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A REPORT ON THE GHOST RIVER PROPERTY, LOCATED IN HARKER, GARRISON, ELLIOTT AND THACKERAY TOWNSHIPS, LARDER LAKE MINING DIVISION OF ONTARIO,

FOR

578619 ONTARIO INC.

May 22, 1984

G.J. Hinse, P.Eng.
9 Gloucester Ct.
Sudbury, Ontario
P3E 5M2

NTS 32D/5-0401-2
Project 2256

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SUMMARY

At the request of the directors of 578619 Ontario Inc., we have prepared this report on the Ghost River property, located in Harker, Garrison, Elliott and Thackeray townships of the Larder Lake Mining Division of Ontario. The report is a geologic evaluation of the economic potential of this property and it recommends further work. The property consists of 103 contiguous unsurveyed mining claims comprising approximately 4,120 acres. It is located 28 miles east of the Town of Matheson.

Prospecting in the area begun in 1907 as a follow up of the discoveries made at Cobalt and Timmins. However, the first significant gold find was not made until 1924 when the Harker 'vein' was located and explored underground through a 1000' shaft and lateral work. In Garrison township, the first discovery was made by Buffonta Mines and production started in 1937 at a rate of 50 tons per day. Prospecting continued until 1942 when all work ceased due to war. After the war, renewed activities was encouraged by the recognition of a major 'break' projected to extend from Timmins, Ontario to Duparquet, Quebec, through the norther portions of Garrison and Harker townships. Yet, due to the loss of premium of the Canadian dollar, and the increasingly unattractive economic interest for gold, all work had ceased by 1949. Recently, however, results obtained by Kerr Addison Mines on their Buffonta property in Garrison township and by Camflo Mines on their McDermott property, led to a re-examination of old prospects and properties using modern geological concepts.

On the Harker and McDermott property, gold mineralization is associated with sedimentary rocks deposited on volcanic paleosurfaces, and is stratabound. Gold is intercalated within volcanic rocks of lower iron content, and thus, favorable horizons are well defined with aeromagnetic survey results. The recently-released results of an Input electromagnetic survey and a total intensity magnetic survey by the Ontario Geological Survey, allow the projection onto the Ghost River property of three distinct horizons known to be favorable to concentrations of gold values. Furthermore, one of the horizon, the Ghostmount is coincident with several Input electromagnetic conductors. The property lies in an area of extensive glacial deposits, with few rock outcrops, and hence, very little work has been done since early prospecting relied heavily on rock exposures.

A modern tool, basal till geochemical sampling has proven to be highly effective to explore for gold deposits masked by thick clay overburden in the North Abitibi belt of Northern Quebec, under conditions somewhat similar to the Ghost River property. It is suggested that this tool, used in conjunction with geophysical work, could be used to trace and explore on the Ghost River property, the gold bearing horizons already indicated by airborne survey work.

A program of exploration to consist of line cutting, magnetic and electromagnetic surveying, and basal till geochemical sampling to be followed by diamond drilling is recommended. This program, in two stages, is estimated to cost $95,970 and $69,000 for a total estimated expenditure of $164,970.

A REPORT ON THE GHOST RIVER PROPERTY, LOCATED IN HARKER, GARRISON, ELLIOTT AND THACKERAY TOWNSHIPS, LARDER LAKE MINING DIVISION OF ONTARIO.

INTRODUCTION

This report, on the Ghost River property, located in Harker, Garrison, Elliott, and Thackeray townships of the Larder Lake Mining Division of Ontario, is a geologic evaluation of the economic potential of this property. It summarizes the exploration work done to-date and it makes recommendations for its further evaluation. The report has been prepared by G.J. Hinse, P.Eng., at the request of the directors of 578619 Ontario Inc. Its purpose is to provide an independent assessment of the economic potential of the property. The property is located 28 miles (45 kilometers) east of the Town of Matheson.

The Harker area was visited during the summer of 1982 as part of an overall geologic evaluation of the area. Visits were made recently to the Buffonta-Kerr Addison Addison property in Garrison township and the McDermott-Camflo Mines property in Holloway township. Assessment work files and other pertinent records on file in the Kirkland office of the Ontario Geological Survey were examined recently. Additional information on this property was also supplied by Mr. Alexander H. Perron. His aid and co-operation in this regard are gratefully acknowledged.

Prospecting in the Lightning River area was initiated shortly after the discovery of gold in the Timmins camp, but it was not until 1924 that the first gold-bearing structure of importance was located and staked in Harker township, to the east of the property. Here, Harker Gold Mines did trenching and diamond drilling, followed by shaft sinking in 1925 and some years later, by underground development. All work ceased in 1929. West of the property, exploration work was carried out during the 1920's and 30's. In 1937, Buffonta attempted production at a rate of 50 tons per day for the best part of the year. Exploration work continued until 1942 when all activities ceased due to war. After the war, prompted by the recognition of a major break extending from Timmins, Ontario to Duparquet, Quebec, exploration was renewed to terminate in 1949. Very little work has been done on this project, and thus, there is little information available. No prospect or mineralization is known to exist. However, increased prices for gold and the great interest created in the area by recent discoveries made by Kerr Addison Mines on their Buffonta property and by Camflo Mines on their McDermott property has revived new interest in the area applying new concept in exploration.

PROPERTY LOCATION AND ACCESS

The Ghost River property is located in the extreme southwestern part of Harker township, extending into adjoining Elliott township to the south, Thackeray to the southwest and Garrison to the west, all in the District of Cochrane, Ontario. It lies approximately 26 miles west of the Ontario-Quebec interprovincial boundary, and 12 miles south of Lake Abitibi within the administrative area of the Larder Lake Mining Division. The general property location is shown in Figure 1.

Access to the property can be gained through several unimproved bush roads, south from Highway 101 along the Munroe esker, leading to the Buffonta property, the Orecar lake or in general the many trails, roads and lumber roads following more or less the Munroe esker. The locations of these roads and trails are shown on Map 1. The road to the Buffonta property is currently maintained year round by Kerr Addison Mines.

The property lies in an area of broad swampy clayey flats of the Ghost River drainage basin. The river drains into Lake Abitibi of the James Bay watershed. Higher ground in Elliott township consists of extensive glaciofluvial deposits of sand and gravel, extending in a north-south direction from the main portion of the Munroe esker to the south. As shown on Map 1 accompanying this report, there are only very few rock outcrops on the property.

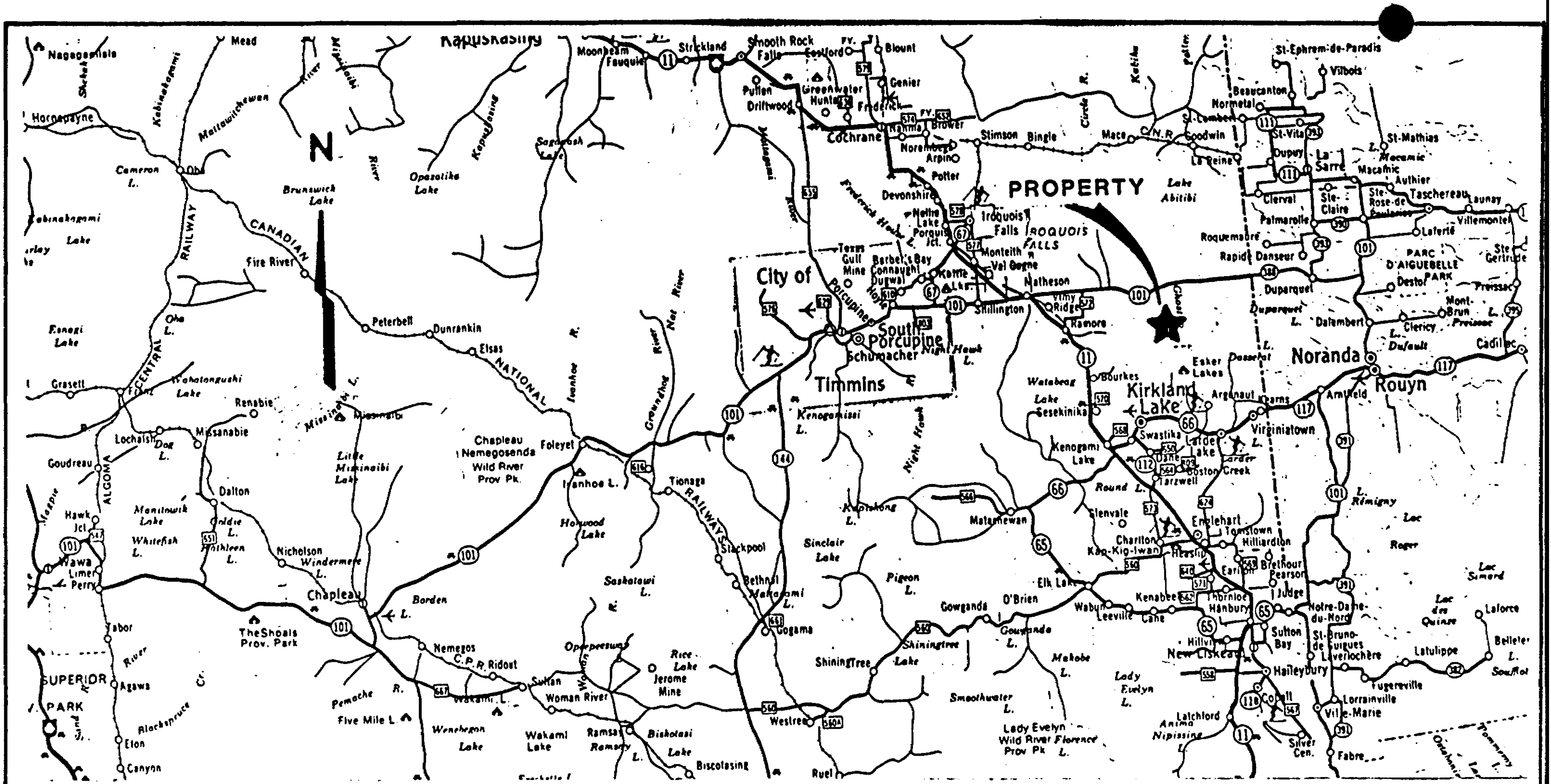


Figure 1.

GENERAL LOCATION MAP
of the
GHOST RIVER PROPERTY
for
578619 ONTARIO INC.

HARKER, GARRISON, ELLIOTT AND THACKERAY TWPS. ONTARIO

10 0 10 30 50 70
km

G. J. HINSE

G J HINSE MAY, 1984

PROJECT 2256 NTS 32D/05-0402

LAND TENURE AND OWNERSHIP

The property consists of 103 contiguous unsurveyed mining claims of approximately 40 acres each, located in Harker, Garrison, Elliott and Thackeray townships, Larder Lake Mining Division of Ontario.

Abstracts obtained from the office of the Mining Recorder at Kirkland Lake show that the claims are in good standing at this time and that they are held and registered under the following numbers. A property plan is attached herein as Figure 2, taken from the Harker, Garrison, Elliott, Thackeray and Garrison claim maps to date April 19, 1984.

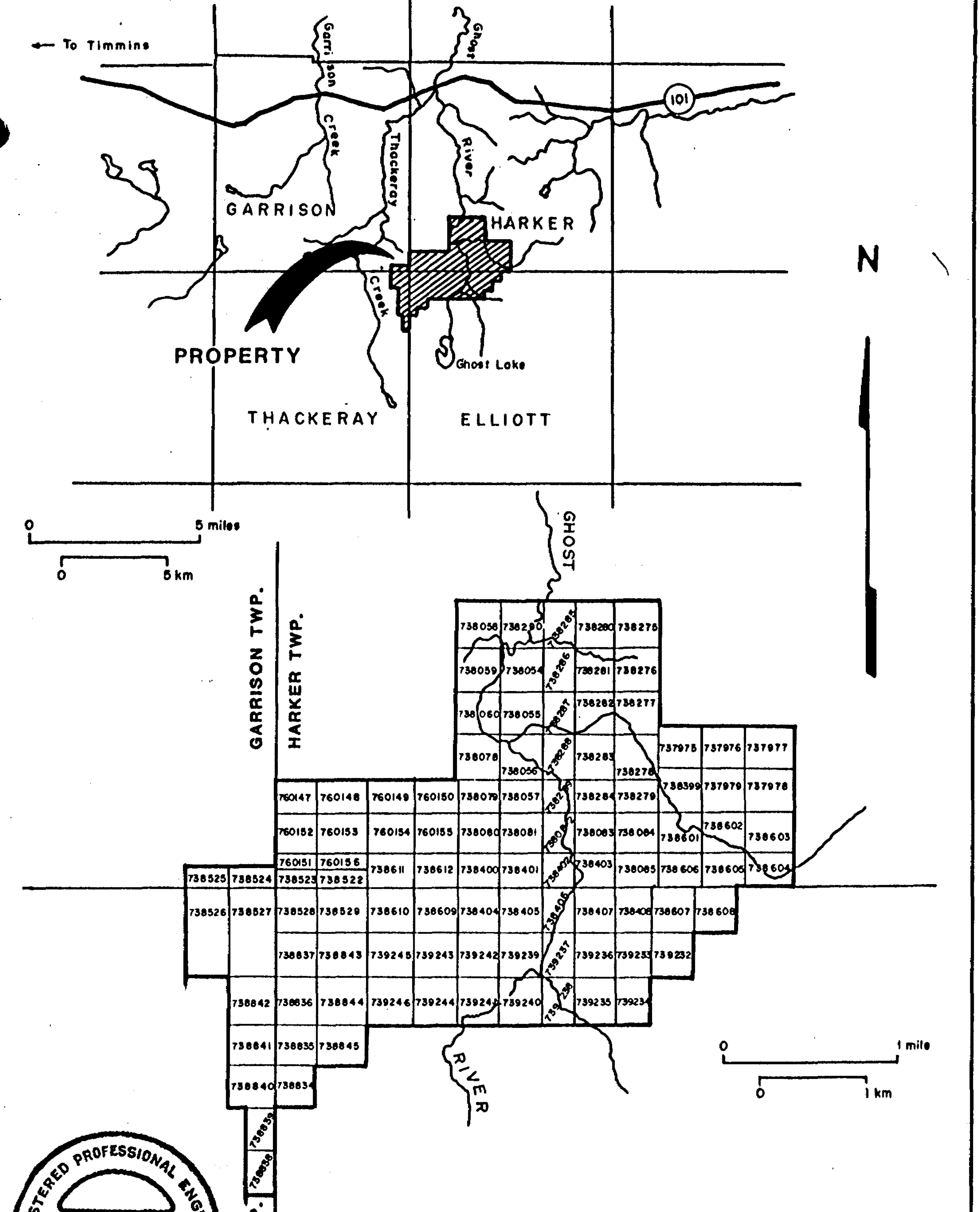
Claim Number	Location	Recording Date
L 737975 to L 737979	Harker Twp.	February 27, 1984
L 738054 to L 738060	Harker Twp.	March 1, 1984
L 738078 to L 738085	Harker Twp.	March 1, 1984
L 738275 to L 738290	Harker Twp.	March 1, 1984
L 738399	Harker Twp.	February 27, 1984
L 738400 to L 738403	Harker Twp.	March 1, 1984
L 738404 to L 738408	Elliott Twp.	March 1, 1984
L 738522 to L 738523	Harker Twp.	March 1, 1984
L 738524 to L 738525	Garrison Twp.	March 23, 1984
L 738526 to L 738527	Thackeray Twp.	March 1, 1984
L 738528 to L 738529	Elliott Twp.	March 1, 1984
L 738601 to L 738606	Harker Twp.	March 9, 1984
L 738607 to L 738610	Elliott Twp.	March 9, 1984
L 738611 to L 738612	Harker Twp.	March 9, 1984
L 738834 to L 738837	Elliott Twp.	March 19, 1984
L 738838 to L 738842	Thackeray Twp.	March 19, 1984
L 738843 to L 738845	Elliott Twp.	March 19, 1984
L 739232 to L 739246	Elliott Twp.	March 23, 1984
L 760147 to L 760156	Harker Twp.	March 1, 1984

Total: 103 claims for approximately 4,120 acres.

Claims 738524 and 738525 were accepted by the Mining Recorder, but were not recorded, pending a field investigation by the Mining Inspector to ascertain their respective locations.

All the claims are held in the name of Alexander H. Perron, 103 Government Road East, Kirkland Lake, Ontario, P2N 1A9.

There are no assessment work credits to the claims. They will be due for renewal at their next anniversary date, being one year from the recording date shown above, when either assessment work will have to be submitted or an application will have to be made to extend the time to submit this assessment work.



REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

G. J. Hinse

Figure 2.

LOCATION AND PROPERTY MAP
of the
GHOST RIVER PROPERTY
for
578619 ONTARIO INC.
HARKER, GARRISON, ELLIOTT AND THACKERAY TWPS. ONTARIO

G. J. HINSE - MAY, 1984

PROJECT 2256 NTS 320/05-0402

Titles to the claims is secure as shown above.

HISTORY OF EXPLORATION

Prospectors entered the area through Lightning river as early as 1907 and 1908 following up the discoveries made earlier at Cobalt. Yet, it was not until 1917 that the first important gold find, known then as the Cochenour, later as the Meridian and now as Coin Lake, was made in Harker township. In 1922, renewed activity by prospectors led in 1923, to the discovery of the Golden Harker Explorations' vein which was subsequently developed through a 1,000' shaft and lateral work on four levels. The property was closed down in 1929. Exploration work in Garrison township was sporadic during the 20's and 30's consisting mostly of surface work until 1937, when Buffonta commenced production from their open pit with a 50-ton per day mill. Production ceased during the same year, yet exploration work of the property continued until 1942. After the war, most of the properties were actively explored and this until 1949. At the same time, the recognition by W.C. Martin of a major fault zone extending from the Porcupine area east into Quebec led to renewed prospection in the area in 1944 on what is called the Destor-Porcupine fault zone. By 1949 all activities had ceased, and prospecting for gold was negligible.

Nevertheless, recent increases in bullion prices for gold have led to a re-examinations of old showings and properties. Northeast of the Harker Lake property, in Holloway township, Camflo Mines is currently exploring the McDermott Mines' prospect and has secured property options along this favorable horizon for five miles to the west. To the west of the property, in Garrison township, Kerr Addison Mines is active developing the old Buffonta property. Mining was carried out by Kerr in the main ore zone a few years ago and current diamond drilling to the east of that zone is returning ore grade values across good widths. The Golden Harker property has recently been optioned by Lenora Exploration and work is planned for the coming summer.

The assessment work records of the Ontario Geological Survey at Kirkland

Lake indicate that very little work has been done over most of the Ghost River property. The claims immediately west of the property in Thackeray and Garrison townships were held by Garthack Mining Co. in the late 1940's, but most of the work was done on a showing some two miles west. In 1948, a magnetic survey was done and the claims were geologized. The map of the latter work shows some vein material located close to the west boundary of the Ghost River property flanking an anomaly of 1,400 gammas correlative with an outcrop of diorite. No information concerning this vein is given.

The only work of significance done on the claims in that of Amax Exploration, Inc. in 1968. Two drill holes were drilled in Harker township, approximately 1 mile apart in a east-southeast direction, probably as a follow-up of airborne survey work. Both drill holes intersected wide sections of sedimentary rocks containing units rich in graphite found intercalated in mafic volcanics. Assay results are only reported in one of the hole and they show anomalous gold values associated with graphitic, quartz carbonate and magnetic mafic volcanic material. The best value reported is 0.01 ounce of gold per ton along a core length of 7.0 feet.

On May 17, the Ontario Geological Survey released the results of an Input electromagnetic and magnetic surveys covering the Matheson-Black River area. The Ghost River property is part of the area covered. Lines were flown at 200 meter intervals at an elevation of 120 meters along lines with a north south direction.

No work has been done by the current owner since acquiring the claims.

GENERAL GEOLOGY

The geology of the Harker Township area is described in the Ontario Department of Mines Report, 1925, Volume 34, Part 6 by T.L. Gledhill, and the Ontario Department of Mines Report, 1951, Volume 60, Part 7, by J. Satterly; that of Garrison Township area in the Ontario Department of Mines Report, 1949, Volume 58, Part 4, by J. Satterly; and that of

Elliott and Thackeray townships in the Ontario Geological Survey Report 165 by L.S. Jensen.

The area is underlain chiefly by Keewatin-type basaltic volcanics which, in the main, strike N 70° E, and face and dip steeply south. The Porcupine-Destor 'break', which is of regional proportions, strikes in a westerly direction across the northern part of the area, and to the north of this, peridotites and serpentinites of the Ghost Range are prominent. Metasediments occur along the Porcupine-Destor 'break' and to a lesser extent within the basaltic sequences to the north and south.

South of the 'break' the basaltic volcanic units occur intercalated with minor rhyolite and metasedimentary units. A large mass of syenite is interpreted to occur in the west-central part of the township, probably related to the syenitic intrusive complex of Garrison township to the west. Small masses of syenite and some diabase dikes also occur sporadically throughout the basaltic area. About 60 percent of Harker township is covered by overburden, including mainly glacial till and clay.

The westerly-trending Porcupine-Destor 'break' is the major fault system occurring in the area. Also prominent, however, are a series of strike faults trending in a N 70° E direction within the basaltic area.

The Ghost River property lies in the extreme southeastern portion of Harker township, and extends into the adjoining townships of Elliott to the south, Thackeray to the southwest and Garrison to the west. It is underlain by basaltic volcanics with minor rhyolite, syenite porphyry and diabase. The attitude of the volcanic members conforms to the regional strike and steep south dip previously noted. Minor north-trending faulting and strike faulting in the N 70° E direction are present in the property area. The surface geology of the property is shown on Map 1, in pocket (from ODM map 1951-4 and 1949-1 by J. Satterly at a scale of 1" = 1000 feet, and OGS map 2368 by L.S. Jensen at a scale of 1" = ½ mile).

ECONOMIC GEOLOGY OF THE GHOST RIVER PROPERTY

General Considerations:

Gold occurrences in the area are known in sheared and fractured zones in sediments, volcanics and intrusives; in mineralized intrusives; and in quartz veins and stockworks. Considerable trenching and exploratory diamond drilling has been done throughout the area, but shafts have been sunk on only four properties; in Harker township, the Harker and Coin Lake properties in the southeastern part, and the Teddy Bear Valley Mines property in the northeastern part. Actually, the Teddy Bear shaft is located just east of the Harker township boundary, in Holloway township, within the Porcupine-Destor fault zone. The Harker and Coin Lake shafts lie about four miles south of the 'break', well within the basaltic flow sequence: In Garrison township, a shaft has been sunk by Buffonta Mines Limited.

As indicated on Map 1, the Ghost River property is located in an area of very few rock outcrops. Thus its geology is not well known. It is suggested to be underlain essentially by basic volcanics, including pillow lava, dioritic or diabasic, or textured lava, spherulitic (vesicular) lava, and fragmentals, chert and tuff. As noted earlier, Amax's drilling intersected mainly basic volcanics and sedimentary rocks. The volcanic sequence appears entirely conformable, assuming a general strike of N 70° E, and dip of about 80° SSE. The volcanics face south.

The presence of some syenite and lamprophyre dikes can be assumed although their extent is unknown. A diabase dike is noted in Amax's drill logs.

Sedimentary rocks have been identified on the Golden Harker dump during 1982 and more recently in drill cores of Camflo Mines from their McDermott project. Their presence suggests that gold is associated with sedimentary horizons, having been deposited on paleosurface consisting mostly of volcanic clastics, delineating channels and depressions on volcanic terranes. Hence, it is stratiform in nature.

Survey Work:

The property has not been covered with any type of ground survey work. As noted, the Ontario Geological Survey has recently released the results of an Input electromagnetic and magnetic surveys flown along north-south lines at an elevation of 120 meters with lines at every 200 meters. The electromagnetic survey was of sufficient sensitivity to be responsive to the McDermott showing and all other known conductors. Conductor definition has been increased noticeably. The magnetic results provide additional details of the underlying rock formations so that the Cryderman horizon is now well defined. This horizon could not be identified on aeromagnetic maps previous available.

INTERPRETATIVE CONSIDERATIONS

As noted previously, the Ghost River property lies in an area covered by glaciofluvial deposits which are part of the Munroe esker, and glacial deposits consisting of clay overburden, thus, outcrops are scarce with the consequence that very little is known about the property. Yet, this does not negate in any way the potential of this property since early exploration work was carried out mostly in areas of shallow overburden and relied heavily on surface work consisting of trenching and prospecting. A combination of geophysical work to be followed by overburden sampling is a very suitable approach to be used as evaluation tools for this property.

Aeromagnetic maps 45G and 46G of the Geological Survey of Canada at a scale of 1" = 1 mile, and the detailed total intensity magnetic maps of Harker, Garrison, Elliott and Thackeray township recently released by the Ontario Geological Survey with the results of the Input survey, outline a series of broad magnetic highs and lows crossing the Harker township area in parallel bands conformable to the underlying rock formation. The recently released maps are of greater details than maps 45G and 46G and illustrate very well the Cryderman horizon which could not be identified on the older maps. Thus, the new maps add greatly to the undersanding of the underlying rock formation and require a re-interpretation of the sedimentary horizons as was known previously known from maps 45G and 46G.

The magnetic lows can be correlated with known gold-bearing horizons such as the McDermott-Consular Harker, Cryderman, and others. Such a magnetic low would also be coincident with the Golden Harker structure and would include to the east the Meridian prospect. This can easily be explained by the fact that volcanic rocks hosting the gold structure are vesicular, deposited in shallow water with contained iron leached out by sea water, this coupled with the presence of iron-poor sedimentary rocks associated with the gold zones. Host volcanic rocks belong to an assemblage of basaltic volcanic rocks alternating from calcalkaline to high MgO in composition, thus the typical high-low magnetic response of the area. Magnetic surveying would delineate volcanic horizons favorable to gold mineralization, although it would not indicate within this horizon the presence of gold mineralization.

Three such horizons are inferred on the Ghost River property. They are from north to south, the projection of the Ghostmount horizon, the Cryderman and the Harker.

It is suggested that diamond drilling done by Amax tested a sedimentary horizon which can be correlated with the Ghostmount. This two-hole program intersected sedimentary rocks contained within basic volcanics.

The recently released results of an Input survey done over the area by the Ontario Geological Survey indicate several Input anomalies to be located on the claim group. These are located coincident with a magnetic low indicated as being the projection of the Ghostmount horizon. The anomalies were tested by Amax Exploration and returned low gold values associated in part with graphitic units containing up to 25% disseminated pyrite. The Input anomalies can be thus satisfactorily accounted for. However, the association of graphite with known gold deposits is well known in the Larder Lake and Timmins areas where graphitic units often underlie gold deposits, these units extending beyond the limits of gold mineralization.

In summary then, the Ghost River property has been shown to contain horizons known to be favorable to gold concentrations. While little exploration work has been done previously on this property due to the lack of rock outcrops, at this time, with gold prices at an improved level, this property offers certainly a worthwhile exploration venture.

Consequently, an exploratory program is hereby proposed to evaluate the potential of the Ghost River property for gold mineralizations of stratiform nature. As discussed above, it is suggested that a magnetic survey may be a most appropriate tool to trace along strike onto this property, the Cryderman, Ghostmount and Harker gold-bearing horizons.

EVALUATION PROGRAM

General Comments:

Two stages are visualized in the evaluation program. The first may be undertaken at any time and consists mostly of line cutting, magnetic surveying and basal till geochemical sampling to be followed by a second stage to consist of diamond drilling to test the best targets previously outlined.

Owing to the fact that gold values in the area are related to horizons of sedimentary rocks, thus stratabound, large and probably quite continuous and since the results of the recently-released airborne magnetic survey outline very well these horizons of interest, it is therefore suggested that surface work be limited in extent to cover only these areas. The initial evaluation stage should thus involve a limited amount of exploration to conserve funds. Thus, line cutting can be done at a spacing of at least 200 meters to be followed by magnetic surveying with readings at every 12.5 meters. Additional readings may have to be taken in areas of interest and intermediate lines can be added; or to satisfy the assessment work requirements of 40 readings per claim. Electromagnetic survey work should be done, but limited in extent to locate on the ground the Input conductors indicated along the Ghostmount horizon. The favorable sedimentary horizons thus indicated should be tested with basal till that could be done directly over the electromagnetic conductors and magnetic lows indicated, or the down-ice side, at every 300 meters along the strike.

The second stage of the program is designed to test the nature and extent of the best targets previously outlined. Although at this time, drilling requirements are difficult to estimate, it is proposed that at least three holes will be needed on the Ghostmount and Cryderman horizons and one on the Harker. For this reason, at least seven holes are planned for.

Stage 1:

As noted earlier, line cutting coverage should be limited in scope and extent as to cover only the favorable horizons as indicated by airborne survey work. Base lines should be established to follow more or less the strike of the Ghostmount, the Cryderman and the Harker horizons, with lines cut at 200 meter centers and extending at least 300 meters on either side of the base line. This will involve approximately 45 kilometers of line cutting. The lines should be covered with a magnetic survey with reading taken at every 12.5 meters. On the Ghostmount horizon, where Input conductors are indicated, horizontal-loop electromagnetic work with reading taken at every 25 meters should be done. Since it is suggested that the results of the Input survey have indicated most of the possible conductors in the area and that there is very little hope that surface work would add significantly to these results, it is thought advisable at this time to forego covering the Cryderman and Harker horizons with ground electromagnetic work.

The magnetic and electromagnetic anomalies indicated with the above work should be followed up with basal till geochemical work. In the case of the Ghostmount horizon, which will have been traced on the ground with electromagnetic and magnetic work, basal till work can be done down-ice at a given distance from the conductors. It is assumed that 300 feet, or 100 meters would be sufficient since mineralization in the area is not known to be stacked up stratigraphy and that there is only one mineralized horizon known.

Line cutting, 45 kilometers @ $170/km	$ 7,650.
Magnetic surveying, 34 kilometers @ $80/km	2,720.
Electromagnetic surveying, 16 kilometers @ $100/km	1,600.
Basal till geochemical sampling, 40 holes of approximately 30 meters each, 1,200 meters @ $40/m	48,000.
Analytical work	5,000.
Compilation, research	10,000.
Supervision, consulting services	12,000.
10% contingencies	9,000.
Total, stage 1	$ 95,970.

Stage 2:

This stage is a follow up of the targets previously outlined and will consist of diamond drilling. Although target locations cannot be given at this time, it envisaged that at least 6 holes will be required to test the Ghostmount and Cryderman horizons and possibly another hole, to test the Harker horizon. Thus 7 holes of 100 meters each are provided for.

Diamond drilling, 700 meters @ $65/m	$ 45,500.
Analytical work	2,500.
Logging, sampling	7,000.
Supervision, consulting services	7,000.
10% contingencies	7,000.
Total, stage 2	$ 69,000.

Summary of Evaluation Costs:

The estimated costs for the entire program may be summarized as follow:

Stage 1	$ 95,970.
Stage 2	$ 69,000.
Total requirements	$164,970.

We believe that the above evaluation program should be sufficient to identify any possible economic concentrations of gold values.

CONCLUSIONS AND RECOMMENDATIONS

The main attraction of the sizeable Ghost River property is that it covers on strike three horizons known to be gold-bearing and identified by their low aeromagnetic signatures. Furthermore, one of these horizons is responsive to Input electromagnetic survey and was tested for its base metal potential some years ago returning anomalous gold values. It is believed that gold concentrations in the area is stratiform, having been deposited on predominantly volcanic paleosurfaces marking channels and depressions.

The Ghost River property lies in an area of little rock outcrops, thus very little work has been done since it was not propicious to early gold exploration which used mostly surface work. Yet, a program of evaluation using modern tools to consist of magnetic and electromagnetic surveying and basal till geochemical sampling to be followed by diamond drilling, would be appropriate to test the economic potential of the property.

Therefore, an exploration program to evaluate the potential of this property is suggested. This two-stage program as outlined in this report is highly recommended and is estimated to cost $95,970 and $69,000 for a total estimated expenditures of $164,970.

Respectfully submitted

G. J. Hinse

G.J. Hinse, P.Eng.

REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

Sudbury, Ontario
May 22, 1984

CERTIFICATE OF QUALIFICATIONS

I, G.J. Hinse, hereby certify that:

1) I reside at 9 Gloucester Ct., Sudbury, Ontario, P3E 5M2

2) I am a qualified geological engineer, having received my training at Laval University.

3) I am a registered Professional Engineer of the Province of Ontario.

4) I have been continuously engaged in my profession for the last twenty-five years.

5) The foregoing report on the Ghost River property to 578619 Ontario Inc. is based on visits to the area during 1982, 1983 and 1984, the records of work done by previous owners, published geological maps and reports and assessment work files.

6) I do not have, nor do I expect to receive any interest in the property described in the foregoing report or in the securities of any company concerned with this property.

7) I hereby consent to the use of the foregoing report by a company in a prospectus or a statement of material facts relating to the raising of funds for this project.

Sudbury, Ontario
May 22, 1984

G. J. HINSE

G.J. Hinse

G.J. Hinse, P.Eng.

APPENDIX I.

References and Sources of Information.

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References and Sources of Information.

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Map 46G - 32D/12 - Aeromagnetic Survey - Lightning River Area, Ontario: Canada Dept. Mines, 1948.

Map 20,134G - 32D/5f - Aeromagnetic Survey: Canada Dept. Energy, Mines and Resources, 1975.

Maps 80599, 80598, 80608 and 80609, Airborne electromagnetic and total intensity magnetic survey, Matheson-Black River area, Harker, Garrison, Thackeray and Elliott townships, District of Cochrane, Ontario: Ont. Geol. Surv., 1984.

Other published and private geological maps, reports and notes, Ontario Geological Survey assessment files at Kirkland Lake, Ontario.

REPORT ON THE HARKER LAKE GOLD PROPERTY, LOCATED IN HARKER TOWNSHIP, LARDER LAKE MINING DIVISION, ONTARIO,

FOR

JOHN A. POLLOCK.

March 15, 1984

Guy J. Hinse, P.Eng.
9 Gloucester Ct.
Sudbury, Ontario
P3E 5M2

NTS 32D/05-0402
Project 2255

LIST OF CO

SUMMARY

This report, on the Harker Lake gold property, has been prepared by G.J. Hinse, P.Eng., at the request of Mr. John A. Pollock. The property comprises 41 contiguous unsurveyed claims in an irregular block, located in the south central portion of Harker township, Larder Lake Mining Division, Ontario. The property is easily accessible through unimproved gravelled lumber road heading south from Highway 101, connecting Matheson to Duparquet.

The rocks of the area consist mostly of an assemblage of basaltic with minor rhyolitic volcanic flows containing intercalated sedimentary horizons composed of volcanic tuff, clastic and chemical carbonate and/or chert-rich sedimentary rock. Gold mineralization is related to the chemical sedimentary rock, and is thus stratiform in nature.

Prospecting has been carried out in the region over the years on areas of outcrop. Two main periods of activity are reported. The first one, during the 1920's resulted in several discoveries and a later one during the early 1940's terminated in 1949. Lately renewed activity due to increases in prices for gold led to the re-examination of the old prospects, applying modern tools and techniques to re-evaluate the potential of the area. In Holloway township, Camflo Mines are currently drilling the former McDermott showing. In Garrison township, Kerr Addison are also currently drilling a new discovery on their Buffonta property.

The Harker Lake property is covered by a thick blanket of outwash and glaciolacustrine deposits. Thus, the property is not well known geologically. However, sufficient information is available from the neighbouring property to the east, the Cryderman, where exploration work has outlined a zone having an average width of 6.0 feet and an average gold content of 0.144 ounce per ton along a strike length of 1,200 feet, to project on strike onto the Harker Lake property, the geological formation. Diamond drilling to the west of the property indicated a sedimentary horizon, that upon its projection to the east, crosses the

Harker Lake property to join up with the Cryderman to the east. This sedimentary horizon is believed to represent a primary exploration target where economic concentrations of gold values could be found. Thus a program of exploration using magnetic surveying over the entire claim block to identify the projected sedimentary horizon, and any other possible parallel and similar horizon, to be followed by basal till geochemical work and diamond drilling is recommended.

The cost of this program in two phases is estimated at $80,100 and $162,500 for a total expenditure of $242,600.

REPORT ON THE HARKER LAKE PROPERTY,
LOCATED IN HARKER TOWNSHIP,
LARDER LAKE MINING DIVISION, ONTARIO.

INTRODUCTION

This report on the Harker Lake gold property, located in Harker township, Larder Lake Mining Division of Ontario, is a geologic evaluation of that property, and it has been prepared by G.J. Hinse, P.Eng., at the request of Mr. John A. Pollock. The purpose of this report is to provide an independent assessment of the economic potential of the property, and to recommend an appropriate exploratory program to further evaluate its potential.

The Harker Lake property was last visited by the writer during the summer of 1982 as part of an overall geologic evaluation of the area. Assessment work files and other pertinent records on file in the Kirkland Lake office of the Ontario Geological Survey were examined recently. Some data on the property has been supplied to the writer by Mr. Alexander H. Perron. His co-operation and aid in this regard are gratefully acknowledged.

Considerable exploration work was done in the area during the 1920's and 40's by several operators and prospectors. However, since the property area is covered by thick glaciofluvial and outwash deposits, rock outcrops are thus scarce within, with the consequence that relatively little work has been done on the property since early prospecting work relied heavily on surface work that could be done only in areas of shallow overburden. Fortunately, sufficient information is available from the neighboring properties to permit the projection onto the Harker Lake property of one the horizon suggested favorable to concentrations of gold values. We are in the opinion that the data available, however general in nature, is sufficient to support the conclusions reached herein.

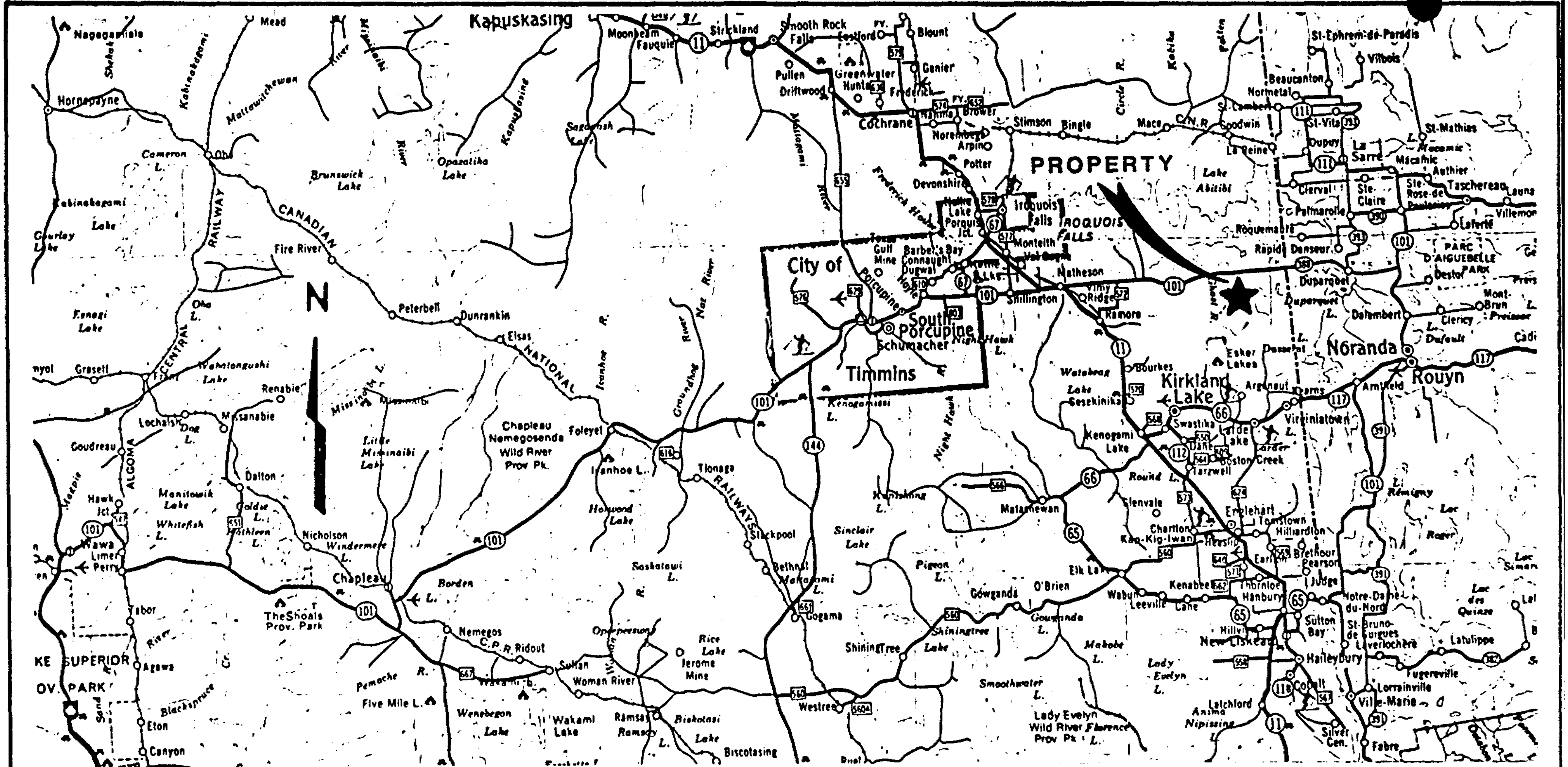


Figure I.

GENERAL LOCATION MAP
of the
HARKER LAKE PROPERTY
for
JOHN A. POLLOCK

HARKER TOWNSHIP ONTARIO

10 0 10 30 50 70

km

REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

G. J. HINSE - MARCH, 1984

PROJECT 2258 NTS 820/05-0402

PROPERTY LOCATION AND ACCESS

The Harker Lake property is located in the south central portion of Harker township, Larder Lake Mining Division of Ontario. It includes 41 contiguous unsurveyed claims in an irregular block. The northeast corner of the property is adjacent to the south shore of Harker Lake. The property is easily accessible through unimproved gravelled lumber roads extending to the south from Highway 101, an east-west highway connecting the towns of Matheson to Duparquet. One such gravelled road, runs in a north-south direction from the east shore of Harker Lake, extending south to the property of Golden Harker Explorations. Another road crosses the property in a southwesterly direction. The towns of Matheson and Duparquet are located approximately 50 kilometers to the west and 42 kilometers to the east.

Services are not available in the immediate vicinity of the property. However, the property is located within a mining area and infrastructure and manpower necessary to a mining operation are available nearby.

The property is located in an area of low relief, approximating 100 feet at the maximum. The area was timbered a few years ago and is now bare, except for the odd hardwood trees such as birch and poplar. However, common tree types of the area are still available from mining concessions which were not harvested. The property lies within an area of thick glaciofluvial and outwash deposits consisting of sand and gravel, belonging to a regional trend which extends in a north south direction for many miles.

LAND TENURE AND OWNERSHIP

The property consists of an irregular block of 41 contiguous unsurveyed claims comprising 1,640 acres more or less. The claims are held under the following numbers with annotations as to their present status.

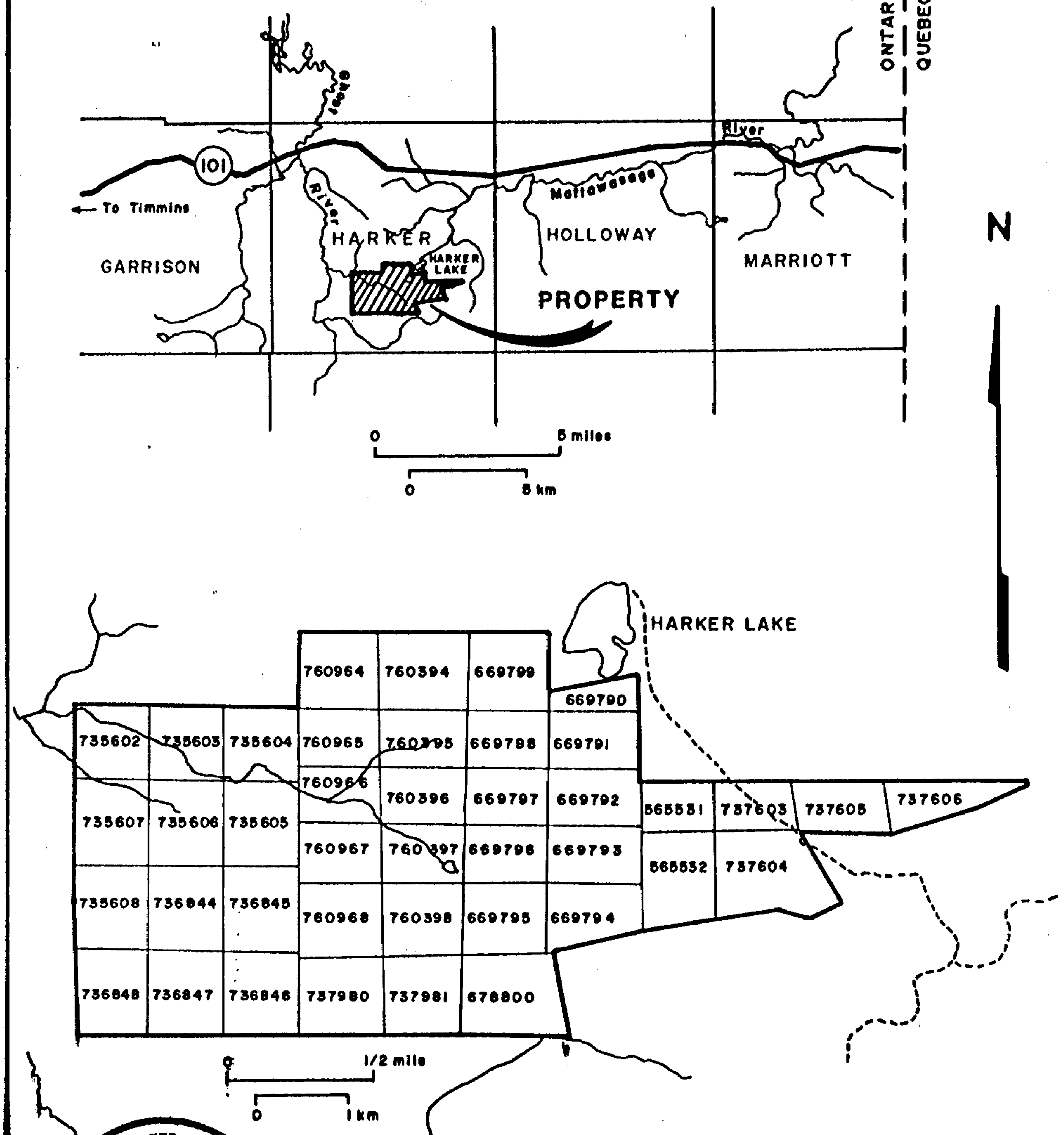
...3

Claim Number	Area (acres)	Registered Owner	Recording Date
L 565531	40	A.H. Perron	Dec. 10/80
L 565532	40	"	Dec. 10/80
L 669790	40	"	Jan. 24/83
L 669791	40	"	Jan. 24/83
L 669792	40	"	Jan. 24/83
L 669793	40	"	Jan. 24/83
L 669794	40	"	Jan. 24/83
L 669795	40	"	Jan. 24/83
L 669796	40	"	Jan. 24/83
L 669797	40	"	Jan. 24/83
L 669798	40	"	Jan. 24/83
L 669799	40	"	Jan. 24/83
L 678800	40	"	Feb. 04/83
L 735602	40	"	Oct. 03/83
L 735603	40	"	Oct. 03/83
L 735604	40	"	Oct. 03/83
L 735605	40	"	Oct. 03/83
L 735606	40	"	Oct. 03/83
L 735607	40	"	Oct. 03/83
L 735608	40	"	Oct. 03/83
L 736844	40	"	Oct. 03/83
L 736845	40	"	Oct. 03/83
L 736846	40	"	Oct. 03/83
L 736847	40	"	Oct. 03/83
L 736848	40	"	Oct. 03/83
L 737603	40	"	Jan. 03/84
L 737604	40	"	Jan. 03/84
L 737605	40	"	Jan. 03/84
L 737606	40	"	Jan. 03/84
L 737980	40	"	Feb. 27/84
L 737981	40	"	Feb. 27/84
L 760394	40	"	May 12/83
L 760395	40	"	May 12/83
L 760396	40	"	May 12/83
L 760397	40	"	May 12/83
L 760398	40	"	May 12/83
L 760964	40	"	May 12/83
L 760965	40	"	May 12/83
L 760966	40	"	May 12/83
L 760967	40	"	May 12/83
L 760968	40	"	May 12/83

Total: 41 claims for approximately 1,640 acres.

Suffixe L denotes claims belonging to the Larder Lake Mining Division of Ontario.

Claims L 565531 and L 565532 are under an extension of time to and including August 31, 1984 for submission of work; claims L 669790 to L 669799 are under an extension to and including July 24, 1984; claim L



G. J. HINSE

G. J. Hinse

G. J. HINSE - MARCH, 1984

Figure 2.

LOCATION AND PROPERTY MAP
of the
HARKER LAKE PROPERTY
for
JOHN A. POLLOCK
HARKER TOWNSHIP ONTARIO

PROJECT 2285 NTS 32 D/05-0402

678800 is under an extension to and including August 2, 1984; all the remaining claims will require assessment work to be submitted before their first anniversary date, being one year from the date listed above, unless an application is made to apply for an extension of time.

Property ownership is thus warranted secure and as stated above.

HISTORY OF PROPERTY

Prospectors entered the area through Lightning river as early as 1907 and 1908 following up the discoveries made earlier at Cobalt. Yet, it was not until 1917 that the first important gold find, known then as the Cochenour, later as the Meridian and now as Coin Lake, was made in Harker township. In 1922, renewed activity by prospectors led in 1923, to the discovery of the Golden Harker Explorations' vein which was subsequently developed through a 1,000' shaft and lateral work on four levels. The property was closed down in 1929. On the property adjoining the Harker Lake property to the east, James R. Cryderman made two discoveries in 1923. Later work outlined a zone of mineralized rhyolite reported as having an average width of 6.0 feet with an average gold content of 0.144 ounce per ton, along a length of 1,200 feet. Later, the recognition by W.C. Martin of a major fault zone extending from the Porcupine area east into Quebec led to renewed prospection in the area in 1944 on what is called the Destor-Porcupine fault zone. By 1949 all activities has ceased, and prospecting for gold was negligible.

However, recent increases in bullion prices for gold have led to a re-examinations of old showings and properties. Northeast of the Harker Lake property, in Holloway township, Camflo Mines are currently exploring the McDermott Mines' prospect and have secured property options along the favorable horizon for five miles to the west. To the west, in Garrison township, Kerr Addison Mines are active developing the old Buffonta property. Mining was carried out by Kerr in the main ore zone some years ago and current diamond drilling to the east of that zone is returning ore grade values across good widths. The Golden Harker property has recently been optioned by Lenora Exploration and work is planned for the coming summer.

The assessment work records of the Ontario Geological Survey at Kirkland Lake indicate that very little work has been done over most of the Harker Lake property. Only the most easterly claims were recently covered with line cutting and survey work consisting of radiometric and magnetic surveying. Again, a few of the most easterly claims were part of Harlight Gold Mines' property during 1945 and were covered with a magnetic survey.

No work has been done by the current owner since acquiring the claims.

GENERAL GEOLOGY

The consolidated rocks underlying the Harker Lake area are Precambrian in age and consist of metavolcanic and metasedimentary rocks intruded by stocks and sills of gabbro, peridotite, dunite and serpentinite; feldspar porphyry, diorite, granodiorite and syenite, some intrusions attaining batholithic size. The older rocks were subsequently intruded by mica lamprophyre and diabase dikes. Metamorphism of the older rocks is developed to the greenschist facies. The rocks are characteristic of greenstone belts of the Superior Province of the Canadian Shield.

The rocks have been folded along east-west and north-south trending axis. Metamorphism is believed to have developed at deep levels of folding and burial giving rise to intrusion that forms domical mass of batholithic dimensions.

The oldest rocks comprise an assemblage of mostly basic and rhyolitic volcanic flows with interbedded sediments. These rocks are believed to underlie a large part of the property. No intrusive has been mapped on the property. However, magnetic surveys done in the east part of the claim area suggest a north-south striking diabase dike to occur at that location.

The volcanic rocks consist of pillowed and massive basalt, locally diabasic, gabbroic and dioritic; and, blotchy, green to black cherty rhyolite. Sediments consist mostly of basaltic tuff and carbonate rich clastic sediment intermixed with chemical sediment consisting of chert, albite, carbonate and pyrite.

The general formation strike N 70° E, faces to the south and dip steeply to the south.

ECONOMIC GEOLOGY

General Considerations:

In the area, gold mineralization is found associated with horizons identified previously as rhyolite. These horizons consist of chert, albite, carbonate and pyrite. They occur closely associated with clastic sedimentary horizon consisting mostly of volcanic tuff and various clastic carbonate-rich sediments. Associated minerals may include carbonate, graphite, tourmaline, quartz and/or chert, epidote, specularite, hematite, chalcopyrite, galena, and sericite.

On the former Harlight Gold Mines' property, adjoining the Harker Lake to the east, a mineralized zone discovered by James R. Cryderman in 1923 was traced along a strike length of 1,200 feet by diamond drilling. This zone is reported to have an average width of 6 feet with an average gold content of 0.144 ounce per ton. The mineralized zone is contained within basalt, either pillowed or diabasic with flow breccia tops. Locally, it is in contact with clastic carbonate-rich sedimentary rocks. The volcanic rocks trend N 65-75° E and dip steeply to the south.

The mineralized zone has been described as being a rhyolite flow, minutely fractured, carbonatized, fine-grained black rock consisting of feldspar, minute plates of specularite and carbonate which obscure the original texture of the rock. The rock is well-mineralized with quartz containing pyrite, chalcopyrite and galena.

The zone is conformable to the enclosing rock formation and can be projected to the adjoining Harker Lake property.

Survey Work:

A magnetic survey done in 1945 on a property south of the Cryderman prospect and that included part of the Harker Lake property, on lines 200 feet apart covered part of claims L 565531, 565532, 669794, 737603 and 737604, located within the east portion of the Harker Lake property. The surveyed area is all drift-covered. Results show a high of 2,000 gammas more or less above background, located close to the north boundary, decreasing to a low of less than 500 gammas to the south. The same area was re-surveyed by D.F. Hurd in 1982. The axis of this magnetic anomaly is shown on Figure 3., 'General Geology of the Harker Lake Property', accompanying this report.

Claims L 565531 and 565532, and other claims to the north, were covered in 1982 with a magnetic and radiometric surveys on north-south lines, 400 feet apart, with stations every 100 feet. The area covered is located within a flat sand plain. Attempts at trenching were also carried out with a sounding bar to a depth of 9.0 feet. This failed to reach bedrock. The radiometric survey, possibly done to outline any hidden intrusive, did not outline any anomaly. Readings were consistently low throughout the survey area. The magnetic survey outlined an east-west striking anomaly located near the center of claim L 565531, coincident with the one indicated by the Harlight survey. The anomaly has wide shoulder and can be interpreted as possibly representing an increase in ferromagnesian minerals in the underlying volcanic rocks. From the anomaly southward, magnetic values decrease by as much as 400 gammas to the south boundary of the Harker Lake property.

The most easterly claims, L 737603, 737605 and 737606, were covered with a magnetic survey on north-south lines, 400 feet apart, with stations at every 100 feet. The survey area is underlain by heavy overburden with only one small outcrop of pillowed lava occurring in the northeast corner of claim L 737603. A north-south striking anomaly of some 100 gammas above background was outlined, coincident to the north with the outcrop. The attitude of this anomaly, being normal to the general schistosity strongly suggests that it is caused by a north-south trending diabase dike.

INTERPRETATIVE CONSIDERATIONS

Within the property area, the underlying rocks are masked by a thick cover of outwash and glaciofluvial deposits. Thus, little is known about the geology of the property. However, a mineralized horizon and host rocks as identified by previous work on the adjoining property to the east can be projected onto the Harker Lake property. This horizon is known to be gold-bearing, previously identified as a mineralized rhyolite consisting of feldspar, sulfides, carbonate and quartz and/or chert. Similar horizon, usually intercalated within volcaniclastic and clastic carbonate-rich sedimentary rocks also occur on the Golden Harker property to the south and on the McDermott property to the north, now under option to Camflo Mines. The McDermott horizon, through recent work, has been traced along strike to the Consular-Harker property, now owned by Lenora Exploration Limited. The similarity and stratabound nature of the mineralized horizons through the area would strongly suggest that they are related major geological units represented by chemical sedimentary rocks.

The presence of quartz veining is interpreted as representing a condition of mild redistribution of contained gold and silica within the sediments, probably not involving much movement from their original sedimentary depositional configuration.

On strike to the west of the Harker Lake property, Amax Exploration Inc. drilled two holes in 1968 as a follow-up of an airborne survey. Both holes, 5,000 feet apart, intersected thick units of carbonatized graphitic sediments intercalated within basaltic volcanic tuffs. This sedimentary horizon can be correlated on strike with the one postulated to cross the Harker Lake property from the Cryderman prospect. The strong and persistent nature of the Cryderman horizon strongly suggest that it could be a major one, in some ways similar to the Consular-Harker-McDermott horizon to the north.

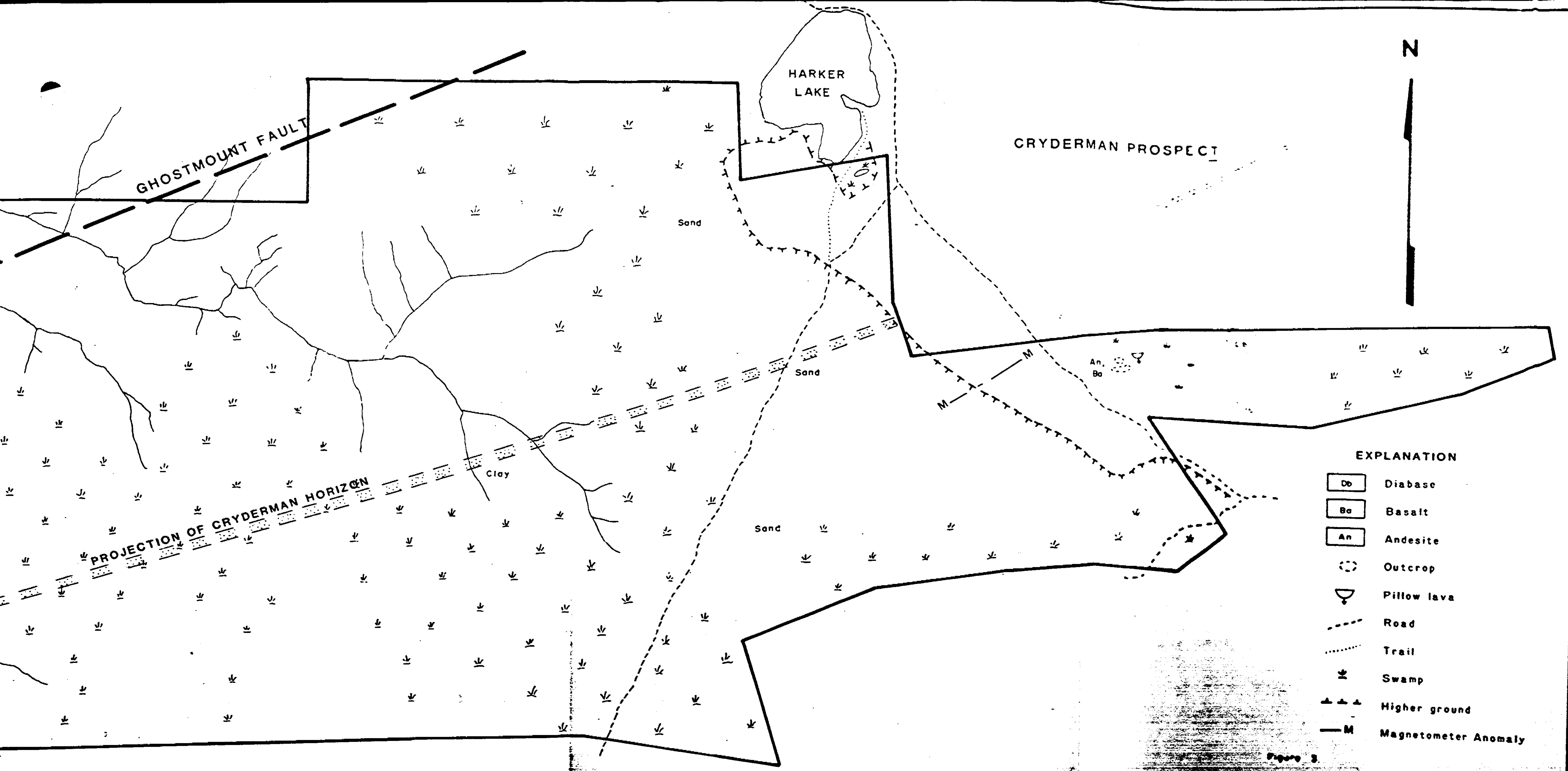
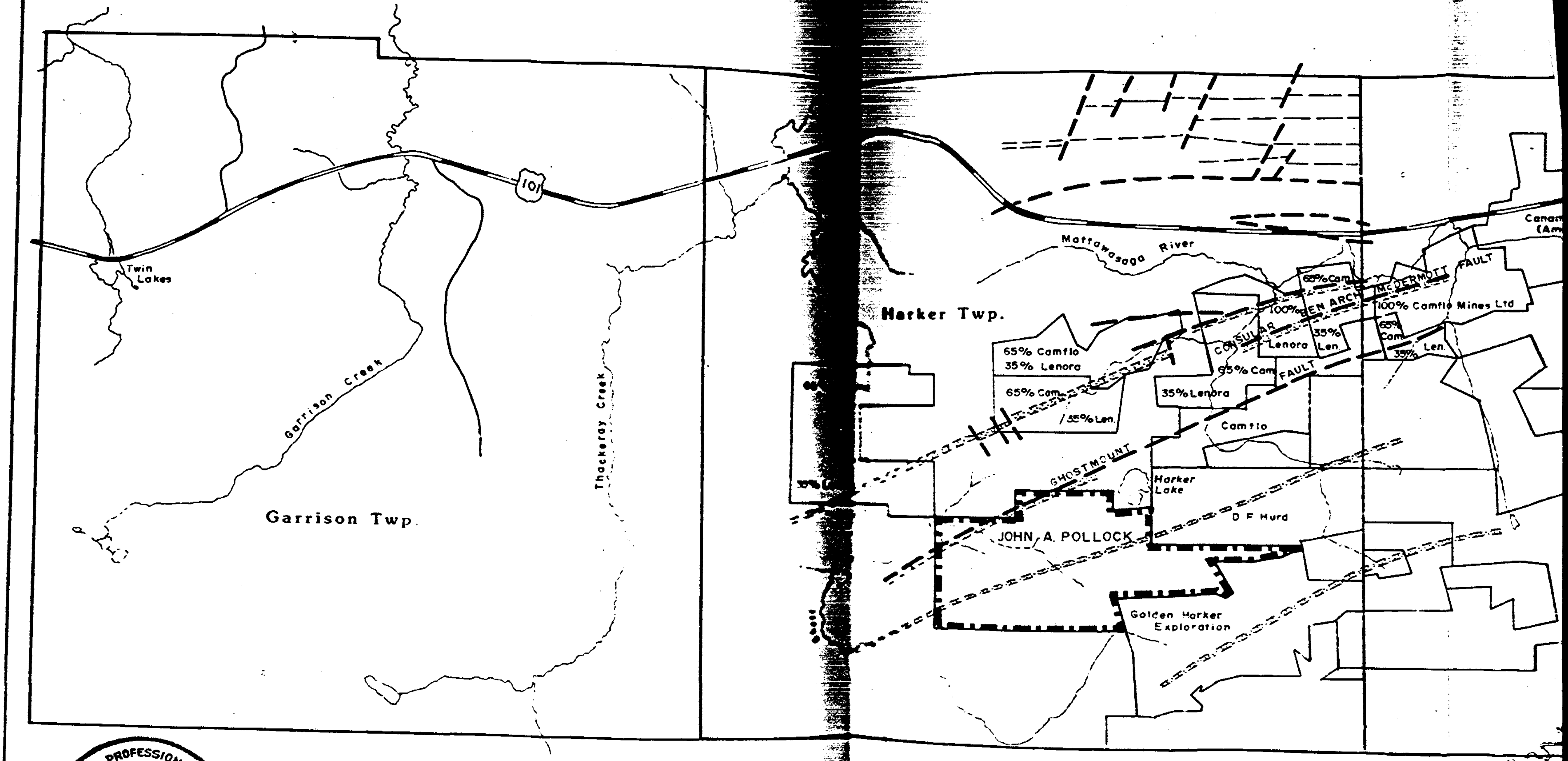


Figure 3

GENERAL GEOLOGY
of the
HARKER LAKE PROPERTY
for
JOHN A. POLLOCK
TOWNSHIP ONTARIO
SCALE 1" = 1000'
1000 feet
200 300 metres
PROJECT 2290 NTS 32D/05-0402



REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

G. J. Hinse

G. J. HINSE - MARCH, 1984

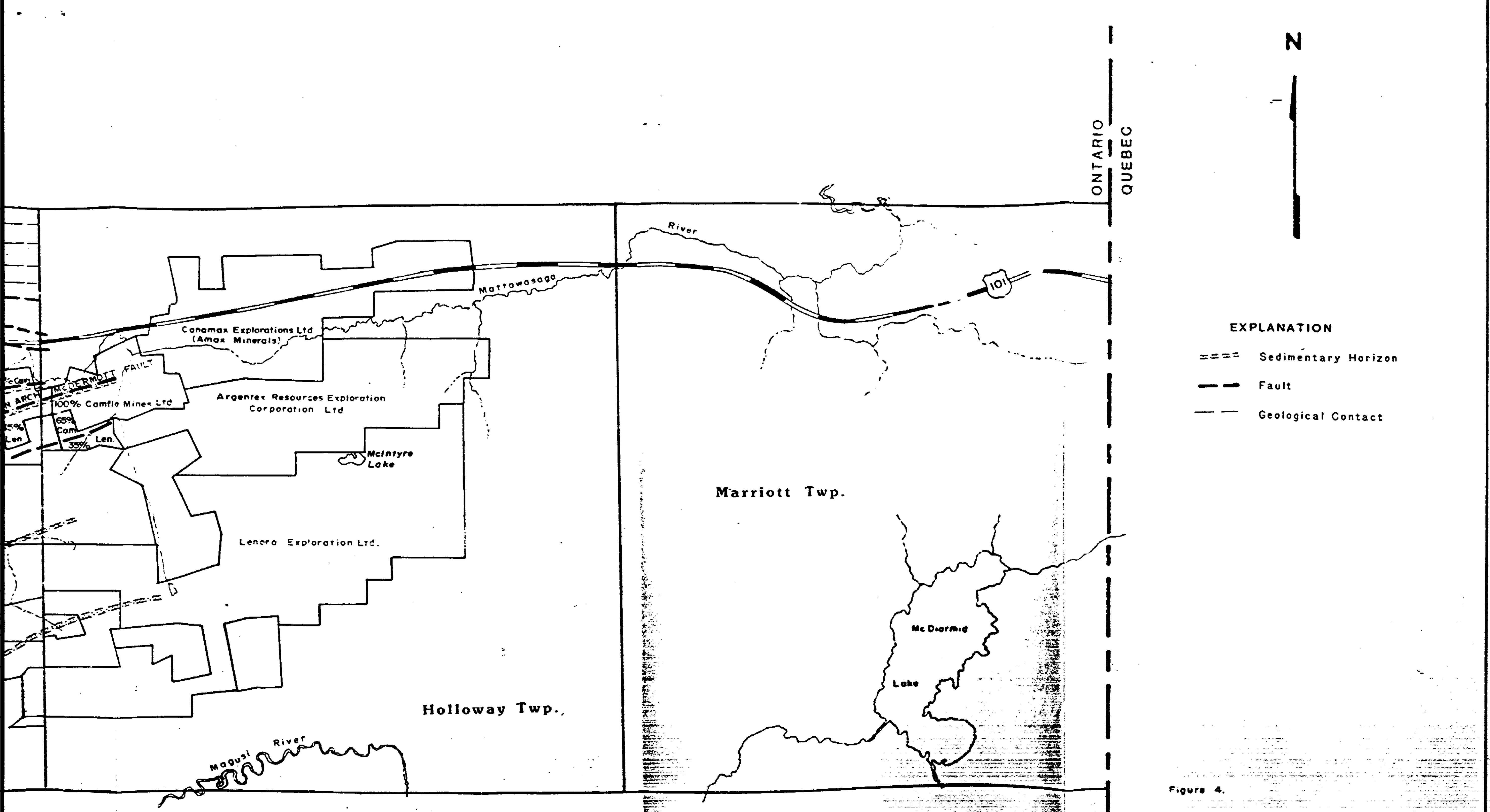
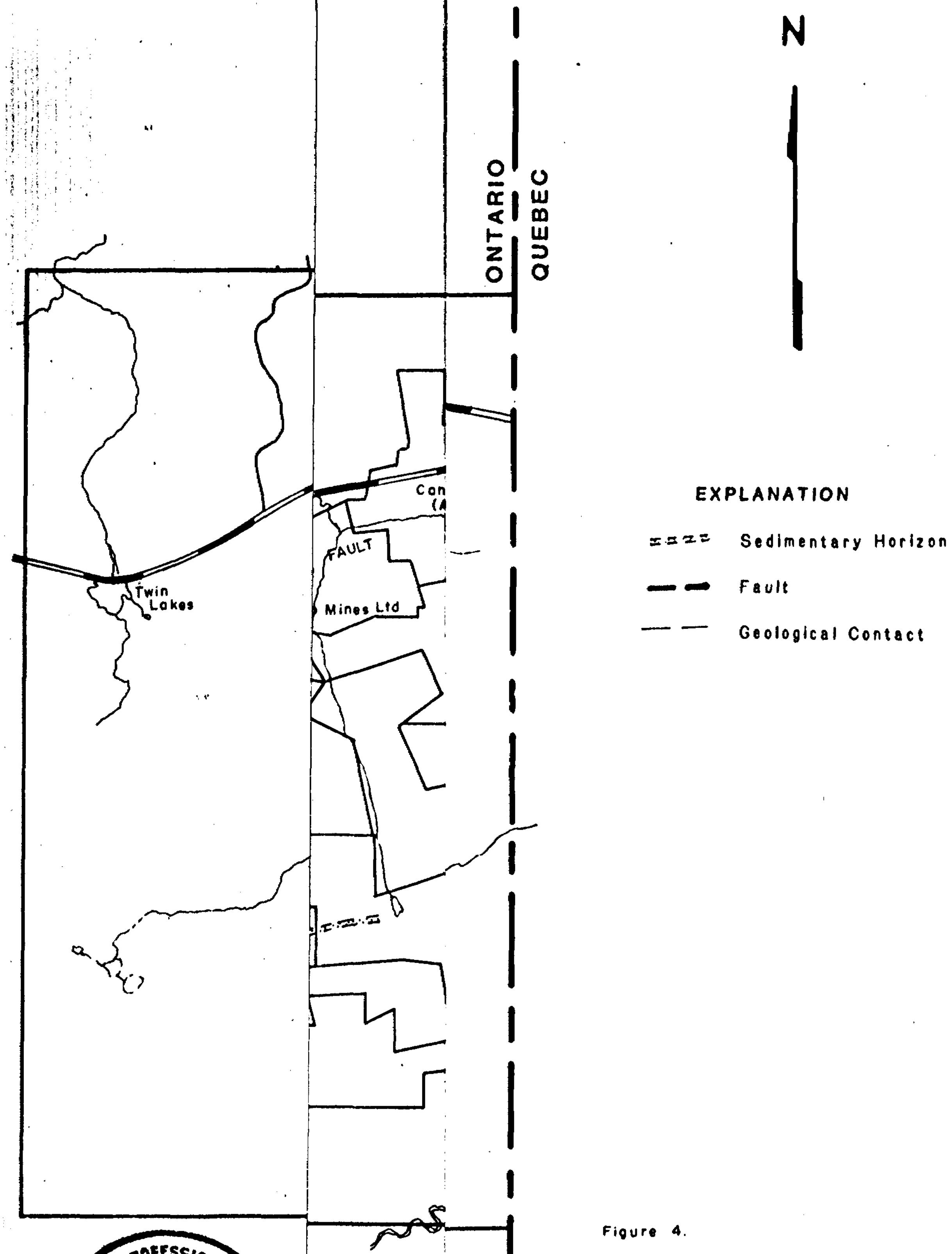


Figure 4.

GENERAL GEOLOGY
of
HARKER TOWNSHIP AREA
SHOWING SEDIMENTARY HORIZONS
for
JOHN A. POLLOCK
HARKER TOWNSHIP ONTARIO
SCALE: 1"= 1mile

PROJECT 2255 NTS 32D/05-0402



EXPLANATION

▭▭▭▭	Sedimentary Horizon
▬ ▬	Fault
— —	Geological Contact

Figure 4.

GENERAL GEOLOGY
of
HARKER TOWNSHIP AREA
SHOWING SEDIMENTARY HORIZONS
for
JOHN A. POLLOCK

HARKER TOWNSHIP ONTARIO

SCALE: 1"= 1mile

1 1/2 0 1 mile

PROJECT 2255 NTS 32D/05-0402

REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

G. J. Hinse

G. J. HINSE - MARCH, 1984

PROPOSED EVALUATION PROGRAM

General Considerations:

Gold mineralization in the area is shown to be related to horizon of clastic and chemical sedimentary rocks, thus, is stratiform in nature, and contained within units of mafic volcanic rocks. In that the host volcanic rocks carry ferromagnesian minerals and/or magnetite, the volcanic units can be traced with magnetic survey work with sufficient details to pinpoint areas lower magnetic response, underlain with sedimentary rocks. Indeed, the airborne magnetic sheets 45A and 46A, Lightening River and Magusi River, of the Geological Survey of Canada, at a scale of 1" = 1 mile, outline a series of parallel magnetic highs and lows crossing the Harker-Holloway township area. However, since the underlying rocks on the Harker Lake property are covered with thick overburden, thus masking partly the magnetic signature of the favorable sedimentary horizon, survey work could result in outlining only very weak anomalies. This combined with the fact that the volcanic rock overlying the favorable sedimentary horizon is gabbroic, reflected very well by the results of the ground survey work done to-date, this condition may in fact locally mask completely the magnetic response of the sedimentary rocks. However, close readings may help define the horizon by analysis of shoulder patterns to identify irregularities.

A chemical sedimentary process such as implied to have been extant in the area, may well have accumulated organic matter, carbonate, pyrite, and other sulfides in paleodepression marked by channels of previous sedimentation. Thus, conductive zones responsive to electromagnetic methods could be used as indicators of favorable contacts. Nevertheless, whether they are gold-bearing or not remains an open question. However, it is not known if electromagnetic methods could be successful in penetrating the thick overburden cover of the Harker Lake property, nor are they known to contain graphitic material.

Since the Harker Lake property is drift-covered and that sounding carried out failed to reach bedrock, surface work such as prospecting, overburden trenching, will not be effective on the Harker Lake property.

Basal till geochemical work, a tool developed in recent years, is highly effective to prospect for gold mineralization hidden under a thick cover of overburden. This method, as used by Canadian Nickel and Golden Knight Resources along the North Abitibi gold belt, in Northwestern Quebec, has proven to be highly successful in outlining gold mineralization under the thick cover of the Abitibi clay belt.

Geophysical data presently available covers only a small portion of the property and is considered inadequate for the purpose of the present evaluation program.

Proposed Evaluation Program:

An exploratory program is hereby proposed to evaluate the potential of the Harker Lake property for gold mineralizations of stratiform nature. As discussed above, it is suggested that a magnetic survey may be a most appropriate tool to trace along strike onto the Harker Lake property, the Cryderman gold-bearing horizon. Owing to the fact that the mineralized horizon is narrow, occurring in an area of thick overburden and that it is located along a strong magnetic high caused by gabbroic basalt, discrimination of the sedimentary horizon may be difficult. It is suggested that a few detailed lines of magnetic survey work be done across the Cryderman prospect to obtain a magnetic signature that could be very helpful in interpretation. Of course, a permission should be obtained from the current owner of this property, Mr. D.F. Hurd. Magnetic surveying should cover all the property to search for parallel horizons. Such a horizon could be found in the north portion of the property along the projection of the Ghostmount fault.

Electromagnetic survey work is not suggested at this time since the mineralization as known will not be sufficiently conductive to show through thick overburden. However, in the most westerly portion of the property, if magnetic surveying fails to outline the sedimentary horizon as projected, then it is possible that HEM-electromagnetic survey work with wide coil separation could be successful in tracing the sedimentary unit, since it is graphitic a short distance away from the west boundary of the Harker Lake property.

The targets outlined by magnetic survey work should be followed up with basal till geochemical work to further discriminate the best targets. This could be done with either with track-mounted reverse circulation equipment or portable plugger work.

Diamond drilling of the best targets will certainly be required. Yet, at this time, drill requirements are difficult to evaluate. However, a provision is being made for a minimum amount of drilling.

Cost Estimate:

Phase 1.

Line cutting at every 100 meters centers, including base lines, 70 kilometers @ $150/km	$10,500
Magnetic surveying, 65 kilometers @ $80/km	5,600
Basal till geochemical sampling, 2,000 feet @ $8.00/ft.	16,000
Diamond drilling, 300 meters @ $75/meters	22,500
Analytical work	5,000
Compilation, interpretation	3,000
Supervision, consulting services	10,000
Contingencies, 10%	7,500
Total, phase 1.	$80,100

Phase 2.

Further diamond drilling, if required, 1,500 meters @ $75/meters	$112,500
Analytical work	5,000
Compilation, interpretation	5,000
Supervision, consulting services	25,000
Contingencies, 10%	15,000
Total, phase 2.	$162,500
TOTAL, PHASE 1 and 2	$242,600

We believe that the implementation of the above program should be more than sufficient to identify the framework of any possible gold-bearing mineralization.

CONCLUSIONS AND RECOMMENDATIONS

The Harker Lake property covers the extension on strike of a gold-bearing sedimentary horizon shown on the adjoining property to the east to have an average width of 6.0 feet and an average gold content of 0.144 ounce per ton along a strike length of 1,200 feet. The persistence and strength of this gold-bearing sedimentary unit is attested by the fact that it is interpreted to have been intersected further to the west of the property in holes drilled by Amax Exploration Inc. Because of higher magnetic response due to the presence of magnetite and/or ferromagnesian minerals in volcanic host rocks, the favorable horizon is believed traceable by magnetic survey work.

The underlying rocks of the Harker Lake property are largely covered by thick outwash and glaciofluvial deposits. Past work in the area was largely oriented towards surface work done in areas of rock outcrops, and thus, little is known of the property and no evaluation has been done of the economic potential of this property. However, it is believed that a combination of geophysical and basal till geochemical work could effectively test the gold potential of the property.

A two phase evaluation program is recommended. The first phase consisting mainly of line cutting , magnetic surveying, basal till geochemical sampling and diamond drilling is estimated to cost $80,100. If results warrant, further work will be needed and a second phase will consist chiefly of diamond drilling with an estimated at $162,500 for a total estimated cost of $242,600.

Respectfully submitted

G. J. HINSE

Sudbury, Ontario
March 15, 1984

G.J. Hinse, P.Eng.

CERTIFICATE OF QUALIFICATIONS

I, G.J. Hinse, hereby certify that:

1) I reside at 9 Gloucester Ct., Sudbury, Ontario, P3E 5M2

2) I am a qualified geologist, having received my training at Laval University.

3) I am a registered Professional Engineer of the Province of Ontario.

4) I have been continuously engaged in my profession for the last twenty-five years.

5) The foregoing report on the Harker Lake property to John A. Pollock is based on a visit to the property and the area during 1982, the records of work done by previous owners, published geological maps and reports and assessment work files.

6) I do not have, nor do I expect to receive any interest in the property described in the foregoing report or in the securities of any company concerned with this property.

7) I hereby consent to the use of the foregoing report by a company in a prospectus or a statement of material facts relating to the raising of funds for this project.

Sudbury, Ontario
March 15, 1984

G. J. HINSE

G.J. Hinse, P.Eng.

APPENDIX I.

References and Sources of Information.

APPENDIX I.

References and Sources of Information.

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MAGNETOMETER SURVEY REPORT

ON THE

PERREX RESOURCES INC. PROPERTY

HARKER LAKE GRID

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

FOR

ALEXANDER H. PERRON

JULY 21, 1984

MARY GREER
GEOPHYSICAL TECHNICIAN

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HARKER LAKE GRID

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

INTRODUCTION

For the recording dates on the Perrex Property see the list of claim numbers and recording dates found in Appendix I.

During the months of May and June, 1984, a geophysical grid, at a 400 foot line spacing, was established by Perrons' Inc. A magnetometer survey was subsequently completed by Perrons' Inc. during June 1984, over the entire Perrex Property. The instrument used for this geophysical survey was an EDA OMNI 350 Proton Precession Magnetometer.

The geophysical survey was conducted by Mary Greer of Perrons' Inc., Kirkland Lake, Ontario.

All drafting and interpretation was completed by Mary Greer.

The purpose of this report is to briefly describe the results obtained in the said survey.

The anomalies detected therefrom are shown on the accompanying plan maps at a scale of one inch to 200 feet, that form an integral part of this report.

PROPERTY DESCRIPTION

The Perrex Property consists of a contiguous block of forty-one (41) unpatented mining claims located in Harker township, Larder Lake Mining Division, District of Cochrane, Ontario. Refer to Appendix I for a complete list of the claim numbers.

Ownership of the claims has been attested to by Alexander H. Perron of 103 Government Road East, Kirkland Lake, Ontario, and was not independently ascertained by the writer. (See Figure 1a).

LOCATION AND ACCESS

The Perrex Property is located in the southeast central part of Harker township, south of Harker Lake and one mile east of the Ghost River. Harker township is approximately thirty (30) miles due east of the town of Matheson, Ontario, along highway No. 101. Matheson is approximately forty (40) miles northeast of the town of Kirkland Lake, Ontario, via highway No. 66 and No. 11.

The property is accessible by standard forestry access roads which criss-cross the Harker area. The main road runs south approximately one mile east of the Ghost River. This road travels south for three (3) miles and then east for two (2) miles swinging around Harker Lake to the Perrex Property and camp. Another road extends south again one mile west of Harker Lake traversing down the west side of the property.

Harker township has an abandoned airstrip located east of the camp.

Kirkland Lake is accessible from Toronto, Ontario, by Nord-Air or Ontario Northland Railroad, and public highways. (See Figure 1a and 1b).

PREVIOUS WORK

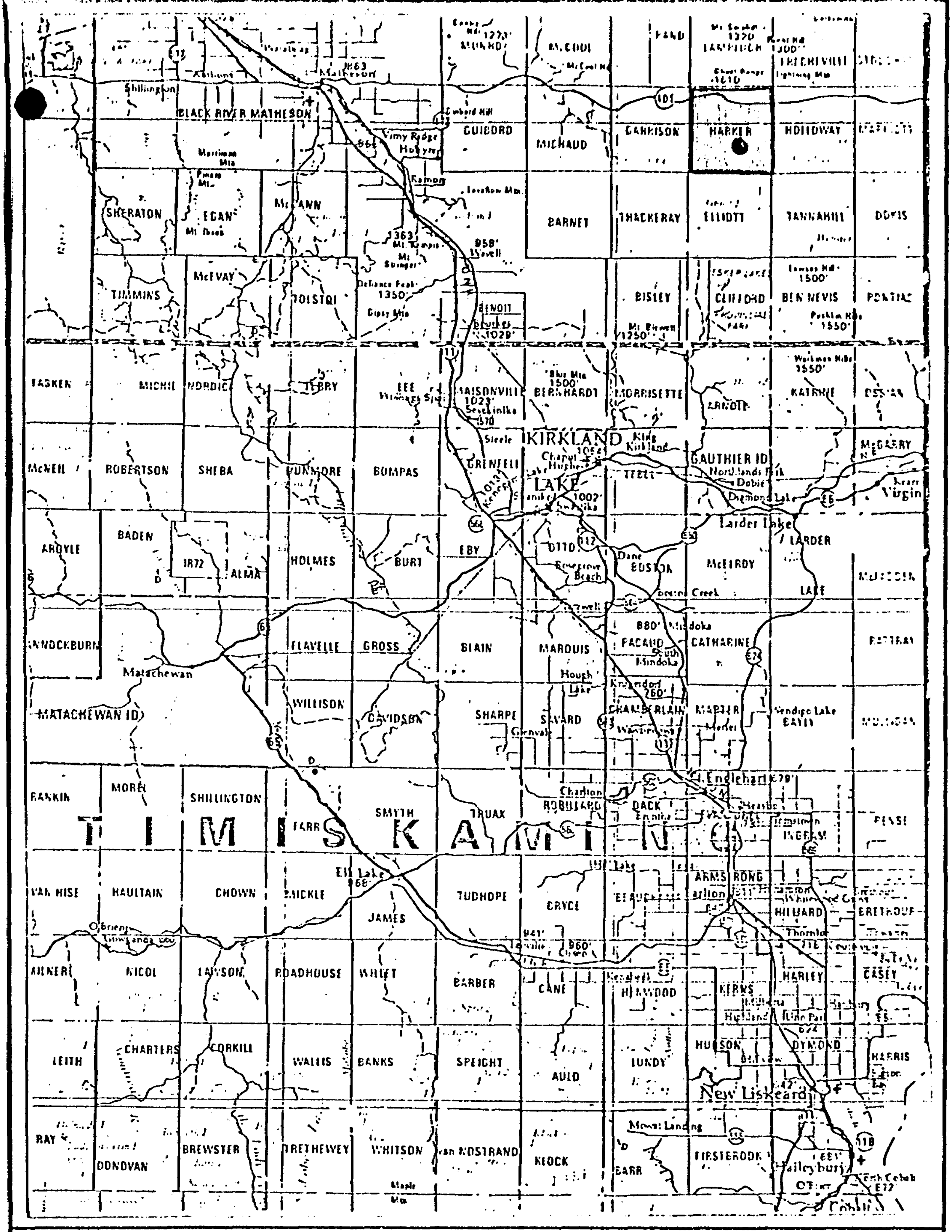
Due to the large amount of overburden, no previous work has been carried out on the Perrex ground. Due to the overburden the claims have been overlooked by other exploration companies.

SURVEY PROCEDURE

A baseline was established from the patent pin at the corner of claim L-669790. The baseline was turned off at an angle of 240° to traverse approximately parallel to the general line of strike of the underlying bedrock.

The baseline was cut for a total footage of 11,100 feet. A grid system of picket lines at 400 foot spacings with stations every 100 feet, was established at right angles to the baseline. Readings were taken at 50 foot intervals along the picket lines.

The primary magnetic base station was established at the Perrex Base Camp, approximately at L 106+00 E 1+00 N. Secondary check stations were established at every 2,000 foot mark along the baseline and at each baseline-picketline intersection.



Location Map

Figure 1b

The time interval between each secondary magnetic check was approximately every one hour.

After the survey was completed, the lines were tied into topographical features using air photos at a scale of one inch to 1,320 feet.

TOPOGRAPHY

The general terrain of the property consists of sand and glacial till covered over a gentle undulating land. Harker Lake is located in the northeast corner of the Perrex Property and the property is cut by a number of creeks which have been flooded by beavers into small ponds. There are some areas of clay beds and these areas are generally wet.

Due to recent logging operations carried out in 1979, the area is open scrub bush covered with young poplar and thick dense stands of willow and alder. Some areas untouched by the logging operations are covered by black spruce and spruce bog.

The eastern claims are open with replanted red pine saplings.

GENERAL GEOLOGY

The underlying bedrock of Harker township are of the Archean age belonging to the Abitibi greenstone belt of the Superior Province.

The bedrock is primarily basic to acidic lava flows, with the basic lava types being the most predominate. Lying between these lava flows are interflow sedimentary bands of greywacke, arkose and some iron formation.

The Abitibi greenstone belt is part of a large synclinorium which trends east-west. The Destor-Porcupine fault occurs on the northern edge and the Kirkland-Larder Lake Break occurs on the southern edge.

The Perrex property is crossed in a northeast southwest direction by the Ghostmount fault and sedimentary horizon and by the Cryderman sedimentary horizon. Both horizons run parallel to each other along the strike of the underlying bedrock.

ECONOMIC GEOLOGY

There are five (5) parallel complex horizons of interflow sediments and fault zones which trend northeast - southwest through Holloway, Harker, Elliott and Thackeray townships.

Extensive diamond drilling programs in Holloway and Harker townships by Canamax and Camflo Resources are proving up large gold bearing zones.

A gold discovery was recently found along the Ghostmount sedimentary horizon, only two (2) miles northeast along strike of the Perrex property.

The same zones found along strike to the southwest of the Perrex property are being found in Thackeray township by Kerr Addison Mines.

The newly discovered zones have potential economic gold tonnage and future full scale mining operations are being proposed.

The Perrex property lies in the middle of these areas with the same gold bearing horizons crossing the property.

INSTRUMENTATION

i) Magnetic Survey:

This system uses a backward motion of spinning protons of a hydrogen atom within a fluid of hydrogen and carbon. These spinning magnetic protons are caused to have two opposite poles by applying a magnetic field using a current within a coil of wire. When the current is stopped, the protons precess about the earth's magnetic field and in turn generate a small current in the wire. This frequency of precession is proportional to the earth's total magnetic field.

This instrument is read directly in gammas which is the absolute value of the earth's total field for that station.

The instrument used for this survey was an EDA OMNI 350 Proton Precession Magnetometer, this instrument has a sensitivity of .01 gamma.

The diurnal variation was monitored by closing each loop at any secondary check station, at a gridline-baseline intersection.

Diurnal corrections were applied by linear distribution of any observed variation over the time between base stations. The corrections were calculated by using a time vs. drift graph.

PRESENTATION AND DISCUSSION OF RESULTS

The field data is presented on five (5) map sheets, at a horizontal scale of one inch to 200 feet, found in the back pockets of the report and numbered as follows:

Map No. 84 - Prx - NE - 1; Map No. 84 - Prx - NW - 1
Map No. 84 - Prx - SE - 1; Map No. 84 - Prx - SW - 1
Map No. 84 - Prx - E - 1

The magnetic data is illustrated as isomagnetic contours (contour interval: 100 gammas) on a Map of corrected magnetic values recorded at each station.

There is a fairly distinct magnetic trend in a northeast-southwest direction. The magnetic trend does not appear to be interrupted by any major structures trending in the opposite direction.

There is a large magnetic high found on the northeast sheet in the vicinity of claims L-669798 and L-669799. This strong magnetic high appears to be pinched out southwest along strike by two (2) magnetic lows trending parallel to the magnetic high.

The same northern magnetic low may be interrupted by a wide area of slightly higher magnetic relief. The magnetic low can be located along the same strike on the northwest sheet.

To the south of the baseline at approximately 6 + 00 S is a magnetic high trending parallel to the baseline for it's complete length.

This high also has magnetic lows trending parallel to it's boundaries for it's complete length.

South of these described structures lies a wide uniform higher magnetic relief which continues off the property. This area lacks the distinct magnetic high and low alternating pattern of the previously described structures.

The magnetic low to the north of the baseline is approximately 1200 feet wide as shown on the northwest sheet. The area shown on the northeast sheet is narrower being surrounded by the higher magnetic relief.

CONCLUSIONS AND RECOMMENDATIONS

The areas of interest on the Perrex Property are the alternating magnetic high and low band which trend the full diagonal length of the Perrex group.

The magnetic highs are areas of basic to acid lava flows, some being wider and more massive as illustrated by the uniform magnetic high found south of the baseline. The areas to be considered for future gold bearing zones are the magnetic lows which are probably interflow sediments.

These sediments were laid down during the long periods between the Pre-Cambrian lava flow activity. It was in these periods that gold mineralization was allowed to take place during the timeless intervals of sediment formation.

The magnetic low that trends approximately 12 + 00 S parallel to the baseline is in the same position as the previously proposed location of the Cryderman horizon.

This horizon should be examined by further defining it's boundaries with a Gradiometer survey and then overburden drill holes to test the underlying bedrock. Upon approval of any results diamond drilling should be marked out along the complete strike length.

The larger magnetic low is interrupted by a higher magnetic relief and it's boundaries are not so clearly shown. It is recommended that this area be closely examined by overburden drilling with a very wide spacing used to try and locate the underlying structural boundaries.

Respectfully submitted,

Mary Greer

July 21, 1984

Mary Greer
Geophysical Technician

BIBLIOGRAPHY

- Sixtieth Annual Report of the Ontario Department of Mines.

being Vol. LX, Part VII, 1951

Geology of Harker Township by

J. Satterly

CERTIFICATE

I, Mary Greer, of Lynden, Ontario, do hereby certify:

1. That I am a Geophysical Technician and reside at:
   49 McKelvie Avenue, Kirkland Lake, Ontario.

2. That I graduated from Sir Sandford Fleming College at Lindsay, Ontario, in 1978, with a diploma as a Geological Technician.

3. That I was employed as a Geophysical Technician by H.E. Neal and Associates Limited for 18 months.

4. That I have been practising my profession for a period of (5) years and I am qualified to write this report.

5. That I supervised and participated in this survey.

July 21/84
Date

Mary Greer
Mary Greer
Geophysical Technician

APPENDIX I

CLAIM NUMBER	RECORDING DATE
L-669790	January 24, 1983
L-669791	January 24, 1983
L-669792	January 24, 1983
L-669793	January 24, 1983
L-669794	January 24, 1983
L-669795	January 24, 1983
L-669796	January 24, 1983
L-669797	January 24, 1983
L-669798	January 24, 1983
L-669799	January 24, 1983
L-678800	February 4, 1983
L-735602	October 3, 1983
L-735603	October 3, 1983
L-735604	October 3, 1983
L-735605	October 3, 1983
L-735606	October 3, 1983
L-735607	October 3, 1983
L-735608	October 3, 1983
L-736844	October 3, 1983
L-736845	October 3, 1983
L-736846	October 3, 1983
L-736847	October 3, 1983
L-736848	October 3, 1983
L-737603	January 3, 1984
L-737604	January 3, 1984
L-737605	January 3, 1984
L-737606	January 3, 1984
L-737980	February 27, 1984
L-737981	February 27, 1984
L-760394	May 12, 1983
L-760395	May 12, 1983
L-760396	May 12, 1983
L-760397	May 12, 1983
L-760398	May 12, 1983
L-760964	May 12, 1983
L-760965	May 12, 1983
L-760966	May 12, 1983
L-760967	May 12, 1983
L-760968	May 12, 1983
L-565531	December 10, 1980
L-565532	December 10, 1980

Ontario

Ministry of Natural Resources

File

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) GEOPHYSICAL MAGNETOMETER
Township or Area HARKER
Claim Holder(s) ALEXANDER H. PERRON
103 GOVERNMENT ROAD EAST, KIRKLAND LAKE, ONT.
Survey Company PERRONS' INC.
Author of Report MARY GREER
Address of Author 49 MCKELVIE AVENUE, KIRKLAND LAKE, ONT. P2N 2K6
Covering Dates of Survey 20/05/84 - 20/07/84 (linecutting to office)
Total Miles of Line Cut APPROXIMATELY 50 MILES

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	40
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer ______ Electromagnetic ______ Radiometric ______
(enter days per claim)

DATE: July 21/84 SIGNATURE: Mary Greer
Author of Report or Agent

Res. Geol. ______ Qualifications ______

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

L	669790
(prefix)	(number)
L	669791
L	669792
L	669793
L	669794
L	669795
L	669796
L	669797
L	669798
L	669799
L	678800
L	735602
L	735603
L	735604
L	735605
L	735606
L	735607
L	735608
L	736844
L	736845
L	736846
L	736847
L	736848
L	737603
L	737604
L	737605
L	737606
L	737980
L	737981
L	760394
L	760395
L	760396
L	760397
L	760398
L	760964
L	760965
L	760966
L	760967
L	760968
L	565531
L	565532

TOTAL CLAIMS ______

If space insufficient, attach list

837 (5/79)

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Num[illegible]f Stations 1761 Number of Readings 3522

Station interval 100 FEET Line spacing 400 FEET

Profile scale

Contour interval 100 GAMMAS

MAGNETIC

Instrument EDA OMNI 350 PROTON PRECESSION MAGNETOMETER

Accuracy – Scale constant .01 GAMMAS

Diurnal correction method CLOSED LOOPS

Base Station check-in interval (hours) APPROXIMATELY 1 HOUR

Base Station location and value L 106 E 1 + 00 N 58957

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency (specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUC POLARIZATION
SISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

040

PROGRESS REPORT ON THE HARKER LAKE GOLD PROJECT

OF

PERREX RESOURCES INC.

FOR

THE PERIOD ENDING JULY 31, 1984.

G.J. Hinse, P.Eng.
9 Gloucester Ct.
Sudbury, Ontario
P3E 5M2

August 02, 1984
NTS 32D/5-0402
Project 2255

August 02, 1984

To the President and Directors
Perrex Resources Inc.
Suite 908
111 Richmond Street West
Toronto, Ontario M5H 2G4

Gentlemen

Re: Harker Lake Gold Project
Progress Report for the Period Ending July 31, 1984.

Total work done to-date on this project includes 33 miles of line cutting and ground magnetic surveying. Lines were cut at every 400 feet normal to a base line established with an azimuth of 240°. Magnetic readings were taken at every 50 feet along the cut grid, including the base line and tie lines. This work was performed as recommended in our report on this property dated April 24, 1984.

Much of the information contained in our previous report will not be repeated here. For further information, the reader is referred to that report.

Results of Work Done:

The ground magnetic survey has outlined three main anomalous areas. These are two linear magnetic lows that can be correlated with the extension onto the Harker Lake property of the Cryderman and Ghostmount gold-bearing horizons; and a third magnetic low outlined near the base line, from lines 28 E to 80 E.

The first anomaly is located at more or less 1200 S of the base line. It extends across of the property and is the expression of the rocks containing the Cryderman gold showing, just east of the property. Locally, the anomaly consists of two separate magnetic lows at a distance varying from less than 100 feet to more than 300 feet. Here, the main anomaly is well defined by low magnetic readings while the parallel anomaly is defined by low readings only on some lines. However, changes in shoulder patterns show this anomaly to be continuous.

The second anomaly is located north of the base line, from 1,000 N in the east portion of the property to 2,000 N in the west portion. It is the expression of the rocks classified as the Ghostmount horizon. This anomaly is broad with no parallel response. Between lines 5600 to 6400E, the anomaly appears to be displaced. Its continuation is somewhat masked by three individual moderate highs that could be interpreted as to represent intrusive emplaced within this horizon.

The third anomaly is located near the base line, from line 1600E to 8400E. It consists of four separate, relatively narrow magnetic lows. This anomaly is interpreted as representing local change in the underlying rock composition rather a major stratigrphic horizon.

The magnetic survey results are shown on a map at a scale of 1" = 200 feet accompanying this report. The line grid, property outline, and the locations of the magnetic lows, are shown on Figure 1, an abstract of map 80599, Harker Township, from the Matheson-Black River Area Total Intensity Magnetic Survey done by the Ontario Geological Survey. The results of this survey were recently released and show an excellent correlation with the field results.

Interpretation:

In the area, magnetic lows correlate with known gold-bearing horizons, such as the Camflo-McDermott-Consular Harker and the Coin Lake-Golden Harker. These magnetic lows outline horizons composed of rocks with lower iron content consisting mostly of volcaniclastics and sedimentary rocks, deposited above volcanic rocks of higher magnetic response. In time and place, each gold-bearing horizon marks the end of a volcanic cycle and a lull in volcanic activity, a time when erosion of the predominantly volcanic highlands alluviated a shallow continental margin along channels. In this survey, these channels are defined by broader areas of magnetic low.

Lulls in volcanic activity, marked by an increase in iron-poor volcaniclastics, favored the accumulation in paleobasin on a predominantly volcanic terrane, of gold, sulfides, silica, micas and clastic sediments.

Individual known gold-bearing horizons in the area can be easily identified on the recently-released total intensity magnetic map of Harker township. As noted, these includes the Ghostmount and Cryderman horizons shown to be present on the Harker Lake property.

A process as outlined above may well also have deposited organic matter in basins marking channels on the margin. Diamond drilling done by Amax on Input conductors located close to the western periphery of the property intersected graphitic units in a wide sedimentary horizons.

In summary, the magnetic survey has identified three magnetic lows thought to represent the extension onto the property of the Cryderman and the Ghostmount gold-bearing horizons. Another horizons has been outlined and could also represent a parallel gold-bearing horizon. Since it is possible that these horizons could be responsive to electromagnetic methods as demonstrated on the neighbouring property to the west, electromagnetic surveying using an instrument having deep penetration such as the MaxMin, should then be carried out before doing basal till geochemical sampling since it is quite possible that this work could provide excellent targets for drilling.

However, the failure of this survey to return any anomalies should not be taken as a negative factor in the further evaluation of the property and basal till geochemical surveying as recommended should be done to continue the evaluation of the magnetic lows.

Electromagnetic surveying should be done to cover the following areas:

Cryderman Horizon, L 8 E to L 44 E, from 700 S to 1700S
L 56 E to L 80 E, from 700 S to 1700 S

Ghostmount Horizon, L 20 E to 48 E, and L 72 E to 92 E,
500 feet on either of sides of the
axis of the magnetic low.

Intermediate Anomaly, L 32 E to 52 E and L 64 E to 80 E,
500' on either sides of the base
line.

The above survey will involve a total of approximately 8 miles for an overall estimated cost of $3,000.

Conclusions and Recommendations:

The recently-completed ground magnetic survey has identified on the Harker Lake property the extensions of the Cryderman and Ghostmount gold-bearing horizons. As well, a new horizon, intermediate betweem the Cryderman and the Ghostmount has also been identified. Although the response of the horizons to electromagnetic surveying is doubtful, nevertheless, if successful, it would provide at low cost, prime targets for further work. Hence, it is recommended. Further assessment of the economic potential of the property is recommended. The evaluation program, with the addition of electromagnetic surveying as outlined above, should proceeds ahead.

Respectfully submitted

REGISTERED PROFESSIONAL ENGINEER
G. J. HINSE
PROVINCE OF ONTARIO

G. J. Hinse

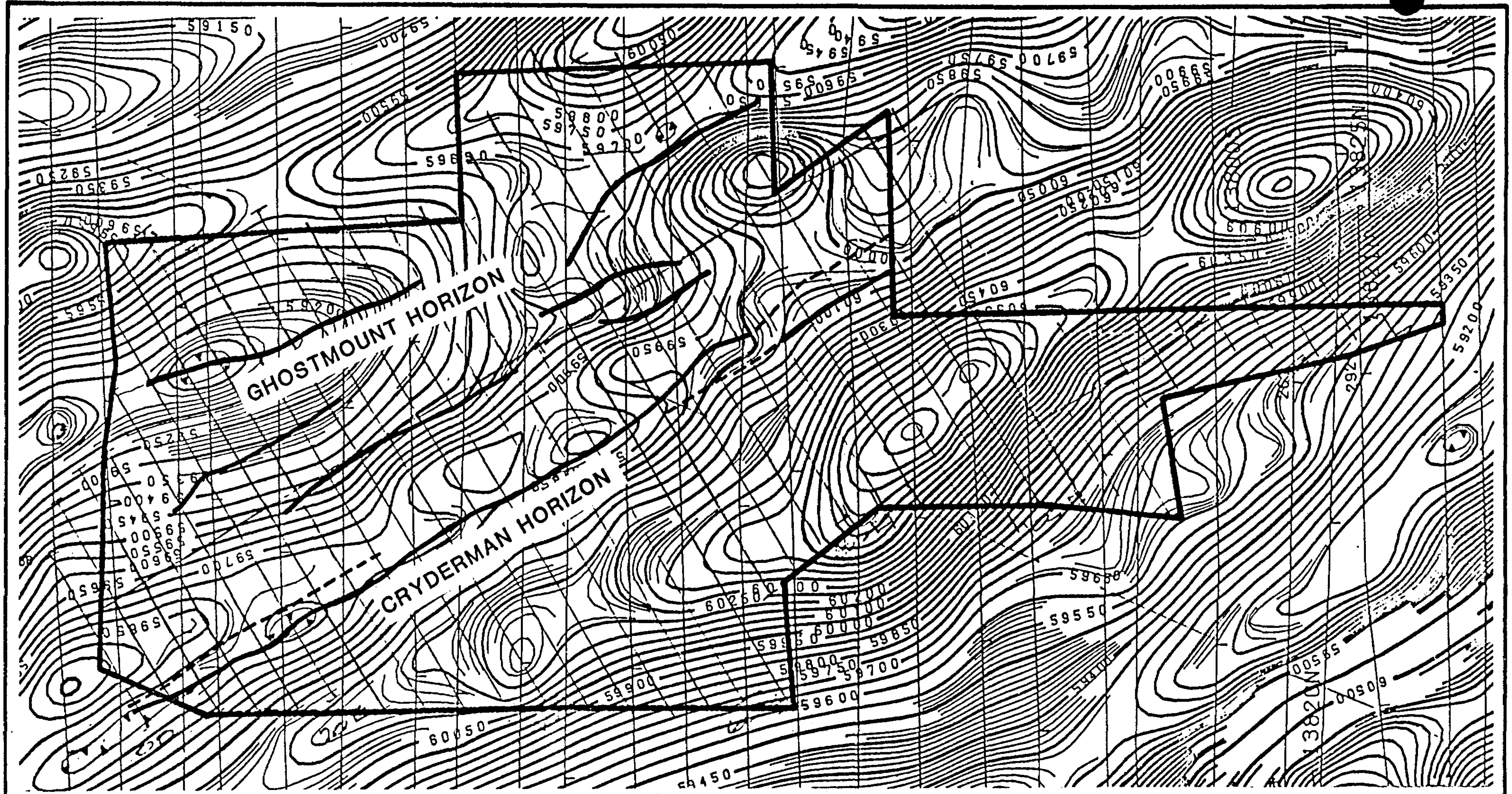
Sudbury, Ontario
August 2, 1984

G.J. Hinse, P.Eng.

Enclosed with this report:

Figure 1 Location Sketch Showing Ground Magnetic Anomalies.

5 Maps Showing the Results of the Ground Magnetic Survey at a scale of 1" = 200'.



From: Map 80,599, Harker Twp., O.G.S. Total Intensity Magnetic Survey.

LOCATION SKETCH SHOWING GROUND MAGNETIC ANOMALIES

HARKER LAKE GOLD PROJECT

HARKER TOWNSHIP · ONTARIO

for

PERREX RESOURCES INC.

SCALE: 1:20,000

500m 0 1km

EXPLANATION

▬▬ / - - - -	Magnetic low

G.J HINSE - AUGUST, 1984

REPORT

on the property of

PERREX RESOURCES INC.

Harker Township, Northeast Ontario

Timmins, Ontario,
October 29, 1984.

R. J. Bradshaw, P. Eng.,
Geologist.

TABLE OF CONTENTS

SUMMARY

The 41 contiguous unpatented mining claims known as the Perrex Resources property are located in central Harker Township, northeastern Ontario. Approximately equidistant from Kirkland Lake or Timmins, they are readily accessible via highway 101 and good gravel roads.

During the past summer, these claims were covered by a magnetic survey; subsequently, 13 overburden holes, forming two northwesterly trending sections in the centre of the property, were drilled and sampled. Mr. John Pollock, P. Eng., requested that the writer review and interpret this work in conjunction with any other significant work in the Township including pertinent government maps and reports.

The property is underlain by an assemblage of southwesterly trending intermediate to mafic volcanic rocks. Rock exposure immediately to the east indicates the likely presence of two rhyolitic flows or beds, about 200 metres apart, through the centre of the property. The southernmost rhyolite unit, averaging six metres wide, is gold-bearing.

It is interpreted from the airborne magnetic survey that the rocks on the Perrex property are displaced about 200 metres south of those to the east by a northerly trending fault. Also apparent is a northwesterly trending fault through the centre of the property which may influence gold deposition. Both of these faults intersect the major Porcupine-Destor structure to the north, which is spatially if not genetically related to numerous gold deposits.

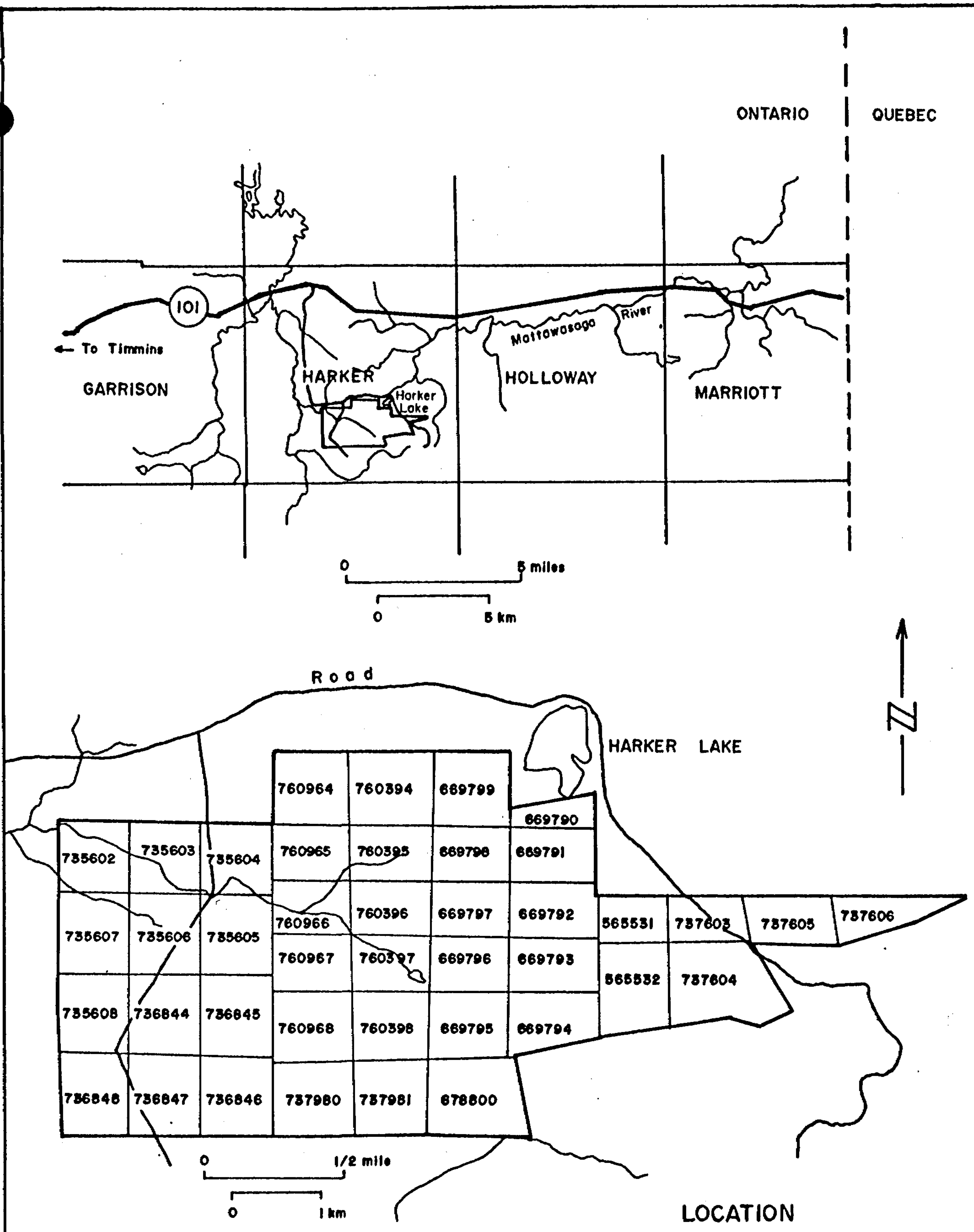
The most significant gold occurrence in the area, the Don Hurd Showing, formerly known as the Harlight, is located immediately northwest of the Perrex property. Gold mineralization was found over a length of 2100 feet (640 metres) in a rhyolite unit which averages 22 feet (6.7 metres) wide. A length of 1200 feet (366 metres) averages 0.144 oz. gold per ton over 6 feet (1.8 metres).

This unit would coincide, if projected southwest, with a prominent southwesterly trending magnetic linear on the Perrex property.

The overburden holes were drilled in the search for a gold dispersal train from a source to the north. Because of the previously described cross fault between the Hurd and Perrex properties, the overburden holes would not have effectively tested the gold-bearing rhyolite horizon. This unit is at least 100 metres south of the southernmost row of holes.

Nevertheless, a number of samples from various holes contained significant gold. The samples, however, do not form dispersal trains which are sufficiently well defined to indicate a drill target. Additional overburden drilling is required to better define anomalous values already indicated and to test the southwestward extension of the gold-bearing rhyolite unit.

It is proposed that 19 holes be drilled at a cost of $40,000. It is anticipated that this work will indicate drill targets. A sum of $100,000., therefore, should be allocated to diamond drill 4000 feet. An expenditure of $140,000. would provide a preliminary evaluation of the property.



LOCATION

of jointly owned property of

PERREX RESOURCES INC.
&
NOLAN RESOURCES LTD.

Harker Township, Ontario

OCTOBER, 1984

Figure 1

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

Oct. 29. 1984

INTRODUCTION

Perrex Resources Inc. holds a group of 41 mining claims in Harker Township. In a report dated April 24, 1984, Guy J. Hinse, P. Eng., recommended a magnetic survey, overburden drilling to acquire basal till samples, and diamond drilling on the property. The magnetic survey and overburden drilling were completed this past summer. Mr. John A. Pollock, P. Eng., has requested that the writer prepare a report concerned with the work completed to date.

To provide an optimum interpretation of the recent work, it was also necessary to review all previous documentation concerning the property. In particular, the report and map describing the geology of Harker Township by J. Satterly, published in 1951, and the airborne magnetic maps released in 1984 by the Ontario Geological Survey were studied. These references and others are listed at the back of the report.

The writer, accompanied by a principal of Perrex Resources, Mr. Alex H. Perron, visited the area on October 11, 1984.

PROPERTY

The 41 unpatented claims forming a contiguous group in Harker Township are registered in the name of Alex H. Perron. An examination of the records of the claims on October 9, 1984, at the Mining Recorder's office in Kirkland Lake provided the following pertinent data.

Claims	Recording Date	Expiry Date
L737603 to 737606 incl.	January 3, 1984	January 3, 1986
L565531 and 565532	December 10, 1980	December 10, 1985
L669790 and 669791	January 24, 1983	January 24, 1987
L669792 to 669799 incl.	January 24, 1983	January 24, 1986
L760394 to 760398 incl.	May 12, 1983	May 12, 1986
L760964 to 760968 incl.	May 12, 1983	May 12, 1986
L735602 to 735608 incl.	October 3, 1983	October 3, 1985
L736844 to 736848 incl.	October 3, 1983	October 3, 1985
L678800	February 4, 1983	February 4, 1986
L737980 and 737981	February 27, 1984	February 27, 1985

It is likely that the expiry date of the claims will be extended for an additional year when the overburden drilling is filed for assessment work. For each $15 expended on the drilling and analytical work, one day assessment work is allowed, up to 60 days per claim.

Alex H. Perron holds the claims in trust for Perrex Resources Inc. and others subject to company agreements.

LOCATION AND ACCESS

The Perrex property is located near the centre of Harker Township, northeastern Ontario.

Highway 101 through Timmins, about 120 kilometres to the west, traverses the north half of the Township. From highway 101 in the northwest corner of the Township, a good gravel truck road extends southerly. About the centre of the Township the road splits to provide access to the east and west sectors of the Perrex property.

Perrex has established a comfortable two-man camp at the south end of Harker Lake.

PREVIOUS WORK IN THE AREA

Apart from the recently completed work, Hinse (April 24, 1984), summarizes in detail all of the previous work in the area pertinent to the Perrex property. Those undertakings of most significance to the Perrex holdings include diamond drilling on the Harlight property, immediately east, and on the Barrick Resources holdings, a few kilometres to the northeast. Each of these situations merits further attention in this report and are described under Economic Geology.

During the early summer of 1984, a magnetic survey was carried out on the Perrex property as described in a report by Greer (July 21, 1984). This work, in conjunction with the recently published airborne magnetic map of Harker Township, is the basis for an interpretation of the main faults crossing the Perrex property described under Structural Geology.

Mr. Huneault of Overburden Drilling Management Limited supervised the drilling of thirteen holes forming two northeasterly trending sections or "fences" in the centre of the property. Analytical work on 76 samples of heavy metal concentrates was completed by Bondar-Clegg of Ottawa. This work is described under Economic Geology.

GEOLOGY

Regional

Harker Township is situated almost centrally within a vast assemblage of mainly volcanic and sedimentary easterly trending rocks some 350 kilometres long termed the Abitibi Greenstone Belt.

Particularly nearby major east trending faults the Abitibi rocks have been a prolific producer of gold as exemplified by the numerous past and present producers at Kirkland Lake and Timmins in Ontario and Val D'Or and Rouyn-Noranda in Quebec.

The east trending Porcupine-Destor fault through the north half of the Township is in proximity to many past and present producers over its length of almost 300 kilometres.

Local Geology

Most of Harker Township, south of the Porcupine-Destor fault, is underlain by a series of poorly exposed mafic volcanic rocks part of the Kinojevis Group, greater than 10 kilometres thick. These rocks, as displayed on maps 1951-4 and P2433 by the Ontario Geological Survey, trend northeasterly, dip near vertically and face south.

A little more than a kilometre to the north of the Perrex property is an oval shaped syenite intrusive having a northwesterly trending axis 3.6 kilometres long.

Within the mafic volcanic assemblage are relatively thin units, up to 150 metres, of fine grained sediments or felsic volcanic rocks. Apparently as a result of shearing or other metamorphic processes, gold is concentrated in these units. Specific examples of this relationship include the gold zone being drilled by Barrick Resources on the McDermott property to the northeast in Holloway Township and the gold occurrence now known as the Don Hurd showing immediately east of the Perrex property (Figure 3).

On the Hurd property, formerly known as the Harlight claims, Satterly termed the felsic volcanic units rhyolite flows. In thin section studies, Satterly identified an abundance of carbonate in the gold-bearing unit suggesting that this rhyolite flow may be a metamorphosed chert-carbonate sediment representing a hiatus in the vulcanism.

Similarly the rock hosting the gold mineralization on the McDermott property is now classified as a sediment.

The Perrex property is entirely covered by overburden (Figure 3). The airborne magnetic survey, however, indicates that the volcanic assemblage, partially exposed to the east, extends across the Perrex property with some disruption caused by faulting.

A map of the ground survey shows a thin continuous magnetic linear trending North 55° East through the centre of the property. Northeast of this feature, in the vicinity of Harker Lake, is a complex of magnetic highs and lows suggesting the presence of intrusive rock, perhaps syenite, related to the mass to the northwest. In the northwest sector of the property low magnetic susceptibilities lacking much relief or a prominent trend is probably representative of intermediate volcanics.

South of the magnetic linear through the centre of the property is present a magnetic low 180 to 240 metres wide followed by a zone of magnetic highs at least 610 metres wide. These sub-parallel features are interpreted to represent conformable volcanic rocks. Mafic units correspond to magnetic highs and the rhyolite unit lacking gold mineralization, exposed to the northeast (Figure 3), coincides with the magnetic low.

Structural Geology

Despite the sub-parallelism of the magnetic features, there is good evidence for cross faulting on the property, particularly on airborne magnetic map 80599 and supported by geological data on map 1951-4.

North of Harker Lake a north trending fault displaces a greywacke bed about 210 metres. In the southeast sector of the Township, on the Iris property, similar movement is indicated by apparent warping of rhyolite units. This left-handed fault is interpreted to pass about 600 metres west of Harker Lake as shown on Figure 3. Exact positioning of this structure requires ground magnetic work on the Hurd property. In any event, rocks on the Perrex property are displaced approximately 200 metres south of those on the Hurd property.

Also apparent on the magnetic surveys is a northwesterly trending fault having little horizontal movement through the centre of the property. This structure probably intersects the Porcupine-Destor fault to the northwest.

To the north of the Perrex property, about 1.5 kilometres, a series of cross faults have been observed at the southern extremity of the syenite intrusive (Map 1951-4). These faults, displaying minor horizontal movement, probably cross the Perrex property and may account for the differing geological environment as reflected by the ground magnetic surveys in the northwest and northeast sectors of the claim group.

ECONOMIC GEOLOGY

General

Satterly (1951) has described various types of gold mineralization in Harker Township, all of which imply mobilization and deposition of hydrothermal gold solutions in various rocks dependent upon structural control. Over the past few years, it has been recognized that the most important type of deposit in the area may be those that are confined to a particular sedimentary or volcanic unit.

Barrick Resources, formerly Camflo Mines Limited, have been drilling a gold-bearing sediment for the past few years, several kilometres to the northeast of the Perrex property, in Holloway Township. The gold, now apparently reconcentrated, is considered to have been deposited as a paleoplacer in the sediment and, therefore, is stratabound.

Immediately to the east of the Perrex claims, gold mineralization, inasmuch as it is confined to a thin rhyolite unit, also displays stratabound characteristics. Although it appears that the rhyolite, because of its relative incompetency, was simply more susceptible to fracturing, detailed study may reveal sedimentary characteristics and evidence for syngenetic gold. This is implied by thin section work undertaken by Satterly (1951).

Overburden Drilling and Sampling Programme

Programme - As shown on Figure 3, thirteen reverse circulation overburden holes were drilled on the Perrex property during the month of August, 1984. These holes form two sections or "fences" which are displayed on Figure 4 and 5, termed Section A and Section B.

Individual holes were logged by R. Huneault of Overburden Drilling Management Limited, whom selected 76 samples of primarily the basal till member for examination and analyses.

Individual samples were processed as shown on the accompanying flow sheet (Figure 6). The non-magnetic heavy mineral concentrate was assayed for gold by Bondar-Clegg and Company. Results of this work, including log descriptions, are shown on Sections A & B. Because of the differing horizontal and vertical scales used in preparation of the sections, the bedrock interface appears much more irregular than is actually the case. Overburden depth was fairly uniform ranging from about 24 to 47 metres.

Characteristics of Significant Glacial Dispersion Trains - During the Pleistocene epoch of the Quaternary period, the crowns of all ore bodies that subcropped beneath the continental ice sheets of North America were eroded and dispersed down-ice in the glacial debris. The dispersion mechanisms were systematic (Averill, 1978) and the resulting ore "trains" in the overburden are generally long, thin and narrow and most importantly are several hundred times larger than the parent ore bodies. These large trains can be used very effectively to locate the remaining roots of the ore bodies.

Because the dispersion trains originated at the base of the ice, they are either partly or entirely buried by younger non-anomalous glacial debris. Many trains are confined to the bottom layer of glacial debris--the basal till. Significant glacial dispersion trains may also occur in formations other than basal till.

While ore mineral dispersion trains are very large, they are also weak, due to dilution by glacial transport, and are difficult to identify from a normal "soil" analysis. Consequently, heavy mineral concentrates are prepared to amplify the primary anomalies.

True anomalies from significant glacial dispersion trains are rare and generally have the following properties:

1. A minimum of 4 to 5 gold particles coarser than 200 microns or ten particles finer than 200 microns.
2. All of the particles have suffered the same degree of glacial abrasion indicating a common distance of transport.

3. Gold assays from significant dispersion trains invariably exceed 1000 ppb* and are generally greater than 3000 ppb.

*ppb equivalent to parts per billion

Dispersion trains are characteristically stratabound at the base of a specific till unit near source, and at the top of the same unit further down-ice. Thus a significant overburden gold anomaly should repeat at the same stratigraphic level in adjacent drill holes across a minimum width of 100 metres, assuming minimum length of a gold deposit is 100 metres.

There are several examples of dispersion trains which are traceable for about one kilometre down-ice.

It has been determined that 10 to 15 per cent of samples from the Abitibi Greenstone Belt contain 1 or 2 gold particles measuring 200 to 1000 microns and produce false heavy mineral geochemical anomalies ranging from 1000 to more than 15000 ppb.

Interpretation of Sample Data - Approximately 20 of 76 samples or 26 per cent show anomalous characteristics.

On Section A showing the southernmost row of holes, which is effectively searching an area to the north for a distance of about one kilometre, there are four anomalous samples in four holes worthy of comment.

In hole 84-1, sample 06, one metre above the mafic volcanic bedrock, assayed 10,790 ppb gold. Lacking visible gold particles, this sample would not be categorized as a valid anomaly.

Sample 07 in hole 84-5, containing visible arsenopyrite, two particles of gold, and 23000 ppb gold is situated at least 5 metres above bedrock in basal till; it may represent a valid dispersion train.

Samples 15 and 13, in holes 84-10 and 11 respectively, returned anomalous gold values about one metre above the mafic volcanic bedrock. Although the values come from the same horizon in the basal till, there is an apparent lack of sufficient gold as visible particles to categorize this anomaly as a definite dispersal train. Anomalous values from a sample at the same horizon midway between holes 84-10 and 11 may validate this anomaly.

On Section B, approximately 330 metres north of Section A (Figure 3), all of the holes, with the exception of 84-8, provided samples containing anomalous gold. However, most of the samples lack a significant number of gold particles.

Values in samples 07 and 08 in holes 84-2 and 3 respectively may represent a valid dispersal train. Although the gold values are low, the samples come from the same horizon in the basal till near bedrock and seven gold particles were observed in sample 2-07.

Samples in holes 84-6 and 7, 520 metres apart, display similar characteristics. Three samples 08, 09 and 10, in hole 84-6, contain anomalous gold values but lack significant gold particles. At the same horizon, in the upper part of the basal till, samples 10 and 11 of hole 84-7 contain anomalous gold; five visible particles of gold and 2 per cent sulphides were also observed in the heavy mineral concentrate of sample 7-10. Additional drilling midway between and a little further north of holes 84-06 and 07 may confirm the validity of this anomaly.

No significant values were found in hole 84-8.

In hole 84-12, sample 09 assayed 12,880 ppb and showed five gold particles and 5 per cent sulphides in the heavy mineral concentrate; the sample above, 12-08, showed five particles of gold and 10 per cent sulphides. These two samples, with the presence of gold particles and sulphides in the concentrate, appear to represent a valid dispersal train. A much weaker value from sample 16 occurs in hole 84-13 at the same horizon. An additional hole or two in the vicinity of holes 84-12 and 13 would better isolate this anomalous condition.

Don Hurd Showing

This gold occurrence, formerly known as the Harlight in Satterly's report, merits description because of its stratabound characteristics nearby and on strike with the Perrex property.

The mineral occurrence is marked by a series of pits on Figure 3 which were excavated on a rhyolite unit ranging from 8 to 37 feet wide. Quartz containing pyrite, chalcopyrite and galena was observed in the pits (Satterly, 1951).

Drilling of the gold zone is described by a quote (C. H. Hitchcock) from Satterly's report. Twelve holes were drilled from north to south at 100 foot intervals along the zone; one hole was abandoned because of caving. All eleven holes returned gold values.

It was calculated that the zone for 1200 feet averaged 0.144 oz. gold per ton over six feet.

Additional drilling with lower gold values extended the length of the zone to 2100 feet; apparently the rhyolite unit continues beyond the limits of the drilling.

Should this rhyolite unit extend to the southwest on the Perrex property it would, because of faulting, approximately correspond to the magnetic linear 550 to 610 metres south of the base line. This interpretation is confirmed by magnetic work completed on the Hurd property by Perrex staff.

CONCLUSIONS

Because of faulting which may have significant vertical displacement, the geology of the Perrex property may not be as simple as suggested by the magnetic surveys. A northwesterly trending fault through the centre of the property is evident on the airborne magnetic plan.

Other structures are likely present, including a northerly trending left-hand fault, with a displacement of about 200 metres between the Hurd showing and the Perrex property. As a result of this displacement, it is concluded that the gold-bearing rhyolite unit on the Hurd property, when projected to the southwest, would correspond to a magnetic linear about 600 metres south of the base line.

If the rhyolite unit continues onto the Perrex property there is an excellent chance that it is gold-bearing, based on previous drilling results on the Hurd property. Although the gold mineralization may not be classified as stratabound in terms of origin, it displays the most important stratabound characteristic. It is confined to a particular rock unit, namely the rhyolite. Stratabound deposits are typically uniform and potentially large.

If, as postulated, the rhyolite horizon corresponds to the second magnetic linear south of the base line on the Perrex property (Figure 3), then the overburden drilling would have been incapable of finding the corresponding dispersal train. Holes forming Section A are at least 100 metres north of the appropriate magnetic linear.

Data from the overburden drilling sampling reveals several possible anomalies perhaps representative of true dispersal trains. They are not, however, sufficiently well defined to indicate a drill target. Holes revealing significant data include 84-5A, 10 and 11 on Section A and 84-2 and 3 , 84-6 and 7, and 84-12 and 13 on Section B. Additional drilling and sampling is required to confirm and isolate these anomalous features.

RECOMMENDATIONS

In order to define drill targets that may represent gold mineralization, additional overburden drilling and sampling is required. The approximate location of the holes forming this supplementary programme are shown on Figure 3.

Based on the programme of 13 recently drilled holes which cost $27,110., or about $2100. per hole, the cost of 19 as shown on

Figure 3 is estimated at $40,000.

An additional sum of $100,000. should be allocated for the diamond drilling of 4000 feet, including supervision and assaying. The drilling would be based on an interpretation of the overburden sampling data. A sum of $140,000. is, therefore, required to more fully evaluate the potential of the Perrex property.

Respectfully submitted,

SHIELD GEOPHYSICS LIMITED,

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

R. J. Bradshaw, P. Eng.,
Geologist.

Timmins, Ontario,
October 29, 1984.

REFERENCES

Averill, S.A. 1984	The Nugget Problem in Till Gold Exploration; Seminar - Till Tomorrow, 84, Kirkland Lake.
1978	Overburden exploration and the new glacial history of Northern Canada; Canadian Mining Journal, Vol. 99, No. 4, p. 58-64.
Doane, K.T. September, 1983	Geological Survey of the Perron Property, Harker Township.
Greer, Mary July 21, 1984	Magnetometer Survey on the Perrex Resources Inc. Property, Harker Township.
Hinse, Guy J. April 24, 1984	Report on the Harker Lake Gold Project, Harker Township.
August 2, 1984	Progress Report on the Harker Lake Gold Project.
Huneault, R. August, 1984	Reverse Circulation Drill Hole Logs - Holes 1-13, Laboratory Sample Logs - Holes 1-13.

MAPS

P2433, 1982	Precambrian Geology of the Lightning River Area by L.S. Jensen.
80599	Airborne electromagnetic and total intensity magnetic surveys for the Ontario Geological Survey.

CERTIFICATE

I, Ronald J. Bradshaw, residing at R. R. 2, Airport Road, a consulting geologist with office facilities at R. R. 2, Airport Road, Timmins, Ontario, do hereby certify that:

I attended Queen's University, Kingston, Ontario, and graduated with an Honours B.A. degree in Geological Sciences in 1958.

I am a Fellow of the Geological Association of Canada, a Member of the Canadian Institute of Mining and Metallurgy and of the Association of Professional Engineers of Ontario.

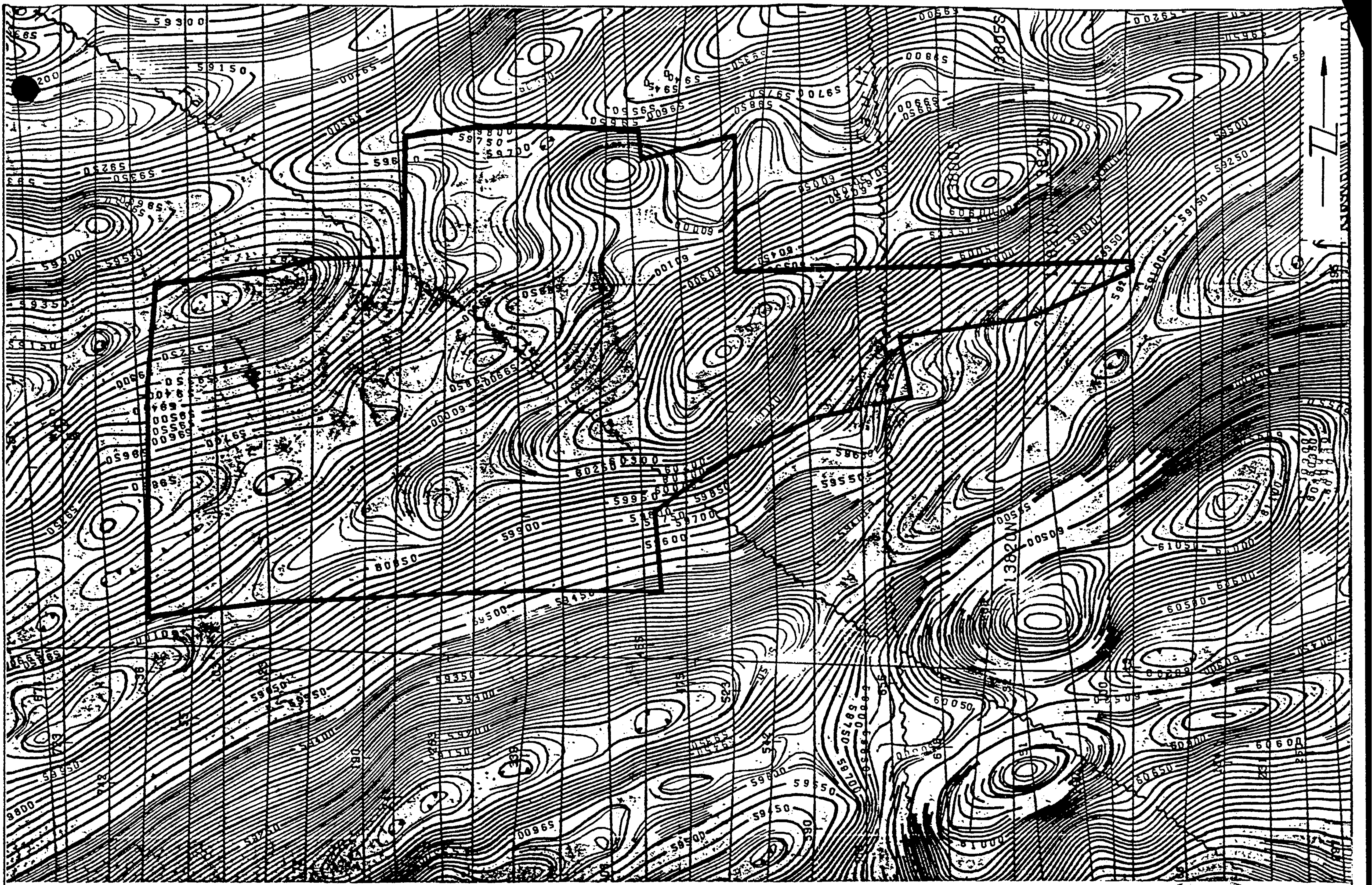
The report is based on the listed references and my visit to the property on October 11, 1984.

I have no direct or indirect interest in the property, shares or securities of the Company or any affiliate, nor do I expect to receive any such interest.

R. J. BRADSHAW

Timmins, Ontario,
October 29, 1984.

R. J. Bradshaw, P. Eng.,
Geologist.



PROPERTY of PERREX RESOURCES INC.

in Harker Township

superimposed on

AIRBORNE MAGNETIC PLAN

0 500 1000m

1 : 20,000

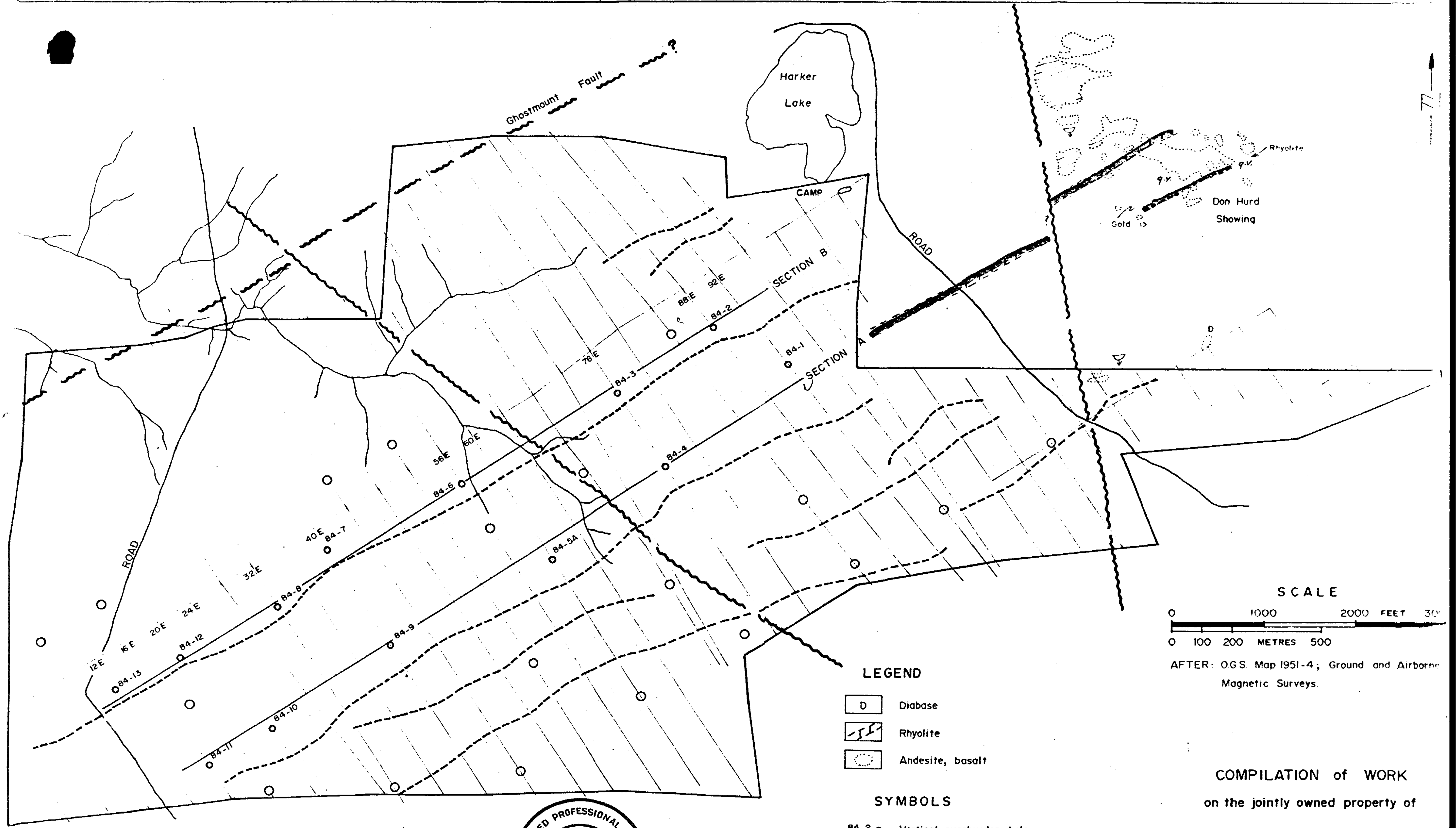
AFTER: Map 80599

OCTOBER, 1984

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

Oct-29-1984

Figure 2



AFTER: O.G.S. Map 1951-4; Ground and Airborne Magnetic Surveys.

R. J. BRADSHAW

Oct. 29. 1984

COMPILATION of WORK

on the jointly owned property of

PERREX RESOURCES INC.

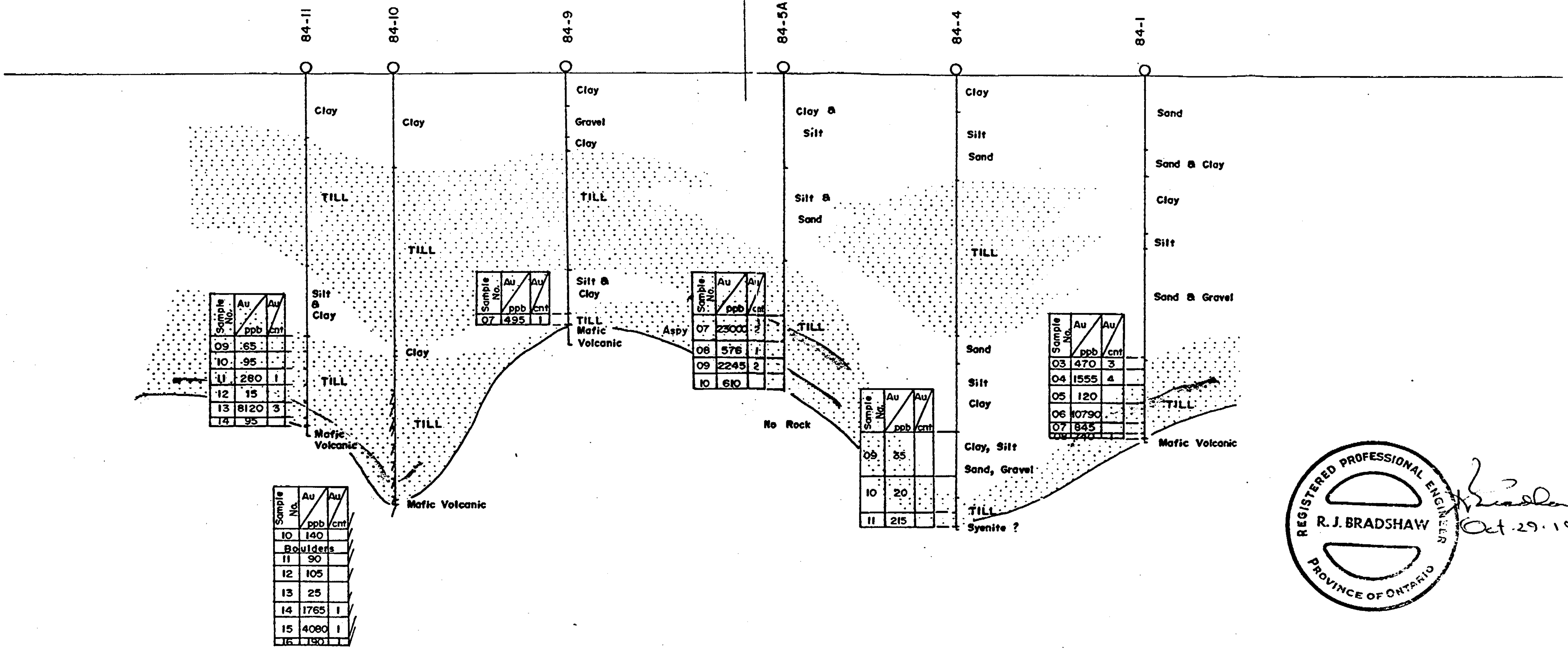
&

NOLAN RESOURCES LTD.

Harker Township, Ontario

OCTOBER, 1984

Figure 3



Sample No.	Au/ppb	Au/cnt
09	65	
10	95	
11	280	1
12	15	
13	8120	3
14	95	

Sample No.	Au/ppb	Au/cnt
10	140	
Boulders		
11	90	
12	105	
13	25	
14	1765	1
15	4080	1
16	190	

Sample No.	Au/ppb	Au/cnt
07	495	1

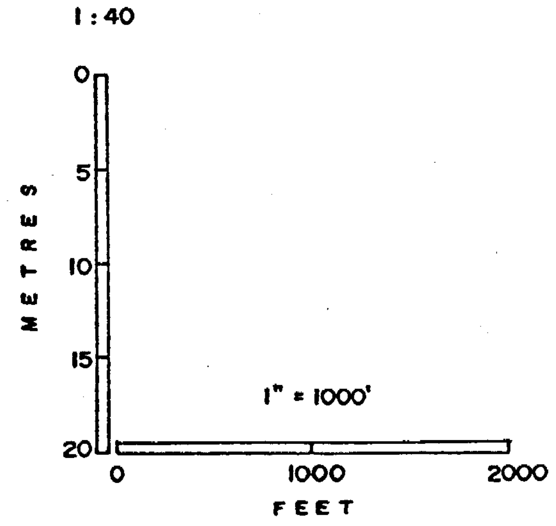
Sample No.	Au/ppb	Au/cnt
07	23000	2
08	576	1
09	2245	2
10	610	

Sample No.	Au/ppb	Au/cnt
09	35	
10	20	
11	215	

Sample No.	Au/ppb	Au/cnt
03	470	3
04	1555	4
05	120	
06	10790	
07	845	
08	740	1

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

Oct. 29. 1984



SYMBOLS

⁙	TILL
☐	Gold-bearing Till, possibly anomalous
◿	Mafic volcanics or intrusive
Au/ppb	Assay of gold in parts per billion from heavy metal concentrate
Au/cnt	Gold particle in heavy metal concentrate

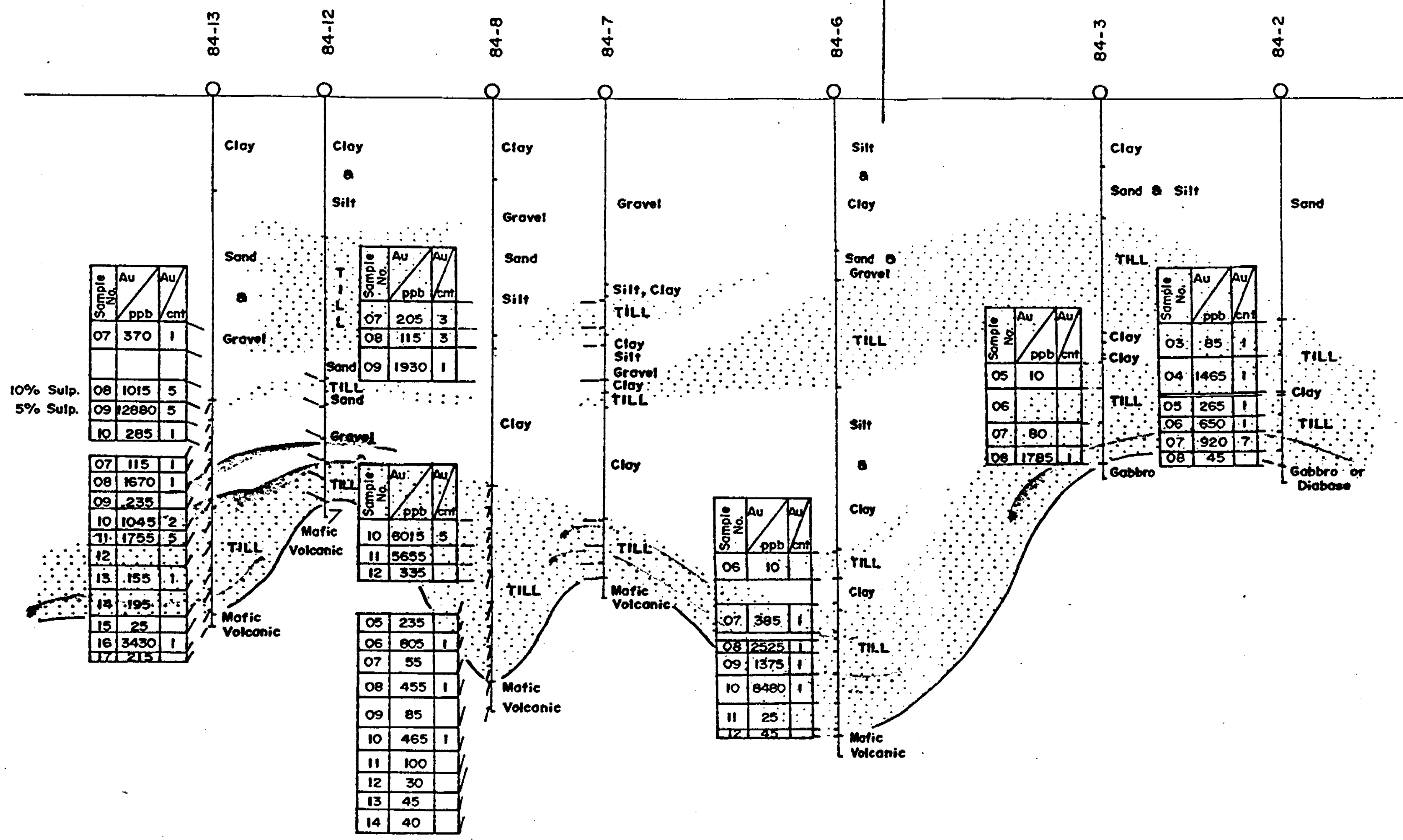
PERREX RESOURCES INC. PROPERTY

Harker Township, Ontario

LONGITUDINAL SECTION A
SHOWING
ANOMALOUS GOLD-BEARING TILL

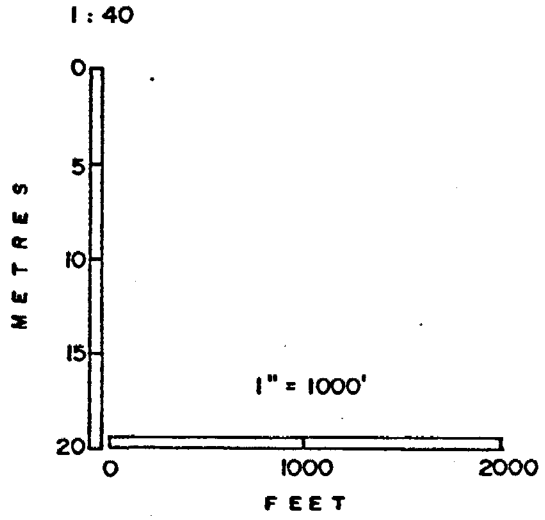
OCTOBER, 1984

Figure 4



R. J. BRADSHAW

Oct-29-1984



SYMBOLS

⁙	TILL
▨	Gold-bearing Till, possibly anomalous
◿	Mafic volcanics or intrusive
Au/ppb	Assay of gold in parts per billion from heavy metal concentrate
Au/cnt	Gold particle in heavy metal concentrate

PERREX RESOURCES INC. PROPERTY

Harker Township, Ontario

LONGITUDINAL SECTION B

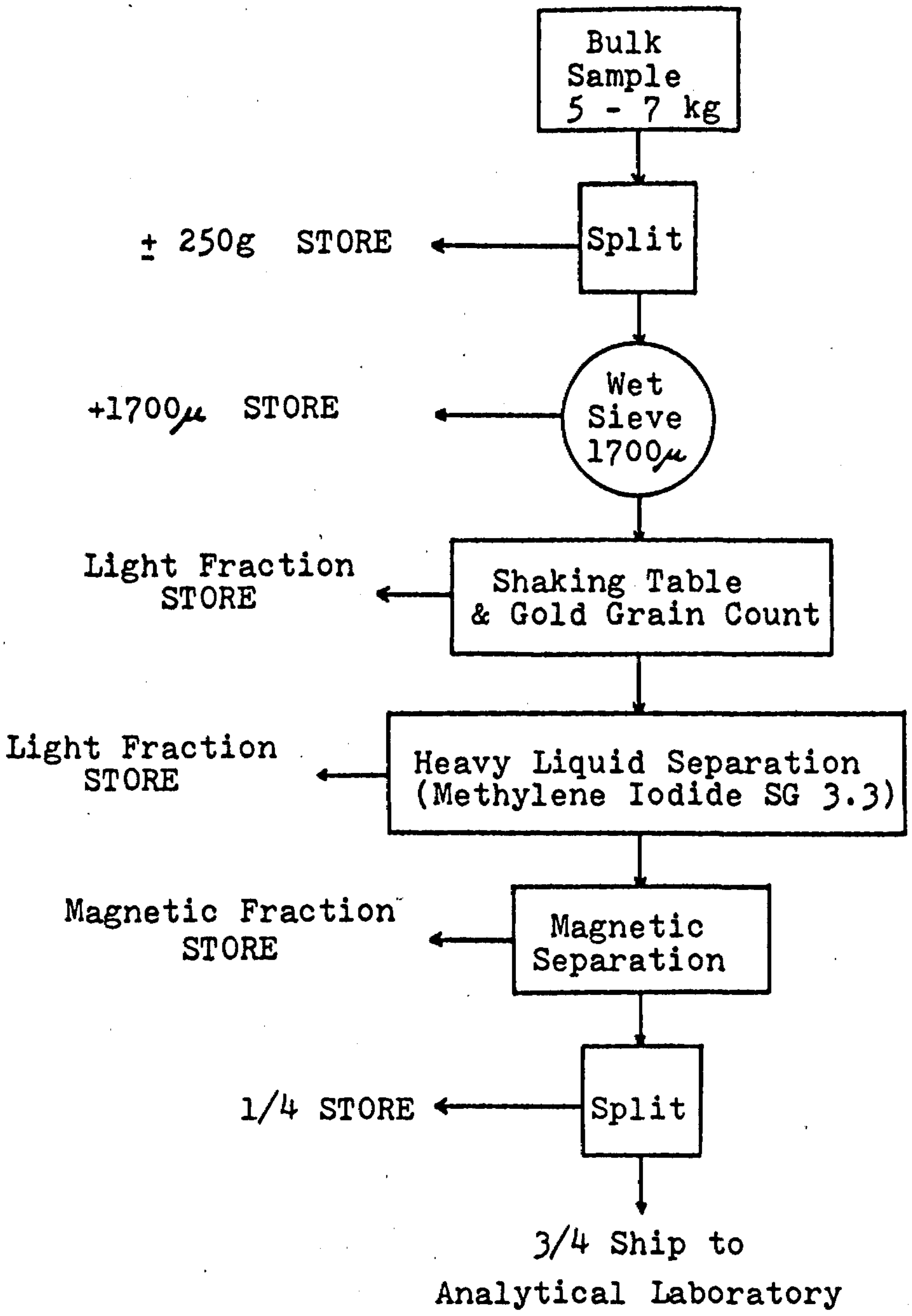
SHOWING

ANOMALOUS GOLD-BEARING TILL

OCTOBER, 1984

Figure 5

OVERBURDEN DRILLING MANAGEMENT LIMITED
SAMPLE PROCESSING FLOW SHEET



REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

Oct. 29. 1984

Figure 6

REPORT

on the property of

PERREX RESOURCES INC.
&
NOLAN RESOURCES LTD.

Harker Township, Northeast Ontario

APPENDIX I

Timmins, Ontario,
January 30, 1985.

R. J. Bradshaw, P. Eng.,
Geologist.

GENERAL

This report should be appended to a report dated October 29, 1984, which fully describes all pertinent data concerning the Perrex property in Harker Township.

Since the October report, the writer has reinterpreted the geology of Harker Township based on airborne magnetic map 80599, released in 1984, and nineteen additional overburden holes have been drilled on the Perrex property. These holes which form five northeasterly trending sections, A to E inclusive, are displayed on Figures 3A to 7A inclusive. Only holes 84-25 and 84-29 do not correspond with a Section. A plan, Figure 1A, shows the geology and location of holes.

Based on this latest work, a diamond drill programme is proposed herein.

GEOLOGY

General

Although the Perrex property is entirely drift-covered, rock exposure on strike to the east, as displayed on Map No. 1951-4, coupled with air magnetic map 80599 indicates that the claim group is dominantly underlain by intermediate to mafic volcanics. These rocks strike east-northeast, dip and face south at about 70°.

A series of sub-parallel magnetic linears, corresponding to the strike, occupy the south portion of the property. These linears forming a single anomalous band on airborne survey map

80599 represent more mafic volcanic flows or beds within the sequence. Displacement of these magnetic features confirms the cross faulting projected from the north. Near the north margin of the more magnetic volcanics are two thin rhyolite units. The gold-bearing rhyolite northeast of the Perrex property is known as the Don Hurd Showing (Figure 1A).

Structural Geology

Folding:

In Harker and adjoining Townships, a relatively thin sedimentary horizon corresponds with a lineal magnetic low. Where this fine grained carbonaceous sediment corresponds with the Porcupine-Destor fault it generally displays a greater thickness. About two miles south of the fault, outcrops of greywecke correlate with a lineal magnetic low. In Holloway Township to the east and near the Guibord-Michaud Township boundary to the west, about 15 miles, the north and south sedimentary horizons apparently merge.

In the east half of Harker Township the sedimentary unit forms an S-shape in part obscured by faulting. Several miles west in Garrison Township the same form is displayed by the trend of volcanic rocks along the west contact of the Garrison syenite. The sedimentary unit, as interpreted in the east half of Harker Township, is considered to represent the form of an easterly trending complex fold. On map 1951-4, bedding and flow tops indicate the presence of a simple anticline within the same area. The S-form of the sedimentary unit, however, indicates a central syncline adjoined by two anticlines, modified by strike faulting.

Repetitive movement along the Porcupine-Destor fault where it coincides with the sedimentary unit accounts for the apparent increased thickness of the unit. Moreover, it is probable that the Porcupine-Destor fault accounts at least in part for the development of this complex fold.

South of the sedimentary unit in the vicinity of the Perrex property, bedding tops shown on map 1951-4 indicate that the volcanic rocks form the south limb of an anticline.

Faulting:

Faulting in the Township displays a complex pattern which not only modified the geology of the area but more importantly provided a system of plumbing for migrating gold solutions.

The easterly trending faults, including the major Porcupine-Destor, are probably the oldest structures followed by the development of northwesterly trending faults.

A northwesterly trending fault crossing the Perrex property seems to be related to the intrusion of syenite. In the southeast corner of the Township a small syenite boss adjoins the interpreted projection of the fault. Similarly in the northwest sector of the Township the fault bisects or is terminated by syenite. Overburden hole 84-4, in the centre of the Perrex property, was stopped in syenite.

A later set of complementary faults striking north-

northwest and north-northeast are particularly dominant in the north half of the Township. These structures are near contemporaneous with the deposition of gold mineralization, displaying evidence for development before and after the emplacement of gold-bearing quartz lodes. A number of these structures cross the Perrex property, the most notable of which is located in the east sector. It is interpreted to have displaced a gold-bearing rhyolite unit (Don Hurd Showing) southwards west of the fault.

OVERBURDEN DRILLING

The overburden drilling conducted on the property, with the exception of holes 84-25 and 84-29, form five northeasterly trending sections termed A to E inclusive.

Of six holes forming Section A, three display anomalous criteria. The bottom sample in hole 84-15 displays the best characteristics of any within the property. This basal sample containing greater than 15000 ppb gold contained four delicate gold particles indicating a dispersal train having a nearby source.

Weakly anomalous samples in holes 84-16 and 84-20 are located near the centre of the till horizon. Concentrates of the samples contain 5 to 10 per cent sulphides and 4 to 6 abraded gold particles. A distant source is suggested but adjacent holes, 900 feet north, failed to encounter significant gold. Hole 84-18A, 900 feet north of 84-20, did, however, stop in rhyolite, the rock type which hosts the gold mineralization to the northeast.

Hole 84-26 failed to confirm the presence of anomalous gold particles in hole 84-12 or the anomalous sulphides in the bottom of hole 84-25.

Hole 84-27 was drilled within 100 metres of hole 84-7 to validate the presence of anomalous gold particles. The results from the sampling of hole 84-27 are not conclusive. Gold values and particles were detected; however, all but one particle is abraded suggesting a distant source, whereas most of the particles in hole 84-7 are irregular in shape.

Analytical results in hole 84-28 tend to substantiate the weak anomaly detected in hole 84-6. Three adjoining samples in each of holes 84-6 and 84-28 contain significant gold values at the same elevation. The anomalous section in hole 84-28 lies adjacent to bedrock over a width of about 13 feet. The minimal number of gold particles, 3 irregular and 5 abraded in three samples, indicate a weak anomaly perhaps representing a dispersal train having an obscure distant source.

CONCLUSIONS

The Perrex property overlies a series of intermediate to mafic volcanics forming the south limb of an anticline. A series of faults striking north to northwest cut the volcanics and have moderately displaced the projection of a gold-bearing zone exposed to the northeast. Some of these faults may also have formed channelways for gold-bearing solutions.

Within the southern two-thirds of the Perrex property, 33 overburden holes have been drilled in the search for a gold-bearing dispersal train having a source on the Perrex property. Characteristics of anomalous gold samples are not sufficiently prominent that any one or group of samples can be classified as representing a true dispersal train.

Nevertheless, three weak anomalous features, because of their spatial relationship to faulting or favourable geology, merit further attention. These features were detected in holes 84-15, 84-20 and 18A, and 84-6 and 28.

Hole 84-15 was drilled adjacent to a postulated north trending fault in the east sector of the property. The presence of four delicate gold particles in the basal till sample may be representative of a dispersal train having a nearby source.

Abraded gold particles in samples from hole 84-20 indicate a more distant source. However, hole 84-18A, 900 feet north, failed to encounter significant gold but did stop in rhyolite, the favourable host rock.

Low but similar gold counts at the same elevation in holes 84-6 and 84-28 are suggestive of a valid dispersal train. Each of the above described features require further investigation by diamond drilling.

The gold-bearing rhyolite horizon on the Don Hurd property, when projected southwest, is interpreted to nearly coincide with the magnetic linear approximately 400 feet south of Section C or 1900 feet south of the base line. This horizon should be investigated by drilling in at least one location nearby structural conditions favourable to the migration and deposition of gold mineralization.

RECOMMENDATIONS

The writer had originally recommended (October, 1984) that funds be allocated to diamond drill 4000 feet. Of that footage 2400 feet would be required to investigate those anomalous features identified under Conclusions. It is recommended that each hole be 600 feet deep. The remaining 1600 feet should be available for follow-up of results in the initial four holes.

It is proposed that the four holes be located as follows.

Hole No.	Location	Direction	Dip	Depth
85-1	150' south of hole 84-15 on line 96+00E	grid NW	50°	600'
85-2	300' south of hole 84-18A on line 60+00E	grid NW	50°	600'
85-3	350' south of B.L. on line 56+00E	grid NW	50°	600'
85-4	2200' south of B.L. on line 72+00E	grid NW	50°	600'

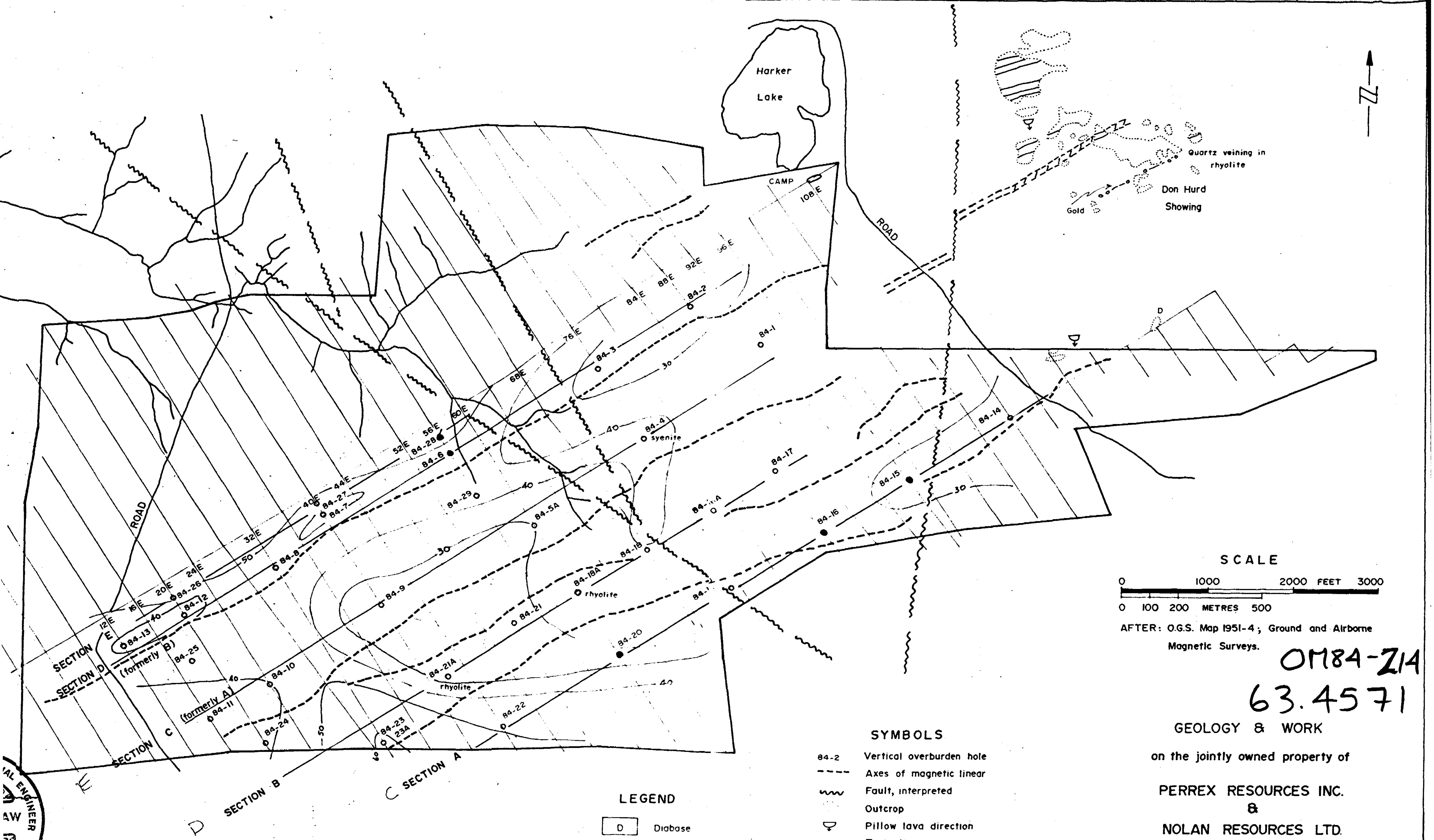
It is estimated that this programme including supervision, assaying and documentation will cost approximately $100,000.

Respectfully submitted,
SHIELD GEOPHYSICS LIMITED,

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

R. J. Bradshaw, P. Eng.,
Geologist.

Timmins, Ontario,
January 30, 1985.



SCALE

0 1000 2000 FEET 3000

0 100 200 METRES 500

AFTER: O.G.S. Map 1951-4; Ground and Airborne Magnetic Surveys.

OM84-Z14

63.4571

LEGEND

D	Diabase
-I I-	Rhyolite
⬚	Andesite, basalt

SYMBOLS

84-2	Vertical overburden hole
- - - -	Axes of magnetic linear
∿∿	Fault, interpreted
⋯	Outcrop
▽	Pillow lava direction
o—o	Test pits
-30-	Contour of bedrock overburden interface (30 metres below surface)

GEOLOGY & WORK

on the jointly owned property of

PERREX RESOURCES INC.

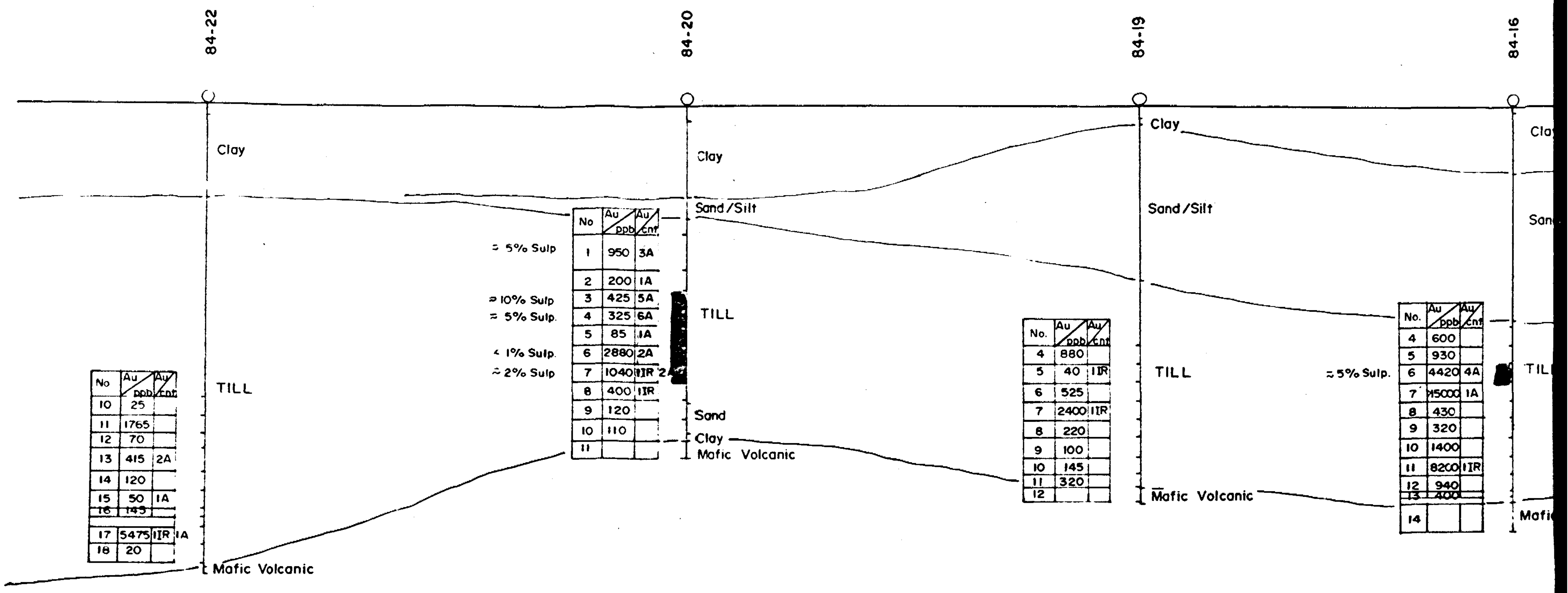
&

NOLAN RESOURCES LTD.

Harker Township, Ontario

JANUARY, 1985

Figure 1 A



84-22

No	Au ppb	Au cnt
10	25	
11	1765	
12	70	
13	415	2A
14	120	
15	50	1A
16	145	
17	5475	1IR 1A
18	20	

84-20

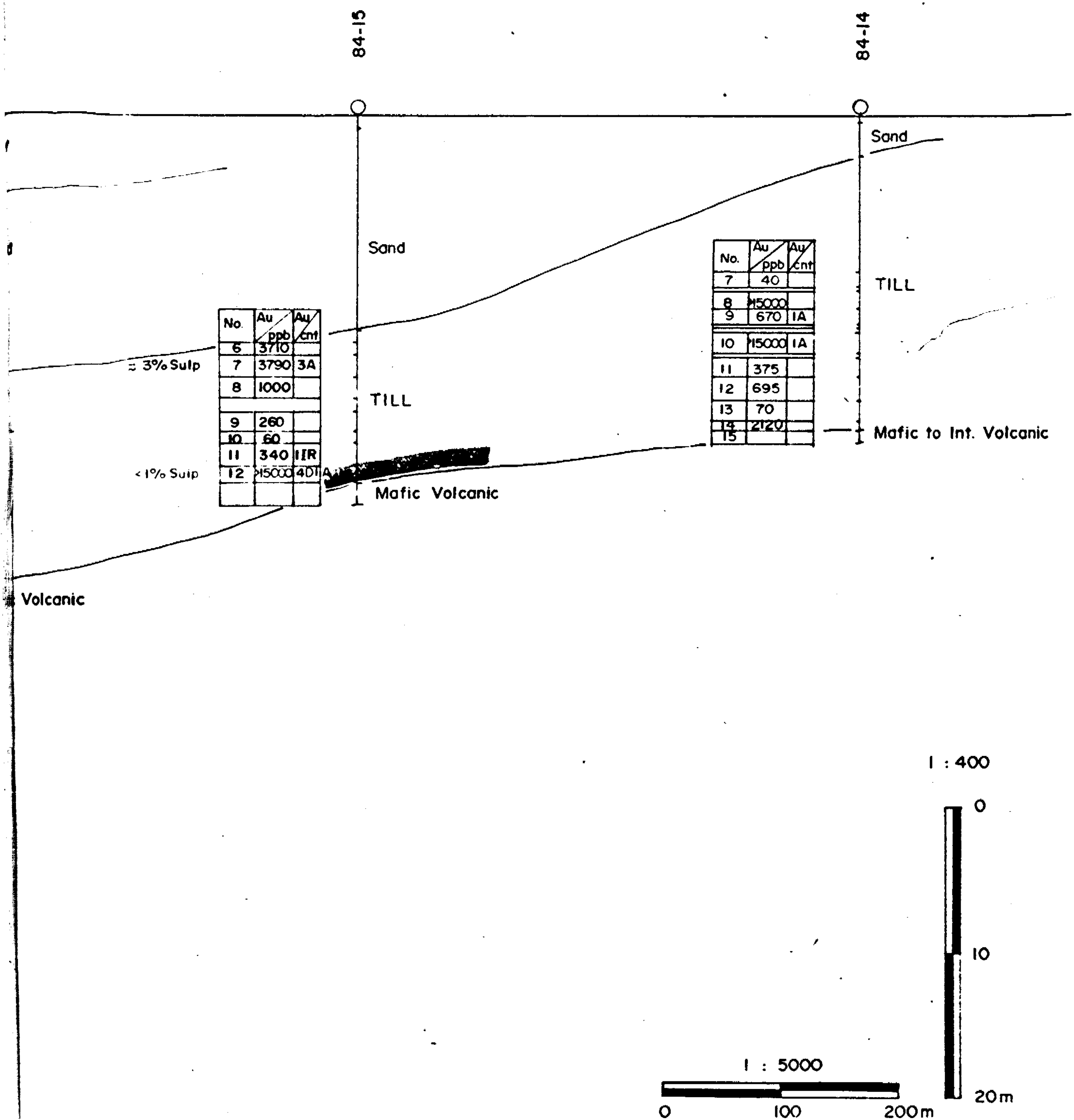
No	Au ppb	Au cnt
1	950	3A
2	200	1A
3	425	5A
4	325	6A
5	85	1A
6	2880	2A
7	1040	1IR 2A
8	400	1IR
9	120	
10	110	
11		

84-19

No.	Au ppb	Au cnt
4	880	
5	40	1IR
6	525	
7	2400	1IR
8	220	
9	100	
10	145	
11	320	
12		

84-16

No.	Au ppb	Au cnt
4	600	
5	930	
6	4420	4A
7	>15000	1A
8	430	
9	320	
10	1400	
11	8200	1IR
12	940	
13	400	
14		



No.	Au ppb	Au cnt
6	3710	
7	3790	3A
8	1000	
9	260	
10	60	
11	340	1IR
12	>15000	4D1A

No.	Au ppb	Au cnt
7	40	
8	>15000	
9	670	1A
10	>15000	1A
11	375	
12	695	
13	70	
14	2120	
15		

OM84-214

63.4571

R. J. BRADSHAW

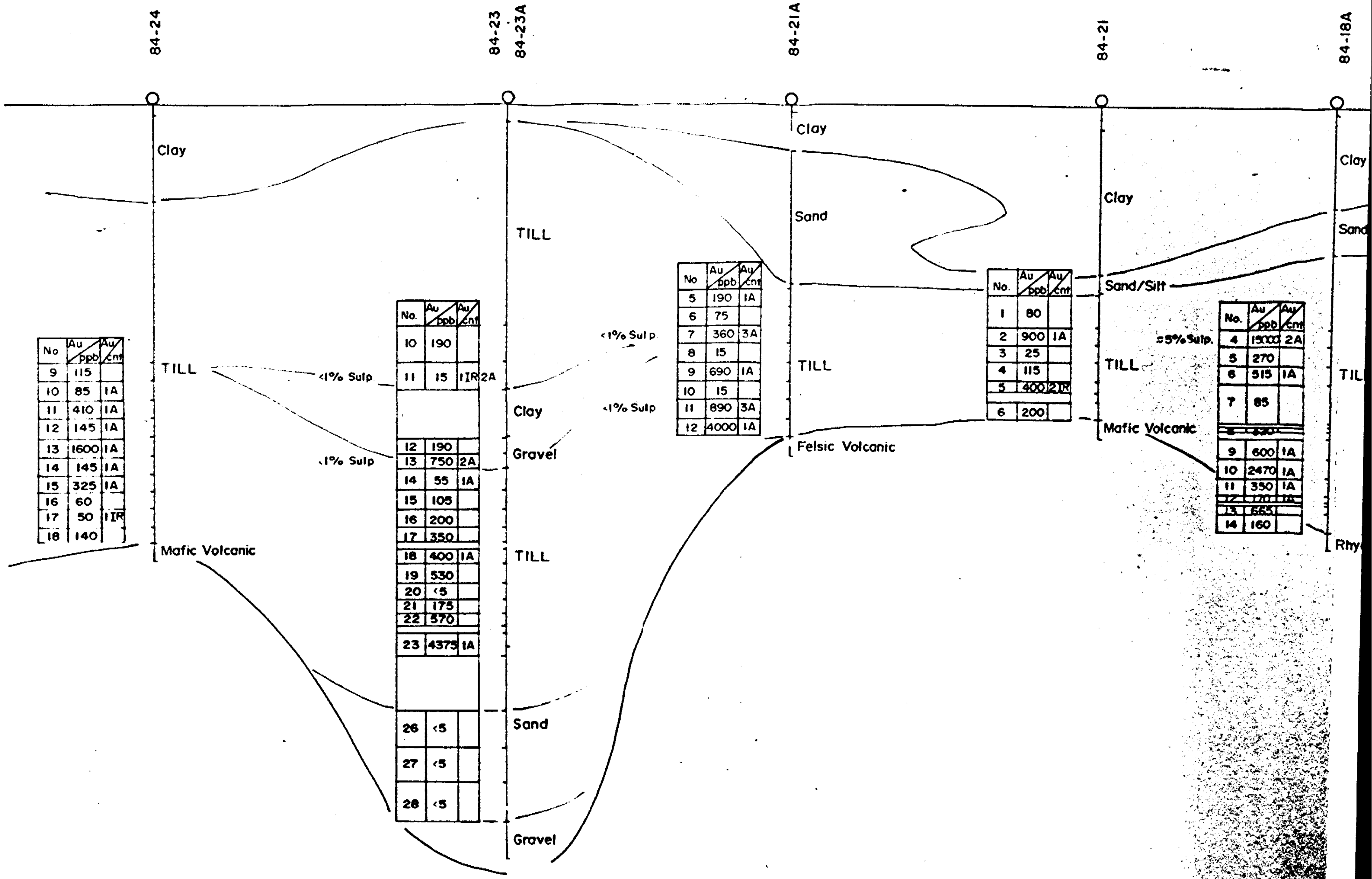
Overburden Holes Forming

SECTION A

PERREX RESOURCES INC.
NOLAN RESOURCES LTD.
Harker Township, Ontario

JANUARY, 1985

Figure 3A



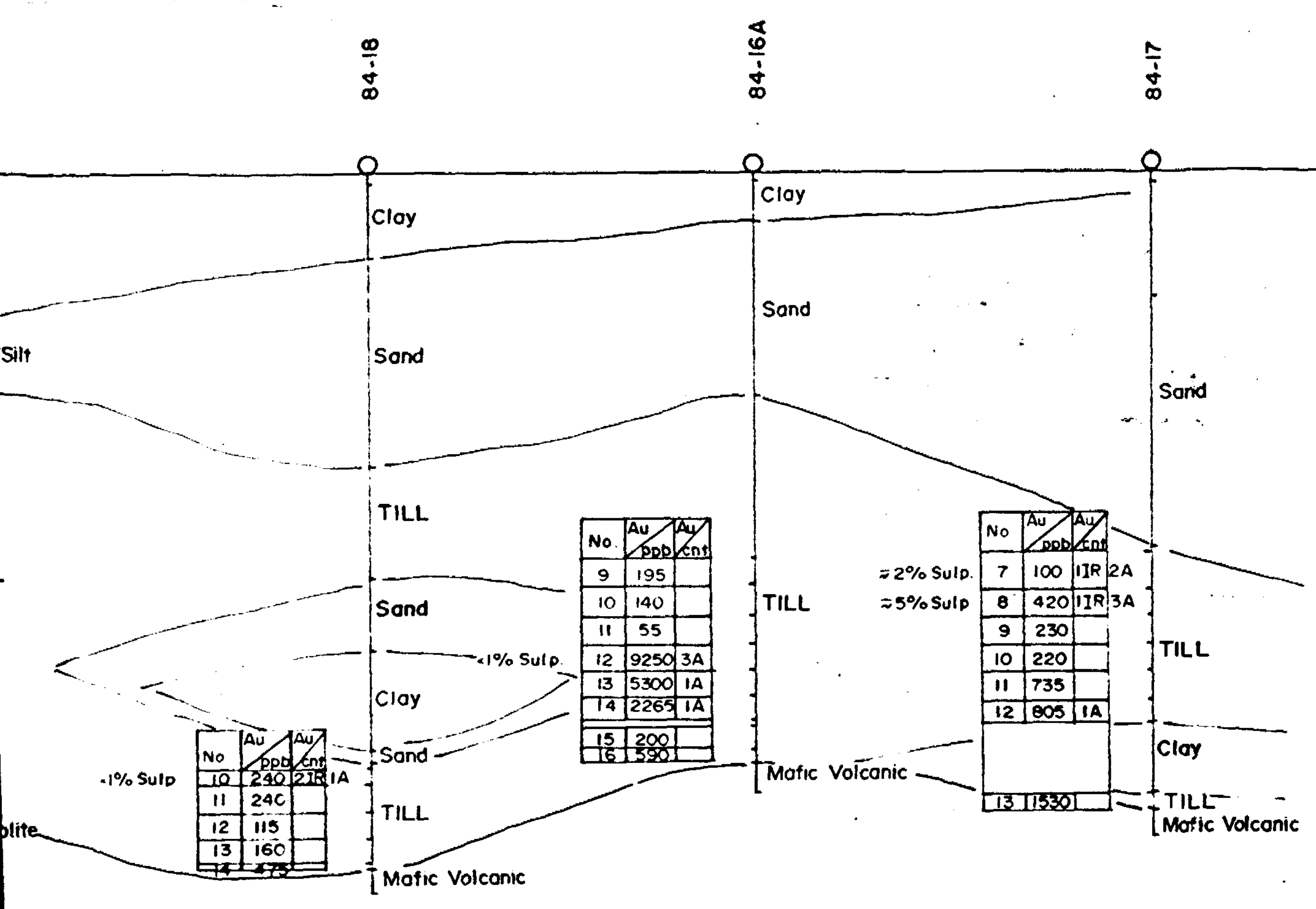
No	Au ppb	Au cnt
9	115	
10	85	1A
11	410	1A
12	145	1A
13	1600	1A
14	145	1A
15	325	1A
16	60	
17	50	1IR
18	140	

No.	Au ppb	Au cnt
10	190	
11	15	1IR 2A
12	190	
13	750	2A
14	55	1A
15	105	
16	200	
17	350	
18	400	1A
19	530	
20	<5	
21	175	
22	570	
23	4375	1A
26	<5	
27	<5	
28	<5	

No	Au ppb	Au cnt
5	190	1A
6	75	
7	360	3A
8	15	
9	690	1A
10	15	
11	890	3A
12	4000	1A

No.	Au ppb	Au cnt
1	80	
2	900	1A
3	25	
4	115	
5	400	2IR
6	200	

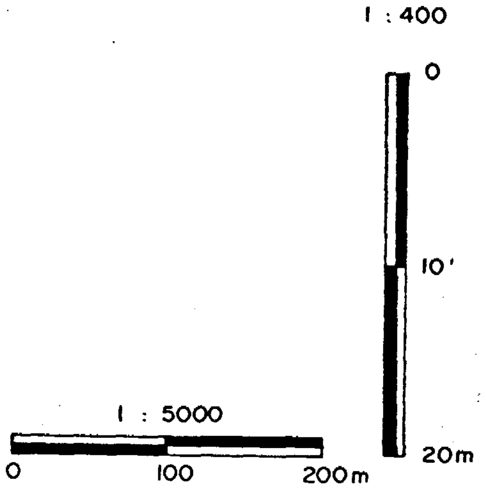
No.	Au ppb	Au cnt
4	15000	2A
5	270	
6	515	1A
7	85	
8	330	
9	600	1A
10	2470	1A
11	350	1A
12	170	1A
13	665	
14	160	



No	Au ppb	Au cnt
10	240	2IR 1A
11	240	
12	115	
13	160	
14	475	

No.	Au ppb	Au cnt
9	195	
10	140	
11	55	
12	9250	3A
13	5300	1A
14	2265	1A
15	200	
16	590	

No	Au ppb	Au cnt
7	100	1IR 2A
8	420	1IR 3A
9	230	
10	220	
11	735	
12	805	1A
13	1530	



OM84-214
63.4571

R. J. BRADSHAW
Jan 30.85

Overburden Holes Forming

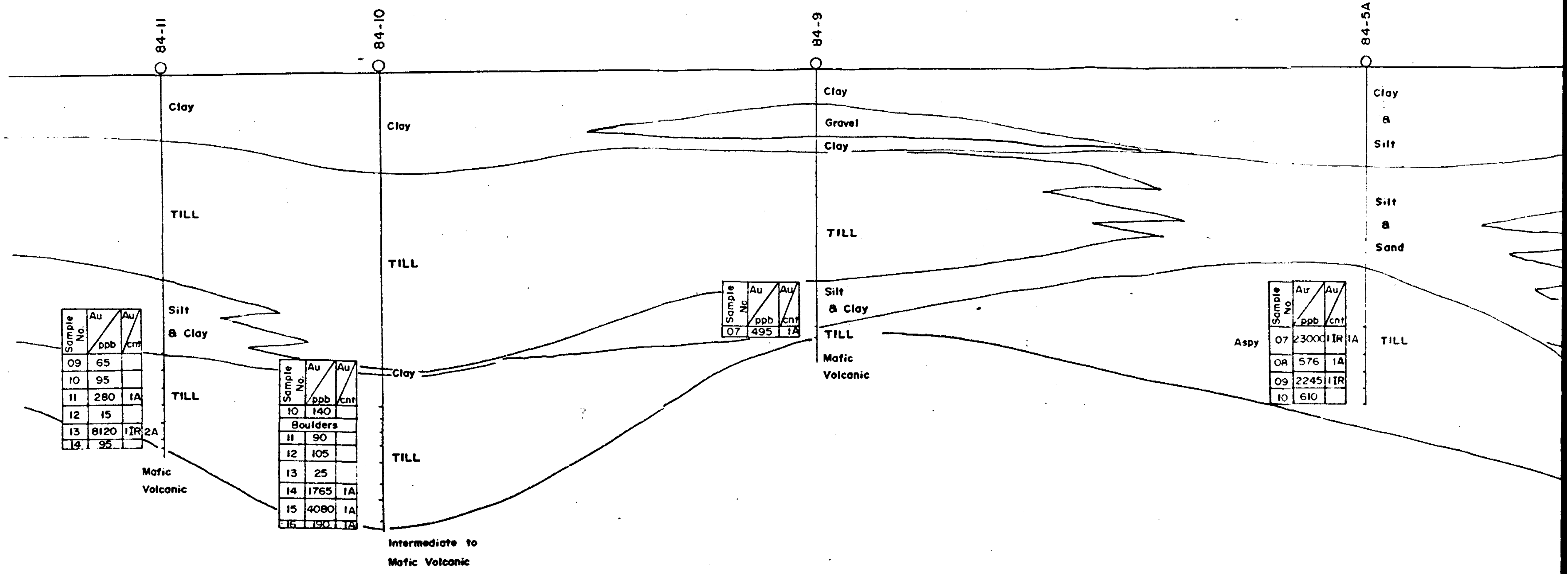
SECTION B

PERREX RESOURCES INC.
NOLAN RESOURCES LTD.

Harker Township, Ontario

JANUARY, 1985

Figure 4A

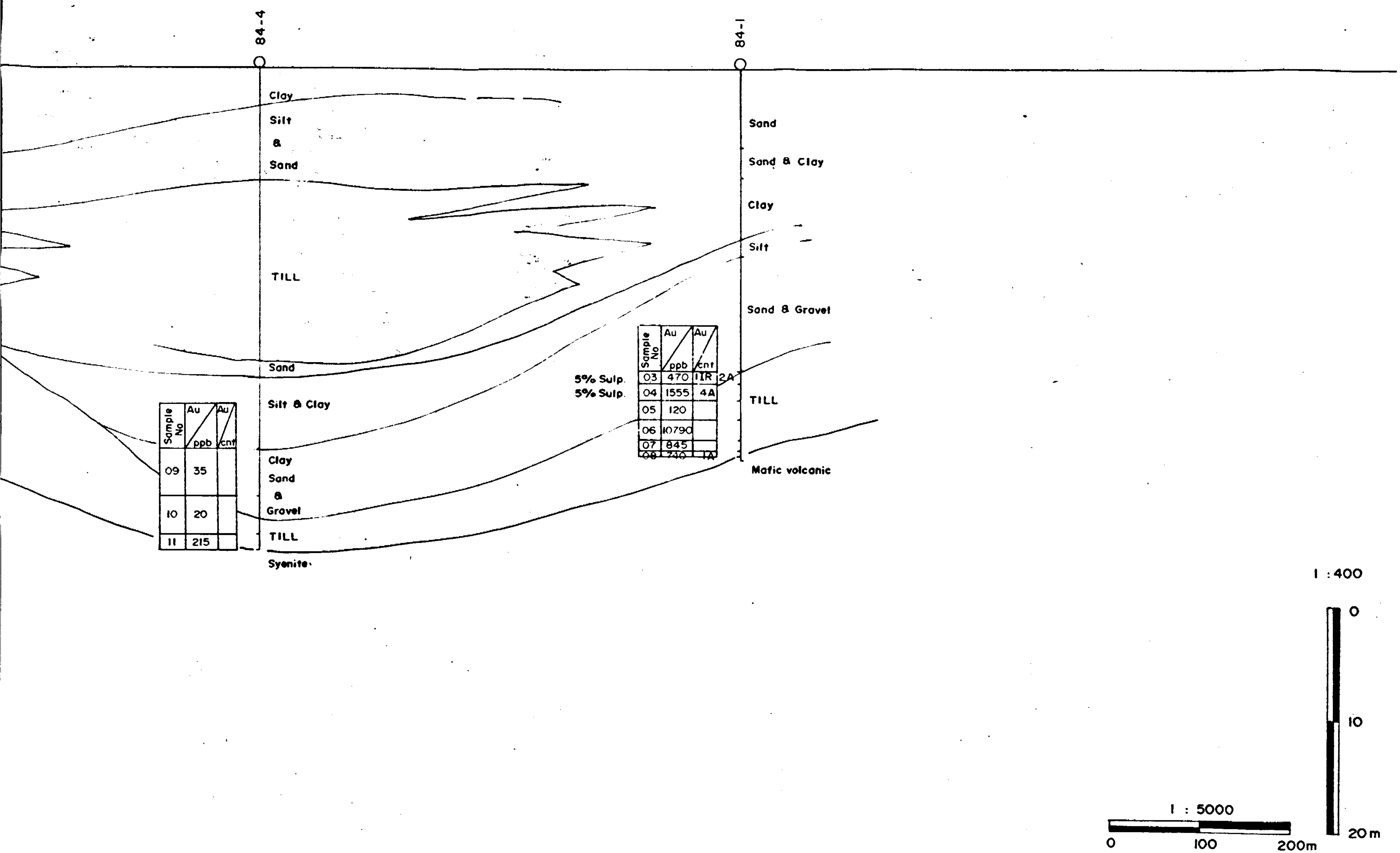


Sample No.	Au ppb	Au cnt
09	65	
10	95	
11	280	1A
12	15	
13	8120	1IR 2A
14	95	

Sample No.	Au ppb	Au cnt
10	140	
Boulders		
11	90	
12	105	
13	25	
14	1765	1A
15	4080	1A
16	190	1A

Sample No	Au ppb	Au cnt
07	495	1A

Sample No	Au ppb	Au cnt
07	23000	1IR 1A
08	576	1A
09	2245	1IR
10	610	



Sample No	Au ppb	Au cnt
09	35	
10	20	
11	215	

Sample No	Au ppb	Au cnt
03	470	11R 2A
04	1555	4A
05	120	
06	10790	
07	845	
08	740	1A

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63.4571

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
Jan 30.85
PROVINCE OF ONTARIO

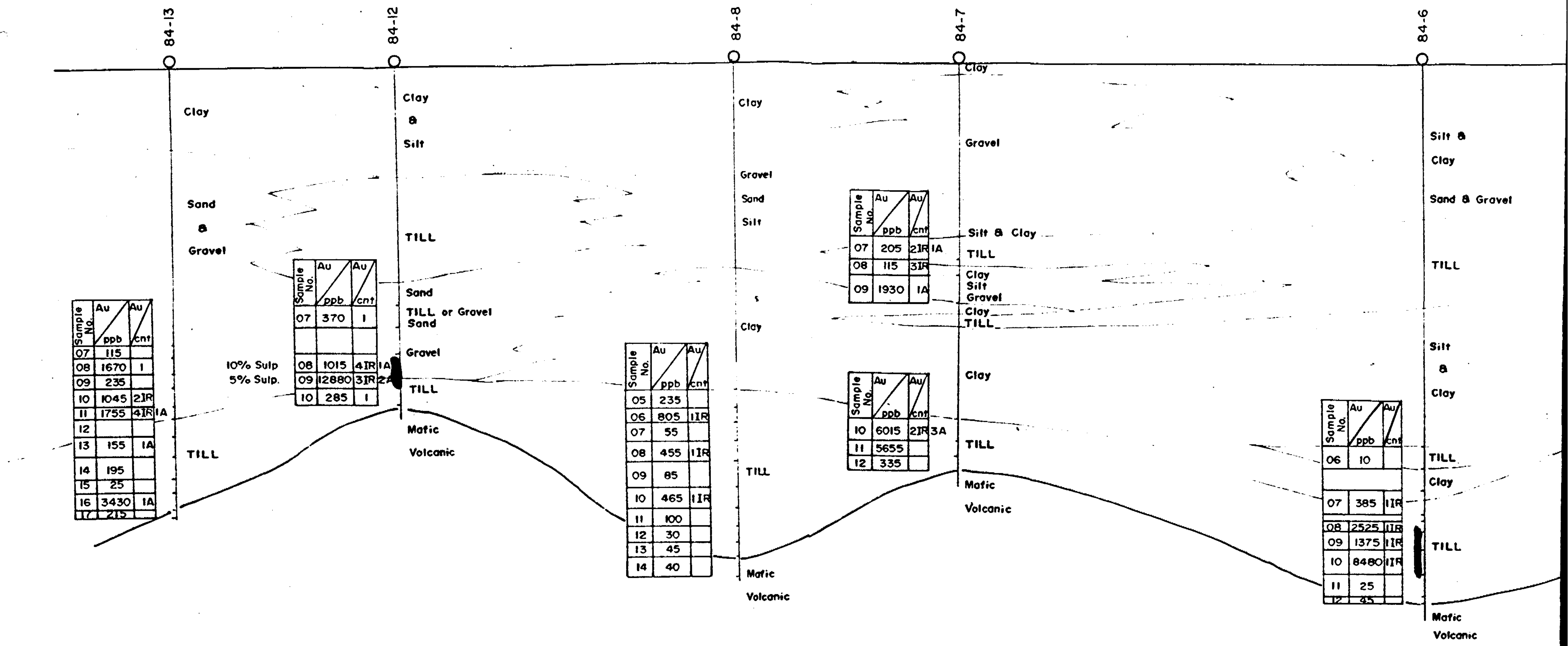
Overburden Holes Forming
SECTION C
(formerly A)

PERREX RESOURCES INC.
NOLAN RESOURCES LTD.

Harker Township, Ontario

JANUARY, 1985

Figure 5A



Sample No.	Au ppb	Au cnt
07	115	
08	1670	1
09	235	
10	1045	2IR
11	1755	4IR 1A
12		
13	155	1A
14	195	
15	25	
16	3430	1A
17	215	

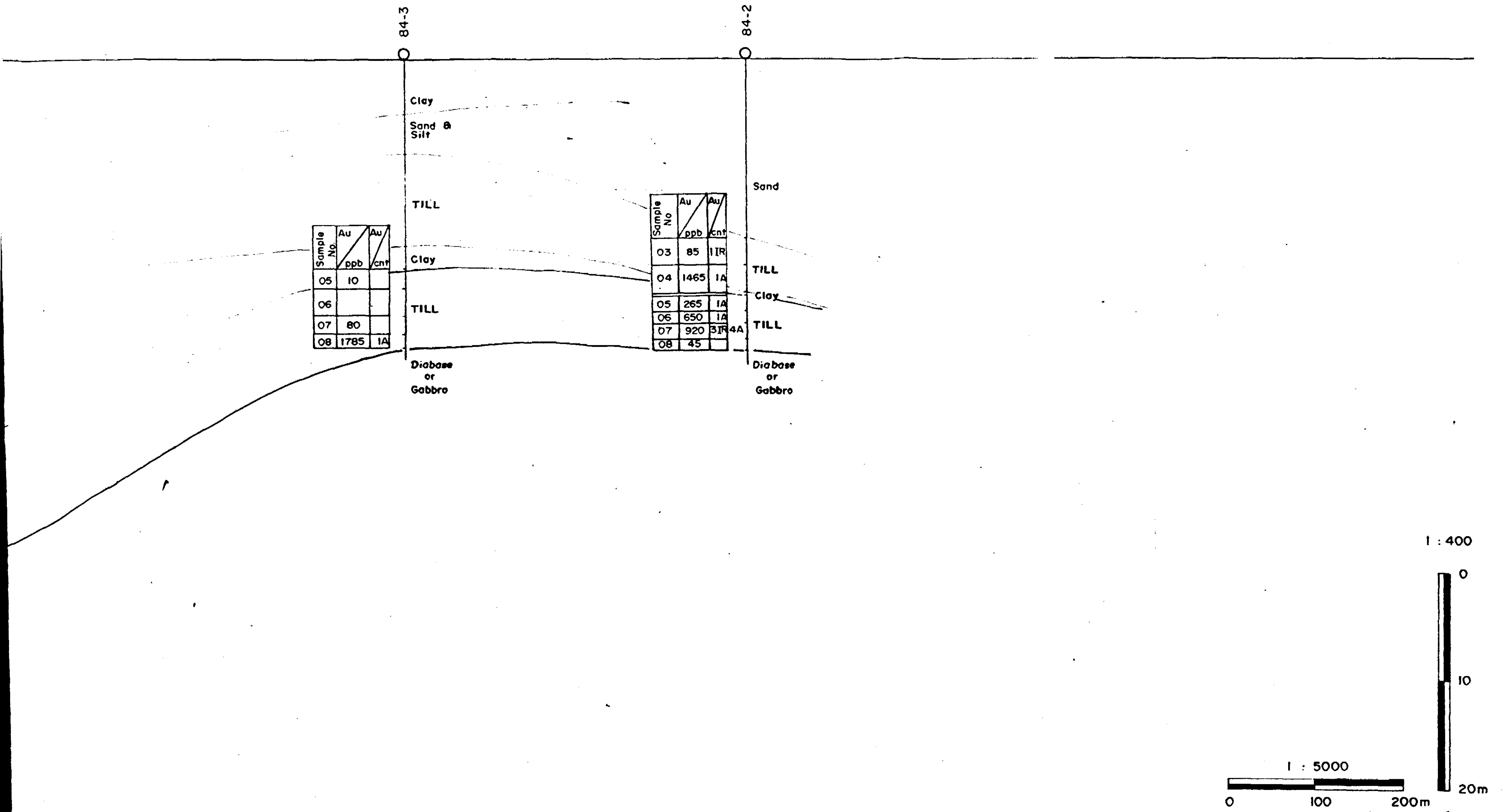
Sample No.	Au ppb	Au cnt
07	370	1
08	1015	4IR 1A
09	12880	3IR 2A
10	285	1

Sample No.	Au ppb	Au cnt
05	235	
06	805	1IR
07	55	
08	455	1IR
09	85	
10	465	1IR
11	100	
12	30	
13	45	
14	40	

Sample No.	Au ppb	Au cnt
07	205	2IR 1A
08	115	3IR
09	1930	1A

Sample No.	Au ppb	Au cnt
10	6015	2IR 3A
11	5655	
12	335	

Sample No.	Au ppb	Au cnt
06	10	
07	385	1IR
08	2525	1IR
09	1375	1IR
10	8480	1IR
11	25	
12	45	



84-3

Sample No	Au ppb	Au cnt
05	10	
06		
07	80	
08	1785	1A

84-2

Sample No	Au ppb	Au cnt
03	85	1 IR
04	1465	1A
05	265	1A
06	650	1A
07	920	3IR 4A
08	45	

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63.4571

Overburden Holes Forming

SECTION D

(formerly B)

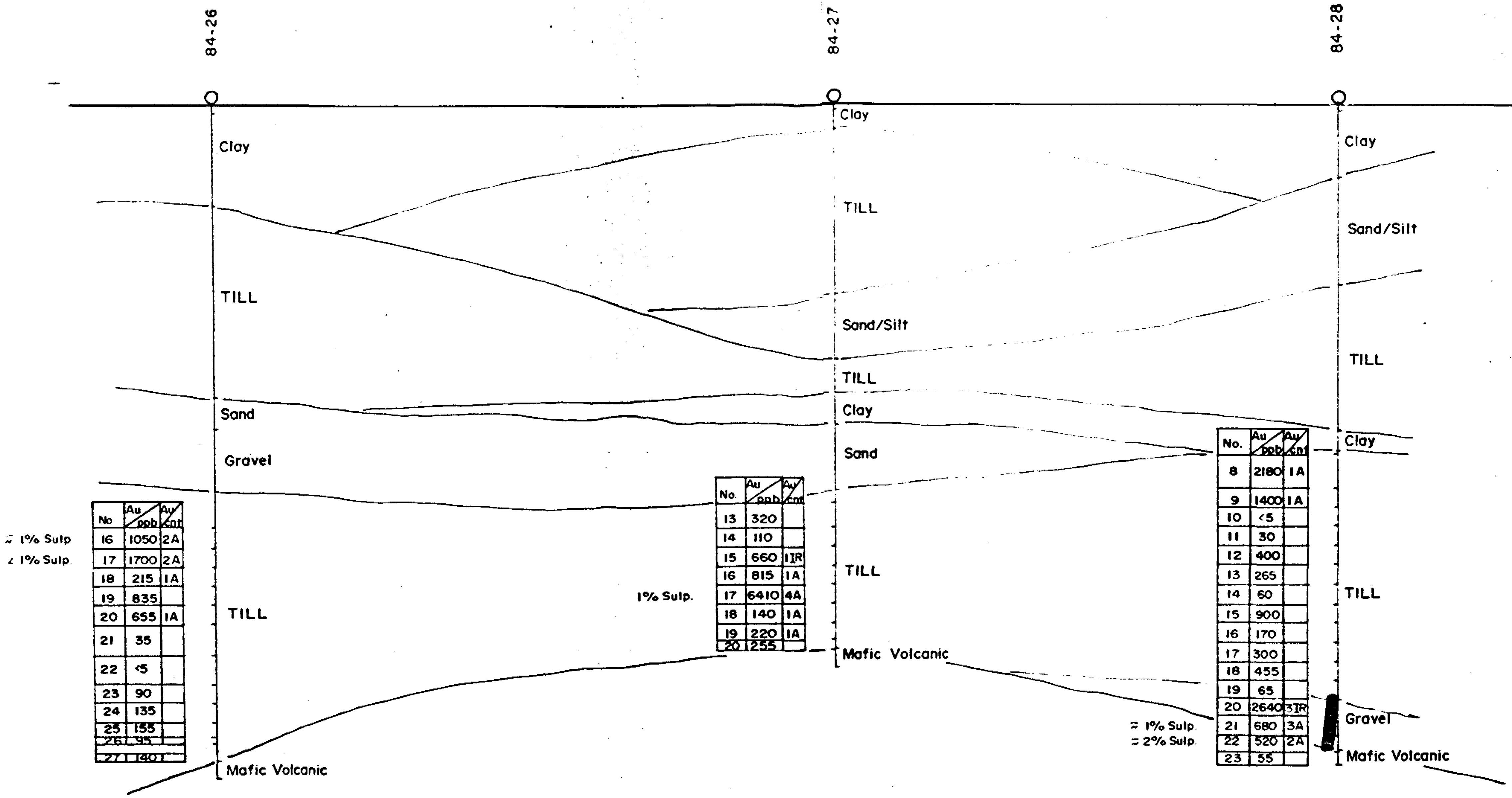
PERREX RESOURCES INC.
NOLAN RESOURCES LTD.

Harker Township, Ontario

R. J. BRADSHAW
Jan 30 85

JANUARY, 1985

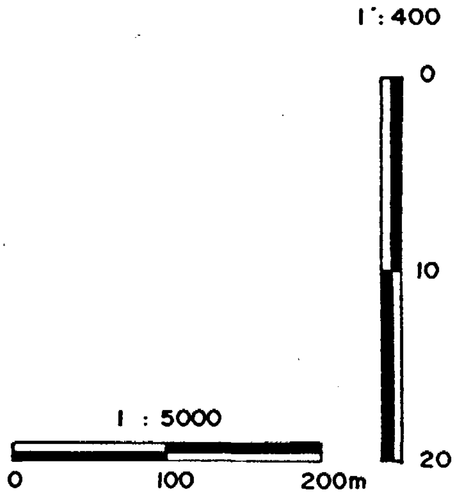
Figure 6A



No	Au ppb	Au cnt
16	1050	2A
17	1700	2A
18	215	1A
19	835	
20	655	1A
21	35	
22	<5	
23	90	
24	135	
25	155	
26	95	
27	140	

No.	Au ppb	Au cnt
13	320	
14	110	
15	660	1IR
16	815	1A
17	6410	4A
18	140	1A
19	220	1A
20	255	

No.	Au ppb	Au cnt
8	2180	1A
9	1400	1A
10	<5	
11	30	
12	400	
13	265	
14	60	
15	900	
16	170	
17	300	
18	455	
19	65	
20	2640	3IR
21	680	3A
22	520	2A
23	55	



OM84-214

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Overburden Holes Forming

SECTION E

PERREX RESOURCES INC.
NOLAN RESOURCES LTD.

Harker Township, Ontario

JANUARY, 1985

Figure 7A

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
Jan 30.85
PROVINCE OF ONTARIO

070

OVERBURDEN DRILLING REPORT
ON THE
PERREX RESOURCES INC. PROPERTY
HARKER LAKE GRID

HARKER TOWNSHIP

LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

FOR

ALEXANDER H. PERRON

MARCH 17, 1985

MARY GREER
GEOLOGICAL TECHNICIAN

TABLE OF CONTENTS

ILLUSTRATIONS

OVERBURDEN DRILLING REPORT
ON THE
PERREX RESOURCES INC. PROPERTY
HARKER LAKE GRID
HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

INTRODUCTION

For the recording dates on the Perrex Property see the list of claim numbers and recording dates found in Appendix 1.

During the months of May and June, 1984, a geophysical grid, at a 400 foot line spacing, was established by Perrons' Inc. A magnetometer survey was subsequently completed by Perrons' Inc. during June 1984.

In August 1984, and November 1984, a reverse circulation program was carried out. This drill program involved thirteen (13) holes in the first drilling and nineteen (19) holes in the second drilling for a total of thirty-two (32) holes.

The drilling program was conducted and supervised by Overburden Drilling Management Limited with Mary Greer assisting.

The purpose of this report is to briefly describe the results obtained in the said survey. Only the Perrex (41) claim group will be described in this report. This is the claim group that the drilling was performed on.

The drill holes are shown on the accompanying plan map at a scale of one inch to 600 feet, that form an integral part of this report.

PROPERTY DESCRIPTION

The Perrex Property consists of a contiguous block of one hundred and forty-seven (147) unpatented mining claims located in Harker, Elliott and Thackeray townships, Larder Lake Mining Division, District of Cochrane, Ontario.

Of these claims the drilling was performed in the forty-one (41) claim group. Refer to Appendix 1 for a complete list of the claim numbers. (See Claim Location Map found in back pocket).

Ownership of the claims has been attested to by Alexander H. Perron of 103 Government Road East, Kirkland Lake, Ontario, and was not independently ascertained by the writer.

LOCATION AND ACCESS

The Perrex Property is located in the southeast central part of Harker township, south of Harker Lake and one mile east of the Ghost River. Harker township is approximately thirty (30) miles due east of the town of Matheson, Ontario, along highway No. 101. Matheson is approximately forty (40) miles northeast of the town of Kirkland Lake, Ontario, via highway No. 66 and No. 11.

The property is accessible by standard forestry access roads which criss-cross the Harker area. The main road runs south approximately one mile east of the Ghost River. This road travels south for three (3) miles and then east for two (2) miles swinging around Harker Lake to the Perrex Property and camp. Another road extends south again one mile west of Harker Lake traversing down the west side of the property.

Harker township has an abandoned airstrip located east of the camp.

Kirkland Lake is accessible from Toronto, Ontario, by Nord-Air or Ontario Northland Railroad, and public highways. (See Claim Location Map, Figure 1b).

PREVIOUS WORK

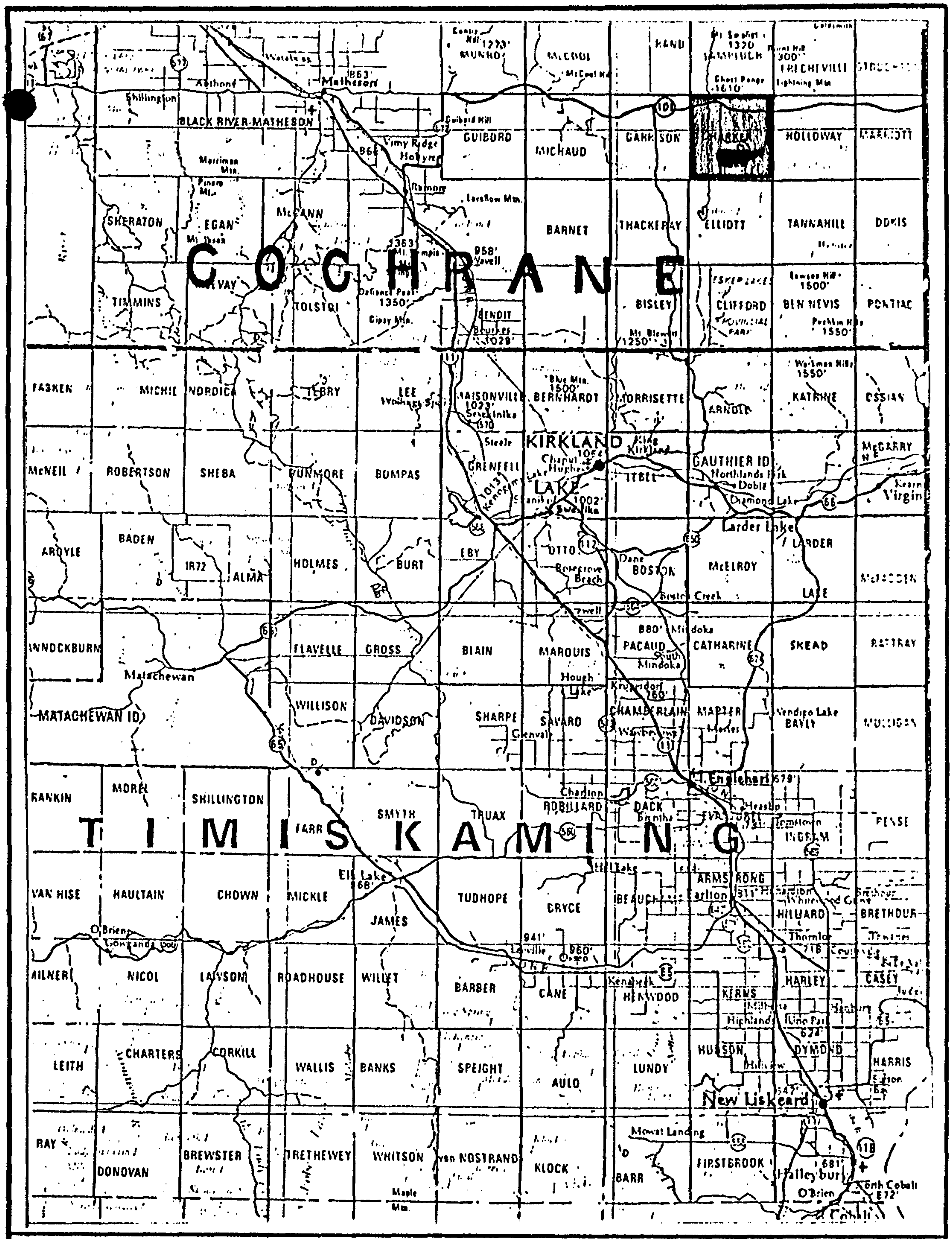
Due to the large amount of overburden, no previous work has been carried out on the Perrex ground. Perrex conducted two magnetic surveys over the Perrex (41) group and the Airborne Group. See the Regional files for these surveys.

FIELD PROCEDURE

A baseline was established from the patent pin at the corner of claim L-669790. The baseline was turned off at an angle of 240° to traverse approximately parallel to the general line of strike of the underlying bedrock.

The baseline was cut for a total footage of 11,100 feet. A grid system of picket lines at 400 foot spacings with stations every 100 feet was established at right angles to the baseline.

The first drill hole program was drilled in two sections or «fences» and the second program was performed to define other sections or «fences»



Location Map

Miles 10 0 10 20

Figure 1b

and confirm finds from the first drilling.

The drilling was performed by a reverse circulation rotary drill mounted on a Nodwell, with a bulldozer assisting to remove trees, stumps and fallen trees.

Compressed air and water are forced down between the inner and outer pipes to the drill bit, where this mixture is directed to the inner pipe, returning material cut by the drill bit to surface. The pack-off sub behind the bit has minimum clearance from the sides of the hole, preventing escape of drilling fluid and cuttings, and preventing contamination by material from elsewhere in the hole. When the slurry of drilling fluid and cuttings reaches surface, it passes through a cyclone, and then through a 10 mesh Tyler screen into a five gallon bucket. Water and light fines overflow the bucket into a water recovery tank. Heavier particles settle in the bucket, which must be changed at frequent intervals, and can be either sampled or discarded. A five foot drill run produces 20 to 60 pounds of cuttings, depending on composition of the overburden.

Individual samples as selected by Overburden Drilling were processed as shown on the accompanying flow sheet. (See Figure 2).

TOPOGRAPHY

The general terrain of the property consists of sand and glacial till covered over a gentle undulating land. Harker Lake is located in the northeast corner of the Perrex Property and the property is cut by a number of creeks which have been flooded by beavers into small ponds. There are some

OVERBURDEN DRILLING MANAGEMENT LIMITED

SAMPLE PROCESSING FLOW SHEET

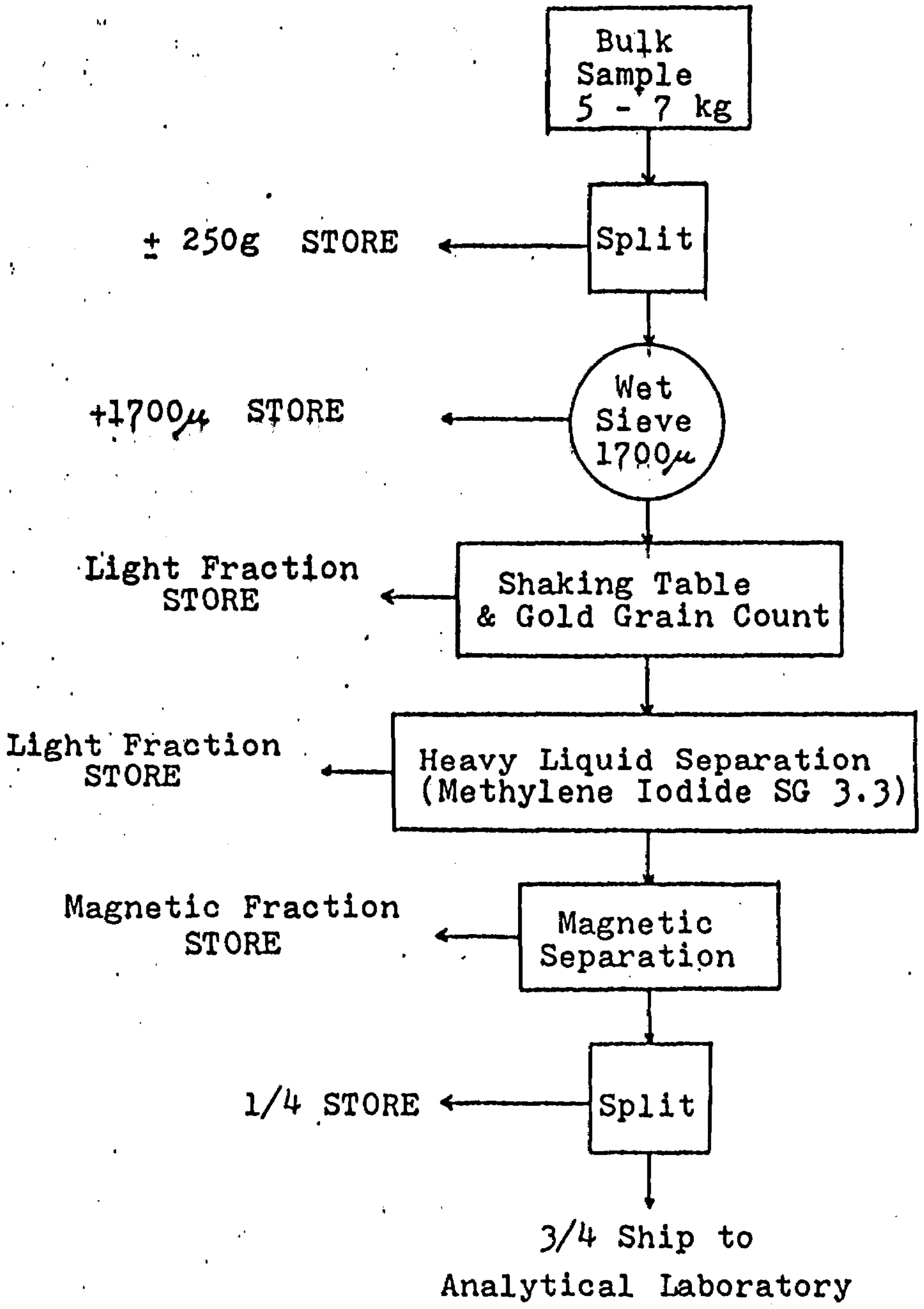


FIGURE 2

areas of clay beds and these areas are generally wet.

Due to recent logging operations carried out in 1979, the area is open scrub bush covered with young poplar and thick dense stands of willow and alder. Some areas untouched by the logging operations are covered by black spruce and spruce bog.

The eastern claims are open with replanted red pine saplings.

GENERAL GEOLOGY

The underlying bedrock of Harker township are of the Archean age belonging to the Abitibi greenstone belt of the Superior Province.

The bedrock is primarily basic to acidic lava flows, with the basic lava types being the most predominate. Lying between these lava flows are interflow sedimentary bands of greywacke, arkose and some iron formation.

The Abitibi greenstone belt is part of a large synclinorium which trends east-west. The Destor-Porcupine fault occurs on the northern edge and the Kirkland-Larder Lake Break occurs on the southern edge.

The Perrex property is crossed in a northeast southwest direction by the Ghostmount fault and sedimentary horizon and by the Cryderman sedimentary horizon. Both horizons run parallel to each other along the strike of the underlying bedrock.

ECONOMIC GEOLOGY

There are five (5) parallel complex horizons of interflow sediments and fault zones which trend northeast - southwest through Holloway, Harker, Elliott and Thackeray townships.

Extensive diamond drilling programs in Holloway and Harker townships by Barrick and Camflo Resources are proving up large gold bearing zones.

A gold discovery was recently found along the Ghostmount sedimentary horizon, only two (2) miles northeast along strike of the Perrex property.

The same zones found along strike to the southwest of the Perrex property are being found in Thackeray township by Kerr Addison Mines.

The newly discovered zones have potential economic gold tonnage and future full scale mining operations are being proposed.

The Perrex property lies in the middle of these areas with the same gold bearing horizons crossing the property.

OVERBURDEN DRILLING AS AN EXPLORATION TOOL

During the Pleistocene epoch of the Quaternary period, the crowns of all ore bodies that subcropped beneath the continental ice sheets of North America were eroded and dispersed down-ice in the glacial debris. The dispersion mechanisms were systematic (Averill, 1978) and the resulting ore «trains» in the overburden are generally long, thin and narrow and most importantly are several hundred times larger than the parent ore bodies. These large trains can be used very effectively to locate the remaining roots of the ore bodies.

Because the dispersion trains originated at the base of the ice, they are either partly or entirely buried by younger non-anomalous glacial debris. Many trains are confined to the bottom layer of glacial debris--the basal till. Significant glacial dispersion trains may also occur in formations other than basal till.

While ore mineral dispersion trains are very large, they are also weak, due to dilution by glacial transport, and are difficult to identify from a normal «soil» analysis. Consequently, heavy mineral concentrates are prepared to amplify the primary anomalies.

True anomalies from significant glacial dispersion trains are rare and generally have the following properties:

1. A minimum of 4 to 5 gold particles coarser than 200 microns or ten particles finer than 200 microns.
2. All of the particles have suffered the same degree of glacial abrasion indicating a common distance of transport.
3. Gold assays from significant dispersion trains in-

variably exceed 1000 ppb* and are generally greater than 3000 ppb.

*ppb equivalent to parts per billion.

Dispersion trains are characteristically stratabound at the base of a specific till unit near source, and at the top of the same unit further down-ice. Thus a significant overburden gold anomaly should repeat at the same stratigraphic level in adjacent drill holes across a minimum width of 100 meters, assuming minimum length of a gold deposit is 100 metres.

There are several examples of dispersion trains which are traceable for about one kilometer down-ice.

It has been determined that 10 to 15 per cent of samples from the Abitibi Greenstone Belt contain 1 or 2 gold particles measuring 200 to 1000 microns and produce false heavy mineral geochemical anomalies ranging from 1000 to more than 15000 ppb.

PRESENTATION AND DISCUSSION OF RESULTS

The drill hole locations are shown on the accompanying plan map, at a horizontal scale of one inch to 600 feet, Map No.: 85-PX-41-OB-1 found in the back pocket of this report.

For complete description of the drill holes, see the drill logs found in the Appendix 2 at the back of the report.

For the purpose of this discussion, the drilling results will be described in two parts referred as Summer Drilling and Winter Drilling.

The drilling was conducted by Overburden Drilling Management Limited of Ottawa, Ontario and the drilling program was handled by Heath & Sherwood Drilling of Kirkland Lake, Ontario, Bulldozing was contracted out to Nychuk Lumber of Kenogami, Ontario.

The equipment used is further described below.

One rotary reverse circulation drill
- complete with an air compressor and ancillary tools - mounted on a Nodwell carrier.

One GT 1000 water carrier
- complete with tank and pump

One D-6 Bulldozer - to provide clear access to all drill sites, free of stumps, boulders and heavy trees.

Summer Drilling:

The depth of the overburden ranged from shallow holes of 70 feet to deeper holes of 155 feet. The average depth was 110 feet.

Section A had four (4) anomalous samples in four (4) holes.

Hole 84-5 contained visible arsenopyrite and particles of gold, representing a valid dispersion train.

Hole 84-10 and 84-11 had anomalous gold values.

Section B found approximately 1000 feet north of Section A - all the holes, with the exception of 84-8 had anomalous gold samples. Hole 84-2 and 84-3 may represent a valid dispersal train. The anomalous samples came from the same horizon in the basal till near bedrock.

Hole 84-6 and 84-7 had similar characteristics, anomalous gold values were found in the same horizon for both holes. Hole 84-7 also showed visible particles of gold and 2 per cent sulphides.

No significant values were found in hole 84-8.

In hole 84-12 samples indicated particles of gold and sulphides which may represent a valid dispersal train. In hole 84-13 a weaker gold value was found in the same horizon.

Winter Drilling:

The depth of these holes ranged from 80 feet to over 200 feet when bedrock was not reached. The average depth of the overburden was found to be approximately 120 feet.

Section C shows anomalous values in three holes. Hole 84-15 had the best characteristics showing gold particles which may indicate a dispersal train having a nearby source. In this same section hole 84-16 and 84-20 had weak anomalous zones in the centre of the till horizon. Holes 900 feet north did not encounter significant gold.

Hole 18-A in Section D stopped in rhyolite which is associated with gold mineralization in the northeast.

Holes 84-26 and 84-27 were drilled to validate the presence of anomalous gold in holes 84-12, 84-25 and 84-7. The results obtained were not conclusive due to the different shapes of the gold particles. This suggests a distant source in 84-27 as compared to 84-7 which had irregular shaped particles.

Hole 84-28 supports the weak anomaly detected in hole 84-6. The section of anomalous gold in 84-28 lies adjacent to bedrock over a width of thirteen (13) feet and due to the shape of the particles, may suggest a dispersal train having a distant source.

CONCLUSIONS AND RECOMMENDATIONS

The overburden drilling was performed to search for a gold bearing dispersal train which would have a source on the Perrex property.

Hole 84-15, 84-20, 84-18A, 84-6 and 84-28 had a close relationship to faulting and geology favourable to gold mineralization and warrant further detailed attention.

The rhyolite zone can be projected about 400 feet south of Section E and may be an important area to consider for diamond drilling. Some holes showed high percentages of sulphides concentrations such as 84-16, 84-20 and 84-12. These areas should be examined with an induced polarization survey or resistivity survey which may assist in locating sulphide bodies which would give further diamond drill targets.

Respectfully yours,

March 17, 1985

Mary Greer
Geological Technician

BIBLIOGRAPHY

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Averill, S.A. 1984	The Nugget Problem in Till Gold Exploration; Seminar - Till Tomorrow, 84, Kirkland Lake.
1978	Overburden exploration and the new glacial history of northern Canada; Canadian Mining Journal, Vol. 99, No. 4, p. 58-64.
Greer, Mary July 21, 1984	Magnetometer Survey on the Perrex Resources Inc. Property, Harker Township.
Hinse, Guy J. April 24, 1984	Report on the Harker Lake Gold Project, Harker Township.
Huneault, R. August 1984	Reverse Circulation Drill Holl Logs - Holes 1-13, Laboratory Sample Logs - Holes 1-13.
Bradshaw, R.J.	Report on the Perrex Resources Harker Township, Northeast, Ontario
Burns, T. November 1984	Reverse Circulation Drill Hole Logs - Holes 14-29 Laboratory Sample Logs - Holes 14-29
Bradshaw, R.J.	Report on the property of Perrex Resources Inc., Appendix I, Harker Township, Northeast, Ontario.

MAPS

P2433, 1982	Precambrian Geology of the Lightning River Area by L.S. Jensen.
80599	Airborne electromagnetic and total intensity magnetic surveys for the Ontario Geological Survey.

CERTIFICATE

I, Mary Greer, of Kirkland Lake, Ontario, do hereby certify:

1) That I am a Geophysical Technician and reside at:
49 McKelvie Avenue, Kirkland Lake, Ont. P2N 2K6.

2) That I graduated from Sir Sandford Fleming College at Lindsay, Ontario, in 1978, with a diploma as a Geological Technician.

3) That I was employed as a Geophysical Technician by H. E. Neal and Associates for 18 months.

4) That I have been practising my profession for a period of five (5) years and I am qualified to write this report.

5) That I supervised and participated in this survey.

Date

Mary Greer
Geological Technician

File__________

Ministry of Natural Resources

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) REVERSE CIRCULATION ROTARY DRILLING
Township or Area HARKER
Claim Holder(s) ALEXANDER H. PERRON
103 GOV'T RD. E., KIRKLAND LAKE, ONT. P2N 1A9
Survey Company PERRONS'
Author of Report MARY GREER
Address of Author 49 MCKELVIE AVE., KIRKLAND LAKE, ONT P2N 2K6
Covering Dates of Survey AUG.23/84 TO DEC.2/84 (linecutting to office)
Total Miles of Line Cut 50 MILES

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	565532
L	669792
L	669793
L	669794
L	669795
L	669796
L	669798
L	736844
L	736845
L	736846
L	736847
L	736848
L	737603
L	737980
L	737981
L	760396
L	760398
L	760967
L	760968

TOTAL CLAIMS 19

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer______ Electromagnetic______ Radiometric______
(enter days per claim)

DATE:__________ SIGNATURE:__________
Author of Report or Agent

Res. Geol.__________ Qualifications__________

Previous Surveys

File No.	Type	Date	Claim Holder

SELF POTENTIAL

Instrument ______ Range ______

Survey Method ______

Corrections made ______

RADIOMETRIC

Instrument ______

Values measured ______

Energy windows (levels) ______

Height of instrument ______ Background Count ______

Size of detector ______

Overburden ______

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey REVERSE CIRCULATION ROTARY DRILLING

Instrument REVERSE CIRCULATION ROTARY DRILL MOUNTED ON A NODWELL CARRIER

Accuracy ______

Parameters measured ______

Additional information (for understanding results) ______

AIRBORNE SURVEYS

Type of survey(s) ______

Instrument(s) ______

(specify for each type of survey)

Accuracy ______

(specify for each type of survey)

Aircraft used ______

Sensor altitude ______

Navigation and flight path recovery method ______

Aircraft altitude ______ Line Spacing ______

Miles flown over total area ______ Over claims only ______

APPENDIX II

HOLE LOCATION AND LOGS

HOLE NUMBERS	LOCATIONS	
SUMMER DRILLING	LINE	STATION
P-84-01	L 92 + 00 E	15 + 40 S
P-84-02	L 88 + 00 E	5 + 40 S
P-84-03	L 76 + 00 E	5 + 90 S
P-84-04	L 76 + 00 E	15 + 50 S
P-84-05	L 60 + 00 E	16 + 60 S
P-84-05A	L 60 + 00 E	16 + 60 S
P-84-06	L 56 + 00 E	4 + 50 S
P-84-07	L 40 + 00 E	2 + 80 S
P-84-08	L 32 + 00 E	5 + 25 S
P-84-09	L 40 + 00 E	15 + 20 S
P-84-10	L 24 + 00 E	16 + 50 S
P-84-11	L 16 + 00 E	16 + 50 S
P-84-12	L 20 + 00 E	4 + 75 S
P-84-13	L 12 + 00 E	4 + 00 S
WINTER DRILLING		
P-84-14	L 112 + 00 E	36 + 00 S
P-84-15	L 96 + 00 E	36 + 00 S
P-84-16	L 84 + 00 E	36 + 00 S
P-84-16A	L 78 + 00 E	27 + 00 S
P-84-17	L 84 + 00 E	27 + 00 S
P-84-18	L 68 + 00 E	26 + 00 S
P-84-18A	L 60 + 00 E	26 + 00 S

Cont'd. . . . . Page -2-

HOLE NUMBERS	LOCATIONS	
WINTER DRILLING	LINE	STATION
P-84-19	L 75 + 00 E	35 + 00 S
P-84-20	L 60 + 00 E	35 + 00 S
P-84-21	L 52 + 00 E	25 + 00 S
P-84-21A	L 42 + 00 E	26 + 00 S
P-84-22	L 44 + 00 E	35 + 00 S
P-84-23	L 32 + 00 E	29 + 00 S
P-84-23A	L 32 + 00 E	29 + 00 S
P-84-24	L 20 + 00 E	22 + 00 S
P-84-25	L 17 + 75 E	10 + 00 S
P-84-26	L 20 + 00 E	2 + 25 S
P-84-27	L 40 + 00 E	11 + 00 S
P-84-28	L 56 + 00 E	2 + 00 S
P-84-29	L 56 + 00 E	10 + 00 S

PERRONS 103 GOVERNMENT ROAD EAST · KIRKLAND LAKE, ONTARIO · P2N 1A9 · (705) 567-7057

March 27, 1985

Mr. Arthur Barr,
Lands Administration Branch,
Mining Lands Section,
Ministry of Natural Resources,
Room 6450, Whitney Block,
Queen's Park,
Toronto, Ontario
M7A IW3

Dear Arthur:

RE: Overburden Drilling Report
Harker Township
Larder Lake Mining Division

Enclosed is a duplicate copy of the following:

- Report dated March 17, 1985, by Mary Greer entitled:

  Overburden Drilling Report on the
  Perrex Resources Inc. Property
  Harker Lake Grid
  Harker Township
  Larder Lake Mining Division
  District of Cochrane, Ontario

This report should be applied to the Ammended Report of Work #57, which was filed according to your instructions on March 26, 1985, with the Larder Lake Mining Recorder. If I have overlooked some part of the report, or of work done, to not qualify for approval by your office, please contact me immediately.

I will correct any problems immediately.

Yours truly,

PERRONS

Mary Greer

Mary Greer,
Geological Technician
MG/p
Encls.

PERREX
RESOURCES INC.

Suite 908, 111 Richmond Street West,
Toronto, Ontario M5H 2G4
(416) 947-1087

103 Government Road East,
Kirkland Lake, Ontario P2N 1A9
(705) 567-7057

Overburden Drilling

Date paid	Cheque #	Amount	Total
Oct. 1/84	139	$6,355.09 ✓	
Dec. 19/84	173	8,779.58 ✓	
Feb. 20/85	188	2,275.00 ✓	$17,409.67

Heath & Sherwood

Oct. 19/84	145	8,575.56	
Nov. 15/84	146	10,000.00 ✓	
Dec. 18/84	171	27,685.33 ✓	
Jan. 4/85	174	8,618.38 ✓	54,879.27

Bondar Clegg

Oct. 16/84	144	627.00	
Dec. 19/84	172	305.25 ✓	
Jan. 18/85	181	1,047.75 ✓	
Jan. 24/85	183	165.00 ✓	
Feb. 20/85	189	52.50	2,197.50

Shield Geophysics

Oct. 31/84	155	3,538.46 ✓	
Dec. 6/84	164	2,321.43 ✓	
Feb. 11/85	184	3,187.50	9,047.39

OVERBURDEN DRILLING MANAGEMENT LIMITED

3 CLEOPATRA DRIVE, NEPEAN, ONTARIO K2G 3M9 (613) 226-1774

January 18,1985

OM84-214
63.4571

Perrex Resources
103 Government Rd. East
Kirkland Lake, Ontario
P2N 1A9

1 OF 2

Dear Sir:

Re: Laboratory Services

Please find enclosed the laboratory sample logs for the sample series P-84-28-12 to P-84-29-13.

The 3/4 split of the non-magnetic heavy mineral concentrate for this series was forwarded to Bondar-Clegg and Company for analysis on Jan. 14th. We will store the remaining fractions from the processing for a period of approximately three months, at which time we will contact you as to their disposition.

Should you require any additional information, do not hesitate to contact the undersigned.

Yours truly,

Kevan Elcomb

Kevan Elcomb
Laboratory Manager

Encl.

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
28-13	8.3	0.6	7.7	164.6	127.1	26.7	10.8	—	Pebs 70%VIS 30%GV.	unsorted gray with clay	TILL
-14	8.1	0.8	7.3	229.7	198.9	21.3	9.5	—	"	"	"
-15	7.5	0.7	6.8	217.7	186.1	23.4	8.2	—	"	unsorted gray beige with clay	"
-16	8.3	0.5	7.8	274.0	239.1	25.4	9.5	—	"	"	"
-17	8.4	0.5	7.9	234.7	204.8	21.6	8.3	—	"	"	"
-18	8.3	1.6	6.7	238.8	163.2	37.1	38.5	—	"	"	"
-19	8.6	1.8	6.8	251.1	198.8	39.4	12.9	—	"	"	"
-20	8.7	1.4	7.3	294.6	250.1	28.5	16.0	*	"	unsorted gray with clay	"
29-01	5.9	0.5	5.4	180.6	145.2	26.8	8.6	IR150 X300	"	"	"
-02	6.8	0.9	5.9	189.4	150.4	29.2	9.8	—	"	unsorted gray beige with clay	"
-03	7.2	0.7	6.5	190.0	152.6	28.9	8.5	—	"	"	"
-04	7.9	0.8	7.1	213.7	175.0	29.0	9.7	—	Pebs 80%VIS 20%GV.	unsorted grey with clay	"
-05	7.1	0.7	6.4	205.7	176.5	22.1	7.1	—	Pebs 70% VIS GCL. 30% GV.	"	"
-06	7.2	0.3	6.9	209.9	188.1	15.7	6.1	—	Pebs 60%VIS 40%Gr. GCL	unsorted gray beige with clay	"
-07	8.2	0.6	7.6	273.5	248.6	17.0	7.9	—	Pebs 70%VIS 30% Gr. Tr.LS.	"	"
-08	8.4	0.7	7.7	195.8	151.5	29.3	15.0	—	Pebs 70%VIS 30%Gr.	unsorted gray with clay	"
-09	8.0	1.0	7.0	185,7	143.2	25.4	17.1	—	Cobs 30%VIS 70%Gr.	unsorted gray beige with clay	"
10	8.6	2.1	6.5	363.7	327.2	25.1	11.4	—	Pebs 75%VIS 25%GV.	"	"
-11	8.8	2.0	6.8	308.3	279.4	15.9	13.0	—	Pebs 70%VIS 30%Gr. Tr.LS.	unsorted gray with clay	"
-12	8.9	1.7	7.2	227.0	195.9	20.6	10.5	—	"	"	"

* SEE PANNING SHEET FOR GOLD COUNT

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE NUMBER	SIZE OF GOLD BY SHAPE				SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			
	A	IR	D	Remarks		A	IR	D	Rema
P-84- -28-20		100X100 100X100 200X250		<1% sulfides					

OVERBURDEN DRILLING MANAGEMENT LIMITED

3 CLEOPATRA DRIVE, NEPEAN, ONTARIO K2G 3M9 (613) 226-1774

January 9, 1985

Perrex Resources
103 Government Rd. East
Kirkland Lake, Ontario
P2N 1A9

Dear Sir:

Re: Laboratory Services

Please find enclosed the laboratory sample logs for the sample series P-84-18A-11 to P-84-28-12.

The 3/4 split of the non-magnetic heavy mineral concentrate for this series was forwarded to Bondar-Clegg and Company for analysis on Jan. 7th. We will store the remaining fractions from the processing for a period of approximately three months, at which time we will contact you as to their disposition.

Should you require any additional information, do not hesitate to contact the undersigned.

Yours truly,

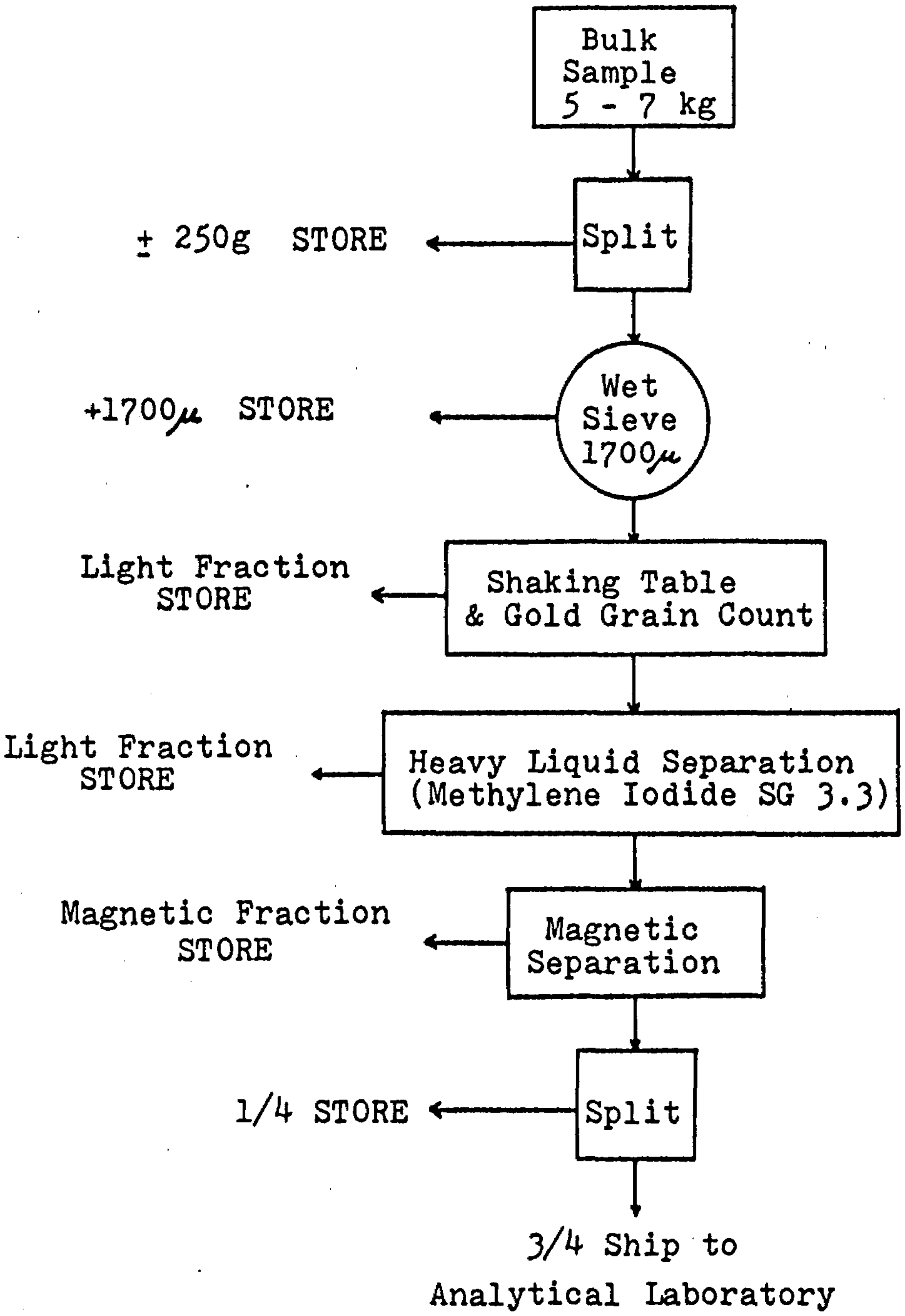
Kevan Elcomb

Kevan Elcomb
Laboratory Manager

Encl.

Copy To Perrex Toronto via Alex
~ John Jan 14/85

OVERBURDEN DRILLING MANAGEMENT LIMITED
SAMPLE PROCESSING FLOW SHEET



OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number		Number assigned to sample in the field
Weight (kg. wet)	Table Split	Weight of whole sample as received from the field less a 250 gram representative split (geochem)
	+10 Rock Chips	Weight of sample greater than 10 mesh
	-10 Table Feed	Weight of sample less than 10 mesh. This portion is fed across the shaking table.
Weight (grams dry)	Table Conc	Dry weight of heavy mineral split recovered from the shaking table
	M.I. Lights	Weight of shaking table concentrate less than 3.3 specific gravity.
	Non-mag	Weight of table concentrate heavier than 3.3 specific gravity with magnetic fraction removed
	Mag	Magnetic fraction of heavy mineral concentrate
Grains	V.G.	Description and size (in microns) of gold grains visible on the shaking table
Description	+10	Description of texture: e.g. granules, cobbles, pebbles Clast percentages Presence of other materials: e.g. pure clay clumps wood chips
	Matrix	Description: e.g. sorted, unsorted, colour, texture
Classification		Description: Till, Gravel, Sand

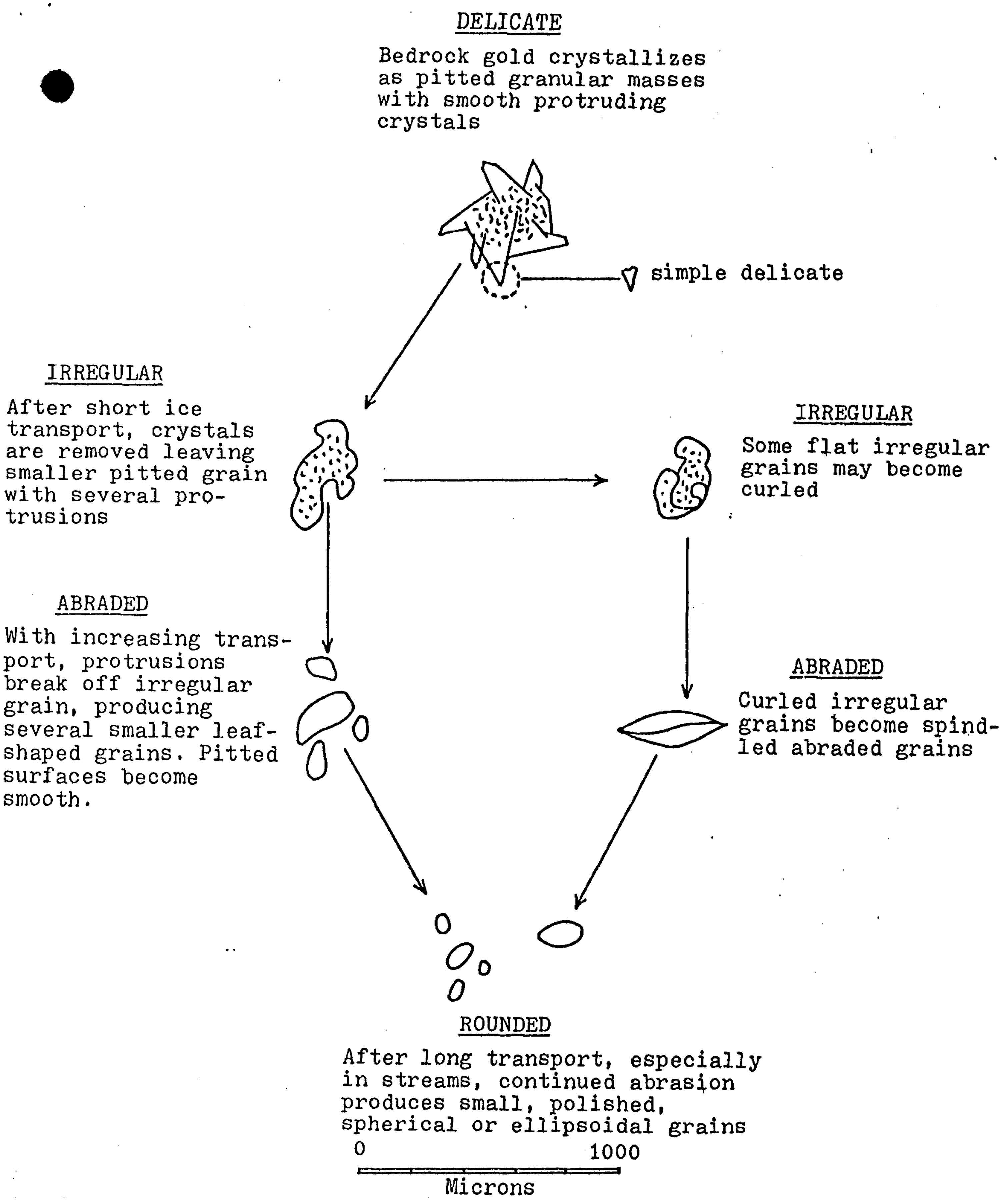
OVERBURDEN DRILLING MANAGEMENT LIMITED
3 CLEOPATRA DRIVE, NEPEAN, ONTARIO K2G 3M9 (613) 226-1774

LIST OF ABBREVIATIONS USED ON LAB DATA SHEETS:

Tr	Trace
Cobs	Cobbles
Pebs	Pebbles
GCls	Gritty clay balls
SCls	Smooth clay balls
V/S	Volcanic and/or sedimentary rocks
Gr	Granitic rocks
Lime	Limestone

ABBREVIATIONS USED FOR GOLD DESCRIPTION:

A	Abraded
R	Rounded
D	Delicate
IR	Irregular
SD	Simple delicate



DELICATE

Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals

IRREGULAR

After short ice transport, crystals are removed leaving smaller pitted grain with several protrusions

IRREGULAR

Some flat irregular grains may become curled

ABRADED

With increasing transport, protrusions break off irregular grain, producing several smaller leaf-shaped grains. Pitted surfaces become smooth.

ABRADED

Curled irregular grains become spindled abraded grains

ROUNDED

After long transport, especially in streams, continued abrasion produces small, polished, spherical or ellipsoidal grains

Effects of Glacial Transport on Gold Particle Size and Shape
(Developed by OVERBURDEN DRILLING MANAGEMENT LTD.)

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
18A-11	6.8	1.4	5.4	159.7	119.4	30.8	9.5	A150x100	COBS 60% V/S 40% Gr.	UNSORTED GREY-BEIGE w̄ CLAY.	TILL
20-01	7.8	0.7	7.1	134.0	91.8	33.8	8.4	*	PEBS 70% V/S 30% Gr.	"	"
-02	7.8	1.2	6.6	141.0	88.0	41.4	11.6	A100x100	"	"	"
-03	7.4	0.7	6.7	136.1	88.1	38.4	9.6	*	"	"	"
-04	8.1	0.7	7.4	158.5	106.4	39.3	12.8	*	PEBS 80% V/S 20% Gr.	"	"
-05	8.2	0.7	7.5	180.6	131.7	37.7	11.2	A200x150	"	"	"
21-01	7.6	0.4	7.2	221.5	174.0	38.3	9.2	-	"	"	"
-02	7.6	0.8	6.8	160.9	122.8	30.0	8.1	A250x150	PEBS 70% V/S 30% Gr.	"	"
-03	7.9	0.8	7.1	145.6	110.0	26.0	9.6	-	PEBS 90% V/S 10% Gr. Tr. LS.	"	"
21A-05	4.3	0.4	3.9	106.5	79.1	22.2	5.2	A150x100	PEBS 80% V/S 20% Gr. Tr. LS.	"	"
-06	6.4	0.6	5.8	118.1	83.0	27.8	7.3	-	"	"	"
-07	8.0	1.0	7.0	180.9	134.5	36.7	9.7	*	"	"	"
-08	6.1	0.6	5.5	115.7	70.6	33.5	11.6	-	PEBS 70% V/S 30% Gr.	"	"
-09	6.8	1.0	5.8	127.9	94.3	24.6	9.0	A350x300	"	"	"
22-10	7.5	0.8	6.7	126.4	83.6	30.6	12.2	-	"	"	"
-11	7.4	0.8	6.6	86.4	56.5	22.6	7.3	A250x150	"	"	"
-12	7.9	1.0	6.9	123.6	90.5	23.0	10.1	-	"	"	"
13	8.0	0.7	7.3	109.9	94.9	12.2	2.8	*	"	"	"
-14	7.8	0.7	7.1	117.9	80.0	27.7	10.2	-	"	"	"

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	−10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
22-15	9.0	1.0	8.0	116.8	78.8	27.7	10.3	A100x100	PEBS 70% V/s 30% Gr.	UNSORTED GREY-BEIGE w̄ CLAY.	TILL
23-10	6.1	0.8	5.3	76.0	62.0	11.5	2.5	-	PEBS 60% V/s 40% Gr.	UNSORTED BEIGE w̄ GREY-BEIGE CLAY.	"
-11	6.7	0.8	5.9	85.1	63.7	17.4	4.0	*	PEBS 70% V/s 30% Gr.	"	"
-12	8.6	1.4	7.2	117.1	81.0	26.4	9.7	-	PEBS 85% V/s 15% Gr.	"	"
-13	7.8	1.9	5.9	226.9	183.0	33.6	10.3	*	"	UNSORTED GREY-GREEN w̄ GREY-BEIGE CLAY	"
-14	8.3	0.6	7.7	118.2	79.0	28.9	10.3	A100x100	"	"	"
-15	6.0	0.8	5.2	99.0	62.7	24.8	11.5	-	PEBS 70% V/s 30% Gr.	"	"
-16	7.1	0.7	6.4	122.7	74.0	36.9	11.8	-	PEBS 85% V/s 15% Gr.	"	"
-17	8.1	0.8	7.3	113.4	63.2	38.3	11.9	-	"	"	"
-18	8.0	0.6	7.4	125.1	79.9	30.0	15.2	A100x50	"	"	"
-19	8.4	0.8	7.6	110.0	69.0	28.3	12.7	-	"	"	"
24-09	7.9	0.9	7.0	189.1	140.8	37.8	10.5	-	PEBS 60% V/s 40% Gr.	UNSORTED GREY-BEIGE w̄ CLAY.	"
-10	8.4	1.0	7.4	176.1	131.5	34.0	10.6	A100x100	PEBS 70% V/s 30% Gr.	"	"
-11	7.6	1.5	6.1	192.7	130.3	51.5	10.9	A150x100	PEBS 80% V/s 20% Gr.	"	"
-12	7.5	0.8	6.7	160.2	123.4	29.2	7.6	A150x100	"	"	"
-13	7.6	0.8	6.8	175.8	112.6	53.8	8.9	A350x200	"	"	"
-14	8.0	1.0	7.0	155.6	109.4	37.8	8.4	A450x200	PEBS 85% V/s 15% Gr. Tr. LS.	"	"
-15	7.8	0.5	7.3	233.3	183.4	42.0	7.9	A150x150	PEBS 70% V/s 30% Gr. Tr. LS.	"	"
25[illegible]4	7.8	0.6	7.2	155.1	98.6	43.7	12.8	*	"	"	"

* SEE ACCOMPANYING SHEET FOR GOLD COUNT / PANNIN RESULTS

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
25-15	8.2	0.6	7.6	186.0	126.0	49.9	10.1	A250x150	PEBS 70% V/S 30% Gr.	UNSORTED GREY-BEIGE w̄ CLAY.	TILL
-16	7.9	0.6	7.3	184.4	127.6	47.2	9.6	*	"	"	"
-17	7.3	0.4	6.9	163.4	100.0	53.1	10.3	*	PEBS 80% V/S 20% Gr. Tr. LS.	"	"
-18	7.5	0.6	6.9	168.9	117.1	42.4	9.4	A100x100	PEBS 70% V/S 30% Gr. Tr. LS.	"	"
26-16	8.1	0.7	7.4	87.9	49.7	27.8	10.4	*	PEBS 80% V/S 20% Gr. Tr. LS.	"	"
-17	8.0	0.7	7.3	140.3	92.5	35.5	12.3	*	COBS 50% V/S 50% Gr. Tr. LS.	"	"
-18	8.1	1.0	7.1	103.6	64.6	30.1	8.9	A100x100	PEBS 60% V/S 40% Gr. Tr. LS.	"	"
-19	7.7	0.6	7.1	95.5	60.7	27.2	7.6	-	"	"	"
-20	7.8	0.6	7.2	83.5	56.9	19.4	7.2	A100x100	PEBS 70% V/S 30% Gr. Tr. LS.	"	"
-21	7.8	1.2	6.6	243.3	228.5	11.8	3.0	-	PEBS 60% V/S 40% Gr. Tr. LS.	SORTED BEIGE MEDIUM.	SAND
-22	7.7	0.2	7.5	127.9	83.9	34.6	9.4	—	"	"	"
-23	7.9	0.5	7.4	102.3	63.4	30.1	8.8	—	Pebs 40% VIS 60% Gr.	unsorted beige with gray beige clay	TILL
-24	8.1	0.6	7.5	111.7	80.7	22.3	8.7	—	Pebs 50% VIS 50% Gr.	"	"
-27-13	7.4	0.4	7.0	82.1	46.3	26.7	9.1	—	"	"	"
-14	8.3	0.6	7.7	100.9	65.8	25.5	9.6	—	Pebs 60% VIS 40% Gr.	"	"
-15	7.3	0.6	6.7	101.9	58.4	34.2	9.3	R100 x100	Pebs 70% VIS 30% Gr. Tr. LS.	"	"
-16	7.9	0.9	7.0	94.1	61.7	23.2	9.2	A200 x150	Cobs 50% VIS 50% Gr.	"	"
-17	7.9	0.7	7.2	120.0	86.0	25.6	8.4	*	Pebs 60% VIS 40% Gr.	"	"
-28-08	8.0	0.6	7.4	103.1	71.6	23.2	8.3	A100 x250	"	"	"

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	−10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
28-09	8.2	0.2	8.0	213.2	172.2	31.6	9.4	A250 X.350	Pebs 60% VIS 40% Gr.	unsorted beige with gray beige clay	TILL
-10	7.8	0.3	7.5	180.9	145.4	27.5	8.0	—	"	unsorted gray with clay	"
-11	5.1	1.1	4.0	118.3	94.7	19.0	4.6	—	Pebs 70% VIS 30% Gr.	"	"
-12	7.8	1.2	6.6	147.1	111.0	26.4	9.7	—	"	"	"

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE NUMBER	SIZE OF GOLD BY SHAPE A	IR	D	* Remarks
P- 84- 20-01	300x100 100x100 50x50			≈5% Sulfides
20-03	150x100 100x100 50x50 150x50 100x100			≈10% Sulfides
20-04	150x100 100x50 50x50 200x100 150x100 100x50			≈5% Sulfides
21A-07	200x150 100x100 100x100			< 1% Sulfides
22-13	100x50 50x50	± 10 Grains Arsenopyrite (100µ) 2 Grains Galena (150µ) Sulfides < 1%		
23-11	150x100 150x100	200x150		<1% Sulfides
23-13	250x200 150x100			<1% Sulfides
25-14	400x200 200x200 250x150			<1% Sulfides
25-16	250x150 150x150	150x100 100x100		≈ 1% Sulfides
25-17	150x150 150x150 100x100 100x100	±10 Grains Arsenopyrite (100-150µ) Sulfides < 1%		
26-16	350x150 100x100	2 Grains Arsenopyrite (100-150µ) Sulfides <1%.		
26-17	250x200 200x150	1 Grain Arsenopyrite (150µ) 1 Grain Galena (300µ) Sulfides < 1%		

SAMPLE NUMBER	SIZE OF GOLD BY SHAPE A	IR	D	Remar
P-84- 27-17	100x100 100x150 100x200 250x450			2grai GALEN sulfid <1%

HEAVY MINERAL CONCENTRATE

OVERBURDEN DRILLING MANAGEMENT LIMITED
3 CLEOPATRA DRIVE, NEPEAN, ONTARIO K2G 3M9 (613) 226-1774

January 3, 1984

Perrex Resources
103 Government Rd. East
Kirkland Lake, Ont.
P2N 1A9

Dear Sir:

Re: Laboratory Services

Please find enclosed the laboratory sample logs for the sample series P-84-14-07 to P-84-29-15.

The 3/4 split of the non-magnetic heavy mineral concentrate for this series was forwarded to Bondar-Clegg and Company for analysis on Jan. 2nd. We will store the remaining fractions from the processing for a period of approximately three months, at which time we will contact you as to their disposition.

Should you require any additional information, do not hesitate to contact the undersigned.

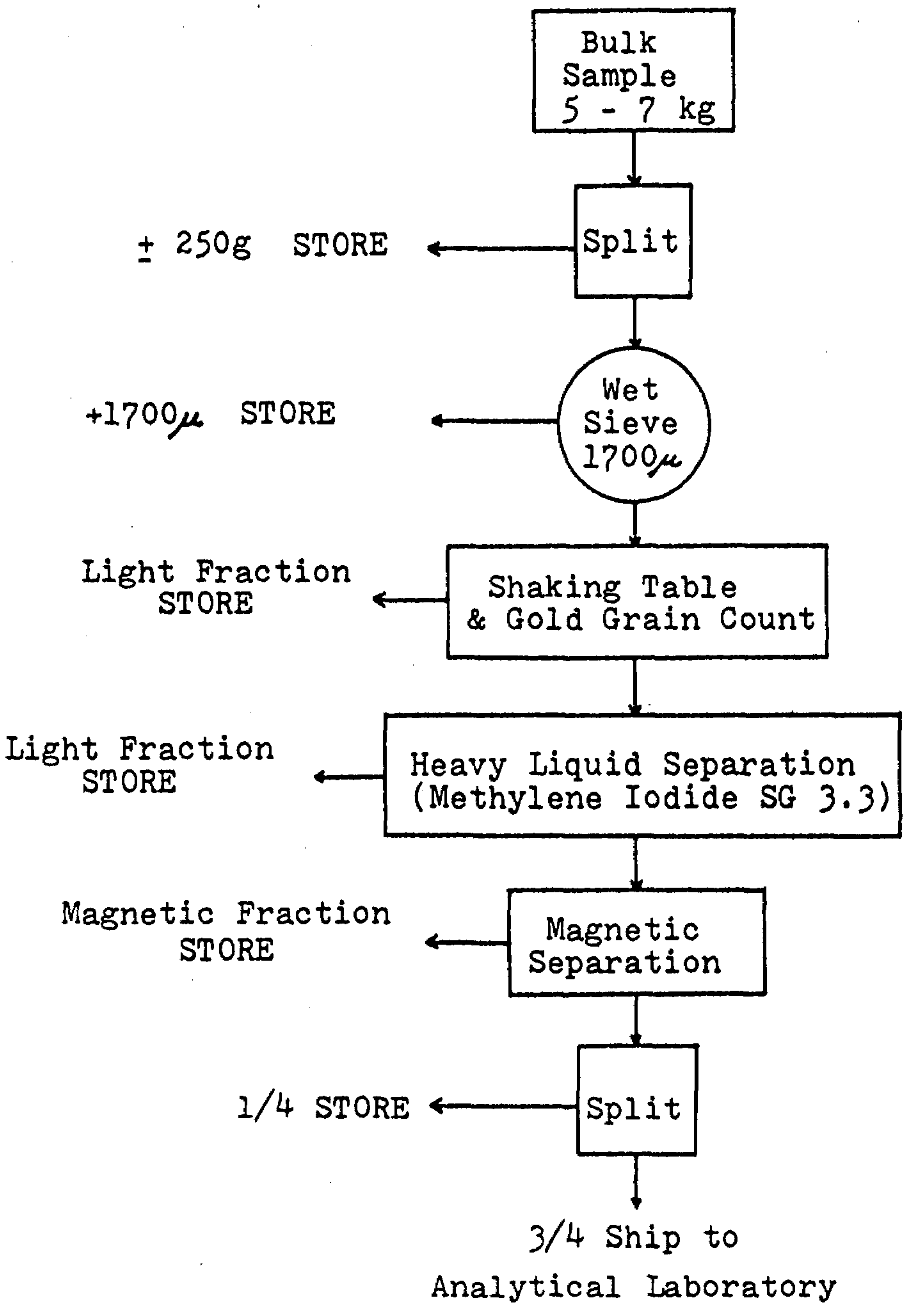
Yours truly,

Kevan Elcomb

Kevan Elcomb
Laboratory Manager

Encl.

OVERBURDEN DRILLING MANAGEMENT LIMITED
SAMPLE PROCESSING FLOW SHEET



OVERBURDEN DRILLING MANAGEMENT LIMITED

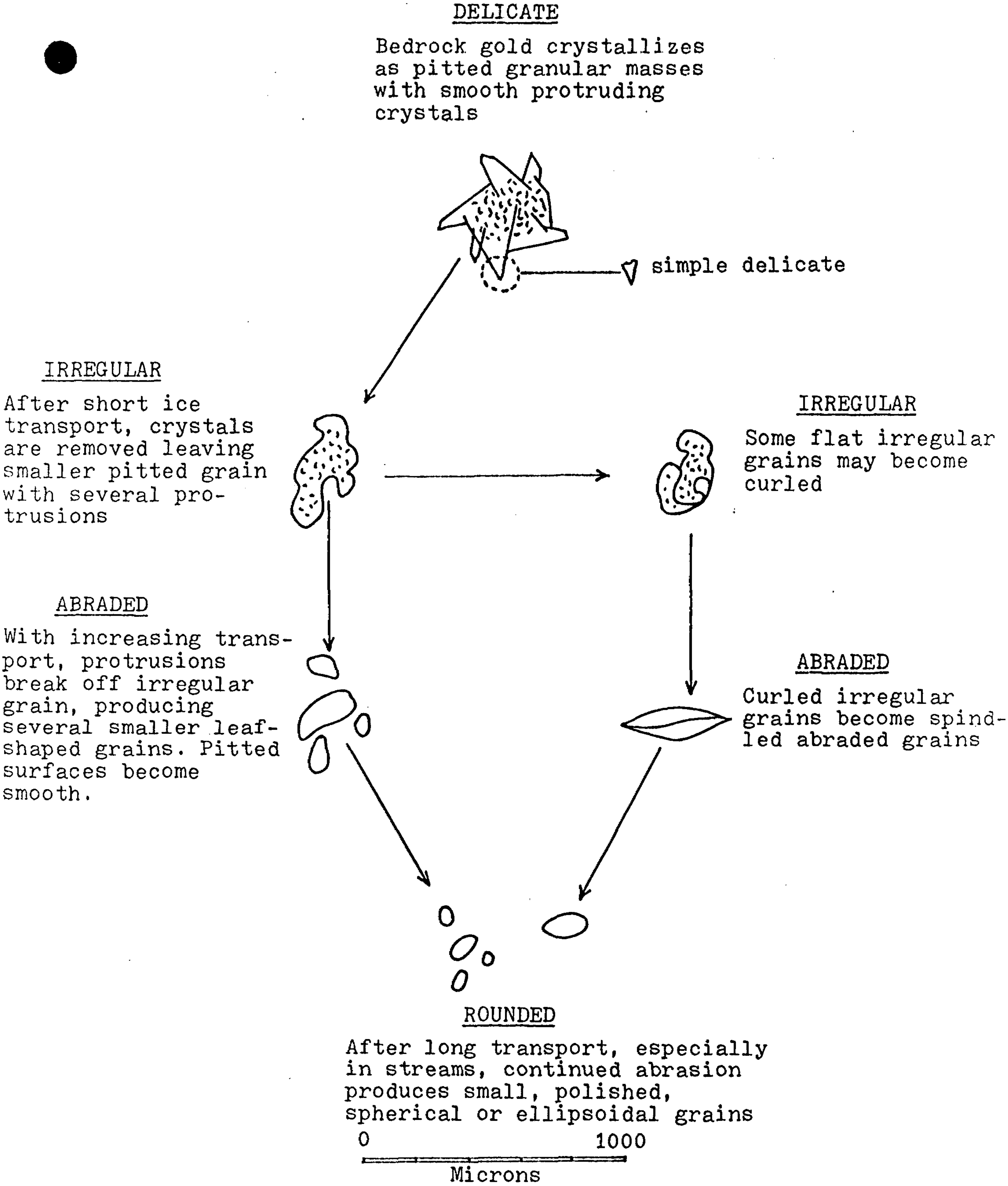
3 CLEOPATRA DRIVE, NEPEAN, ONTARIO K2G 3M9 (613) 226-1774

LIST OF ABBREVIATIONS USED ON LAB DATA SHEETS:

Tr	Trace
Cobs	Cobbles
Pebs	Pebbles
GCls	Gritty clay balls
SCls	Smooth clay balls
V/S	Volcanic and/or sedimentary rocks
Gr	Granitic rocks
Lime	Limestone

ABBREVIATIONS USED FOR GOLD DESCRIPTION:

A	Abraded
R	Rounded
D	Delicate
IR	Irregular
SD	Simple delicate



DELICATE

Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals

IRREGULAR

After short ice transport, crystals are removed leaving smaller pitted grain with several protrusions

IRREGULAR

Some flat irregular grains may become curled

ABRADED

With increasing transport, protrusions break off irregular grain, producing several smaller leaf-shaped grains. Pitted surfaces become smooth.

ABRADED

Curled irregular grains become spindled abraded grains

ROUNDED

After long transport, especially in streams, continued abrasion produces small, polished, spherical or ellipsoidal grains

Effects of Glacial Transport on Gold Particle Size and Shape
(Developed by OVERBURDEN DRILLING MANAGEMENT LTD.)

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

	Weight (kg. wet)			Weight (grams dry)				Grains	Description		
Sample Number	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	Classification
● Number assigned to sample in the field	Weight of whole sample as received from the field less a 250 gram representative split (geochem)	Weight of sample greater than 10 mesh	Weight of sample less than 10 mesh. This portion is fed across the shaking table.	Dry weight of heavy mineral split recovered from the shaking table	Weight of shaking table concentrate less than 3.3 specific gravity.	Weight of table concentrate heavier than 3.3 specific gravity with magnetic fraction removed	Magnetic fraction of heavy mineral concentrate	Description and size (in microns) of gold grains visible on the shaking table	Description of texture: e.g. granules, cobbles, pebbles Clast percentages Presence of other materials: e.g. pure clay clumps wood chips	Description: e.g. sorted, unsorted, colour, texture	Description: Till, Gravel, Sand

LAB. REPORT NO. 015-0005

BONDAR-CLEGG

SAMPLE SHIPMENT NOTICE

OTTAWA ☑ VANCOUVER ☐ WHITEHORSE ☐

Please analyze by special ☐ normal ☑ assay ☐ geochemical ☑ methods, the enclosed prepared ☐ unprepared ☑ samples

If special, please provide special instructions and/or additional remarks

Total No. Samples ______ No. Parcels in Shipment ______

Type of Samples	No. of Samples	Sample Numbers (Series)	Elements to be Analyzed	Remarks
MINERAL		P-84-24-17 to	Au	
CONC'N.	66	P-84-29-15		
		+ P-84-14-07		
		to P-84-18A-10		

Size Fraction to be analyzed (geochem. Only) ______

Disposal of Oversize: Store 1 month ☐ Dispose of ☐ Return ☑

Disposal of Pulps: Store 1 year ☐ Dispose of ☐ Return ☑

Date Shipped JAN. 02 1985 Via SPEEDY Prepaid ☑ Collect ☐

Results and Invoices To Be Sent To:

PERREX RESOURCES
103 GOVERNMENT RD. EAST
KIRKLAND LAKE, ONT.
P2N 1A9
Att'n: A.H. PERRON

☑ Results ☑
☑ Invoice ☐

RON BRADSHAW
P.O. BOX 630
TIMMINS, ONT.
P4N 7G2

☐ Results ☑
☐ Invoice ☐

PERREX RESOURCES
SUITE 909-111 RICHMOND ST. W
TORONTO, ONT.
M5H 2G4

Samples Submitted By

ODM.

Client Project Number ______

Samples Received By John Coyne

Date Received Jan 2/85.

WHITE - LABORATORY COPY YELLOW - SHIPPING COPY

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
14-12	8.4	0.8	7.6	176.8	138.1	27.3	11.4	—	Pebs 75% V/S 25% Gr Tr LS.	Unsorted grey-beige with clay	TILL
-13	7.9	0.4	7.5	156.8	123.5	24.0	9.3	—	"	"	"
-14	3.8	0.5	3.3	97.6	79.0	14.9	3.7	1R 300X 250	"	"	"
-15-10	7.9	0.8	7.1	110.4	83.5	26.0	9.0	—	Pebs 75% V/S 25% Gr	Unsorted grey with clay	"
-11	8.1	0.2	7.9	122.5	83.3	28.2	11.0	1R 200 x 150	"	Unsorted grey-beige with clay	"
-12	8.5	0.6	7.9	158.3	109.3	34.2	14.8	*	Cobs 85% V/S 15% Gr	Unsorted grey-green with silt	"
17-11	4.8	0.4	4.4	152.5	130.0	17.5	5.0	—	Pebs 60% V/S 40% Gr	Unsorted grey-beige with clay	"
-12	6.0	0.4	5.6	155.7	127.0	23.4	5.3	A 150X 200	Pebs 70% V/S 30% Gr	"	"
-13	5.3	0.6	4.7	212.3	178.1	24.2	10.0	—	Pebs 80% V/S 20% Gr	Unsorted grey-green with grey-beige clay	"
16A-14	8.3	1.6	6.7	164.7	132.6	22.2	9.9	A 200X 250	Pebs 70% V/S 30% Gr Tr LS	Unsorted grey-green with grey-beige silt	"
-15	8.6	0.6	8.0	154.3	100.0	41.5	12.8	—	Cobs 95% V/S 5% Gr Tr LS	"	"
-16	7.0	0.3	6.7	166.5	109.2	42.9	14.4	A 50X150 A 100X150	"	"	"
-16-11	8.0	1.2	6.8	233.2	185.5	29.3	18.4	1R 350 x900	Pebs 90% V/S 10% Gr	Unsorted green-grey with silt	"
-12	7.8	0.8	7.0	228.2	131.0	34.7	62.5	—	Pebs 70% V/S 30% Gr	"	"
-13	7.9	0.3	7.6	288.0	182.7	39.5	65.8	—	Pebs 10% V/S 90% Gr	Unsorted grey-beige with clay	"
-19-09	7.8	0.7	7.1	276.5	234.2	34.5	7.8	—	Pebs 90% V/S 10% Gr	Unsorted grey with grey-beige clay.	"
-10	7.2	1.0	6.2	135.4	80.0	36.9	18.5	—	"	Unsorted grey-beige with silt	"
-11	8.1	0.3	7.8	174.4	144.1	20.5	9.8	—	"	"	"
1[illegible] 12	8.3	1.2	7.1	214.4	181.5	23.4	9.5	—	"	Unsorted grey-green with silt.	"

* FOR GOLD COUNT, SEE ACCOMPANYING SHEET LISTING V.G. FROM SHAKER TABLE & PANNING

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg, wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	−10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84 -											
18-13	8.0	1.7	6.3	183.4	145.5	25.7	12.2	—	Pebs 95% V/S 5% Gr	Unsorted grey-green with silt	TILL
-14	6.9	0.6	6.3	172.2	112.5	28.7	31.0	—	"	Unsorted grey-green with grey-beige clay	"
18A-12	8.4	1.4	7.0	165.5	130.9	22.9	11.7	AB 100X 200	Pebs 85% V/S 15% Gr	Unsorted grey with grey-beige clay	"
-13	5.2	0.9	4.3	218.7	181.4	25.6	11.7	—	"	"	"
-14	4.3	1.0	3.3	177.4	157.2	15.4	4.8	—	"	"	"
20-08	7.7	0.5	7.2	180.2	153.8	20.0	6.4	IR 50 x 150	"	Unsorted grey-beige with clay	"
-09	4.6	0.4	4.2	155.1	136.9	13.5	4.7	—	"	"	"
-10	7.8	<0.2	7.8	257.3	232.2	19.8	5.3	—	Pebs 80% V/S 20% Gr GCL	"	"
21-04	5.0	0.9	4.1	263.1	230.9	23.3	8.9	—	Pebs 80% V/S 20% Gr	Unsorted grey with grey-beige clay	"
-05	7.4	1.0	6.4	205.7	173.5	21.0	11.2	IR50 x150 IR250 x300	"	"	"
-06	8.2	1.0	7.2	186.2	153.7	22.5	10.0	—	Pebs 75% V/S 25% Gr	"	"
22-16	8.6	0.7	7.9	250.3	209.9	29.5	10.9	—	Pebs 70% V/S 30% Gr	"	"
-17	8.4	0.9	7.5	267.3	222.2	33.3	11.8	A 100X150 IR 400X450	Pebs 80% V/S 20% Gr	"	"
-18	5.5	0.6	4.9	191.6	129.8	53.9	7.9	—	"	Unsorted grey-green with grey-beige clay	"
23-26	8.4	<0.1	8.4	165.9	120.3	35.9	9.7	—	———	Sorted grey-beige Medium	SAND
-24	7.4	<0.1	7.4	162.0	132.3	24.9	4.8	—	———	"	"
-28	7.6	<0.1	7.6	147.8	116.0	25.8	6.0	—	———	"	"
24-16	8.0	0.8	7.2	175.4	139.0	28.6	7.8	—	Pebs 60% V/S 40% Gr	Unsorted grey beige with silt.	TILL

ERREX P-84 Series VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			Remarks	SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			Remark
	A	IR	D			A	IR	D	
P-84-15-12	250x250		300x950 150x150x100 <50x50 <60x50	<1% Sulfides					

LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	−10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
24-17	8.3	0.9	7.4	125.7	85.5	30.9	9.3	Ir 150x50	PEBS 60% v/s 40% Gr.	UNSORTED GREY-BEIGE w̄ CLAY.	TILL
-18	8.6	1.5	7.1	144.7	88.4	36.6	19.7	-	PEBS 90% v/s 10% Gr.	UNSORTED GREY-GREEN w̄ SILT	"
25-19	7.3	0.7	6.6	160.3	116.8	32.7	10.8	-	"	UNSORTED GREY w̄ SILT	"
-20	3.5	0.2	3.3	140.9	117.3	16.7	6.9	Ir 100x100	"	UNSORTED GREY w̄ CLAY	"
-21	6.7	1.1	5.6	183.7	95.8	41.7	46.2	-	PEBS 75% v/s 25% Gr.	UNSORTED GREY-GREEN w̄ GREY CLAY	"
26-25	8.0	0.6	7.4	222.9	188.2	26.7	8.0.	-	"	UNSORTED GREY-BEIGE w̄ GREY CLAY.	"
-26	1.3	0.2	1.1	78.0	71.4	6.0	0.6	-	"	UNSORTED GREY-GREEN w̄ SILT	"
-27	8.6	2.2	6.4	141.3	97.6	32.7	11.0	-	PEBS 85% v/s 15% Gr.	UNSORTED GREY-GREEN w̄ GREY CLAY.	"
20-06	5.3	0.6	4.7	192.3	174.2	14.0	4.1	**	"	"	"
-07	7.5	0.7	6.8	145.1	108.3	29.1	7.7	**	"	UNSORTED GREY-BEIGE w̄ CLAY.	"
21A-10	7.6	0.6	7.0	211.6	167.3	33.7	10.6	-	"	UNSORTED GREY-BEIGE w̄ SILT	"
-11	7.5	*	*	165.0	132.2	24.6	8.2	**	"	"	"
-12	7.3	0.5	6.8	196.9	161.9	27.2	7.8	A 550x200	"	UNSORTED GREY w̄ CLAY.	"
23-20	7.9	0.4	7.5	247.9	219.1	23.1	5.7	-	"	UNSORTED GREY-BEIGE w̄ SILT	"
-21	7.9	0.1	7.8	182.2	156.0	21.4	4.8	-	"	"	"
-22	6.8	1.2	5.6	134.4	110.5	17.8	6.1	-	"	UNSORTED GREY w̄ CLAY.	"
-23	7.5	0.3	7.2	177.8	149.5	22.1	6.2	A 100x50	PEBS 90% v/s 10% Gr.	UNSORTED GREY-BEIGE w̄ CLAY.	"
25-22	8.3	0.8	7.5	103.6	49.5	24.3	29.8	**	COBS 95% v/s 5% Gr.	UNSORTED GREY-GREEN w̄ CLAY.	"
2[illegible]-18	8.6	0.6	8.0	176.3	134.9	30.9	10.5	A 200x100	PEBS 70% v/s 30% Gr. Tr. LS.	UNSORTED GREY-BEIGE w̄ CLAY.	"

* +10 ROCK CHIPS LOST. ** SEE ACCOMPANYING SHEET FOR GOLD COUNT / PANNING RESULTS.

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
27-19	8.2	0.8	7.4	199.1	155.5	32.4	11.2	A100x50	COBS 70% w/s 30% Gr. Tr. LS.	UNSORTED GREY-BEIGE w̄ CLAY.	TILL
-20	6.1	0.5	5.6	168.2	139.9	22.0	6.3	-	PEBS 60% w/s 40% Gr. Tr. LS.	"	"
28-21	8.9	0.9	8.0	197.8	145.9	37.1	14.8	*	PEBS 60% w/s 40% Gr. Tr. LS.	"	"
-22	8.3	1.2	7.1	216.8	155.1	43.2	18.5	*	PEBS 80% w/s 20% Gr. Tr. LS.	"	"
-23	2.8	0.2	2.6	99.6	81.0	13.8	4.8	-	PEBS 90% w/s 10% Gr.	UNSORTED GREY-GREEN w̄ CLAY.	"
29-13	8.1	2.5	5.6	217.3	128.1	76.1	13.1	-	PEBS 85% w/s 15% Gr. Tr. LS.	UNSORTED GREY-BEIGE w̄ CLAY.	"
-14	7.9	3.2	4.7	181.4	113.3	57.8	10.3	-	PEBS 90% w/s 10% Gr. Tr. LS.	UNSORTED GREY w̄ CLAY	"
-15	8.1	2.0	6.1	94.4	30.2	48.8	15.4	-	"	UNSORTED GREY-GREEN w̄ CLAY.	"

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			* Remarks	SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			Remar
	A	IR	D			A	IR	D	
P-84- 20·06	350x150 150x100			<1% Solfides					
20·07	200x200 100x100	100x50		≃2% Solfides					
21A·11	150x150 100x100 100x50			<1% Solfides					
25·22	200x150 150x50 100x100			≃50% Solfides					
28·21	200x150 150x150 150x100			≃1% Solfides					
28·22	500x250 200x100			≃2% Solfides					

* SOLFIDE CONTENT GIVEN AS A PERCENTAGE OF HEAVY MINERAL CONCENTRATE

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg, wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	−10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
14-07	8.0	1.9	6.1	106.3	64.7	33.0	8.6	-	PEBS 80% V/S 20% Gr. Tr. LS	UNSORTED BEIGE w̄ GREY-BEIGE CLAY.	TILL
-08	7.2	1.3	5.9	88.5	58.5	23.3	6.7	-	PEBS 70% V/S 30% Gr. Tr. LS.	"	"
-09	6.3	1.4	4.9	115.3	90.7	18.5	6.1	A150x100	"	"	"
-10	4.8	0.6	4.2	95.6	70.7	20.5	4.4	A200x150	PEBS 90% V/S 10% Gr. Tr. LS.	"	"
-11	8.2	1.9	6.3	121.3	88.4	21.3	11.6	-	"	"	"
15-06	7.3	0.9	6.4	179.6	145.9	25.1	8.6	-	PEBS 75% V/S 25% Gr. Tr. LS. GCL	UNSORTED GREY- BEIGE w̄ CLAY.	"
-07	6.8	1.2	5.6	121.2	85.1	29.7	6.4	*	"	UNSORTED GREY- BEIGE w̄ CLAY	"
-08	7.7	1.1	6.6	147.9	106.1	33.8	8.0	-	PEBS 85% V/S 15% Gr. Tr. LS. GCL	"	"
-09	7.2	1.4	5.8	175.6	120.8	39.1	15.7	-	"	"	"
17-07	7.5	1.0	6.5	139.2	89.4	38.9	10.9	*	"	"	"
-08	7.9	0.8	7.1	190.1	138.6	39.7	11.8	*	"	"	"
-09	7.7	0.9	6.8	221.2	211.4	7.2	2.6	-	"	"	"
-10	6.5	0.5	6.0	178.1	158.0	14.3	5.8	-	PEBS 70% V/S 30% Gr.	"	"
16A-09	8.3	0.8	7.5	156.7	122.3	27.9	6.5	-	"	"	"
-10	7.3	0.6	6.7	186.5	147.1	32.0	7.4	-	PEBS 80% V/S 20% Gr.	"	"
-11	7.4	0.2	7.2	148.6	97.8	41.2	9.6	-	"	"	"
-12	8.1	1.5	6.6	186.4	130.3	41.5	14.6	*	"	"	"
13	8.2	1.7	6.5	257.3	224.6	23.2	9.5	A300x200	"	"	"
16-04	6.9	0.5	6.4	107.1	62.7	32.5	11.9	-	"	"	"

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg, wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
16-05	4.5	0.3	4.2	67.9	40.9	21.6	5.4	-	PEBS 80% V/S 20% Gr.	UNSORTED GREY-BEIGE W̄ CLAY.	TILL
-06	7.0	0.7	6.3	139.5	102.8	27.6	9.1	*	PEBS 70% V/S 30% Gr.	"	"
-07	6.9	0.8	6.1	127.4	85.3	33.2	8.9	A900x450	"	"	"
-08	7.6	0.5	7.1	109.8	70.7	30.8	8.3	-	"	"	"
-09	6.6	0.8	5.8	126.3	81.4	34.5	10.4	-	"	"	"
-10	7.4	0.6	6.8	106.5	64.6	31.9	10.0	-	PEBS 80% V/S 20% Gr.	"	"
19-04	7.7	0.5	7.2	102.9	62.3	32.8	7.8	-	PEBS 70% V/S 30% Gr.	"	"
-05	7.6	0.9	6.7	95.2	56.5	30.4	8.3	1r700x350	"	"	"
-06	8.1	1.1	7.0	121.5	80.0	32.6	8.9	-	"	"	"
-07	6.8	0.6	6.2	103.3	61.3	33.6	8.4	1r50x50	"	"	"
-08	7.5	0.8	6.8	150.4	109.4	32.3	8.7	-	"	"	"
18-10	7.4	0.8	6.6	86.9	60.0	21.8	5.1	*	"	"	"
-11	8.0	0.5	7.5	160.6	116.7	35.3	8.6	-	"	"	"
18A-04	8.2	1.4	6.8	186.7	134.2	38.3	14.2	*	"	"	"
-05	7.9	0.8	7.1	147.4	102.5	33.6	11.3	A100x50	"	"	"
-06	6.2	1.0	5.2	96.0	67.1	22.2	6.7	-	"	"	"
-07	7.1	0.5	6.6	73.6	36.8	29.5	7.3	-	"	"	"
-08	7.5	0.3	7.2	94.9	55.0	31.8	8.1	-	PEBS 60% V/S 40% Gr.	UNSORTED GREY-GREEN W̄ CLAY	"
-09	4.8	0.7	4.1	145.0	117.9	21.9	5.2	A150x100	COBS 30% V/S 70% Gr.	UNSORTED GREY-BEIGE W̄ CLAY	"
-10	6.7	1.3	5.4	153.7	121.3	26.0	6.4	A300x250	COBS 60% V/S 40% Gr.	"	

* SEE

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			Remarks	SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			Remar
	A	IR	D			A	IR	D	
P-84-									
15-07	350x350 200x100 150x100			≃3% Sulfides					
17-07	200x150 150x100	150x100		≃2% Sulfides					
17-08	450x300 300x250 200x100	200x150		≃5% Sulfides					
16A-12	500x250 250x150 150x150			<1% Sulfides					
16-06	250x250 100x100 (2) 50x50			≃5% Sulfides					
18-10	50x50	150x50 150x100		<1% Sulfides					
18A-04	350x250 700x650			≃5% Sulfides					

Ontario

MINISTRY OF NORTHERN DEVELOPMENT AND MINES
ONTARIO GEOLOGICAL SURVEY
GEOSCIENCE DATA CENTRE

MINERAL DEPOSIT INVENTORY (MDI) RECO

DEPOSIT NAME MARCHAUD

DISTRICT COCHRANE
NTS 42A/08NE
TOWNSHIP MICHAUD
LATITUDE 48°21'06"
LONGITUDE 80°05'20"

MDI # C 0377
SMDR #
UTM ZONE 17
NORTHING 5370388
EASTING 567326

NTS EXTENSION

TOWNSHIP EXTENSION

ENTITY CODED SIMPLE
POINT LOCATED EASTERNMOST DRILL HOLE JUST N OF LUDGATE LAKE
HOW LOCATED PRECISE
MAP REFERENCE OGS 1980, P871 MICHAUD TOWNSHIP
DEPOSIT STATUS ~~RAW~~ DEVELOPED PROSPECT

MAP SCALE C
RECORD DATE ~~APRIL 16, 1984~~ JUNE 19, 1987

COMMODITY	QUALIFIER	STATUS
1 AU	MAJOR	~~RAW~~ DEVELOPED PROSPECT

COMMODITY	QUALIFIER	STATUS

REFERENCES

NML FILE, 42A/8 AU 36
OGS 1948, AR VOL 57 PT 4, P21-22
OGS 1971, MRC 13, P133

ALTERNATE NAMES

LUDGATE LAKE

LEGEND

ENTITY CODED

SIMPLE	A single body of mineralization; includes all occurrences and raw prospects.
COMPOUND	More than one body of mineralization.
PARTIAL	A single body of mineralization under two or more managements and thus split into two or more records.

HOW LOCATED

PRECISE	A clearly defined point at the deposit on published map showing latitudes and longitudes.
TRANSFER	Same as above but map lacks latitudes and longitudes; either geographic grid or point was transferred from or to another map respectively.
GENERAL	Point not at the deposit or location inferred from written or verbal descriptions.

MAP SCALE

CODE	RANGE (Map Scale)	IMPERIAL SCALE
A	≤12,000	1000 FT (12,000)
B	>12,000 ≤ 25,000	1/4 MI (15,840)
C	>25,000 ≤ 50,000	1/2 MI (31,680)
D	>50,000 ≤ 100,000	1 MI (63,360)
E	>100,000 ≤ 125,000	
F	>125,000 ≤ 150,000	2 MI (126,720)
G	>150,000 ≤ 200,000	
H	>200,000 ≤ 250,000	
I	>250,000 ≤ 300,000	4 MI (253,440)
J	>300,000 ≤ 500,000	
K	>500,000	

OVERBURDEN DRILLING MANAGEMENT LIMITED

3 CLEOPATRA DRIVE, NEPEAN, ONTARIO K2G 3M9 (613) 226-1774

October 11,1984

Perrex Resources
103 Government Rd. East
Kirkland Lake,Ont.
P2N 1A9

Attention: A. H. Perron

Dear Sir:

Re: Laboratory Services

Please find enclosed the laboratory sample logs for the sample series P-84-01-03 to P-84-13-17.

The 3/4 split of the non-magnetic heavy mineral concentrate for this series was forwarded to Bondar-Clegg and Company for analysis on Oct. 3rd. We will store the remaining fractions from the processing for a period of approximately three months, at which time we will contact you as to their disposition.

Should you require any additional information, do not hesitate to contact the undersigned.

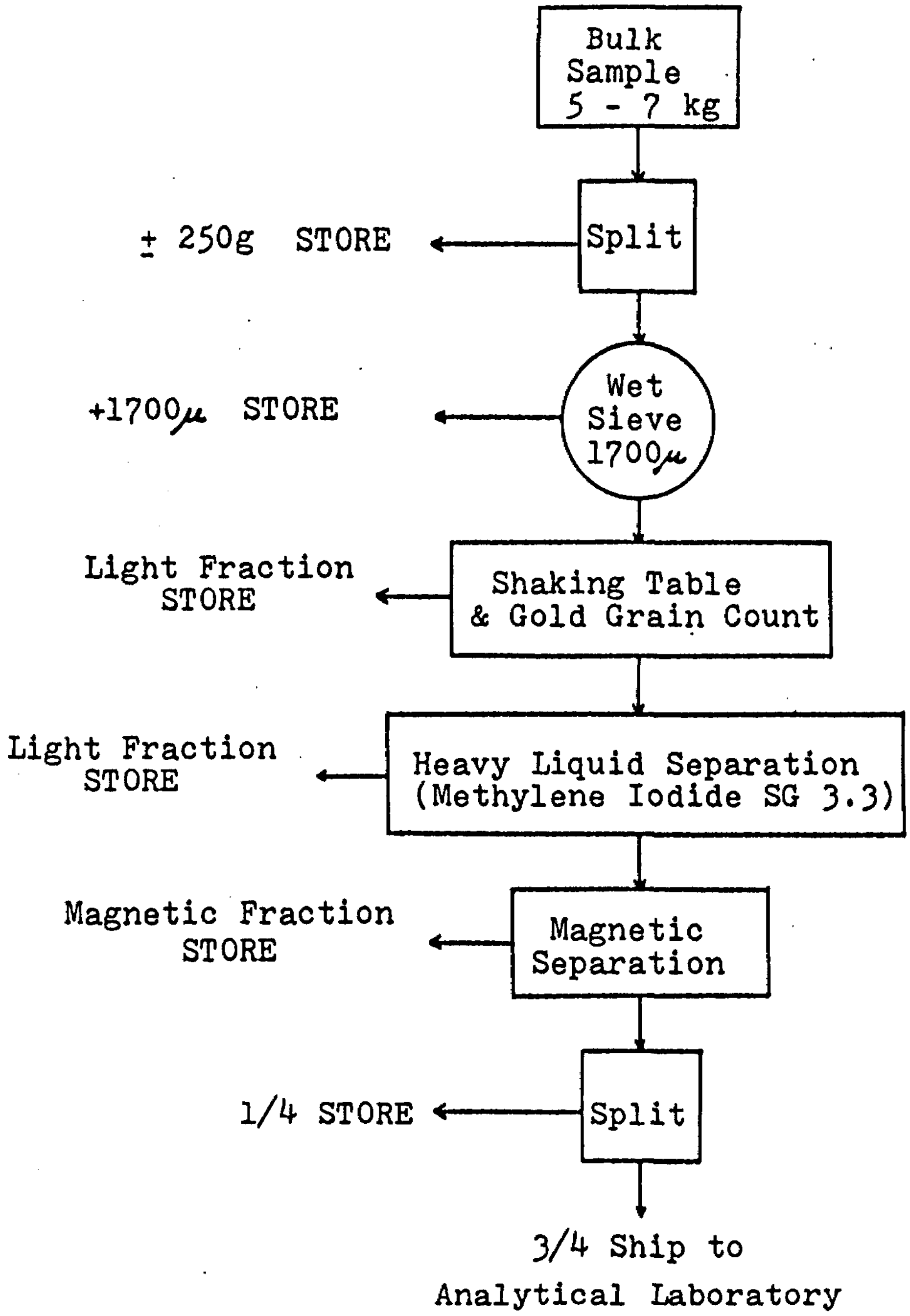
Yours truly,

Kevan Elcomb

Kevan Elcomb
Laboratory Manager

Encl.

OVERBURDEN DRILLING MANAGEMENT LIMITED
SAMPLE PROCESSING FLOW SHEET



OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

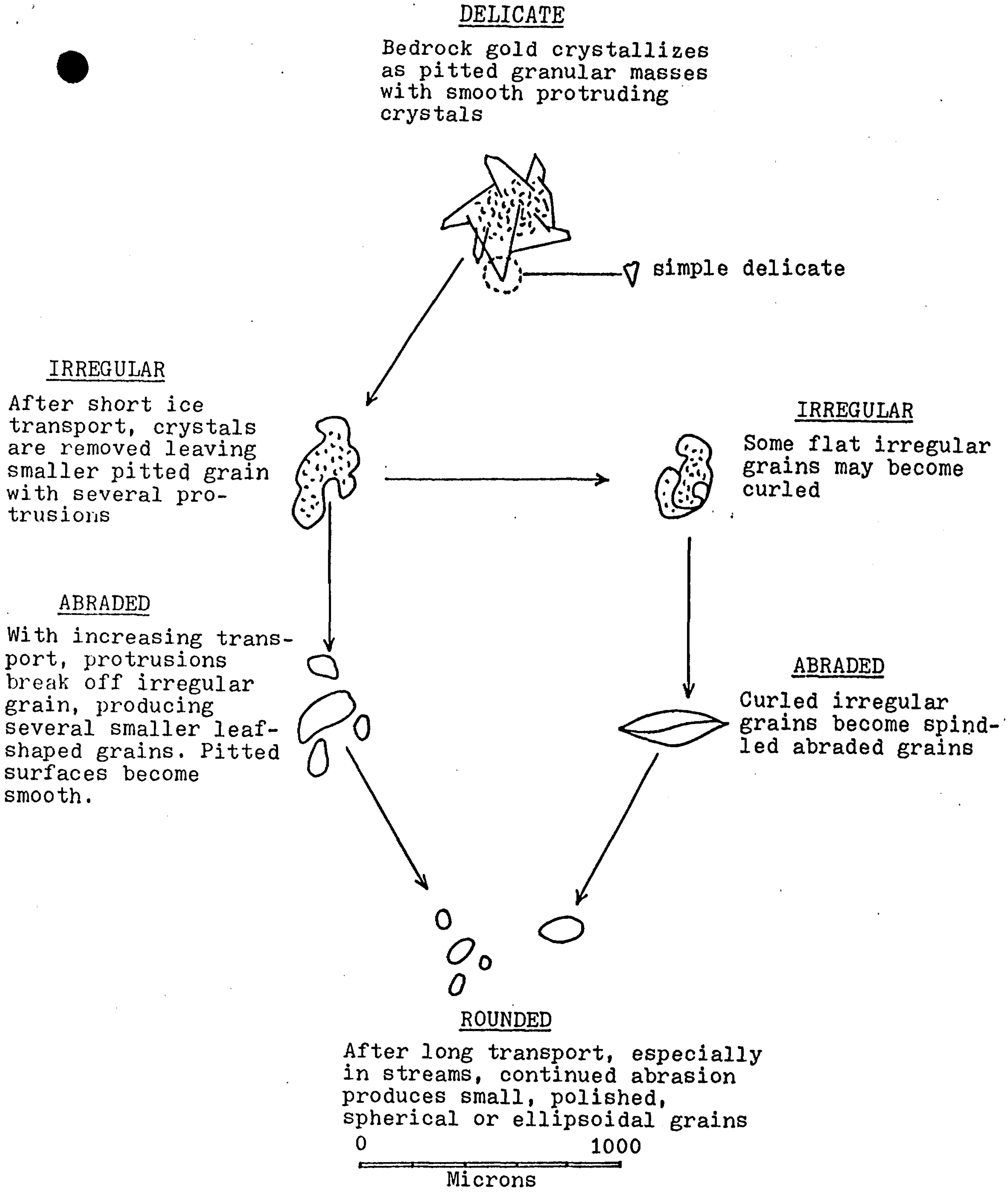
Sample Number		Number assigned to sample in the field
Weight (kg. wet)	Table Split	Weight of whole sample as received from the field less a 250 gram representative split (geochem)
	+10 Rock Chips	Weight of sample greater than 10 mesh
	-10 Table Feed	Weight of sample less than 10 mesh. This portion is fed across the shaking table.
Weight (grams dry)	Table Conc	Dry weight of heavy mineral split recovered from the shaking table
	M.I. Lights	Weight of shaking table concentrate less than 3.3 specific gravity.
	Non-mag	Weight of table concentrate heavier than 3.3 specific gravity with magnetic fraction removed
	Mag	Magnetic fraction of heavy mineral concentrate
Grains	V.G.	Description and size (in microns) of gold grains visible on the shaking table
Description	+10	Description of texture: e.g. granules, cobbles, pebbles Clast percentages Presence of other materials: e.g. pure clay clumps wood chips
	Matrix	Description: e.g. sorted, unsorted, colour, texture
Classification		Description: Till, Gravel, Sand

List of abbreviations used on lab data sheets.

Tr	Trace
Cobs	Cobbles
Pebs	Pebbles
GCls	Gritty clay balls
SCls	Smooth clay balls
V/S	Volcanic and/or sedimentary rocks
Gr	Granitic rocks
Lime	Limestone

Abbreviatons used for Gold description.

A	Abraded
R	Rounded
D	Delicate
IR	Irregular
SD	Simple delicate



DELICATE

Bedrock gold crystallizes as pitted granular masses with smooth protruding crystals

IRREGULAR

After short ice transport, crystals are removed leaving smaller pitted grain with several protrusions

IRREGULAR

Some flat irregular grains may become curled

ABRADED

With increasing transport, protrusions break off irregular grain, producing several smaller leaf-shaped grains. Pitted surfaces become smooth.

ABRADED

Curled irregular grains become spindled abraded grains

ROUNDED

After long transport, especially in streams, continued abrasion produces small, polished, spherical or ellipsoidal grains

Effects of Glacial Transport on Gold Particle Size and Shape
(Developed by OVERBURDEN DRILLING MANAGEMENT LTD.)

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	−10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-01-03	7.7	0.9	6.8	304.3	265.2	28.5	10.6	*	Pebs 50%VIS 50% Gr.	unsorted grey beige with silt	TILL
-04	8.0	1.6	6.4	234.5	206.5	20.4	7.6	*	"	"	"
-05	7.8	0.4	7.4	253.4	226.4	21.0	6.0	—	"	"	"
-06	7.2	0.7	6.5	266.0	224.3	30.9	10.8	—	"	"	"
-07	7.1	2.1	5.0	207.3	174.5	21.7	11.1	—	Cobs 80%VIS 20% Gr.	unsorted gray green with silt.	TILL and BEDROCK
-08	8.2	2.6	5.6	276.1	226.0	37.7	12.4	A 200 x 300	Pebs 60% VIS 40% Gv.	unsorted gray with silt.	TILL
-02-03	6.5	0.3	6.2	260.2	223.6	30.9	5.7	IR 200 x 250	Pebs 50% VIS 50% Gr.	unsorted gray beige with silt	TILL
-04	6.6	0.4	6.2	195.8	178.1	13.9	3.8	A150 x150	"	"	"
-05	7.4	0.9	6.5	162.6	121.1	32.7	8.8	A150 x 150	Pebs 60% VIS 40%Gr.	"	"
-06	7.1	0.6	6.5	303.1	261.8	33.4	7.9	A150 x250	"	"	"
-07	7.9	1.2	6.7	251.1	193.3	38.4	19.4	*	"	"	"
-08	8.0	1.1	7.9	205.1	168.9	26.7	9.5	—	"	unsorted gray with silt.	"
-03-05	6.2	0.9	5.3	147.6	113.3	25.8	8.5	—	Pebs 70%VIS 30%Gr.	"	"
-07	6.2	0.7	5.5	162.2	129.9	23.7	8.6	—	Pebs 60% VIS 40% Gr	unsorted gray beige with silt.	"
-08	4.2	0.8	3.4	144.6	119.6	17.2	7.8	A150 x 250	Cobs 70%VIS 30% Gr	"	"
-04-09	7.2	0.5	6.7	261.4	228.1	28.8	4.5	—	Pebs 60%VIS 40% Gr.	unsorted gray with gray beige clay	"
-10	8.1	1.6	6.5	249.6	200.0	35.3	14.3	—	Pebs 50% VIS 50% Gr.	"	"
-11	8.2	2.3	5.9	228.6	175.9	32.8	19.9	—	Pebs 70% VIS 30% Gr.	unsorted gray with silt.	"
05A-07	7.9	0.7	7.2.	172.8	138.8	22.0	12.0	*	Cobs 70%VIS 30%Gr.	"	"

* SEE PANNING SHEET FOR GOLD COUNT

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-											
-05A-08	7.1	0.6	6.5	194.2	150.9	29.8	13.5	A150 x150	Cobs 40% V/S 60% Gr	unsorted grey with silt.	TILL
-09	7.8	0.6	7.2	274.0	215.3	42.6	16.1	IR100 x150	Pebs 60% V/S 40% Gr.	unsorted grey with silt.	"
-10	7.9	0.8	7.1	215.2	154.3	34.6	26.3	—	Cobs 40% V/S 60% Gr.	unsorted grey with clay	"
-06-06	6.4	0.7	5.7	170.8	157.8	9.2	3.8	—	Pebs 50% V/S 50% Gr.	"	"
-07	5.7	0.6	5.1	148.4	129.6	14.0	4.8	IR50 x150	Cobs 50% V/S 50% Gr.	"	"
-08	8.2	1.3	6.9	226.7	182.2	27.1	17.4	IR250 x500	Cobs 60% V/S 40% Gr.	"	"
-09	6.5	1.4	5.1	177.5	151.6	16.4	9.5	IR300 x550	Pebs 40% V/S 60% Gr.	"	"
-10	6.8	1.1	5.7	116.4	96.4	11.5	8.5	IR 300 x400	Cobs 60% V/S 40% Gr.	unsorted green gray with clay	"
-11	6.8	1.2	5.6	94.3	75.7	11.8	6.8	—	Pebs 60% V/S 40% Gr.	"	"
-12	4.0	0.5	3.5	89.7	56.7	9.4	23.6	—	Cobs 85% V/S 15% Gr.	"	"
-07-07	6.0	0.5	5.5	123.3	97.0	18.3	8.0	*	Cobs 40% V/S 60% Gr.	unsorted grey with clay	"
-08	7.6	0.7	6.9	180.2	143.0	27.2	10.0	*	"	"	"
-09	1.9	<0.1	1.9	87.4	79.1	6.5	1.8	IR150 x200	Cobs V/S & Gr.	"	"
-10	7.7	0.4	7.3	201.4	161.7	31.6	8.1	*	Cobs 50% V/S 50% Gr.	"	"
-11	8.0	0.8	7.2	187.2	141.9	34.2	11.1	—	Cobs 40% V/S 60% Gr.	"	"
-12	2.0	0.3	1.7	80.1	71.8	6.4	1.9	—	Cobs 20% V/S 80% Gr.	"	"
-08-05	6.5	0.7	5.8	176.6	157.9	13.0	5.7	—	"	"	"
-06	9.0	1.0	8.0	130.3	103.1	17.9	9.3	IR100 x200	Pebs 40% V/S 60% Gr.	"	"
-07	8.6	0.8	7.8	234.1	184.1	38.0	12.0	—	Cobs 20% V/S 80% Gr.	"	"

* SEE PANNING SHEET FOR GOLD COUNT

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-08-08	8.4	0.7	7.7	133.2	80.9	37.6	14.7	IR 150 x 150	Cobs 40% V/S 60% Gr.	unsorted gray with clay	TILL
-09	8.0	0.4	7.6	236.3	206.0	21.3	9.0	—	Gran. 40% V/S 60% Gr.	"	"
-10	6.5	0.3	6.2	80.9	51.3	22.9	6.7	IR 200 X 250	Pebs 40% V/S 60% Gr.	"	"
-11	5.5	0.4	5.1	131.5	120.5	7.7	3.3	—	"	"	"
-12	5.9	0.5	5.4	157.6	140.8	10.8	6.0	—	"	"	"
-13	7.6	0.7	6.9	167.0	131.2	22.5	13.3	—	"	"	"
-09-03	6.9	0.5	6.4	165.6	144.8	14.6	6.2	—	Cobs 50% V/S 50% Gr	"	"
-04	6.4	0.2	6.2	183.8	166.9	12.5	4.4	—	Pebs 50% V/S 50% Gr.	"	"
-05	6.7	0.6	6.1	265.6	235.7	23.4	6.5	—	Pebs 70% V/S Tr. LS. 30% Gr	unsorted gray beige with clay	"
-06	4.4	0.2	4.2	107.1	85.6	16.8	4.7	—	Pebs 90% V/S 10% Gr. Tr. LS.	"	"
-07	8.4	0.3	8.1	281.0	223.9	41.1	16.0	A 50 x 150	Pebs 80% V/S 20% Gr.	unsorted green beige with beige clay	"
10-10	8.8	2.3	6.5	278.3	241.3	23.6	13.4	—	Pebs 70% V/S Tr. LS. 30% Gr.	"	"
-11	8.7	0.7	8.0	237.2	148.8	46.7	41.7	—	"	unsorted rust beige with clay	"
-12	8.4	1.0	7.4	177.5	139.6	26.7	11.2	—	Pebs 60% V/S 40% Gr. Tr. LS.	unsorted beige with clay	"
-13	8.3	0.6	7.7	182.0	148.9	23.7	9.4	—	Pebs 50% V/S 50% Gr. Tr. LS.	"	"
-14	8.0	1.1	6.9	105.4	64.9	26.9	13.6	A 200 x 200	"	"	"
-15	8.5	0.8	7.7	216.6	200.2	10.7	5.7	A 200 X 300	Pebs 60% V/S 40% Gr.	unsorted gray beige with clay	"
-16	4.4	0.5	3.9	93.1	69.8	16.7	6.6	A 200 x 200	Cobs 80% V/S 20% Gr.	unsorted grey beige with silt	"
-11[illegible]09	9.1	2.9	6.2	116.3	91.9	17.5	6.9	—	Pebs 70% V/S 30% Gr.	sorted grey beige coarse	GRAVEL

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
P-84-11-10	8.5	2.2	6.3	159.2	137.7	14.8	6.7	—	Pebs 70%V/S 30% Gr.	sorted grey beige, coarse	GRAVEL
-11	9.0	1.3	6.7	237.9	201.6	26.0	10.3	A 300 x550	"	"	"
-12	9.4	1.2	8.2	195.8	147.6	34.2	14.0	—	Pebs 75%V/S 25% Gr.	"	"
-13	8.6	1.0	7.6	69.2	29.8	28.6	10.8	*	Pebs 60% V/S 40%Gr. Tr. LS.	unsorted gray beige with silt	TILL
-14	8.3	0.3	8.0	136.8	99.3	27.0	10.5	—	Pebs 50%V/S 50% Gr.	"	"
12-07	8.4	0.1	8.3	95.9	46.3	37.4	12.2	A 150 x 200	Pebs 80% V/S 20% Gr.	"	"
-08	8.1	1.3	6.8	136.8	102.0	27.8	7.0	*	Pebs 70%V/S 30% Gr	"	"
-09	8.7	0.9	7.8	116.9	78.6	27.5	10.8	*	Pebs 65%V/S 35%Gr. Tr. LS	"	"
-10	8.3	1.2	7.1	135.7	93.7	28.0	14.0	A 150 x 250	Pebs 70%V/S 30%Gr. Tr. LS	"	"
-13-07	8.4	0.2	8.2	76.7	48.9	21.3	6.5	—	"	"	"
-08	8.7	0.8	7.9	145.1	118.7	18.1	8.3	IR 50 x 100	"	"	"
-09	9.0	1.3	6.7	152.5	133.1	13.4	6.0	—	Pebs 80%V/S 20%Gr. Tr. LS.	"	"
-10	9.1	1.4	6.7	111.0	88.6	16.6	5.8	*	Pebs 70% V/S 30%Gr. Tr. LS.	"	"
-11	8.7	1.1	7.6	106.6	87.5	13.6	5.5	*	"	unsorted gray with silt.	"
-13	9.1	0.8	8.3	160.6	116.6	32.2	11.8	A200 x 300	Pebs 75%V/S 25% Gr.	unsorted gray beige with silt.	"
-14	9.2	0.8	8.4	100.3	67.4	23.3	9.6	—	Pebs 60%V/S 40% Gr.	"	"
-15	8.4	0.4	8.0	134.0	91.2	31.2	11.6	—	Pebs 40%V/S 60% Gr.	"	"
-16	8.6	0.5	8.1	128.5	98.2	21.6	8.7	A200 x350	Pebs 80%V/S 20% Gr.	unsorted gray beige with clay	"
-17	4.3	0.5	3.8	85.2	63.0	11.3	10.9	—	Cobs 80%V/S 20% Gr.	"	"

* SEE PANNING SHEET FOR GOLD COUNT

VISIBLE GOLD FROM SHAKING TABLE AND PANNING.

SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			Remarks	SAMPLE NUMBER	SIZE OF GOLD BY SHAPE			Remarks
	A	IR	D			A	IR	D	
P-84-01-03	50x50 100 x 150	250x350		≃5% sulfides.					
-04	50x100 100x150 150x200 150x200			≃5% sulfides.					
-02-07	50x50 100x150 100x200 150x200	50x50 100x 100 100 x 200		≃2% sulfides					
-05A-07	300x650	400x400		≃10 fine grains of arsenopyrite ≃5% sulfides					
-07-07	100 x100	50 x 100 150 x 150		≃3% sulfides					
-08		100x100 150x150 150x 350		as above					
-10	100x100(x2) 100 x 150	100 x100 150x 300x600		Trace Galena ≃2% sulfides					
-11-13	100x100 150 x 200	250x400							
12-08	150x250	50 x 100 50x 200 150 x 150 250x450		≃10% sulfides.					
-09	200x 350 300x450	100x100(x2) 100x150		≃5% sulfides					
-13-10		100 x 100 200x 250		Trace sulfides					
-13-11	150x250	50x50 100x100(x2) 150x300		as above					

DRILLING SUMMARY

for week ending ____________

DATE	HOLE NUMBER	DRILL OPERATING HOURS			TRAVEL	STAND-BY	DOWN TIME	TOTAL SHIFT HOURS	EXTRA HRS				CONSUMABLES					OTHER ITEMS	
		MOVE	DRILL	OTHER					WC	TC	SM	L	B	S	R	SR	M		COS
Nov 29	P-84-25	0.25	4.25						4.5				1						1491.7
	26	0.25	4.75						5.0				1						1555
30	26		4.25						3.25				1						1434.
	27	0.5	4.75						5.75				1						156
Dec 1	28	0.5	7.25						7.75				1					28,367.08	2053.
1	29	0.5	2.75						3.25				1						1257.
2	29		2.75						2.75				1						1181.1
	23A	1.25	6.25						7.5										1301.
3	23A	1.5	7.75						9.25				1					36,466.05	2311
TOTAL																			
RATE		164.50	164.50	164.50		139.10													
COST																			

Perrex

DRILLING SUMMARY

for week ending ____________

DATE	HOLE NUMBER	DRILL OPERATING ,HOURS			TRAVEL	STAND -BY	DOWN TIME	TOTAL SHIFT HOURS	EXTRA HRS				CONSUMABLES					OTHER ITEMS	
		MOVE	DRILL	OTHER					WC	TC	SM	L	B	S	R	SR	M		COS
Nov 19	P-84-14	1.0							1				1	1					229.5
20	P-84-14		2						2	7			1	1					1393
20	15	.5	6.5						7	}			1		cones broke off				1909.
21	17	.5	7.50						8.0	7			1 → 1						2789.
21	16A	.25	3.25						3.5	}									601.6
22	16	.5	2.75						3.0	7			1						1266
22	19	.75	2.50						3.25	}									569.
23	19		3.25						3.25	7					6				---
23	18	.25	2.50						2.75	}									477.
23	18A	.75	4.25						2.50				1						1534
24	20	1.0	2.25										1						1227.
24	21	1.0	2.50																575.
24	21A	.75	2.25						5.0				1						1251.
25	22	.25	7.00						7.25				1						1967.
26	22		4.25						4.25				1	1	rods broke.				2501.
27	23	0.5	8.5						9.0				1						2268
28	23	2.5	3.5						6.0				1						1752.
	24	0.5	4.5						55										
TOTAL																			
RATE		164.50	164.50			130.10			17 565 mm 7.40 pa hr				693	345.4	474.5				
COST																			

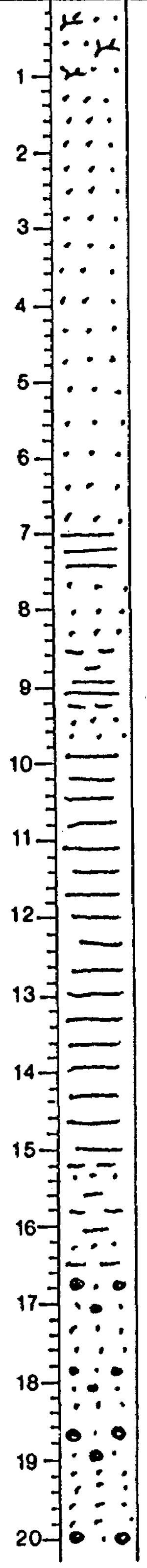
Page 1 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO P-84-01 LOCATION L92E , 15+40 S
GEOLOGIST R.Huneault DRILLER D.Gibson BIT NO. B65505 BIT FOOTAGE 15.0 → 49.5
MOVE TO HOLE 8:15 to 8:45
DRILL 8:45 to 10:30 ; pull out 10:30 to 10:45
MECHANICAL DOWN TIME 7:30 to 8:15 replace main hydraulic hose
DRILLING PROBLEMS
OTHER TRAVEL: 7:00 to 7:30
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 7.0 Sand
0-1.0 - sand + organics
1.0-7.0 - beige
- fine grain
- occasional pebble

7.0-9.6 Interbedded Sand + Clay
- beige fine sand + smooth clay
- minor silt

9.6 - 15.0 Clay
- smooth, soft
- grey

15.0 - 16.5 Silt
- grey
- minor fine sand

16.5 - 26.8 Sand + Gravel
16.5 - 21.2 - interbedded thin beds of beige fine, medium, and coarse sand and pebbly gravel.

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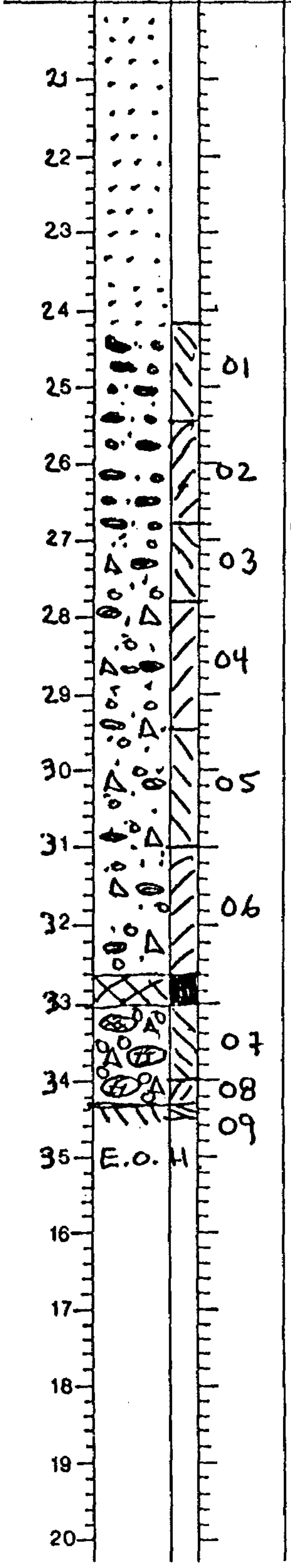
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO P-84-01 LOCATION _____
GEOLOGIST _____ DRILLER _____ BIT NO. _____ BIT FOOTAGE _____
MOVE TO HOLE _____
DRILL _____
MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____
OTHER _____
MOVE TO NEXT HOLE _____

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



21.2 - 24.2 coarse sand
- beige

24.2 - 26.8 Gravel
- coarse granular matrix
- cobbly 70%v/s 30%Gr

26.8 - 34.3 Till

26.8 - 32.6 - grey silt matri
- cobbly 75%v/s
25%Gr.

32.6 - 33.0 Boulder
- fine grain
- army green
- intermediate to mafic volcanic

33.0 - 34.3 - matrix scarce
- very compact
- cobbly 95%v/s
5% Gr.

34.3 - 34.5 Bedrock.
- medium army green
- fine grain
- intermediate to mafic volcani

34.5 - E.O.H. - Excessive torque
- rods binding.

Rémy Vermeault

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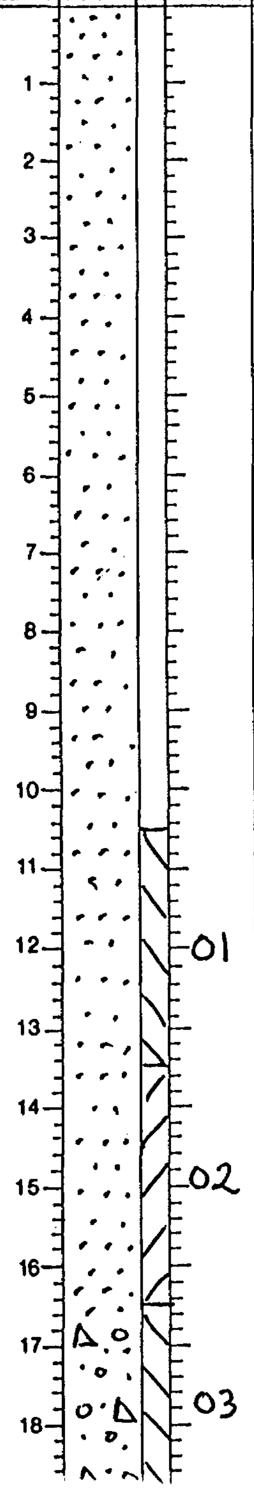
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO P-84-02 LOCATION L 88 E 5+40 S
GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. B65505 BIT FOOTAGE 49.5 - 78.0
MOVE TO HOLE 10:45 to 11:00
DRILL 11:00 to 11:45 ; 11:45 to 12:45 ; pull out 12:45 to 1:00
MECHANICAL DOWN TIME
DRILLING PROBLEMS Rods clogged at 13.5 m. pull out 11:15 to 11:45
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-16.5 Sand

0-10.5 - beige
- fine grain
- occasional medium grain becoming more common as drilling advance

10.5-16.5 - grey beige
- medium to coarse

16.5-21.8 Till
- grey silt matrix

16.5-19.0 pebbly 70% v/s
30% Gr.

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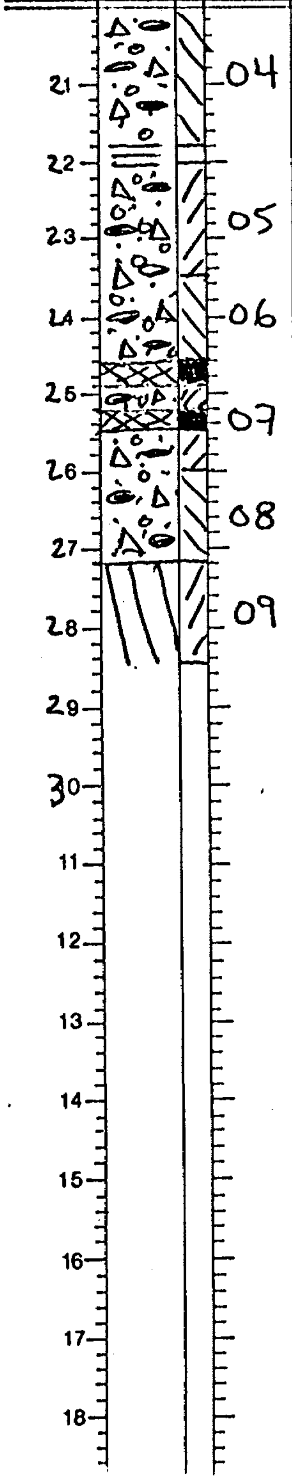
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO P-84-02 LOCATION ______
GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______
MOVE TO HOLE ______
DRILL ______
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
OTHER ______
MOVE TO NEXT HOLE ______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



21.8 - 22.0 Clay
- beige
- smooth, compact
- super clay.

22.0 - 27.2 Till

22.0 - 24.6 - grey silt matrix
- cobbly 90% V/S
10% Gr.

24.6 - 24.9 Boulder.
- med. grain
- intrusive.
- syenite

24.9 - 25.2 - grey silt matrix
- cobbly 90% V/S
10% Gr

25.2 - 25.5 Boulder
- fine grain
- shitose
- dark green
- intermediate to mafic volcanic

25.5 - 27.2 - grey silt matrix
- cobbly 90% V/S
10% Gr

27.2 - 28.5 B

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-03 LOCATION L 76+00 E 5+90 S

GEOLOGIST Rémy Huneault DRILLER D. Gibson BIT NO. 44754 BIT FOOTAGE 0-28.0

MOVE TO HOLE 1:00 to 1:30

DRILL 1:30 to 3:15 ; pull out 3:15 to 3:30

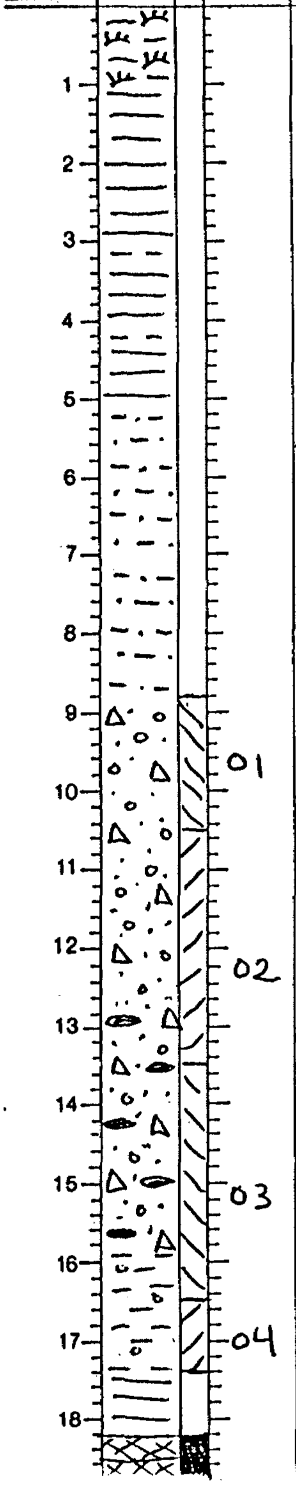
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0 - 5.0 Clay

0-1.0 - mostly organics
- rusty brown

1.0-2.8 - grey, smooth, compact

2.8-5.0 - grey, soft, smooth
- soopy return
- minor silt

5.0-8.8 Sand + Silt
- mainly grey silt
with minor grey beige
fine sand.

8.8 - 17.4 Till
- grey beige fine sand to
silt matrix

8.8 - 12.6 - pebbly 60% v/s, 40% Gr.
12.6 - 15.6 - cobbly 60% v/s, 40% Gr.
15.6 - 17.4 - matrix mainly grey
beige silt.
- pebbly, minor.

17.4 - 18.2 Clay
- brownish beige
- slightly gritty to smooth
- hard, compact ⇒ super clay

18.2 - 18.8 Boulder
18.2-18.5- fine grain, med.

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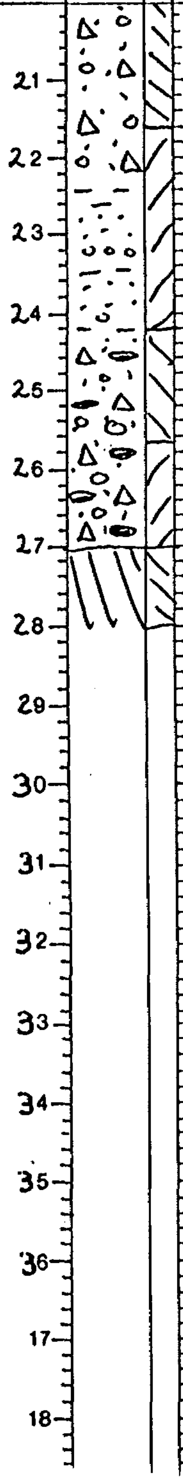
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 1984
HOLE NO P-84-03 LOCATION
GEOLOGIST DRILLER BIT NO. BIT FOOTAGE
SHIFT HOURS
TO
MOVE TO HOLE
DRILL
TOTAL HOURS
MECHANICAL DOWN TIME
DRILLING PROBLEMS
CONTRACT HOURS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.:
05 cont.
06
07
08
09

19.5 - 27.0 Till

19.5 - 22.0 - grey beige silt matrix
- occ. sand & silt beds within till.
- pebbly 50% vls
50% Gr.

22.0 - 24.2 - interbedded
- fine sand and silt with minor pebbles
- grey beige

24.2 - 25.5 - grey beige silt matrix
- cobbly 50% vls
50% Gr

25.5 - 27.0 - very compact
- cobbly 80% volc.
20% Gr.

27.0 - 28.0 Bedrock
- medium grain
- dark green
- magnetic
- gabbro

28.0 E.O.H.

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-04 LOCATION L 76+00 E 15+50 S

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. 44754 BIT FOOTAGE 28.0-45.2

B 66242 0 - 25.8

MOVE TO HOLE 3:30 to 3:45

DRILL 3:45 to 4:15 ; 4:45 to 7:15 ; 7:15 to 7:45 pull out.

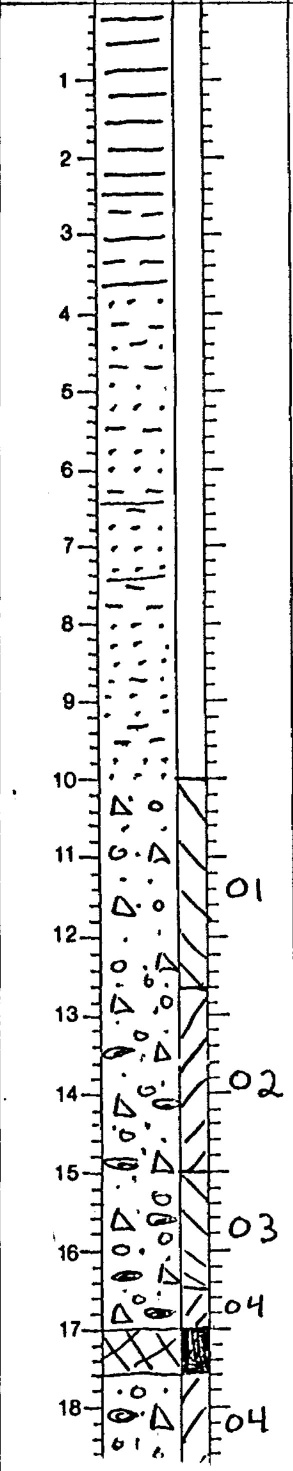
MECHANICAL DOWN TIME

DRILLING PROBLEMS BIT WORN → pull out at 17.2 to change bit: 4:15 to 4:45

OTHER TRAVEL: 7:45 to 8:30

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-3.4 Clay

0-2.6 - grey, smooth, compact

2.4-3.4 - minor grey beige silt
- clay softer

3.4-10.0 Silt and Sand

3.4-4.1 - mainly silt
- grey beige
- minor thin clay beds
- minor fine sand

4.1-10.0 - mainly fine sand
- grey beige
- minor thin clay beds
- minor silt.

10.0-24.8 Till

- fine sand to silt grey beige matrix
- occasional fine sand and silt beds.

10.0-12.8 pebbly 50% v/s
50% Gr.

12.8-15.5 cobbly 50% v/s
50% Gr.

15.5-17.0 - very compact
- cobbly 50% v/s
50% Gr.

17.0 - 17.6 Boulder.

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-04 LOCATION _____

GEOLOGIST _____ DRILLER _____ BIT NO. _____ BIT FOOTAGE _____

MOVE TO, HOLE _____

DRILL _____

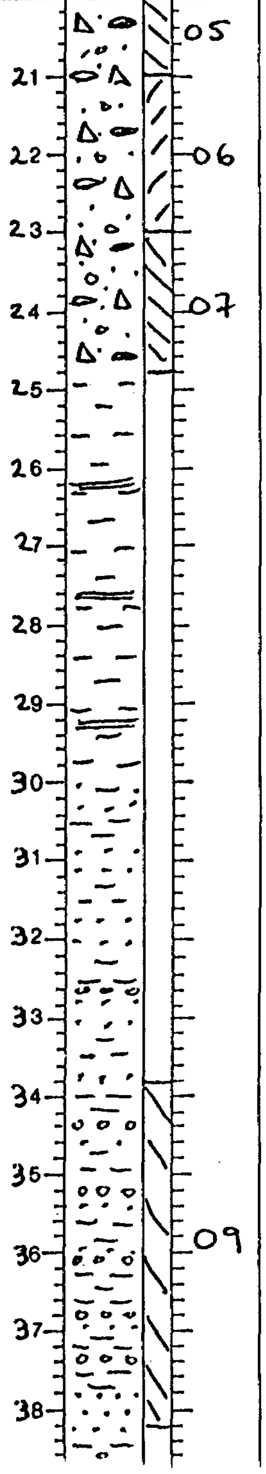
MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



24.8 - 27.4 Sand
- beige
- very coarse, granular
- occasional pebble

24.7 - 33.8 Silt and Clay

24.7 - 32.0 - mainly silt
- dark grey beige
- occasional grey green super clay beds → smooth very compact.
- organics → wood chips at 27,8 m, 30.4 m and 33.5 m.

32.0 33.8 - mainly fine sand and silt, grey beige
- minor clay
- occasional pebbly bed.

33.8 - 40.0 Interbedded clay, Silt, sand and Gravels.

33.8 - 37.8 - pebbly beds frequent
- occasionnal grey gritty clay balls
- mainly silt, grey beige minor fine sand.

37.8 - 38.4 - beige fine to medium sand

38.4 - 39.0 - mainly grey beige silt
- minor pebbly

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-04 LOCATION ______

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			10	40.0 - 42.8 Till
41				- grey beige silt matrix
42			11	- very compact - cobbly 95% v/s, 5% Gr.
43	E.O.H		12	42.8 ~ 43.0 Boulder
44				(BEDROCK?)
45				- coarse grain - whitish pink
46				- granitic, minor quartz. - Syenite.
7				43.0 E.O.H. due to excessive
8				torque and extremely
9				slow penetration.
10				
11				
12				
13				
14				
15				
16				
17				
18				

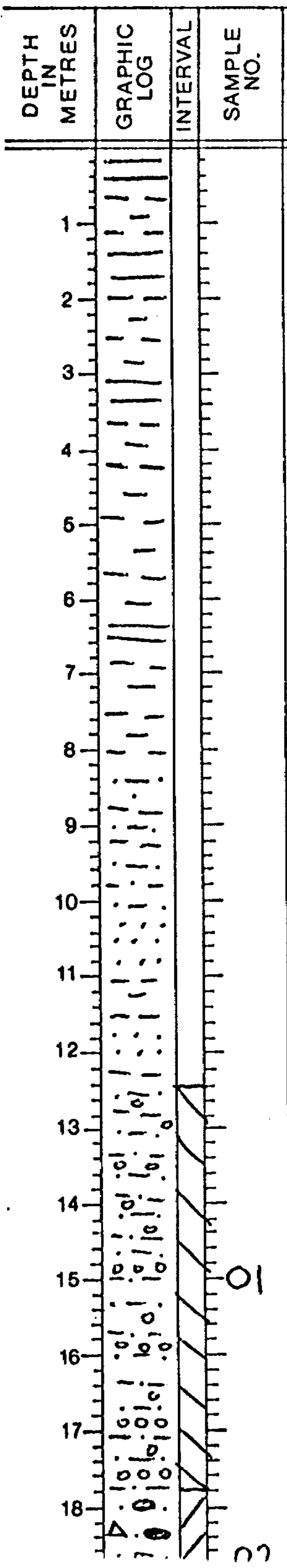
Page 1 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 24 19 84
SHIFT HOURS
____ TO ____
TOTAL HOURS
CONTRACT HOURS

HOLE NO P-84-05 LOCATION L 60 , 16+60 S
GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. B66242 BIT FOOTAGE 25.8 - 49.8
MOVE TO HOLE 8:00 to 8:30
DRILL 8:30 to 9:00 ; 9:30 to 11:00 ; 11:00 to 11:15 pull out
MECHANICAL DOWN TIME
DRILLING PROBLEMS RODS PLUGGED-up at 16.5m ; pull out 9:00 → 9:30
OTHER
MOVE TO NEXT HOLE
TRAVEL: 7:00 to 8:00

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-9.0 Clay + Silt

0-2.0 - interbedded
- beige
- smooth clay, compact

2.0-8.0 - clay minor
- silt grey beige

8.0-9.0 - mainly silt
- minor fine sand
- grey beige

9.0-17.8 Silt + Sand
- grey beige
- occasional pebble starting at 12.4

17.8 - 24.0 Till

17.8 - 20.6 - grey beige silt

Page 2 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-05 LOCATION

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. BIT FOOTAGE

MOVE TO HOLE

DRILL

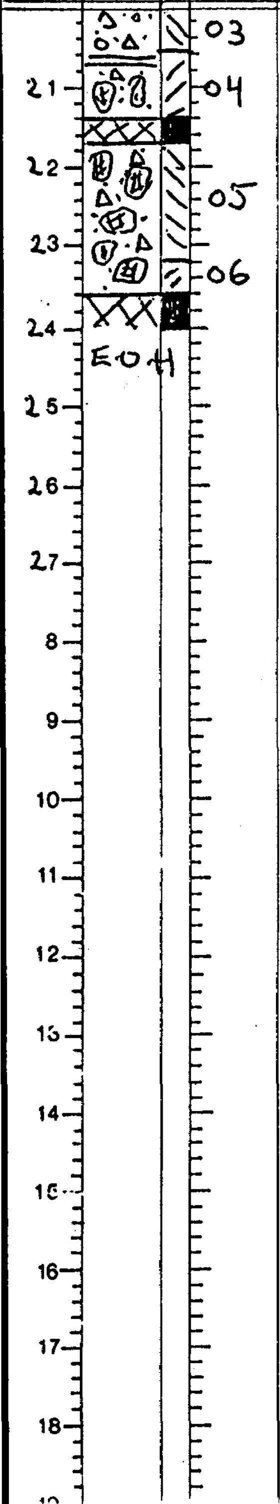
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



20.6 - 20.7 - gritty clay
- dark brownish beige
- very thin section

20.7 - 21.4 - silt matrix
- grey beige
- very compact
- bouldery to cobbly
80%v/s 20%Gr.

21.4 - 21.7 Boulder
- dark green
- fine grain
- slightly magnetic
- mafic volcanic

21.7 - 23.6 - as 20.7 - 21.4

23.6 - 24.0 Boulder
as 21.4 - 21.7

24.0 E.O.H. Bit worn
- pull out

MOVE HOLE 3m. south
See ⇒ P-84-05A

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 24 19 84

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO P-84-05 A LOCATION L 60 16+60 S

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. CB66498 BIT FOOTAGE 0-30.2

MOVE TO HOLE ______

DRILL 11:15 to 1:45 ; pull out 1:45 to 2:00

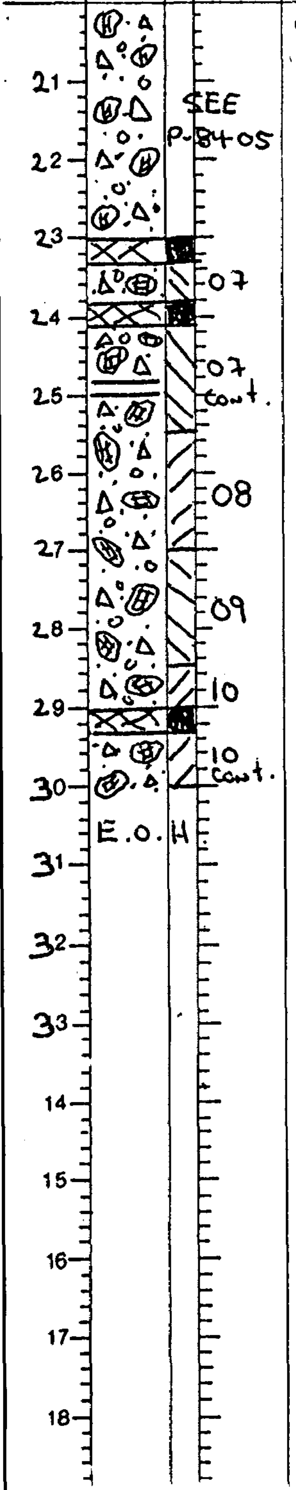
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-20.0 m SEE HOLE P-84-05

20.0-30.2 Till

20.0-23.0 - beige silt matrix
- very compact
- bouldery to cobbly
80% v/s 20% Gr.

23.0-23.3 Boulder
- coarse grain
- pinkish
- syenite

23.3-23.8 - as 20.0-23.0

23.8-24.1 Boulder
- fine grain
- army green
- intermediate to mafic volcanic

24.1-24.9 as 20.0-23.0

24.9-25.0 very thin grey smooth clay bed

25.0-29.0 as 20.0-23.0

29.0-29.3 Boulder
- dark green
- fine to med. grain
- intermediate to mafic volcanic

29.3-30.2 as 20.0-23.0

30.2 E.O.H - Excessive torque

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 24 19 84

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-06 LOCATION L 56E , 4+50 S

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. B66250 BIT FOOTAGE 0-48.5

MOVE TO HOLE 2:00 to 2:45

DRILL 2:45 to 3:30 ; 4:00 to 4:45

MECHANICAL DOWN TIME

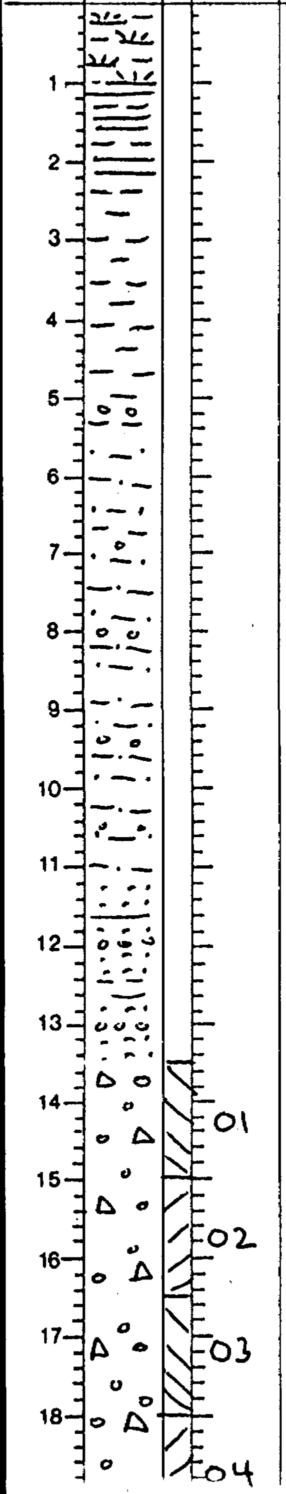
DRILLING PROBLEMS 4:45 to 6:00 rods clogged at 31.5 m.

OTHER Clean tanks, wait for water 3:30 to 4:00

MOVE TO NEXT HOLE

Travel : 6:00 to 7:00 pm.

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-11.4 Silt + Clay

0-1.0 - clay + organics
- brown, slightly gritty
- very compact
- minor silt

1.0-2.2 - interbedded
- grey smooth, soft clay and grey beige silt

2.2-5.0 - mainly silt
- grey beige
- minor clay

5.0-11.4 - mainly silt
- minor fine sand
- occasionnal pebbles

11.4-13.5 Sand + Gravel
- interbedded
- grey beige fine sand
- minor silt + clay
- minor gravel

13.5-21.4 Till
- grey beige silt matrix
- pebbly 60% V/S 40% Gr.

Page 2 of 2.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 25 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-06 LOCATION

GEOLOGIST R.Huneault DRILLER D.Gibson BIT NO. BIT FOOTAGE

MOVE TO HOLE

DRILL 8:30 to 10:30 ; pull out 10:30 to 11:00

MECHANICAL DOWN TIME

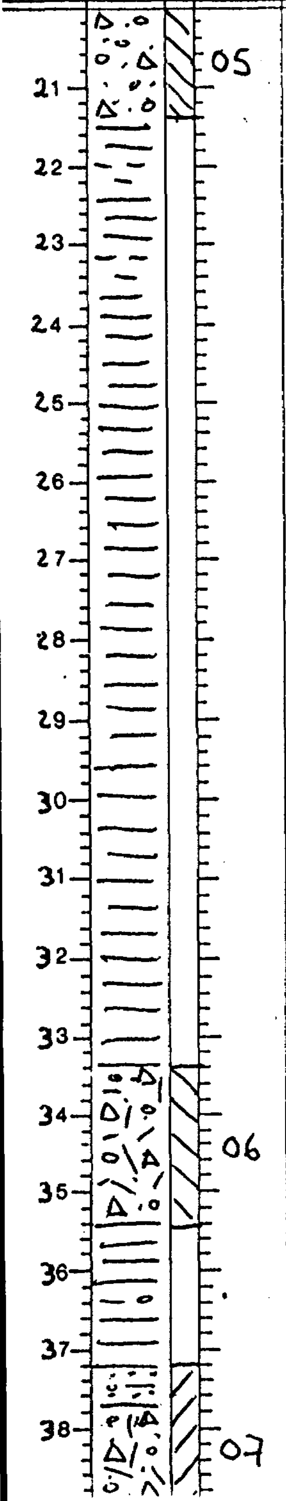
DRILLING PROBLEMS

OTHER Rig service → 7:45 to 8:00

MOVE TO NEXT HOLE

TRAVEL: 7:00 to 8:30

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



21.4 - 33.4 Silt & Clay

21.4-29.6 - grey green smooth soft
- few pebs
- minor silt, grey beige

22.4 → wood chips!

29.6 - 33.4 - super clay
- grey, smooth
- very compact

(using super poly mud)

33.4 - 35.4 Till
- grey gritty clay matrix
- pebbly 75% V/S 25% Gr

35.4 - 37.8 Clay
- grey, smooth, soft
- few pebble
- few fine sand beds beige.

37.8 - 47.0 Till

37.8 - 39.2 as 33.4 to 35.4

39.2 - 39.4 - grey silt matrix
- very compact
- cobbly 90% V/S 10% Gr.

39.4 - 39.7 Boulder

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 25 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-06 LOCATION ______

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

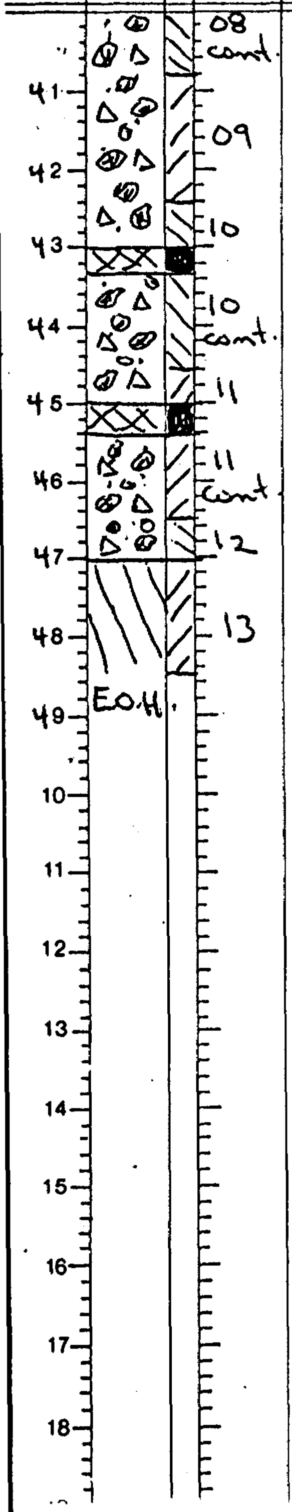
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



43.0 - 43.3 Boulder.
- fine grain
- int to mafic volcanic

43.3 - 45.0 - grey silt matrix
- very compact
- cobbly 90% vls
10% Gr.

45.0 - 45.4 Boulder.
- fine grain
- int. to. mafic volcanic

45.4 - 47.0 as 43.3 to 45.0

47.0 - 48.5 Bedrock
- dark green
- fine grain
- sligtly magnetic
- mafic volcanic

48.5 E.O.H.

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 25 19 84

SHIFT HOURS

_______ TO _______

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO P-84-07 LOCATION L 40 E 2+80 S

GEOLOGIST R. Huneault DRILLER D Gibson BIT NO. B66250 BIT FOOTAGE 48.5 → 85.4

MOVE TO HOLE 11:00 to 11:45

DRILL 11:45 to 4:45 ; pull out 4:45 to 5:15

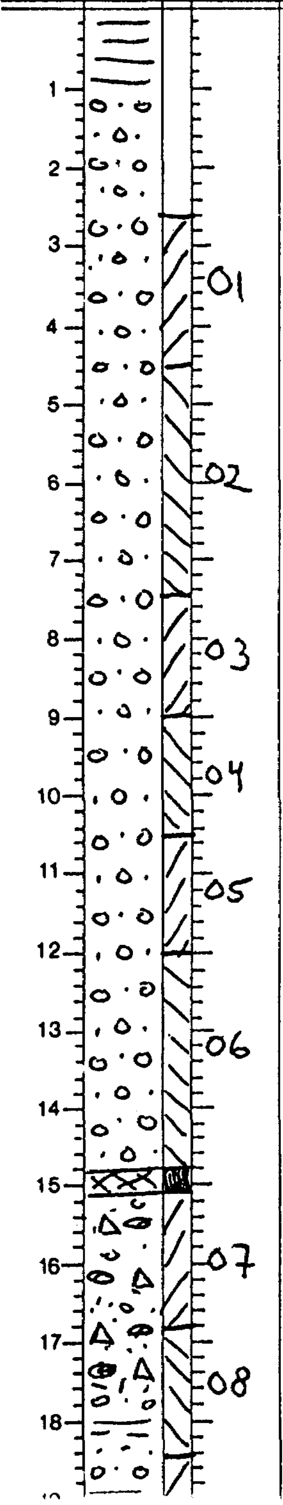
MECHANICAL DOWN TIME _______

DRILLING PROBLEMS _______

OTHER _______

MOVE TO NEXT HOLE _______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-1.0 Clay
- rusty beige, smooth, soft

1.0-14.8 Gravel
1.0-2.6 - interbedded with fine sand and clay

2.6-5.6 - granular matrix
- beige
- cobbly 60% Gr 40% V/s

5.6-8.0 - Gray beige granular to coarse sand matrix.
- cobbly 60% Gr 40% V/s

8.0-14.0 cobbly 70% Gr 30% V/s

14.0-14.8 Silt + Clay
- mostly silt
- occasional grey smooth clay beds

14.8-15.1 Boulder
- fine grain, dark green
- mafic volcanic

15.1-17.6 Till
- grey silt matrix
- cobbly 80% V/s 20% Gr.

17.6- minor gritty clay, grey

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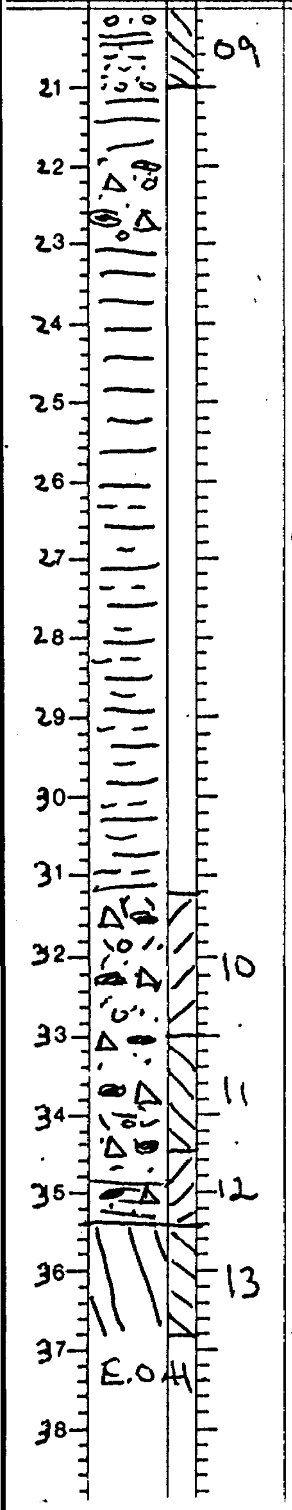
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 25 1984
HOLE NO P-84-07 LOCATION
GEOLOGIST DRILLER BIT NO. BIT FOOTAGE
SHIFT HOURS
TO
MOVE TO HOLE
DRILL
TOTAL HOURS
MECHANICAL DOWN TIME
DRILLING PROBLEMS
CONTRACT HOURS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



21.0 - 21.8 Clay
- grey green, smooth
- supper clay

21.8 - 23.0 Till
- beige gritty clay
occasional in matrix
- mostly grey beige silt
matrix
- cobbly 70% v/s 30% Gr.

23.0 - 31.2 Clay
23.0 - 23.6 - slightly gritty
- brownish, beige
- very compact

23.6 - 26.0 - grey green, smooth
- very compact

26.0 - 31.2 - Clay - silt
- mostly clay, minor
silt.

31.2 - 35.4 Till
- grey silt matrix
31.2 - 32.0 - gritty clay
in matrix, grey
34.0 - 34.1 - grey gritty clay
in matrix

- cobbly 70% v/s 30% Gr.

34.8 - 35.4 - Clay, grey
- very compact
- slightly gritty

35.4 - [illegible]

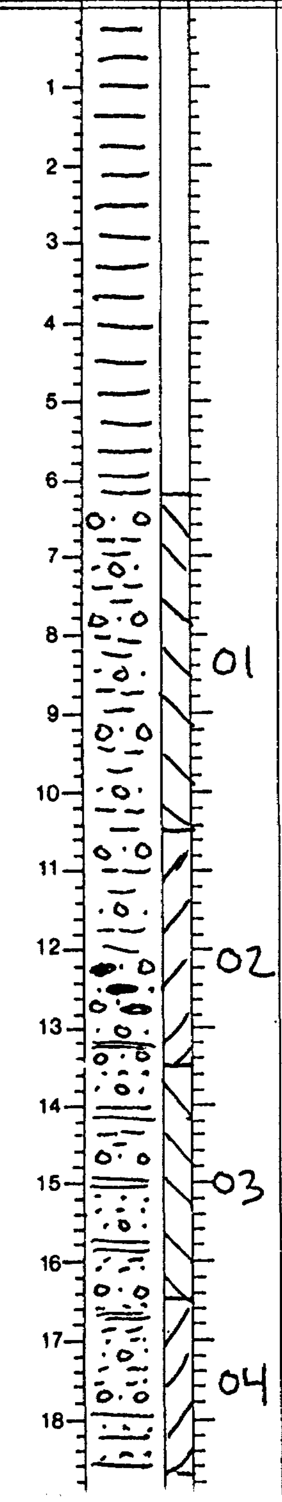
Page 1 of 3

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 25 1984
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO P-84-08 LOCATION L32E . 5+25 S
GEOLOGIST R.Huneault DRILLER D.Gibson BIT NO. B66253 BIT FOOTAGE 0-45.0
MOVE TO HOLE 5:15 to 5:30
DRILL 5:30 to 6:15 END OFF SHIFT @ at 19.5 m.
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE
TRAVEL: 6:15 to 7:00

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-6.2 Clay.
0-1.0 beige } smooth
1.0-6.2 grey } compact.

6.2-17.8 Gravel, Sand, Silt
Interbedded
6.2-12.0 - very granular sections, pebbly
- beige silt sections
- 50% vls, 50% Gr.

12.0-13.0 - cobbly 60% vls.
40% Gr.

13.6-16.0 - occasional smooth clay bed, very thin
- grey,

16.0-17.8 - very thin interbedding of gravel, fine to coarse sand and silts with minor clay.
- grey to grey beige

17.8-28.8 Clay.
17.8-18.7 - sligtly gritty
- brownish beige
- very compact
- occasional cob.

18.7-20.2 - grey gr

Page 2 of 3

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 26 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-08 LOCATION ______

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL 7:45 to 9:30 ; 9:45 to 10:00 ; 10:45 to 12:15

MECHANICAL DOWN TIME ______

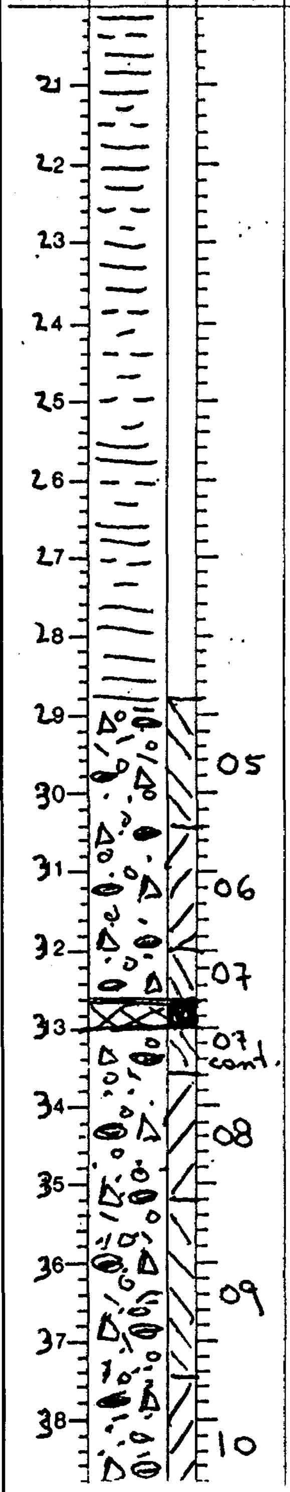
DRILLING PROBLEMS Rods clogged 9:30 → 9:45 ; 10:00 → 10:45

OTHER (at 40.0m) (at 41.4m)

MOVE TO NEXT HOLE ______

TRAVEL : 7:00 to 7:45

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



20.2 - 21.4 - mostly smooth soft, grey clay
- occasional grey-beige silt.

21.4 - 27.8 - mostly grey-beige silt
- occasional clay. smooth, compact.

27.8 - 28.8 - grey, smooth
- very compact
- super clay.

28.8 - 43.2 Till

- grey beige silt matrix
- cobbly 60% vls 40% Gr

28.8 - 29.5 occasional gritty grey clay in matrix

32.7 - 33.0 Boulder
- intermediate to mafic volcanic.

35.2 - 38.0 occasional gritty grey clay in matrix

38.0 - 39.5 cobbly 70% vls 30% Gr.

39.5 - 40.0 occasional clay lum

Page 3 of 3

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 26 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-08 LOCATION ______

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL 12:30 to 1:00 ; pull out 1:00 → 1:30

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS Clogged at 44.5 m. pull out 12:15 to 12:30

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			11 cont.	40.0 - 41.3 grey silt matrix
41			12	41.3 → grey gritty clay balls in matrix
42				cobbly 85% V/S 15% Gr.
43			13	41.3 - 43.2 grey silt matrix
44			14	
45				43.2 - 45.0 Bedrock - fine grain - magnetic - dark green - mafic volcanic 43.8 - 44.4 - seam - silt, clay - grey.
46				
7				
8				
9				
10				
11				45.0 E.O.H.
12				
13				
14				
15				
16				
17				
18				

Huneault.

Page 1 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 26 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-09 LOCATION L 40 E 15+20 S

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. B662 BIT FOOTAGE 0 -

MOVE TO HOLE 1:30 to 2:00

DRILL 2:00 to 4:00 ; 4:00 to 4:15 pull out.

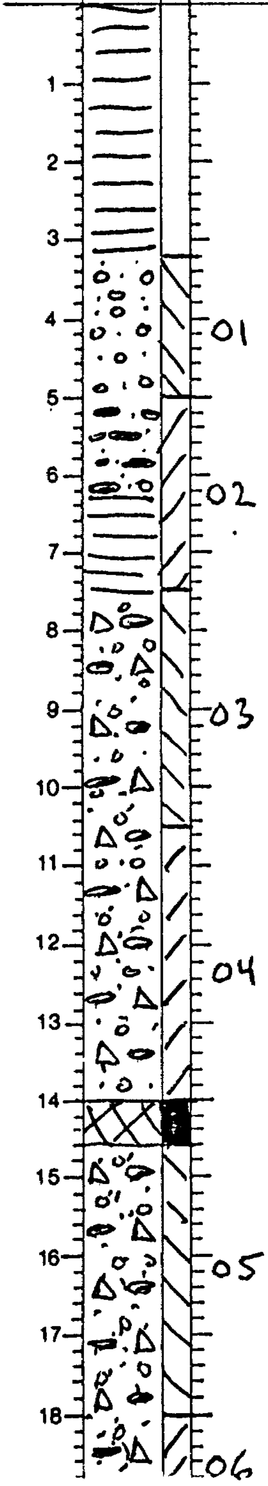
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0-3.2 Clay

0-2.9 - beige, smooth - compact.

2.9-3.2 - grey, smooth - compact.

3.2-6.2 Gravel.

- coarse granular matrix
- minor fine sand

3.2-5.0 pebbly 50% v/s, 50% Gr

5.0-6.2 cobbly 70% v/s, 30% Gr.

6.2-7.5 Clay

- grey gritty
- moderately soft
- minor peb's.

7.5-18.8 Till

7.5-14.0 - grey silt matrix - cobbly 70% v/s 30% Gr.

14.0-14.6 Boulder - intermediate mafic volcanic.

14.6-18.4 - as 7.5 to 14.0

18.4-18.8 - occasional smooth clay lumps, grey.

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 26 1984
HOLE NO P-84-09 LOCATION
GEOLOGIST R. Hureault DRILLER D. Gibson BIT NO. BIT FOOTAGE
SHIFT HOURS
MOVE TO HOLE
_____ TO _____
DRILL
TOTAL HOURS
MECHANICAL DOWN TIME
DRILLING PROBLEMS
CONTRACT HOURS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG

21 22 23 24 25 26 27 28 29 30 11 12 13 14 15 16 17 18

Sample 07
Sample 08

22.8 - minor gravel beds
- very thin

23.0 - 24.0 Till
23.0 - 23.2 - gritty clay
- grey
- minor pebbles
23.2 - 24.0 - grey silt matrix
- cobbly 80% Vls
20% Gr.

24.0 - 25.8 Bedrock
- medium grain
- dark green
- minor disseminated pyrite
- sligthy magnetic
- mafic volcanic

25.8 E.O.H

Serge Hureault.

Page 1 of 3

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 26 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-10 LOCATION L 24 E 16+50 S

GEOLOGIST R.Huneault DRILLER D.Gibson BIT NO. CB 66513 BIT FOOTAGE 25.8-38.

MOVE TO HOLE 4:15 to 4:45

DRILL 4:45 to 5:15

MECHANICAL DOWN TIME 6:00 → GT-1000 overheating

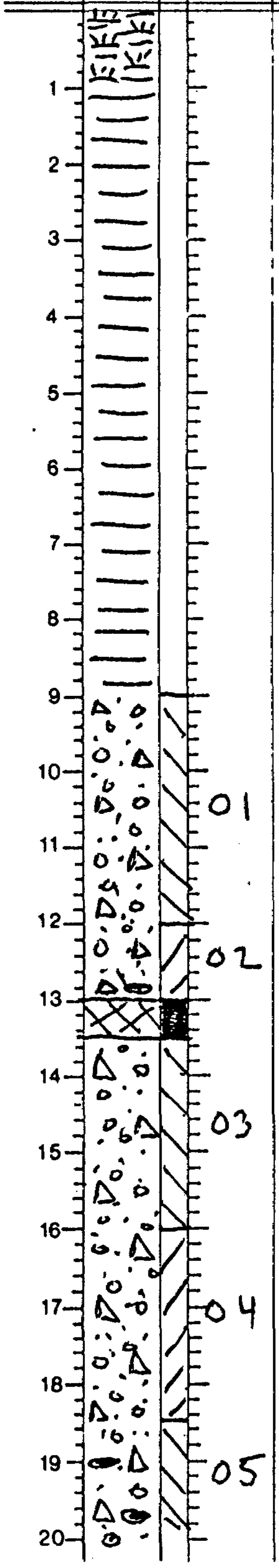
DRILLING PROBLEMS

OTHER 5:15 to 6:00 wait for water; clean tanks

MOVE TO NEXT HOLE

Travel: 6:00 to 7:00

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 9.0 Clay

0-1.0 brownish beige, smooth organics, compact.

1.0-3.0 beige, smooth, soft

3.0 - 7.0 grey, smooth, soft soappy return

7.0-9.0 minor silt, grey beige

9.0 - 26.4 Till

9.0 - 12.2 - grey beige silt matrix

- pebbly 50% V/s 50% Gr
- occasional smooth clay beds, thin, grey

11.2 - 12.8 - grey gritty clay in matrix

12.8 - 13.0 - cobbly 70% V/s 30% Gr.

13.0 - 13.5 Boulder

- intermediate to mafic volcanic

(Bit worn ⇒ pull to change bit.)

13.5 - 18.5 - grey silt matrix

- pebbly 70% V/s 30% Gr.
- some granular sections

18.5 - 20.6 - cobbly 50% V/s 40% Gr.

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OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 23 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-10 LOCATION ______

GEOLOGIST R. Huneault DRILLER D. Gibson BIT NO. 44754 BIT FOOTAGE 0-18.1

MOVE TO HOLE ______

DRILL 9:15 to 10:45 ; 11:30 to 12:00 ; 1:00 to 3:45

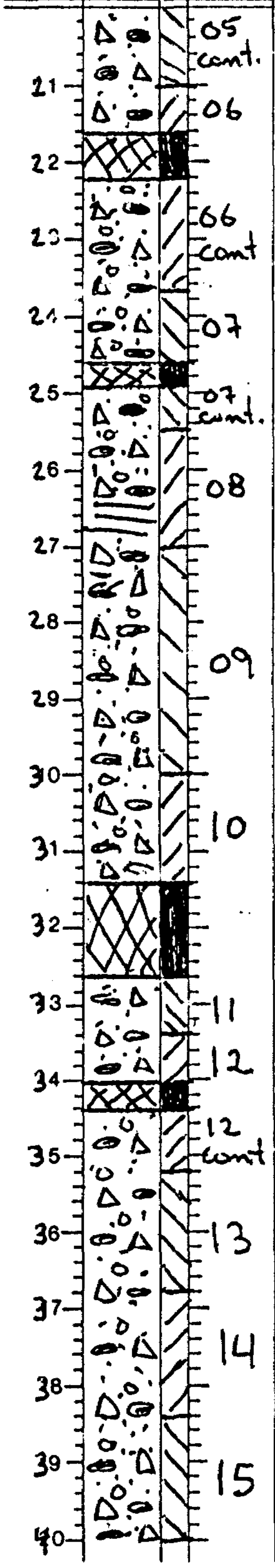
MECHANICAL DOWN TIME 12:00 to 1:00 fix transmission fluid filler mech.

DRILLING PROBLEMS 10:45 to 11:30 pull up to change bit at 31.5

OTHER ______

MOVE TO NEXT HOLE ______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



at 20.6 gritty clay lumps, grey

21.6-22.2 Boulder
- intermediate mafic volcanic.

22.2-24.5 Till
- fine sand to silt matrix
- grey beige
- cobbly 70% v/s, 30% Gr.

24.5-24.6 - grey, smooth clay

24.6-24.9 Boulder
- intermediate mafic volcanic

24.9-26.4 - as 22.2 to 24.5
26.0 - smooth clay balls, grey

26.4-26.8 Clay
- grey, compact, smooth

26.8-40.4 Till
26.8-29.6 grey silt matrix
27.5 slightly gritty clay in matrix.
29.6-31.4 - grey beige fine sand to silt matrix
- very granular
- cobbly 75% v/s 25% Gr.

31.4-31.7 Boulder
- granitic, pinkish
- syenite

31.7-32.6 Boulder
- intermediate to mafic volcanic

32.6-34.0 - grey beige silt matrix
- cobbly 70% v/s, 30% Gr.

34.0-34.4 Boulder
- intrusive, gabbro

Page 3 of 3

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 27 19 84

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO P-84-10 LOCATION ____

GEOLOGIST R. Huneault DRILLER ____ BIT NO. 44752 BIT FOOTAGE 0 - 9.3

~~MOVE TO HOLE~~ Drill: 8:15 to 9:00 ; 9:15 to 10:45.

DRILL 3:45 to 4:00 pull out.

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS 9:00 to 9:15 pull up to change bit at (13.4m

OTHER 7:45 to 8:15 Service rig.

MOVE TO NEXT HOLE ____

Travel: 7:00 → 7:45

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			15 16	34.4 -35.0 as 32.6 to 34.0
41	E.O.	H		35.0 - 35.1 grey smooth clay
42				35.1 - 38.4 as 32.6 to 34.0
43				38.4 - 39.4 grey gritty clay in matrix.
4				39.4 - 40.1 as 32.6 to 34.0
5				40.1 - 40.4 as 38.4 to 39.4
6				40.4 to 40.8 Bedrock
7				- med. grain
8				- dark green - minor diss. pyrite
9				- int. mafic volcanic
10				E.O.H. at 40.8
11				- excessive torque
12				- slow penetration.
13				
14				
15				
16				
17				
18				
19				
20				

Page 1 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 27 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-11 LOCATION L16E 16+50S

GEOLOGIST R.Huneault DRILLER D.Gibson BIT NO. 44752 BIT FOOTAGE 9.3-39.3

MOVE TO HOLE 4:00 to 4:15

DRILL 4:15 to 6:30

MECHANICAL DOWN TIME ______

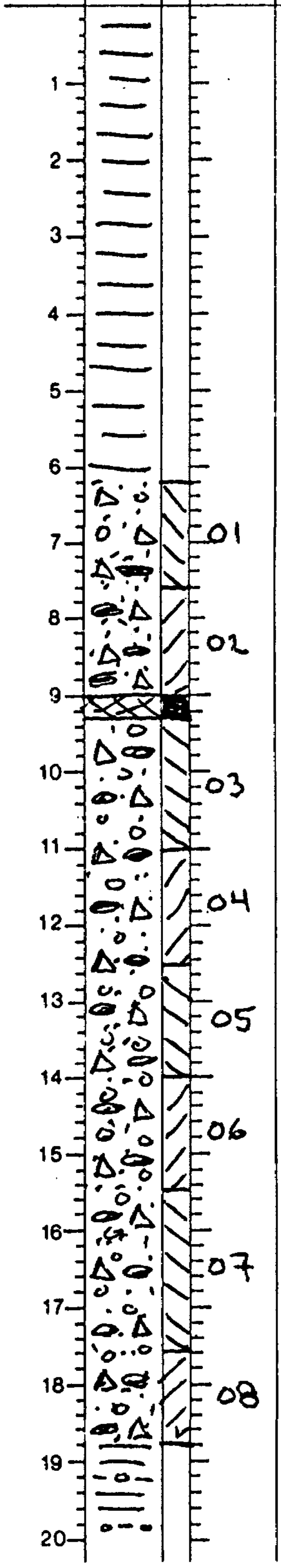
DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

Travel: 6:30 to 7:15

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0-6.1 Clay

0-4.2 beige, smooth, compact

4.2-5.0 greybeige to grey smooth, compact.

5.0-6.1 grey, soft, smooth

6.1-18.4 Till

6.1-7.0 - greybeige silt matrix
- pebbly 50% v/s 50% Gr.

7.0-9.0 - cobbly 50% v/s 50% Gr.
- greybeige silt matrix

9.0-9.3 Boulder
- coarse, granitic
- pinkish, syenite

9.3-15.6 as 7.0-9.0

15.6-16.0 occasional grey gritty clay in matrix

16.0-17.2 pebbly section

18.4-25.0 Silt + Clay
- grey beige silt interbedded with grey smooth clay
- occasional pebble.

Page 2 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 28 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P. 84-11 LOCATION ______

GEOLOGIST R. Huneault DRILLER G. HOWG BIT NO. B66514 BIT FOOTAGE 0 - 4.5

MOVE TO HOLE ______

DRILL 8:00 to 8:15; 8:45 to 8:45 ; pull out 9:45 to 10:00

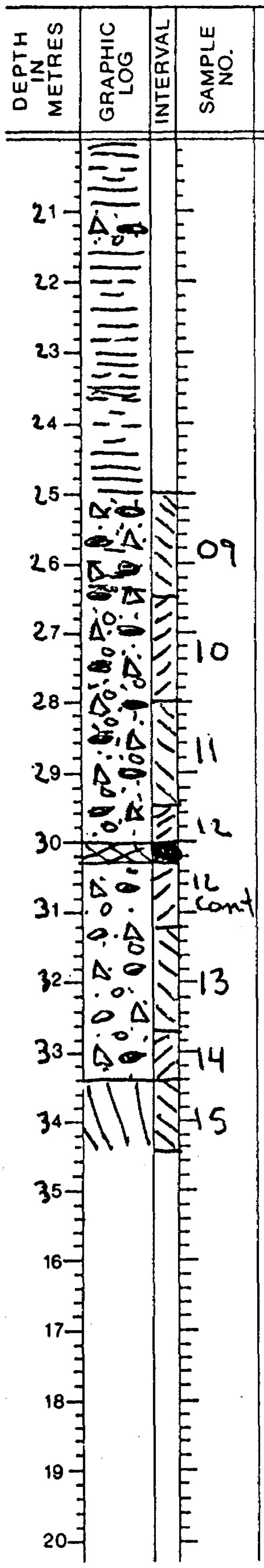
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS 8:15 to 8:45 pull up clogged rods ; change bit at 30.

OTHER 7:15 to 7:30 go for water, fuel.

MOVE TO NEXT HOLE ______

Travel: 6:30 to 7:15 ; 7:30 to 8:00



DESCRIPTIVE LOG

21.0 - 21.4 cobbly bed
Till? minor grey silt
80% vls 20% Gr.

21.4 - 23.0 clay, grey, smooth
compact.

23.0 - 23.6 silt & clay
- interbedded
- grey, smooth.

23.6 - 24.4 - silt, grey beige
- minor fine sand.

24.4 - 25.0 - super clay
- grey green
- very compact, smooth.

25.0 - 33.4 Till

25.0 - 25.4 - occasional smooth
clay, grey
- cobbly 60% vls 40% Gr
- granular (Gravel ?)

25.4 - 30.0 - grey beige fine
sand to silt matrix
- cobbly 60% vls
40% Gr.

30.0 - 30.3 Boulder
- mafic volcanic

30.3 - 32.7 - minor fine sand
- coarse granular
matrix (Gravels)

32.7 - 33.4 as 25.4 - 30.0

33.4 - 34.5 Bedrock
- fine grain
- dark green
- minor diss. pyrite
- minor calcite veinlets
- mafic volc.

34.5 E.O.H.

Page 1 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL. HOLE LOG

DATE August 28 19 84

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-12 LOCATION L 20E 4+75 S

GEOLOGIST R. Huneault DRILLER G. Howg. BIT NO. B66514 BIT FOOTAGE 4.5-36.

MOVE TO HOLE 10:00 to 10:30

DRILL 10:30 to 11:45 ; 12:15 to 2:00 ; pull out 2:00 to 2:15

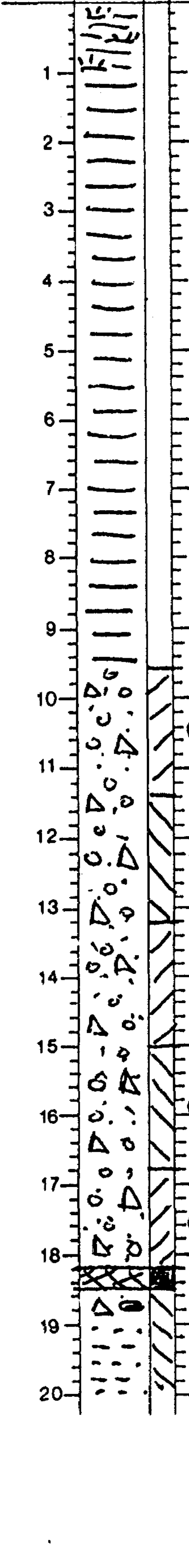
MECHANICAL DOWN TIME

DRILLING PROBLEMS 11:45 to 12:15 pull out; clogged at 25.5 m.

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



01
02
03
04
05
06

0-9.6 Clay & Silt.
0-1.0 - beige, smooth
- moderately compact
- minor organics
1.0-3.0 beige, smooth, soft
3.0-8.0 - grey, smooth, soft
- soopy return
8.0-9.6 - grey smooth, soft clay and grey beige silt.

9.6-18.8 Till
- grey beige silt matrix
- pebbly 50% V/s 50% Gr.
18.2-18.5 Boulder
- int. mafic volcanic.
18.5-18.8 cobbly 70% V/s
30% Gr.

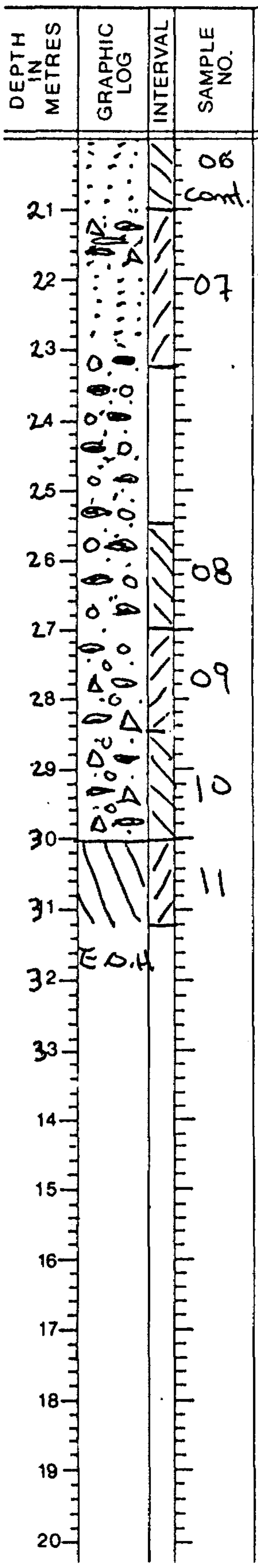
18.8-21.0 Sand
- grey beige
- fine
- minor silt.

Page 2 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 28 19 84
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO P-84-12 LOCATION _____
GEOLOGIST R. Huneault DRILLER G. Howg BIT NO. _____ BIT FOOTAGE _____
MOVE TO HOLE _____
DRILL _____
MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____
OTHER _____
MOVE TO NEXT HOLE _____



DESCRIPTIVE LOG

21.6-21.8 Till (or Gravel?)
- minor smooth grey clay lumps.
- cobbly 60% v/s 40% Gr
- fine sand to silt matrix
- grey beige.

21.8-22.8 Sand
- grey beige
- very fine
- minor clay
- occasional pebble

22.8-27.2 Gravel
- coarse granular matrix
- cobbly - 70% v/s 30% Gr.
at 26.0-27.2 cobbly 80% v/s 20% Gr.

27.2-30.0 Till
- fine sand to silt matrix
- grey beige
- cobbley, 80% v/s 20% Gr.

30.0-31.2 Bedrock
- med. grain
- dark green to black.
- minor diss. pyrite
- magnetic
- mafic volcanic

31.2. E.O.H.

Page 1 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 28 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-13 LOCATION L12E 4+00 S

GEOLOGIST R Huneault DRILLER G. Howg BIT NO. B66514 BIT FOOTAGE 36.7-75.

MOVE TO HOLE 2:15 to 2:30

DRILL 2:30 to 4:30 ; 4:45 to 5:00 ; pull out 5:00 to 5:15

MECHANICAL DOWN TIME 4:30 to 4:45 fix return hose

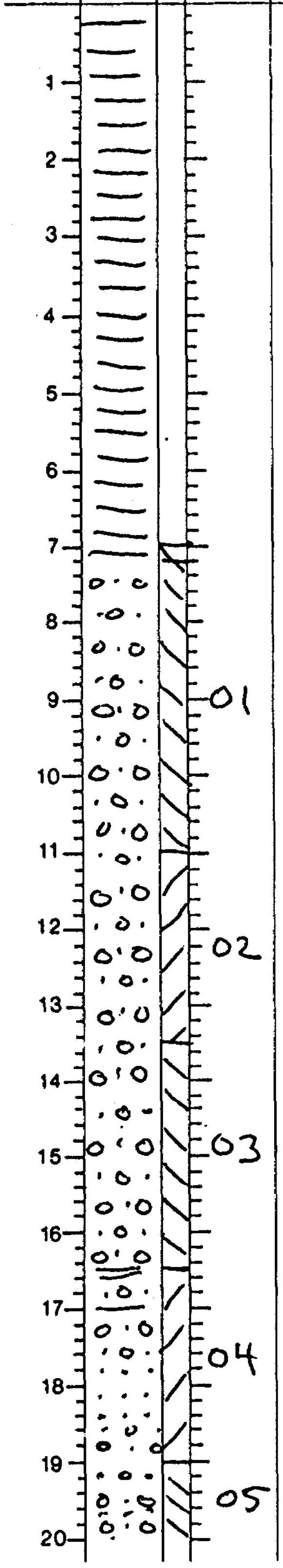
DRILLING PROBLEMS ______

OTHER 5:15 to 5:30 clean tanks, rig.

MOVE TO ~~(NEXT HOLE)~~ road: 5:30 to 5:45

Travel : 5:45 to 6:30

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 - 7.0 Clay.

0-3.0 beige, smooth, moderately compact.

3.0-5.8 grey beige, smooth, soft

5.8 - 7.0 minor grey beige silt occasional pebbles

7.0 - 30.4 Sands + Gravels.

7.0 - 17.8 - thinly interbedded

→ fine sand and gravel.

- gravel is pebbly 50% v/s 50% Gr
- fine sand is grey beige and abundant.
- minor silt.
- minor grey smooth clay 16.4 - 17.0

17.8 ↓ 18.6 - grey beige medium to coarse sand.

18.6 - 21.8 - gravel

- medium sand matrix
- grey beige
- minor fine sand beds.
- coarse sand common.
- pebbly 70% v/s 30% Gr.

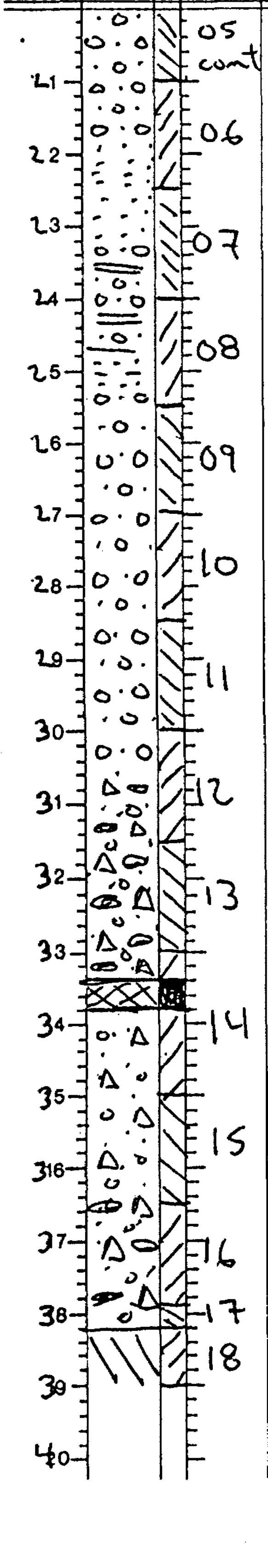
Page 2 of 2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE August 28 19 84
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO P-84-13 LOCATION L12E 4+00S
GEOLOGIST R. Huneault DRILLEF G. Houg BIT NO. ______ BIT FOOTAGE ______
MOVE TO HOLE ______
DRILL ______
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
OTHER ______
MOVE TO NEXT HOLE ______

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



21.8 - 23.2 - fine sand
- grey beige
- minor silt
- occasional pebbles

23.2 - 30.4 - gravel
- coarse sand matrix
- grey beige
- pebbly 70V/s 30% Gr
23.5 - 24.6 - minor grey smooth clay
24.6 - 25.2 - interbedded with grey beige fine sand and silt

25.2 - 30.4 gravel.

30.4 - 38.2 Till

30.4 - 33.4 - fine sand to silt matrix
- grey beige
- cobbly 70% v/s 30% Gr.

33.4 - 33.8 Boulder
- pinkish.
- med. grain
- syenite.

33.8 - 37.8 - grey beige silt matrix.
- pebbly 70% v/s 30% Gr

36.0 - 38.2 cobbly 85% v/s 15% Gr.

37.8 - 37.9 grey gritty clay in matrix.

38.2 - 39.0 Bedrock.
- med. grain, dark green
- minor diss. pyrite, magnetic
- mafic volcanic

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 20 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-14 LOCATION L112E 36+00S

GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB66576 BIT FOOTAGE 0->22.5

MOVE TO HOLE Nov 19th 5.00 -> 6.00

DRILL 7.45 -> 8.15, 8.30 -> 11.00

MECHANICAL DOWN TIME 7.30 -> 7.45 rig service, 8.15 -> 8.30 repair compressor

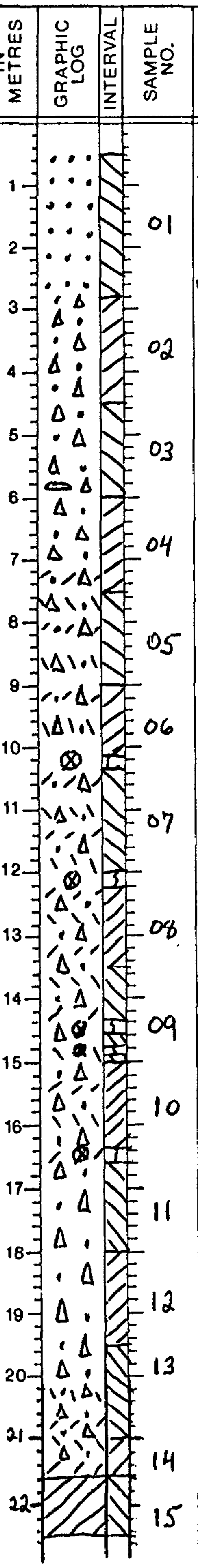
DRILLING PROBLEMS

OTHER 7.15 -> 7.30 travel

MOVE TO NEXT HOLE

* New bit
* New sub.

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

0 -> 0.5 No Return

0.5 -> 2.8 Sand gray beige, fine grained

2.8 -> 21.6 Till

- gray beige, fine sand matrix, pebbly, clasts 75% mafic volcanic and sediments, 25% granitic
- cobbly, clasts 65% mafic volcanic and sediments, 35% granitic from 5.6 to 5.9
- gritty gray clay matrix below 9.0
- boulders, gabbro 10.1 -> 10.3
  mafic volcanic 12.0 -> 12.2
  16.4 -> 16.6
  felsic volcanic 14.4 -> 14.6
  14.8 -> 14.9
- high percentage fine sand matrix below 17.6 to 20.3
- gray green clay matrix below 20.3

21.6 -> 22.5 Bedrock mafic to intermediate volcanic

- reddish orange and brick red clay from 21.8 -> 22.1
  22.1 -> 22.5 dark green, medium to coarse grained generally massive, slightly fractured, gabbro-like locally.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE *Nov 20* 19 *84*

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO *P-84-15* LOCATION *L96E 36+00S*

GEOLOGIST *T. Burns* DRILLER *G. Dudgeon* BIT NO. *CB66576* BIT FOOTAGE *22.5 → 42.0*

MOVE TO HOLE *11.00 → 11.30* *CB66663* *0 → 26.6*

DRILL *11.30 → 1.00, 1.30 → 2.00, 2.30 → 5.45*

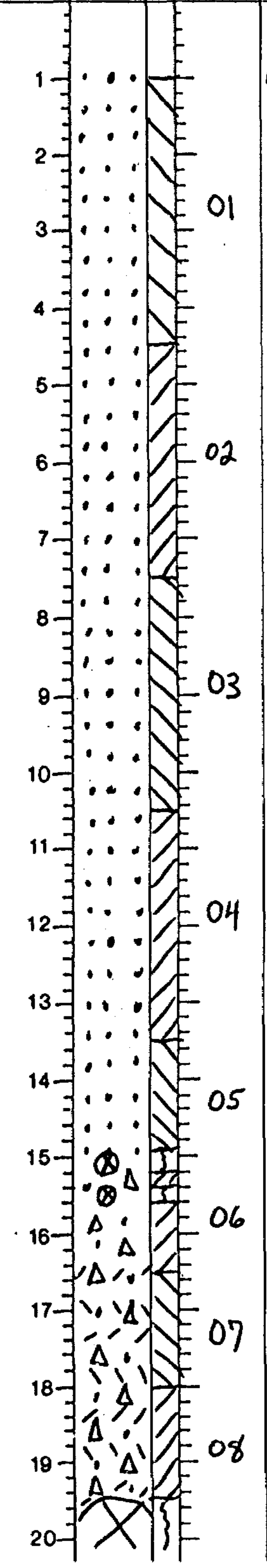
MECHANICAL DOWN TIME

DRILLING PROBLEMS *1.00 → 1.30 change bit, 2.00 → 2.30 change bit and moved 3 ft*

OTHER *5.45 → 6.00 travel*

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 → 1.0 No Return

1.0 → 14.9 Sand rusty-beige above 3.0 gray-beige below, fine to medium grained
- minor interbedded soft smooth light gray clay below 2.5

14.9 → 25.1 Till
- gray beige, fine sand matrix cobbly, clasts 75% mafic volcanic and sediments, 25% granitic
- boulders gabbro 14.8 → 15.2
  15.4 → 15.6
  mafic volcanic 19.5 → 20.4
- gritty gray clay matrix below 16.2
- clasts 85% mafic volcanic and sediments, 15% granitics

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 20 1984

SHIFT HOURS

TO

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-15 LOCATION L96E 36+00S

GEOLOGIST DRILLER BIT NO. BIT FOOTAGE

MOVE TO HOLE

DRILL

MECHANICAL DOWN TIME

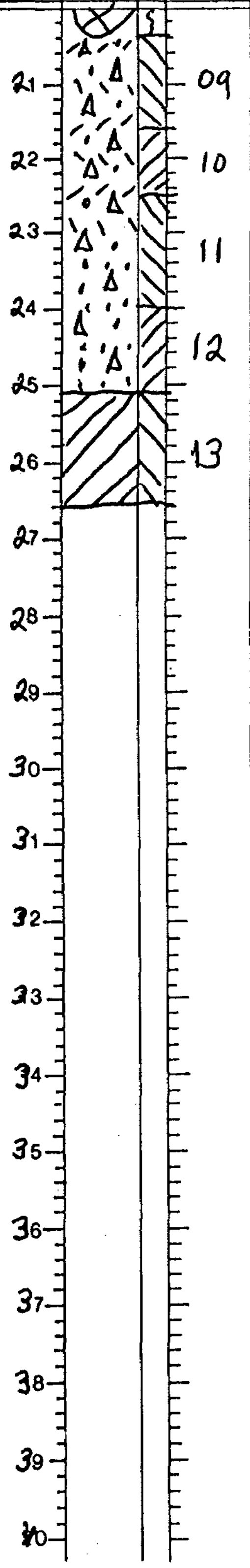
DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

2 of 2

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



- high percentage of matrix below ~23.0 (sandy)

25.1->26.6 <u>Bedrock</u> mafic volcanic
- dark green, medium to coarse grained, massive

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 22 1984

SHIFT HOURS

______ TO ______

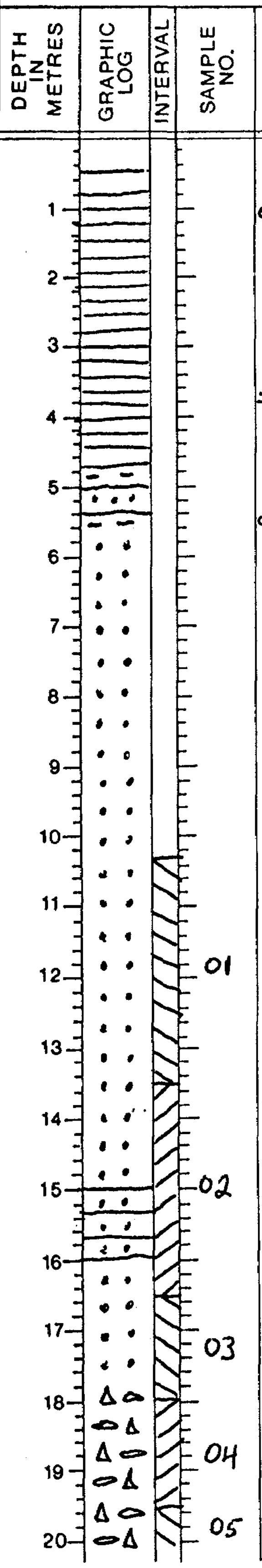
TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-16 LOCATION L84E 36+00S
GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB66666 BIT FOOTAGE 0→34.8
MOVE TO HOLE 7.30→8.00
DRILL 8.30→11.30
MECHANICAL DOWN TIME
DRILLING PROBLEMS 8.00→8.30 warm-up
OTHER 7.15→7.30 travel
MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0→0.5 No Return

0.5→5.5 Clay gray, soft, smooth
- minor fine sand from 3.2→3.4
- interbedded fine sand and silt from 4.8→5.5

5.5→9.6 Sand/Silt very fine sand
- minor gray clay 9.2→9.4

9.6→17.5 Sand fine grained
- wood chips at 11.7
- minor gray clay 15.0→16.0

17.5→32.4 Till gray to gray-beige, fine sand matrix, cobbly, clasts 70% mafic volcanic and sediments, 30% granitic
- compact

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 22 19 84

SHIFT HOURS

_______ TO _______

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO P-84-16 LOCATION L84E 36+00S

GEOLOGIST _______ DRILLER _______ BIT NO. _______ BIT FOOTAGE _______

MOVE TO HOLE _______

DRILL _______

MECHANICAL DOWN TIME _______

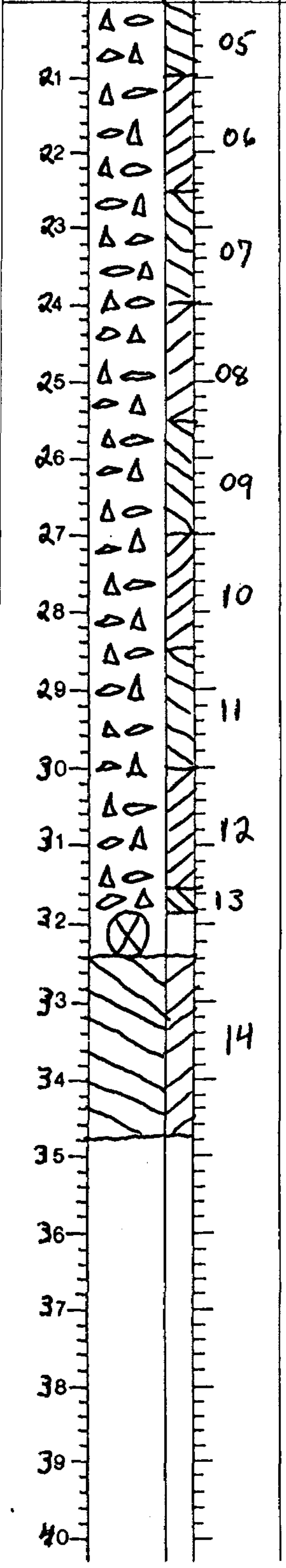
DRILLING PROBLEMS _______

OTHER _______

MOVE TO NEXT HOLE _______

page 2 of 2.

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



- minor smooth gray clay 26.4->26.6
- very compact below 28.0, gravel-like below 28.5
- abundant return, slow penetration rate.
- boulder, syenite, 32.1->32.4

32.4 -> 34.8 <u>Bedrock</u> mafic volcanic dark green, fine grained, massive, minor felsic veinlets from 33.1->33.6

33.6 -> 34.6 felsic intrusive pink, fine grained

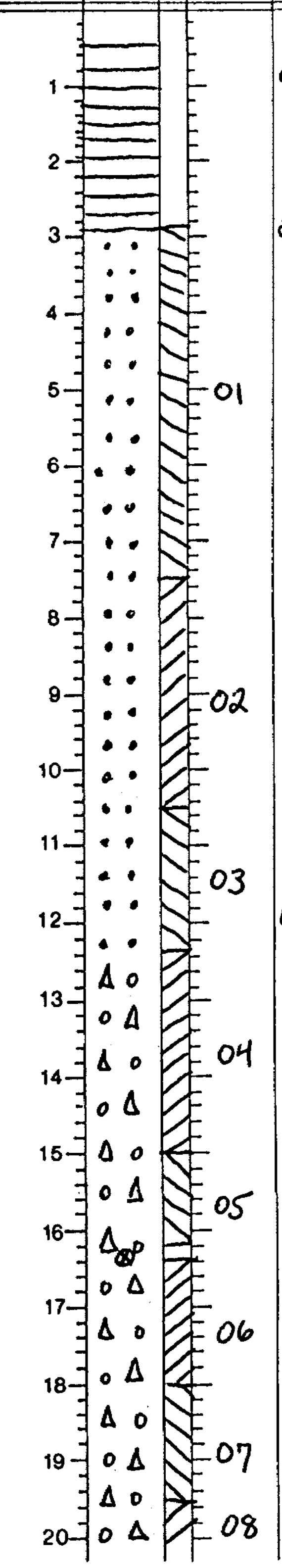
34.6 -> 348 mafic volcanic.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 21 1984
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO P-84-16A LOCATION L78E 27+00S
GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. C866665 BIT FOOTAGE 36 -> 69.7
MOVE TO HOLE 3.30 -> 3.45
DRILL 3.45 -> 7.00
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 -> 0.5 No Return

0.5 -> 2.9 Clay brown to beige, smooth moderately compact

2.9 -> 12.3 Sand gray-beige, fine grained minor interbedded light gray smooth clay
- trace woods chips at 9.6.

12.3 -> 32.2 Till gray to gray-beige, fine sand matrix, pebbly, clasts 75% mafic volcanic and sediments, 25% granitic
- boulder mafic volcanic 16.2 -> 16.4
- high percentage matrix from ~16.5 -> 18.0.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 21 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-16A LOCATION L78E 27+00S

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

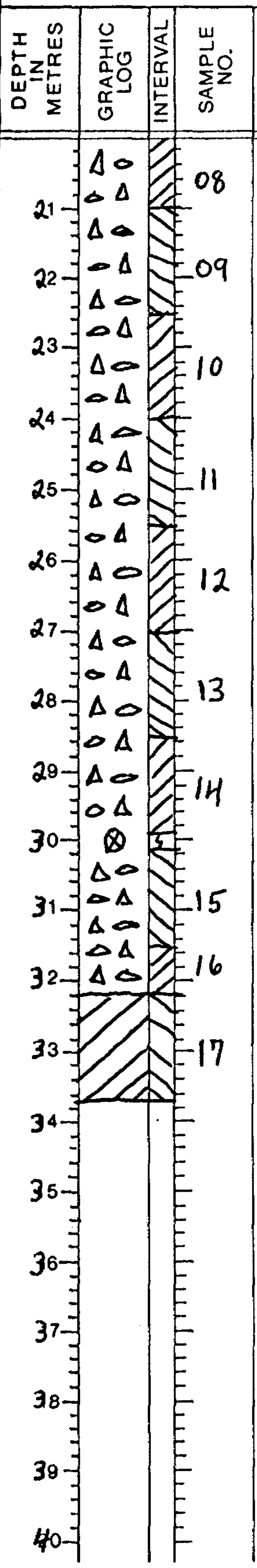
MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

Page 2 of 2



DESCRIPTIVE LOG

gravel - like from 21.9 -> 32.2
- boulder, mafic volcanic 29.9 -> 30.1
- high percentage fine sand from 30.1 -> 31.0

32.2 -> 33.7 **Bedrock** mafic volcanic dark green, fine grained, generally massive, locally fractured, minor pyrite associated with fracturing.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE ________ 19__

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-17 LOCATION L84E 27+00S

GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB66663
CB66664
CB66665 BIT FOOTAGE 26.6 → 61.1
0 → 0.1
0 → 36.0

MOVE TO HOLE 7.30 → 8.00

DRILL 8.15 → 8.30, 8.45 → 11.00, 12.00 → 12.15, 12.30 → 3.30

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS 8.00 → 8.15 warm-up, 8.30 → 8.45 wait H_2O 11.00 → 12.00 change bit

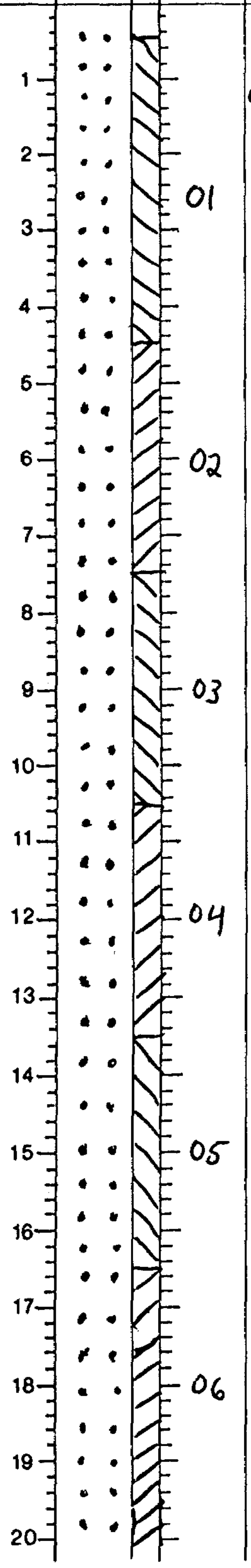
OTHER 7.15 → 7.30 travel, 7.15 → 7.30 travel | 12.15 → 12.30 change bit, move ahead

MOVE TO NEXT HOLE ______

* New bit CB66664 → lost one cone dilling on cones from previous bit

* New bit CB66665

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 → 0.5 No Return

0.5 → 20.4 Sand beige, fine grained
- minor interbedded granular sections below 12.8
- fine to medium from ~16 to 19
- minor soft smooth gray clay from 20.3 → 20.4

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE *Nov 21* 19*84*

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO *No P-84-17* LOCATION *L84E 27+00S*

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

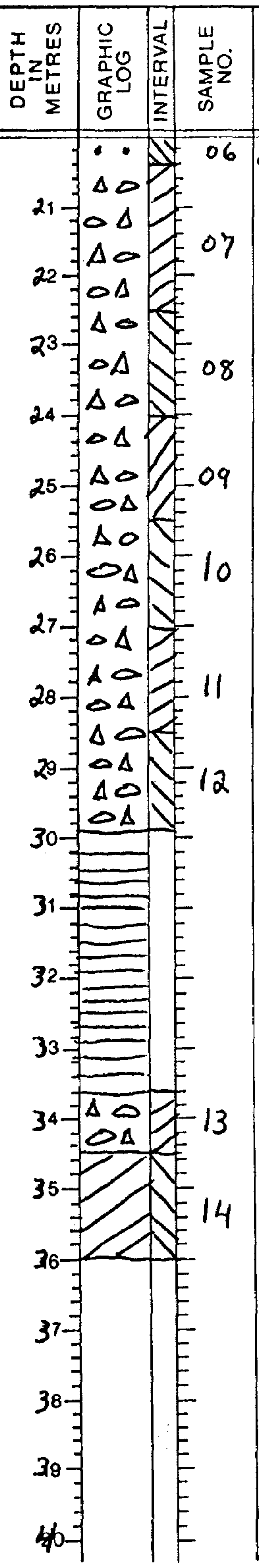
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

2 of 2



DESCRIPTIVE LOG

20.4 → 29.9	**Till** gray-beige, fine sand matrix, cobbly, clasts 70% mafic volcanic and sediments, 30% granitic - very cobbly, low percentage of matrix from 24.6 → 26.0 - gray soft smooth clay section from 27.2 → 27.4 - gritty clay matrix below 27.7 (low percentage +10) - abundant fine sand and silt.
29.9 → 33.6	**Clay** gray smooth compact - minor gritty clay below 33.4
33.6 → 34.5	**Till** (?) gray, fine sand matrix, very cobbly, clasts 80% mafic volcanic and sediment, 20% granitic
34.5 → 36.0	**Bedrock** mafic to intermediate volcanic dark green, fine to medium grained, some coarse sections locally, generally massive, some fracturing

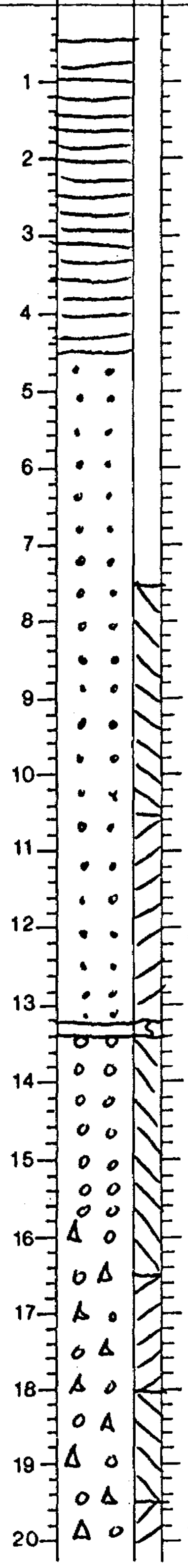
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 23 19 84
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO P-84-18 LOCATION L68E 26+00S
GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB66667 BIT FOOTAGE 0→39.0
MOVE TO HOLE 10.30→11.00
DRILL 11.00→1.30
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER 7.30→8.00 travel, 8.00→10.30 attempt to recover lost rods
MOVE TO NEXT HOLE

* New bit CB66667

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



SAMPLE NO.:
01
02
03
04
05
06

0→0.5 No Return

0.5→~4.5 clay brown above 1.0 gray below, soft, smooth
- minor interbedded fine sand below 3.0

~4.5→15.8 Sand gray to gray-beige fine grained
- minor interbedded smooth gray clay
- minor wood chips at 6.4
- 13.2→13.4 smooth gray clay
- 13.4→15.8 pebbly sand

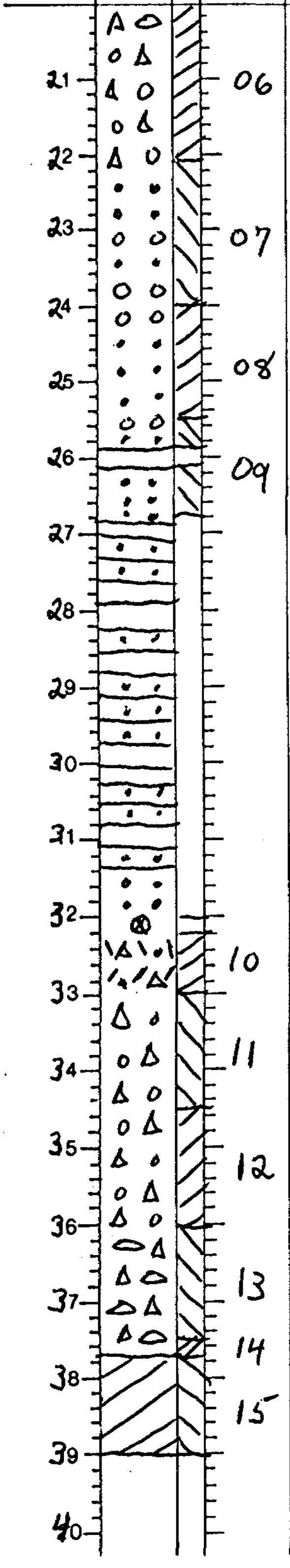
15.8→22.0 Till gray-beige, fine sand matrix, pebbly clasts 65% mafic volcanic and sediments, 35% granitic
- little +10 return below 18.0
- minor lumps gritty clay

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 23 1984
HOLE NO P-84-18 LOCATION L 68E 26+00S
GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______
SHIFT HOURS
______ TO ______
MOVE TO HOLE ______
DRILL ______
TOTAL HOURS
______
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
CONTRACT HOURS
______
OTHER ______
MOVE TO NEXT HOLE ______

page 2 of 2

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

22.1 → 26.8	Sand medium grained pebbly, interbedded gravel. - gray smooth clay 25.9 → 26.1 - sand 26.1 → 26.8
26.8 → 31.3	Clay dark gray smooth compact, minor interbedded fine sand
31.3 → 32.0	Sand gray-beige, fine grained pebbly beds (till-like?)
32.0 → 37.7	Till gray, gritty clay matrix from 32.2 → 32.9 - abundant fine sand matrix from 32.9 → 35.2 - pebbly above 36.0 clasts 70% mafic volcanic and sediments, 30% granitic - cobbly below 36.0 clasts 80% mafic volcanic and sediments, 20% granitic
37.7 → 39.0	Bedrock mafic volcanic dark green, fine grained massive, trace disseminated pyrite, highly fractured below 38.6.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 23 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-18A LOCATION L60E 26+00S

GEOLOGIST T. Burns DRILLER G Dudgeen BIT NO. 6B66667 BIT FOOTAGE 39.0 → 75.0

MOVE TO HOLE 1.30 → 2.00

DRILL 2.00 → 6.30

MECHANICAL DOWN TIME

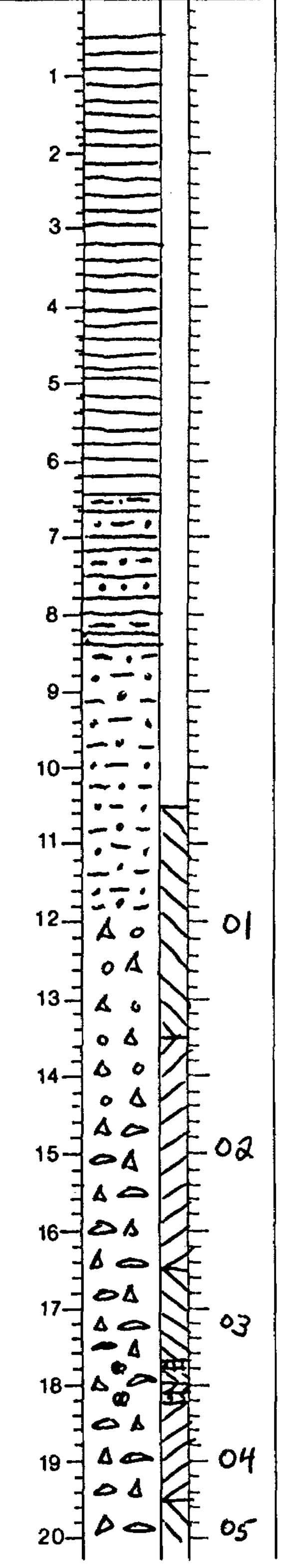
DRILLING PROBLEMS

OTHER 6.30 → 7.00 travel

MOVE TO NEXT HOLE

* water tractor on mechanical down at 4.00 p.m.

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0 → 0.5 No Return

0.5 → 8.4 clay gray soft smooth
- minor interbedded silt and fine sand below ~6.5

8.4 → 12.0 Sand/Silt beige, very fine grained

12.0 → 34.6 Till
- gray beige, fine sand matrix, pebbly above 14.4 clasts 65% mafic volcanic and sediments 35% granitic
- cobbly below 14.4 clasts 75% mafic volcanic and sediments, 25% granitic
- low +10 return below ~17.0
- boulders mafic volcanic
17.7 → 17.8
18.1 → 18.2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 23 1984

SHIFT HOURS

_______ TO _______

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-18A LOCATION L60E 26+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

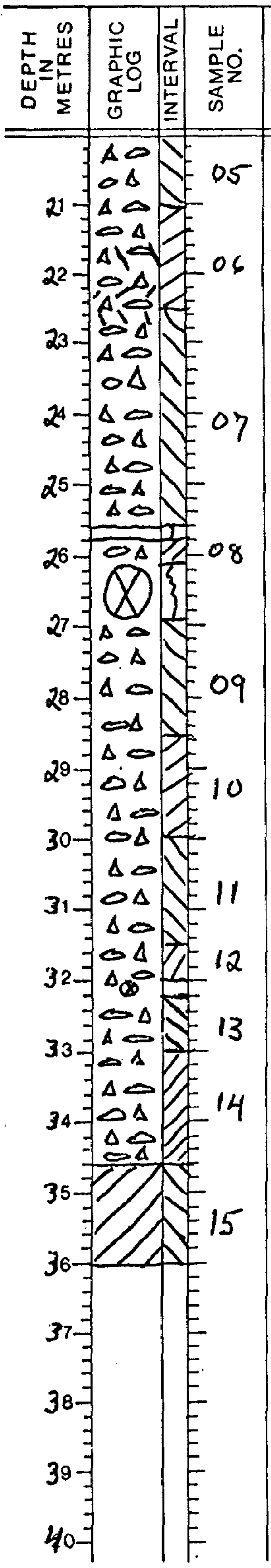
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 2



DESCRIPTIVE LOG

- gritty clay matrix below 21.7 to 22.3

22.3 → 34.6 abundant silt and very fine sand, minor smooth gray clay, little sporadic H2O return, very compact (hard to drill) cobbly

- smooth gray clay from 25.6 → 25.8

- boulders mafic volcanic 26.1 → 26.9
granodiorite 32.0 → 32.2

34.6 → 36.0 Bedrock. felsic volcanic (ryholite)

- pink, fine grained, generally massive, trace diseminated pyrite locally trace quartz veining.
- minor mafic volcanic below 35.6

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 22 19 84

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-19 LOCATION L75E 35+00S

GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB66666 BIT FOOTAGE 34.8->67.3

MOVE TO HOLE 11.30-> 12.00

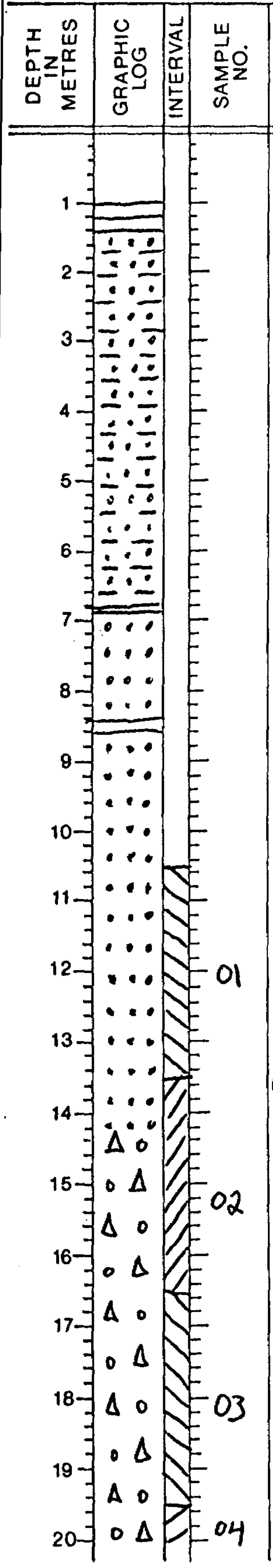
DRILL 12.00-> 2.30

MECHANICAL DOWN TIME

DRILLING PROBLEMS 2.30->2.45 pull rods, 2.45->3.00. fish for rods

OTHER 8.30->9.30 attempt to fish rods.

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0-> 1.0 <u>No Return</u>

1.0-> 1.4 <u>clay</u> brown, compact

1.4-> 14.3 <u>Sand / Silt</u> very fine beige sand, minor soft smooth gray clay at 6.7, 8.5
- fine sand below 6.8

14.3-> 31.1 <u>Till</u>
- gray beige, fine sand matrix pebbly, clasts 65% mafic volcanic and sediments, 35% granitic
- high percentage matrix above ~20.0 (sandy till)
- cobbly below 26.0, clasts 75% mafic volcanic and sediments, 25% granitic

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 22 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO P-84-19 LOCATION L75E 35+00S

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

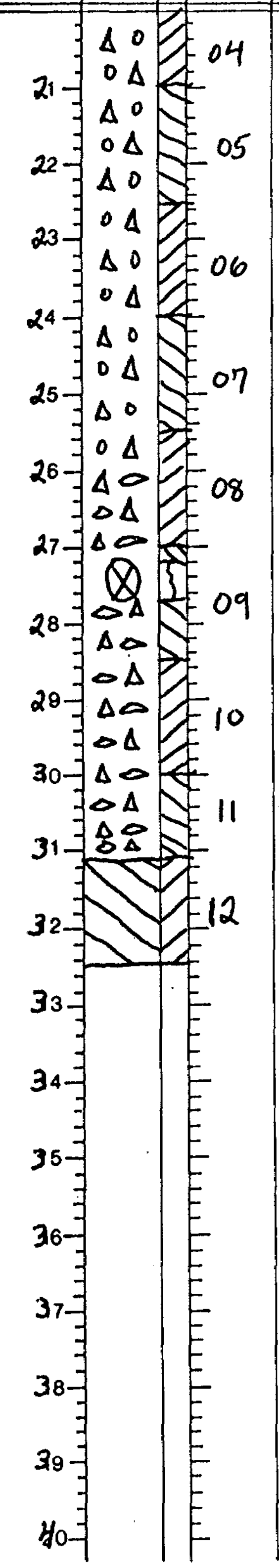
MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



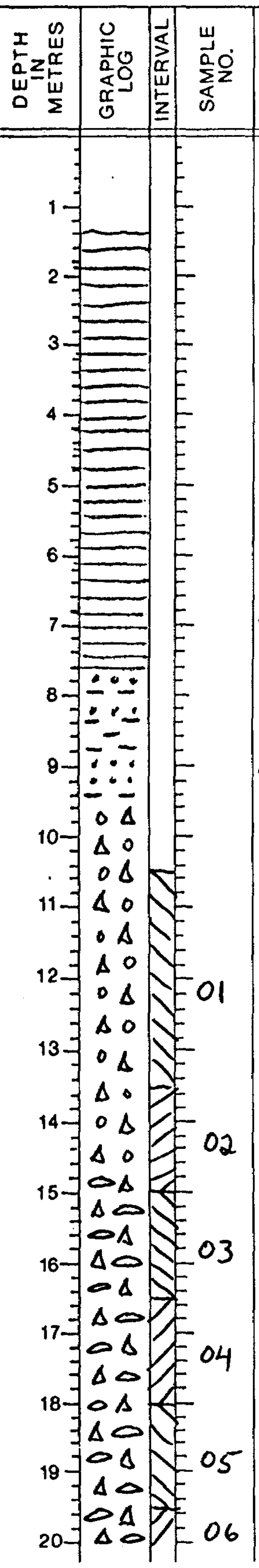
- boulder granodiorite 27.2 -> 27.7

31.1 -> 32.5 Bedrock mafic volcanic dark green, fine grained, generally massive, minor fracturing, trace pyrite associated with quartz veining
- minor magnetite veinlets below 32.3
- 0.5 -> 1.0% calcite veining

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 24 19 84
SHIFT HOURS
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO P-84-20 LOCATION L60E 35+00S
GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB66668 BIT FOOTAGE 0→28.8
MOVE TO HOLE 8.00→8.30
DRILL 8.30→11.15
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER 7.30→8.00 travel
MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0→1.4 Organics

1.4→7.6 Clay gray soft smooth

7.6→9.4 Sand/Silt very fine beige sand

9.4→24.4 Till gray to gray-beige, fine sand matrix, pebbly, clasts 70% mafic volcanic and sediments, 30% granitic

- sporadic +10 return above 12.4, high Percentage matrix (very sandy)
- cobbly below 14.5 clasts 70% mafic volcanic and sediment, 30% granitic
- compact below ~ 16.0
- little +10 return below 18.8

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 24 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-20 LOCATION L60E 35+00S

GEOLOGIST _____ DRILLER _____ BIT NO. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____

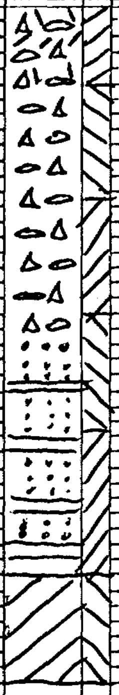
MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

Page 2 of 2



DEPTH IN METRES	SAMPLE NO.	DESCRIPTIVE LOG
	06	- minor gritty clay below 19.9
21		- very compact below 21.0 abundant silt and very fine sand
22	07	
23	08	
24		24.4 -> 26.9 Sand beige, fine grained interbedded lumps of smooth dark gray clay, trace of wood chips
25	09	
26		
27	10	26.9 -> 27.4 Clay dark gray smooth compact
28	11	27.4 -> 28.8 Bedrock mafic to intermediate volcanic - medium to dark green, fine grained, locally medium to coarse, generally massive - trace disseminated pyrite - minor calcite veining.
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 24 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-21 LOCATION L52E 25+00S

GEOLOGIST T. Burns DRILLER O. Dudgeon BIT NO. CB66668 BIT FOOTAGE 2818→5518

MOVE TO HOLE 11.15 → 11.45

DRILL 11.45 → 2.45

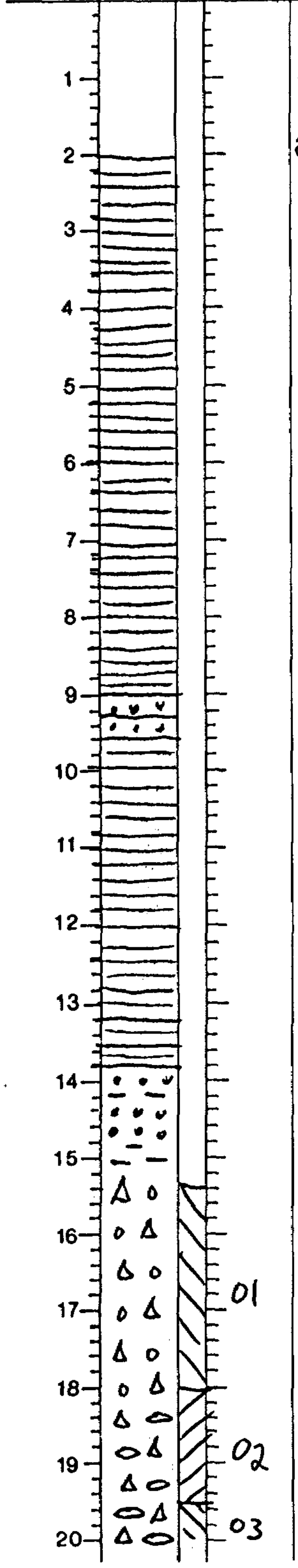
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



0 → 1.0 No Return

1.0 → 2.0 Organics

2.0 → 13.8 clay dark gray, smooth soft, light to medium gray below ~ 6.5
- interbedded fine grained sand 9.2 → 9.6.

13.8 → 15.3 Sand / Silt very fine beige sand

15.3 → 25.5 Till gray - beige, fine sand matrix, pebbly, clasts 65% mafic volcanic and sediments; 35% granitic
- sporadic +10 return above 16.5
- cobbly below 18.5 clasts 70% mafic volcanic and sediments, 30% granitic

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 24 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-21 LOCATION L52E 25+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

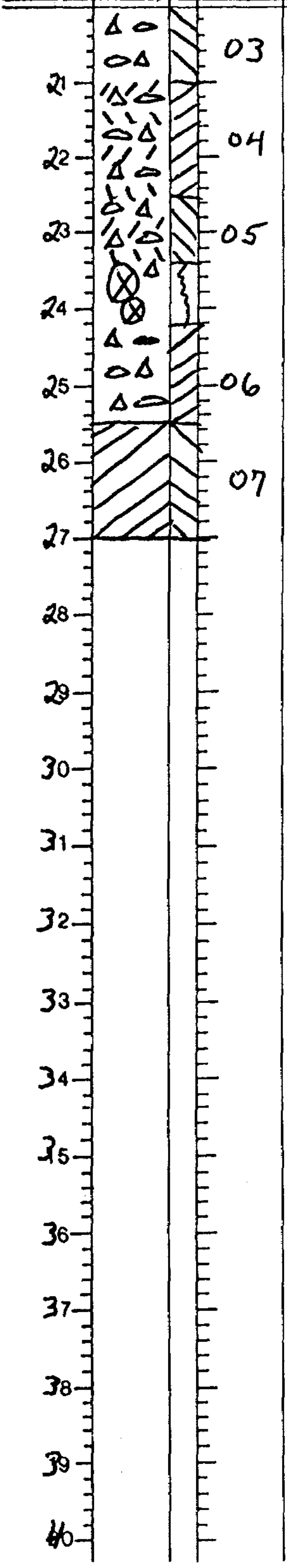
DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

Page 2 of 2.

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



- compact below 20.0
- gritty gray clay matrix below 21.1 -> 23,4
- boulders felsic volc. 23.4->23.9
  mafic volc. 23.9->24.2
- fine sand matrix below 24.2

25.5->27.0 Bedrock mafic volcanic dark green, fine grained, massive, trace disseminated pyrite

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 24 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

CONTRACT HOURS

HOLE NO D-84-21A LOCATION L42E 26+00S

GEOLOGIST _____ DRILLER _____ BIT NO. CB66583 BIT FOOTAGE 0->28.5

MOVE TO HOLE 2.45-> 3.15

DRILL 3.15 -> 5.30

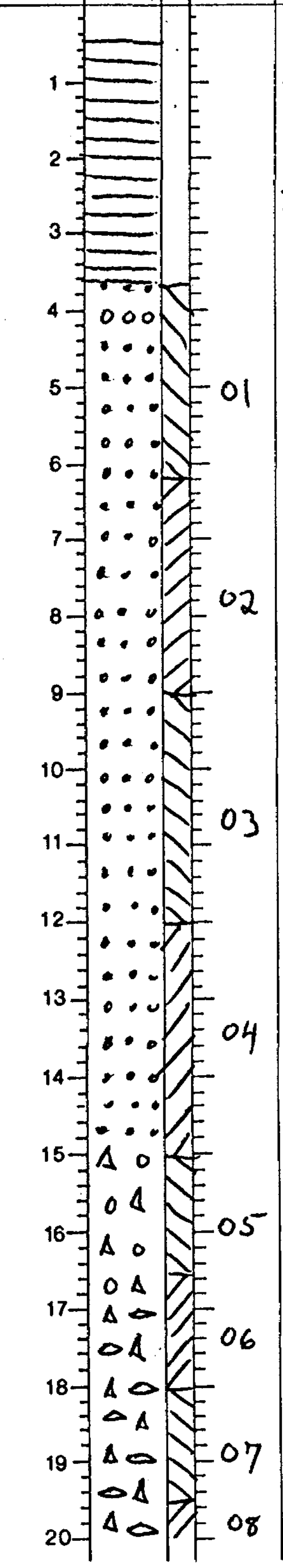
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER 5.30-> 6.00 travel

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0-> 0.5 NO Return

0.5->3.7 Clay brown above 1.8 gray below, soft, smooth

3.7->14.7 Sand gray-beige, pebbly (till-like) above 6.2

14.7->27.0 Till gray-beige, fine sand matrix pebbly above ~17.0, cobbly below, clasts 75% mafic volcanics and sediments, 25% granitic

- very compact from 19.8 to 22.2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 24 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-21A LOCATION L42E 26+00S

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

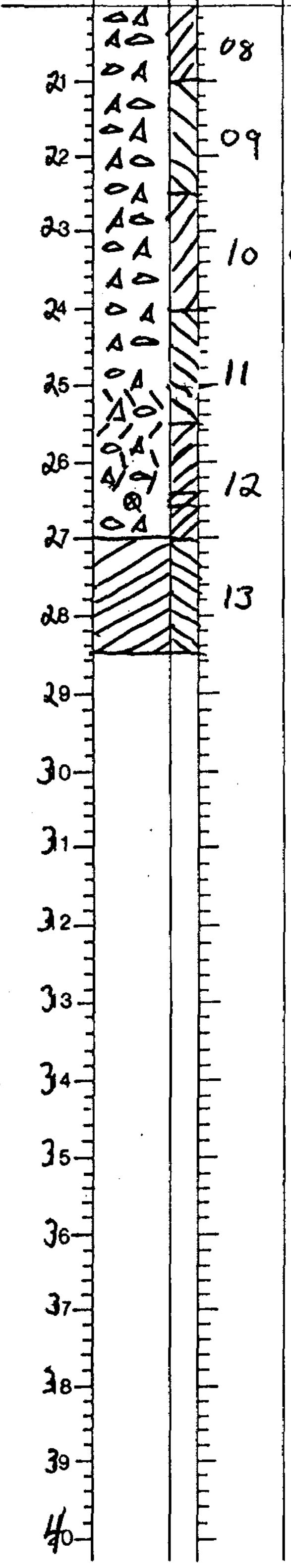
MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



- minor gray gritty below ~21.0 abundant gray gritty clay from 25.3 to 26.4

- 26.4 -> 26.6 boulder, granodiorite

27.0 -> 28.5 Bedrock felsic volcanic gray-green, porphyritic, quartz and feldspar phenocysts, trace disseminated pyrite

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 25 19 84

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-22 LOCATION L44E 35+00S

GEOLOGISTS T. Burns M. Greer DRILLER G. Dudgeon BIT NO. CB66583 CB66584 CB66671 BIT FOOTAGE 28.5-56.7 0->32.0 0->38.5

MOVE TO HOLE 8.30 -> 9.00

DRILL 9.00 -> 1.30

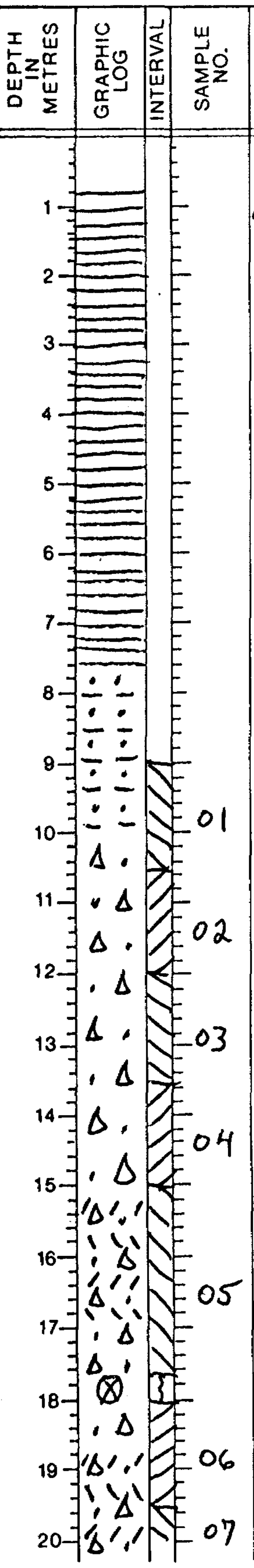
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER 7.30 -> 8.00 travel 8.00 -> 8.30 wait for fuel

MOVE TO NEXT HOLE

* job stopped at 1.30 to obtain replacement rods. Rod broken, left in hole to run casing over



DESCRIPTIVE LOG

0 -> 0.8 Organics

0.8 -> 7.6 Clay gray soft smooth

7.6 -> 9.9 Till gray-beige, fine sand matrix, pebbly, clasts 60% mafic volcanics and sediments, 40% granitic

- high percentage matrix (sandy till)
- smooth gray clay 15.1 -> 15.3
- gritty gray clay matrix from 15.3 -> 16.7
- boulder, mafic volcanic 17.7 -> 18.0
- very compact below 18.0, little +10 return
- gritty clay matrix from 18.8 -> 26.5

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 27 1984

SHIFT HOURS
______ TO ______

TOTAL HOURS
______

CONTRACT HOURS
______

HOLE NO P-84-22 LOCATION L44E 35+00S

GEOLOGIST M. Greer DRILLER G. Dudgeon BIT NO. CB66671 BIT FOOTAGE 37.5→38.5

MOVE TO HOLE ______

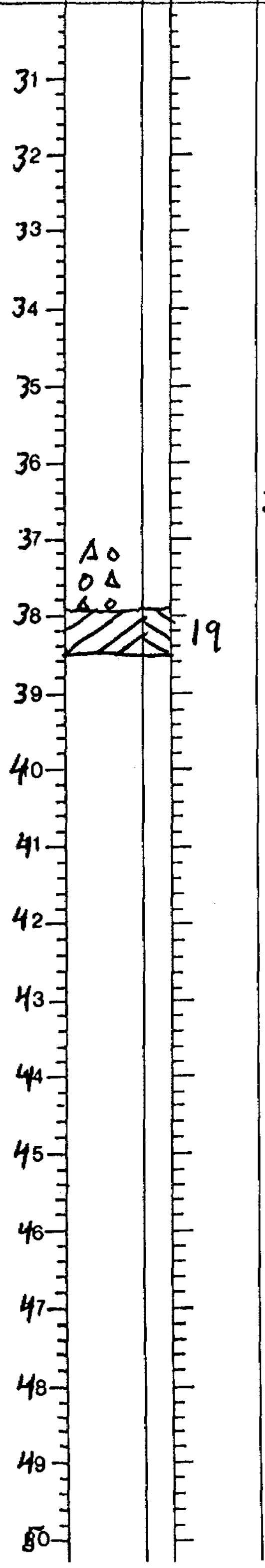
DRILL ______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER 7.15→7.45 travel 7.45→8.15 haul fuel 8.15→8.45 rig service

MOVE TO NEXT HOLE ______

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
38			19	37.5→37.9 <u></u>**Till** gray-beige, fine sand matrix, pebbly clasts 70% mafic volcanic and sediments 30% granitic - section too small to sample 37.9→38.5 **Bedrock** mafic volcanic dark gray-green to black fine grained, massive - dark green putty clay seam 38.4→38.5 E.O.H. 38.5 due to excess torque on rods.

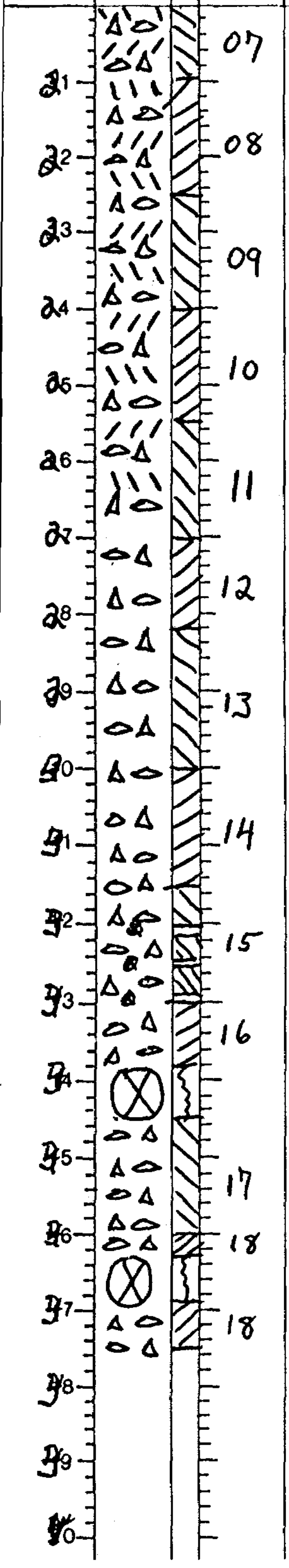
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 25,26 19 84
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO P-84-22 LOCATION L44E 35+00S
GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______
MOVE TO HOLE ______
DRILL 3.45 → 7.15
MECHANICAL DOWN TIME ______
DRILLING PROBLEMS ______
OTHER Nov 26. Geologist at drill from 1.30. lost down hole 1 rod, sub, bit.
MOVE TO NEXT HOLE hole moved ahead 5 ft and redrilled.

Page 2 of 2.

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



- cobbly below ~20.0

- sandy matrix below 26.5

- very sandy matrix below 31.0.

- boulders mafic volcanic 32.0 → 32.1
32.4 → 32.5
felsic volcanic 32.9 → 33.0.

- below 33.4 clasts 70% mafic volcanic and sediments, 30% granitic

- boulders mafic volcanic 33.8 → 34.5
36.3 → 36.9

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 27 19 84

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-23 LOCATION L32E 29+00S

GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. CB66672 BIT FOOTAGE 0->

MOVE TO HOLE 9.30 -> 10.00

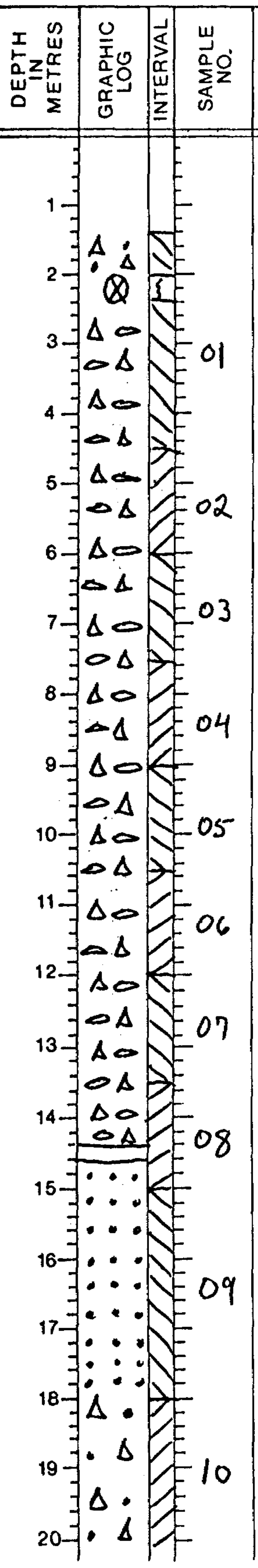
DRILL 10.00 -> 4.00 , 4.45 -> 5.45 pull rods part way, clean tanks and shack.

MECHANICAL DOWN TIME

DRILLING PROBLEMS 4.00 plugged rods. 4.45,

OTHER 5.45 -> 6.30 travel

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0 -> 1.4 No Return

1.4 -> 23.4 Till gray-beige, fine sand matrix, pebbly above 2.0 clasts 60% mafic volcanic and sediments, 40% granitic

- cobbly below 2.0
- boulder mafic volcanic 2.0 -> 2.3
- high percentage matrix below ~ 3.0 -> ~ 8.5 (sandy till)
- compact below 8.5 -> 11.6
- smooth gray-brown clay 14.4 -> 14.6
- sand section 14.6 -> 17.8 beige to gray-beige, fine grained, minor interbedded soft light gray clay
- till below 17.8 gray, silt to very fine sand matrix, pebbly but with sporadic +10 return above ~ 19.0
- soft smooth gray clay from 20.5 -> 20.7
- numerous small soft gray clay lenses from 20.7 -> ~ 22.0
- sandy till below ~ 22.0 low percentage matrix

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 27 1984

SHIFT HOURS ______ TO ______

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO P-84-23 LOCATION L32E 29+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

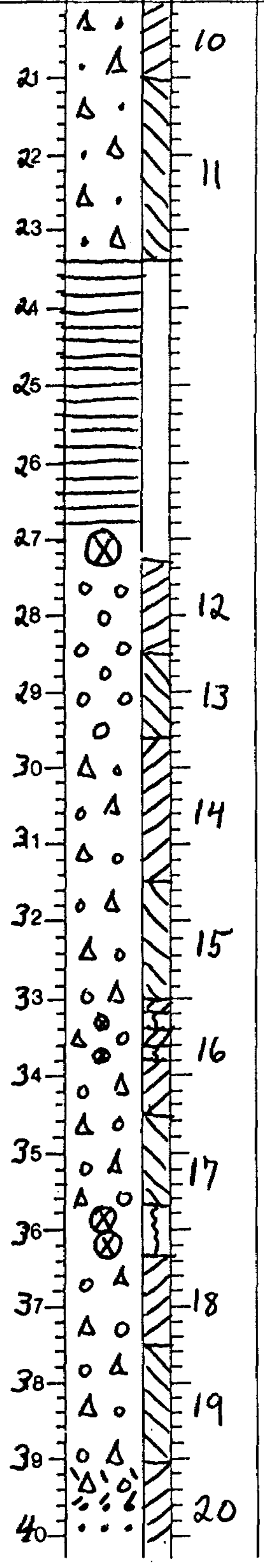
DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

Page 2 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



23.4 → 27.3 clay gray-brown, smooth, compact (super clay)

- medium grained pebbly sand section from 25.9 → 26.1
- boulder, mafic volcanic 26.9 → 27.3

27.3 → 29.6 Gravel gray-beige, fine to medium sand matrix (abundant +10 return) pebbly clasts 75% mafic volcanics and sediments, 25% granitic pebbles well rounded.

29.6 → 44.3 Till gray-beige, fine sand matrix with minor gritty clay matrix locally, pebbly, clasts 80% mafic volcanic and sediments, 20% granitic

- boulders mafic volcanic 33.2 → 33.4
  33.6 → 33.8
- clasts 95% mafic volcanic and sediments, 5% granitic from 32.5 → 34.0
- boulders granodiorite 35.7 → 36.0
  mafic volcanic 36.0 → 36.3
- gray gritty clay matrix 39.4 → 39.6.
- coarse sand section 39.6 → 41.2.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 27 19 84

HOLE NO P-84-23 LOCATION L32E 29+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

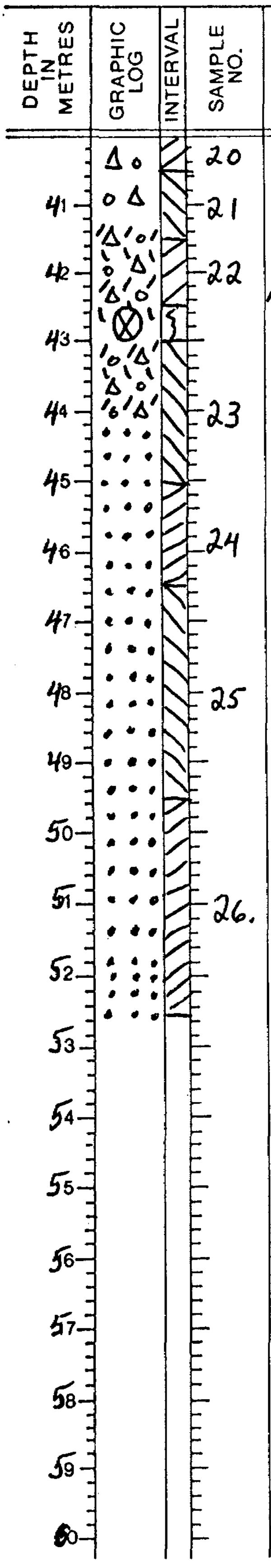
DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

3 of 3.



DESCRIPTIVE LOG

- gray gritty clay matrix below 41.2
- boulder mafic volcanic 42.5 -> 43.0

44.3 -> 52.5 Sand beige, fine grained

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 28 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-23 LOCATION L32E 29+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL 9.30→11.00, 11.45→1.30

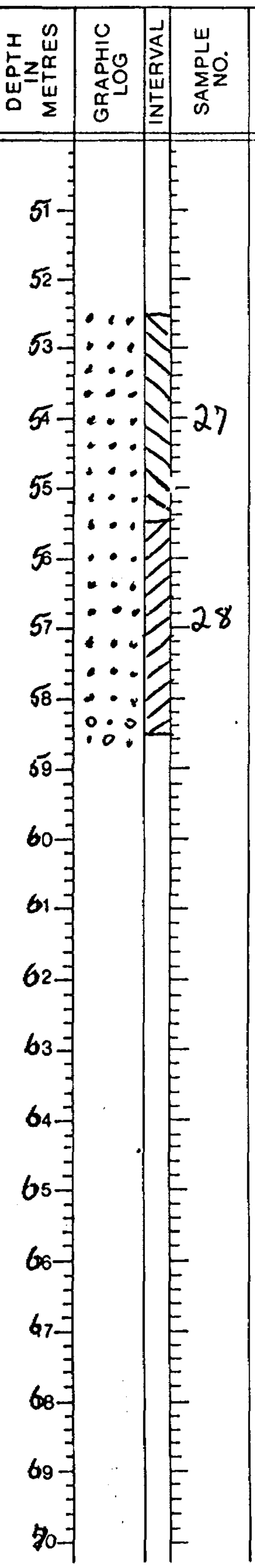
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS 11.00→11.45 change bit

OTHER 7.15→7.45 travel, 7.45→9.30 hauling rods, sloop stuck

MOVE TO NEXT HOLE ______

* mud used to keep rods from plugging



DESCRIPTIVE LOG

NOTE! For a description of units above 52.5 see log for previous day

52.5→58.5 Sand beige, fine to medium grained
- minimal return above 56.3
- pebbly sand at 58.4
- hole terminated at 58.5. bit under gauge.
- rods plugged at 37.5m redrilling.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Dec. 2+3 19 84

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

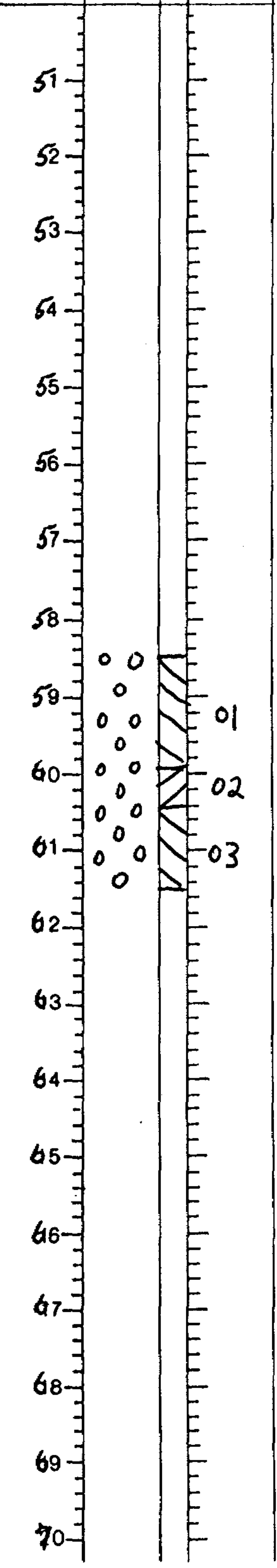
______

HOLE NO P-84-23A LOCATION L 32E 29+00S

GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. CB66697 BIT FOOTAGE 0->61.5

MOVE TO HOLE	12.00 -> 1.00	
DRILL	1.00 -> 7.30	8.30 -> 4.00
MECHANICAL DOWN TIME		7.45 -> 8.00 rig service
DRILLING PROBLEMS		
OTHER	7.30 -> 8.00 travel	7.15 -> 7.45 travel
MOVE TO NEXT HOLE		

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



NOTE! P-84-23A is a redrill of P-84-23. For a description of units above see previous log

58.5->61.5 Gravel abundant, gray, fine to medium sand matrix pebbly, clasts 70% mafic volcanic and sediments 30% granitic generally well rounded clasts.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 28 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-24 LOCATION L20E 22S

GEOLOGIST TI Burns DRILLER G Dudgeon BIT NO. cB66673 BIT FOOTAGE 0→37.3

MOVE TO HOLE 1.30→2.00

DRILL 2.00→6.00

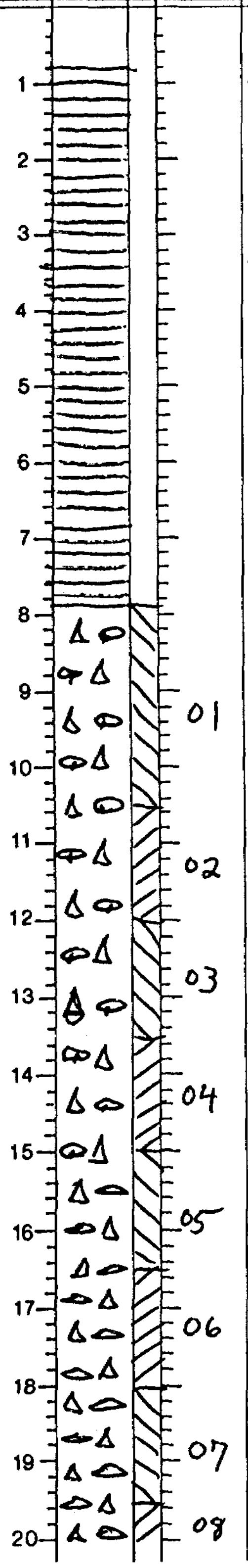
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER

MOVE TO NEXT HOLE 6.00→6.30

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0→0.8 Organics

0.8→7.9 Clay dark gray above 1.2 beige below 1.2, gray-beige below 2.6

7.9→35.8 Till gray-beige, fine sand matrix, cobbly, clasts 65% mafic volcanic and sediments, 35% granitic
- high percentage of matrix (sandy till),
- compact, minimal return from ~ 17.0→20.2

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 28 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-24 LOCATION L20E 22+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

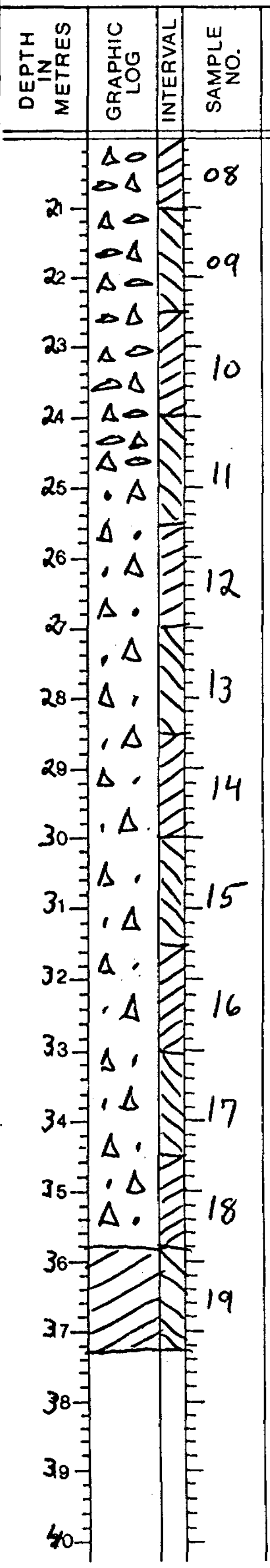
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 2.



DESCRIPTIVE LOG

- very compact cobbly till below ~23.0 clasts, 75% mafic volcanic and sediments, 25% granitic
- gravel-like from 24.6 -> 26.3
- very high percentage matrix, fine to medium sand, abundant return
- minor smooth gray clay lumps at 33.3

35.8 -> 37.3 Bedrock mafic volcanic dark green, fine grained massive, traces of disseminated pyrite

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 29 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-25 LOCATION L17+75E 10+00S

GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. CB66674 BIT FOOTAGE 0 -> 44.6

MOVE TO HOLE _____

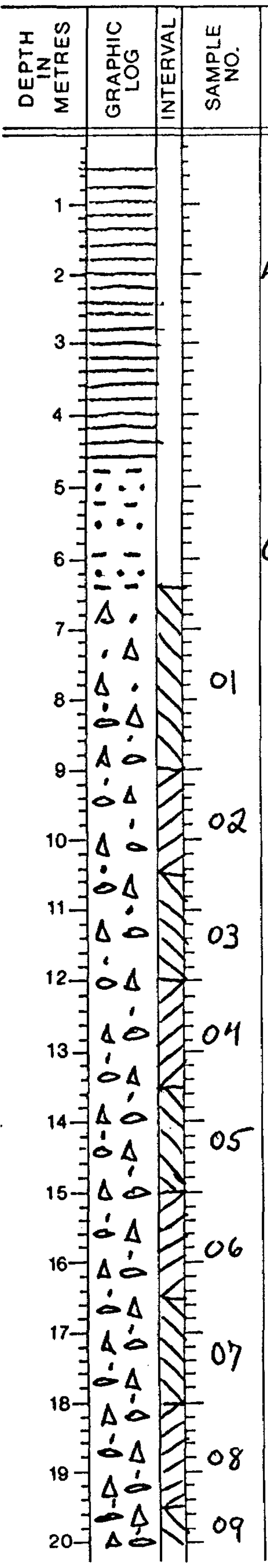
DRILL 8.00 -> 12.15

MECHANICAL DOWN TIME _____

DRILLING PROBLEMS 12.15 -> 12.30

OTHER 7.00 -> 7.45 travel 7.45 -> 8.00 rig service

MOVE TO NEXT HOLE _____



DESCRIPTIVE LOG

0 -> 0.5 No Return

0.5 -> 4.8 clay gray-beige soft smooth

4.8 -> 6.4 Sand/Silt very fine grained beige sand with minor interbedded beige and gray clay

6.4 -> 21.3 Till gray beige, fine sand matrix pebbly clasts 65% mafic volcanics and sediments, 35% granitic

- high percentage of matrix (sandy till)
- cobbly below 8.4 -> 12.0
- minor gray gritty clay below 9.5
- pebbly below 12.0 -> 17.2 compact
- minimal +10 return 14.6 -> ~16
- gravel like from 17.2 -> 21.3 abundant return, pebbly, high percentage fine and medium sand.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 29 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-25 LOCATION L17+75E 10+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

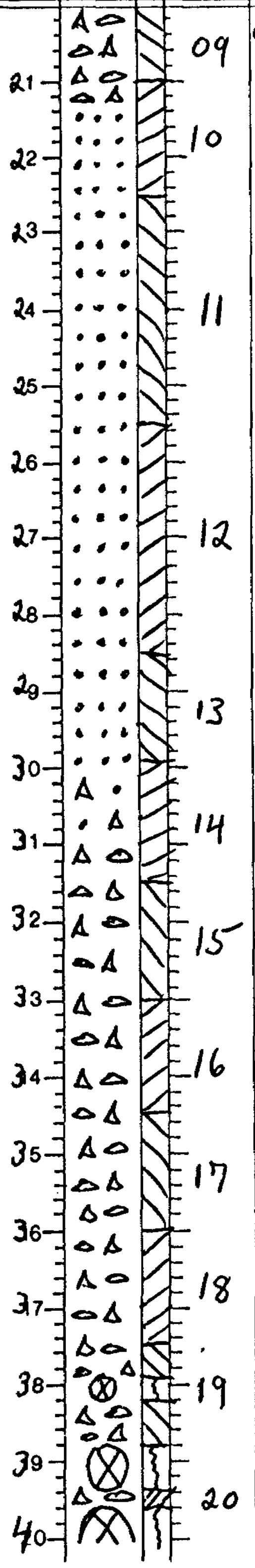
DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



21.3→29.4 Sand coarse grained
- medium to coarse below ~24.0, fine grained below ~28.0

29.9→43.1 Till gray beige, fine sand matrix; pebbly clasts 70% mafic volcanic and sediments 30% granitic
- high percentage matrix (sandy till) gravel-like from 29.9→31.0
- compact below 31.0, cobbly clasts 75% mafic volcanic and sediments, 25% granitic
- minor smooth gray clay at 34.9,
- boulders mafic volc. 37.9→38.2
granite 38.8→39.4
rhyolite 39.6→40.8

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 29 1984

HOLE NO P-84-25 LOCATION L17+75 E 10+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

MECHANICAL DOWN TIME ______

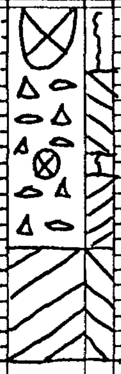
DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 3 of 3



DEPTH IN METRES	SAMPLE NO.	DESCRIPTIVE LOG
		- abundant gray gritty clay matri below 40.8
41	21	- clasts below 41.0, 95% mafic volcanic and sediments, 5% granitic
42		
43	22	
44	23	43.1 → 44.6 <u>Bedrock</u> mafic volcanic dark green, fine grained slightly fractured
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 29 19 84

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-26 LOCATION L20E 2+25S

GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. CB66675 BIT FOOTAGE 0 -> 50.5

MOVE TO HOLE 12.45 -> 1.00

DRILL 1.00 -> 5.30

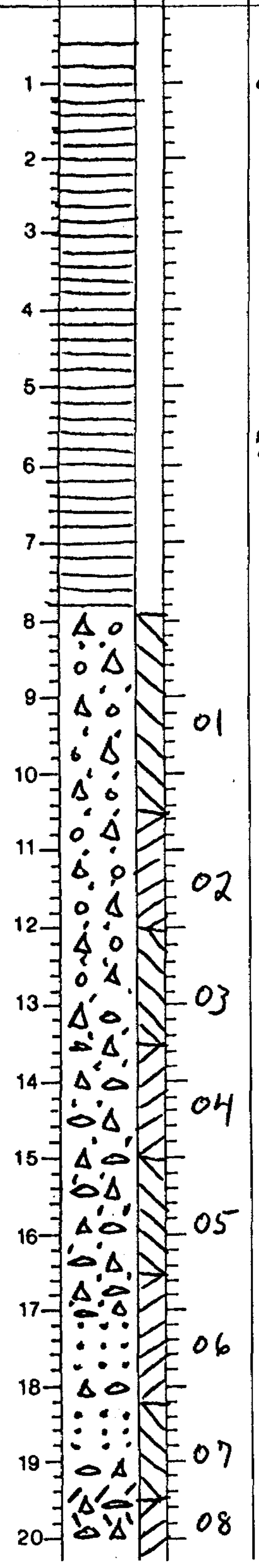
MECHANICAL DOWN TIME _____

DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0->0.5 No Return

0.5->7.9 Clay brown above 3.0, soft smooth gray below 3.0

7.9->22.7 Till gray beige, fine sand matrix, pebbly clasts 60% mafic volcanics and sediments, 40% granitic
- high percentage matrix (sandy till)
- lumps smooth soft gray clay at 12.3
- cobbly below 12.8
- gravel-like 15.0->15.2
- fine beige sand sections 17.2-> 17.8 18.4-> 18.8
- gritty gray clay matrix 19.6-> 21.4

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 29 1984

HOLE NO P-84-26 LOCATION L20E 2+25S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

SHIFT HOURS

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS

______

MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

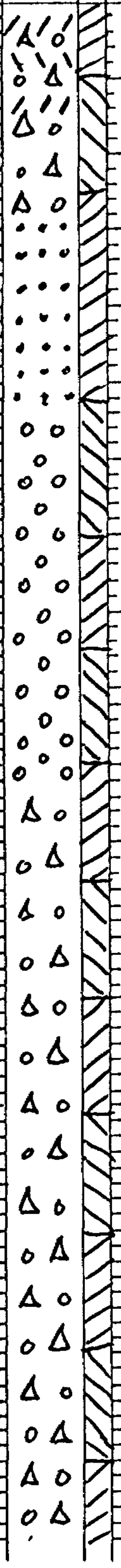
CONTRACT HOURS

______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 3



DEPTH IN METRES	SAMPLE NO.	DESCRIPTIVE LOG
	08	- smooth soft gray clay lumps below 21.4
21		
22	09	
		22.7 -> 25.2 <u>Sand</u> beige fine to medium grained
23		
24	10	
		25.2 -> 30.1 <u>Gravel</u> dark gray, fine to medium sand matrix, till-like from 25.2 -> 26.5, pebbly clasts 85% mafic volcanic and sediments, 15% granitic
25		
26	11	
27		
28	12	
		30.1 -> 50.5 <u>Till</u>, gray-beige, fine sand matrix, pebbly clasts 70% mafic volcanic and sediments, 30% granitic - gravel like below 34.0 (abundant return, fine sand matrix partially sorted?)
29	13	
30		
31	14	
32	15	
33		
34	16	
35	17	
36		
37	18	
38	19	
39		
40	20	
]

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 29 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-26 LOCATION L20E 2+25S

GEOLOGIST _____ DRILLER _____ BIT NO. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____

MECHANICAL DOWN TIME _____

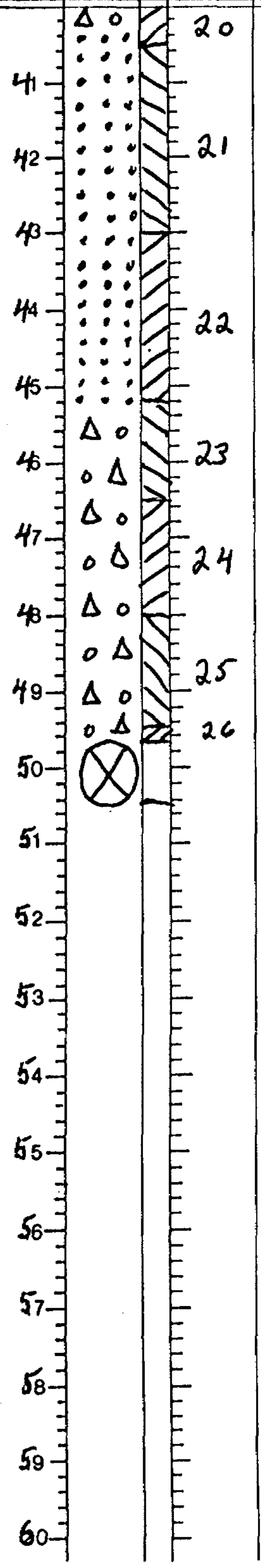
DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

page 3 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



- sand, beige coarse grained from 40.3 → 43.2
  fine grained from 43.2 → 45.2
- very compact below 45.2
- 2-3% limestone clasts below 45.2
- boulder mafic volcanic 49.7 → 50.5

E.O.H. → 50.5 due to bit failure

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 30 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-26 LOCATION L20E 2+25S

GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB64676 BIT FOOTAGE 0->52.5

MOVE TO HOLE

DRILL 8.15 - 12.00

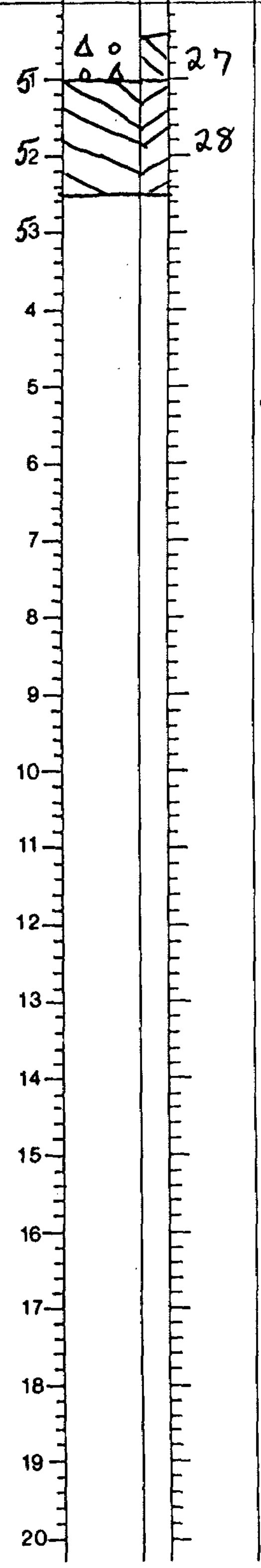
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER 7.15 -> 8.00 travel, 8.00 -> 8.15 wait H2O

MOVE TO NEXT HOLE

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG



50.5 -> 51.0 <u>Till</u> gray to gray beige fine to medium sand matrix pebbly clasts 95% mafic volcanic and sediments, 5% granitic
- lower portion of sample may be highly fractured bedrock

51.0 -> 52.5 **Bedrock** mafic volcanic dark green, medium to coarse grained, highly fractured, ~ 5% carbonate veining, diseminated coarse pyrite aggregates (~1%), light green chlorite alteration hematite staining associated with some fractures
(fragmental appearance possibly result of alteration)

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 30 19 84

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-27 LOCATION L40E 1+00S

GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. CB66696 BIT FOOTAGE 0->44.1

MOVE TO HOLE 12.00-> 12.30

DRILL 12.30-> 5.00

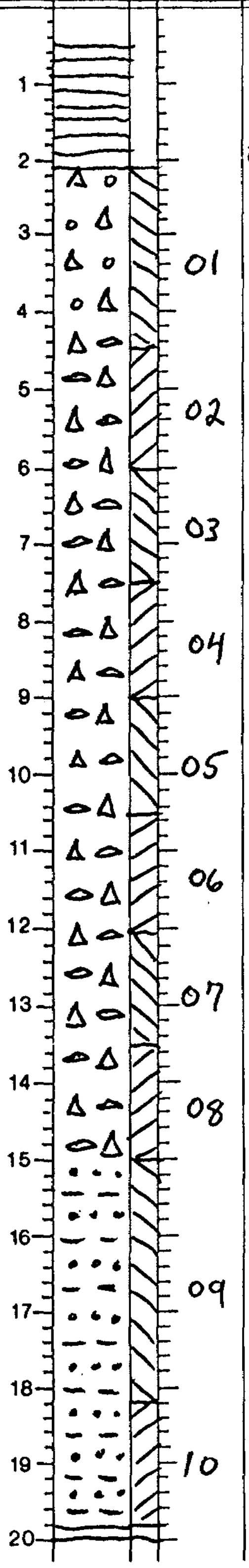
MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER 5.00->5.30 travel

MOVE TO NEXT HOLE

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



0->0.5 No Return

0.5->2.1 clay beige, soft, smooth

2.1->22.6 Till gray beige, fine sand matrix, pebbly above 4.0 clasts 60% mafic volcanics and sediments, 40% granitic cobbly below 4.0

- high percentage matrix below ~5.0 (sandy till)
- minimal +10 return 11.7->13.1

14.9->20.0 Sand/Silt very fine beige sand, interbedded small slightly gritty gray clay

- minor granular sections
- compact smooth gray-brown clay at 19.8->20.0

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 30 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-27 LOCATION L40E 1400S

GEOLOGIST _____ DRILLER _____ BIT NO. _____ BIT FOOTAGE _____

MOVE TO HOLE _____

DRILL _____

MECHANICAL DOWN TIME _____

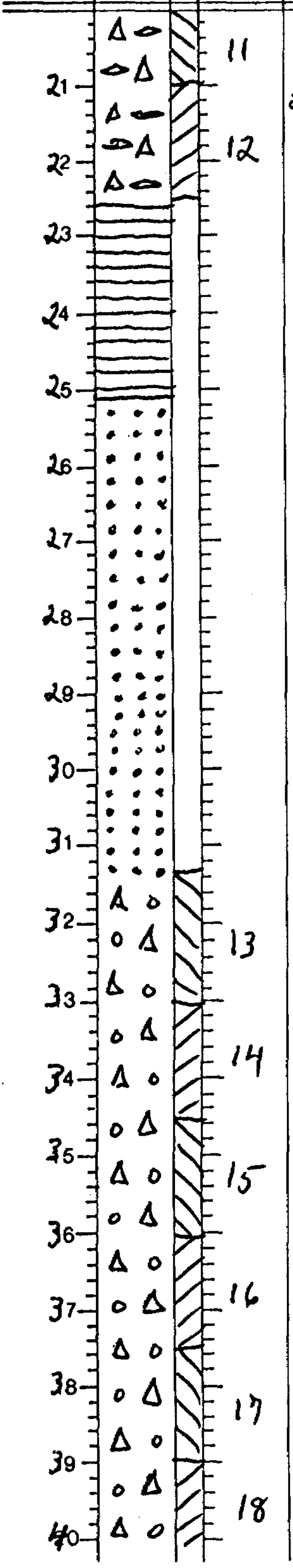
DRILLING PROBLEMS _____

OTHER _____

MOVE TO NEXT HOLE _____

page 2 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



22.6 -> 25.1 Clay gray smooth compact

25.1 -> 31.3 Sand beige, fine grained minor interbedded smooth gray clay at 27.3, 29.5, 30.7

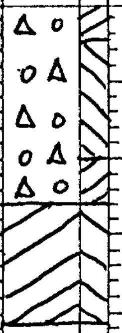
31.3 -> 42.6 Till gray beige, fine sand matrix, pebbly clasts 75% mafic volcanic and sediments, 25% granitic - high percentage matrix below ~38.5

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Nov 30 19__
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO P-84-27 LOCATION L40E 1+00S
GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____
MOVE TO HOLE ____
DRILL ____
MECHANICAL DOWN TIME ____
DRILLING PROBLEMS ____
OTHER ____
MOVE TO NEXT HOLE ____

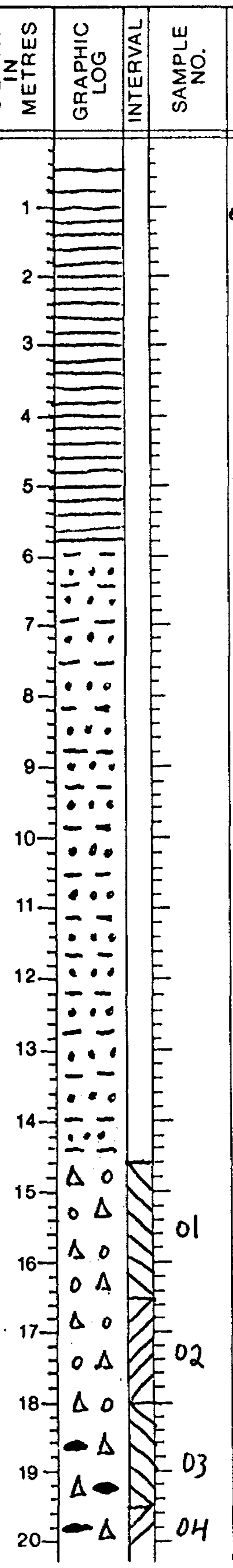
page 3 of 3

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG
			18	
41			19	
42			20	42.6 -> 44.1 Bedrock mafic volcanic dark to medium green, medium to coarse grained, generally massive, slightly fractured, 0.5 % interstitial carbonate, trace to 0.5 % disseminated pyrite
43			21	
44				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Dec 1 1984
SHIFT HOURS
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO P-84-28 LOCATION L56E 2+00S
GEOLOGIST T. Burns DRILLER G Dudgeon BIT NO. CB66694 BIT FOOTAGE 0→51.8
MOVE TO HOLE 7.30 → 8.30
DRILL 8.30→9.00 warm-up 9.00→2.30
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER 7.00→7.30 travel
MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0→0.5 No Return

0.5→5.8 Clay beige, soft, smooth

5.8→14.4 Sand / Silt beige, very fine to fine grained sand
- minor interbedded smooth gray clay

14.4→25.6 Till gray beige, fine sand matrix, pebbly clasts 65% mafic volcanics and sediments 35% granitic
- high percentage matrix 17.4→17.8 21.6→24.3
- cobbly below 18.3 to 21.6

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Dec 1 1984

SHIFT HOURS

______ TO ______

TOTAL HOURS

______

CONTRACT HOURS

______

HOLE NO P-84-28 LOCATION L56E 2+00S

GEOLOGIST ______ DRILLER ______ BIT NO. ______ BIT FOOTAGE ______

MOVE TO HOLE ______

DRILL ______

MECHANICAL DOWN TIME ______

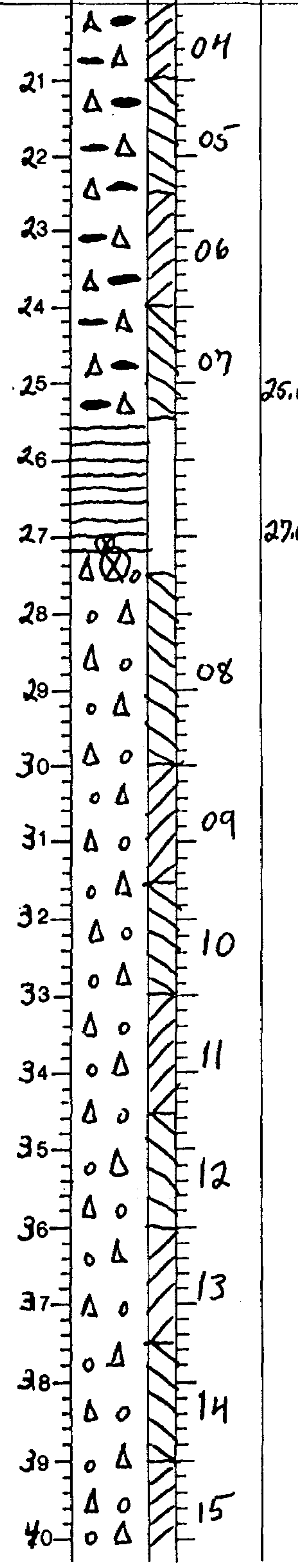
DRILLING PROBLEMS ______

OTHER ______

MOVE TO NEXT HOLE ______

page 2 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO.



DESCRIPTIVE LOG

- lumps smooth gray clay at 23.9
- minimal +10 return below 24.3
minor fine sand very compact

25.6 -> 27.0 <u>clay</u> gray soft smooth compact

27.0 -> 50.8 <u>Till</u> gray beige, abundant
fine sand matrix pebbly clasts
65% mafic volcanic and
sediments, 35% granitic
compact above ~ 29.5

- very sandy below 30.2 to ~32.0
sporadic +10 return
- clasts 85% mafic volcanic
and sediments, 15% granitic
below ~ 35.0.
- boulders granodiorite 27.0 -> 27.2
mafic volcanic 27.2 -> 27.5
- minimal +10 return below 38.5
to 40.7

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Dec 1 19 84

SHIFT HOURS

____ TO ____

TOTAL HOURS

____

CONTRACT HOURS

____

HOLE NO P-84-28 LOCATION L56E 2+00S

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

MECHANICAL DOWN TIME ____

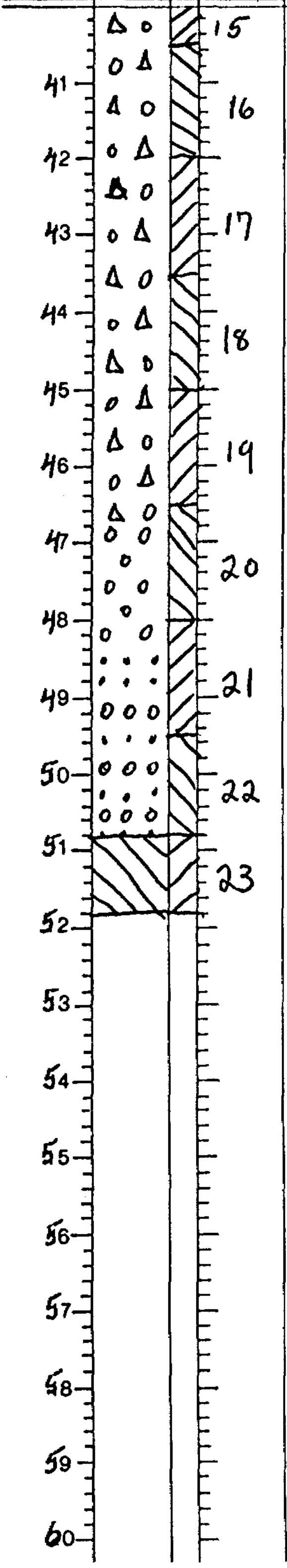
DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

page 3 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



- gravel like from 40.7 → 41.6
- lumps of smooth compact gray clay at 43.2.

46.8 → 50.8 Gravel gray, medium to coarse sand matrix pebbly clasts 55% mafic volcanic and sediments, 45% granitic
- abundant coarse sand below ~48.5

50.8 → 51.8 Bedrock mafic volcanic dark green, medium to coarse grained generally massive, minor carbonate veining, slightly magnetic locally

51.8 → E.O.H. bit failure plus high torque on the rods.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Dec 1 1984

SHIFT HOURS

_____ TO _____

TOTAL HOURS

_____

CONTRACT HOURS

_____

HOLE NO P-84-29 LOCATION L56E 10+00S

GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. CB66695 BIT FOOTAGE 0->43.0

MOVE TO HOLE 2.30->3.00

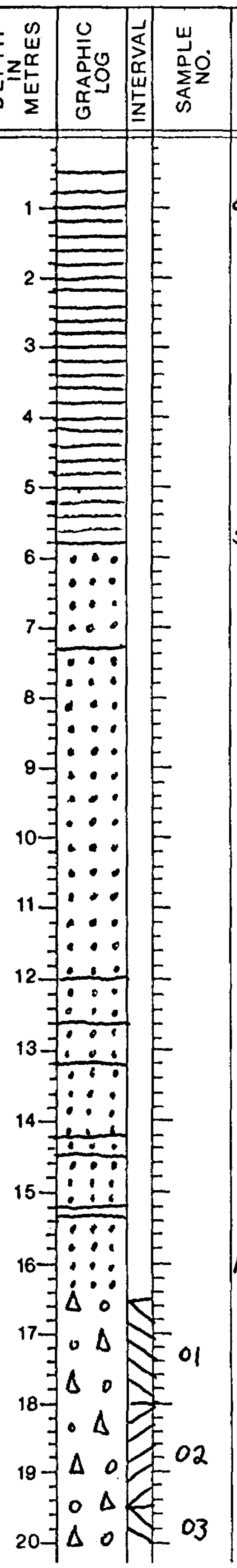
DRILL 3.00->6.45

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER 6.45->7.30 Travel

MOVE TO NEXT HOLE



DESCRIPTIVE LOG

0->0.5 No Return

0.5->5.8 clay beige, soft, smooth

5.8->16.4 Sand beige, fine grained
minor interbedded smooth
gray clay

16.4->33.5 Till gray beige, fine sand
matrix, pebbly clasts 65%
mafic volcanic and sediments
35% granitic
- high percentage matrix above
20.8

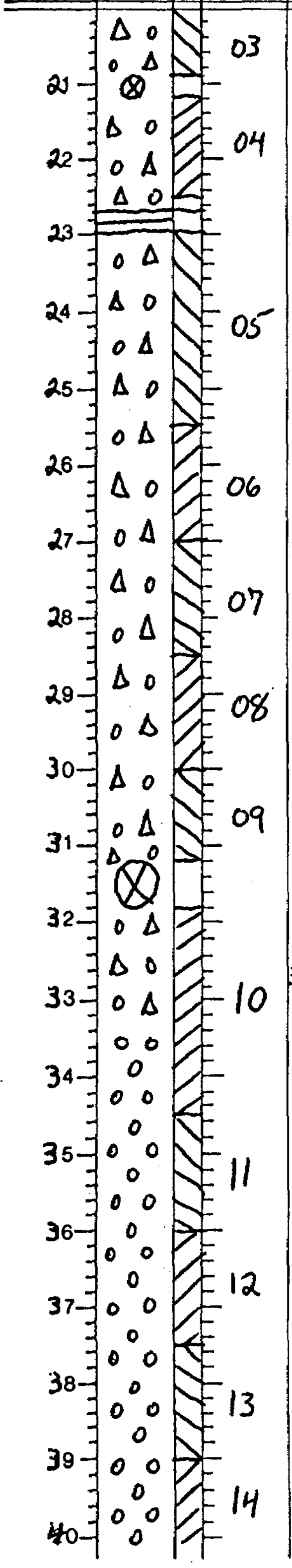
OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Dec. 1+2 19 84
SHIFT HOURS
______ TO ______
TOTAL HOURS
______
CONTRACT HOURS
______

HOLE NO P-84-29 LOCATION L56E 10+00S
GEOLOGIST T. Burns DRILLER G. Dudgeon BIT NO. ______ BIT FOOTAGE ______
MOVE TO HOLE ______
DRILL 9.00 → 12.00
MECHANICAL DOWN TIME 8.00 → 9.00 repair water pump
DRILLING PROBLEMS ______
OTHER 7.15 → 8.00 travel
MOVE TO NEXT HOLE ______

page 2 of 3

DEPTH IN METRES | GRAPHIC LOG | INTERVAL | SAMPLE NO. | DESCRIPTIVE LOG



- gravel like below 21.2
- lumps smooth gray clay at 22.3
- clay section 22.7 → 23.0
- minimal +10 return below 23.0 abundant fine sand/silt with gritty clay
- boulders mafic volcanics 20.9 → 21.2 31.2 → 31.8

33.5 → 41.2 Gravel gray, medium to coarse sand matrix pebbly above 37.0 cobbly below, clasts 75% mafic volcanic and sediments, 25% granitic

- may be broken bedrock from 41.0 → 41.2.

OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG

DATE Dec 2 1984

SHIFT HOURS

____ TO ____

TOTAL HOURS

CONTRACT HOURS

HOLE NO P-84-29 LOCATION L56E 10+00S

GEOLOGIST ____ DRILLER ____ BIT NO. ____ BIT FOOTAGE ____

MOVE TO HOLE ____

DRILL ____

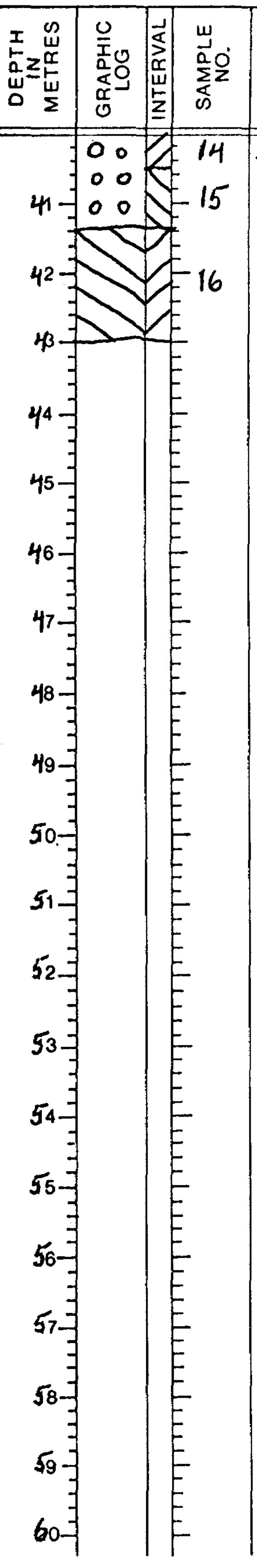
MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO NEXT HOLE ____

page 3 of 3



DESCRIPTIVE LOG

41.2 → 43.0 Bedrock mafic volcanic dark green medium to coarse grained, gabbroic appearance locally, highly fractured throughout

- minor green gritty clay at 41.7, 41.9
- 1→2% disseminated leucoxene (ilmenite probable magnetic mineral)

REPORT

on the property of

PERREX RESOURCES INC.

Harker, Elliott and Thackeray Townships

Northeast Ontario

Timmins, Ontario,
October 7, 1985.

R. J. Bradshaw, P. Eng.,
Geologist.

TABLE of CONTENTS

SUMMARY

Perrex Resources Inc. holds a contiguous group of 103 unpatented mining claims in Harker, Elliott and Thackeray Townships in northeastern Ontario. The property is accessible by a truck road running south for eight kilometres from highway 101. This main westerly trending route provides access to Timmins, a distance of 106 kilometres or Kirkland Lake via intersecting highways.

Based on airborne magnetic maps coupled with Township geological maps published by the Ontario government, it is apparent that the Perrex property overlies the same geological rock units which host gold deposits recently discovered to the northeast in Holloway Township. These rock units strike northeast and dip south.

Government maps display limited exposure of the more resistent mafic volcanic rocks which implies that the rock assemblage in the area is dominantly of this type. The magnetic profiles, intensive exploration to the northeast, and two previous drill holes on the Perrex property indicate that the relatively thick mafic volcanic units are interbedded with sediment-tuff horizons. These units are the loci for shear faulting and accompanying alteration.

To the northeast in Holloway Township, adjacent to the Harker Township boundary, Barrick Resources and Canamax Resources have outlined significant gold deposits in the sediment-tuff units. There is apparently substantial evidence that these deposits are syngenetic having, therefore, considerable potential for economic size and uniform distribution of gold.

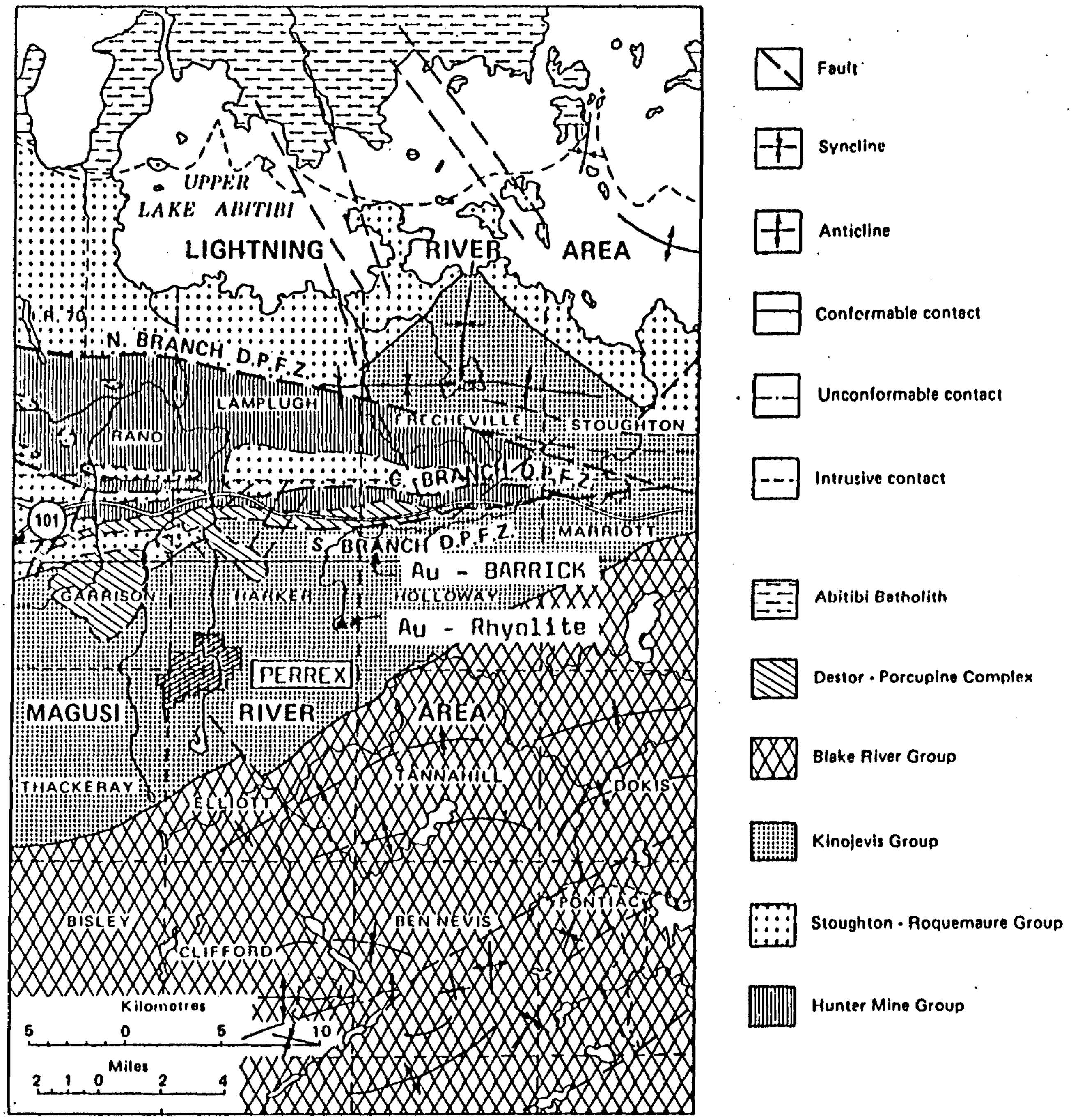
It has been reported in press releases that Barrick has outlined a deposit of 1.3 million tons averaging 0.18 oz. gold per ton. Sinking of a 1200 foot (366 metre) shaft is now underway to provide underground access for further exploration and development.

Also to the northeast of the Perrex property, about 3.5 kilometres, is present a thin rhyolite unit which hosts significant gold mineralization. This mineralization, although stratabound, is likely epigenetic. Mineralized fluids have been channeled into the fractured relatively incompetent rhyolite.

Both the rhyolite and sediment-tuff bed or equivalent units cross the Perrex property. These rocks merit special attention in the search for gold. Formulation of an exploration programme on the Perrex claims must take into consideration the widespread deep overburden and lack of rock exposure.

A minimum programme costing approximately $150,000. is recommended. This programme initially includes establishment of base lines and grids, stripping and mapping of one specific area of outcrop, a limited magnetic survey and attendant contingencies estimated to cost $19,000. The base lines will provide control for the location of 28 overburden drill holes to acquire till samples in the search for gold dispersion trains having a source in the favourable rock units. This drilling, sampling, analyses and documentation is estimated to cost $56,000. Finally, based on results of these programmes, a minimum 3000 feet of diamond drilling will be required. At an estimated overall cost of $25 per foot, this work would cost $75,000.

Significant gold values encountered in this preliminary programme would be the subject of an interim review and report and necessitate substantial additional drilling.



GENERAL GEOLOGY

Part of Northeastern Ontario

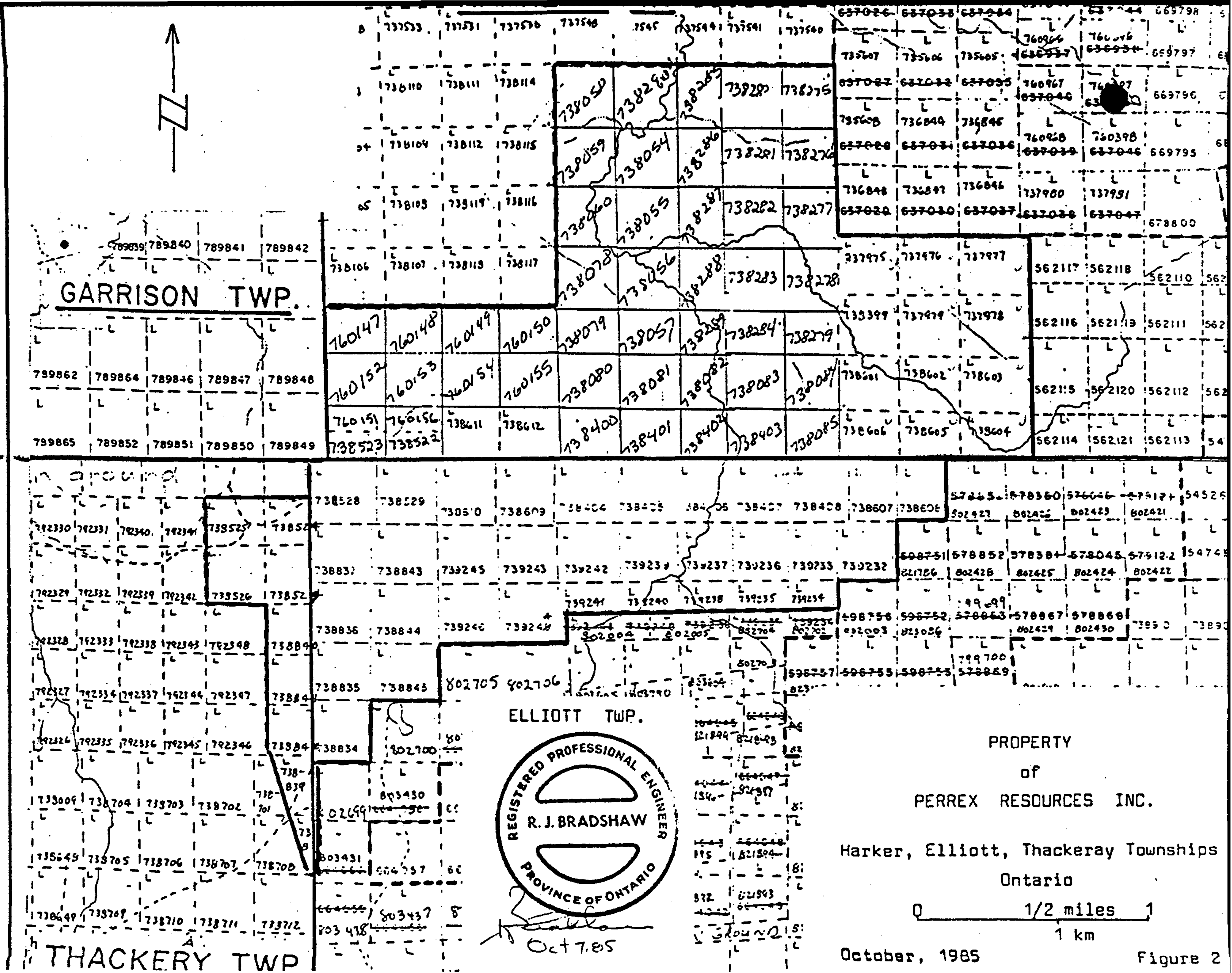
October 1985

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

Oct. 7, 85

After: OGS Map 2433

Figure 1



PROPERTY

of

PERREX RESOURCES INC.

Harker, Elliott, Thackeray Townships

Ontario

0 1/2 miles 1

1 km

October, 1985

Figure 2

REGISTERED PROFESSIONAL ENGINEER

R. J. BRADSHAW

PROVINCE OF ONTARIO

Oct 7.85

INTRODUCTION

Officers of Perrex Resources Inc. have requested the writer to prepare a report on their 103 claim property in Harker, Elliott and Thackeray Townships. Although very little work has been undertaken on this drift-covered property, it is considered to be a gold prospect. It lies generally on strike with gold-bearing rock units several kilometres to the northeast.

Pertinent Ontario government publications describing the geology and geophysics of the area, described under References, are the main source of data and interpretation presented in this report. On September 25th, the writer examined the only known area of rock exposure on the property. Also over the past several years the writer has undertaken six other projects in the area.

Based on an interpretation of the geology of the region and taking into consideration the terrain and widespread deep overburden cover, a programme for exploration of the gold potential is proposed for the property.

PROPERTY

The property consists of 103 contiguous, unpatented claims distributed in three Townships as follows:

Harker Township	Days Work Completed	Expiry Date
L738275 to 738290 inclusive - 16	60	Mar. 1, 1987
L737975 to 737979 inclusive - 5	60	Feb. 27, 1987
L738601 to 738606 inclusive - 6	60	Mar. 9, 1987
L738054 to 738060 inclusive - 7	60	Mar. 1, 1987
L738078 to 738085 inclusive - 8	60	Mar. 1, 1987

Harker Township		Days Work Completed	Expiry Date
L738399	- 1	60	Feb. 27, 1987
L738400 to 738403 inclusive	- 4	60	Mar. 1, 1987
L760147 to 760156 inclusive	- 10	60	Mar. 1, 1987
L738522 to 738523 inclusive	- 2	60	Mar. 1, 1987
L738611 to 738612 inclusive	- 2	60	Mar. 9, 1987
	61		

Elliott Township

L738528 to 738529 inclusive	- 2	50	Mar. 1, 1986
L738834 to 738835 inclusive	- 2	60	Mar. 19, 1987
L738836 to 738837 inclusive	- 2	50	Mar. 19, 1986
L738843	- 1	50	Mar. 19, 1986
L738844 to 838845 inclusive	- 2	60	Mar. 19, 1987
L738607 to 738610 inclusive	- 4	60	Mar. 9, 1987
L738404 to 738408 inclusive	- 5	60	Mar. 1, 1987
L739232 to 739246 inclusive	- 15	60	Mar. 23, 1987
	33		

Thackeray Township

L738838 to 738840 inclusive	- 3	80	Mar. 19, 1987
L738841	- 1	60	Mar. 19, 1986
L738842	- 1	50	Mar. 19, 1986
L738524 to 738525 inclusive	- 2	50	Apr. 25, 1986
L738526 to 738527 inclusive	- 2	50	Mar. 1, 1986
	9		

The above information provided by the office of Perrex Resources has been confirmed by the Mining Recorder at Kirkland Lake, Ontario

In order to keep the claims in good standing, the claim holder is required to undertake assessment work each year. Over a period of five years 200 days is required, including 20 days the first year, 40 days for each of the second, third and fourth years, and 60 days work in the fifth year. Thereafter, providing the claim holder is willing to undertake the cost of a land survey, the claims may be leased from the Crown with the payment of annual rental fees.

Various types of exploration work qualify for assessment work credits. For example, each foot of diamond drilling is equivalent to one day assessment work. Each type of geophysical survey or a geological survey, satisfying government guidelines, may qualify for 20 days assessment work per claim.

Perrex have already undertaken 50 to 80 days assessment work on the claims in the form of geophysical surveys and reverse circulation drilling. Some of the claims expire in March and April of 1986. Prior to this period, further work should be undertaken to keep the claims in good standing. The reverse circulation drilling was completed on a 41 claim group adjacent to the northeast.

LOCATION AND ACCESS

Most of the claim group is situated in the southeast corner of Harker Township. The common corner of Harker, Elliott and Thackeray Townships is located 106 kilometres east of Timmins and 34 kilometres north of Kirkland Lake, Ontario.

Highway 101 which runs westerly from the Quebec provincial boundary through Matheson and Timmins is the main transportation route in the area. It lies just south of the north boundary of Harker Township.

A truck road which runs southerly from highway 101 along the east side of the Ghost River provides access to the centre of the claim group and the south boundary of Harker Township.

The provincial government is currently surveying a new road from Kirkland Lake to highway 101 near the east boundary of Harker Township to provide better service for development of gold mines in the area. This road will provide easy and quick access to the property from Kirkland Lake.

PREVIOUS WORK

Interest in the area of the Perrex property stems mainly from the recent gold discoveries to the northeast in Holloway Township.

Just east of the Harker-Holloway Township boundary Barrick Resources have outlined 1.3 million tons averaging 0.18 oz. gold per ton on their McDermott property (Northern Miner, June 1985). Barrick are sufficiently encouraged that an underground test is to be undertaken on their deposit. Adjacent to Barrick, Canamax Resources have also encountered significant gold values. These new discoveries account for the provincial government's decision to proceed with a new road between Kirkland Lake and highway 101 adjacent to these properties.

Also northeast of the Perrex Resources property Newmont Exploration are currently evaluating a gold deposit on the Don Hurd property in Harker Township.

Perrex Resources et al own a 41 claim group between the Don Hurd claims and the subject property. Over the past few years Perrex have completed geophysical surveys and an overburden sampling programme using reverse circulation drilling equipment. This property has recently been optioned to Sherritt Gordon Mines Limited whom are expected to undertake a diamond drilling programme. Elsewhere in the area, particularly to the north adjacent to highway 101, several other companies are active.

Only a limited amount of work has previously been completed on the Perrex group of 103 claims. Recently, as described in a report by Mary Greer (March, 1985), the north sector of the property has been covered by magnetic and VLF electromagnetic surveys. The survey area includes claims L738054 to 738060 inclusive, L738275 to 738290 inclusive, L738078, and L738079.

Within the above area, apparently on claim L738055, Amax Exploration Inc. (Canamax) previously drilled a hole in 1968. This hole and one other, 1.6 kilometres to the southwest, were drilled to test coincident induced polarization and electromagnetic anomalies.

GEOLOGY

General

The geology of the region is documented in various Ontario government reports including Geology of Harker Township by J. Satterly published in 1952 and Geology of Thackeray, Elliott, Tannahill and Dokis Township by L. S. Jensen in 1978. A series of airborne geophysical plans also assist the interpretation of the geology. These include maps 80598, 80599, 80608 and 80609 published in 1984 by the Ontario Geological Survey which display results of an electromagnetic survey and a total intensity magnetic survey.

Within the property boundaries rock exposure is almost nonexistent. Geology of the property is, therefore, based on projections from areas having some rock exposure as shown on Map 1951-4, the government airborne geophysical survey (1984) and two holes drilled by Amax (Canamax) in 1968.

The only known area of rock exposure was examined by the writer. This outcrop is situated on claim L738607, Elliott Township, in the southeast sector of the property. With respect to a newly established grid on the property, the area of exposure lies between Lines 0 and 4E at 13+00 South. Generally the same sequence of rock was observed as displayed on Figure 3 by Jensen (1978). Stripping by the writer, however, revealed a narrow north trending diabase dyke, a pyritized, sheared and laminated mafic tuff, apparently a few metres wide, and a intermediate flow top breccia which may either be a float or equivalent to the rock classified by Jensen as a hyaloclastite. Carbonate-filled fractures in the breccia are splashed with pyrite and chalcopyrite.

The terrain traversed by the writer has been recently timbered. Second growth includes alders and jackpine. Except along the course of the Ghost River and its tributaries, which have steep embankments, relief in the area is not significant.

Regional Geology

Harker and Elliott Townships are situated almost centrally within a vast assemblage of mainly volcanic and sedimentary rocks which trend easterly for about 350 kilometres, termed the Abitibi Greenstone Belt.

Particularly nearby major east trending faults the Abitibi rocks host gold mineralization as exemplified by the numerous past and present producers at Kirkland Lake and Timmins in Ontario and Val D'Or and Rouyn-Noranda in Quebec. The east trending Porcupine-Destor fault in the north half of Harker Township is in proximity to many gold mines over its 300 kilometre length.

The northeasterly trending volcanic-sedimentary rock assemblage on the Perrex property is part of the Kinojevis Group which is more than 10 kilometres thick. These rocks form the north limb of a synclinorium which widens and plunges eastward toward the provincial boundary.

Local Geology

The one known area of rock exposure on the Perrex claim group is located on the south flank of a prominent magnetic linear which strikes northeasterly for several kilometres. The most northerly outcrops which are closest to the higher magnetic susceptibilities include dark coloured diabasic and gabbroic flows and pillow lava. It is thereby suggested that the broad magnetic linear, underlying most of the southeast sector of the property, is underlain by similar mafic volcanics.

Along the north flank of the above described magnetic high are a series of poorly defined magnetic lows, forming a parallel linear, which interrupt the otherwise gently descending magnetic profile. This northeasterly trending feature crosses the centre of the property and to the northeast may correspond to a rhyolite horizon depicted on Satterly's map (1951-4).

The magnetic profile finally descends to form a trough representing a well defined northeasterly trending linear. This feature appears to be truncated by a northwesterly trending fault a few kilometres east of the property. Further to the northeast, the linear if projected, corresponds to the assumed Ghostmount fault (Satterly, 1951-4).

Within the Perrex property a number of airborne conductor intercepts are present within the linear magnetic low. Pyritized graphite intersected in the 1968 Amax drilling would account for these conductors. This drilling indicates a section of variably sheared, carbonatized, chloritized and partially graphitic tuffs and argillite 100 to 200 metres thick bounded by mafic volcanic rocks.

The unit trends more or less uniformly southwest except for a section several hundred metres long in the vicinity of the southwest corner of Harker Township. Here the linear shows a perceptible change in direction. This warp may be attributed to folding or faulting or a combination thereof.

To the northwest of this unit the steeply ascending magnetic profile indicates the presence of a thick unit of mafic volcanics confirmed in part by one of the Amax (1968) holes.

This whole assemblage dips and faces to the south. There is little evidence on the airborne magnetic survey plans for the cross faults depicted on O.G.S. map 2368 of Elliott Township. On the other hand there is substantial evidence for the presence of northeasterly trending shear faults. The Amax drilling in 1968 intersected widespread shearing in the sediment-tuff horizon in the northwest sector of the property. Also, if the Ghostmount fault (Map 1951-4) were projected southwestwards, it may correspond to the sediment-tuff unit.

Economic Geology

The potential on the Perrex property is mainly based on the recent discoveries of gold mineralization by Barrick Resources and Canamax Resources, several kilometres to the northeast in Holloway Township.

Barrick Resources plans to sink a 1200 foot (366 metres) shaft to undertake underground tests and ultimately make a production decision by the fall of 1986 (Northern Miner, June, 1985). Their deposit of 1.3 million tons, grading 0.18 oz. gold per ton, is situated adjacent to the south of the Porcupine-Destor fault near the west boundary of Holloway Township.

The Barrick deposits and gold mineralization discovered by Canamax Resources are apparently located in an altered sediment-tuff unit either coinciding with or a few hundred metres north of the horizon marked by the Ghostmount fault. Field geologists active in the area generally surmise that these deposits are stratabound and derived from a paleoplacer in the sediments (personal communications). Such an origin implies uniform dimensions and grade.

Gold-bearing mineralization on the recently optioned Don Hurd property in the east-central sector of Holloway Township is also confined to a specific rock unit. Quartz stringers and veins follow a fracture zone in a rhyolite unit. Although the gold mineralization is stratabound it is unlikely that it was originally deposited during the rock forming processes.

Other gold deposits in the area display the typical characteristics of an epigenetic quartz lode. Following fractures, faults and other zones of weaknesses the mineralization is erratic in dimensions and distribution. Most significant deposits of this type are spatially if not genetically related to the Porcupine-Destor fault.

In Amax hole KX-27-68, apparently drilled on Perrex claim L760149, a seven foot section from 675 to 682 feet assayed 0.01 oz. gold per ton. No metal assays were provided in the log of hole KX-28-68 on claim L738055. Canamax (Amax) officials imply that no samples were taken in this hole.

CONCLUSIONS

Government published geological and geophysical maps and reports suggest that the area is underlain by a thick sequence of mainly volcanic rocks which strike northeasterly and dip south. Two drill holes on the Perrex property (1968), rock exposure to the northeast, coupled with more intensive exploration work reveals that substantial beds of generally altered sediment-tuff are present in the immediate area. These units, formed during quiescent periods of vulcanism, are represented by magnetic linears of low magnetic susceptibility. They are less resistent to erosion and seldom exposed.

To the northeast in Holloway Township these sediment-tuff units apparently host important gold deposits being developed by Barrick Resources and Canamax Resources.

So far of secondary importance are the existence of thin rhyolite units to the east which host gold-bearing quartz lode deposits. The Don Hurd property on strike about 3.5 kilometres to the northeast displays this type of mineralization.

It is apparent that both the sediment-tuff and rhyolite units cross the Perrex property. These horizons particularly where disrupted by shear or cross faults merit special attention. The government airborne magnetic survey does not indicate significant displacement of magnetic linears that would represent cross faulting.

Shear faulting within a sediment-tuff unit has been reported in the Amax diamond drill logs. This unit, which crosses the northwest sector of the Perrex property, displays a warped configuration in the northwest corner of Elliott Township (claim L738528).

A ground magnetic survey covering about 10 claims, centred by L738528, would assist in outlining this structure which may be influenced by cross faulting.

Geophysical methods are not likely to detect mineralization associated with gold because of the widespread deep overburden present on the claim group. Overburden sampling, using reverse circulation equipment, is therefore considered to be the best technique for finding diamond drill targets.

RECOMMENDATIONS

Initially, it is recommended that two base lines be established on the property to provide location control for the exploration work herein proposed. These parallel picket lines are spaced at 1050 metres as shown on Figure 4. The southwest portion of the north line is offset to the south to accommodate positioning of reverse circulation drill holes and a magnetic survey grid. Similarly the locations of proposed reverse circulation drill holes are shown on Figure 4. More specifically, the programme recommended for the Perrex property is as follows.

1.	Establishment of base lines - 10 kilometres @ $185 per km	$ 1,850.
2.	Establishment of geophysical survey grid with picket lines at 100 metre intervals centred by claim L738528 - 14 kilometres @ $185 per km	2,590.
3.	Magnetic survey - 15 km @ $100 per km	1,500.
4.	Stripping and mapping of outcrop situated on claim L738408	3,000.
5.	Drilling two tiers of reverse circulation holes at 400 metre intervals along base lines - 28 holes @ $2000 each including supervision and analyses	56,000.
6.	Diamond drilling a minimum of 3000 feet estimated to cost $25 per foot including supervision, recording and assaying	75,000.
7.	Contingencies	10,060.
		$150,000.

The reverse circulation drill holes have been located parallel to and south of linear magnetic lows interpreted to represent horizons of sediment-tuff or rhyolite. By sampling and analyzing the till beds within the Quaternary section, gold may be detected representing a dispersal train from a source to the north up-ice.

The stripping and mapping of the outcrop area on claim L738408 is proposed to assist detailed prospecting and provide a better understanding of the local geology.

Laboratory and analytical work on the till samples coupled with an interpretation of the airborne and ground magnetic surveys is expected to indicate zones having potential for gold mineralization. Should significant gold values be encountered by the preliminary drill programme proposed, substantial additional drilling would be required and form the subject of an interim review and report.

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

Respectfully submitted,
SHIELD GEOPHYSICS LIMITED,

R. J. Bradshaw, P. Eng.,
Geologist.

Timmins, Ontario,
October 7, 1985.

REFERENCES

Bradshaw, R.J. 1984,85	Report on the property of Perrex Resources Inc. (41 claims) Harker Township, Ontario.
Greer, Mary 1985	Magnetic and Electromagnetic Survey on Airborne Group (24 claims), Harker Township, Ontario.
Jensen, L.S. 1978	Geology of Thackeray, Elliott, Tannahill and Dokis Townships, Ontario Geological Survey Report 165.
Satterly, J. 1951	Geology of Harker Township, Ontario Department of Mines, Map 1951-4 enclosed.

Maps

80598, 80599, 80608, 80609 1984	Airborne Electromagnetic and Total Intensity Magnetic Survey for the Ontario Geological Survey, Townships of Garrison, Harker, Thackeray and Elliott.

CERTIFICATE

I, Ronald J. Bradshaw, residing at R. R. 2, Airport Road, a consulting geologist with office facilities at R. R. 2, Airport Road, Box 630, Timmins, Ontario, do hereby certify that:

I attended Queen's University, Kingston, Ontario, and graduated with an Honours B.A. degree in Geological Sciences in 1958.

I am a Fellow of the Geological Association of Canada, a Member of the Canadian Institute of Mining and Metallurgy and of the Association of Professional Engineers of Ontario.

This report is based on the listed References and my visit to the property on September 25, 1985.

I have no direct or indirect interest in the property, shares or securities of the Company or any affiliate, nor do I expect to receive any such interest.

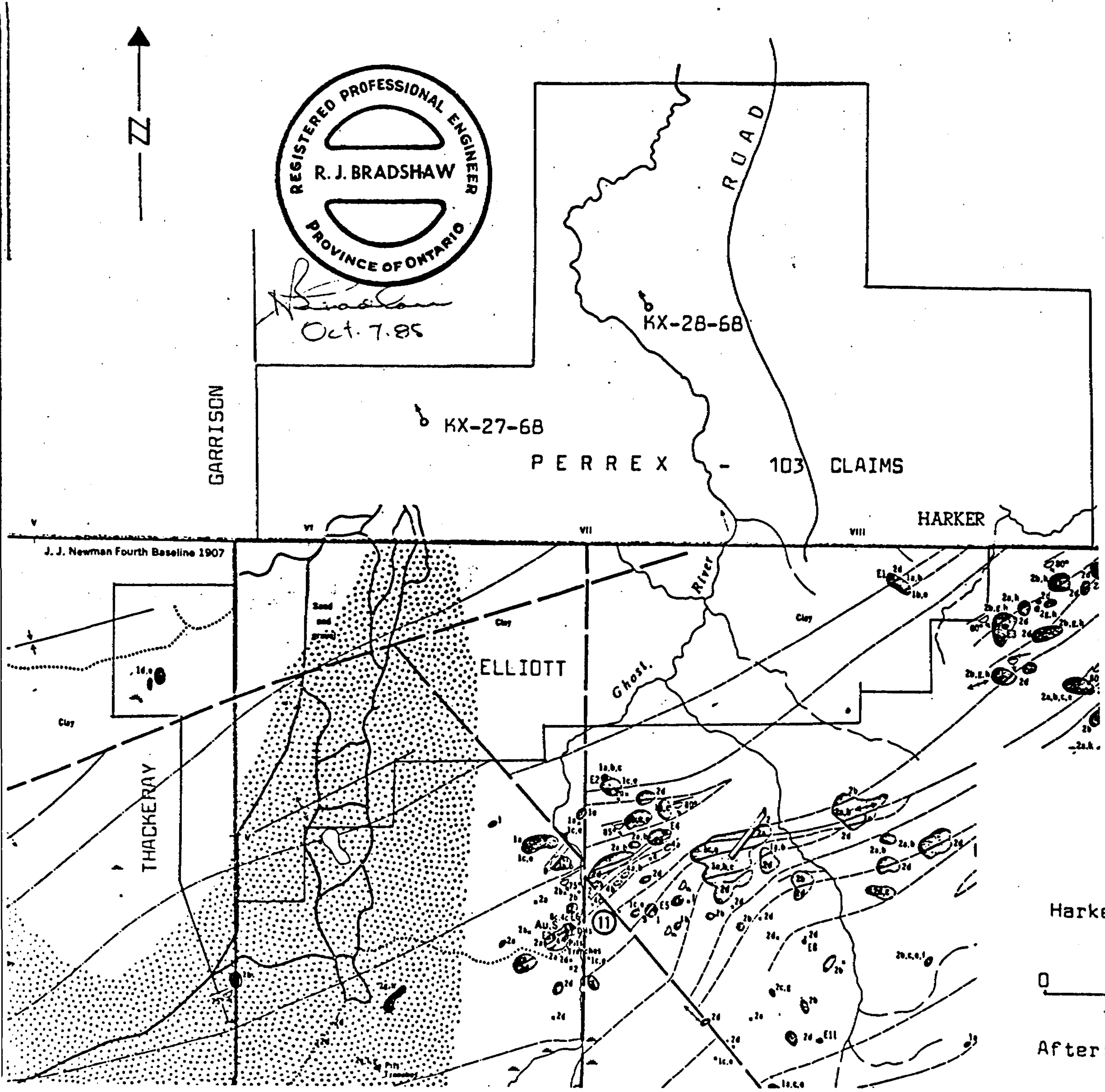
R. J. BRADSHAW

Timmins, Ontario,
October 7, 1985.

R. J. Bradshaw, P. Eng.,
Geologist.

REGISTERED PROFESSIONAL ENGINEER
R. J. BRADSHAW
PROVINCE OF ONTARIO

Oct. 7.85



LEGEND

2	Unsubdivided black to dark green iron-rich basaltic and andesitic rocks.
2a	Massive fine-grained flows.
2b	Pillowed flows.
2c	Flow-top breccia, pillow-breccia.
2d	Diabasic to gabbroic textured massive flows.
2e	Broken pillow-breccia (1 to 3 cm fragments).
2f	Fine-grained hyaloclastite, reworked tuff.
2g	Hyaloclastite.
2h	Variolitic flows.
2j	Amygdaloidal flows.
2k	Interflow sediments (chert).
1	Unsubdivided grey to green magnesium-rich basaltic rocks.
1a	Massive fine-grained flows.
1b	Pillowed flows.
1c	Flow-top breccia, pillow-breccia.
1d	Diabasic to gabbroic textured massive flows.
1e	Hyaloclastite.
1g	Variolitic flows.
1h	Amygdaloidal flows.

Area of bedrock outcrop.

Bedding, top unknown; (inclined, vertical).

Bedding, top indicated by arrow; (inclined, vertical, overturned).

Lava flow; top (arrow) from pillows shape and packing.

Fault; (observed, assumed). Spot indicates down throw side, arrows indicate horizontal movement.

Anticline, syncline, with plunge.

Drill hole; (vertical, inclined).

Property of
PERREX RESOURCES INC.
in
Harker, Elliott & Thackeray Twp.
Northeast Ontario

0 1/2 1 1½

1 : 31,680 or 1" to ½ mi.

After: OGS map 2368 et al

Oct. 1985
Figure 3

After OGS Maps:

80598, 80599,
80608, 80609

PERREX PROPERTY - AIRBORNE MAGNETIC PLAN

0 500 1000m

OCT. 1985 1 : 20 000 Fig. 4

R. J. BRADSHAW

Oct. 7.85

SYMBOLS

Sediment - tuff unit

Rhyolite unit

Axis of magnetic high

Base line with location of reverse circulation hole

1 of

900

Perrex Resources ...

OM84-6-c-214

June. 1987

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES. (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

COMPARABLE MATERIAL

	SEE FILE
① Geological Survey Report, Perrex Property, M. Greer for Perrex Resources Inc., Mar. 1985. ⟹	#2.7865
② GEOPHYSICAL Survey Report, Perrex Property, M. Greer for Perrex Resources Inc., Mar. 1985 ⟹	#2.7932

2 of 2

PERREX RESOURCES INC.

OM84-6-C-214 Jun. 19/87

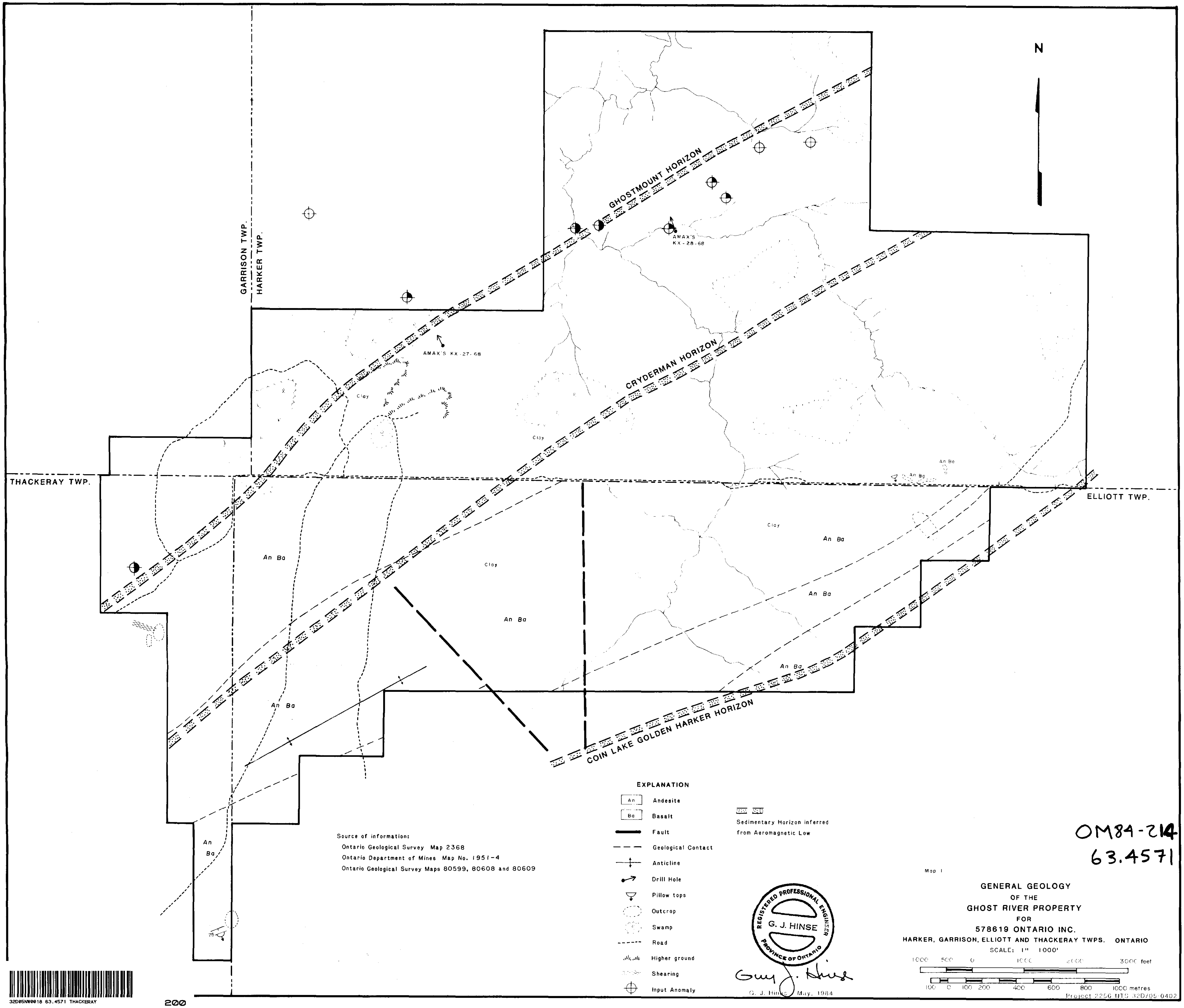
THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

COMPARABLE MATERIAL

SEE FILE:

① GEOLOGICAL SURVEY REPORT, PERREX PROPERTY, M. GREER FOR PERREX RESOURCES INC., MAR. 1985. ⟹ #2.7865

② GEOPHYSICAL SURVEY REPORT, PERREX PROPERTY, M. GREER FOR PERREX RESOURCES INC., MAR. 1985. ⟹ #2.7932



EXPLANATION

An	Andesite
Ba	Basalt
━━	Fault
— — —	Geological Contact
	Anticline
	Drill Hole
	Pillow tops
	Outcrop
	Swamp
- - - - -	Road
	Higher ground
	Shearing
⊕	Input Anomaly

Sedimentary Horizon inferred from Aeromagnetic Low

Source of information:
Ontario Geological Survey Map 2368
Ontario Department of Mines Map No. 1951-4
Ontario Geological Survey Maps 80599, 80608 and 80609

G. J. HINSE

Guy J. Hinse
G. J. Hinse May, 1984

OM84-214
63.4571

Map I

GENERAL GEOLOGY
OF THE
GHOST RIVER PROPERTY
FOR
578619 ONTARIO INC.
HARKER, GARRISON, ELLIOTT AND THACKERAY TWPS. ONTARIO

SCALE: 1" 1000'

1000 500 0 1000 2000 3000 feet

100 0 100 200 400 600 800 1000 metres

Project 2256 NTS 32D/05-0402

Magnetic North I

LEGEND

☐
☐
☐ 2
☐ 1
☐ 16
☐ 12
☐ 90
☐ < 9

SYMBOLS

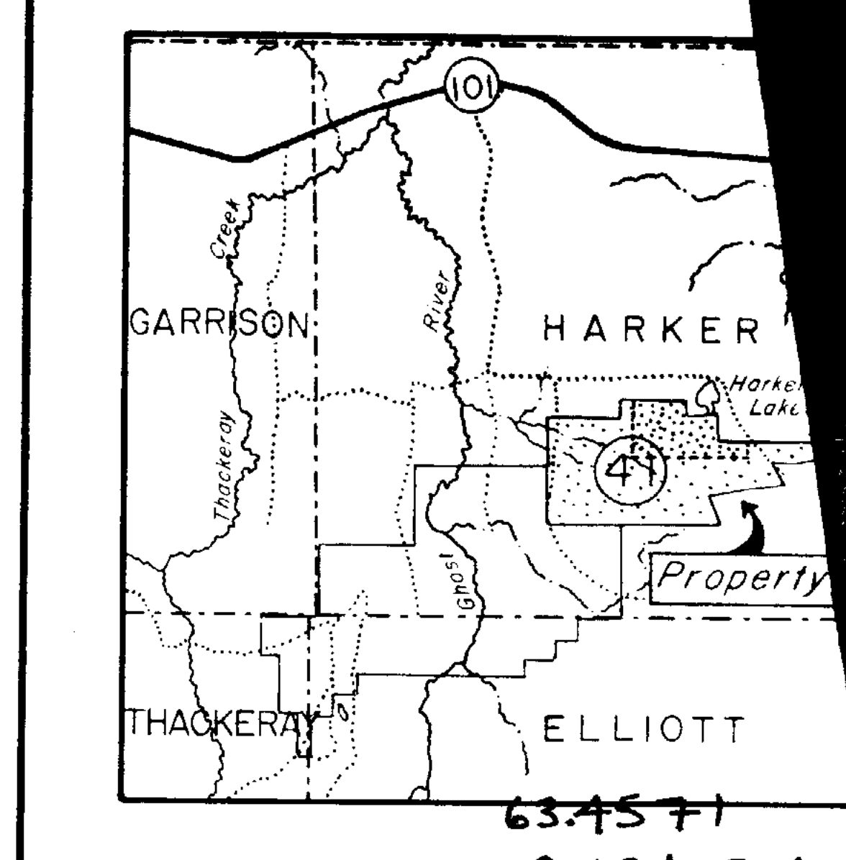
Isomagnetic c
Base station
Claim post □ (
Claim line
Primary access
Secondary acces
Creek
Lake or pond

INSTRUMENTAT

EDA OMNI 350
PRECESSION MAGNE
Contour interval: 10
Tune background : 58,
Contoured by: Mary

KEY MAP

(Scale: I



63.4571
OM84-214

PERREX
RESOURCES INC. (4

HARKER LAKE GRI

GROUND MAGNETOMETER SURVEY—NORTHEAST SHEE

HARKER TOWNSHIP
LARDER LAKE MINING DIVISIO
DISTRICT OF COCHRANE, ONTA

200 0 200 400

Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer	Map No 84 Prx NE-1	Date July 1984

32D05NW0018 63.4571 THACKERAY

210

Magnetic North 10° W

N

LEGEND

☐	> 4000 ४
☐	3000 - 4000 ४
☐	2400 - 3000 ४
☐	1900 - 2400 ४
☐	1600 - 1900 ४
☐	1200 - 1600 ४
☐	900 - 1200 ४
☐	< 900 ४

SYMBOLS

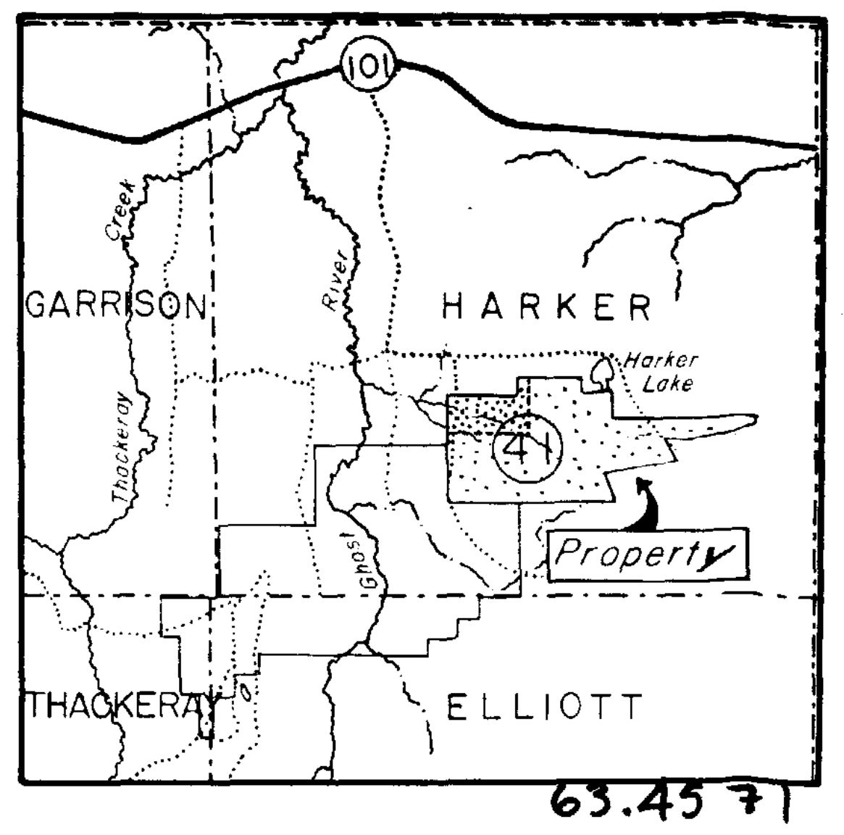
- Isomagnetic contours
- Base station ○
- Claim post □ (located) ■
- Claim line
- Primary access road
- Secondary access road
- Creek
- Lake or pond

INSTRUMENTATION

EDA OMNI 350 PROTON
PRECESSION MAGNETOMETER
Contour interval: 100 gammas
Tune background: 58,000 ४
Contoured by: Mary Greer

KEY MAP

(Scale: 1 inch to 2 miles)



63.4571
OM84-21

PERREX
RESOURCES INC. (4)

HARKER LAKE GRID

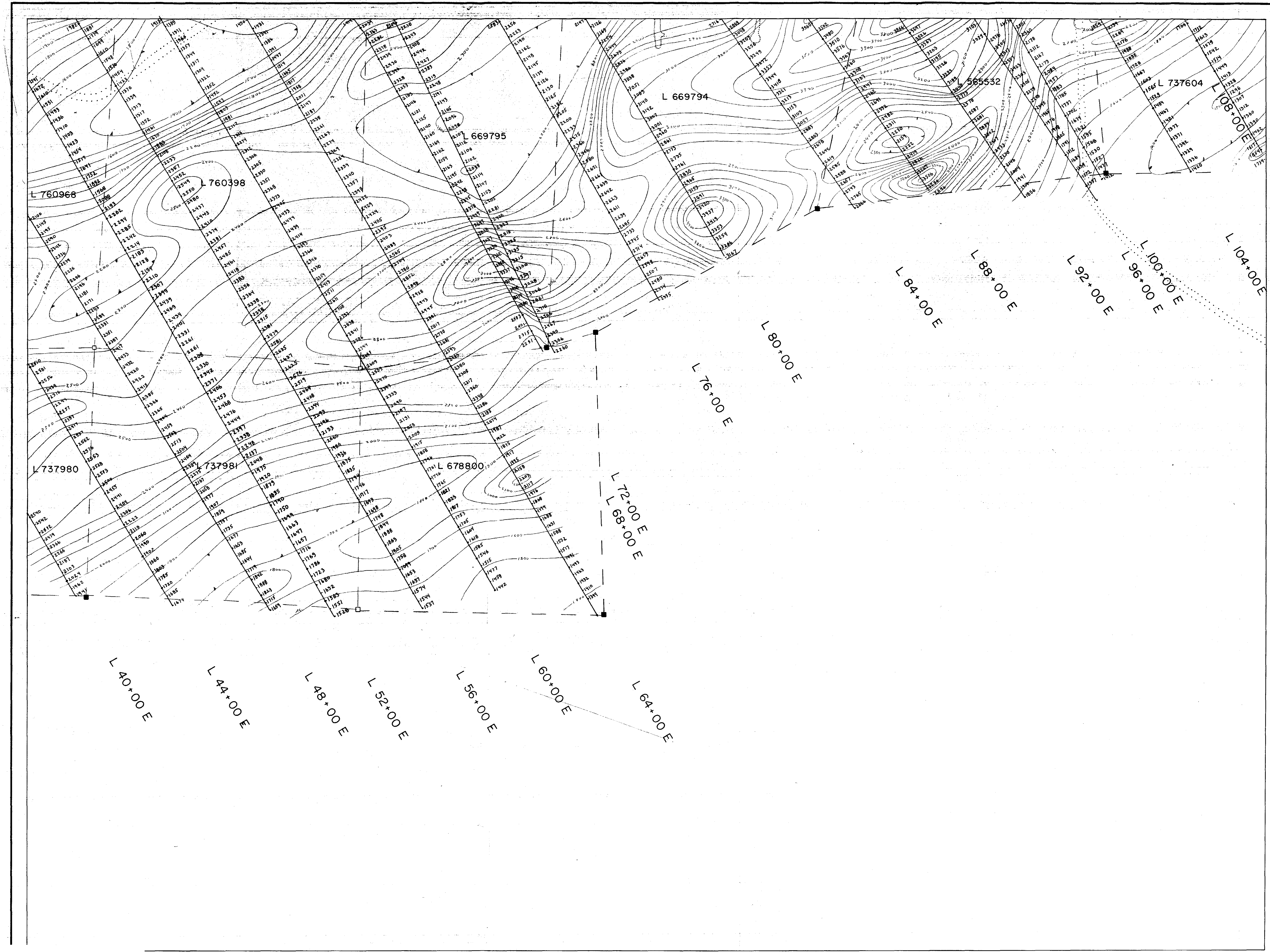
GROUND MAGNETOMETER
SURVEY—NORTHWEST SHEET

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

200 0 200 400 600
Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer	Map No. 84-Pr X NW-1	Date: July 1984



Magnetic North 10°W

N

LEGEND

- ☐ >14000 ɣ
- ☐ 3000 - 4000 ɣ
- ☐ 2400 - 3000 ɣ
- ☐ 1900 - 2400 ɣ
- ☐ 1600 - 1900 ɣ
- ☐ 1200 - 1600 ɣ
- ☐ 900 - 1200 ɣ
- ☐ < 900 ɣ

SYMBOLS

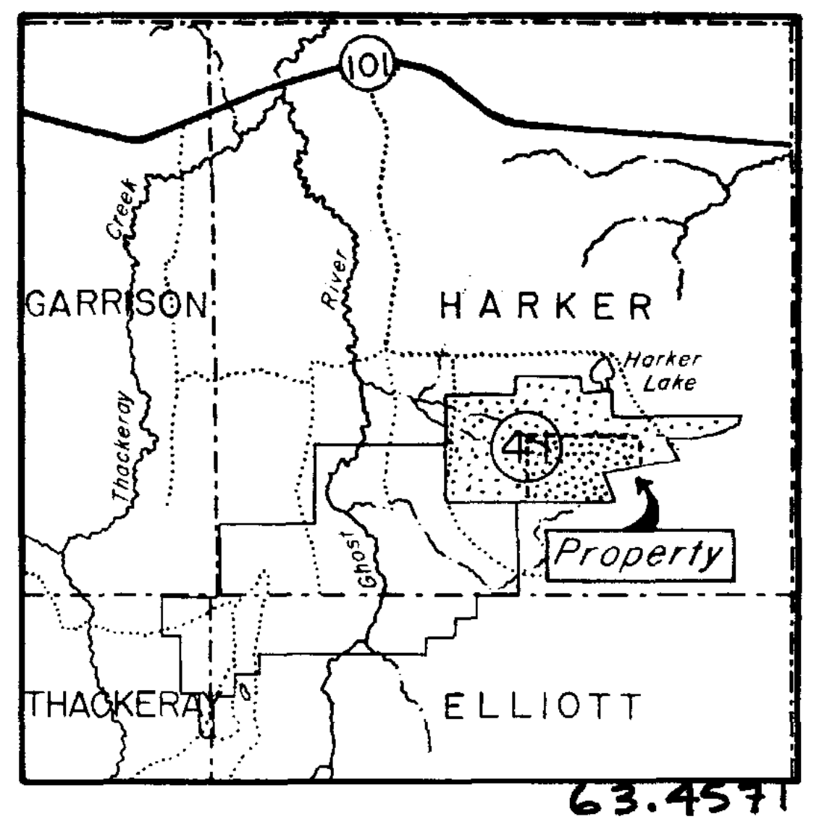
Isomagnetic contours	1100 1200 1300
Base station	⬡
Claim post □ (located)	■
Claim line	— —
Primary access road	┈┈┈
Secondary access road	: : : :
Creek	∽
Lake or pond	▨

INSTRUMENTATION

EDA OMNI 350 PROTON
PRECESSION MAGNETOMETER
Contour interval: 100 gammas
Tune background: 58,000 ɣ
Contoured by: Mary Greer

KEY MAP

(Scale: 1 inch to 2 miles)



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OM84-214

PERREX
RESOURCES INC. (41)

HARKER LAKE GRID

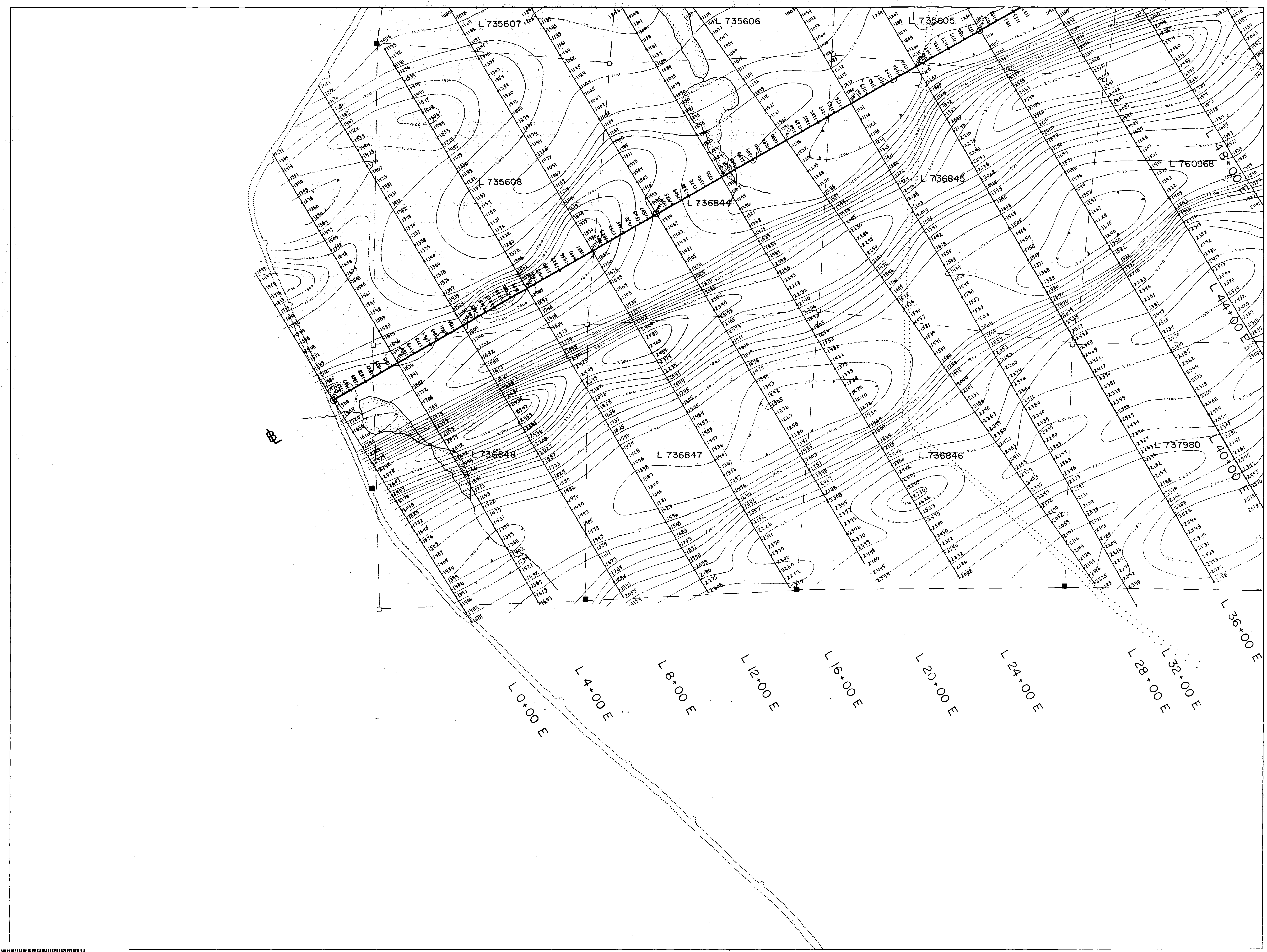
GROUND MAGNETOMETER
SURVEY—SOUTHEAST SHEET

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

200 0 200 400 600
Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer	Map No.: 84-Pr X SE-1	Date: July 1984



Magnetic North 10° W

N

LEGEND

☐ > 4000 ʊ
☐ 3000 - 4000 ʊ
☐ 2400 - 3000 ʊ
☐ 1900 - 2400 ʊ
☐ 1600 - 1900 ʊ
☐ 1200 - 1600 ʊ
☐ 900 - 1200 ʊ
☐ < 900

SYMBOLS

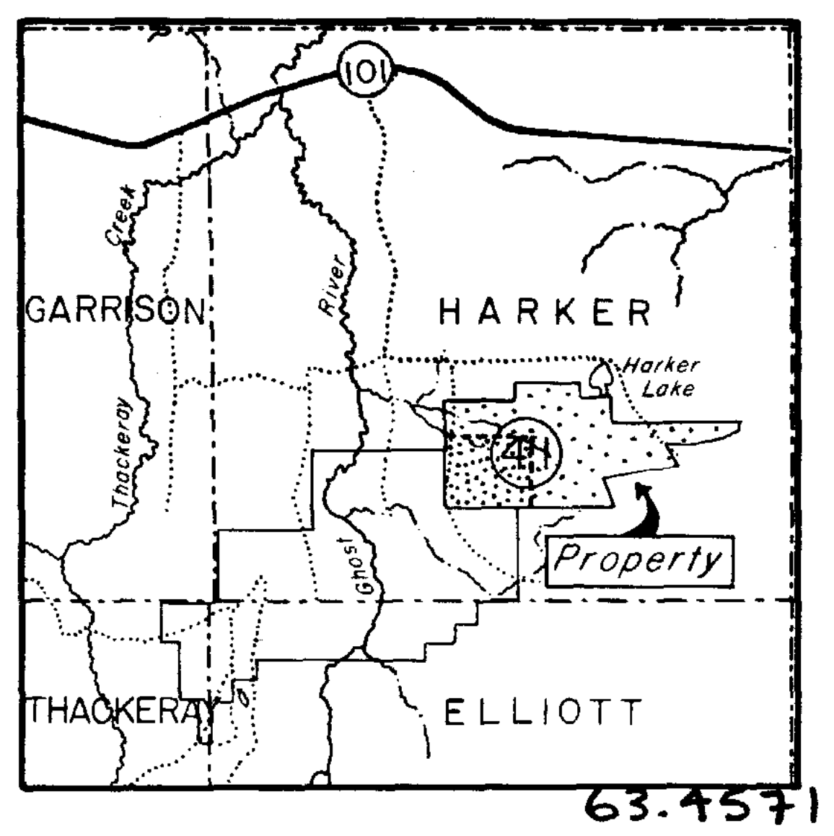
Isomagnetic contours	
Base station	○
Claim post □ (located)	■
Claim line	— —
Primary access road	
Secondary access road	:::::
Creek	
Lake or pond	

INSTRUMENTATION

EDA OMNI 350 PROTON
PRECESSION MAGNETOMETER
Contour interval: 100 gammas
Tune background: 58,000 ʊ
Contoured by: Mary Greer

KEY MAP

(Scale: 1 inch to 2 miles)



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OM84-214

PERREX
RESOURCES INC. (41)

HARKER LAKE GRID

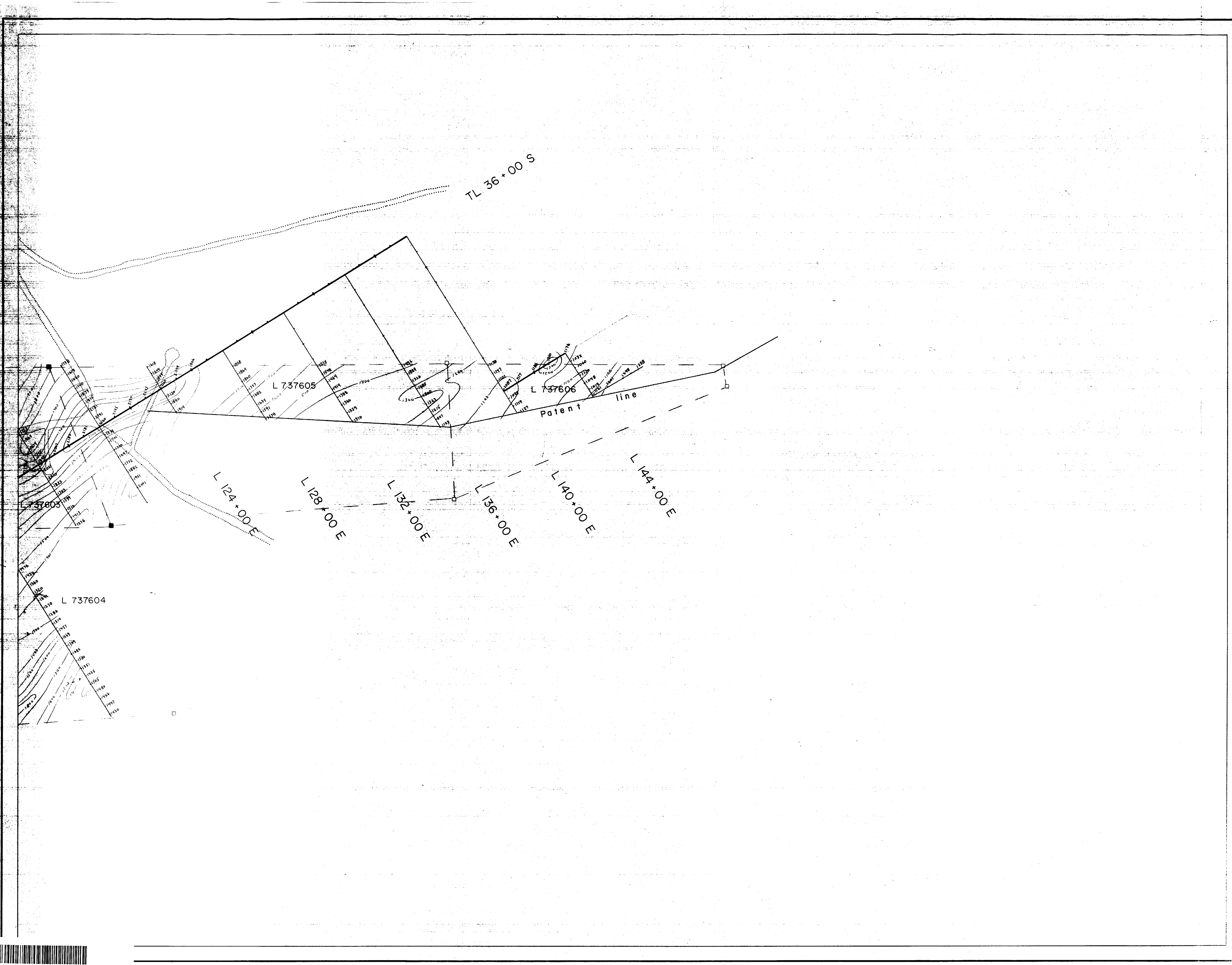
GROUND MAGNETOMETER SURVEY—SOUTHWEST SHEET

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

200 0 200 400 600
Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer | Map No. 84 Prx S.W. | Date July 1984



Magnetic North 10°W

N

LEGEND

☐	> 4000 ɣ
☐	3000 - 4000 ɣ
☐	2400 - 3000 ɣ
☐	1900 - 2400 ɣ
☐	1600 - 1900 ɣ
☐	1200 - 1600 ɣ
☐	900 - 1200 ɣ
☐	< 900 ɣ

SYMBOLS

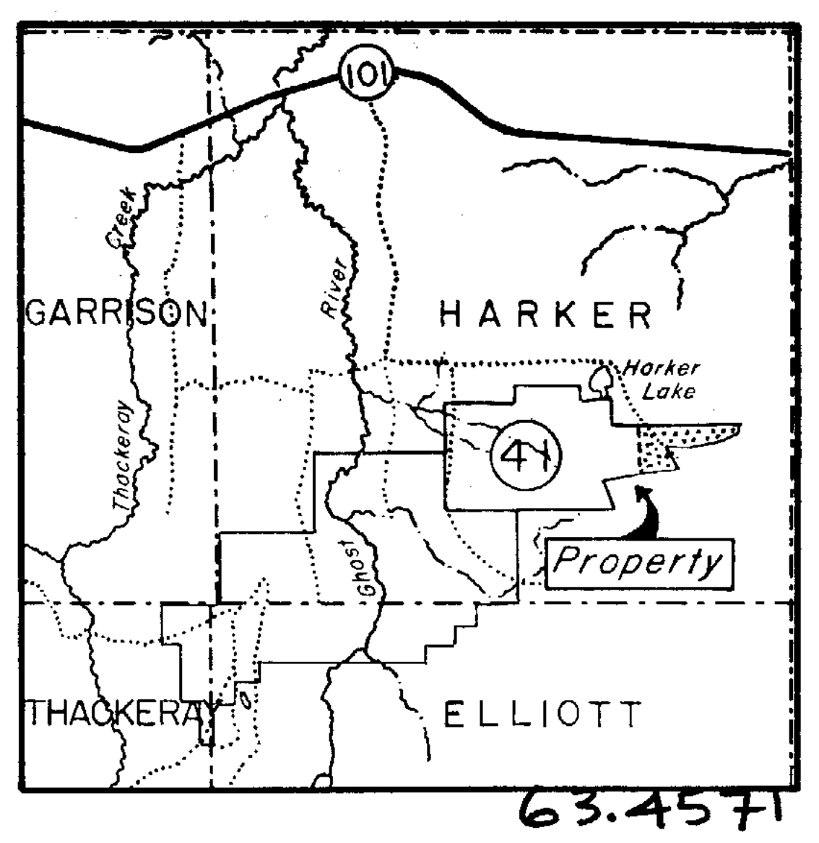
Isomagnetic contours	
Base station	○
Claim post □ (located)	■
Claim line	— —
Primary access road	
Secondary access road	:::::
Creek	
Lake or pond	

INSTRUMENTATION

EDA OMNI 350 PROTON
PRECESSION MAGNETOMETER
Contour interval: 100 gammas
Tune background: 58,000 ɣ
Contoured by: Mary Greer

KEY MAP

(Scale: 1 inch to 2 miles)



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OM84-214

PERREX
RESOURCES INC. (41)

HARKER LAKE GRID

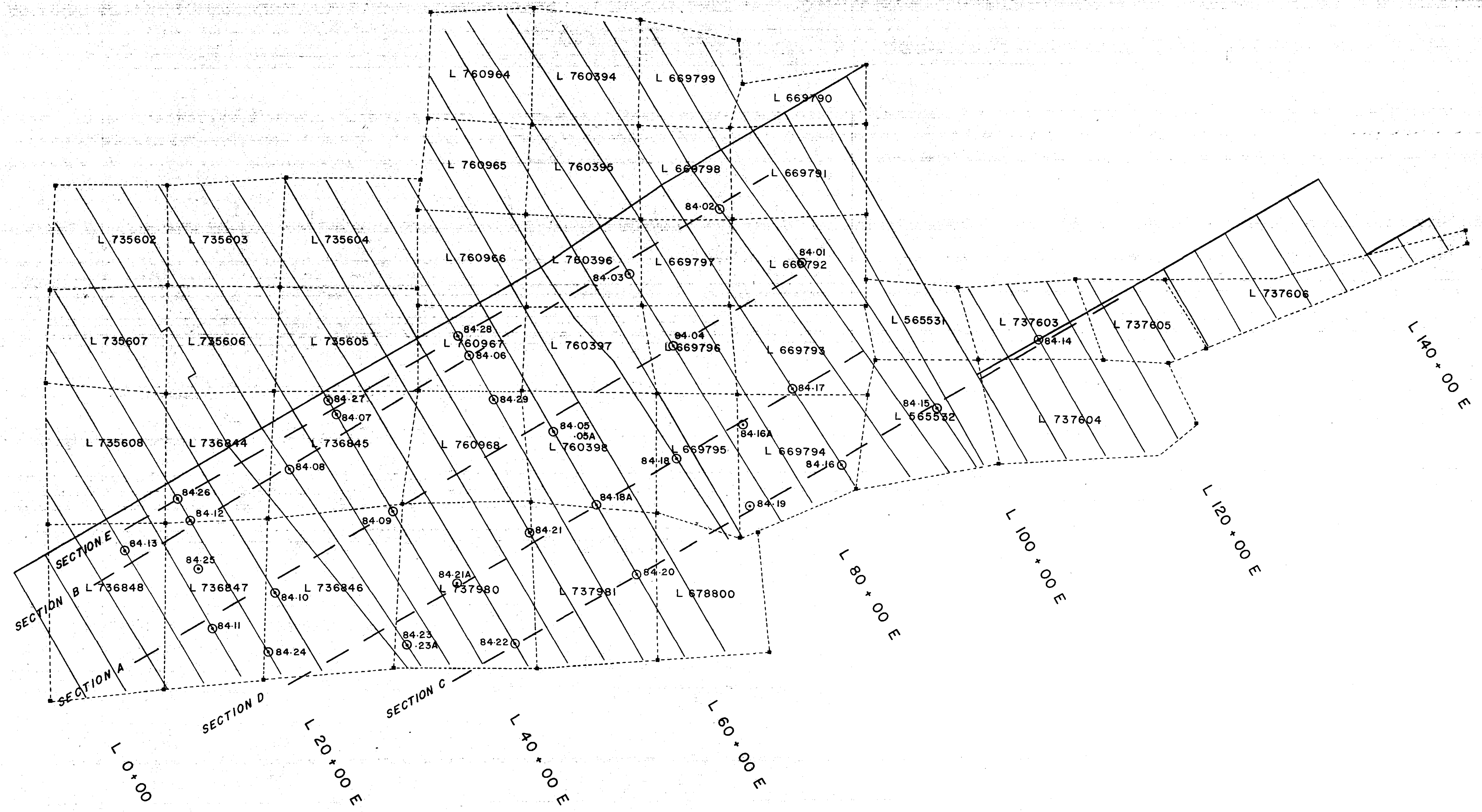
GROUND MAGNETOMETER
SURVEY-EAST SHEET

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

Drawn by

32D05NW0018 63.4571 THACKERAY

250



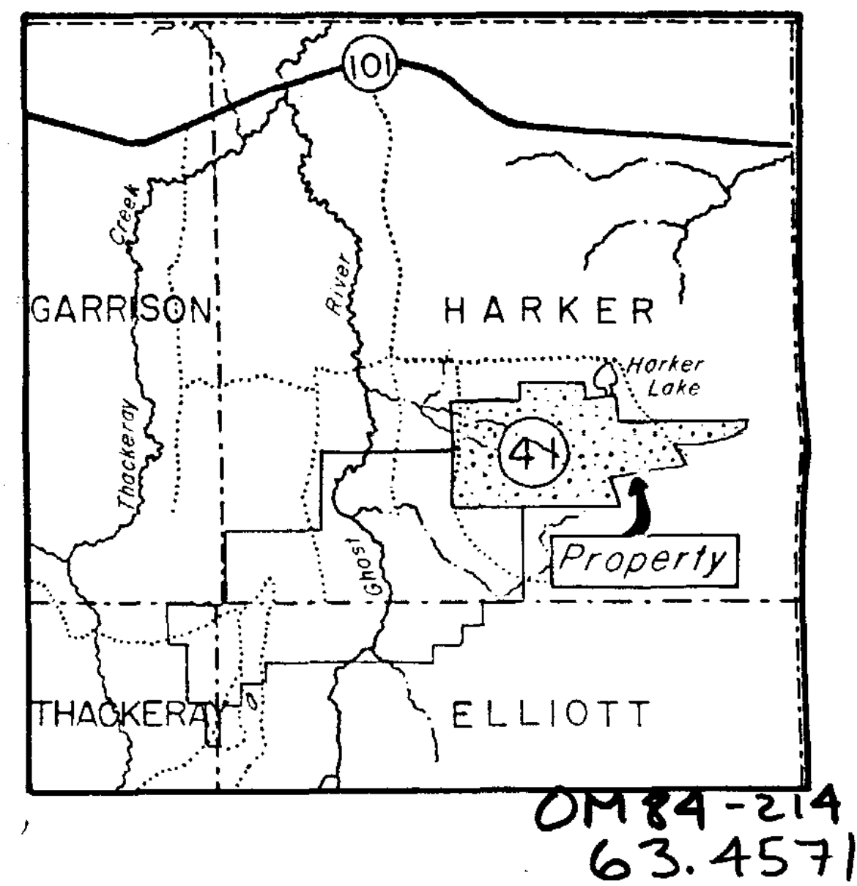
Mag. N 10° W

N

SYMBOLS

Overburden drill hole	⊙
Assumed geological horizon	— —
Claim post	•
Claim line	-------
Picket grid system	

KEY MAP (Scale: 1 inch to 2 miles)



OM84-214
63.4571

PERREX
RESOURCES INC. (41)

HARKER LAKE GRID

OVERBURDEN DRILLING

SHOWING HOLE LOCATIONS

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

200 0 200 400 600

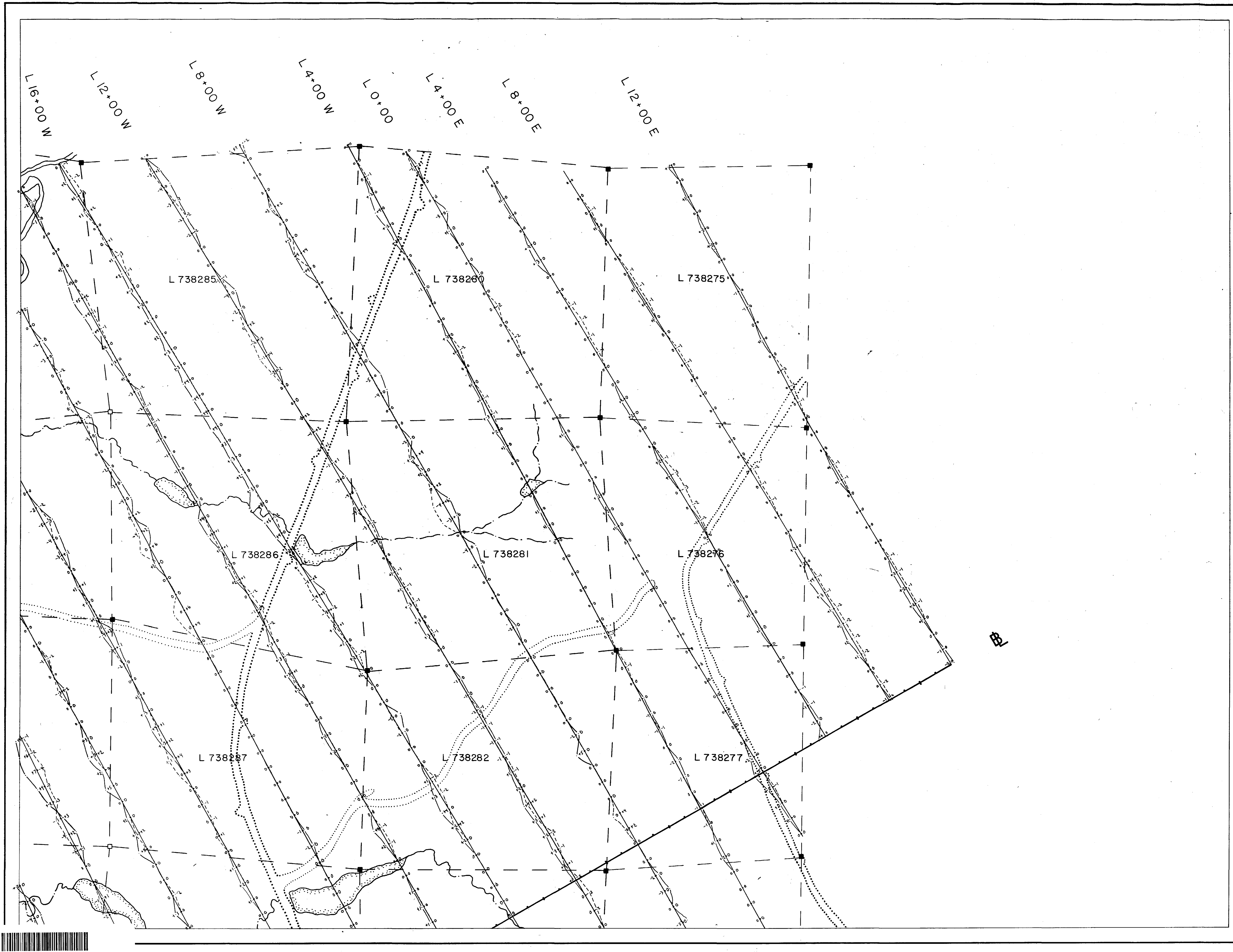
Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer	Map No. 85-Px 41-RC-1	Date March 1985

32D05NW0018 63.4571 THACKERAY

260



Mag. N 10° W

N

SYMBOLS

In-phase
Quadrature
Claim post ■ (located) □
Claim line
Access road (primary)
(secondary)
River Creek Pond

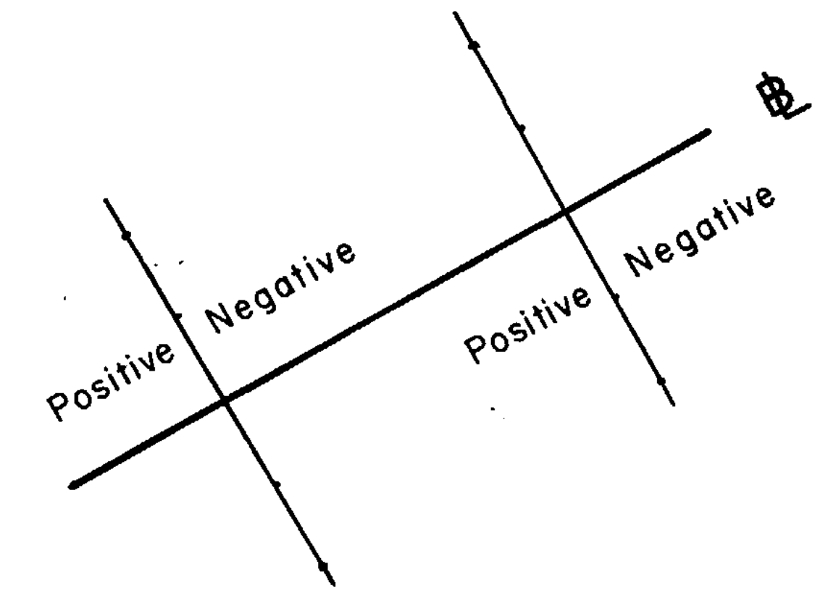
INSTRUMENTATION

GEONICS VLF-EM16

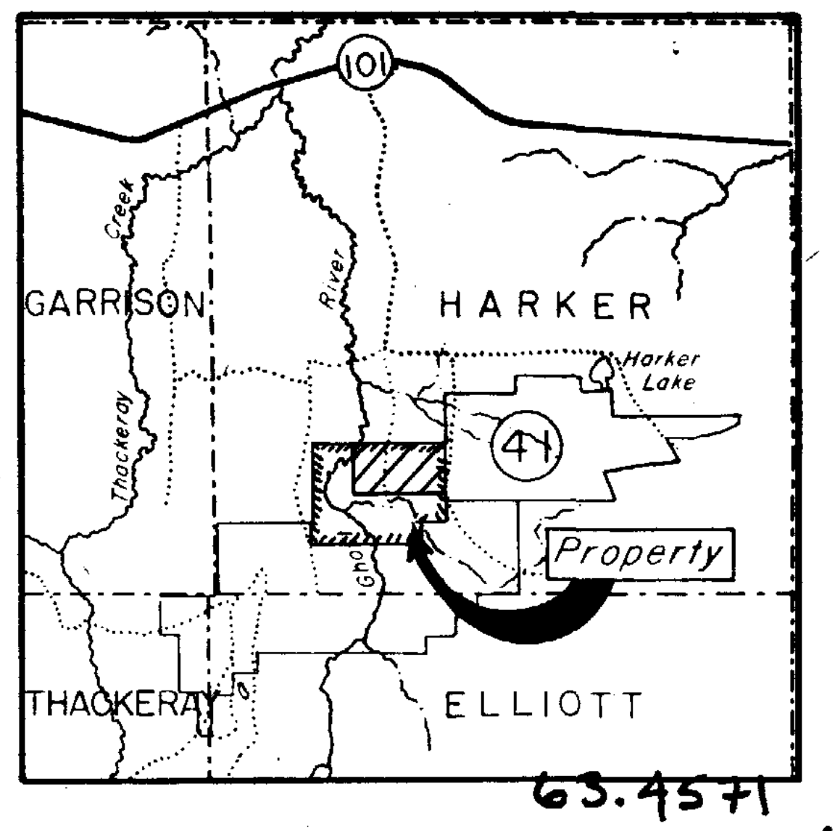
Station used: NAA Cutler, Maine

Frequency: 24.0 kHz

Vertical scale: 1 inch = ±20%



KEY MAP (Scale: 1 inch to 2 miles)



63.4571
OM84-214

PERREX
RESOURCES INC. (A.G.)

AIRBORNE GROUP

GROUND VLF-EM SURVEY

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

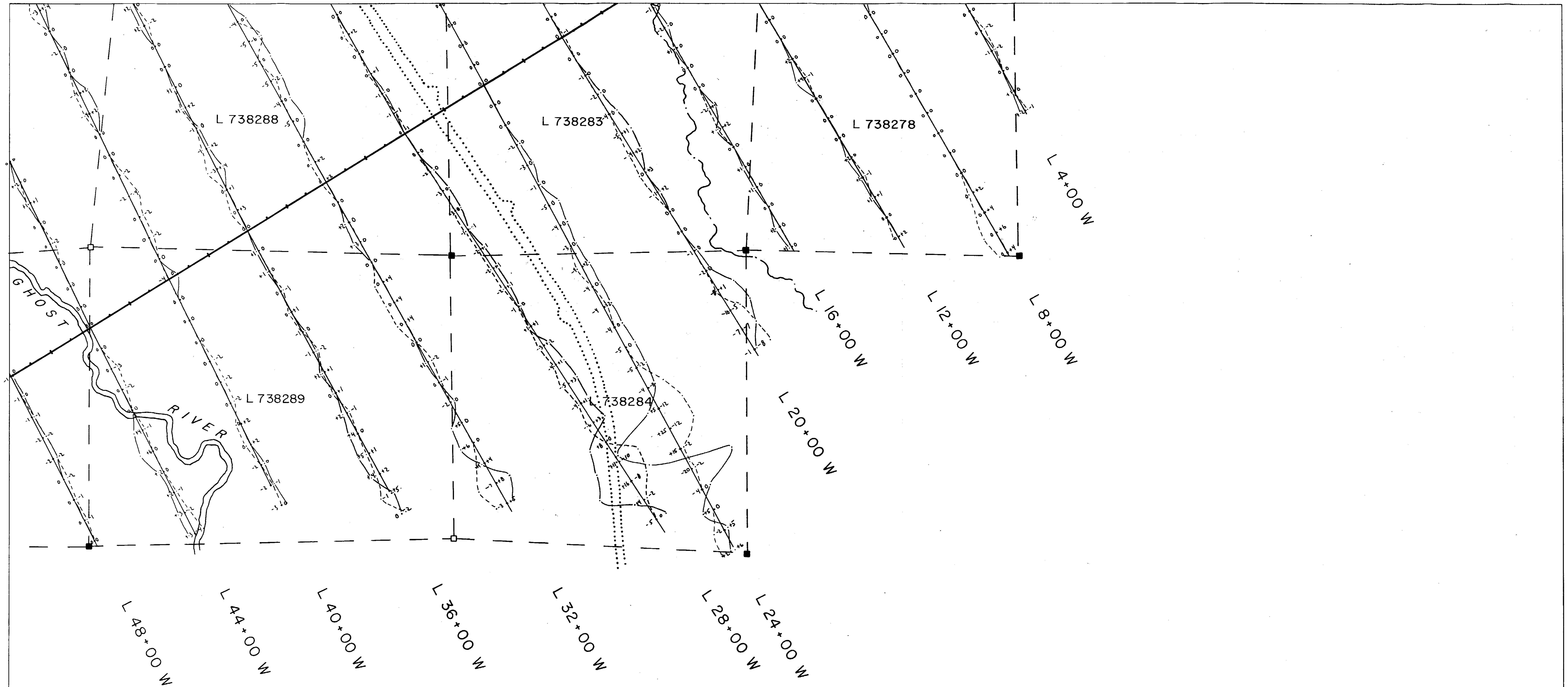
200 0 200 400 600
Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer | Map No. 85-Px A.G.-2a | Date: March 1985

32D05NW0016 63.4571 THACKERAY

270



Mag. N 10° W

N

SYMBOLS

In-phase
Quadrature
Claim post □ (located) ■
Claim line
Access road (primary)
(secondary)
River Creek Pond

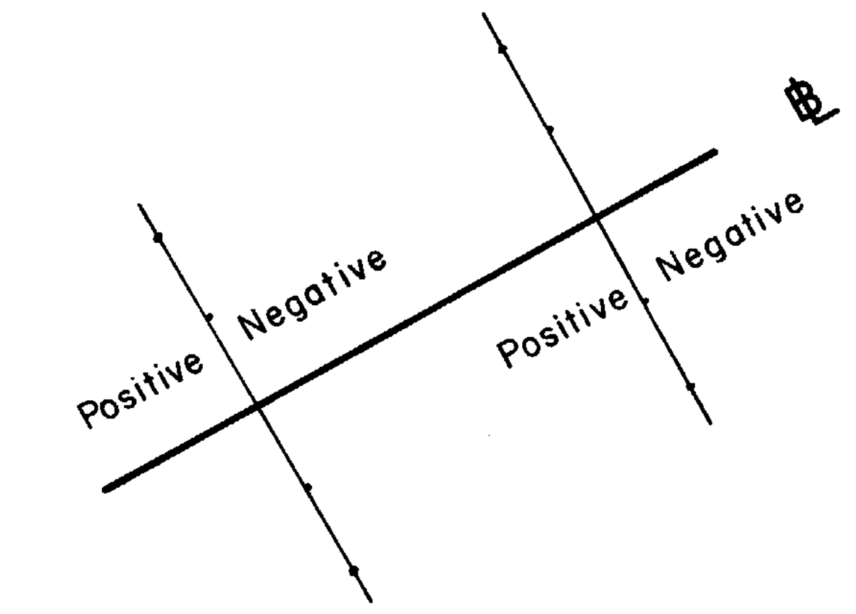
INSTRUMENTATION

GEONICS VLF-EM16

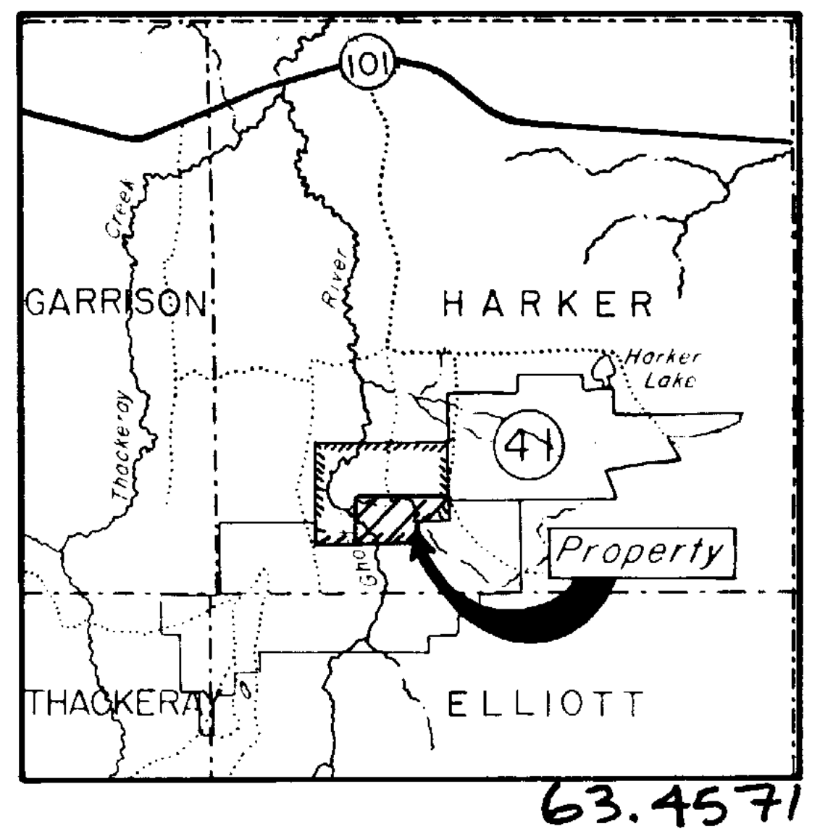
Station used: NAA Cutler, Maine

Frequency: 24.0 kHz

Vertical scale: 1 inch = ±20 %



KEY MAP (Scale: 1 inch to 2 miles)



63.4571
OM84-214

PERREX
RESOURCES INC. (A.G.)

AIRBORNE GROUP

GROUND VLF-EM
SURVEY

HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

200 0 200 400 600

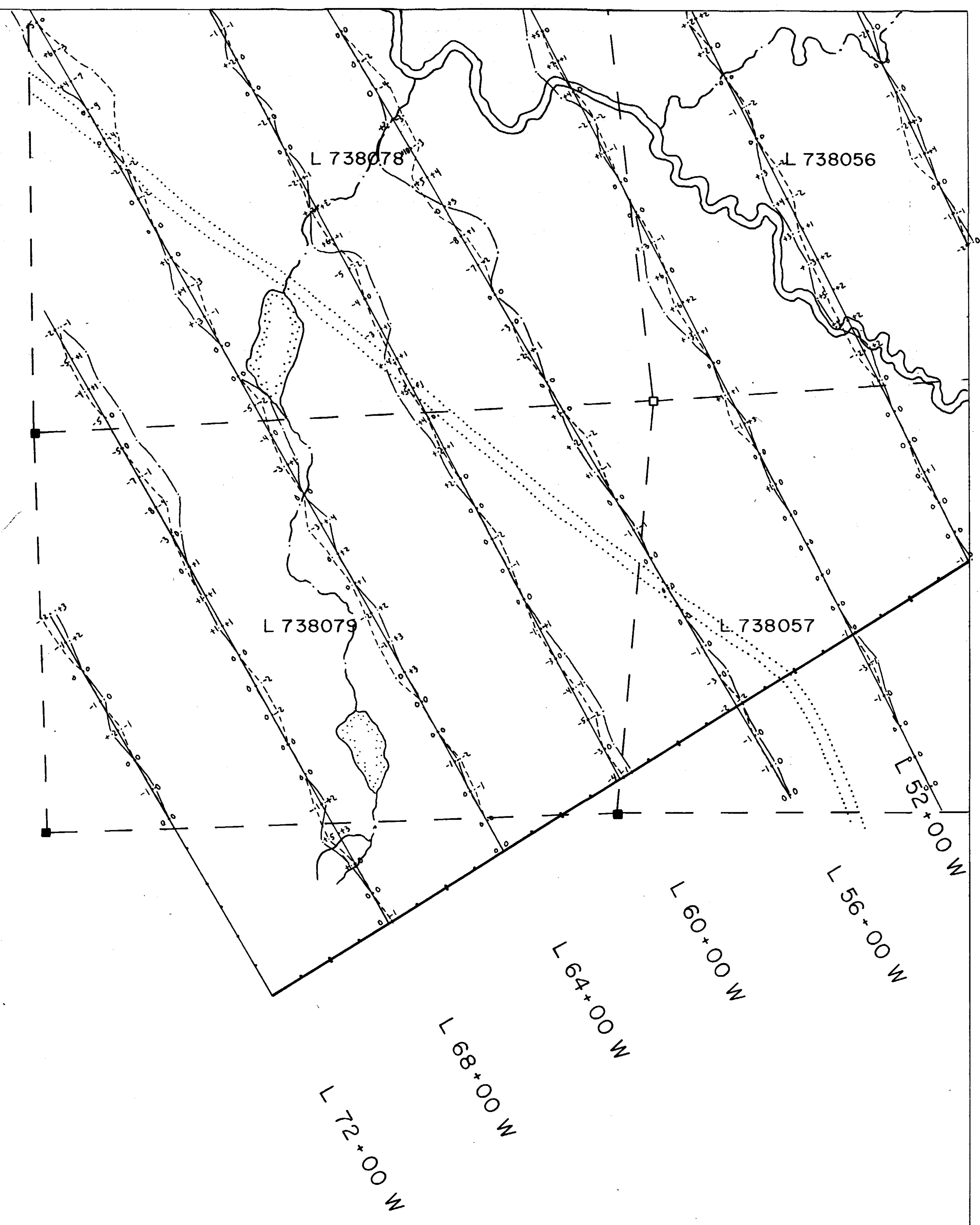
Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer | Map No 85-Px A.G. 2b | Date March 1985

32D05NW0018 63.4571 THACKERAY

280



Mag. N 10° W

N

SYMBOLS

In-phase
Quadrature
Claim post □ (located) ■
Claim line
Access road (primary)
(secondary)
River Creek Pond

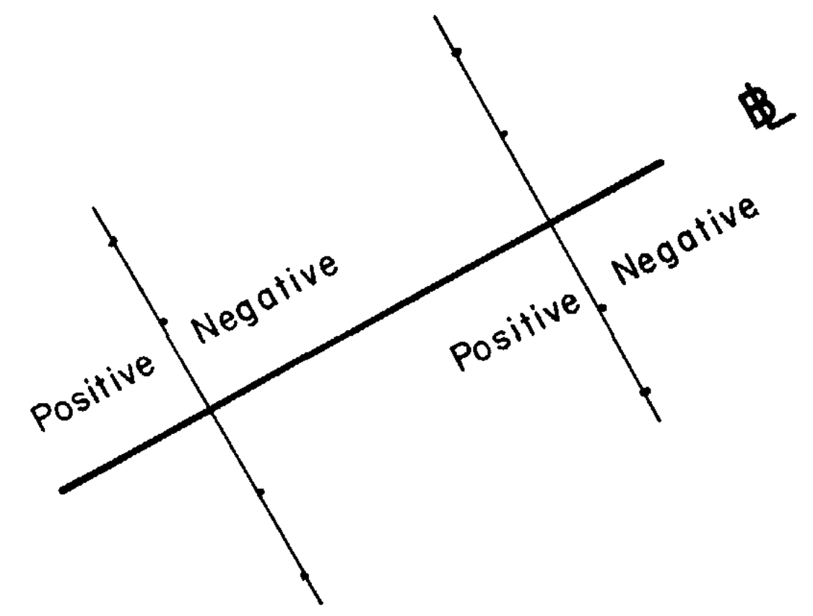
INSTRUMENTATION

GEONICS VLF-EM16

Station used: NAA Cutler, Maine

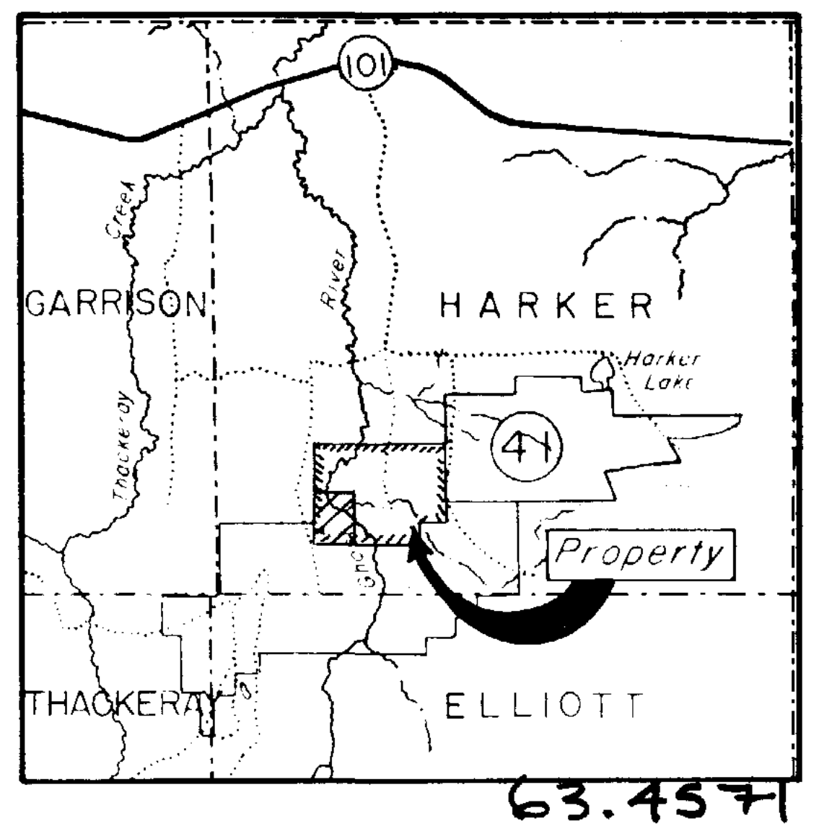
Frequency: 24.0 kHz

Vertical scale: 1 inch = ±20%



KEY MAP

(Scale: 1 inch to 2 miles)



63.4571
OM84-214

PERREX
RESOURCES INC. (A.G.)

AIRBORNE GROUP

GROUND VLF-EM SURVEY

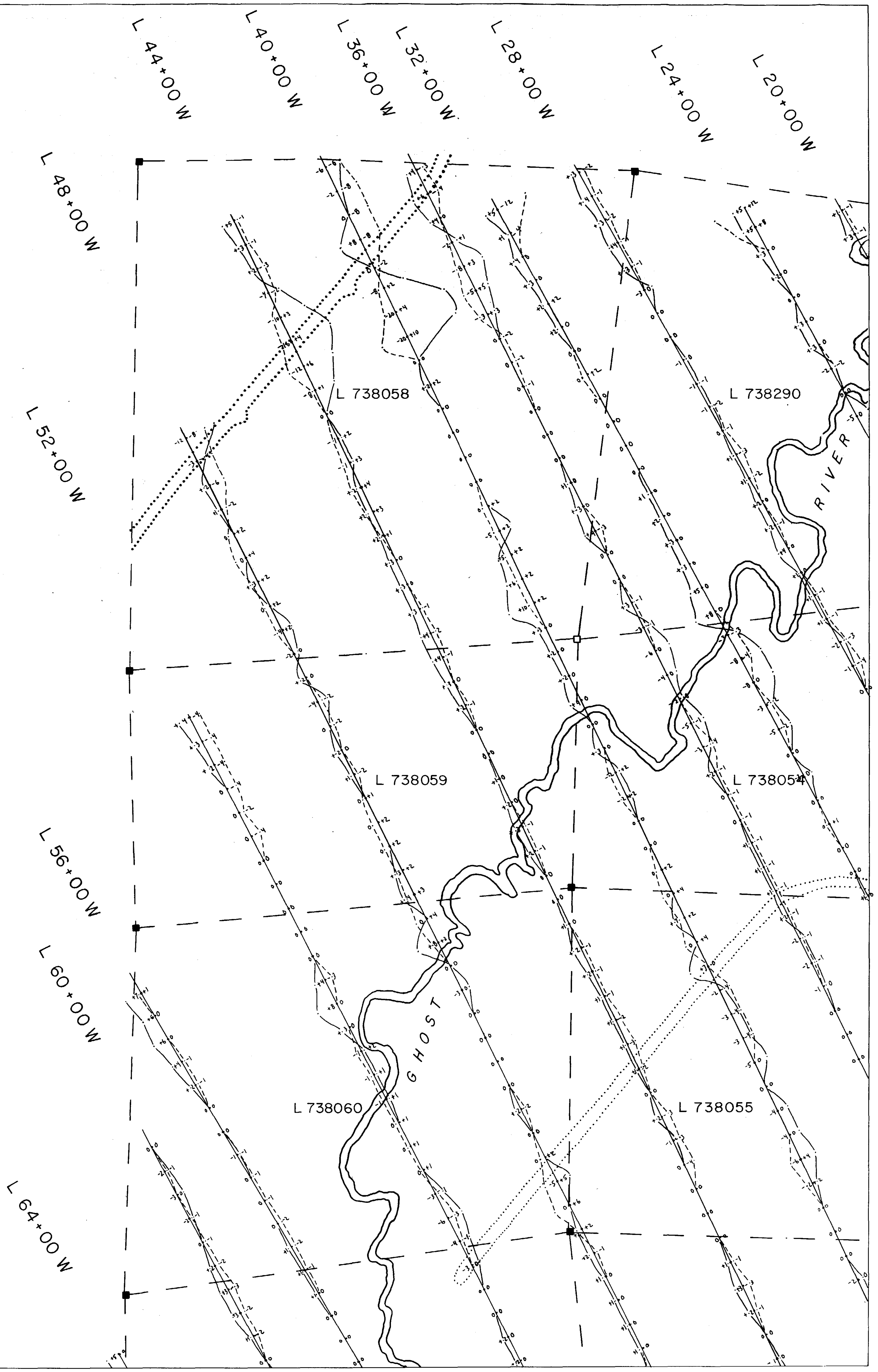
HARKER TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF COCHRANE, ONTARIO

200 0 200 400 600

Scale: 1 inch to 200 feet

PERRONS' INC.
Kirkland Lake Canada

Drawn by: [illegible]
Map No. 85-Fx A.G.-2c
Date: March 1985



Mag. N 10° W

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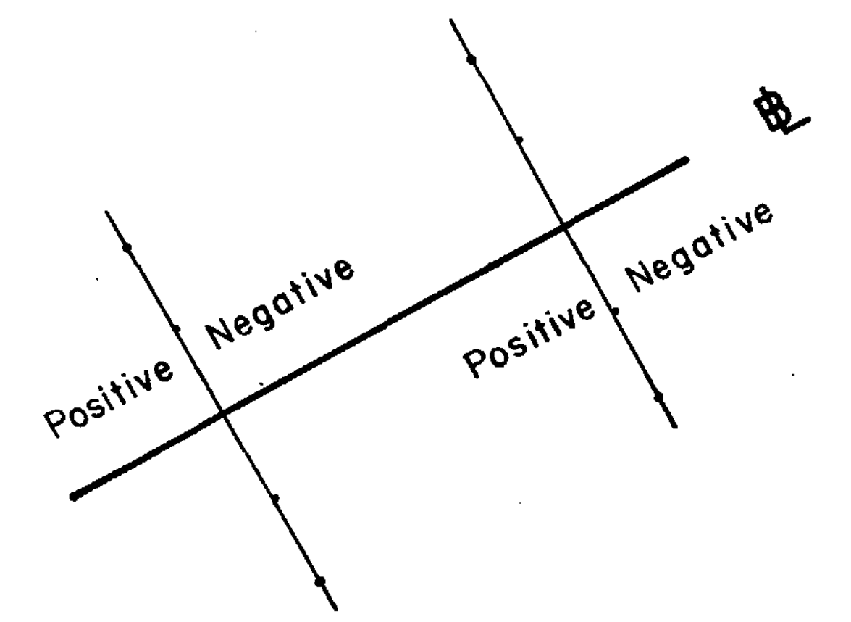
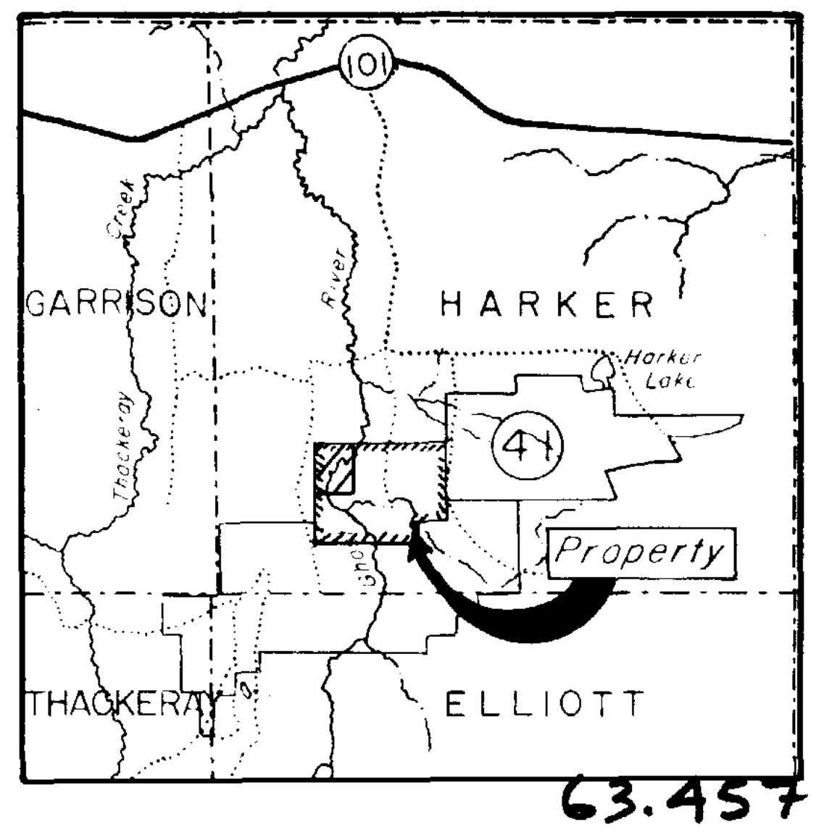


KEY MAP (Scale: 1 inch to 2 miles)



63.4571
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PERRONS' INC.
Kirkland Lake Canada

Drawn by Mary Greer	Map No. 85·Px A.G.·2d	Date: Mar