010

Reverse Circulation Overburden Drilling Report

on the

Frederick House Lake Property,

German, Evelyn & Dundonald Townships
Porcupine Mining Division, Ontario

for

Kangeld Resources Limited

by

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April 1988

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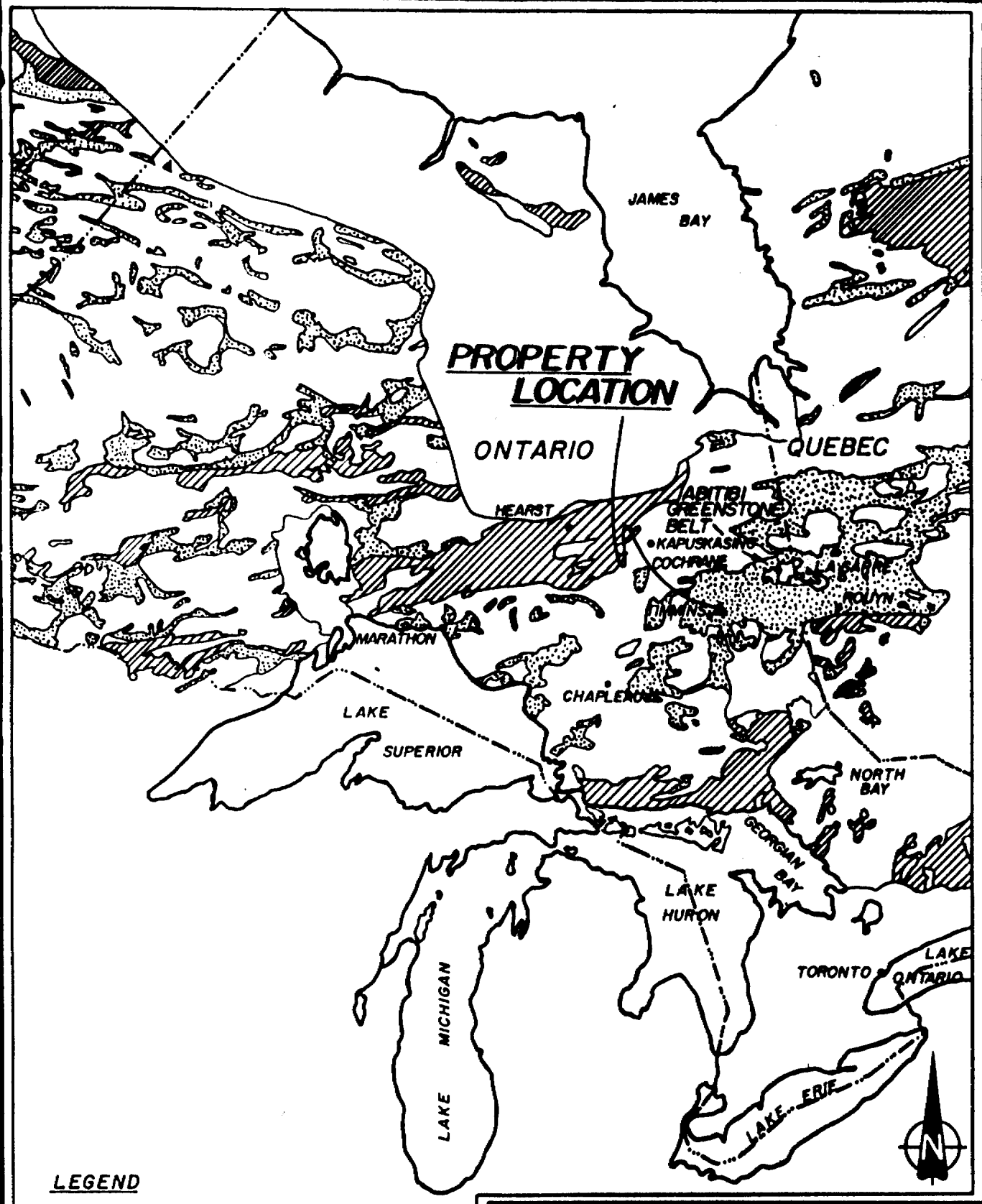


LEGEND

- Archean greenstone and associated Sediments
- Granitic Terrain
- Archean Sediments, some volcanics and intrusions

Revisions	DURHAM GEOLOGICAL SERVICES INC.	
	KANGELD RESOURCES LTD.	
	PROPERTY LOCATION	
	Date Mar. 1988	Drawn K.B.	Scale 1:7,603200
	N.T.S.	Approved B.D.	Figure 1

INTRODUCTION

Thirty eight reverse circulation overburden drill holes were drilled on Kangeld Resources Ltd.'s Frederick House Lake Property from January 30 to February 29, 1988. Heath and Sherwood Drilling Inc. of Kirkland Lake, Ontario was contracted to perform the drilling.

The property is located within German, Evelyn & Dundonald Townships, approximately 31 kilometers northeast of the City of Timmins, Ontario and covers roughly the southwestern half of Frederick House Lake and most of the Barbers Bay Lake system including some adjacent land.

The objectives of the program were to locate any gold dispersion trains within the basal tills and to expand the geological database within the area in order to ascertain the location of the Pipestone Fault, which traverses the area. Poor ice conditions, however, limited the drilling mainly to shorelines.

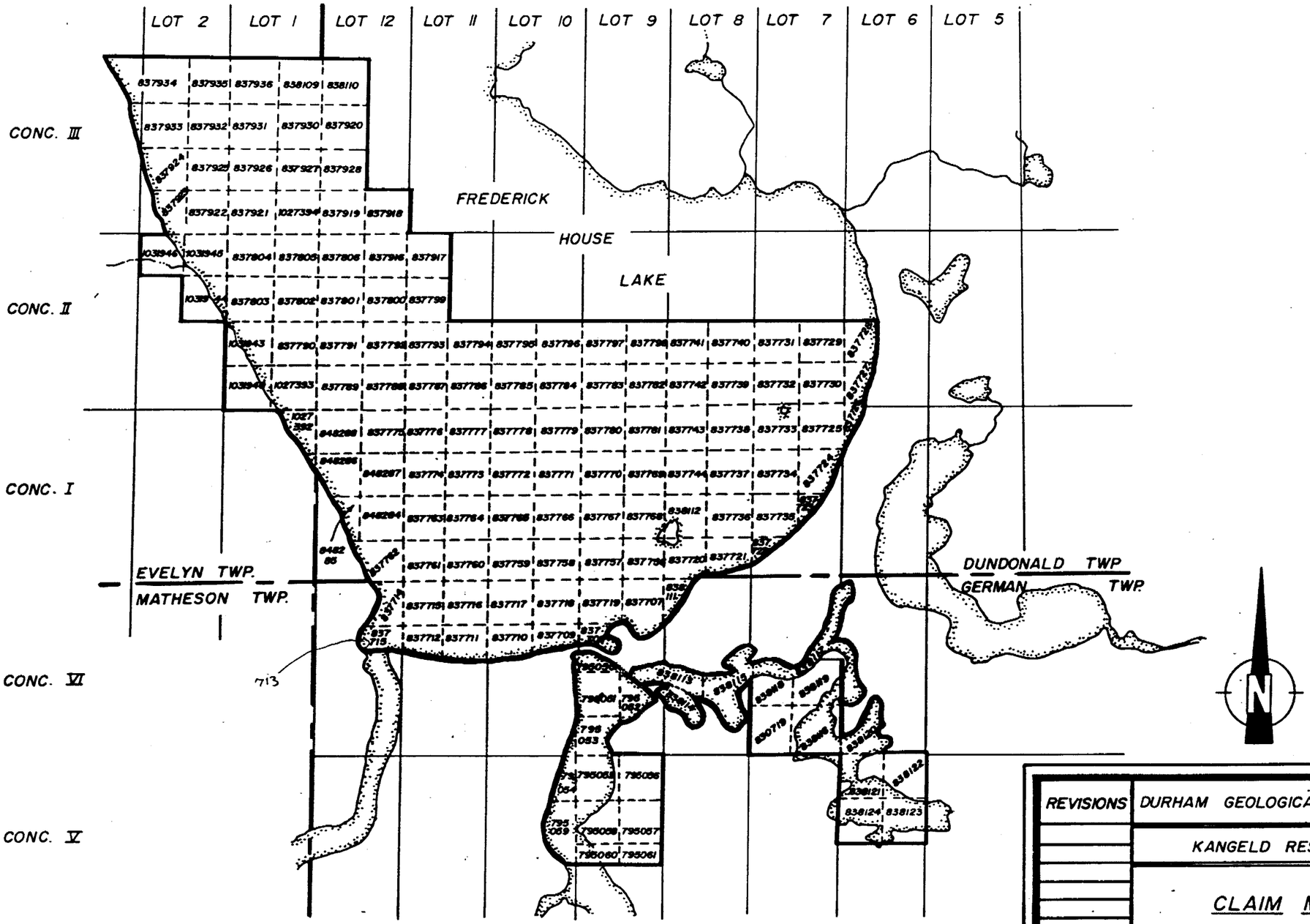
Cumulative footage for the thirty eight holes was 6019 feet. The maximum overburden depth was 265 feet, the minimum was 95 feet, and the average depth per hole was 158 feet. Technical staff consisted of sampler Morris Rochon and geologist Henry Hutteri.

PROPERTY DESCRIPTION

Kangeld Resources Ltd. holds 151 unpatented mining claims in German, Evelyn and Dundonald Townships in the Porcupine Mining Division of Ontario. The Frederick House Lake property consists of three groups of contiguous claims separated by highways 610 and 67 as in figure 2. The majority of the property is underlain by Frederick House Lake and the Barbers Bay Lake system.

All of the claims including recently staked ones are currently held in trust for Kangeld Resources Ltd. by H. L. Mineral Holdings Ltd., holder of prospectors licence number T-4645. The claim numbers are listed below.

CLAIM NUMBERS	NUMBER OF CLAIMS
Dundonald Township	
P-837720 to P-837744	25
P-837756 to P-837789	34
P-837806	1
P-837916 to P-837919	4
P-837928 to P-837929	2
P-838110	1
P-837791 to P-837801	11
P-848284 to P-848288	5
Evelyn Township	
P-837930 to P-837936	7
P-838109	1
P-837921 to P-837927	7
P-837790	1
P-837802 to P-837805	4
P-1031942 to P-1031946	5
P-1027392 to P-1027394	3



REVISIONS	DURHAM GEOLOGICAL SERVICES INC.
	KANGELD RESOURCES LTD.
	CLAIM MAP
	Date: MARCH 1988 | Drawn: K.B./C.E. | Scale: 1cm = 400m
	N.T.S.: | Approved: B.D. | Figure: 2

CLAIM NUMBERS	NUMBER OF CLAIMS
German Township	
P-795050 to P-795061	12
P-830719	1
P-837707 to P-837719	13
P-838111	1
P-838113 to P-838124	12
Total	151

LOCATION AND ACCESS

The Frederick House Lake Property is located in German, Evelyn and Dundonald Townships, approximately 31 kilometers northeast of Timmins, Ontario.

The property is readily accessible by Highway 610 and Highway 67 which traverses its southern half. Several all weather gravel side roads provide further access. As the majority of the property is covered by Frederick House Lake and the Barber's Bay Lake system, exploration for the most part is limited to winter programs.

Hydroelectric power, road and rail transportation are readily available to the property. A skilled labour force and all necessary support facilities are available nearby in the city of Timmins.

PREVIOUS WORK

In 1954, Dominion Gulf Co.'s D. A. Bull Property consisted of four claims in Lots 6 and 7, Concession VI, German Township. Three claims, P-838118, P-838119, and P-830719, of the present day Kangeld Resources Ltd. property, were covered by the D. A. Bull Property. A ground magnetometer survey was carried out and several small easterly trending magnetic anomalies were defined.

In 1955 the O. Kangas Property was located in Lot 5, N 1/2 Concession VI, in German Township, approximately 2.5 km east of the Kangeld Property.

One diamond drill hole totalling 1,455 ft. intersected fragmental dacite, peridotite and talc-serpentine schists. The hole intersected numerous quartz carbonate veinlets with 4-5% pyrite mineralization. This section was sampled and was reported to have gold values of 0.17 oz/ton Au over five feet.

Consolidated Mining and Smelting Co. held an eastern and western claim group in Evelyn Township on Frederick House Lake. The eastern claim block comprised part of the Kangeld Resources Ltd. claim block

Magnetometer and EM surveys conducted in January and February of 1965 did not locate any geophysical anomalies on the eastern claim block.

The western claim block was located adjacent and to the west of the Kangeld claims. A northwest trending magnetic anomaly and three EM conductors were located on this claim group.

North Summit Exploration Ltd. held a claim block in eastern Evelyn Township on Frederick House Lake which includes part of the Kangeld Resources Ltd. property. A grid system was established in March 1965, and magnetometer and EM surveys were conducted in April 1965. No magnetic anomalies or EM conductors were found.

Hollinger Mines Ltd. held a contiguous 95 claim group which covers the eastern portion of the Kangeld Resources Ltd. claim group. The company carried out a major exploration program for nickel from 1963 to 1971.

The exploration program centered around a nickel deposit discovered on an island named "Swiss Cheese" Island on Kangeld claim number P-837733. This island is located approximately 1.2 km north of the south shore of Frederick House Lake; 73 diamond drill holes totalling 9,679 meters were completed in the vicinity of this island.

In early 1963, an extensive geophysical program was undertaken; this involved magnetometer, horizontal loop EM, and JEM surveys which outlined several conductors.

In March of 1965 a Turam electromagnetic survey was conducted on three separate portions of the property. Eight major conductors were outlined.

In the winter of 1963 a diamond drill program commenced and continued through the winters of 1964 and 1965. The program also resumed briefly in 1967. Approximately 18,000 ft. of drilling was conducted with no drill core retained.

The results of the diamond drilling indicated that the magnetic anomalies defined sill-like masses of ultramafics, and the variations in overburden thickness had a strong effect on the contour patterns. The EM conductors reflected (i) sheared and serpentinized ultramafics, (ii) disseminated sulfides, (iii) graphite in shears, (iv) water filled shears, and (v) lithologic contacts. This program failed to give economic results from a base metal prospective. However, it is interesting to note that gold assays were encountered in the two following diamond drill holes.

In 1965 hole D-35, totalling 922 ft., intersected a section of dacite with quartz carbonate stringers and specks of sphalerite and pyrrhotite. This zone returned an assay of 1.39 oz/ton Au over a one foot interval. The hole was drilled to intersect a Turam EM conductor. The hole also intersected rhyolite, peridotite, brecciated dacite and gabbro. Sericite and carbonate alteration was also present. A five foot section from 535 to 540 ft. intersected 25-40% sulfides with quartz stringers and graphite present in a dacite breccia. The core was not assayed for gold in this section. Pyrrhotite, sphalerite, chalcopyrite, pyrite and graphite were also present in this hole.

In 1964, hole D-14 intersected a 40-80% quartz carbonate stringer zone in a dacite-rhyolite breccia. The following assays were taken from this zone: 0.01 oz/ton Au over 3 ft.;0.04 oz/ton Au over 5 ft.; and 0.04 oz/ton Au over 2 ft. Hole D-14, totalling 808.6 ft., also intersected dacite with serpentine (ultramafic rock); ultramafic rocks with spinifex texture and gabbro.

In the summer of 1963 a geologic mapping program was carried out on claims on the shore of the lake on the north portion of the Hollinger property located northeast of the Kangeld Resources Ltd. property.

In 1967 three diamond drill holes on the northeast side of Swiss Cheese Island yielded some significant nickel values.

From February to June, 1968, 8,000 feet of "FH" series holes (FH1-FH22) were drilled, yielding up to 1% nickel due to pentlandite in the core. Swiss Cheese Island was mapped at a scale of 1" =50 feet.

In 1969 three diamond drill holes totalling 1,600 ft. were completed near Swiss Cheese Island. Magnetometer, HEM and VLEM surveys were completed, although the reports for this work were not filed for assessment.

In 1971 Falconbridge Nickel Ltd. held a 31 claim group under option from Hollinger Mines Ltd. in Dundonald and German townships, including an eastern portion of the Kangeld Resources Ltd. claim group.

A diamond drill program, IP and EM surveys were carried out in the vicinity of Swiss Cheese Island, on Frederick House Lake; 10 diamond drill holes totalling 3,211 ft. were completed. The drill core was not assayed for gold.

The open pit reserves of nickel mineralization on Swiss Cheese Island on Frederick House Lake were calculated at 185,000 tons of ore with an average of 0.46% nickel. The nickel

mineralization was found in altered volcanics and intrusive ultramafic rocks and extended to a depth of 300 ft.

Due to adverse working conditions, a short working season, thick overburden, limited tonnages outlined, reduced interest in nickel developments, and low metallurgical recoveries, the property was not viewed to be economic for nickel development and exploration was suspended.

In 1969, Noranda Exploration Ltd. held a claim group which includes part of the northeastern section of the Kangeld Resources Ltd. property on Frederick House Lake in Dundonald Township.

The property included five of the Kangeld claims, P-837728, P-837729, P-837731, P-837740 and P-837741. Vertical loop EM and magnetometer surveys were carried out on the lake. One main conductive zone striking northeast and several weak conductive zones were outlined with no magnetic correlation.

In 1970 one diamond drill hole, located north of Kangeld claim P-837729, intersected rhyolite and serpentinized peridotite; 1-2% pyrrhotite, pyrite and chalcopyrite were present. No assays were submitted for assessment work.

In 1972 Texas Gulf Sulphur Co. Ltd. held a seven claim property (Lots 1-3, S1/2 Concession II- Evelyn Township) adjacent to and south of the Kangeld claims. Magnetometer, horizontal loop and vertical loop EM surveys were carried out on the property. One north trending magnetic anomaly was defined on the west end of the claim group and two conductors were delineated. One diamond drill hole intersected sericite schist and graphitic greywacke. The conductor was explained by the presence of graphite in sediments in the drill core. The hole contained trace pyrite mineralization.

Canamax Resources Inc. held a 10 claim property in German Township (Lot 3-6, N1/2 Concession VI) on McIntosh Lake, located approximately 2.5 km east of the Kangeld Resources Ltd. claim group. One diamond drill hole totalling 190 meters intersected greywacke, mafic to intermediate tuffs, and ultramafic flows. Numerous quartz-ankerite veinlets, graphite, trace pyrite and arsenopyrite were found. No gold assays were submitted for assessment credit.

In 1985 Angela Developments Ltd. carried out an airborne magnetic and VLF survey over the Kangeld Resources Ltd. property in Evelyn, Dundonald and German Townships. The survey covered a number of claim blocks, in nine separate townships, in conjunction with several companies.

Six northwest trending anomalies were interpreted to be due to magnetite in ultramafic rocks. Three of the six anomalies were drilled previously with low nickel results. These anomalies are on strike with the old Alexo Mine (Lot 1, Concession III, Dundonald Township), located east of the Kangeld property. The airborne VLF-EM survey defined eight conductors, which are located north of the Kangeld Resources Inc. property.

A roughly northwest trending fault, interpreted by F. Scott to represent the western extension of the Pipestone Fault, was postulated to cross through the southwestern portion of the Kangeld Resources Ltd. property.

In February 1986, Kangeld Resources Ltd. completed three diamond drill holes to test a VLF-EM anomaly on claims P-837737, P-838112, and P-837732, in Dundonald Township. A total of 1,840 feet drilled in three diamond drill holes intersected rhyolite tuff, diorite, gabbro and peridotite. Hole K-3 was abandoned in 356 feet. of overburden. Hole K-2 was abandoned at 471 ft. in peridotite rock. Hole K-1 reached a total depth of 1,087 and intersected a 17 foot interval of massive sulfides which explained the EM conductor.

The old Hollinger hole, D-35 which was collared in the vicinity of Hole K-1, intersected a brecciated rhyolite unit which returned a gold assay of 0.39 oz/ton Au. Hole K-1 was

targeted to intersect this mineralized zone. Hole K-1 intersected the brecciated rhyolite unit but gold values reported were nil.

In April, 1986, a limited exploration program consisting of linecutting, vertical loop EM and magnetometer surveys were carried out for Kangeld Resources Ltd. The purpose of the survey was to provide more detail over certain magnetic features. Two grid systems; and eastern Grid #2, and a western Grid #1, were established on Frederick House Lake in German and Dundonald Townships. Grid #2 was established in the proximity of an island located approximately 0.4km north of the southern shore of Frederick House Lake. The baseline was established at 300° and perpendicular crosslines were established at 100 meter intervals.

On Grid #1 located on Barber's Bay, a baseline was established at 90° and perpendicular crosslines were established at 200 meter intervals. The results indicated that there was a recognizable contact with more magnetic ultramafics to the north, as outlined by the airborne magnetic survey (Kangeld Resources, 1985).

A weak vertical loop EM anomaly was also located coincident with this magnetic contact. The VLEM conductor was more pronounced on Grid #2. The VLEM response was extremely weak and very likely only represents very deep overburden which is common

in the area. Hole K-2 (Kangeld Resources Inc., 1986) would have intersected the VLEM anomaly and the magnetic contact had it not been abandoned (365' of casing).

In February, 1987, a ground magnetometer survey was conducted in German Township on Barber's Bay south of the highway, between Lots 8 and 9, S1/2 Concession VII. Two grid systems; eastern and western, were established. On the western grid, the baseline was established at 090° and perpendicular crosslines were established at 100 m intervals. A magnetic anomaly was located south of the baseline between 15 and 35. On the eastern grid, a baseline was established at 060° and perpendicular crosslines were established at 100 meter intervals. A smaller magnetic anomaly was located in the north part of the grid (4N-6N). On both grids the magnetic anomalies were interpreted to represent ultramafic rocks or bedrock ridge effects.

In January/February, 1987 a 9 hole diamond drill program was completed on Frederick House Lake in Dundonald and German townships by Kangeld Resources Ltd. Metasediments, ultramafic rocks and carbonate alteration were encountered, however, anomalous gold mineralization was not detected.

DRILL PROGRAM

A reconnaissance reverse circulation drill program was planned for the Kangeld Resources Ltd's large claim group within the Frederick House Lake area. Poor ice conditions restricted the drilling mainly to shorelines as the majority of the property is underlain by Frederick House Lake and the Barber's Bay Lake system. The program was initiated to locate "up ice" auriferous zones and to define bedrock lithologies in order to determine the location of the pipestone fault, which lies along an ultramafic/metasedimentary rock contact and traverses the immediate area.

Drill hole spacings varied from 100 to 400 meters depending on the priority of certain areas, previously established. The drill holes were tied into topographic features and spacings were measured with a hip chain. The ice direction within the area is approximately 240°.

In each hole, the continuous return was logged. Till sections were sampled at five foot intervals or when changes in glacial stratigraphy were suspected. Up to five feet of bedrock was drilled and sampled at the base of each hole. The bedrock lithologies were identified, and the samples were examined for mineralization and alteration, then sent out for assay.

PLEISTOCENE GEOLOGY

A lacustrine clay layer was found immediately below surface in 31 of the 37 holes drilled. The clay was often underlain by well sorted sands and/or an upper till sheet. A lower till sheet situated immediately above bedrock was separated from the upper till sheet by relatively well sorted glaciolacustrine clays and sand which reached a maximum thickness of 32 feet. Bedrock was reached in 32 of the 38 holes drilled.

The glaciolacustrine clays which capped most other units varied in thicknesses from 33 to 200 feet. The clays were generally soft, grey and brown, varved, and fairly pure with minor silt appearing towards the base of the unit. Clay units encountered further at depth were often interbedded within well sorted sand deposits and in general were gritty and fairly compact. These clays were formed in proglacial lakes which formed along the margins of a retreating glacier. The well sorted and often thick sand units were formed in an outwash plain located between the receding glacier and the proglacial lake. These clays and sands were not sampled due to their complex transportation mechanisms and since they do not represent local material.

The upper till sheet was encountered in 17 of the 38 holes drilled on the property. It generally consisted of 20 to 40%

mainly subrounded granules to coarse pebbles in a sand-silt clay matrix. Very few cobbles or boulders were noted. The clasts were composed of 40-60% granitic rocks, quartz and limestone and 40-60% mafic intrusive/volcanics and lesser sediments. The upper till unit reached a maximum thickness of 31 feet but generally averaged 10 to 15 feet in thickness.

The lower till sheet was encountered in 25 of the 38 holes. It generally consisted of 50-70% subrounded to subangular granules to boulders in a sand-silt and minor clay matrix. The clasts were composed of 60-80% sediments, mafic volcanics/intrusive, lesser sericite schist and ultramafic rocks and 20-30% granitic rocks, quartz and minor limestone. The lower till unit reached a maximum thickness of 29 feet but averaged 9 feet in thickness. In a few holes, the upper till sheet sat directly upon the lower till sheet. The lower till was however, easily recognized mainly due to the increased clast content and the increased mafic content. Slightly washed lower till was noted in hole K-88-15. Fairly good basal tills were observed in holes K-88-1, K-88-6, K-88-9, K-88-10, K-88-11, K-88-12, K-88-16, K-88-20, K-88-22, K-88-23, K-88-24, K-88-25, K-88-26, K-88-30, K-88-31, K-88-32, K-88-34 and K-88-36. Good basal tills were recognized by a high percentage of local clasts, increasing angularity of the clasts and by a lack of sorting. These are the most useful tills for exploration as they reflect the local up ice bedrock lithologies and related alteration and

mineralization.

BEDROCK GEOLOGY

Bedrock chip samples from the 32 completed holes revealed that the property is predominantly underlain by siltstone and lesser peridotite. Sericite schist was also encountered in four of the bedrock samples within the metasediments in the southern half of the property. The lithologies encountered are described below.:

SILTSTONE	Dark grey and very fine grained. Relatively fresh and unaltered in appearance with a well developed slaty cleavage. Generally very few quartz-calcite stringers. Often <1% py in bedrock samples. Unaltered siltstone encountered in holes K-88-1, 8, 17, 18, 19 29, 31 and 37. Drill holes K-88-19 and 31 were also noted to have minor altered siltstone.
ALTERED SILTSTONE	Medium grey to greenish grey and very fine grained. Altered and slightly schistose in appearance with no remnant slaty cleavage. Bedrock was noticeably harder and silicified in holes K-88-9, 22, 25, 30 and 33. Weak sericite and weak to moderate pervasive calcite alteration were present in most of the samples. Quartz-calcite stringers were noticeably more abundant in the altered sediments and often contained 1-2% py. Altered siltstone was encountered in holes K-88-9, 10, 11, 13, 14, 15, 20, 22, 23, 25, 26, 27, 28, 30, 33, 34 and 35.

SERICITE SCHIST

Medium to light green and fine to medium grained. Well foliated with very minor green mica noted at times. Relatively soft with abundant quartz-calcite stringers noted often. Weak to moderate carbonate alteration was noted in a few samples. Pyrite content averaged 2-3%. Sericite schist was encountered in holes K-88-12, 16, 24 and 32. Sericite schist was also observed in subordinate amounts with altered sediments in holes K-88-20, 23 and 27.

PERIDOTITE

Dark green-black and fine to medium grained. Massive with a faint intrusive texture noticeable a times and magnetic. Relatively soft and weakly serpentinized in hole K-88-5. Peridotite was encountered in holes K-88-5 and 6.

RESULTS

Sixty three till samples were sent to Overburden Drilling Management Ltd. in Rouyn, Quebec for heavy mineral concentration and gold grain identification. The heavy mineral concentrates were then shipped to Bondar-Clegg Laboratories in Ottawa for analysis of gold plus 25 trace elements by the neutron activation method. Thirty five bedrock samples were sent to Min-En Labs in Timmins, Ontario for analysis of gold plus 31 trace elements by the ICP Method. The results of all the analyses are shown in Appendix B.

DISCUSSION OF RESULTS

The tills within the Frederick House Lake Property display typical gold concentrations for tills in the Abitibi region with 0-5 gold grains often detected in the heavy mineral concentrates. The gold is generally round and abraded, and not considered to be from local sources, however, irregular and delicate gold grains were also encountered and are considered to be from local sources.

The gold analyses showed low gold concentrations for the most part (<5 gold grains) with anomalous values being detected in several holes. High calculated gold values were obtained with high gold grain counts and with very large gold grains.

Hole K-88-5 contained 6 gold grains and 100 grains of arsenopyrite in three till samples. Hole K-88-6 contained 16 gold grains (3349 ppb-calc) and 250 grains of arsenopyrite in 6 till samples. Hole K-88-10 contained 11 gold grains in 3 till samples, two of which were fine delicate grains. Hole K-88-11 contained 32 gold grains and 300 grains of arsenopyrite in two till samples. Three of the gold grains were delicate and up to 125x225 microns in size. One of the gold grains was irregular and 250x325 microns in size. Hole K-88-12 contained 27 gold grains and 250 arsenopyrite grains in 5 till samples. Six of the gold grains were delicate and ranged up to 75x125 microns in

size. One irregular gold grain (75x100 microns) was also recorded. Hole K-88-22 contained 9 gold grains (2 fine delicate) and 250 arsenopyrite grains in 2 till samples. Hole K-88-25 contained 4 fairly large gold grains in 2 till samples, the lower most of which had a calculated gold content of 1617 ppb. The largest gold grain was 250x550 microns in size. Hole K-88-30 contained 3 fairly large gold grains within the lowermost till sample (2630 ppb-calc.) the largest of which was 275x475 microns. Hole K-88-31 contained 1 large gold grain in 2 till samples which measured 350x850 microns with a calculated gold value of 4929 ppb. Hole K-88-32 contained 9 gold grains in 3 till samples, 7 of which occur in the lowermost sample. Five of the 7 gold grains in the bottom sample were delicate and reached a maximum size of 75x125 microns. Hole K-88-34 contained 5 gold grains and 200 arsenopyrite grains in the lowermost sample. The largest gold grain was 200x400 microns. Hole K-88-36 contained 4 gold grains and 100 arsenopyrite grains in 7 till samples. Holes K-88-15 and K-88-16 were also noted to contain 350 and 50 grains of arsenopyrite respectively. Analysis of the heavy mineral concentrates by Bondar-Clegg showed anomalous gold concentrations in several holes. The following samples had heavy mineral concentrates which assayed from 500 to 1830 ppb Au: K-88-6-06, K-88-11-01, K-88-11-02, K-88-15-02, K-88-23-02, K-88-25-01, K-88-25-02, K-88-30-04, K-88-31-01 and K-88-32-03 (Appendix B).

All of the aforementioned till samples were taken immediately above the bedrock surface in what was considered to be fairly good basal till. The majority of the gold grains encountered in the basal tills were abraded, however, several holes were noted to contain delicate and irregular grains, some of which were relatively large. Also of significance are the high arsenopyrite concentrations in 10 of the holes and the good correlation which it has with high gold grain counts, suggesting an identical source.

CONCLUSIONS AND RECOMMENDATIONS

The results of the overburden drilling program have outlined:

(1) the presence of two major depositional cycles, each of which is often capped by a clay unit.

(2) an irregular bedrock surface covered by a relatively persistent sheet of basal till.

(3) several sericite schist units within a broad band of altered metasediments.

(4) several gold/arsenopyrite dispersion trains in basal till. These trains have source areas to the north-east of holes K-88-5, K-88-6, K-88-10, K-88-11, K-88-12, K-88-15, K-88-16, K-88-22, K-88-23 K-88-25, K-88-30 and K-88-31, K-88-32, K-88-34, and K-88-36.

It is recommended that additional overburden drilling be carried out on Frederick House Lake to more fully define the source areas. Diamond drilling would then follow to test the possible source areas of the gold and arsenopyrite mineralization.

April 22, 1988

Henry P. Hutteri, H.BSc.

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McCance, J. A.
1974: Ground Vertical Component Magnetics, Dundonald Township, District of Cochrane; Ontario Div. Mines. Preliminary Map P.942, Geophysical Series. Scale: 1 inch to 1/4 mile. Survey and compilation 1972, 1973.

Porcupine Mining Division Assessment Files, Timmins, Ontario

D. A. Bull Property, Dominion Gulf Co. Option	T-547
Okangas Property	T-564
Consolidated Mining & Smelting Co.	T-1172
North Summit Exploration Ltd.	T-998
Hollinger Consolidated Mines	T-644
Falconbridge Nickel Ltd. Hollinger Option	T-1264
Noranda Exploration Co. Ltd.	T-1413
Texas Gulf Sulphur Co.Ltd.	T-190
Canamax Resources Inc.	T-2658
Angela Development Ltd.	T-2744

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Satterly, J.
1959: German Township, Ontario Department of Mines, Preliminary Map P. 37, Scale 1 inch to 1/4 mile.

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Woytiuk, K and Durham, B.
1987: Diamond Drill report for the Kangeld Resources Ltd., Frederick House Lake Property in German, Evelyn, and Dundonald Townships.

APPENDIX A

OVERBURDEN DRILLING MANAGEMENT LIMITED - LABORATORY SAMPLE LOG

ABBREVIATIONS

DATA LOG

Clast:

Size of Clast:
- G: Granules
- P: Pebbles
- C: Cobbles
- BL: Boulder Chips
- BK: 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

Class:
- BLD: Boulder Chips
- BDK: Bedrock Chips

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

Colour:
- B: Beige
- GY: Grey
- GB: Grey Beige
- GN: Green
- GG: Grey Green
- BN: Brown
- BK: Black
- OC: Ochre
- PK: Pink
- OE: Orange

GOLD LOG

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:

A: Gritty Clay Lumps Present

B: Smooth Clay Lumps Present

C: Organics Present

D: Oxidized

DURHAM GEOLOGICAL

03/22/8

DURK1MAR.WRI

OVERBURDEN DRILLING MANAGEMENT LIMITED

TOTAL # OF SAMPLES IN THIS REPORT = 60

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	COLOR CY	
K-88																						
1-01	6.2	0.0	6.2	140.5	110.6	29.9	22.8	7.1	1	66	TR	NA	NA	NA	NA	U	Y	Y	Y	GG	GG	TILL
2-01	11.0	0.0	11.0	297.6	246.1	51.5	40.0	11.5	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
5-01	9.9	0.0	9.9	188.8	127.2	61.6	43.1	18.5	1	35	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
5-02	19.2	0.0	19.2	268.6	157.9	110.7	75.4	35.3	5	59	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
5-03	15.9	0.0	15.9	224.2	142.0	82.2	61.0	21.2	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
6-01	11.7	0.0	11.7	315.6	251.9	63.7	45.7	18.0	2	130	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
6-02	17.0	0.0	17.0	134.5	85.4	49.1	33.0	16.1	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
6-03	13.2	0.0	13.2	193.0	133.2	59.8	38.6	21.2	7	266	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GG	TILL
6-04	9.8	0.0	9.8	161.5	121.6	39.9	27.2	12.7	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
6-05	8.4	0.0	8.4	118.7	86.8	31.9	21.5	10.4	5	290	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
6-06	14.7	0.0	14.7	260.0	207.3	52.7	36.6	16.1	2	2663	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
10-01	14.3	0.0	14.3	233.2	163.7	69.5	47.0	22.5	9	171	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
10-02	10.0	0.0	10.0	151.6	119.6	32.0	22.4	9.6	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
10-03	11.5	0.0	11.5	133.2	101.0	32.2	22.6	9.6	2	145	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL
11-01	14.5	0.0	14.5	313.2	230.3	82.9	54.5	28.4	16	1292	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
11-02	15.5	0.0	15.5	304.8	229.1	75.7	48.9	26.8	16	1152	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	B	TILL
12-01	21.3	0.0	21.3	339.8	242.1	97.7	67.1	30.6	17	1231	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
12-02	12.1	0.0	12.1	292.2	240.6	51.6	35.0	16.6	1	43	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	B	TILL
12-03	10.0	0.0	10.0	219.8	169.0	50.8	35.3	15.5	2	29	TR	NA	NA	NA	NA	U	Y	Y	Y	GG	B	TILL
12-04	16.0	0.0	16.0	206.9	124.3	82.6	55.0	27.6	7	74	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	B	TILL
12-05	13.9	0.0	13.9	201.5	153.0	48.5	31.0	17.5	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	B	TILL
13-01	8.4	0.0	8.4	193.7	152.8	40.9	32.2	8.7	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GG	GG	TILL
15-01	5.3	0.0	5.3	131.7	107.1	24.6	20.4	4.2	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GG	GG	TILL
15-02	8.9	0.0	8.9	271.3	215.6	55.7	43.0	12.7	1	373	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
16-01	10.2	0.0	10.2	311.3	223.7	87.6	66.3	21.3	2	38	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
17-01	2.6	0.0	2.6	64.9	57.0	7.9	6.8	1.1	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
18-01	16.7	0.0	16.7	397.5	316.8	80.7	64.7	16.0	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
19-01	13.8	0.0	13.8	217.9	169.7	48.2	39.1	9.1	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
20-01	7.7	0.0	7.7	157.3	111.2	46.1	32.8	13.3	1	65	TR	NA	NA	NA	NA	U	Y	Y	Y	G	G	TILL
20-02	7.4	0.2	7.2	149.4	106.8	42.6	31.1	11.5	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
20-03	11.6	0.0	11.6	217.7	166.1	51.6	39.2	12.4	4	162	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
22-01	9.7	0.0	9.7	244.5	168.8	75.7	53.8	21.9	9	942	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
23-01	19.4	0.0	19.4	227.9	137.4	90.5	65.1	25.4	5	323	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
23-02	15.5	0.0	15.5	178.4	102.2	76.2	54.5	21.7	13	1595	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
24-01	2.9	0.0	2.9	95.9	78.1	17.8	14.2	3.6	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GN	GN	TILL
25-01	15.1	0.6	14.5	285.7	234.1	51.6	37.5	14.1	1	77	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
25-02	14.3	0.6	13.7	277.8	186.3	91.5	64.8	26.7	3	1617	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
26-01	11.0	0.0	11.0	183.0	133.0	50.0	36.6	13.4	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
27-01	15.5	0.0	15.5	351.0	288.2	62.8	49.1	13.7	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
27-02	14.5	0.0	14.5	147.5	104.8	42.7	31.4	11.3	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL

DURHAM GEOLOGICAL

03/22/88

DURK2MAR.WR1

OVERBURDEN DRILLING MANAGEMENT LIMITED

TOTAL OF SAMPLES IN THIS REPORT = 23

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	COLOR CY	
K-88																						
27-03	9.2	0.2	9.0	143.2	85.3	57.9	41.7	16.2	1	92	P	80	20	NA	NA	U	Y	Y	Y	GB	GB	TILL
29-01	12.1	0.0	12.1	127.8	90.5	37.3	29.6	7.7	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
30-01	2.1	0.0	2.1	57.1	46.3	10.8	8.4	2.4	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
30-02	10.1	0.6	9.5	309.2	260.6	48.6	36.7	11.9	0	NA	P,C	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL
30-03	13.4	0.6	12.8	279.3	207.1	72.2	54.6	17.6	0	NA	C	90	10	NA	NA	U	Y	Y	Y	GB	GB	TILL
30-04	12.3	0.0	12.3	152.6	98.4	54.2	36.9	17.3	3	2630	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
31-01	15.8	0.0	15.8	142.5	76.4	66.1	49.3	16.8	1	4929	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
31-02	8.7	0.0	8.7	137.7	96.6	41.1	32.5	8.6	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
32-01	13.1	0.0	13.1	258.4	183.4	75.0	56.4	18.6	1	137	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
32-02	9.3	0.0	9.3	179.8	137.0	42.8	32.4	10.4	1	352	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL
32-03	13.4	0.0	13.4	256.8	169.4	87.4	63.4	24.0	7	670	TR	NA	NA	NA	NA	U	Y	Y	Y	B	B	TILL
34-01	12.3	0.0	12.3	185.0	104.4	80.6	60.4	20.2	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
34-02	19.0	1.1	17.9	282.0	170.8	111.2	74.7	36.5	5	545	P	80	18	2	NA	U	Y	Y	Y	GG	GNB	TILL
36-01	2.5	0.0	2.5	33.1	24.7	8.4	8.1	0.3	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
36-02	5.1	0.0	5.1	113.4	96.3	17.1	16.2	0.9	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
36-03	10.0	0.0	10.0	237.4	200.6	36.8	31.8	5.0	4	141	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
36-04	9.5	0.0	9.5	177.7	139.7	38.0	30.7	7.3	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
36-05	7.9	0.0	7.9	211.4	186.7	24.7	15.0	9.7	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
36-06	11.0	0.0	11.0	351.6	319.4	32.2	24.4	7.8	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GNB	GNB	TILL
36-07	13.2	0.3	12.9	198.8	173.8	25.0	15.3	9.7	0	NA	C	80	20	NA	NA	U	Y	Y	Y	GN	GN	TILL
37-01	9.5	0.0	9.5	138.7	102.9	35.8	32.7	3.1	0	NA	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
37-02	11.2	0.0	11.2	163.2	118.4	44.8	33.8	11.0	1	63	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL
37-03	10.2	0.0	10.2	139.4	98.0	41.4	31.7	9.7	1	47	TR	NA	NA	NA	NA	U	Y	Y	Y	GB	GB	TILL

DURHAM GEOLOGICAL

03/22/88

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

DURK1MAR.WRI

TOTAL # OF PANNINGS 19

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
K-88													
1-01	N	75 X 125	20 C	1						1			
										1	22.8	66	
2-01	N	NO VISIBLE GOLD											
5-01	N	75 X 125	20 C	1						1			
										1	43.1	35	
5-02	Y	25 X 50	8 C				1			1			EST. 5% PYRITE
		50 X 50	10 C				1			1			100 GRAINS ARSENOPYRITE
		50 X 100	15 C	1			1			2			
		100 X 150	25 C	1						1			
										5	75.4	59	
5-03	N	NO VISIBLE GOLD											
6-01	Y	75 X 150	22 C	1						1			EST. 2% PYRITE
		125 X 150	27 C	1						1			50 GRAINS ARSENOPYRITE
										2	45.7	130	
6-02	N	NO VISIBLE GOLD											
6-03	Y	25 X 75	10 C				2			2			EST. 8% PYRITE
		50 X 50	10 C				2			2			150 GRAINS ARSENOPYRITE
		50 X 75	13 C				1			1			
		75 X 175	25 C	1						1			
		125 X 200	31 C	1						1			
										7	38.6	266	
6-04	N	NO VISIBLE GOLD											
6-05	Y	50 X 50	10 C				2			2			EST. 5% PYRITE
		75 X 100	18 C	2						2			50 GRAINS ARSENOPYRITE
		125 X 150	27 C	1						1			
										5	21.5	290	
6-06	Y	75 X 100	18 C	1						1			EST. 2% PYRITE
		300 X 550	71 C	1						1			
										2	36.6	2663	

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

DURK1MAR.WR1

TOTAL # OF PANNINGS 19

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
K-88													
10-01	Y	25 X 25	5 C						1	1			EST. 2% PYRITE
		25 X 50	8 C						1	1			
		50 X 100	15 C	1	1					2			
		75 X 100	18 C	1	2					3			
		75 X 125	20 C	1						1			
		75 X 150	22 C		1					1			
										9	47.0	171	
10-02	N	NO VISIBLE GOLD											
10-03	Y	50 X 75	13 C	1						1			EST. 0.5% PYRITE
		125 X 125	25 C	1						1			
										2	22.6	145	
11-01	Y	25 X 25	5 C		1					1			EST. 0.25% PYRITE
		50 X 50	10 C		4					4			150 GRAINS ARSENOPYRITE
		50 X 75	13 C		3					3			
		50 X 100	15 C		1					1			
		75 X 75	15 C		2					2			
		75 X 100	18 C						1	1			
		100 X 125	22 C					1		1			
		150 X 175	31 C	1						1			
		225 X 300	48 C	1						1			
		250 X 325	52 C			1				1			
										16	54.5	1292	
11-02	Y	50 X 50	10 C		1					1			EST. 2% PYRITRE
		50 X 75	13 C		3					3			150 GRAINS ARSENOPYRITE
		75 X 100	18 C		2					2			
		75 X 150	22 C	1						1			
		100 X 100	20 C	1						1			
		100 X 125	22 C		1					1			
		100 X 150	25 C		1					1			
		125 X 125	25 C		1					1			
		125 X 150	27 C	1						1			
		125 X 225	34 C					1		1			
		150 X 150	29 C	1						1			
		150 X 275	40 C	1						1			
		200 X 200	38 C	1						1			
										16	48.9	1152	
12-01	Y	25 X 25	5 C						2	2			EST. 0.5% PYRITE
		50 X 50	10 C		3					3			100 GRAINS ARSENOPYRITE

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

DURKIMAR.WR1

TOTAL # OF PANNINGS 19

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
K-88													
		50 X 75	13 C		1					1			
		50 X 100	15 C		1					1			
		50 X 125	18 C		1					1			
		75 X 100	18 C		1					1			
		100 X 100	20 C						1	1			
		100 X 125	22 C	1						1			
		100 X 150	25 C	1						1			
		100 X 200	29 C		1					1			
		125 X 125	25 C	1						1			
		125 X 175	29 C		1					1			
		200 X 275	44 C	1						1			
		250 X 375	56 C	1						1			
										17	67.1	1231	
12-02	N	75 X 125	20 C	1						1			
										1	35.0	43	
12-03	Y	50 X 75	13 C		1					1			EST. 10% PYRITE
		50 X 100	15 C					1		1			100 GRAINS ARSENOPYRITE
										2	35.3	29	
12-04	Y	25 X 25	5 C		1					1			EST. 2% PYRITE
		25 X 50	8 C	1						1			50 GRAINS ARSENIOPYRITE
		50 X 50	10 C		1					1			
		50 X 100	15 C						1	1			
		75 X 75	15 C	1						1			
		75 X 100	18 C			1				1			
		75 X 125	20 C					1		1			
										7	55.0	74	
12-05	N	NO VISIBLE GOLD											
13-01	N	NO VISIBLE GOLD											
15-01	N	NO VISIBLE GOLD											
15-02	Y	200 X 250	42 C	1						1			EST. 65% PYRITE
													350 GRAINS ARSENOPYRITE
										1	43	373	
16-01	Y	50 X 75	13 C		1					1			EST. 10% PYRITE
		75 X 150	22 C	1						1			50 GRAINS ARSENOPYRITE

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

DURKIMAR.WRI

TOTAL # OF PANNINGS 19

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
K-88										2	66.3	38	
17-01	N	NO VISIBLE GOLD											
18-01	N	NO VISIBLE GOLD											
19-01	N	NO VISIBLE GOLD											
20-01	N	100 X 125	22 C	1						1			
										1	32.8	65	
20-02	N	NO VISIBLE GOLD											
20-03	Y	25 X 25	5 C		1					1			EST. 10% PYRITE
		75 X 100	18 C	1						1			
		75 X 125	20 C	1						1			
		75 X 200	27 C		1					1			
										4	39.2	162	
22-01	Y	50 X 75	13 C		1					1			EST. 50 GRAINS PYRITE
		75 X 75	15 C		1					1			150 GRAINS ARSENOPYRITE
		75 X 100	18 C	2	1					3			
		75 X 125	20 C	1						1			
		100 X 125	22 C		2					2			
		225 X 400	56 C		1					1			
										9	53.8	942	
23-01	Y	50 X 75	13 C		1				1	2			EST. 10% PYRITE
		100 X 150	25 C		1					1			150 GRAINS ARSENOPYRITE
		100 X 175	27 C	1						1			
		175 X 250	40 C	1						1			
										5	65.1	323	
23-02	Y	25 X 25	5 C		1				1	2			EST. 8% PYRITE
		25 X 50	8 C		1					1			100 GRAINS ARSENOPYRITE
		50 X 50	10 C		1					1			
		50 X 100	15 C		1					1			
		75 X 75	15 C		1					1			
		125 X 150	27 C	1						1			
		125 X 175	29 C	1	1					2			
		150 X 150	29 C	1						1			
		150 X 225	36 C	1						1			
		225 X 300	48 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

DUPK1MAR.WR1

TOTAL # OF PANNINGS 19

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
K-88													
		275 X 300	52 C	1						1			
										13	54.5	1595	
24-01	N	NO VISIBLE GOLD											
25-01	N	125 X 125	25 C	1						1			
										1	37.5	77	
25-02	Y	75 X 125	20 C	1						1			EST. 15% PYRITE
		200 X 300	46 C	1						1			
		250 X 550	68 C	1						1			
										3	64.8	1617	
26-01	N	NO VISIBLE GOLD											
27-01	N	NO VISIBLE GOLD											
27-02	N	NO VISIBLE GOLD											

DURHAM GEOLOGICAL

03/22/88

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

DURK2MAR.WR1

TOTAL # OF PANNINGS 4

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
K-88													
27-03	N	100 X 175	27 C	1						1			
										1	41.7	92	
29-01	N	NO VISIBLE GOLD											
30-01	N	NO VISIBLE GOLD											
30-02	N	NO VISIBLE GOLD											
30-03	N	NO VISIBLE GOLD											
30-04	Y	50 X 75	13 C		1					1			EST. 20% PYRITE
		250 X 300	50 C	1						1			
		275 X 475	65 C	1						1			
										3	36.9	2630	
31-01	N	350 X 850	90 C	1						1			
										1	49.3	6929	
31-02	N	NO VISIBLE GOLD											
32-01	N	150 X 200	34 C	1						1			
										1	56.4	137	
32-02	N	125 X 275	38 C	1						1			
										1	32.4	352	
32-03	Y	25 X 25	5 C					2		2			EST. 10% PYRITE
		50 X 50	10 C					1		1			
		50 X 75	13 C					1		1			
		75 X 125	20 C					1		1			
		175 X 325	46 C	1						1			
		200 X 275	44 C	1						1			
										7	63.4	670	
34-01	N	NO VISIBLE GOLD											
34-02	Y	50 X 50	10 C		2					2			EST. 3% PYRITE
		75 X 100	18 C	1						1			200 GRAINS ARSENOPYRITE
		75 X 175	25 C	1						1			
		200 X 400	54 C	1						1			

GOLD CLASSIFICATION

VISIBLE GOLD FROM SHAKING TABLE AND PANNING

DURK2MAR.WR1

TOTAL # OF PANNINGS 4

SAMPLE #	PANNED Y/N	DIAMETER	THICKNESS	NUMBER OF GRAINS ABRADED T	ABRADED P	IRREGULAR T	IRREGULAR P	DELICATE T	DELICATE P	TOTAL	NON MAG GMS	CALC V.G. ASSAY PPB	REMARKS
K-88													
										5	74.7	545	
36-01	N	NO VISIBLE GOLD											
36-02	N	NO VISIBLE GOLD											
36-03	Y	50 X 50	10 C			1				1			EST. 1% PYRITE
		50 X 75	13 C	1						1			100 GRAINS ARSENOPYRITE
		75 X 100	18 C	1						1			
		100 X 150	25 C	1						1			
										4	31.8	141	
36-04	N	NO VISIBLE GOLD											
36-05	N	NO VISIBLE GOLD											
36-06	N	NO VISIBLE GOLD											
36-07	N	NO VISIBLE GOLD											
37-01	N	NO VISIBLE GOLD											
37-02	N	100 X 125	22 C	1						1			
										1	33.8	63	
37-03	N	100 X 100	20 C				1			1			
										1	31.7	67	

APPENDIX B

COMPANY: DURHAM GEOLOGICAL
PROJECT NO: K-88
ATTENTION: R.SPRDULE

MIN-EN LABS ICP REPORT
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

(ACT:F31) PAGE 1 OF 3
FILE NO: 82-401R/P1+2
* TYPE ROCK GEOCHEM * DATE:MARCH 6, 1988

(VALUES IN PPM)	AG	AL	AS	B	BA	BE	BI	CA	CD	CO	CU	FE
1-[redacted]	.8	23700	13	57	96	1.3	1	6060	.3	13	62	37470
2-02	.6	24060	7	46	56	1.4	1	4030	.6	12	64	38790
5-04	.5	25340	6	48	20	1.5	1	17780	.4	30	39	40630
6-07	.8	22340	19	55	39	1.5	1	6770	.6	34	38	40260
8-02	.8	23510	6	32	53	1.4	1	10120	.5	12	44	40550
9-02	.6	20700	8	27	74	1.1	1	14130	.3	14	62	31410
10-04	.6	19390	5	23	98	1.1	1	3440	.5	14	39	29600
11-03	.6	16720	9	18	66	1.0	1	18620	.4	7	41	27360
12-06	.4	19170	10	23	61	1.1	1	5410	.3	11	39	30060
13-02	.8	19330	11	22	68	1.0	1	7050	.6	14	45	28070
14-01	.8	15770	5	18	46	1.1	1	17970	.4	9	40	31980
14-02	.6	24080	2	32	47	1.4	1	7030	.4	11	44	43550
15-03	.6	10410	4	14	35	1.4	1	40680	.5	11	37	39830
16-02	.6	16310	1	20	54	1.1	1	16330	.6	11	48	34900
17-02	.4	20390	6	26	70	1.1	1	7420	.5	15	76	33750
18-02	.4	23830	2	48	87	1.3	2	7520	.7	14	56	38630
19-02	.6	23790	7	39	76	1.2	1	8830	.7	10	38	35370
20-04	.4	14890	6	24	71	1.2	1	24480	.3	10	45	33240
20-05	.5	18700	9	28	84	1.2	1	19790	.5	11	45	33710
22-02	.6	20120	13	27	67	1.0	5	17320	.4	12	43	29710
23-03	.8	15130	3	20	68	.9	1	11720	.5	8	31	25890
23-04	.4	7260	8	7	53	.6	1	19800	.3	4	18	18090
24-02	.8	5370	10	7	63	.9	1	21570	.5	6	49	26490
25-03	.8	19080	11	22	60	1.0	1	19600	.7	9	43	30570
26-02	.6	19980	12	25	77	1.2	7	14310	.7	12	40	31890
27-04	.7	14850	9	19	68	1.1	1	16890	.5	10	43	32670
28-01	.4	7070	9	10	51	1.0	1	17990	.4	10	47	29140
29-02	.7	12600	1	15	50	1.0	1	18500	.4	10	41	30490
30-05	.8	18980	11	24	65	1.1	8	10010	.4	13	47	32240
31-03	.6	16060	9	20	67	1.0	1	18710	.6	9	46	29360
32-04	1.2	11010	1	54	52	.8	1	33090	.5	8	43	22130
33-01	.6	16690	1	35	58	1.0	4	16320	.5	14	59	30540
34-03	.7	17510	2	28	64	1.0	4	13560	.6	11	39	28930
35-01	.6	23090	2	32	60	1.3	2	4750	.5	14	55	39170
37-04	.6	23370	11	31	54	1.2	2	13050	.9	12	43	37300

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(604)980-5814 OR (604)988-4524

(ACT:F31) PAGE 2 OF 3
FILE NO: 82-401R/P1+2
TYPE ROCK GEOCHEM # DATE:MARCH 6, 1988

(VALUES IN PPM)	K	LI	MG	MN	MO	NA	NI	P	PB	SB	SR	TH
1-02	2520	52	18720	339	2	610	60	1540	12	4	3	2
2-02	2350	52	18480	186	1	270	54	1640	5	3	5	2
5-04	320	31	78150	486	1	360	576	120	20	4	5	8
6-07	4130	9	96820	580	1	920	843	20	21	4	3	8
8-02	1890	52	23670	449	1	370	106	1480	12	4	10	2
9-02	2470	42	16730	386	1	650	69	1730	16	1	35	1
10-04	1900	31	17000	290	1	530	58	1910	11	2	5	1
1-03	1540	40	14320	417	1	570	31	1460	15	3	126	1
12-06	1940	34	15490	340	1	430	44	1320	10	2	3	1
13-02	1980	40	15880	319	1	560	48	1760	17	2	20	1
14-01	1880	29	14560	504	1	430	42	1370	10	2	78	1
14-02	1910	46	19050	391	1	300	56	1530	12	1	8	2
15-03	1230	26	30500	744	1	940	64	3420	14	1	442	2
16-02	1650	36	16870	421	1	560	43	1540	15	1	85	1
17-02	2380	56	15030	247	1	330	65	1490	8	1	12	1
18-02	2440	38	18550	471	1	470	68	1800	8	3	4	2
19-02	2860	44	17640	423	1	800	50	1630	7	2	7	1
20-04	2430	28	18810	608	1	800	46	1580	12	2	164	1
20-05	2980	34	16350	566	1	650	51	1580	10	3	103	1
22-02	2420	35	14470	459	1	480	44	1520	10	1	56	1
23-03	2540	17	13740	327	1	450	35	1360	8	1	67	1
23-04	1980	7	12370	470	1	190	21	1240	7	1	108	1
24-02	2130	4	11780	457	1	520	29	1480	11	1	134	1
25-03	2110	26	14260	565	1	810	33	1610	9	3	174	1
26-02	2190	35	15600	424	1	510	43	1580	13	1	38	1
27-04	1940	31	15190	408	1	510	46	1320	12	1	63	1
28-01	1740	10	14840	469	1	730	57	1590	12	1	79	1
29-02	1440	27	16270	521	1	590	45	1630	14	1	65	1
30-05	1920	35	15810	394	1	450	58	1690	16	1	54	1
31-03	2050	18	12890	485	1	400	43	1650	22	3	38	1
32-04	1660	33	17100	429	1	580	53	1250	10	2	84	1
33-01	1490	41	12450	436	1	540	39	1450	13	1	50	1
34-03	1930	29	16880	364	1	460	68	1410	8	1	4	1
35-01	1950	52	15060	182	1	480	64	1830	11	1	3	1
37-04	1900	36	18830	553	1	430	64	1750	12	1	9	1

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(ACT:F31) PAGE 3 OF 3
FILE NO: 82-401R/P1+2
* TYPE ROCK GEOCHEM * DATE:MARCH 6, 1988

(VALUES IN PPM)	U	V	ZN	GA	SN	W	CR	AU-PPB
1-02	1	30.5	72	1	1	2	89	3
2-02	1	25.3	69	1	1	1	103	2
5-04	1	48.3	33	2	2	2	1094	4
6-07	1	37.6	26	2	1	2	352	2
8-02	1	30.1	47	1	1	1	130	1
9-02	1	29.3	48	1	1	1	142	1
10-04	2	25.7	53	1	1	1	147	3
1-03	2	21.0	47	1	1	1	146	30
12-06	2	25.6	51	1	1	1	124	2
13-02	2	26.8	48	1	1	1	169	1
14-01	1	20.0	49	1	1	1	92	2
14-02	1	29.5	55	1	1	1	98	1
15-03	1	27.5	46	1	1	1	137	3
16-02	1	24.5	71	1	1	1	135	2
17-02	1	20.8	41	1	1	1	68	10
18-02	1	31.5	78	1	1	2	109	3
19-02	1	35.1	45	1	1	1	147	2
20-04	1	22.4	33	1	1	1	119	1
20-05	1	25.1	31	1	1	1	104	1
22-02	2	27.2	46	1	1	1	105	3
23-03	2	16.4	56	1	1	1	113	2
23-04	2	10.6	30	1	1	1	144	1
24-02	2	10.3	35	1	1	1	101	2
25-03	1	24.7	51	1	1	1	142	3
26-02	1	31.9	50	1	1	2	162	2
27-04	1	21.1	49	1	1	1	111	1
28-01	1	12.7	47	1	1	1	86	7
29-02	1	21.0	52	1	1	1	103	2
30-05	1	30.1	52	1	1	1	113	2
31-03	1	20.8	44	1	1	1	115	4
32-04	1	27.5	60	1	1	1	153	11
33-01	1	31.1	84	1	1	1	137	2
34-03	1	33.0	65	1	1	1	233	10
35-01	1	28.3	60	1	1	1	103	5
37-04	1	28.4	54	1	1	1	110	7

Bondar-Clegg & Company Ltd.
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BONDAR-CLEGG

Geochemical Lab Report

REPORT; 088-01573.0

PROJECT: NONE PAGE 1A

SAMPLE NUMBER	ELEMENT UNITS	Na PCT	Sc PPM	Cr PPM	Fe PCT	Co PPM	Ni PPM	Zn PPM	As PPM	Se PPM	Br PPM	Rb PPM	Zr PPM
K88-01-01-H		0.22	84.9	1900	20.0	250	650	<200	183	<10	<5	<10	14000
K88-02-01-H		0.21	99.3	960	22.0	78	85	<200	33	<10	<5	<10	5000
K88-05-01-H		0.15	101.0	1300	22.0	65	<50	<200	22	<10	<5	<10	11000
K88-05-02-H		0.20	95.0	2900	23.0	79	67	<200	41	<10	<5	<10	8800
K88-05-03-H		0.18	98.8	1700	22.0	75	<50	<200	35	<10	<5	<10	9600
K88-06-01-H		0.18	100.0	1900	22.0	73	71	<200	52	<10	<5	<10	6000
K88-06-02-H		0.28	106.0	4100	25.0	100	99	200	73	<10	<5	<10	12000
K88-06-03-H		0.28	87.6	4600	25.0	110	66	<200	144	<10	<5	<10	9900
K88-06-04-H		0.30	87.4	3100	23.0	100	81	<200	173	<10	<5	<10	10000
K88-06-05-H		0.26	82.1	3000	22.0	89	100	<200	312	<10	<5	21	12000
K88-06-06-H		0.21	77.5	3800	19.0	85	130	<200	286	<10	<5	<10	8600
K88-10-01-H		0.24	101.0	1800	22.0	54	<50	<200	9	<10	<5	<10	13000
K88-10-02-H		0.28	97.1	4700	22.0	47	57	<200	4	<10	<5	<10	11000
K88-10-03-H		0.26	92.3	6430	22.0	50	61	<200	8	<10	<5	<10	15000
K88-11-01-H		0.24	106.0	1800	23.0	52	<50	<200	6	<10	<5	<10	11000
K88-11-02-H		0.21	98.1	2400	24.0	61	<50	<200	25	<10	<5	<10	10000
K88-12-01-H		0.21	104.0	1900	23.0	38	<50	<200	<6	<10	<5	<10	9400
K88-12-02-H		0.22	89.1	1600	25.0	140	220	<200	375	<10	<5	<10	5200
K88-12-03-H		0.16	87.3	1700	25.0	140	180	<200	228	<10	<5	<10	6700
K88-12-04-H		0.23	89.0	1800	24.0	110	120	<200	114	<10	<5	<10	14000
K88-12-05-H		0.18	98.1	1500	24.0	110	110	<200	113	<10	<5	18	9500
K88-13-01-H		0.23	93.6	1100	23.0	120	160	<200	2900	<10	<5	<10	7900
K88-15-01-H		0.17	106.0	740	21.0	66	56	<200	39	<10	<5	<10	5300
K88-15-02-H		0.25	69.6	1300	30.0	170	230	<200	3680	<10	<5	<10	3000
K88-16-01-H		0.25	86.2	1600	26.0	130	100	<200	95	<10	<5	12	3900
K88-17-01-H		0.23	93.2	780	19.0	64	81	<200	16	<10	<5	<10	6200
K88-18-01-H		0.17	92.5	930	21.0	110	140	<200	55	<10	<5	<10	3800
K88-19-01-H		0.22	111.0	1100	23.0	88	110	220	26	<10	<5	<10	5200
K88-20-01-H		0.13	75.0	1500	23.0	160	210	<200	349	<10	<5	<10	5800
K88-20-02-H		<0.13	92.2	1500	23.0	120	140	<200	232	<10	<5	<10	8700
K88-20-03-H		0.33	96.4	1100	24.0	140	190	<200	244	<10	<5	<10	11000
K88-22-01-H		0.23	108.0	2100	23.0	60	61	<200	7	<10	<5	<10	9300
K88-23-01-H		0.23	93.6	2000	22.0	84	56	<200	80	<10	<5	12	9100
K88-23-02-H		0.24	96.8	1800	23.0	66	52	<200	65	<10	<5	<10	10000
K88-24-01-H		0.31	78.9	1900	25.0	110	130	<200	200	<10	<5	16	5900
K88-25-01-H		0.15	87.8	1900	25.0	130	180	<200	1410	<10	<5	14	4200
K88-25-02-H		0.19	85.2	2200	26.0	160	190	<200	1160	<10	<5	<10	4800
K88-26-01-H		0.30	80.0	780	22.0	150	280	<200	290	<10	<5	<10	8300
K88-27-01-H		0.18	101.0	1000	21.0	74	63	<200	22	<10	<5	<10	5600
K88-27-02-H		0.25	89.9	810	19.0	64	56	<200	32	<10	<5	<10	8400

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BONDAR-CLEGG

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REPORT: 088-01573.0

PROJECT: NONE PAGE 1B

SAMPLE NUMBER	ELEMENT UNITS	Mo PPM	Ag PPM	Cd PPM	Sn PPM	Sb PPM	Te PPM	Cs PPM	Ba PPM	La PPM	Ce PPM	Sm PPM	Eu PPM
K88-01-01-H		9	<5	<10	<200	18.0	<20	<1	<100	512	900	95.2	3
K88-02-01-H		<2	<5	<10	<200	0.5	<20	<1	<100	340	630	70.9	5
K88-05-01-H		<2	<5	<10	<200	0.5	<20	<1	<100	531	940	94.2	5
K88-05-02-H		<2	<5	<10	<200	0.4	<20	<1	<100	516	890	96.9	5
K88-05-03-H		<2	<5	<10	<200	0.3	<20	<1	<100	460	800	87.6	5
K88-06-01-H		<2	<5	<10	<200	0.3	<20	<1	<100	400	710	79.0	6
K88-06-02-H		<2	<5	<10	<200	0.5	<20	<1	<100	571	1000	99.5	6
K88-06-03-H		4	<5	<10	<200	1.4	<20	<1	<100	430	770	74.8	5
K88-06-04-H		<2	<5	<10	<200	1.2	<20	<1	<100	400	700	72.5	4
K88-06-05-H		4	<5	<10	<200	1.9	<20	<1	<100	380	690	71.0	4
K88-06-06-H		<2	<5	<10	<200	1.5	<20	<1	180	310	530	58.4	4
K88-10-01-H		<2	<5	<10	<200	0.9	<20	<1	<100	652	1140	113.0	6
K88-10-02-H		<2	<5	<10	250	0.8	<20	<1	<100	470	860	79.3	7
K88-10-03-H		<2	<5	<10	<200	1.0	<20	<1	<100	480	840	77.2	5
K88-11-01-H		<2	<5	<10	<200	0.4	<20	<1	<100	535	960	112.0	9
K88-11-02-H		<2	<5	<10	<200	2.6	<20	<1	<100	611	1040	105.0	3
K88-12-01-H		<2	<5	<10	<200	0.3	<20	<1	<100	581	990	105.0	5
K88-12-02-H		8	<5	<10	<200	5.2	<20	<1	110	350	620	62.2	4
K88-12-03-H		5	<5	<10	<200	3.6	<20	<1	<100	410	720	73.2	4
K88-12-04-H		<2	<5	<10	<200	2.6	<20	<1	<100	557	970	109.0	5
K88-12-05-H		<2	<5	<10	<200	2.4	<20	1	<100	450	780	76.3	4
K88-13-01-H		4	<5	<10	<200	3.9	<44	<1	<100	390	650	69.2	6
K88-15-01-H		4	<5	<10	<200	0.6	<20	<1	100	330	610	64.4	5
K88-15-02-H		5	<5	<10	<200	6.8	<45	<1	<100	240	420	48.0	3
K88-16-01-H		<2	<5	<10	<200	13.0	<20	<1	<100	390	680	72.0	4
K88-17-01-H		4	<5	<10	<200	0.9	<20	<1	<100	300	560	58.0	8
K88-18-01-H		<2	<5	12	<200	5.2	<20	<1	<100	220	420	53.4	4
K88-19-01-H		<2	<5	<10	<200	0.6	<20	<1	<100	330	610	70.4	6
K88-20-01-H		<2	<5	<10	<200	7.1	<20	<1	<100	330	580	64.1	4
K88-20-02-H		4	<5	<10	<200	3.2	<20	<1	<100	420	760	81.2	4
K88-20-03-H		<2	<5	<10	<200	4.6	<20	<1	<100	470	820	84.4	6
K88-22-01-H		<2	<5	<10	<200	1.1	<20	<1	<100	516	890	95.9	4
K88-23-01-H		<2	<5	<10	<200	1.1	<20	<1	<100	450	800	86.5	5
K88-23-02-H		<2	<5	<10	<200	1.1	<20	<1	<100	516	880	95.7	5
K88-24-01-H		3	<5	<10	<200	3.3	<20	<1	<100	300	550	53.6	5
K88-25-01-H		3	<5	<10	<200	3.8	<20	<1	<100	340	580	60.8	3
K88-25-02-H		<2	<5	<10	<200	4.9	<20	<1	<100	390	670	74.1	<2
K88-26-01-H		<2	<5	<10	<200	7.8	<20	<1	<100	380	660	71.4	5
K88-27-01-H		<2	<5	<10	<200	0.3	<20	<1	<100	360	670	78.7	6
K88-27-02-H		3	<5	<10	<200	0.7	<20	<1	<100	380	680	71.5	5

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REPORT: 088-01573.0

PROJECT: NONE

SAMPLE NUMBER	ELEMENT UNITS	Tb PPM	Yb PPM	Lu PPM	Hf PPM	Ta PPM	W PPM	Ir PPB	Au PPB	Th PPM	U PPM	WT .9
K88-01-01-H		10	26	3.9	258	14	<8	<100	170	264.0	29.0	22.89
K88-02-01-H		8	26	4.5	100	11	<6	<100	16	166.0	17.0	39.84
K88-05-01-H		10	32	5.5	209	16	10	<100	120	263.0	25.0	42.69
K88-05-02-H		9	27	5.1	170	13	29	<100	34	236.0	24.0	75.18
K88-05-03-H		9	27	5.1	180	12	22	<100	23	205.0	22.0	60.67
K88-06-01-H		9	25	4.7	120	15	6	<100	99	188.0	18.0	45.79
K88-06-02-H		10	30	5.5	238	15	26	<100	26	283.0	27.0	33.03
K88-06-03-H		8	26	4.3	180	12	40	<100	250	220.0	51.8	37.84
K88-06-04-H		8	24	3.9	214	10	48	<100	54	198.0	26.0	26.89
K88-06-05-H		8	23	3.5	232	10	13	<100	320	202.0	21.0	21.19
K88-06-06-H		7	20	3.4	170	10	<6	<100	618	145.0	16.0	36.74
K88-10-01-H		10	32	5.3	265	15	16	<100	190	303.0	28.0	46.80
K88-10-02-H		9	31	4.6	221	12	<7	<100	47	226.0	20.0	22.37
K88-10-03-H		9	30	4.6	283	11	<7	<100	100	215.0	21.0	22.33
K88-11-01-H		11	32	6.1	213	18	26	<100	543	247.0	25.0	54.35
K88-11-02-H		10	30	5.6	203	16	37	<100	721	305.0	24.0	48.74
K88-12-01-H		9	31	5.5	180	15	22	<100	696	265.0	23.0	67.29
K88-12-02-H		7	22	3.8	97	9	100	<100	140	179.0	15.0	34.58
K88-12-03-H		8	25	4.1	140	11	17	<100	200	212.0	18.0	35.23
K88-12-04-H		10	26	4.9	264	14	27	<100	89	277.0	29.0	54.55
K88-12-05-H		8	27	4.5	190	12	12	<100	58	222.0	19.0	30.92
K88-13-01-H		7	24	4.4	160	11	42	<100	200	167.0	18.0	32.03
K88-15-01-H		8	27	4.3	110	11	<8	<100	21	146.0	15.0	20.26
K88-15-02-H		5	16	3.2	59	11	57	<100	1270	119.0	9.0	42.50
K88-16-01-H		7	23	4.1	82	11	16	<100	200	183.0	15.0	64.67
K88-17-01-H		8	24	3.6	120	10	<11	<100	350	131.0	15.0	6.75
K88-18-01-H		6	20	3.9	71	10	<5	<100	60	83.4	10.0	64.37
K88-19-01-H		8	26	4.4	100	11	<7	<100	13	147.0	15.0	38.84
K88-20-01-H		8	20	3.5	120	10	49	<100	190	179.0	16.0	32.45
K88-20-02-H		9	24	4.0	160	13	<8	<100	100	220.0	21.0	30.92
K88-20-03-H		9	26	4.6	207	13	<8	<100	370	215.0	22.0	38.92
K88-22-01-H		9	29	5.8	180	16	23	<100	490	361.0	34.0	53.35
K88-23-01-H		9	27	5.2	180	13	13	<100	130	206.0	20.0	65.15
K88-23-02-H		9	28	5.1	203	14	17	<100	1030	243.0	24.0	54.14
K88-24-01-H		6	21	3.3	120	9	45	<100	120	145.0	12.0	13.91
K88-25-01-H		6	23	4.1	79	10	12	<100	1890	169.0	13.0	37.45
K88-25-02-H		7	23	4.1	89	11	<7	<100	1280	217.0	16.0	64.65
K88-26-01-H		7	25	4.2	160	12	61	<100	160	182.0	17.0	36.38
K88-27-01-H		9	24	4.3	110	12	11	<100	50	173.0	17.0	48.99
K88-27-02-H		8	25	4.6	170	13	14	<100	37	175.0	19.0	31.49

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SAMPLE NUMBER	ELEMENT UNITS	Na PCT	Sc PPM	Cr PPM	Fe PCT	Co PPM	Ni PPM	Zn PPM	As PPM	Se PPM	Br PPM	Rb PPM	Zr PPM
K88-27-03-H		0.19	91.0	1200	23.0	130	160	<200	353	<10	<5	<10	6600
K88-29-01-H		0.21	98.7	1100	24.0	110	140	<200	669	<10	<5	<10	13000
K88-30-01-H		<0.18	97.3	1400	22.0	100	120	<200	89	<10	<5	<10	5700
K88-30-02-H		0.28	85.8	1300	25.0	210	250	270	180	<10	<5	<10	4300
K88-30-03-H		0.27	84.8	1200	25.0	180	250	<200	192	<10	<5	18	3400
K88-30-04-H		0.43	72.0	1300	24.0	200	280	<200	213	<10	<5	15	3700
K88-31-01-H		0.21	93.1	1200	21.0	58	<50	<200	69	<10	<5	<10	16000
K88-31-02-H		0.20	79.1	920	18.0	78	110	<200	278	<10	<5	<10	13000
K88-32-01-H		0.17	105.0	1300	23.0	90	78	<200	55	<10	<5	<10	5500
K88-32-02-H		0.25	105.0	1200	22.0	76	<50	<200	26	<10	<5	<10	5500
K88-32-03-H		0.20	102.0	1500	23.0	99	66	<200	89	<10	<5	<10	5200
K88-34-01-H		0.20	100.0	1300	23.0	97	110	<200	77	<10	<5	<10	5700
K88-34-02-H		0.25	97.2	1400	26.0	140	150	<200	128	<10	<5	<10	8400
K88-36-01-H		<0.23	112.0	2200	21.0	110	130	<200	58	<10	<5	<10	9400
K88-36-02-H		<0.16	108.0	2000	21.0	120	140	<200	56	<10	<5	<10	9100
K88-36-03-H		0.23	105.0	1300	19.0	84	120	<200	29	<10	<5	<10	8200
K88-36-04-H		0.29	102.0	970	19.0	79	87	<200	55	<10	<5	<10	12000
K88-36-05-H		<0.21	85.3	3200	17.0	79	120	<200	27	<10	<5	<10	8800
K88-36-06-H		0.20	84.5	4800	20.0	81	220	<200	19	<10	<5	<10	4200
K88-36-07-H		0.28	85.0	6350	19.0	140	220	<200	86	<10	<5	<10	4100
K88-37-01-H		<0.18	119.0	1700	23.0	130	160	<200	60	<10	<5	<10	9800
K88-37-02-H		<0.13	96.0	1100	19.0	98	210	<200	40	<10	<5	<10	8800
K88-37-03-H		<0.15	91.6	1200	18.0	81	130	<200	42	<10	<5	16	8800

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SAMPLE NUMBER	ELEMENT UNITS	Mo PPM	Ag PPM	Cd PPM	Sn PPM	Sb PPM	Te PPM	Cs PPM	Ba PPM	La PPM	Ce PPM	Sm PPM	Eu PPM
K88-27-03-H		<2	<5	<10	<200	2.4	<20	<1	<100	420	710	75.0	4
K88-29-01-H		<2	<5	<10	<200	0.7	<20	<1	<100	532	920	90.4	7
K88-30-01-H		6	<5	<10	<200	1.4	<20	<1	<100	350	620	57.0	5
K88-30-02-H		3	<5	<10	<200	8.9	<20	<1	<100	300	530	57.8	4
K88-30-03-H		5	<5	<10	<200	9.4	<20	<1	<100	280	490	56.0	5
K88-30-04-H		6	<5	<10	<200	12.0	<20	<1	<100	480	810	74.0	3
K88-31-01-H		<2	<5	<10	230	0.9	<20	<1	<100	656	1130	119.0	5
K88-31-02-H		4	<5	<10	210	1.7	<20	<1	<100	490	860	94.0	6
K88-32-01-H		<2	<5	<10	<200	0.6	<20	<1	<100	410	750	90.4	4
K88-32-02-H		<2	<5	<10	<200	0.3	26	<1	<100	400	730	74.1	6
K88-32-03-H		<2	<5	<10	<200	0.9	<20	<1	<100	390	750	79.7	4
K88-34-01-H		<2	<5	<10	<200	1.0	<20	<1	<100	380	680	72.6	4
K88-34-02-H		<2	<5	<10	<200	2.3	<20	<1	<100	533	930	95.7	3
K88-36-01-H		7	<5	<10	<200	1.1	<40	<1	<100	400	730	68.6	6
K88-36-02-H		4	<5	<10	<200	0.7	<20	2	<100	440	810	79.0	7
K88-36-03-H		<2	<5	<10	<200	0.5	<20	<1	<100	430	790	85.2	7
K88-36-04-H		<2	<5	<10	<200	1.1	<20	<1	<100	460	840	89.2	9
K88-36-05-H		10	<5	<10	<200	0.7	<20	<1	<100	440	800	95.3	7
K88-36-06-H		3	<5	<10	<200	0.6	<20	<1	<100	240	450	49.0	5
K88-36-07-H		4	<5	<10	<200	4.0	<20	<1	<100	410	730	67.5	5
K88-37-01-H		<2	<5	<10	<200	2.0	<20	<1	<100	524	920	94.7	6
K88-37-02-H		<2	<5	<10	<200	4.3	<20	<1	<100	420	750	80.0	6
K88-37-03-H		5	<5	<10	<200	3.5	<20	<1	<100	430	770	79.5	5

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SAMPLE NUMBER	ELEMENT UNITS	Tb PPM	Yb PPM	Lu PPM	Hf PPM	Ta PPM	W PPM	Ir PPB	Au PPB	Th PPM	U PPM	WT g
K88-27-03-H		8	26	4.5	140	12	11	<100	270	204.0	18.0	41.21
K88-29-01-H		10	28	4.9	254	13	22	<100	44	236.0	26.0	29.71
K88-30-01-H		7	26	4.1	110	11	<12	<100	210	169.0	17.0	8.22
K88-30-02-H		7	23	4.0	84	10	<7	<100	120	144.0	12.0	36.64
K88-30-03-H		6	21	3.9	68	8	13	<100	87	132.0	13.0	54.32
K88-30-04-H		7	21	3.2	68	9	19	<100	1550	264.0	15.0	36.75
K88-31-01-H		11	31	5.5	318	16	14	<100	1830	304.0	34.0	48.80
K88-31-02-H		10	25	3.7	238	13	14	<100	68	247.0	27.0	32.37
K88-32-01-H		9	27	4.6	110	15	<8	<100	83	210.0	19.0	56.50
K88-32-02-H		8	29	4.9	110	15	21	<100	170	199.0	17.0	32.22
K88-32-03-H		8	26	4.9	100	12	<7	<100	500	190.0	16.0	63.15
K88-34-01-H		8	26	4.5	110	10	<7	<100	250	171.0	16.0	60.15
K88-34-02-H		9	28	5.3	160	13	41	<100	440	256.0	23.0	74.66
K88-36-01-H		9	33	4.6	170	11	<15	<100	81	187.0	17.0	7.70
K88-36-02-H		9	32	5.0	180	12	50	<100	48	209.0	19.0	15.91
K88-36-03-H		9	27	4.9	170	15	24	<100	68	190.0	18.0	31.50
K88-36-04-H		10	29	5.1	232	15	25	<100	42	205.0	22.0	30.53
K88-36-05-H		11	25	3.7	180	16	1670	<100	<13	212.0	27.0	14.90
K88-36-06-H		6	19	3.0	83	7	140	<100	120	121.0	11.0	24.29
K88-36-07-H		7	18	2.7	79	8	130	<100	110	250.0	14.0	15.25
K88-37-01-H		11	32	5.6	209	13	12	<100	170	237.0	22.0	32.33
K88-37-02-H		8	28	4.5	180	13	19	<100	24	189.0	19.0	33.59
K88-37-03-H		9	25	4.6	170	13	<9	<100	87	212.0	20.0	31.53

APPENDIX C

DATE Jan 30/88 HOLE No. K-88-1 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION on beach, 100'E of point infront of Dupuis house on Frederick House Lake

BIT No. 1000842 FOOTAGE ON BIT Hole depth = 95'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 11:00 am Finish 2:10 pm 1hr delay - clogged rods, fix swivel

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
	Ice		0-2' Ice			
			2'-8' no return			
10			8'-84' Sand - f-m grained, well sorted sand with m-c grained sand @ 72'-79' - few wood chips noted @ 83'			
20						
30			84-91' Till - 50-60% subrounded clasts, granule to c. pebbles in a f. sand-silt-minor clay matrix - unsorted with minor clay adhesion noted - 60-70% mafics + seds, 30-40% granite + qtz, 2% limestone			
40						
50						
			91-95' Bedrock - dark greenish-grey, vfg siltstone with a slaty cleavage			
60						
70			95' EOH			
80						
		01		1	66	0
90		02 Bedrock			3	
100						

DATE Jan 30/88 HOLE No. K-88-2 GEOLOGIST H.H. DRILLER Goodyear

HOLE LOCATION 200m E of K-88-1

BIT No. same FOOTAGE ON BIT Hole depth = 170'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 2:45 pm Finish 5:pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
			2-10' No return	
10			10-36' Lacustrine Clay - smooth, soft, grey clay - fairly pure becoming silty @ 28'	
20				
			36'-139' Sand - generally f-m grained, well sorted sands with slightly coarser sections @ 50-55', 120-127' and 130-137' - woodchips noted @ 92'	
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-2 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			- woodchips noted @ 139'			
			- 139-142' Compact Clay - relatively hard, silty, light grey clay			
120			- 142-148' Slightly Pebbly Sand - <10% f-c pebbles in f. sand - clasts consist mainly of mafics + sediments			
130			148-164' Sand - f-m well sorted sand			
140			164' Loose bedrock - Siltstone			
			165-170' Bedrock - medium grey, fg siltstone with a slaty cleavage - a few qtz stringers noted			
150			170' E.O.H.			
160		01		0	0	0
		02			2	
170		Bedrock				
180						

DATE Jan 31/88 HOLE No. K-88-3 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION just off pt, 400m E of K-88-2

BIT No. same FOOTAGE ON BIT Hole depth = 245'

HOURS MOVED ____ HOURS DRILLED ____ OTHER Hole Abandoned

Start 10:25am / rods clogged @ 185' + redrilled / Hole abandoned @ 6:50pm - clogged rods - 245'

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
			2-35' No return	
10				
	no return		35-70' Lacustrine Clay - soft, smooth grey & brown - quick penetration - fairly pure	
20				
			70-130' Sand - well sorted, qtz-rich fine sand with <1% pebbles - wood chips noted @ 70' and 95'	
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-3 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
110			-130-131' Compact Clay - moderately hard, grey, gritty clay - slow penetration	
120			-131'-245' Silty Sand - fine, well sorted, silty sand -@230'- <5% granules-f. pebbles appear in silty sand	
130				
140				
150				
160				
170				
180				
190				
200				

DATE _____ HOLE No. K-88-3 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
210				
220				
230				
240			- hole abandoned @ 245' due to plugged rods	
250				
260				

DATE Feb 1/88 HOLE No. K-88-4 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 200m E of K-88-3 along shoreline

BIT No. same FOOTAGE ON BIT Hole depth 215'- Abandoned

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 11:30am / rods plugged @ 205'- redrill Feb 2 / 1½hr mechanical delays / rods plugged @ 215'- -abandoned @ 3:45pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
			2-70' Lacustrine Clay - soft, smooth, grey & brown varved clays - slightly silty from 37' down	
			70 - 215' Sand - v. well sorted fine sand - quick penetration - << 1% clasts - wood chips noted @ 90-105' and 190-195'	

10 20 30 40 50 60 70 80 90 100

DATE _____ HOLE No. K-88-4 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
110				
120				
130				
140				
150				
160				
170				
180				
190				
200				

DATE _____ HOLE No. K-88-4 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
210			- hole abandoned @ 215' due to clogged rods	
220				
230				
240				
250				

DATE Feb 3/88 HOLE No. K-88-5 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION on beach 2000m E along shoreline of K-88-4 on Frederick House Lake

BIT No. Same FOOTAGE ON BIT Hole depth 144'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 10:20am Finish 12:00 noon

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
10			2-124' Lacustrine Clay - soft, smooth, fairly pure, grey & brown varved clays - minor sand & organics @ 2-15' - becoming silty @ 60'	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-5 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			-124-139' Till - 30-40% mainly granules → f. pebbles in a sand-silt matrix - v. few c. pebbles - clasts are subrounded - 60% ultramafics, mafics and sediments, 30-40% granite + qtz, 5% limestone - unsorted			
120						
130		01	- one irregular 3/16" chunk of py noted in till - no clay observed	1	35	0
		02		5	59	100
		03		0	0	0
140		04 Bedrock	-139-144' Bedrock - serpentinized peridotite - dark green, medium grained with a fibrous appearance @ times - a few calcite stringers observed		4	
150			144' E.O.H.			
160						

DATE Feb 3/88 HOLE No. K-88-6 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 400m SW along shoreline of K-88-5

BIT No. J000841 FOOTAGE ON BIT Hole depth 204'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 1:10 pm Finish 5:20 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice 2-5' No return 5-60' Lacustrine Clay - soft, smooth, grey & brown varved clays - silty clay @ 30' 60-68' Sand - fine, well sorted sand 68-75' Sandy Clay - fine sand in grey clay 75-113' Sand - fine, well sorted	

10 20 30 40 50 60 70 80 90 100

DATE _____ HOLE No. K-88-6 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc)	No. Asp. Grains
110			-113-115' Clay - grey, hard & gritty			
			-115-170' Sand - fine, well sorted sand			
120						
130			-170-199' Till - 50-70% subrounded to subangular, mainly granule to medium pebbles in a sand-silt- and minor clay matrix - clay adhesion noted - unsorted with 50% ultramafics, mafics & sediments, 40-50% granitic rocks & qtz, 5% limestone			
140						
150			- several cpebbles → f. cobbles of ultramafics @ 176'-181' - 25% hgcb @ 181' increasing to 70% of +10 mesh @ 182' then back to 25% - ultramafic & mafic clast content increases to 70% @ 183' with 25% hgcb in +10 mesh - good till!			
160			- fine cobble of granite @ 184' - 187-190' - 20% f-c pebbles in a clay-sand matrix; clasts are subrounded to subangular with 70-80% ultramafics, mafics & sediments			
170		01	- 6" ultramafic intrusive cobbles @ 194.5' and @ 196'	2	130	50
		02	- 197' - 10% hgcb in +10 mesh still with high mafic content	0	0	0
180		03		7	266	150
		04	-199-204' Bedrock - dark green, medium grained, olivine-rich peridotite	0	0	0
190		05	- not serpentinized as @ hole #1 - much harder	5	290	50
		06	204' E.O.H.	2	2663	0
200		07 Bedrock			2	

DATE Feb 4/88 HOLE No. K-88-7 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 600 m E along shoreline of BL 0/7+00 E on Frederick House Lake

BIT No. same-new FOOTAGE ON BIT Hole depth 205'-abandoned

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 10:00am/20min. delay-change filters/rods clogged @ 195'-redrill/rods plugged @ 205'-abandoned @ 5:30 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice 2'-200' Lacustrine Clay - silty with organics down to 15' - soft, smooth, grey and fairly pure with very few fine clasts - grey & brown varved clays from 68'±down - minor silt appears @ 90'	
10				
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-7 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
110			- becoming increasingly silty @ 195' - a few woodchips noted @ 195'	
120			-200' sand - fg sand + silt → well sorted - rods plugged @ 205' - hole abandoned @ 5:30pm	
130				
140				
150				
160				
170				
180				
190				
200				

DATE Feb 6/88 HOLE No. K-88-8 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 200m E of old brown house on south shore of Frederick House Lake

BIT No. same FOOTAGE ON BIT Hole depth = 189'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 12:10 / bit broke @ 166' - redrill Feb 7 (J000735) / Finish 1:30 pm

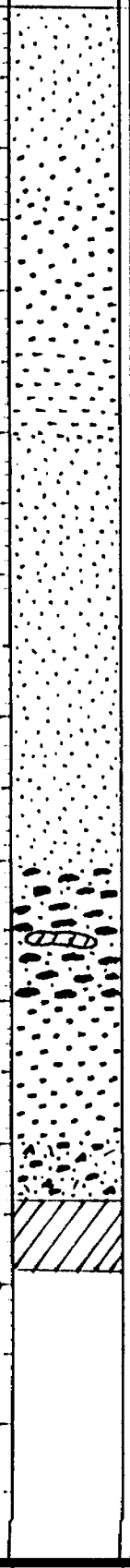
DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-1' Ice 1-14.5' Coarse Gravel - f-m cobbles of mainly granitic rocks and lesser mafics in minor sand-pebble matrix - 13.5-14.5' - altered sediment boulder	
20			14.5-29' Fine-Medium Gravel - mainly granule to c. pebbles, with minor medium sand	
30			29-34' Sand - f-c sand, moderately well sorted	
40			34-47' Fine-Medium Gravel - mainly granule to medium pebbles with little sand 47-55' Medium-Coarse Gravel	
50			55-67' Fine-Medium Gravel	
60			67-78' Sand - fine sand grading down into well sorted medium grained sand 78-98' Fine-Medium Gravel - well sorted, mainly granule → f pebs with minor sand - clear water	
70				
80			98-110' Sand - well sorted medium-coarse sand	
90				
100				

DATE _____ HOLE No. K-88-8 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____



DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES					
				No. Au Grains	Au ppb	No. Asp. Grains			
			110-130' Fine Gravel - mainly granule→f pebbles with minor coarse sand - well sorted						
			130-160' Sand - f-m sand, well sorted grading down into m-c sand						
			160-170' Medium-Coarse Gravel						
			170-180' Fine Gravel						
			180-184' Till - 80% seds in +10 mesh - mainly m-c pebbles with less granule→f pebbles in sand-silt-minor clay matrix - abundant sand in sample - minor clay adhesion noted - moderately slow penetration						
			184-189' Bedrock - dark grey, fg. slaty siltstone - slaty cleavage - 1% py						
			189' E.O.H.						
		01							
		02 Bedrock			1				

DATE Feb 7/88 HOLE No. K-88-9 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 300m W of K-88-8 along shoreline

BIT No. J000840 FOOTAGE ON BIT Hole depth = 141'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 2:30pm / Finish 6:10pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	no return		0-1' Ice 1-10' No return	
10			10-90' Lacustrine Clay - soft, smooth mainly grey & lesser brown clays - fairly pure - quick penetration - minor fine sand in clay @ 60-65' - minor silt appears @ 70' - grades into silty clay @ 75' - slightly pebbly & sandy clay @ 85' + down	
20				
30				
40			90-97' Sand - fine sand, moderately sorted with <5% granules-f. pebbles - mafic volc. f. cobble @ 96'	
50				
60			97-135' Lacustrine Clay - grey, fairly hard, slow penetration - <1% clasts with minor silt and sand at times	
70				
80				
90				
100				

DATE _____ HOLE No. K-88-9 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb	No. Asp. Grains
			- grey & brown varved clays noted @ 110' + down			
110						
			135-138' Till - 40-50% subrounded granule + e. pebbles in a sand-silt-minor clay matrix - clasts composed of 60% mafics + seds, 40% granitic rocks, qtz, chert + limestone - clay adhesion noted but no hgt - slow penetration			
120						
130						
		01				
		02	138' Bedrock - medium grey, fg. altered siltstone - slightly altered appearance → more massive with no cleavage - minor qtz-calcite stringers - hard - very slow penetration		1	
140		Bedrock				
150						
			141' E.O.H.			
160						
170						
180						

DATE Feb 8/88 HOLE No. K-88-10 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 300m W of K-88-9

BIT No. same FOOTAGE ON BIT Hole depth = 125'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 9:15am / Finish 12:20pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES

0-1' Ice

1-75' Lacustrine Clay
- soft, smooth grey & brown clays
- minor silt increasing downward
- v. quick penetration

75-82' Till (Upper Till Sheet)
- 20-30% subrounded to rounded, granule to c. pebbles in a sand-silt matrix
- no clay observed
- 50% mafics & seds

82-104' Lacustrine Clay
- fairly hard, slightly silty, grey & brown varved clays
- slow penetration

10 20 30 40 50 60 70 80 90 100

DATE _____ HOLE No. K-88-10 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc)	No. Asp. Grains
			104-105' Mafic Intrusive Boulder			
		01	105-120' Till	9	171	0
110			- 40-50% subrounded granule to boulders in sand-silt matrix			
		02	- slow penetration from 108' to 120'	0	0	0
		03	- 60-70% ultramafics, mafics + seds., 30-40% granitoids, qtz and minor limestone	2	145	0
120		04 Bedrock	- 109.5'-111' - hornblende granite boulder		3	
			- unsorted			
130			120-125' Bedrock			
			- medium green, relatively soft, foliated, fine grained with numerous rusty specks - py?			
140			- Probably fg. sericitic sediment			
			125' EOH.			
150						
160						
170						
180						

DATE _____ HOLE No. K-88-11 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			114-124' Till - 50-80% subrounded granule to c. pebbles in a sand-silt-minor clay matrix - minor clay adhesion noted - abundant +10 mesh return - slow penetration - 60% mafics, ultramafics + seds, 35% graniteids + qtz, and 5% limestone - 117-118' - granitic boulder - unsorted			
120		01		16	1292	150
		02		16	1152	150
130		03 Bedrock	124-129' Bedrock - medium grey, schistose, weakly sericitic and moderately carbonated altered siltstone - 1-2% cubic py and a few qtz-calcite stringers		30	
140						
150			129' E.O.H.			
160						
170						

DATE Feb 9/88 HOLE No. K-88-12 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 200m W of K-88-11

BIT No. Same FOOTAGE ON BIT Hole depth = 145'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 9:10am / Finish 1:30pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
			0-1' Ice	
			1-78' Lacustrine Clay - soft, smooth grey and brown clays - varved - fairly pure becoming slightly silty with 5% fine pebbles @ 74'	
			78-83' Till - 30% subrounded granule to c. pebbles in a sand-silt-minor clay matrix - abundant +10 mesh return - minor clay adhesion noted - 60% mafics, ultramafics and seds., 35% granitoids, qtz and 5% limestone + chert	
			83-85' Clay - grey, fairly hard & compact	
			85-87' Till - clast supported - granule - c. pebbles - mainly m-c pebbles → groundup +10 mesh - 60-70% mafics, ultramafics and seds. → subrounded clasts - v. slow penetration - several hgcb noted @ base of section	
			87-118' Lacustrine Clay - fairly hard, grey & brown varved clays - slow penetration - 1% clasts	

10 20 30 40 50 60 70 80 90 100

DATE _____ HOLE No. K-88-12 GEOLOGIST H. Hutteri DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			118-141.5' Till - 50% subrounded granule to m. pebbles in a sand-silt matrix - moderately quick penetration - very pebbly - abundant +10 mesh return - 50% mafics, ultramafics + seds, 45% granitoids + qtz, 5% limestone			
120		01	- 60% mafics, ultramafics + seds. @ 125' - slow penetration from 125' down	17	1231	100
		02	- c. pebble of granite @ 124.5'	1	43	0
130		03	- a few sericitic seds. noted @ 126' - f. cobble siltstone @ 127' - @ 128' - 80% mafics, seds + ultramafics, 20% granitoids, qtz and limestone	2	29	100
		04	- 60-80% clasts in sand-silt matrix	7	74	50
140		05	- 130-131' - sericitic siltstone boulder with 1% py	0	0	0
		06	- slightly quicker penetration after 131'		2	
		Bedrock	- several sericitic clasts noted - one irregular chunk of py (3/16") noted @ 136' - slow penetration after 135' - numerous fragments of sericite schist noted - 140-141' sericite schist boulder - 130-140' → 80% mafics, sericite schist, seds + ultramafics, 20% granitoids, qtz + limestone			
150			141.5-145' Bedrock - light to medium green, f.g., moderately carbonatized Sericite Schist - <1% py			
160			145' EOH			
170						

DATE Feb 9/88 HOLE No. K-88-13 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 150 m W along beach of K-88-12

BIT No. I000701 +sub FOOTAGE ON BIT Hole depth = 140'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 2:15pm / Finish 5:35pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
			2-76' Lacustrine Clay - soft, smooth grey & brown varved clay - fairly pure - v. quick penetration	
10				
20			76-78' Till - 40% subrounded granule to f. pebbles in sand-silt matrix - 50-60% mafics, ultramafics + seds, 40-50% granitoids, qtz, limestone + chert	
30			78-95' Lacustrine Clay - grey, gritty, fairly hard & compact clay - clay becomes less gritty down section - f. cobble of granite @ 80' - grey & brown varved clays noted @ 85' + down	
40				
50			95-99' Till - @ 95-96' - f. cobbles of granitoids + seds. - @ 96' - 60-70% subrounded granule - m. pebbles in sand-silt matrix - abundant +10 mesh - moderately quick penetration - 60% mafics, ultramafics + seds, 40% granitoids, qtz, limestone + chert	
60				
70			99-131' Sand - fine, well sorted sand - <1% clasts - c. sand bed @ 127-129' with 2% clasts	
80				
90				
100				

DATE _____ HOLE No. K-88-13 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc)	No. Asp. Grains
110						
120			131-135' Till - 80% seds → sub rounded granule to c. pebbles in sand-silt matrix - slow penetration - grinding - possibly broken up bedrock in part			
130			135-140' Bedrock			
		01	- medium-/light grey, f.g., carbonatized and weakly sericitic sediment	0	0	0
		02 Bedrock	- altered siltstone - several qtz-calcite stringers which contain minor py - 1% py overall		1	
140			140' E.O.H.			
150						
160						
170						

DATE Feb 12/88 HOLE No. K-88-14 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION on powerline on left fork off Querion West Rd - Barbers Bay Area

BIT No. same FOOTAGE ON BIT Hole depth = 155'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 8:30am / Finish 10:15am

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-132' Sand - fine to medium grained, well sorted sand - <1% clasts - quick penetration - woodchips noted @ 94' - m-c sand noted @ 118-120'	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-14 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES					
				No. Au Grains	Au ppb	No. Asp. Grains			
110			132-132.5' Clay - grey & gritty						
120			132.5-150' Sand - f-c sand - <1% clasts						
130			150-155' Bedrock - sericitic siltstone - medium grey, slightly platy appearance - weakly sericitic greysed. with qtz-calcite stringers and lesser light green-white chips of sericite - moderately carbonated - 1-2% py occurring mainly in qtz-carb. stringers - @ 153.5-155' - dark grey boring siltstone - much less altered						
140									
150		01 Bedrock			2				
		02 Bedrock	155' EOH		1				
160									
170									

DATE Feb 12/88 HOLE No. K-88-15 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 200m N of K-88-14 along road

BIT No. Same FOOTAGE ON BIT Hole depth = 222'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 10:55 am / Finish 3:30 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-118' Sand - f-m grained, well sorted sand grading down into m-c sand @ 30' - 49' - minor clay & few pebbles noted in sand - 49.5' - f. cobble of mafic volcanics - fine silty sand @ 50-69' - 69-110' - f-c sand with <5% granules	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-15 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
110			-110-118'- f-m. well sorted sand 118-125' Clay - light grey, very sandy clay - slow penetration 125-146' Sand - f-m. sand, well sorted - grades down into clay-rich sand @ 130-146' → slower penetration - <5% granules - f. pebbles @ 134-136'	
120				
130				
140			146-149' Clay - grey, gritty, fairly soft with 5% granules - f. pebbles 149-158' Sand - f-m well sorted sand 158-160' Clay - grey, fairly soft & gritty 160-200' Sand - fine silty sand - quick penetration	
150				
160				
170				
180				
190				
200				

DATE _____ HOLE No. K-88-15 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
			200-202 Clay - grey, gritty, moderately hard - slow penetration			
210		01	202-208' Sand - medium grained, well sorted sand - quick penetration	0	0	0
		02	208-213' Clay - grey, gritty + compact - slow penetration - c. pebble sed. @ 210'	1	373 3	350
220		03 Bedrock				
			213-215' Sand - f-m sand, well sorted - quick penetration - becoming slightly pebbly @ 214'			
230			215-218' Till - fairly coarse, matrix supported till - possibly slightly washed - granule to c pebble in size but mainly m-c pebbles - very slow + grinding - subrounded clasts composed of 70-80% sericitic seds. with pyrite - minor sand in matrix - abundant +10 mesh return			
240			218-219' Loose Bedrock - sericitic siltstone with abundant qtz-carb stringers + 1-2% py			
250			219-222' Bedrock - medium grey siltstone with abundant qtz-calcite stringers with 1-2% py - weakly carbonated + slightly sericitic around qtz-carb. stringers - 221'-222' - less altered with <1% py			
			222' E.O.H.			

DATE Feb 12/88 HOLE No. K-88-16 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 200m N of K-88-15

BIT No. I000736 FOOTAGE ON BIT Hole depth = 225'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 4:15pm / Bit broke @ 190' @ 7pm - redrilled Feb 13 (I000704) / Finished Feb 13 @ 12 noon

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-75' Sand - f.g. sand, well sorted, grading down to f-m sand @ 40' - quick penetration	
20			75-78' Fine Gravel - mainly granule - f. pebbles with minor sand	
30			78-109' Sand - mainly f-m sand with m-c sand sections @ 92-94' and 104-109'	
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-16 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
110			109-111' Fine Gravel - mainly granule to f. pebble with minor sand 111'-117' Sand - m-c sand, well sorted 117-118' Fine Gravel 118-138' Sand - fine sand, well sorted - grading down to m-c sand @ 133' - wood chips noted @ 125'	
120				
130			138-140' Fine Gravel 140-141' Fine Sand 141-143' Fine Gravel 143-148' Fine Sand 148-149' Fine Gravel 149-167' Sand - f-m sand, well sorted - abundant wood chips @ 165'	
140				
150			167-174' Clay - grey, gritty clay - 6" siltstone cobble @ 170' 174-181' Silt - fine silt with <5% fine clasts - minor clay adhesion noted - fairly quick penetration	
160			181-212' Till - 181-182' - siltstone boulder - 60-70% subrounded-subangular, granule to boulders in a sand-silt matrix - 60-70% sedst + mafics - slow + grinding - 1/4" py chunk noted @ 184' - 188-189' siltstone boulder - @ 189' 50% granule-cpebbles in sand-silt matrix - a few sericitic sed. clasts noted - 193-194' - siltstone boulder - <5% hgcb noted @ 200'+ down	
170				
180				
190				
200				

DATE _____ HOLE No. K-88-16 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
210			212-218' Clay - grey + gritty			
			218-221' Clayey Sand - clay rich sand - quicker penetration			
220		01 02 Bedrock	221-221.5' Till - v. pebbly - drill slows down - 60% mainly sericite schist and siltstone, 40% granite, qtz + limestone - mainly subrounded granulet+ m. pebbles in sand-silt-clay matrix - clay adhesion noted	2	38 2	50
230			221.5-225' Bedrock - Sericite Schist - well developed, light green sericite with v. minor green mica noted - minor qtz-calcite stringers - 2-3% py overall - moderately fast penetration for bedrock - relatively soft.			
240			225' EOH			
250						
260						

DATE Feb 13/88 HOLE No. K-88-17 GEOLOGIST H. Hutteri DRILLER Goodycar

HOLE LOCATION 200m N of fork on Querion West Rd.

BIT No. same FOOTAGE ON BIT Hole depth = 176'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 1:15 pm/rods plugged @ 135' @ 4:25 pm - redrill Feb 15 / Finish Feb 15 @ 10:00 am

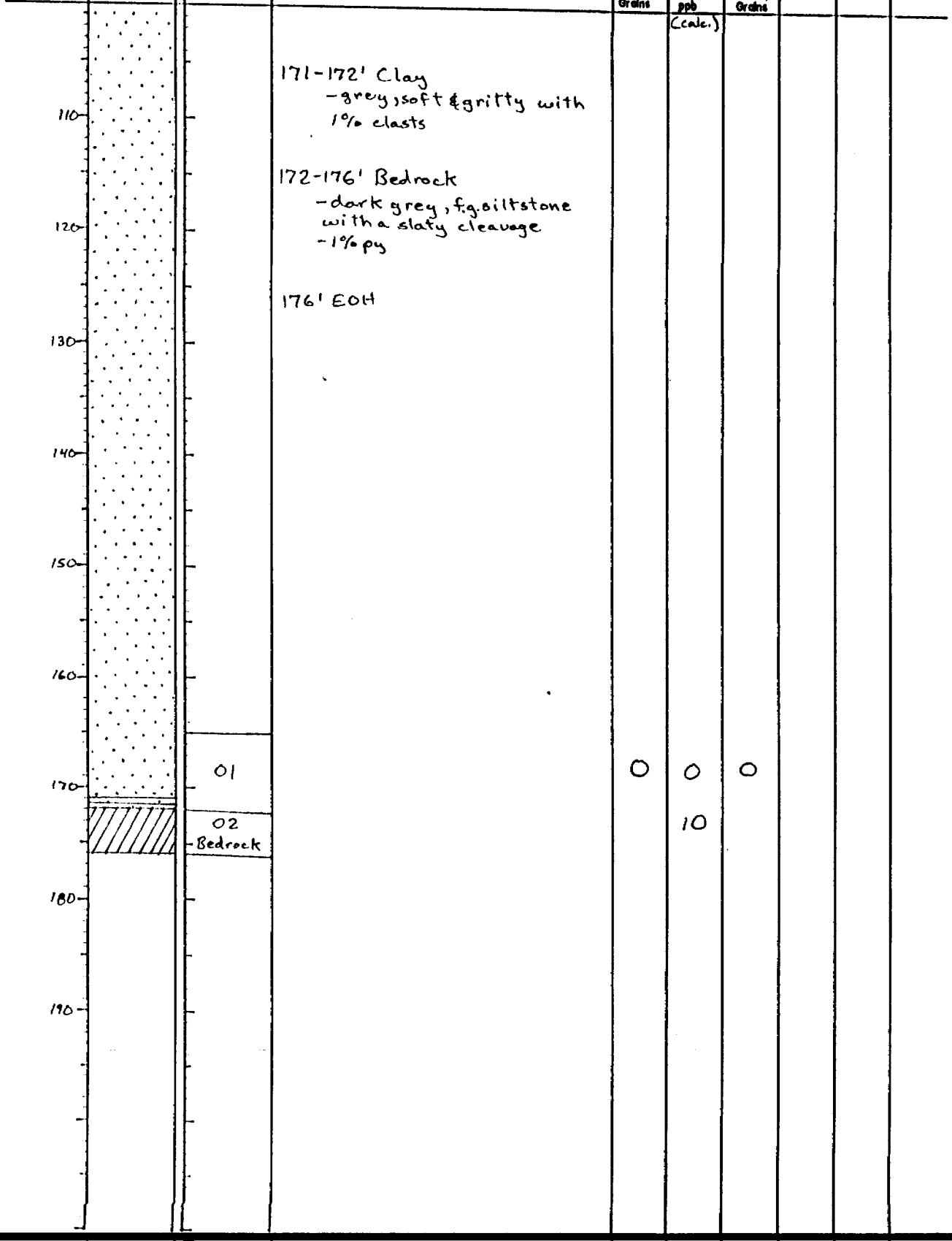
DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-25' Sand - f-m sand with <5% granule to f. pebbles - a few v. thin brown clay seams from 0-15' within sand - 19-21' - fine gravel	
20			25-73' Lacustrine Clay - fairly pure + soft light brown + lesser grey clays - minor silt @ 55' increasing downward - very silty clay @ 70'	
30				
40			73-171' Sand - fine silty sand with minor clay coarsening down to f-m sand @ 80' with 2-5% c. sand + granules - 142-171' - fine silty sand with minor clay in sand @ 155' + down	
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-17 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____



DATE Feb 15/88 HOLE No. K-88-18 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 200m N of K-88-17 along road

BIT No. I000686 FOOTAGE ON BIT Hole depth = 216'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 12:00 noon / Finish 4:15pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-48' Lacustrine Clay - fairly pure, moderately hard, brown + lesser grey clays - minor silt appears @ 30' & increases downward	
20			48-89' Sand - fine silty sand, well sorted, grades down into fine sand @ 60'	
30			89-95' Clay - gritty, grey & compact - <1% clasts - fairly slow penetration	
40			95-158' Sand - f-m sand with <5% c. sand + granules - thin grey & gritty clay seam from 152-153'	
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-18 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
110			158-175' Till - 70-80% subrounded granule to c. pebbles in a sand-silt-clay matrix - abundant +10 mesh return - clay adhesion noted several times - no hgcb - slightly coarser + slower penetration @ 166' with 5% hgcb noted - 60-70% seds + mafics with 30-40% granitoids, qtz + limestone	
120				
130			175-181' Sand - f-m sand, well sorted	
140			181-184' Clay - grey, soft clay	
			184-190' Sand - f-m sand with 5% c. sand	
150			190-197' Till - slightly washed - very slow + grinding - clast supported - 90% subrounded granule to c. pebble in minor sand-clay matrix - minor clay adhesion noted - 50% seds + mafics - well washed from 195-197'	
160				
170			197-209' Sand - f-m sand with <5% clasts grading down into m-c sand @ 208'	
180				
190				
200				

DATE _____ HOLE No. K-88-18 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc)	No. Asp. Grains
210		01	209-210.5' Till - 60% granule to m. pebbles in sand silt matrix - subrounded clasts - 50-60% seds + mafics - possibly slightly sorted due to lack of coarse clasts - sample contaminated by above sand unit	0	0 3	0
		02 Bedrock	210.5-216' Bedrock - dark grey, fg siltstone with a slaty cleavage - sample contaminated			
220						
230						
240						
250			216' E.O.H.			

DATE Feb 16/88 HOLE No. K-88-19 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N along road of K-88-18

BIT No. same FOOTAGE ON BIT Hole depth = 139'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 8:45am / Finish 11:15am

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-52' Lacustrine Clay - soft, brown clays - quick penetration - minor silt noted @ 20' + increases downward	
20			52-62' Silt - well sorted silt grading down into silty fine sand	
30			62-64' Clay - grey, fairly soft + gritty	
40			64-77' Sand - fine, well sorted sand - quick penetration	
50			77-85' Clay - grey, gritty + compact - slow penetration	
60			85-135' Sand - fine sand, well sorted - quick penetration - $< 1\%$ clasts	
70				
80				
90				
100				

DATE _____ HOLE No. K-88-19 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc)	No. Asp. Grains
110			135-139' Bedrock - dark grey, fg. siltstone with minor qtz-carb. stringers containing trace pyrite - slaty cleavage for most part - rest has more massive + slightly altered appearance			
120						
130		01	139' E.O.H.	0	0	0
		02 Bedrock			2	
140						
150						
160						
170						

DATE Feb16/88 HOLE No. K-88-20 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N of K88-19 along Querion West Rd

BIT No. same FOOTAGE ON BIT Holedepth = 197'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 12:10 / broken bit @ 181' - redrill Feb 17/88 with I000703 / Finish 10:45am, Feb17.

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-88' Lacustrine Clay - soft, smooth grey & brown clays - minor silt appearing @ 65' - @ 75' +down - grey, gritty compact clay	
20			88-169' Sand - fine, well sorted silty sand - quick penetration - wood chips noted @ 104' - grading into f-m sand @ 111' - <5% c. sand & granules noted after 135' - wood chips noted @ 135'	
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-20 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			169-179' Clay - grey & gritty - slow penetration - @ 173' - clay is very compact			
120			179-192' Till - 60-70% subrounded to subangular, granule to f. cobbles in a sand-silt matrix - 60-80% seds, mafics & sericite, + 20-30% granitoids, qtz & limestone. - slow penetration - 60% seds & mafics @ 187' - sandy with quicker penetration @ 188-191'. - m. cobble of siltstone @ 179.5'			
130						
140			192-197' Bedrock - Sericitic Siltstone - well foliated, weak to moderately sericitic with 1-2% py & minor qtz-carb. stringers - medium grey to greenish grey - @ 196-197' - sericite schist with qtz-carb. stringers & 2-3% py			
150						
160			197' EOH			
170						
180		01		1	65	0
190		02		0	0	0
		03		4	162	0
		04 Bedrock			1	
		05 Bedrock			1	
200						

DATE Feb 17/88 HOLE No. K-88-21 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION Sand pit road, 200m S of K-88-14

BIT No. same FOOTAGE ON BIT

HOURS MOVED HOURS DRILLED OTHER

Start 12:20pm / Abandoned @ 5:35pm due to plugged rods @ 265'

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-66' Sand - f-m sand, well sorted - quick penetration 66-70' Clay - grey & brown gritty clays - soft, quick penetration 70-76' Sand - medium grained sand, well sorted 76-81' Clay - gritty grey clay 81-96' Sand - m. sand, well sorted 96-118' Clay - gritty, grey clay	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-21 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
			118-127' Sand - medium grained, well sorted	
110			127-129' Clay - grey, gritty sand - fairly soft	
			129-139' Sand - m-c sand, well sorted	
120			139-142' Clay - grey, gritty clay	
			142-146' Sand - m-c sand	
130			146-161' Clay - gritty, grey clay - compact - slow penetration	
140			161-168' Fine Gravel - c. sand + granules	
			168-176' Clay - sandy clay with 45% f. pebbles - slow penetration	
150			176-265' Sand - f-c sands, fairly well sorted	
160				
170				
180				
190				
200				

DATE _____ HOLE No. K-88-21 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
210				
220				
230				
240				
250			-Hole abandoned @ 265' due to plugged rods	
260				
270				
280				

DATE Feb 22/88 HOLE No. K-88-22 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION on beach in front of Mickinon Home on Barbers Bay

BIT No. same FOOTAGE ON BIT Hole depth = 110'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 1 pm / fix hoses from 1:20-2:05 pm / Finish 4:15 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
	Ice		0-1.5' Ice			
			1.5-50' Lacustrine Clay - soft, smooth, grey & brown varved clay - fairly pure with minor silt appearing @ 35'			
10						
20			50-60' Pebbly Sand - 20% granule to f. pebbles in fine silty sand - quick penetration			
30			60-78' Till (Upper till sheet) - 20% subrounded, granule to m. pebbles in a clay + lesser sand matrix - 20% hgeb in +10 mesh - 50% mafics + seds, 50% granitoids, qtz + limestone - slightly coarser material after 70' - c. pebble diabase @ 70' - 10% hgeb in +10 mesh @ 75' - c. pebble of granite @ 76' - clasts are mainly granule to f. pebbles			
40						
50			78-86' Sand - fine, well sorted sand - 1% clasts			
60			86-103' Lacustrine Clay - grey & brown, compact, fairly pure clays - v. slow penetration			
70			103'-104.5' Till - 8" granitic cobble @ 103' - v. slow + grinding - 104' - f. cobble of siltstone - 60-70% subrounded, granule to f. cobbles in sand-silt + minor clay matrix - 60-70% mainly seds + lesser mafic volcanics + intrusives, 30-40% granitoids, qtz + minor limestone - abundant coarser clasts → mainly fragments in +10 mesh - minor clay adhesion noted			
80						
90			104.5-105.5' Loose bedrock - siltstone			
			105.5-110' Bedrock - dark grey, fg. siltstone - mildly silicified → hard + slightly altered in appearance - no good cleavage - more massive	9	942	150
100		01				
		02 Bedrock	110' E.O.H.		3	

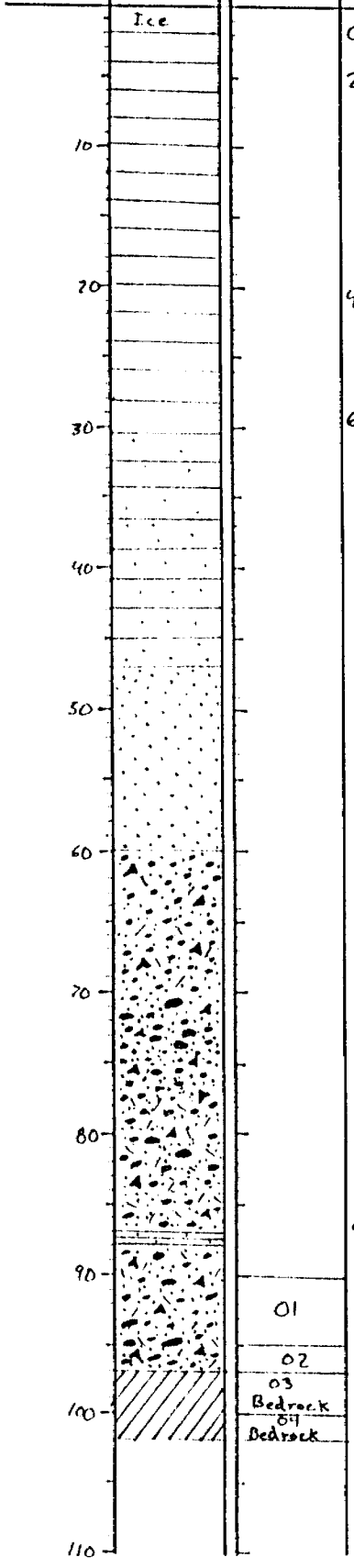
DATE Feb 23/88 HOLE No. K-88-23 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N of K-88-22 along shoreline

BIT No. I000702+sub FOOTAGE ON BIT Hole depth = 102'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 8:20 am / Finish 10:00 am



DESCRIPTIVE LOG

0-2' Ice

2-47' Lacustrine Clay
- minor organics @ top
- brown & grey, moderately soft clays
- minor silt appears @ 28'+ increases downward

47-60' Sand
- silt grades down to silty sand
- a few f. pebbles noted @ 52-53'.

60-87' Till (Upper till sheet)
- 20% subrounded, granule to sm. pebbles in sand-clay matrix
- 2% hgcb in +10 mesh return
- 40-60% mafics + seds
- moderately quick penetration
- c. pebble of granite @ 71'
- @ 73' c. pebbles of granite + mafic intrusives
- quicker penetration @ 74-75'
- clay rich matrix @ 77'+ down with 10% hgcb in +10 mesh decreasing down
- a few c. pebbles of granite + mafics @ 80-82'
- from 82'+ down - quick penetration with 20% granule to f. pebbles
- 20% hgcb @ 85'

87-88' Clay
- grey, hard, v. compact with 5% subrounded clasts

88-97' Till
- noticably higher local clast content -> 60-70% mafic volcanics + intrusives + seds and minor sericite
- very pebbly - abundant +10 return
- slow + grinding
- 50% granule to c. pebbles in a sand-clay matrix
- a few hgcb noted

97'-102' Bedrock
- 97-100 - altered siltstone as @ Hole #22, with sericite schist @ 97-97.5' with 5% py
- 100-101' 80% qv material with sericite schist around stringers (1-2% py)
- 101-102' - medium green, f.g. sericite schist.

102' E.O.H.

ANALYSES					
No. Au Grains	Au ppb (calc.)	No. Asp. Grains			
5	323	150			
13	1595	100			
	2				
	1				

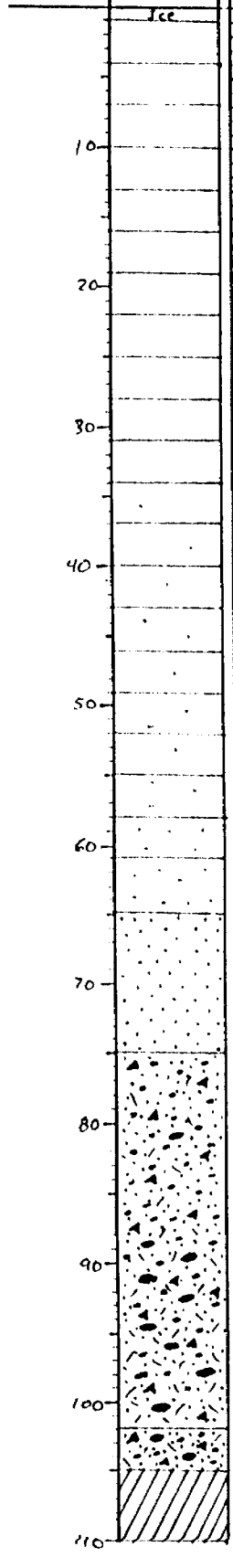
DATE Feb 23/88 HOLE No. K-88-24 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N of K-88-23 along shoreline

BIT No. same FOOTAGE ON BIT Hole depth = 110'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 10:20 am / Finish 11:20 am



DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG
	Ice		0-1' Ice
			1-65' Lacustrine Clay - soft, smooth grey & brown varved clays - minor silt noted @ 35' + increasing downwards
			65-75' Sand - silty sand, well sorted
			75-102' Till (Upper till sheet) - 10-20% granule to f. pebbles with a few m-c pebbles in a sand-silt-clay matrix - clay adhesion noted - fairly quick penetration - 50% mafics - slightly coarser material @ 88' with slower penetration - a few c. pebbles of mafics + seds. after 88' and several of granite - some hgcb noted after 88' - @ 96' - 20% clasts in sand-clay matrix with 20% hgcb in +10 mesh - c. pebble of granite @ 100'
			102-105' Till - slow & grinding - 60-70% granule to c. pebbles - subrounded clasts in a sand-silt-minor clay matrix - v. minor clay adhesion noted - 60-80% seds. + mafics -> mainly seds.
			105-110' Bedrock - Sericite Schist - light rusty rind @ top - generally light green with abundant qtz stringer material and 2-3% py - well developed sericite schist
			110' EOH
		01	
		02 Bedrock	

ANALYSES					
No. Au Grains	Au ppb (calc.)	No. Asp. Grains			
0	0	0			
	2				

DATE Feb 23/88 HOLE No. K-88-25 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N of K-88-24 along shoreline

BIT No. I000675 FOOTAGE ON BIT Hole depth = 136'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 11:50am / Finish 3:10pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-1' Ice 1-55' Lacustrine Clay - minor organics @ top - soft, smooth grey & brown varved clay - minor silt @ 25' increasing downwards 55-93' Sand - well sorted silt grades down into silty fine sand @ 65' 93-105' Till (Upper till sheet) - v. pebbly with abundant +10 mesh return → mainly granule to fine pebbles with a few m-c pebbles further down in section - 30-40% mafics + seds. - a few sericite fragments were noted - 50-60% mafics + seds. @ 105' in sand-silt matrix	
10				
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-25 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
			105-120' Clay - grey, compact clay with <10% clasts + some sand - c. pebble mafic volcanic @ 107' - c. pebble granite @ 110' - becoming less pebbly + sandy downwards - 117-119' - Mafic-Intermediate volcanic boulder			
120			120-127' Sand - fine, well sorted sand becoming slightly pebbly @ 124'			
		01		1	77	0
130		02	127-133' Till	3	1617	0
		03 Bedrock	- slow + grinding - 60-80% subrounded clasts in a sand-clay matrix + gran.-c. pebs. - a few hgcb noted + clay adhesion - abundant +10 mesh return - 60-70% seds., mafics + sericite - siltstone boulder @ 129-130' - @ 132' - 80% seds, sericite + mafics		3	
140						
150			133-136' Bedrock - medium grey, very hard + silicified altered siltstone with 1% py - massive + broken up - no slaty cleavage - abundant qtz-carb stringers throughout - similar to bedrock @ hole #22			
160						
			136' EOH			
170						

DATE Feb 23/88 HOLE No. K-88-26 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N of K-88-25 along shoreline

BIT No. same FOOTAGE ON BIT Hole depth = 127'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 3:45 pm / Finish 5:20 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
			2-33' Lacustrine Clay - minor organics @ top - soft, smooth, grey & brown varved clays	
			33-60' Sand - fine, well sorted, silty sand	
			60-85' Clay - soft, grey, fairly pure but becoming very gritty @ 70'	
			85-90' Sand - fine, well sorted sand	
			90-110' Clay - grey, gritty clay with <10% fine clasts	

10 20 30 40 50 60 70 80 90 100

DATE _____ HOLE No. K-88-26 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc)	No. Asp. Grains
110			110-116' Till (Upper till sheet) - 50-60% granule to c. pebbles in sand-clay matrix - abundant +10 mesh return - 50% mafics + seds - becoming clay rich @ 115'			
120		01	116-120' Clay - grey, compact, v. gritty with <5% clasts	0	0	0
		02			2	
130		Bedrock	120-123' Till - 30-40% subrounded to subangular granule to m. pebbles in a sandy clay matrix - abundant hgcb in +10 mesh - 70-80% seds, 20-30% granitoids, qtz + limestone			
140			123-127' Bedrock - medium to dark grey, altered siltstone with 1-2% py - fairly good penetration for bedrock - abundant qtz-carb stringers containing minor py - sericite noted often surrounding the qtz-carb. stringers			
150			127' EOH			
160						
170						

DATE Feb24/88 HOLE No. K-88-27 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100 m N of K-88-26 along shoreline

BIT No. 1000685 FOOTAGE ON BIT Hole depth = 130'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 8:45am / Finish 10:45am

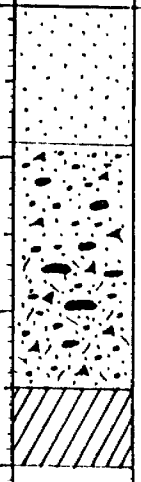
DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice 2-80' Lacustrine Clay - organics @ top - soft, smooth brown & grey varved clays - fairly pure with silty clay appearing @ 40' 80-109' Sand - well sorted silt @ 80' grading downwards into fine sand with < 1% fine pebbles @ 97'	
10				
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-27 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____



DEPTH	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
		109-125' Till - 20-30% subrounded to subangular, granule to f. pebbles with a few m-c pebbles in a sand-clay matrix - clast content increasing downward - 50-60% seds + mafics with several fragments of sericite noted			
110	01		0	0	0
	02	- clay rich matrix @ 116'	0	0	0
120	03	- 117' - f. cobble of granite - 119' - f. cobble of granite	1	92	0
	04 Bedrock	125-130 Bedrock - light green sericite schist grading down into a slightly sericitic siltstone → med. grey - 1% py overall		1	
130		130' EOH			
140					
150					
160					
170					

DATE Feb24/88 HOLE No. K-88-28 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N of Hole K-88-27

BIT No. same FOOTAGE ON BIT Hole depth = 131'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 11:20am / rods plugged @ 126' - redrill @ 2:30pm after Head repaired (1¼hr) / Finish @ 3:30pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-1' Ice 1-126' Lacustrine Clay - minor organics @ top - quick penetration - soft, smooth, brown and grey clays - minor silt appears @ 35' - silty clay @ 60'-126'	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-28 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb	No. Asp. Grains
110						
120						
			126-131' Bedrock -@ 126-129' - broken up, weathered bedrock - weakly sericitic siltstone - 129-131' - slightly slower penetration -> medium to light grey, v. weak to moderately sericitic siltstone		7	
130		01 Bedrock				
			131' EOH			
140						
150						
160						
170						

DATE Feb 24/88 HOLE No. K-88-29 GEOLOGIST H. Hutteri DRILLER _____

HOLE LOCATION 100m N of K-88-28 along shore

BIT No. same FOOTAGE ON BIT _____ Hole depth = 154'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 4:05 pm / Finish 5:45 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
10			0-1' Ice 1-105' Lacustrine Clay - minor organics @ top - soft, smooth brown + grey clays - fairly pure becoming silty @ 45' + down - a few granule - f. pebbles @ 47-48'	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-29 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			105-130' Sand - well sorted, fine sand			
120			130-145' Lacustrine Clay - compact, gritty grey & brown varved clay - fairly slow penetration - 142-143' - weakly sericitic siltstone boulder			
130			145-150' Till - 20% subangular mainly m-c pebbles with fewer granule to f. pebbles in sandy clay matrix - slow penetration - 70-80% seds with 20-30% granite, qtz + limestone - modest +10 mesh return			
140						
150		01	150-154' Bedrock - medium to dark grey siltstone with minor weak sericite at times - 1% py	0	0 2	0
		02 Bedrock				
160			154' E.O.H.			
170						
180						

DATE Feb 25/88 HOLE No. K-88-30 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 100m N of K-88-29 along shoreline

BIT No. I000707 FOOTAGE ON BIT Hole depth = 180'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 9:05am / Finish 12:00noon

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
			0-1' Ice	
10			1-33' Lacustrine Clay - minor organics @ top - soft, smooth brown & grey varved clays	
20			33-48' Sand - fine, well sorted	
30			48-73' Lacustrine Clay - soft, gritty grey + lesser brown clays - a few f. pebbles noted @ 68-69'	
40			73-160' Sand - well sorted silty sand grading down into f-m sand @ 80' - m-c sand @ 101-102'	
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-30 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			160-162' Clay - grey + gritty			
120			162-175' Till - 30% subrounded to subangular, granule to c. pebbles in a clay-sand matrix - slow penetration - 70% seds + mafics - @167' - c. pebble of siltstone - @167' - +10 return increasing + lesser clay noted with 60% seds + mafics - @172' - slow + grinding, minor clay adhesion noted with only a few hqcb, and 70% seds + lesser mafics - minor sand + clay in matrix - numerous weakly sericitic seds. noted throughout till - 173-174' - granite boulder - 174.5 - c. pebble diorite			
130						
140						
150			175-180' Bedrock - medium green, fg, fairly massive, silicified siltstone? - 1-2% py - v. slow penetration - hard - weak pervasive calcite alteration noted			
160		01		0	0	0
		02		0	0	0
170		03		0	0	0
		04		3	2630	0
		05 Bedrock			2	
180						
190						
200						

DATE Feb 25/88 HOLE No. K-88-31 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 50m N of K-88-24

BIT No. Same FOOTAGE ON BIT Hole depth = 145'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 12:40 pm / Finish 4:30 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	ce		0-2' Ice	
			2-54' Lacustrine Clay - soft, smooth brown & grey varved clays - c. pebble of diorite @ 36' - silty clay appears @ 40'	
			54-58' Sand - well sorted, silty sand	
			58-80' Silty Clay - brown + grey, soft, silty clay	
			80-90' fine silty Sand	
			90-98' Till? (Upper till sheet?) - 10% granule to f. pebbles in sand + less clay matrix - quick penetration	
			98-99' Clay - grey with 2% fine clasts	
			99-130' Till - slow penetration - abundant +10 mesh return - 50-60% subrounded to subangular, granule to m. pebbles mainly in a sand - clay matrix (lesser clay) - 60-70% seds, mafics + sericite - 30-40% granitoids, qtz, limestone + chert - numerous hgcb in +10 mesh after 101' - sandy clay matrix - @ 102.5' - f. cobble of dirty yellow quartz - @ 105' - 30-40% clasts in sandy clay → 80% seds + mafics - @ 108' m. cobble of qtz-sericite schist with 1-2% py in clay-rich till - c. pebble of granite @ 113' - c. pebble of light brown, fg, sediment @ 117' - after 117' - 60% seds, mafics + sericite with abundant +10 mesh return - mainly granules to m. pebbles with no clay + v. little sand - washed till @ 117-130'	
10				
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-31 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
			130-138' silt-well sorted			
110			138-143' Till -slow grinding -@138'-f. cobble of altered sed. -c. pebble of granite @139' -after 140'-mainly f-m pebbles, subrounded to subangular, in a sand-silt-clay matrix -unsorted-clay to f. cobbles -50-60% seds, mafics+sericite -after 142'-80% seds+mafics in a sand-clay matrix			
120						
130			143-145' Bedrock			
		01	-medium to dark grey with a good slaty cleavage except where slightly altered with qtz-carb stringers + minor py -<1% py	1	4929	0
140		02		0	0	0
		03 Bedrock			4	
150			145' E.O.H. (rods binding)			
160						
170						

DATE Feb 27/88 HOLE No. K-88-32 GEOLOGIST H. Hutter DRILLER Goodyear

HOLE LOCATION 100' N of highway just west of bridge in Connaught, on Frederick House Lake

BIT No. same FOOTAGE ON BIT Hole depth = 119'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 9:15 am / Finish 11:20 am

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
10			2-101' Lacustrine Clay - smooth, soft, grey & brown varved clays - fairly pure with minor silt appearing @ 85'	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-32 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
		01		1	137	0
		02	101-113' Till - 30-40% subrounded to subangular, granule to m. pebbles mainly in a sand-silt-clay matrix - 50-60% seds, mafics + minor sericite - abundant +10 mesh return - clay adhesion + a few hgcb noted after 109' - c. pebble sed. @ 108' - a fair amount of matic intrusives in till	1	352	0
110		03		7	670	0
		04 Bedrock			11	
120			113-119' Bedrock - Qtz-Sericite Schist - light green to white sericite + qtz material - slow penetration - sample is fairly contaminated			
130						
140			119' EOH			
150						
160						
170						
180						

DATE Feb 26/88 HOLE No. K-88-33 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 400m N of K-88-32 along shoreline, just off point

BIT No. I000705 FOOTAGE ON BIT Hole depth = 173'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 3:15pm / Finish 6:05pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
			2-86' Lacustrine Clay - soft, smooth grey clay - v. quick penetration - minor silt @ 65' - silty clay @ 85'	
			86-90' Pebbly Sand - <10% granule to m. pebbles in fine sand	
			90-111' Till - 10-20% granule to m. pebbles in a fine sand matrix - 50% mafic intrusives, volcanics, + seds, 50% granite, qtz, limestone and minor feldspar porphyry - fairly quick penetration slowing down @ 105' - 50% mafics + seds in sand-clay matrix @ 105' - minor clay adhesion	

10 20 30 40 50 60 70 80 90 100

DATE Feb 26/88 HOLE No. K-88-33 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES					
				No. Au Grains	Au ppb	No. Asp. Grains			
110			111-119' Clay - compact grey, gritty clay 119-128' Sand - f-m sand with <5% c. sand and granules 128-134' Clay - grey + gritty clay 134-146' Sand - m-c well sorted sand 146-149' Fine Gravel 149-169' Sand - f-m sand with 45% c. sand + granules - grading into m-c sand @ 164' 169-173' Bedrock - medium grey, hard → silicified, slightly altered looking siltstone - barren of sulphides 173' EOH						
120									
130									
140									
150									
160									
170		01 Bedrock			2				
180									
190									
200									

DATE Feb 27/88 HOLE No. K-88-34 GEOLOGIST H. Hutter DRILLER Goodyear

HOLE LOCATION 400m N of K-88-33 along shoreline

BIT No. Same FOOTAGE ON BIT Hole depth = 176'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 12:05pm / Finish 2:00pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
			0-1' Ice	
10			1-131' Lacustrine Clay - soft, smooth grey & brown varved clay - minor silt noted @ 90'	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-34 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

DH No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
110			131-138' Till - 50-70% subrounded, granule to boulders, mainly f. pebbles to c. pebbles in sand-silt - 60% matic volcanics, intrusives + seds - numerous hgcb appear @ 136' then decrease soon after			
120						
130			138-160' Clay - grey, gritty, compact clay			
140			160-165' Pebbly Sand - <10% granule to fine pebbles in f-m sand			
150			165-171' Till - slow + grinding - abundant +10 mesh return - granule to c. pebbles in sand-silt matrix with a few hgcb noted @ 170-171' - clasts are subangular to subrounded - 60-70% seds + matics increasing to 80% @ 170'			
160		01		0	0	0
170		02	171-176' Bedrock - medium grey, altered siltstone - no good cleavage planes - altered in appearance	5	545	200
		03 Bedrock	- schistose - a few barren qtz stringers - 1% py with minor limonite staining		10	
180			176' EOH			
190						
200						

DATE Feb 27/88 HOLE No. K-88-35 GEOLOGIST H. Hutteri DRILLER Goodyear

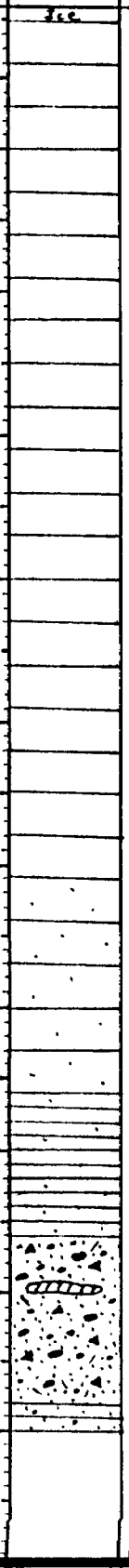
HOLE LOCATION 400m N along shore of K-88-35 on Frederick House Lake

BIT No. Same FOOTAGE ON BIT Hole depth = 135'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 3:15pm / fix header transmission from 4:30-5:45pm / Finish Feb 28 @ 9:45am

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES



0-1' Ice

1-86' Lacustrine Clay
- soft, smooth, grey & brown varved clays
- fairly pure with minor silt appearing @ 60'
- 76-86' - compact grey clay

86-98' Till (Upper till sheet)
- 50% subrounded, granule to boulders in a sand-silt-clay matrix
- fairly slow penetration
- 50% mafics + seds.
- 89-90' - mafic intrusive boulder
- +10 mesh return not very abundant
- a fair amount of granite-limestone in till
- v. minor clay adhesion noted
- a few hgcb noted from 95-98'

98-100' Clay
- grey, gritty compact clay with 2-5% granule to f. pebbles

DATE _____ HOLE No. K-88-35 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES					
				No. Au Grains	Au ppb	No. Asp. Grains			
110			100-103' Till - moderately slow penetration with 30-40% subangular to subrounded, granule to c. pebbles in a sand-silt matrix - 50-60% mafic volcanics + seds						
120			103-118' Sand - well sorted, m-c sand with <10% granules + f. pebbles						
130			118-120' Clay - grey, gritty compact clay						
		01 Bedrock	120-130' Sand - f-m sand with <10% granules + f. pebbles		5				
140			130-135' Bedrock - medium grey, relatively soft, fg., altered siltstone with minor rust - poor cleavage imparted by weak sericite alteration @ times - no sulphides observed						
150									
160			135' EOH						
170									

DATE Feb 28/88 HOLE No. K-88-36 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 400m N of K-88-35 along shoreline

BIT No. 1000706+sub FOOTAGE ON BIT Hole depth = 115' (Abandoned)

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 10:35am / rods binding @ 115' encountered artesian spring - abandoned @ 3 pm

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb	No. Asp. Grains
	Ice		0-2' Ice			
			2-55' Lacustrine Clay - soft, smooth grey & brown varved clays			
10						
			55-60' Till - moderately slow + grinding with 30-40% granules to m. pebbles in a sandy clay matrix - clasts are sub rounded to subangular and are composed of 50% mafics + seds			
20						
30						
			60-81' Lacustrine Clay - gritty, compact, dark brown + grey clays with 2% f. clasts - grades down into fairly pure clay			
40						
50			81-115' Till (Upper till sheet-81-103') - 10-20% sub rounded to subangular, granules to f. pebbles in a sandy clay matrix - several c. pebbles in till after 85' - numerous hgcb in +10 mesh - @ 87' - c. pebble of black, fg mafic rock - @ 89' - c. pebble of mafic volcanics - @ 90' - c. pebble of granite - meagre +10 return down to 90' - c. pebble of siltstone @ 93' with 30-40% clasts in a sandy clay matrix - c. pebble of granite @ 96' with <5% hgcb in surrounding matrix - c. pebble of mafic intrusive @ 96.5' - @ 100' - c. pebble of granite			
60						
70						
80			Lower Till → @ 103' - 60-70% mafics + seds, 20% granite + qtz + 5-10% limestone - clay adhesion observed - no hgcb			
		01	- 60-70% clasts @ 103'	0	0	0
		02	- @ 103.5' - c. pebble of mafic intrusive followed by f. cobble of sandstone - @ 103-110' - abundant +10 return, granule to c. pebbles in a sand-silt-clay matrix with a high local clast content - good till	0	0	0
90		03		4	141	100
		04		0	0	0
100						

DATE _____ HOLE No. K-88-36 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
		05	Till cont'd.	0	0	0
		06	-110-115' - washed till → abundant +10 mesh return, clast supported with very little fines	0	0	0
110		07	-60-80% mafic intrusives, volcanics, seds + serpentinized ultramafics	0	0	0
			-a few hgch appearing @ 115'			
120			-rods binding @ 115' + artesian spring intersected so hole was abandoned.			
			115' E.O.H. (Abandoned)			
130						
140						

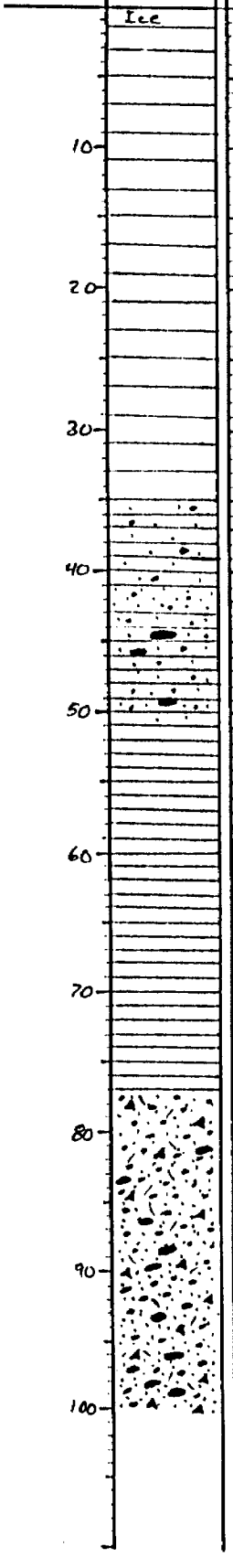
DATE Feb 29/88 HOLE No. K-88-37 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 400m North of K-88-36 along shareline

BIT No. CB69689 FOOTAGE ON BIT Hole depth = 111'

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 8:50am / Finished 11:45am



DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
	Ice		0-1.5' Ice			
			1.5-41' Lacustrine Clay - soft, smooth brown + grey varved clays - fairly pure becoming slightly pebbly + sandy, grey & compact @ 35'			
			41-43' Pebbly Sand - <10% granules + f. pebbles in sand			
			43-77' Lacustrine Clay - sandy, grey & brown, compact clays with <10% clasts up to f. cobble in size - f. cobble of granite @ 44' - c. pebble of granite @ 45.5' - c. pebble of granite @ 49' - fairly pure clays with <1% clasts after 50'			
			77-106' Till - moderately slow penetration - 40-50% subrounded, granule to m. pebbles mainly with the odd c. pebble, in a silty clay matrix - 40-50% mafics + seds - a few hgcb noted + minor clay adhesion - c. pebble of granite @ 87' - c. pebble of diabase @ 88' - c. pebble of matic intrusive @ 93' - c. pebble of granite @ 96' - c. pebbles of granite @ 98' + 98.5' - c. pebble of siltstone @ 102' in sand-silt matrix - abundant granitic material in till - possibly upper till sheet			
80		01		0	0	0
90		02		1	63	0
100		03				

DATE _____ HOLE No. K-88-37 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES No. Au Grains	Au ppb (calc.)	No. Asp. Grains
		03		1	47	0
		04 Bedrock	106-111' Bedrock - dark grey, fg siltstone with a moderately well developed slaty cleavage - <1% py		7	
110						
120			111' E.O.H.			
130						
140						
150						
160						
170						

DATE Feb 29/88 HOLE No. K-88-38 GEOLOGIST H. Hutteri DRILLER Goodyear

HOLE LOCATION 400m North of K-88-37 along shoreline

BIT No. same FOOTAGE ON BIT Hole depth = 128' (Abandoned)

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

Start 2:00 pm / delay from 12:30 to 2pm - broken fuel pump / Abandoned @ 6:05 pm due to rods binding

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
	Ice		0-2' Ice	
10			2-105' Lacustrine Clay - soft, smooth grey & brown clays - fairly pure becoming gritty with <5% fine clasts @ 45' - @ 48' - compact, grey & brown clays with <1% clasts, gritty @ top becoming purer downward - @ 96' - silty clay with 2% fine clasts - @ 104' - 10% fine clasts in sandy clay	
20				
30				
40				
50				
60				
70				
80				
90				
100				

DATE _____ HOLE No. K-88-38 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVED _____ HOURS DRILLED _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE LOG	DESCRIPTIVE LOG	ANALYSES
110			105-110' Till - 20-30% subrounded to subangular, granule to f. pebbles mainly with a few m-c. pebbles in a sandy clay matrix - c. pebble of siltstone @ 105' - 50-60% mafics + seds - poor +10 return for till	
120			110-128' Clay - grey, gritty clay - compact with <10% clasts decreasing downward - @ 116.5' - mafic volcanic c. pebble - abandon hole @ 128' due to rods binding	
130			128' E.O.H.	
140				
150				
160				
170				

Ministry of Northern Affairs and Mines

Ontario

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

DOCUM W880

42A10NW0563 2.11105 DUNDONALD

900

W8806·067

Mining Act

1110

In the Expend. Days Cr. columns. Do not use shaded areas below.

Type of Survey(s): Reverse Circulation Overburden Drilling

Township or Area: German Twp

Claim Holder(s): Held for Kangold Resources Ltd by H.L. Holdings Ltd.

Prospector's Licence No.: T-4645

Address: Suite 1900, 999 West Hastings Street, Vancouver, BC. V6C 2W2

Survey Company: Heath & Sherwood Drilling Inc.

Date of Survey (from & to): 30 01 88 (Day Mo. Yr.) 29 02 88 (Day Mo. Yr.)

Total Miles of line Cut: 10 holes

Name and Address of Author (of Geo-Technical report): Henry P. Hutteri Box 734, Timmins, Ontario P4N 7G2

Credits Requested per Each Claim in Columns at right

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

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	795050	~~100~~ 60
	795051	~~100~~ 60
	795052	~~100~~ 60
	795053	~~100~~ 60
	795054	~~100~~ 60
	795055	~~100~~ 60
	795056	~~100~~ 60
	795057	~~100~~ 60
	795058	~~100~~ 60
	795059	~~100~~ 60
	795060	~~100~~ 60
	795061	~~100~~ 60

Maximum 60 days credit allowed on each claim under Section 77-19.

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Expenditures (excludes power stripping)

Type of Work Performed: Reverse Circulation Drilling + Ice Road Preparation

Performed on Claim(s): 795054, 795051

Calculation of Expenditure Days Credits

Total Expenditures: $18,105.00 ÷ 15 = Total Days Credits: 1207

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

Total number of mining claims covered by this report of work: 12

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
720	March 18/88	
	Date Approved as Recorded	Branch Director
		See verbal statements

Date: March 18/88

Recorded Holder or Agent (Signature): Henry P Hutteri

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: Henry P Hutteri, Box 734, Timmins, Ont. P4N 7G2

Date Certified: March 18 1988

Certified by (Signature): Henry P Hutteri

Ministry of Northern Affairs and Mines
Ontario

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

DOCUMENT No. W 8806.070

May 7

Mining Act 2.11105

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s): Reverse Circulation Drilling

Township or Area: German Township

Claim Holder(s): Held for Kangeld Resources Ltd. by H.L. Holdings Ltd.

Prospector's Licence No.: T-4645

Address: Suite 1900, 999 West Hastings Street, Vancouver, BC. V6C 2W2

Survey Company: Heath & Sherwood Drilling Inc.

Date of Survey (from & to): 30 Day | 01 Mo. | 88 Yr. | 29 Day | 02 Mo. | 88 Yr.

Total Miles of line Cut: 8 holes

Name and Address of Author (of Geo-Technical report): Henry P. Hutteri Box 734, Timmins, Ont. P4N 7G2

Credits Requested per Each Claim in Columns at right

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

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Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

PORCUPINE MINING DIVISION
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Expenditures (excludes power stripping) Sect. 77-19

Type of Work Performed: Reverse Circulation Drilling

Performed on Claim(s): 838118, 838119, 830719

Calculation of Expenditure Days Credits

Total Expenditures: $ 20,122.00 ÷ 15 = Total Days Credits: 1341

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	838113	~~103~~ 60
	838114	~~103~~ 60
	838115	~~103~~ 60
	838116	~~103~~ 60
	838117	~~103~~ 60
	838118	~~103~~ 60
	838119	~~103~~ 60
	838120	~~103~~ 60
	838121	~~103~~ 60
	838122	~~103~~ 60
	838123	~~103~~ 60
	838124	~~103~~ 60
	830719	~~103~~ 60

Maximum of 60 days credit allowed on each claim under Section 77-19

RECORDED
MAR 18 1988

Total number of mining claims covered by this report of work: 13

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
780	Mar 18/88	
	Date Approved as Recorded	Branch Director
		See revised work statement.

Date: March 18/88

Recorded Holder or Agent (Signature): Henry P Hutteri

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: Henry P. Hutteri, Box 734, Timmins, Ont. P4N 7G2

Date Certified: March 18/88

Certified by (Signature): Henry P Hutteri

May 7

Ministry of Northern Affairs and Mines
Ontario

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

DOCUMENT No. W 8806.080

Mining Act 2 1105

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

Type of Survey(s): Reverse Circulation Drilling & Horizontal Loop EM survey
Township or Area: Evelyn, German, Dundonald Twps
Claim Holder(s): Held for Kangeld Resources Ltd. by H.L. Holding Ltd.
Prospector's Licence No.: T4645
Address: Suite 1900, 999 West Hastings Street, Vancouver, BC. V6C 2W2
Survey Company: Heath & Sherwood Drilling / Guy Thibault Exploration Services
Date of Survey (from & to): 30 01 88 (Day Mo. Yr.) 29 02 88
Total Miles of line Cut: 20 RC holes, 14.95 km of lines
Name and Address of Author (of Geo-Technical report): Henry P Hutteri, Box 734, Timmins, Ontario, P4N 7G2

Credits Requested per Each Claim in Columns at right

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

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Electromagnetic	
	- Other	
	Geological	
	Geochemical	

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

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APR 8 1988
MINING LANDS SECTION

PORCUPINE MINING DIVISION
RECEIVED
MAR 18 1988

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	see attached list	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECORDED
MAR 18 1988

Total number of mining claims covered by this report of work: 126

Expenditures (excludes power stripping)

Type of Work Performed: RC. Drilling / Horizontal Loop EM Survey
Performed on Claim(s): see attached list

Calculation of Expenditure Days Credits

Total Expenditures			=	Total Days Credits
$48,775	÷	15	=	3251

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

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
3,228	Mar 18/88	
	Date Approved as Recorded	Branch Director
		See revised work Statement

Date: March 18/88
Recorded Holder or Agent (Signature): Henry P Hutteri

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: Henry P Hutteri, Box 734, Timmins, Ont. P4N 7G2

Date Certified: March 18/88
Certified by (Signature): Henry P Hutteri

Reverse Circulation Drilling performed on claims:

837707
837720
837721
837735
837725
837727
837709
837710
837711
837712
837713
837714
837762
848285
848286
1027392

Linecutting and Horizontal Loop EM performed on claims:

837720
837721
837725
837728
837729
837730
837731
837732
837733
837734
837736
837737
837738
837739
837740
837741
837742
837743
837744
837767
837768
837769
837770
837771
837778
837779
837780
837781
837782
837783
837784
837785
837796
837797
837798
838112
848237
848239
848246
848247
848252
848253

Mining Claims traversed by R.C. Drill + Horizontal Loop EM Survey

Claim Number	Credit
837707	26
837708	26
837709	26
837710	26
837711	26
837712	26
837713	26
837714	26
837715	26
837716	26
837717	26
837718	26
837719	26
837720	26
837721	26
837722	26
837723	26
837724	26
837725	26
837726	26
837727	26
837728	26
837729	26
837730	26
837731	26
837732	26
837733	26
837734	26
837735	26
837736	26
837737	26
837738	26
837739	26
837740	26
837741	26
837742	26
837743	26
837744	26
837756	26
837757	26
837758	26
837759	26
837760	26
837761	26

Claim Number	Credit
837762	26
837763	26
837764	26
837765	26
837766	26
837767	26
837768	26
[illegible]	26
837770	26
837771	26
837772	26
837773	26
837774	26
837775	26
837776	26
837777	26
837778	26
837779	26
837780	26
837781	26
837782	26
837783	26
837784	26
837785	26
837786	26
837787	26
837788	26
[illegible]	26
837790	26
837791	26
837792	26
837793	26
837794	26
837795	26
837796	26
837797	26
837798	26
837799	26
837800	26
837801	26
837802	26
837803	26
837804	26
837805	26

Claim Number	Credit
837806	26
837916	26
837917	26
837918	26
837919	26
837921	26
837922	26
837923	26
837924	26
837925	26
837926	26
837927	26
837928	26
837929	26
837930	26
837931	26
837932	26
837933	26
837934	26
837935	26
837936	26
838109	26
838110	26
838111	26
838112	26
*848284	26
*848285	26
*848286	26
*848287	26
*848288	26
*1027392	20
*1027393	20
*1027394	20
*1031942	20
*1031943	20
*1031944	20
*1031945	20
*1031946	20

Ministry of
Northern Development
and Mines

Ontario

Ministère du
Développement du Nord
et des Mines

August 15, 1988

Your file: W8806-67
W8806-70
W8806-80
Our file: 2.11105

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

Dear Sir:

Re: Notice of Intent dated July 27, 1988
Reverse Circulation Overburden Drilling
submitted on Mining Claims P 795050 et al
in the Township of German

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

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

Yours sincerely,

D. Hurst

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

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

Telephone: (416) 965-4888

D.K:pl
Enclosure

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

Resident Geologist
Timmins, Ontario

Kangeld Resources Ltd.
Suite 1900
999 West Hastings Street
Vancouver, B.C.
V6C 2W2

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File 2.11105

Date July 27, 1988

Mining Recorder's Report of Work No. W8806-67
W8806-70
W8806-80

Recorded Holder
Kangeld Resources Ltd.

Township ~~XXXX~~
Dundonald, Evelyn and German

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days ☐ Airborne ☐ Special provision ☐ Ground ☐ ☐ Credits have been reduced because of partial coverage of claims. ☐ Credits have been reduced because of corrections to work dates and figures of applicant.	$83,549.00 SPENT ON OVERBURDEN DRILLING ON MINING CLAIMS: P-795051 795054 830719 837707 837709 to 14 inclusive 837720-21 837725 837727 837735 838118-19 1027392-93 5,570 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.

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

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

- No assessment credit under Section 77(19) for a Geophysical (Electromagnetic) Survey.

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

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY

S.R.O. – SURFACE RIGHTS ONLY

M.+S. – MINING AND SURFACE RIGHTS

	Description	Order No.	Date	Disposition	File
(1)	SEC. 42/60			S.R.O.	32269
(2)	SEC. 43/70	W.66/75	1/12/75	M.+S.	1593
(R3)	NKO 31/85		22/11/85	MR+SR.	

SAND AND GRAVEL

(G1) M.T.C. PIT. 1284

(G2) M.T.C. PIT 1274

NOTES

PART OF THIS TOWNSHIP SOUTH AND EAST OF FREDERIC HOUSE LAKE LIES WITHIN THE MUNICIPALITY OF THE CITY OF TIMMINS

WITNESS POSTS FOR CLAIMS STAKED OUT COVERING LAND UNDER THE WATERS OF FREDERICK HOUSE LAKE IN DUNDONALD TWP SHOULD NOT BE ERECTED OR PLANTED IN EVELYN TWP

FLOODING RIGHTS ON FREDERICK HOUSE LAKE RESERVED TO ONTARIO HYDRO TO CONTOUR ELEV. 903', L.O. 7128, FILE 64518, VOL 2

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

@ LUP (LAND USE PERMIT)

McCART TWP.

EVELYN TWP.

CLERGUE TWP.

GERMAN TWP.

12 11 10 9 8 7 6 5 4 3 2 1

VI V IV III II I

200

Frederick House River

Frederick House Lake

Dundonald Lake

Chapman Lake

Creek

McIntosh Lake

NORTHLAND

ONT

STA. Fielding

PO McIntosh STN. Springer

LUP

48°57'30"

80°48'40"

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◓
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	▬
" , MINING RIGHTS ONLY	▬
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	(R)
CANCELLED	⊗
SAND & GRAVEL	(G)

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 1000 (1 KM) 2000 (2 KM)

TOWNSHIP

DUNDONALD

M.N.R. ADMINISTRATIVE DISTRICT

COCHRANE

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

COCHRANE

Ontario Ministry of Natural Resources — Land Management Branch

Date MARCH, 1985

Number G-3240

By D. Vallillee

By L.h.

Plotted in F.I.C. May 9/85

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+S. – MINING AND SURFACE RIGHTS
LITTLE TOWNSHIP
GOWAN TOWNSHIP
DUNDONALD TOWNSHIP
MATHESON TOWNSHIP
FREDERICK HOUSE LAKE PROVINCIAL NATURE RESERVE
Clearwater
Ice Chest Lake
FREDERICK
12
11
10
9
8
7
6
5
4
3
2
1
IV
III
II
I
HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
SCALE 1:20 000
TOWNSHIP
EVELYN
M.N.R. ADMINISTRATIVE DISTRICT
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
COCHRANE
Ministry of Natural Resources
Ministry of Northern Development and Mines
Ontario
RECEIVED
JUN 15 1988
42A10NW8563 2.11165 DUNDONALD
220

MAP SYMBOLOGY

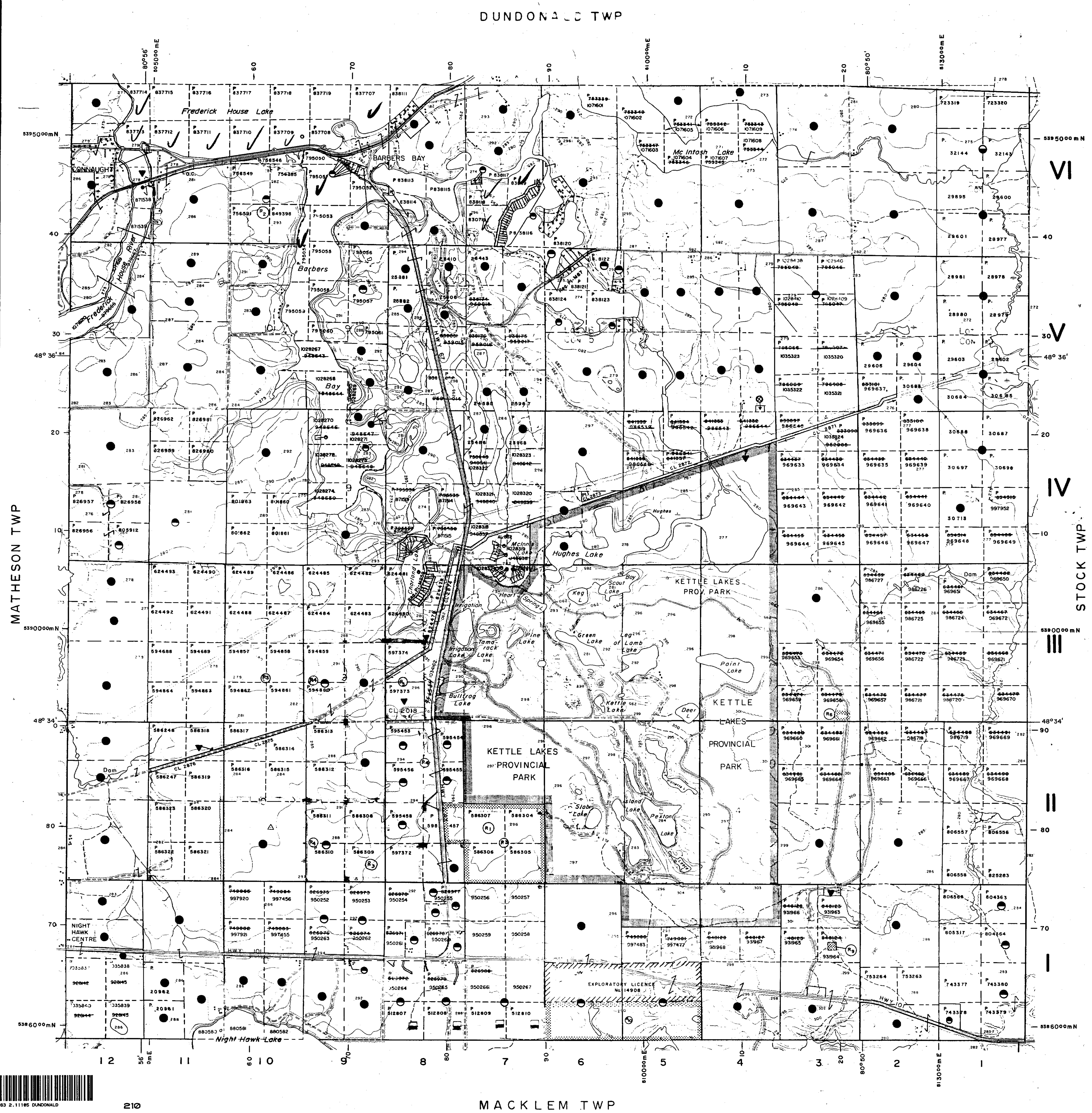
Aerial Cableway, Boundary, Interprovincial, International, District, Township, Indian Reserve, Lot, Concession, Approximate, Park Boundary, Bridge, Road, Railroad, Building, Chimney, Cliff, Pit, Pile, Contours, Interpolated, Approximate, Depression, Control Points, Horizontal, Vertical, Culvert, Falls, Fence, Hedge, Wall, Feature Outline, Flooded Land, Lock, Marsh or Swamp, Mast, Mine Head Frame, Outcrop

Pipeline, Railroad, Road, Trail, Bush Road, Rapids, Reservoir, River, Stream, Canal, Rock, Shoal, Spot Elevation, Tower, Transmission Line, Tunnel, Utility Poles, Wharf, Dock, Pier, Wooded Area

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
(R1) CERTIFIED AGRICULTURAL LAND				
(R2) MINING RIGHTS ONLY WITHDRAWN UNDER SECTION 36 OF THE MINING ACT RSO 1980	ORDER NO. W-13 87	AUG 10 87		
(R6)	W 76/77	22/9/77	S.R.O.	54339
(R9) SEWAGE DISPOSAL SITE — BONA FIDE APPLICATION UNDER P.L.A.				
(R10) MINING RIGHTS ONLY WITHDRAWN UNDER SECTION 36 OF THE MINING ACT RSO 1980	ORDER # 1/84			
(R3) MINING AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 190(2) OF THE MINING ACT RSO 1980	ORDER NO. W-9/88	JAN. 29/88		
(R4) MINING RIGHTS ONLY ARE WITHDRAWN UNDER SECTION 190 (2) OF THE MINING ACT RSO 1980	ORDER NO. W-10/88	JAN. 29/88		



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
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LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	⬒
" , MINING RIGHTS ONLY	⬓
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓡ
CANCELLED	⊗
SAND & GRAVEL	Ⓢ

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

Metres 500 0 1000 Metres
Chains 10 0 10 20 30 40 50 60 70 Chains
Feet 500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000

GRID ZONE : 17

NOTES

FLOODING RIGHTS ON NIGHTHAWK LAKE AND FREDRICK HOUSE RIVER TO ELEV. 903·5' RESERVED TO ONTARIO HYDRO.

FLOODING RIGHTS ON FREDRICK HOUSE LAKE TO ELEV. 903·0' TO ONTARIO HYDRO

REGISTERED PLAN OF SUBDIVISION

RECEIVED
JUL 11 1988

TOWNSHIP

GERMAN

M.N.R. ADMINISTRATIVE DISTRICT
TIMMINS

MINING DIVISION
PORCUPINE

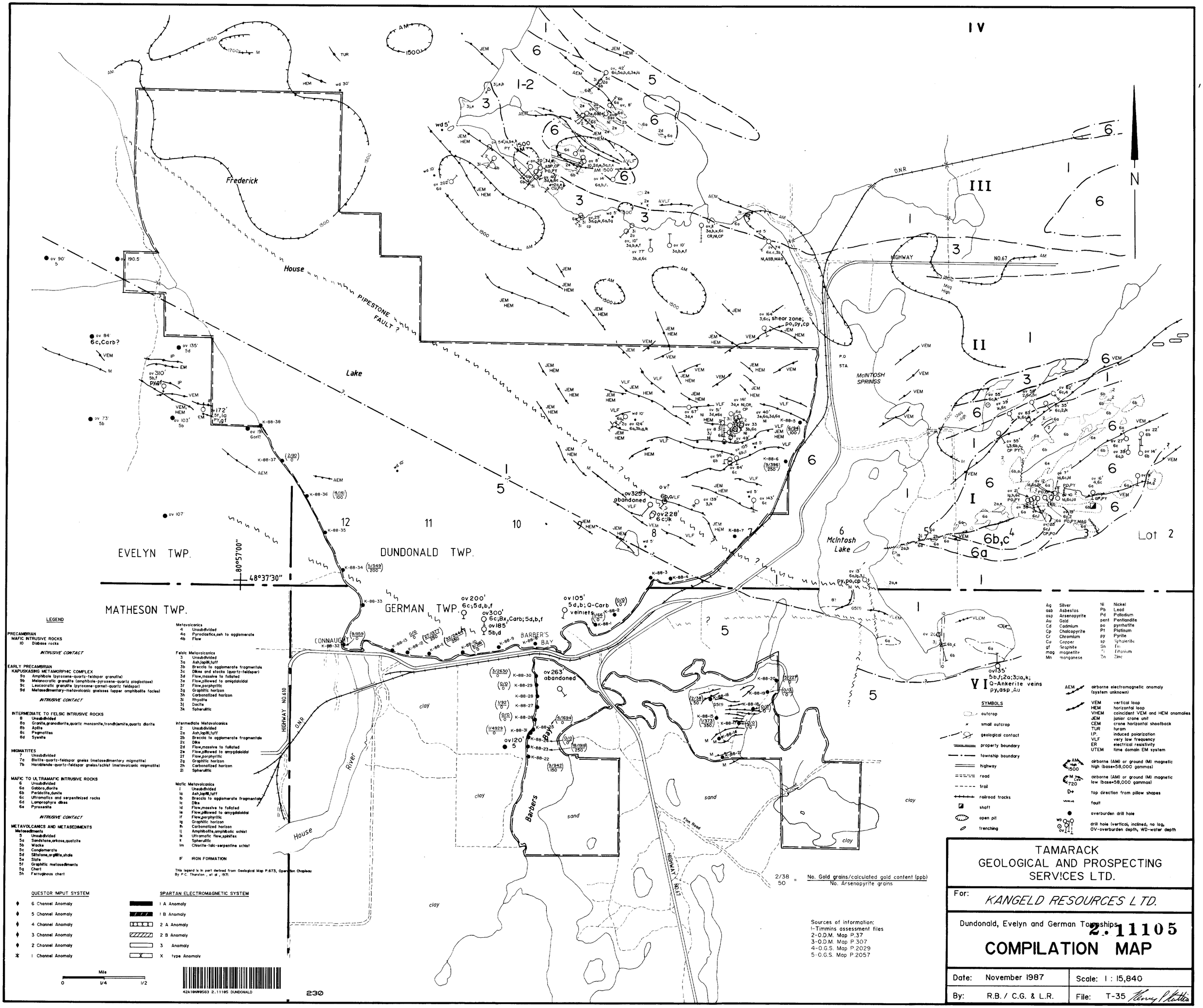
LAND TITLES / REGISTRY DIVISION
COCHRANE

Ontario
Ministry of Natural Resources
Land Management Branch

ORIGINAL COMPILATION	JULY 1984	Number
REVISED	July 23/87 66 July 24/87 c1 July 24 87 LN	G-3992

42A10NW0563 2.11185 DUNDONALD

210



LEGEND

PRECAMBRIAN

MAFIC INTRUSIVE ROCKS
- 10 Diabase rocks

INTRUSIVE CONTACT

EARLY PRECAMBRIAN
KAPUSKASING METAMORPHIC COMPLEX
- 9a Amphibole (pyroxene-quartz-feldspar granulite)
- 9b Melanocratic granulite (amphibole-pyroxene-quartz plagioclase)
- 9c Leucocratic granulite (pyroxene-garnet-quartz feldspar)
- 9d Metasedimentary-metavolcanic gneisses (upper amphibolite facies)

INTRUSIVE CONTACT

INTERMEDIATE TO FELSIC INTRUSIVE ROCKS
- 8 Unsubdivided
- 8a Granite,granodiorite,quartz monzonite,trondhjemite,quartz diorite
- 8b Aplite
- 8c Pegmatites
- 8d Syenite

MIGMATITES
- 7 Unsubdivided
- 7a Biotite-quartz-feldspar gneiss (metasedimentary migmatite)
- 7b Hornblende-quartz-feldspar gneiss/schist (metavolcanic migmatite)

MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS
- 6 Unsubdivided
- 6a Gabbro,diorite
- 6b Peridotite,dunite
- 6c Ultramafics and serpentinized rocks
- 6d Lamprophyre dikes
- 6e Pyroxenite

INTRUSIVE CONTACT

METAVOLCANICS AND METASEDIMENTS
Metasediments
- 5 Unsubdivided
- 5a Sandstone,arkose,quatzite
- 5b Wacke
- 5c Conglomerate
- 5d Siltstone,argillite,shale
- 5e Slate
- 5f Graphitic metasediments
- 5g Chert
- 5h Ferruginous chert

Metavolcanics
- 4 Unsubdivided
- 4a Pyroclastics,ash to agglomerate
- 4b Flow

Felsic Metavolcanics
- 3 Unsubdivided
- 3a Ash,lapilli,tuff
- 3b Breccia to agglomerate fragmentals
- 3c Dikes and stocks (quartz-feldspar)
- 3d Flow,massive to foliated
- 3e Flow,pillowed to amigdaloidal
- 3f Flow,porphyritic
- 3g Graphitic horizon
- 3h Carbonatized horizon
- 3i Rhyolite
- 3j Dacite
- 3k Spherulitic

Intermediate Metavolcanics
- 2 Unsubdivided
- 2a Ash,lapilli,tuff
- 2b Breccia to agglomerate fragmentals
- 2c Dike
- 2d Flow,massive to foliated
- 2e Flow,pillowed to amygdaloidal
- 2f Flow,porphyritic
- 2g Graphitic horizon
- 2h Carbonatized horizon
- 2i Spherulitic

Mafic Metavolcanics
- 1 Unsubdivided
- 1a Ash,lapilli,tuff
- 1b Breccia to agglomerate fragmentals
- 1c Dike
- 1d Flow,massive to foliated
- 1e Flow,pillowed to amygdaloidal
- 1f Flow,porphyritic
- 1g Graphitic horizon
- 1h Carbonatized horizon
- 1j Amphibolite,amphibolic schist
- 1k Ultramafic flow,spinifex
- 1l Spherulitic
- 1m Chlorite-talc-serpentine schist

IF IRON FORMATION

This legend is in part derived from Geological Map P.673, Opasatica Chapleau By P.C. Thurston, et al, 1971

QUESTOR INPUT SYSTEM
- 6 Channel Anomaly
- 5 Channel Anomaly
- 4 Channel Anomaly
- 3 Channel Anomaly
- 2 Channel Anomaly
- 1 Channel Anomaly

SPARTAN ELECTROMAGNETIC SYSTEM
- 1 A Anomaly
- 1 B Anomaly
- 2 A Anomaly
- 2 B Anomaly
- 3 Anomaly
- X type Anomaly

Mile 0 1/4 1/2

42A10NW0563 2.11105 DUNDONALD

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Ag	Silver
asb	Asbestos
asp	Arsenopyrite
Au	Gold
Cd	Cadmium
Cp	Chalcopyrite
Cr	Chromium
Cu	Copper
gf	Graphite
mag	magnetite
Mn	manganese
Ni	Nickel
Pb	Lead
Pd	Palladium
pent	Pentlandite
po	pyrrhotite
Pt	Platinum
py	Pyrite
sp	Sphalerite
Sn	Tin
Ti	Titanium
Zn	Zinc

SYMBOLS
- outcrop
- small outcrop
- geological contact
- property boundary
- township boundary
- highway
- road
- trail
- railroad tracks
- shaft
- open pit
- trenching
- AEM airborne electromagnetic anomaly (system unknown)
- VEM vertical loop
- HEM horizontal loop
- VHEM coincident VEM and HEM anomalies
- JEM junior crone unit
- CEM crone horizontal shootback
- TUR turam
- I.P. induced polarization
- VLF very low frequency
- ER electrical resistivity
- UTEM time domain EM system
- AM 1500 airborne (AM) or ground (MI) magnetic high (base=58,000 gammas)
- M 720 airborne (AM) or ground (MI) magnetic low (base=58,000 gammas)
- D+ top direction from pillow shapes
- fault
- overburden drill hole
- WD ov drill hole (vertical, inclined, no log, OV-overburden depth, WD-water depth

2/38 = No. Gold grains/calculated gold content (ppb) / 50 = No. Arsenopyrite grains

Sources of information:
1-Timmins assessment files
2-O.D.M. Map P.37
3-O.D.M. Map P.307
4-O.G.S. Map P.2029
5-O.G.S. Map P.2057

TAMARACK GEOLOGICAL AND PROSPECTING SERVICES LTD.

For: *KANGELD RESOURCES LTD.*

Dundonald, Evelyn and German Townships

2.11105

COMPILATION MAP

Date: November 1987	Scale: 1 : 15,840
By: R.B. / C.G. & L.R.	File: T-35