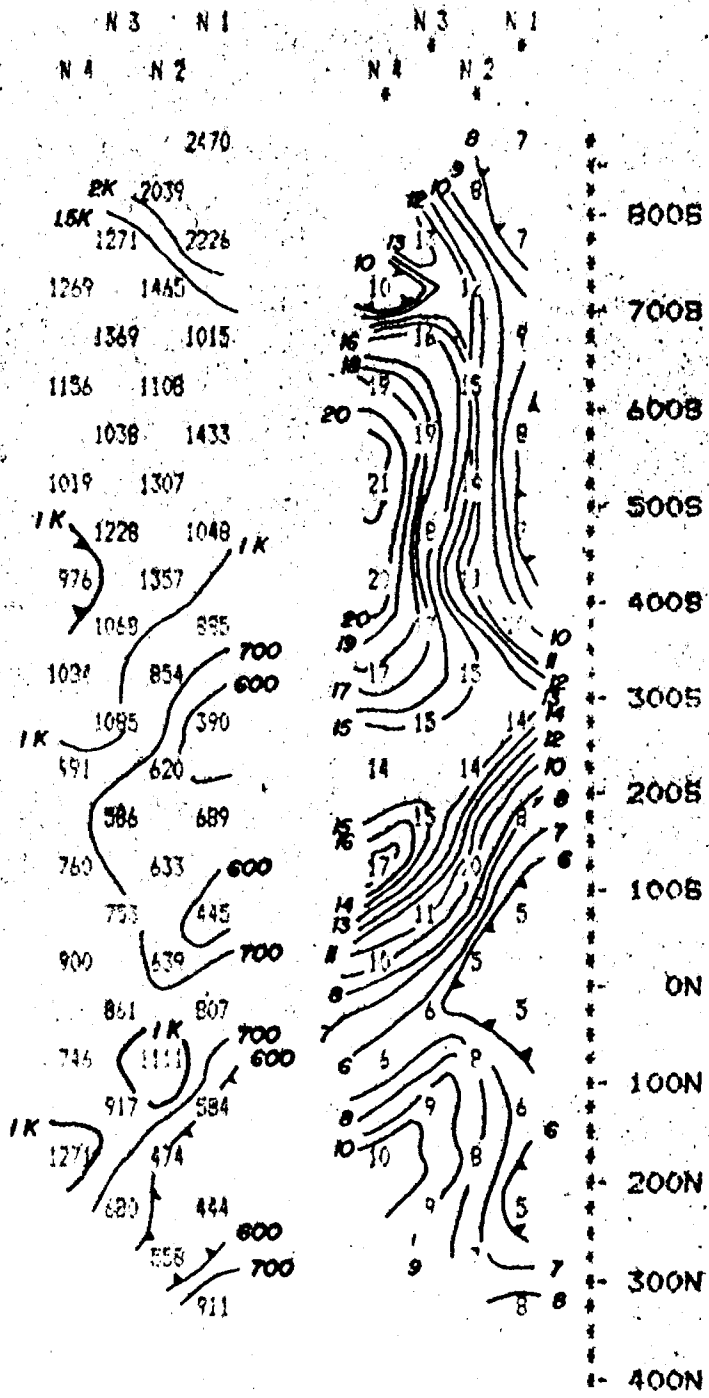


2nd 63.2388

SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



Property : SOTHMAN TWP.
Client : QUOTE RESOURCES

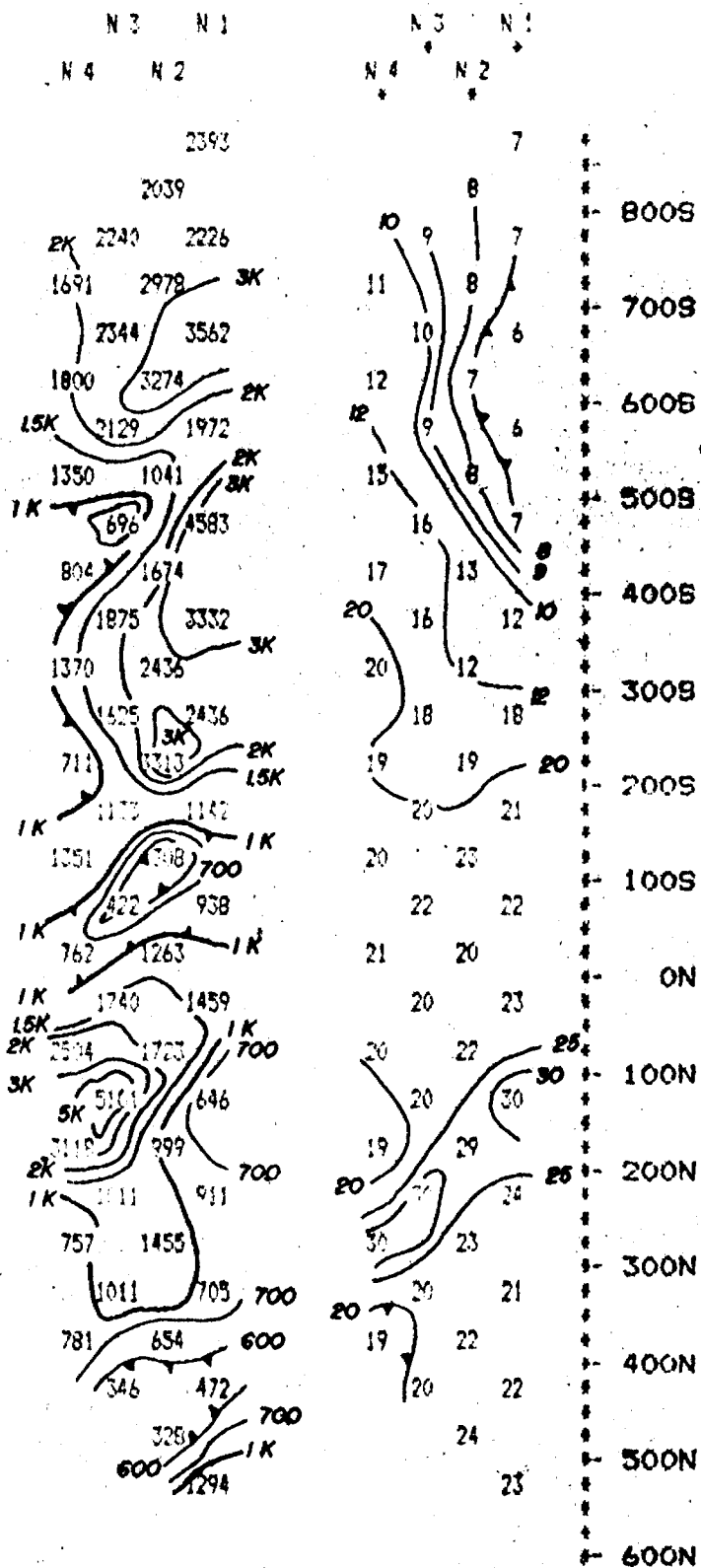
Date of Survey : 14/12/87
Operator : DAW
Electrode array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-8
Transmitter : PHONIX IPT1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

R. S. MIDDLETON EXPLORATION
SERVICES INC.

IP Pseudosections for N = 1 to 4
'a' Spacing = 100 ft

RESISTIVITY

CHARGEABILITY



Property : SOTHMAN TWP.
 Client : QUOTE RESOURCES

Date of Survey : 14/12/87
 Operator : DAW
 Electrode Array : POLE - DIPOLE
 Mode : TIME DOMAIN
 Receiver : SCINTREX IPR-B
 Transmitter : PHONIX IPT1
 Pulse Time : 2 Sec on 2 Sec off
 Delay Time : 450 ms
 Integration Time : 900 ms

 R. S. MIDDLETON EXPLORATION
 SERVICES INC.

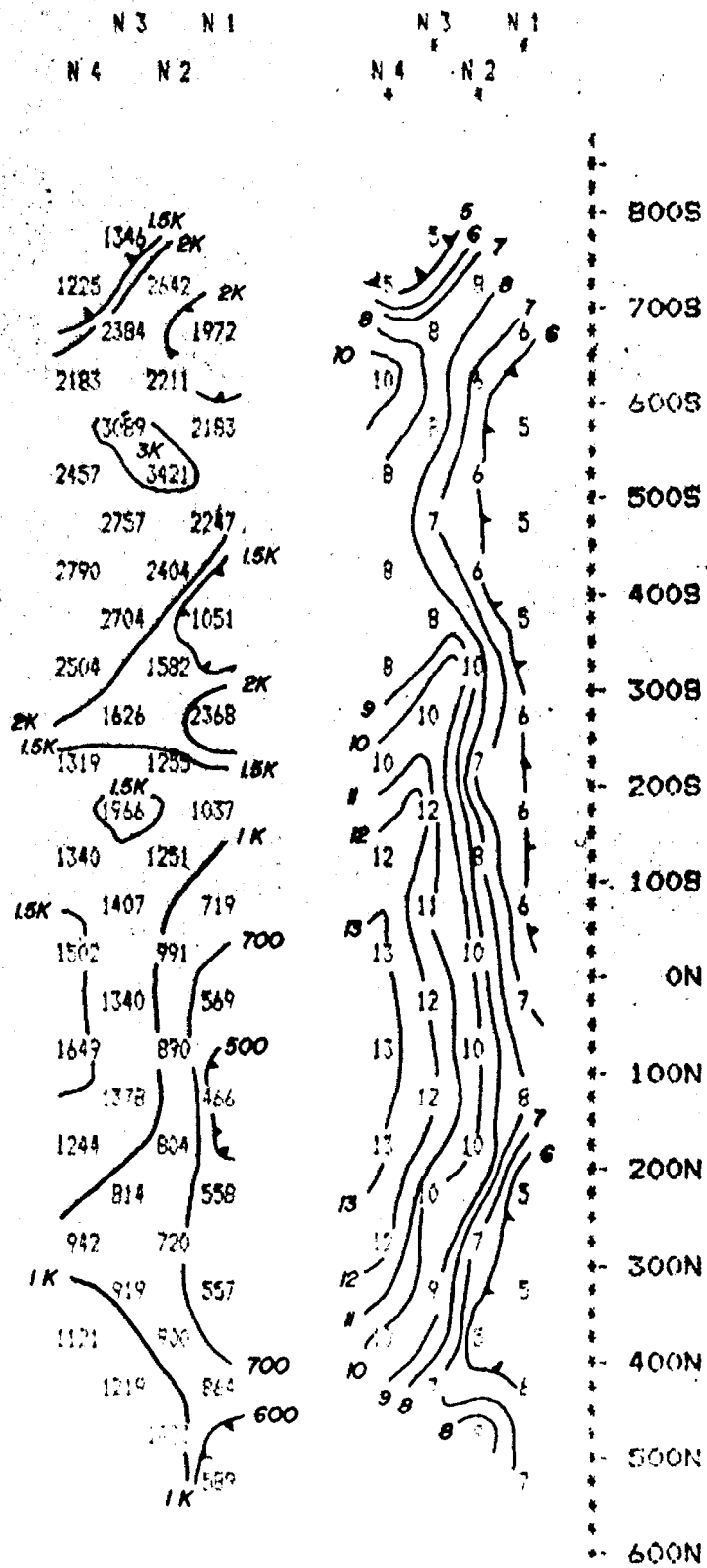
IP Pseudosections for N = 1 to 4
 'a' Spacing = 100 ft

RESISTIVITY

(ohm - meters)

CHARGEABILITY

(microseconds)



Property : BOTHERMAN TWP.
 Client : QUOTE RESOURCES

Date of Survey : 19/12/87
 Operator : DAW
 Electrode Array : POLE - DIPOLE
 Mode : TIME DOMAIN
 Receiver : SCINTREX IFR-B
 Transmitter : PHONIX IPT1
 Pulse Time : 2 Sec on 2 Sec off
 Delay Time : 450 ms
 Integration Time : 900 ms

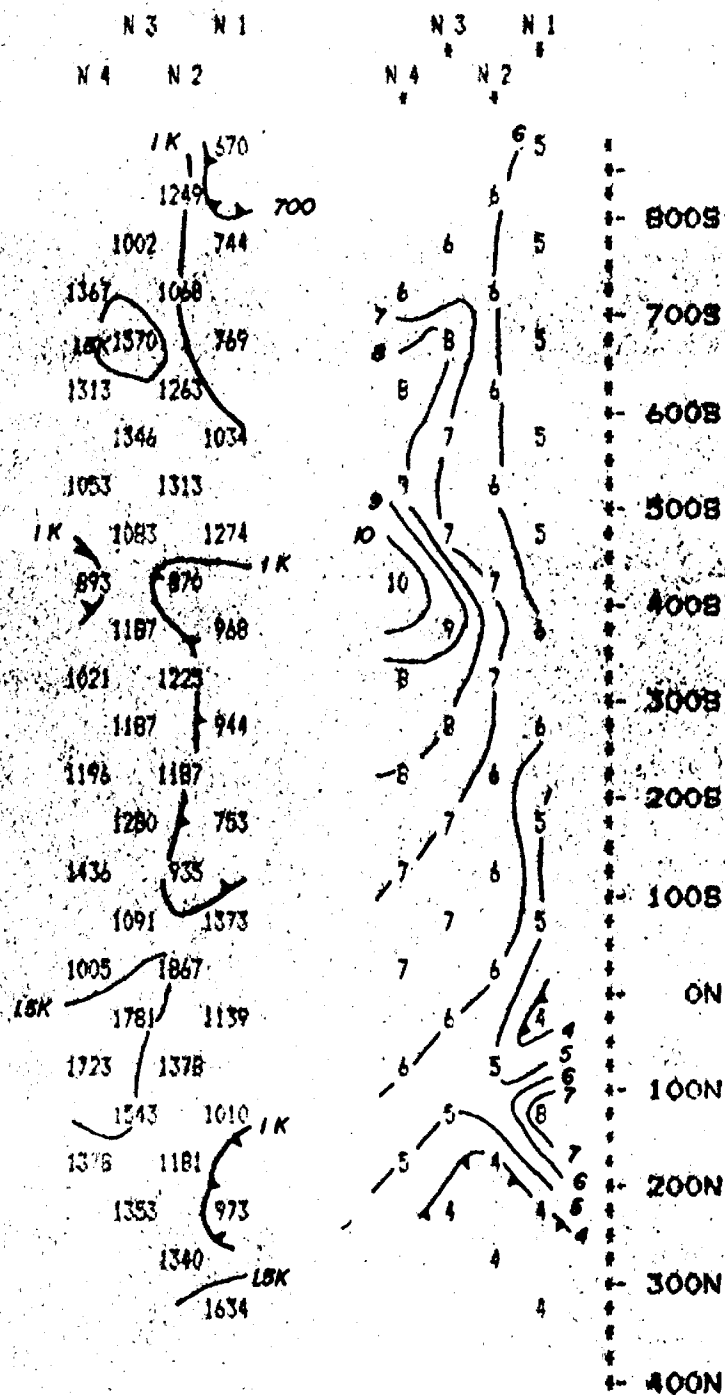
 R. S. MIDDLETON EXPLORATION
 SERVICES INC.

IP Pseudosections for N = 1 to 4
 'a' Spacing = 100 ft

SCALE : 1 inch to 200 feet

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



Property : BOTHMAN TWP.

Client : QUOTE RESOURCES

Date of Survey : 19/12/87

Operator : DAW

Electrode Array : POLE - DIPOLE

Mode : TIME DOMAIN

Receiver : SCINTREX IPR-8

Transmitter : PHONIX IPT1

Pulse Time : 2 Sec on 2 Sec off

Delay Time : 450 ms

Integration Time : 900 ms

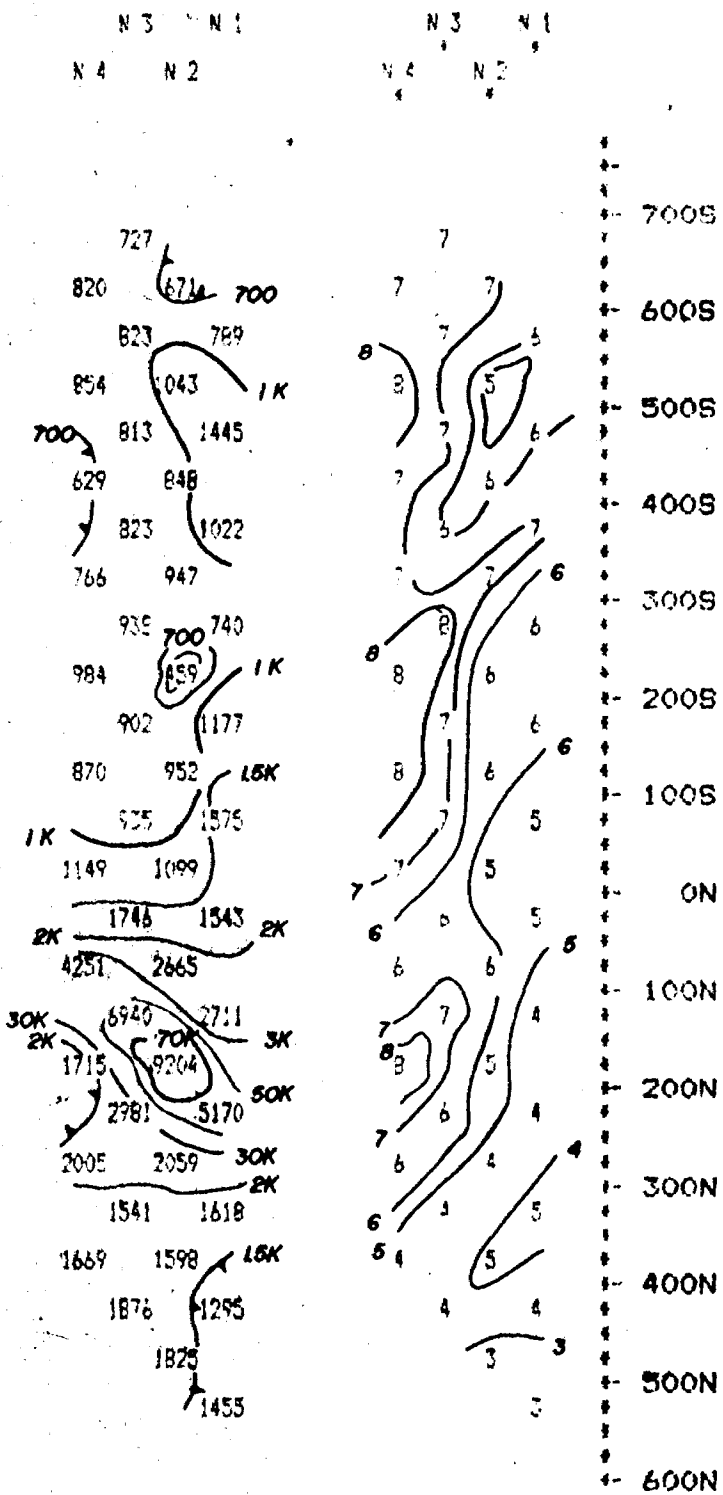
R. S. MIDDLETON EXPLORATION
SERVICES INC.

IP Pseudosections for N = 1 to 4

'a' Spacing = 100 ft

RESISTIVITY
(ohm - metres)

CHARGEABILITY
(milliseconds)



Property : SOTHMAN TWP.
Client : QUOTE RESOURCES

Date of Survey : 17/12/87
Operator : DAW
Electrode Array : POLE - DIPOLE
Mode : TIME DOMAIN
Receiver : SCINTREX IPR-B
Transmitter : PHONIX IPT1
Pulse Time : 2 Sec on 2 Sec off
Delay Time : 450 ms
Integration Time : 900 ms

R. S. MIDDLETON EXPLORATION
SERVICES INC.

IP Pseudosections for N = 1 to 4

'a' Spacing = 100 ft

General Location Map

QUOTE RESOURCES INC.

BUDD LAKE GOLD PROPERTY

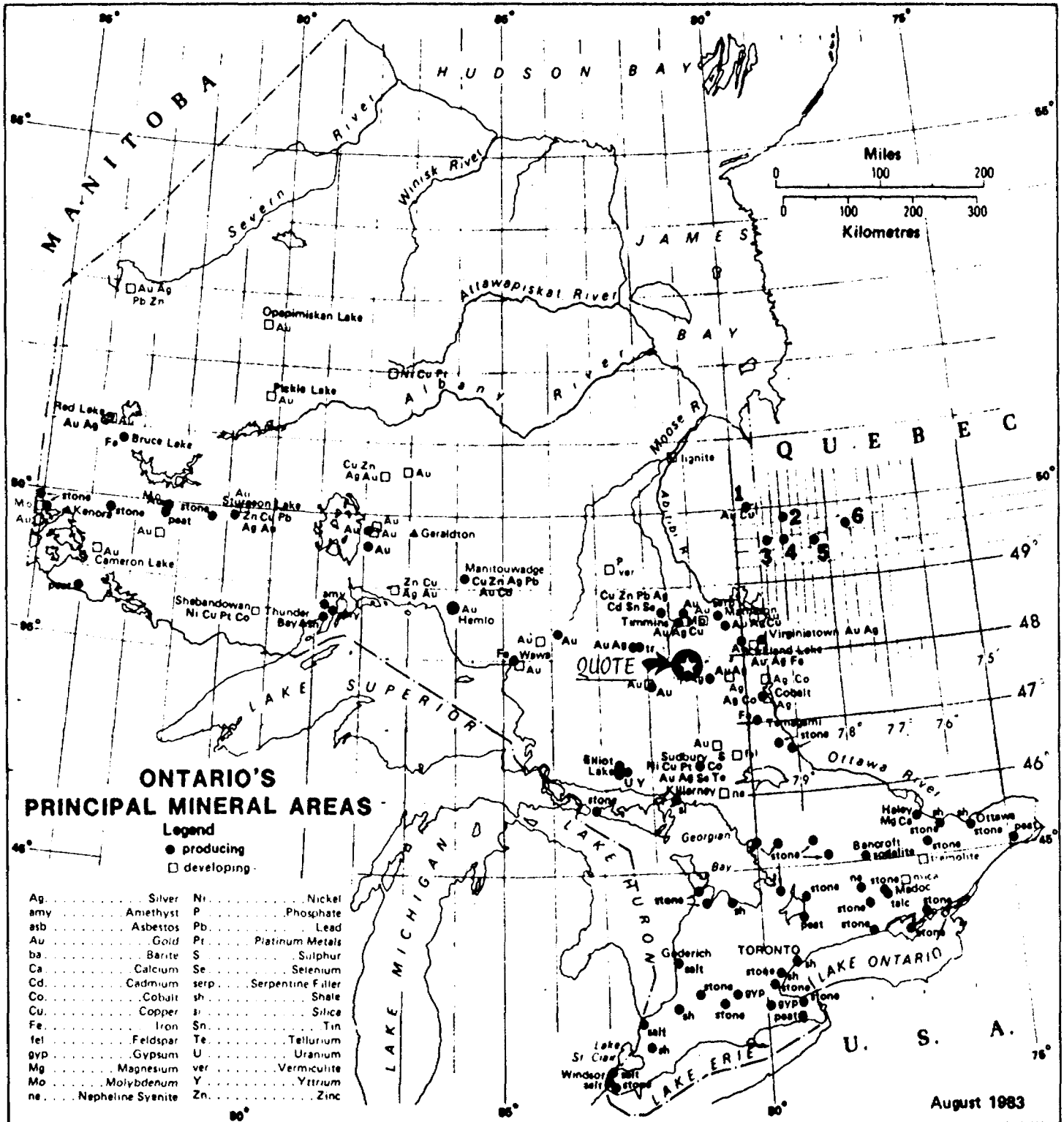
LOTHTMAN TOWNSHIP, ONTARIO

Porcupine Mining Division
District of Sudbury

1. Detour Lake
2. Les Mines Selbaie
3. Inco-Golden Knight
4. Teck-Golden Hope
5. Joutel
6. Matagami Lake

2.1118

Scale: 1 inch = 135 miles



Regional Location Map

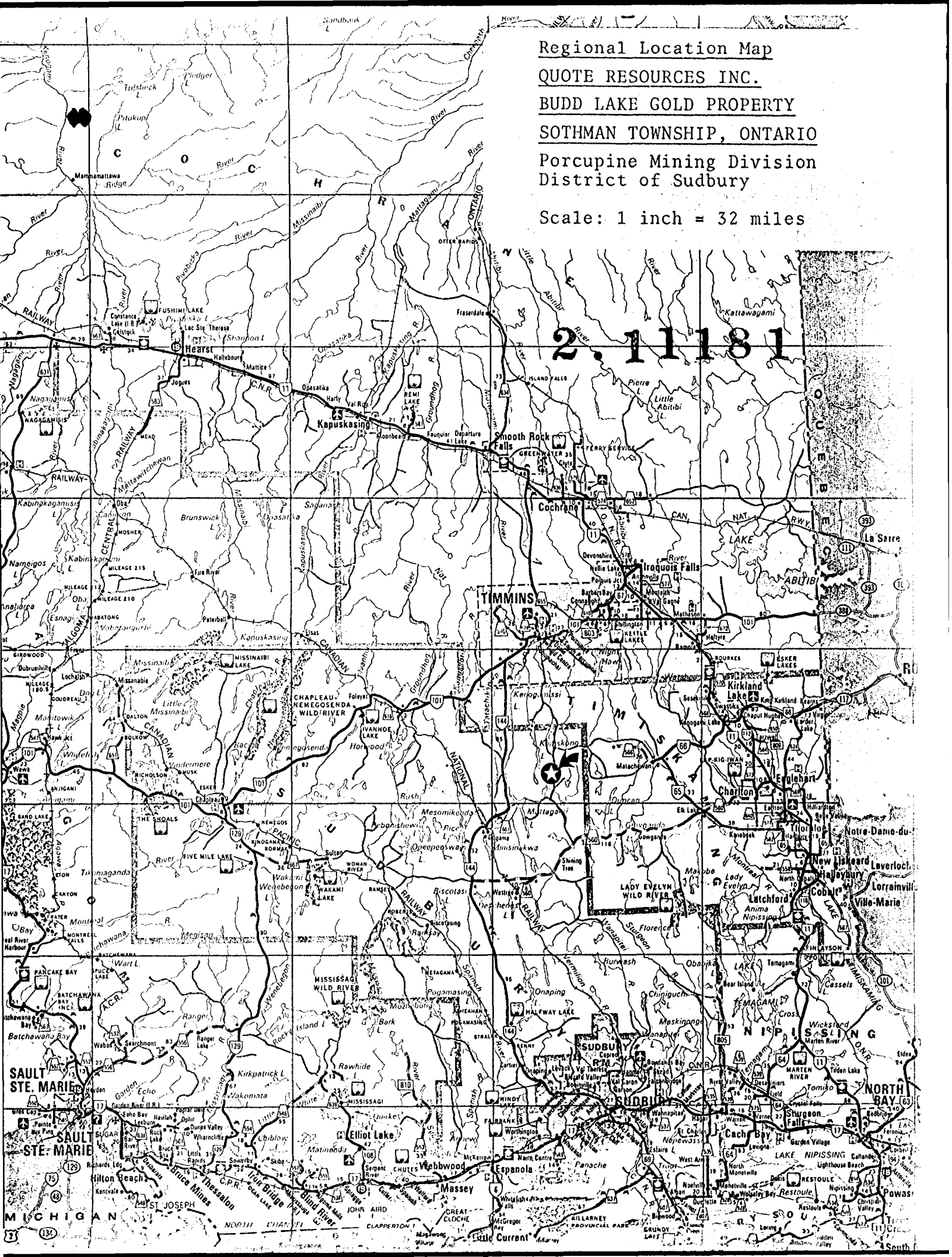
QUOTE RESOURCES INC.

BUDD LAKE GOLD PROPERTY

SOTHMAN TOWNSHIP, ONTARIO

Porcupine Mining Division
District of Sudbury

Scale: 1 inch = 32 miles



2.11181



Township Location Map

QUOTE RESOURCES INC.

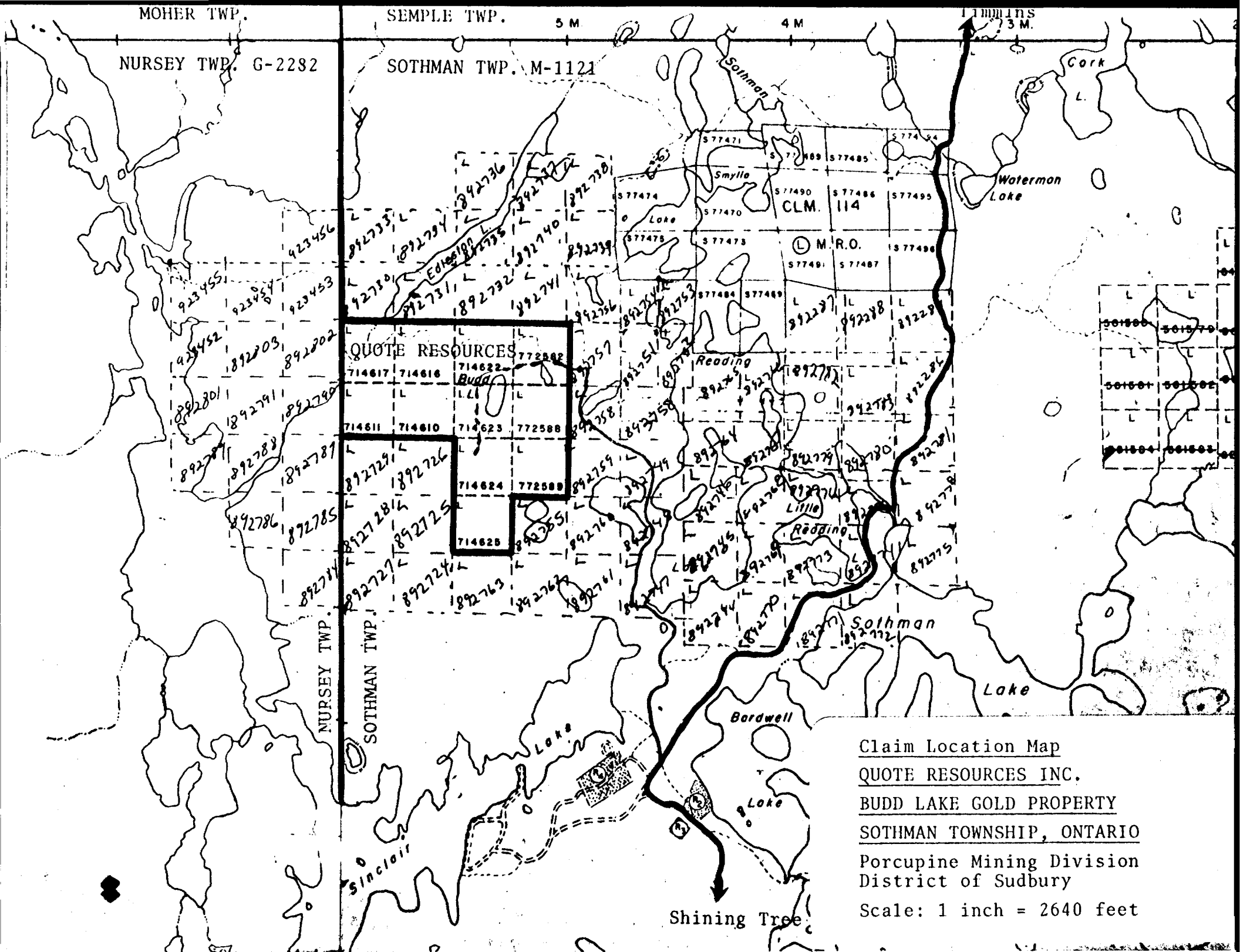
BUDD LAKE GOLD PROPERTY

SOTHMAN TOWNSHIP, ONTARIO

Porcupine Mining Division
District of Sudbury

Scale: 1: 600 000

2-11181



Claim Location Map
QUOTE RESOURCES INC.
BUDD LAKE GOLD PROPERTY
SOTHMAN TOWNSHIP, ONTARIO
 Porcupine Mining Division
 District of Sudbury
 Scale: 1 inch = 2640 feet

*NOTE:- Locations Shown are approximate only and were established by Brunton Compass & Chaining.

KHD

BL-0+00

714623

714624

LEGEND

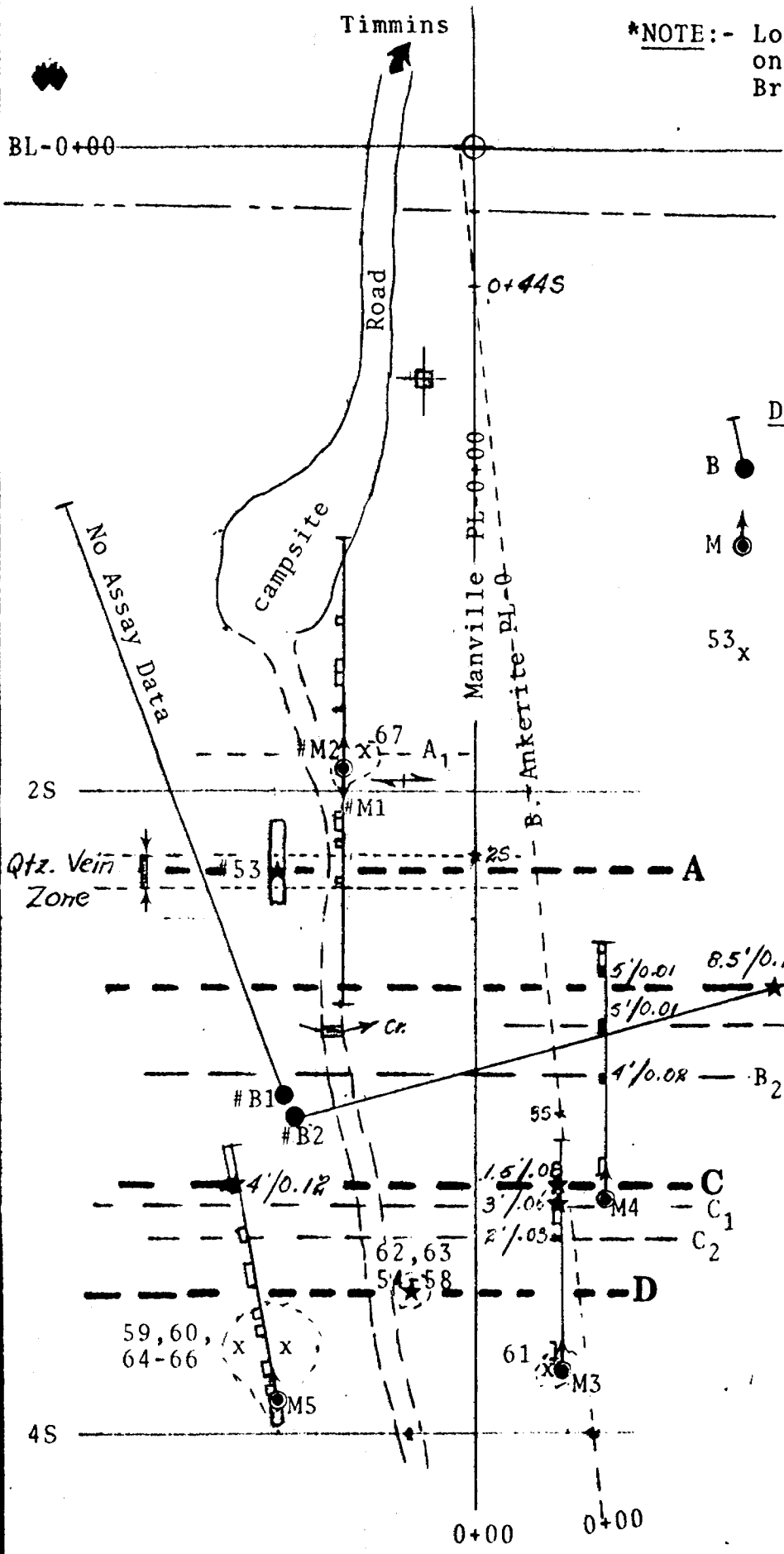
Diamond Drill Holes:

- B ● Buffalo Ankerite (1946)
- M ● Manville Canada (1983)
(Hole Series S83-1 to 5)

Sample Locations (1987):

53_x (Nos. 9853-67 inclusive)

#53:	0.18	oz. Au/ton
56:	0.06	"
57:	0.14	"
58:	0.01	"
67:	0.01	"



Diamond Drill Hole & Sample Location Plan*

QUOTE RESOURCES INC.
BUDD LAKE GOLD PROPERTY
SOTHMAN TOWNSHIP, ONTARIO
Porcupine Mining Division

Scale: 1 inch = 50 feet

K.H. Darke, P. Eng.
Oct. 31, 1987



41P14NW0004 2.11181 SOTHMAN

030

GEOPHYSICAL INTERPRETATION
of the
Budd Lake Property
for
QUOTE RESOURCES
by
Greg Hodges, B.Sc.
January, 1988

Robert S. Middleton Exploration Services Inc. conducted a total field magnetics and induced polarization survey on the Budd Lake Property of Quote Resources in Sothman Township.

The magnetic survey clearly outlined the contacts between the Haileyburian Intrusives and the Huronian metasediments on the property. Due to alteration around the edges of the intrusives, the contact does not appear as a hard line, but on the contoured magnetic map the 1000nT to 1400nT contours could be taken as a rough approximation of the contact. Both of the magnetic highs on the grid (the group on 600N and the south west corner) are caused by mafic to ultramafic intrusives.

The induced polarization results were not as clear as the magnetics, producing a scattering of anomalies of varying strength and size. The most prominent is on line 0, from 500N to roughly 200S. This anomaly is strong (roughly 20 mV/V) and very homogeneous in chargeability. The resistivity of the anomaly is variable, and the appearance of both is that of a strongly altered, possibly serpentized zone adjacent to the ultramafics.

The rest of the anomalies are discontinuous, with no clear lineations formed. Of particular interest is the anomaly on 2+00W between 2+50S and 6+50S. It appears as two moderate chargeability zones, one at each of 3+00S and 6+00S, possibly connected by a weak, deep zone. This is interesting because it straddles a magnetic low which has apparently altered the

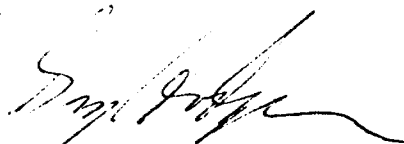
ultramafic rocks around it. There is a moderate strength IP anomaly at the baseline on line 200E, and another at 3+00N on line 2+00W. The former is in the acid volcanics, while the latter is on the boundary of the ultramafic, and may be adjacent to a northwest striking fault.

It is not possible, with the information available to this author, to accurately determine the offset between the present survey grid and the grid shown by Darke (1987) in his diamond drill hole and sample location plan. This should be done, and any correlation between the IP anomalies and any of the gold "zones" described by Darke (1987) should be further investigated by diamond drilling or detailed IP surveying.

The following zones are recommended for follow-up in order of priority: The anomaly on the fault at 4+00S on L2+00W, any gold zone as described by Darke (1987) which correlates with IP anomalies on more than one line, the anomaly on line 2+00W at 3+00N, and the strong anomaly on the baseline. These should be investigated by inspection by a geologist for outcrop before further work is considered.

Due to the north-south trend of the geology, surveying of several east-west lines of IP is recommended.

Respectfully submitted



Greg Hodges
Geophysicist

REFERENCES

DARKE, K.H.
1987

Summary Exploration Report on the Budd
Lake Gold Property, Sothman Township,
Ontario for Quote Resources Inc.

Applications Manual for
Portable Magnetometers.

Sheldon Breiner; GeoMetrics

Instrument Use

The common types of portable magnetometers in use today are fluxgate, proton precession, Schmidt field balance, dip needle and other special purpose instruments. Field balances and dip needles are mechanical devices comprised of pivoted magnets measuring vertical or horizontal intensity or field direction, and are not much used today being replaced by the more sensitive and less cumbersome fluxgate and proton magnetometers. Portable fluxgate magnetometers employ a saturable core sensor held in a vertical direction to measure vertical intensity with an effective sensitivity on the order of several gammas. Fluxgate magnetometers, too, are slowly being replaced by the proton magnetometer which has greater sensitivity (1 gamma or better), absolute accuracy, no moving parts, and measures total field intensity with freedom from orientation errors. For reasons of its increasing utilization and because many applications require these features, the proton magnetometer will be the principal instrument under discussion in the Manual. Much of the Manual from Chapters III through IX nevertheless applies to vertical component flux gate magnetometers as well. Anomaly signatures at high latitudes (magnetic dip 70° or greater) are practically identical for the two instruments; at other latitudes they differ significantly.

Proton Magnetometer

The proton precession magnetometer is so named because it utilizes the precession of spinning protons or nuclei of the hydrogen atom in a sample of hydrocarbon fluid to measure the total magnetic intensity. The spinning protons in a sample of water, kerosene, alcohol, etc., behave as small, spinning magnetic dipoles. These magnets are temporarily aligned or polarized by application of a uniform magnetic field generated by a current in a coil of wire. When the current is removed, the spin of the protons causes them to precess about the direction of the ambient or earth's magnetic field, much as a spinning top precesses about the gravity field. The precessing protons then generate a small signal in the same coil used to polarize them, a signal whose frequency is

PROTON PRECESSION MAGNETOMETER

precisely proportional to the total magnetic field intensity and independent of the orientation of the coil, i.e., sensor of the magnetometer. The proportionality constant which relates frequency to field intensity is a well known atomic constant: the gyromagnetic ratio of the proton. The precession frequency, typically 2000 Hz, is measured by modern digital counters as the absolute value of the total magnetic field intensity with an accuracy of 1 gamma, and in special cases 0.1 gamma, in the earth's field of approximately 50,000 gammas.

Total Field Measurement

The total magnetic field intensity, as measured by a proton magnetometer, is a scalar measurement, or simply the magnitude of the earth's field vector independent of its direction. The measurement can be expressed as in Figure 1a as simply the length of the earth's field vector, F , shown here to be 50,000 gammas. A local perturba-

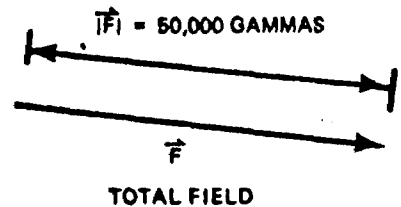


Figure 1a.

tion, T , of 10 gammas, as might be measured in any of the applications discussed herein, is shown in Figure 1b as a vector of arbitrary direction. This disturbance vector adds to the undisturbed field in the usual manner of vector addition as shown in Figure 1b, paying special notice to how the figure would actually appear if both the 50,000 and 10 gamma vectors were drawn to scale. It is clear from the figure, then, that since the proton magnetometer measures only the magnitude of the resultant vector whose direction is almost exactly parallel

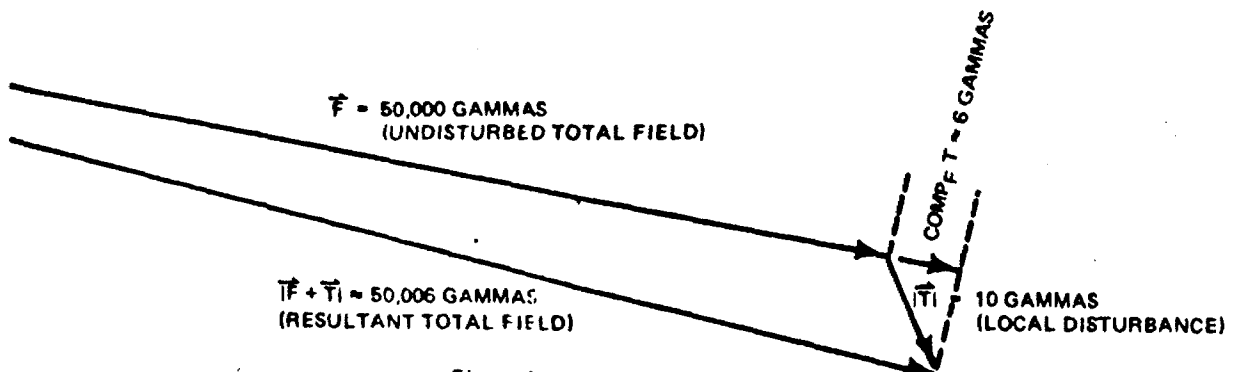


Figure 1b.

4.

Proton Magnetometers continued: ...

to the undisturbed total field vector, that which is measured is very nearly the component of the disturbance vector in the direction of the original undisturbed total field, or where

$$|\vec{F} + \vec{T}| \approx F + \text{comp}_F T$$

where

$$|\vec{F}| \gg |\vec{T}|.$$

Such conditions are almost always valid except in the near field of large steel objects or in the vicinity of iron ore deposits or certain ultrabasic rocks which produce anomalies larger than 10,000 gammas. Thus, the change in total field, $\Delta F = \text{comp}_F T$, i.e., the component of the anomalous field, T , in the direction of F . (Except where noted, $\text{comp}_F T$ will be referred to simply as the anomaly T .) The proton precession magnetometer, for small perturbations, can therefore be considered to be an *earth's-field-determined component magnetometer*.

This property of measuring this scalar magnitude of the field, otherwise called total field intensity, is very significant with respect to the asymmetric signatures of anomalies, interpretation of anomalies, and in various special applications. Furthermore, the fact that what is measured is independent of the orientation of the sensor, allows the magnetometer to be operated without attention to orientation or leveling such as would be the case with

a fluxgate magnetometer on the mobile platform of a person, vehicle, or aircraft. The only limitation of such a scalar measurement, albeit a minor one, is the fact that the component of the anomalous field which is measured is not normally under the control of the observer, but rather at the whim of the local direction of the earth's magnetic field.

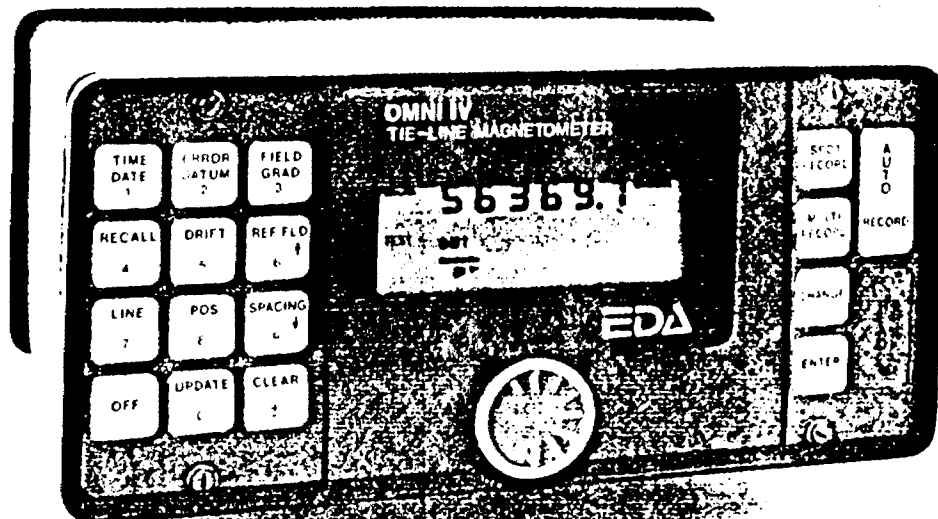
Limitations of a Proton Magnetometer

The proton magnetometer has no moving parts, produces an absolute and relatively high resolution measurement of the field and usually displays the measurement in the form of an unambiguous digital lighted readout. Several operational restrictions exist, however, which may be of concern under special field conditions. First, the proton precession signal is sharply degraded in the presence of a large magnetic field gradient greater than 200 gammas per foot (approximately 600 gammas per meter). Also, the signal amplitude from the sensor is on the order of microvolts and must be measured to an accuracy of 0.04 Hz of the precession frequency of several thousand Hz. This small signal can be rendered immeasurable by the effects of nearby alternating current electrical power sources. For these two reasons, a *proton magnetometer cannot usually be operated within the confines of a typical building*. Developments and procedures are presented which minimize these effects for the applications to be described in the Manual.

OMNI IV "Tie-Line" Magnetometer



OMNI IV
TIE-LINE MAGNETOMETER



- Four Magnetometers in One
- Self Correcting for Diurnal Variations
- Reduced Instrumentation Requirements
- 25% Weight Reduction
- User Friendly Keypad Operation
- Universal Computer Interface
- Comprehensive Software Packages

EDA Instruments Inc
 4 Thorncliffe Park Drive
 Toronto, Ontario
 Canada M4H 1H1
 Telex: 06 23222 EDA 10R
 Cable: Instruments Toronto
 (416) 425 7800

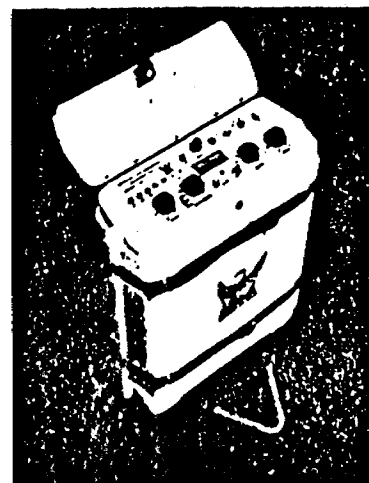
Specifications: EDA OMNI IV

Dynamic Range	18,000 to 110,000 gammas. Roll-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	0.1 gamma
Processing Sensitivity	± 0.02 gamma
Statistical Error Resolution	0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	
Total Field or Gradient	1,200 data blocks or sets of readings
Tie-Line Points	100 data blocks or sets of readings
Base Station	5,000 data blocks or sets of readings
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from -40°C to +55°C. The display contains six numeric digits, decimal point, battery status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS 232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	-40°C to +55°C; 0-100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	
Instrument Console Only	2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	1.8 kg, 540 x 100 x 40mm
Sensor	1.2 kg, 56mm diameter x 200mm
Gradient Sensor (0.5 m separation - standard)	2.1 kg, 56mm diameter x 790mm
Gradient Sensor (1.0 m separation - optional)	2.2 kg, 56mm diameter x 1300mm
Standard System Complement	Instrument console; sensor; 3-meter cable, aluminum sectional sensor staff, power supply, harness assembly, operations manual.
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	Standard system plus 0.5 meter sensor

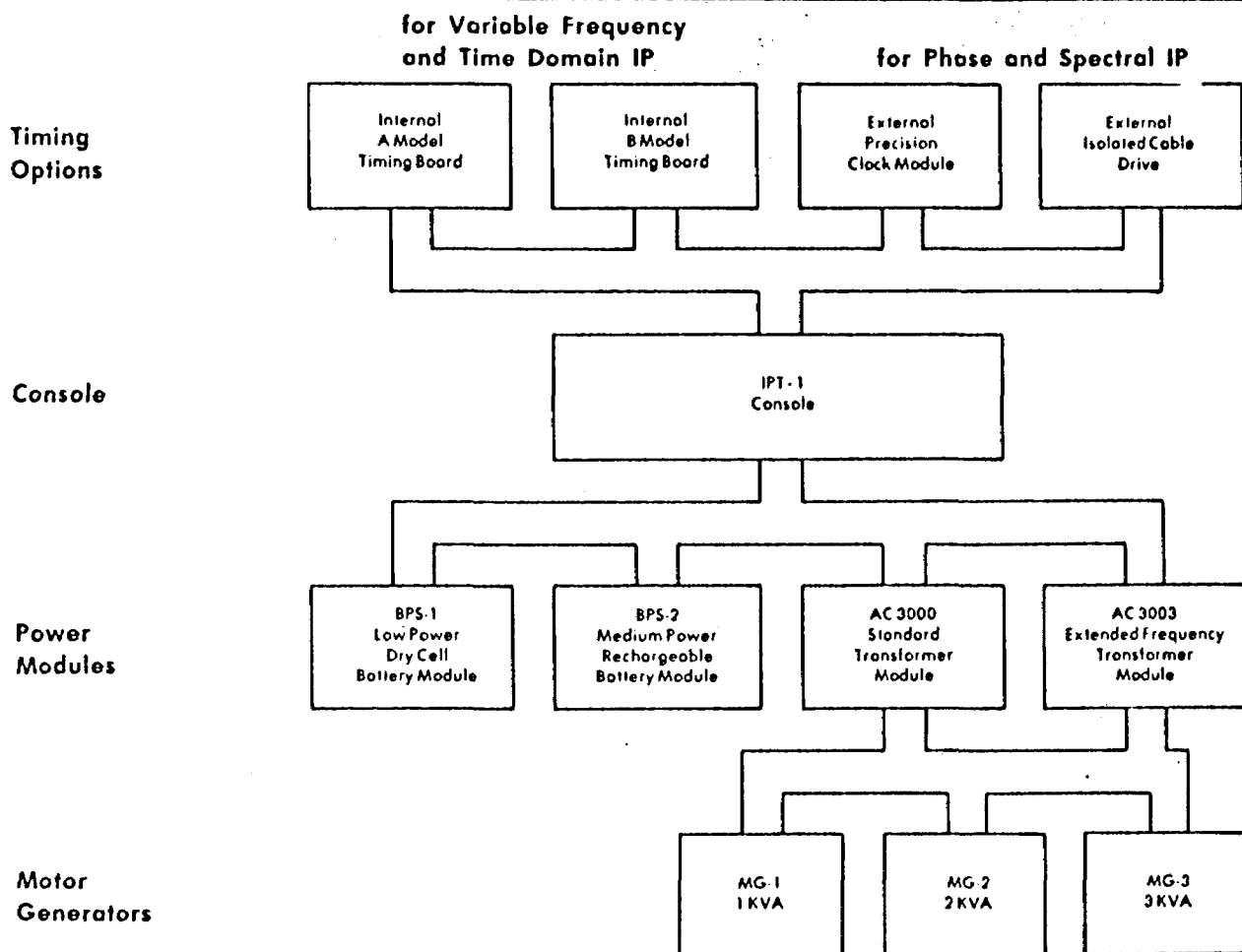
IPT-1

Variable Frequency, Time Domain and Phase IP Transmitter

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



Transmitter Configurations



PHOENIX GEOPHYSICS LIMITED

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

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

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

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

Timing Options

INTERNAL TIMING BOARD

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

	STANDARD FREQUENCY SERIES	OPTIONAL FREQUENCY SERIES (change link on board)
Model A :	Frequency domain mode ±DC, .062, .125, .25, 1, 2 and 4 Hz. Time domain mode 2 sec +, 2 sec off, 2 sec -, 2 sec off. Simultaneous transmission mode .25 and 4.0 Hz standard, other pairs available.	Frequency domain mode ±DC, .078, .156, .313, 1.25, 2.5, and 5.0 Hz. Time domain mode 1.6 sec +, 1.6 sec off, 1.6 sec -, 1.6 sec off. Simultaneous transmission mode .313 and 5.0 Hz standard, other pairs available.

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

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

EXTERNAL HIGH PRECISION CRYSTAL CLOCKS

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

EXTERNAL ISOLATED CABLE DRIVE

The isolated cable drive option allows the IPT-1 to be driven by the timing circuitry of the IPV-3 spectral IP receiver. The maximum distance allowed between transmitter and receiver is 500m. For efficient spectral IP field surveying, the distance between the transmitter and receiver is always maintained at one electrode interval. Thus the maximum convenient electrode interval, using the isolated cable drive option, is 500m. The IPV-3 measures the current plus six voltage dipoles ($n=1,6$) simultaneously.

Console

Ammeter Ranges	:	30 mA, 100 mA, 300 mA, 1A, 3A and 10A full scale.
Meter Display	:	A meter function switch selects the display of current level, regulation status, input frequency, output voltage, control voltage and line voltage. An optional digital display presents all of the above, plus external circuit resistance.
Current Regulation	:	The change in output current is less than 0.2% for a 10% change in input voltage or electrode impedance.
Protection	:	The current is turned off automatically if it exceeds 150% full scale or if it is less than 5% full scale.





SCINTREX

SCINTREX IPR-8

INDUCED POLARIZATION
TIME DOMAIN RECEIVER

IPR-8

features

Up to 20 standard selectable integration channels

1,3 or 6 channels simultaneously integrated

Automatic memory register storage for up to 6 channels

Reads directly in V_s/V_p , normalized for channel width and number of pulses selected

Automatic programmer for 2,4 and 8 cycles

Multiple channel readouts normalized for standard decay curve shape, providing immediate field indication of anomalous curve shape

Synchronous gating to reduce mistrigging by noise

*Automatic self-potential tracking
Calibrated manual S.P. bucking for S.P. measurements*

Useable with any time domain transmitter

High input impedance

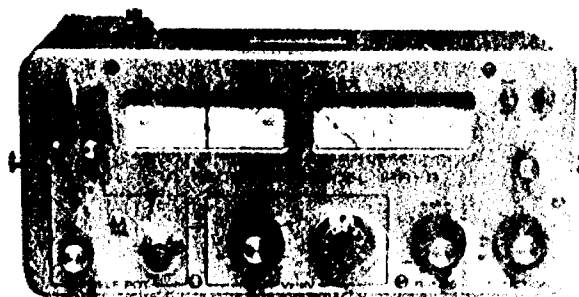
Built in external circuit tester

Excellent power line noise rejection

Latest COS/MOS circuitry permits long battery life using dry cells

Very lightweight

The IPR-8 Time Domain Induced Polarization receiver provides a maximum of transient curve shape information in a remarkably small and flexible format. Many calculations are automatically performed, including normalization for channel width, pulse number and standard decay curve form. The use of state-of-the-art COS/MOS circuitry permits long battery life using universally available D cells.



SCINTREX LIMITED

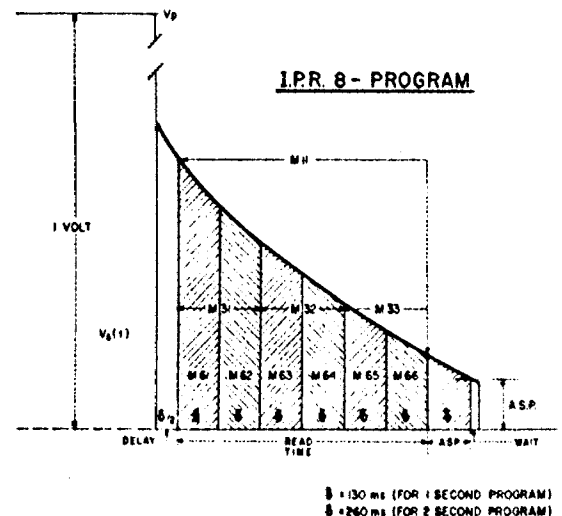
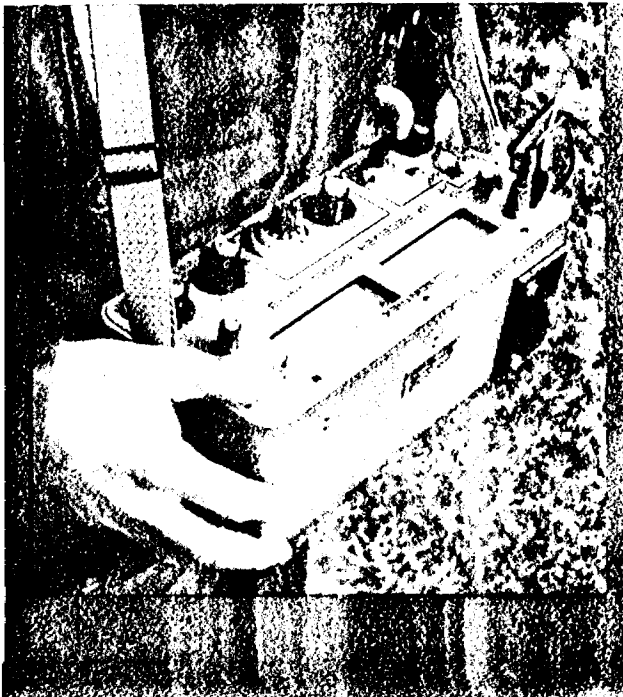
222 Snidercroft Rd.,
Concord, Ontario, Canada, L4K 1B5

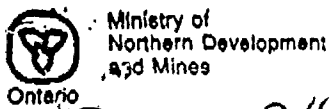
TECHNICAL DESCRIPTION OF IPR-8 RECEIVER

SCINTREX



Input Impedance	3.3 megohms
50 or 60 Hz Powerline Rejection	-50 db (300x)
Primary Voltage Range	300 microvolts to 40 volts in 10 ranges
Accuracy of Vp Measurement	±3% of full scale
Vs/Vp Range	2% and 10% (20 and 100 per mil) full scale
Vs/Vp Accuracy	3% of full scale
Primary SP Buckout Range	± 1 volt
Automatic SP Tracking Range	6 x Vp, maximum ± 1 volt
Continuity Meter Reading	0 - 500 k ohms
Required Stability of Transmitter Timing	Need only exceed measuring program selected (1 second or 2 seconds)
Operating Temperature Range	-30°C to + 60°C
Dimensions	31 cm x 15 cm x 17 cm
Weight	3.6 kg
Power Supply	4 D cells; estimated battery life 2 months intermittent duty at 25°C





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

DOOL
 W88



41P14NW0004 2.11181 SOTHMAN

900

88-06240

Type of Survey(s) _____ Township or Area Sothman Twp.

Claim Holder(s) MANVILLE CANADA Inc Helophane Division Prospector's Licence No. T-1330

Address 1620 Steeles Ave. Brampton Ont. L6T 1A5

Survey Company BayLake Explorations Ltd. Letchford Date of Survey (from & to) 30 6 88 to 7 7 88 Total Miles of line Cut _____

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

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
				714610	5.1
				714611	5.1
				714616	5.1
				714617	5.1
				714622	5.1
				714625	5.1
				772582	5.1
				772588	5.1
				772589	5.1

RECEIVED
 AUG 25 1988

CORDED
 AUG 25 1988

Expenditures (excludes power stripping)

Type of Work Performed Assaying

Performed on Claim(s) P 714624 ; P 772589

Calculation of Expenditure Days Credits

Total Expenditures		Total Days Credits
\$ <u>69130</u>	+ 15 =	<u>46</u>

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

Date Aug 11/88 Recorded Holder or Agent (Signature) [Signature]

For Office Use Only

Total Days Cr. Recorded 46 Date Recorded Aug. 25/87 Mining Recorder [Signature]

Date Approved as Recorded _____ Branch Director See work statements

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 J.A. MORTSON Box 1456 Timmins Ont. P4N 7N2

Date Certified Aug 12/88 Certified by (Signature) [Signature]

Recorded Holder
Manville Canada Inc./Holophane Division

Township or Area
Sothman Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days	<p>\$691.30 SPENT ON ANALYSES OF SAMPLES TAKEN FROM MINING CLAIM: P-714624</p> <p>46 DAYS CREDIT ARE ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.</p>
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

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

No credits have been allowed for the following mining claims

not sufficiently covered by the survey insufficient technical data filed

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



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

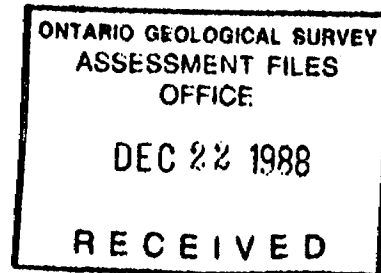
Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

December 1, 1988

Your file: W8806-240
Our file: 2.11181

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



Dear Sir:

Re: Data for Assaying submitted under Section 77(19) of the Mining Act
R.S.O. 1980 on Mining Claims P 714624 in Sothman Township

The enclosed statement of assessment work credits for Data for Assaying has been approved as of the above date.

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

Yours sincerely,

W.R. Cowan
Provincial Manager, Mining Lands
Mines & Minerals Division

WJK:p1
Enclosure (2)

cc: Resident Geologist
Timmins, Ontario

Manville Canada Inc.
Holophane Division
1620 Steeles Ave.
Brampton, Ontario
L6T 1A5

Mr. J.A. Mortson
Box 1456
Timmins, Ontario
P4N 7N2

Resources
Ontario

(Geophysical, Geological,
Geochemical and Expenditures)

WB8808-132

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

The Mining Act

Type of Survey(s) I. P. Survey	Township or Area Sothman Twp.
Claim Holder(s) Manville Canada Inc.	Prospector's License No. 7 1830
Address NATHESON, Ont.	
Survey Company P. S. Middleton Exploration Ltd	Date of Survey (from & to) 15. 12. 87. 21. 12. 87.
Name and Address of Author (of Geo-Technical report) G. Hodges, 136 Cedar St. Timmins,	Total Miles of Line Cut 14.17
K. H. Danke, 338 Spruce St. Timmins, Ont.	

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

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

Man Days	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
74	714610	27			
	714611	27			
	714616	27			
	714617	27			
	714622	27			
	714623	27			
	714624	27			
	714625	27			
	772582	27			
	772588	27			
	772589	27			

Expenditures (excludes power stripping) **227 227**

Type of Work Performed
Beneficiation Studies

Performed on Claim(s)
Assays Etc.

Calculation of Expenditure Days Credits

Total Expenditures **\$ 4,500.00** + **15** = **300** 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.

Date **April 6, 1988** Recorded Holder of Agent (Signature) **[Signature]** (Agent)

For Office Use Only

Total Days Cr. Recorded **511** Date Recorded **April 6, 1988** Mining Recorder **[Signature]**

Date Approved as Recorded **[Signature]** Branch Director **[Signature]** Mining Recorder

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
Naurice Hibbard
Connaught, Ontario

Date Certified **April 6, 1988** Certified by Signature **[Signature]**

RECORDED
APR - 9 1988

Semple Twp. - M. 1100

THE TOWNSHIP OF
OF
SOTHMAN

DISTRICT OF
SUDBURY

PORCUPINE
MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS —
- IMPROVED ROADS —
- KING'S HIGHWAYS —
- RAILWAYS —
- POWER LINES —
- MARSH OR MUSKEG —
- MINES *
- CANCELLED C.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Flooding Rights - L.O. 7191 File No. 1162 vol. 4.

Areas withdrawn from staking under Section 33 of the Mining Act (R.S.O. 1970).

Order No.	File	Date	Disposition
①	W. 49/84 CLM 262	22/2/84	M.R.O.
②	Waste Disposal Site Buffer Zone	2/9/81	
③	W. 89/81 188517	28/8/81	S.R.O.
④	MNR GRAVEL RESERVE 3C37		
■	Trapping Cabin		

RECEIVED
AUG 31 1988

#18

PLAN NO. **M-1121**

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

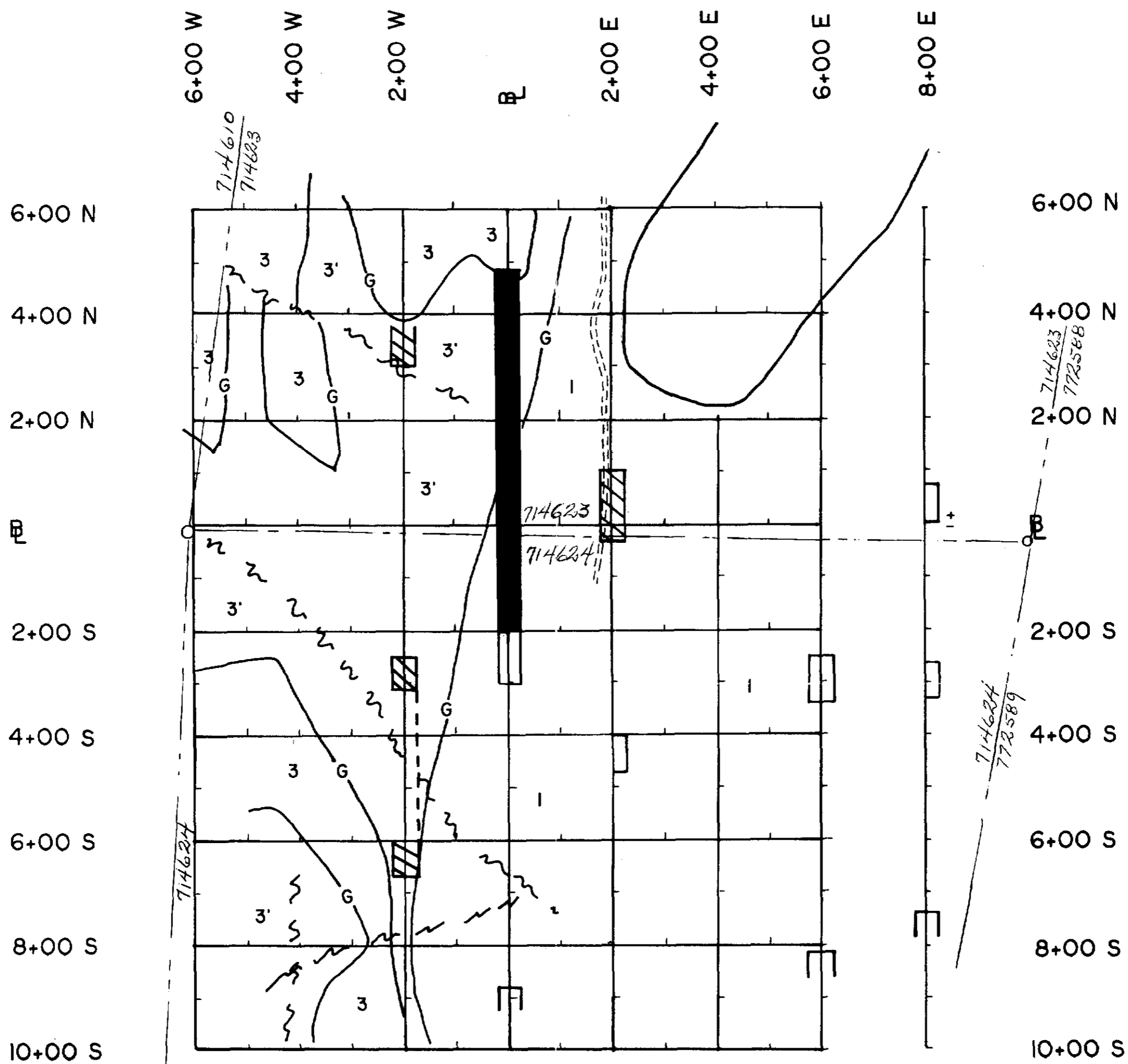
Nursesey Twp. - M. 1031

Halliday Twp. - M. 910

Kemp Twp. - M. 966



41P14NW0004 2.11181 SOTHMAN



6+00 W 4+00 W 2+00 W B 2+00 E 4+00 E 6+00 E 8+00 E

2.11181
Dup

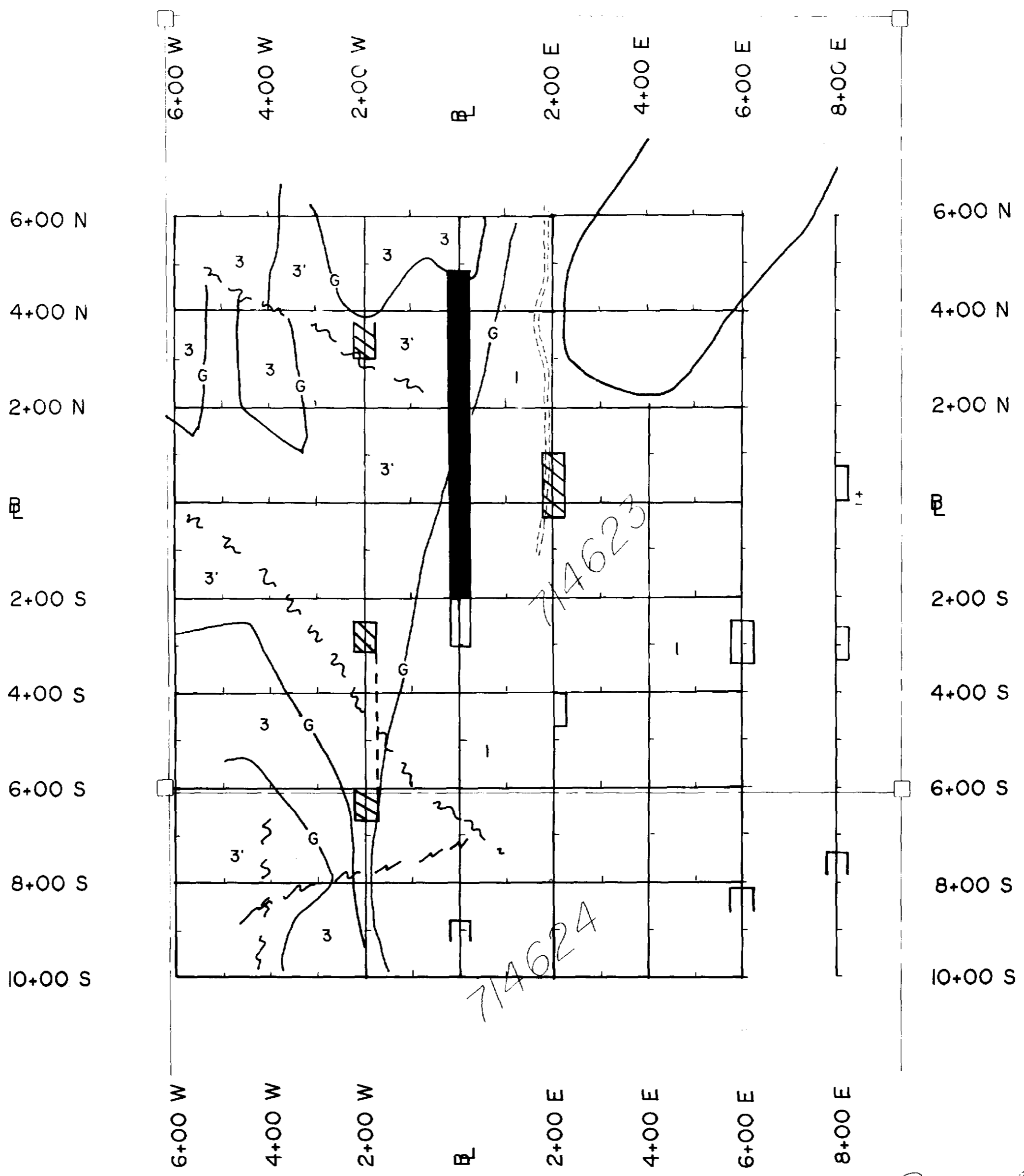
LEGEND

- 3 Mafic to Ultramafic Haileyburian Intrusives
- 3' Altered Haileyburian Intrusives
- 1 Acid to Intermediate Keewatin Volcanics

These plans show incorrect boundaries.

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for	QUOTE RESOURCES INC.	
	Title	BUDD LAKE PROPERTY,	SOTHMAN TWP.
	COMPILATION		
	Date: Jan, 88	Scale: 1" = 200'	N.T.S.:
	Drawn: JB	Approved:	File: M-312





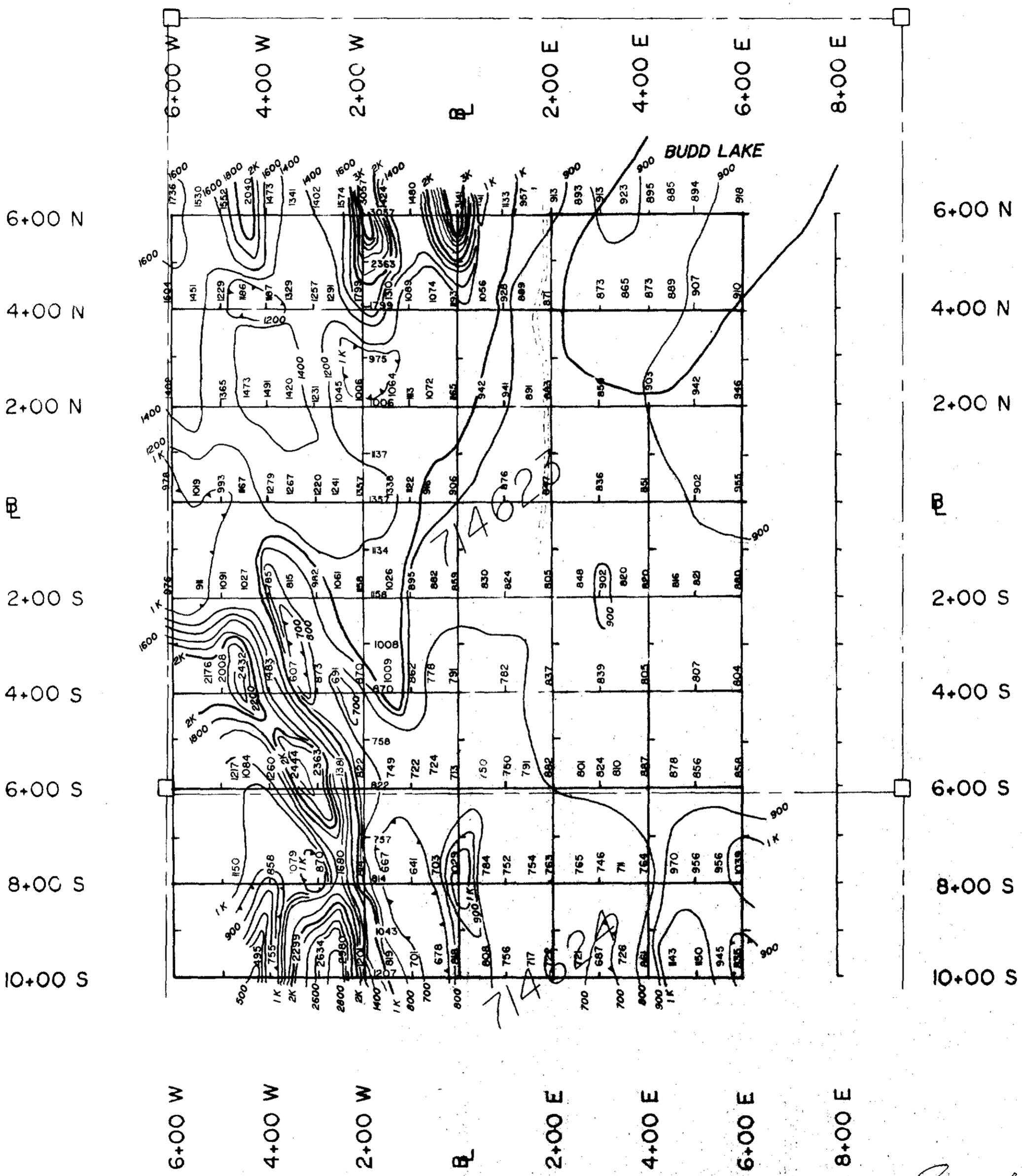
LEGEND

- 3 Mafic to Ultramafic Halleyburian Intrusives
- 3' Altered Halleyburian Intrusives
- 1 Acid to Intermediate Keewatin Volcanics
- Claim Post

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for QUOTE RESOURCES INC.		
	Title BUDD LAKE PROPERTY, SOTHMAN TWP.		
	COMPILATION		
	Date: Jan. 88	Scale: 1" = 200'	N.T.S.:
	Drawn: JB	Approved:	File: M-312



41P14NW0004 2.11181 SOTHMAN



LEGEND

□ Claim Post

INSTRUMENT
 PROTON PRECESSION MAGNETOMETER
 EDA OMNI IV TIE-LINE
 Accuracy: ± 1 nanotesla

REVISIONS		
ROBERT S. MIDDLETON EXPLORATION SERVICES INC. for QUOTE RESOURCES INC. Title BUDD LAKE PROPERTY, SOTHMAN TWP. MAGNETOMETER SURVEY		
Date: JAN 88	Scale: 1" = 200'	N.T.S.
Drawn: J.S.	Approved:	File: M-32



41P14N#0004 2.11181 SOTHMAN