GM 43321

REPORT ON REVERSE CIRCULATION DRILLING AND GEOPHYSICAL SURVEYS, MATAGAMI PROJECT, GROUP 5

REPORT ON REVERSE CIRCULATION DRILLING AND GEOPHYSICAL SURVEYS

MATAGAMI PROJECT

GROUP 5

STE. HÉLÈNE AND LA GAUCHETIÈRE TOWNSHIPS

QUEBEC

for

MINEREX RESOURCES LTD.

VANCOUVER, B.C.

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Toronto, Ontario
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Ministère de l'Énergie et des Ressources
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Date: 28 OCT. 1986
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SUMMARY

An integrated exploration program consisting of ground geophysical surveys and reverse circulation drilling was successfully completed by MPH Consulting Limited during the period January 15 to February 17, 1986 over the 93 claim Group 5 property in Ste. Hélène and La Gauchetière Townships east of Matagami, Quebec on behalf of Minerex Resources Ltd. of Vancouver, B.C.

Located within the central portion of the Abitibi greenstone belt, the property is known from government geological mapping and prior exploration to be predominantly underlain by east-west trending mafic volcanics accompanied by thin interbeds of felsic and tuffaceous rocks. The geological setting is favourable for gold and polymetallic sulphide deposits as evidenced by the nearby mineral deposits at Joutel and Matagami and, most particularly, those in Casa Berardi and Estrades Townships.

Prior exploration of this area, consisting of airborne and ground geophysical surveys and limited drilling directed at base metal massive sulphide targets, has been moderately intense. Previous drill holes intersected a number of conductive graphitic ± pyritic horizons. Limited assaying for gold revealed several anomalous intervals.

The MaxMin II horizontal loop EM survey, carried out on wide-spread lines, reconfirmed conductors indicated by earlier surveys. Nine conductive zones were detected (A-J), of which seven (A, B, C, D, E, F and J) are regarded as probable to definite bedrock conductors. The remaining two conductors are considered as having possible bedrock sources. Most of these conductors have been partially tested by prior drilling, primarily for their base metal potential.

The reverse circulation drilling program, consisting of 65 holes undertaken to sample the basal till immediately down ice from various conductors, encountered significant geochemical results in over one-third of the drill holes and indicated potential for both gold and base metal mineralization on the property.

Persistently anomalous trace element (Au, Ag, As, Cu, Zn) values in till, visible gold grains and/or sulphide minerals and favourable bedrock geochemistry have highlighted EM conductors A, C, E and F and their immediate environments as high priority targets for subsequent evaluation by additional reverse circulation and diamond drilling. Conductors B and D which were not specifically tested by reverse circulation drilling are rated as secondary targets. Conductor H, while lacking a geochemical signature in the till samples in its immediate vicinity is considered a priority target on the basis of high arsenic values in bedrock. The remaining conductors lack geochemical encouragement and consequently are regarded as having a lower potential for economic mineralization.

Further exploration of the Group 5 property is recommended, consisting of:

1. Additional reverse circulation drilling (30 holes) to refine target definition.

2. Approximately 50 km of additional MaxMin surveying to provide complete definition of the conductors in the areas of most interest.

3. An initial program of diamond drilling totalling 2,000 meters to test the most favourable conductors.

4. A second phase of diamond drilling, estimated to total 2,500 meters, to confirm and delineate any indicated mineralization.

The above program, including supervision, interpretation and reporting, is estimated to total $837,000.

TABLE OF CONTENTS

LIST OF FIGURES

TABLE OF MAPS

(in Volume II)

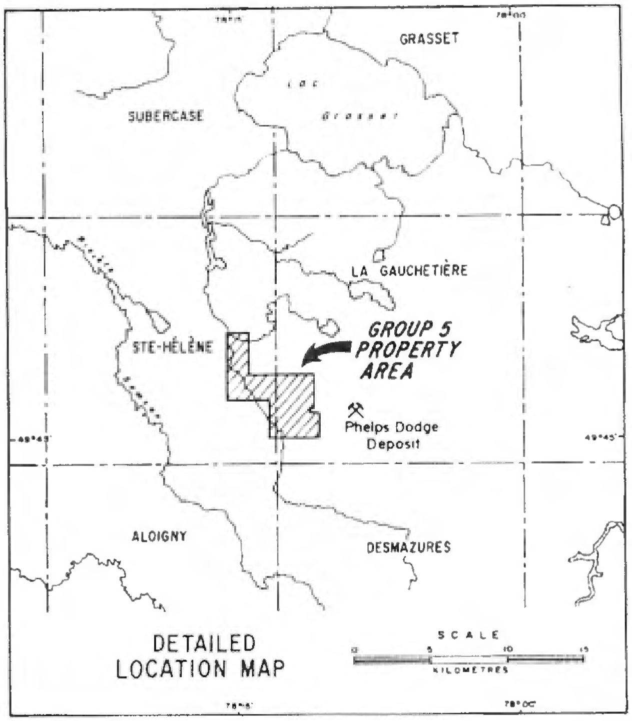
1.0 INTRODUCTION

This report presents and discusses the results of a combined ground geophysics and reverse circulation drilling program carried out by MPH Consulting Limited at Toronto on behalf of Minerex Resources Ltd. over the latter's Group 5 property of the Matagami Project in northwestern Quebec.

A MaxMin horizontal loop EM survey was undertaken to detect and define zones of conductive sulphides that could reflect economic gold or polymetallic sulphide mineralization.

The reverse circulation drilling program was carried out to test the geophysically defined targets down-ice and/or detect indicators of gold and/or polymetallic sulphides in the glacial overburden.

The report includes a description of the various exploration techniques, a discussion of the individual results as well as an integrated evaluation, together with recommendations for further evaluation of the gold and polymetallic sulphide potential of the property.



MINEREX RESOURCES LIMITED

MATAGAMI PROJECT – GROUP 5

LOCATION MAP

Project No:	C-833	**By:**	J. Siriunas, J. Roth
Scale:		**Drawn:**	MPH
Drawing No:	Figure 1	**Date:**	April, 1986

MPH Consulting Limited

2.0 LOCATION, ACCESS AND INFRASTRUCTURE

The Group 5 project area is centered in Ste. Hélène and La Gauchetière Townships some 40 km west of the town of Matagami in northwestern Quebec, approximately 600 km north of Toronto.

The topography of the area is characterized by flat, swampy terrain typical of northern Quebec. The Subercase River, which crosses the property from northwest to southeast, is the principal topographic feature.

Access to the Group 5 area was achieved by opening and maintaining 21 km of road leading past the Matagami airport to the old Phelps Dodge massive sulphide deposit. A further 10 km of winter road was constructed by bulldozer through the bush to the centre of the property. Travel time to the Group 5 area was approximately one hour by truck from Matagami where the drill crew and MPH crew were staying. The travel time to the more remote overburden drill holes on Group 5 increased when it became necessary to travel by tracked vehicle and snow machines in addition to trucks.

Matagami, a mining town with a population of 2,500, is the main centre of service and supply in the region. Matagami is serviced by an all-weather paved highway and a spur line of the Canadian National Railway. Hydro-electric power is readily available. All manner of mining equipment contract services, exploration services, food, field supplies, etc. is available here along with a skilled and stable mining work force.

The nearest base metals smelter is that of Noranda Mines Limited at Noranda, Quebec some 160 km to the south. The current base metals mining and milling infrastructure within the Noranda-controlled Matagami camp might also be available to receive custom ores from a deposit that might not justify a mill in its own right.

MINEREX GROUP 5 PROPERTY MAP

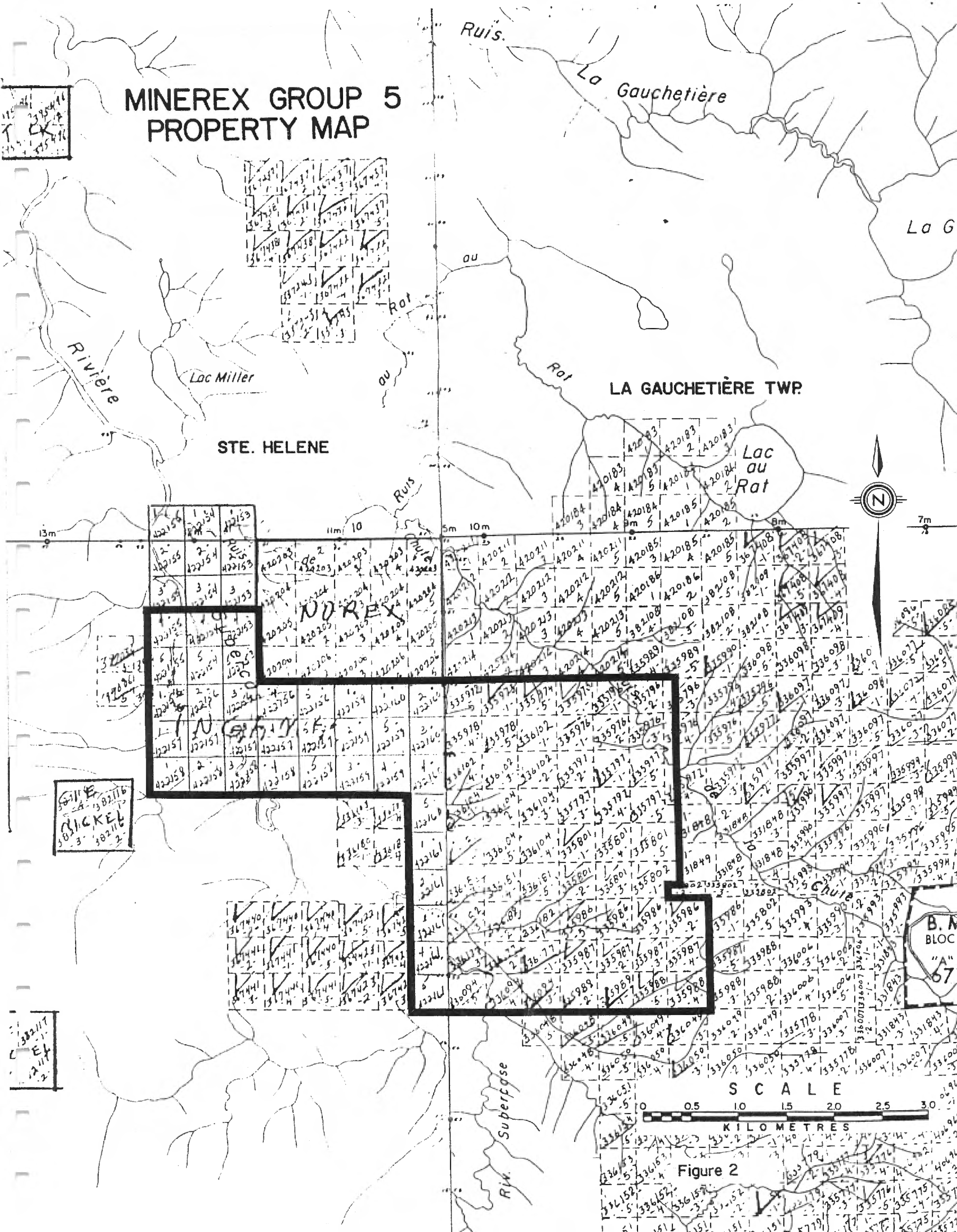


Figure 2

3.0 PROPERTY

The Group 5 property presently consists of 93 unpatented mining claims staked in May and June, 1984 by Ingamar Exploration Ltd. of Connaught, Ontario for the Detour Syndicate. The property totals some 1,522 hectares (3,760 acres), more or less, in Ste. Hélène and La Gauchetière townships as shown in Figure 2 and more properly described as follows:

Claim No.	Present Expiry Date
422153, 4-5	29 May 1986
422154, 4-5	30 May 1986
422155, 4-5	31 May 1986
422156, 1-5	1 June 1986
422157, 1-5	2 June 1986
422158, 1-5	3 June 1986
422159, 1-5	4 June 1986
422160, 1-5	5 June 1986
422161, 1-5	6 June 1986
422162, 1-5	7 June 1986
422164, 1-5	29 May 1986
422165, 1-5	30 May 1986
422166, 1-5	31 May 1986
422167, 1-5	1 June 1986
422168, 1-5	2 June 1986
422169, 1-5	3 June 1986
422170, 1-5	4 June 1986
422171, 1-5	5 June 1986
422172, 1-5	6 June 1986
422173, 1-5	7 June 1986
422174, 1-5	8 June 1986

To maintain the claims in good standing, assessment work is required by the Quebec government on an annual expenditure basis for each claim as follows:

First year	$5/hectare (i.e. $80/claim)
Second to tenth years	$10/hectare (i.e. $160/claim)

Work performed on one claim may be applied to other claims of the same group provided the claims are contiguous and the claim grouping does not exceed 480 hectares (1200 acres).

There is also an annual tax of $0.75/hectare which must be paid to the government within 10 days of the expiration date of the claim.

The holder of a claim(s) who wishes to retain his rights must apply for a development licence no later than 10 days prior to the expiration of a claim. The licence is valid for one year and must be renewed each year.

The work reported in herein will satisfy assessment requirements for the full ten years. It will only be necessary to pay the appropriate taxes and renew the development licences to maintain the claims in good standing for this period.

4.0 PREVIOUS EXPLORATION

The Townships of La Gauchetière and Ste. Hélène have received moderately intense prior exploration, particularly during the period in the late 1950's following the discovery by AEM of the various massive sulphide deposits of the Matagami camp to the east.

The area has been flown by a variety of AEM systems, although the conductive overburden limited the effectiveness of the early surveys. The Input survey flown by the MERQ in 1981 was fully effective and, with the new gold discoveries in Casa Berardi, has initiated a new period of intensified exploration.

The following is a summary of previous mining exploration in the immediate Group 5 area in the Townships of La Gauchetière and Ste. Hélène as recorded in the files in the Ministère de l'Énergie et Ressources, Rouyn, Quebec. The "GM" number refers to the appropriate microfile.

Key drill holes and conductors from previous exploration are shown in Map 1.

St. Mary's Exploration Ltd. (GM 8756) carried out airborne electromagnetic and magnetic surveys over a property directly to the south of the present southeast property boundary in 1959. Several low-order EM anomalies were detected and recommendations were presented for ground follow-up.

Iso Uranium Mines Ltd. (GM 8773) in 1959 carried out magnetic and EM surveys over a property the south portion of which covered the central area of the present property.

Numerous EM conductive zones were located of which three immediately north of the present property (on ground now held by Noranda) were recommended for further work.

Subsequent trenching on their EM "Zone 4" disclosed a "sulphide deposit of pyrrhotite with some pyrite, minor chalcopyrite and arsenopyrite ... Considerable magnetite also occurs in this horizon". Fine graphite is also present. Assays for gold and silver were negative.

This zone is located near the north edge of the east-central part of the present property.

The Iso work is significant in that some of the conductors located by them on the present property appear to be untested to this day (particularly their zones 8, 9 and 10 and scattered crossovers to the east of zone 8).

St. Mary's Explorations Ltd. (GM 13986) held the ground directly to the south of the Iso Uranium property in 1959 extending approximately to the south boundary of the present group. They carried out magnetic and electromagnetic surveying. A number of EM anomalous zones was detected, three of which were drill tested. All of these are on the present ground. The holes showed the conductivity to be due to graphite and sulphides in a mixed sedimentary-volcanic assemblage. Of particular significance in terms of the present work, their hole SM-1 returned a 16 inch section from 209.5 ft to 210.8 ft which assayed 0.07 oz Au/ton along with a 3 foot section from 380 ft to 383 ft which returned 0.01 oz Au/ton.

Both of these intersections were described as sediments with pyrite ± graphite, with quartz. This zone has a high priority for follow-up exploration as there is a substantial strike length of conductivity which has never been subjected to any additional drilling.

Noranda Exploration Company Ltd. (GM 16441) in 1965 restaked the north part of the old Iso Uranium property and additional claims to the east. EM and magnetic surveys were repeated and three holes were drilled immediately to the north of the northeast boundary of the present property. Extensive sulphides and graphite were intersected in a predominantly intermediate to felsic volcanic setting (holes MS-1 to 3). Much sampling was carried out but no assays are reported.

Noranda then drilled a subsequent 5 holes (MS-4 to 8) to further test conductive zones. Hole MS-8 is located in the north-central portion of the present property. The hole intersected 2-3 ft section of 60% pyrite with less pyrrhotite and graphite. No assays are reported.

Noranda holds ground immediately to the north of Group 5 to this day and in fact recently added to their land holding position.

Phelps Dodge Corporation of Canada Ltd. (GM 29763) carried out extensive airborne and ground geophysical surveys in the general area in the early 1970's and, in the course of this, drilled 4 holes on the present claims (holes 121-27, 28, 30, 31). The holes intersected variable pyrite in graphitic tuff and felsic volcanics. No assays are reported. Holes 28, 30 and 31 are indicated by Phelps Dodge to represent conductors directly to the north of those previously tested by St. Mary's Exploration in 1959. Phelps Dodge conductor "A" (which they did not re-drill) represents the zone tested by St. Mary's in their hole 1 in 1959 which returned interesting gold values.

Phelps Dodge also drilled a single hole (PD-121-32) two claims west of the southwest boundary of the present group.

Selco Mining Corporation Ltd. (GM 32519) held a small property straddling the Subercase River in the northwest portion of the present claims in 1976. They carried out magnetic and horizontal loop EM surveys. Two strong, ENE-striking conductors were located.

Hole G-49-1 was drilled to test the best portion of the south conductor. This was seen to consist of graphitic argillite with massive pyrite in mainly intermediate pyroclastics. No assays are reported.

Amoco Canada Petroleum Company Ltd. (GM 36102) in 1978 drilled two holes (78-18-1, 2) on the above ground previously held by Selco. Both holes intersected massive pyrite and graphitic argillite in a predominantly mafic volcanic setting. A 5 ft section of massive pyrite from 287 ft to 292 ft returned 0.01 oz Au/ton. The adjoining 9 ft of pyritic felsite and siliceous argillite returned 0.02 oz Au/ton.

Noranda Exploration Company Ltd. (GM 10193-A) drilled 11 holes on JEM conductors in the west portion of the present ground in 1960 as part of their Kitichigama program. Hole 1 intersected minor copper (0.11%) and gold (0.01 oz/ton) over 10 ft in a carbonated volcanic rock with abundant fine pyrite. The balance of the holes intersected a mixed volcanic-intrusive assemblage with some volcanic breccia. Conductivity was due in many cases to graphitic metasediments. Of particular interest in this drilling is the description in holes 1 and 2 of pyritic carbonated volcanics containing minor gold. It appears that some sections of this rock were not analyzed during the drilling. These types of rocks host much gold in the Abitibi. This zone should have high priority for follow-up work.

4.2 Current Mining Activity

This entire sector of the Abitibi has experienced increased exploration activity following the realization that the Inco-Golden Knight discovery in Casa Berardi township is of major proportions. The level of activity has further increased with the discovery of bonanza-grade polymetallic mineralization by the Teck/Golden Hope joint venture in Estrades Townships in December, 1985.

Major companies involved in the general area include Selco, Noranda, Inco, Newmont, Teck, Placer and Homestake along with numerous joint interests.

It is noteworthy that the Group 5 property is directly tied on to holdings of two major companies (Noranda and Inco).

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5.0 GEOLOGY AND MINERAL DEPOSITS: DETOUR-MATAGAMI SECTOR, ABITIBI GREENSTONE BELT

5.1 Regional Geology

The Group 5 property lies within the overall Abitibi Greenstone Belt, as indicated in Figure 3. The Abitibi is the largest and most productive of several east-west trending metavolcanic-metasedimentary belts within the Superior Structural Province of the Canadian Shield. These supracrustal rocks are dominantly of Archean age, generally greater than 2 billion years B.P.

The general area of interest is a rectangular zone 200 km long by 125 km wide bounded approximately by the Detour mine in the northwest, the Burntbush area in the southwest, the Joutel area in the southeast and the Matagami area in the northeast.

This is generally a flat, monotonous area with endless black spruce swamp and muskeg cover. Outcrop exposure is probably 1% or less so that the geology is very imperfectly known. A further corollary of this is that additional undiscovered major deposits likely exist beneath overburden in the region.

Mafic metavolcanics are interpreted to be the predominant lithology. Scattered throughout this mafic "sea" are several centres of felsic volcanism such as in the Matagami area and around the Selbaie Mine. However, extensive assessment research indicates that there are far more felsic rocks in this region than commonly recognized. This is very important from an exploration viewpoint in that massive sulphide gold-base metal deposits are typically hosted by felsic volcanics.

Intercalated with the volcanic rocks are regional sedimentary-tuffaceous units with abundant graphite, argillite, sulphides and oxide iron formation. These units typically appear as zones of airborne

EM conductors which may extend for tens of km across country. As such, they provide valuable stratigraphic marker horizons. This sedimentary-tuffaceous setting can also be a fertile one for mineral deposits. The Casa Berardi deposit is in such a setting as is the Agnico-Eagle Mine.

Intruding all of these rocks are various intermediate to felsic plutons, some of which may be broadly coeval with volcanism, i.e. synvolcanic, and hence of interest from an exploration viewpoint.

5.2 Mineral Deposits

After the Republic of South Africa's Witwatersrand, which produced some 1,114 million ounces of gold between 1884 and 1978, the greatest gold mining area of the western world is Canada's Abitibi belt. Composed mainly of Archean volcanic and sedimentary rocks, the Abitibi has produed more than 133 million ounces of gold between 1906 and 1981.

Several major gold and base metal deposits are present in the general region. The characteristics of some of these deposits, pertinent to further exploration in the region, are described below:

(a) Detour Mine - Ontario

The Detour gold (± copper) deposit was discovered in 1974 by Amoco Canada Petroleum Company Ltd. during a geophysically oriented search for base metal massive sulphide deposits. The original drill target was a strong electromagnetic conductor with a directly coincident magnetic high. These geophysical responses are now known to relate primarily to the cherty sulphide (pyrite, pyrrhotite ± chalcopyrite) iron formation which hosts much of the gold ore.

Present reserves are quoted at approximately 10.9 million tons averaging approximately 0.128 oz Au per ton and 0.15% Cu. These reserves extend to the 1,800 foot level and the deposit is completely open to depth. The mine went into official production on November 4,1983 at a rate of 2,500 tons per day. Initial production was by open pit although operations are currently suspended due to a lower than expected gold grade and weak gold prices. Shaft sinking is currently underway to determine the economic feasibility of the underground mining of the deposit.

The "main zone" of gold mineralization at Detour is essentially an auriferous quartz fracture zone. It is centered on a cherty tuff unit and extends upwards into the immediately overlying basalts. Gold values also extend beneath the cherty tuff into underlying altered ultramafics. The overall mineralized zone plunges 45 degrees west.

The main zone is generally 20 to 40 feet in width and consists of a system of narrow quartz veins which contain 10 to 15% pyrrhotite, 0.5 to 1% chalcopyrite and 1 to 5% pyrite within the veins and selvages.

Four gold zones are found in the hangingwall basalts above the main zone and are referred to as the quartz-vein zones. The mineralization is similar to the main zone in that the gold occurs within quartz veins with associated pyrrhotite and chalcopyrite with biotite selvages. Most of the quartz vein zones are interpreted to occur in structures that parallel the main zone.

There are several zones of mineralization in underlying talc-carbonate rocks. In these zones, the gold occurs as blebs and specks in close association with pyrrhotite and chalcopyrite.

Quartz veins are occasionally present but are not essential for the presence of gold.

The Detour ore body occurs at a local, gentle anticlinal warp on the north limb of the Detour anticlinal fold, the axis of which is located well south of the mine. The plunge of the ore is exactly that of the fold and appears to occupy a fracture zone which is axial planar to the subsidiary warp. It is therefore suggested that there is a very strong structural influence at Detour in addition to the obvious stratigraphic control.

(b) Selbaie Mine - Brouillan Township

The Selbaie zinc-copper (± gold, silver) mine is located 50 km west of the present property and was discovered in 1974 by a Selco Exploration - Pickands Mather joint venture. The deposit was discovered by diamond drilling of a very weak horizontal loop EM anomaly in follow-up to an airborne EM survey. Production began in mid-1981 at 1,500 metric tonnes per day (B-Zone). The mine is currently undergoing a major expansion, funded in part by the Quebec government.

The Selbaie deposit occurs within acid pyroclastic and volcaniclastic rocks which form part of the Matagami section of the Archean Abitibi orogenic belt.

Ore reserves in the B Zone at December, 1982 consisted of 2.83 million tonnes averaging 3.5% Cu, 0.7% Zn, 33 g Ag, 1.2 g Au per metric tonne. Reserve figures quoted for the A-2 Zone (1978) were 5 million tons in grading 2.02% Cu, 1.33% Zn, 0.36 oz Ag and 0.036 oz Au per ton.

This base metal deposit is somewhat atypical in that it consists mainly of epigenetic quartz-carbonate-base metal vein systems resulting from hydrothermal activity related to late stages of acid volcanism rather than the standard massive sulphides emplaced in syngenetic fashion.

The host rocks consist of rhyolitic tuffs and breccias, bedded chert-pyrite and volcaniclastic debris. An overlying quartz porphyry unit, which is weakly mineralized, may have acted as an impermeable cap rock during the mineralization event.

Veining and minor replacement occur in preferred but variable steeply dipping fracture/fault systems. The vein systems (Zones A-1 and A-2) are concentrated within subhorizontal, permeable rhyolitic units.

Principal hypogene minerals are pyrite, sphalerite and chalcopyrite. Galena, tetrahedrite, polybasite, and native silver occur in minor amounts together with native gold. Supergene chalcocite, digenite, covellite, bornite and native copper occur as fracture fillings and replacement rims around hypogene sulphides.

Important characteristics of the Selbaie deposit include the relatively weak nature of the related EM target and the epigenetic nature of the mineralization as compared to the classical stratiform massive sulphide model.

(c) Agnico-Eagle Mine, Joutel Township

Located near Joutel, some 20 miles south of the present property, this gold mine has produced 610,000 ounces of gold from 3,300,000 tons of ore from 1974 to 1984. Reserves at December 31, 1984 were 1,401,592 tons of 0.203 oz gold per ton. Barnett et al. (1982) report on the deposit as follows:

"Investigations leading to the discovery of the deposit began in February, 1962 during early exploration of the Joutel-Poirier district for base metal sulphide deposits. Ground geophysical surveys outlined coincident magnetic and electromagnetic anamalies which were tested by diamond drilling in late spring of the same year. Exploration continued, and by 1967 it was apparent that a potentially mineable deposit of auriferous pyrite existed, and underground development was initiated. Regular and substained production began in 1974.

Unlike most Archean gold deposits, Agnico-Eagle has many similarities to massive base metal sulphide deposits, suggesting a common volcanogenic origin. The gold is contained within the sulphide facies of a stratabound to stratiform carbonate-sulphide-silicate-oxide facies iron formation which immediately overlies a sequence of partially welded felsic tuff and lapilli tuff. A carbonaceous schist containing pyrite bands and nodules occur immediately overlying the ore zone.

The ore-bearing sequence is distinctly zoned with an outward change from an iron silicate facies exhalite at the center of the ore body to iron carbonate facies exhalite. Although chalcopyrite and sphalerite are present only in accessory quantities, analytical data indicates that copper and zinc exhibit both lateral and vertical zonation. The only important ore mineral is native gold with a fineness of approximately 830. The gold occurs as microscopic-size inclusions and veinlets in and around pyrite in the carbonate facies exhalite, and pyrite and pyrrhotite in the silicate facies exhalite. It is proposed that like many massive base metal sulphide bodies, the Agnico-Eagle deposit formed by volcanogenic and exhalative process."

A key observation concerning the Agnico-Eagle mine is that it is essentially a massive pyrite deposit which carries economic gold values. This deposit is reminiscent of the Horne Mine in Noranda which, although generally thought of as a base metal mine (mainly copper), is a massive sulphide gold deposit which produced 11 million ounces of gold from 58 million tons of ore.

Any pyrite ± pyrrhotite zone in this region should therefore be thoroughly evaluated for its gold potential. It is our finding that many such zones have not been assayed for gold in the past.

(d) The Golden Pond Gold Deposits, Casa Berardi Township

Four separate gold deposits are now indicated on the Golden Pond property. Estimated reserves at the Golden Pond and Golden Pond East deposits currently total some 6.3 million tons of 0.255 oz gold per ton with approximately equivalent tonnages in both zones.

The initial discovery was made by INCO in 1981 by diamond drilling of a ground electromagnetic-magnetic anomaly. The initial discovery hole was drilled on what is now known to be a small satellitic zone to the south of the main Golden Pond deposit. Three holes drilled as follow-up to the discovery hole were blanks. It was only by continued drilling of targets in the immediate area that the Golden Pond deposit was eventually discovered.

Golden Knight Resources Inc. of Vancouver subsequently farmed into the entire 882 claim property to earn a 40% interest in the property by spending $3,000,000 on exploration with INCO remaining as operator.

The following geological details on the Golden Pond deposits are paraphrased from a presentation given by Golden Knight in Toronto on June 12, 1984.

The property lies on the south limb of a regional synclinorium and straddles the contact between a lower sequence of volcanics and an overlying thick sedimentary pile. The contact generally trends E-W and dips almost vertically.

The geology of the property has been differentiated into various units using regional iron formations and graphitic horizons as marker horizons. The main rock units from stratigraphic top to bottom are given below:

Unit	Description
3	Clastic sediments, mostly sandstone, siltstone.
2e	Upper banded iron formation, ferruginous sediments.
2d	Golden Pond pyroclastic unit, agglomerate, lapilli tuff, tuffaceous sediments (ore-bearing).
2a	Volcaniclastic conglomerates.
1	Lower iron formation, magnetite, ferruginous sediments, clastic sediments.

Both geological and geophysical data clearly show that the Golden Pond gold-bearing zone lies within a major east-west trending conductive zone and an overlying complex pyroclastic unit. The conductive unit is traced without ambiguity west to the Turgeon River for a strike length of 20 km. At this point, the conductive unit bifurcates and correlation is less certain.

West of the river, a double conductive horizon continues to the Ontario-Quebec border.

It should be noted that there appears to be a major zone of east-west faulting, shearing and alteration, designated the "Casa Berardi Break", which extends through the deposit area and which may have played a role in ore localization.

In detail, the geology of the Golden Pond area, based on drilling to November 1983, can conveniently be considered in terms of a sequence of four mini-cycles. The cycles (from south to north) are briefly described as follows:

The base of cycle I consists of a thick polymictic volcaniclastic conglomerate. Clasts of pyritic grey chert and white bedded chert are characteristic. The basal unit is overlain by graphitic mudstone-siltstone which is capped by a discontinuous lens of bedded sulphide facies (chert-pyrite) iron formation. Cycle I hosts three distinct types of gold occurrences described below:

1. A weak but continuous gold zone that straddles the contact between the polymictic conglomerate and graphitic sediments.
2. A high-grade quartz-tourmaline-arsenopyrite-pyrite zone in mudstone-siltstone containing visible gold.
3. Disseminated auriferous arsenopyrite in the pyrite-chert exhalite.

The base of Cycle II consist of a variety of dacitic volcanic and volcaniclastic rock with intraformational conglomerates. The bulk of the cycle consists of a very thick sequence of turbidite greywacke, sandstone, siltstone, mudstone, containing nodular pyritegraphite and chert. Variable quantities of intermediate to felsic volcaniclastic material are associated with one or more apparently transgressive, carbonate-sericite alteration zones which cut diagonally across the units. The alteration is intense and pervasive and may represent fossil hydrothermal conduits.

Ore grade mineralization in Cycle II is associated with the alteration and is also associated with graphite-pyrite-chert-arsenopyrite zones at the top of the cycle.

Cycle III is dominantly pyroclastic. The cycle begins with a thin, somewhat discontinuous, lapilli-tuff horizon overlain by a thick, felsic agglomerate unit. The agglomerate is overlain by a mixed sequence of lapilli-to-ash tuffs, green chloritic mudstone, cherts and a thin dacitic flow (?). The cycle ends with a magnetite quartz-chlorite-carbonate-pyrite iron formation.

Gold mineralization in Cycle III has been located on both the south and north contacts of the agglomerate unit and in one thin bed of pyritic iron formation.

Cycle IV is imperfectly defined and consists of well-bedded calcareous sandstone-mudstone.

Some of the best gold mineralization found so far is in the central and western part of the Golden Pond area. Values higher than 0.15 ounces gold per ton over 10 feet were intersected by 16 out of 22 holes along a strike length of 720 meters (2,360 feet). Most of the holes in this sector returned two or more sections of economic interest.

An on-going, aggressive exploration effort has subsequently resulted in the discovery and partial delineation of the Golden Pond East deposit and more recently, the Golden Pond West zone.

The significance of the Golden Pond East zone is emphasized by an article in the Northern Miner (December 13, 1984) which notes that:

> "Hole 71747 returned an impressive 44.2 ft. grading 0.78 oz gold per ton from 693.5-737.7 ft. This section included 19.3 ft. grading 1.27 oz. gold per ton."

A $7,200,000 underground evaluation program is in progress on the Golden Pond east zone. A ramp has already progressed some 700 meters from the collar (Northern Miner - January 13, 1986).

The above issue of the Miner also released details of an initial hole into what may be another discovery in the Golden Pond West area, a hole impressive by any standards. The hole contained three separate intersections as follows: 66.3 feet of 0.41 oz Au/ton; 47.6 feet of 0.1 oz Au/ton and 19.8 feet 0.46 oz Au/ton.

Key points at Golden Pond in our opinion include the crosscutting, quartz-sulphide vein nature of the mineralization, its occurrence near a regional INPUT-magnetic zone reflective of sulphide-graphite-oxide iron formation. The abundance of arsenopyrite in the deposit indicates that arsenic may be a very useful pathfinder element in this region.

(e) The Estrades Deposit, Estrades Township

The Estrades deposit was discovered by the Golden Hope-Teck Corporation joint venture in late 1985. The deposit occurs in an Archean clastic sedimentary and felsic volcaniclastic sequence (locally graphitic and pyritic) with interbedded mafic to intermediate volcanic flows and associated pyroclastics. The discovery would appear to be in the same broad regional stratigraphic package which contains the Golden Pond deposits and possibly the Agnico-Eagle mine.

Information from drilling to-date suggests a steeply dipping, tabular massive sulphide deposit striking east-west. The discovery hole, spotted approximately 400 ft south of the north Golden Hope boundary cut a 35.1 ft section grading 0.2 oz gold per ton and 9.15 oz silver with high copper and zinc values (Northern Miner, December 2, 1985).

Drilling is being concentrated on two weakly conductive zones which probable represent a common horizon. The western part of the conductor has a strike component of more than 600 meters, while the eastern part extends for approximately 1,100 meters. Both are separated by a narrow gap occupied by a magnetic high which appears to represent a cross-cutting diabase dyke emplaced along-a fault.

Thin section studies of the first core are indicated to reveal a quartz-sericite schist in the hangingwall and a volcaniclastic sediment comprising the footwall. These horizons form a thin but persistent unit in an environment generally characterized by mafic to intermediate volcanics.

Of importance to other exploration in this area in the fact that Teck drilled an extremely weak, albeit discrete, airborne conductor. A similarity to the Selbaie discovery is suggested in this regard.

The deposit area is being actively explored with four diamond drills assigned to testing both the east and west electromagnetic anomaly zones.

The assay results of the first 9 holes on the west zone are given in Table 1. The result of the first two holes drilled on the east zone are also included in the Table. The values underscore the significance of the discovery.

TABLE 1

Drill Hole	From-To (feet)	Interval (feet)	Approx. True Width (feet)	Gold (oz/T)	Silver (oz/T)	Copper (%)	Zinc (%)
Discovery Zone							
3	186.3-190.6	4.3		0.280	5.63	0.76	29.52
	190.6-194.9	4.3		0.325	5.77	0.70	27.29
	194.9-199.5	4.6		0.220	13.77	4.80	32.24
	199.5-204.1	4.6		0.246	7.36	0.46	14.26
	204.1-207.7	3.6		0.215	18.20	7.44	6.58
	207.7-211.0	3.3		0.266	16.51	8.04	8.56
	211.0-214.3	3.3		0.104	6.92	1.71	6.64
	214.3-217.2	2.9		0.066	4.91	2.06	2.60
	217.2-220.1	2.9		0.008	1.00	0.31	0.76
	220.1-221.4	1.3		0.050	11.85	4.31	0.17
	or						
	186.3-214.3	27.9	18.1	0.241	10.34	3.20	18.99
9		36.7	23.9	0.352	13.25	2.72	26.53
10		19.4	12.6	0.365	7.80	1.64	27.80
11		25.1	16.3	0.775	9.82	2.14	18.60
13		12.7	8.3	0.321	7.34	2.17	18.40
14		17.3	11.2	0.145	4.28	1.24	12.40
15		10.7	7.0	0.255	3.88	0.43	9.56
16	495.7-505.5	9.8	6.4	0.15	4.50	1.00	21.10
		7.5	4.9	0.20	3.60	1.30	25.60
17		23.2	15.1	0.012	1.05	0.25	0.97
East Zone							
12	240.0-271.0	31.0	20.2	0.011	0.64	1.40	0.43
		7.9	5.1	0.013	0.80	3.20	0.08
18		33.1	21.5	0.009	0.21	0.35	0.22

(f) Matagami Camp

The first discovery and still the largest deposit (approximately 25 million tons) in the Matagami Camp is the Mattagami Lake massive sulphide base metal deposit discovered in 1957. The deposit was found in follow-up to airborne geophysical surveys flown in 1956. A number of other massive sulphide deposits (12 in all) were found over a three township area, subsequent to the main discovery, including the Orchan, Norita, New Hosco, Bell Allard, Radiore A, Radiore B, Bell Channel and Garon Lake. At least five of the deposits became producing mines.

The Mattagami Lake mine has been in production since 1964. In the year to December 31, 1985, the Mattagami Lake mill treated 1,208,000 tons of ore to produce 9,453 tons of copper, 42,325 tons of zinc, 250,000 oz silver and 4,044 oz gold. Reserves at the main Mattagami Lake Mine at December, 1985 were indicated to be 1,805,000 tons grading 0.42% Cu, 4.86% Zn, 0.60 oz Ag/ton and 0.01 oz Au/ton. There is no production from most of the other smaller deposits, at this time. Some of the smaller deposits have been mined out (e.g. Bell Allard [production: 258,124 tons at 9,30% Zn, 1.15% Cu, 1.08 oz Ag/ton and 0.012 oz Au/ton). Noranda Mines has controlled most of the production from this camp.

A major new discovery was reported by Noranda in October, 1985 on the Isle-Dieu Matagami Mine property, 1.5 km west of the Mattagami shaft. The discovery hole (N. 85-2) gave 18 ft (1702-1820 ft) of 0.59% Cu, 26.36% Zn and 1.78 oz Ag/ton. Hole No. 85-3 gave 43.6 ft (1370-1413.6 ft) of 0.65% Cu, 27.51% Zn and 3.20 oz of Ag/ton and 14.6 ft (1583.4-1598 ft) of 0.93% Cu, 19.93% Zn and 1.03 oz Ag/ton.

In April (Northern Miner; April 21, 1986) Noranda announced a hole (86-29) which intersected 104.8 ft (1705.4-1810.2 ft) of 1.08% Cu, 31.94% Zn and 3.92 oz Ag/ton and 18.3 ft (1571.1-1589.4 ft) of 19.3% Zn and 3.07 oz Ag/ton. This hole underlines the fact that significant new discoveries can be made even within the heart of a major mining camp.

District geology is described by MacGeehan et al (1981).

> The Matagami mining district lies 150 km north of Noranda, Quebec on the north side of the Abitibi Greenstone belt in the Superior Province of the Canadian Shield. A series of twelve pyrite-pyrrhotite-sphalerite-chalcopyrite-bearing massive sulphide deposits occur clustered within a major Archean volcanic centre composed of a bimodal suite of basalts and rhyolites intruded by contemporaneous gabbro dykes and sills and underlain by the Bell River Igneous Complex, a high-level, subvolcanic layered gabbro-anorthosite pluton. This assemblage of volcanic rocks, stratiform sulphide deposits and contemporaneous intrusions was then metamorphosed to the greenschist facies and folded into a westward-plunging anticlinal structure. The Bell River Igneous Complex occupies the core of the anticline and is flanked by volcanic rocks on either limb. A series of granitic rocks were intruded at a later date. There is poor outcrop in much of the district, and the geology has mostly been established from drill-core correlation, geophysical interpretation and underground mapping in the mines.
>
> On the south limb of the anticline, the massive sulphide deposits, including the Bell Allard, Orchan and Mattagami Lake mines, are all located at or toward the base of the 'key tuffite', a thin semi-continuous mixed cherty tuffaceous unit traced for over 10 km on strike along a rhyolite-andesite contact. Sharpe (1968) divided this stratigraphy into the rhyolitic Watson Lake Group, underlying the 'key tuffite', and an overlying Wabassee Group, composed predominantly of basalt and andesite, but including several rhyolitic units, one of which overlie the 'key tuffite' at the Orchan Mine.

On the north limb of the anticline these stratigraphic subdivisions cannot be recognized, mainly because the 'key tuffite' is not present. However, the volcanic stratigraphy there includes seven basalt units, a pillowed feldspar porphyry (FP) and three rhyolite flows. Most of the sulphide deposits are associated with the Norita and Bell Channel rhyolites at the base of the exposed volcanic succession, but the Garon Lake deposit is developed above the stratigraphically higher Garon Lake rhyolite. Above this mineralized rhyolite-basalt sequence, and extending to the known top of the belt, is a thick section of mainly pillowed basalt, loosely termed the 'Wabasee Group' cut by numerous sills of similar composition. No ore deposits have been found in this sequence to date.

Petrographic studies and chemical analyses of the basalt-rhyolite sequence on the northern side of the camp show the volcanic rocks to be of tholeiitic affinity. The basalts are iron-rich, low-potassium tholeiites, and the rhyolites are quartz-rich (75% SiO_2), but oligoclase-normative, tholeiitic rocks termed dacite in some classification systems. Most of the volcanic rocks associated with mineralization were hyrdothermally altered during sub-seafloor geothermal activity. The basalts were spilitized, silicified and bleached to rocks of andesitic or dacitic appearance, and the rhyolites frequently chloritized. However, the primary nature of the rocks can be identified from textures and by mapping individual altered flow-units along strike into less altered domains.

(g) La Gauchetière Deposit - Quebec

The deposit was found in the early 1970's during follow-up to airborne geophysical surveys in the region west of Matagami by Phelps Dodge. The deposit is now owned by Noranda.

The deposit is indicated to be a stratiform, volcanogenic, massive sulphide zone in felsic volcanic rocks. Drill indicated reserves as of 1979 were 1,700,000 tons at 1.1% Cu, 4.9% Zn and 0.48 oz Ag/ton with minor gold. Production was planned for 1982 but has been postponed for some time.

5.3 Exploration Models

The foregoing descriptions illustrate the probable types of gold deposits which can be expected in the area and may serve as models to guide exploration:

(a) stratiform/stratabound deposits ± sulphides, quartz vein zones, graphite, oxide iron formation in both mafic volcanic environments (Detour mine) and felsic volcaniclastic-tuffaceous-sedimentary environments near volcanic contacts (Golden Pond).

(b) massive and stringer sulphide gold deposits without base metals (Agnico-Eagle mine) or with base metals (Selbaie mine and Estrades deposit) in a generally felsic volcanic-sedimentary environment.

The following models are also considered prospective in the area:

(c) Structurally-controlled, intrusive-associated, quartz stockwork types of deposit localized along the margins of or within intermediate to felsic plutons. Such deposits are well represented in the Val d'Or area to the southwest.

(d) Disseminated gold deposits associated with carbonated, pyritic mafic volcanics. Such deposits are important sources of gold ore elsewhere in the Abitibi, noteably, in the Timmins area (Owl Creek mine, Dome mine).

5.4 Property Geology

Previous airborne and ground geophysical surveys, diamond drilling and the present reverse circulation drill program indicate that the property is underlain by approximately east-west trending, steeply dipping interbedded/interlayered metasedimentary, and mafic to felsic metavolcanic and pyroclastic rocks (Map 1).

The majority of the metasedimentary rocks are generally classified as argillites (S4) and "felsic sediments" (S6). The latter designation may refer to felsic tuffaceous rocks or at least siliceous rocks of volcaniclastic derivation. These rocks are frequently commonly admixed with mafic to intermediate volcanics (V5) and their tuffaceous equivalents (V9).

Dacitic to rhyolitic flows (V4, V2) and equivalent tuffs (V9) are very fine grained, light grey green to pale green and grey green in colour and are strongly sericitic and sheared.

A graphitic horizon hosted by pyritic rhyolite (tuff?) is evident in the central east portion of the property (diamond-drill interpreted). The horizon forms a prominent EM conductor.

Graphite was noted with felsic volcanic rocks in several other holes on the property.

At least three north-south trending geophysically interpreted faults cross the property: one in the west and two in the central portions of the claim group.

As previously discussed in section 4.0, pyritic and graphitic metasediments (volcaniclastic rocks?) returned low gold values in a drill hole located in the central-east portion of the property (St. Mary's Explorations Ltd., 1959). Assays of 0.07 oz gold per ton over 1.4 ft and 0.01 oz gold per ton over 3.0 ft were reported.

Numerous other pyritic ± graphitic mafic to felsic volcanic, pyroclastic rocks and argillite were reported in other past drill holes.

Sericitization ± carbonatization is common in mafic intermediate volcanic and tuffaceous rocks.

Gabbroic, anorthositic and dioritic sills (36, 2D) are interpreted in the north, northwest and south, southeastern portions of the property.

5.5 Glacial Geology

Glacial landforms and striae in the area suggest that two major ice sheets of the latest or Wisconsin continental glaciation appear to have coalesced in the Matagami area. A younger or Keewatin ice flow from the northwest appears to have collided with a retreating, older or Laurentide ice sheet which had advanced from the north-northeast. The result of this coalescence is an interlobe moraine or "esker" passing to the west of the present property knwn as the "Matagami Esker". This north-trending feature is of regional proportions extending for some 100 km or more.

As ice receded from the area, the periglacial terrain tilted northward as a result of isostatic adjustment. North-flowing Arctic drainage was impeded by the receding ice mass and combined with southward flushing of melt waters to produce proglacial ponding. This ponding produced Lake Barlow and subsequent Lake Ojibway which inundated the region with depths in excess of 300 ft some 8100 years B.P. Following this, sedimentation in the proglacial lakes is represented by deep water varved silt and clays and shallower water fine sands.

Both of these ice sheets deposited variable amounts of lodgement till during continental overiding. It is clear in many areas that the older Laurentide tills have been extensively modified or destroyed by the adjoining Keewatin ice. Patches of older till are, however, well preserved in various bedrock depressions.

The presence of a number of even older tills has been alluded to by workers in the region although their origin and distribution remains uncertain.

6.0 EXPLORATION PROCEDURES

6.1 Horizontal Loop EM Method

The horizontal loop electromagnetic method is a generally practiced and widely accepted geophysical technique for detecting and delineating conductive targets.

The method employs two horizontal coils maintained at a fixed separation and operated at a variety of frequencies. The parameters measured are the in-phase and quadrature components of the secondary electromagnetic field, generally expressed as a percentage of non-anomalous background.

The measured parameters are normally displayed as in-phase and quadrature profiles. The results are readily interpretable in a quantitative fashion as to the location, geometry and quality of the causative source, enabling precise drill targeting. Bedrock conductors can generally be distinguished from overburden features, although poorly conductive bedrock features and narrow overburden sources may be similar. Good bedrock conductors typically reflect graphite or sulphide horizons, while poor bedrock conductors include faults and shear zones.

6.2 The Reverse Circulation Drilling Method

6.2.1 General

Overburden or reverse circulation drilling consists of drilling through the unconsolidated (Quaternary) materials overlying bedrock with dual-tube rods and a tricone bit using a water-air mixture as drill fluid. The resultant slurry is visually monitored, collected, sampled and then processed to obtain a concentrate of heavy minerals. This concentrate is then analysed optically and geochemically to detect ore or indicator particles and/or indicator elements.

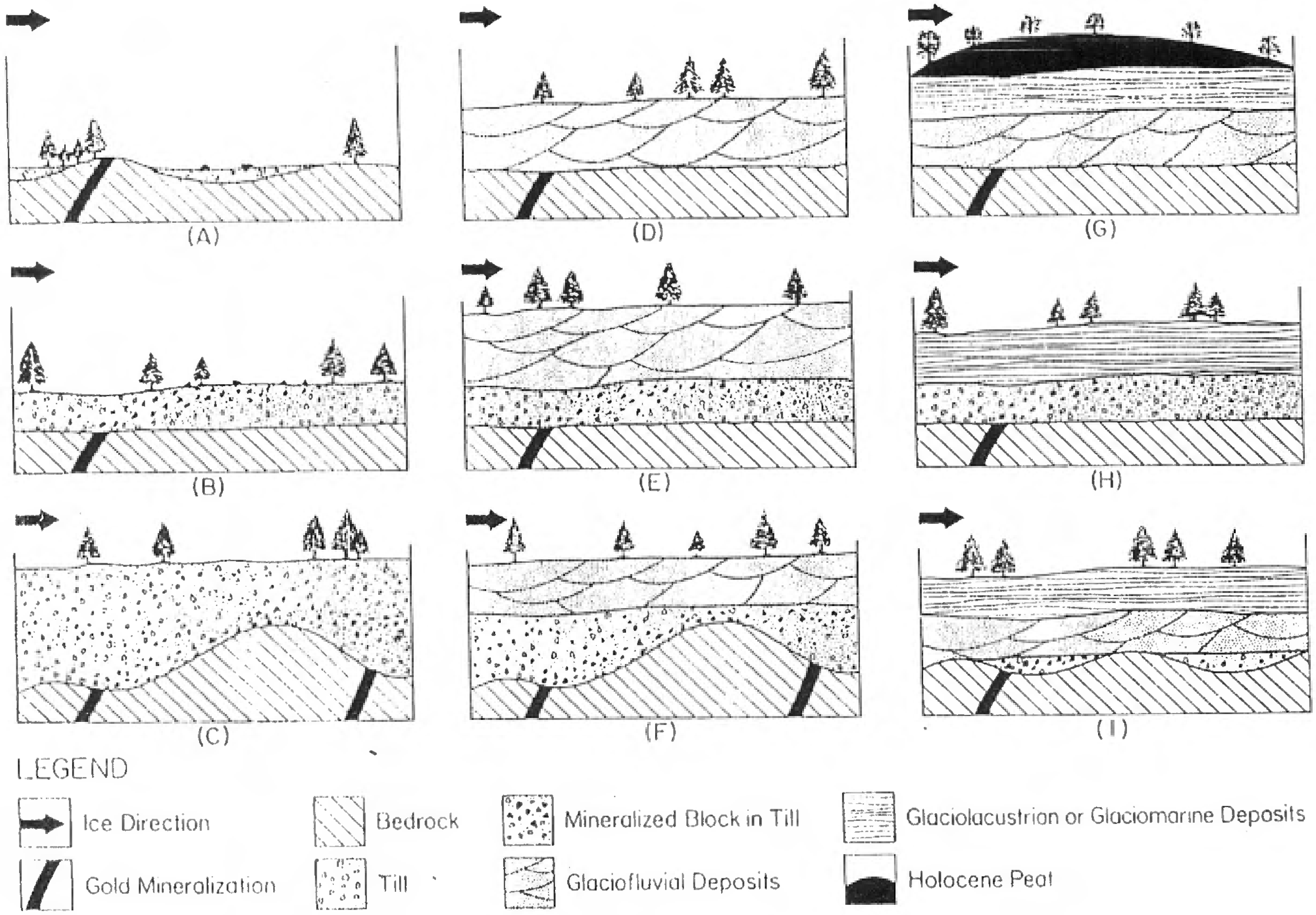

Figure 4: Conceptual model of the generation of mineralized trains in overburden material (after Fortesque, 1983).

The method is based on the principle that there are dispersion trains created in tills during glacial over-riding which can be detected and traced back, up-ice, to the source area (Figure 4). The use of heavy mineral concentrates greatly enhances anomalous metals concentrations making the method extremely sensitive to distant deposits.

One of the most important applications of the method is in the detailed follow-up to airborne and/or ground geophysical surveys.

6.2.2 Glacial Sediments and Dispersion Trains

Approximately 97% of Canada's land surface was glaciated during the Quaternary. Figures 4 and 5 summarize the types of glacial sediments and their associated land forms.

Lodgement till is the most favourable drift exploration medium because in general, the source of clasts in the till will be directly up-ice. In till, the concentration of ore clasts shows a sharp peak at or near the source followed up a rapid then gradual, i.e. approximately exponential, decline in the down-ice direction. The size, shape and continuity (and therefore detectability) of a dispersion train will depend on many factors. These include size and composition of source, bedrock topography, vigour of glacial quarrying and abrasion, etc. Boulders closest to source will be larger and more angular. Down-ice comminution leads to a decrease in average clast size and increase in sphericity.

There is a recognizable indicator train almost 10 miles long down-ice from the George Lake Zn deposit in northern Saskatchewan. In the Noranda area, anomalous Cu-Zn values have been recorded in till up to 1.5 km down-ice from the Horne deposit while geochemical anomalies in till are restricted to within 1,000 ft. of the nearby West Macdonald low grade Zn deposit. A dispersion train appears to extend for over 6 miles down-ice from the Kidd Creek Mine near Timmins based on a 1970-71 Geological Survey of Canada overburden drilling program. The above program also showed that the separation between anomalous lenses in till and bedrock increases down-ice from the Kam-Kotia deposit near Timmins. This is interpreted as representing relict shear planes in the glacier.

In gold exploration, dispersion trains seem to be most easily detectable at distances of 1 km or less from source. In some cases, down-ice dispersion may be very limited. At the Golden Pond deposit, for example, the recognizable gold train seems to be no more than 200 m long. Trains may also be very narrow, 200 m or less in some cases, and have a distinct pencil-like form, e.g. Dome Mine near Timmins. An example of the effect of bedrock topography on down-ice dispersion is to be seen at the Golden Hope Estrades deposit. Here, a bedrock ridge immediately down-ice from the deposit has completely blocked the formation of any significant dispersion fans.

When in close proximity to the source, anomalous values are concentrated in the basal part of the till sheet so that this area of the overburden column is of prime importance during sampling. Spectacular sulphide concentrations may occur down-ice from a sulphide deposit. In such cases, it is not necessary to await geochemical analyses. Additional overburden drilling can progress based directly on the visual (real-time) results.

The stratified varieties of drift, i.e. bedded gravels, sands, silts and clays, are a less favourable sampling medium because the fluvial re-working inherent in their formation

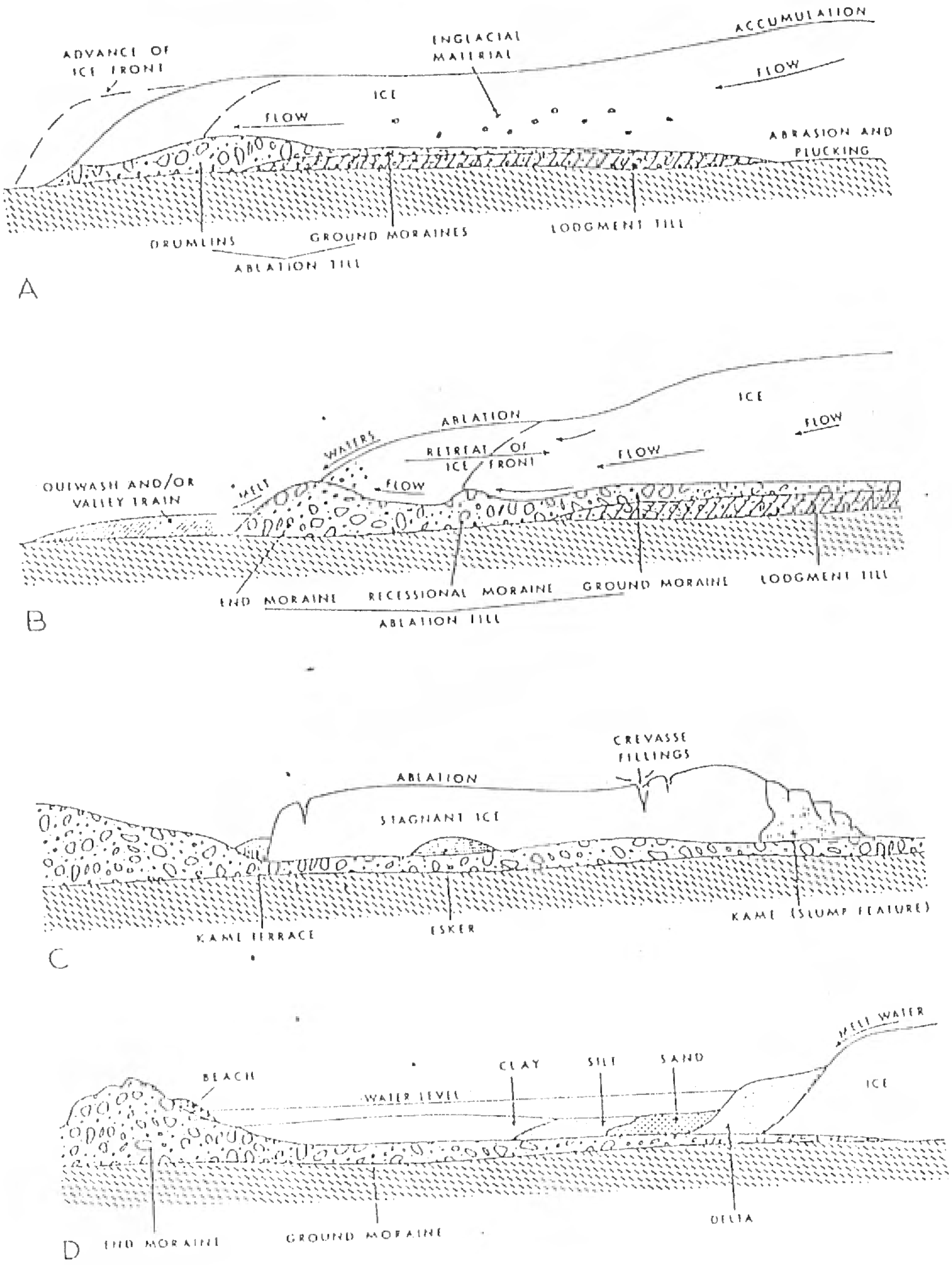

Figure 5: Glacial sediment and landform deposition relative to ice front.

may make it difficult or impossible to identify the bedrock source area. Placer-like concentrations, in which normal background values are upgraded, may develop during the meltwater re-working of glacial debris. This can produce spurious anomalies in an overburden drilling program. This effect, however, has been used to advantage in esker sampling.

Varved clays representing rock flour washed out of glacial drift and deposited in proglacial lakes are (to date) virtually useless in minerals exploration and are not usually sampled during the drilling process. Analyses on varved clays over the Kidd Creek and South Bay polymetallic massive sulphide orebodies, for example, show no signs of the underlying mineralization.

During drilling, the clays serve the useful purpose of sealing the hole which results in good sample return. In addition, sulphide minerals survive well in the reducing environment that exists beneath the clay cap; oxidation and leaching of sulphides can be a problem in some exposed tills.

6.2.3 Drilling and Sampling

The reverse ciculation method uses an approximately 3 inch O.D. dual-tube drill pipe. The drill fluid consisting of water and air is pumped down between the inner and outer tubes, past the drill bit and back up the inner tube with the cuttings which are then collected and sampled. The return water overflows the sampling tub and is collected in the underlying tank. This water may then be re-used as drilling fluid or conversely water may be pumped or hauled entirely from some external source.

The drill and accessory equipment such as pumps and compressors weighs about 20 tons and is mounted either on the back of a large tracked carrier such as a Nodwell or on skids so that it can be towed from drill site to drill site by a medium-sized tractor. A permanent or removable drillshack erected around the drill protects drillers and geologists from the elements and allows for year-round operation (24 hours per day if desired).

Figure 6 illustrates the drilling-sampling procedure.

Three drillers are normally required to carry out the drilling, to haul water if necessary, to make roads, to effect repairs, etc. A geologist and an assistant are also present. The geologist logs the overburden section by "feeling" the return and monitoring the material collecting in a relatively coarse sieve (usually about 10 mesh). The helper bags samples and generally assists the geologist. Logging is generally done in imperial units.

Although it will emerge in the geochemical results in any event, the visual monitoring is very important since the recognition of an ore clast during the drilling allows the geologist to modify/extend the program while the drill is in the immediate area or to act immediately on significant results.

The return is normally sampled at 5 ft intervals or at major sedimentary boundaries. The +10 mesh material is discarded after inspection during the drilling as is the return from most boulders. A five foot run normally yields about 15 lbs (6.8 kg) of -10 mesh material. An overburden hole is usually continued 2-5 ft into bedrock to ensure that the bit is not in a boulder. Obviously, if a very large boulder is encountered in a hole, the rsulting interpretations will prove to

OVERBURDEN DRILLING - SCHEMATIC

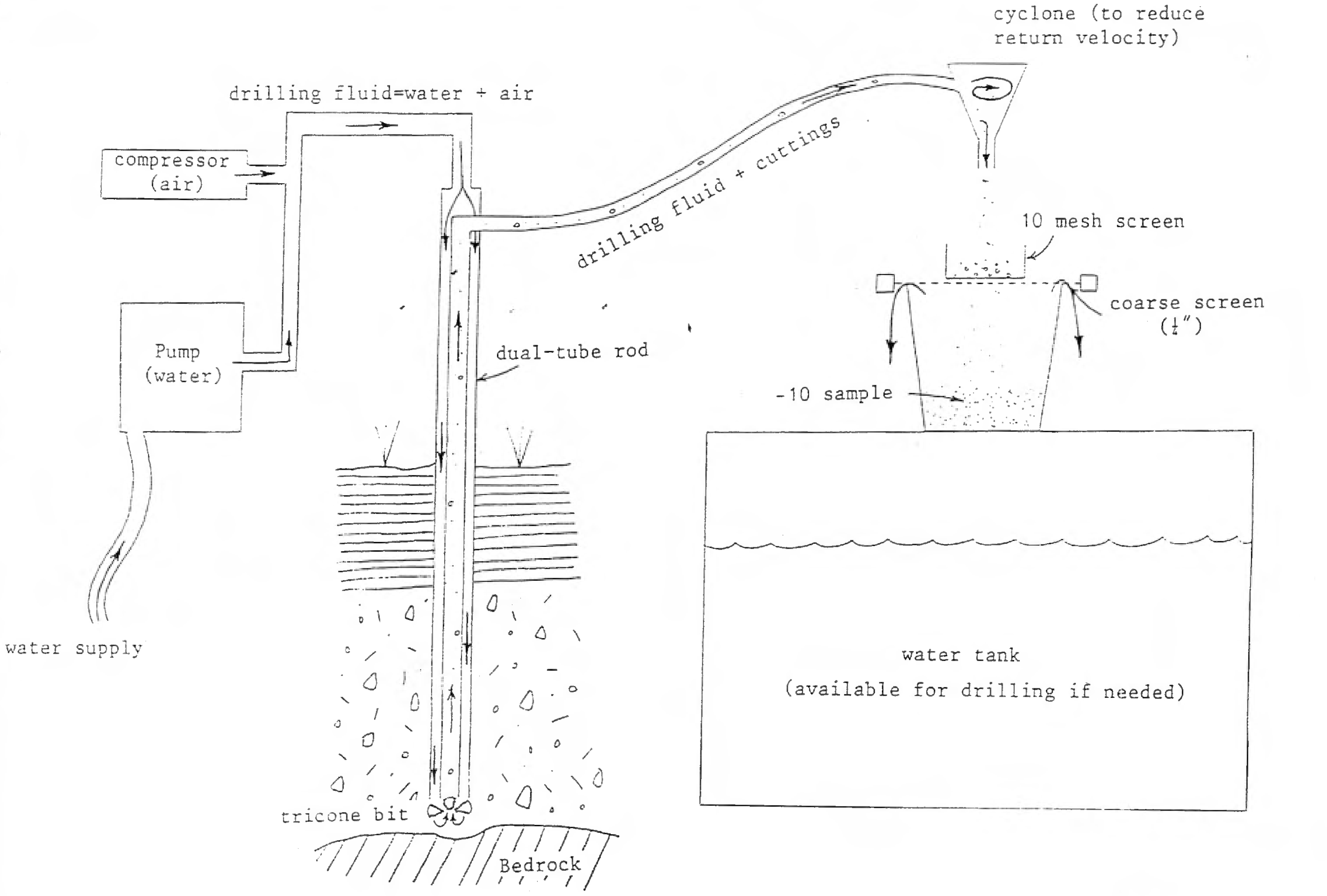

Figure 6

be incorrect. The progress of a tricone bit into bedrock (or boulders) is generally at a slow rate (average 5 feet per hour) and therefore it is not usually cost effective to proceed further into suspected bedrock unless previous knowledge or unusual geological circumstances dictate.

6.2.4 Sample Processing and the Heavy Minerals Concentrate

The following describes the typical processing methods applied to gold exploration as used by Overburden Drilling Management Ltd. in this program. Other means of sample treatment exist, but the adopted procedures are regarded as effective in obtaining significant results.

At the processing laboratory in Ottawa, the field samples are first wet screened at 10 (Tyler) mesh (No. 12 Canada or U.S. Standard). The -10 mesh material is then passed across a Deister shaking table to produce a heavy minerals preconcentrate. Any grains of native gold present in the samples will be seen on the table and be recorded by the laboratory technician during this operation. Samples containing gold grains are subjected to a careful panning operation in which the gold grains are isolated for microscopic inspection, measurement and micro-photography if desired.

Overburden Drilling Management Ltd. generally classify gold grains as being "abraded", "irregular" or "delicate". These shapes are felt to be generally indicative of transport distance with delicate grains being closest to source, perhaps a few tens of meters, with heavily abraded grains having travelled much longer distances on the order of a kilometer or more. This however does not address the possibilities and problems of secondary or recrystallized gold (Mann, 1984, Webster and Mann, 1984).

TABLE 2

LIST OF MINERALS WITH SPECIFIC GRAVITIES >3.3

Native Elements

Arsenic
Copper
*Diamond
*Gold
Iron
Mercury
*Platinum
Silver
Tellurium

Sulphides, Arsenides, Tellurides, Sulphosalts

All minerals have S.G.> 3.3. Common examples include:

*Arsenopyrite
Bornite
Calaverite
*Chalcopyrite
*Galena
*Molybdenite
Pyrargyrite
*Pyrite
*Pyrrhotite
*Sphalerite
Stibnite
Tetrahedrite

Oxides

Anatase
Bixbyite
Brookite
*Cassiterite
Chrysoberyl
*Columbite
*Corundum
Cuprite
(Diaspore)
Goethite
*Hematite
*Ilmenite
Lepidocrocite
(Limonite)
Manganite
Massicot
Microlite
Periclase
Perovskite
Psilomelane
Pyrolusite
*Rutile
*Spinels
*Tantalite
Tungstite
*Uraninite
Zincite

Silicates

Allanite
*(Amphiboles)
Astrophyllite
(Axinite)
(Bustamite)
(Celsian)
Chloritoid
Clinohumite
*(Clinopyroxenes)
(Clinozoisite)
Enigmatite
*(Epidotes)
*Garnets
(Helvites)
*Kyanite
Lavenite
*(Olivines)
*(Orthopyroxenes)
Pyroxmangite
Rhodonite
Sapphirine
*Sphene
*Staurolite
*Topaz
Vesuvianite
Willemite
*Zircon

Others

Anglesite
Azurite
*Barite
Caledonite
Carnotite
Celestite
Cerrusite
Crocoite
Hydrozincite
Malachite
*Monazite
Phosgenite
Powellite
Pyromorphite
Rhodocrosite
*Scheelite
Scorzalite
*Siderite
Smithsonite
Strontianite
Vanadinite
Witherite
*Wolframite
Wulfenite

Species in parentheses may have specific gravities less than 3.3 depending on variable elemental substitutions.

Most commonly expected species indicated with asterisks.

The table preconcentrates are passed through a heavy media (methylene iodide; S.G. = 3.3) to effect the true heavy minerals separation. This will contain mainly the common sulphides, free gold, magnetite, garnet and epidote (a more complete list of minerals is presented in Table 2). The magnetic fraction is then removed. A 3/4 split is sent for geochemical analysis with a ¼ split retained for reference purposes.

Individual grains can be further subjected to Scanning Electron Microscope or microprobe work to determine the presence of trace elements (which may "fingerprint" a source area), and to examine morphological features such as the folding of grains, re-crystallization, etc. The value of the microscope was amply demonstrated in one instance around Timmins where some highly anomalous Cu values were shown by microscopic examination to be caused by copper filings derived from O-rings on a water pump and not by copper-bearing minerals. This sort of contamination has now been virtually eliminated in overburden drilling work. Heavy mineral concentrates can also be viewed under ultraviolet light or be examined by a scintillometer in the case of uranium exploration.

Occasionally, the "lights" are of interest as in exploration for asbestos or the common lithium-beryllium minerals. Appropriate heavy media can be used to isolate specific gravity ranges of interest.

Concentration ratios for the "heavies" vary between 100:1 to 200:1. This concentration greatly enhances anomalous metal values making the method extremely sensitive with respect to achieving detection limits and increasing peak to background ratios. For example, if Cu background in till was 100 ppm, the addition of a few grains of chalcopyrite constituting another 100 ppm Cu to the sample would only double the standard -80 mesh anomaly but would produce a huge heavy minerals anomaly of 10,000 to 20,000 ppm because of the concentration ratio.

Conversely, one can work backwards from an analytical value derived from a heavy mineral concentrate, to calculate an "equivalent" metal value. Based on the concentration factor (which can be expressed as ug/g of heavy mineral concentrate) the amount of metal in the concentrate can be redistributed back into the original sample to gain an estimate of the contribution to the overall metal content of the original sample made by the heavy mineral concentrate (Equation 1). The degree to which this estimate reflects the original total metal content will be dependent on the sample mineralogy, size fractionation of the mineralogy and the efficiency of the concentrating method.

1 $$\frac{\text{Analysis ug/g x Proportion heavy mineral ug/g}}{1{,}000} = \text{Equivalent metal value (ng/g)}$$

6.2.5 Applications

There are applications for overburden drilling on both the regional and detailed scales. Regional work involves wider hole spacings, up to 1 km or more apart. Such large step-outs are allowed by the high sensitivity of the method. The usual purpose of regional work is to intersect an indicator train which can then be traced back up-ice where the probable source area can be explored by detailed overburden drilling, geophysics and diamond drilling.

A very important use of the method is in follow-up to airborne and/or ground geophysical surveys to assist diamond drilling in anomaly evaluation. In this way all or most of the anomalies located during a survey can be evaluated, not only those with the highest geophysical rating. The overburden drilling approach is also very useful in evaluating long, formational anomalies.

A standard approach in the case of EM conductors is to drill a string of holes immediately down-ice from the conductive zone with a hole spacing of 100 to 300 m. This results in a reading on the entire conductive zone. This is particularly desirable since the actual economic deposit may not be part of the main conductor or may be a less conductive part off or beside same. In addition, it is common practice to drill an overburden hole(s) directly into the conductor. There have been instances of direct ore intersections being made during overburden drilling (e.g., the Asarco gold deposit, Timmins, Ontario).

Another detailed application is to further explore a property where a favourable contact or small deposit is known from previous work and the bedrock information gained from overburden drilling is also very important for lithologic correlation and rock geochemistry.

6.3 Lithogeochemistry

Lithogeochemical techniques have been developed over the last decade to enable chemical characterization of bedrock as to normative and anomalous rock-forming and trace elements. Properly used, the technique helps identify favourable geologic settings from subtle indicator aspects.

6.3.1 Rock Classification

Chemical classifications of the rocks are herein performed by four methods: the Jensen Cation Plot (Jensen, 1976; Grunsky, 1981), the method of Irvine and Baragar (1971) and by their silica and titania contents. The Jensen scheme is based strictly on the chemistry of the (subalkaline) volcanic rocks while the Irvine and Baragar method is based in part on the normative mineral percentages calculated from the major rock forming components and on an AEM ternary plot. Classification based on the silica and titania contents of the rocks, though not nearly as complex, are less sensitive to alteration processes. Since all these classifications schemes are designed to be used exclusively on volcanic rocks, all terminology contained therein for the classification of non-extrusive rock types is in terms of chemo-volcanic equivalents.

6.3.2 Volcanogenic Evaluations

The geochemical analysis of the major oxides (SiO_2, Al_2O_3 (total Fe), CaO, MgO, Na_2O, K_2O, TiO_2, MnO, CO_2) may be used to help characterize rock types or to aid in identifying unusual chemical features which may be present due to some mineralizing process. At MPH Consulting Limited, microcomputer systems are used to evaluate whole rock geochemical data for the purposes of rock classification (as previously discussed) and the detection of the presence of geochemical conditions that may be the result of volcanogenic mineralization processes (Siriunas, 1984). The intent of the procedure is not to replace geological or mineralogical methods but rather to be used as an additional tool on which to base exploration decisions.

Alteration components that might effect the classifications of rock type or be closely related to volcanogenic mineralization are examined more specifically by the computer methodology employed. The program examines a number of residual components (MgO, K_2O, CaO, Na_2O, Fe_2O_3, SiO_2) whose deviation from expected ranges may be indicative of hydrothermal alteration. Combinations of various oxide components are also examined in a number of ratios and discriminant functions. For the purposes of this report, only two of these factors are presented total alkali alteration score (TAAS) and the Marcotte-David Score (DF1). The

TAAS is derived from the ratio of those oxides expected to be enriched due to alteration with respect to the total alkali content (i.e. $(MgO + K_2O)/(CaO + Na_2O + K_2O + MgO) \times 100$, after Hashimoto, 1977). As MgO and K_2O contents of a volcanic rock increases with respect to the total alkali content, the TAAS approaches 100. Average values for subalkaline mafic to felsic volcanics lie between 35 and 50. Subalkaline komatites and alkaline volcanics typically exhibit TAAS's greater than 70 due to their inherently high MgO and K_2O contents, respectively. Highly altered felsic volcanic rocks will have TAAS values in excess of 80 or 90.

Discriminant analysis is a statistical technique that can be used to help "discriminate" between different populations (i.e. background and anomalous) in a larger population of multivariate (i.e. multielement) data. Based on known data, an equation with varying proportions of the component elements is generated. When the equation is solved with the various data from a sample point, the magnitude of the scalar product sum is used to classify that particular sample as "background" or "anomalous". As with most populations, there is some overlap, but the equation is selected as to minimize the overlap between the two populations. The Marcotte-David Score (Marcotte and David, 1981) is based on the linear equation:

$$1.91-0.57*Na_2O+0.30*MgO - 0.26*CaO + \\ 1.44*TiO_2 - 0.18*Fe_2O_3 \qquad (2)$$

which was derived from 574 felsic (greater than or equal to 60% SiO_2) volcanic rock samples representing 22 deposits in the Abitibi region. Scores greater than 1.5 are interpreted to occur (with 80% probability) in a mineralized environment while scores between 0.5 and 1.5 include the overlap in background and anomalous populations. The test area used for their study was the Normetal deposit and environs.

MacGeehan and Hodgson (1981) have reported anomalies in the peraluminosity index ($Al_2O_3/(CaO + K_2O + Na_2O) \times 100$) of volcanic rocks surrounding the producing mines in the Red Lake area. Relative enrichment in alumina is also noted to be associated with gold deposits in felsic environments at the Bousquet Mine (Valliant et al., 1983) and possibly at the deposits in the Helmo area (Patterson, 1984).

6.3.3 Trace Elements

Trace element data may be examined by a variety of methods. Values for Au, Ag, As, Cu and Zn in bedrock have been normalized by their Clarke values and is the method most recently proposed for use by Fortescue (1985). Clarke values (i.e. average crustal abundances) for these elements were as those reported by Rickwood (1983):

Au	0.004	ppm
Ag	0.07	ppm
As	2	ppm
Cu	60	ppm
Zn	70	ppm

Dividing the observed concentration in a sample by its corresponding Clarke value obtains the "Clarke of Concentration" or Clarke index (K) for that sample. Populations can then be partitioned into groupings or classes based on their observed Clarke indexes.

7.0 EXPLORATION PROGRAM

7.1 Geophysical Surveys

An initial program of linecutting and MaxMin II EM surveying was carried out by MPH personnel in early February of 1986. The lines were located at wide spacings to provide selected coverage of a number of airborne EM (INPUT) conductors which extend across the property.

The MaxMin results were then integrated with previous ground EM surveys by Phelps Dodge Corp., Noranda Exploration and Selco Exploration to produce a detailed plan of ground EM conductors on the property which would serve as a basis for the reverse circulation drilling.

A total of 14 km of line was cut and surveyed with a 150 m coil separation. Several lines were re-surveyed in detail with a 100 m coil spacing. Readings were taken at 25 m station intervals, measuring in-phase and quadrature values of the secondary electromagnetic field at 444 and 1777 Hz.

The MaxMin survey was carried out by an MPH geophysical crew consisting of:

Martin Kratochvil, B.Sc., Geophysicist
Terry McGloin, Technician

Data acquisition was completed during the period February 5 to 15, 1986.

7.2 Reverse Circulation Drilling Operations

Sixty-five reverse circulation drill holes totalling approximately 6,285 ft (1,916 m) were completed in the period from January 25 to February 17, 1986. Holes were normally spotted at 200-300 m intervals on fences approximately 100 m down-ice from the EM conductors established by the MaxMin survey. Several holes were sited to penetrate directly into EM conductive zones.

The drill contractor was Heath and Sherwood Ltd. of Kirkland Lake, Ontario who supplied an Acker dual tube reverse circulation drill mounted on an FN 60 Nodwell tracked vehicle along with a B15 tracked vehicle carrying a 1,000 gallon water tank. The drill crew consisted of a drill operator or "runner", a runner's helper and a water hauler to provide water for the drilling operations.

The following MPH personnel were involved with the reverse circulation drilling phase of the project.

Geochemical Consultant	John M. Siriunas, P.Eng.
Geologist	Paul Rollinson, B.Sc. (Hon)
Sampler	Ronald Bouger

Overburden samples collected during the drilling were sent to the laboratory of Overburden Drilling Management Ltd. in Ottawa for heavy minerals processing. Three quarter splits of resulting heavy mineral concentrates were then sent to Bondar Clegg and Co. Ltd. for Cu, Zn, Au, Ag, As analyses. The remaining one quarter split was retained for microscopic examination and as a permanent record. All +10 mesh bedrock chip samples were also sent to Bondar Clegg for Cu, Zn, Au, Ag, As analyses with a vial of +10 chips sent to MPH in Toronto for examination and classification. Selected bedrock samples were also analyzed for major and minor oxides including LOI (i.e. "classical whole rock analysis").

Average overburden depth encountered was 96 ft (29.3 m). Nineteen tricone bits were used for an average of 331 ft per bit indicating good drilling conditions. Two types of bits were used; it may be of interest to note that bits manufactured by "Champion Ltd." averaged 303 ft per bit while those manufactured by "Smith & Gruner Ltd." averaged 341 ft per bit. Table 3 presents a more detailed breakdown of drilling statistics.

TABLE 3

DRILLING STATISTICS

Bits Consumed (Group 5)

	Bit Number	Footage (ft)	Number of Holes
1.	J000346	410	5.0
2.	I000310	369.5	3.0
3.	CB-67746	403	3.0
4.	CB-67743	481	4.0
5.	CB-67742	310	3.0
6.	CB-67744	492	4.0
7.	CB-67745	489	5.5
8.	CB-67747	150	1.0
9.	CB-67752	254	2.0
10.	CB-67749	905	8.0
11.	CB-67750	224	2.5
12.	CB-67751	197	3.0
13.	CB-67752	197	3.0
14.	CB-67753	217	2.0
15.	L000439	290	2.0
16.	L000440	100	0.5
17.	L000441	346	3.5
18.	CB-67778	206	4.0
19.	CB-67779	244.5	6.0
	19	6,285	65.0

Average depth: 96'
Average footage/bit: 331'

Note I, J, L series - Champion bits - average footage $= \frac{1515.5}{5}$

$= 303'$

Note CB series "Smith Gruner" - average footage $= \frac{4769.5}{15}$

$= 341'$

8.0 GEOPHYSICAL RESULTS

The MaxMin HLEM traverses carried out at selected strategic intervals successfully detected and re-confirmed certain Input and horizontal loop EM features partially defined in previous surveys.

The primary survey coverage with a 150 meter coil separation and frequencies of 444 and 1777 Hz disclosed nine significant conductive zones designated A through J.

In addition, a number of probable overburden responses were detected. These are not of direct exploration interest as targets, but likely indicate overburden troughs where lodgement till is locally thicker.

Given the wide line spacing between individual MaxMin traverses, the correlation of anomalies from line-to-line has been guided by the character and continuity of the Input data, and the previous more complete HLEM surveys.

The resulting inferred conductor continuity appears reasonably assured, although the conductive features C' and E' have been so designated as to indicate that their correlation with zones C and E, respectively, is uncertain.

The individual analyzed responses exhibit depths generally in the range of 15 to 40 meters, as seen in Map 2. The general attitude of the conductors is 90°, although several show steep dips either to the north as in conductor B on line 15+00E or to the south as in conductor on line 20+00E.

In certain instances, particularly where the in-phase to quadrature ratio is poor, the derived conductor depths are viewed as more uncertain than normal.

The detailed coverage with the 100 meter coil separation and frequencies of 444 and 1777 Hz has substantially re-confirmed the conductors indicated with the larger coil separation, and provided more diagnostic characterization.

Of the various conductive zones indicated by the MaxMin coverage, seven zones (A, B, C, D, E, F and J) are firmly considered to be probable to definite bedrock conductors. Zone H which is partially indicated at the northern end of line 37+50E and zone G, which has a very low conductivity-thickness, are considered possible bedrock sources but could be caused by overburden.

The anomaly identified as conductor D on line 24+00E near 2+75S remains of uncertain provenance. Its general form on this line is such as to suggest conductive overburden. However, the conductor identified as D on line 32+00E near 2+00S is a strong, definite bedrock conductor.

Most of the conductors established on the ground can be correlated with reasonable confidence with probable to definite Input conductors, detected in the 1981 survey by the MERQ.

One noteable exception to the above statement is the strong, definite conductor D on line 32+00E where there is no evident Input anomaly correlating with the ground conductor. The lack of an Input anomaly may have arisen because flight lines diverged around a relatively short strike length feature.

Conductor J detected on line 40+50E near 6+00N constitutes a similar exception. Because the present survey has established the conductor only on this one line, its strike extent and continuity are somewhat uncertain. If a short weak conductor, it could readily have been missed by the Input coverage. DDH PD-121-31 may have tested a southeastern extension of conductor J.

In previous exploration programs principally oriented towards base metals, conductor A was tested by two DDHs, which intersected a graphitic horizon with pyrite; conductor B was tested by two and possibly three DDHs, which intersected a mixed pyrite-grahitic horizon; conductor C by one DDH (graphite with pyrite) at its western end; conductor D by one DDH (PD-121-30) which intersected graphite and pyrite (although the drill hole location relative to the present grid is somewhat uncertain); conductor E by two DDHs which intersected a pyritic horizon accompanied by minor gold; conductor F by one DDH which intersected pyrite.

Thus the MaxMin HLEM coverage on selected lines was substantially successful in defining conductive bedrock targets with sufficient precision as to location and continuity that they could be effectively targeted as part of the reverse circulation drilling program.

The significant conductors are also shown in summary fashion with the compiled geochemical results and previous exploration in Map 9.

9.0 REVERSE CIRCULATION DRILLING RESULTS

9.1 Overburden Geology

Overburden drill hole locations and profiles are presented on Map 5 at the scale of 1:10,000. Vertical exaggeration of the profiles is 10 times. Results of the drilling are summarized in Table 4 and detailed logs are presented in Appendix A.

Average thickness of overburden was found to be 88.8 ft (27.1 m) with a maximum depth to bedrock of 186 ft (56.7 m) in hole 27. Holes 11, 17, 25, 33, 39 and 44 did not reach bedrock because of drilling problems; of these holes 11 and 17 were successfully redrilled at nearby locations (holes 11A and 17A).

The majority of holes on Group 5 encountered a relatively simple glacial stratigraphy that appears to be reflective primarily of an ice advance from the northwest (the Keewatin advance). A significant number of holes, however, also contained tills lying stratigraphically below the Keewatin deposits. These are interpreted to have been deposited by the earlier Laurentide advance from the north-northeast. The glacial stratigraphy of the Group 5 area may be described as follows:

The youngest deposits in the area consist of recent humic and swamp deposits. Beneath this, a thick lacustrine clay to silty sand unit is encountered in most of the Group 5 area. The clay is dark to light grey, well floculated and relatively homogenous. The clay tends to grade downwards into a fine silty sand which contains varying amounts of subrounded pebbles.

The thick clay unit blankets the entire Group 5 area but the silty sand horizon is sometimes absent. The absence of the silty sand unit normally coincides with the presence of a bedrock high over which the thick clay sequence has been draped. Although of little use as a sampling medium, the clay unit does provide a good capping which allows for excellent return of sample material during the drilling process.

TABLE 4

REVERSE CIRCULATION DRILL RESULTS

OVERBURDEN AND BEDROCK GEOLOGY

Hole	Thickness (feet)					Depth to Bedrock (feet)	Depth Total (feet)	Bedrock
	Peat	Clay	Silt/ Sand	K-Till[1]	L-Till[2]			
1	2	62				64	68	Maf-Int Volc.
2	3	71		5		79	83	Int-Fels Volc.
3	3	61		6		70	75	Maf Volc.
4	3	57		28		88	90	Int Volc.
5	3	78		3	7	91	94	Int Volc.
6	3	111		5		119	124	Maf Volc.
7	3	87		12		102	105	Maf Volc.
8	3	103		4	28	138	140	Int Volc.
9	3	97		6	39	145	150	Int Volc.
10	3	92	36	5	18	154	160	Maf Volc/Argillite
11	5	70		18			93	ABDND
11A	5	60	11	3		79	85	Maf-Int Volc.
12	5	60	50	16		131	135	Maf Volc.
13	5	50	11	3		69	79	Fels Volc or Intr
14	3	70	13	4		90	96	Maf Volc/Argillite?
15	3	77	16	9		105	110	Fels Tuff
16	5	75	15	9	12	116	120	Argillite
17	5	80	55	26			166	ABDND
17A	5	80	53	23		161	165	Maf Volc.
18	3	72	3			86	89	Fels Volc.
18A	5	60	61	5		131	135	Fels Volc.
19	3	47	44	6		100	103	Maf Volc.
20	5	35	16	8	10	74	77	Argillite
21	5	28	30	8		71	75	Maf-Int Volc.
22	5	35	24	35		89	93	Int Volc.
23	5	49		10		64	70	Maf Tuff
24	5	45	16	3		69	74	Maf-Int Volc.
25	5	35	55	55			150	ABDND
26	5	46		8		59	63	Maf-Int Volc.
27	12	58	45	40		186	191	Maf-Int Volc.
28	5	42	43			90	94	Int-Fels Tuff
28A	5	42	57	2		106	107	Int-Fels Tuff
29	5	63	17	1		86	95	Int-Fels Tuff
30	5	42	19	10		76	79	Int-Fels Volc.
31	5	42	29	1		77	80	Int-Fels Volc.
32	5	34	20	1		60	63	Maf-Int Tuff
33	5	43	87				135	ABDND

1 - till associated with Keewatin advance from the northwest
2 - till associated with Laurentide advance from the northeast

TABLE 4 (Continued)

Hole	Thickness (feet)					Depth to Bedrock (feet)	Depth Total (feet)	Bedrock
	Peat	Clay	Silt/ Sand	K-Till[1]	L-Till[2]			
34	5	45	30	17		97	101	Int-Fels Volc.
35	5	47	47	48		147	151	Fels Volc.
36	3	17		88		108	110	Int-Fels Tuff
37/ 37A	5	6	22	59	10	102	105	Int-Fels Tuff
38	3	33	22	2	10	70	74	Maf-Int Volc.
39	3	43	21	11			88	ABDND
40	5	10		9		24	27	Maf Intr
41	3	31		2		36	38	Maf-Int Volc.
42	3	90	7	5	21	126	132	Maf Volc/Argillite
43	3	60		16	23	102	105	Maf-Int Volc.
44	3	63	9	5	32		112	ABDND
45	3	56	15	12	60	146	150	Maf-Int Tuff
46	5	33	7	21	57	135	140	Fels Volc
47	3	51	21	12	22	109	115	Maf Volc.
48	3	38	3	76	30	150	155	Argillite
49	3	22	13	22	26	86	90	Int Volc.
50	15	18		41	8	82	86	Grph Argillite
51	12	22		30	26	90	94	Int-Fels Volc.
52	5	20	1	2		28	32	Grph Argillite
53	3	16		6	9	34	40	Maf-Int Volc.
54	3	24	3	6		36	40	Maf Volc.
55	2	13		1		16	18	Fels Volc.
56	3	32		9		44	49	Int Volc.
57	3	43	1	1		48	51	Maf-Int Volc.
58	2	20				22	25	Int-Fels Volc.
59	4	33		8		45	52	Int-Fels Volc.
60	6	34	3	1		44	49	Maf Volc.

1 - till associated with Keewatin advance from the northwest
2 - till associated with Laurentide advance from the northeast

A sandy, pebbly to gravelly till unit is encountered beneath the initial clay/sand unit. This till is variable in thickness, overall composition, size and shape of clasts. It contains predominantly mafic to intermediate volcanic pebbles and cobbles with varying amounts of fine sand and minor granitic clasts.

The clasts range from subangular to subrounded in shape. Isolated lenses of boulders and cobbles are also common to this unit.

This till sequence appears to represent mainly ablation material melted out of wasting Keewatin ice, judging by the composition of the clasts. It seems likely that a significant part of the detritus was derived locally from bedrock to the northwest.

A number of holes contained abundant pyrite mineralization within this pebbly to gravelly till unit. Pyrite generally occurs in one of three ways: either as discrete, rounded, sedimentary-derived nodules, as fine disseminations in graphite or as grains in intermediate to mafic volcanics. Holes 17A, 18, 19, 26, 30, 36, 41, 42 and 51 exhibit significant pyrite mineralization in the basal, gravelly till overburden. It is felt that the source area of this mineralization is in close proximity to these holes due to size and composition of fragments and presence of nearby EM conductors. Holes 17A, 18, 19 are directly down-ice from a strong EM conductor (C) and show possible evidence of this feature with the number of pyritic-graphitic boulders encountered in drilling.

Beneath the gravelly Keewatin till, either bedrock or a unit of gritty, well-indurated clay till is encountered. The gritty clay unit is thought to represent a lodgement till from the earlier Laurentide ice advance from the north-northeast. This till is found in a significant amount of holes and generally seems to be present in areas of deeper overburden as might be expected. Holes 04, 05, 08, 09, 10, 16, 20, 37A, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53 all show a well-developed gritty clay unit below the sandy pebbly gravel till. This lower clay till generally contains 60-90% well-indurated gritty clay. Varying but generally minor amounts of pebbles and cobble fragments are mainly volcanic rocks of mafic to intermediate composition. Minor isolated boulders of varying composition and size are also randomly dispersed through this unit.

In general, the gritty clay till rests directly on bedrock but, on occasion, it is underlain by a coarse, angular, gravelly lodgement till. This latter till was found in holes 04, 05, 08, 09, 10, 45 and 46 and usually contains 80-90% mafic to intermediate volcanic clasts with varying amounts of fine sand.

This till appears to be very locally derived and as such should represent an excellent sampling medium. It is believed to also be related to the Laurentide advance although it may, in fact, represent some earlier till whose provenance is poorly understood.

9.2 Till Geochemistry

A total of 205 samples of overburden and bedrock was submitted to Overburden Drilling Management of Ottawa, Ontario for heavy mineral processing. Of these samples, 185 were samples of till, 13 were of bedrock and seven represented other types of overburden material.

A total of 31 grains of visible gold was detected in 17 holes during the tabling and subsequent panning process. Twenty-four of these are described as abraded, three as irregular and four as delicate (Table 5). The laboratory grain count reports showing grain size are presented in Appendix B.

The largest grain measured 350 x 350 microns and was found in hole 48. Holes 12 and 48 had the greatest amount of visible gold with 3 abraded grains in each hole. As will be discussed further in the following sections, not all mineral grains (e.g. gold) may be identified during the heavy mineral processing (see Section 9.5).

The samples of heavy mineral concentrate were subsequently submitted to Bondar-Clegg and Company Ltd. for geochemical analysis for Au, Ag, As, Cu and Zn. Any samples containing obvious visible gold were analyzed by the pulp and metallics method whereby the coarser fraction of the sample (+150 mesh), which presumably contains the gold grains, was analyzed separately from the fine fraction (-150 mesh) of that sample. The results are then combined in a weighted average for the sample. Au was analyzed for fire assay pre-concentration followed by aqua regia dissolution and atomic absorption analysis; Ag, Cu and Zn were analyzed by atomic absorption analysis after a hydrochloric acid - nitric acid digestion and As was analyzed by a colourimetric determination after a nitric acid - perchloric acid digestion. Certificates of analysis are presented in Appendix C.

Weights of heavy mineral concentrate have been converted to ug/g (ppm) of original sample material (i.e. table feed x 0.75 (void factor)). "Equivalent" values (i.e. "eAu") have been calculated for all elemental values based on the amount of non-magnetic heavy mineral concentrate recovered for each sample. Analytical data, $\log_{10}$ - transformed data and "equivalent" data have been examined using histograms. Summary statistics for the various elements are presented in Table 6. More complete computer print outs are available in Appendix D.

Comparison of the coefficients of variation for all samples and duplicate samples (Table 7) indicates that the intrasample variation is much less than the overall variation observed in the entire population of till samples. The intrasample variation is therefore not expected to contribute significantly to the overall variation of the population even though Sopuck et al (1985) have alluded to possible variabilities of 40% to 50% in field and analytical data as documented in their till sampling case history.

From an examination of computer-generated histograms, all elements and equivalent values can be approximated by $\log_{10}$ - normal distributions and for the purpose of establishing thresholds, $\log_{10}$ - normal distributions and probability-cumulative frequency plots have been used. The thresholds that have been selected include (a) threshold for "elevated" concentrations (50% probability of occurrence); (b) threshold for "possibly anomalous" concentrations (5% probability of occurrence); and (c) threshold for "probably anomalous" concentrations (2.5% probability of occurrence).

Thresholds for the individual elements are presented in Table 8. "Elevated", "possibly anomalous" and "probably anomalous" concentrations of elements in till samples are indicated on Map 6 and Map 7 (equivalent values). Relative positions of the individual samples in each hole are indicated by the stacked plots on those maps. Equivalent values have been used in the discussions and interpretations that follow within this report. A summary of all anaytical values and equivalent values is presented in Appendix D.

Equivalent gold (eAu) exhibited the most widespread distribution of statistically anomalous values: "possibly anomalous" values were found in Holes 5, 42 and 45 and "probably anomalous" values were found in Holes 6, 12, 21, 35, 38 and 48. Other anomalies ("possible" or "probable" levels) were noted for eAg in Holes 10, 11, 36 and 37A; for eAs in Holes 18A, 19, 35, 36 and 37A; for eCu in Holes 11 and 36 and for eZn in Holes 10, 19, 35, 36 and 37A.

9.3 Bedrock Geology

Bedrock lithologies were found to be predominantly massive and tuffaceous metavolanic rocks of variable composition (mafic through felsic). The rocks appear to be fairly altered: mafic varieties are chloritized and intermediate to felsic varieties are reported as being sericitized and/or silicified. Minor, presumably interbedded,

TABLE 5
GROUP 5: REVERSE CIRCULATION RESULTS: GOLD

HOLE # AND SAMPLE	Au ppb	OBSERVED GOLD GRAINS		
		Abraded	Irregular	Delicate
M86-05-02 (01, 01A, 01B)	80			
-03-01	215			
-03-02, 02A, 02B	180			
-04-01, 02	2225	2		
-04-03, 04	80			
-04-05, 06	330			
-05-01	55			
-05-02	1460			
-06-01, 02, 03	16630			
-07-01	95			
-07,02, 03	70			
-07-04, 05, 06	55			
-08-01, 02	70000	1		
-08-03	65			
-08-04, 05	135			
-08-06	1055			
-09-01	100			
-09-02, 03	25			
-09-04, 05	40			
-09-06	30			
-09-07, 07A	220			
-10-01	165			
-10-02	70			
-10-03	80			
-10-04	420			
-11-01, 02	50			
-11-03	110	1		
-11-04, 04A	115			
-11-05	135			
-11A-01, 01A	125			
-12-1, 1A, 1B	355	1		
-12-01, 01A, 01B	8350	1		
-12-02, 02A	60	1		
-12-03	6880	1		
-13-01, 01A	185			
-13-02, 02A	280			
-14-01, 01A	110			
-14-02, 02A	1000			
-15-01, 01A	30			
-15-02, 02A	40			
-16-01, 01A, 01B	45			
-16-02, 02A	95			

TABLE 5 (Continued)

HOLE # AND SAMPLE	Au ppb	OBSERVED GOLD GRAINS		
		Abraded	Irregular	Delicate
M86-05-16-03	130			
-17-01, 01A, 01B	225			
-17-02	100			
-17-02A	55			
-17A-03, 03A, 3B, 03C	100			
-17A-01	35			
-17A-02, 02A	80			
-17A-04, 04A	15			
-17A-05, 05A	30			
-17A-06, 06A, 6B, 6C	560			2
-18-01, 01A, 01B	80			
-18A-01, 01A	125			
-18A-01B, 01C	50	1		1
-18A-01D, 01E, 01F	55			
-18A-01E, 01F	190			
-18A-02	90			
-19-01, 01A	30			
-19-01B, 01C	60			
-19-01D, 01E	25			
-20-01, 01A	35			
-20-02	25			
-20-03	425			
-21-01, 01A	5700	1		1
-22-01	120			
-22-02	85			
-22-03, 03A	1225	1		
-23-01, 01A	100			
-24-01, 01A	40			
-24-02	180			
-25-07, 07A, 07B, 07C, 07D	805			
-25-08, 08A, 08B, 08C	255			
-25-09, 09A, 09B, 09C	60			
-25-10, 10A, 10B	140			
-25-11, 11A, 11B, 11C	90			
-25-12, 12A, 12B, 12C	245			
-26-01	50			
-26-02, 02A	335			
-27-01, 01A, 01B, 01C	55			
-27-02, 02A, 02B	70			
-27-03, 03A, 04, 04A 05, 05A	840			

TABLE 5 (Continued)

HOLE # AND SAMPLE	Au ppb	OBSERVED GOLD GRAINS		
		Abraded	Irregular	Delicate
M86-05-27-06, 06A	95			
-27-07, 07A, 08, 08A	20			
-27-09	35			
-27-09A	5			
-27-10, 10A	30			
-27-11, 11A	220			
-27-12, 12A	5			
-27-13, 13A, 14, 14A	75			
-27-15, 15A	215			
-28-01, 01A	105			
-28A-03	65			
-28A-04, 04A	7040	2		
-29-01, 01A, 01B	280			
-30-01, 01A	115			
-30-02, 02A, 02B	70	1		
-30-03, 03A	60			
-30-04, 04A	185	1		
-31-01, 01A, 01B	160	2		
-32-01, 01A	130			
-34-01, 01A, 01B, 01C	140	2		
-34-1D	200			
-34-1E	975			
-34-02, 02A, 02B	350			
-35-01, 01A, 02, 02A	120			
-35-03, 04, 04A	760			
-35-05, 05A	210			
-35-06, 06A	1960	1		
-36-01, 01A, 02	170			
-36-03, 03A, 04	20			
-36-05, 06, 07	25			
-36-08	110			
-36-09, 09A	80			
-36-10, 10A	70			
-36-11, 11A	50			
-36-12	120			
-37-02, 02A, 02B	45			
-37-03, 37A, 03, 04	15			
-37A-05	215			
-37A-06, 06A	45			
-37A-07, 07A	35			
-38-01, 01A	1400			

TABLE 5 (Continued)

HOLE # AND SAMPLE	Au ppb Average	OBSERVED GOLD GRAINS		
		Abraded	Irregular	Delicate
M86-05-39-01, 01A	315			
-39-02, 02A, 02B	515			
-39-03, 03A	35			
-39-04, 04A	10			
-39-05, 06, 06A	15			
-40-01, 01A	35			
-40-02, 02A	2920			
-41-01, 01A	165			
-42-01	45			
-42-02	35			
-42-03	127000			
-42-04	40			
-43-01, 01A	95	1		
-43-02, 02A	35			
-43-04, 05	145			
-43-06, 07	90			
-44-01, 01A	60			
-44-02	325			
-44-03	410			
-44-04	30			
-44-05	245			
-44-06	20			
-45-01, 01A	625			
-45-02, 02A	5			
-45-03, 03A	10			
-45-05, 06	70			
-45-07	1670			
-45-08, 09, 09A	45			
-45-10	10			
-45-11, 11A	135			
-45-12	30			
-46-01	25			
-46-02, 02A	10			
-46-03	15			
-46-04	70			
-46-05, 05A	210			
-46-06, 06A	15			
-46-07, 07A, 07B	20			
-46-08, 08A, 08B	100			
-46-09, 09A	140			
-46-10, 10A	45			

TABLE 5 (Continued)

HOLE # AND SAMPLE	Au ppb Average	OBSERVED GOLD GRAINS		
		Abraded	Irregular	Delicate
M86-05-46-11, 11A	170			
-47-01, 01A	10			
-47-02, 02A	40			
-47-03, 03A	255			
-47-04	50			
-47-05	35			
-47-06, 06A	145			
-47-07	45			
-48-01, 02	40	1		
-48-03, 04	65			
-48-05, 06	25	1		
-48-07, 08	5870	1		
-48-09, 10	20			
-48-11, 12	35			
-48-13	57			
-49-01, 02	380			
-49-03, 04, 05	10			
-49-06, 07	120			
-50-01, 02, 03	110			
-50-04, 05	25			
-50-06	30			
-51-01, 01A, 02	60			
-51-03, 04	60			
-51-05, 06	25			
-51-07	100	1		
-52-01, 01A	20			
-52-02, 02A	115			
-53-01	25			
-53-02	30			
-53-03	25			
-54-01	30			
-54-02, 02A, 02B	30			
-54-03	45			
-55-01	460			
-56-01, 01A	115			
-56-02	55			
-57-01, 01A, 01B	25			
-58-01, 01A	140			
-59-01, 01A	40	1		
-60-01, 01A	115			

TABLE 6

SUMMARY STATISTICS

ANALYTICAL RESULTS

REVERSE CIRCULATION TILL SAMPLES

Element	No. Samples	Arith mean	Stnd Dev	Geom Mean	Stnd Dev	Min	Max
Au (ppb)	185	572.06	2872.28	93.02	4.56	2.50	34286[1]
eAu (ppt)	185	824.91	2052.02	214.13	4.8	4.81	13219.83
Ag (ppm)	184	0.59	0.57	0.35	3.14	0.05	3.10
eAg (ppb)	184	2.0	3.49	0.81	4.07	0.01	31.44
As (ppm)	184	185.56	206.85	102.1	3.37	2.00	1184.00
eAs (ppb)	184	751.3	1754.08	238.73	4.52	1.27	14695.16
Cu (ppm)	184	338.61	494.03	257.42	2.0	13.00	6200.00
eCu (ppb)	184	1035.76	2631.75	602.03	2.65	5.71	34616.67
Zn (ppm)	184	104.34	140.45	76.02	2.0	12.00	1388.00
eZn (ppb)	184	450.25	1382.69	177.73	2.99	2.79	11037.58
Non-mag/g	185	2896.12	2423.8			116.96	19134.33
Mag (g)	185	2714.49	2284.72			115.94	28736.51

1 - maximum 170,000 ppb cut to 34286 ppb

TABLE 7

COEFFICIENTS OF VARIATION FOR HEAVY MINERAL CONCENTRATE ANALYSES REVERSE CIRCULATION TILL SAMPLES

Element	Total Population	Average of Duplicates[1]
Au	5.02	0.70
Ag	0.95	0.24
As	1.11	0.28
Cu	1.46	0.16
Zn	1.35	0.18
Non-Mag	0.84	0.33
mag	0.84	0.17

1 - including seven sets of duplicates:

1. 5-07-2-3, 5-07-4-6
2. 5-12-02-2A, 5-12-02B
3. 5-17-02, 5-17-02A
4. 5-18A-01-1A, 5-18A-01B-1C, 5-18A-01D, 5-18A-01E-1F
5. 5-19-01-1A, 5-19-01B-1C
6. 5-27-09, 5-27-09A
7. 5-34-01ABC, 5-34-01D, 5-34-01E

TABLE 8

CALCULATED THRESHOLDS
REVERSE CIRCULATION TILL SAMPLES

Element	"Elevated" Threshold	"Possibly Anomalous" Threshold	"Probably Anomalous" Threshold
Au	147 ppb	1343 ppb	1980 ppb
eAu	275 ppt	3500 ppt	6000 ppt
Ag	0.3 ppm	1.9 ppm	2.5 ppm
eAg	1 ppb	10 ppb	20 ppb
As	95 ppm	650 ppm	970 ppm
eAs	270 ppb	4000 ppb	8000 ppb
Cu	266 ppm	800 ppm	1363 ppm
eCu	800 ppb	6000 ppb	9000 ppb
Zn	89 ppm	355 ppm	478 ppm
eZn	310 ppb	2400 ppb	3500 ppb

TABLE 9
DESCRIPTION OF BEDROCK CHIPS

Hole	Description
1	mafic to intermediate tuff
2	felsic volcanic
3	mafic to intermediate volcanic
4	mafic to intermediate tuff
5	mafic to intermediete tuff
6	mafic to intermediate volcanic
7	intermediate volcanic
8	mafic to intermediate volcanic
9	mafic to intermediate tuff
10	intermediate to felsic tuff, abundant quartz chips
11	mafic to intermediate tuff
12	mafic to intermediate tuff
13	felsic volcanic
14	missing
15	felsic tuff
16	missing
17	mafic to intermediate tuff
18	siliceous argillite
19	mafic to intermediate volcanic
20	siliceous argillite
21	siliecous argillite
22	siliceous argillite
23	felsic volcanic/sediment ?
24	felsic volcanic/sediment ?
25	no bedrock
26	felsic tuff
27	missing
28	felsic tuff
29	felsic volcanic
30	missing
31	mafic to intermediate volcanic
32	mafic to intermediate volcanic
33	no bedrock
34	mafic to intermediate tuff
35	felsic volcanic
36	intermediate tuff
37	felsic tuff
38	felsic tuff
39	no bedrock
40	mafic to intermediate volcanic
41	mafic to intermediate tuff
42	mafic to intermediate volcanic
43	intermediate tuff
44	no bedrock
45	felsic volcanic

TABLE 9
(Continued)

Hole	Description
46	felsic volcanic
47	felsic tuff
48	mafic to intermediate volcanic
49	mafic to intermediate volcanic
50	mafic to intermediete tuff
51	mafic to intermediate tuff
52	argillite
53	mafic to intermediate volcanic
54	missing
55	intermediate to felsic volcanic
56	missing
57	mafic to intermediate tuff
58	missing
59	argillite and mafic to intermediate volcanic
60	mafic to intermediate volcanic

argillitic rocks were encountered in several of the holes (holes 10, 14, 21, 27, 42, 48, 49, 50).

An examination of bedrock chip samples identified bedrock types as noted in Table 9. Many of these samples appeared to be contaminated by exotic species.

9.4 Bedrock Geochemistry

9.4.1 Methodology

A total of 17 bedrock chip samples were analyzed for the major and minor rock-forming oxides (SiO_2, Al_2O_3, Fe_2O_3, CaO, MgO, Na_2O, K_2O, TiO_2, MnO, P_2O_5 and LOI). In addition all bedrock chip samples and processed bedrock samples (total 66 samples) were analyzed for Cu, Zn, As, Ag and Au.

All samples were crushed with a split portion being pulverized to about -200 mesh. The oxide analyses were performed by DC Plasma Emission Spectroscopy after a lithium metaborate fusion. Trace elements were analyzed by methods previously described (section 9.2).

In addition, 38 samples of rock chips collected from bedrock and boulders were submitted to Swastika Laboratories Limited for trace element analysis (Au, Ag, As, Cu, Zn) as preliminary checks during the drilling program. Most of these results are duplicated by the aforementioned sampling.

Certificates for all rock analyses are presented in Appendix C.

The significant aspects of the bedrock geochemistry as outlined in the following paragraphs are featured as Map 8.

9.4.2 Whole Rock Oxide Analyses

Bedrock samples as characterized by Jensen Cation Plot classifications ranged over the suite of calc-alkaline volcanics from basalt to dacite. As well, tholeiitic basalts, high iron basalts and basaltic komatiites are present.

The silica and titania contents of all the rocks classify them as largely intermediate to felsic in composition. Irvine Baragar classifications yield results similar to the Jensen method. Results of these classifications have not been included in Table 10.

Bedrock in holes 10, 13 and 19 have provided the most interesting results from the whole rock analyses. Bedrock in hole 10 displays the classic signature of an altered volcanic rock: extremely high total alkali alteration and discriminant scores and a high peraluminosity index. Hole 7, which is spatially close to hole 10 also displays a positive but low (0.26) discriminant score. In hole 13 the felsic bedrock exhibits moderate TAAS value, though not of a definitely anomalous nature. The moderate TAAS and discriminant scores for the bedrock in hole 19 are of note since ultramafic rocks (as this sample is classified by the Jensen method) typically display these characteristics. The basaltic komatiite nature of this rock plus the presence of tholeiites approaching high magnesium composition in holes 1 and 11A constitute favourable indicators in as much as they are typical host volcanics for gold mineralization in the Timmins camp (Fyon and Crocket, 1981).

9.4.3 Precious and Base Metal and Arsenic Analyses

No values of particular interest with respect to base and precious metals were noted within the bedrock chips analyzed. Values for these elements were on average around normal crustal abundances (Clarke values) for those elements (Table 11).

TABLE 10
SUMMARY OF CHARACTERISTICS
BEDROCK WHOLE ROCK ANALYSES

Sample No.	Field Name	Jensen Classification[1]	TAAS[2]	DFl[3]	PI[4]
5-01-03	Maf-Int Volcanic	TB (TMgB)	40.67	-0.22	0.98
5-02-02	Int-Fels Volcanic	CAA (CAD)	33.12	-1.06	1.07
5-07-07	Mafic Volcanic	CAB (TB)	38.36	0.26	1.2
5-10-05	Mafic Volcanic or Argillite	CAB (CAA)	92.36	2.23	2.66
5-11A-02	Maf-Int Volcanic	TB (TMgB)(CAB)	40.54	-0.65	0.91
5-13-03	Felsic Volcanic or Intrusive	CAD (CAR)	53.28	-2.10	0.99
5-15-03	Felsic Tuff	CAA	32.78	-1.56	1.09
5-18A-2A	Felsic Volcanic	CAA	40.59	-0.63	1.33
5-19-02	Mafic Volcanic	KBK	59.40	1.32	0.92
5-28-02	Int-Fels Volcanic	CAA (CAD)	36.02	-0.76	1.08
5-35-07	Felsic Volcanic	CAD (CAA)	32.60	-1.39	1.03
5-46-12	Felsic Volcanic	CAA	35.71	-1.17	1.09
5-47-08	Mafic Volcanic	CAB	35.05	-0.84	0.93
5-50-07	Graphitic Argillite	TFeB	28.94	-1.10	0.94
5-52-02A	Graphitic Argillite	TFeB	26.99	-1.35	1.0
5-55-02	Felsic Volcanic	CAA	27.77	-1.04	1.12
5-60-02	Mafic Volcanic	TFeB (TB)	30.85	-1.72	1.01

1 - Jensen Classification abbreviations:
TFeB - tholeiitic high iron basalt
TMgB - tholeiitic high magnesium basalt
TB - tholeiitic basalt
TA - tholeiitic andesite
TD - tholeiitic dacite
TR - tholeiitic rhyolite
CAB - calc-alkaline basalt
CAA - calc-alkaline andesite
CAD - calc-alkaline dacite
CAR - calc-alkaline rhyolite
KBK - komatiitic basalt (ultramafic)
( ) - classification close to field boundary of rock type in parentheses
2 - TAAS - total alkali alteration score
3 - DFI - Marcotte-David (discriminant function) score
4 - PI - peraluminosity index

TABLE 11

SUMMARY STATISTICS
BEDROCK TRACE ELEMENT ANALYSES

Element[1]	No. Samples	Arith Mean	Stnd Dev	Geom Mean	Stnd Dev	Min	Max
Au (ppb)	53	3.07	3.24	2.68	1.44	2.5	25
K(Au)[2](ppb)	53	0.77	0.81			0.63	6.25
Ag	53	0.1	0.08	0.08	1.83	0.05	0.4
K(Ag)	53	1.42	1.11			0.71	5.72
As	53	9.75	12.58	5.42	2.87	1	59
K(As)	53	4.88	6.29			0.5	29.5
Cu	53	52.94	26.94	44.05	1.75	7	120
K(Cu)	53	0.88	0.45			0.12	2.0
Zn	53	63.47	20.4	60.1	1.41	22	116
K(Zn)	53	0.91	0.29			0.31	1.66

1 - all values in ppm unless otherwise noted

2 - Clarke normalized values. Clarke indexes after Rickwood, 1983.

TABLE 12

SUMMARY STATISTICS

HEAVY MINERAL CONCENTRATES FROM BEDROCK SAMPLES

Element	No. Samples	Mean	Stnd Dev	Min	Max
Au	13	719.23	1915.42	45	7040
Ag	13	1.85	1.44	.1	5.3
As	13	500	527.26	56	2000
Cu	13	963.46	934.06	260	3650
Zn	13	377.08	796.33	44	2970
Non-mag	13	1881.51	1465.06	251.57	5763.44
mag	13	1287	1013.86	25.16	2883.72

Arsenic, however, exhibited a greater range of values and included values many times the normal crustal abundance, as shown by the arsenic values in bedrock chips symbolically plotted on Map 8.

Two areas of high (>2K) arsenic in bedrock can be defined from the data at hand. The first zone lies in the western part of the property in the vicinity of holes 20, 23, 34 and 38 which define the approximate corners of the zone. The second zone is found in the eastern part of the property and defines a linear trend from hole 42 to hole 50. Definition of both these areas is constrained by the available data. A third area in the southeast (e.g. holes 1, 10, 15) is also considered to be of geochemical interest but is poorly defined.

The presence of elevated levels of arsenic in bedrock is significant in that arsenic is a significant indicator of gold mineralization in the Timmins area (Whitehead et al, 1981).

Bedrock samples processed for heavy mineral concentrates had average trace metals contents much higher then the till samples and correspondingly lower concentrations of heavy minerals (Table 12).

9.5 Individual Drill Holes

Drill holes in which visible gold grains have been identified or in which interesting geochemical results occur are discussed individually below:

Hole 01

High arsenic was found in a bedrock sample identified as mafic to intermediate tuff from this hole. This hole may have tested a possible conductive zone.

Hole 04

Two abraded gold grains were discovered in the uppermost sample in hole 04 with corresponding analytical gold value of 2225 ppb. Hole 04 is immediately south of conductive zone E; however, given the position of the gold in the upper part of the hole, the source is probably to the north of this conductor, possibly in the area of conductive zones C', J or H.

Hole 05

An gold value of 1460 ppb with no visible gold was found in the basal sample in hole 05. This may be an indication that the gold could be related to sulphides rather than a free gold type of occurrence. It may also mean that gold was missed during the visual inspection of tabling of heavy mineral concentrates. The high gold value in hole 05 is derived from a well-developed lodgement clay till implying a fairly local source from the northeast. The source may well be related to the gold mineralization intersected by St. Mary's Exploration DDH #1 on conductive zone E.

Hole 06

An extremely high value of 16,630 ppb Au was recorded in hole 06 in a basal till sample. No free gold was identified but the heavy minerals concentrate is reported to contain 50% pyrite. Thirty percent of the pyrite appeared as limonitized euhedral cubes. The remaining 20% was massive pyrite with quartz and minor dolomite. One till clast fragment contained chalcopyrite, bornite, pyrite and carbonate. Fifty fine grains of arsenopyrite were also identified. Of importance here is the fact that gold may be related to sulphides and not a quartz lode occurrence. The sample from hole 06 which provided this high analysis was a relatively thin unit (6 ft) and could imply a fairly local source. It is further concluded that this is a Keewatin till implying a source direction to the northwest. An obvious proximal source area is EM conductor F.

Hole 08

Hole 08 contained one abraded gold grain high up in the hole as well as a gold value of 1055 ppb in the basal sample where no gold grains were identified. The isolated gold grain in the upper portion of the hole may be well distant from its source. The gold value in the basal sample is concluded to be within Laurentide till, indicating a source to the northeast. The source area may be, as in hole 05, associated with conductive zone E.

Hole 10

The bedrock sample which is classified as a calc-alkaline basalt (or andesite) exhibits the characteristics of an extremely altered volcanic rock. Similar alteration is typically noted in the volcanic rocks that stratigraphically underlie syngenetic massive sulphide deposits. The associated arsenic value in bedrock material is of moderate tenor.

Hole 11

One abraded gold grain and 50% pyrite was noted in hole 11 from an intermediate depth of till, probably derived from a source to the northwest.

Hole 12

Three abraded gold grains were found in hole 12. The grains were found in three consecutive samples in the hole just above bedrock providing the most continuous indication of the presence of gold from any of the holes on the property. The basal Keewatin till here is rather exotic with abundant granitic pebbles that suggest a distant source. However, this does not rule out that the source for the gold may be one of the local conductive horizons.

Hole 15

This hole intersected conductor E in bedrock and returned high As in the bedrock sample of felsic tuff.

(Parenthetically, it is of interest that the preceding results were obtained in an east-west series of drill holes intended to evaluate conductor E.)

Hole 17A

Two delicate gold grains and 10% pyrite were recorded in the basal Keewatin till sample in hole 17A. This sample returned 560 ppb Au. Of interest here is the correlation between gold and sulphides, considering that numerous pyritic boulders were encountered in this hole. These boulders are believed to be locally derived from the north/northwest, suggesting that conductors C and/ or B are possible sources.

Hole 18A

Hole 18A was found to contain one abraded and one delicate gold grain with thirty percent pyrite in a good basal till sample. This particular sample also reported a high arsenic value of 1,184 ppm corresponding with analysis of cuttings from sulphide boulders within this till unit (18A-126: 1,000 ppm As; 18A-127: 1,708 ppm As). A third sulphide boulder intersected in this part of the hole produced a zinc value of 5744 ppm (sample 18A-132). Hole 18A, like the adjacent anomalous hole 17A, stimulates interest in conductors C and B to the north.

Hole 21

A value of 5700 ppb Au was reported from the basal till sample directly above bedrock in hole 21. Two small gold grains were detected, one abraded and one delicate. The delicate grain is reported as a "delicate crystal" by the processing laboratory. Along with the gold grains it was found that the sample contained 50% massive nodular pyrite and one coarse grain of arsenopyrite. Of interest again is the strong correlation between sulphides and gold content. High arsenic was found to occur in bedrock chips identified as siliceous argillite.

Hole 22

Similar to adjoining hole 21, the basal Keewatin-till sample in hole 22 contained one abraded gold grain and up to 35% pyrite with a gold value of 1225 ppb.

Hole 23

High arsenic was found to occur in the bedrock sample identified as felsic volcanic or siliceous metasediment.

Hole 23 and the preceding holes 17A, 18A, 21 and 22 are located along an east-west fence south of conductors C and B. Thus these conductors are indicated as having significant potential.

Hole 27

A gold analysis of 840 ppb is reported from a sample relatively high up in hole 27. No visible gold grains or sulphides were noted.

Hole 28A

A sample indicated to be bedrock was reported to contain two abraded gold grains and up to 30% pyrite. A contamination of bedrock fines by overlying basal till may be responsible for this value. This would present significant geochemical encouragement for conductor B or western extensions of conductors A and/or C.

Hole 30

Two abraded gold grains were noted in the lower part of hole 30. One abraded grain is reported from a basal till sample and one from a bedrock sample. The bedrock sample containing 1 abraded gold grain as well as 40% pyrite may represent the contamination of bedrock material with immediately overlying basal till material. Neither sample showed values in Au.

Hole 31

Two abraded gold grains were recorded in a very thin till unit in hole 31. Ten percent pyrite was noted along with the two gold grains. The sulphides may relate to the EM conductor immediately up-ice. It is of interest that a previous unsuccessful attempt by Noranda to drill this particular conductor was abandoned in clay and quartz material.

Hole 34

One abraded gold value was found in a sample high up in hole 34. Slightly lower down in the hole a value of 975 ppb Au was reported but no visible gold was observed. Moderate to high values for As are reported from the samples of bedrock (mafic to intermediate tuff) from this hole.

Hole 35

The basal till sample from hole 35 contained one abraded gold grain and 30% pyrite with a gold value of 1960 ppb. The till here is a relatively sandy pebbly deposit. Higher up in the hole, sample 3-4A was found to contain 760 ppb Au with no observed gold grains.

The gold grain in the basal sample is relatively small; hence the anomalous analytical value indicated that some gold may be tied up in the pyrite. Note that this hole was an attempt to directly penetrate EM conductor A and that high arsenic is reported from the bedrock sample identified as felsic volcanic.

Hole 36

High arsenic occurs in the bedrock (intermediate tuff) sample from this hole.

Hole 37

High arsenic also occurs in the bedrock sample of felsic tuff from this hole.

Hole 38

A very thin till was encountered in hole 38. The sample returned a gold value of 1400 ppb with 25% pyrite. No visible gold grains were identified. A moderate arsenic value occurs in felsic tuff bedrock sampled by this hole.

Hole 40

A value of 2920 ppb Au with 2% pyrite was recorded in the basal till sample from hole 40. No visible gold was identified during the tabling process. This hole was drilled in the immediate proximity of EM conductor A which can be considered a probable source environment for the gold mineralization.

More generally it is noted that anomalous holes 34, 35, 38, and 40 are all part of an east-west fence of holes located south of conductor A. The characteristics of these holes highlights the potential of this conductor.

Hole 39, which was also drilled to test this conductor, did not reach bedrock.

Hole 42

An extremely high gold value of 127,000 ppb was produced from a small sample of clayey basal till in hole 42. This number represents a nugget effect whereby a gold grain within a very small sample tends to produce a high analytical value. No gold grains or sulphides were noted during the tabling procedure of this sample. For the statistical treatment of data this high sample was cut to 34286 ppb.

From the lowest basal till sample in the hole one abraded gold grain and up to 50% pyrite were noted during laboratory procedures. Pyrite is probably related to a boulder indicated to contain 5% pyrite just above bedrock. Analysis of +10 mesh chips from the boulder indicated no elevated values for any element (sample M86-05-42-125). Source area for this basal till is believed to be to the northeast (i.e. associated with Laurentide advance).

Hole 42 is not situated directly down ice from any conductive zones. It is, however, situated very close to an indicated fault which may have some significance regarding the material sampled. High arsenic is reported to occur in the bedrock sample of mafic to intermediate volcanic.

Hole 45

Hole 45, situated directly down ice from conductive zone H, produced slightly anomalous gold values. A value of 625 ppb Au was found in the uppermost till sample. No gold grains or sulphides were noted in this hole. The analytical value probably represents an isolated gold grain within the Keewatin till derived from the northwest.

A second value of 1670 ppb gold was discovered lower down in basal till in this hole. No gold grains or sulphides were indicated during the tabling procedure of this sample. Source area is probably from the northeast since this value appears to be derived from the older Laurentide till. The high analytical value may relate to an isolated gold grain which was not identified during processing.

Hole 46

This hole sited to intersect conductor J returned a high As value from bedrock material consisting of a felsic volcanic.

Hole 48

Three abraded gold grains were discovered in various levels of hole 48 which lies directly down ice from conductive zone H. Two of the grains were classed as irregular and one as abraded. These grains were found relatively high up in hole 48 and as such are believed derived from the younger Keewatin till making the source area to the northwest. One analytical value of 5870 ppb Au was found to correlate with the lowermost gold grain discovered. No other values or sulphides were associated with these grains. A high value for arsenic in bedrock (mafic to intermediate volcanic) was returned.

Hole 49

High arsenic occurs in the mafic to intermediate volcanic sample of bedrock from this hole.

Hole 50

High arsenic also occurs in the bedrock (mafic to intermediate tuff) sample from this hole.

Hole 51

One abraded gold grain and a corresponding analytical value of 1000 ppb were found in the basal till sample of hole 51. Source direction is probably to the northeast which may be of interest when considering the fact that hole 51 is directly down ice from conductive zone H. No sulphides were found within this sample.

Hole 59

One abraded gold grain and an analytical value of 40 ppb gold were found from the basal till sample in hole 59 located immediately down-ice from conductor J. Till was not well developed and probably represents an ablationary till of the Keewatin ice advance indicating a source area to the northwest. A high value for arsenic is reported from argillite and mafic to intermediate volcanic encountered in bedrock in this hole.

9.6 Discussion

The reverse circulation drilling program which sampled galcial tills and bedrock has delineated areas of geochemical interest on the Group 5 property. One area of interest is defined by tills with anomalous metal content immediately down-ice (i.e. south) of conductor A in the western part of the property. This area was determined by sampler from holes 35, 36, 37 and 38 is characterized by possibly to probably anomalous values in trace elements analyzed for.

While conductor A is the more likely source, a conductor lying to the north off the present property is also a possible source of anomalous trace elements in the till samples.

A second area lies just to the south of conductor C. Holes 18A, 19 and 21 sampled tills that were variously possibly or probably anomalous in As, Zn and Au. Hole 18A also contained near bedrock boulders with high concentrations of arsenic and zinc.

A third area of interest accurs in the eastern part of the property, immediately south of conductor E. Hole 5 contained anomalous Au while the upper portions of holes 10 and 11 contained anomalous Ag and base metals. Just to the south of these, hole 6 was found to contain anomalous Au.

Additional encouragement is provided by hole 12 which also contained anomalous Au in till. While the hole lies just south of the western end of conductor E, it could reflect dispersion from conductor C located approximately 1,200 meters up-ice to the north.

Bedrock sampling by the reverse circulation method has indicated the existence of high arsenic values in bedrock in and around conductors A, B and C in the western part of the property and conductors H and possibly J in the eastern part of the property. A geochemical association of As with conductor E in the southeastern portion of the property may also exist. A highly altered volcanic rock classified as calc-alkaline basalt encountered in hole 10 is also closely associated with conductor E as are rocks approaching high magnesium tholeiitic compositions (holes 1 and 11A).

Given the spatial relationships of the geochemically interesting till and bedrock samples, the following areas for priority follow-up are recommended:

1. Conductors A and C (possibly B) between lines 3+85E and 15+00E.
2. Conductor E between lines 20+00E and 32+00E.
3. Conductor F.
4. Conductor H between lines 32+00E and 37+50E.

No geochemical response was identified in the overburden immediately down-ice from conductor H; however, zinc, copper and silver values in tills further to the south (in particular holes 10 and 11) occur above the very basal material and hence may reflect transport over greater distances.

Conductors E and F still appear to be the most plausible sources of anomalous Au in holes 5 and 6, respectively, though with the thinner nature of the tills in that area and the unknown effects of bedrock topography the possibility of transport of the overburden constitutes over a greater than expected distance cannot be discounted. It is conceivable that the source of the gold in holes 5 and 6 may have been from a source further up-ice (i.e. conductor H).

10.0 CONCLUSIONS

The integrated exploration program of MaxMin HLEM surveys and reverse circulation drilling has succeeded in confirming the potential of Minerex Resources Group 5 of the Matagami Project, primarily for gold mineralization.

In particular, based on the preceding results, it is concluded that:

1. The property is underlain by east-west trending mafic volcanics with intercalated felsic including tuffaceous horizons, an environment favourable for several types of gold deposits;

2. Seven conductive zones (A, B, C, D, E, F, J) out of the nine identified by the selective MaxMin survey are confidently regarded as probable to definite bedrock conductors, while the remaining two (G and H) are considered as a possible bedrock sources.

3. Prior exploration, consisting of ground geophysical surveys and limited diamond drilling directed mainly at massive sulphide targets, has partially tested most of these conductors and established the presence of graphitic ± pyritic horizons, several of which contain anomalous gold values.

4. Reverse circulation drilling is an effective geochemical sampling technique on Group 5, in that the sixty drill holes completed encountered substantial till derived from Keewatin and Laurentide ice advances.

5. Clusters of drill holes with consistently anomalous geochemical analyses and/or visible gold grains indicate potentially interesting mineralization located up-ice from the holes, and probably related to the nearby EM conductors A, C, E and F.

6. Areas of high arsenic in bedrock outline two major areas which may represent alteration zones associated with mineralization, plus a third zone poorly defined by the present data. Bedrock which exhibits the characteristics of a highly altered volcanic rock is found in close proximity to this third zone as are other bedrock samples with favourable lithologic characteristics. These zones are most closely related to EM conductors A, B, C, E and H.

7. Conductors A, C, E, F and H (and their immediate vicinity) are judged to constitute high priority targets for follow-up work including additional reverse circulation drilling, geophysical surveying and diamond drilling to establish the nature and tenor of the inferred sources of gold and/or base metals.

8. Conductor D, a short and imperfectly defined zone, and Conductor B constitute good secondary targets which were not specifically tested by reverse circulation.

9. A lower potential for mineralization is assigned to the remaining conductors due to the absence of favourable geochemical indications in the till recovered from reverse circulation drilling down ice from these conductors.

11.0 RECOMMENDATIONS

Based on the preceding favourable results and conclusions, it is recommended that further exploration for gold and base metals be undertaken on Group 5. This work should consist of:

1. Additional reverse circulation drilling (30 holes) to further refine the definition of target areas. Till and bedrock samples should be collected from north-south profiles in the western and eastern areas of the property where multiple geophysical conductors and geochemical encouragement exist. Fill-in east-west fences of holes should be included especially near conductors B and D.

2. Additional line cutting and MaxMin surveying at 200 meter line spacings totalling approximately 50 km. This program is to be carried out over the favourable conductors to precisely define their location and geometry prior to diamond drilling. Some detailing may be locally required.

3. An initial program of diamond drilling totalling 2,000 meters in 12 holes designed to sample each indicated favourable target in at least two locations along strike.

4. If warranted by favourable results, a further program of diamond drilling totalling an estimate of 2,500 meters to confirm and further delineate the results of the first phase of drilling.

An approximate budget for the recommended program totals $837,000, as detailed below:

Phase I:	Reverse Circulation Drilling		$125,000	
	Analyses		15,000	
	Line-cutting	50 km @ $195	9,750	
	MaxMin Surveys	50 km @ $210	10,500	
	Drafting, Interpretation, Reporting		10,500	
	Planning, Supervision, Consulting		12,000	
				$182,750

Phase IIa:

Diamond Drilling 2,000 meters	$240,000
Analyses	7,500
Drafting, Interpretation, Reporting	12,000
Planning, Supervision, Consulting	15,000
	$274,500

Phase IIb:

Diamond Drilling 2,500 meters	$300,000
Analyses	10,000
Drafting, Interpretation, Reporting	14,500
Planning, Supervision, Consulting	15,000
	$339,500

SUB-TOTAL	$796,750
Contingency @ 5%	40,250
TOTAL	$837,000

Respectfully submitted,

J. Siriunas, P.Eng.

J. Roth, M.A.

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CERTIFICATE

I, Jeremy Roth of Toronto, Ontario hereby certify that:

1. I hold a Bachelor of Arts degree in Mathematics from Harvard College, Cambridge, Mass., and a Master of Arts degree in Geophysics from Harvard University, Cambridge, Mass.

2. I have practised my profession in exploration geophysics continuously since graduation.

3. I have based conclusions contained in this report on my personal experience in geophysical exploration techniques and knowledge of geophysical interpretation techniques.

4. I hold no interest, directly or indirectly, in this property other than professional fees, nor do I expect to receive any interest in the property or in Minerex Resources Ltd. or any of its subsidiary companies.

Toronto, Ontario
June, 1986

Jeremy Roth, M.A.
MPH CONSULTING LIMITED

CERTIFICATE OF QUALIFICATIONS

I, J.M. Siriunas, of 2803 Hollington Crescent, Mississauga, Ontario, certify that:

1. I hold a Bachelor of Applied Science Degree (1976) in Geological Engineering and a Master of Applied Science Degree (1979) in Geology from the University of Toronto.

2. I am a member of the Association of Professional Engineers of the Province of Ontario and have practised my profession continuously since graduation.

3. I have based conclusions and recommendations contained in this report on my experience and knowledge of geology, geochemistry and mineral deposits and on the information obtained from the various referenced reports.

4. I hold no interest, directly or indirectly, in this property other than professional fees, nor do I expect to receive any interest in the property or in Minerex Resources Ltd. or any of its subsidiary companies.

Toronto, Ontario
June, 1986

J.M. Siriunas, M.A.Sc., P. Eng.

APPENDIX A

Drill Hole Logs

M86-05-01 through 60

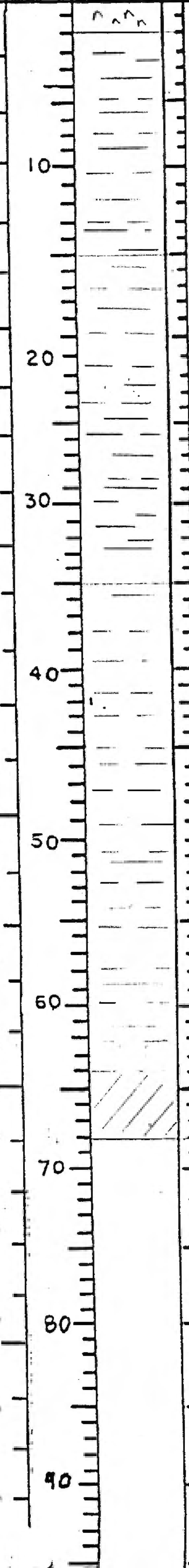
Sample screening 10 Mesh

Remarks

start 2:20

Finish 4:00

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICA



01, 01A

02

03, 03A

0 - 2' Humus, organics

2' - 64' - light brown to grey clay
- good floculation -
- occasional isolated pebble (< 1%)

64' - 68' bedrock
- green schistose mafic to intermediate volcanic - possibly tuffaceous
- soft green flakes in + 10 mesh possibly represent chlorite ground by the bit.
- minor (Py) less than (1%)
- 67' - 20% quartzo-feldspathic veining with abundant chloritization

* + 10 Mesh bedrock sample taken

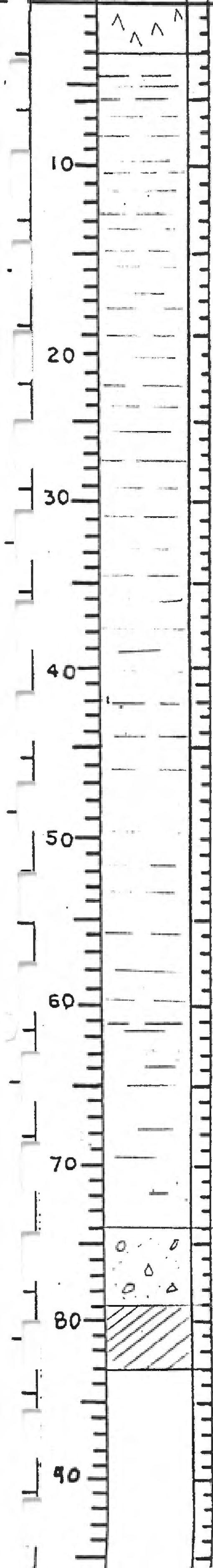
EOH - 68'

Note* - Samples - 01, 01A, & 02 were not analysed.

Sample screening mesh

Remarks start - 4:25 shut down to change swivel head -
start - 9:15 Finish - 10:07

M	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL



0 - 3' - Humus - Organics - wood chips
- dark brown clayrich mud balls

3' - 74' - Homogeneous light to dark grey clay
- good floculation - ie - long strands of clay
- occasional isolated pebbles - pred. mafic volcanic (<1%)

74' - 79' - Mixed sandy gravel - till
- varying heterogeneous mixture
- abundant - fine sand -
- clasts - subrounded - to subangular predominantly mafic - int. volcanic - 60%
granitic - 30%
other - 10%

79' - Bedrock
- light - to medium green felsic to intermediate volcanic
- schistose - with up to 2% fine grained disseminated (py)
- minor serricite alteration

(80.5') - minor quartz veining but no sulphides associated

82' - rock appears more chloritized - with 1% fine grained (py).

83' - EOH

Note * + 10 Mesh Bedrock sample taken

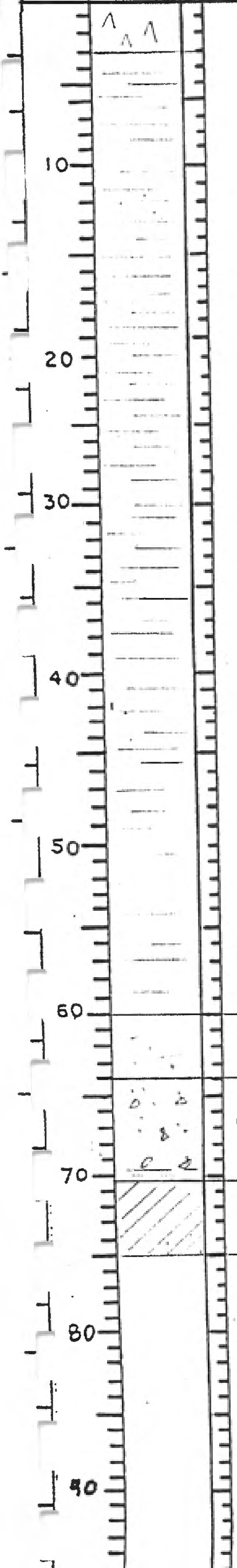
Sample No.
01
01A, 01B
02, 02A

Sample screening +10 mesh

Remarks . START - 10:30

FINISH - 11:30

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL



60'–64': 01

64'–70': 02, 02A, 02B

70'–75': 03

0 - 3' . Organics - Humus

3'-64' - light to dark grey homogeneous lacustrine clay .

- minor isolated pebbles (<1%) usually dark possibly mafic volcanic
- floculates well
- a few mixed pebbles around - 60'

64' - 70.5'

- Sandy clayey pebbly till
- very sandy with subrounded to subangular pebbles of varying composition.

68'- predominantly - mafic - int. volcanic gravel fragments

-70'- clay rich layer - sandy clay with ~ 40% mixed gravel - pred. mafic - int. volcanics

70.5' - <u>Bedrock</u> -

- dark green schistose - chloritized mafic volcanic
- soft green flakes in + 10 mesh possibly representing chlorite ground by the bit.

* Note + 10 mesh bedrock sample taken

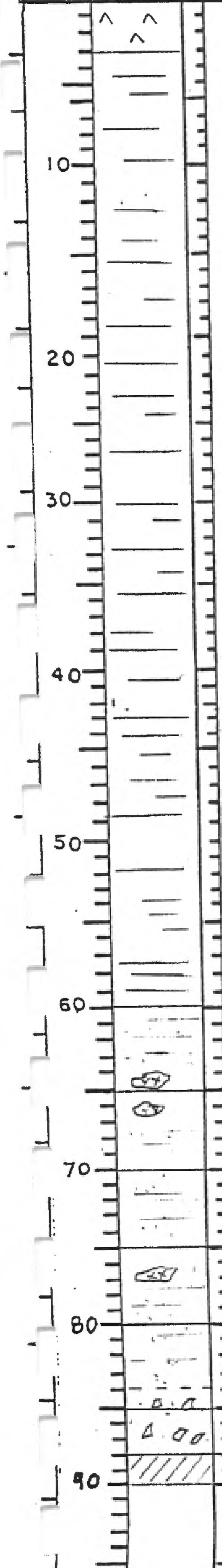
. EOH - 75'

Sample screening

Remarks START 11:50

FINISH - 2:30

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL



Sample No.:
- 01
- 02
- 03.
- 04
- 05
- 06
- 07

0 - 3' - Humus, Organics

3'- 60' - light to dark grey homogeneous clay
- flocculates well
- minor isolated pebbles - dark black - predominantly mafic volc. / argillite

60'-63' Mixed sandy. pebbly gravel till
varying mixture of subrounded to subangular pebbles - pred. mafic volcanic

63'-84' 90% coarse sandy clay balls - with isolated boulders
- 10% mixed gravel
- (64') - granite <u>boulder</u>
- (64.7') - clay rich sandy till - 60% clay
- (66') int. volcanic <u>boulder</u>
- (67') - mixed gravel till predominantly mafic to int. volcanic
- (69') 90% sandy gritty clay balls
  10% mixed gravel of varying composition
- 77' - epidotized gabbro boulder (med. gr.)

84'- 88' - angular - mixed gravel till
- minor amounts of fine sand
- pred. mafic volcanic - with minor mixed gravel frags -

<u>Bedrock</u>

88' - 90' - light green schistose int. volcanic
- appears to be tuffaceous
- < 1% py (fine grained disseminated)
- soft green flakes in +10 Mesh possibly chlorite

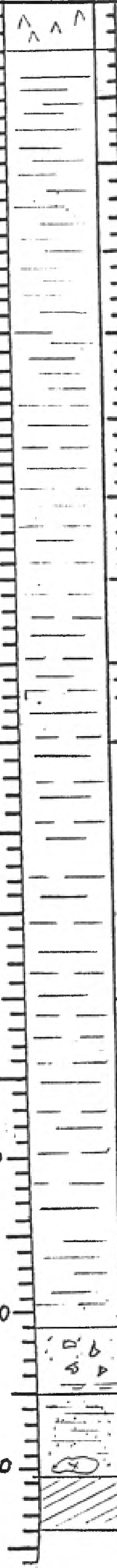
EOH - 90'

+10 Mesh bedrock sample taken

Remarks . START - 3:05 Hydraulic pump - leaking badly - seal added 2:40

FINISH 4:35 - general lack of power due to leaking hydraulics

M	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
	10 20 30 40 50 60 70 80				
			01		
			02		
	90		03		



0 - 3' . Organics - Humus

3' - 81' - light to dark - homogeneous grey clay - (lacustrine)

- minor isolated pebbles - usually dark black - mafic volcanic/argillite - (1%)
- good flocculation - long - strands hold together well

81' - 84'

- Mixed sandy gravel till
- heterogeneous mixture of angular to subangular fragments

84'-91.5' - 60% coarse sandy - gritty clay balls

40% - mixed gravel pred. mafic volc.

-(88') 90% clay balls with coarse sand in clay - 10% - mixed gravel

- (90') dark green schistose - chloritized mafic volcanic boulder

Bedrock

91.5' - light green grey intermediate volcanic

- minor quartzo - feldspathic veinlets (5%) 2 - 4 mm wide
- soft green flakes in +10 mesh possibly represent - chlorite chewed by the bit

+10 Mesh bedrock sample taken

EOH - 94'

*Note - 4:35 - gasket seal did not work - (hydraulic pump)

- carboard gasket put in

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
				0 - 2' Humus, organics					
				2' - 64' - light brown to grey clay - good flocculation - occasional isolated pebble (<1%)					
			[illegible] 01A	64' - 68' **bedrock** - green schistose mafic to intermediate volcanic - possibly [illegible] - soft green flakes in +10 mesh possibly represent [illegible] ground by the bit - minor (Py) less than 1% - 67' - 20% quartz feldspathic veining with abundant chloritization * +10 Mesh bedrock sample taken					
			02	EOH - 68'					
				Note: Samples 01, 01A & 02 were not analysed.					
			[illegible] 03A		10	0.1	106	64	59

M.	Ft.	GRAPHIC LOG.	SAMPLE NO.	DESCRIPTIVE LOG

0 - 3' - Humus - Organics - wood chips
- dark brown [illegible] mud balls

3' - 74' - Homogeneous light to dark grey clay
- good floculation - ie - long strands of clay
- occasional isolated pebbles prod. mafic volcanic (<1%)

74' - 79' - Mixed sandy gravel - till
varying heterogeneous mixture
- abundant fine sand
<u>clasts</u> - subrounded to [illegible]
predominantly mafic int. volcanic - 60%
granitic 30%
other 10%

79' - Bedrock
- light to medium green felsic to intermediate volcanic
[illegible] close - with up to 2% fine grained disseminated (PY)
minor sericite alteration

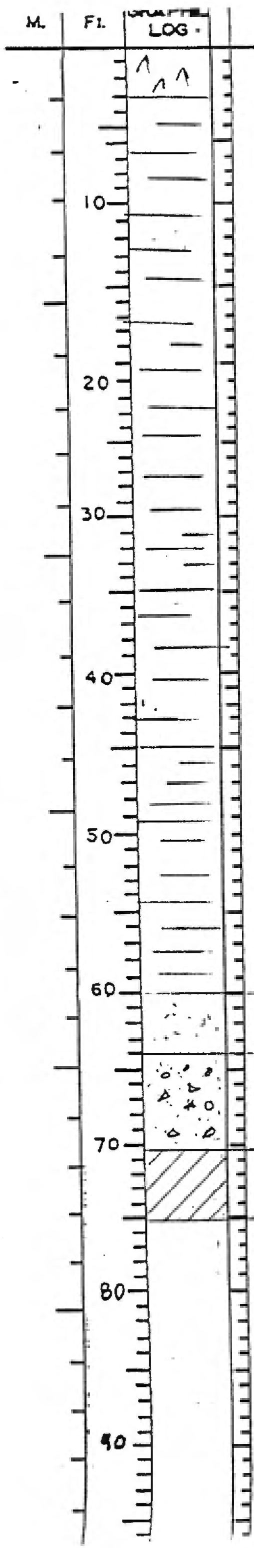
80.5') minor quartz veining but no sulphides associated

82' - rock appears more chloritized with 1% fine grained (PY)

83' EOH

Note x + 10 Mesh Bedrock sample taken

SAMPLE NO.	ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01 01A 01B	80	0.4	154	36	43
02,02A	<5	0.1	32	37	6



DESCRIPTIVE LOG

0 - 3' . Organics. Humus

3 - 64' - light to dark grey homogeneous lacustrine clay
- minor isolated pebbles <1% usually dark possibly mafic volcanic
- floculates well
- a few isolated pebbles around 60'

64' - 70.5'
- Sandy clayey pebbly till
- very sandy with subrounded to subangular pebbles of varying comp.

68' - predominantly - mafic int. volcanic gravel fragments

70' - clay rich layer - sandy clay with 40% mixed gravel pred. mafic int. volcanics

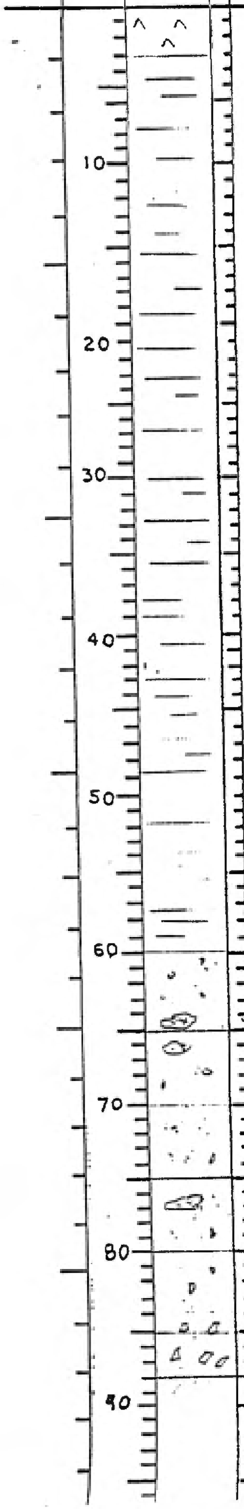
70.5'. Bedrock -
dark green schistose. chloritized mafic volcanic
soft green flakes in + 10 mesh possibly representing chlorite ground by the bit.

* Note + 10 mesh bedrock sample taken

EOH 75'

SAMPLE NO.	ANALYTICAL				
	Au	Ag	Cu	Zn	As
	ppb	ppm	ppm	ppm	ppm
01	215	0.2	200	69	73
02,02A,02B	180	0.5	410	50	91
03	<5	<0.1	29	50	<2

M.	Ft.	LOG	SAMPLE NO.	DESCRIPTIVE LOG



0 - 3' - Humus + Organics

3' - 60' - light to dark grey [illegible]
- clay
- flocculates well
- minor isolated pebbles, dark black - predominantly [illegible]

60' - 63' Mixed sandy / pebbly gravel till varying mixture of subrounded to subangular pebbles - pred. mafic volcanic

63' - 84' 90% [illegible] sandy clay balls - with [illegible] to "mixed gravel" [illegible]
- 64' granitic boulder
- 64.7' clay rich sandy till - 60% clay
- 66' int. volcanic boulder
- 67' mixed gravel till predominantly mafic [illegible] int. volcanic
- 69' 90% sandy gritty clay balls, 10% mixed gravel of varying composition
- 77' epidotized gabbro boulder med. gr.

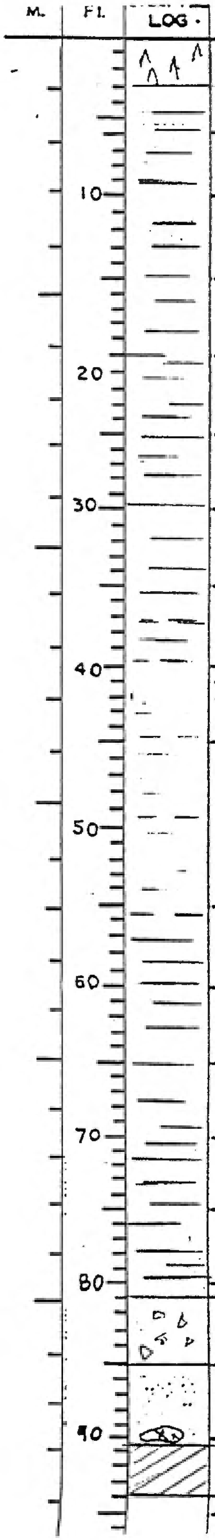
84' - 88' - angular - mixed gravel till
- minor amounts of fine sand
- pred. mafic [illegible] mixed gravel frags.

88' - [illegible] - **Bedrock** light green schistose int volcanic
- appears to be tuffaceous
- < 1% py (fine grained disseminated)
- soft green flakes in +10 mesh possibly chlorite

EOH - 90'

SAMPLE NO.		ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01 02	*	2225	0.6	220	54	60
03 04		80	0.3	380	66	147
05		330	0.5	520	97	168
06 07		<5	<0.1	52	68	5

M. | FT. | LOG | SAMPLE NO. | DESCRIPTIVE LOG | ANALYTICAL



DESCRIPTIVE LOG

0 - 3' Organics Humus

3' - 81' - light to dark homogeneous grey clay - (lacustrine)
- minor isolated pebbles - usually dark black mafic volcanics
- good flocculation long strands hold together well

81' - 84'
Mixed sandy gravel till
- heterogeneous mixture of angular to subangular fragments

84'-91.5' - 60% coarse sandy gritty clay balls
40% mixed gravel pred. mafic volc.
- (88') 90% clay balls with coarse sand in clay - 10% - mixed gravel
- (90') dark green schistose chloritized mafic volcanic boulder

Bedrock

91.5' - light green grey intermediate volcanic
- minor quartzo-feldspathic veinlets (5%) 2 - 4 mm wide
- soft green flakes in +10 mesh possibly represent chlorite chewed by the bit

+10 Mesh bedrock sample taken

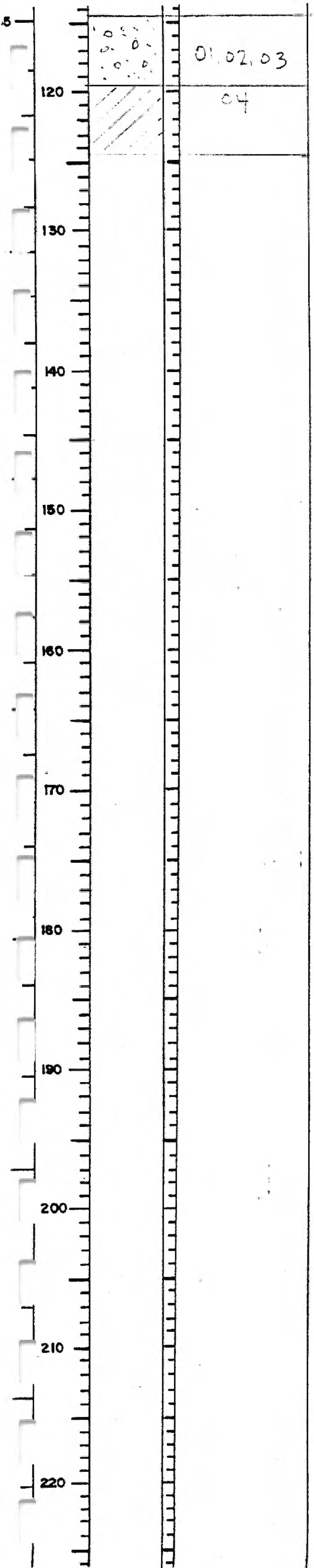
EOH 94'

*Note 4.35 gasket [illegible] rock ([illegible] proof)
- carboard gasket put in

SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01	55	2.1	350	105	105
02	1460	0.3	320	64	78
03					

Remarks START - 8:35
FINISH - 10:00

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL Au	Ag	Cu	Zn	A
	10 20 30 40 50 60 70 80 90 100			0 - 3' - Humus - Organics 3'- 114' - light brown to grey homogeneous clay - good floculation - minor isolated pebbles - (5%) pred. mafic volcanic and argillite 55'-60' - very fine sand - with very sandy clay 114 -1195' Mixed sandy gravel till - subrounded to subangular heterogeneous sandy till - pred. mafic - int. volcanics - 60% - granitic - felsic - 30% - other - 10% **Bedrock** 119.5'-124.5' green chloritized. schistose mafic volcanic with 5% qv. - < 1% finely disseminated (py) - +10 Mesh bedrock sample taken EOH - 124.5' See - pg. ②					



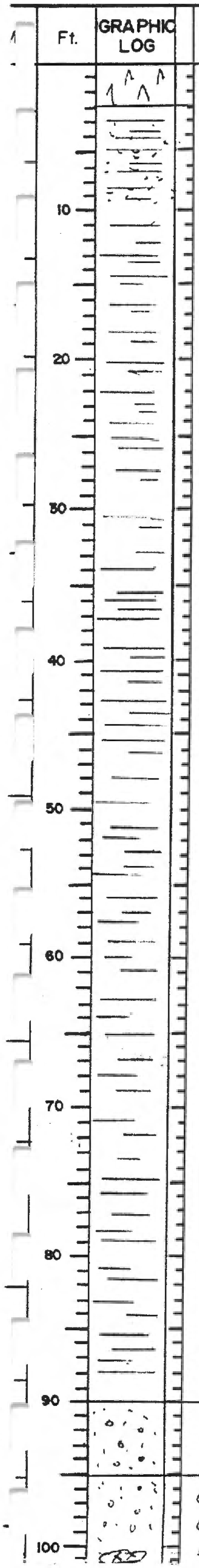
01, 02, 03

04

LOH - 124.5'

16630	1.1	430	80	176
<5	<0.1	35	48	2

Remarks Start 10:40 1:20 rods pulled - suspect bit damaged
Finish - 12:50 - simply plugged



DESCRIPTIVE LOG

0-3' - Humus - Organics - wood chips

3-8' - light brown - clay rich soil - very hard - plugged rod.

8' - 90' - homogeneous (lacustrine) light to dark grey clay
- well floculated
- a few isolated pebbles (1%) appear to be pred. mafic volc.
- 80-90' - clay contains abundant coarse sand

90'-102' Mixed sandy gravel
- subangular to subrounded gravel and pebbles with abundant fine sand
- varying heterogeneous mixture of
  - int. — mafic volcanic - 60%
  - granitic, quartz, felsic volc. } 30%
  - other - 10%

(101') - granitic boulder - offwhite to pink

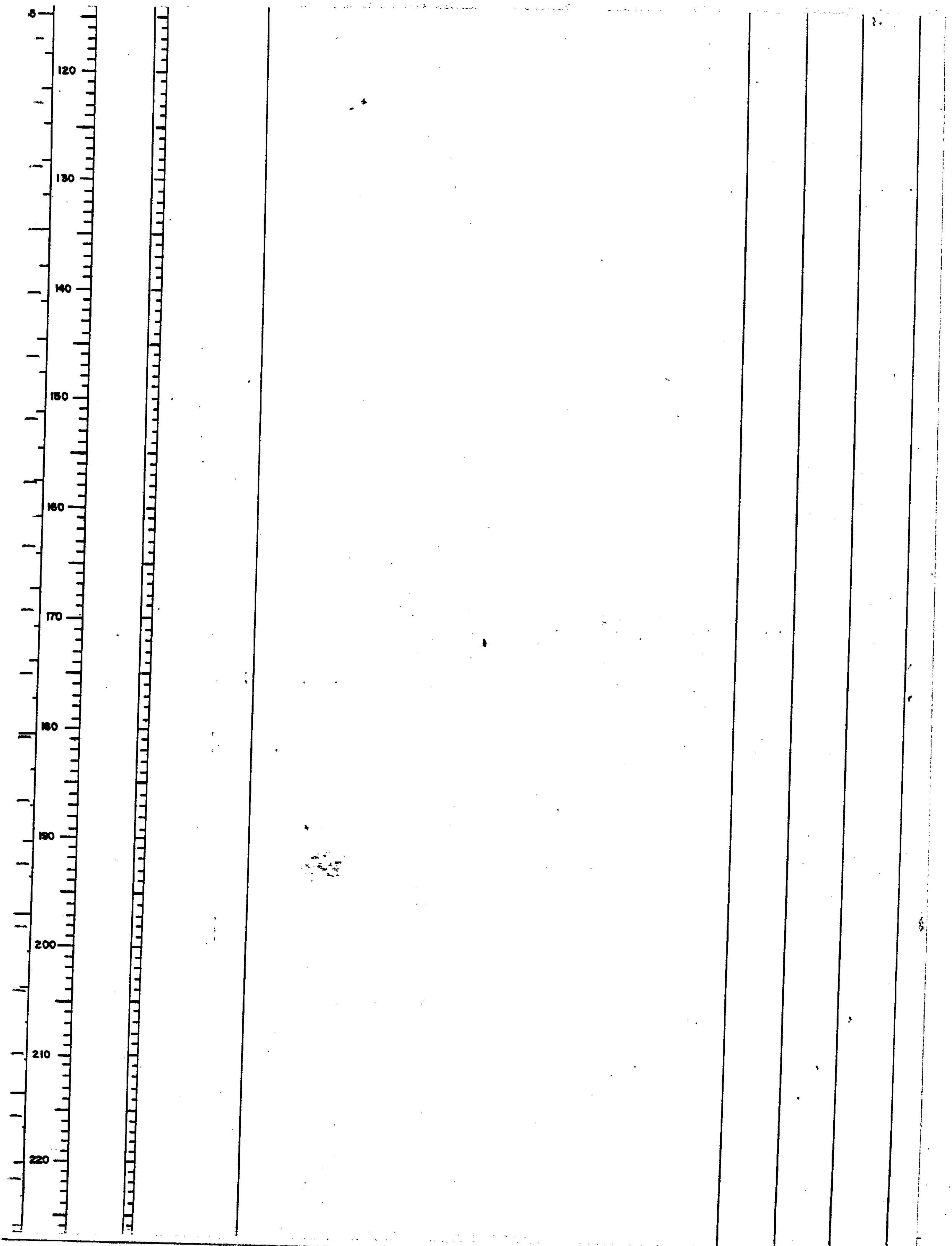
*appears to be an underground water source - since water is flushing out of hole

(102') - predominance of tiny rounded pebbles - heterogeneous mixture with abundant fine sand

102.2' **Bedrock**
- dark green schistose mafic volcanic
- abundant chloritization with trace (py)
- <5% quartzo-feldspathic veinlets
- +10 Mesh bedrock sample taken

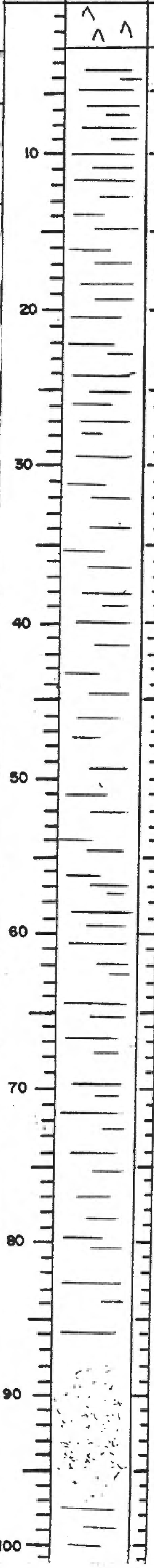
EOH - 105'

SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01	95	0.9	340	74	104
02. 03 04. 05 06	70	0.5	330	55	44
	55	0.6	250	48	544


120
130
140
150
160
170
180
190
200
210
220

Remarks START - 1:50
FINISH - 4:20

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL			



0 - 3' - Organics

3' - 90' - light to dark - homogeneous grey clay -
- good floculation - coming out in long strands
- minor assorted pebbles (< 1%)

90' - 95' - very sandy clay

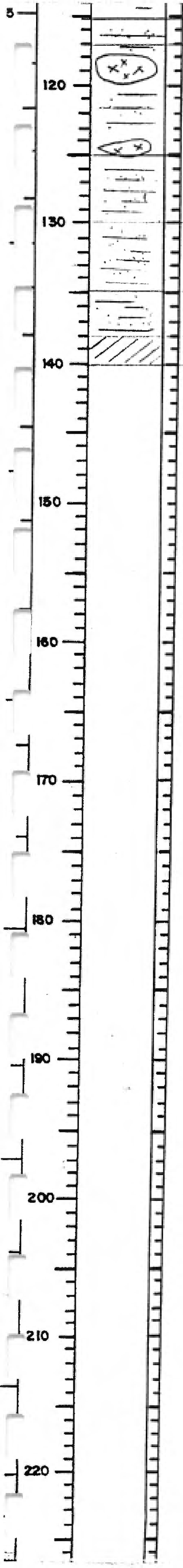
106' - 110' Heterogeneous sandy gravel
- abundant fine sand with pebbles and gravel of varying composition
(108') - granodiorite cobbles - with abundant fine sand
(110') - 90% - mafic to intermediate volc.
10% - clayey sand

111' - 135' - 60-80% clay with coarse sand
- clay in little balls with varying amounts of intermediate and mafic volcanics - (10 - 20%)
- (117 - 119') m.g. gabbro - boulder
- (124') intermediate volcanic boulder

135' - 138' Sandy gravel till
- 90% mafic to intermediate volcanic fragments - with abundant fine sand

138' - Bedrock
- light green schistose altered int. volcanic
- appears to be tuffaceous
- chloritized with chlorite appearing as soft green flakes in +10 mesh
- +10 mesh bedrock sample taken

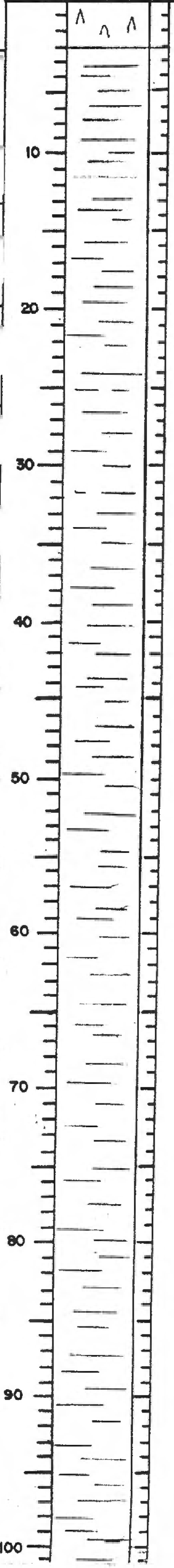
EOH - 140'



02					
03	65	0.3	560	49	72
04	135	0.3	470	65	11
05					
06	1055	0.4	450	47	102
07	<5	0.1	46	57	<2

Remarks Start - 4:40 -
Finish 9:45 -

M	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
					Au	Ag	Cu	Zn	Pb
					ppb	ppm	ppm	ppm	ppm



0 - 3' - Organics - humus - wood chips

3' - 100' light to dark homogeneous grey clay
- good floculation down to 45'
- around 45' - less floculation
- minor - isolated pebbles - (<1%) seen to be predominantly mafic volcanic - / argillite ?

100' - 106' - Mixed sandy pebbly till
- Subangular to subrounded heterogeneous sandy pebbly till predominantly

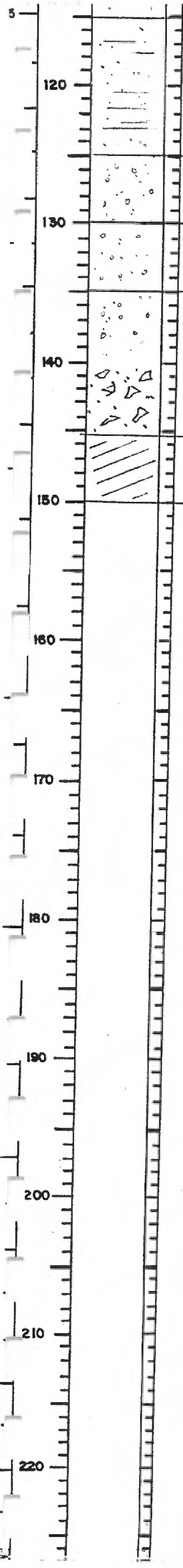
mafic - int. volcanics	-	60%
granitic	-	30%
other	-	10%

(qtz. argillite, felsic volc etc.)

(104.5') - mesocratic - m.g. gabbro boulder

106' - 123' 98% - sandy gritty clay balls
2% isolated pebbles - pred. mafic to intermediate volcanic
- (109') green - int. volcanic boulder
- (111') light green sercicitized int. to felsic volcanic boulder - tr py
- at 121' up to 40% subangular to subrounded pebbles with clay balls

123' - 140' Sandy pebbly till - heterogeneous mixture of pebbles and fragments possible limestone frags (1%) ?
- (129') predominantly green mafic volcanic with 5% tiny clay balls
- (133' - 136') - 60% sandy clay balls with 40% mixed pebbly till



04

05

06

07,07A

08

10% (more rounded) granitic pebbles

145.5' - Bedrock
- light green schistose intermediate volcanic
- chloritized and serricitized
- appears to be somewhat silicified
- 3% tiny pink & white quartzo-feldspathic veinlets
- * Note +10 Mesh Bedrock sample taken

EOH - 150'

40	1.0	270	110	24
30	1.6	400	53	15
220	0.5	235	45	13
<5	0.2	22	32	2

Remarks START 10:10
FINISH 2:20

M	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
					Au	Ag	Cu	Zn	As
					ppb	ppm	ppm	ppm	

10
20
30
40
50
60
70
80
90
100

0 - 3' - Humus - Organics

3 - 5' - Dark brown clay rich soil

5'-95' - Varying light to dark grey homogeneous lacustrine clay
- good Floculation
- isolated subangular pebbles (<1%) predominantly mafic volcanic minor granitic
- (35-45') very sandy clay

95'-131' Very fine silty sand
- minor intermitent sandy clay horizons - (10%) -

131'-136' - Very sandy - silty pebbly till
- predominantly int. to mafic volcanic - 60%
granitic - 30%
other - 10%

* - (132') Massive Sulphide cobble
py - po? - appears to be py
associated with graphite
+10 Mesh sample taken

- (134.5') granite boulder

136'-141' - 40% to 90% sandy clay balls
- with varying amounts of mixed pebbles
- (138') - mafic volcanic boulder

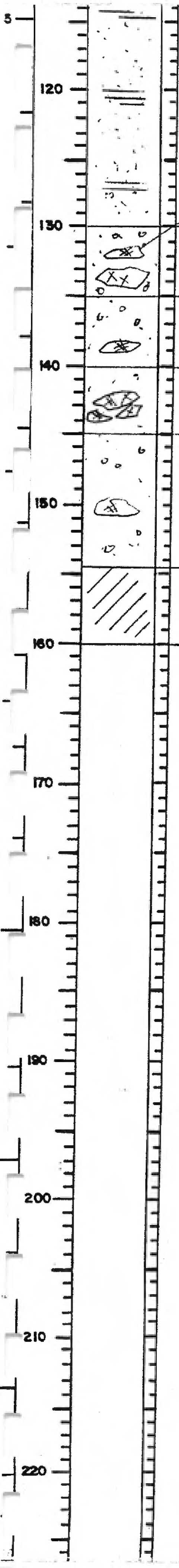
141'-146' - predominantly green and black mafic to intermediate volcanic frags.
(143') - int. volcanic boulder

146'-154.5' - 90% very fine silty sand - with 10% mixed pebbles
- (130') - light green int. to felsic volcanic boulder

scratch with a knife

- minor quartz veining - 159' (5%)

EOH - 160'



01	165	2.1	590	* 1388	13
02	70	1.2	410	553	13
03	80	0.7	310	168	16
04 poor sample combine with - 03	420	0.7	470	166	18
05	<5	<0.1	25	43.	5

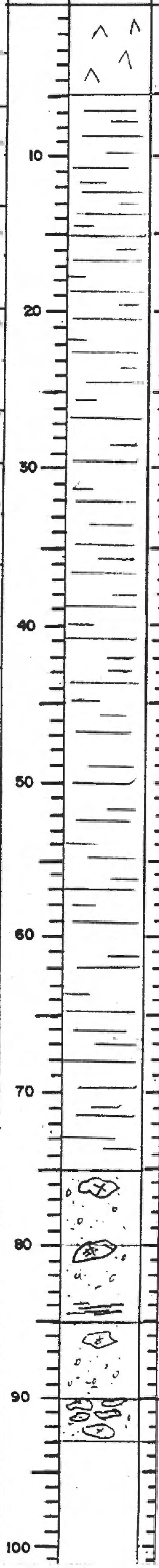
* Note - Very little power - stop drilling at 12:50 to change hydraulic pump

- start again 1:50

05 ← very poor sample bit was damaged

Remarks START - 2:45

FINISH - 4:50 - Bit destroyed



DESCRIPTIVE LOG

0' - 5' - Humus - organics - wood chips etc.

5' - 75' - light to dark homogeneous grey lacustrine clay
- minor (1%) isolated pebbles pred. mafic volcanic & gabbro

75' - - Heterogeneous sandy gravel
- subangular to sub-rounded very sandy
- predominantly mafic and int. volcanic gravel fragments

(76') - granodiorite - granite - boulder medium grained felsic intrusive
- minor quartz veining 80'

(80.5') - dark green mafic volcanic boulder -
- chloritized - 1-2% py

(84') - hard green chloritic clay in tiny balls - with tiny mafic granules

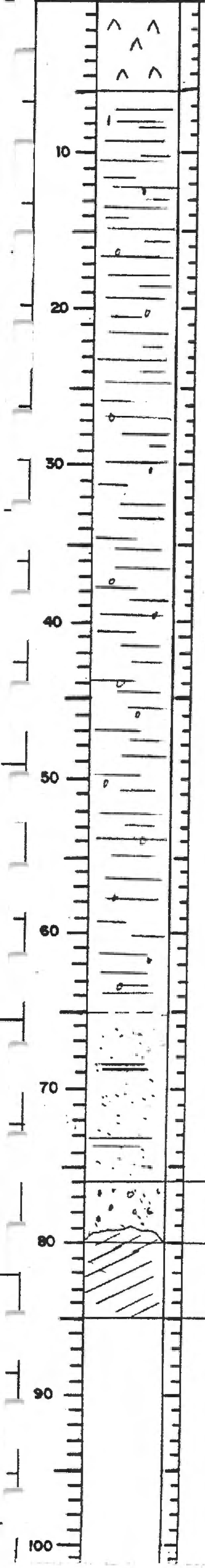
(86') granite cobble.

(90-93') granite cobbles - bit destroyed

EOH - 93'

SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01 & 02 — Combined	50	1.1	620	108	210
03	110	2.0	* 6200	48	96
04, 04A	115	0.7	960	92	114
05	<135	0.7	* 2600	62	182

Remarks Start - 1:20
Finish - 2:25



DESCRIPTIVE LOG

0 - 5' - Humus - Organics - wood chips

5'- 65' - light brown grading to gray homogeneous lacustrine clay
- good floculation
- minor isolated pebbles 1% predoninantly mafic volc.

65 - 76' - Fine silty sand with isolated clay layers 10%

76'- 79' - Heterogeneous sandy pebbly till
- subrounded to subangular
- very sandy with mafic volcanic fragments more dominant towards contact

79'- **Bedrock**
- dark green schistose mafic/int intrusive very fine - diorite
- chloritized
- up to 2% (py) as finely disseminated cubes
+ 10 Mesh Bedrock sample taken

EOH - 85'

ANALYTICAL

SAMPLE NO.		Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01, 01A		125	1.1	770	76	21
02, 03	02	<5	0.1	65	72	3
	03	<5	<0.1	80	80	4

Remarks Note - Hole - beside the river Start - 8:27
Finish 9:55

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
				Au	Ag	Cu	Zn	As
				ppb	ppm	ppm	ppm	ppm
10 20 30 40 50 60 70 80 90 100			0-5' - Organics - Humus 5'-65' - light to dark homogeneous grey lacustrine clay - locally good floculation - minor isolated pebbles - (1%) predominantly mafic volc/arg. 65'-115' - very fine silty sand with intermittent clay horizons (10%) 115'-130' Mixed sandy pebbly till - very sandy heterogeneous mixture of subrounded to subangular pebbles (116') granite boulder - till very heterogeneous - granite felsic volcanic, mafic volcanic in varying proportions 130'-131' - 90% angular mafic volcanic with very little sand - 10% 131' - Bedrock - dark green schistose chloritized mafic tuff - chlorite appearing as soft green flakes in +10 mesh screen - +10 mesh bedrock sample taken EOH - 135'					

120

130

140

150

160

170

180

190

200

210

220

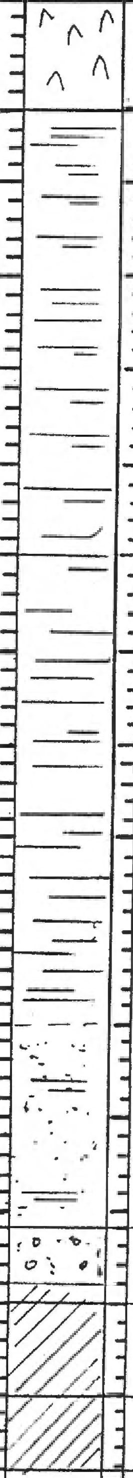
01,01A,01B	355	0.5	270	57	0.5
02,02A,02B	1.79	0.8	380	107	34.
	0.39	1.3	450	81	324
03	3.98	<0.1	460	67	101
04	<5	0.1	39	60	3

03 — small sample

Au average ppm

Remarks Start - 10:15
Finish - 11:11

Ft.	SAMPLE NO.	DESCRIPTIVE LOG		Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
66–69	01,01A		fines	185	0.5	410	91	0.5
70–75	02,02A			<280	0.7	*3650	314	464
75–79	03			<5	<0.1	7	22	2



DESCRIPTIVE LOG

0 - 5' - Organics - Humus

5'-55' - light to dark homogeneous grey clay (lacustrine)
- good floculation
- minor isolated - pebbles 1% pred. mafic volc/argillite pebbles

55'-66' - very fine sand - with intermittent sandy clay horizons - 10%

66'-69' Very sandy mixed pebbly till
- heterogeneous mixture of pred. mafic to int. volcanics

69' - <u>bedrock</u>
- light brown rusty quartzo-feldspathic rock (possible intrusive)

(71') - more rusty less siliceous

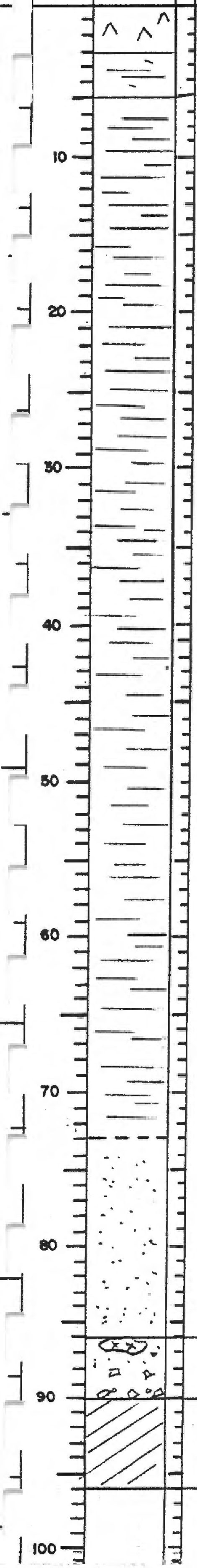
(74') - grading into white and green - quartzo-feldspar, serricitized, chloritized, and schistose - local pink fragments of quartzo-feldspathic material

(76') - light brown rusty quartzo feldspar

Note - Several +10 Mesh samples taken

EOH - 79'

Remarks Start - 11:31
Finish - 12:51



DESCRIPTIVE LOG

0-3'. Humus. Organics. wood chips

3-5' - Dark brown hard clayey soil

5'-73' - dark to light grey homogeneous lacustrine clay
- good floculation
- minor isolated pebbles (<1%) pred. gabbro - mafic volcanic

73'-86'- Very fine sand with minor isolated sandy clay horizons (10%)

86'-87' very sandy mixed gravel till - 10% mafic - int. volcanic gravel frags with up to 90% fine sand

(86.5') - green int. chloritized tuff boulder

87'-90'- Mixed gravel till
- 90% graphite & mafic volcanic fragments

90'- Bedrock

graphitic? grading from black to dark green mafic volcanic/argillite?
- schistose - chloritized
- soft enough to be scratched with a knife
- note seems to grade from dark black to dark green chloritic fines *
- +10 Mesh bedrock sample taken

EOH - 96'

SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01.01A	110	0.2	360	57	139
02,02A	1000	2.0	1340	53	20

Remarks Note - trying to hit conductor directly　Start : 2:44
Finish : 4:25

M | Ft. | GRAPHIC LOG | SAMPLE NO. | DESCRIPTIVE LOG | ANALYTICAL

Au	Ag	Cu	Zn	A
ppb	ppm	ppm	ppm	ppm

0'-3'- Humus - Organics

3-5' - Dark brown clay rich soil

5-80'- light to dark homogeneous grey lacustrine clay
- locally exhibits good floculation
- minor isolated pebbles (1%) pred. mafic volcanic - granitic

80'-96' - very fine silty sand with intermittent clay horizons

96'-105'- sandy pebbly till
- heterogeneous mixture of subangular to subrounded grains
- predominantly mafic and intermediate volcanic pebbles and gravel fragments

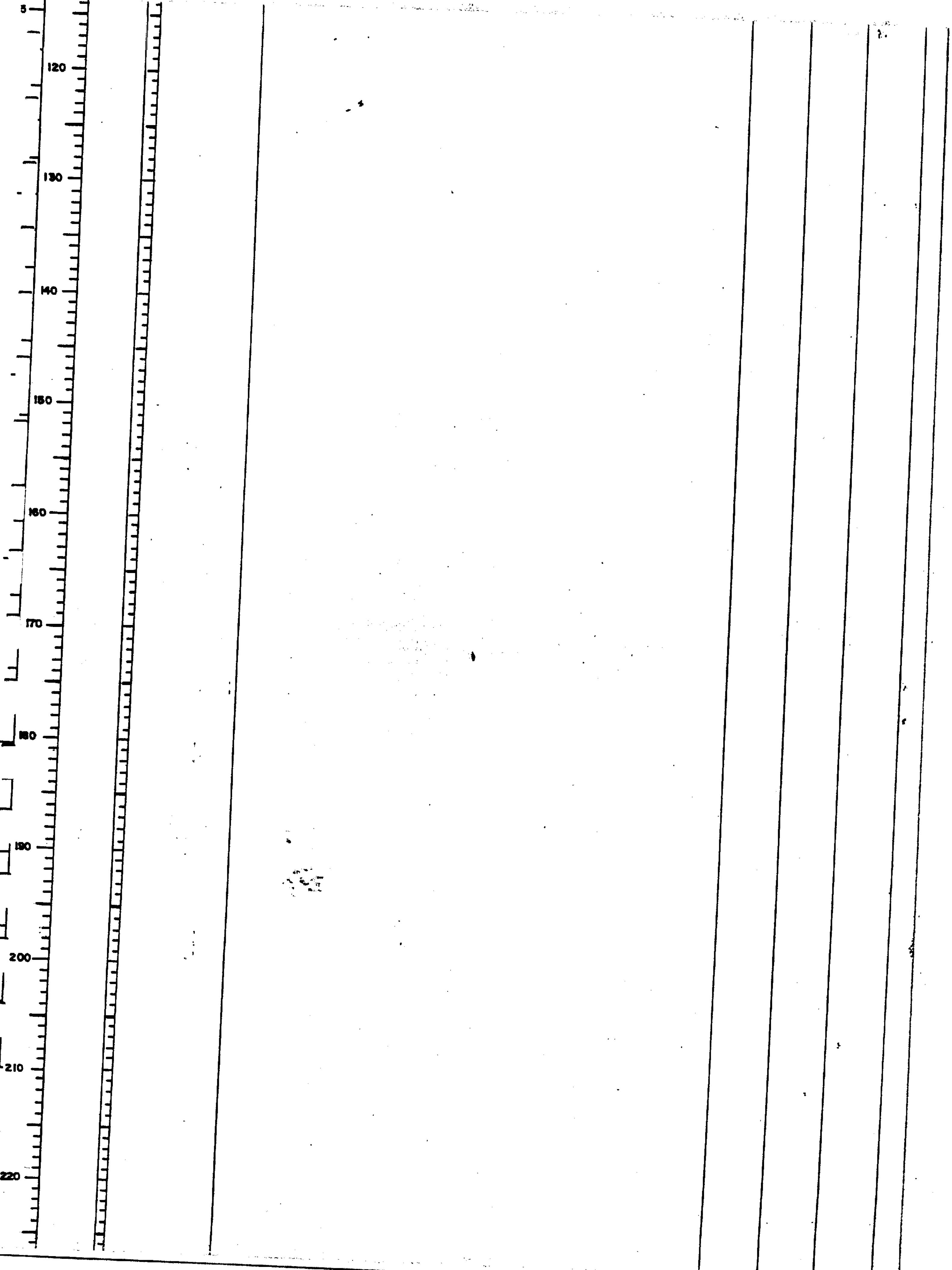
(98.5') - 30% assorted gravel frags
60% very fine sand

(99') - 60% heterogeneous - pebbly gravel
30% very fine sand

(100.5') - light green - int. volcanic boulder

105'- Bedrock
- light green to white
- silicified felsic tuff
- very fine grained (PY) up to 1%
- + 10 Mesh bedrock sample taken

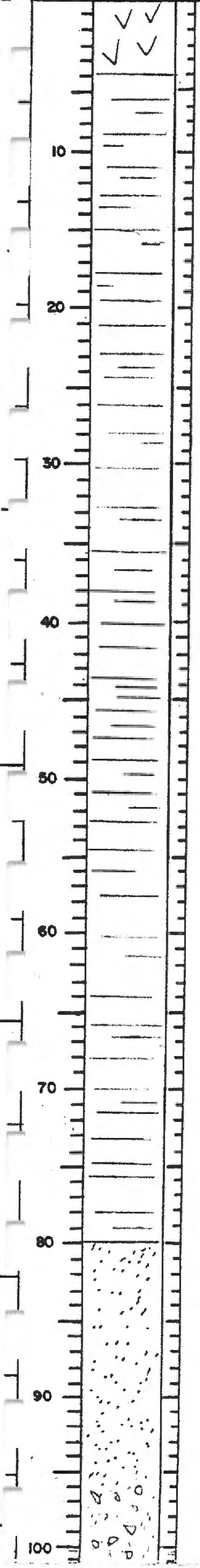
01, 01A　EOH - 110'


5
120
130
140
150
160
170
180
190
200
210
220

Remarks Start: 8:30 am

Finish: 10:00

					ANALYTICAL				
M	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	Au	Ag	Cu	Zn	As
					ppb	ppm	ppm	ppm	ppm



0'-5' - Humus - Organics - dark brown clay rich soil

5'-80' - light to dark grey homogeneous lacustrine clay

- minor (1%) isolated pebbles pred. mafic volcanic/gabbro

80'-95' Very fine sand with minor sandy clay horizons

- minor assorted pebbles - 5%

95'-104' - Heterogeneous sandy pebbly till

- subrounded to subangular
- predominantly mafic - int. volcanic pebbles - 70%

104'-116' - sandy gritty clay balls 80%

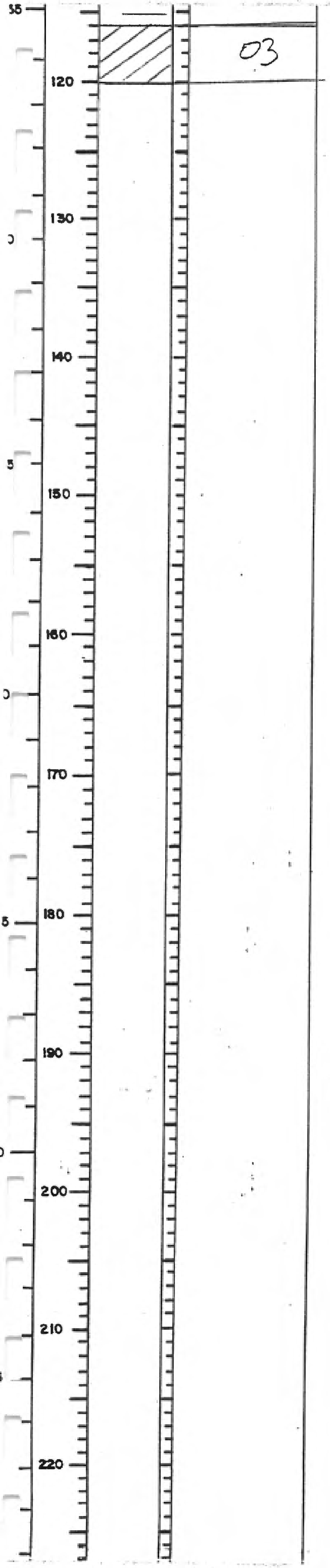
20% heterogeneous gravel

- predominantly mafic volcanic pebbles and grit
- (110') intermediate tuff boulder
- (114') graphitic/argillitic boulder

116' - Bedrock

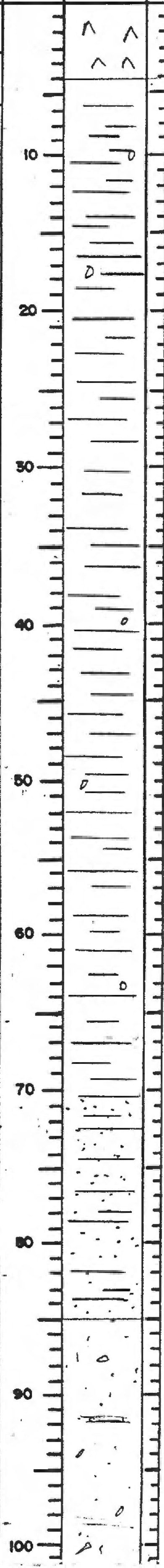
- light to medium grey - schistose platy argillite/greywacke?
- +10 Mesh sample taken
- fairly soft - able to break flakes with fingers
- quartz veining - (117') - 5-10%
- trace py on some grains

EOH - 120'


03
120
130
140
150
160
170
180
190
200
210
220

Remarks START - 10:35
FINISH - 11:25 *Note - Bedrock not reached

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	Au	Ag	Cu	Zn	A
				ppb	ppm	ppm	ppm	ppm



0'-5'- Humus Organics - Wood chips

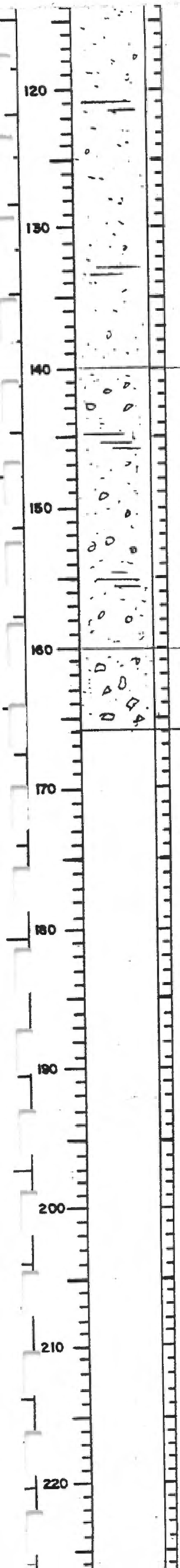
5'-85'- light to dark grey homogeneous lacustrine clay
- minor isolated pebbles predominantly mafic - 1%
- (70') - very sandy clay -

85'-140' - very fine silty sand
- with 5% isolated pebbles predominantly mafic - (sub-rounded)
- isolated sandy clay horizons 10%

140'-156' - very sandy (90%) with 10% - 60% mixed pebbly till - varying heterogeneous mixture with abundant fine sand
- (145') sandy clay horizon
- (155') sandy clay horizon followed by intermediate volcanic boulder

156'- Sandy mixed gravel till
- very sandy with predominance of mafic volcanic subangular to subrounded fragments.

166' - Bit destroyed rods pulled



01

01A

01B

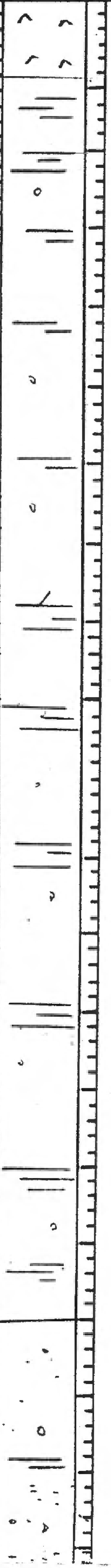
02,02A

	225	0.4	162	82	14
02	100	0.7	205	125	26
02A	55	0.4	210	80	27

Remarks Start - 12:15
Finish 2:35

Note - Drilled 20' from
Hole 17

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL Au	Ag	Cu	Zn	A
				ppb	ppm	ppm	ppm	ppm



0 - 5'. Humus - Organics - wood chips

5' - 85'. light to dark grey homogeneous lacustrine clay
- minor isolated pebbles predominantly mafic - 1%

85' - 138' - very fine silty sand
- 5% isolated pebbles - pred. subrounded mafic volcanic
- isolated clay horizons - 10%

138' - 161'
- heterogeneous sandy pebbly gravel till
- subangular to subrounded pebbles and gravel of varying composition
- (147') - predominantly mafic - int. volcanic fragments - 60% subangular - minor granitic pebbles - 20% - other 10%

(148') - Syenite boulder

(151') - Underground water source extremely good sample return

(153') - intermediate volcanic boulder containing - 2% py

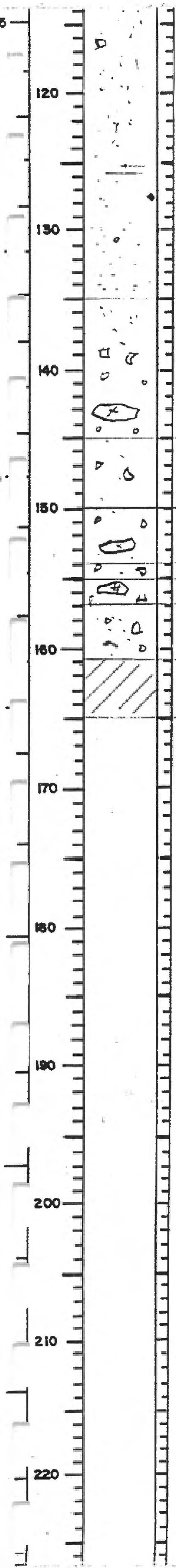
(156') - intermediate volcanic boulder containing up to 2% py

P.T.O.

up to 1% py

- serricitized, chloritized
- tiny quartzo-feldspathic veinlets 1mm wide
- +10 Mesh bedrock taken

EOH - 165'

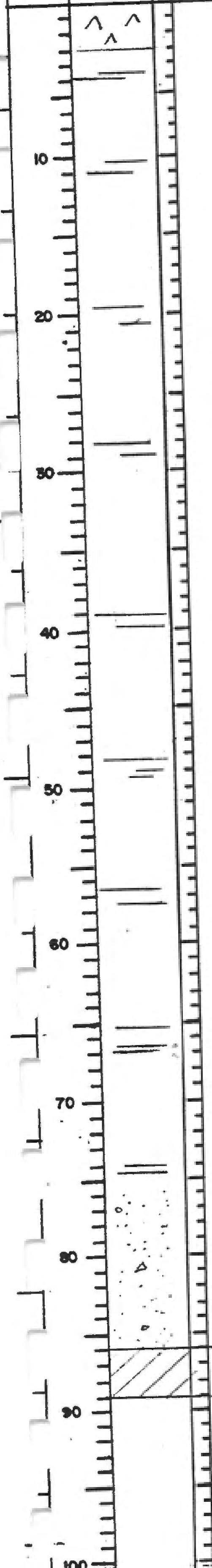


01		35	0.2	360	65	33
02,02A		80	0.7	310	60	23
03,03A,03B,03C		100	0.4	146	52	12
04,04A		15	<0.1	124	42	8
05,05A		30	0.2	200	41	149
06,06A,06B	*	560	0.1	205	199	131
07		<5	0.2	86	75	3

Abundance of sample material due to underground water source.

marks START - 3:05
FINISH - 3:50

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG



0 - 3' - Humus - Organics
3 - 5' - Dark Brown - Clay rich soil

5 - 75' - light brown grading to dark grey homogeneous lacustrine clay
- good floculation -
- minor isolated pebbles 1% predominantly mafic subrounded

75' - 86' - very fine silty sand
- minor isolated pebbles 5%

86' - 89' - Bedrock - Boulder?
- grey green felsic volcanic
- up to 1% py finely disseminated on 10% of fragments
- +10 Mesh sample taken

EOH - 89'

Apparently no till ∴ had drill move 100' to the west - and drilled hole - 18A.

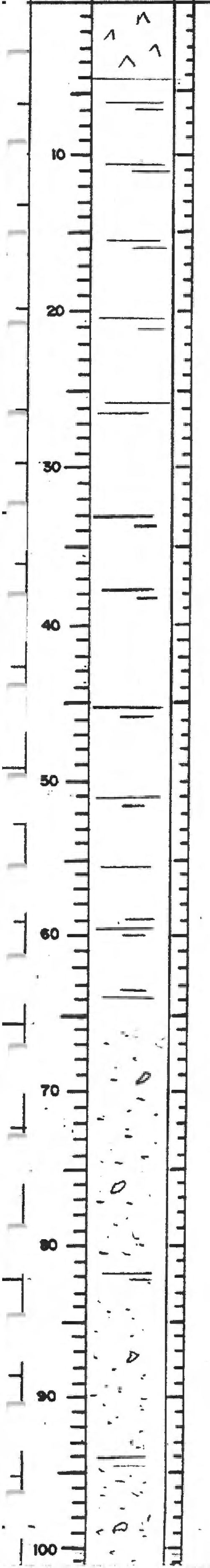
SAMPLE NO.: 01, 01A, 01B

ANALYTICAL

	Au ppb	Ag ppm	Cu ppm	Zn ppm	As
bedrock fines	80	1.9	395	112	968
bedrock chips	20	0.3	94	100	11

Remarks START - 4:06
FINISH - 5:40

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
				Au	Ag	Cu	Zn	As
				ppb	ppm	ppm	ppm	ppm



0 - 5'. Organics - Humus - dark brown clay rich mud

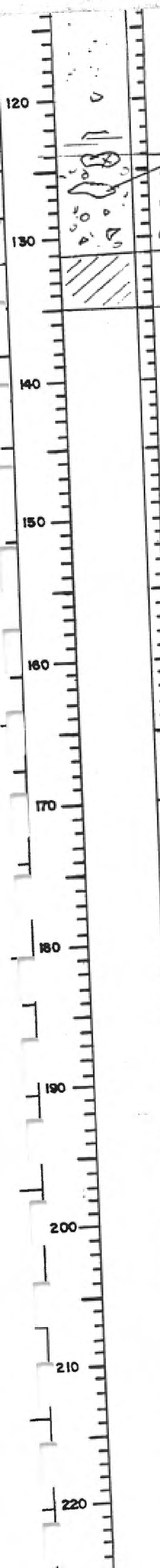
5 - 65' - light to dark grey homogeneous grey clay
- good floculation
- minor isolated pebbles pred. mafic volcanic 1%

65'-126'. very fine sandy silt
- minor isolated pebbles - subrounded - pred. mafic volcanic 5%.
- 10% Sandy clay horizons
- (124') pink mg. granite boulder with trace py
*-(126') massive sulphide boulder. predominantly py

126' - 131'. very sandy mixed gravel
- (filled sample buckets)
- heterogeneous mixture of varying composition
- predominantly mafic and int. volcanic -70%.
- up to 40% granitic pebbles at times
- <1% of frags appear as massive PY - of sedimentary origin ie) nodules.

131 - 135'. Bedrock
- hard dark grey siliceous felsic volcanic
- appears as a black grey rhyolite possibly siliceous ash tuff?
- very fine banding evident

+ 10 Mesh sample taken
EOH - 135'



01, 01A

01B, 01C

01D, 01E, 01F

02, 02A

massive sulphide boulder predominontly PY

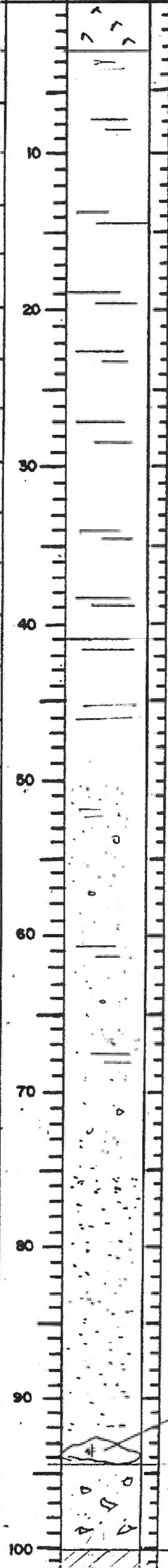
EOH - 135'

+10 Mesh → bedrock sample taken

	125	0.4	320	93	23
	50	0.8	410	78	118
	55	0.7	380	64	104
02A	<5	<0.1	46	78	5
02	<5	<0.1	68	43	2
+10 Mesh	30	2.3	78	106	1

Remarks START - 9:00

FINISH - 10:30



DESCRIPTIVE LOG

0-3' - Humus, organics

3-5' - light brown clay rich soil

5-50' - light to dark grey homogeneous lacustrine clay
- good floculation
- a few isolated pebbles pred. mafic volcanic & gabbro (1%)

50'-94.5' - very fine silty sand
- minor clay lenses - 5%
- minor assorted pebbles 5%
- (75-93) 99% very fine sand
- (93') - graphite boulder with - 2-5% py

94.5-100'. Mixed sandy gravel till
- varing mixture of subangular fragments
- predominantly mafic-int. volcanic - 70%
  granitic - 20%
  other - 10%

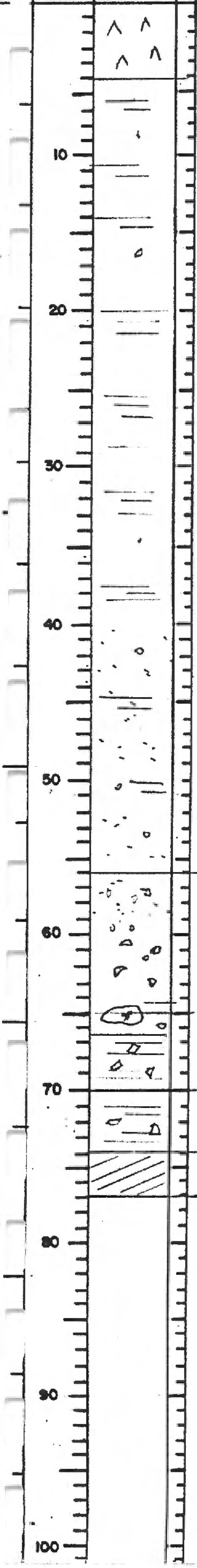
100'-103' - Bedrock
- dark green schistose mafic volcanic? possibly diorite/gabbro
- fairly soft - chips crumble easily in fingers
- chloritized -
- +10 Mesh - bedrock sample taken

EOH - 103'

SAMPLE NO.	ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	A
01, 01A	30	0.5	164	137	76
01B, 01C	60	0.9	200	154	62
01D, 01E	25	0.8	210	142	49

Remarks START - 10:50
FINISH - 12:00

M | Ft. | GRAPHIC LOG | SAMPLE NO. | DESCRIPTIVE LOG | ANALYTICAL



DESCRIPTIVE LOG

0-5' - Humus Organics

5-40' - light to dark grey homogeneous lacustrine clay with up to 1% isolated pebbles

40-56' - Very fine silty sand
- sandy clay horizons 10%
- 5% assorted subrounded pebbles

56'-64' - Very sandy pebbly till
- tiny (2mm) rounded & subrounded pebbles
- varying heterogeneous mixture from 50% granitic to 50% mafic int. volc.

-(60') sandy gravel till
- predominantly mafic - int. volcanics (70%) - angular to subangular fragments

64-74' - 60-80% sandy gritty clay balls
20-40% - mixed gravel - pred. mafic to intermediate volcanics

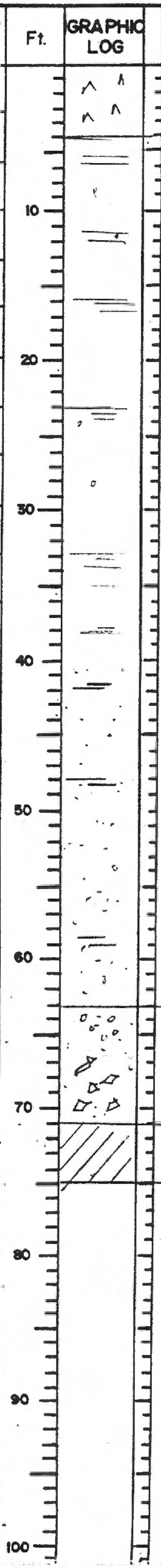
-(65') light to dark grey int. volcanic or metased
- very fine grained -

74-77' **bedrock**
- light green slightly schistose massive volcanic flow - or argillite
-(75') minor qv. (1mm wide)

EOH - 77' +10 Mesh sample taken

SAMPLE NO.	Au	Ag	Cu	Zn	A
	ppb	ppm	ppm	ppm	ppm
01, 01A	35	0.5	340	62	184
02	25	0.6	340	62	17
03	425	0.2	245	60	103
04	<5	0.2	35	68	7

Remarks START - 12:20
FINISH - 1:15

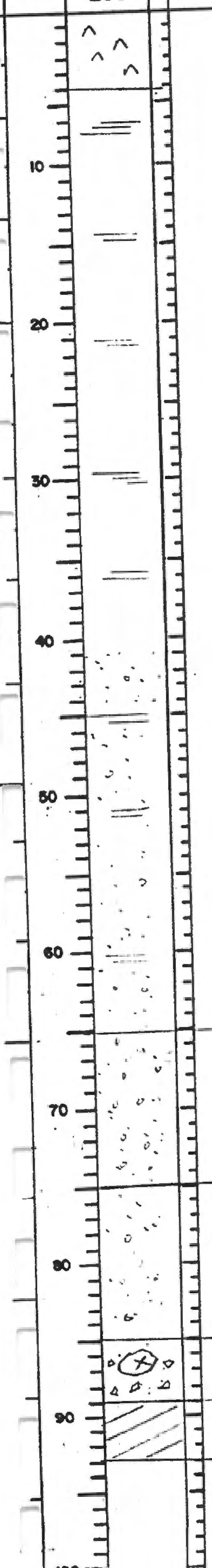


SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
		Au	Ag	Cu	Zn	A
	0 - 5 - Humus Organics - Wood Chips Brown clay rich soil	ppb	ppm	ppm	ppm	pp
	5 - 12' - very fine sand					
	12 - 40' - light to dark homogeneous grey clay - good floculation - 1% assorted pebbles - pred. volcanic					
	40 - 63' - very fine silty sand with minor sandy clay horizons (10%) - minor isolated pebbles - (5%)					
	63' - 71' - very sandy mixed pebbly till - till varying - heterogeneous composition (66') - rounded - sedimentary derived pyrite nodule (66') - more gravel fragments - subangular to angular predominance of mafic - int. volcanics *					
01 01A		5700	0.8	230	96	26
02, 02A	71' - 75' - Bedrock - green int. - mafic volc.	<5	0.1	55	82	10
EOH - 75'	- possibly flow or argillite? - slightly schistose - 1% py associated with tiny quartz veins - soft green flakes in +10 mesh possibly chlorite - - quartz veins - 1% +10 Mesh bedrock sample taken					

Note - 2:00 - Fuel line broken

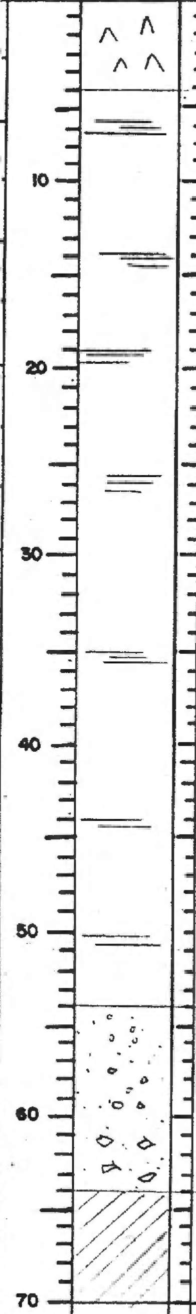
marks START - 1:50

FINISH - 3:40



		ANALYTICAL				
SAMPLE NO.	DESCRIPTIVE LOG	Au ppb	Ag ppm	Cu ppm	Zn ppn	A pp
	0-5' Humus Organics - hard brown clay rich soil					
	5-40' - light to dark homogeneous grey clay - (lacustrine) - good floculation - appearing as long strands					
	40'-64' - very fine silty sand - isolated sandy clay lenses - minor isolated pebbles - 5% (varying composition)					
	64'-86' - very sandy pebbly till - varying rounded to subrounded pebbles - with abundant fine sand					
	86-89' - sandy gravel till - predominantly subangular to angular mafic & int. volcanic fragments (86.5)' - pink mg. granitic boulder					
01	89-93' <u>Bedrock</u>	120	0.9	300	56	26
02	- light green grey intermediate volcanic with carbonate stringers - able to scratch with knife - possibly a tuff	85	1.5	230	65	167
03, 03A	+ 10 mesh bedrock sample taken	* 1225	2.1	400	300	32
04	- trace PY	<5	0.2	35	72	5

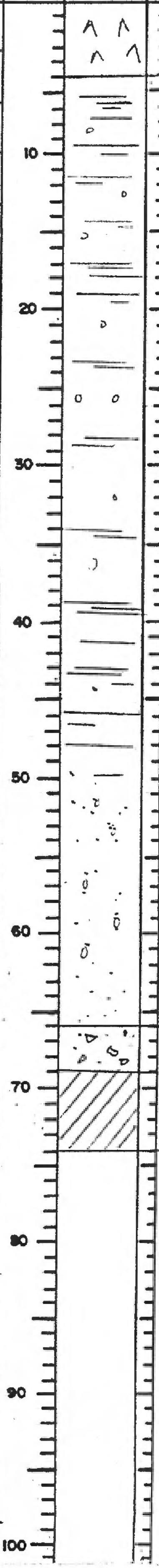
Remarks START - 4:01
FINISH - 4:45



Ft.	SAMPLE NO.	DESCRIPTIVE LOG	Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
		0-5' Humus Organics 5-54' - light to dark grey homogeneous lacustrine clay - good floculation - appearing in long strands 54'-60' - Sandy pebbly till - varying heterogeneous mixture - Subrounded to rounded pebbles 60-64' - sandy gravel till - larger fragments - subangular to angular - predominantly mafic volcanic - 64-70' - Bedrock - dark green grey mafic tuff - slightly schistose - with tr py					
54-64	01, 01A	- chloritized with chlorite appearing as soft green flakes in + 10 Mesh	100	0,5	330	67	37
64-70	02	+10 Mesh bedrock sample taken	<5	<0.1	34	54	3

EOH - 70'

Remarks start - 8:30 - 8:30 (Next day)
Finish 6:00 9.05



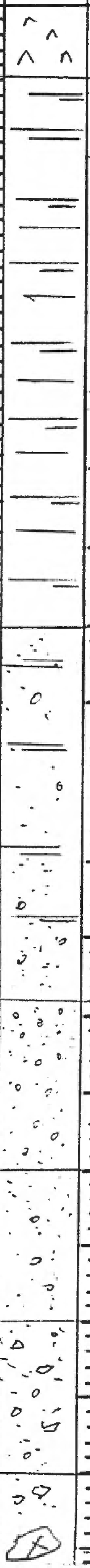
SAMPLE NO.	DESCRIPTIVE LOG	Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
	0-5' - Humus - Organics					
	5-50' - light to dark homogeneous grey lacustrine clay - minor isolated pebbles 1% predominantly mafic volcanic					
	50'-66' - Very fine silty sand - minor isolated - subrounded pebbles - (mixture) 5%					
	66'-69' Sandy gravel till - Subangular to angular gravel frags - predominance of mafic - int. volcanics 60% granitic - 30% other - 10%					
	69-74' - Bedrock - green mafic to intermediate volcanic - schistose - fairly soft - crumbles in fingers - Chlorite appearing as soft					
01, 01A	green flakes in +10 Mesh	40	<0.1	44	22	31
02	- +10 Mesh bedrock sample taken	180	0.7	530	185	48
		10	0.3	70	73	6

EOH - 74'

BONDAR CLEGG analysis of ~~bedrock~~ fines

Swastika analysis of bedrock chips

marks Start - 10:00 - 10:15 part sheared on water pump - shutdown



Ft.	SAMPLE NO.	ANALYTICAL Au	Ag	Cu	Zn	A
		ppb	ppm	ppm	ppm	ppm
10						
20						
30						
40						
50						
60						
70	01, 01A					
80	02					
90	03					
100	04, 04A 04B					

DESCRIPTIVE LOG

0 - 5' - Humus, Organics - clay rich soil

5' - 40' - - light to dark homogeneous grey clay (lacustrine)
- good flocculation
- minor isolated pebbles - pred. mafic volcanic - represent 1%

40 - 64' - Very fine silty sand
- 20% sandy clay horizons
- 5% heterogeneous isolated pebbles

64' - 75' - 60% very fine sand
- 40% subangular to subrounded heterogeneous pebbles

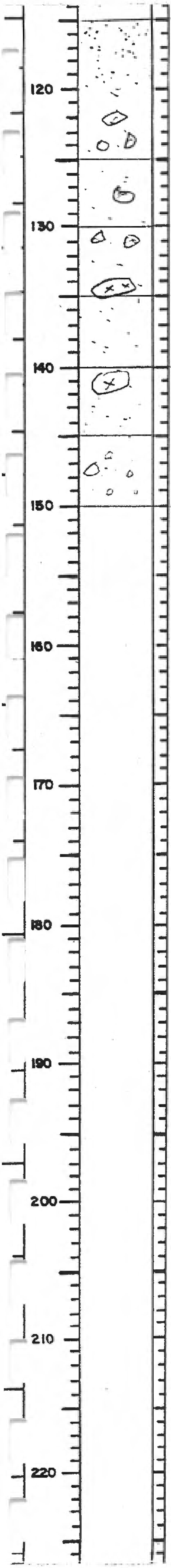
75' - 90' Very fine sand - 95%
5% assorted pebbles

90' - 115' Sandy pebbly till with pebbles of varying composition
- subrounded - to subangular
- (100') int. volcanic boulder
- (105') large pebbles - bit damaged new bit - CB - 67747
- (110') less sand more angular gravel frags - of varying composition

115 - 120' - very fine sand - 99%
- sandy horizon

120 - 150' - mixed gravel - boulder till
- numerous boulders pred. mafic and int. volcanic.

P.T.O.



07, 07A 07B, 07C 07D	*505	1.2	300	57	60
08, 08A 08B, 08C	255	3.1	350	80	46
09, 09A 09B, 09C	60	0.9	400	108	280
10, 10A 10B	140	0.9	930	64	51
11, 11A, 11B, 11C	90	0.6	470	65	25
12A, 12B 12C, 12D 12E, 12F, 12	245	0.9	430	67	382

- (145') Underground water source - a lot of heterogeneous gravel - material being flushed out

- 150' - <u>Bit damaged</u>

Bedrock not reached

Hole scrapped.

Remarks START - 12:33
FINISH - 1:25

DESCRIPTIVE LOG

0-5' - Humus Organics

5-51' - light to dark homogeneous grey clay (lacustrine)
- good floculation
- minor isolated pebbles 1% (assorted)

51-59' - Mixed sandy gravel till
- predominantly angular to subangular mafic to intermediate fragments
- numerous graphitic frags with 3-5% py - possible indication of conducter to the north

59-63' - Bedrock
- green to dark green mafic-int. volcanic - possibly tuffaceous
- trace py on 1% of fragments
- serricitized - chloritized

(61') - graded into a thin - cherty? siliceous black rhyolite? layers

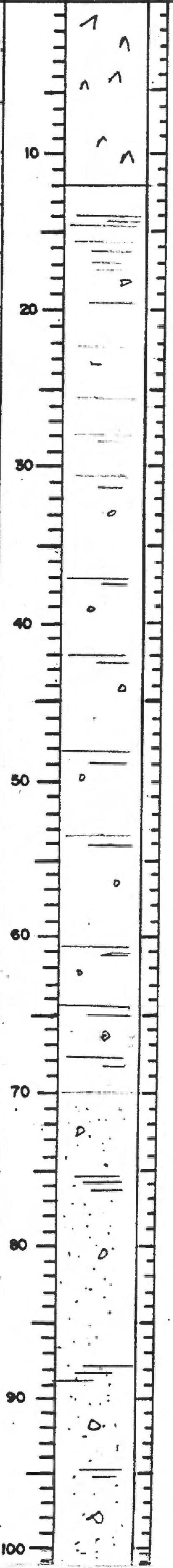
EOH - 63'

SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn ppm	A
01	50	1.2	380	87	13
02, 02A	335	1.4	660	57	39.
03, 03A	25	<0.1	21	30	<2

Remarks START - 1:45
FINISH - 5:05

Note - Attempting to hit conducter directly along strike from Hole 25

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
				Au	Ag	Cu	Zn	As
				ppb	ppm	ppm	ppm	



0 - 12'. Humus Organics - Grass -

12 - 70'. light to dark homogeneous grey clay
- good floculation
- 1% assorted subrounded pebbles

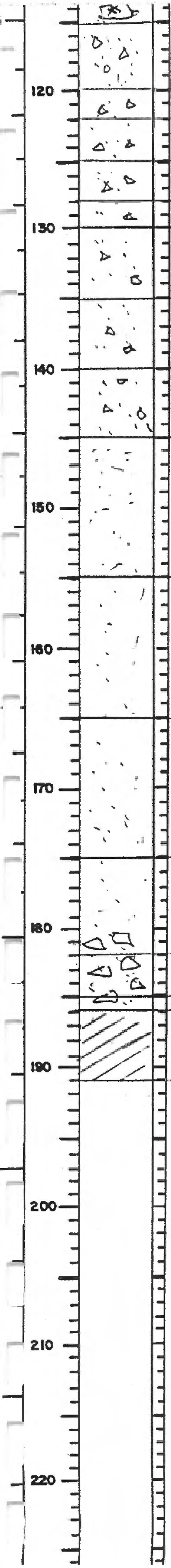
70' - 115'
- very fine silty sand
- sandy clay horizons - 10%
- minor (1%) assorted pebbles - (rounded)
- (114') - int. volcanic boulder
- (115') rounded pink quartz pebble (10% py)

115' - 146' - very sandy pebbly bouldery till
- coarsening downwards
- subangular to rounded -
- very heterogeneous -
- extreme amount of sample material due to underground water source
- minor graphite frags - containing up to 10% py
- (120'-121') abundance of mafic & int. volcanic material
- (127') granite boulder
- some pebbles quite spherical indicating long transport
- appears to be a stratified fluvial deposit

146 - 180' - very fine green sand (60%)
- water turned green
- 40% assorted gravel & pebbles

180 - 186' - intermediate to mafic volcanic fragments from boulders in a very sandy matrix

P.T.O.



py in quartz veining (5%)

- ~~conductor~~ conductor explained -

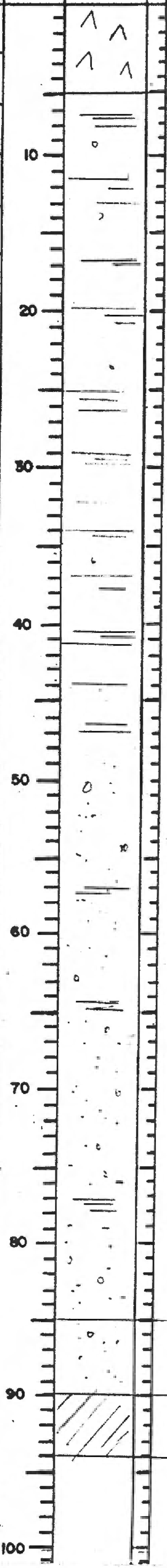
lost — sampler threw out !

EOH - 191'

BONDAR CLEGG analysis of fines

01, 01A 01B, 01C		55	0.8	315	87	17
02, 02A, 02B		70	0.4	270	73	12
lost						
03, 03A 04, 04A 05, 05A	*	840	1.1	360	12	27
06, 06A		95	1.9	270	110	11
07, 07A		20	0.7	200	27	75
08, 08A						
09		35	0.2	33	12	2
09A		<5	0.2	25	16	4
10, 10A		30	0.1	13	14	4
11, 11A		220	0.2	37	14	2
12, 12A		<5	0.1	36	15	6
13, 13A 14, 14A		75	0.5	123	29	56
15, 15A	BONDAR CLEGG analysis of fines	215	0.5	260	53	22

Remarks START - 8:50.
FINISH - 9:40



DESCRIPTIVE LOG

0' log- 1-5'- Humus Organics
- clay rich - soil (brown)

5-47' - light to dark grey homogeneous lacustrine clay
- minor (1%) rounded pebbles of assorted composition
- good floculation - appearing in strands

47'-90' - very fine sand
- minor (10%) sandy clay horizons
- minor isolated pebbles (rounded) pred. mafic volcanic & granitic (1%)

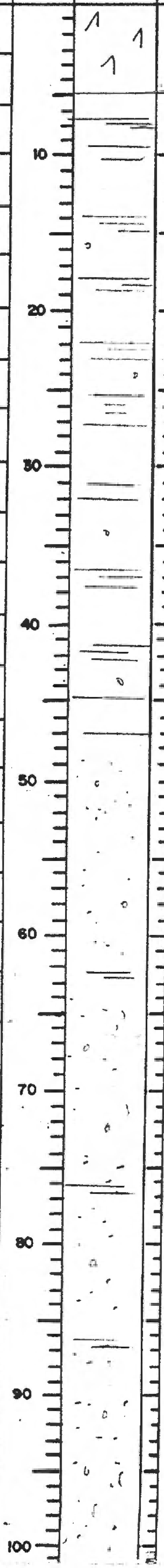
90'-94'- **Bedrock**?
- light to dark green intermediate-felsic tuff
- 1-2% - py stringers
- chloritized
- very interesting looking -

* Since No till - moved north 50M to drill hole M86-05-28A

SAMPLE NO.	ANALYTICAL Au ppb	Ag ppm	C. ppm	Zn ppm	A
01, 01A	105	0.4	235	71	7.
02, 02A	<5	0.1	23	32	2

Remarks START 9:49 * Note - this hole drilled 50 M from
FINISH - 10:25 M86-05-28 to try and get - till.

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
				Au	Ag	Cu	Zn	A



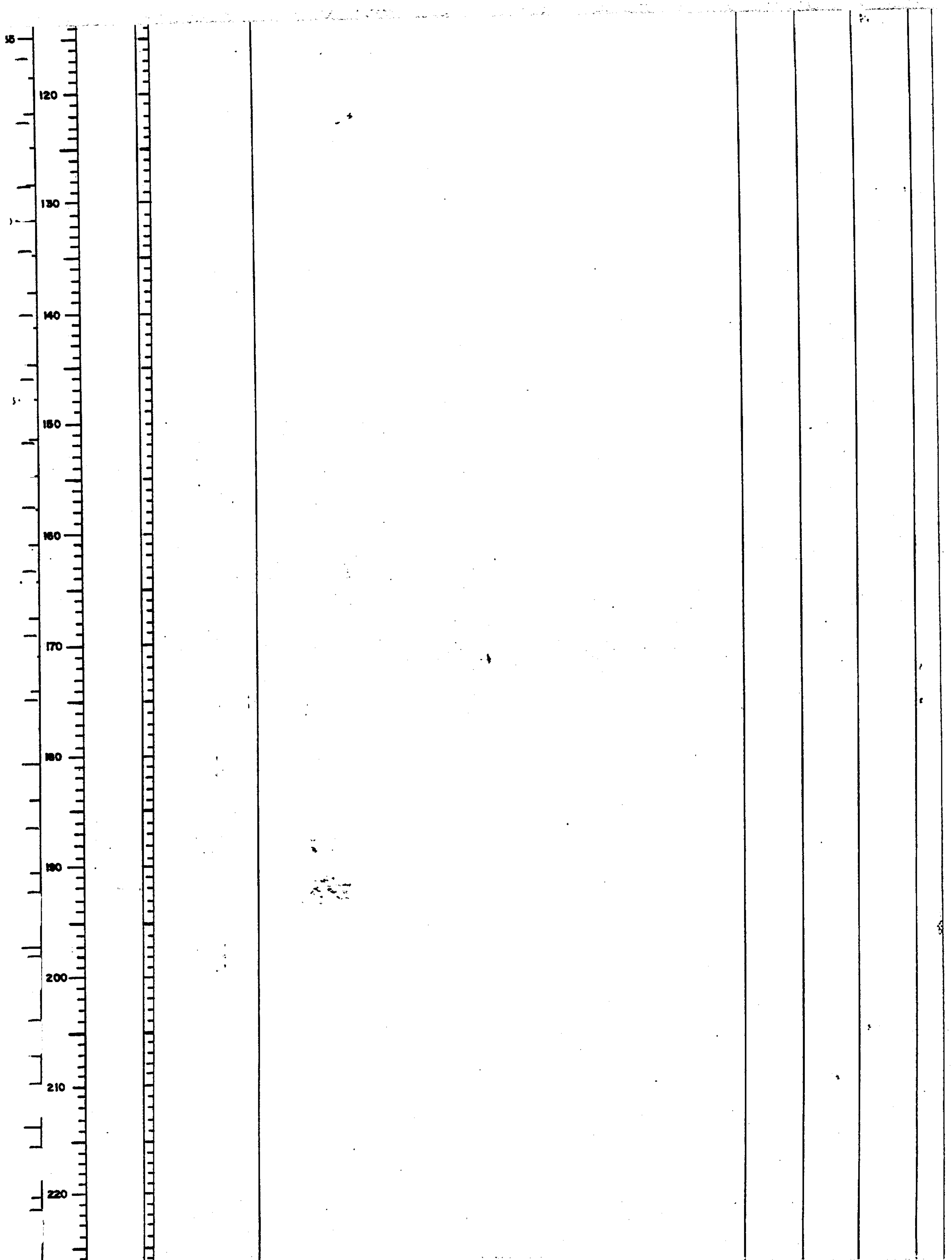
0-5' - Humus Organics
- brown clay rich soil

5-47' - light to dark grey homogeneous lacustrine clay
- minor (1%) assorted rounded pebbles - various composition
- good floculation

47-104' - very fine sand
- minor (10%) sandy clay horizons
- minor isolated - rounded pebbles - (1%)

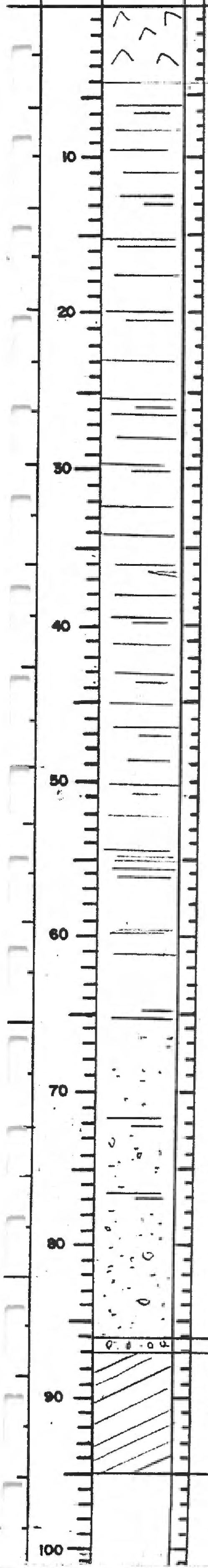
104'-106' - Sandy gravel till
- predominantly intermediate to mafic volcanics
- subangular to angular

106-107 - Bedrock
- light to dark green int. - felsic tuff
- chloritized - serricitized
- up to 2% PY


120
130
140
150
160
170
180
190
200
210
220

emarks START - 11:25
FINISH - 12:25

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG



0-5' . Humus Organics

5'-68' - Homogeneous light to dark grey clay
- good floculation
- a few isolated pebbles <5% pred. mafic volcanic

68'-86' - fine sandy silt
- minor sandy clay horizons (10%)
- minor isolated pebbles - 5% pred. mafic- int. volcanic

86-86.5' good sandy gravel till
- angular to subangular fragments
- predominantly mafic - intermediate volcanics - 70%
granitic - 20%
other - 10%

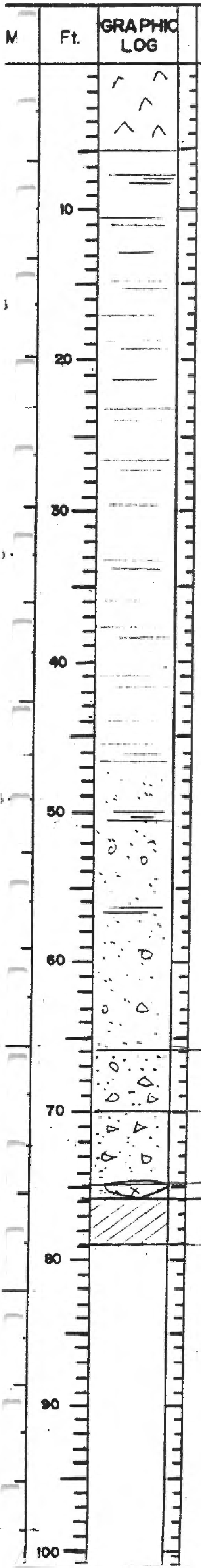
86.5'-95' <u>Bedrock</u>
- light green int. - felsic lapilli tuff
- silicified - quartz stringers up to 2% - at 87'
- up to 1% py

EOH - 95'

SAMPLE NO.	Au	Ag	Cu	Zn	A
01, 01A, 01B	280	0.6	210	65	254
02, 02A	<5	<0.1	18	32	2

Sampler
Sample screening

Remarks START 12:45
FINISH 1:30



DESCRIPTIVE LOG

0-5' - Humus, Organics -

5-47' - light to dark homogeneous grey clay (lacustrine)
- good floculation
- minor amounts of rounded pebbles - 5%

47-66' - very fine sandy silt
- minor sandy clay horizons 10%
- minor isolated pebbles - subrounded account for 5%

66-76' - sandy gravel till
- angular to subangular fragments
- Somewhat varying but on the whole predominantly mafic-int. volcanics + 70%
granitics - 20%
- occasionally tiny chunks of sedimentary derived py nodules <1%

(75') - pyritized int. volcanic boulder 2% py

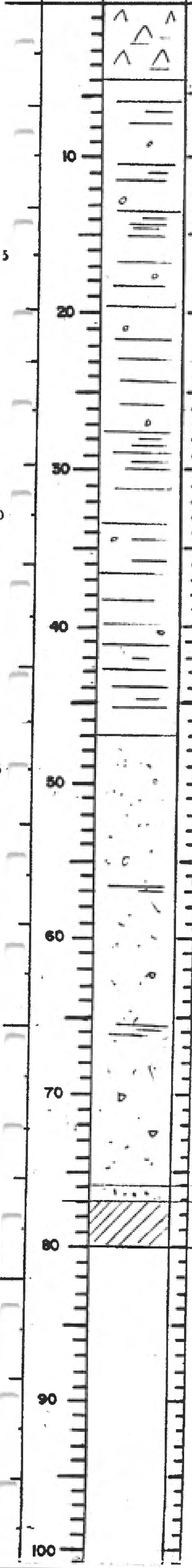
76-79' - Bedrock
- green intermediate - felsic volcanic
- probably tuffaceous
- appears to be silicified
- tiny quartz stringers <5%
- 1-2% finely diss. py
- soft green flakes in + 10 Mesh possibly chlorite

* Au Av ppm

SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn pp	As
01, 01A	115	1.3	320	80	22
02, 02A 02B	0.07	1.2	280	80	162
03, 03A	60	1.0	190	137	13
04, 04A	185	3.5	815	625	23

Sampler
Sample screening

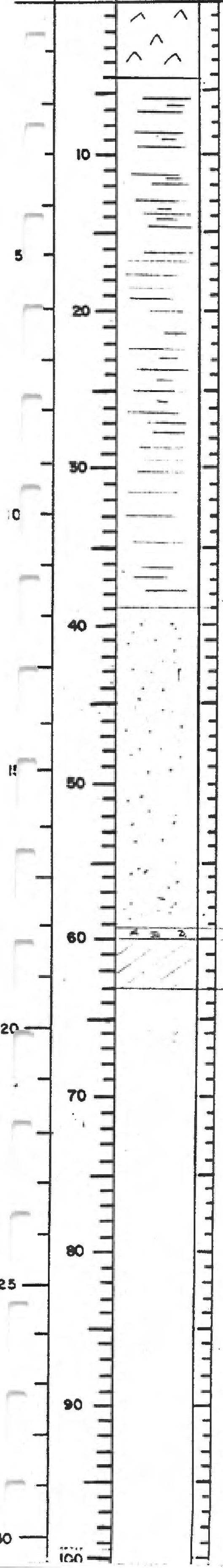
Remarks START 1:50
FINISH 2:35



SAMPLE NO.	DESCRIPTIVE LOG	Au	Ag	Cu	Zn	
		av. ppm	ppm	ppm	ppm	
	0'-5' - Organics - clay rich brown soil					
	5'-47' - dark to light homogeneous grey clay - (lacustrine) - good floculation near top of clay sequence - lesser floculated at the base - minor (5%) isolated pebbles pred. mafic - volcanic - subrounded					
	47-76' - very fine silty sand - minor sandy clay horizons - 10% - minor isolated pebbles - (5%) assorted types - (54') medium grained gabbro boulder					
produced by washing 01, 01A, 01B	76-77' - sandy gravel till - 90% intermediate - felsic volcanic fragments - (coarse angular frags) - very little till - ∴ had driller wash to produce 1A & B					
02, 02A	77-80' Bedrock - dark green intermediate to felsic tuff - very fine grained * - slightly schistose - soft green flakes in +10 mesh possibly chlorite - (80') tiny 1mm wide quartz veinlets 5%	0.16	2.0	455	116	40

Sampler

emarks START - 2:53
FINISH - 3:30

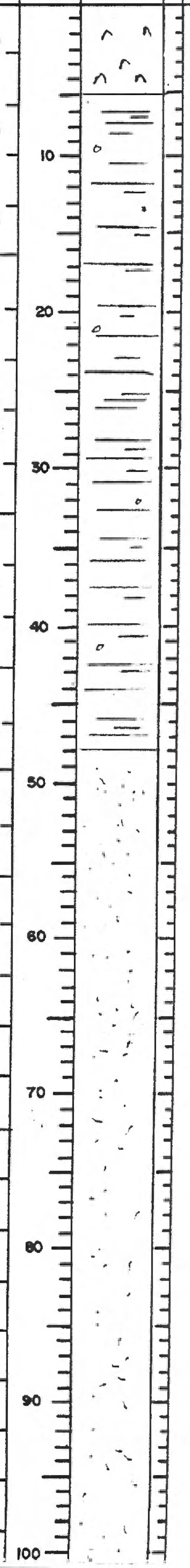


SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
		Au	Ag	Cu	Zn	
	0-5' - Organics - Humus - a lot of grassy material - plugged intake hose	ppb	ppm	ppm	ppm	
	5-39' - light to dark homogeneous grey clay (lacustrine) - good floculation - long strands - minor (5%) rounded pebbles. gabbroic - mafic volcanic - granitic					
	39' - 59.5': Very fine sand - minor sandy clay horizons - minor isolated - pebbles - (3-5%) (assorted)					
01, 01A	59.5 - 60'. Heterogeneous sandy gravel till - subangular to subrounded assorted pebbles & gravel - had driller wash to produce 1 & 1A					
02, 02A	60' - 63' - **Bedrock** - intermediate to mafic lapilli tuff - dark green - (visible - frags) slightly schistose - minor quartz veining 1mm wide - soft green flakes in +10 mesh possibly chlorite	130	1.4	360	405	24
	EOH - 63'					

Sampler

Remarks START - 4:05 / 5:35 / 10:00
FINISH - 10:55

Ft. | GRAPHIC LOG | SAMPLE NO. | DESCRIPTIVE LOG | ANALYTICAL



0-5' - Very grassy - organics, humus

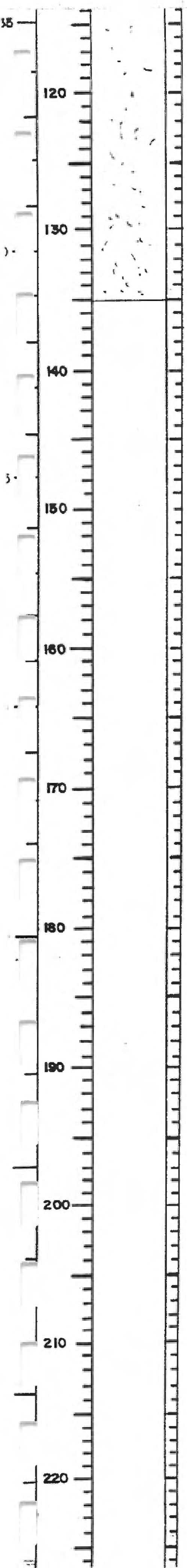
5'-48' - light to dark homogeneous grey clay
- good floculation
- a few minor isolated pebbles predominantly mafic volcanic -3%

48' - Very fine silty sand
- a few isolated sandy clay horizons

*

Note - extremely tough drilling.
- rods plugged - 3 times -
- lubricant was added -
- Hole stopped - was meant only to be a filler hole if drilling was going very well -
- felt too much time wasted
- No sample taken

EOH - 135' - * Note still in fine sand

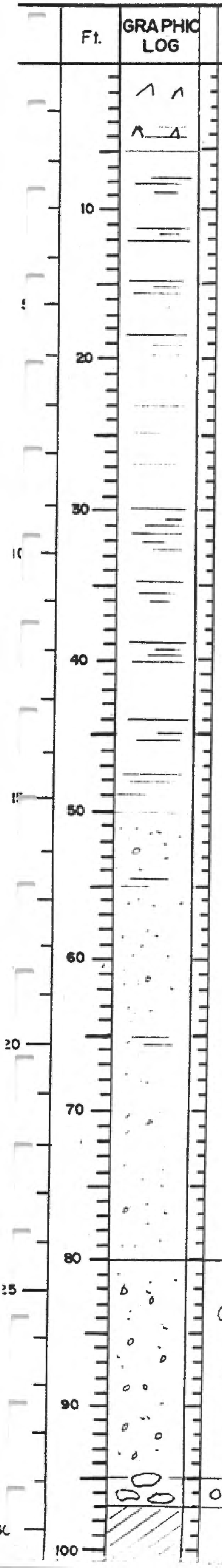


EOH - 135'

Sampler ______ | Sample screening

8

emarks START : 11:40
FINISH : 1:30



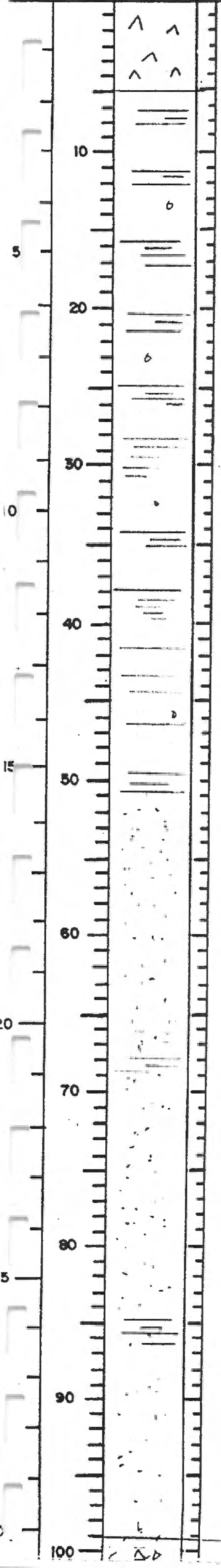
SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	A
	0'- tree					
	1'- 5' Humus, Organics - large dark brown, balls of decomposed organics - grading into clay rich dark brown soil					
	5 - 50' - dark to light homogeneous grey clay. - good floculation - - seems to be darker more floculated - at the top of sequence lighter - less floculated at base					
	50 - 80' - very fine sand - minor sandy clay horizons - 10% - minor isolated pebbles - assorted subrounded - 3%					
	80 - 97' - Sandy gravel till - subangular to angular heterogeneous sandy till - predominantly int. - mafic volcanic - large sample section taken since joiner for sample pails lost (95') - graphite boulder } around this point there seemed to be an underground water source (96') - graphite boulder } (96.5') - light green int. volcanic boulder					
01, 01A 01B, 01C	97'- 101' - **Bedrock** 01, 01A, 01B, 01C	140	1.3	300	103	50
01D, 01E	- light green intermediate to felsic volcanic 01D	200	1.5	530	120	47
	- tiny quartz veins (1%) * 01E	975	1.1	275	74	27
02, 02A, 02B	- chloritized - soft green flakes in + 10 Mesh.	350	1.9	380	205	42
03						

Sampler ___ | Sample Screening ___

emarks START - 1:50 | * Note attempting to hit conducter L 9E

FINISH · 3:35

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
				Au	Ag	Cu	Zn	A
				ppb	ppm	ppm	ppm	



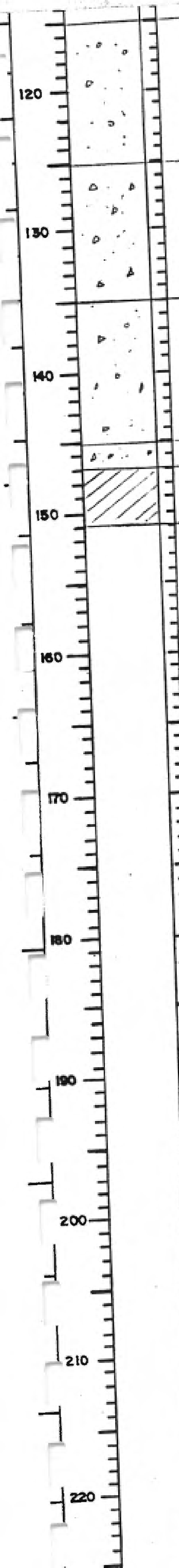
0 - 5' - Organics - Humus
- dark brown clay rich soil

5 - 52' - dark to light homogeneous grey clay (lacustrine)
- minor (1%) assorted isolated pebbles

52' - 99' - very fine sandy silt
- minor sandy clay lenses. 10%
- minor (5%) assorted - isolated pebbles

99' - 147' - Very sandy gravely pebbly till
- subangular to rounded - pebbles and fragments
- varying heterogeneous mixture
- large amounts of sample material produced.
- (115' - 125') - up to 80% sand - 20% sand and gravel

147 - 151' - <u>Bedrock</u>
- white felsic volcanic. (rhyolite)
- white with dark shady wisps
- chlorite stringers -
- 2-3% py stringers
- alternating from barren to (1-5%) py
- intermittent green chloritized zones



03

04, 04A

05,05A

06,06A

07.07A,07B

EOH - 151'

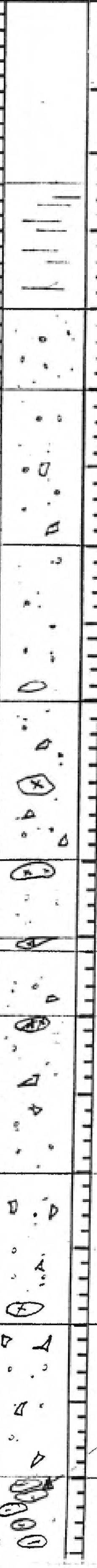
*	760	1.0	325	65	59
	210	1.8	390	70	49
*	1960	1.3	325	575	77

Sampler

Sample screening

Remarks START - 4:10 - problems with starter rod (thread stripped) 8

Finish -



Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL Au	Ag	Cu	Zn	A
				ppb	ppm	ppm	ppm	
10			0 - 3'. Humus- organics 3 - 12'. light brown clay rich soil 12 - 20' - dark to light grey homogeneous lacustrine clay good floculation					
20		01, 01A	20'-61' – Heterogeneous sandy pebbly gravel till	170	0.7	230	57	1
30		02	- varying heterogeneous mixture - - very sandy subangular to subrounded pebbles and fragments.					
40		03, 03A	-(30-40') - very fine sand -(44') granite boulder	20	0.3	14	32	10.
50		04	-(50') int. volcanic boulder -(56') granite boulder -(60.5') - dark green black chloritized mafic volcanic boulder					
		05	61'-105' coarse gravely till with very little sand - heterogeneous - varying	25	0.6	300	58	10
60		06						
		07	- - angular - to subangular					
70		08	-(66') granite boulder -(70 - 83') Coarse sand & rounded pebbles - very heterogeneous - often predominance of granitic pebbles	<110	0.6	* 600	72	72
80		09, 09A	-(84') intermediate volcanic boulder -(96') graphite boulder	80	0.1	195	38	4
90		10, 10A	* -(97') coarse fragments of py nodule probably from a graphite boulder (98') granite boulder -(99') graphite boulder	70	1.0	320	87	23
100		11, 11A	-(101') py in graphite boulder	50	1.4	350	* 875	45

and graphite frags
- noticeable amount of py frags in + 10 mesh (1%) (sedimentary derived)

-(106.5') - mafic volcanic boulder

108' - 110' - Bedrock
- intermediate to felsic lapilli tuff
- light green - with trace py on 1% of fragments
- soft light green flakes in + 10 mesh possibly chlorite

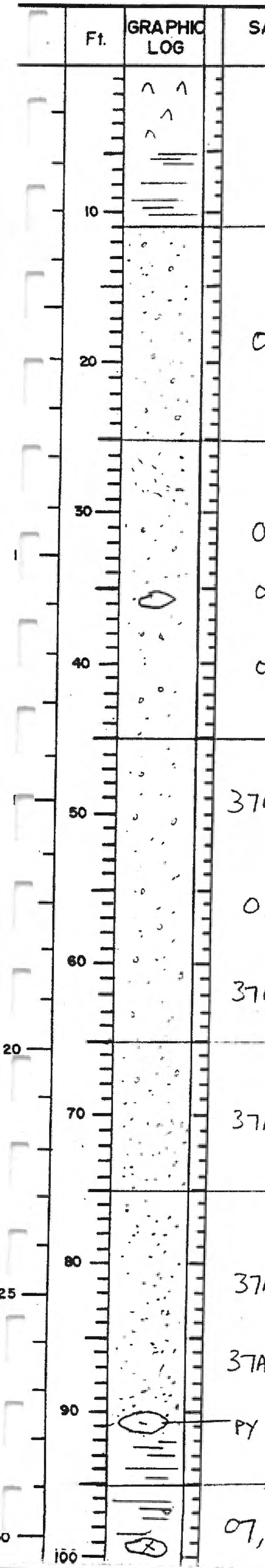
-(109') 1% quartz carbonate on fractures

EOH - 110'

Sampler

Remarks Start - 11:55

Finish - 5:35



Hole 37 **DESCRIPTIVE LOG**

0-5' - Humus, Organics - light brown clay rich soil

5-11' - light brown homogeneous clay

11-64' - heterogeneous, sandy, pebbly bouldery till
- varying mixture of subrounded to subangular pebbles
- (25'-30') very coarse sand with rounded pebbles 1-2mm in diameter
- (36') mafic tuff boulder
- (64') light green int. volcanic boulder

* Note losing a lot of water around boulders,

* at 64' - rods froze - ∴ pulled & moved ahead - 20' - and redrilled - did not go down the same hole because of the abundance of boulders - New hole 37A - started sampling at 45'

Hole 37A - 20' away (first 70' - the same as 37)

70'-92' - very fine sand 99%
- 1% assorted rounded pebbles

(91') - graphite boulder with 5% PY nodules

92'-102' - well indurated sandy gritty clay balls

P.T.O

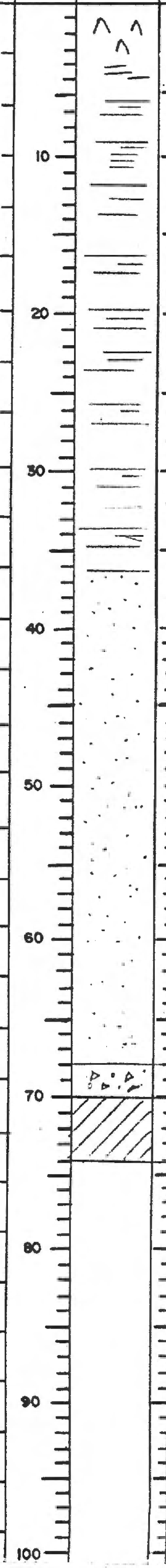
SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn ppm	A
01, 01A	10	0.2	94	25	2
02 02A 02B	45	1.4	320	120	3
37A-03 03 37A-04	<15	0.4	260	30	9
37A-05	215	0.7	155	95	3
37A-06 37A-06A	45	1.5	260	150	15
07, 07A	35	1.3	300	160	48

- Bedrock -
- light green intermediate to felsic tuff
- very hard
- tiny 1mm wide quartz veins
- trace py on 1% of bedrock chips

EOH - 105'

Sampler

emarks START - 1:00 Note - In morning walked in small tractor with sloop Note - Problems with hydraulic hose on replacement tractor for B15
FINISH - 2:00



DESCRIPTIVE LOG

0 - 3' - Humus Organics

3 - 5' - light brown clay rich soil

5 - 36' - Dark to light grey clay
- homogeneous - good flocculation

36' - 68' - Very fine sand
- minor isolated clay horizons (5%)
- a few tiny pebbles subrounded assorted (5%)

68 - 70' - Sandy gravel till
- subangular to subrounded
- py in graphite cobble (2%)
- frags - predominantly mafic volcanic and graphite

70 - 74' <u>Bedrock</u>
- light to dark green soft mafic to intermediate volcanic
- soft green flakes in + 10 mesh possibly chlorite
- trace amounts of py
- appears tuffaceous

(73') - rusty py 1% - sheared
- quartz veining up to 10%

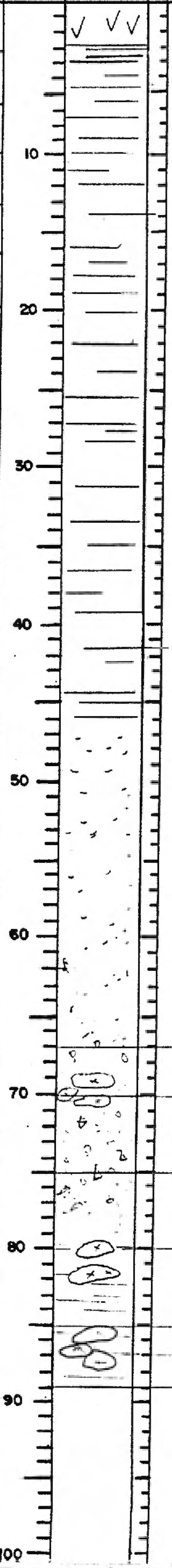
(74') - rock appears to be more silicified - much harder than at first

EOH - 74' Note - Had driller wash to produce 1A wash

SAMPLE NO.		ANALYTICAL				
		Au	Ag	Cu	Zn	A
		ppb	ppm	ppm	ppm	ppr
01, 01A wash	*	1400	1.1	365	230	1
02						

emarks Start 8:35 Note - Note - Transmission - hot on Nodwell $
Finish - 10:00 shutdown

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL



SAMPLE NO.

01, 01A
02, 02A, 02B
03, 03A
04, 04A
05
06, 06A

DESCRIPTIVE LOG

0 - 3'. Humus - Organics

3 - 5'. Dark brown clay rich mud

5'-46'. Dark to light homogeneous lacustrine clay
- good floculation
-(44') 1% minor pebbles - subrounded mainly granitic & mafic volcanic

46'-67' - Very fine sand with minor sandy clay horizons (10%)
-(63') light grey to white sandy clay horizons

67'-78'. Sandy gravel till
80% sub angular to angular mafic - intermediate volcanics
- (69') mafic to int. volcanic boulder
*note drill turning very slowly very little power
-(70') mafic - int. cobble - with minor sand - (5%)
-(71') granite boulder

78' - 88' Sandy gritty clay balls with periodic boulders
-(80') int. tuff boulder. light green with quartz veining
-(82') large coarse grained gabbro boulder
-(86') pink f.g. granite boulder
-(87') - dark green black mafic volcanic boulder

P.T.O

moved to save water hauler - Unable to go down the same hole, for 2 reasons

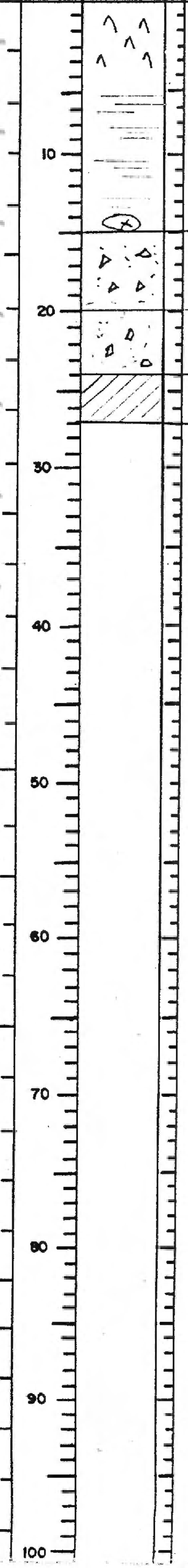
① Too many boulders

② Impossible to center Nodwell over hole after being moved.

Sampler

emarks START - 12:50
FINISH - 2:55

Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	A
		01,01A		35	0.8	230	100	5
		02,02A	*	2920	<0.1	45	22	1
		03,03A						



0 - 5' - Organics Humus

5 - 15' - light to dark grey homogeneous clay
- very good floculation
- (14') granite boulder

15' - 24' - Sandy gravel till
- angular to subangular
- 70% mafic - int. volcanics
- (17-24') 90% mafic - int. volcanic fragments - with very little sand

24 - 27' - Bedrock
- dark green fine grained mafic intrusive - gabbro - diorite
- chloritized - soft green flakes in +10 mesh possibly chlorite
- at times almost appears as a chloritized mafic tuff
- (25') abundant chloritization
- (25.5') - tiny pink & white quartzo feldspathic veinlets (1mm wide)

Note - 1:50 - Drill stopped oil pressure is low
- gasket leaking on oil pump
2:30 - start - again

EOH - 27'

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OVERBURDEN DRILL LOG

Hole M86-05-41

Property/Area MINEREX / MATAGAMI

Township St. Helene

Claim No.

Location Group 5

attempting to hit conductor 4+00N L15E

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 10 / 86

Drilling Co. Heath & Sherwood

Bit No. CB - 67752

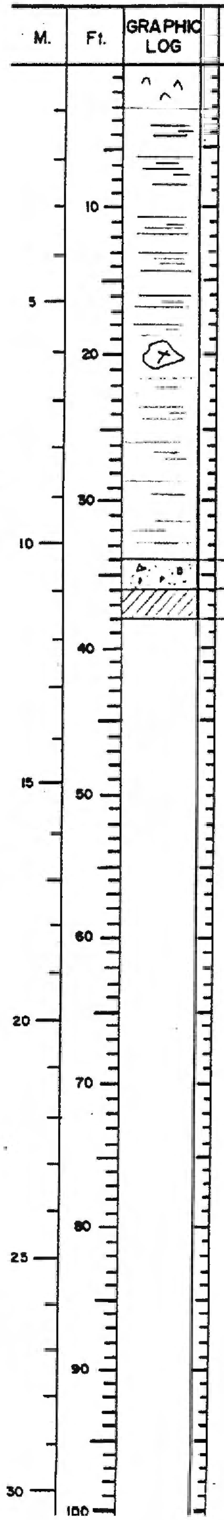
Depth to bedrock 36'

Total depth 38'

Sample screening 10 Mesh

Remarks START - 3:20

FINISH - 4:20



DESCRIPTIVE LOG

0 - 3' Organics, Humus

3' - 34 Dark to light homogeneous grey clay with good floculation

(20') gabbro boulder - similar in composition to bedrock in Hole M86-05-40

34-36' - Mixed gravel pebble till
- Predominantly mafic - int. volcanics 60%
- rhyolite chips - 10%
- graphite with tr. py - 5%
- 25% granitic felsic intrusive

<u>Bedrock</u>

36' - 38' – Dark green schistose mafic to intermediate volcanic
- chloritized with < 1% finely disseminated (py)
- minor quartz veining < 1% 1mm wide

-(36.5') - more siliceous - grading into light grey
- up to 5% quartz veining with 1% py associated

-(37') - less schistose more felsic no py

-(37.5') slightly rusty quartzo feldspathic shear - very fine lamination - possible indication of tuff

-(38') - 10% qv.

EOH - 38'

SAMPLE NO.	Au	Ag	Cu	Zn	As
	ppb	ppm	ppm	ppm	
01, 01A wash	165	0.5	350	89	156
02, 02A					

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OVERBURDEN DRILL LOG

Hole M86-05-42

Property/Area MINEPEX | MATAGAMI

Township St. Helene

Claim No.

Location GROUP 5

Logged by J. PAUL POLLINSON

Sampler R. BOUGIER

Date(s) Feb. 11 / 86

Drilling Co. Heath & Sherwood

Bit No. CB 67752

Depth to bedrock 126'

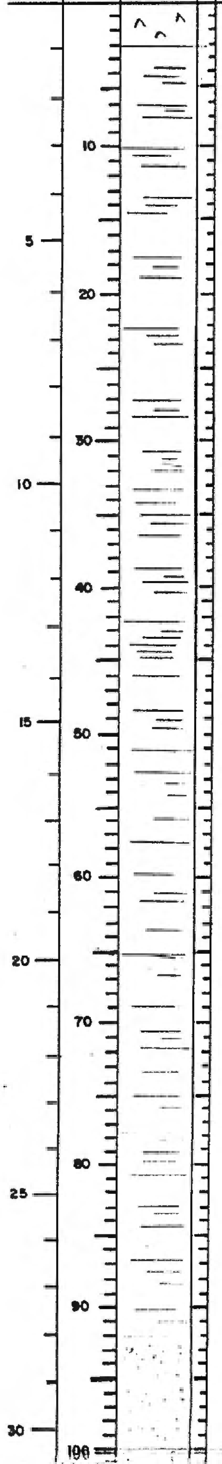
Total depth 132'

Sample screening 10 Mesh

Remarks Start 5:08 / 8:10

FINISH 6:40 / 8:50

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL



0-3'. Organics. Humus - Wood chips

3-93' - dark to light homogeneous grey clay

- appears to be darker - and better flocculated at the top of the sequence
- minor isolated - subrounded pebbles - (5%) predominantly mafic volcanic and - granitic

93'-100' - 100% - 95% very fine sand

- up to 5% assorted - rounded pebbles

100-105' - very sandy pebbly till

- varying heterogeneous mixture of subrounded to subangular pebbles with abundant fine sand

105-126' - varying from 60-98% sandy gritty clay balls - well indurated and very slow drilling

- 2-40% assorted pebbles and gravel fragments - predominantly mafic and int. volcanics
- (116') black schistose mafic volcanic boulder
- (124') mafic volcanic/argillite boulder

*-(125') med. grained green int. volcanic boulder - up to 5% (PY), possibly a tuff - +10 mesh taken

P.T.O.

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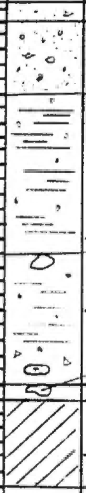
OVERBURDEN DRILL LOG

Hole M86-05-42



M.	Ft.	SAMPLE No.	DESCRIPTIVE LOG		ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
	100	01	126'-132' <u>Bedrock</u> - black to dark grey mafic volcanic/argillite - very fine grained almost cherty appearance - carbonate along some fractures - very soft.		45	0.4	340	100	81
35	110	02			35	<0.1	162	76	38
	120	03		*	127000	IS	IS	IS	IS
		04	EOH - 132'	*	40	0.4	490	35	244
40	130	05							

M.: 35, 40, 45, 50, 55

Ft.: 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220

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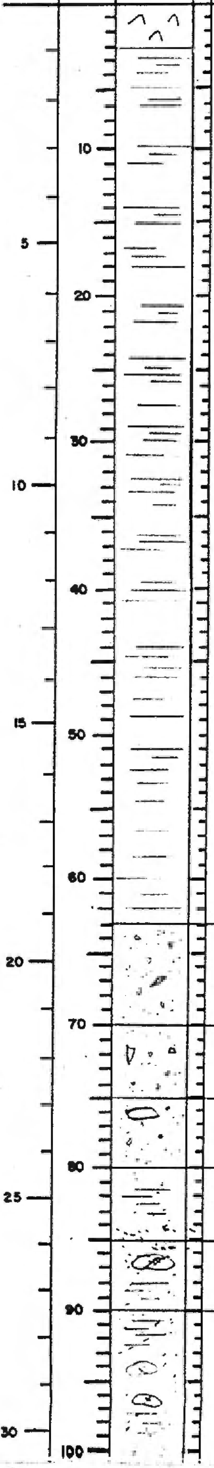
OVERBURDEN DRILL LOG

Hole M86-05-43

Property/Area MINEREX / MATAGAMI
Township St. Helène
Claim No.
Location GROUP 5
LINE 29E 25S
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 11 /86
Drilling Co. Heath & Sherwood
Bit No. CB-67753
Depth to bedrock 102'
Total depth 105'
Sample screening 10 Mesh

Remarks START - 9:20
FINISH - 11:10



DESCRIPTIVE LOG

0-3' - Humus, Organics. Wood Chips

3-6' - light brown clay rich soil

6-63' - dark to light grey homogeneous lacustrine clay
- good floculation

63'-79' - Heterogeneous sandy pebbly
- varying from subangular to subrounded -
- constantly varying mixture up to 70% granitic pebbles at times
- (77') black schistose mafic volcanic boulder

79'-102'
- well indurated sandy gritty clay balls - with isolated boulders and sandy pebble horizons
- (84-87') very fine sand with 20-30% mafic/granitic pebbles
- (87') graphite boulder
- (94') pink m.g. granite boulder
- (96-97') pink f.g. granitic (felsic intrusive)
- (100-101') very fine sand with 20% mixed pebbles

102-105' Bedrock
- light to med. green mafic - int. volcanic
- soft green flakes in 110 mesh - chlorite
- slightly schistose

SAMPLE NO.	ANALYTICAL Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01, 01A	95	<0.1	142	124	17
02, 02A	35	<0.1	132	58	18
03	145	<0.1	210	56	16
04					
05					
06	90	0.2	188	80	26

Combination 6 & 7

P.T.O.

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OVERBURDEN DRILL LOG

Hole M86-05-43

M.	Ft.	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYTICAL				
					Au	Ag	Cu	Zn	As
			06						
	100		07	cont'd. Bedrock	90	0.2	188	80	26
		▨	08	-, appears to be tuffaceous - (104.5') tiny 1mm wide quartz carbonate - veinlets					
	110								
35				EOH - 105'					
	120								
	130								
40									
	140								
45									
	150								
	160								
50									
	170								
	180								
55									
	190								
30									
	200								
	210								
15									
	220								

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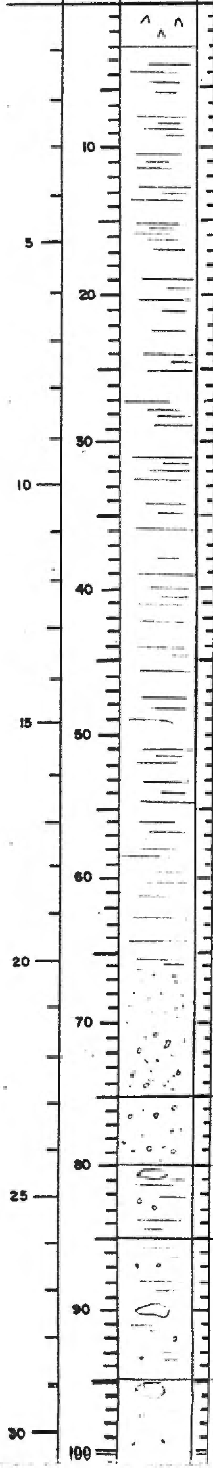
OVERBURDEN DRILL LOG

Hole M86-05-44

Property/Area MINEREX / MATAGAMI
Township ST. Heléne
Claim No.
Location GROUP 5
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 11 / 86
Drilling Co. Heath & Sherwood
Bit No. CB 67753
Depth to bedrock
Total depth 112'
Sample screening 10 Mesh

Remarks START - 11:40
FINISH 2:40

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
					Au	Ag	Cu	Zn	A
				0-3'. Organics Humus	ppb	ppm	ppm	pp	m
				3-66'. dark to light grey homogeneous lacustrine clay - minor isolated rounded pebbles 1% pred. mafic volcanic - appears to be better floculated near the top of the sequence					
				66-75' - Very fine sand with 10% heterogeneous subrounded pebbles					
				75-80'. very sandy pebbly till - - varying heterogeneous mixture of subrounded to subangular pebbles - up to 30% graphitic frags					
				80'-112' - well indurated, gritty, grey to green clay balls (95%) with 5-10% pebbles and fragments predominantly mafic volcanic and isolated boulders - (81') pink fg-mg. granite boulder - *Note 12:35 - rods plugged - Start again - 1:15 - (90') granite cobble in clay					
			01, 01A	- (96') - mafic - int. volcanic boulder	60	0.1	168	36	56
			02	- (102') light green felsic - int. volcanic boulder with minor quartz veining	325	<0.1	200	112	20
			03	- (104') mg. melanocratic gabbro boulder	410	0.1	210	54	48
			04	- (109') dark to med. green mafic flow (with quartz carbonate stringers) boulder P.T.O.	30	<0.1	290	60	34

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OVERBURDEN DRILL LOG

Hole M86 - 05 - 44

M.	Ft.	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	Au	Ag	Cu	Zn	As
					ANALYTICAL				
	100			Cont'd.	ppb	ppm	ppm	ppm	
			04	- (112') - Bit destroyed rods pulled again -	30	<0.1	290	60	34
			05	- Left - far too many boulders to go back down the same hole	245	<0.1	230	60	34
	110		06	∴ Bedrock not reached	20	0.4	* ~~11~~25	74	95
35									
	120								
	130								
40									
	140								
45									
	150								
	160								
50									
	170								
	180								
55									
	190								
60									
	200								
	210								
65									
	220								

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OVERBURDEN DRILL LOG

Hole M86-05-45

Property/Area MINEREX / MATAGAMI

Township ST. Heléne

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 12 / 86

Drilling Co. Heath and Sherwood

Bit No. L000 439

Depth to bedrock 146'

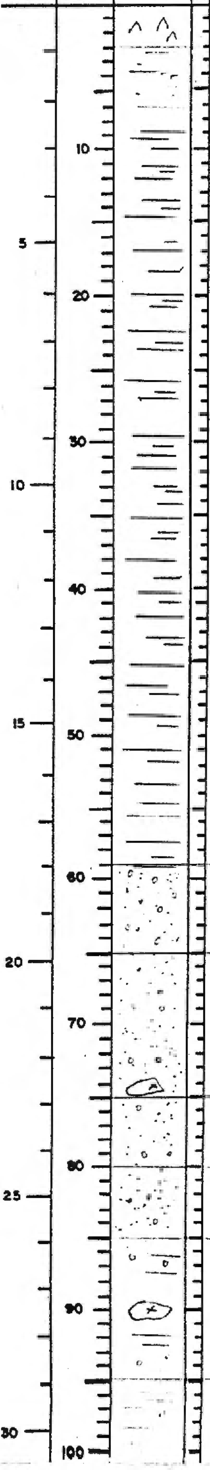
Total depth 150'

Sample screening 10 Mesh

Remarks START: 3:00 / 8:40

FINISH: 6:00 / 9:30

GRAPHIC LOG



DESCRIPTIVE LOG

0 - 3'. Humus, organics - wood chips

3 - 6' - light brown beige clay

6 - 59' - light to dark grey well flocculated, homogeneous lacustrine clay
- minor isolated pebbles (1%)
- (45' - 59') less well flocculated

59' - 71' - sandy pebbly gravel till
- subangular to subrounded pebbles and gravel frags.
- varying mixture but on average 50% mafic - int. volcanic fragments
- (69') abundant fine sand -

71 - 86' - abundant fine sand (70%) with 30% assorted gravel
- (74') pink and white orthogneiss boulder

86' - 140' Assorted boulders and cobble within sandy gritty well indurated clay - (lubricant added)
- (90') mafic volcanic boulder
- (110') pink m.g. granite boulder
- (120 - 121') sandy gravel clayey till
- (121') dark green highly altered mafic volcanic boulder tr py

140 - 146' - Cobbles and boulders - with almost no clay
- (140') mafic volcanic boulder
- (142') granite boulder

SAMPLE NO.	Au ppb	Ag ppm	Cu ppm	Zn ppm	As ppm
01, 01A	625	<0.1	124	34	41
02, 02A	5	<0.1	136	50	21
03, 03A	10	<0.1	152	54	15
04					
05	70	<0.1	124	44	39
06					

P.T.O.

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OVERBURDEN DRILL LOG

Hole M86-05 - 45

DESCRIPTIVE LOG

Cont'd

- (143') mafic - int. volcanic boulder
- (145') granite boulder

146 - 150' Bedrock
- light green schistose, highly serricitized int. to mafic tuff
- soft green flakes in +10 mesh possibly chlorite
- minor quartzo feldspalhic veining 1mm wide
- (148') quartz carbonate in fractures - 5%. - trace amounts of very f.g. py
- (149.5') carbonate in fractures 5%

EOH - 150'

SAMPLE No.	Au	Au	Cu	Zn	A
06	70	<0.1	124	44	39
07	* 1670	0.1	330	114	72
08 / 09, 09A	45	<0.1	198	74	57
10	10	<0.1	200	120	50
11, 11A	135	0.2	375	97	258
12	30	0.1	340	133	17
13, 13A	3	<0.1	92	94	<5
	3	<0.1	91	75	<5

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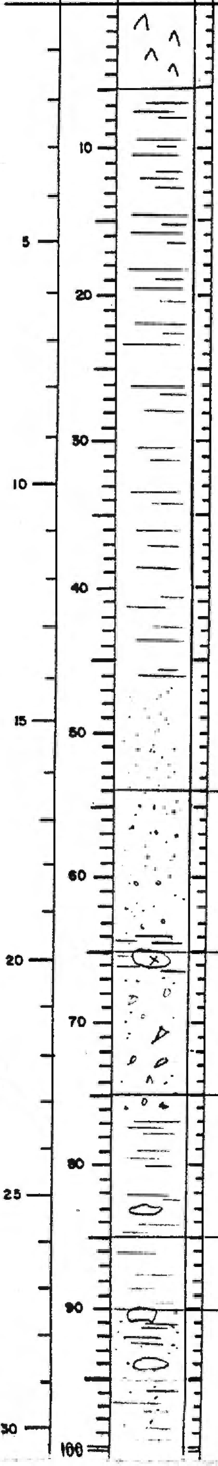
OVERBURDEN DRILL LOG

Hole M86-05-46

Property/Area MINEREX / MATAGAMI
Township ST. Heleno
Claim No.
Location Group 5
Line 32E - 4+75N
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 12 / 86
Drilling Co. Heath and Sherwood
Bit No. L000439
Depth to bedrock 135'
Total depth 140'
Sample screening 10 Mesh

Remarks START - 10:00 *Note attempting to hit conductor
FINISH - 2:15



SAMPLE NO.	DESCRIPTIVE LOG	Au	Ag	Cu	Zn	
		ppb	ppm	ppm	ppm	
	0-5' Organics. Humus, wood chips					
	5-46' light to dark grey homogeneous lacustrine clay - appears to be better flocculated at the top of the sequence.					
	46-53' - very fine sand with 10% sandy clay horizons					
	53-64' - sandy pebble till - 80-90% sand - with 10-20% subrounded to rounded pebbly till					
	64-66' - 90% well indurated sandy gritty clay balls. 10% assorted pebbles -(65') granite boulder					
01	66-76.5' - heterogeneous sandy gravel till - up to 40% mafic - int. volcanics Subangular to subrounded					
02, 02A	76.5' - 90' - soft light grey homogeneous clay - very slow drilling -(83') Black mafic volcanic boulder					
03	90' - 104' - well indurated sandy gritty clay balls, - 10% subangular pebbles and fragments pred. mafic - int. volcanic					
04	-(90.5) - black mafic volcanic boulder with tr (PY) in fractures					
05, 05A	-(94') - dark green basalt boulder with tr PY					
06, 06A	P.T.O.					

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OVERBURDEN DRILL LOG. Hole M 86-05-46

M.	Ft.	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYTICAL

M.: 35, 40, 45, 50, 55, 60, 65

Ft.: 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220

06, 06A

07, 07A
07B

08, 08A
08B

09, 09A

10, 10A

11, 11A

12, 12A

(Con'td.)

-(104.5') black and white schistose
silicified volcanic boulder

104 - 135' - Sandy gravel till with gritty
clay horizons
- 70% mafic - int. volcanic frags
angular to subangular

- (108 - 112') 80% sandy gritty
clay balls

- (116') sandy gritty pebbly horizon

-(119.5' - 122') light green felsic to
int. tuff, serricitized,
trace py (boulder)

-(125') light green felsic volcanic
boulder

- (130 - 134) well indurated sandy clay
10% pebble frags. pred. mafic
to int. volcanic

-(134') light green schistose int. volcanic
boulder

135 - 140' <u>Bedrock</u>

- felsic volcanic rhyolite
- light to off white with
trace py

-(136') grading into grey green
more chlorite rich less
siliceous volcanic

-(138') grading back to more
siliceous rhyolite - with
trace py

EOH - 140'

* Note - around 120' - 1% metal
filings from rods.

MPH Consulting Limited

OVERBURDEN DRILL LOG

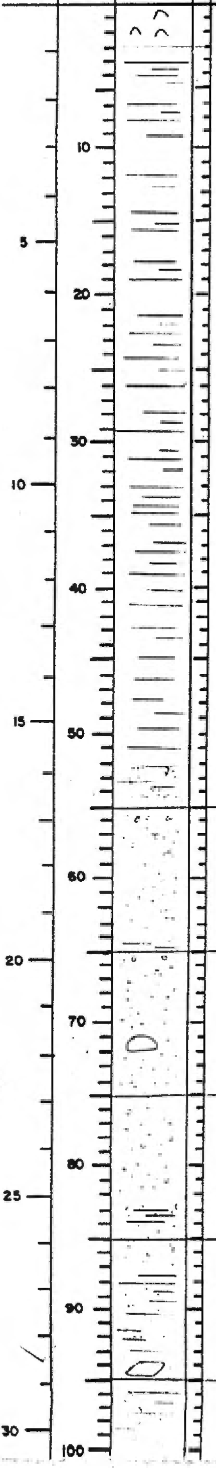
Hole M86-05-47

Property/Area MINEREX | MATAGAMI
Township St. Heléne
Claim No.
Location GROUP 5
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 13/86
Drilling Co. Heath and Sherwood
Bit No. L000 440 / L000441
Depth to bedrock 109'
Total depth 115'
Sample screening 10 Mesh

Remarks START 2:50 / 9:50 Note 4:30 changed cups on
FINISH 6:10 / 11:00 water pump

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				



SAMPLE NO.:
01,01A
02,02A
03,03A
04
05

0-3' Organics - humus

3-54' - dark to light grey homogeneous grey clay (lacustrine)
- good floculation
- (50') very sandy clay

54'-66' - sandy pebbly till
- subrounded to subangular heterogeneous mixture
- (64') sandy clay horizon

66-87' - very fine sand 10-20% assorted pebbles
- pred. mafic - int. volcanic pebbles
- (72') mafic - int. volcanic boulder
- (83') sandy clay horizon

87'-109' 90% well indurated sandy gritty clay - 10% pebbles and fragments
- (94') light green int. volcanic boulder
- (100') mafic volcanic boulder
*{101' Bit damaged rods pulled - }
- (103') sandy gravel till horizon
- (106') light green (dacite?) int. volcanic boulder

109-115 <u>Bedrock</u>
- dark green very schistose - chloritized serricitized mafic volcanic
- very soft crumbles in fingers
- minor quartz veinlets 1-2mm wide

P.T.O

MPH Consulting Limited

OVERBURDEN DRILL LOG. Hole M86-05-47

M.	Ft.	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYTICAL
	100		06, 06A	Bedrock contd.	
			07		
	110		08		

<u>Bedrock</u> contd.

- (110') 1% rusty brown quartzo-feldspathic veinlets
- (110.5') soft light green clay like material suspect bit is churning bedrock material
- (113') tiny quartz veins - 1mm wide - also trace py

EOH - 115'

MPH Consulting Limited

OVERBURDEN DRILL LOG

Hole M86-05-48

Property/Area MINEREX / MATAGAMI

Township ST. Helene

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 13 / 86

Drilling Co. Heath and Sherwood

Bit No. L00044 I

Depth to bedrock 150'

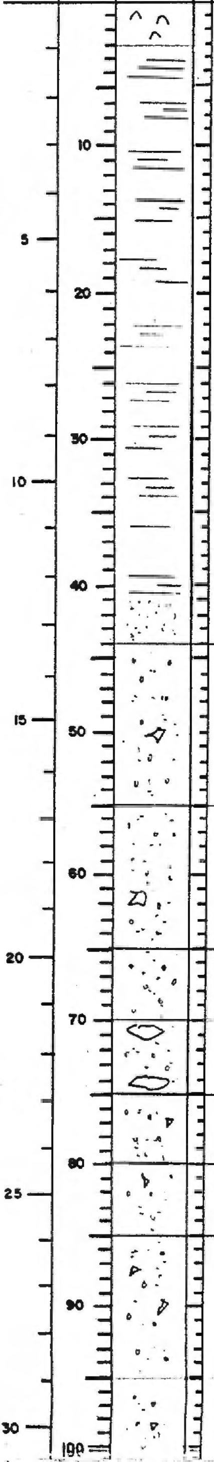
Total depth 155'

Sample screening 10 Mesh

Remarks START - 11:20

FINISH - 3:00

M. | Ft. | GRAPHIC LOG | SAMPLE NO. | DESCRIPTIVE LOG | ANALYTICAL



SAMPLE NO.: 01, 02, 03, 04, 05, 06, 07, 08

0-3' - Humus organics

3-41' - light brown homogeneous clay grading into dark grey homogeneous clay
- good floculation
- minor assorted isolated pebbles

41-44' - very fine sand

44-120' - Sandy pebbly till
- very sandy with subangular to subrounded pebbles
- very heterogeneous - 50% mafic int. volcanics on average
-(70') less sand - more gravel and cobbles
-(71') hornblende rich granodiorite
-(74.5') light green int. volcanic boulder
-(96') 90% mafic - int. volcanic fragments
-(100-104') very fine sand - 20% assorted pebbles
-(104') 10% sandy gritty clay balls
-(118') black mafic volcanic boulder

120 - 150' - 95% sandy gritty well indurated clay balls - 5-10% mafic volcanic fragments - cobbles - boulders
- 136' int. volcanic boulder

P.T.O

OVERBURDEN DRILL LOG

Hole M 86-05-48

M.	Ft.	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYTICAL
	100		08		
	110		09		
35	120		10		
	130		11		
40	140		12		
45			13		
	150		14		
	160				
50	170				
55	180				
	190				
30	200				
	210				
15	220				

150'-155' <u>Bedrock</u>

- grey to brown argillite ?
  metased ?
- up to 20% quartz veining
- (151') relativly soft - 10% q.v.
- slightly schistose
- (153') up to 30% quartz veining
- (154.5') soft paste possibly
  churning of bedrock by bit

EOH - 155

MPH Consulting Limited

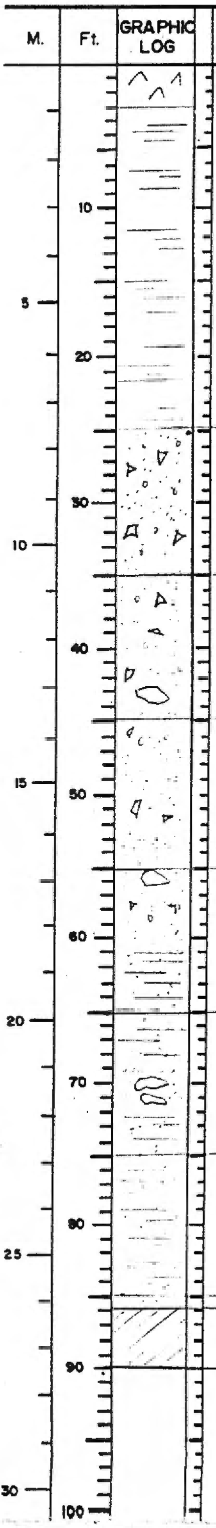
OVERBURDEN DRILL LOG

Hole M86-05-49

Property/Area MINLREX / MATAGAMI
Township St. Héléne
Claim No.
Location GROUP 5
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 13 / 86
Drilling Co. Heath and Sherwood
Bit No. L000441
Depth to bedrock 86'
Total depth 90'
Sample screening 10 Mesh

Remarks START - 3:30
FINISH - 6:00



SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
	0 - 3' - Humus Organics 3 - 25' - light to dark homogeneous grey clay 25' - 47' - Mixed sandy pebbly, gravel boulder till - varying heterogeneous mixture of subrounded - subangular fragments	
01	- (40') pred. mafic and int. volcanic fragments - (43') granodiorite boulder	
02	47 - 60' - 60% fine sand with 40% pebbles and gravel - pred. mafic and int. volcanics	
03	- (56') mafic volcanic boulder with epidote veining	
04	60 - 86. - 80 - 95% well indurated sandy gritty clay balls with isolated boulders and 5 - 10% mixed pebbles and fragments	
05	- (70') black schistose mafic volcanic boulder - (71') granite boulder	
06	-(72') pred. mafic - int. volcanic pebbles	
07	86 - 90' - <u>Bedrock</u>	
08	- light to medium green serricitized int. volcanic/metased - Soft green flakes in + 10 mesh possibly chlorite - appears to be a tuff -(87') - tiny quartzo feldspathic veinlets	

F.ill 90'

MPH Consulting Limited

OVERBURDEN DRILL LOG

Hole M86-05-50

Property/Area MINEREX / MATAGAMI

Township St. Hélène

Claim No.

Location GROUP 5

L 37+50E 8+75N

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 13 / 86

Drilling Co. Heath and Sherwood

Bit No. L000441

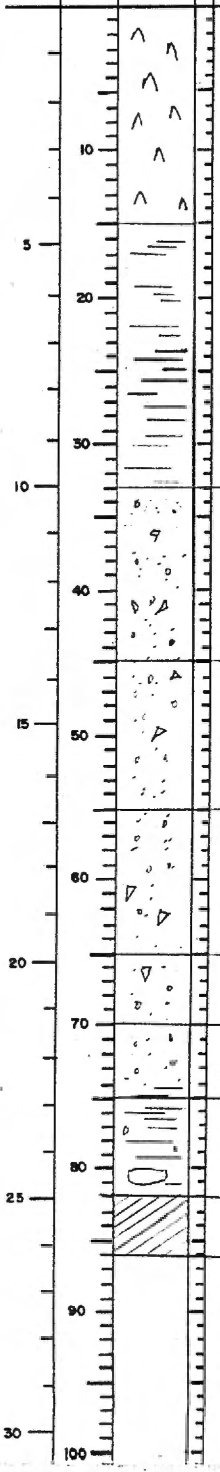
Depth to bedrock 82'

Total depth 86'

Sample screening 10 Mesh

Remarks START - 6:10 *Note. attempting to hit conductor* right on

FINISH - 7:50



SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
	0 - 15' - Humus, Organics - grassy material	
	15 - 33' - Homogeneous dark grey clay with very good floculation	
01 02 03 04 05	33' - 74' - Sandy pebbly gravel till - varying heterogeneous mixture with approx. 50% mafic-int. volcanics - subangular to subrounded - (44') predominantly - (70%) mafic - volcanic / argillite - (60') predominantly mafic volcanic and int. volcanic fragments (70%) subangular to angular	
06	74' - 82' - 90% sandy gritty well indurated clay balls - 10% mafic volcanic pebbles - (81') black mafic volcanic boulder	
07, 07A	82 - 86' - Bedrock - light grey with black graphitic stringers - some kind of metasediment / argillite - (83') trace (py) in grey material and rounded py clasts in graphite - (84.5') - 10% graphitic bands with 2-3% py - seems to explain conductor	

MPH Consulting Limited

OVERBURDEN DRILL LOG

Hole M86-05-51

Property/Area MINEREX | MATAGAMI

Township ST. HÉLÉNE

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 14 | 86

Drilling Co. Heath and Sherwood

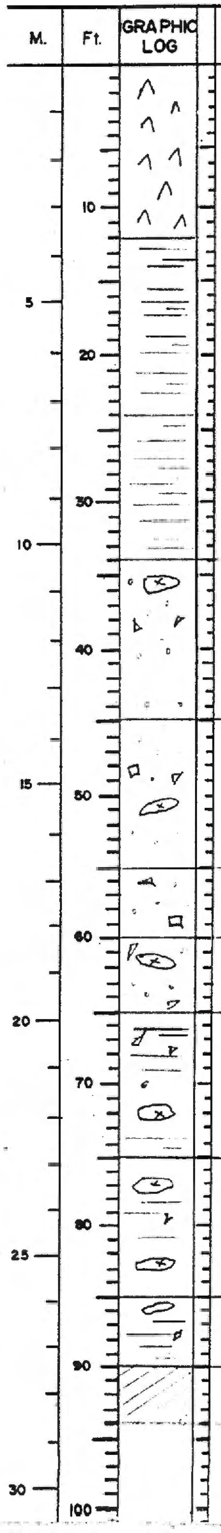
Bit No. CB 67778

Depth to bedrock 90'

Total depth 94'

Sample screening 10 Mesh

Remarks START 8:40
FINISH - 11:15



SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
	0-12' . Humus, Organics, grassy fibres	
	12-34' - Grey homogeneous lacustrine clay - - good floculation - (30') from here down more sandy and pebbly	
	34-64' - sandy gravel till - very sandy with pred. mafic to int. volcanic Fragments (70%) - Subangular to subrounded	
01	- minor (py) on graphite frags. <1% -(35.5') chloritized mafic volcanic boulder - green - black	
02	- note minor py on a lot of int. volc. frags -	
03	-(51') granite boulder	
04	-(54-55') well indurated sandy gritty	
05	-(62') mafic - int. volcanic boulder 1-2% finely disseminated (py) 64-90' - Sandy gritty clay balls with	
06	isolated boulders and sandy gravel horizons - -(70-72') sandy gravel till horizon	
07	-(73') int. volcanic boulders	
08		

P.T.O.

MPH Consulting Limited

OVERBURDEN DRILL LOG

Hole M86-05-51

M.	Ft.	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYTICAL
	100				
	110				
35					
	120				
	130				
40					
	140				
45					
	150				
	160				
50					
	170				
55	180				
	190				
0					
	200				
	210				
5					
	220				

cont'd.

- (77') - chloritized serricitized dark green - int. tuff boulder - tiny epidote veins
- (83') - light grey - argillite - graphitic with trace py - similar to bedrock on hole 50
- (86') - light green felsic - int. volcanic boulder

90-94' Bedrock

- light green felsic to int. volcanic - tuffaceous ?
- serricitized -
- soft green flakes in + 10 mesh possibly chlorite
- very fine gr. possibly a tuff
- (92.5') trace (py) on 1% of chips
- (93') quartzo-feldspathic veinlets 5%

EOH - 94'

MPH Consulting Limited

OVERBURDEN DRILL LOG

Hole MS6-05-52

Property/Area MINEREX / MATAGAMI
Township St. Hélène
Claim No.
Location GROUP 5
Hole beside river
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 14 / 86
Drilling Co. Heath and Sherwood
Bit No. CB-67778
Depth to bedrock 28'
Total depth 32'
Sample screening 10 Mesh

Remarks START - 12:00
FINISH - 12:41

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
5 10 15 20 25 30	10 20 30 40 50 60 70 80 90 100		01, 01A 02, 02A		

0-5' - Humus, Organics

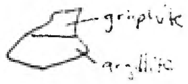
5-25' - Homogeneous - grey lacustrine clay

25-26' - Very fine sand with minor clay - (clay may have been stuck in the cyclone)

26-28' Heterogeneous sandy gravel till
- subangular to subrounded. predominantly mafic to int.

28-32' - Bedrock

- graphite with 5% py grading into a, soft green argillite
- soft green flakes in +10 Mesh
- Some bedrock chips show black and green banding ex



~30'. tiny quartzo feldspatic veinlets-2%

EOH-32'

*Note Had driller move 20' away and drill again just to make sure it was bedrock.

* sample 52A - 01A taken

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OVERBURDEN DRILL LOG

Hole M86-05-53

Property/Area MINEREY / MATAGAMI

Township ST. Helene

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 14/86

Drilling Co. Heath and Sherwood

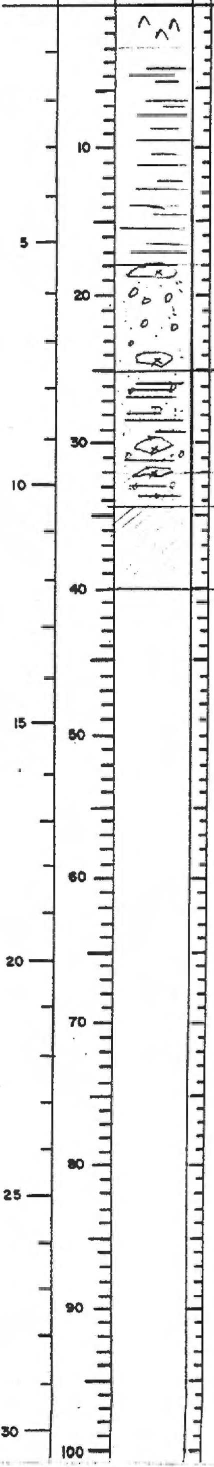
Bit No. CB-67778

Depth to bedrock 34.5'

Total depth 40'

Sample screening 10 Mesh

Remarks START - 1:30
FINISH - 2:40



SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				
	0 - 3'- Humus, Organics					
	3 - 19'- dark to light homogeneous grey clay - good floculation - (18') - light green int. volcanic boulder					
01 02 03	19 - 25.5' - Sandy gravely till - subangular to subrounded - (24') light green int. volcanic boulder (PY) <1%					
04	25.5' - 34.5' - well indurated sandy gritty clay balls - 5 - 40% mixed pebbles and gravel (pred. mafic and int. volcanic) -(30') mafic - int. volcanic boulder -(32') light green felsic to int. volcanic boulder -(33') mafic - int. volcanic boulder with epidote veins.					
	34.5 - 40' **Bedrock** - light green, int. to mafic volcanic - very fine gr. slightly schistose andesite ? - carbonate in fractures 5% (35')					
	EOH - 40'					

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OVERBURDEN DRILL LOG

Hole M86-05-54

Property/Area MINEREX / MATAGAMI

Township ST. Hélène

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 14 / 86

Drilling Co. Heath and Sherwood

Bit No. CB 67778

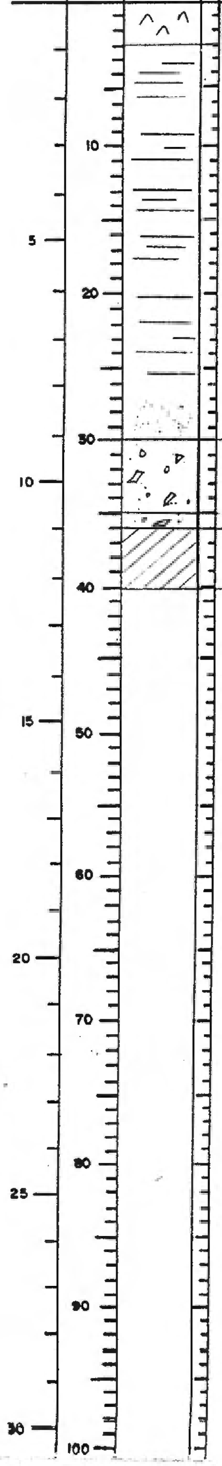
Depth to bedrock 36'

Total depth 40'

Sample screening 10 Mesh

Remarks START · 2:55
FINISH · 4:15

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL				



SAMPLE NO.

01

02 02A 02B

03

DESCRIPTIVE LOG

0-3' - Humus Organics

3-27' Homogeneous - dark to light grey clay good floculation
- 25'. a few isolated pebbles

27-30' - Very fine sand

30-36' - Heterogeneous sandy gravel fill
- pred. mafic - int. volcanics
subangular to subrounded
- (34') 5% py in graphite cobble

36-40' Bedrock
- mafic volcanic or v.f.g intrusive?
- dark green highly altered
- chloritized, serricitized
- up to 10% quartz veining
- appears to be v.f.g. melanocratic gabbro
- (37') pink and white quartzo feldspathic veinlets -

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OVERBURDEN DRILL LOG

Hole M86-05-55

Property/Area MINEREX / MATAGAMI

Township ST. HELENE

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 15/86

Drilling Co. Heath and Sherwood

Bit No. CB 67779

Depth to bedrock 16.5'

Total depth 18.5'

Sample screening 10 Mesh

Remarks START - 4:30 / 8:50

FINISH - 5:15 / 9:44

SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
	0-2' - Humus, Organics	
	3-5' Hard dark brown clay rich soil	
01	5-16' - dark well floculated, homogeneous lacustrine clay	
02	16-16.5 · sandy gravel till - pred. mafic and int. volcanic fragments	
	16.5-18.5 Bedrock - light grey white felsic volcanic - appears to be tuffaceous with trace py - very hard - (siliceous) ∴ slow drilling -(17') epidote veinlets 1%	
	EOH - 18.5 - Note had driller move 20' and check for same bedrock -	

MPH Consulting Limited

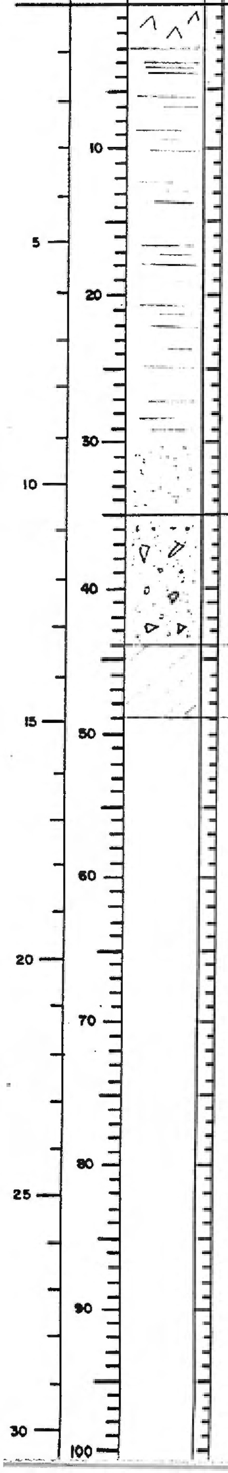
OVERBURDEN DRILL LOG

Hole M8[illegible]-[illegible]-56

Property/Area MINERLY / MATAGAMI
Township St. Heléne
Claim No.
Location GROUP 5
L 37+50
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 15/86
Drilling Co. Heath and Sherwood
Bit No. CB 67779
Depth to bedrock 44'
Total depth 49'
Sample screening 10 Mesh

Remarks Start - 10:00
FINISH - 10:50



SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
	0-3'. Humus, Organics	
	3-5'. Hard brown clay rich soil	
	5-30'. dark to light homogeneous grey clay - good flocculation	
	30-35'. very fine sand 99% 1% tiny assorted pebbles	
01 01A 01B	35-44.8'. very sandy gravel till - pred. angular to subangular mafic to int. volcanic	
02	44.8-49' Bedrock - light green-grey int. volcanic - slightly schistose - serricitized - minor quartz veins 1% - soft green flakes in +10 mesh possibly chlorite - (45.5') up to 30% quartz veining	
	EOH - 49'	

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OVERBURDEN DRILL LOG

Hole M86 - 05 - 1

Property/Area MINERAX / MATAGAMI

Township St. Helene

Claim No.

Location GROUP 5

Logged by J PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 16 / 86

Drilling Co. Heath & Sherwood

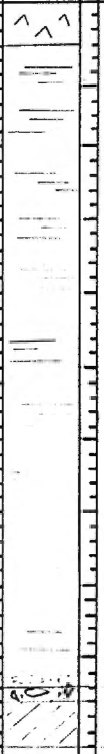
Bit No. CB67779

Depth to bedrock 42

Total depth 51

Sample screening 10 Mesh

Remarks START - 11:30
FINISH - 12:40



M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
				0-3' Humus, Organics	
				3-46' - dark to light homogereous grey clay - good flocculation around 35')	
				46-47' - very fine silty sand	
			01, 01A, 01B	47-48' - sandy gravel till - pred. mafic to int. volcanics - subangular to subrounded - graphite boulder 10% py	
			02	48-51' - Bedrock - light green int. to mafic volcanic - serricitized - tiny quartz veins 1-2mm wide - appears to be carbonatized (5%)	

M.: 5, 10, 15, 20, 25, 30

Ft.: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

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OVERBURDEN DRILL LOG

Hole M86-05-58

Property/Area MINEREX | MATAGAMI

Township St. Helène

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 16 | 86

Drilling Co. Heath and Sherwood

Bit No. CB 67779

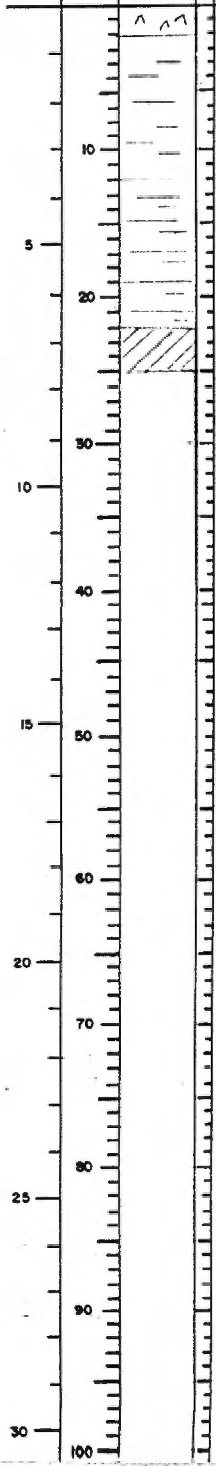
Depth to bedrock 22'

Total depth 25'

Sample screening 10 Mesh

Remarks Start - 1:00
Finish - 1:30

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL
				0-2' - Humus, Organics	
				2-12' - light brown clay rich soil	
				12-12 - dark to light homogeneous grey clay	
			01, 01A	22-25' **Bedrock** - light to med. grey int. to felsic volcanic - slightly schistose - soft green flakes in +10 mesh possibly chlorite - ?	
				Note- No till - possibly as a result of being on a ridge	



MPH Consulting Limited

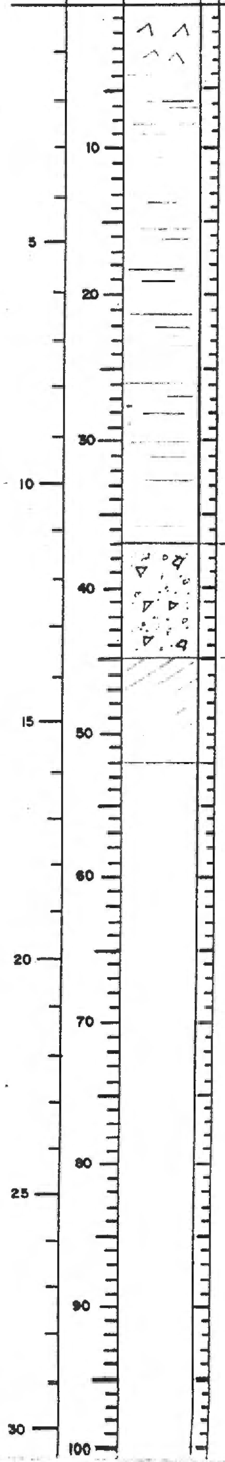
OVERBURDEN DRILL LOG

Hole M 86-05-59

Property/Area MINEREX | MATAGAMI
Township ST. Hélène
Claim No.
Location GROUP 5
Base line / L 32E
Logged by J. PAUL ROLLINSON
Sampler R. BOUGIER

Date(s) Feb. 17 | 86
Drilling Co. Heath and Sherwood
Bit No. CB 67779
Depth to bedrock 45'
Total depth 52'
Sample screening 10 Mesh

Remarks Start 1:45
FINISH 2:40



SAMPLE NO.	DESCRIPTIVE LOG
	0-4' Humus, Organics, wood chips etc.
	4-37' - light to dark homogeneous grey clay - good floculation
01,01A	37-45'. Sandy gravel till - ranging from 20-80% sand - assorted subangular to subrounded gravel - pred. mafic - int.
02,02A	45-52'. bedrock - light to dark grey int. to felsic volcanic with rusty rind. - very fine gr. (dusty) disseminated (PY) - possibly a silicified metased. - (46') black graphitic bands - (48') - 70% black graphite up to 1% PY
	EOH - 52'

ANALYTICAL

MPH Consulting Limited

OVERBURDEN DRILL LOG

Hole M86-05-60

Property/Area MINEREX | MATAGAMI

Township St. Héléne

Claim No.

Location GROUP 5

Logged by J. PAUL ROLLINSON

Sampler R. BOUGIER

Date(s) Feb. 17 | 86

Drilling Co. Heath & Sherwood

Bit No. CB67779

Depth to bedrock 44'

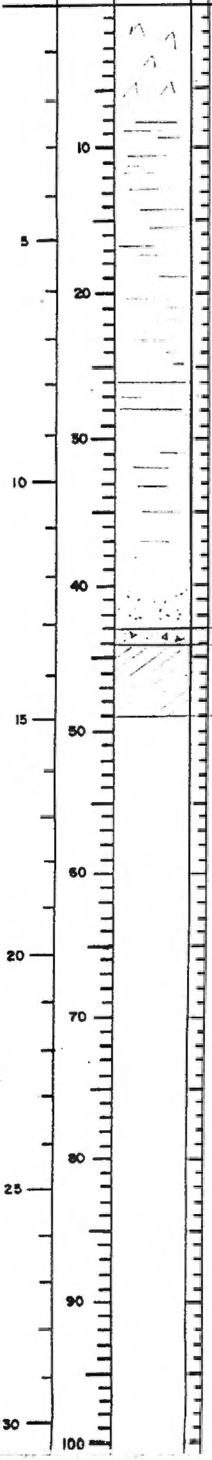
Total depth 49'

Sample screening 10 Mesh

Remarks START - 3:00 Move to group 4

FINISH - 3:50

M.	Ft.	GRAPHIC LOG	SAMPLE NO.	DESCRIPTIVE LOG	ANALYTICAL			



SAMPLE NO.	DESCRIPTIVE LOG
	0-6' - Humus. organic -
	6 - 40' - light to dark homogeneous grey - clay - good floculation
	40-43' - very fine sand
01, 01A wash	43 - 44' - sandy gravel till - pred mafic to int. angular to subangular gravel frags. with abundant fine sand
02, 02A	44 - 49' - dark green mafic volcanic flow - soft green flakes in +10 mesh are possibly chlorite - very fine grained trace py - minor amts of chlorite

APPENDIX B

Heavy Mineral Processing Reports

RC DHs M86-05-01 through 60

(B)

GROUP 5

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	% V/S	GR	LS	OT	S/U	SD	ST	CY	COLOR SD	CY	
M86-03																						
02-1,A,B	15.0	0.6	14.4	158.4	97.2	61.2	29.8	31.4	0	NA	C	75	25	NA	NA	U	Y	Y	Y	B	B	TILL
03-01	4.1	0.3	3.8	97.4	76.5	20.9	9.6	11.3	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
03-2,A,B	17.2	0.9	16.3	71.0	40.0	31.0	12.5	18.5	0	NA	G	50	50	NA	NA	U	Y	Y	Y	GB	GB	TILL
04-1,2	11.1	0.5	10.6	108.3	69.0	39.3	11.7	*27.6	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-3,4	7.4	0.2	7.2	95.8	74.5	21.3	10.1	11.2	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GG	GB	TILL
-5,6	7.2	0.3	6.9	144.5	138.4	6.1	5.5	0.6	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GG	GB	TILL
05-01	5.6	0.7	4.9	78.0	62.3	15.7	6.5	9.2	0	NA	P	50	50	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	2.1	0.1	2.0	223.9	216.8	7.1	4.3	2.8	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
* 06-1,2,3	15.4	0.8	14.6	280.0	252.8	27.2	6.1	21.1	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL -50% py
07-01	4.9	0.3	4.6	75.8	55.9	19.9	7.6	12.3	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-2,3	13.2	0.4	12.8	167.3	141.6	25.7	10.0	15.7	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-4,5,6	19.8	0.8	19.0	203.1	141.0	62.1	25.6	36.5	0	NA	G/P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
08-1,2	9.1	0.4	8.7	65.5	41.6	23.9	7.9	16.0	1	2369	G/P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	4.2	0.2	4.0	120.4	94.2	26.2	12.4	13.8	0	NA	G/BD	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL/BLR
-4,5	7.4	0.3	7.1	77.7	65.0	12.7	6.4	6.3	0	NA	G/P	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	2.8	0.2	2.6	48.6	41.4	7.2	3.8	3.4	0	NA	G/BD	80	20	NA	NA	U	Y	Y	Y	GG	GB	TILL/BLR
09-01	6.4	1.4	5.0	74.7	58.3	16.4	8.8	7.6	0	NA	G/P	50	50	NA	NA	S	C	Y	Y	GB	GB	GRAVEL
-2,3	2.9	0.2	2.7	82.6	74.3	8.3	5.0	3.3	0	NA	G/P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-4,5	7.6	1.0	6.6	65.1	51.6	13.5	5.7	7.8	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-06	2.4	0.0	2.4	117.0	102.3	14.7	9.1	5.6	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
10-04	2.0	0.2	1.8	122.4	118.0	4.4	2.5	1.9	0	NA	P/BR	90	10	NA	NA	U	Y	Y	Y	GN	GY	TILL
11-1,2	8.9	1.8	7.1	198.7	180.3	18.4	8.4	10.0	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GB	GY	TILL
-03	5.6	0.8	4.8	110.4	71.1	39.3	20.1	19.2	1	32	G	90	10	NA	NA	U	Y	Y	Y	GN	GN	TILL -50% py
-4,4A	7.5	0.3	7.2	211.8	192.8	19.0	5.6	13.4	0	NA	G	80	20	NA	NA	U	Y	Y	Y	BN	GN	TILL
-05	5.8	0.4	5.4	108.4	105.1	3.3	1.7	1.6	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GN	GN	TILL
11A-1,1A	5.2	0.4	4.8	188.2	164.3	23.9	12.9	11.0	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GN	GN	TILL
12-1,A,B	13.2	0.6	12.6	220.8	180.0	40.8	18.4	22.4	1	157	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-2,2A	13.1	0.8	12.3	379.9	274.6	105.3	44.0	61.3	1	176	P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
14-2,2A	8.3	0.4	7.9	116.5	113.7	2.8	2.0	0.8	0	NA	G	90	10	NA	NA	U*	Y	Y	Y	GN	GN	TILL - Should be bedrock!
17A-3ABC	24.4	1.0	23.4	522.0	442.2	79.8	37.1	42.7	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
09-7,7A	9.8	0.5	9.3	133.7	103.5	30.2	15.6	14.6	0	NA	P/BR	90	10	NA	NA	U	Y	Y	Y	GG	GG	TILL
10-01	2.9	0.2	2.7	129.5	113.7	15.8	8.3	7.5	0	NA	G/P	55	45	NA	NA	U	Y	Y	Y	B	B	TILL
-02	2.9	0.2	2.7	136.2	127.0	9.2	5.2	4.0	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	5.2	0.8	4.4	151.6	138.5	13.1	7.2	5.9	0	NA	BD/P	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL
12-03	2.8	0.5	2.3	85.1	75.6	9.5	4.7	4.8	1	2426	P	65	45	NA	NA	U	Y	Y	Y	GG	GG	TILL
13-1,1A	9.2	0.5	8.7	189.4	157.3	32.1	14.3	17.8	0	NA	G/P	25	75	NA	NA	U	Y	Y	Y	B	B	TILL
-2.2A	7.5	0.6	6.9	83.3	80.8	2.5	1.2	1.3	0	NA	BD	2	98	NA	NA	S	Y	Y	NA	B	NA	BDRK
14-1,1A	12.0	0.6	11.4	179.5	151.0	48.5	23.7	24.8	0	NA	C	95	5	NA	NA	U	Y	Y	Y	GY	GY	TILL
12-02B	4.9	0.3	4.6	159.0	129.3	29.7	13.9	15.8	0	NA	G	30	70	NA	NA	U	Y	Y	Y	GB	GB	TILL
M86-04																						
01-01	6.5	0.3	6.2	167.1	147.0	20.1	10.3	9.8	0	NA	C	80	20	NA	NA	U	Y	Y	Y	GY	GY	TILL
-02	6.1	0.3	5.8	188.9	164.7	24.2	10.0	14.2	0	NA	C/BD	85	15	NA	NA	U	Y	Y	Y	GY	GY	TILL
-03	6.7	0.3	6.4	116.9	102.2	14.7	6.6	8.1	0	NA	C	75	25	NA	NA	U	Y	Y	Y	GY	GY	TILL

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OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
-03A	3.7	0.1	3.6	92.7	82.4	10.3	6.0	4.3	0	NA	C	80	20	NA	NA	U	Y	Y	Y	GY	GY	TILL
02-01	6.9	0.9	6.0	115.5	99.5	16.0	7.1	8.9	0	NA	C	30	70	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	6.2	0.4	5.8	158.9	149.1	9.8	4.4	5.4	0	NA	G	20	80	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	6.4	0.2	6.2	132.1	95.6	36.5	13.9	22.6	0	NA	G	30	70	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03A	7.0	0.3	6.7	150.9	111.6	39.3	15.3	24.0	1	506	G	40	60	NA	NA	U	Y	Y	Y	GB	GB	TILL
M86-05																						
16-01,AB	18.8	0.8	18.0	164.7	89.4	75.3	34.0	41.3	0	NA	G	30	70	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02,2A	11.3	0.4	10.9	123.9	98.6	25.3	11.4	13.9	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-03	4.7	1.4	3.3	96.4	94.5	1.9	1.4	0.5	0	NA	BR	100	0	NA	NA	S	C	Y	Y	GY	GY	BDK
17-01,AB	16.6	0.6	16.0	229.7	155.4	74.3	42.0	32.3	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GY	GY	TILL
-02	6.6	0.8	5.8	256.7	209.1	47.6	22.2	25.4	0	NA	G	40	60	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02A	3.4	0.2	3.2	146.0	121.4	24.6	11.0	13.6	0	NA	P	50	50	NA	NA	U	Y	Y	Y	B	B	TILL
17A-01	5.4	0.4	5.0	169.8	137.6	32.2	16.1	16.1	0	NA	P	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-02,2A	12.3	1.4	10.9	165.4	120.8	44.6	21.6	23.0	0	NA	G	50	50	NA	NA	U	Y	Y	Y	GB	GB	TILL

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GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

NUMBER OF GRAINS

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	ABBRADED T	ABBRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
M86-05													
02-1.A.B	N	NO VISIBLE GOLD											
03-01	N	NO VISIBLE GOLD											
03-2,A,B	N	NO VISIBLE GOLD											
04-1,2	N	NO VISIBLE GOLD											
-3,4	N	NO VISIBLE GOLD											
-5,6	N	NO VISIBLE GOLD											
05-01	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
06-1,2,3	N	NO VISIBLE GOLD											
07-01	N	NO VISIBLE GOLD											
-2,3	N	NO VISIBLE GOLD											
-4,5,6	N	NO VISIBLE GOLD											
08-1,2	Y	200 X 275	44 C	1						1			
									TOTAL	1	7.9	2369	
-03	N	NO VISIBLE GOLD											
-4.5	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
09-01	N	NO VISIBLE GOLD											
-2,3	N	NO VISIBLE GOLD											
-4.5	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
10-04	N	NO VISIBLE GOLD											
11-1,2	N	NO VISIBLE GOLD											
-03	Y	50 X 100	15 C	1						1			EST: 50% PYRITE

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GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

                                      NUMBER OF GRAINS

                                      ABBRADED  IRREGULAR  DELICATE        NON    CALC V.G.
SAMPLE # PANNED                       ========  =========  ========        MAG     ASSAY
          Y/N    DIAMETER   THICKNESS     T    P    T    P    T    P TOTAL GMS      PPB    REMARKS

                                                                      ____________________
                                                                TOTAL    1   20.1       32

   4,4A    N   NO VISIBLE GOLD

    -05    N   NO VISIBLE GOLD

11A-1,1A   N   NO VISIBLE GOLD

12-1,A,B   Y     100 X  150      25 C    1                               1
                                                                      ____________________
                                                                TOTAL    1   18.4      157

 -2,A,B    Y     150 X  200      34 C    1                               1
                                                                      ____________________
                                                                TOTAL    1   44.0      176

14-2,2A    N   NO VISIBLE GOLD

17A-3ABC   N   NO VISIBLE GOLD

09-7,7A    N   NO VISIBLE GOLD

  10-01    N   NO VISIBLE GOLD

    -02    N   NO VISIBLE GOLD

    -03    N   NO VISIBLE GOLD

  12-03    Y     150 X  250      38 C    1                               1
                                                                      ____________________
                                                                TOTAL    1    4.7     2426

13-1,1A    N   NO VISIBLE GOLD

  -2,2A    N   NO VISIBLE GOLD

14-1,1A    N   NO VISIBLE GOLD

 12-02B    N   NO VISIBLE GOLD

M86-04

  01-01    N   NO VISIBLE GOLD

    -02    N   NO VISIBLE GOLD

    -03    N   NO VISIBLE GOLD
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GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

                                      NUMBER OF GRAINS

                                      ABRADED  IRREGULAR  DELICATE      NON    CALC V.G.
SAMPLE # PANNED                       ========  =========  ========      MAG      ASSAY
          Y/N   DIAMETER   THICKNESS   T    P    T    P    T    P TOTAL GMS       PPB    REMARKS


    -03A   N   NO VISIBLE GOLD

   02-01   N   NO VISIBLE GOLD

     -02   N   NO VISIBLE GOLD

     -03   N   NO VISIBLE GOLD

    -03A   Y    100 X  250       34 C   1                        1

                                                          TOTAL   1   15.3       506

 M86-05

   01-03   N   NO VISIBLE GOLD

    -03A   N   NO VISIBLE GOLD

 16-01,AB  N   NO VISIBLE GOLD

   -2,2A   N   NO VISIBLE GOLD

     -03   Y   NO VISIBLE GOLD                                                          EST: 30% PYRITE

 17-1,A,B  N   NO VISIBLE GOLD

     -02   N   NO VISIBLE GOLD

    -02A   N   NO VISIBLE GOLD

  17A-01   N   NO VISIBLE GOLD

   -2,2A   N   NO VISIBLE GOLD
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OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
												%								COLOR		
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	V/S	GR	LS	OT	S/U	SD	ST	CY	SD	CY	
M86-05																						
25-7-7D	26.5	2.0	24.5	576.8	492.3	84.5	36.3	48.2	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL
-08-08C	22.1	3.0	19.1	365.5	303.2	62.3	22.8	39.5	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL
-9-09C	23.9	1.3	22.6	320.8	257.9	62.9	34.1	28.8	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	GNB	TILL
10-10B	15.5	0.8	14.7	145.8	112.2	33.6	19.8	13.8	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
11-11C	21.9	2.3	19.6	133.0	111.9	21.1	10.2	10.9	0	NA	G	60	40	NA	NA	S	M	Y	NA	B	NA	SAND
12-12C	22.4	1.6	20.8	254.0	223.6	30.4	13.9	16.5	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
22-01	5.2	0.0	5.2	121.5	105.0	16.5	9.3	7.2	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL
-02	2.7	0.0	2.7	63.0	49.7	13.3	7.8	5.5	0	NA	TR	NA	NA	NA	NA	S	F/M	Y	Y	B	B	SAND
-03,03A	8.8	1.0	7.8	114.2	86.9	27.3	15.5	11.8	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL
26-01	2.1	0.3	1.8	81.9	70.8	11.1	5.5	5.6	0	NA	G,P	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-02.02A	6.8	1.0	5.8	124.2	97.6	26.6	14.4	12.2	0	NA	G	70	30	NA	NA	U	Y	Y	Y	B	B	TILL

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GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

                                           NUMBER OF GRAINS

                                           ABBRADED  IRREGULAR  DELICATE       NON    CALC V.G.
SAMPLE # PANNED                            ========  =========  ========       MAG     ASSAY
          Y/N    DIAMETER    THICKNESS       T    P     T    P     T    P TOTAL GMS      PPB    REMARKS

M86-05
25-7-7D    N   NO VISIBLE GOLD

-08-08C    N   NO VISIBLE GOLD

-09-09C    N   NO VISIBLE GOLD

 10-10B    N   NO VISIBLE GOLD

-11-11C    N   NO VISIBLE GOLD

 12-12C    N   NO VISIBLE GOLD

  22-01    N   NO VISIBLE GOLD

    -02    N   NO VISIBLE GOLD

-03,03A    N   NO VISIBLE GOLD

  26-01    N   NO VISIBLE GOLD

-02,02A    N   NO VISIBLE GOLD
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Group 5

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
												%								COLOR		
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	V/S	GR	LS	OT	S/U	SD	ST	CY	SD	CY	
M86-05																						
17A-04,A	13.4	0.7	12.7	210.9	175.7	35.2	17.4	17.8	0	NA	G	30	70	NA	NA	U	Y	Y	Y	B	B	TILL
-05,5A	12.7	0.8	11.9	245.2	207.3	37.9	18.6	19.3	0	NA	G	30	70	NA	NA	S	M	Y	NA	B	NA	SAND
-6,A,B,C	20.7	2.4	18.3	377.3	274.0	103.3	53.4	49.9	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL
18-1,A,B	16.3	0.7	15.6	174.9	140.3	34.6	18.2	16.4	0	NA	BR	95	5	NA	NA	U	Y	Y	Y	GB	GB	TILL/BDK
18A-1,A	12.2	1.4	10.8	309.4	230.3	79.1	57.0	22.1	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
-01B,C	11.7	0.4	11.3	273.3	177.8	95.5	68.7	26.8	$\boxed{2}$	43	G	80	20	NA	NA	S	M	Y	NA	B	NA	SAND
-01D	6.1	0.2	5.9	183.7	137.6	46.1	31.8	14.3	0	NA	P	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
19-01,A	13.8	0.4	13.4	488.3	267.7	220.6	192.3	28.3	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-01B,C	13.0	0.1	12.9	209.9	114.6	95.3	69.1	26.2	0	NA	G	95	5	NA	NA	U	Y	Y	Y	GB	GB	TILL
-01D,E	11.9	0.1	11.8	236.8	175.1	61.7	39.4	22.3	0	NA	G	85	15	NA	NA	U	Y	Y	Y	GB	GB	TILL
20-01,A	11.3	0.8	10.5	173.6	127.4	46.2	19.9	26.3	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	5.9	0.2	5.7	117.2	98.7	18.5	9.5	9.0	0	NA	G	85	15	NA	NA	U	Y	Y	Y	GG	GG	TILL
-03	3.4	0.1	3.3	117.2	106.3	10.9	6.2	4.7	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
21-01,A	12.8	0.2	12.6	202.8	151.7	51.1	19.8	31.3	0	NA	G	30	70	NA	NA	U	Y	Y	Y	B	B	TILL
23-01,A	11.0	0.6	10.4	204.3	156.4	47.9	18.0	29.9	0	NA	P	20	80	NA	NA	U	Y	Y	Y	B	B	TILL
24-01,A	9.4	1.5	7.9	129.1	95.7	33.4	13.1	20.3	0	NA	P	50	50	NA	NA	U	Y	Y	Y	B	B	TILL
-02	6.8	0.2	6.6	153.8	135.0	18.8	9.2	9.6	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

NUMBER OF GRAINS

SAMPLE #	PANNED			ABBRADED		IRREGULAR		DELICATE			NON MAG	CALC V.G. ASSAY	
	Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P	TOTAL	GMS	PPB	REMARKS
M86-05													
17A-4,A	N	NO VISIBLE GOLD											
-05,A	N	NO VISIBLE GOLD											
-6,A,B,C	N	NO VISIBLE GOLD											
18-1,A,B	N	NO VISIBLE GOLD											
18A-01,A	Y	NO VISIBLE GOLD											EST: 40% PYRITE *
-01B,C	Y	25 X 50	8 C						1	1			EST: 30% PYRITE *
		100 X 150	25 C	1						1			
									TOTAL	2	68.7	43	
-01D	Y	NO VISIBLE GOLD											EST: 30% PYRITE *
19-01,A	Y	NO VISIBLE GOLD											EST: 30% PYRITE *
-01B,C	Y	NO VISIBLE GOLD											EST: 40% PYRITE *
-01D,E	Y	NO VISIBLE GOLD											EST: 30% PYRITE *
20-01,A	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
21-01,A	N	NO VISIBLE GOLD											
23-01,A	N	NO VISIBLE GOLD											
24-01,A	N	NO VISIBLE GOLD											
24-02	N	NO VISIBLE GOLD											

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OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS	
						M. I. CONC					CLAST					MATRIX							
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR			
												V/S	GR	LS	OT					SD	CY		
M-05-86																							
27-01,ABC	22.3	0.3	22.0	294.4	217.9	76.5	44.1	32.4	0	NA	G	70	30	NA	NA	U	Y	Y	Y	B	B	TILL	
-02,02A,B	17.5	0.1	17.4	294.6	230.6	64.0	39.3	24.7	0	NA	P,G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL	
-03,04,05	38.8	2.4	36.4	470.0	381.5	88.5	42.7	45.8	0	NA	G	70	30	NA	NA	U	Y	Y	Y	B	B	TILL	
-06,06A	12.6	0.6	12.0	317.3	284.9	32.4	16.4	16.0	0	NA	G	80	20	NA	NA	U	Y	Y	Y	B	B	TILL	
-07-08A	23.6	0.9	22.7	296.1	259.1	37.0	19.0	18.0	0	NA	P,G	75	25	NA	NA	U	Y	Y	Y	B	B	TILL	
-09	5.5	0.0	5.5	118.6	91.2	27.4	17.3	10.1	0	NA	TR	NA	NA	NA	NA	S	F/M	Y	Y	B	B	SAND	
-09A	5.4	0.1	5.3	130.4	103.0	27.4	16.6	10.8	0	NA	P	60	40	NA	NA	U	Y	Y	Y	B	B	TILL	
-10,10A	11.9	0.0	11.9	215.9	165.2	50.7	28.0	22.7	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL	
-11,11A	12.0	0.0	12.0	379.1	345.0	34.1	20.8	13.3	0	NA	TR	NA	NA	NA	NA	U	Y	Y	N	B	NA	TILL	
-12,12A	12.4	0.3	12.1	427.8	359.4	68.4	44.3	24.1	0	NA	G	80	20	NA	NA	U	Y	Y	Y	B	B	TILL	
-13-14A	18.7	1.0	17.7	595.7	515.3	80.4	53.5	26.9	0	NA	G	90	10	NA	NA	U	Y	Y	Y	B	B	TILL	
-15,15A	12.1	2.8	9.3	229.5	173.3	56.2	40.2	16.0	0	NA	BR	100	NA	NA	NA	U	Y	Y	Y	B	GY	TILL	Bedr
28-1,1A	8.3	0.0	8.3	166.8	127.7	39.1	20.5	18.6	0	NA	TR	NA	NA	NA	2	S	F	Y	Y	GY	GY	SAND	
28A-3	4.2	0.0	4.2	97.6	80.0	17.6	9.8	7.8	0	NA	TR	NA	NA	NA	NA	S	F	Y	Y	GY	GY	SAND	
-4,4A	8.8	0.6	8.2	98.8	62.5	36.3	22.3	14.0	2	4694	G,P	80	20	NA	NA	U	Y	Y	Y	GY	GY	TILL	Bedrock
29-1,AB	16.5	0.2	16.3	98.4	55.8	42.6	17.6	25.0	0	NA	G,P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
30-1,AB	8.9	0.8	8.1	104.9	81.5	23.4	10.4	13.0	0	NA	G,P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-2,AB	17.5	0.8	16.7	308.0	223.8	84.2	39.0	45.2	1	292	G,P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-3,3A	11.2	0.4	10.8	145.1	90.0	55.1	21.7	33.4	0	NA	G,P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	No ass
-4,4A	9.6	3.0	6.6	84.2	64.3	19.9	13.7	6.2	1	14	C,BR	100	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL	SONDAR CL
31-1.AB	16.2	0.7	15.5	153.5	100.2	53.3	24.5	28.8	2	3392	G,P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL	
32-1,1A	10.6	0.4	10.2	134.6	100.3	34.3	16.6	17.7	0	NA	G,P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL	Bedroc
34-1,ABC	23.6	1.8	21.8	414.3	279.9	134.4	68.3	66.1	1	42	G,P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
34-1D	5.5	0.5	5.0	132.3	113.4	18.9	8.9	10.0	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL	
34-1E	5.9	0.7	5.2	175.8	161.1	14.7	8.0	6.7	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
34-2,A,B	11.4	0.6	10.8	203.1	168.1	35.0	19.3	15.7	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
35-1-2A	10.8	0.1	10.7	147.1	105.3	41.8	20.4	21.4	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL	
-3-4A	14.0	0.5	13.5	181.7	143.5	38.2	15.4	22.8	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-5,5A	10.1	1.4	8.7	357.6	282.8	74.8	32.3	42.5	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-6.6A	10.3	1.0	9.3	272.4	209.5	62.9	36.2	26.7	1	1	G,P	55	45	NA	NA	U	Y	Y	Y	GB	GB	TILL	
36-1-2	9.8	1.7	8.1	212.0	181.5	30.5	15.1	15.4	0	NA	G,P	65	35	NA	NA	U	Y	Y	Y	B	B	TILL	
-3,4	14.7	0.8	13.9	181.1	165.3	15.8	7.0	8.8	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL	
-5,6,7	10.7	1.5	9.2	140.0	121.9	18.1	7.1	11.0	0	NA	G,P	65	35	NA	NA	U	Y	Y	Y	B	B	TILL	
-8	3.8	0.4	3.4	139.5	134.0	5.5	2.1	3.4	0	NA	G,P	40	60	NA	NA	U	Y	Y	Y	B	B	TILL	
-9,9A	12.7	0.5	12.2	298.1	272.5	25.6	9.7	15.9	0	NA	G,P	50	50	NA	NA	U	Y	Y	Y	B	B	TILL	
-10,10A	10.3	0.7	9.6	193.1	174.0	19.1	8.5	10.6	0	NA	G,P	60	40	NA	NA	U	Y	Y	Y	B	B	TILL	
-11,11A	11.2	1.0	10.2	316.3	186.3	130.0	96.5	33.5	0	NA	G,P	65	35	NA	NA	U	Y	Y	Y	B	B	TILL	
-12	4.6	0.8	3.8	130.0	68.2	61.8	52.7	9.1	0	NA	C	95	5	NA	NA	U	Y	Y	Y	GB	GB	TILL	
37-1,A	13.1	0.3	12.8	232.2	205.4	26.8	11.9	14.9	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL	
-2,A,B	10.4	0.5	9.9	299.3	277.1	22.2	11.1	11.1	0	NA	G,P	65	35	NA	NA	U	Y	Y	Y	B	B	TILL	
37A-3,4	11.9	0.7	11.2	258.3	239.2	19.1	9.4	9.7	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL	
37A-5	5.9	0.2	5.7	189.0	173.4	15.6	7.4	8.2	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL	
-6,6A	12.3	0.2	12.1	167.8	106.5	61.3	35.8	25.5	0	NA	G,P	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-7,7A	10.0	1.2	8.8	209.0	100.4	108.6	87.4	21.2	0	NA	C,BD	98	2	NA	NA	U	Y	Y	Y	GG	GG	TILL	

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS	
						M. I. CONC					CLAST					MATRIX							
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR			
												V/S	GR	LS	OT					SD	CY		
38-1,1A	4.8	0.6	4.2	131.8	99.9	31.9	18.8	13.1	0	NA	C	80	20	TR	NA	U	Y	Y	Y	B	B	TILL	
39-1,1A	10.0	0.8	9.2	193.8	162.3	31.5	15.7	15.8	0	NA	G,P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL	
-2,A,B	10.3	0.4	9.9	114.6	83.9	30.7	15.6	15.1	0	NA	G,P	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-3,3A	8.1	0.2	7.9	144.1	118.3	25.8	12.6	13.2	0	NA	G	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-4,4A	6.3	0.2	6.1	130.2	103.7	26.5	14.3	12.2	0	NA	G	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-5,6,6A	14.7	0.6	14.1	326.6	279.9	46.7	17.3	29.4	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	GB	TILL	
40-1,1A	10.1	0.4	9.7	201.1	160.9	40.2	16.2	24.0	0	NA	G,P	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	-2920 ppb
41-1,1A	8.3	0.6	7.7	183.3	156.2	27.1	16.0	11.1	0	NA	G,C	90	10	NA	NA	U	Y	Y	Y	GG	GG	TILL	
[redacted]	5.9	0.1	5.8	169.4	150.2	19.2	10.2	9.0	0	NA	G,P	60	40	NA	NA	U	Y	Y	Y	B	GB	TILL	
-2	5.9	0.0	5.9	69.8	57.0	12.8	8.2	4.6	0	NA	G,P	60	40	NA	NA	U	Y	Y	Y	B	GB	TILL	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	>20 000 ppb
-4	5.4	0.3	5.1	211.4	182.8	28.6	22.6	6.0	1	94	BR.G	95	5	NA	NA	U	Y	Y	Y	GB	B	TILL	
43-1,1A	12.4	0.3	12.1	200.1	167.5	32.6	9.2	23.4	0	NA	G	25	75	NA	NA	U	Y	Y	Y	B	B	TILL	
-2,2A	13.0	0.3	12.7	225.8	181.2	44.6	20.5	24.1	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL	
-3,4,5	12.5	0.4	12.1	132.8	90.5	42.3	20.6	21.7	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL	
-6.7	8.6	0.3	8.3	122.9	96.9	26.0	13.4	12.6	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL	
44-1,1A	12.9	0.4	12.5	224.6	175.9	48.7	22.3	26.4	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL	
-2	4.9	0.0	4.9	94.6	75.9	18.7	10.4	8.3	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	GB	TILL	
-3	5.9	0.2	5.7	181.6	144.2	37.4	16.1	21.3	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	GB	TILL	
-4	3.8	0.2	3.6	131.5	113.2	18.3	9.7	8.6	0	NA	G,P	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-5	2.6	0.0	2.6	85.4	77.8	7.6	4.6	3.0	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL	
-6	6.7	1.3	5.4	197.2	179.2	18.0	9.2	8.8	0	NA	BR	100	TR	NA	NA	U	Y	Y	Y	GB	GNB	TILL	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	625 ppb
-2,2A	11.3	0.3	11.0	231.9	194.2	37.7	17.3	20.4	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL	
-3,3A,4	10.5	0.2	10.3	201.5	167.7	33.8	16.2	17.6	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	GB	TILL	
-5,6	10.8	0.0	10.8	241.1	197.9	43.2	20.4	22.8	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	GB	TILL	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	1670 ppb
-8,9,9A	10.0	0.2	9.8	141.8	114.9	26.9	12.3	14.6	0	NA	G	80	20	NA	NA	U	Y	Y	Y	B	B	TILL	
-10	6.2	0.0	6.2	117.3	100.0	17.3	7.7	9.6	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL	
-11,11A	11.6	0.3	11.3	147.6	118.5	29.1	15.6	13.5	0	NA	G	80	20	NA	NA	U	Y	Y	Y	B	B	TILL	
-12	3.1	0.0	3.1	92.2	75.4	16.8	8.6	8.2	0	NA	BR	NA	NA	NA	NA	U	Y	Y	Y	GN	GN	TILL	
46-1	5.4	0.1	5.3	126.9	112.5	14.4	8.2	6.2	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL	
-2,2A	13.4	0.1	13.3	104.0	78.1	25.9	13.3	12.6	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL	
-3	5.8	0.0	5.8	128.8	115.0	13.8	8.7	5.1	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL	
-4	5.8	0.1	5.7	124.1	108.3	15.8	9.2	6.6	0	NA	G	80	20	NA	NA	U	Y	Y	Y	B	B	TILL	
-5,5A	10.8	0.3	10.5	163.0	135.9	27.1	13.4	13.7	0	NA	G	80	20	NA	NA	U	Y	Y	Y	B	B	TILL	
-6,6A	13.0	0.1	12.9	208.5	180.3	28.2	12.8	15.4	0	NA	G	70	30	NA	NA	U	Y	Y	Y	B	B	TILL	
-7,7A,7B	10.4	0.0	10.4	277.7	244.7	33.0	17.8	15.2	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL	
8,8A,8B	10.1	0.3	9.8	210.8	170.0	40.8	20.2	20.6	0	NA	G	70	30	NA	NA	U	Y	Y	Y	B	B	TILL	
-9,9A	13.0	0.4	12.6	217.9	167.4	50.5	22.1	28.4	0	NA	G	90	10	NA	NA	U	Y	Y	Y	GB	B	TILL	
-10,10A	11.7	0.6	11.1	256.3	215.5	40.8	23.1	17.7	0	NA	G	75	25	NA	NA	U	Y	Y	Y	GB	B	TILL	
-11,11A	10.8	0.5	10.3	215.7	163.7	52.0	25.5	26.5	0	NA	G	70	30	NA	NA	U	Y	Y	Y	GB	B	TILL	
47-1,1A	10.0	0.2	9.8	176.8	142.9	33.9	17.8	16.1	0	NA	G	35	65	NA	NA	U	Y	Y	Y	B	B	TILL	
-2,2A	10.5	0.1	10.4	236.2	175.7	60.5	33.4	27.1	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL	

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GOLD CLASSIFICATION
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VISIBLE GOLD FROM SHAKING TABLE AND PANNING

                                      NUMBER OF GRAINS

                                      ABBRADED   IRREGULAR  DELICATE       NON    CALC V.G.
SAMPLE # PANNED                       ========   =========  ========       MAG      ASSAY
          Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P TOTAL GMS      PPB    REMARKS

M-5-86
27-1-1C    N   NO VISIBLE GOLD

  -2-2B    N   NO VISIBLE GOLD

  -3-5A    N   NO VISIBLE GOLD

  -6,6A    N   NO VISIBLE GOLD

  -7-8A    N   NO VISIBLE GOLD

     -9    N   NO VISIBLE GOLD

    -9A    N   NO VISIBLE GOLD

-10,10A    N   NO VISIBLE GOLD

-11,11A    N   NO VISIBLE GOLD

-12,12A    N   NO VISIBLE GOLD

-13-14A    N   NO VISIBLE GOLD

-15,15A    N   NO VISIBLE GOLD

28A1,1A    N   NO VISIBLE GOLD

     -3    N   NO VISIBLE GOLD

  -4,4A    Y       200 X  400      54 C              1                    1                   EST. 30% PYRITE
                   200 X  550      65 C              1                    1
                                                                      ---------------------
                                                                TOTAL     2   22.3      4694

29-1-1B    N   NO VISIBLE GOLD

30-1,1A    N   NO VISIBLE GOLD

 -2,A,B    N       200 X  200      38 C      1                            1
                                                                      ---------------------
                                                                TOTAL     1   39.0       292

 -3,3A     N   NO VISIBLE GOLD

 -4,4A     Y        50 X   50      10 C           1                       1                   EST:  40% PYRITE
                                                                      ---------------------
                                                                TOTAL     1   13.7        14
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GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

NUMBER OF GRAINS

SAMPLE #	PANNED			ABRADED		IRREGULAR		DELICATE			NON MAG	CALC V.G. ASSAY	
	Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P	TOTAL	GMS	PPB	REMARKS
31-1,A,B	Y	100 X 100	20 C	1						1			EST. 10% PYRITE
		300 X 500	68 C	1						1			
									TOTAL	2	24.5	3392	
32-1.1A	N	NO VISIBLE GOLD											
34-1,ABC	N	100 X 150	25 C	1						1			
									TOTAL	1	68.3	42	
-1D	N	NO VISIBLE GOLD											
-1E	N	NO VISIBLE GOLD											
-2,A,B	N	NO VISIBLE GOLD											
35-1-2A	N	NO VISIBLE GOLD											
-3-4A	N	NO VISIBLE GOLD											
-5,5A	N	NO VISIBLE GOLD											
-6,6A	Y	25 X 25	5 C		1					1			EST. 30% PYRITE
									TOTAL	1	36.2	1	
36-1-2	N	NO VISIBLE GOLD											
-3,3A.4	N	NO VISIBLE GOLD											
-5.6,7	N	NO VISIBLE GOLD											
-8	N	NO VISIBLE GOLD											
-9,9A	N	NO VISIBLE GOLD											
-10,10A	N	NO VISIBLE GOLD											
-11,11A	N	NO VISIBLE GOLD											
-12	Y	NO VISIBLE GOLD											EST. 60% PYRITE (IN ROCK CHIPS)
37-2,A,B	N	NO VISIBLE GOLD											
-3;37A34	N	NO VISIBLE GOLD											
37A-05	N	NO VISIBLE GOLD											

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS							NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
				ABRADED		IRREGULAR		DELICATE					
				T	P	T	P	T	P	TOTAL			
-06,06A	N	NO VISIBLE GOLD											
-07,07A	N	NO VISIBLE GOLD											
38-01,A	N	NO VISIBLE GOLD											
39-01,A	N	NO VISIBLE GOLD											
-02,A,B	N	NO VISIBLE GOLD											
-03,03A	N	NO VISIBLE GOLD											
-04,04A	N	NO VISIBLE GOLD											
39-5,6,A	N	NO VISIBLE GOLD											
40-01,A	N	NO VISIBLE GOLD											
02,A	N	NO VISIBLE GOLD											
41-01,A	N	NO VISIBLE GOLD											
42-01	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	Y	100 X 125	22 C		1					1			EST: 50% PYRITE (IN ROCK CHIPS)
									TOTAL	1	22.6	94	
43-01,A	N	NO VISIBLE GOLD											
-02,02A	N	NO VISIBLE GOLD											
-03,4,5	N	NO VISIBLE GOLD											
-06,07	N	NO VISIBLE GOLD											
44-01,A	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

NUMBER OF GRAINS

SAMPLE #	PANNED			ABBRADED		IRREGULAR		DELICATE			NON MAG	CALC V.G. ASSAY	
	Y/N	DIAMETER	THICKNESS	T	P	T	P	T	P	TOTAL	GMS	PPB	REMARKS
-05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
45-01,A	N	NO VISIBLE GOLD											
-02,A	N	NO VISIBLE GOLD											
-03,A,4	N	NO VISIBLE GOLD											
-05,6	N	NO VISIBLE GOLD											
-07	N	NO VISIBLE GOLD											
-08,9,9A	N	NO VISIBLE GOLD											
-10	N	NO VISIBLE GOLD											
-11,11A	N	NO VISIBLE GOLD											
-12	N	NO VISIBLE GOLD											
46-01	N	NO VISIBLE GOLD											
-02,A	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
-05,5A	N	NO VISIBLE GOLD											
-06,6A	N	NO VISIBLE GOLD											
-07,A,B	N	NO VISIBLE GOLD											
-08,A,B	N	NO VISIBLE GOLD											
-09,9A	N	NO VISIBLE GOLD											
-10,10A	N	NO VISIBLE GOLD											
-11,11A	N	NO VISIBLE GOLD											
47-01,A	N	NO VISIBLE GOLD											
-02,2A	N	NO VISIBLE GOLD											

MPHM2APR.86

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

SAMPLE NO.	WEIGHT (KG.WET)			WEIGHT (GRAMS DRY)					AU		DESCRIPTION											CLASS
						M. I. CONC					CLAST					MATRIX						
	TABLE SPLIT	+10 CHIPS	TABLE FEED	TABLE CONC	M.I. LIGHTS	CONC. TOTAL	NON MAG	MAG	NO. V.G.	CALC PPB	SIZE	%				S/U	SD	ST	CY	COLOR		
												V/S	GR	LS	OT					SD	CY	
M-86-05																						
47-03,A	8.3	0.2	8.1	149.4	110.6	36.8	20.4	18.4	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL
-04	4.1	0.1	4.0	81.4	62.6	18.8	10.3	8.5	0	NA	G	40	60	NA	NA	U	Y	Y	Y	BB	GB	TILL
-05	4.5	0.1	4.4	101.8	73.8	28.0	14.3	13.7	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-06.A	10.3	0.4	9.9	285.5	175.1	110.4	30.0	80.4	0	NA	G	45	55	NA	NA	U	Y	Y	Y	B	B	TILL
-07	4.4	0.1	4.3	85.6	67.3	18.3	10.1	8.2	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
48-01,02	12.8	0.4	12.4	209.8	155.6	54.2	24.4	29.8	1 *	659	G	45	55	NA	NA	U	Y	Y	Y	B	B	TILL
-03,04	11.1	0.3	10.8	147.4	108.1	39.3	19.0	20.3	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-05,06	12.2	0.1	12.1	153.6	106.6	47.0	21.1	25.9	1 *	234.	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-07,08	12.6	0.7	11.9	230.8	184.0	46.8	20.1	26.7	1 *	2800	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL
-09,10	13.7	0.0	13.7	327.0	260.7	66.3	28.7	37.6	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL
-11,12	8.6	0.3	8.3	245.8	219.1	26.7	13.9	12.8	0	NA	G	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-13	3.1	0.2	2.9	109.4	103.2	6.2	3.9	2.3	0	NA	BR/G	70	30	NA	NA	U	Y	Y	Y	GB	GY	TILL/BDK
49-01.02	12.2	0.5	11.7	350.7	285.5	65.2	31.1	34.1	0	NA	G/P	60	40	NA	NA	U	Y	Y	Y	B	B	TILL
-03,4,5	9.8	0.3	9.5	225.6	189.3	36.3	17.6	18.7	0	NA	G	50	50	NA	NA	U	Y	Y	Y	B	B	TILL
-06,07	4.6	0.2	4.4	154.3	142.4	11.9	7.0	4.9	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
50-01,2,3	10.3	0.2	10.1	260.0	223.3	36.7	19.3	17.4	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-04,05	12.5	0.2	12.3	183.4	140.6	42.8	23.9	18.9	0	NA	G/P	70	30	NA	NA	U	Y	Y	Y	B	GB	TILL
-06	4.8	0.2	4.6	130.7	113.3	17.4	9.5	7.9	0	NA	G	50	50	NA	NA	U	Y	Y	Y	GB	GB	TILL
51-01,A,2	9.7	0.2	9.5	195.8	155.1	40.7	18.0	22.7	0	NA	G	40	60	NA	NA	U	Y	Y	Y	B	B	TILL
-03,04	11.3	0.3	11.0	198.0	160.7	37.3	21.2	16.1	0	NA	G	60	40	NA	NA	U	Y	Y	Y	GB	GB	TILL
-05,06	12.2	0.5	11.7	234.1	193.8	40.3	24.1	16.2	0	NA	G/P	70	30	NA	NA	U	Y	Y	Y	GY	GY	TILL
-07	5.0	0.3	4.7	150.7	135.6	15.1	8.4	6.7	1 *	NA	BR/G	90	10	NA	NA	U	Y	Y	Y	GY	GY	TILL/BDK
52,A-01,A	10.6	1.0	9.6	203.0	141.6	61.4	40.7	20.7	0	NA	G/P	80	20	NA	NA	U	Y	Y	Y	GY	GY	TILL
52-02,A	9.4	3.6	5.8	93.7	90.9	2.8	2.1	0.7	0	NA	BR	100	0	NA	NA	S	Y	Y	Y	GN	GN	BDK
53-01	6.4	0.2	6.2	191.7	164.2	27.5	12.7	14.8	0	NA	G	90	10	NA	NA	U	Y	Y	Y	B	B	TILL
-02	6.1	0.2	5.9	165.0	149.9	15.1	8.4	6.7	0	NA	G	90	10	NA	NA	U	Y	Y	Y	B	GB	TILL
-03	4.6	0.3	4.3	134.9	122.4	12.5	7.7	4.8	0	NA	BR	95	5	NA	NA	U	Y	Y	Y	GN	GN	TILL/BDK
54-01	6.6	0.2	6.4	199.3	164.6	34.7	18.2	16.5	0	NA	G	75	25	NA	NA	U	Y	Y	Y	B	GB	TILL
-02,A,B	10.2	0.2	10.0	286.2	246.9	39.3	17.6	21.7	0	NA	G	75	25	NA	NA	U	Y	Y	Y	GB	GB	TILL
54-03	6.7	2.4	4.3	134.0	116.1	17.9	8.6	9.3	0	NA	C	95	5	NA	NA	U	Y	Y	Y	GB	GB	TILL
55-01	3.6	0.2	3.4	103.8	94.2	9.6	5.1	4.5	0	NA	BR	95	5	NA	NA	C	Y	Y	Y	GY	GY	TILL/BDK
56-01,01A	11.6	0.3	11.3	206.5	142.9	63.6	33.5	30.1	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
-02	7.9	1.9	6.0	105.9	91.6	14.3	6.0	8.3	0	NA	BR	100	0	NA	NA	S	Y	Y	Y	GB	GB	BDK
57-01,A,B	14.6	0.5	14.1	151.9	90.2	61.7	29.2	32.5	0	NA	G	90	20	NA	NA	U	Y	Y	Y	GB	B	TILL
58-01,01A	8.6	3.3	5.3	180.3	179.2	1.1	1.0	0.1	0	NA	BR	100	0	NA	NA	S	Y	Y	Y	GN	B	BLR
59-01,01A	7.8	0.3	7.5	145.4	111.1	34.3	17.3	17.0	1	NA	G	70	30	NA	NA	U	Y	Y	Y	B	B	TILL
60-01.01A	9.8	0.5	9.3	176.5	145.8	30.7	14.2	16.5	0	NA	P/G	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL
✓ 15-01.01A	13.6	0.3	13.3	159.5	93.5	66.0	31.8	34.2	0	NA	G/P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
✓ 15-02,02A	8.2	0.6	7.6	151.3	122.1	29.2	16.1	13.1	0	NA	G	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
18A-1E,1F	13.3	0.2	13.1	250.9	167.6	83.3	53.9	29.4	0	NA	P	80	20	NA	NA	U	Y	Y	Y	B	B	TILL
-02	6.4	0.2	6.2	229.8	206.1	23.7	14.1	9.6	0	NA	G	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	PANNED	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED		IRREGULAR		DELICATE			NON MAG	CALC V.G. ASSAY	REMARKS
	Y/N			T	P	T	P	T	P	TOTAL	GMS	PPB	
M-86-05													
47-03.A	N	NO VISIBLE GOLD											
-04	N	NO VISIBLE GOLD											
-05	N	NO VISIBLE GOLD											
-06.6A	N	NO VISIBLE GOLD											
-07	N	NO VISIBLE GOLD											
48-01,02	N	100 X 125	22 C			1				1			
									TOTAL	1	24.4	87	
-03,04	N	NO VISIBLE GOLD											
-05,06	N	150 X 150	29 C			1				1			
									TOTAL	1	21.1	234	
-07,08	N	350 X 350	61 C	1						1			
									TOTAL	1	20.1	2800	
-09,10	N	NO VISIBLE GOLD											
-11,12	N	NO VISIBLE GOLD											
-13	N	NO VISIBLE GOLD											
49-01,2	N	NO VISIBLE GOLD											
-03.4,5	N	NO VISIBLE GOLD											
-06.07	N	NO VISIBLE GOLD											
50-1,2,3	N	NO VISIBLE GOLD											
-04,05	N	NO VISIBLE GOLD											
-06	N	NO VISIBLE GOLD											
51-1,A,2	N	NO VISIBLE GOLD											
-03.04	N	NO VISIBLE GOLD											
-05,06	N	NO VISIBLE GOLD											

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

SAMPLE #	PANNED	DIAMETER	THICKNESS	NUMBER OF GRAINS							NON	CALC V.G.	REMARKS
				ABBRADED		IRREGULAR		DELICATE			MAG	ASSAY	
	Y/N			T	P	T	P	T	P	TOTAL	GMS	PPB	
-07	N	250 X 350	54 C	1						1			
									TOTAL	1	8.4	4339	
52,A-1,A	Y	NO VISIBLE GOLD											EST: 50% PYRITE X
52-02,2A	Y	NO VISIBLE GOLD											EST: 20% PYRITE X
53-01	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
-03	N	NO VISIBLE GOLD											
54-01	N	NO VISIBLE GOLD											
-02,A,B	N	NO VISIBLE GOLD											
54-03	N	NO VISIBLE GOLD											
55-01	Y	NO VISIBLE GOLD											EST: 15% PYRITE X
56-01,A	N	NO VISIBLE GOLD											
-02	N	NO VISIBLE GOLD											
57-1,A,B	N	NO VISIBLE GOLD											
58-1,1A	N	NO VISIBLE GOLD											
59-01,1A	N	125 X 275	38 C	1						1			
									TOTAL	1	17.3	659	
60-01,1A	N	NO VISIBLE GOLD											
15-01,1A	N	NO VISIBLE GOLD											
15-02,2A	N	NO VISIBLE GOLD											
18A-1E,F	Y	NO VISIBLE GOLD											EST: 20% PYRITE X
-02	N	NO VISIBLE GOLD											

OVERBURDEN DRILLING MANAGEMENT LIMITED
3 CLEOPATRA DR. NEPEAN, ONTARIO K2G 3M9
Telephone: 226-1771 or 226-1774

May 12, 1986

MPH Consulting Limited
120 Adelaide Street West
Suite 2406
Toronto, Ontario
M5H 1T1

Attention: Paul Rollinson

Dear Sir:

Please find enclosed the results of the 1/4 pannings that you requested.

Should you require further information, do not hesitate to contact us.

Yours truly,

Alistair Calvert

for. Kevan Elcomb
Laboratory Manager

AC:ms

ABBREVIATIONS

NUMBER OF GRAINS:

T: NUMBER FOUND ON SHAKING TABLE
P: NUMBER FOUND AFTER PANNING

THICKNESS:

C: CALCULATED THICKNESS OF GRAIN
M: ACTUAL MEASURED THICKNESS OF GRAIN

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

                                       NUMBER OF GRAINS

                                       ABBRADED  IRREGULAR  DELICATE      NON    CALC V.G.
SAMPLE # PANNED                        ========  =========  ========      MAG      ASSAY
         Y/N    DIAMETER    THICKNESS    T    P     T    P     T    P TOTAL GMS      PPB    REMARKS

M86-05
45-01,A    Y      50 X   50       10 C                   1               1                 EST:  1% PYRITE


  45-07    Y   NO VISIBLE GOLD                                                             EST:  5% PYRITE
```

```
GOLD CLASSIFICATION
===================
VISIBLE GOLD FROM SHAKING TABLE AND PANNING

                                            NUMBER OF GRAINS

                                            ABBRADED  IRREGULAR  DELICATE      NON    CALC V.G.
SAMPLE # PANNED                             ========  =========  ========      MAG      ASSAY
          Y/N    DIAMETER   THICKNESS    T    P    T    P    T    P TOTAL GMS      PPB    REMARKS

M86-05
04-01,02   Y       25 X   25      5 C          1                          1               EST:  20% PYRITE
                   25 X   50      8 C          1                          1


06-1,2,3   Y    NO VISIBLE GOLD                                                           EST: 30% PYRITE EUHEDRAL CUBES
                                                                                               SOME LIMONITIZED
                                                                                               20% PYRITE, MASSIVE AND CHIPS
                                                                                               1 CHIP CHALCOPYRITE, WITH
                                                                                               BORNITE, PYRITE, QUARTZ & SLOW
                                                                                               CARBONATE
                                                                                               PYRITE FROM GROUNDED BOULDER?
                                                                                               50 GRAINS ARSENOPYRITE (FINE)


17-6ABC    Y       50 X   50     10 C                                 1   1               EST:  10% PYRITE
                   75 X  100     18 C                                 1   1


21-01,A    Y       50 X  125     18 C          1                          1               EST: 50% COARSE MASSIVE PYRITE
                   75 X   75     15 C                                 1   1                     1 COARSE GRAIN MASSIVE
                                                                                                    ARSENOPYRITE
                                                                                          DELICATE GRAIN IS DELICATE CRYSTAL

22-03,A    Y       50 X   75      0 C     1                               1               EST: 35% PYRITE COARSE (MASSIVE)

25-7ABCD   Y    NO VISIBLE GOLD                                                           EST:  15% PYRITE

27-03,A    Y    NO VISIBLE GOLD                                                           EST:  20% PYRITE
  -04,A
  -05,A


  34-1E    Y    NO VISIBLE GOLD                                                           EST:  10% PYRITE


35-3,4,A   Y    NO VISIBLE GOLD                                                           EST:  20% PYRITE

38-01,A    Y    NO VISIBLE GOLD                                                           EST: 25% PYRITE COARSE (MASSIVE)

40-02,A    Y    NO VISIBLE GOLD                                                           EST:  2% PYRITE

  44-06    Y       50 X  100     15 C          1                          1               EST:  5% PYRITE
                                                                                                (HALF IN COARSE ROCK CHIPS)
```

OVERBURDEN DRILLING MANAGEMENT LIMITED - LABORATORY SAMPLE LOG

ABBREVIATIONS

CLAST:

SIZE OF CLAST:
G: GRANULES
P: PEBBLES
C: COBBLES
BD: BOULDER CHIPS
BR: BEDROCK CHIPS

% CLAST COMPOSITION
V/S VOLCANICS AND SEDIMENTS
GR GRANITICS
LS LIMESTONE
OT OTHER LITHOLOGIES (REFER TO FOOTNOTES BELOW)
TR ONLY TRACE PRESENT
NA NOT APPLICABLE

MATRIX:
S/U SORTED OR UNSORTED
SD SAND ¦ Y YES FRACTION PRESENT ¦ F: FINE
ST SILT ¦ N FRACTION NOT PRESENT ¦ M: MEDIUM
CY CLAY ¦ ¦ C: COARSE

COLOR:
B: BEIGE
GY: GREY
GB: GREY BEIGE
GN: GREEN
GG: GREY GREEN
BN: BROWN
BK: BLACK
OC: OCHRE
PK: PINK
OE: ORANGE

DESCRIPTION:

BLR: BOULDER CHIPS
BDK: BEDROCK CHIPS

ABBREVIATIONS

NUMBER OF GRAINS:

T: NUMBER FOUND ON SHAKING TABLE
P: NUMBER FOUND AFTER PANNING

THICKNESS:

C: CALCULATED THICKNESS OF GRAIN
M: ACTUAL MEASURED THICKNESS OF GRAIN

FOOTNOTES:

1. GRITTY CLAY LUMPS PRESENT

2. SMOOTH CLAY LUMPS PRESENT

3. ORGANICS PRESENT

4. SAMPLE HIGHLY OXIDIZED

OVERBURDEN DRILLING MANAGEMENT LIMITED
3 CLEOPATRA DR., NEPEAN, ONTARIO K2G 3M9

April 22, 1986

MPH Consulting Limited
120 Adelaide Street West
Suite 2406
Toronto, Ontario
M5H 1T1

Attention: Bill Brereton

Dear Sir:

Please find enclosed the laboratory sample logs for the sample series M-05-86-27-01,ABC to 47-2A. The non-magnetic heavy mineral concentrate for this series was forwarded to Bondar-Clegg for analysis on April 11 and 17, 1986.

Due to space restrictions we are now only able to store the remaining fractions for a period of 6 weeks. At which time we will return or dispose of the fractions as per your instructions.

The laboratory sample logs are in a new format as produced by our micro computer. To assist you, some of the new features are listed below:

- a "CONC. TOTAL" column, the sum of the NON-MAG and MAG
- a "NO. V.G." column, the number of visible gold grains
- a "CALC. PPB" column, the calculated ppb based on visible gold. Determined by a formula developed by Overburden Drilling
- a new format for the description of clasts and matrix.
- separate log for visible gold from shaking table and panning. V.G. is listed by size and shape along with calculated ppb.

If there are any problems or suggestions please do not hesitate to contact me.

Yours truly

Kevan Elcomb
Laboratory Manager

APPENDIX C

Certificates of Analysis

RC DHs M86-05-01 through 60

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 8X5
Phone: (613) 749-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 016-1111 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: C-833

SUBMITTED BY: OVERBURDEN
DATE PRINTED: 8-APR-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	66	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	66	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	66	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	66	2 PPM	HNO3-HClO4	Colourimetric
5	Au Gold	66	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
6	TestWt Au Test Weight	40	0.01 gm		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	67	-200	67	PULVERIZE -200	66

REMARKS: < MEANS LESS THAN

REPORT COPIES TO: BILL BRERETON

INVOICE TO: BILL BRERETON

Bondar-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 8X5
Phone: (613) 749-2220
Telex: 053-3233

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 016-1111

PROJECT: C-833 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au PPB	TestWt gm
PREFIX BY M-86-05							
02-01-01A,01B-3/4H		154	36	0.4	43	80	
03-01-3/4H		200	69	0.2	73	215	4.50
03-02,02A,02B-3/4H		410	50	0.5	91	180	6.50
04-01,02-3/4H		220	54	0.6	60	2225	6.00
04-03,04-3/4H		380	66	0.3	147	80	5.00
04-05,06-3/4H		520	97	0.5	168	330	2.50
05-01-3/4H		350	105	2.1	105	55	3.00
05-02-3/4H		320	64	0.3	78	1460	2.30
06-01,02,03-3/4H		430	80	1.1	176	*16630	9.50
07-01-3/4H		340	74	0.9	1048	95	2.80
07-02,03-3/4H		330	55	0.5	448	70	5.00
07-04,05,06-3/4H		250	48	0.6	544	55	
08-03-3/4H		560	49	0.3	72	65	6.50
08-04,05-3/4H		470	65	0.3	116	135	2.25
08-06-H		450	47	0.4	102	*1055	1.85
09-01-3/4H		270	86	0.5	224	100	4.30
09-02,03-3/4H		410	58	0.8	808	25	1.90
09-04,05-3/4H		270	110	1.0	244	40	1.50
09-06-3/4H		400	53	1.6	150	30	4.20
09-07,07A-3/4H		235	45	0.5	135	220	8.90
10-01-3/4H		590	1388	2.1	135	165	3.00
10-02-3/4H		410	553	1.2	130	70	2.00
10-03-3/4H		310	168	0.7	165	80	3.00
10-04-H		470	166	0.7	183	420	1.00
11-01,02-3/4H		620	108	1.1	210	50	4.00
11-03-3/4H		6200	48	2.0	96	110	
11-04,04A-3/4H		960	92	0.7	114	115	2.20
11-05-H		2600	62	0.7	182	<135	0.38
11A-01,01A-3/4H		770	76	1.1	210	125	7.00
12-1,1A,1B-3/4H		270	57	0.5	132	355	
13-01,01A-H		410	91	0.5	366	185	8.10
13-02,02A-H		3650	314	0.7	464	<280	0.18
14-01,01A-3/4H		360	57	0.2	139	110	
14-02,02A-H		1340	53	2.0	206	*1000	0.50
16-01,01A,01B-3/4H		148	43	0.1	153	45	
16-02-02A-3/4H		310	201	0.3	97	95	6.00
16-03-H		920	2970	2.5	768	<130	0.39
17-01,01A,01B-3/4H		162	82	0.4	140	225	
17-02-3/4H		205	125	0.7	264	100	

REPORT: 016-1111

PROJECT: C-833

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au PPB	TestWt gm
17-02A-3/4H		210	80	0.4	278	55	5.80
17A-03,03A,B,C-3/4H		146	52	0.4	122	100	
17A-01-3/4H		360	65	0.2	338	35	9.50
17A-02-02A-3/4H		310	60	0.7	230	80	
17A-04,04A-3/4H		124	42	<0.1	88	15	9.50
17A-05,05A-3/4H		200	41	0.2	149	30	
17A-06,06A,B,C-3/4H		205	199	0.1	131	*560	
18-01,01A,01B-3/4H		395	112	1.9	968	80	
18A-01,01A-3/4H		320	93	0.4	286	125	
18A-01B,01C-3.4H		410	78	0.8	1184	50	
18A-1D,1E,1F-3/4H		380	64	0.7	1040	55	
19-01,01A-3/4H		164	137	0.5	768	30	
19-01B,01C-3/4H		200	154	0.9	624	60	
19-01D,01E-3/4H		210	142	0.8	496	25	
20-01,01A-3/4H		340	62	0.5	184	35	
20-02-3/4H		340	62	0.6	177	25	4.40
20-03-3/4H		245	60	0.2	103	425	2.50
21-01,01A-3/4H		230	96	0.8	260	*5700	
23-01,01A-3/4H		330	69	0.5	370	100	
24-01,01A-3/4H		44	22	<0.1	31	40	7.00
24-02-3/4H		530	185	0.7	488	180	4.30
25-07,07A,B,C,D-3/4H		300	57	1.2	600	*805	
25-08,08A,B,C-3/4H		350	80	3.1	464	*255	
25-09,09A,B,C-3/4H		400	108	0.9	280	60	
25-10-10A-10B-3/4H		930	64	0.9	512	140	
25-11-11A,B,C,-3/4H		470	65	0.6	256	90	5.00
25-12-12A,B,C,-3/4H		430	67	0.9	382	245	8.00

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Geochemical Lab Report

REPORT: 016-1509 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: C-833

SUBMITTED BY: OVERBURDEN
DATE PRINTED: 30-APR-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	4	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	4	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	4	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	-150Wt Weight -150 Obtained	4	0.01 gms		
5	As Arsenic	4	2 PPM	HNO3-HClO4	Colourimetric
6	Au-150 Gold -150 Fraction	4	0.01 PPM	AQUA REGIA	Fire Assay AA
7	Au+150 Gold +150 Fraction	4	0.01 PPM	AQUA REGIA	Fire Assay AA
8	Au AV Gold Weight Average	4	0.01 PPM		
9	TestWt Au Test Weight -150	4	0.01 gms		
10	+150Wt Weight +150 Obtained	4	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	5	+150/-150	5	METALLICS +150/-150	4

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Geochemical Lab Report

REPORT: 016-1509

PROJECT: C-833 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	-150Wt gms	As PPM	Au-150 PPM	Au+150 PPM	Au AV PPM	TestWt gms	+150Wt gms
PREFIX M-86-05											
15-01,01A-3/4		230	59	0.6	22.29	144	0.03	<0.01	0.03	20.00	0.53
15-02,02A-3/4		310	97	0.8	11.39	135	0.04	0.11	0.04	10.00	0.35
18-1E,1F-3/4		380	70	1.1	32.21	704	0.19	0.04	0.19	20.00	0.45
18-02-3/4		550	274	2.1	7.84	368	0.09	0.10	0.09	6.00	0.60

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Geochemical Lab Report

REPORT: 016-1316 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: OVERBURDEN
DATE PRINTED: 18-APR-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	52	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	52	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	52	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	52	2 PPM	HNO3-HClO4	Colourimetric
5	Au Gold	52	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
6	TestWt Au Test Weight	27	0.01 gm		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	53	-200	53	PULVERIZE -200	52

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Geochemical Lab Report

REPORT: 016-1316

PROJECT: NONE

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au PPB	TestWt gm
PREFIX BY M-86-05							
22-01-3/4		300	56	0.9	260	120	4.30
22-02-3/4		230	65	1.5	167	85	4.10
22-03,03A-3/4		400	300	2.1	322	1225	9.00
26-01-3/4		380	87	1.2	136	50	2.00
26-02,02A-3/4		660	57	1.4	398	335	8.50
27-01,01A,B,C-3/4		315	87	0.8	177	55	
27-02,02A,02B-3/4		270	73	0.4	127	70	
270303A0404A0505A3/4		360	123	1.1	272	840	
27-06,06A-3/4		270	110	1.9	164	95	
27-07,07A,08,08A-3/4		200	27	0.7	75	20	
27-09-3/4		33	12	0.2	2	35	
27-09A-3/4		25	16	0.2	4	<5	
27-10,10A-3/4		13	14	0.1	4	30	
27-11,11A-3/4		37	14	0.2	2	220	
27-12,12A-3/4		36	15	0.1	6	<5	
27-13,13A,14,14A-3/4		123	29	0.5	568	75	
27-15,15A-3/4		260	53	0.5	>2000	215	
28-01,01A-3/4		235	71	0.4	171	105	
28A-03-3/4		350	84	0.9	230	65	4.50
29-01,01A,01B-3/4		210	65	0.6	254	280	
30-01,01A-3/4		320	80	1.3	220	115	5.50
30-03,03A-3/4		190	137	1.0	130	60	
30-04,04A-3/4		815	625	3.5	238	185	7.00
32-01,01A-3/4		360	405	1.4	244	130	9.00
34-1D-3/4		530	120	1.5	472	200	4.00
34-1E-3/4		275	74	1.1	276	975	3.00
34-02,02A,02B-3/4		380	205	1.9	424	350	
35-01,01A,02,02A-3/4		350	75	2.8	440	120	
35-03,04,04A-3/4		325	65	1.0	592	760	9.00
35-05,05A-3/4		390	70	1.8	496	210	
35-06,06A-3/4		325	575	1.3	776	1960	
36-01,01A-02-3/4		230	57	0.7	198	170	9.00
36-03,03A,04-3/4		140	32	0.3	102	20	3.00
36-05,06,07-3/4		300	58	0.6	109	25	3.00
36-08-H		600	72	0.6	72	<110	0.45
36-09,09A-3/4		195	38	0.1	43	80	5.00
36-10,10A-3/4		320	87	1.0	230	70	5.00
36-12-3/4		370	575	1.7	552	120	
37-01,01A-3/4		94	25	0.2	22	10	6.00

REPORT: 016-1316

PROJECT: NONE

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au PPB	TestWt gm
37-02,02A,02B-3/4		320	120	1.4	36	45	6.00
37-03-37A-03,04-3/4		260	30	0.4	92	<15	4.00
37A-05-3/4		155	95	0.7	328	215	3.00
37A-06,06A-3/4		260	450	1.5	150	45	
37A-07,07A-3/4		300	460	1.3	484	35	
38-01,01A-3/4		365	230	1.1	179	1400	
39-01,01A-3/4		315	180	0.8	151	315	9.00
39-02,02A,02B-3/4		320	114	0.5	71	515	9.00
39-03,03A-3/4		150	50	0.4	47	35	7.00
39-04,04A-3/4		50	22	0.2	37	10	8.00
39-05,06,06A-3/4		315	82	0.6	139	15	
40-01,01A-3/4		230	100	0.8	52	35	9.00
40-02,02A-3/4		45	22	<0.1	10	2920	

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Geochemical Lab Report

REPORT: 016-1112 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: C-833

SUBMITTED BY: OVERBURDEN
DATE PRINTED: 8-APR-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	4	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	4	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	4	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	4	2 PPM	HNO3-HClO4	Colourimetric
5	Au-150 Gold -150 Fraction	4	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au+150 Gold +150 Fraction	4	0.01 PPM	AQUA REGIA	Fire Assay AA
7	Au AV Gold Weight Average	4	0.01 PPM		
8	TestWt Au Test Weight -150	4	0.01 gms		
9	-150Wt Weight -150 Obtained	4	0.01 gms		
10	+150Wt Weight +150 Obtained	4	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	5	+150/-150	5	METALLICS +150/-150	4

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Geochemical Lab Report

REPORT: 016-1112

PROJECT: C-833 PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au-150 PPM	Au+150 PPM	Au AV PPM	TestWt gms	-150Wt gms	+150Wt gms
PREFIX M-86-05											
08-01,02-3/4H		275	72	<0.1	132	1.64	70.00	2.58	3.50	5.03	0.07
12-02,02A-3/4H		380	107	0.8	348	0.13	8.35	1.79	20.00	23.81	6.02
12-02,02B-3/4H		450	81	1.3	324	0.68	0.06	0.39	3.75	5.14	4.66
12-03-3/4H		460	67	<0.1	101	0.09	6.88	3.98	1.07	1.97	2.64

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Geochemical Lab Report

REPORT: 016-1314 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: OVERBURDEN
DATE PRINTED: 17-APR-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	3	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	3	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	3	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	3	2 PPM	HNO3-HClO4	Colourimetric
5	Au-150 Gold -150 Fraction	3	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au+150 Gold +150 Fraction	3	0.01 PPM	AQUA REGIA	Fire Assay AA
7	Au AV Gold Weight Average	3	0.01 PPM		
8	TestWt Au Test Weight -150	3	0.01 gms		
9	-150Wt Weight -150 Obtained	3	0.01 gms		
10	+150Wt Weight +150 Obtained	3	0.01 gms		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	4	+150/-150	4	METALLICS +150/-150	3

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Geochemical Lab Report

REPORT: 016-1314

PROJECT: NONE

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au-150 PPM	Au+150 PPM	Au AV PPM	TestWt gms	-150Wt gms	+150Wt gms
PREFIX BY M-86-05											
28A-04-04A-3/4		380	72	5.3	165	2.02	454.12	7.04	12.94	15.15	0.17
30-02-02A,B-3/4		280	80	1.2	162	0.07	0.17	0.07	20.00	26.31	1.17
31-01-01A,B-3/4		455	116	2.0	408	0.16	0.08	0.16	14.92	16.53	1.00

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Geochemical Lab Report

REPORT: 016-1315 (COMPLETE)

REFERENCE INFO:

CLIENT: APH CONSULTING
PROJECT: NONE

SUBMITTED BY: OVERBURDEN
DATE PRINTED: 17-APR-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	2	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	2	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	2	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	2	2 PPM	HNO3-HClO4	Colourimetric
5	Au Gold	2	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	3	-200	3	PULVERIZE -200	2

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Geochemical Lab Report

REPORT: 016-1315

PROJECT: NONE

SAMPLE	ELEMENT	Cu	Zn	Ag	As	Au
NUMBER	UNITS	PPM	PPM	PPM	PPM	PPB
PREFIX NPH-86-05						
34-01,01A,B,C-3/4		300	103	1.3	504	140
36-11,11A-3/4		350	875	1.4	456	50

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Geochemical Lab Report

REPORT: 016-1409 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: ODM
DATE PRINTED: 16-MAY-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	47	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	47	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	47	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	47	2 PPM	HNO3-HC104	Colourimetric
5	Au Gold	47	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight
6	TestWt Au Test Weight	22	0.01 gm		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	48	-200	48	PULVERIZE -200	47

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Geochemical Lab Report

REPORT: 016-1368

PROJECT: NONE PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au PPB	TestWt gm
PREFIX M-86-05							
41-01-01A		350	89	0.5	156	165	8.00
42-01-3/4		340	100	0.4	81	45	5.00
42-02-3/4		162	76	<0.1	38	35	3.00
42-03-H		IS	IS	IS	IS	>20000	0.24
42-04-3/4		490	335	0.4	244	40	
43-01-01A-3/4		142	124	<0.1	17	95	
43-02-02A-3/4		132	58	<0.1	18	35	
43-04-05-3/4		210	56	<0.1	16	145	
43-06-07-3/4		188	80	0.2	26	90	7.00
44-01-01A-3/4		168	36	0.1	56	60	
44-02-3/4		200	112	<0.1	20	325	4.00
44-03-3/4		210	54	0.1	48	410	9.00
44-04-3/4		290	60	<0.1	34	30	4.00
44-05-H		230	60	<0.1	34	245	1.50
44-06-3/4		1125	74	0.4	95	20	4.00
45-01-01A-3/4		124	34	<0.1	41	625	9.00
45-02-02A-3/4		136	50	<0.1	21	5	
45-03-03A-3/4		152	54	<0.1	15	10	8.00
45-05,06-3/4		124	44	<0.1	39	70	
45-07-3/4		330	114	0.1	72	1670	3.00
45-08,09,09A-3/4		198	74	<0.1	57	45	6.00
45-10-3/4		200	120	<0.1	50	10	3.00
45-11,11A-3/4		375	97	0.2	258	135	9.00
45-12-3/4		340	133	0.1	175	30	4.00

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Geochemical Lab Report

REPORT: 016-1409

PROJECT: NONE PAGE 1

SAMPLE ELEMENT	Cu	Zn	Ag	As	Au	TestWt
NUMBER UNITS	PPM	PPM	PPM	PPM	PPB	gm
PREFIX BY M-86-05						
46-01 3/4	94	40	0.3	9	25	3.00
46-02,02A 3/4	85	44	<0.1	11	<10	6.90
46-03 3/4	220	40	<0.1	8	<15	4.20
46-04 3/4	172	88	0.1	24	70	4.00
46-05,05A 3/4	182	60	0.2	32	210	7.60
46-06,06A 3/4	142	72	0.1	28	15	7.10
46-07,07A,07B 3/4	188	96	0.1	43	20	
46-08,08A,08B 3/4	280	120	0.4	93	100	
46-09,09A 3/4	290	136	0.1	168	140	
46-10,10A 3/4	470	136	0.5	134	45	
46-11,11A 3/4	320	130	0.2	92	170	
47-01,01A 3/4	150	30	<0.1	21	10	
47-02,02A 3/4	370	51	0.1	13	40	
47-03,03A 3/4	130	32	<0.1	224	255	
47-04 3/4	132	52	<0.1	24	50	5.65
47-05 3/4	250	88	<0.1	31	35	8.10
47-06,06A 3/4	192	54	0.1	26	145	
47-07 3/4	260	56	0.1	45	45	5.00
48-01,02 3/4	165	50	0.1	44	40	
48-03,04 3/4	170	54	<0.1	19	65	
48-05,06 3/4	120	48	0.1	19	25	
48-09,10 3/4	182	50	0.1	17	20	
48-11,12 3/4	220	126	0.1	51	35	7.60
48-13 3/4	775	270	0.3	81	57	1.40
49-01,02 3/4	172	44	0.3	101	380	
49-03,04,05 3/4	156	52	0.1	47	10	
49-06,07 3/4	260	146	<0.1	75	120	2.80
50-01,02,03 3/4	166	70	0.1	27	110	
50-04,05 3/4	168	72	0.1	18	25	
50-06 3/4	260	122	0.2	70	30	4.70
51-01,01A,02 3/4	169	62	0.3	32	60	
51-03.04 3/4	184	70	0.5	63	60	
51-05-06 3/4	360	92	0.5	100	25	
52-01,52A-01A 3/4	200	34	0.1	38	20	
52-02,02A H	1650	65	2.0	150	115	0.35
53-01 3/4	260	106	0.3	64	25	6.00
53-02 3/4	530	144	0.8	103	30	3.10
53-03 3/4	490	92	0.1	43	25	3.50
54-01 3/4	240	84	0.6	157	30	

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Geochemical Lab Report

REPORT: 016-1409

PROJECT: NONE PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au PPB	TestWt gm
54-02,02A,02B 3/4		230	52	0.4	67	30	
54-03 3/4		310	74	0.1	69	45	3.65
55-01 3/4		240	62	0.3	52	460	1.90
56-01,01A 3/4		142	40	0.2	40	115	
56-02 3/4		775	61	0.5	56	55	1.70
57-01,01A,01B 3/4		275	50	0.3	41	25	
58-01,01A H		1450	44	2.3	560	140	0.50
60-01,01A 3/4		250	56	<0.1	54	115	7.70

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Geochemical Lab Report

REPORT: 016-1410 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: ODM
DATE PRINTED: 24-APR-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Zn Zinc	3	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Cu Copper	3	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	3	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	Au-150 Gold -150 Fraction	3	0.01 PPM	AQUA REGIA	Fire Assay AA
5	Au+150 Gold +150 Fraction	3	0.01 PPM	AQUA REGIA	Fire Assay AA
6	Au AV Gold Weight Average	3	0.01 PPM		
7	TestWt Au Test Weight -150	3	0.01 gms		
8	-150Wt Weight -150 Obtained	3	0.01 gms		
9	+150Wt Weight +150 Obtained	3	0.01 gms		
10	As Arsenic	3	2 PPM	HNO3-HClO4	Colourimetric

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
HEAVY MINERAL CONC.	3	+150/-150	3	METALLICS +150/-150	3

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Geochemical Lab Report

REPORT: 016-1410

PROJECT: NONE PAGE 1

SAMPLE	ELEMENT	Zn	Cu	Ag	Au-150	Au+150	Au AV	TestWt	-150Wt	+150Wt	As
NUMBER	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	gms	gms	gms	PPM
M-86-05-48-07,08 3/4		48	157	0.2	0.36	269.45	5.87	10.00	13.86	0.29	22
M-86-05-51-07 3/4		48	434	0.6	0.09	0.56	0.10	4.00	5.28	0.16	101
M-86-05-59-01,01A3/4		110	178	1.1	0.03	0.26	0.04	9.00	10.19	0.23	108

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Geochemical Lab Report

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Geochemical Lab Report

REPORT: 016-1770 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: MPH CONSULTING
DATE PRINTED: 30-MAY-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	SiO2 Silica (SiO2)	26	0.01 PCT	Borate Fusion	DC Plasma
2	TiO2 Titanium (TiO2)	26	0.01 PCT	Borate Fusion	DC Plasma
3	Al2O3 Alumina (Al2O3)	26	0.01 PCT	Borate Fusion	DC Plasma
4	Fe2O3* Total Iron (Fe2O3*)	26	0.01 PCT	Borate Fusion	DC Plasma
5	MnO Manganese (MnO)	26	0.01 PCT	Borate Fusion	DC Plasma
6	MgO Magnesium (MgO)	26	0.01 PCT	Borate Fusion	DC Plasma
7	CaO Calcium (CaO)	26	0.01 PCT	Borate Fusion	DC Plasma
8	Na2O Sodium (Na2O)	26	0.01 PCT	Borate Fusion	DC Plasma
9	K2O Potassium (K2O)	26	0.01 PCT	Borate Fusion	DC Plasma
10	P2O5 Phosphorous (P2O5)	26	0.01 PCT	Borate Fusion	DC Plasma
11	LOI Loss on Ignition	26	0.01 PCT		Gravimetric
12	Total Whole Rock Total	26	0.01 PCT		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
PREPARED PULP	28	AS RECEIVED	28	AS RECEIVED, NO SP	26

REMARKS: PULP NOT REC'D (M-86-04-9-02-B) AND
(M-86-05-24-03-B)
9 PULP FROM 016-1672
10 PULP FROM 016-1519
7 PULP FROM 016-1538

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Geochemical Lab Report

REPORT: 016-1770 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: MPH CONSULTING
DATE PRINTED: 30-MAY-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	SiO2 Silica (SiO2)	26	0.01 PCT	Borate Fusion	DC Plasma
2	TiO2 Titanium (TiO2)	26	0.01 PCT	Borate Fusion	DC Plasma
3	Al2O3 Alumina (Al2O3)	26	0.01 PCT	Borate Fusion	DC Plasma
4	Fe2O3* Total Iron (Fe2O3*)	26	0.01 PCT	Borate Fusion	DC Plasma
5	MnO Manganese (MnO)	26	0.01 PCT	Borate Fusion	DC Plasma
6	MgO Magnesium (MgO)	26	0.01 PCT	Borate Fusion	DC Plasma
7	CaO Calcium (CaO)	26	0.01 PCT	Borate Fusion	DC Plasma
8	Na2O Sodium (Na2O)	26	0.01 PCT	Borate Fusion	DC Plasma
9	K2O Potassium (K2O)	26	0.01 PCT	Borate Fusion	DC Plasma
10	P2O5 Phosphorous (P2O5)	26	0.01 PCT	Borate Fusion	DC Plasma
11	LOI Loss on Ignition	26	0.01 PCT		Gravimetric
12	Total Whole Rock Total	26	0.01 PCT		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
PREPARED PULP	28	AS RECEIVED	28	AS RECEIVED, NO SP	26

REMARKS: PULP NOT REC'D (M-86-04-9-02-B) AND
(M-86-05-24-03-B)
9 PULP FROM 016-1672
10 PULP FROM 016-1519
7 PULP FROM 016-1538

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Geochemical Lab Report

REPORT: 016-1770

PROJECT: NONE PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT
PREFIX M-86-04													
01-04-B		66.90	0.38	14.60	4.12	0.07	2.04	3.80	4.73	1.45	0.11	1.80	100.00
02-04-B C-832		58.00	0.78	15.10	7.38	0.09	2.83	9.26	3.06	0.92	0.19	3.15	100.76
05-02-B		54.60	0.73	16.00	11.00	0.06	4.46	4.30	3.32	1.41	0.15	1.90	97.93
05-02A-B		60.70	0.53	14.50	6.96	0.06	3.31	5.24	3.66	1.43	0.19	1.85	98.43
05-02B-B		57.90	0.58	15.00	8.90	0.06	3.86	4.21	3.56	1.57	0.19	1.60	97.43
10-04-B		59.00	0.63	15.40	7.14	0.11	5.63	6.25	4.20	0.51	0.17	1.85	100.87
10-04A-B		58.00	0.63	15.20	7.28	0.11	5.28	6.87	3.83	0.34	0.25	1.80	99.60
15-02-B		58.20	1.35	12.30	12.20	0.15	3.10	6.89	2.44	0.80	0.26	3.30	100.98
15-02-A-B		57.30	1.40	12.10	12.50	0.14	3.28	5.60	2.71	0.78	0.18	3.90	98.99
PREFIX M-86-05													
01-03,03A-B		49.30	0.78	11.40	9.04	0.14	6.17	8.69	1.68	0.94	0.21	10.55	98.91
02-02,03A-B		60.00	0.44	13.10	4.36	0.09	2.25	5.37	3.20	1.99	0.28	6.00	97.07
07-07-B		58.20	0.99	12.20	8.25	0.12	4.32	6.77	1.77	1.00	0.25	3.20	97.07
10-05-B C-833		72.60	0.40	10.40	5.41	0.06	2.82	0.43	0.05	3.18	0.13	2.30	97.78
11A-02-B		52.10	0.76	12.10	7.66	0.12	5.18	7.11	3.02	1.73	0.34	6.95	97.06
13-03-B		67.30	0.24	12.80	2.78	0.05	1.25	3.31	5.50	0.79	0.16	4.70	98.88
15-03-B		59.50	0.50	13.60	6.25	0.10	3.17	3.62	4.94	1.00	0.30	8.15	101.12
18A-02A-B		62.20	0.58	15.60	6.74	0.10	3.18	4.23	3.44	2.06	0.22	2.15	100.50
19-02-B		50.20	0.48	12.40	8.29	0.14	11.90	7.41	2.46	2.54	0.48	1.85	98.14
28-02,02A-B		70.70	0.40	12.60	3.97	0.06	2.05	3.06	4.08	1.97	0.08	1.25	100.22
35-07,07A,07B-B		65.50	0.39	13.70	3.98	0.07	2.03	3.90	4.59	2.08	0.13	2.80	99.17
46-12-12A-B		61.70	0.44	13.20	6.33	0.09	2.85	4.78	3.55	1.78	0.16	5.35	100.24
47-08-B		58.60	0.66	11.40	7.03	0.13	3.62	6.84	2.69	1.52	0.15	7.60	100.24
50-07,07A-B		46.80	1.58	11.40	14.80	0.41	3.90	9.14	1.92	0.60	0.16	10.80	101.51
52-02A-B		46.60	1.64	11.50	17.10	0.45	3.92	9.09	1.87	0.13	0.13	8.90	101.33
55-02-02A-B		65.60	0.63	12.20	6.13	0.13	1.90	3.91	3.78	1.06	0.13	2.65	98.12
60-02,02A-B		49.10	0.85	12.30	11.80	0.31	4.09	7.89	2.64	0.69	0.12	8.10	97.80

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Geochemical Lab Report

REPORT: 016-1519 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: AVERILL
DATE PRINTED: 7-MAY-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	26	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	26	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	26	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	26	2 PPM	HNO3-HClO4	Colourimetric
5	Au Gold	26	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BEDROCK	26	-200	26	PULVERIZE -200	26

REMARKS: < MEANS LESS THAN

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Geochemical Lab Report

REPORT: 016-1519

PROJECT: NONE PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Ag PPM	As PPM	Au PPB
M86-05-01-03,03A-B		106	64	0.1	59	10
M86-05-02-02,03A-B		32	37	0.1	6	<5
M86-05-03-03-B		29	50	<0.1	<2	<5
M86-05-04-07-B		52	68	<0.1	5	<5
M86-05-05-03-B		40	52	0.2	<2	<5
M86-05-06-04-B		35	48	<0.1	2	<5
M86-05-07-07-B		50	54	0.4	4	<5
M86-05-08-07-B		46	57	0.1	<2	<5
M86-05-09-08-B		22	33	0.2	2	<5
M86-05-10-05-B		25	43	<0.1	5	<5
M86-05-11A-02-B		65	72	0.1	3	<5
M86-05-11A-03-B		80	80	<0.1	4	<5
M86-05-12-04-B		39	60	0.1	3	<5
M86-05-13-03-B		7	22	<0.1	2	<5
M86-05-15-03-B		35	67	<0.1	24	25
M86-05-15-04-B		37	68	0.1	18	<5
M86-05-17A-07-B		86	75	0.2	3	<5
M86-05-18A-02A-B		46	78	<0.1	5	<5
M86-05-19-02-B		68	43	<0.1	2	<5
M86-05-20-04-B		35	68	0.2	7	<5
M86-05-21-02,02A-B		55	82	0.1	10	<5
M86-05-22-04-B		35	72	0.2	5	<5
M86-05-23-02-B		34	54	<0.1	37	<5
M86-05-26-03,03A-B		21	30	<0.1	<2	<5
M86-05-28-02,02A-B		23	32	0.1	2	<5
M86-05-29-02,02A-B		18	32	<0.1	2	<5

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Geochemical Lab Report

REPORT: 016-1538 (COMPLETE)

REFERENCE INFO:

CLIENT: MPH CONSULTING
PROJECT: NONE

SUBMITTED BY: OVERBURDEN
DATE PRINTED: 9-MAY-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	27	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
2	Zn Zinc	27	1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
3	Ag Silver	27	0.1 PPM	HCl-HNO3, (1:3)	Atomic Absorption
4	As Arsenic	27	2 PPM	HNO3-HClO4	Colourimetric
5	Au Gold	27	5 PPB	AQUA REGIA	FA-AA @ 10 gm weight

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
BEDROCK	28	-200	28	PULVERIZE -200	27

REMARKS: < MEANS LESS THAN

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Geochemical Lab Report

REPORT: 016-1538

PROJECT: NONE PAGE 1

SAMPLE	ELEMENT	Cu	Zn	Ag	As	Au
NUMBER	UNITS	PPM	PPM	PPM	PPM	PPB
PREFIX A-86-05						
31-02,02A-B		20	46	<0.1	2	<5
32-02,02A-B		28	57	0.2	5	<5
34-03-B		26	64	<0.1	9	<5
34-03A-B		29	80	0.1	8	<5
35-07A,07B-07-B		66	114	0.3	12	<5
36-13,13A-B		42	73	<0.1	9	<5
37A-08-B		42	63	0.1	32	<5
37A-08A-B		48	63	0.1	20	<5
38-02-B		52	69	<0.1	5	<5
40-03,03A-B		70	43	0.1	3	<5
41-02,02A-B		89	83	<0.1	2	<5
42-05-B		42	58	0.2	16	<5
43-08-B		37	60	<0.1	7	<5
45-13-B		92	94	<0.1	3	<5
45-13A-B		91	75	<0.1	3	<5
46-12,12A-B		33	58	0.3	53	<5
47-08-B		76	48	0.1	5	<5
48-14-B		107	72	<0.1	29	<5
49-08-B		92	79	<0.1	12	<5
50-07-07A-B		76	114	<0.1	24	<5
51-08-B		120	76	<0.1	4	<5
52-02A-B		75	116	<0.1	4	<5
53-04-B		86	78	0.1	2	<5
55-02,02A-B		63	37	<0.1	2	<5
57-02-B		63	61	<0.1	4	<5
59-02,02A-B		31	78	<0.1	22	<5
60-02,02A-B		89	64	<0.1	6	<5

MAR 11 1986

SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS ● ASSAYERS ● CONSULTANTS

Certificate of Analysis

Certificate No. 62548 Date: March 5, 1986

Received Feb. 24 /86 30 Samples of bedrock chips

Submitted by M.P. H. Consulting Ltd., Toronto, Ontario Att'n: W. Brereton

SAMPLE NO.	GOLD PPB	SAMPLE NO.	GOLD PPB	SILVER PPM	ZINC PPM	ARSENIC PPM
M-86-05		M-86-05				
01	10	17A-156'	70	2.7	45	32
02	10	17A-163	60	2.3	81	38
03	10	18A-126	10	2.1	40	1000
04	20	18A-127	30	2.0	40	1708
05	40	* 18A-132	100	2.9	* 5744	84
06	Nil	19-93	Nil	2.1	170	240
07	10					
08	10					
09	10					
11A	20					
12	Nil					
13	10					
14	10					
15	20					
16	30					
17A	40					
18	20					
18A	30					
19	30					
20	20					
21	10					
22	Nil					
23	10					
24	10					

Per G. Lebel
G. Lebel, Manager

SWASTIKA LABORATORIES LIMITED
P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 62548-A Date: March 13, 1986

Received Feb. 24, 1986 24 Samples of bedrock chips

Submitted by MPH Consulting Ltd., Toronto, Ontario

SAMPLE NO. M-86-05	SILVER PPM	COPPER PPM	ZINC PPM	ARSENIC PPM
01	0.6	129	40	8
02	0.1	46	46	3
03	<0.1	44	32	<1
04	<0.1	77	31	1
05	<0.1	64	32	<1
06	0.3	70	61	4
07	0.3	93	67	<1
08	<0.1	78	40	<1
09	<0.1	56	47	3
11A	0.3	110	76	<1
12	<0.1	53	58	2
13	0.4	29	24	7 *
14	1.1	39	75	<1
15	1.2	47	65	10
16	0.2	61	88	15
17A	0.4	86	83	<1
18	0.3	94	100	11
18A	2.3	78	106	1
19	0.8	83	40	8
20	1.2	45	54	5
21	0.2	59	82	3
22	<0.1	62	66	2
23	0.1	60	76	22
24	0.3	70	73	6

Per G. Lebel

G. Lebel, Manager

Member Canadian Testing Association

ESTABLISHED 1928

SLL

SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 62852 Date: April 15 1986

Received Mar.27/86 8 Samples of bedrock chips

Submitted by MPH Consulting Ltd., Toronto, Ontario Att'n: Mr. W. Brereton

Proj.#C-833

SAMPLE NO.	GOLD PPB	SILVER PPM	COPPER PPM	ZINC PPM	ARSENIC PPM
M86-05 35 150'	24	0.9	193	345	36
48 152'	7	0.7	83	63	24
50	11	0.9	57	102	8
52 26'	< 5	0.7	23	53	< 1
55 16.5'	< 5	0.5	75	49	3
35 147'	11	0.4	72	202	138
37A 91'	40	2.4	192	371	136
42 125'	9	1.4	210	200	57

Per
G. Lebel -- Manager

ESTABLISHED 1928

APPENDIX D

Statistical Analyses

INTERPRETATION LEGEND

OVERBURDEN HOLE NO.
LOCATION
SAMPLE NO.

Sample interval - Descriptors[1] - Depth to Bedrock

Misc. Remarks (where applicable)

Concentrations of Heavy Minerals - Grain Counts[2]

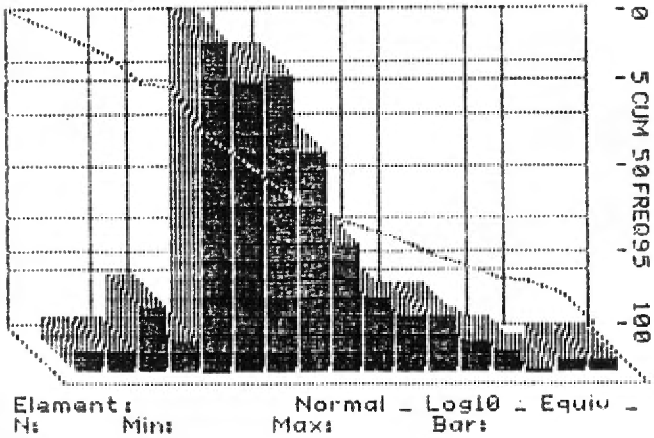
Analyses	Calculated Equivalents[3]
Au (ppb)	eAu (ppt)
Ag (ppm)	eAg (ppb)
As (ppm)	eAs (ppb)
Cu (ppm)	eCu (ppb)
Zn (ppm)	eZn (ppb)

GRAPHIC SUMMARY

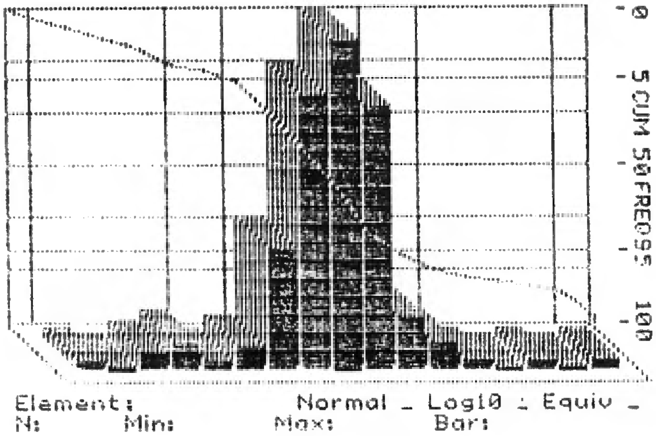
Relative depth of sample in overburden hole indicated by value of grain count	Relative metal and heavy mineral concentations in sample based on minima and maxima of entire data set

EEEE - other overburden material
XXXX - bedrock

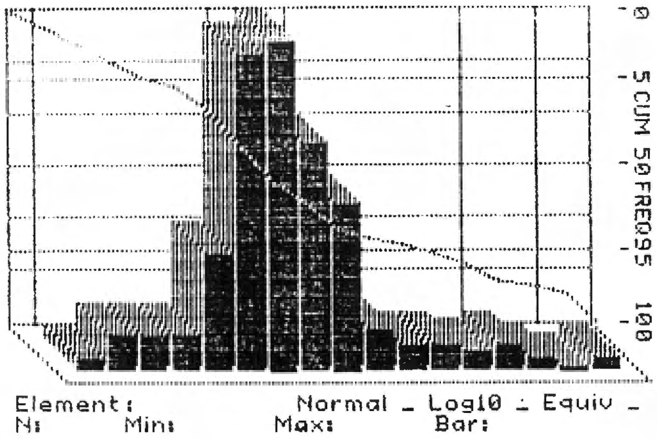
1. Descriptors: TYPE: 80 - till; 90 - bedrock
   SS: 10 - basal till; 20 - other; 30 - boulder/bedrock
2. Grains Counts: VG - visible gold ASPY - arsenopyrite (where applicable)
3. Calculated equivalent: "equivalent" metal contribution to original untreated sample



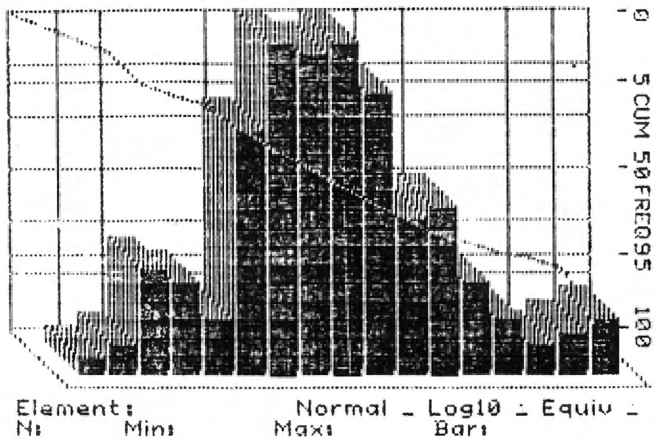
```
AU          MIN= .4    MEAN= 93.02    BAR WDTH= .26    MAX= 4.54
            N CLASS=17    ST DEV= 4.56    SKEW= 18.04    KURT= 57.47
             50%= 159.11    95%= 3090.91    97.5%= 5594.55
```



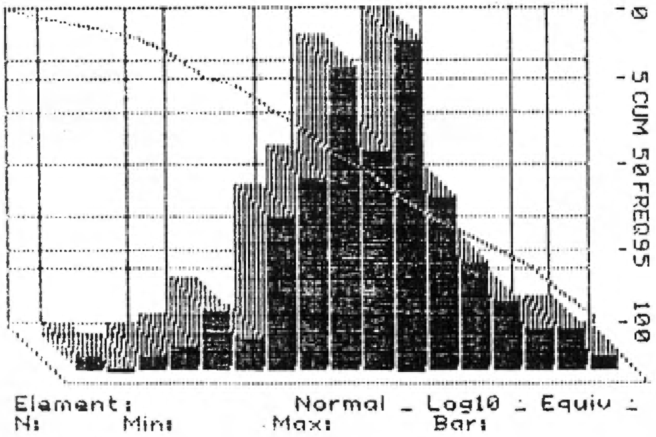
```
CU          MIN= 1.11    MEAN= 257.42    BAR WDTH= .17    MAX= 3.79
            N CLASS=17    ST DEV= 2    SKEW= 10.86    KURT= 67.4
             50%= 412.44    95%= 889.21    97.5%= 1305.66
```



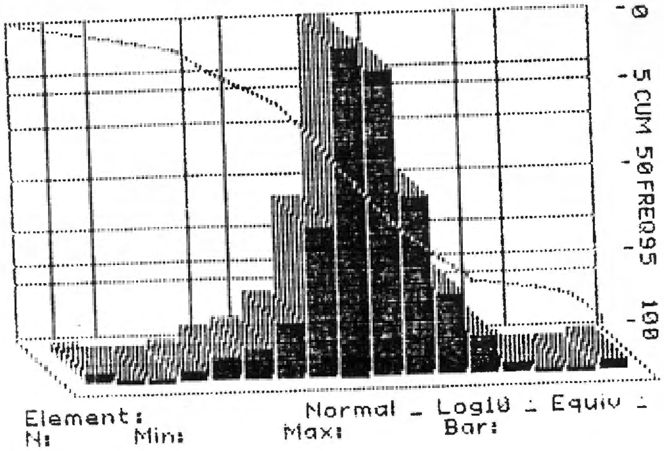
```
ZN         MIN= 1.08    MEAN= 76.02    BAR WDTH= .13    MAX= 3.14
           N CLASS=17    ST DEV= 2    SKEW= 19.32    KURT= 69.98
            50%= 95.22    95%= 418.05    97.5%= 755.51
```



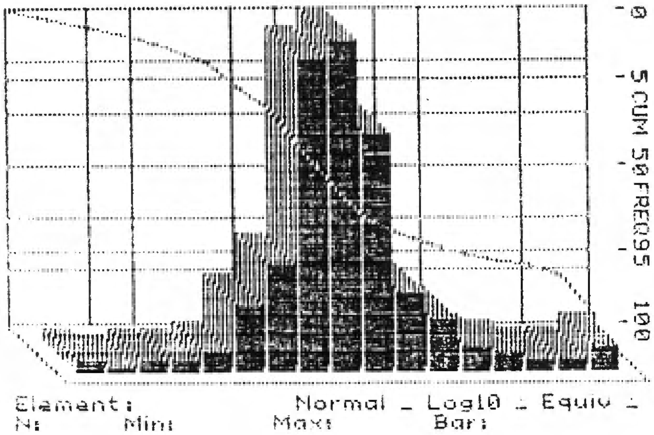
```
eAU         MIN= .68    MEAN= 214.13    BAR WDTH= .21    MAX= 4.12
            N CLASS=17    ST DEV= 4.8    SKEW= 12.57    KURT= 35.02
             50%= 407.98    95%= 4807.02    97.5%= 12893.5
```



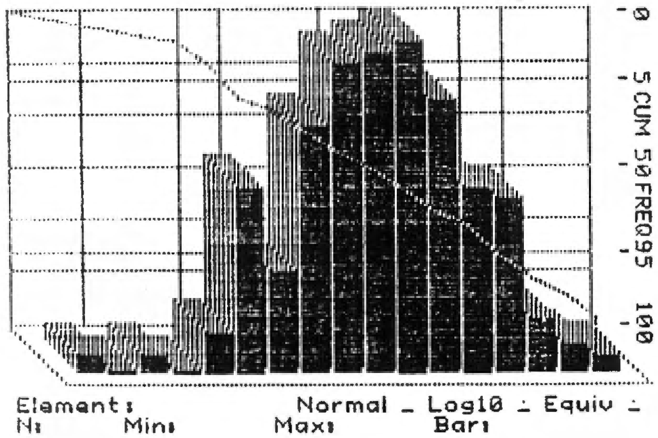
```
eAS         MIN= .1    MEAN= 238.73    BAR WDTH= .25    MAX= 4.17
            N CLASS=17    ST DEV= 4.52    SKEW= 8.77    KURT= 31.41
             50%= 431.79    95%= 4444.99    97.5%= 14261.65
```



```
eCU          MIN= .76    MEAN= 602.03    BAR WDTH= .24     MAX= 4.54
             N CLASS=17    ST DEV= 2.65    SKEW= 7.92    KURT= 50.21
              50%= 1298.75    95%= 3844.14    97.5%= 6613.58
```



```
eZN          MIN= .45    MEAN= 177.73    BAR WDTH= .22     MAX= 4.04
             N CLASS=17    ST DEV= 2.99    SKEW= 20.04    KURT= 78.65
              50%= 290.36    95%= 2286.83    97.5%= 6417.71
```



```
eAG        MIN= -2.2   MEAN= .81   BAR WDTH= .23   MAX= 1.5
           N CLASS=17   ST DEV= 4.07   SKEW= 6.42   KURT= 24.5
            50%= 1.27   95%= 10.58   97.5%= 17.98
```

```
              M86-05-02

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
           0           0           0

                 1-AB

     FROM    TO   TYPE  SS   BEDROCK
       74     79    80  20       79


  PPM NON MAG   PPM MAG     VG
      2759         2907     0      0

     Au: 80                  eAu: 221
     Ag: .4                  eAg: 1.1
     As: 43                  eAs: 119
     Cu: 154                 eCu: 425
     Zn: 36                  eZn: 99


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  **
  EEEE   MAG  **
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  0000
  0000
  0000
  XXXX
  XXXX
```

```
                              M86-05-03

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0           0

                                  01

                 FROM      TO     TYPE    SS   BEDROCK
                   60      64      10     40       70


             PPM NON MAG   PPM MAG      VG
                3368         3965       0          0

                 Au:  215                   eAu:  724
                 Ag:  .2                    eAg:  .7
                 As:  73                    eAs:  246
                 Cu:  200                   eCu:  674
                 Zn:  69                    eZn:  232



          Surface
            EEEE
            EEEE
            EEEE
            EEEE           MIN                     MAX
            EEEE     NM    ***
            EEEE    MAG    **
            EEEE     Au    *
            EEEE    eAu    *
            EEEE     Ag    *
            EEEE    eAg    *
            EEEE     As    *
            EEEE    eAs    *
            EEEE     Cu    *
            EEEE    eCu    *
            EEEE     Zn    *
            EEEE    eZn    *
            0000
            0000
            EEEE
            EEEE
            XXXX
            XXXX
```

```
                         M86-05-03

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                  0           0           0

                           2-AB

         FROM      TO    TYPE   SS   BEDROCK
           64      70     80    20       70


      PPM NON MAG   PPM MAG     VG
         1022         1513      0       0

         Au:  180                eAu:  184
         Ag:  .5                 eAg:  .5
         As:  91                 eAs:  93
         Cu:  410                eCu:  419
         Zn:  50                 eZn:  51


   Surface
     EEEE
     EEEE
     EEEE
     EEEE           MIN                   MAX
     EEEE     NM   *
     EEEE    MAG   *
     EEEE     Au   *
     EEEE    eAu   *
     EEEE     Ag   *
     EEEE    eAg   *
     EEEE     As   *
     EEEE    eAs   *
     EEEE     Cu   *
     EEEE    eCu   *
     EEEE     Zn   *
     EEEE    eZn   *
     EEEE
     OOOO
     OOOO
     OOOO
     XXXX
     XXXX
```

01B GRP.FIVE C-833

```
                         M86-05-04

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0          0           0

                           01-2

         FROM       TO    TYPE   SS   BEDROCK
           60       70     80    10        88

                 20% PYRITE ON PANNING

     PPM NON MAG   PPM MAG      VG
         1472          3472      2        0

         Au: 2225               eAu: 3275
         Ag: .6                 eAg: .9
         As: 60                 eAs: 88
         Cu: 220                eCu: 324
         Zn: 54                 eZn: 79


   Surface
     EEEE
     EEEE
     EEEE
     EEEE          MIN                    MAX
     EEEE     NM   *
     EEEE    MAG   **
     EEEE     Au   *
     EEEE    eAu   ****
     EEEE     Ag   **
     EEEE    eAg   *
     EEEE     As   *
     EEEE    eAs   *
     2222     Cu   *
     2222    eCu   *
     2222     Zn   *
     EEEE    eZn   *
     EEEE
     EEEE
     EEEE
     EEEE
     XXXX
     XXXX
```

```
               M86-05-04

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                   3-4
     FROM     TO   TYPE  SS   BEDROCK
       70      80   80   10       88


  PPM NON MAG   PPM MAG     VG
      1870         2074     0      0

     Au:  80                eAu:  150
     Ag:  .3                eAg:  .6
     As:  147               eAs:  275
     Cu:  380               eCu:  711
     Zn:  66                eZn:  123


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE     NM   *
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  0000     Zn   *
  0000    eZn   *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                          M86-05-04

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0           0           0

                             5-6

              FROM      TO    TYPE   SS   BEDROCK
                80      88     80    20        88


           PPM NON MAG   PPM MAG      VG
               1063          116       0        0

              Au: 330                eAu: 351
              Ag: .5                 eAg: .5
              As: 168                eAs: 179
              Cu: 520                eCu: 553
              Zn: 97                 eZn: 103


         Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                      MAX
           EEEE     NM   *
           EEEE    MAG   *
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   *
           EEEE    eAg   *
           EEEE     As   *
           EEEE    eAs   *
           EEEE     Cu   *
           EEEE    eCu   *
           EEEE     Zn   *
           EEEE    eZn   *
           EEEE
           0000
           0000
           0000
           XXXX
           XXXX
```

01B GRP.FIVE C-833

```
              M86-05-05

    DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
               0           0            0


                   01

     FROM      TO   TYPE  SS  BEDROCK
       81      85    80   20       91


  PPM NON MAG   PPM MAG      VG
      1769          2503     0         0

     Au:  55                 eAu:  97
     Ag:  2.1                eAg:  3.7
     As:  105                eAs:  186
     Cu:  350                eCu:  619
     Zn:  105                eZn:  186


Surface
  EEEE
  EEEE
  EEEE
  EEEE            MIN                MAX
  EEEE      NM    *
  EEEE     MAG    *
  EEEE      Au    *
  EEEE     eAu    *
  EEEE      Ag    *******
  EEEE     eAg    **
  EEEE      As    *
  EEEE     eAs    *
  EEEE      Cu    *
  EEEE     eCu    *
  EEEE      Zn    *
  EEEE     eZn    *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-05

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0          0

                   02

     FROM       TO    TYPE   SS  BEDROCK
       85       91     80    20       91


  PPM NON MAG   PPM MAG      VG
      2867         1867      0      0

     Au:  1460               eAu:  4185
     Ag:  .3                 eAg:  .9
     As:  78                 eAs:  224
     Cu:  320                eCu:  917
     Zn:  64                 eZn:  183


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   ******
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  0000
  0000
  0000
  XXXX
  XXXX
```

```
               M6-05-06

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0


                  1-3

     FROM    TO   TYPE  SS  BEDROCK
      114    120   80   20      120

           50% PY XL & FRAGS +CPY+BO

  PPM NON MAG  PPM MAG    VG   ASPY
       557        1927    0     50

     Au: 16630          eAu: 9264
     Ag: 1.1            eAg: .6
     As: 176            eAs: 98
     Cu: 430            eCu: 240
     Zn: 80             eZn: 45


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN               MAX
  EEEE     NM   *
  EEEE    MAG   *
  EEEE     Au   *********
  EEEE    eAu   **************
  EEEE     Ag   ****
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  OOOO
  OOOO
  XXXX
  XXXX
```

```
              M86-05-07

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                   01

     FROM      TO    TYPE   SS   BEDROCK
       90      95    80    10       102


  PPM NON MAG   PPM MAG      VG
      2203         3565      0      0

     Au:  95                 eAu:  209
     Ag:  .9                 eAg:  2
     As:  1048               eAs:  2309
     Cu:  340                eCu:  749
     Zn:  74                 eZn:  163


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE      NM  **
  EEEE     MAG  **
  EEEE      Au  *
  EEEE     eAu  *
  EEEE      Ag  ***
  EEEE     eAg  *
  EEEE      As  **********
  EEEE     eAs  ***
  EEEE      Cu  *
  EEEE     eCu  *
  EEEE      Zn  *
  EEEE     eZn  *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-07

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0


                  2-3
     FROM    TO   TYPE  SS  BEDROCK
       95    105   80   20     102


  PPM NON MAG  PPM MAG     VG
      1042        1635     0      0

     Au: 70              eAu: 73
     Ag: .5              eAg: .5
     As: 448             eAs: 467
     Cu: 330             eCu: 344
     Zn: 55              eZn: 57


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   *
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   ****
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  OOOO
  OOOO
  OOOO
  XXXX
  XXXX
```

```
              M86-05-07

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                  4-6

     FROM    TO   TYPE  SS  BEDROCK
       95   105    80   20     102


  PPM NON MAG   PPM MAG      VG
      1796         2561      0      0

     Au: 55                eAu: 99
     Ag: .6                eAg: 1.1
     As: 544               eAs: 977
     Cu: 250               eCu: 449
     Zn: 48                eZn: 86


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   *
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   **
  EEEE    eAg   *
  EEEE     As   *****
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  0000
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-08

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0


                  1-2

     FROM    TO   TYPE   SS  BEDROCK
      106    117   80    10     138


  PPM NON MAG  PPM MAG      VG
      1211        2452      1      O

     Au: 2580               eAu: 3124
     Ag: .05                eAg: .1
     As: 132                eAs: 160
     Cu: 275                eCu: 333
     Zn: 72                 eZn: 87


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE     NM *
  EEEE    MAG *
  EEEE     Au *
  EEEE    eAu ****
  EEEE     Ag *
  EEEE    eAg *
  EEEE     As *
  EEEE    eAs *
  EEEE     Cu *
  EEEE    eCu *
  1111     Zn *
  1111    eZn *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-08

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0


                   03

     FROM      TO    TYPE   SS  BEDROCK
      117     125     80    10      138


  PPM NON MAG   PPM MAG      VG
      4133          4600     0      0

     Au: 65                eAu: 269
     Ag: .3                eAg: 1.2
     As: 72                eAs: 298
     Cu: 560               eCu: 2315
     Zn: 49                eZn: 203


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   ****
  EEEE    MAG   ***
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  0000    eZn   *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

018 GRP.FIVE C-833

```
                                   M86-05-08

                        DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                              0           0           0

                                      4-5

                      FROM      TO    TYPE   SS   BEDROCK
                       125      135    80    20      138


                  PPM NON MAG   PPM MAG      VG
                      1202          1183     0       0

                      Au: 135                Au: 162
                      Ag: .3                 eAg: .4
                      As: 116                eAs: 139
                      Cu: 470                eCu: 565
                      Zn: 65                 eZn: 78


               Surface
                  EEEE
                  EEEE
                  EEEE
                  EEEE             MIN                  MAX
                  EEEE      NM     *
                  EEEE     MAG     *
                  EEEE      Au     *
                  EEEE     eAu     *
                  EEEE      Ag     *
                  EEEE     eAg     *
                  EEEE      As     *
                  EEEE     eAs     *
                  EEEE      Cu     *
                  EEEE     eCu     *
                  EEEE      Zn     *
                  EEEE     eZn     *
                  EEEE
                  0000
                  0000
                  EEEE
                  XXXX
                  XXXX
```

```
                              M86-05-08

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0           0           0

                                 06

             FROM      TO     TYPE   SS   BEDROCK
              135      138     80    20      138


          PPM NON MAG   PPM MAG      VG
              1949         1744      0      0

             Au:  1055               eAu:  2056
             Ag:  .4                 eAg:  .8
             As:  102                eAs:  199
             Cu:  450                eCu:  877
             Zn:  47                 eZn:  92


       Surface
         EEEE
         EEEE
         EEEE
         EEEE           MIN                MAX
         EEEE     NM    *
         EEEE    MAG    *
         EEEE     Au    *
         EEEE    eAu    ***
         EEEE     Ag    *
         EEEE    eAg    *
         EEEE     As    *
         EEEE    eAs    *
         EEEE     Cu    *
         EEEE    eCu    *
         EEEE     Zn    *
         EEEE    eZn    *
         EEEE
         EEEE
         OOOO
         OOOO
         XXXX
         XXXX
```

```
                     M86-05-09

        DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0          0            0

                           01

      FROM     TO    TYPE   SS   BEDROCK
       100     105    80    10      145


   PPM NON MAG   PPM MAG     VG
      2347          2027     0        0

      Au:  100               eAu:  235
      Ag:  .5                eAg:  1.2
      As:  224               eAs:  526
      Cu:  270               eCu:  634
      Zn:  86                eZn:  202


Surface
   EEEE
   EEEE
   EEEE
   EEEE          MIN                  MAX
   EEEE     NM   **
   EEEE    MAG   *
   EEEE     Au   *
   EEEE    eAu   *
   EEEE     Ag   *
   EEEE    eAg   *
   EEEE     As   **
   EEEE    eAs   *
   OOOO     Cu   *
   OOOO    eCu   *
   EEEE     Zn   *
   EEEE    eZn   *
   EEEE
   EEEE
   EEEE
   EEEE
   XXXX
   XXXX
```

```
              M86-05-09

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                  2-3

     FROM    TO   TYPE  SS  BEDROCK
      105    115   80   10      145


  PPM NON MAG  PPM MAG     VG
      2469        1630     0      0

     Au:  25               eAu:  62
     Ag:  .8               eAg:  2
     As:  808              eAs:  1995
     Cu:  410              eCu:  1012
     Zn:  58               eZn:  143


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  **
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  ***
  EEEE   eAg  *
  EEEE    As  ********
  EEEE   eAs  **
  EEEE    Cu  *
  0000   eCu  *
  0000    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                    M86-05-09

        DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                  0           0           0

                        4-5

          FROM     TO    TYPE   SS   BEDROCK
           115     130    80    10      145


      PPM NON MAG   PPM MAG      VG
         1152          1576      0       0

          Au:  40                   eAu:  46
          Ag:  1                    eAg:  1.2
          As:  244                  eAs:  281
          Cu:  270                  eCu:  311
          Zn:  110                  eZn:  127



    Surface
      EEEE
      EEEE
      EEEE
      EEEE           MIN                   MAX
      EEEE      NM   *
      EEEE     MAG   *
      EEEE      Au   *
      EEEE     eAu   *
      EEEE      Ag   ***
      EEEE     eAg   *
      EEEE      As   **
      EEEE     eAs   *
      EEEE      Cu   *
      EEEE     eCu   *
      0000      Zn   *
      0000     eZn   *
      0000
      EEEE
      EEEE
      EEEE
      XXXX
      XXXX
```

```
                         M86-05-09

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                               06

             FROM       TO    TYPE   SS   BEDROCK
              130      135     80    10      145


          PPM NON MAG   PPM MAG      VG
              5056          3111      0        0

             Au:  30                   eAu:  152
             Ag:  1.6                  eAg:  8.1
             As:  150                  eAs:  758
             Cu:  400                  eCu:  2022
             Zn:  53                   eZn:  268



        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                  MAX
          EEEE     NM   *****
          EEEE    MAG   **
          EEEE     Au   *
          EEEE    eAu   *
          EEEE     Ag   ******
          EEEE    eAg   *****
          EEEE     As   *
          EEEE    eAs   *
          EEEE     Cu   *
          EEEE    eCu   *
          EEEE     Zn   *
          EEEE    eZn   *
          0000
          0000
          EEEE
          EEEE
          XXXX
          XXXX
```

```
              M86-05-09

      DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
           0           0           0

                 7-7A

     FROM    TO    TYPE  SS   BEDROCK
      135    145    80   20      145


  PPM NON MAG  PPM MAG     VG
      2237        2093     0      0

     Au: 220               eAu: 492
     Ag: .5                eAg: 1.1
     As: 135               eAs: 302
     Cu: 235               eCu: 526
     Zn: 45                eZn: 101


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN               MAX
  EEEE     NM **
  EEEE    MAG *
  EEEE     Au *
  EEEE    eAu *
  EEEE     Ag *
  EEEE    eAg *
  EEEE     As *
  EEEE    eAs *
  EEEE     Cu *
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  0000
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-10

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                   01

     FROM    TO   TYPE  SS  BEDROCK
      130    135   80   10      155


  PPM NON MAG  PPM MAG     VG
      6420        3704     0      0

     Au: 165             eAu: 1059
     Ag: 2.1             eAg: 13.5
     As: 135             eAs: 867
     Cu: 590             eCu: 3788
     Zn: 1388            eZn: 8911



Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  ******
  EEEE   MAG  **
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *******
  EEEE   eAg  ********
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  **
  EEEE    Zn  *********
  0000   eZn  ****************
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-10

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                   02

     FROM    TO   TYPE  SS  BEDROCK
      135    140   80   10     155


  PPM NON MAG  PPM MAG     VG
      2568        1975     0      0

     Au: 70                eAu: 180
     Ag: 1.2               eAg: 3.1
     As: 130               eAs: 334
     Cu: 410               eCu: 1053
     Zn: 553               eZn: 1420


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  **
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  ****
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  ***
  EEEE   eZn  **
  OOOO
  OOOO
  EEEE
  EEEE
  XXXX
  XXXX
```

01B GRP.FIVE C-833

```
              M86-05-10

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0       0

                   03

     FROM    TO   TYPE  SS  BEDROCK
      140    145   80   10      155


  PPM NON MAG   PPM MAG     VG
      2182         1788     0      0

     Au: 80                 eAu: 175
     Ag: .7                 eAg: 1.5
     As: 165                eAs: 360
     Cu: 310                eCu: 676
     Zn: 168                eZn: 367


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  **
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  **
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                              M86-05-10

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                            0          0          0

                                 04

                FROM      TO    TYPE   SS   BEDROCK
                 145      155    80    20      155


            PPM NON MAG   PPM MAG      VG
               1852          1407      0       0

                Au:  420                  eAu:  778
                Ag:  .7                   eAg:  1.3
                As:  183                  eAs:  339
                Cu:  470                  eCu:  870
                Zn:  166                  eZn:  307



         Surface
           EEEE
           EEEE
           EEEE
           EEEE            MIN                    MAX
           EEEE      NM    *
           EEEE     MAG    *
           EEEE      Au    *
           EEEE     eAu    *
           EEEE      Ag    **
           EEEE     eAg    *
           EEEE      As    *
           EEEE     eAs    *
           EEEE      Cu    *
           EEEE     eCu    *
           EEEE      Zn    *
           EEEE     eZn    *
           EEEE
           0000
           0000
           0000
           XXXX
           XXXX
```

```
                         M86-05-11

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                    0           0           0

                            1-2

             FROM      TO    TYPE   SS   BEDROCK
               75       80    80    10      100


          PPM NON MAG   PPM MAG      VG
              1577         1878      0        0

             Au:  50                eAu:  79
             Ag:  1.1               eAg:  1.7
             As:  210               eAs:  331
             Cu:  620               eCu:  978
             Zn:  108               eZn:  170



        Surface
          EEEE
          EEEE
          EEEE
          EEEE        MIN                 MAX
          EEEE     NM  *
          EEEE    MAG  *
          EEEE     Au  *
          EEEE    eAu  *
          EEEE     Ag  ****
          EEEE    eAg  *
          EEEE     As  **
          EEEE    eAs  *
          EEEE     Cu  **
          EEEE    eCu  *
          0000     Zn  *
          0000    eZn  *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
              M86-05-11

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                   03

     FROM    TO   TYPE  SS  BEDROCK
       80     85   80   10      100

               50% PY ON PANNING

  PPM NON MAG  PPM MAG     VG
      5583        5333     1      0

     Au: 110             eAu: 614
     Ag: 2               eAg: 11.2
     As: 96              eAs: 536
     Cu: 6200            eCu: 34617
     Zn: 48              eZn: 268


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE      NM  *****
  EEEE     MAG  ***
  EEEE      Au  *
  EEEE     eAu  *
  EEEE      Ag  *******
  EEEE     eAg  *******
  EEEE      As  *
  EEEE     eAs  *
  EEEE      Cu  ********************
  EEEE     eCu  *******************
  EEEE      Zn  *
  1111     eZn  *
  1111
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                          M86-05-11

               DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                             4-4A

            FROM      TO    TYPE   SS   BEDROCK
              85      90     80    10      100


         PPM NON MAG   PPM MAG      VG
           1037          2481       0       0

            Au: 115                 eAu: 119
            Ag: .7                  eAg: .7
            As: 114                 eAs: 118
            Cu: 960                 eCu: 996
            Zn: 92                  eZn: 95


       Surface
         EEEE
         EEEE
         EEEE
         EEEE           MIN                MAX
         EEEE      NM   *
         EEEE     MAG   *
         EEEE      Au   *
         EEEE     eAu   *
         EEEE      Ag   **
         EEEE     eAg   *
         EEEE      As   *
         EEEE     eAs   *
         EEEE      Cu   ***
         EEEE     eCu   *
         EEEE      Zn   *
         EEEE     eZn   *
         OOOO
         OOOO
         EEEE
         EEEE
         XXXX
         XXXX
```

```
              M86-05-11

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                   05

     FROM    TO    TYPE  SS  BEDROCK
       90     93    80   10     100


  PPM NON MAG   PPM MAG     VG
       420         395      0      0

     Au: 67.5               eAu: 28
     Ag: .7                 eAg: .3
     As: 182                eAs: 76
     Cu: 2600               eCu: 1091
     Zn: 62                 eZn: 26


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE     NM *
  EEEE    MAG *
  EEEE     Au *
  EEEE    eAu *
  EEEE     Ag **
  EEEE    eAg *
  EEEE     As *
  EEEE    eAs *
  EEEE     Cu ********
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  OOOO
  EEEE
  EEEE
  XXXX
  XXXX
```

01B GRP.FIVE C-833

```
                           M86-05-11A

                 DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                       0           0           0

                              1-1A

               FROM      TO    TYPE   SS   BEDROCK
                 76       79    80    20        79


          PPM NON MAG   PPM MAG      VG
              3583         3056      0       0

               Au: 125                 eAu: 448
               Ag: 1.1                 eAg: 3.9
               As: 210                 eAs: 752
               Cu: 770                 eCu: 2759
               Zn: 76                  eZn: 272


       Surface
         EEEE
         EEEE
         EEEE
         EEEE          MIN                    MAX
         EEEE     NM   ***
         EEEE    MAG   **
         EEEE     Au   *
         EEEE    eAu   *
         EEEE     Ag-  ****
         EEEE    eAg   **
         EEEE     As   **
         EEEE    eAs   *
         EEEE     Cu   **
         EEEE    eCu   *
         EEEE     Zn   *
         EEEE    eZn   *
         EEEE
         EEEE
         0000
         0000
         XXXX
         XXXX
```

```
                         M86-05-12

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                           1-AB

            FROM      TO    TYPE   SS   BEDROCK
             115     120     80    10      131


        PPM NON MAG   PPM MAG      VG
           1947         2370      1       O

            Au: 355                  eAu: 691
            Ag: .5                   eAg: 1
            As: 132                  eAs: 257
            Cu: 270                  eCu: 526
            Zn: 57                   eZn: 111


     Surface
        EEEE
        EEEE
        EEEE
        EEEE          MIN                     MAX
        EEEE      NM  *
        EEEE     MAG  *
        EEEE      Au  *
        EEEE     eAu  *
        EEEE      Ag  *
        EEEE     eAg  *
        EEEE      As  *
        EEEE     eAs  *
        EEEE      Cu  *
        EEEE     eCu  *
        EEEE      Zn  *
        EEEE     eZn  *
        1111
        1111
        EEEE
        EEEE
        XXXX
        XXXX
```

```
              M86-05-12

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                 2-2A

     FROM    TO   TYPE  SS  BEDROCK
      120    125   80   20      131


  PPM NON MAG  PPM MAG     VG
      4770        6645     1      0

     Au: 1790            eAu: 8538
     Ag: .8              eAg: 3.8
     As: 348             eAs: 1660
     Cu: 380             eCu: 1812
     Zn: 107             eZn: 510


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN               MAX
  EEEE     NM ****
  EEEE    MAG ****
  EEEE     Au *
  EEEE    eAu ************
  EEEE     Ag ***
  EEEE    eAg **
  EEEE     As ***
  EEEE    eAs **
  EEEE     Cu *
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  1111
  1111
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-12

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0          0          0

                            02B

              FROM      TO     TYPE    SS   BEDROCK
               120     125      80     20      131


          PPM NON MAG   PPM MAG      VG
              4029         4580      0        0

              Au: 390                eAu: 1571
              Ag: 1.3                eAg: 5.2
              As: 324                eAs: 1305
              Cu: 450                eCu: 1813
              Zn: 81                 eZn: 326


        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                MAX
          EEEE    NM   ****
          EEEE   MAG   ***
          EEEE    Au   *
          EEEE   eAu   **
          EEEE    Ag   ****
          EEEE   eAg   ***
          EEEE    As   ***
          EEEE   eAs   *
          EEEE    Cu   *
          EEEE   eCu   *
          EEEE    Zn   *
          EEEE   eZn   *
          EEEE
          OOOO
          OOOO
          EEEE
          XXXX
          XXXX
```

```
                    M86-05-12

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
               0          0           0

                        03

          FROM     TO    TYPE   SS   BEDROCK
           125     131    80    20      131


      PPM NON MAG   PPM MAG      VG
          2725         2783      1        0

          Au: 3980               eAu: 10844
          Ag: .05                eAg: .1
          As: 101                eAs: 275
          Cu: 460                eCu: 1253
          Zn: 67                 eZn: 183



    Surface
      EEEE
      EEEE
      EEEE
      EEEE         MIN                MAX
      EEEE     NM  **
      EEEE    MAG  *
      EEEE     Au  **
      EEEE    eAu  ****************
      EEEE     Ag  *
      EEEE    eAg  *
      EEEE     As  *
      EEEE    eAs  *
      EEEE     Cu  *
      EEEE    eCu  *
      EEEE     Zn  *
      EEEE    eZn  *
      EEEE
      EEEE
      1111
      1111
      XXXX
      XXXX
```

```
          M86-05-13

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
              0           0           0

             1-1A

    FROM      TO    TYPE   SS   BEDROCK
     66       69     80    20        69


  PPM NON MAG   PPM MAG      VG
     2192          2728      0        0

    Au:  185               eAu:  405
    Ag:  .5                eAg:  1.1
    As:  366               eAs:  802
    Cu:  410               eCu:  899
    Zn:  91                eZn:  199


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN                   MAX
  EEEE    NM   **
  EEEE   MAG   *
  EEEE    Au   *
  EEEE   eAu   *
  EEEE    Ag   *
  EEEE   eAg   *
  EEEE    As   ***
  EEEE   eAs   *
  EEEE    Cu   *
  EEEE   eCu   *
  EEEE    Zn   *
  EEEE   eZn   *
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

```
                    M86-05-13

      DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0           0

                      2-2A

        FROM     TO    TYPE   SS   BEDROCK
          69     75     90    30        69

                 PROCESSED BEDROCK

     PPM NON MAG   PPM MAG      VG
         1159          251      0       0

        Au:  140               eAu:  162
        Ag:  .7                eAg:  .8
        As:  464               eAs:  538
        Cu:  3650              eCu:  4232
        Zn:  314               eZn:  364


  Surface
    EEEE
    EEEE
    EEEE
    EEEE         MIN                MAX
    EEEE     NM  *
    EEEE    MAG  *
    EEEE     Au  *
    EEEE    eAu  *
    EEEE     Ag  **
    EEEE    eAg  *
    EEEE     As  ****
    EEEE    eAs  *
    EEEE     Cu  ***********
    EEEE    eCu  **
    EEEE     Zn  **
    EEEE    eZn  *
    EEEE
    EEEE
    0000
    0000
    0000
    XXXX
```

```
                              M86-05-14

                 DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0          0          0

                                1-1A

              FROM      TO    TYPE   SS   BEDROCK
               86       90     80    20      90


          PPM NON MAG   PPM MAG      VG
              117          2901      0        0

              Au: 110                Au: 13
              Ag: .2                eAg: 0
              As: 139               eAs: 16
              Cu: 360               eCu: 42
              Zn: 57                eZn: 7


        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                     MAX
          EEEE     NM   *
          EEEE    MAG   **
          EEEE     Au   *
          EEEE    eAu   *
          EEEE     Ag   *
          EEEE    eAg   *
          EEEE     As   *
          EEEE    eAs   *
          EEEE     Cu   *
          EEEE    eCu   *
          EEEE     Zn   *
          EEEE    eZn   *
          EEEE
          EEEE
          0000
          0000
          XXXX
          XXXX
```

```
                              M86-05-14

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                                 2-2A

               FROM      TO    TYPE   SS   BEDROCK
                 90      96     90    30        90

                           PROCESSED BEDROCK

          PPM NON MAG   PPM MAG       VG
               338          135       0          0

               Au:  1000                eAu:  338
               Ag:  2                   eAg:  .7
               As:  206                 eAs:  70
               Cu:  1340                eCu:  452
               Zn:  53                  eZn:  18


        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                    MAX
          EEEE      NM  *
          EEEE     MAG  *
          EEEE      Au  *
          EEEE     eAu  *
          EEEE      Ag  *******
          EEEE     eAg  *
          EEEE      As  **
          EEEE     eAs  *
          EEEE      Cu  ****
          EEEE     eCu  *
          EEEE      Zn  *
          EEEE     eZn  *
          EEEE
          EEEE
          EEEE
          0000
          0000
          XXXX
```

```
                              M86-05-15

                   DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                              0          0          0


                                 1-1A

                  FROM      TO    TYPE   SS   BEDROCK
                    96     100     80    20      105


              PPM NON MAG   PPM MAG      VG
                 3188          3429      0       0

                  Au: 30                  eAu: 96
                  Ag: .6                  eAg: 1.9
                  As: 144                 eAs: 459
                  Cu: 230                 eCu: 733
                  Zn: 59                  eZn: 188


           Surface
             EEEE
             EEEE
             EEEE
             EEEE         MIN                    MAX
             EEEE     NM  ***
             EEEE    MAG  **
             EEEE     Au  *
             EEEE    eAu  *
             EEEE     Ag  **
             EEEE    eAg  *
             EEEE     As  *
             EEEE    eAs  *
             EEEE     Cu  *
             EEEE    eCu  *
             EEEE     Zn  *
             EEEE    eZn  *
             EEEE
             OOOO
             OOOO
             EEEE
             XXXX
             XXXX
```

```
                         M86-05-15

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0          0


                            2-2A

             FROM      TO    TYPE   SS   BEDROCK
              100     105     80    20       105


          PPM NON MAG   PPM MAG      VG
               2825        2298      0        0

             Au:  40                  eAu:  113
             Ag:  .8                  eAg:  2.3
             As:  135                 eAs:  381
             Cu:  310                 eCu:  876
             Zn:  97                  eZn:  274


        Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                       MAX
           EEEE     NM   **
           EEEE    MAG   *
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   ***
           EEEE    eAg   *
           EEEE     As   *
           EEEE    eAs   *
           EEEE     Cu   *
           EEEE    eCu   *
           EEEE     Zn   *
           EEEE    eZn   *
           EEEE
           EEEE
           0000
           0000
           XXXX
           XXXX
```

018 GRP.FIVE C-833

```
                                M86-05-16

                    DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                                  1-AB

                  FROM      TO    TYPE    SS   BEDROCK
                   100      105    80     10     116


             PPM NON MAG   PPM MAG      VG
                2519          3059      0         0

                  Au:  45                    eAu:  113
                  Ag:  .1                    eAg:  .3
                  As:  153                   eAs:  385
                  Cu:  148                   eCu:  373
                  Zn:  43                    eZn:  108


          Surface
            EEEE
            EEEE
            EEEE
            EEEE         MIN               MAX
            EEEE     NM  **
            EEEE    MAG  **
            EEEE     Au  *
            EEEE    eAu  *
            EEEE     Ag  *
            EEEE    eAg  *
            EEEE     As  *
            EEEE    eAs  *
            EEEE     Cu  *
            EEEE    eCu  *
            EEEE     Zn  *
            EEEE    eZn  *
            OOOO
            OOOO
            EEEE
            EEEE
            XXXX
            XXXX
```

018 GRP.FIVE C-833

```
                        M86-05-16

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0           0           0

                           2-2A

            FROM      TO    TYPE   SS   BEDROCK
             105      116    80    20     116


        PPM NON MAG   PPM MAG      VG
            1394         1700      0       0

            Au: 95                    eAu: 132
            Ag: .3                    eAg: .4
            As: 97                    eAs: 135
            Cu: 310                   eCu: 432
            Zn: 201                   eZn: 280


      Surface
         EEEE
         EEEE
         EEEE
         EEEE         MIN                  MAX
         EEEE     NM  *
         EEEE    MAG  *
         EEEE     Au  *
         EEEE    eAu  *
         EEEE     Ag  *
         EEEE    eAg  *
         EEEE     As  *
         EEEE    eAs  *
         EEEE     Cu  *
         EEEE    eCu  *
         EEEE     Zn  *
         EEEE    eZn  *
         EEEE
         0000
         0000
         0000
         XXXX
         XXXX
```

```
                              M86-05-16

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                         0           0           0

                                 03

                FROM      TO    TYPE   SS   BEDROCK
                 116     120     90    30     116

                           PROCESSED BEDROCK

          PPM NON MAG   PPM MAG      VG
              566           202       0         0

               Au:  65                  eAu:  37
               Ag:  2.5                 eAg:  1.4
               As:  768                 eAs:  434
               Cu:  920                 eCu:  520
               Zn:  2970                eZn:  1680


   Surface
     EEEE
     EEEE
     EEEE
     EEEE           MIN                MAX
     EEEE      NM   *
     EEEE     MAG   *
     EEEE      Au   *
     EEEE     eAu   *
     EEEE      Ag   *********
     EEEE     eAg   *
     EEEE      As   *******
     EEEE     eAs   *
     EEEE      Cu   **
     EEEE     eCu   *
     EEEE      Zn   ********************
     EEEE     eZn   ***
     EEEE
     EEEE
     0000
     0000
     XXXX
     XXXX
```

```
                                M86-05-17

                    DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                           0           0           0


                                  1-AB

                     FROM      TO    TYPE   SS   BEDROCK
                      140     160     80    10      170


                PPM NON MAG   PPM MAG      VG
                   3500         2692       0       0

                     Au:  225               eAu:  788
                     Ag:  .4                eAg:  1.4
                     As:  140               eAs:  490
                     Cu:  162               eCu:  567
                     Zn:  82                eZn:  287



             Surface
               EEEE
               EEEE
               EEEE
               EEEE         MIN                 MAX
               EEEE     NM  ***
               EEEE    MAG  *
               EEEE     Au  *
               EEEE    eAu  *
               EEEE     Ag  *
               EEEE    eAg  *
               EEEE     As  *
               EEEE    eAs  *
               EEEE     Cu  *
               EEEE    eCu  *
               EEEE     Zn  *
               0000    eZn  *
               0000
               0000
               EEEE
               EEEE
               XXXX
               XXXX
```

OIB GRP.FIVE C-833

```
                      M86-05-17

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0           0

                          02

           FROM      TO    TYPE   SS   BEDROCK
            160     166     80    10      170


       PPM NON MAG   PPM MAG      VG
          5103          5839      0        0

           Au:  100                 eAu:  510
           Ag:  .7                  eAg:  3.6
           As:  264                 eAs:  1347
           Cu:  205                 eCu:  1046
           Zn:  125                 eZn:  638


     Surface
       EEEE
       EEEE
       EEEE
       EEEE            MIN                  MAX
       EEEE      NM    *****
       EEEE     MAG    ****
       EEEE      Au    *
       EEEE     eAu    *
       EEEE      Ag    **
       EEEE     eAg    **
       EEEE      As    **
       EEEE     eAs    *
       EEEE      Cu    *
       EEEE     eCu    *
       EEEE      Zn    *
       EEEE     eZn    *
       EEEE
       0000
       0000
       EEEE
       XXXX
       XXXX
```

```
             M86-05-17

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
          0           0           0

                 02A

    FROM     TO    TYPE   SS   BEDROCK
     160     166    80    10      170


  PPM NON MAG   PPM MAG      VG
     4583          5667      0       0

    Au:  55                eAu:  252
    Ag:  .4                eAg:  1.8
    As:  278               eAs:  1274
    Cu:  210               eCu:  962
    Zn:  80                eZn:  367


Surface
 EEEE
 EEEE
 EEEE
 EEEE         MIN                     MAX
 EEEE     NM  ****
 EEEE    MAG  ***
 EEEE     Au  *
 EEEE    eAu  *
 EEEE     Ag  *
 EEEE    eAg  *
 EEEE     As  **
 EEEE    eAs  *
 EEEE     Cu  *
 EEEE    eCu  *
 EEEE     Zn  *
 EEEE    eZn  *
 EEEE
 OOOO
 OOOO
 EEEE
 XXXX
 XXXX
```

```
             M86-05-17A

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                   01

     FROM    TO   TYPE  SS  BEDROCK
      135    145   80   10     161


  PPM NON MAG  PPM MAG     VG
      4293        4293     0      0

     Au: 35               eAu: 150
     Ag: .2               eAg: .9
     As: 338              eAs: 1451
     Cu: 360              eCu: 1546
     Zn: 65               eZn: 279


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE      NM  ****
  EEEE     MAG  **
  EEEE      Au  *
  EEEE     eAu  *
  EEEE      Ag  *
  EEEE     eAg  *
  EEEE      As  ***
  EEEE     eAs  *
  EEEE      Cu  *
  EEEE     eCu  *
  EEEE      Zn  *
  OOOO     eZn  *
  OOOO
  OOOO
  EEEE
  EEEE
  XXXX
  XXXX
```

013 GRP.FIVE C-833

```
             M86-05-17A

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 2-2A

     FROM    TO   TYPE  SS  BEDROCK
      145    150   80   10     161


  PPM NON MAG   PPM MAG     VG
      2642         2813     0      0

     Au:  80                eAu:  211
     Ag:  .7                eAg:  1.8
     As:  230               eAs:  608
     Cu:  310               eCu:  819
     Zn:  60                eZn:  159


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   **
  EEEE    eAg   *
  EEEE     As   **
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  OOOO
  EEEE
  EEEE
  XXXX
  XXXX
```

```
             M86-05-17A

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0          0          0

                 3ABC

     FROM    TO    TYPE  SS   BEDROCK
      150    154    80   20      161


  PPM NON MAG   PPM MAG      VG
      2114         2433      0      0

     Au:  100                eAu:  211
     Ag:  .4                 eAg:  .8
     As:  122                eAs:  258
     Cu:  146                eCu:  309
     Zn:  52                 eZn:  110


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE      NM  **
  EEEE     MAG  *
  EEEE      Au  *
  EEEE     eAu  *
  EEEE      Ag  *
  EEEE     eAg  *
  EEEE      As  *
  EEEE     eAs  *
  EEEE      Cu  *
  EEEE     eCu  *
  EEEE      Zn  *
  EEEE     eZn  *
  EEEE
  OOOO
  OOOO
  EEEE
  XXXX
  XXXX
```

```
             M86-05-17A

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0            0

                 4-4A

     FROM    TO    TYPE  SS  BEDROCK
      154    155    80   20     161


  PPM NON MAG  PPM MAG    VG
      1827       1869     0      0

     Au:  15                eAu:  27
     Ag:  .05               eAg:  .1
     As:  88                eAs:  161
     Cu:  124               eCu:  227
     Zn:  42                eZn:  77


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE     NM *
  EEEE    MAG *
  EEEE     Au *
  EEEE    eAu *
  EEEE     Ag *
  EEEE    eAg *
  EEEE     As *
  EEEE    eAs *
  EEEE     Cu *
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  EEEE
  0000
  EEEE
  XXXX
  XXXX
```

```
                        M86-05-17A

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                    0           0           0

                           5-5A

               FROM     TO    TYPE   SS   BEDROCK
                155     157    80    20      161


          PPM NON MAG   PPM MAG      VG
             2084          2162       0        0

               Au: 30                eAu: 63
               Ag: .2                eAg: .4
               As: 149               eAs: 311
               Cu: 200               eCu: 417
               Zn: 41                eZn: 85



      Surface
        EEEE
        EEEE
        EEEE
        EEEE         MIN                     MAX
        EEEE     NM  **
        EEEE    MAG  *
        EEEE     Au  *
        EEEE    eAu  *
        EEEE     Ag  *
        EEEE    eAg  *
        EEEE     As  *
        EEEE    eAs  *
        EEEE     Cu  *
        EEEE    eCu  *
        EEEE     Zn  *
        EEEE    eZn  *
        EEEE
        EEEE
        OOOO
        EEEE
        XXXX
        XXXX
```

```
                          M86-05-17A

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                       0           0           0


                             6ABC

             FROM      TO     TYPE   SS   BEDROCK
              157      166     80    20      161

                     10% PYRITE ON PANNING

       PPM NON MAG   PPM MAG      VG
           3891          3636     2       0

             Au:  560                 eAu:  2179
             Ag:  .1                  eAg:  .4
             As:  131                 eAs:  510
             Cu:  205                 eCu:  798
             Zn:  199                 eZn:  774



       Surface
          EEEE
          EEEE
          EEEE
          EEEE           MIN                        MAX
          EEEE      NM   ***
          EEEE     MAG   **
          EEEE      Au   *
          EEEE     eAu   ***
          EEEE      Ag   *
          EEEE     eAg   *
          EEEE      As   *
          EEEE     eAs   *
          EEEE      Cu   *
          EEEE     eCu   *
          EEEE      Zn   *
          EEEE     eZn   *
          EEEE
          EEEE
          2222
          2222
          XXXX
          XXXX
```

```
              M86-05-18

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 1-AB

     FROM     TO    TYPE  SS  BEDROCK
       86      89    90   30       86

               PROCESSED BEDROCK

  PPM NON MAG   PPM MAG      VG
      1556         1402      0      0

     Au:  80                eAu:  124
     Ag:  1.9               eAg:  3
     As:  968               eAs:  1506
     Cu:  395               eCu:  614
     Zn:  112               eZn:  174


Surface
  EEEE
  EEEE
  EEEE
  EEEE           MIN              MAX
  EEEE      NM   *
  EEEE     MAG   *
  EEEE      Au   *
  EEEE     eAu   *
  EEEE      Ag   *******
  EEEE     eAg   *
  EEEE      As   *********
  EEEE     eAs   **
  EEEE      Cu   *
  EEEE     eCu   *
  EEEE      Zn   *
  EEEE     eZn   *
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

01B GRP.FIVE C-833

```
                                   M86-05-18A

                       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                             0          0           0


                                       1-1A

                      FROM      TO     TYPE   SS   BEDROCK
                       124      131     80    20      131

                               40% PYRITE ON PANNING

                  PPM NON MAG   PPM MAG       VG
                     7037          2728       0        0

                      Au:  125                eAu:  880
                      Ag:  .4                 eAg:  2.8
                      As:  286                eAs:  2013
                      Cu:  320                eCu:  2252
                      Zn:  93                 eZn:  654



               Surface
                  EEEE
                  EEEE
                  EEEE
                  EEEE        MIN                    MAX
                  EEEE     NM *******
                  EEEE    MAG *
                  EEEE     Au *
                  EEEE    eAu *
                  EEEE     Ag *
                  EEEE    eAg *
                  EEEE     As **
                  EEEE    eAs **
                  EEEE     Cu *
                  EEEE    eCu *
                  EEEE     Zn *
                  EEEE    eZn *
                  EEEE
                  OOOO
                  OOOO
                  OOOO
                  XXXX
                  XXXX
```

```
             M86-05-18A

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0


                 1B-C

     FROM    TO   TYPE  SS  BEDROCK
      124    131   80   20     131

            30% PYRITE ON PANNING

  PPM NON MAG  PPM MAG      VG
      8106         3162     2      0

     Au: 50               eAu: 405
     Ag: .8               eAg: 6.5
     As: 1184             eAs: 9598
     Cu: 410              eCu: 3324
     Zn: 78               eZn: 632


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  ********
  EEEE   MAG  **
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  ***
  EEEE   eAg  ****
  EEEE    As  ***********
  EEEE   eAs  *************
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  2222
  2222
  2222
  XXXX
  XXXX
```

01B GRP.FIVE C-833

```
                         M86-05-18A

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                    0           0           0

                             01D

            FROM     TO    TYPE   SS   BEDROCK
             124     131    80    20      131

                    30% PYRITE ON PANNING

         PPM NON MAG   PPM MAG      VG
             7186          3232      0       0

            Au: 55                  eAu: 395
            Ag: .7                  eAg: 5
            As: 1040                eAs: 7474
            Cu: 380                 eCu: 2731
            Zn: 64                  eZn: 460


      Surface
        EEEE
        EEEE
        EEEE
        EEEE         MIN                 MAX
        EEEE    NM   *******
        EEEE   MAG   **
        EEEE    Au   *
        EEEE   eAu   *
        EEEE    Ag   **
        EEEE   eAg   ***
        EEEE    As   **********
        EEEE   eAs   **********
        EEEE    Cu   *
        EEEE   eCu   *
        EEEE    Zn   *
        EEEE   eZn   *
        EEEE
        0000
        0000
        0000
        XXXX
        XXXX
```

```
                              M86-05-18A

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0           0

                                 1E-F

                 FROM      TO    TYPE   SS   BEDROCK
                  124     131     80    20      131

                         20% PYRITE ON PANNING

           PPM NON MAG   PPM MAG      VG
               5486         2992       0        0

                 Au:  190                  eAu:  1042
                 Ag:  1.1                  eAg:  6
                 As:  704                  eAs:  3862
                 Cu:  380                  eCu:  2085
                 Zn:  70                   eZn:  384


         Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                  MAX
           EEEE     NM   *****
           EEEE    MAG   **
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   ****
           EEEE    eAg   ***
           EEEE     As   *******
           EEEE    eAs   *****
           EEEE     Cu   *
           EEEE    eCu   *
           EEEE     Zn   *
           EEEE    eZn   *
           EEEE
           OOOO
           OOOO
           OOOO
           XXXX
           XXXX
```

```
                          M86-05-18A

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0            0           0

                               02

             FROM      TO    TYPE   SS   BEDROCK
              131      135    90    30      131

                        PROCESSED BEDROCK

          PPM NON MAG   PPM MAG      VG
              3032        2065       0       0

             Au:  90                eAu:  273
             Ag:  2.1               eAg:  6.4
             As:  368               eAs:  1116
             Cu:  550               eCu:  1668
             Zn:  274               eZn:  831


        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                    MAX
          EEEE     NM   ***
          EEEE    MAG   *
          EEEE     Au   *
          EEEE    eAu   *
          EEEE     Ag   *******
          EEEE    eAg   ****
          EEEE     As   ***
          EEEE    eAs   *
          EEEE     Cu   *
          EEEE    eCu   *
          EEEE     Zn   *
          EEEE    eZn   *
          EEEE
          EEEE
          0000
          0000
          XXXX
          XXXX
```

```
O/B GRP.FIVE C-833

                    M86-05-19

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0           0

                      1-1A

          FROM    TO   TYPE   SS  BEDROCK
           95    100    80    20      100

               30% PYRITE ON PANNING

       PPM NON MAG  PPM MAG     VG
          19134        2816      0      0

          Au: 30                eAu: 574
          Ag: .5                eAg: 9.6
          As: 768               eAs: 14695
          Cu: 164               eCu: 3138
          Zn: 137               eZn: 2621


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *******************
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  ******
  EEEE    As  *******
  EEEE   eAs  ********************
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  ****
  EEEE
  EEEE
  OOOO
  OOOO
  XXXX
  XXXX
```

O/B GRP.FIVE C-833

```
              M86-05-19

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0


                 1B-C

     FROM    TO   TYPE  SS  BEDROCK
       95    100   80   20     100

             40% PYRITE ON PANNING

  PPM NON MAG   PPM MAG     VG
      7142        2708      0      0

     Au: 60                 eAu: 429
     Ag: .9                 eAg: 6.4
     As: 624                eAs: 4457
     Cu: 200                eCu: 1428
     Zn: 154                eZn: 1100



Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE     NM *******
  EEEE    MAG *
  EEEE     Au *
  EEEE    eAu *
  EEEE     Ag ***
  EEEE    eAg ****
  EEEE     As ******
  EEEE    eAs ******
  EEEE     Cu *
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-19

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
            0           0            0

                 1D-E

     FROM    TO    TYPE  SS  BEDROCK
       95    100    80   20     100

            30% PYRITE ON PANNING

  PPM NON MAG  PPM MAG      VG
      4452        2520       0      0

     Au: 25                eAu: 111
     Ag: .8                eAg: 3.6
     As: 496               eAs: 2208
     Cu: 210               eCu: 935
     Zn: 142               eZn: 632


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN               MAX
  EEEE     NM  ****
  EEEE    MAG  *
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  ***
  EEEE    eAg  **
  EEEE     As  ****
  EEEE    eAs  ***
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  *
  EEEE    eZn  *
  EEEE
  EEEE
  OOOO
  OOOO
  XXXX
  XXXX
```

O/B GRP.FIVE C-833

```
              M86-05-20

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 1-1A

     FROM    TO   TYPE  SS  BEDROCK
       56    65    80   10      74


  PPM NON MAG  PPM MAG     VG
      2527       28737     0      0

     Au: 35              eAu: 88
     Ag: .5              eAg: 1.3
     As: 184             eAs: 465
     Cu: 340             eCu: 859
     Zn: 62              eZn: 157


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  **
  EEEE    MAG  ********************
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  *
  EEEE    eAg  *
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  0000     Zn  *
  0000    eZn  *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                       M86-05-20

             DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0          0          0

                              02

          FROM      TO    TYPE   SS   BEDROCK
            65      70     80    20        74


  PPM NON MAG    PPM MAG        VG
     2222          2105         0        0

          Au:  25                Au:  56
          Ag:  .6               eAg:  1.3
          As:  177              eAs:  393
          Cu:  340              eCu:  756
          Zn:  62               eZn:  138


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                    MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   **
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-20

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0          0          0

                                03

               FROM      TO    TYPE   SS   BEDROCK
                 70      74     80    20        74


            PPM NON MAG  PPM MAG       VG
                2505        1899       0       0

               Au:  425                  eAu:  1065
               Ag:  .2                   eAg:  .5
               As:  103                  eAs:  258
               Cu:  245                  eCu:  614
               Zn:  60                   eZn:  150


         Surface
           EEEE
           EEEE
           EEEE
           EEEE         MIN                    MAX
           EEEE     NM  **
           EEEE    MAG  *
           EEEE     Au  *
           EEEE    eAu  *
           EEEE     Ag  *
           EEEE    eAg  *
           EEEE     As  *
           EEEE    eAs  *
           EEEE     Cu  *
           EEEE    eCu  *
           EEEE     Zn  *
           EEEE    eZn  *
           EEEE
           0000
           0000
           0000
           XXXX
           XXXX
```

OIB GRP.FIVE C-833

```
              M86-05-21

    DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0          0           0

                 1-1A

     FROM     TO    TYPE  SS   BEDROCK
       63      71    80   20       71

            50% PYRITE ON PANNING

  PPM NON MAG   PPM MAG      VG    ASPY
      2095          3312      2       1

     Au: 5700               eAu: 11943
     Ag: .8                 eAg: 1.7
     As: 260                eAs: 545
     Cu: 230                eCu: 482
     Zn: 96                 eZn: 201


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  **
  EEEE    MAG  **
  EEEE     Au  ***
  EEEE    eAu  ******************
  EEEE     Ag  ***
  EEEE    eAg  *
  EEEE     As  **
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  *
  EEEE    eZn  *
  2222
  2222
  2222
  2222
  XXXX
  XXXX
```

```
                          M86-05-22

             DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                   0           0           0

                              01

           FROM      TO     TYPE    SS   BEDROCK
             65      75      80     10        89


        PPM NON MAG   PPM MAG       VG
           2385          1846       0        0

           Au:  120                  eAu:  286
           Ag:  .9                   eAg:  2.1
           As:  260                  eAs:  620
           Cu:  300                  eCu:  715
           Zn:  56                   eZn:  134


      Surface
        EEEE
        EEEE
        EEEE
        EEEE          MIN                     MAX
        EEEE     NM   **
        EEEE    MAG   *
        EEEE     Au   *
        EEEE    eAu   *
        EEEE     Ag   ***
        EEEE    eAg   *
        EEEE     As   **
        EEEE    eAs   *
        EEEE     Cu   *
        0000    eCu   *
        0000     Zn   *
        0000    eZn   *
        EEEE
        EEEE
        EEEE
        EEEE
        XXXX
        XXXX
```

```
                    M86-05-22

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0          0          0

                            02

        FROM      TO    TYPE   SS   BEDROCK
          75      85     80    10        89


     PPM NON MAG   PPM MAG      VG
         3852         2716      0       0

        Au: 85                  eAu: 327
        Ag: 1.5                 eAg: 5.8
        As: 167                 eAs: 643
        Cu: 230                 eCu: 886
        Zn: 65                  eZn: 250


   Surface
     EEEE
     EEEE
     EEEE
     EEEE          MIN                MAX
     EEEE     NM   ***
     EEEE    MAG   *
     EEEE     Au   *
     EEEE    eAu   *
     EEEE     Ag   *****
     EEEE    eAg   ***
     EEEE     As   *
     EEEE    eAs   *
     EEEE     Cu   *
     EEEE    eCu   *
     EEEE     Zn   *
     0000    eZn   *
     0000
     0000
     0000
     EEEE
     XXXX
     XXXX
```

01B GRP.FIVE C-833

```
                    M86-05-22

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                       3-3A

         FROM     TO    TYPE   SS   BEDROCK
           85     89     80    20       89

              35% COARSE PY ON PANNING

      PPM NON MAG   PPM MAG      VG
          2650          2017      1      0

         Au: 1225             eAu: 3246
         Ag: 2.1              eAg: 5.6
         As: 322              eAs: 853
         Cu: 400              eCu: 1060
         Zn: 300              eZn: 795


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                 MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   ****
  EEEE     Ag   *******
  EEEE    eAg   ***
  EEEE     As   ***
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   **
  EEEE    eZn   *
  EEEE
  EEEE
  1111
  1111
  XXXX
  XXXX
```

```
           M86-05-23

      DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
          0    0     0

             1-1A

    FROM      TO    TYPE   SS   BEDROCK
      54      64    80     20        64


  PPM NON MAG   PPM MAG      VG
     2308          3833      0       0

    Au:  100               eAu:  231
    Ag:  .5                eAg:  1.2
    As:  370               eAs:  854
    Cu:  330               eCu:  762
    Zn:  69                eZn:  159


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN                   MAX
  EEEE     NM  **
  EEEE    MAG  **
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  *
  EEEE    eAg  *
  EEEE     As  ***
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  *
  0000    eZn  *
  0000
  0000
  0000
  0000
  XXXX
  XXXX
```

```
                         M86-05-24

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0          0          0

                            1-1A

          FROM      TO     TYPE    SS   BEDROCK
            66      69      80     20        69


      PPM NON MAG   PPM MAG      VG
         2211          3426       0          0

          Au: 40                      eAu: 88
          Ag: .05                     eAg: .1
          As: 31                      eAs: 69
          Cu: 44                      eCu: 97
          Zn: 22                      eZn: 49


   Surface
      EEEE
      EEEE
      EEEE
      EEEE            MIN                     MAX
      EEEE      NM    **
      EEEE     MAG    **
      EEEE      Au    *
      EEEE     eAu    *
      EEEE      Ag    *
      EEEE     eAg    *
      EEEE      As    *
      EEEE     eAs    *
      EEEE      Cu    *
      EEEE     eCu    *
      EEEE      Zn    *
      EEEE     eZn    *
      EEEE
      EEEE
      0000
      0000
      XXXX
      XXXX
```

```
                                        M86-05-24

                                 DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                                       0      0      0

                                             02

                               FROM    TO   TYPE  SS  BEDROCK
                                 69     74   90   30      69

                                         PROCESSES BEDROCK

                            PPM NON MAG  PPM MAG     VG
                                1859        1939     0      0

                               Au: 180             eAu: 335
                               Ag: .7              eAg: 1.3
                               As: 488             eAs: 907
                               Cu: 530             eCu: 985
                               Zn: 185             eZn: 344


                          Surface
                            EEEE
                            EEEE
                            EEEE
                            EEEE        MIN              MAX
                            EEEE    NM  *
                            EEEE   MAG  *
                            EEEE    Au  *
                            EEEE   eAu  *
                            EEEE    Ag  **
                            EEEE   eAg  *
                            EEEE    As  ****
                            EEEE   eAs  *
                            EEEE    Cu  *
                            EEEE   eCu  *
                            EEEE    Zn  *
                            EEEE   eZn  *
                            EEEE
                            EEEE
                            0000
                            0000
                            0000
                            XXXX
```

OIB GRP.FIVE C-833

```
              M86-05-25

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 7-7D

     FROM    TO   TYPE  SS  BEDROCK
      115    125   80   10      160

             15% PYRITE ON PANNING

  PPM NON MAG   PPM MAG     VG
      1976         2623     0      0

     Au: 805              eAu: 1590
     Ag: 1.2              eAg: 2.4
     As: 600              eAs: 1185
     Cu: 300              eCu: 593
     Zn: 57               eZn: 113


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   *
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   **
  EEEE     Ag   ****
  EEEE    eAg   *
  EEEE     As   ******
  EEEE    eAs   *
  EEEE     Cu   *
  0000    eCu   *
  0000     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

018 GRP.FIVE C-833

```
              M86-05-25

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                 8-8C

     FROM    TO   TYPE  SS  BEDROCK
      125    130   80   10       160


  PPM NON MAG  PPM MAG     VG
      1592        2757     0      0

     Au: 255             eAu: 406
     Ag: 3.1             eAg: 4.9
     As: 464             eAs: 739
     Cu: 350             eCu: 557
     Zn: 80              eZn: 127


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  ***********
  EEEE   eAg  ***
  EEEE    As  ****
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  0000    Zn  *
  0000   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-25

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0          0          0

                            9-9C

              FROM      TO    TYPE   SS   BEDROCK
               130     135     80    10      160


           PPM NON MAG   PPM MAG       VG
               2012         1699        0       0

              Au:  60                  eAu:  121
              Ag:  .9                  eAg:  1.8
              As:  280                 eAs:  563
              Cu:  400                 eCu:  805
              Zn:  108                 eZn:  217


         Surface
           EEEE
           EEEE
           EEEE
           EEEE         MIN                 MAX
           EEEE     NM  *
           EEEE    MAG  *
           EEEE     Au  *
           EEEE    eAu  *
           EEEE     Ag  ***
           EEEE    eAg  *
           EEEE     As  **
           EEEE    eAs  *
           EEEE     Cu  *
           EEEE    eCu  *
           EEEE     Zn  *
           OOOO    eZn  *
           EEEE
           EEEE
           EEEE
           EEEE
           XXXX
           XXXX
```

```
              M86-05-25

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 10-B

     FROM    TO   TYPE  SS  BEDROCK
      135    140   80   10     160


  PPM NON MAG  PPM MAG     VG
      1796        1252     0      0

     Au: 140                Au: 251
     Ag: .9                eAg: 1.6
     As: 512               eAs: 920
     Cu: 930               eCu: 1670
     Zn: 64                eZn: 115


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  *
  EEEE    MAG  *
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  ***
  EEEE    eAg  *
  EEEE     As  *****
  EEEE    eAs  *
  EEEE     Cu  ***
  EEEE    eCu  *
  EEEE     Zn  *
  0000    eZn  *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                              M86-05-25

                 DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                                11-C

              FROM      TO    TYPE    SS   BEDROCK
               140     145     80     10       160


          PPM NON MAG   PPM MAG       VG
                694          741       0         0

              Au:  90                     eAu:  62
              Ag:  .6                     eAg:  .4
              As:  256                    eAs:  178
              Cu:  470                    eCu:  326
              Zn:  65                     eZn:  45


         Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                   MAX
           EEEE     NM   *
           EEEE    MAG   *
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   **
           EEEE    eAg   *
           EEEE     As   **
           EEEE    eAs   *
           EEEE     Cu   *
           EEEE    eCu   *
           EEEE     Zn   *
           EEEE    eZn   *
           OOOO
           OOOO
           EEEE
           EEEE
           XXXX
           XXXX
```

```
              M86-05-25

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 12-C

     FROM       TO     TYPE   SS   BEDROCK
      145      150      80    10      160


  PPM NON MAG   PPM MAG       VG
       891           1058      0       0

     Au:  245                  eAu:  218
     Ag:  .9                   eAg:  .8
     As:  382                  eAs:  340
     Cu:  430                  eCu:  383
     Zn:  67                   eZn:  60


Surface
  EEEE
  EEEE
  EEEE
  EEEE           MIN                MAX
  EEEE     NM    *
  EEEE    MAG    *
  EEEE     Au    *
  EEEE    eAu    *
  EEEE     Ag    ***
  EEEE    eAg    *
  EEEE     As    ***
  EEEE    eAs    *
  EEEE     Cu    *
  EEEE    eCu    *
  EEEE     Zn    *
  EEEE    eZn    *
  EEEE
  OOOO
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-26

             DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0          0          0

                             01

          FROM      TO    TYPE   SS   BEDROCK
            51      55     80    20        59


       PPM NON MAG   PPM MAG       VG
           4074          4148       0        0

          Au: 50                   eAu: 204
          Ag: 1.2                  eAg: 4.9
          As: 136                  eAs: 554
          Cu: 380                  eCu: 1548
          Zn: 87                   eZn: 354


     Surface
       EEEE
       EEEE
       EEEE
       EEEE         MIN                  MAX
       EEEE     NM  ****
       EEEE    MAG  **
       EEEE     Au  *
       EEEE    eAu  *
       EEEE     Ag  ****
       EEEE    eAg  ***
       EEEE     As  *
       EEEE    eAs  *
       EEEE     Cu  *
       EEEE    eCu  *
       EEEE     Zn  *
       EEEE    eZn  *
       0000
       0000
       EEEE
       EEEE
       XXXX
       XXXX
```

```
                         M86-05-26

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0           0

                            2-2A

           FROM      TO    TYPE   SS   BEDROCK
             55      59     80    20        59


        PPM NON MAG   PPM MAG      VG
            3310          2805      0       0

           Au: 335                 eAu: 1109
           Ag: 1.4                 eAg: 4.6
           As: 398                 eAs: 1318
           Cu: 660                 eCu: 2185
           Zn: 57                  eZn: 189


      Surface
        EEEE
        EEEE
        EEEE
        EEEE            MIN                 MAX
        EEEE     NM    ***
        EEEE    MAG    *
        EEEE     Au    *
        EEEE    eAu    *
        EEEE     Ag    *****
        EEEE    eAg    **
        EEEE     As    ***
        EEEE    eAs    *
        EEEE     Cu    **
        EEEE    eCu    *
        EEEE     Zn    *
        EEEE    eZn    *
        EEEE
        0000
        0000
        0000
        XXXX
        XXXX
```

```
                         M86-05-27

             DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                   0           0           0

                           1-1C

              FROM     TO    TYPE   SS   BEDROCK
               115     120    80    10      186


           PPM NON MAG   PPM MAG      VG
               2673         1964       0       0

              Au: 55                 eAu: 147
              Ag: .8                 eAg: 2.1
              As: 177                eAs: 473
              Cu: 315                eCu: 842
              Zn: 87                 eZn: 233


        Surface
          EEEE
          EEEE
          EEEE
          EEEE           MIN                MAX
          EEEE      NM   **
          EEEE     MAG   *
          EEEE      Au   *
          EEEE     eAu   *
          EEEE      Ag   ***
          EEEE     eAg   *
          EEEE      As   *
          0000     eAs   *
          EEEE      Cu   *
          EEEE     eCu   *
          EEEE      Zn   *
          EEEE     eZn   *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
                         M86-05-27

             DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                       0           0           0


                            2-2B

             FROM     TO    TYPE   SS   BEDROCK
              120     122    80    10      186


          PPM NON MAG   PPM MAG      VG
              3011         1893      0       0

             Au: 70                  eAu: 211
             Ag: .4                  eAg: 1.2
             As: 127                 eAs: 382
             Cu: 270                 eCu: 813
             Zn: 73                  eZn: 220


        Surface
          EEEE
          EEEE
          EEEE
          EEEE            MIN                 MAX
          EEEE      NM    ***
          EEEE     MAG    *
          EEEE      Au    *
          EEEE     eAu    *
          EEEE      Ag    *
          EEEE     eAg    *
          EEEE      As    *
          0000     eAs    *
          0000      Cu    *
          EEEE     eCu    *
          EEEE      Zn    *
          EEEE     eZn    *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
              M86-05-27

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                  3-5

     FROM    TO   TYPE  SS  BEDROCK
      125    130   80    10      186

             20% PYRITE ON PANNING

  PPM NON MAG  PPM MAG      VG
      1564        1678      0      0

     Au: 840             eAu: 1314
     Ag: 1.1             eAg: 1.7
     As: 272             eAs: 425
     Cu: 360             eCu: 563
     Zn: 123             eZn: 192


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  ****
  EEEE   eAg  *
  EEEE    As  **
  EEEE   eAs  *
  0000    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-27

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0          0           0

                           6-6A

             FROM      TO    TYPE   SS   BEDROCK
              130     135     80    10      186


          PPM NON MAG   PPM MAG      VG
              1822          1778      0       0

             Au: 95                 eAu: 173
             Ag: 1.9                eAg: 3.5
             As: 164                eAs: 299
             Cu: 270                eCu: 492
             Zn: 110                eZn: 200


      Surface
        EEEE
        EEEE
        EEEE
        EEEE          MIN                MAX
        EEEE     NM   *
        EEEE    MAG   *
        EEEE     Au   *
        EEEE    eAu   *
        EEEE     Ag   *******
        EEEE    eAg   **
        EEEE     As   *
        EEEE    eAs   *
        0000     Cu   *
        0000    eCu   *
        EEEE     Zn   *
        EEEE    eZn   *
        EEEE
        EEEE
        EEEE
        EEEE
        XXXX
        XXXX
```

```
              M86-05-27

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0


                 7-8A

     FROM    TO   TYPE  SS   BEDROCK
      135    145   80   10      186


  PPM NON MAG   PPM MAG    VG
      1116          1057     0      0

     Au: 20                  eAu: 22
     Ag: .7                  eAg: .8
     As: 75                  eAs: 84
     Cu: 200                 eCu: 223
     Zn: 27                  eZn: 30


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  **
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  0000   eCu  *
  0000    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

O/B GRP.FIVE C-833

```
          M86-05-27

   DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

              09

   FROM     TO    TYPE   SS  BEDROCK
    145     155    80    10      186


 PPM NON MAG   PPM MAG      VG
    4194          2448      0      0

   Au:  35              eAu:  147
   Ag:  .2              eAg:  .8
   As:  2               eAs:  8
   Cu:  33              eCu:  138
   Zn:  12              eZn:  50


Surface
 EEEE
 EEEE
 EEEE
 EEEE           MIN              MAX
 EEEE      NM  ****
 EEEE     MAG  *
 EEEE      Au  *
 EEEE     eAu  *
 EEEE      Ag  *
 EEEE     eAg  *
 EEEE      As  *
 EEEE     eAs  *
 EEEE      Cu  *
 EEEE     eCu  *
 0000      Zn  *
 0000     eZn  *
 EEEE
 EEEE
 EEEE
 EEEE
 XXXX
 XXXX
```

```
              M86-05-27

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                  09A

     FROM    TO   TYPE  SS   BEDROCK
      145    155   80   10      186


  PPM NON MAG  PPM MAG     VG
      4176        2717     0      0

     Au: 2.5               eAu: 10
     Ag: .2                eAg: .8
     As: 4                 eAs: 17
     Cu: 25                eCu: 104
     Zn: 16                eZn: 67


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE    NM   ****
  EEEE   MAG   *
  EEEE    Au   *
  EEEE   eAu   *
  EEEE    Ag   *
  EEEE   eAg   *
  EEEE    As   *
  EEEE   eAs   *
  EEEE    Cu   *
  EEEE   eCu   *
  0000    Zn   *
  0000   eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                    M86-05-27

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
               0           0            0

                       10-A

          FROM     TO    TYPE   SS   BEDROCK
           155    165     80    10      186


     PPM NON MAG   PPM MAG      VG
         3137         2543       0        0

          Au:  30                eAu:  94
          Ag:  .1                eAg:  .3
          As:  4                 eAs:  13
          Cu:  13                eCu:  41
          Zn:  14                eZn:  44


   Surface
     EEEE
     EEEE
     EEEE
     EEEE          MIN                  MAX
     EEEE     NM   ***
     EEEE    MAG   *
     EEEE     Au   *
     EEEE    eAu   *
     EEEE     Ag   *
     EEEE    eAg   *
     EEEE     As   *
     EEEE    eAs   *
     EEEE     Cu   *
     EEEE    eCu   *
     EEEE     Zn   *
     0000    eZn   *
     0000
     EEEE
     EEEE
     EEEE
     XXXX
     XXXX
```

```
                          M86-05-27

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0           0           0

                             11-A

             FROM      TO    TYPE   SS   BEDROCK
              165     175     80    10      186


          PPM NON MAG   PPM MAG      VG
              2311         1478      0        0

             Au: 220                eAu: 508
             Ag: .2                 eAg: .5
             As: 2                  eAs: 5
             Cu: 37                 eCu: 86
             Zn: 14                 eZn: 32


        Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                     MAX
           EEEE     NM   **
           EEEE    MAG   *
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   *
           EEEE    eAg   *
           EEEE     As   *
           EEEE    eAs   *
           EEEE     Cu   *
           EEEE    eCu   *
           EEEE     Zn   *
           EEEE    eZn   *
           0000
           0000
           EEEE
           EEEE
           XXXX
           XXXX
```

```
                         M86-05-27

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0           0

                            12-A

                FROM     TO    TYPE   SS   BEDROCK
                 175     182    80    20     186


          PPM NON MAG   PPM MAG      VG
              4882          2656      0       0

                Au:  2.5                eAu:  12
                Ag:  .1                 eAg:  .5
                As:  6                  eAs:  29
                Cu:  36                 eCu:  176
                Zn:  15                 eZn:  73


        Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                MAX
           EEEE     NM   *****
           EEEE    MAG   *
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   *
           EEEE    eAg   *
           EEEE     As   *
           EEEE    eAs   *
           EEEE     Cu   *
           EEEE    eCu   *
           EEEE     Zn   *
           EEEE    eZn   *
           EEEE
           OOOO
           OOOO
           EEEE
           XXXX
           XXXX
```

```
                         M86-05-27

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                             1314

            FROM      TO    TYPE   SS   BEDROCK
             182     186     80    20      186


        PPM NON MAG   PPM MAG       VG
            4030         2026       0        0

            Au:  75                    eAu:  302
            Ag:  .5                    eAg:  2
            As:  568                   eAs:  2289
            Cu:  123                   eCu:  496
            Zn:  29                    eZn:  117


      Surface
        EEEE
        EEEE
        EEEE
        EEEE          MIN                  MAX
        EEEE     NM   ****
        EEEE    MAG   *
        EEEE     Au   *
        EEEE    eAu   *
        EEEE     Ag   *
        EEEE    eAg   *
        EEEE     As   *****
        EEEE    eAs   ***
        EEEE     Cu   *
        EEEE    eCu   *
        EEEE     Zn   *
        EEEE    eZn   *
        EEEE
        EEEE
        0000
        0000
        XXXX
        XXXX
```

```
              M86-05-27

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0            0           0

                 15-A

     FROM    TO   TYPE  SS   BEDROCK
      186    191   90   30      186

               PROCESSED BEDROCK

  PPM NON MAG   PPM MAG     VG
      5763         2294     0      0

     Au:  215                eAu:  1239
     Ag:  .5                 eAg:  2.9
     As:  2000               eAs:  11527
     Cu:  260                eCu:  1498
     Zn:  53                 eZn:  305


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   *****
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   ********************
  EEEE    eAs   ***************
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-28

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0          0


                 1-1A

     FROM      TO    TYPE   SS   BEDROCK
       85       90    50    20        90


  PPM NON MAG   PPM MAG      VG
      3293         2988      0      0

     Au:  105                eAu:  346
     Ag:  .4                 eAg:  1.3
     As:  171                eAs:  563
     Cu:  235                eCu:  774
     Zn:  71                 eZn:  234


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE      NM  ***
  EEEE     MAG  **
  EEEE      Au  *
  EEEE     eAu  *
  EEEE      Ag  *
  EEEE     eAg  *
  EEEE      As  *
  EEEE     eAs  *
  EEEE      Cu  *
  EEEE     eCu  *
  EEEE      Zn  *
  EEEE     eZn  *
  EEEE
  0000
  0000
  0000
  XXXX
  XXXX
```

```
                          M86-05-28A

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                       0           0           0

                              03

           FROM       TO     TYPE    SS   BEDROCK
            104      106      80     20      106


      PPM NON MAG   PPM MAG      VG
          4444          2476      0        0

           Au:  65                  eAu:  289
           Ag:  .9                  eAg:  4
           As:  230                 eAs:  1022
           Cu:  350                 eCu:  1556
           Zn:  84                  eZn:  373


 Surface
   EEEE
   EEEE
   EEEE
   EEEE           MIN                    MAX
   EEEE      NM   ****
   EEEE     MAG   *
   EEEE      Au   *
   EEEE     eAu   *
   EEEE      Ag   ***
   EEEE     eAg   **
   EEEE      As   **
   EEEE     eAs   *
   EEEE      Cu   *
   EEEE     eCu   *
   EEEE      Zn   *
   EEEE     eZn   *
   EEEE
   EEEE
   0000
   0000
   XXXX
   XXXX
```

```
                    M86-05-28A

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
           0           0            0

                       4-4A

      FROM      TO     TYPE    SS    BEDROCK
       106      107     90     30      106

               PROCESSED BDRCK 30% PY

   PPM NON MAG   PPM MAG       VG
       1789         2276       2       0

      Au:  7040                eAu:  12592
      Ag:  5.3                 eAg:  9.5
      As:  165                 eAs:  295
      Cu:  380                 eCu:  680
      Zn:  72                  eZn:  129


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  ****
  EEEE   eAu  *******************
  EEEE    Ag  ********************
  EEEE   eAg  ******
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  2222
  2222
  XXXX
  XXXX
```

```
                              M86-05-29

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                            0           0           0

                                 1-AB

                 FROM       TO    TYPE   SS   BEDROCK
                   86       87     80    20       87


            PPM NON MAG   PPM MAG       VG
                1440          2045      0          0

                 Au: 280                    eAu: 403
                 Ag: .6                     eAg: .9
                 As: 254                    eAs: 366
                 Cu: 210                    eCu: 302
                 Zn: 65                     eZn: 94


         Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                MAX
           EEEE     NM   *
           EEEE    MAG   *
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   **
           EEEE    eAg   *
           EEEE     As   **
           EEEE    eAs   *
           EEEE     Cu   *
           EEEE    eCu   *
           EEEE     Zn   *
           EEEE    eZn   *
           EEEE
           EEEE
           0000
           0000
           XXXX
           XXXX
```

```
              M86-05-30

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 1-AB

     FROM    TO   TYPE  SS  BEDROCK
       66     70   80   20      76


  PPM NON MAG  PPM MAG     VG
      1712        2140     0      0

     Au:  115              eAu:  197
     Ag:  1.3              eAg:  2.2
     As:  220              eAs:  377
     Cu:  320              eCu:  548
     Zn:  80               eZn:  137


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  ****
  EEEE   eAg  *
  EEEE    As  **
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-30

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
              0          0          0

                 2-AB

     FROM    TO   TYPE  SS  BEDROCK
       70    75    80   20      76


  PPM NON MAG  PPM MAG     VG
      3114         3609    1      0

     Au: 70                   eAu: 218
     Ag: 1.2                  eAg: 3.7
     As: 162                  eAs: 504
     Cu: 280                  eCu: 872
     Zn: 80                   eZn: 249


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  ***
  EEEE    MAG  **
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  ****
  EEEE    eAg  **
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  *
  EEEE    eZn  *
  EEEE
  1111
  1111
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-30

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0           0

                            3-3A

           FROM       TO    TYPE   SS   BEDROCK
             75       76     80    20        76


      PPM NON MAG   PPM MAG      VG
         2679          4123      0        0

           Au:  60                   eAu:  161
           Ag:  1                    eAg:  2.7
           As:  130                  eAs:  348
           Cu:  190                  eCu:  509
           Zn:  137                  eZn:  367


   Surface
     EEEE
     EEEE
     EEEE
     EEEE            MIN                       MAX
     EEEE      NM    **
     EEEE     MAG    **
     EEEE      Au    *
     EEEE     eAu    *
     EEEE      Ag    ***
     EEEE     eAg    *
     EEEE      As    *
     EEEE     eAs    *
     EEEE      Cu    *
     EEEE     eCu    *
     EEEE      Zn    *
     EEEE     eZn    *
     EEEE
     EEEE
     0000
     0000
     XXXX
     XXXX
```

```
018 GRP.FIVE C-833

              M86-05-30

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0            0            0

                 4-4A

     FROM    TO   TYPE  SS   BEDROCK
       76     79   90   30       76

            PROCESSED BDRCK 40% PY

  PPM NON MAG   PPM MAG     VG
      2768          1253     1      0

     Au:  185           eAu:  512
     Ag:  3.5           eAg:  9.7
     As:  238           eAs:  659
     Cu:  315           eCu:  872
     Zn:  625           eZn:  1730


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  **
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *************
  EEEE   eAg  ******
  EEEE    As  **
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  ****
  EEEE   eZn  ***
  EEEE
  EEEE
  EEEE
  1111
  XXXX
  XXXX
```

OIB GRP.FIVE C-833

```
                    M86-05-31

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
          0           0           0

                      1-AB

     FROM      TO     TYPE   SS   BEDROCK
      76       77      80    20      77

              10% PYRITE ON PANNING

  PPM NON MAG   PPM MAG      VG
     2108          2477      2        0

     Au:  160                eAu:  337
     Ag:  2                  eAg:  4.2
     As:  408                eAs:  860
     Cu:  455                eCu:  959
     Zn:  116                eZn:  244



Surface
   EEEE
   EEEE
   EEEE
   EEEE          MIN                      MAX
   EEEE     NM   **
   EEEE    MAG   *
   EEEE     Au   *
   EEEE    eAu   *
   EEEE     Ag   *******
   EEEE    eAg   **
   EEEE     As   ****
   EEEE    eAs   *
   EEEE     Cu   *
   EEEE    eCu   *
   EEEE     Zn   *
   EEEE    eZn   *
   EEEE
   EEEE
   2222
   2222
   XXXX
   XXXX
```

```
                              M86-05-32

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                             0           0           0

                                 1-1A

                     FROM      TO    TYPE   SS   BEDROCK
                       59      60     80    20        60


                PPM NON MAG   PPM MAG      VG
                     2170        2314      0        0

                     Au:  130                eAu:  282
                     Ag:  1.4                eAg:  3
                     As:  244                eAs:  529
                     Cu:  360                eCu:  781
                     Zn:  405                eZn:  879


             Surface
               EEEE
               EEEE
               EEEE
               EEEE         MIN                  MAX
               EEEE     NM  **
               EEEE    MAG  *
               EEEE     Au  *
               EEEE    eAu  *
               EEEE     Ag  *****
               EEEE    eAg  *
               EEEE     As  **
               EEEE    eAs  *
               EEEE     Cu  *
               EEEE    eCu  *
               EEEE     Zn  **
               EEEE    eZn  *
               EEEE
               EEEE
               0000
               0000
               XXXX
               XXXX
```

```
                         M86-05-34

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0            0

                            1ABC

                FROM      TO    TYPE   SS   BEDROCK
                  80       95    80    20        97


         PPM NON MAG   PPM MAG       VG
             4177          4043      1        0

                Au:  140                  eAu:  585
                Ag:  1.3                  eAg:  5.4
                As:  504                  eAs:  2105
                Cu:  300                  eCu:  1253
                Zn:  103                  eZn:  430


       Surface
          EEEE
          EEEE
          EEEE
          EEEE            MIN                  MAX
          EEEE      NM   ****
          EEEE     MAG   **
          EEEE      Au   *
          EEEE     eAu   *
          EEEE      Ag   ****
          EEEE     eAg   ***
          EEEE      As   *****
          EEEE     eAs   **
          EEEE      Cu   *
          EEEE     eCu   *
          EEEE      Zn   *
          1111     eZn   *
          1111
          1111
          1111
          EEEE
          XXXX
          XXXX
```

```
                            M86-05-34

                 DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0          0           0

                                  1D

              FROM      TO    TYPE   SS   BEDROCK
                80       95    80    20        97


          PPM NON MAG   PPM MAG      VG
             2373          2667      0       0

              Au:  200                 eAu:  475
              Ag:  1.5                 eAg:  3.6
              As:  472                 eAs:  1120
              Cu:  530                 eCu:  1258
              Zn:  120                 eZn:  285


        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                  MAX
          EEEE     NM   **
          EEEE    MAG   *
          EEEE     Au   *
          EEEE    eAu   *
          EEEE     Ag   *****
          EEEE    eAg   **
          EEEE     As   ****
          EEEE    eAs   *
          EEEE     Cu   *
          EEEE    eCu   *
          EEEE     Zn   *
          0000    eZn   *
          0000
          0000
          0000
          EEEE
          XXXX
          XXXX
```

```
              M86-05-34

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0          0           0

                   1E

     FROM     TO    TYPE  SS   BEDROCK
       80      95    80   20        97

             10% PYRITE ON PANNING

  PPM NON MAG   PPM MAG     VG
      1795          1718    0      0

     Au: 975                 eAu: 1750
     Ag: 1.1                 eAg: 2
     As: 276                 eAs: 495
     Cu: 275                 eCu: 494
     Zn: 74                  eZn: 133


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE      NM  *
  EEEE     MAG  *
  EEEE      Au  *
  EEEE     eAu  **
  EEEE      Ag  ****
  EEEE     eAg  *
  EEEE      As  **
  EEEE     eAs  *
  EEEE      Cu  *
  EEEE     eCu  *
  EEEE      Zn  *
  0000     eZn  *
  0000
  0000
  0000
  EEEE
  XXXX
  XXXX
```

```
              M86-05-34

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 2-AB

     FROM     TO   TYPE  SS  BEDROCK
       95     97    80   20       97


  PPM NON MAG   PPM MAG     VG
      2383         1938     0      0

     Au:  350              eAu:  834
     Ag:  1.9              eAg:  4.5
     As:  424              eAs:  1010
     Cu:  380              eCu:  905
     Zn:  205              eZn:  488


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *******
  EEEE    eAg   **
  EEEE     As   ****
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  OOOO
  OOOO
  XXXX
  XXXX
```

```
                              M86-05-35

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                           0          0          0

                                1-2A

                FROM      TO     TYPE   SS   BEDROCK
                  99     115      80    10      147


            PPM NON MAG   PPM MAG      VG
               2542          2667      0         0

                Au: 120                  eAu: 305
                Ag: 2.8                  eAg: 7.1
                As: 440                  eAs: 1119
                Cu: 350                  eCu: 890
                Zn: 75                   eZn: 191


         Surface
            EEEE
            EEEE
            EEEE
            EEEE           MIN                    MAX
            EEEE      NM   **
            EEEE     MAG   *
            EEEE      Au   *
            EEEE     eAu   *
            EEEE      Ag   **********
            EEEE     eAg   ****
            EEEE      As   ****
            EEEE     eAs   *
            0000      Cu   *
            0000     eCu   *
            0000      Zn   *
            EEEE     eZn   *
            EEEE
            EEEE
            EEEE
            EEEE
            XXXX
            XXXX
```

```
                         M86-05-35

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                         0          0           0

                            3-4A

            FROM      TO    TYPE   SS   BEDROCK
             115      135    80    10      147

                    20% PYRITE ON PANNING

       PPM NON MAG   PPM MAG      VG
           1521         2252       0        0

            Au:  760                eAu:  1156
            Ag:  1                  eAg:  1.5
            As:  592                eAs:  900
            Cu:  325                eCu:  494
            Zn:  65                 eZn:  99


      Surface
        EEEE
        EEEE
        EEEE
        EEEE             MIN                       MAX
        EEEE       NM    *
        EEEE      MAG    *
        EEEE       Au    *
        EEEE      eAu    *
        EEEE       Ag    ***
        EEEE      eAg    *
        EEEE       As    *****
        EEEE      eAs    *
        EEEE       Cu    *
        EEEE      eCu    *
        0000       Zn    *
        0000      eZn    *
        0000
        0000
        EEEE
        EEEE
        XXXX
        XXXX
```

```
                         M86-05-35

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                   0           0           0

                            5-5A

            FROM      TO    TYPE   SS   BEDROCK
             135     145     80    20      147


       PPM NON MAG   PPM MAG      VG
          4950          6513      0       0

            Au:  210                eAu:  1040
            Ag:  1.8                eAg:  8.9
            As:  496                eAs:  2455
            Cu:  390                eCu:  1931
            Zn:  70                 eZn:  347


     Surface
       EEEE
       EEEE
       EEEE
       EEEE          MIN                MAX
       EEEE     NM   *****
       EEEE    MAG   ****
       EEEE     Au   *
       EEEE    eAu   *
       EEEE     Ag   ******
       EEEE    eAg   *****
       EEEE     As   ****
       EEEE    eAs   ***
       EEEE     Cu   *
       EEEE    eCu   *
       EEEE     Zn   *
       EEEE    eZn   *
       EEEE
       OOOO
       OOOO
       EEEE
       XXXX
       XXXX
```

018 GRP.FIVE C-833

```
              M86-05-35

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                 6-6A

     FROM    TO   TYPE  SS  BEDROCK
      145    147   80   20      147

             30% PYRITE ON PANNING

  PPM NON MAG   PPM MAG     VG
      5190         3828      1      0

     Au: 1960              eAu: 10172
     Ag: 1.3               eAg: 6.7
     As: 776               eAs: 4027
     Cu: 325               eCu: 1687
     Zn: 575               eZn: 2984


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  *****
  EEEE    MAG  **
  EEEE     Au  *
  EEEE    eAu  ***************
  EEEE     Ag  ****
  EEEE    eAg  ****
  EEEE     As  *******
  EEEE    eAs  *****
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  ***
  EEEE    eZn  *****
  EEEE
  EEEE
  1111
  1111
  XXXX
  XXXX
```

```
              M86-05-36

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                  1-2

     FROM    TO   TYPE  SS  BEDROCK
       20    35    80   10      108


  PPM NON MAG  PPM MAG     VG
      2486        2535     0      0

     Au:  170            eAu:  423
     Ag:  .7             eAg:  1.7
     As:  198            eAs:  492
     Cu:  230            eCu:  572
     Zn:  57             eZn:  142


Surface
  EEEE
  EEEE
  0000
  0000        MIN              MAX
  0000    NM  **
  0000   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  **
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-36

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                  3-4

     FROM    TO   TYPE  SS  BEDROCK
       35     55    80  10      108


  PPM NON MAG  PPM MAG    VG
       671          844    0      0

     Au:  20                eAu:  13
     Ag:  .3                eAg:  .2
     As:  102               eAs:  68
     Cu:  140               eCu:  94
     Zn:  32                eZn:  21


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN                MAX
  EEEE    NM   *
  0000   MAG   *
  0000    Au   *
  0000   eAu   *
  0000    Ag   *
  0000   eAg   *
  EEEE    As   *
  EEEE   eAs   *
  EEEE    Cu   *
  EEEE   eCu   *
  EEEE    Zn   *
  EEEE   eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-36

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
            0      0       0


                  5-7

     FROM    TO   TYPE  SS  BEDROCK
       55     65   80   10     108


  PPM NON MAG  PPM MAG     VG
      1029        1594     0     0

     Au: 25             eAu: 26
     Ag: .6             eAg: .6
     As: 109            eAs: 112
     Cu: 300            eCu: 309
     Zn: 58             eZn: 60


Surface
  EEEE
  EEEE
  EEEE
  EEEE           MIN                MAX
  EEEE      NM   *
  EEEE     MAG   *
  EEEE      Au   *
  EEEE     eAu   *
  EEEE      Ag   **
  0000     eAg   *
  0000      As   *
  0000     eAs   *
  EEEE      Cu   *
  EEEE     eCu   *
  EEEE      Zn   *
  EEEE     eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-36

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0           0

                             08

            FROM       TO     TYPE   SS   BEDROCK
              65       75      80    10      108


         PPM NON MAG   PPM MAG      VG
              824         1333      0        0

            Au:  55                   eAu:  45
            Ag:  .6                   eAg:  .5
            As:  72                   eAs:  59
            Cu:  600                  eCu:  494
            Zn:  72                   eZn:  59



       Surface
         EEEE
         EEEE
         EEEE
         EEEE          MIN                 MAX
         EEEE     NM   *
         EEEE    MAG   *
         EEEE     Au   *
         EEEE    eAu   *
         EEEE     Ag   **
         EEEE    eAg   *
         EEEE     As   *
         0000    eAs   *
         0000     Cu   *
         EEEE    eCu   *
         EEEE     Zn   *
         EEEE    eZn   *
         EEEE
         EEEE
         EEEE
         EEEE
         XXXX
         XXXX
```

```
                         M86-05-36

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0           0          0

                            9-9A

              FROM      TO    TYPE   SS   BEDROCK
                75      85     80    10      108


          PPM NON MAG   PPM MAG      VG
             1060          1738      0        0

              Au:  80                eAu:  85
              Ag:  .1                eAg:  .1
              As:  43                eAs:  46
              Cu:  195               eCu:  207
              Zn:  38                eZn:  40


        Surface
          EEEE
          EEEE
          EEEE
          EEEE             MIN                 MAX
          EEEE       NM    *
          EEEE      MAG    *
          EEEE       Au    *
          EEEE      eAu    *
          EEEE       Ag    *
          EEEE      eAg    *
          EEEE       As    *
          EEEE      eAs    *
          0000       Cu    *
          0000      eCu    *
          0000       Zn    *
          EEEE      eZn    *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
                         M86-05-36

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                            10-A

                FROM      TO    TYPE   SS   BEDROCK
                  85      95     80    10       108


            PPM NON MAG   PPM MAG      VG
                1528         1472      0         0

                Au:  70                   eAu:  107
                Ag:  1                    eAg:  1.5
                As:  230                  eAs:  351
                Cu:  320                  eCu:  489
                Zn:  87                   eZn:  133


          Surface
            EEEE
            EEEE
            EEEE
            EEEE          MIN                 MAX
            EEEE      NM  *
            EEEE     MAG  *
            EEEE      Au  *
            EEEE     eAu  *
            EEEE      Ag  ***
            EEEE     eAg  *
            EEEE      As  **
            EEEE     eAs  *
            EEEE      Cu  *
            EEEE     eCu  *
            0000      Zn  *
            0000     eZn  *
            0000
            EEEE
            EEEE
            EEEE
            XXXX
            XXXX
```

```
              M86-05-36

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0           0

                 11-A

     FROM    TO   TYPE  SS  BEDROCK
       95    105   80   20      108


  PPM NON MAG   PPM MAG     VG
     12614        4379      0      0

     Au: 50                eAu: 631
     Ag: 1.4               eAg: 17.7
     As: 456               eAs: 5752
     Cu: 350               eCu: 4415
     Zn: 875               eZn: 11038


Surface
  EEEE
  EEEE
  EEEE
  EEEE            MIN              MAX
  EEEE      NM    *************
  EEEE     MAG    ***
  EEEE      Au    *
  EEEE     eAu    *
  EEEE      Ag    *****
  EEEE     eAg    ***********
  EEEE      As    ****
  EEEE     eAs    *******
  EEEE      Cu    *
  EEEE     eCu    **
  EEEE      Zn    *****
  EEEE     eZn    *******************
  0000
  0000
  0000
  EEEE
  XXXX
  XXXX
```

```
                  M86-05-36

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
           0           0           0

                     12

      FROM      TO    TYPE   SS   BEDROCK
       105     108     80    20      108

              60% PYRITE ON PANNING

   PPM NON MAG   PPM MAG      VG
      18491         3193      0       0

      Au:  120               eAu:  2219
      Ag:  1.7               eAg:  31.4
      As:  552               eAs:  10207
      Cu:  370               eCu:  6842
      Zn:  575               eZn:  10632


Surface
  EEEE
  EEEE
  EEEE
  EEEE           MIN              MAX
  EEEE       NM  *******************
  EEEE      MAG  **
  EEEE       Au  *
  EEEE      eAu  ***
  EEEE       Ag  ******
  EEEE      eAg  ********************
  EEEE       As  *****
  EEEE      eAs  *************
  EEEE       Cu  *
  EEEE      eCu  ***
  EEEE       Zn  ***
  EEEE      eZn  *******************
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

```
                         M86-05-37

               DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0          0

                            1-1A

              FROM      TO    TYPE   SS   BEDROCK
                11      25     80    10      102


       PPM NON MAG   PPM MAG        VG
          1240          1552        0        0

             Au:  10                 eAu:  12
             Ag:  .2                 eAg:  .2
             As:  22                 eAs:  27
             Cu:  94                 eCu:  117
             Zn:  25                 eZn:  31


     Surface
       EEEE
       0000
       0000
       0000           MIN                      MAX
       EEEE     NM    *
       EEEE    MAG    *
       EEEE     Au    *
       EEEE    eAu    *
       EEEE     Ag    *
       EEEE    eAg    *
       EEEE     As    *
       EEEE    eAs    *
       EEEE     Cu    *
       EEEE    eCu    *
       EEEE     Zn    *
       EEEE    eZn    *
       EEEE
       EEEE
       EEEE
       EEEE
       XXXX
       XXXX
```

```
                         M86-05-37

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                             2-AB

             FROM      TO    TYPE   SS   BEDROCK
               25      45     80    10      102


         PPM NON MAG   PPM MAG       VG
             1495         1495       0        0

             Au:  45                  eAu:  67
             Ag:  1.4                 eAg:  2.1
             As:  36                  eAs:  54
             Cu:  320                 eCu:  478
             Zn:  120                 eZn:  179


       Surface
         EEEE
         EEEE
         EEEE
         0000           MIN                    MAX
         0000     NM    *
         0000    MAG    *
         0000     Au    *
         0000    eAu    *
         EEEE     Ag    *****
         EEEE    eAg    *
         EEEE     As    *
         EEEE    eAs    *
         EEEE     Cu    *
         EEEE    eCu    *
         EEEE     Zn    *
         EEEE    eZn    *
         EEEE
         EEEE
         EEEE
         EEEE
         XXXX
         XXXX
```

```
              M86-05-37

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                  3-4

     FROM    TO   TYPE  SS  BEDROCK
       45      65   80    10      102


  PPM NON MAG  PPM MAG     VG
      1119        1155      0      0

     Au: 7.5               eAu: 8
     Ag: .4                eAg: .4
     As: 92                eAs: 103
     Cu: 260               eCu: 291
     Zn: 30                eZn: 34


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  0000   eAu  *
  0000    Ag  *
  0000   eAg  *
  0000    As  *
  0000   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                          M86-05-37

         DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                   0           0          0


                              05

          FROM       TO    TYPE   SS   BEDROCK
           65        75     60    10      102


      PPM NON MAG   PPM MAG      VG
         1731          1918      0        0

          Au:  215                eAu:  372
          Ag:  .7                 eAg:  1.2
          As:  328                eAs:  568
          Cu:  155                eCu:  268
          Zn:  95                 eZn:  164


    Surface
      EEEE
      EEEE
      EEEE
      EEEE         MIN                MAX
      EEEE     NM  *
      EEEE    MAG  *
      EEEE     Au  *
      EEEE    eAu  *
      EEEE     Ag  **
      EEEE    eAg  *
      EEEE     As  ***
      0000    eAs  *
      0000     Cu  *
      0000    eCu  *
      EEEE     Zn  *
      EEEE    eZn  *
      EEEE
      EEEE
      EEEE
      EEEE
      XXXX
      XXXX
```

```
                              M86-05-37

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                                6-6A

              FROM      TO    TYPE   SS   BEDROCK
                75      95     60    10      102


          PPM NON MAG   PPM MAG      VG
              3945         2810      0      0

              Au:  45                eAu:  178
              Ag:  1.5               eAg:  5.9
              As:  150               eAs:  592
              Cu:  260               eCu:  1026
              Zn:  450               eZn:  1775


        Surface
          EEEE
          EEEE
          EEEE
          EEEE           MIN                MAX
          EEEE     NM    ****
          EEEE    MAG    *
          EEEE     Au    *
          EEEE    eAu    *
          EEEE     Ag    *****
          EEEE    eAg    ***
          EEEE     As    *
          EEEE    eAs    *
          EEEE     Cu    *
          0000    eCu    *
          0000     Zn    ***
          0000    eZn    ***
          0000
          0000
          EEEE
          EEEE
          XXXX
          XXXX
```

```
                 M86-05-37

   DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0           0

                   7-7A

       FROM     TO    TYPE   SS   BEDROCK
         95     102    80    20      102


    PPM NON MAG   PPM MAG      VG
       13242         3212      0       0

       Au:  35                eAu:  463
       Ag:  1.3               eAg:  17.2
       As:  484               eAs:  6409
       Cu:  300               eCu:  3973
       Zn:  460               eZn:  6092



  Surface
    EEEE
    EEEE
    EEEE
    EEEE         MIN               MAX
    EEEE     NM  *************
    EEEE    MAG  **
    EEEE     Au  *
    EEEE    eAu  *
    EEEE     Ag  ****
    EEEE    eAg  **********
    EEEE     As  ****
    EEEE    eAs  ********
    EEEE     Cu  *
    EEEE    eCu  **
    EEEE     Zn  ***
    EEEE    eZn  ***********
    EEEE
    0000
    0000
    0000
    XXXX
    XXXX
```

```
                          M86-05-38

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                    0           0           0

                             1-1A

            FROM      TO    TYPE   SS   BEDROCK
              68      70     80    20       70

                 25% COARSE PY OR PANNING

         PPM NON MAG   PPM MAG      VG
             5968         4159      0       0

            Au:  1400              eAu:  8356
            Ag:  1.1               eAg:  6.6
            As:  179               eAs:  1068
            Cu:  365               eCu:  2178
            Zn:  230               eZn:  1373


      Surface
        EEEE
        EEEE
        EEEE
        EEEE          MIN                   MAX
        EEEE     NM   ******
        EEEE    MAG   **
        EEEE     Au   *
        EEEE    eAu   ************
        EEEE     Ag   ****
        EEEE    eAg   ****
        EEEE     As   *
        EEEE    eAs   *
        EEEE     Cu   *
        EEEE    eCu   *
        EEEE     Zn   *
        EEEE    eZn   **
        EEEE
        EEEE
        OOOO
        OOOO
        XXXX
        XXXX
```

```
                         M86-05-39

             DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0           0          0

                            1-1A

              FROM      TO    TYPE   SS   BEDROCK
                67      70     80    10       100


          PPM NON MAG   PPM MAG      VG
             2275          2290      0        0

              Au:  315                 eAu:  717
              Ag:  .8                  eAg:  1.8
              As:  151                 eAs:  344
              Cu:  315                 eCu:  717
              Zn:  180                 eZn:  410



        Surface
          EEEE
          EEEE
          EEEE
          EEEE           MIN                      MAX
          EEEE      NM   **
          EEEE     MAG   *
          EEEE      Au   *
          EEEE     eAu   *
          EEEE      Ag   ***
          EEEE     eAg   *
          EEEE      As   *
          EEEE     eAs   *
          0000      Cu   *
          0000     eCu   *
          EEEE      Zn   *
          EEEE     eZn   *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
                          M86-05-39

               DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                         0          0           0


                             2-AB

                 FROM      TO    TYPE   SS   BEDROCK
                   70      75     80    10      100


             PPM NON MAG   PPM MAG       VG
                 2101          2034       0        0

                 Au:  515                 eAu:  1082
                 Ag:  .5                  eAg:  1.1
                 As:  71                  eAs:  149
                 Cu:  320                 eCu:  672
                 Zn:  114                 eZn:  240


          Surface
            EEEE
            EEEE
            EEEE
            EEEE          MIN                   MAX
            EEEE     NM   **
            EEEE    MAG   *
            EEEE     Au   *
            EEEE    eAu   *
            EEEE     Ag   *
            EEEE    eAg   *
            EEEE     As   *
            EEEE    eAs   *
            EEEE     Cu   *
            0000    eCu   *
            0000     Zn   *
            EEEE    eZn   *
            EEEE
            EEEE
            EEEE
            EEEE
            XXXX
            XXXX
```

```
                         M86-05-39

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0          0          0

                           3-3A

          FROM      TO    TYPE   SS   BEDROCK
            75      80     80    10       100


       PPM NON MAG   PPM MAG       VG
           2127          2228      0        0

          Au: 35                    eAu: 74
          Ag: .4                    eAg: .9
          As: 47                    eAs: 100
          Cu: 150                   eCu: 319
          Zn: 50                    eZn: 106


    Surface
      EEEE
      EEEE
      EEEE
      EEEE        MIN                 MAX
      EEEE     NM  **
      EEEE    MAG  *
      EEEE     Au  *
      EEEE    eAu  *
      EEEE     Ag  *
      EEEE    eAg  *
      EEEE     As  *
      EEEE    eAs  *
      EEEE     Cu  *
      EEEE    eCu  *
      OOOO     Zn  *
      OOOO    eZn  *
      EEEE
      EEEE
      EEEE
      EEEE
      XXXX
      XXXX
```

```
                      M86-05-39

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0           0           0


                         4-4A

    FROM      TO    TYPE   SS   BEDROCK
      80      85     80    10      100


  PPM NON MAG   PPM MAG      VG
     3126          2667      0        0

    Au:  10                 eAu:  31
    Ag:  .2                 eAg:  .6
    As:  37                 eAs:  116
    Cu:  50                 eCu:  156
    Zn:  22                 eZn:  69



Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                 MAX
  EEEE     NM   ***
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  0000    eZn   *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-39
       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 5-6A
     FROM    TO   TYPE  SS  BEDROCK
       85     89   80    10     100


  PPM NON MAG  PPM MAG      VG
      1636        2780       0      0

     Au: 15              eAu: 25
     Ag: .6              eAg: 1
     As: 139             eAs: 227
     Cu: 315             eCu: 515
     Zn: 82              eZn: 134


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE      NM  *
  EEEE     MAG  *
  EEEE      Au  *
  EEEE     eAu  *
  EEEE      Ag  **
  EEEE     eAg  *
  EEEE      As  *
  EEEE     eAs  *
  EEEE      Cu  *
  EEEE     eCu  *
  EEEE      Zn  *
  EEEE     eZn  *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

01B GRP.FIVE C-833

```
                              M86-05-40

                 DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0           0

                                 1-1A

                FROM      TO    TYPE   SS   BEDROCK
                  15      20     80    20       24


             PPM NON MAG   PPM MAG      VG
                 137          3299      0        0

                Au: 35                eAu: 5
                Ag: .8                eAg: .1
                As: 52                eAs: 7
                Cu: 230               eCu: 32
                Zn: 100               eZn: 14


          Surface
            EEEE
            EEEE
            EEEE
            EEEE          MIN                   MAX
            EEEE     NM   *
            EEEE    MAG   **
            EEEE     Au   *
            EEEE    eAu   *
            EEEE     Ag   ***
            EEEE    eAg   *
            EEEE     As   *
            0000    eAs   *
            0000     Cu   *
            0000    eCu   *
            0000     Zn   *
            0000    eZn   *
            EEEE
            EEEE
            EEEE
            EEEE
            XXXX
            XXXX
```

O/B GRP.FIVE C-833

```
                    M86-05-40

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
              0          0          0

                       2-2A

     FROM     TO    TYPE   SS   BEDROCK
      20      24     80    20       24

                2% PYRITE ON PANNING

 PPM NON MAG   PPM MAG      VG
     127          6146      0       0

     Au: 2920              eAu: 371
     Ag: .05               eAg: 0
     As: 10                eAs: 1
     Cu: 45                eCu: 6
     Zn: 22                eZn: 3


Surface
 EEEE
 EEEE
 EEEE
 EEEE        MIN              MAX
 EEEE    NM  *
 EEEE   MAG  ****
 EEEE    Au  *
 EEEE   eAu  *
 EEEE    Ag  *
 EEEE   eAg  *
 EEEE    As  *
 EEEE   eAs  *
 EEEE    Cu  *
 EEEE   eCu  *
 EEEE    Zn  *
 0000   eZn  *
 0000
 0000
 0000
 0000
 XXXX
 XXXX
```

```
              M86-05-41

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 1-1A

     FROM    TO   TYPE  SS  BEDROCK
       34     36   80   20      36


  PPM NON MAG  PPM MAG     VG
      2771        1922     0      0

     Au: 165               eAu: 457
     Ag: .5                eAg: 1.4
     As: 156               eAs: 432
     Cu: 350               eCu: 970
     Zn: 89                eZn: 247


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE    NM   **
  EEEE   MAG   *
  EEEE    Au   *
  EEEE   eAu   *
  EEEE    Ag   *
  EEEE   eAg   *
  EEEE    As   *
  EEEE   eAs   *
  EEEE    Cu   *
  EEEE   eCu   *
  EEEE    Zn   *
  EEEE   eZn   *
  EEEE
  0000
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-42

       BEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
              0          0          0

                   01

     FROM    TO   TYPE  SS   BEDROCK
      100    105   80   10      126


  PPM NON MAG  PPM MAG     VG
      2345        2069     0      0

     Au: 45              eAu: 106
     Ag: .4              eAg: .9
     As: 81              eAs: 190
     Cu: 340             eCu: 797
     Zn: 100             eZn: 234


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  0000     Zn   *
  0000    eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-42

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                   02

     FROM    TO    TYPE  SS  BEDROCK
      105    116    80   10      126


  PPM NON MAG  PPM MAG     VG
      1853        1040     0      0

     Au: 35                Au: 65
     Ag: .05               eAg: .1
     As: 38                eAs: 70
     Cu: 162               eCu: 300
     Zn: 76                eZn: 141


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE      NM  *
  EEEE     MAG  *
  EEEE      Au  *
  EEEE     eAu  *
  EEEE      Ag  *
  EEEE     eAg  *
  EEEE      As  *
  EEEE     eAs  *
  EEEE      Cu  *
  EEEE     eCu  *
  EEEE      Zn  *
  OOOO     eZn  *
  OOOO
  OOOO
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-42

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                   03

     FROM    TO   TYPE  SS  BEDROCK
      116   125    80   20     126

            AU CUT FROM 127000 PPB

  PPM NON MAG   PPM MAG     VG
       131          235     0      0

     Au: 34286              eAu: 4482
     Ag: 0                  eAg: 0
     As: 0                  eAs: 0
     Cu: 0                  eCu: 0
     Zn: 0                  eZn: 0



Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE      NM  *
  EEEE     MAG  *
  EEEE      Au  *******************
  EEEE     eAu  ******
  EEEE      Ag  N
  EEEE     eAg  N
  EEEE      As  N
  EEEE     eAs  N
  EEEE      Cu  N
  EEEE     eCu  N
  EEEE      Zn  N
  EEEE     eZn  N
  EEEE
  OOOO
  OOOO
  EEEE
  XXXX
  XXXX
```

```
              M86-05-42

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0           0

                   04

     FROM    TO    TYPE  SS   BEDROCK
      125    126    80   20      126

             50% PYRITE ON PANNING

  PPM NON MAG  PPM MAG     VG
      5908         1569     1      0

     Au: 40                eAu: 236
     Ag: .4                eAg: 2.4
     As: 244               eAs: 1442
     Cu: 490               eCu: 2895
     Zn: 335               eZn: 1979


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE    NM   ******
  EEEE   MAG   *
  EEEE    Au   *
  EEEE   eAu   *
  EEEE    Ag   *
  EEEE   eAg   *
  EEEE    As   **
  EEEE   eAs   *
  EEEE    Cu   *
  EEEE   eCu   *
  EEEE    Zn   **
  EEEE   eZn   ***
  EEEE
  EEEE
  1111
  1111
  XXXX
  XXXX
```

```
                              M86-05-43

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                             0           0           0

                                 1-1A

               FROM       TO     TYPE    SS   BEDROCK
                 63       70      80     10      102


          PPM NON MAG   PPM MAG       VG
               1014        2579       0          0

               Au:  95                    eAu:  96
               Ag:  .05                   eAg:  .1
               As:  17                    eAs:  17
               Cu:  142                   eCu:  144
               Zn:  124                   eZn:  126


        Surface
           EEEE
           EEEE
           EEEE
           EEEE            MIN                      MAX
           EEEE       NM   *
           EEEE      MAG   *
           EEEE       Au   *
           EEEE      eAu   *
           EEEE       Ag   *
           EEEE      eAg   *
           EEEE       As   *
           0000      eAs   *
           0000       Cu   *
           EEEE      eCu   *
           EEEE       Zn   *
           EEEE      eZn   *
           EEEE
           EEEE
           EEEE
           EEEE
           XXXX
           XXXX
```

OIB GRP.FIVE C-833

```
                         M86-05-43

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                         0           0           0

                            2-2A

              FROM      TO    TYPE   SS   BEDROCK
                70      75     80    10      102


        PPM NON MAG   PPM MAG       VG
             2152        2530       0         0

            Au:  35                    eAu:  75
            Ag:  .05                   eAg:  .1
            As:  18                    eAs:  39
            Cu:  132                   eCu:  284
            Zn:  58                    eZn:  125


    Surface
       EEEE
       EEEE
       EEEE
       EEEE           MIN                        MAX
       EEEE      NM   **
       EEEE     MAG   *
       EEEE      Au   *
       EEEE     eAu   *
       EEEE      Ag   *
       EEEE     eAg   *
       EEEE      As   *
       EEEE     eAs   *
       0000      Cu   *
       0000     eCu   *
       EEEE      Zn   *
       EEEE     eZn   *
       EEEE
       EEEE
       EEEE
       EEEE
       XXXX
       XXXX
```

```
                              M86-05-43

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                           0           0           0

                                 3-5

             FROM       TO    TYPE   SS   BEDROCK
               75       90     80    10      102


         PPM NON MAG   PPM MAG      VG
             2270          2391     0       0

             Au:  145                eAu:  329
             Ag:  .05                eAg:  .1
             As:  16                 eAs:  36
             Cu:  210                eCu:  477
             Zn:  56                 eZn:  127


        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                MAX
          EEEE     NM   **
          EEEE    MAG   *
          EEEE     Au   *
          EEEE    eAu   *
          EEEE     Ag   *
          EEEE    eAg   *
          EEEE     As   *
          EEEE    eAs   *
          EEEE     Cu   *
          0000    eCu   *
          0000     Zn   *
          0000    eZn   *
          0000
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
                              M86-05-43

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                            0          0          0

                                 6-7

                 FROM      TO     TYPE    SS   BEDROCK
                   90      102     80     20      102


           PPM NON MAG   PPM MAG      VG
               2153          2024      0       0

                 Au:  90                 eAu:  194
                 Ag:  .2                 eAg:  .4
                 As:  26                 eAs:  56
                 Cu:  188                eCu:  405
                 Zn:  80                 eZn:  172


          Surface
            EEEE
            EEEE
            EEEE
            EEEE          MIN                 MAX
            EEEE      NM  **
            EEEE     MAG  *
            EEEE      Au  *
            EEEE     eAu  *
            EEEE      Ag  *
            EEEE     eAg  *
            EEEE      As  *
            EEEE     eAs  *
            EEEE      Cu  *
            EEEE     eCu  *
            EEEE      Zn  *
            EEEE     eZn  *
            0000
            0000
            0000
            0000
            XXXX
            XXXX
```

```
                         M86-05-44

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                       0           0           0

                            1-1A

             FROM       TO    TYPE   SS   BEDROCK
               75       80     80    10       120


         PPM NON MAG   PPM MAG       VG
            2379          2816       0        0

             Au:  60                  eAu:  143
             Ag:  .1                  eAg:  .2
             As:  56                  eAs:  133
             Cu:  168                 eCu:  400
             Zn:  36                  eZn:  86


       Surface
         EEEE
         EEEE
         EEEE
         EEEE          MIN                   MAX
         EEEE     NM   **
         EEEE    MAG   *
         EEEE     Au   *
         EEEE    eAu   *
         EEEE     Ag   *
         EEEE    eAg   *
         EEEE     As   *
         0000    eAs   *
         0000     Cu   *
         EEEE    eCu   *
         EEEE     Zn   *
         EEEE    eZn   *
         EEEE
         EEEE
         EEEE
         EEEE
         XXXX
         XXXX
```

```
                              M86-05-44

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                                  02

               FROM      TO    TYPE   SS   BEDROCK
                 80      85     80    10      120


          PPM NON MAG   PPM MAG      VG
              2830         2259      0        0

               Au:  325              eAu:  920
               Ag:  .05              eAg:  .1
               As:  20               eAs:  57
               Cu:  200              eCu:  566
               Zn:  112              eZn:  317


       Surface
          EEEE
          EEEE
          EEEE
          EEEE           MIN                 MAX
          EEEE      NM   **
          EEEE     MAG   *
          EEEE      Au   *
          EEEE     eAu   *
          EEEE      Ag   *
          EEEE     eAg   *
          EEEE      As   *
          EEEE     eAs   *
          0000      Cu   *
          0000     eCu   *
          EEEE      Zn   *
          EEEE     eZn   *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
              M86-05-44

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                   03

     FROM     TO    TYPE  SS   BEDROCK
       85     95     80   10      120


  PPM NON MAG   PPM MAG     VG
      3766        4982      0      0

     Au:  410                eAu:  1544
     Ag:  .1                 eAg:  .4
     As:  48                 eAs:  181
     Cu:  210                eCu:  791
     Zn:  54                 eZn:  203


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN               MAX
  EEEE     NM   ***
  EEEE    MAG   ***
  EEEE     Au   *
  EEEE    eAu   **
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  0000    eCu   *
  0000     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-44

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0            0            0

                   04

     FROM    TO   TYPE  SS  BEDROCK
       95    105   80   10     120


  PPM NON MAG  PPM MAG    VG
      3593        3185     0      0

     Au: 30                  eAu: 108
     Ag: .05                 eAg: .2
     As: 34                  eAs: 122
     Cu: 290                 eCu: 1042
     Zn: 60                  eZn: 216


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  ***
  EEEE    MAG  **
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  *
  EEEE    eAg  *
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  0000     Zn  *
  0000    eZn  *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-44

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0            0            0

                   05

     FROM    TO   TYPE  SS  BEDROCK
      105    109   80   10     120


  PPM NON MAG  PPM MAG     VG
      2359        1538     0      0

     Au:  245              eAu:  578
     Ag:  .05              eAg:  .1
     As:  34               eAs:  80
     Cu:  230              eCu:  543
     Zn:  60               eZn:  142


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE    NM   **
  EEEE   MAG   *
  EEEE    Au   *
  EEEE   eAu   *
  EEEE    Ag   *
  EEEE   eAg   *
  EEEE    As   *
  EEEE   eAs   *
  EEEE    Cu   *
  EEEE   eCu   *
  EEEE    Zn   *
  EEEE   eZn   *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-44

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0          0          0

                   06

     FROM    TO   TYPE  SS  BEDROCK
      109    112   80   10     120

             5% PYRITE ON PANNING

  PPM NON MAG   PPM MAG     VG
      1481         2173     1      0

     Au: 20                eAu: 30
     Ag: .4                eAg: .6
     As: 95                eAs: 141
     Cu: 1125              eCu: 1667
     Zn: 74                eZn: 110


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN               MAX
  EEEE     NM  *
  EEEE    MAG  *
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  *
  EEEE    eAg  *
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  ***
  EEEE    eCu  *
  EEEE     Zn  *
  EEEE    eZn  *
  EEEE
  1111
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-45

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 1-1A

     FROM    TO   TYPE  SS  BEDROCK
       59     65   80   10     146

             1% PYRITE ON PANNING

  PPM NON MAG  PPM MAG     VG
      1921        1989      1      0

     Au: 625              eAu: 1201
     Ag: .05              eAg: .1
     As: 41               eAs: 79
     Cu: 124              eCu: 238
     Zn: 34               eZn: 65


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE     NM *
  EEEE    MAG *
  EEEE     Au *
  1111    eAu *
  EEEE     Ag *
  EEEE    eAg *
  EEEE     As *
  EEEE    eAs *
  EEEE     Cu *
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                    M86-05-45

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                  0           0           0

                      2-2A

        FROM      TO    TYPE   SS   BEDROCK
          65      75     80    10      146


     PPM NON MAG   PPM MAG       VG
         2097         2473       0        0

        Au:  5                   eAu:  10
        Ag:  .05                 eAg:  .1
        As:  21                  eAs:  44
        Cu:  136                 eCu:  285
        Zn:  50                  eZn:  105


   Surface
     EEEE
     EEEE
     EEEE
     EEEE             MIN                MAX
     EEEE       NM    **
     EEEE      MAG    *
     EEEE       Au    *
     0000      eAu    *
     0000       Ag    *
     0000      eAg    *
     EEEE       As    *
     EEEE      eAs    *
     EEEE       Cu    *
     EEEE      eCu    *
     EEEE       Zn    *
     EEEE      eZn    *
     EEEE
     EEEE
     EEEE
     EEEE
     XXXX
     XXXX
```

```
                                    M86-05-45

                       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                                  0          0           0

                                       3-A4

                        FROM      TO    TYPE   SS   BEDROCK
                          75      85     80    10       146


                     PPM NON MAG   PPM MAG      VG
                         2097          2278     0         0

                        Au:  10                   eAu:  21
                        Ag:  .05                  eAg:  .1
                        As:  15                   eAs:  31
                        Cu:  152                  eCu:  319
                        Zn:  54                   eZn:  113


                   Surface
                     EEEE
                     EEEE
                     EEEE
                     EEEE          MIN                    MAX
                     EEEE     NM   **
                     EEEE    MAG   *
                     EEEE     Au   *
                     EEEE    eAu   *
                     EEEE     Ag   *
                     0000    eAg   *
                     0000     As   *
                     EEEE    eAs   *
                     EEEE     Cu   *
                     EEEE    eCu   *
                     EEEE     Zn   *
                     EEEE    eZn   *
                     EEEE
                     EEEE
                     EEEE
                     EEEE
                     XXXX
                     XXXX
```

```
              M86-05-45

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                  5-6

     FROM    TO   TYPE  SS  BEDROCK
       85    105   80   10      146


  PPM NON MAG  PPM MAG     VG
      2519        2815     0      0

     Au:  70                 eAu:  176
     Ag:  .05                eAg:  .1
     As:  39                 eAs:  98
     Cu:  124                eCu:  312
     Zn:  44                 eZn:  111


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE    NM    **
  EEEE   MAG    *
  EEEE    Au    *
  EEEE   eAu    *
  EEEE    Ag    *
  EEEE   eAg    *
  0000    As    *
  0000   eAs    *
  0000    Cu    *
  0000   eCu    *
  EEEE    Zn    *
  EEEE   eZn    *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-45

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0          0

                            07

          FROM      TO    TYPE   SS   BEDROCK
           105     115     80    10      146

                   5% PYRITE ON PANNING

       PPM NON MAG   PPM MAG      VG
           2194         1833      0        0

          Au:  1670                eAu:  3665
          Ag:  .1                  eAg:  .2
          As:  72                  eAs:  158
          Cu:  330                 eCu:  724
          Zn:  114                 eZn:  250


     Surface
       EEEE
       EEEE
       EEEE
       EEEE             MIN                  MAX
       EEEE      NM     **
       EEEE     MAG     *
       EEEE      Au     *
       EEEE     eAu     *****
       EEEE      Ag     *
       EEEE     eAg     *
       EEEE      As     *
       EEEE     eAs     *
       EEEE      Cu     *
       0000     eCu     *
       0000      Zn     *
       EEEE     eZn     *
       EEEE
       EEEE
       EEEE
       EEEE
       XXXX
       XXXX
```

```
          M86-05-45

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0          0          0

             8-9A

    FROM     TO    TYPE  SS   BEDROCK
     115     125    80   10      146


  PPM NON MAG  PPM MAG     VG
    1673         1986      0      0

    Au: 45                eAu: 75
    Ag: .05               eAg: .1
    As: 57                eAs: 95
    Cu: 198               eCu: 331
    Zn: 74                eZn: 124


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN          MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  0000    Zn  *
  0000   eZn  *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

0/B GRP.FIVE C-833

```
                         M86-05-45

               DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                              10

              FROM       TO     TYPE   SS   BEDROCK
               125      135     80     10      146


          PPM NON MAG   PPM MAG       VG
              1656          2065      0         0

              Au:  10                eAu:  17
              Ag:  .05               eAg:  .1
              As:  50                eAs:  83
              Cu:  200               eCu:  331
              Zn:  120               eZn:  199


        Surface
           EEEE
           EEEE
           EEEE
           EEEE         MIN                      MAX
           EEEE    NM   *
           EEEE   MAG   *
           EEEE    Au   *
           EEEE   eAu   *
           EEEE    Ag   *
           EEEE   eAg   *
           EEEE    As   *
           EEEE   eAs   *
           EEEE    Cu   *
           EEEE   eCu   *
           EEEE    Zn   *
           EEEE   eZn   *
           0000
           0000
           EEEE
           EEEE
           XXXX
           XXXX
```

```
              M86-05-45

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 11-A

     FROM    TO   TYPE  SS  BEDROCK
      135    145   80   20     146


  PPM NON MAG   PPM MAG     VG
      1841         1593     0      0

     Au: 135                eAu: 248
     Ag: .2                 eAg: .4
     As: 258                eAs: 475
     Cu: 375                eCu: 690
     Zn: 97                 eZn: 179


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   *
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   **
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  OOOO
  OOOO
  EEEE
  XXXX
  XXXX
```

```
                              M86-05-45

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0            0           0

                                 12

              FROM      TO     TYPE   SS   BEDROCK
               145      146     80    20      146


         PPM NON MAG   PPM MAG        VG
              3699          3527       0        0

              Au: 30                   eAu: 111
              Ag: .1                   eAg: .4
              As: 175                  eAs: 647
              Cu: 340                  eCu: 1258
              Zn: 133                  eZn: 492



        Surface
           EEEE
           EEEE
           EEEE
           EEEE             MIN                   MAX
           EEEE        NM   ***
           EEEE       MAG   **
           EEEE        Au   *
           EEEE       eAu   *
           EEEE        Ag   *
           EEEE       eAg   *
           EEEE        As   *
           EEEE       eAs   *
           EEEE        Cu   *
           EEEE       eCu   *
           EEEE        Zn   *
           EEEE       eZn   *
           EEEE
           EEEE
           0000
           0000
           XXXX
           XXXX
```

```
                         M86-05-46

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                            01

            FROM      TO     TYPE   SS   BEDROCK
              54      65      80    10      135


         PPM NON MAG   PPM MAG       VG
           2063          1560        0        0

            Au:  25                 eAu:  52
            Ag:  .3                 eAg:  .6
            As:  9                  eAs:  19
            Cu:  94                 eCu:  194
            Zn:  40                 eZn:  83


        Surface
          EEEE
          EEEE
          EEEE
          EEEE            MIN                     MAX
          EEEE       NM   **
          EEEE      MAG   *
          EEEE       Au   *
          0000      eAu   *
          0000       Ag   *
          EEEE      eAg   *
          EEEE       As   *
          EEEE      eAs   *
          EEEE       Cu   *
          EEEE      eCu   *
          EEEE       Zn   *
          EEEE      eZn   *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
                         M86-05-46

               DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                            2-2A

               FROM      TO    TYPE   SS   BEDROCK
                 65      75     80    10       135


          PPM NON MAG   PPM MAG      VG
              1333          1263      0          0

               Au:  5                     eAu:  7
               Ag:  .05                   eAg:  .1
               As:  11                    eAs:  15
               Cu:  85                    eCu:  113
               Zn:  44                    eZn:  59


        Surface
          EEEE
          EEEE
          EEEE
          EEEE          MIN                     MAX
          EEEE     NM   *
          EEEE    MAG   *
          EEEE     Au   *
          EEEE    eAu   *
          0000     Ag   *
          0000    eAg   *
          0000     As   *
          EEEE    eAs   *
          EEEE     Cu   *
          EEEE    eCu   *
          EEEE     Zn   *
          EEEE    eZn   *
          EEEE
          EEEE
          EEEE
          EEEE
          XXXX
          XXXX
```

```
                         M86-05-46

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0          0          0

                            03

          FROM      TO    TYPE   SS   BEDROCK
            75      85     80    10      135


      PPM NON MAG   PPM MAG       VG
          2000         1172       0        0

          Au:  7.5                eAu:  15
          Ag:  .05                eAg:  .1
          As:  8                  eAs:  16
          Cu:  220                eCu:  440
          Zn:  40                 eZn:  80


   Surface
      EEEE
      EEEE
      EEEE
      EEEE            MIN                      MAX
      EEEE      NM    *
      EEEE     MAG    *
      EEEE      Au    *
      EEEE     eAu    *
      EEEE      Ag    *
      EEEE     eAg    *
      OOOO      As    *
      OOOO     eAs    *
      EEEE      Cu    *
      EEEE     eCu    *
      EEEE      Zn    *
      EEEE     eZn    *
      EEEE
      EEEE
      EEEE
      EEEE
      XXXX
      XXXX
```

```
                        M86-05-46

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0           0

                            04

          FROM      TO     TYPE    SS    BEDROCK
            85      90      80     10      135


     PPM NON MAG   PPM MAG       VG
        2152          1544       0        0

          Au:  70                     eAu:  151
          Ag:  .1                     eAg:  .2
          As:  24                     eAs:  52
          Cu:  172                    eCu:  370
          Zn:  88                     eZn:  189


  Surface
     EEEE
     EEEE
     EEEE
     EEEE            MIN                        MAX
     EEEE      NM    **
     EEEE     MAG    *
     EEEE      Au    *
     EEEE     eAu    *
     EEEE      Ag    *
     EEEE     eAg    *
     EEEE      As    *
     0000     eAs    *
     0000      Cu    *
     EEEE     eCu    *
     EEEE      Zn    *
     EEEE     eZn    *
     EEEE
     EEEE
     EEEE
     EEEE
     XXXX
     XXXX
```

```
                         M86-05-46

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                    0           0           0

                           5-5A

           FROM      TO    TYPE   SS   BEDROCK
             90      95     80    10     135


       PPM NON MAG   PPM MAG      VG
           1702         1740      0        0

           Au: 210              eAu: 357
           Ag: .2               eAg: .3
           As: 32               eAs: 54
           Cu: 182              eCu: 310
           Zn: 60               eZn: 102


     Surface
       EEEE
       EEEE
       EEEE
       EEEE           MIN                MAX
       EEEE    NM     *
       EEEE   MAG     *
       EEEE    Au     *
       EEEE   eAu     *
       EEEE    Ag     *
       EEEE   eAg     *
       EEEE    As     *
       EEEE   eAs     *
       0000    Cu     *
       0000   eCu     *
       EEEE    Zn     *
       EEEE   eZn     *
       EEEE
       EEEE
       EEEE
       EEEE
       XXXX
       XXXX
```

018 GRP.FIVE C-833

```
                         M86-05-46

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                    0           0           0

                            6-6A

          FROM      TO    TYPE   SS   BEDROCK
            95     105     80    10      135


       PPM NON MAG   PPM MAG      VG
           1323          1592     0        0

          Au:  15                 eAu:  20
          Ag:  .1                 eAg:  .1
          As:  28                 eAs:  37
          Cu:  142                eCu:  188
          Zn:  72                 eZn:  95



     Surface
       EEEE
       EEEE
       EEEE
       EEEE          MIN                  MAX
       EEEE     NM   *
       EEEE    MAG   *
       EEEE     Au   *
       EEEE    eAu   *
       EEEE     Ag   *
       EEEE    eAg   *
       EEEE     As   *
       EEEE    eAs   *
       EEEE     Cu   *
       0000    eCu   *
       0000     Zn   *
       EEEE    eZn   *
       EEEE
       EEEE
       EEEE
       EEEE
       XXXX
       XXXX
```

OIB GRP.FIVE C-833

```
              M86-05-46

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 7-AB

     FROM     TO    TYPE   SS   BEDROCK
      105     112    80    10       135


  PPM NON MAG   PPM MAG      VG
      2282          1949     0      0

     Au:  20                eAu:  46
     Ag:  .1                eAg:  .2
     As:  43                eAs:  98
     Cu:  188               eCu:  429
     Zn:  96                eZn:  219


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  **
  EEEE    MAG  *
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  *
  EEEE    eAg  *
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  0000     Zn  *
  0000    eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-46

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0            0           0


                 8-AB

     FROM    TO   TYPE  SS  BEDROCK
      112    119   80   10     135


  PPM NON MAG   PPM MAG     VG
      2748         2803     0       0

     Au:  100               eAu:  275
     Ag:  .4                eAg:  1.1
     As:  93                eAs:  256
     Cu:  280               eCu:  770
     Zn:  120               eZn:  330



Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  0000    eZn   *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-46

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                 9-9A

     FROM    TO   TYPE  SS  BEDROCK
      119    125   80   10     135


  PPM NON MAG  PPM MAG     VG
      2339        3005     0      0

     Au: 140             eAu: 327
     Ag: .1              eAg: .2
     As: 168             eAs: 393
     Cu: 290             eCu: 678
     Zn: 136             eZn: 318


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  **
  EEEE   MAG  **
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                    M86-05-46

           DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                      0          0          0

                       10-A

       FROM      TO    TYPE   SS   BEDROCK
        125      130    80    20      135


   PPM NON MAG   PPM MAG      VG
      2775          2126      0        0

       Au:  45                    eAu:  125
       Ag:  .5                    eAg:  1.4
       As:  134                   eAs:  372
       Cu:  470                   eCu:  1304
       Zn:  136                   eZn:  377


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN                  MAX
  EEEE     NM  **
  EEEE    MAG  *
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  *
  EEEE    eAg  *
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  *
  EEEE    eZn  *
  EEEE
  OOOO
  OOOO
  EEEE
  XXXX
  XXXX
```

```
                              M86-05-46

                DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                       0           0           0

                                11-A

                    FROM     TO    TYPE   SS   BEDROCK
                     130     135    80    20     135


              PPM NON MAG   PPM MAG     VG
                 3301          3430     0       0

                    Au:  170                eAu:  561
                    Ag:  .2                 eAg:  .7
                    As:  92                 eAs:  304
                    Cu:  320                eCu:  1056
                    Zn:  130                eZn:  429


           Surface
             EEEE
             EEEE
             EEEE
             EEEE        MIN                   MAX
             EEEE     NM ***
             EEEE    MAG **
             EEEE     Au *
             EEEE    eAu *
             EEEE     Ag *
             EEEE    eAg *
             EEEE     As *
             EEEE    eAs *
             EEEE     Cu *
             EEEE    eCu *
             EEEE     Zn *
             EEEE    eZn *
             EEEE
             EEEE
             0000
             0000
             XXXX
             XXXX
```

```
                              M86-05-47

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                        0           0           0

                                1-1A

                 FROM      TO    TYPE   SS   BEDROCK
                   55      65     60    10      109


             PPM NON MAG   PPM MAG       VG
                2422          2190       0          0

                 Au:  10                    eAu:  24
                 Ag:  .05                   eAg:  .1
                 As:  21                    eAs:  51
                 Cu:  150                   eCu:  363
                 Zn:  30                    eZn:  73


          Surface
            EEEE
            EEEE
            EEEE
            EEEE          MIN                 MAX
            EEEE     NM   **
            EEEE    MAG   *
            EEEE     Au   *
            EEEE    eAu   *
            EEEE     Ag   *
            0000    eAg   *
            0000     As   *
            EEEE    eAs   *
            EEEE     Cu   *
            EEEE    eCu   *
            EEEE     Zn   *
            EEEE    eZn   *
            EEEE
            EEEE
            EEEE
            EEEE
            XXXX
            XXXX
```

```
              M86-05-47

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0            0           0

                 2-2A

     FROM    TO   TYPE  SS   BEDROCK
       65    75    60   10       109


  PPM NON MAG   PPM MAG     VG
      4282         3474     0      0

     Au:  40               eAu:  171
     Ag:  .1               eAg:  .4
     As:  13               eAs:  56
     Cu:  370              eCu:  1584
     Zn:  51               eZn:  218


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   ****
  EEEE    MAG   **
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  0000     As   *
  0000    eAs   *
  0000     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                    M86-05-47

        DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                   0           0           0

                      3-3A

         FROM      TO    TYPE   SS   BEDROCK
           75      85     60    10      109


      PPM NON MAG   PPM MAG      VG
          3358         3029      0       0

         Au:  255               eAu:  856
         Ag:  .05               eAg:  .2
         As:  224               eAs:  752
         Cu:  130               eCu:  437
         Zn:  32                eZn:  107



    Surface
      EEEE
      EEEE
      EEEE
      EEEE          MIN                   MAX
      EEEE     NM   ***
      EEEE    MAG   **
      EEEE     Au   *
      EEEE    eAu   *
      EEEE     Ag   *
      EEEE    eAg   *
      EEEE     As   **
      EEEE    eAs   *
      0000     Cu   *
      0000    eCu   *
      0000     Zn   *
      EEEE    eZn   *
      EEEE
      EEEE
      EEEE
      EEEE
      XXXX
      XXXX
```

```
              M86-05-47

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0           0           0

                   04

     FROM      TO    TYPE   SS   BEDROCK
       85      95     80    10      109


  PPM NON MAG   PPM MAG      VG
      3433         2833      0        0

     Au:  50                eAu:  172
     Ag:  .05               eAg:  .2
     As:  24                eAs:  82
     Cu:  132               eCu:  453
     Zn:  52                eZn:  179


Surface
  EEEE
  EEEE
  EEEE
  EEEE       MIN                MAX
  EEEE    NM ***
  EEEE   MAG *
  EEEE    Au *
  EEEE   eAu *
  EEEE    Ag *
  EEEE   eAg *
  EEEE    As *
  EEEE   eAs *
  EEEE    Cu *
  EEEE   eCu *
  0000    Zn *
  0000   eZn *
  0000
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-47

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                   0           0           0

                             05

          FROM      TO    TYPE    SS   BEDROCK
           95      100     80     10      109


     PPM NON MAG   PPM MAG        VG
        4333          4152        0          0

          Au:  35                      eAu:  152
          Ag:  .05                     eAg:  .2
          As:  31                      eAs:  134
          Cu:  250                     eCu:  1083
          Zn:  88                      eZn:  381



    Surface
      EEEE
      EEEE
      EEEE
      EEEE            MIN                        MAX
      EEEE       NM   ****
      EEEE      MAG   **
      EEEE       Au   *
      EEEE      eAu   *
      EEEE       Ag   *
      EEEE      eAg   *
      EEEE       As   *
      EEEE      eAs   *
      EEEE       Cu   *
      EEEE      eCu   *
      EEEE       Zn   *
      EEEE      eZn   *
      OOOO
      OOOO
      EEEE
      EEEE
      XXXX
      XXXX
```

```
          M86-05-47

     DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
          0         0          0

             6-6A

    FROM    TO    TYPE   SS   BEDROCK
     100    105    80    20      109


 PPM NON MAG  PPM MAG      VG
    4040        10828      0      0

    Au:  145              eAu:  586
    Ag:  .1               eAg:  .4
    As:  26               eAs:  105
    Cu:  192              eCu:  776
    Zn:  54               eZn:  218


Surface
 EEEE
 EEEE
 EEEE
 EEEE         MIN            MAX
 EEEE     NM  ****
 EEEE    MAG  *******
 EEEE     Au  *
 EEEE    eAu  *
 EEEE     Ag  *
 EEEE    eAg  *
 EEEE     As  *
 EEEE    eAs  *
 EEEE     Cu  *
 EEEE    eCu  *
 EEEE     Zn  *
 EEEE    eZn  *
 EEEE
 0000
 0000
 EEEE
 XXXX
 XXXX
```

```
                              M86-05-47

                    DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                          0           0           0

                                 07

                FROM      TO     TYPE   SS   BEDROCK
                 105      109     80    20      109


             PPM NON MAG   PPM MAG      VG
                3132          2543      0       0

                Au:  45                  eAu:  141
                Ag:  .1                  eAg:  .3
                As:  45                  eAs:  141
                Cu:  260                 eCu:  814
                Zn:  56                  eZn:  175



          Surface
            EEEE
            EEEE
            EEEE
            EEEE          MIN                   MAX
            EEEE     NM   ***
            EEEE    MAG   *
            EEEE     Au   *
            EEEE    eAu   *
            EEEE     Ag   *
            EEEE    eAg   *
            EEEE     As   *
            EEEE    eAs   *
            EEEE     Cu   *
            EEEE    eCu   *
            EEEE     Zn   *
            EEEE    eZn   *
            EEEE
            EEEE
            0000
            0000
            XXXX
            XXXX
```

```
                         M86-05-48

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0           0            0

                            01-2

               FROM      TO    TYPE   SS   BEDROCK
                 44      55     80    10      150


            PPM NON MAG   PPM MAG      VG
               2624          3204      1       0

               Au:  40                 eAu:  105
               Ag:  .1                 eAg:  .3
               As:  44                 eAs:  115
               Cu:  165                eCu:  433
               Zn:  50                 eZn:  131



          Surface
            EEEE
            EEEE
            EEEE
            EEEE         MIN                    MAX
            1111    NM   **
            1111   MAG   **
            1111    Au   *
            EEEE   eAu   *
            EEEE    Ag   *
            EEEE   eAg   *
            EEEE    As   *
            EEEE   eAs   *
            EEEE    Cu   *
            EEEE   eCu   *
            EEEE    Zn   *
            EEEE   eZn   *
            EEEE
            EEEE
            EEEE
            EEEE
            XXXX
            XXXX
```

```
              M86-05-48

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 03-4

     FROM    TO   TYPE  SS   BEDROCK
       65     75   80   10      150


  PPM NON MAG  PPM MAG     VG
      2346        2506     0      0

     Au:  65                eAu:  152
     Ag:  .05               eAg:  .1
     As:  19                eAs:  45
     Cu:  170               eCu:  399
     Zn:  54                eZn:  127


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN                MAX
  EEEE    NM  **
  EEEE   MAG  *
  EEEE    Au  *
  OOOO   eAu  *
  OOOO    Ag  *
  OOOO   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-48

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 05-6

     FROM    TO    TYPE  SS   BEDROCK
       75     85    80   10      150


  PPM NON MAG  PPM MAG     VG
      2325        2854      1      O

     Au:  25              eAu:  58
     Ag:  .1              eAg:  .2
     As:  19              eAs:  44
     Cu:  120             eCu:  279
     Zn:  48              eZn:  112


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE    NM    **
  EEEE   MAG    *
  EEEE    Au    *
  EEEE   eAu    *
  EEEE    Ag    *
  1111   eAg    *
  1111    As    *
  EEEE   eAs    *
  EEEE    Cu    *
  EEEE   eCu    *
  EEEE    Zn    *
  EEEE   eZn    *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-48

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 07-8

     FROM    TO    TYPE   SS   BEDROCK
       85    105    80    10       150


  PPM NON MAG   PPM MAG     VG
      2252          2992       1      0

     Au: 5870           eAu: 13220
     Ag: .2             eAg: .5
     As: 22             eAs: 50
     Cu: 157            eCu: 354
     Zn: 48             eZn: 108


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE      NM  **
  EEEE     MAG  **
  EEEE      Au  ***
  EEEE     eAu  ********************
  EEEE      Ag  *
  EEEE     eAg  *
  1111      As  *
  1111     eAs  *
  1111      Cu  *
  1111     eCu  *
  EEEE      Zn  *
  EEEE     eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-48

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0


                 9-10

     FROM    TO   TYPE  SS  BEDROCK
      105    125   80   10     150


  PPM NON MAG  PPM MAG     VG
      2793        3659     0      0

     Au: 20                eAu: 56
     Ag: .1                eAg: .3
     As: 17                eAs: 47
     Cu: 182               eCu: 508
     Zn: 50                eZn: 140



Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE    NM    **
  EEEE   MAG    **
  EEEE    Au    *
  EEEE   eAu    *
  EEEE    Ag    *
  EEEE   eAg    *
  EEEE    As    *
  EEEE   eAs    *
  EEEE    Cu    *
  0000   eCu    *
  0000    Zn    *
  0000   eZn    *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                         M86-05-48

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                         0          0          0

                            1112

            FROM      TO     TYPE   SS   BEDROCK
             125      145     80    10      150


        PPM NON MAG   PPM MAG      VG
            2233          2056     0         0

            Au:  35                  eAu:  78
            Ag:  .1                  eAg:  .2
            As:  51                  eAs:  114
            Cu:  220                 eCu:  491
            Zn:  126                 eZn:  281


      Surface
        EEEE
        EEEE
        EEEE
        EEEE         MIN                  MAX
        EEEE     NM  **
        EEEE    MAG  *
        EEEE     Au  *
        EEEE    eAu  *
        EEEE     Ag  *
        EEEE    eAg  *
        EEEE     As  *
        EEEE    eAs  *
        EEEE     Cu  *
        EEEE    eCu  *
        EEEE     Zn  *
        OOOO    eZn  *
        OOOO
        OOOO
        OOOO
        EEEE
        XXXX
        XXXX
```

```
              M86-05-48

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                    13

     FROM    TO   TYPE   SS  BEDROCK
      145    150   80    20      150


  PPM NON MAG  PPM MAG     VG
      1793        1057      0      0

     Au: 57                eAu: 102
     Ag: .3                eAg: .5
     As: 81                eAs: 145
     Cu: 775               eCu: 1390
     Zn: 270               eZn: 484


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN               MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  **
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-49

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0           0             0

                 01-2

     FROM    TO   TYPE  SS  BEDROCK
       25     45    80    10      86


  PPM NON MAG  PPM MAG     VG
      3544        3886     0      0

     Au: 380           eAu: 1347
     Ag: .3            eAg: 1.1
     As: 101           eAs: 358
     Cu: 172           eCu: 610
     Zn: 44            eZn: 156


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  0000    NM  ***
  0000   MAG  **
  0000    Au  *
  0000   eAu  **
  0000    Ag  *
  0000   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                                   M86-05-49

                       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                                 0          0          0

                                      03-5

                       FROM      TO    TYPE   SS   BEDROCK
                         45      75     80    10        86


                    PPM NON MAG   PPM MAG      VG
                        2470         2625      0        0

                       Au:  10                    eAu:  25
                       Ag:  .1                    eAg:  .2
                       As:  47                    eAs:  116
                       Cu:  156                   eCu:  385
                       Zn:  52                    eZn:  128


                  Surface
                    EEEE
                    EEEE
                    EEEE
                    EEEE           MIN                    MAX
                    EEEE      NM   **
                    EEEE     MAG   *
                    EEEE      Au   *
                    EEEE     eAu   *
                    EEEE      Ag   *
                    0000     eAg   *
                    0000      As   *
                    0000     eAs   *
                    0000      Cu   *
                    0000     eCu   *
                    0000      Zn   *
                    0000     eZn   *
                    0000
                    EEEE
                    EEEE
                    EEEE
                    XXXX
                    XXXX
```

```
                          M86-05-49

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                         0          0          0

                             06-7

            FROM       TO    TYPE   SS   BEDROCK
              75       86     80    20        86


         PPM NON MAG   PPM MAG      VG
             2121          1485      0       0

            Au:  120                eAu:  255
            Ag:  .05                eAg:  .1
            As:  75                 eAs:  159
            Cu:  260                eCu:  552
            Zn:  146                eZn:  310


       Surface
         EEEE
         EEEE
         EEEE
         EEEE          MIN                  MAX
         EEEE     NM   **
         EEEE    MAG   *
         EEEE     Au   *
         EEEE    eAu   *
         EEEE     Ag   *
         EEEE    eAg   *
         EEEE     As   *
         EEEE    eAs   *
         EEEE     Cu   *
         EEEE    eCu   *
         EEEE     Zn   *
         EEEE    eZn   *
         0000
         0000
         0000
         0000
         XXXX
         XXXX
```

```
                 M86-05-50

         DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
               0           0           0

                   01-3

    FROM     TO    TYPE   SS   BEDROCK
      33      65    80    10       82


  PPM NON MAG   PPM MAG      VG
     2548          2297      0       0

    Au:  110                eAu:  280
    Ag:  .1                 eAg:  .3
    As:  27                 eAs:  69
    Cu:  166                eCu:  423
    Zn:  70                 eZn:  178


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN             MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  OOOO    eAu   *
  OOOO     Ag   *
  OOOO    eAg   *
  OOOO     As   *
  OOOO    eAs   *
  OOOO     Cu   *
  OOOO    eCu   *
  OOOO     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                    M86-05-50

         DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0          0          0

                      04-5

         FROM      TO    TYPE   SS   BEDROCK
           65      75     80    10       82


     PPM NON MAG   PPM MAG      VG
         2591         2049      0        0

        Au: 25                  eAu: 65
        Ag: .1                  eAg: .3
        As: 18                  eAs: 47
        Cu: 168                 eCu: 435
        Zn: 72                  eZn: 187


  Surface
    EEEE
    EEEE
    EEEE
    EEEE          MIN                 MAX
    EEEE     NM   **
    EEEE    MAG   *
    EEEE     Au   *
    EEEE    eAu   *
    EEEE     Ag   *
    EEEE    eAg   *
    EEEE     As   *
    EEEE    eAs   *
    EEEE     Cu   *
    EEEE    eCu   *
    0000     Zn   *
    0000    eZn   *
    0000
    0000
    EEEE
    EEEE
    XXXX
    XXXX
```

```
                       M86-05-50

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0           0           0

                            06

          FROM      TO    TYPE   SS   BEDROCK
            75      82     80    20        82


     PPM NON MAG   PPM MAG      VG
         2754          2290      0       0

          Au:  30                  eAu:  83
          Ag:  .2                  eAg:  .6
          As:  70                  eAs:  193
          Cu:  260                 eCu:  716
          Zn:  122                 eZn:  336


   Surface
     EEEE
     EEEE
     EEEE
     EEEE          MIN                 MAX
     EEEE     NM   **
     EEEE    MAG   *
     EEEE     Au   *
     EEEE    eAu   *
     EEEE     Ag   *
     EEEE    eAg   *
     EEEE     As   *
     EEEE    eAs   *
     EEEE     Cu   *
     EEEE    eCu   *
     EEEE     Zn   *
     EEEE    eZn   *
     EEEE
     0000
     0000
     0000
     XXXX
     XXXX
```

```
                        M86-05-51

          DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0           0

                           1-A2

           FROM     TO    TYPE   SS   BEDROCK
             34     55     80    10       90


        PPM NON MAG   PPM MAG      VG
            2526         3186      0        0

           Au: 60                 eAu: 152
           Ag: .3                 eAg: .8
           As: 32                 eAs: 81
           Cu: 169                eCu: 427
           Zn: 62                 eZn: 157


      Surface
         EEEE
         EEEE
         EEEE
         EEEE          MIN                   MAX
         EEEE     NM   **
         EEEE    MAG   **
         0000     Au   *
         0000    eAu   *
         0000     Ag   *
         0000    eAg   *
         0000     As   *
         0000    eAs   *
         EEEE     Cu   *
         EEEE    eCu   *
         EEEE     Zn   *
         EEEE    eZn   *
         EEEE
         EEEE
         EEEE
         EEEE
         XXXX
         XXXX
```

```
              M86-05-51

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 03-4

     FROM    TO   TYPE  SS  BEDROCK
       55     65   80   10      90


  PPM NON MAG  PPM MAG     VG
      2570        1952     0      0

     Au: 60                Au: 154
     Ag: .5               eAg: 1.3
     As: 63               eAs: 162
     Cu: 184              eCu: 473
     Zn: 70               eZn: 180


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  **
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  *
  EEEE    As  *
  0000   eAs  *
  0000    Cu  *
  0000   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  EEEE
  EEEE
  XXXX
  XXXX
```

```
                          M86-05-51

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                    0           0           0

                            05-6

               FROM      TO    TYPE   SS   BEDROCK
                 65      85     80    10        90


           PPM NON MAG   PPM MAG       VG
              2746          1846       0        0

               Au:  25                eAu:  69
               Ag:  .5                eAg:  1.4
               As:  100               eAs:  275
               Cu:  360               eCu:  989
               Zn:  92                eZn:  253


         Surface
           EEEE
           EEEE
           EEEE
           EEEE          MIN                       MAX
           EEEE     NM   **
           EEEE    MAG   *
           EEEE     Au   *
           EEEE    eAu   *
           EEEE     Ag   *
           EEEE    eAg   *
           EEEE     As   *
           EEEE    eAs   *
           EEEE     Cu   *
           0000    eCu   *
           0000     Zn   *
           0000    eZn   *
           0000
           0000
           EEEE
           EEEE
           XXXX
           XXXX
```

```
              M86-05-51

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                   07

     FROM     TO    TYPE   SS   BEDROCK
       85      90    80    20       90


  PPM NON MAG   PPM MAG      VG
      2383         1901      1      0

     Au:  100                Au:  238
     Ag:  .6                eAg:  1.4
     As:  101               eAs:  241
     Cu:  434               eCu:  1034
     Zn:  48                eZn:  114


Surface
  EEEE
  EEEE
  EEEE
  EEEE           MIN               MAX
  EEEE      NM   **
  EEEE     MAG   *
  EEEE      Au   *
  EEEE     eAu   *
  EEEE      Ag   **
  EEEE     eAg   *
  EEEE      As   *
  EEEE     eAs   *
  EEEE      Cu   *
  EEEE     eCu   *
  EEEE      Zn   *
  EEEE     eZn   *
  EEEE
  1111
  1111
  1111
  XXXX
  XXXX
```

```
                         M86-05-52

            DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0           0           0

                            1-1A

              FROM      TO    TYPE   SS   BEDROCK
                26      28     80    20        28

                     50% PYRITE ON PANNING

          PPM NON MAG   PPM MAG       VG
              5653          2875      0        0

              Au: 20                 eAu: 113
              Ag: .1                 eAg: .6
              As: 38                 eAs: 215
              Cu: 200                eCu: 1131
              Zn: 34                 eZn: 192


        Surface
          EEEE
          EEEE
          EEEE
          EEEE         MIN                  MAX
          EEEE     NM  *****
          EEEE    MAG  *
          EEEE     Au  *
          EEEE    eAu  *
          EEEE     Ag  *
          EEEE    eAg  *
          EEEE     As  *
          EEEE    eAs  *
          EEEE     Cu  *
          EEEE    eCu  *
          EEEE     Zn  *
          EEEE    eZn  *
          EEEE
          OOOO
          OOOO
          OOOO
          XXXX
          XXXX
```

```
              M86-05-52

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 2-2A

     FROM    TO   TYPE  SS  BEDROCK
       28     32   90   30      28

            PROCESSED BDRCK 20% PY

  PPM NON MAG  PPM MAG     VG
      1379         161     0      0

     Au: 115               eAu: 159
     Ag: 2                 eAg: 2.8
     As: 150               eAs: 207
     Cu: 1650              eCu: 2276
     Zn: 65                eZn: 90


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE     NM *
  EEEE    MAG *
  EEEE     Au *
  EEEE    eAu *
  EEEE     Ag *******
  EEEE    eAg *
  EEEE     As *
  EEEE    eAs *
  EEEE     Cu *****
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  EEEE
  EEEE
  0000
  0000
  XXXX
```

OIB GRP.FIVE C-833

```
                           M86-05-53

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                     0          0          0

                               01

          FROM      TO    TYPE   SS   BEDROCK
           18       25     80    10        35

       PPM NON MAG  PPM MAG      VG
          2731          3183     0       0

          Au:  25                eAu:  68
          Ag:  .3                eAg:  .8
          As:  64                eAs:  175
          Cu:  260               eCu:  710
          Zn:  106               eZn:  290


    Surface
      EEEE
      EEEE
      EEEE
      EEEE        MIN                MAX
      EEEE     NM **
      EEEE    MAG **
      EEEE     Au *
      EEEE    eAu *
      EEEE     Ag *
      0000    eAg *
      0000     As *
      0000    eAs *
      0000     Cu *
      0000    eCu *
      EEEE     Zn *
      EEEE    eZn *
      EEEE
      EEEE
      EEEE
      EEEE
      XXXX
      XXXX
```

```
              M86-05-53

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                  0          0          0

                   02

     FROM    TO   TYPE  SS  BEDROCK
       25    32    80   20       35


  PPM NON MAG   PPM MAG     VG
      1898         1514     0      0

     Au:  30                 eAu:  57
     Ag:  .8                 eAg:  1.5
     As:  103                eAs:  196
     Cu:  530                eCu:  1006
     Zn:  144                eZn:  273


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN                MAX
  EEEE     NM   *
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   ***
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  0000    eCu   *
  0000     Zn   *
  0000    eZn   *
  0000
  0000
  EEEE
  EEEE
  XXXX
  XXXX
```

```
              M86-05-53

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0


                   03

     FROM    TO   TYPE  SS   BEDROCK
       32     35    80  20       35


  PPM NON MAG  PPM MAG     VG
      2388        1488     0      0

     Au: 25                eAu: 60
     Ag: .1                eAg: .2
     As: 43                eAs: 103
     Cu: 490               eCu: 1170
     Zn: 92                eZn: 220


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   **
  EEEE    MAG   *
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  0000
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-54

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                 0          0           0

                   01

     FROM    TO   TYPE  SS  BEDROCK
       30     35   80   20      36


  PPM NON MAG  PPM MAG     VG
      3792         3437     0      0

     Au: 30                Au: 114
     Ag: .6               eAg: 2.3
     As: 157              eAs: 595
     Cu: 240              eCu: 910
     Zn: 84               eZn: 319


Surface
  EEEE
  EEEE
  EEEE
  EEEE            MIN              MAX
  EEEE     NM     ***
  EEEE    MAG     **
  EEEE     Au     *
  EEEE    eAu     *
  EEEE     Ag     **
  EEEE    eAg     *
  EEEE     As     *
  EEEE    eAs     *
  EEEE     Cu     *
  EEEE    eCu     *
  EEEE     Zn     *
  0000    eZn     *
  0000
  0000
  0000
  EEEE
  XXXX
  XXXX
```

```
                              M86-05-54

                  DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                       0           0           0

                                 2-AB

               FROM      TO    TYPE   SS   BEDROCK
                 35       36    80    20        36


          PPM NON MAG   PPM MAG       VG
              2347         2893       O        O

               Au:  30                eAu:  70
               Ag:  .4                eAg:  .9
               As:  67                eAs:  157
               Cu:  230               eCu:  540
               Zn:  52                eZn:  122


        Surface
          EEEE
          EEEE
          EEEE
          EEEE           MIN                      MAX
          EEEE      NM   **
          EEEE     MAG   *
          EEEE      Au   *
          EEEE     eAu   *
          EEEE      Ag   *
          EEEE     eAg   *
          EEEE      As   *
          EEEE     eAs   *
          EEEE      Cu   *
          EEEE     eCu   *
          EEEE      Zn   *
          EEEE     eZn   *
          EEEE
          EEEE
          OOOO
          OOOO
          XXXX
          XXXX
```

```
              M86-05-54

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                   03

     FROM    TO   TYPE  SS   BEDROCK
       36     40   90   30       36

               PROCESSED BEDROCK

  PPM NON MAG   PPM MAG     VG
      2667         2884     0      0

     Au:  45                 eAu:  120
     Ag:  .1                 eAg:  .3
     As:  69                 eAs:  184
     Cu:  310                eCu:  827
     Zn:  74                 eZn:  197


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE     NM **
  EEEE    MAG *
  EEEE     Au *
  EEEE    eAu *
  EEEE     Ag *
  EEEE    eAg *
  EEEE     As *
  EEEE    eAs *
  EEEE     Cu *
  EEEE    eCu *
  EEEE     Zn *
  EEEE    eZn *
  EEEE
  EEEE
  EEEE
  OOOO
  OOOO
  XXXX
```

```
                         M86-05-55

              DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                         0          0          0


                              01

              FROM      TO     TYPE   SS   BEDROCK
                16      17      80    20       17


          PPM NON MAG   PPM MAG      VG
               2000          1765     0        0

              Au: 460                 eAu: 920
              Ag: .3                  eAg: .6
              As: 52                  eAs: 104
              Cu: 240                 eCu: 480
              Zn: 62                  eZn: 124


       Surface
         EEEE
         EEEE
         EEEE
         EEEE          MIN                     MAX
         EEEE     NM   *
         EEEE    MAG   *
         EEEE     Au   *
         EEEE    eAu   *
         EEEE     Ag   *
         EEEE    eAg   *
         EEEE     As   *
         EEEE    eAs   *
         EEEE     Cu   *
         EEEE    eCu   *
         EEEE     Zn   *
         EEEE    eZn   *
         EEEE
         0000
         0000
         0000
         XXXX
         XXXX
```

```
              M86-05-56

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 1-1A

     FROM    TO   TYPE  SS   BEDROCK
       35     44   80    20      44


  PPM NON MAG  PPM MAG     VG
      3953        3552        0      0

     Au: 115               eAu: 455
     Ag: .2                eAg: .8
     As: 40                eAs: 158
     Cu: 142               eCu: 561
     Zn: 40                eZn: 158


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  ****
  EEEE   MAG  **
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  *
  EEEE   eCu  *
  0000    Zn  *
  0000   eZn  *
  0000
  0000
  0000
  0000
  XXXX
  XXXX
```

```
              M86-05-56

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0            0           0

                   02

     FROM     TO    TYPE   SS   BEDROCK
       44      49    90    30       44

               PROCESSED BEDROCK

  PPM NON MAG   PPM MAG      VG
      1333          1844      0      0

     Au: 55                   eAu: 73
     Ag: .5                   eAg: .7
     As: 56                   eAs: 75
     Cu: 775                  eCu: 1033
     Zn: 61                   eZn: 81


Surface
  EEEE
  EEEE
  EEEE
  EEEE        MIN              MAX
  EEEE    NM  *
  EEEE   MAG  *
  EEEE    Au  *
  EEEE   eAu  *
  EEEE    Ag  *
  EEEE   eAg  *
  EEEE    As  *
  EEEE   eAs  *
  EEEE    Cu  **
  EEEE   eCu  *
  EEEE    Zn  *
  EEEE   eZn  *
  EEEE
  EEEE
  OOOO
  OOOO
  OOOO
  XXXX
```

```
              M86-05-57

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 1-AB

     FROM     TO   TYPE  SS   BEDROCK
       47      48    80   20       48


  PPM NON MAG   PPM MAG      VG
      2761          3073     0      0

     Au:  25                eAu:  69
     Ag:  .3                eAg:  .8
     As:  41                eAs:  113
     Cu:  275               eCu:  759
     Zn:  50                eZn:  138


Surface
  EEEE
  EEEE
  EEEE
  EEEE          MIN              MAX
  EEEE     NM   **
  EEEE    MAG   **
  EEEE     Au   *
  EEEE    eAu   *
  EEEE     Ag   *
  EEEE    eAg   *
  EEEE     As   *
  EEEE    eAs   *
  EEEE     Cu   *
  EEEE    eCu   *
  EEEE     Zn   *
  EEEE    eZn   *
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

```
                    M86-05-58

         DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
                0           0          0

                       1-1A

    FROM      TO    TYPE   SS   BEDROCK
      22       25    90    30        22

                  PROCESSED BEDROCK

 PPM NON MAG   PPM MAG      VG
     252            25      0        0

    Au: 140                eAu: 35
    Ag: 2.3                eAg: .6
    As: 560                eAs: 141
    Cu: 1450               eCu: 365
    Zn: 44                 eZn: 11


Surface
 EEEE
 EEEE
 EEEE
 EEEE          MIN                MAX
 EEEE     NM   *
 EEEE    MAG   *
 EEEE     Au   *
 EEEE    eAu   *
 EEEE     Ag   ********
 EEEE    eAg   *
 EEEE     As   *****
 EEEE    eAs   *
 EEEE     Cu   ****
 EEEE    eCu   *
 EEEE     Zn   *
 EEEE    eZn   *
 EEEE
 EEEE
 0000
 0000
 0000
 XXXX
```

```
              M86-05-59

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0          0          0

                 1-1A

     FROM    TO   TYPE  SS  BEDROCK
       37    45    80   20       45


  PPM NON MAG  PPM MAG    VG
       356        3022    1      0

     Au: 40                eAu: 14
     Ag: 1.1               eAg: .4
     As: 108               eAs: 38
     Cu: 178               eCu: 63
     Zn: 110               eZn: 39


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  *
  EEEE    MAG  **
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  ****
  EEEE    eAg  *
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  *
  1111    eZn  *
  1111
  1111
  1111
  1111
  XXXX
  XXXX
```

01B GRP.FIVE C-833

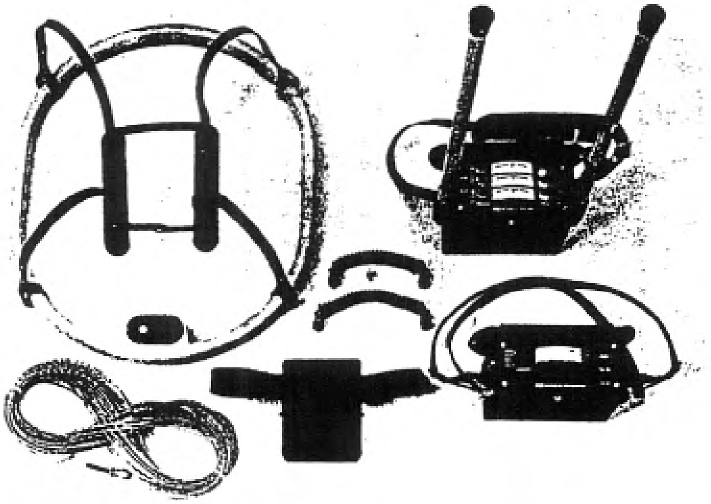
```
              M86-05-60

       DEPARTURE(X) LATITUDE(Y) ELEVATION(Z)
             0      0      0

                 1-1A

     FROM    TO   TYPE  SS   BEDROCK
       43     44   80   20        44


  PPM NON MAG  PPM MAG     VG
      2036        2366     0      0

     Au:  115              eAu:  234
     Ag:  .05              eAg:  .1
     As:  54               eAs:  110
     Cu:  250              eCu:  509
     Zn:  56               eZn:  114


Surface
  EEEE
  EEEE
  EEEE
  EEEE         MIN              MAX
  EEEE     NM  **
  EEEE    MAG  *
  EEEE     Au  *
  EEEE    eAu  *
  EEEE     Ag  *
  EEEE    eAg  *
  EEEE     As  *
  EEEE    eAs  *
  EEEE     Cu  *
  EEEE    eCu  *
  EEEE     Zn  *
  EEEE    eZn  *
  EEEE
  EEEE
  0000
  0000
  XXXX
  XXXX
```

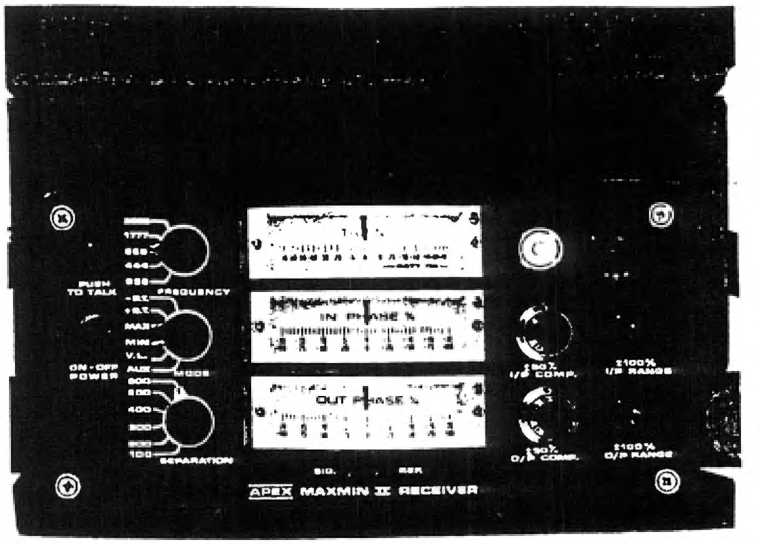
APPENDIX E

Geophysical Equipment Specifications

APEX MAXMIN II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180 m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.





SPECIFICATIONS :

Frequencies:	222, 444, 888, 1777 and 3555 Hz.
Modes of Operation:	MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer. cable. MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable. V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.
Coil Separations:	25, 50, 100, 150, 200 & 250m (MMII) or 100, 200, 300, 400, 600 and 800 ft. (MMIIF). Coil separations in V.L. mode not restricted to fixed values.
Parameters Read:	- In-Phase and Quadrature components of the secondary field in MAX and MIN modes. - Tilt-angle of the total field in V.L. mode.
Readouts:	- Automatic, direct readout on 90 mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary. - Tilt angle and null in 90 mm edgewise meters in V.L. mode.
Scale Ranges:	In-Phase: ±20%, ±100% by push-button switch. Quadrature: ±20%, ±100% by push-button switch. Tilt: ±75% slope. Null (V.L.): Sensitivity adjustable by separation switch.
Readability:	In-Phase and Quadrature: 0.25 % to 0.5 % ; Tilt: 1 %.
Repeatability:	±0.25 % to ±1% normally, depending on conditions, frequencies and coil separation used.
Transmitter Output:	- 222 Hz : 220 Atm² - 444 Hz : 200 Atm² - 888 Hz : 120 Atm² - 1777 Hz : 60 Atm² - 3555 Hz : 30 Atm²
Receiver Batteries:	9V trans. radio type batteries (4). Life: approx. 35 hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.
Transmitter Batteries:	12V 6 Ah Gel-type rechargeable battery. (Charger supplied).
Reference Cable:	Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.
Voice Link:	Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.
Indicator Lights:	Built-in signal and reference warning lights to indicate erroneous readings.
Temperature Range:	-40°C to +60°C (-40°F to +140°F).
Receiver Weight:	6kg (13 lbs.)
Transmitter Weight:	13kg (29 lbs.)
Shipping Weight:	Typically 60kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification.

APEX PARAMETRICS LIMITED
200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

Phone: (416) 495-1612 Cables: APEXPARA TORONTO Telex: 06-966773 NORDVIK TOR