GLEN AUDEN RESOURCES

Report on Reverse Circulation Overburden Drilling in Tweed Township, Ontario

March 1986

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ABSTRACT

A reverse circulation overburden drill program was conducted on the Glen Auden property in Tweed Township, Larder Lake Mining Division. Although the glacial sediment was thick, basal tills were found in only 14 of 31 drill holes. Anomalous gold concentrations were found in several samples. Among these, the highest value was 5500 ppb and 4 samples contained gold concentrations greater than 1000 ppb. In summary, three areas where anomalous gold values were encountered in local tills proximal to geophysical targets are recommended for follow-up diamond drilling.

INTRODUCTION

Thirty-one reverse circulation overburden drill holes were drilled on the Glen Auden Tweed Township property between February 7, 1985 and February 25, 1985. The work was performed on the 161 claim contiguous block consisting of claims:

780702-780706	-	5
783054	-	1
790352-790359	-	8
796405-796430	-	26
796443-796444	-	2
796515-796518	-	4
797281-797320	-	40
798627-798652	-	26
798661-798686	-	26

798726-798730 - 5
842592-842599 - 8

Heath and Sherwood Drilling of Kirkland Lake, Ontario was contracted to drill the holes using a timberjack mounted acker reverse circulation overburden drill rig. Cummulative footage for the 31 holes was 3,649 feet. The maximum depth drilled was 180 feet; the minimum 38 feet and the average depth per hole was 118 feet. The program objectives were to determine if anomalous gold, arsenic, zinc or copper concentrations exist in glacial tills derived from bedrock near known geophysical anomalies and to ascertain bedrock lithologies on the property. Drill hole locations were selected based on results of airborne geophysical surveys flown by Dighem Surveys and Processing Inc., and a horizontal loop EM (Max-Min II) survey done by R.S. Middleton Exploration Services Inc.

LOCATION AND ACCESS

The property is located in the south-east corner of Tweed Township, in the Burntbush River area of northeastern Ontario, 48 air miles northeast of Cochrane, Ontario (Figure 1). Access to the property is via the Detour Lake Mine road that passes through the northwest corner of the property. The town of Cochrane is 63 road miles from the property. A network of winter roads was made on the property connecting drill holes.

Relief on the property varied from low, flat, swampy, clay

plains and high rolling esker ridges centered between Two Island Lake and Four Island Lake. Hummocky moraines provide considerable relief in the south-east corner of the property. Vegetation is also extremely variable as hardwood, birch, poplar and jack pine predominate in the sandy eskers while black spruce is the main constituent of flatter clay plains. Abundant lakes, rivers and creeks provide ample water for drilling. Summer drilling may be difficult in the more swampy portions of the property.

PREVIOUS WORK

No Bedrock exposure has been found on the property which has restricted prospecting on the property in the past. The earliest work recorded in the area is drilling by Texas Gulf Sulphur carried out in 1967 one to two miles west and southwest of the property. Five holes were drilled to test conductors. Metasediments and rhyolite tuffs were reported from these holes and the conductors were described as pyrrhotite-pyrite with quartz rich rocks (quartzite or cherts) often with specs of chalcopyrite. These units could now be interpreted as exhalitive horizons which would be a favourable setting for gold mineralization. No assays were reported, nor was there any record of the core being split. Since the project was a base metal exploration program, it could be assumed that gold analysis was not done.

In 1967-1968 ground magnetometer (Sharpe MF-1 (fluxgate)) and electromagnetic (EM 16) surveys were carried out on an area on the northern part of the property for Movado Mining Company Limited, Sullivan, D.W. (1968) and Duff, D. (1967). Two holes approximately 500 feet were drilled to test one conductor on the north edge of the property and two sulphide horizons were intersected in each hole. Ten samples from these holes were assayed and values of .1 - .2% copper were reported.

These intersections are interpreted by R. P. Bowen as sulphide facies iron formation which would be favourable host for stratabound gold deposits. A large amplitude magnetic anomaly on the central part of the property (see figure 6 at the back of this report), illustrates the presence of an oxide facies iron formation which is time equivalent to the oxide facies iron formation associated with the Inco-Casa Berardi discovery. The sulphide facies of the northern most iron formation horizon within the Casa Berardi discovery contains significant gold values besides the ankerite-quartz vein systems in the metasediments adjacent to the iron formations. Therefore the Tweed suite of rocks is likely identical to Casa Berardi.

In 1974 vertical loop EM and magnetic (fluxgate) surveys were done by Noranda Exploration Company on 8 claims (Group 2-73) on the central part of the property (west of Floodwood Lake) using a McPhar vertical loop system (VLEM) operating at 1000 and

5000 cps and a McPhar M700 fluxgate magnetometer, Fraser, R.J. (1975). Three parallel conductors with strike lengths up to a mile were outlined. These conductors have not been drilled. Also in 1974, Noranda surveyed 6 claims 1/2 mile north of the Bragg - Tweed boundary (grid 1-73) and a weak conductor on the south side of a small pond was outlined, Graham, W.F. (1974). These conductors are interpreted by R. P. Bowen to be sulphide horizons at the base of the oxide iron formation.

Hudson Bay Exploration and Development Company Limited, R.O. MacTavish (1977), surveyed 3 grids within the area of the property (Grids H, J and K) using a Ronka EM 17 horizontal loop EM unit with a 100 meter coil operating at 1600 Hz. Several conductors were outlined in the central part of the property on Grid J which may be in part an extension of the conductors outlined by the Noranda Survey on Grid 2-73. Grid H which extended across the Blakelock Township boundary on the east west property showed one weak conductor 3/4 of a mile north of Floodwood Lake. Group K contained the northwest extension of a series of conductors that extended in a southeast direction into Bragg Township.

Utah Mines Ltd. carried out electromagnetic and magnetic surveys on a 5 claim block in the central part of the property which reported work on the northeast corner of the Hudson Bay Exploration, Grid J using a Max Min II EM (400 foot cable) and

proton precession total field magnetometer. Three conductors were outlined, Mitchell, W.S. (1982). These zones are interpreted to be sulphide and graphitic zones adjacent to the oxide facies iron formation.

DRILL PROGRAM

The drill program was designed to test airborne and ground geophysical anomalies. A long, continuous, east-west trending non-magnetic conductor extends along most of the southern boundary of the property. This conductor was tested with 11 holes spaced generally 100 to 250 meters east-west, and 25 to 125 meters south of the conductor. Another conductor, with a magnetic expression, trending southeast crosses the southwest corner of the property. It was tested with two drill holes spaced 675 meters east-west and 25 to 125 meters south of the conductor. An isolated, small weakly magnetic conductor was detected also in the southwest corner. It was tested with one hole drilled 75 meters south of the airborne Dighem anomaly. A set of parallel, weakly magnetic, east-west trending weak conductors were detected in the south-central portion of the property. These were tested with 2 holes spaced 275 meters east-west and 50 to 100 meters south of the conductor. A long, continuous, non-magnetic, northeast trending conductor bisecting Two Island Lake and Four Island Lake was tested by four holes drilled on the shores of the lake and 50 to 100 meters south of

the conductors. The remaining 9 holes were drilled into a group of parallel, short, east-west trending, weakly magetic conductors located west of Floodwood Lake. East-west spacing was 100 to 400 meters and "down ice" distance from the conductors was 25 to 100 meters.

It is hoped that the Glen Auden property has similar characteristics to the Golden Pond property. An orientation survey performed by Inco (J.A. Sanerbrei, 1985) over the Golden Pond deposit shows that the gold-arsenic dispersion train resulting from the Golden Pond mineralization is characterized by having a minimum width of 200 meters measured perpendicular to the direction of ice advance, and can be detected up to 400 meters down-ice with delicate grains detected 100 meters down-ice. Initial spacing for testing targets were intervals either 300 meters or 400 meters along strike and 25 meters to 100 meters down-ice.

In each hole, the continuous return was logged and monitored throughout the section. Glacial till was sampled at 5 foot intervals or when changes in glacial lithology were suspected. Three to five feet of bedrock was drilled and sampled at the base of each hole. A grab sample of bedrock was saved to be examined at a later date to confirm bedrock lithology and to be examined closely for mineralization and alteration.

PLEISTOCENE GEOLOGY

Property

The overburden encountered on the Glen Auden property was relatively complex. A ubiquitous, thin clay till was found in the first 5 to 20 feet in all but one hole. This till was matrix supported with 10 to 25% sand to pebble sized clasts. Clasts were subangular to subrounded, unsorted and were composed of predominantly durable lithologies such as granitoids, quartz grains, mafic intrusive rocks, Paleozoic limestones, etc. Local lithologies such as metavolcanics or metasediments usually constituted no more than 10 to 20%. Matrix material was a compact, hard, brown clay. This till is interpreted as a lodgement till, deposited at the base of the latest glacial advance. The low local clast fraction and the stratigraphic position of this till (above lacustrine clays) nullifies this till as a good sampling medium. This hard, brown, gritty clay is probably the local extension of the Cochrane till, a local till caused by a local readvancemnt lobe from the retreating Laurentide Ice Sheet. Evidence for this interpretation includes the stratigraphic position of the till, the clayey composition of the till and the low erosional power shown by the inability of the readvancement lobe to erode eskers and other high relief features.

Glacifluvial sediments were found in the area centered

between Two Island Lake and Four Island Lake and constituted the main component of holes GAO-01, 02, 03, 04, 05, and 06. Glaciofluvial sediments ranged from very fine grained silt with interbedded clay facies through sandy facies to a coarse gravel facies found in holes GAO-02, 03, and 04. Glaciofluvial sediments exhibited good sorting and well rounded clasts, a general lack of any matrix clay component, an abundance of quartz sand and durable clast lithologies such as granitoids, Paleozoic limestones and mafic intrusives and often exhibited graded bedding. Glaciofluvial sediments were not sampled as their transportation mechanisms are complex and provenance is difficult to determine without detailed lithological studies.

Glaciolacustrine clays were observed in most holes except in holes GAO-01, 02, 04, and 05 where the esker ridge protruded above the lake water elevation. The clay was a homogeneous soft grey clay with occasional dropstones of exotic lithologies, generally between 10 and 70 feet thick. These clays were deposited in the slow water regime of glacial Lake Ojibway, a proglacial lake that abuted against the toe of the retreating ice sheet during the deglaciation of the James Bay drainage basin (Vincent and Hardy, 1979). These clays were not sampled as their transportation mechanisms are very complex.

At least one till sheet was found in most holes. As shown above, a complex range and distribution of sediements result from

glaciation, and each different sediment varies with respect to its value as a sampling media. Several different varieties of till were recognized. Flowed tills were recognized in GAO-08, 12, 13, 14, 18, 21, 24, 25, 26, 28, 29, 30, and 31. Flowed tills are formed as supraglacial material at the glacier toe "flows" into glacial troughs or off the toe into the periglacial environment. Flowed tills were recognized on the drill rig by recognizing limited sorting of till like material, limited stratification and low order consolidation. Flowed tills are derived from supraglacial material and have limited uses as sampling media as most material is distal. Flowed till samples were discarded where excessively thick.

Ablation tills or water-laid tills were recognized in holes GAO-03, 09, 10, 11, 13, 14, 18, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, and 31. The occurance of proglacial Lake Ojibway probably played a major role in the deposition process of ablation tills. Ablation tills were recognized by their lack of sorting, mostly distal lithological composition, lack of consolidation and absence or low percentage of a clay fraction. Where limited sorting was observed water-laid tills were suspected. Ablation tills also have a limited value as a sampling media.

Basal Tills were observed in holes GAO-03, 04, 09, 14, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31. Basal tills were either

basal melt-out tills or lodgement tills and took on a variety of forms. A hard, grey to green compacted, local gritty clay (rock four) was observed in most holes. Basal tills are the most significant sampling medium as material has been locally derived, travelled at the glacier base, and deposited subglacially having little or no post glacial redistribution.

BEDROCK GEOLOGY

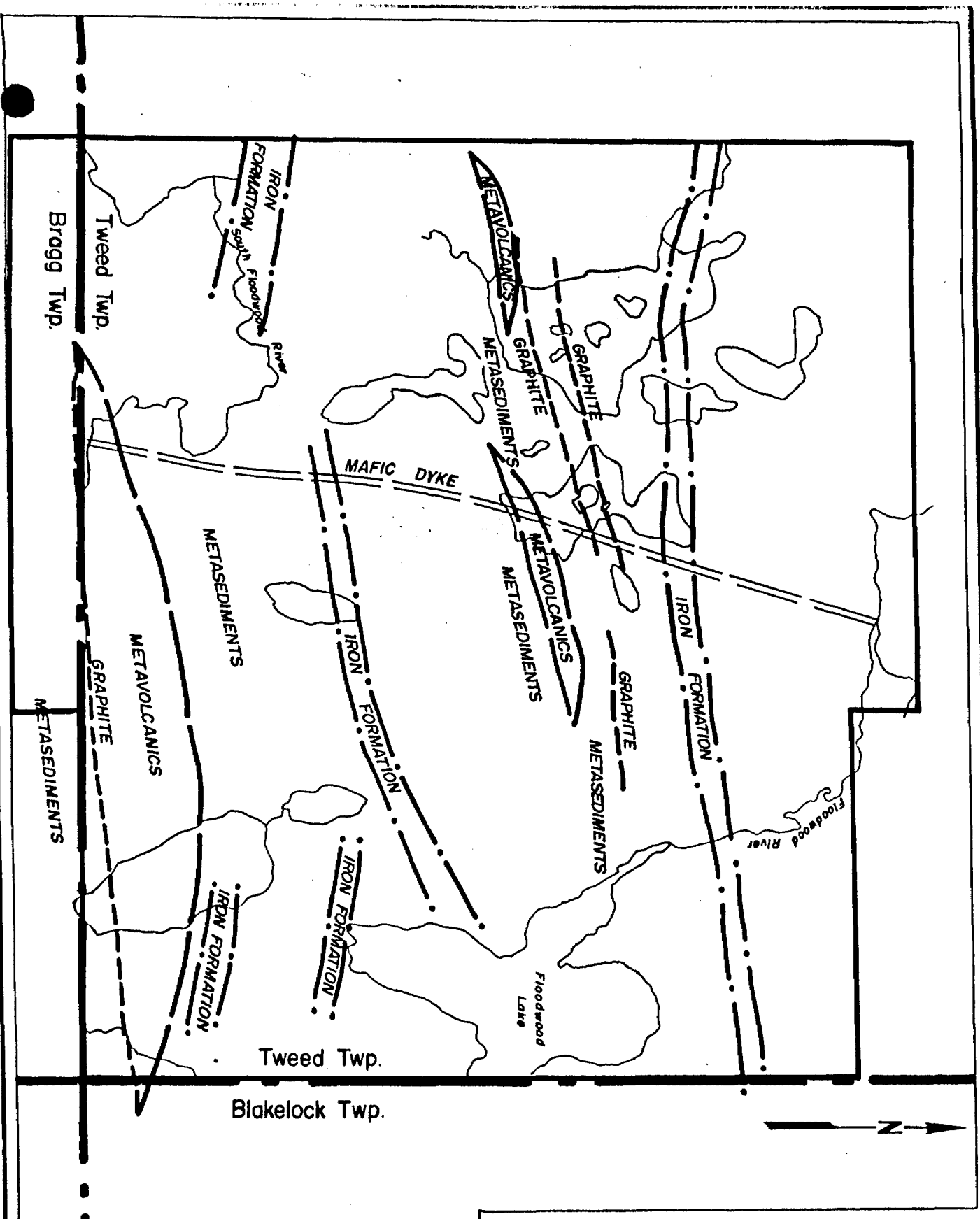
The bedrock encountered in all drill holes was supracrustal metasediments or metavolcanics. The metasediments encountered include argillites, graphitic argillite, amphibolites and micaceous sandstones. Argillite or graphite argillite was found in holes GAO-01, 13, and 30. The argillitic rocks were very dark grey to black, aphanitic, smooth or greasy, moderately soft with fine lammations and microfolding discernable even at rock chip scale in GAO-01 and 30 and more massive in GAO-13. In all cases fine grained, euhedral pyrite constituted 1 to 3% of the rock. Graphitic argillites were found where holes were drilled closest to bedrock conductors.

Amphibolites were distinguishable in GAO-06, 07, 08, 09, 10, 12, and 18. The amphibolites were mostly dark grey/black to green depending on quartz or chlorite composition, massive or subtly schistose, gritty, moderately hard with minor pyrite composition. Fine grained euhedral amphibole constituted 50 to 90% of the rock with quartz, biotite, feldspar, chlorite,

sulphides and occasionally garnet (GAO-10) comprising the remainder of the rock. Amphibolite and the garnet occurance may suggest local higher temperature, low-grade metamorphism which may be related to local fold structures (B.C. Wilson, 1979).

Micaceous sandstone was recognized in holes GAO-04, 11, 19, 20, 25, 26, 27, 28, 29, and 31. These rocks showed highly variable composition and texture as quartz would alternately vary between 10 and 75% of the rock. Other minerals would naturally vary antipathetically with quartz with biotite comprising 20 to 60%, feldspars up to 10% with occasional garnet, pyrite and chlorite in minor proportions. Grain size, roundness and sorting also varied but grains usually were between .1 to 2 mm, with moderate sorting and subrounded grain boundaries. Differences in size, roundness and sorting were occasionally observed over 5 feet suggesting graded bedding or some small scale stratification. Mafic to intermediate metavolcnics were observed in holes GAO-03, 06, 15, 16, and 21. The metavolcanics were dark grey to green, aphanitic massive to schistose, with minor to 2% (GAO-06) pyrite. Composition of the metavolcanics was estimated from hardness, colour and texture of the rock.

Correlation between holes is difficult due to variable lithologies and large gaps between drill fences. A Preliminary geological map is shown in Figure 3. The interhole and intrahole variance suggests an unstable volcanic depositional environment



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	for GLEN AUDEN RESOURCES LTD.		
	Title: Preliminary Geology Map — Fig. 3		
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with metasediments probably representing greywackes derived from eroding volcanics.

RESULTS

The results of heavy mineral concentration performed by Overburden Exploration Services Ltd, and Neutron activation analysis performed by X-Ray Assay Laboratories Limited ore shown in appendix E. Gold and arsenic results are placed alongside correspinding drill holes on the cross sections. Bedrock assays from returned bedrock chips are shown in appendix E.

DISCUSSION OF RESULTS

No visible gold was detected in the nonmagnetic heavy mineral concentrates (HMC) on the basis of a 'quick look' on the superpanner. This suggests that:

1. No gold was present in any samples,
2. Very fine gold was present and was undetectable by visable searches,
3. Visable gold grains were present but not detected by the detection method.

The gold analysis shows generally low gold concentrations with occasional high 'spikes'. This leads to the conclusion that background fine gold was present with an occasional sporadic grain as occurs in many tills overlying the Abitibi belt.

Anomolous pyrite concentrations were observed in three samples; 91740, 91745 and 91746. These anomalies are significant as they are from basal till samples and correlate to observations made on the drill. Sample 91740 contains 10% subhedral pyrite in the HMC. Local sediments (quartz biotite schists) constituted 70% of this sample and were observed to contain unusually high (3%) pyrite concentrations. Samples 91745 and 91746 contain 5% and 2% pyrite respectively in the HMC. These samples were from lodgement till and contained up to 90% local clasts of chlorite schist and graphitic argillites. The graphitic argillites were pyritiferous with up to 2% pyrite. Analysis of these samples were disappointing with gold being at background values and only slight elevations in some other elements.

Geochemical analysis of the HMC were generally unimpressive. Subtle indications of mineralization may be present, however, the relatively high gold values were sporadic and located high in the quaternery sections where till origins are complicated and material provenance is difficult to interpret. The highest gold value was 5.500 ppm found in sample 91782. This high value is probably due to the nugget effect as the analysis was performed on an extremely small sample (9.34 grams compared to a 50-70 gram average mass). In addition, samples above and below 91782 show no enrichment and other indicator elements show no enrichment. Interesting values are discussed, hole by hole, below.

GAO-06 Sample 91663 taken immediately above bedrock returned 230 ppb Au in the HMC and is slightly enriched in As, Co, and Mo. The sample was taken from the bottom of a thick glaciofluvial sequence in a thin till unit with mostly distal clasts and thus has low probability of being local.

GAO-09 Samples 91685 and 91686 returned 680 ppb Au and 3300 ppb Au respectively, and are slightly elevated in Cr and Zn. The samples were taken close to bedrock in a till interpreted as being water lain ablation till. The coincidence of two highly anomolous values is significant.

GAO-17 Sample 91749 returned 220 ppb Au and 72 ppm As and is slightly enriched in Co, Ag, Ba, La, Lu, W and Th. This sample is significant as it was taken from immediately above bedrock in a till unit interpreted as basal till or weathered bedrock. In addition, the elevation in concentration of a host of Au indicator elements is significant.

GAO-28 Samples 91895, 91896, 91898 and 91901 returned 140, 1400, 250,and 420 ppb Au respectively and are enriched in As and Ba. The samples were taken from the middle of section in a unit interpreted as ablation, possibly water lain, till. The

clustering of these high gold values is significant.

GAO-29 Sample 91921 returned 260 ppb Au and is enriched in W. The sample was taken from the base of the section, immediately above bedrock in a unit interpreted as basal till. The elevated gold value immediately above bedrock is significant.

GAO-30 Sample 91936, 91937, 91941 and 91942 returned 150, 170, 150 and 110 ppb Au respectively and is enriched in Cr, Co, As, Mo, W and Th. Samples 91936 and 91937 were taken from mid section in a unit interpreted as ablation, possibly water lain, till. Sample 91941 was taken from five feet above bedrock at the base of the ablation till unit. Sample 91942 was taken from immediately above bedrock in a unit interpreted as basal till. The clustering gold values, the strong association of indicater elements and the high gold value in basal till are significant.

CONCLUSIONS

Although no outstanding Au values were found, significant, subtly anomolous values may indicate the presence of mineralization. The absence of local tills in many holes prohibits drawing any conclusions regarding mineral potential in those holes. In addition, the reconnaisance nature of the drilling does not extensively test the known geophysical

anomalies.

From the discussion of results, three areas require follow-up based on overburden results.

Area 1 Drill hole GAO-17 returned significant values as discussed above. The geophysical target was a highly conductive, slightly magnetic linear feature bording the southern boundary.

Area 2 Drill hole GAO-28 and GAO-29 returned anomolous gold values, the highest being 1400 ppb as discussed above. The geophysical target was a long linear, continuous conductor along the southern boundary which probably represents a graphite bed

Area 3 Drill hole GAO-09 returned two samples with anomolous gold values. This hole was drilled to test three parallel conductors. Interpreted as being sulphide horizons at the base of Iron Formations.

RECOMMENDATIONS

The three areas indicated above should be diamond drilled to test for the source of the anomalous gold in tills. The exact locations should be spotted using the HLEM data. Drill targets should be picked from geophysical data where overburden drilling was not useful.

Respectfully submitted,

Rob Abernethy

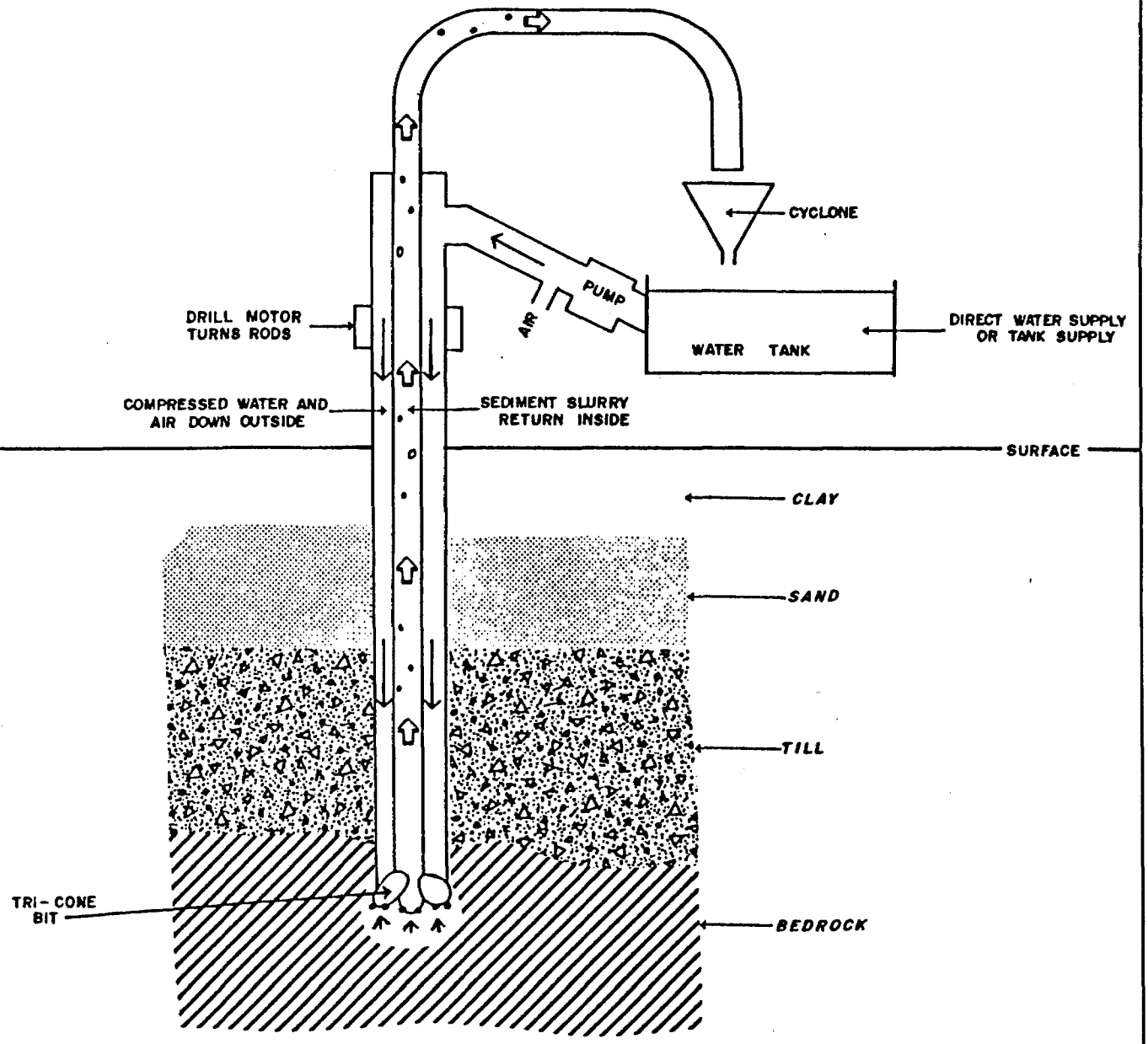
Robert K. Abernethy, B.A.Sc.

A P P E N D I X

DRILLING METHODS

Heath and Sherwood's reverse circulation system employs a hydraulic drill on a nodwell mounted, fully enclosed platform. A GT 1000 also carried a 500 gallon water tank to supply the drill with water. Winter roads were cut between some holes.

Reverse circulation drilling employs a mixture of compressed air and water as the drilling fluid to ensure that the sample returns to the surface instantly. The air-water mixture is forced down the outer rod to the bit face where it aids the tri-cone bit in disaggregating sediment. The new slurry is, in turn, forced up the inner tube between the bit cones and returns to the surface. Ten foot rods with 2.75 inch diameters were employed, with a 2.94 inch tri-cone bit and "sub" adapter.



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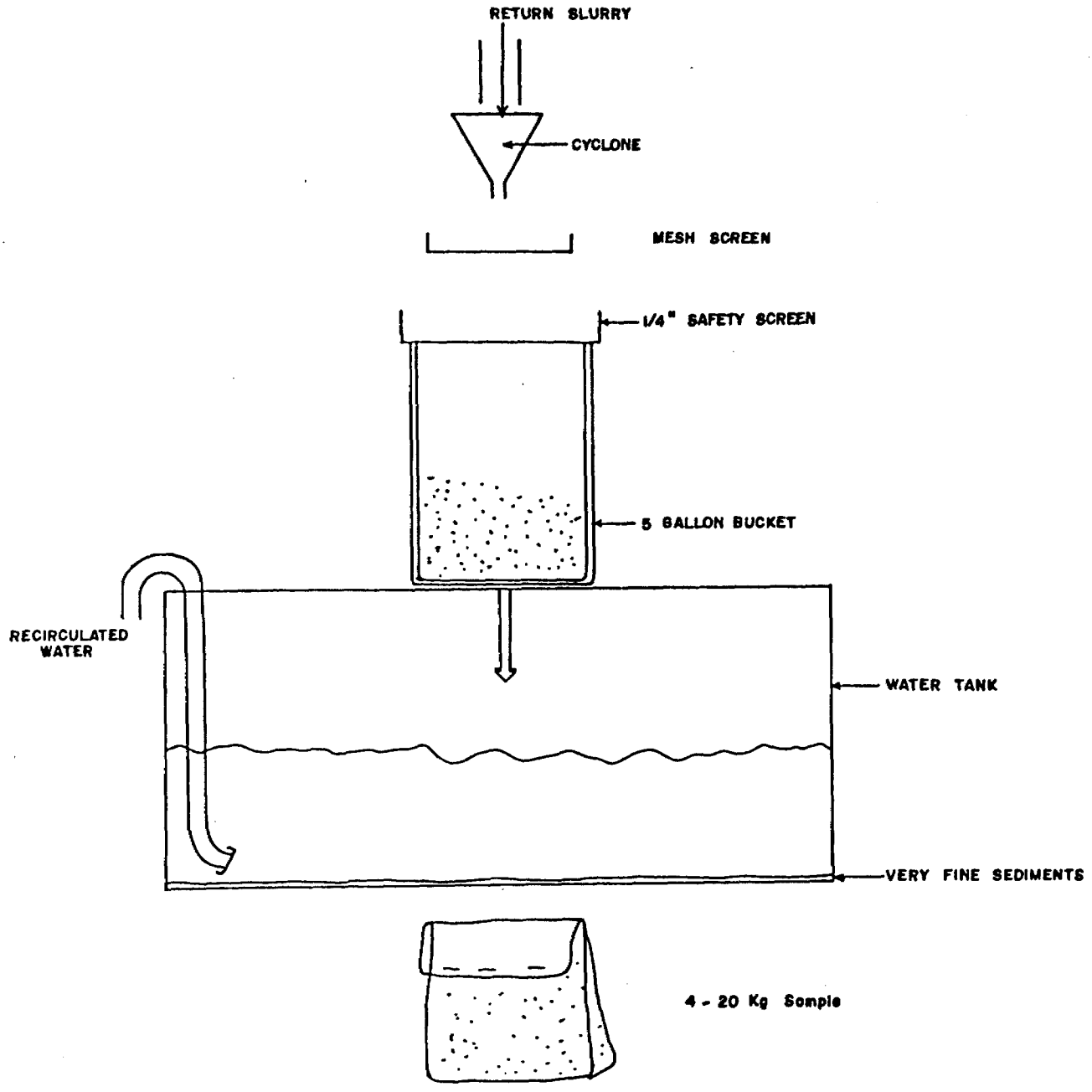
SAMPLE COLLECTION

A continuous return slurry must be logged and sampled where appropriate (Figure 3). The high pressure return slurry is fed into a cyclone above the sampling table in order to reduce hydraulic head so that it falls gently onto the sampling tray. A five gallon bucket is placed below the cyclone to retain solids. When sampling, a 10 mesh screen was used to separate + 10 mesh material (usually rock chips) from the finer silt. A large plastic sample bag was placed inside the 5 gallon bucket when sampling. Most solids settle to the bottom of the bag, except for very fine or light material. Water overflows the bucket and is recaptured in the settling tank where almost all fines are removed. The water may be recirculated if water is scarce.

Most of the + 10 mesh chips are discarded as they are multimineralic and are an unsuitable medium from which to prepare heavy mineral concentrates (Averill and Thompson, 1981). The - 10 mesh fines are sampled in tills or in disputable glaciofluvial units. Sampling begins as soon as till is recognized and samples taken at 5 foot intervals, or when changes in stratigraphy are recognized, or when the sample bag becomes full. Between 4 and 20 kilograms of sample are taken with the average mass being about 10 kilograms.

The drill holes extended 2 to 10 feet into the underlying bedrock. The bedrock did not exhibit any changes in lithology

over 2 to 10 feet so a single sample of bedrock was taken. Contrary to overburden samples the + 10 mesh was saved for analysis. This was done because bedrock samples undergo different methods of analysis and also to eliminate extraneous fines that either seep into the bedrock hole at the base or are already in the circulatory system. These fines would contaminate the sample. A small bedrock split was retained for binocular examination.



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	Title: SAMPLE COLLECTION Fig. 5		
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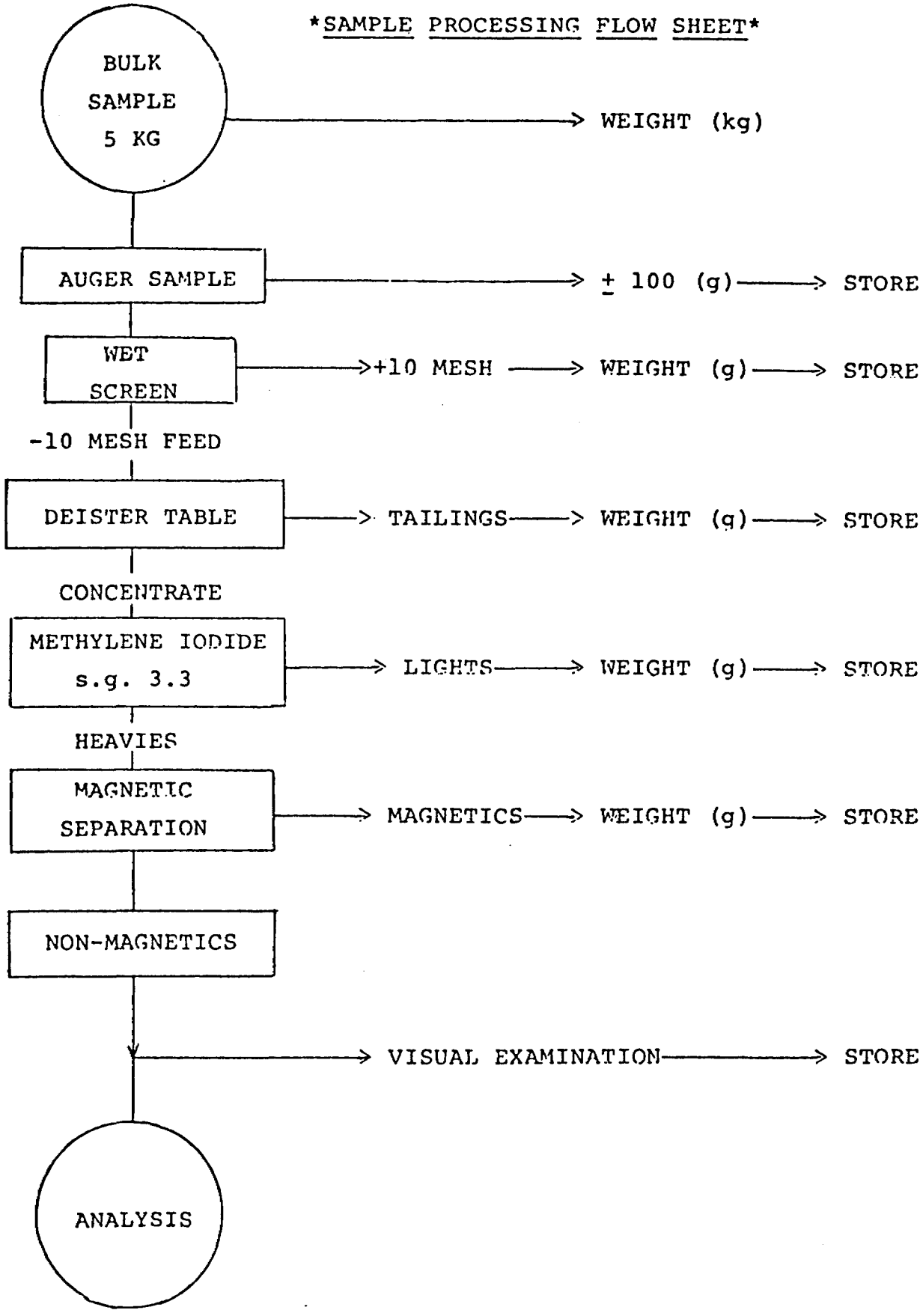
SAMPLE PROCESSING

All overburden samples were sent to Assayers (Ontario) Limited for analysis. A summary flowsheet of the sampling process is shown in Figure 6. Upon receiving the samples, they are weighed as received and run over a 10 mesh stainless steel screen. The + 10 mesh is weighed and saved. The - 10 mesh fraction is taken to the table feed (Deister table). A normal table feed for the Deister table is appromixately five (5) kilograms. Waterflow, slant and dip are controlled and kept constant for the same type of samples. Two runs are made. In the first run, a large "cut" is taken to ensure that all minerals are collected. This "cut" then rerun, and any material, horneblende and heavier, is collected as concentrate . The Tailings are collected, weighed and saved.

The concentrate is dried, weighed and tracted with Methylene Iodide (M.I.) S.S. 3.3, to separate the light silicates. Both heavy and light fractions are dried, weighed, and saved. The heavy concentrates then undergo magnetic separation. The non-magnetics are separated from the heavy concentrate. Both magnetics and non-magnetics are weighed and saved. The non-magnetic heavy concentrate undergoes microscopic examination and gold grains are picked out, described and sized. The remaining non-magnetic heavy concentrate is treated with Aqua Regia and analyzed for Au and As by ICP.

SAMPLE PROCESSING FLOW SHEET



DATE Feb 8/9, 1986 HOLE No. GAO-01 GEOLOGIST RA, PW DRILLER Marcel Lajoie

HOLE LOCATION 16+00 E 3+50 N

BIT No. CB67731 FOOTAGE ON BIT 0

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

Start: 8:40

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0	NR			
			7'- sand - well sorted, well rounded quartz sand pure - no clay clean water return medium grained	
10				
			15'- Clay - hard, brown-grey, gritty 5-10 % sand	
20				
			20'- very hard clay - clay balls, cylinders	
30				
			32'- Sand, - well sorted, well rounded - quartz sand.	
40				
			graded - fine grained to medium grained sand - biotite flakes in sand	
50				
60				
70				
			78'- Very coarse sand → small pebbles - well sorted, well rounded - mostly quartz and granitic rock fragments.	
80				
			80-90 extremely well sorted pebbles - well rounded - clean water (no clay)	
90				
			95'- fine grained sand.	
100				

DATE Feb 9, 1986 HOLE No. GAO-01 GEOLOGIST RA DRILLER Marcel Lajoie

HOLE LOCATION 16+00 E 3+50 N

BIT No. CB 67731 FOOTAGE ON BIT 100

HOURS MOVE HOURS DRILL OTHER

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100			Sand - graded - mostly quartz sand and granitic rock fragments.	
110			graded sands.	
120			NO TILL	
130		91651-A	129' - Bedrock - Argillite - dark grey to green - very fine grained, aphanitic, laminated - well defined schistosity, folded (corn chips) - quartz veining - clear and druzy quartz. - 1% pyrite in quartz. - trace pyrite in rock - no carbonatization - moderately hard (~4.5)	
140				
150				

DATE Feb 9, 1986 HOLE No. GAD-02 GEOLOGIST RA RW DRILLER ML

HOLE LOCATION 225 N 13+25 E

BIT No. SAME FOOTAGE ON BIT 132'

HOURS MOVE HOURS DRILL OTHER

START: 12:15

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0			4'- Clay - light brown, very hard, gritty 5-10%	
10			13'- Sand - fine grained - well sorted quartz sand.	
20			17'- Silt	
30				
40				
50			very fine sand	
60				
70				
80			medium sand	
90			coarse sand	
100				

DATE Feb 9, 1986 HOLE No. GA0-02 GEOLOGIST RA DRILLER ML

HOLE LOCATION 2+25 N 13+25 E

No. SAME FOOTAGE ON BIT 232

HOURS MOVE HOURS DRILL OTHER

STOP: 3:30

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100			Coarse sand	
110			graded	
120				
130				
140				
150				
160			155'- gravel - coarse sand, pebbles, cobbles - exotic - 80% granitic, 10% paleozoic, 10% greenstone - well rounded, moderately well sorted. - no clays or silts.	
170		41652A	No Till.	
180			166'- Bedrock - Quartz Biotite schist - Metasediment - dark grey to black - fine grained, biotite flakes "sparkle" - no sulphides, no quartz veining, no alteration - subtle schistosity on massive - quartz and/or plagioclase patches.	
190				
200				

DATE Feb 9, 1986 HOLE No. GAO-03 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION 6+00 E 3+00 N

BIT No. CB 67730 FOOTAGE ON BIT new bit

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

Start 4:50

DEPTH	GRAPHIC LOG	SAMPLE No	DESCRIPTIVE LOG	ANALYSES
0			5' - Clay - light brown (beige), hard, gritty. 10% sand.	
10				
			16' - Clay - softer, grey, 2-5% sand.	
20				
30				
40				
50				
			58' - Silt	
60				
70				
80				
90				
100				

DATE Feb 9, 1986 HOLE No. GAC-03 GEOLOGIST RA-PW DRILLER ML

HOLE LOCATION 6100E 3100N

RIG No. SAME FOOTAGE ON BIT 100

HOURS MOVE HOURS DRILL OTHER

STOP

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100			armored clay balls	
110				
120				
130				
140				
150			Fine sand	
			149' - Gravel	
			- moderately well sorted	
			- well rounded	
160			- mostly exotic clasts	
		91653	162' - Gravel Till	
			- unsorted	
		91654	- moderately angular clasts	
170			- local mafic volcanics increase to 40-50%	
		91655	172' - locals increase to 60%	
			- Pebble till → overall size decreases	
		91656A	- clay balls	
180			176' - Bedrock - Chlorite Schist (MetaVolcanic)	
			- dark grey / black to green	
			- aphanitic, trace pyrite	
190			- minor quartz veining	
			- subtle schistosity to massive.	
200				

DATE Feb 10, 1986 HOLE No. GAO-04 GEOLOGIST RA DRILLER ML

HOLE LOCATION 16+75 E 0+35 S

BIT No. ~~SAME~~ CB67733 FOOTAGE ON BIT ~~100~~ 0

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

START 3:40

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0			4' - Clay - light brown, very hard, gritty - 5-10% sand, pebbles.	
10			4' - Sand - medium grained - well sorted, well rounded - quartz, feldspar, biotite sand.	
20				
30				
40			graded - fine grained sand to medium grained pebbles	
50				
60				
70				
80				
90				
100				

DATE Feb 10, 1986 HOLE No. GAD-04 GEOLOGIST RA, PW DRILLER ML

HOLE LOCATION 16+75E 0+75S

BIT No. SAME FOOTAGE ON BIT 100'

HOURS MOVE HOURS DRILL OTHER

STOP

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100			Sand.	
110				
120			164'. Metasediment (?) Boulder - 5% sulphides - quartz veining	
130			166'. Gravel Till (Basal) - mostly local lithologies (metasediments, mafic volcanics) (70-80%), with 20-30% granitics, paleozoics, exotic greenstone - 40% cobbles, 40% pebbles, + sand, silt	
140			172'. Bedrock - 1. Chlorite Schist (chloritic amphibolite) - dark grey / black to green - very fine grained euhedral amphibole prisms - good schistosity - no sulphides observed - very minor quartz veining - hard (~5)	
150				
160			174' 2. Micaceous Sandstone (Bedrock Contact) - grey, massive - medium grained (1-3mm) quartz grains (40-60%) in very fine grained, micaceous, dark grey/black matrix - grain to grain contact - well sorted, subrounded quartz grains - trace pyrite in matrix - quartz veining.	
170		91657 91658 91659		
180		91660A		
190				
200				

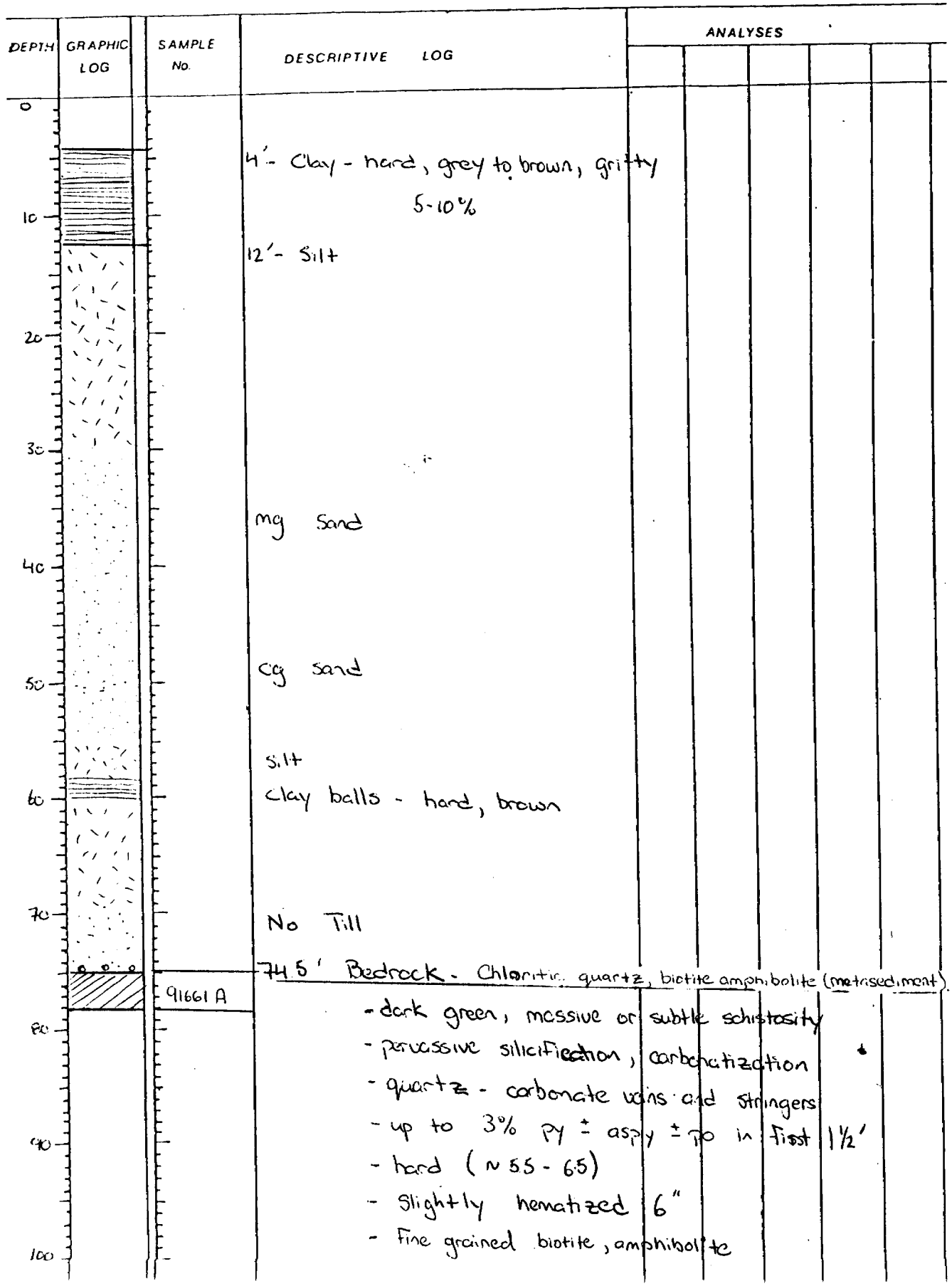
DATE Feb 11, 1986 HOLE No. GA0-05 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION 23+00 E 7+25 N

BIT No. SAME FOOTAGE ON BIT 177'

HOURS MOVE HOURS DRILL OTHER

START 9:45



DATE Feb 12, 1986 HOLE No. GAO-06 GEOLOGIST RA AW DRILLER ML

HOLE LOCATION 25 too E 1+25 N

T No. SAME FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

Start 4:10 Finnish 5:27

New screen - watch out For false Zn anomaly

DEPTH	GRAPHIC LOG	SAMPLE No	DESCRIPTIVE LOG	ANALYSES
0			4'- Clay - hard, brown, gritty	
10				
			17'- Silt	
20				
30				
40				
			46'- Fine grained sand.	
50				
60				
			67'- orange water 1m.	
70			60-70' graded sand	
			Fg to cg sand	
			beds 6cm to 2m thick.	
80			78'- Clay bed.	
			83'- Clay bed	
			92'- Gravel Till	
			- moderately well rounded, poor sorting	
90			- mostly distal granitoids, 20-40% local volcanics, seds	
			- 30% cobbles, 40% pebbles, 30% sand, silt, clay.	
		91662	96'- Bedrock - Graphite (5% pyrite)	
		91663	97'- Intermediate Volcanic (Sericite Schist)	
100		91664A	- dark grey, aphanitic, massive or subtle schistosity	
			- minor carbonatization, quartz-calcite veining	
			- 40 to 2% disseminated pyrite	

DATE Feb 12, 1986 HOLE No. GAO-07 GEOLOGIST RA-PW DRILLER ML

HOLE LOCATION L 27+00 E 1+25 N

BIT No. OLD BIT FROM 03 FOOTAGE ON BIT 170

HOURS MOVE HOURS DRILL OTHER

START 6:05 PM

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0			4' - Clay - hard, brown, gritty	
10				
			16' - Silt	
20				
			28 - Clay bed - 5cm	
30				
			Silt	
40				
			49' - Clay - bed - 5cm	
50				
			59 - Clay bed - 5cm	
60			Silt	
			67' Clay bed - 5cm	
70				
		91665	71' - Gravel Till (?) 6"	
		91666A	72' - Bedrock - Fine Grained Amphibolite	
80			- fine grained, massive, dark grey/black	
			- moderately hard (~4.5)	
			- gritty	
90			- 70-90% euhedral amphibole prisms	
			- minor quartz calcite veining	
			- ½ % disseminated pyrite.	
100				

DATE Feb 14, 1986 HOLE No. GA0-08 GEOLOGIST RA PW DRILLER ML

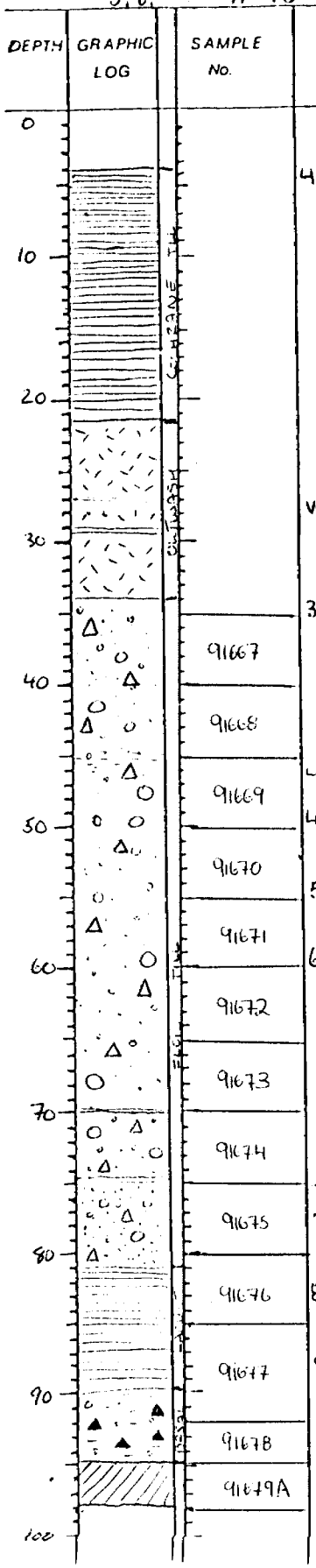
HOLE LOCATION 35+00 E 5N

BIT No. old FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

START: 7:55

STOP: 11:15



DESCRIPTIVE LOG

ANALYSES

4' - Clay - hard, brown, gritty

very fine silt

34' Gravel Till

- unsorted, moderately well ~~sorted~~ rounded
- cobbles 25%, pebbles 35%, sand 30% st, cl 10%
- mostly distal granites, exotic paleozoic, diabase
- 10-25% local

45' - clay bed

40-50' pebbles increase to 40-50%
Slight increase in local greenstones → 30-40%

50-60' locals still 30-40%
- chlorite schists (mafic vol), sediments.

66' size decreases
- pebbles increase to 40%, sand 40%, cobbles > 5%
- flow till → limited sorting, still well rounded

75' - Clay bed

76' - Sandy Gravel Till
40-50% sand.

82' - Clay - grey, soft, gritty
- still 10% sd, st

90' - Gravel Till
- mostly local 70-80%
- 20% cobbles, 60% pebbles, 20% sd, st, cl.
- unsorted, angular.

94' - Bedrock - Biotite, Quartz, amphibole schist or Biotite, quartz amphibolite
- Similar to GA0-07 except for more biotite
- black, fine grained euhedral amphibole and biotite, granular quartz and silica matrix
- massive or subtle schistosity
- hard (5.5), gritty,
- minor chlorite → green patches
- no pyrite, no quartz veining, no carbonatization

DATE Feb 13, 1986 HOLE No. GA0-09 GEOLOGIST RA PW DRILLER ML

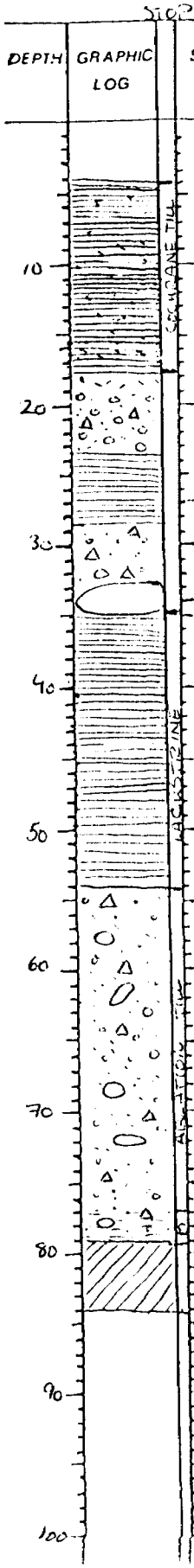
HOLE LOCATION 39+00E 2+75N

No. old FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

START 7:55

STOP 11:15



ANALYSES

4' - Clay - hard, brown, gritty

18' - Gravel Till (?)
- angular, unsorted
- 30-40 local volcanics and sediments
- 25% cobbles, 40% Pebbles, 35% sand, silt, clay.

23-28 clay bed.

28' - Pebble Gravel Till

91681

91682

34' - pure grey soft clay

54' - Gravel Till
- unsorted, angular clasts
- mostly distal 30-40% dark green volcanics, sediments
- 20% cobbles, 40% Pebbles 20-40% sand, silt, clay

91683

91684

91685

very fast drilling

91686

77' - high local content 60-70% dark green/grey schist
- clay balls, very small, gritty (armoured)
- hard → slower drilling.
- size decreases → Pebbly gravel till

91687

91688A

79.5 Bedrock - Biotite, amphibole schist
- dark/grey/black, good schistosity (aligned mica)
- gritty, fine grained euhedral biotite and amphibole crystals or aphanitic in some zones.
- moderately hard (N5)
- very minor quartz veining
- 1% pyrite.

DATE Feb 13, 1986 HOLE No. GAO-10 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION 41+00 E 2+75 N

RIG No. SAME FOOTAGE ON BIT 85'

HOURS MOVE HOURS DRILL OTHER

START 2:10

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0				
10			10' - Clay - hard, brown, gritty	
20				
30				
			33' - Gravel Till (?) 1'	
		91689A	34' - Bedrock - Quartz, biotite, amphibole schist.	
40			- dark grey / black, lighter where quartz veining	
			- green patches (chlorite), pink "spots" (garnets)(?)	
50			- massive or subtle schistosity	
			- fine grained, euhedral, amphibole crystals, biotite flakes parallel to schistosity	
60			- 1 mm subhedral garnets or rose quartz	
			- trace pyrite - disseminated, very fine grained	
70			- aphanitic matrix, dark grey (fine grained amphibole) or minor quartz grains / silica matrix	
80				
90				
100				

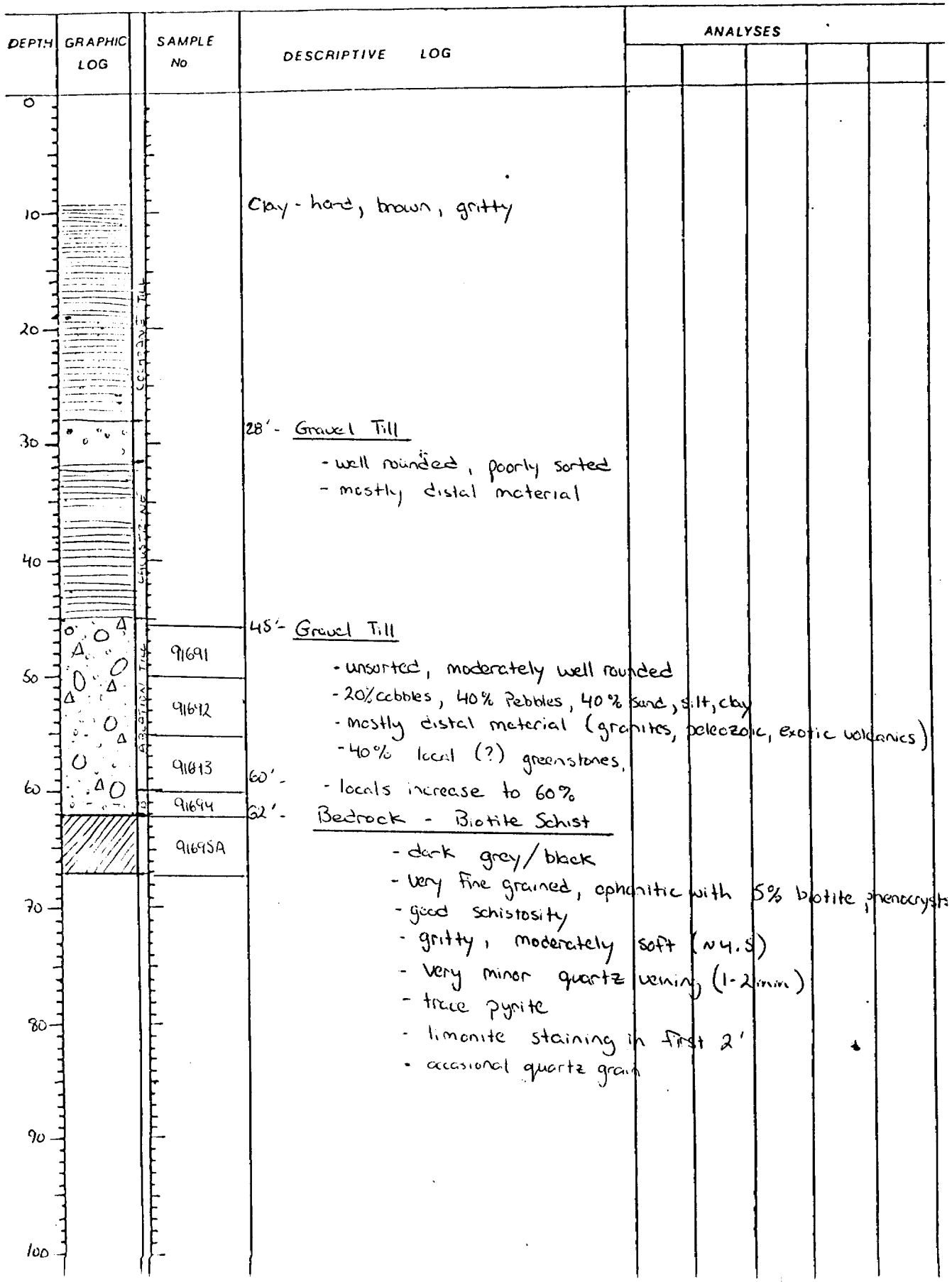
DATE Feb 13, 1986 HOLE No. GAD-11 GEOLOGIST RA-PD DRILLER ML

HOLE LOCATION 40+00 E 2+75 N

RT No. OLD FOOTAGE ON BIT 120'

HOURS MOVE HOURS DRILL OTHER

START 3:40



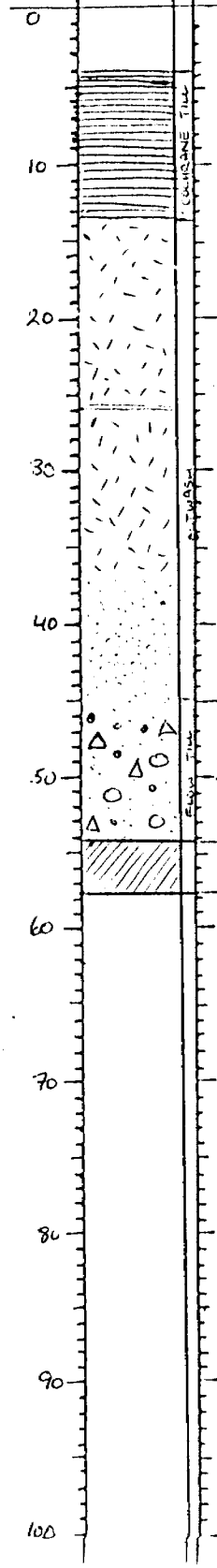
DATE Feb 14, 1986 HOLE No. GAO-12 GEOLOGIST PA - PW DRILLER ML

HOLE LOCATION 28+00 E 1+75 N

No. CB 67334 FOOTAGE ON BIT 0

HOURS MOVE HOURS DRILL OTHER

START: 10:00



DESCRIPTIVE LOG

ANALYSES

4'- beige, hard, gritty clay

14'- Silt

6" Clay bed

37' Fine grained sand

45'- Gravel Till

- moderately well sorted, moderately well rounded
- 40% cobbles, 40% pebbles, 20% sand, silt, clay
- mostly (70%) distal granitoids
- 10-20% local volcanics, sediments

50'

- limited sorting
- still seeing rounded clasts
- no increase in locals observed above bedrock

54.5' Bedrock - Quartz biotite amphibolite

- dark grey / black, massive or subtle schistosity
- fine grained - euhedral amphibole prisms, biotite flakes give "sparkling" lustre
- aphanitic matrix → silica or quartz grains
- minor quartz veining
- trace sulphides (pyrite)
- moderately hard (~4.5)
- minor chorite → green patches.

DATE Feb 14, 1986 HOLE No. GAO-13 GEOLOGIST RA / PW DRILLER ML

HOLE LOCATION 31 + 50 E 7+25 N

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

START 2:10

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
			- Clay. brown, hard, gritty	
10				
			17' - Cobble Till	
20		91704	- moderate sorting, moderately rounded	
		91705	- 60% cobbles, 20% Pebbles, 20% Sand, silt, clay.	
30		91706	- mostly distal, granitoids, paleozoic, diabase, exotic vol	
			- 10% local sediments	
		91707	21.5' - armoured clay balls	
40		91708	- still mostly granitic, 90% exotic	
			- still limited sorting	
		91709	47' - Clay balls. 40% local greenstones	
50		91710		
		91711	- locals decrease	
60		91712	60' - Locals increase to 40% (dark grey amphibolite)	
		91713		
70			69' - Pebble Till	
		91714	- general size decrease	
		91715	75' - 40% local	
80		91716	80 Pebble Clay Till	
		91717	- 30% pebbles, sand, silt	
			- 40% local pebbles	
90		91718	- increased angularity	
			89' - Cobble Till	
		91719	- 40% locals,	
100			- 50% cobbles.	

DATE _____ HOLE No. GAC-13/2 GEOLOGIST _____ DRILLER _____

HOLE LOCATION _____

T No. _____ FOOTAGE ON BIT _____

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

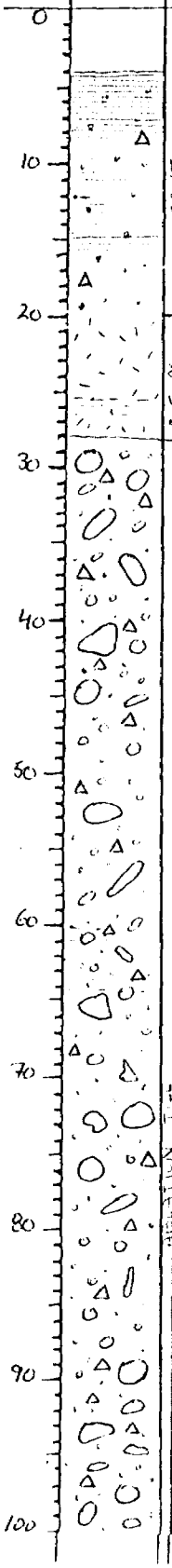
DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100			100' - Bedrock - 1. Quartz Biotite Schist (metasediment)	
			- fine grained, dark grey, silica matrix	
			- massive or subtle schistosity, minor pyrite	
110			102' - 2. Alteration Zone - Quartz vein	
			- 2-3" Quartz vein	
			- bleached rock 6" on either side	
			- pale green, ± sericite or muscovite	
			- 1% pyrite	
			103' - 3. Graphitic Argillite (?)	
			- dark grey / black, soft, aphanitic, massive	
			- 2-5 % pyrite	

DATE Feb 14, 1986 HOLE No. GAO-14 GEOLOGIST RA / PW DRILLER ML

HOLE LOCATION 7+25 N 32+0 E

BIT No. CB C7735 FOOTAGE ON BIT 0

HOURS MOVE _____ HOURS DRILL _____ OTHER _____



4'- Clay - hard, brown, gritty

20'- silt

27'- Cobble Till

- unsorted angular
- Mostly distal (70% granitic)
- 40% cobbles, 30% pebbles, 20% sand, 10% silt, clay.

40-50'- still cobble till
- no clay
- probably flow till or slump

60-64'- armoured clay balls
- still cobble till - slightly fewer cobbles
- only 25% local
- still subangular → poorly sorted.

70-80 - Limited sorting from Pebble till at 75' to cobble till at 78
- probably waterlaid or flow till
- ablation till
- still 25% local
- clay balls 67' to 69'

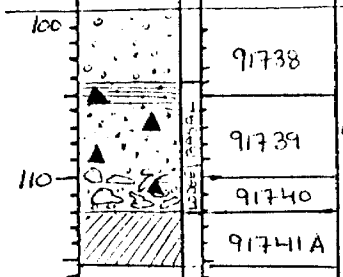
80-90'- pebble to gravel to cobble tills - limited sorting
- no clay seen
- slight increase in locals to ± 30%

DATE Feb 14, 1986 HOLE No. GAD-14 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION 7+25 N 32+00 E

No. SAME FOOTAGE ON BIT 100

HOURS MOVE HOURS DRILL OTHER



DESCRIPTIVE LOG

ANALYSES

100' - Pebble Till
- Pebbles 40%
- locals increase to 40%

104' - Clay - hard, grey, 20-30% sand, silt, pebbles
- locals increase to 50-60% (dk grey), gritty, aphanitic schist
- subangular, unsorted (not lacustrine)
- locals increase to 70%
- no +10 mesh.

109 - Gravel Till or regolith
- extremely high local content
- angular, unsorted clasts.
- probably lodgement till
- slow drilling → hard.

112' Bedrock - Quartz biotite schist (metasediment)
- dark grey to black
- very fine grained, gritty
- biotite flakes, very fine grained except along shear planes
- good schistosity
- very minor quartz veining (barren)
- up to 3% pyrite
- disseminated pyrite and concentrated along schistosity / shear / bedding planes.
- some massive pyrite chips (3x2x1) mm
- less than 5% quartz
- silica matrix → hard, grey
- probably amphibolite with aphanitic amphibole
- similar appearence to other metasediments

DATE Feb 15, 1986 HOLE No. GA0-15 GEOLOGIST RA PW DRILLER M1

HOLE LOCATION 22 + 50 E 23 + 75 S

BIT No. 1000446 FOOTAGE ON BIT 0

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

START 2:10

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
10			3'- Clay Till - brown, hard clay - 25% pebbles and cobbles.	
20				
			25'- Clay - grey, soft, pure	
30				
40				
50				
60				
			66'- Silt	
70			69'- Fine grained sand	
			graded sand fg-mg	
80				
90				
			99'- Clay bed.	
100				

DATE Feb 15, 1986 HOLE No. GAO-15 GEOLOGIST RA PW DRILLER M1

HOLE LOCATION 22+50 E 23+75 S

BIT No. 000046 FOOTAGE ON BIT 0

HOURS MOVE HOURS DRILL OTHER

START 2:10

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100			Silt with interbedded clay	
110				
120		91742	116'- Regolith or lodgement till	
		91743	- 90% chlorite schist,	
		91744	10% distal material - also clay balls.	
			may be bedrock	
130			120 - Bedrock (?) Chlorite Schist (Intermediate Volcanic)	
			- dark green, good cleavage, laminated, hard (NS)	
140			- Fine grained tuff fragments, aphanitic matrix	
			- recrystallized and stretched, bedded -> laminated	
			- lapilli sized fragments observed	
150			- minor pyrite	
			- very minor quartz veining	
			- still 5% till material in sample	
			121' EOH	
160				
170				
180				
190				
200				

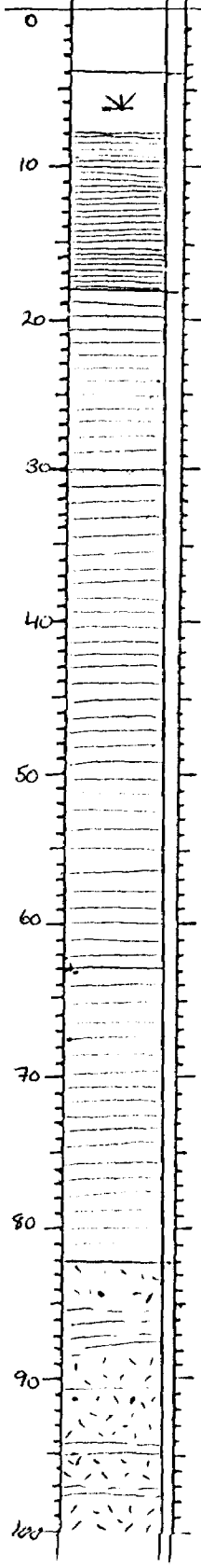
DATE Feb 16, 1986 HOLE No. GAO-16 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION L 16 + 00 E 24 + 75 S

No. SAME FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

START 10:00



DESCRIPTIVE LOG

ANALYSES

8' - Clay - hard, brown, gritty

18' - Clay - soft, grey, pure

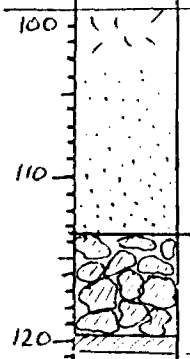
82' Silt with clay beds.

DATE Feb 16, 1986 HOLE No. GAO-16 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION

BIT No. SAME FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER



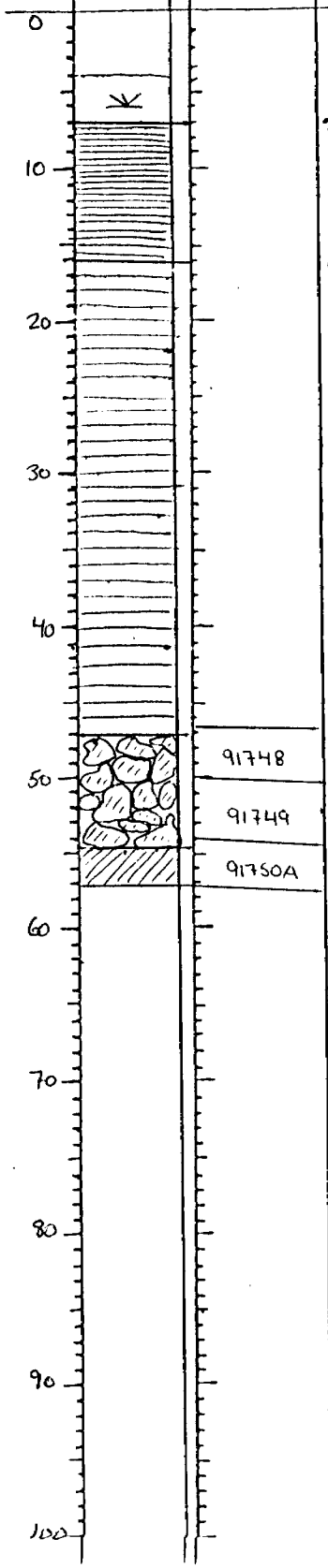
DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100			Sand - well sorted - medium grained.	
110				
		91745	113.5' - Regolith or Lodgement Till	
		91746	- extremely high local content (90%)	
		91747A	- still 10% distal material (large chips - not seepage)	
120			- broken @ bedrock.	
			- Also seeing 3-5% pyritic rhyolite.	
130			119' - Bedrock (?) Chlorite Schist (mafic volcanic)	
			- dark green → chloritic	
			- very fine grained	
			- well developed schistosity	
140			- moderately soft (~4.0)	
			- no quartz veining	
			- minor pyrite	
150			- also observing a soft graphitic argillite - possibly an interflow sediment.	

DATE Feb 16, 1986 HOLE No. GAO-17 GEOLOGIST RA - PW DRILLER ML

HOLE LOCATION L11+00 E 25+40 S

No. SAME FOOTAGE ON BIT 240

HOURS MOVE HOURS DRILL OTHER



ANALYSES

7'- Clay - hard, brown, gritty

16'- Clay - soft, grey, pure

47'- Gravel Till

- very high local content (70')
- mostly dark grey, limonitic schist
- angular, unsorted clasts
- 30% cobbles, 40% pebbles, 30% sand silt clay
- armoured clay balls.

54.5' Bedrock - Chlorite, biotite, amphibole schist

- dark grey / black to dark green (chlorite)
- fine grained euhedral amphibole and biotite in aphanitic (silica, chlorite, amphibole) matrix
- percussive limonitic alteration in first 1'
- minor quartz veining
- 1% pyrite
- moderately soft (4.5)

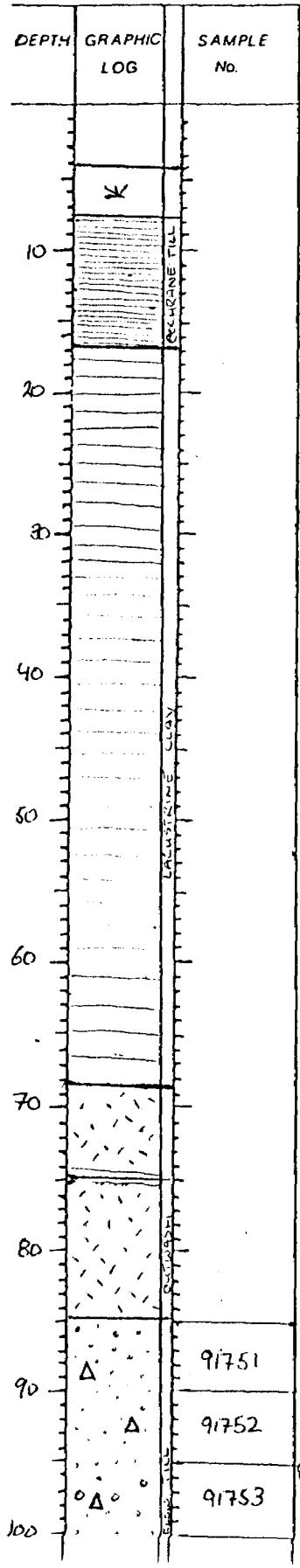
DATE Feb 16, 1986 HOLE No. GAO-18 GEOLOGIST PA PW DRILLER ML

HOLE LOCATION 9+75 E 21+50 S

No. SAME FOOTAGE ON BIT 197'

HOURS MOVE HOURS DRILL OTHER

START 2:25



DESCRIPTIVE LOG

ANALYSES

7'- Clay- hard, brown, gritty

17'- Clay- soft, grey, 5% pebbles, sand

Silt - with clay beds

85' Pebble Till

10% Cobbles, 60% Pebbles, 30% sand, silt + clay balls
30-40% local chlorite schists, dark grey/green
limited sorting, sub-angular

88' Sandy Till

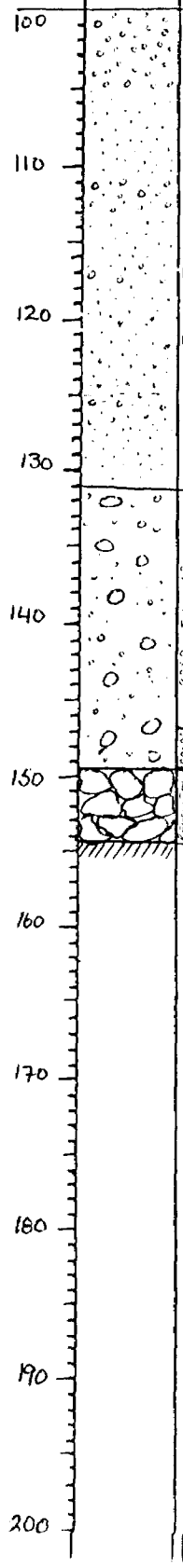
- 70% sand, 10% pebbles, no clay
mostly distal material
limited sorting / subangular

DATE Feb 16, 1986 HOLE No. GA0-18 GEOLOGIST RA - PW DRILLER ML

HOLE LOCATION 9+75 E 21+75 S

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVE _____ HOURS DRILL _____ OTHER _____



DESCRIPTIVE LOG

100' Gravel Till
80% Gravel 20% sand, st

105' - Sandy Till
90% sand 10% pebbles.
pebbles are subrounded.
local clasts still 40%

100-110 limited sorting sandy till to Gravel till
may be Flow till.

125' Clay bed

131' Cobble Till
40% cobbles, 30% pebbles, 30% sand, silt
no clay
Sub angular unsorted.
30-40% local

136' - begin to notice 5% clay
- locals increase to 50%

148' - locals increase to 75%

149 5 - Regolith or lodgement till
- 90% local material with 10% foreign material

152 (?) Bedrock - Biotite Amphibolite
dark grey / black to dark green (minor chlorite patches)
massive or subtle schistosity
fine grained euhedral amphibole and biotite
carbonatized
quartz - calcite veinlets.
trace pyrite
moderately soft (N4.5)

ANALYSES

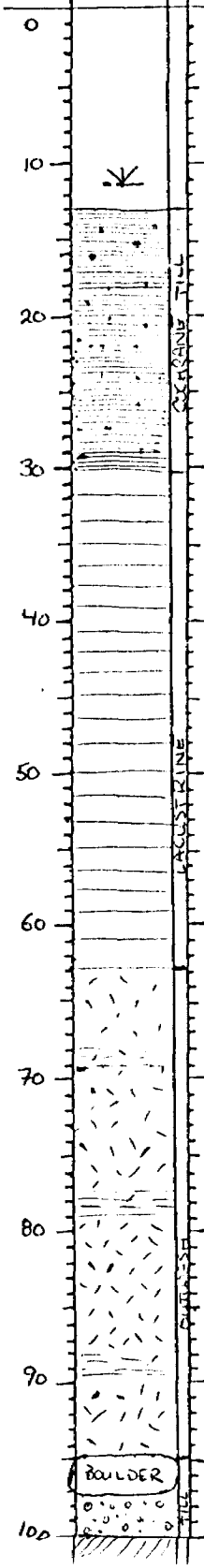
DATE Feb 17, 1986 HOLE No. GAD-19 GEOLOGIST RA - PW DRILLER ML

HOLE LOCATION LOE 22+60S

No. L0004448 FOOTAGE ON BIT 0

HOURS MOVE HOURS DRILL OTHER

START



DESCRIPTIVE LOG

ANALYSES

13' - Clay - hard, brown, gritty

30' - Clay - soft, grey, pure

Silt - interbedded clay

95' - Amphibole Monzonite Boulder

97' - Gravel Till

- rapid increase in local clasts
  From 10% at 97.5 to 70% at 99.5
- angular - sub rounded, unsorted
- 25% cobbles, 50% Pebbles, 25% sand, silt, no clay.
- Sample 91766 unrepresentitive.

100' - Bedrock - Quartz biotite schist (Biotite Metasandstone)

- dark grey, massive or subtle schistosity, moderately hard (~3.5)
- fine grained quartz (1mm) in fine grained biotite and aphanitic black matrix
- well rounded, well sorted quartz grains (20%)
- no quartz veining, trace pyrite

DATE Feb 17, 1986 HOLE No. GAO-20 GEOLOGIST RA - RW DRILLER ML

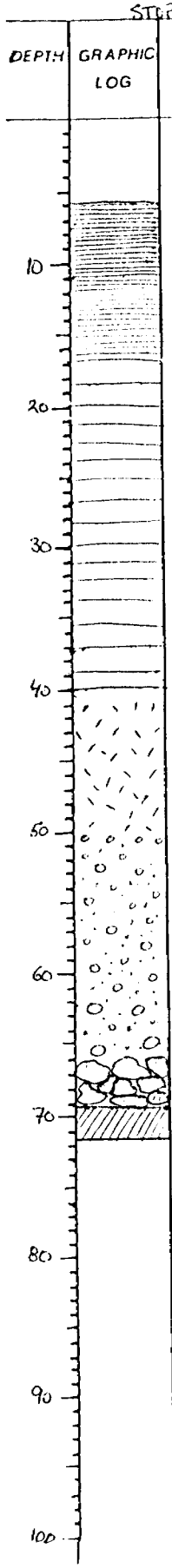
HOLE LOCATION L 6E 25+80 S

BIT No. SAME FOOTAGE ON BIT 103'

HOURS MOVE HOURS DRILL OTHER

START 2:05

STOP 4:15



ANALYSES

DESCRIPTIVE LOG

6' - Clay - hard, brown, gritty.

17' - Clay - soft, grey, pure.

49' Gravel Till
- unsorted, sub angular
- mostly, distal material
- 35% local
- 25% cobbles, 40% pebbles, 35% sand silt no clay.

60' - locals increase to 40%

65.5 locals increase to 60%

66' - Regolith or Lodgement Till
- extremely local - 90%

69' Bedrock - Quartz Biotite Schist (Biotite metasandstone)
- dark grey, massive or subtle schistosity.
- fine grained quartz (1mm) in fine grained biotite and aphanitic black matrix.
- well rounded, well sorted quartz grains (20%)
- no grain to grain contact.
- no quartz veining
- trace pyrite
- moderately hard.

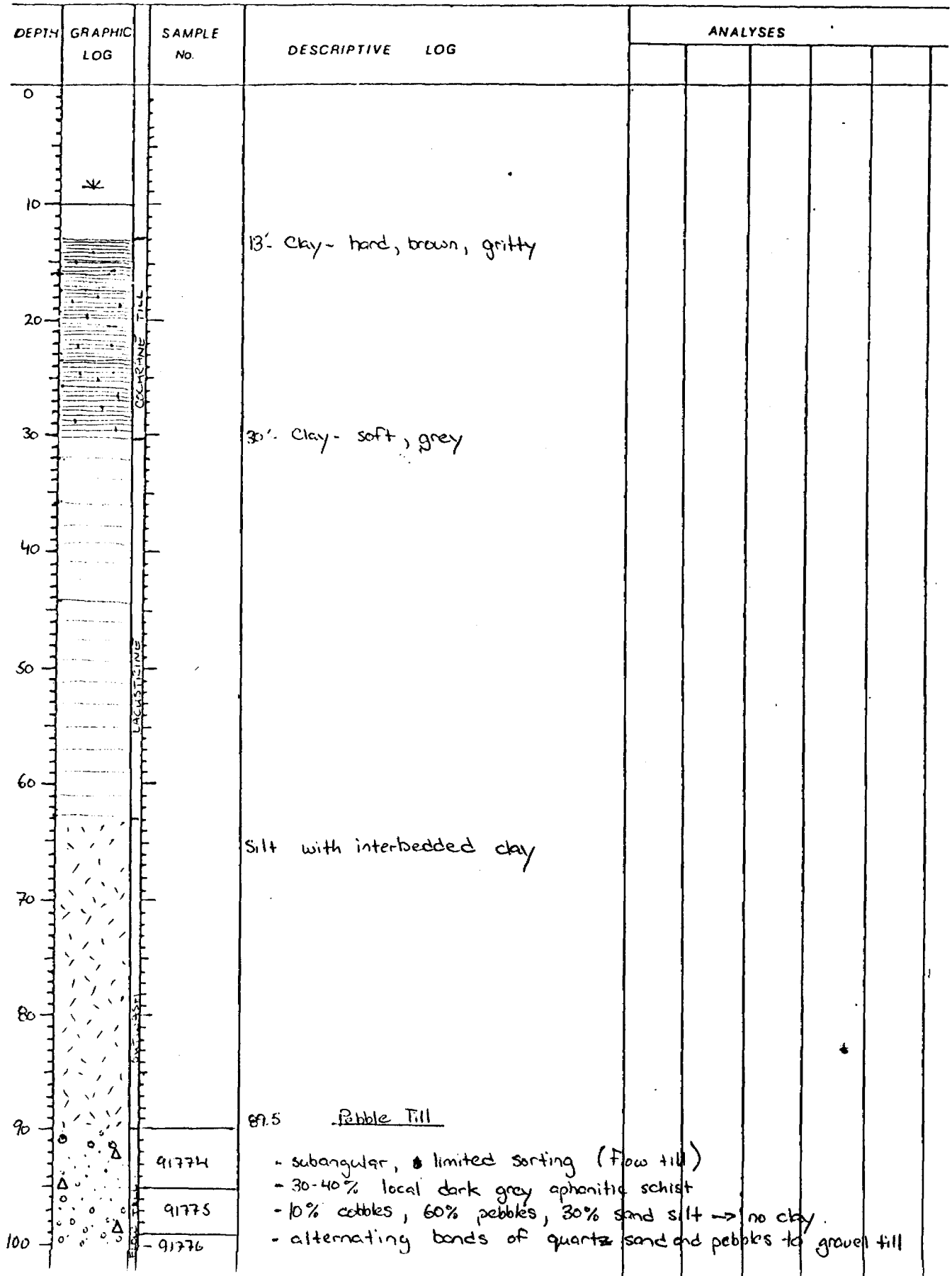
DATE Feb 17, 1986 HOLE No. GA0-21 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION L26E 22+00 S

BIT No. SAME FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

START 5:50



DATE Feb 18, 1986 HOLE No. GA0-21 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION L26E 22+00 S

No. SAME FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

START 5:50

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100		91777	100-110 - Gravel Till to Sandy Till	
		91778	mostly distal material	
		91779	20-40% local	
110			probably flow till	
		91780	Sandy Till causes sample bags to fill rapidly.	
			subangular to subrounded.	
		91781	no clay	
		91782	clear water - similar to glaciofluvial	
120			116 well sorted, well rounded	
		91783		
		91784		
		91785		
130		91785		
		91786		
			134 - Regolith or Lodgement till	
		91787A	- extremely high percentage of locals (90%)	
140				
			138' Bedrock - Chlorite, amphibole schist (mafic volcanic)	
			- dark grey/black to dark green	
			- very fine grained amphibole	
			- chloritic patches cause green patches	
150			- subtle schistosity	
			- trace pyrite	
			- hardness (~4.5)	
			- no quartz veining	

DATE Feb 18, 1986 HOLE No. GAO-22 GEOLOGIST PA PW DRILLER ML

HOLE LOCATION ~~24+75 S~~ ~~28+25 E~~ 24+75 E 16+25 S

No. L000447 FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

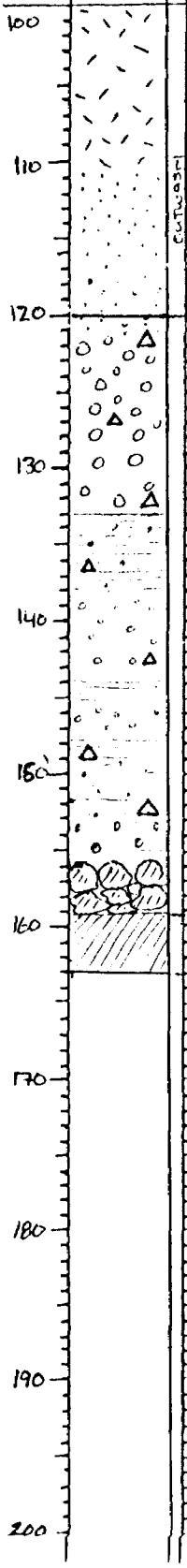
DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
10			10': Clay - hard, brown, gritty	
20			20' - Clay - soft, grey, pure.	
30				
40				
50				
60				
70			Silt; with interbedded clay	
80				
90				
100				

DATE Feb 18, 1986 HOLE No. GAO-22 GEOLOGIST RA FW DRILLER ML

HOLE LOCATION 24+75E 16+25S

No. SAME FOOTAGE ON BIT 100'

HOURS MOVE HOURS DRILL OTHER



DESCRIPTIVE LOG	ANALYSES
110 - Fine grained sand.	
117 - medium grained sand	
120 - Sandy Pebble Till - well sorted, well rounded.	
122 Gravel Till 30% cobbles, 40% Pebbles, 30% sand, silt, clay armoured clay balls. 30% local angular, unsorted	
127' locals increase to 40-50% (volcanics)	
128' sandy increases to 60% -> many samples	
133' Clay Till	
138' 20-30% sand, pebbles (clay matrix) - 60% local clasts - basal till - subangular, unsorted.	
140' Pebble Till - limited sorting, sub-angular clasts - 10% cobbles, 50% Pebbles, 40% sand, silt, clay. - 50-60% local	
145' Clay Till - hard, grey, fissil - 10% sand, silt	
156' Regolith or Lodgement Till	
159 Bedrock - Chlorite, biotite schist (mafic to intermediate tuff) - dark grey / black, fine grained tuff fragments (?) - massive or subtle schistosity - no sulphides observed - hardness (~4.0) - minor quartz veining.	

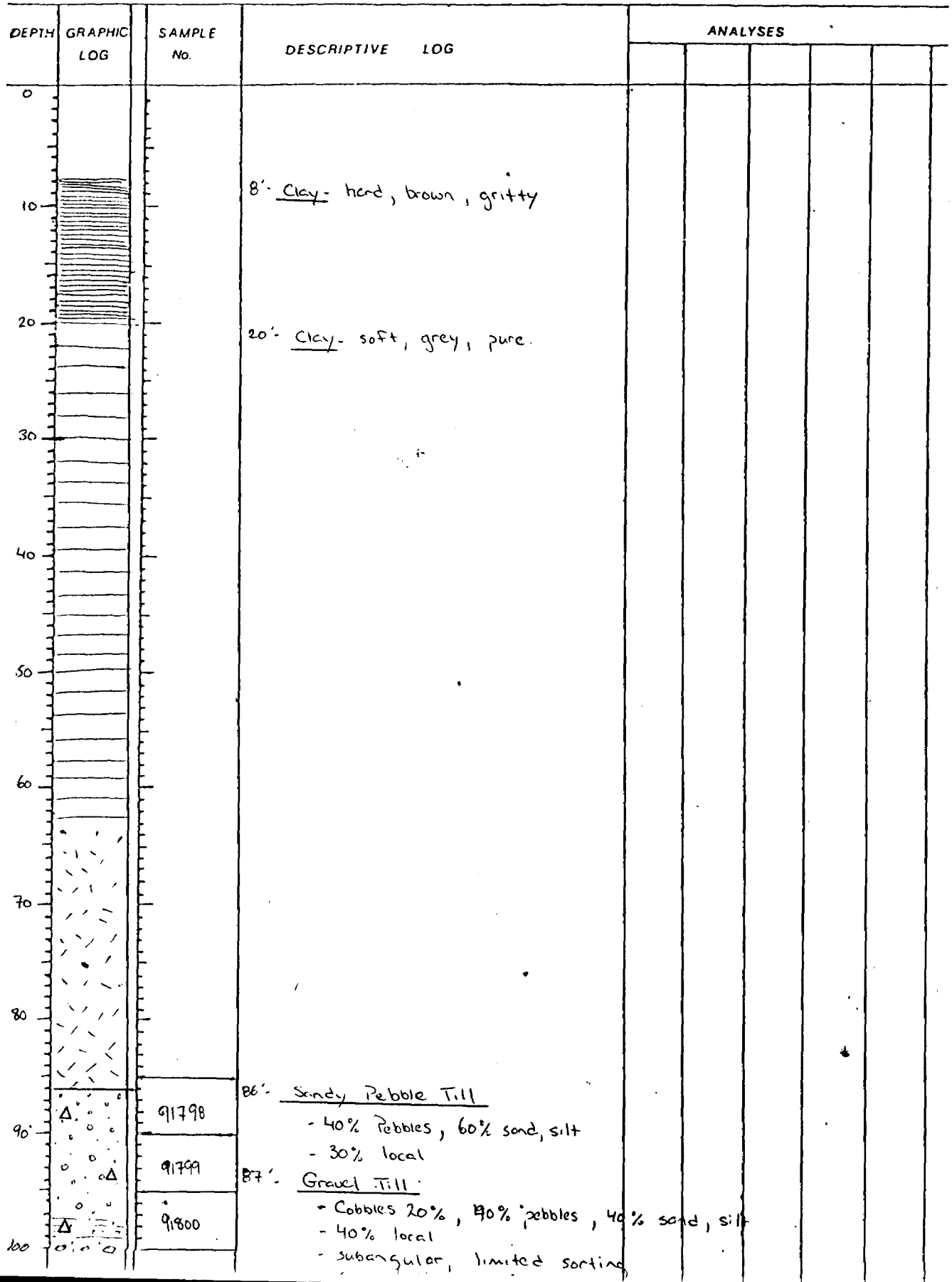
DATE Feb 18, 1986 HOLE No. GAO-23 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION 17+50 S 27+25 E

T No. SAME FOOTAGE ON BIT 150'

HOURS MOVE HOURS DRILL OTHER

START: 3:50

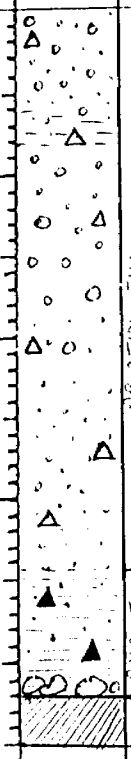


DATE Feb 18, 1986 HOLE No. GAD-23 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION 17+50 S 27+25 E

BIT No. SAME FOOTAGE ON BIT 150'

HOURS MOVE HOURS DRILL OTHER

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100		91801	102' - Gravel Till - sub-angular, limited sorting - Still clay fraction - 40-50% local	
		91802		
110		91803		
		91804		
120		91805	122' - Pebble Till - 60% Pebbles, 30% sand, 10% silt + clay. - 40% local	
		91806	134' - Clay bed	
130		91807	- gritty clay (10% sand) - may be small lacustrine deposit.	
		91808	142 - Bedrock - Biotite, chlorite schist (metasediment or metatuff)	
140		91809	- pale green to dark green - well developed schistosity - fine grained biotite in aphanitic matrix - percussive quartz/carbonate alteration - moderately hard (5) - trace sulphides - glassy texture → silicification	
		91810A		
150				

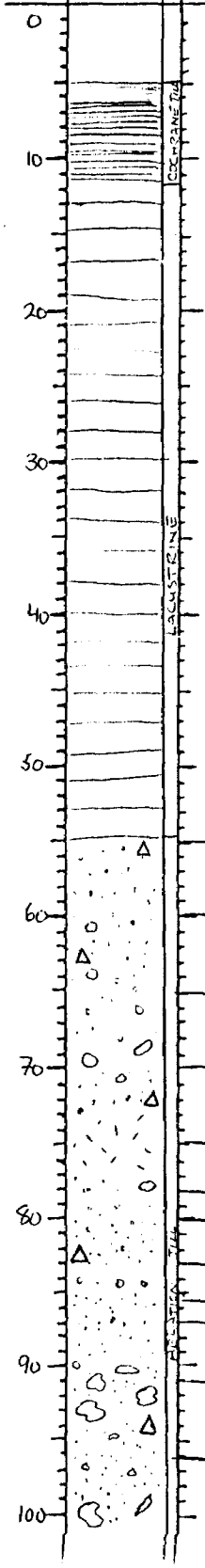
DATE Feb 19, 1986 HOLE No. GAD-24 GEOLOGIST RA - PW DRILLER ML

HOLE LOCATION L 28+25 E 24+65 S

BIT No. SAME FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

START 9:00 AM



SAMPLE No.	DESCRIPTIVE LOG
	5' - Clay - brown, hard, gritty
	13' - Clay - soft, grey, pure
91811	54.5' Pebble Till - 30% Pebbles, 60% sand, 10% silt - 20% local
91812	56' Pebbly Gravel Till - 25% cobbles, 30% pebbles, 40% sand - armored clay balls - unsorted, angular - 20% local clasts
91813	
91814	
91815	75' - silt (limited sorting)
91816	76' - Pebble Till
91817	- 20%-40% local clasts
91818	- 50% pebbles, 40% sand, 10% silt
91819	
91820	- Stratified - grading from sandy till through pebble till to gravel till
91821	
91822	

ANALYSES

DATE Feb 18, 1986 HOLE No. GAD-2H GEOLOGIST RA - PW DRILLER ML

HOLE LOCATION L 28+25E 24+65 S

[redacted] No. Same FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100		91823	99' - Gravel Till - 20% cobbles, 30% Pebbles, 30% sand, 20% silt and clay. - 40% local clasts. (black, aphanitic schist) - subangular, unsorted	
		91824		
110		91825	111' - Granitic boulder	
		NO SAMPLE		
		91826	116' - Clay - pure grey clay - returns as clay balls - 5-10% sand and silt - hard, fissile clay "chips" at 121'	
120				
		91827	122' Gravel Till - 20% cobbles, 40% pebbles, 30% sand, 10% silt and clay. - unsorted, angular - 60% local clasts, mafic to intermediate volcanics and metasediment.	
130		91828		
		91829		
140		91830	149' - Bedrock (?) Highly altered weathered Gosser - pale green (chloritic) clay with small (1-3mm) chips of highly altered schistose rock - quartz veining - no sulphides observed.	
		91831		
150		91832A		

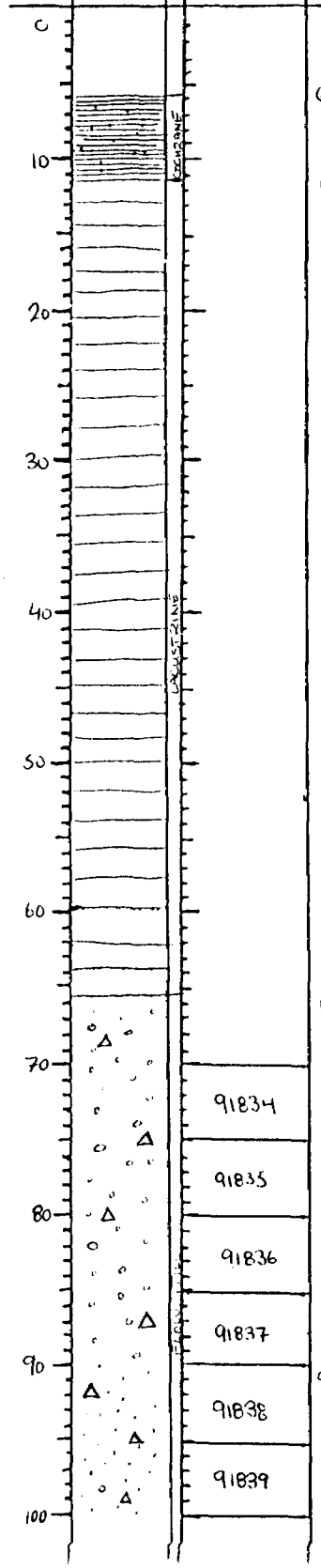
DATE Feb. 18, 1986 HOLE No. GAO-25 GEOLOGIST RA - PW DRILLER ML

HOLE LOCATION L 30+75E 24+30S

No. L000449 FOOTAGE ON BIT 0

HOURS MOVE HOURS DRILL OTHER

START 4:05



DESCRIPTIVE LOG

ANALYSES

0' - Clay - hard, brown, gritty

12' - Clay - soft, grey, pure

66.5' Pebbly Gravel Till

- 10% cobbles, 35% pebbles, 45% sand, 10% silt
- 20-30% local volcanics
- quartz sand rich
- limited sorting, subrounded clasts
- no clay component (clear water return)

90' - Sandy Till

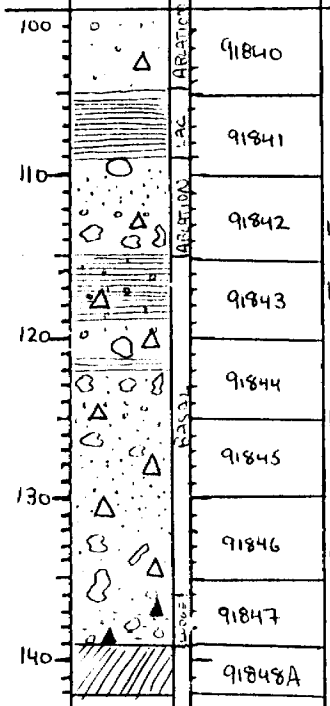
70% sand.

DATE Feb 18, 1986 HOLE No. GAO-25 GEOLOGIST RA ZO DRILLER ML

HOLE LOCATION L 30+75 E 24+30 S

No. L0004449 FOOTAGE ON BIT 100

HOURS MOVE HOURS DRILL OTHER



SAMPLE No.	DESCRIPTIVE LOG
91840	105' - Clay Bed.
91841	- pure, (3% sand) grey clay
	- moderately hard, fissile
91842	109' - Granitic Boulder
91843	110' Sandy Till
	- 70% sand, 30% silt, pebbles.
91844	- 40% local (pebbles)
	113' Gravel Till
91845	- 10% cobbles, 40% pebbles, 30% sand, 20% silt and clay
	- armored clay balls.
91846	115' Clay Till
	- 40% local
91847	- subangular, unsorted
	- fissile clay - dark grey
91848A	- 50% sand and pebbles
	122 - Gravel Till
	128 - Sandy Till
	131 - Gravel Till
	136 - rapid increase in local clasts
	local clasts 60-70%
	139' - Bedrock - Micaceous Sandstone (Metasediment)
	- dark grey, massive
	- fine grained quartz in aphanitic black matrix
	- quartz grains are 1-3mm diameters, subrounded, well sorted
	- grain to grain contact in most places
	- minor quartz - calcite veining
	- trace pyrite
	- no chloritic alteration
	- dirty quartz rich metasediment.

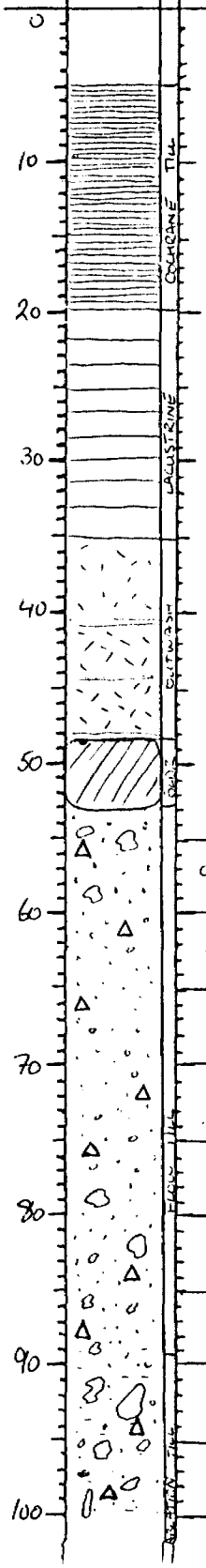
ANALYSES

DATE Feb 20, 1986 HOLE No. GA0-26 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION L 33+80 E 23+70 S

BIT No. L000450 FOOTAGE ON BIT 0

HOURS MOVE _____ HOURS DRILL _____ OTHER _____



ANALYSES

5' - Clay - hard, brown, gritty.

20' - Clay - soft, grey, pure

35' - Silt

59' - Pebble Till
- stratified, limited sorting
- grading from sandy till to gravel till
- subrounded clasts.
- mostly distal clasts (10-20% local)

78' - Gravel Till
- 20% cobble, 40% pebbles, 30% sand, 10% silt
- no clay
- 10-20% local clasts.

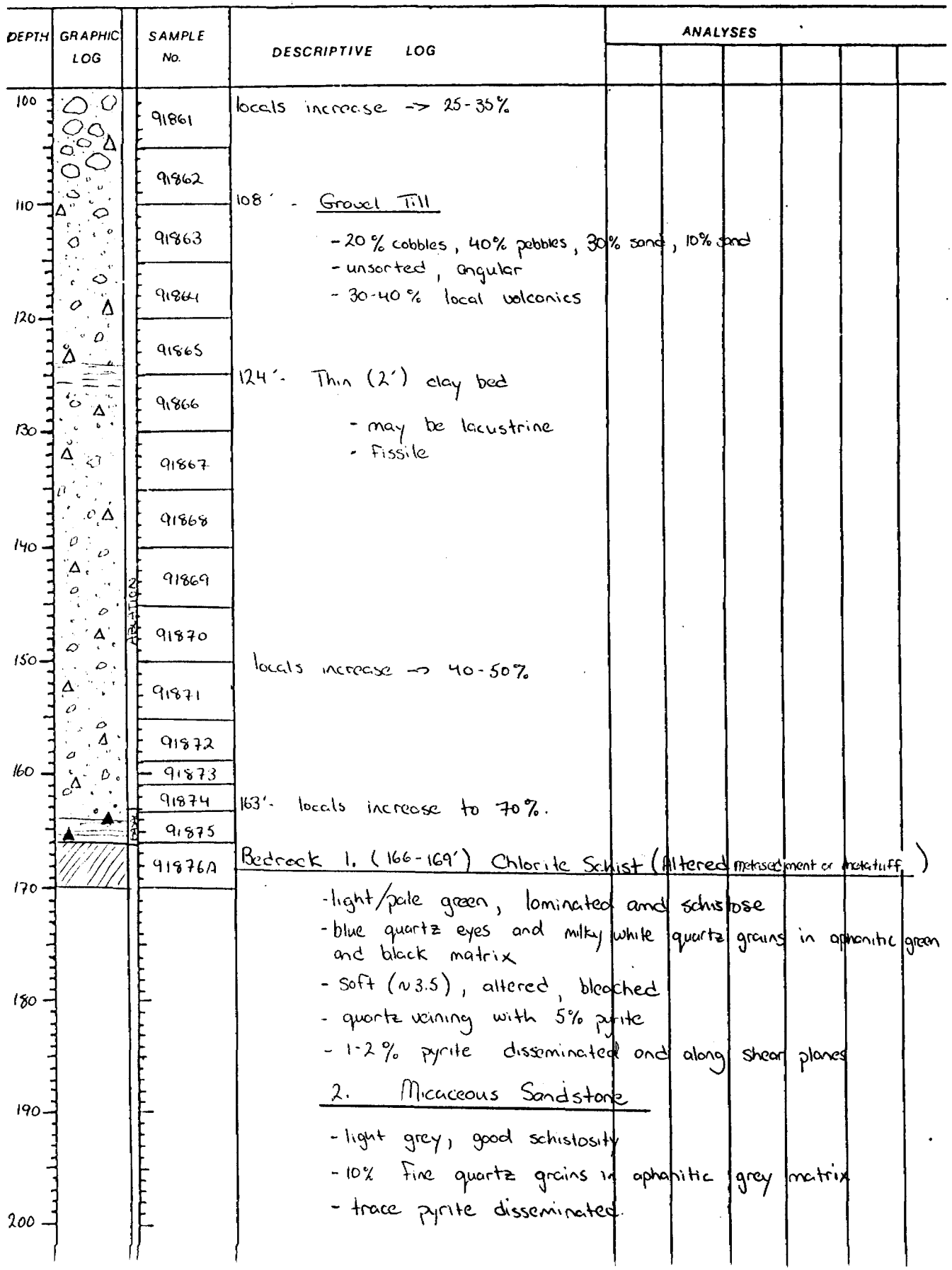
90' Cobble Till
- 10% cobbles, 30% pebbles, 20% sand, 10% silt
- Mostly granitic, durable lithologies.
- 10-20% local

DATE Feb 20, 1986 HOLE No. GAC-26 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION

BIT No. FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

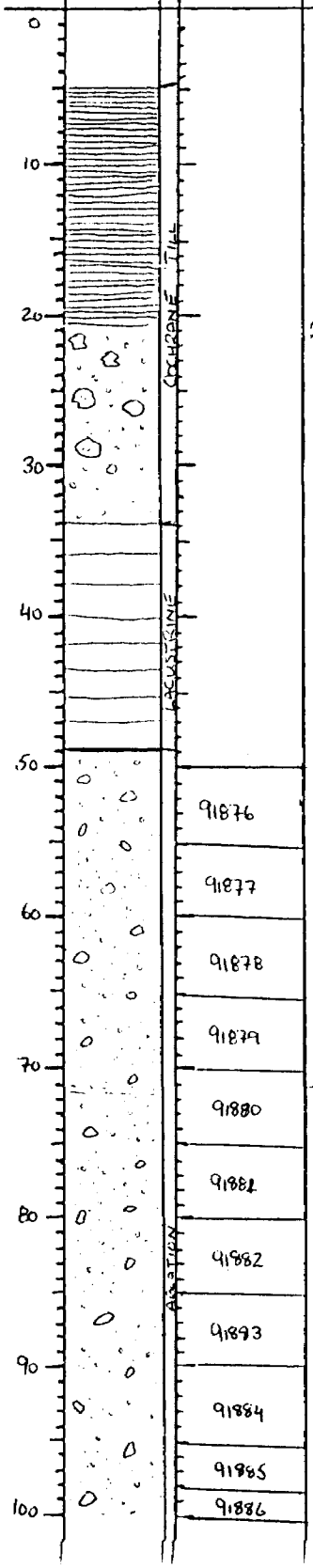


TE Feb 2, 1986 HOLE No. GAO-27 GEOLOGIST RA PW DRILLER ML

OLE LOCATION L38+30 E 23+40 S

BIT No. SAME FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER



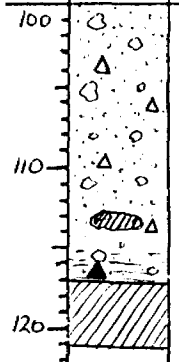
DEPTH	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0		5' - Clay - hard, brown, gritty	
10		5-10% sand, pebbles	
20		22' - Gravel Till	
		- distal, durable clasts.	
30		- angular unsorted	
40			
50	91876	49.5 - Gravel Till	
	91877	- unsorted, subrounded	
60	91878	- mostly distal material (5% local)	
	91879	- 15% cobbles, 40% pebbles, 40% sand, 15% silt and clay.	
		10% local volcanics	
70	91880	71' Clay beds	
	91881		
80		80 - locals increase to 30%	
	91882		
	91893		
90			
	91884		
	91885		
100	91886		

DATE Feb 21, 1986 HOLE No. GAO-27 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION L38+30 E 23+40 S

BIT No. _____ FOOTAGE ON BIT _____

HOURS MOVE _____ HOURS DRILL _____ OTHER _____



DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100		91887		
		91888	- 30% local sed 10% local volcanics	
110		91889	110'- Pebble Till	
		91890		
		91891	- 60% pebbles, 40% sand silt - no clay.	
120		91892A	115'- Locals increase to 60% - minor armored clay balls	
			117'- Bedrock - Micaceous Sandstone	
130			- dark gray / black, massive - fine grained quartz (20-40%)(1mm-3mm) in aphanitic black matrix (very fine grained amphibole) - quartz is moderately sorted and subrounded - grain to grain contacts in some chips but not in others (graded?) - no quartz veining - minor pyrite - moderately hard (4.5) - no carbonatization	
140				
150				

DATE Feb 21, 1986 HOLE No. GAD-28 GEOLOGIST RA PW DRILLER ML

HOLE LOCATION 42+30E 24+25S

BIT No. SAME FOOTAGE ON BIT 23'

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
10			12' - Clay - hard, brown, gritty	
			17' - Clay - soft, grey, pure.	
20				
30				
40				
50				
60			59.5 - Pebble Till	
			- 60% pebbles, 40% sand, silt	
			- mostly subrounded, moderately sorted, distal, durable clasts	
70		91816		
		91898		
80			30% locals	
		91899	80' - Gravel Till	
			- 40-50% local volcanics, 5-10% local sediments	
		91900		
		91901		
90		91902		
			93 - Clay bed	
		91903	- 20-30% pebbles, sand	
100			97': Gravel Till	
			- high local contents. (70% volcanics)	

DATE Feb 23, 1986 HOLE No. GAD-28 GEOLOGIST RA RW DRILLER ML

HOLE LOCATION 42+30E 24+25S

BIT No. SAME FOOTAGE ON BIT 130'

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

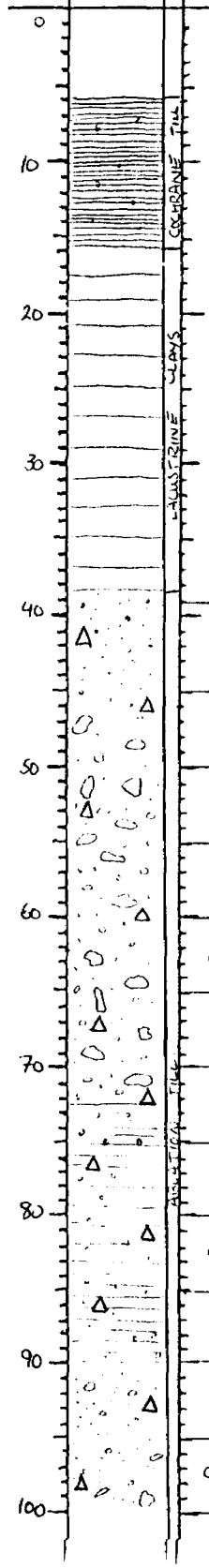
DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100		91904	100'. Regolith.	
		91905A	102'. Bedrock. Micaceous Sandstone	
110			- pale green / grey, massive	
			- fine grained quartz (1mm-2mm) (50%) in aphanitic green (chloritized) matrix	
120			- grain to grain contact	
			- well sorted, well rounded grains.	
			- no sulphides observed	
130			- quartz veining	
			- other sediments in area do not have pervasive chloritization	
140			- very soft. (N 3.5)	
150				

DATE Feb 13, 1986 HOLE No. GDO-29 GEOLOGIST BA PW DRILLER ML

HOLE LOCATION L 44+08 E 23+65 S

BIT No. SAME FOOTAGE ON BIT 130'

HOURS MOVE HOURS DRILL OTHER



DEPTH	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0			
6'		Clay - hard, brown, gritty	
16'		Clay - soft, grey, pure.	
38'		Pebble Till	
	91904	- well rounded, limited sorting	
	91905	- 10% cb, 50% Pb, 40% sand, silt.	
		- 10% local	
45'		Gravel Till	
	91906	- sub angular, limited sorting	
	91907	- 25% cobbles, 40% pebbles, 35% sand, silt	
		- local lithologies increase to 25% (metavolcanics)	
	91908		
72'	91909	Clay Till	
	91910	- 70% clay, 30% pebbles, sand, silt.	
		- 40% local	
	91911	- Fissile clay	
		- subangular, unsorted clasts	
	91912		
	91913		
90'		Gravel Till	
	91914	- 20% cobbles, 40% pebbles, 40% sand, silt + clay beds	
		- sub-angular, limited sorting	
	91915	- 30-40 % local sediments and volcanics.	
100			

DATE Feb 24, 1986 HOLE No. GAO-29 GEOLOGIST PA - PW DRILLER ML

HOLE LOCATION

BIT No. FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER

DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
100		91916		
		91917	108-111' Pebble Till	
110		91918	112' Gravel Till - increase in local lithologies.	
		91919	117' Regolith.	
120		91920	118' - Bedrock - Micaceous Sandstone - dark grey / black with rusty hematitic staining in 1st 2" - Subtle schistosity - appears massive with occasional shear. - fine grained (1-2mm) quartz grains in aphanitic black matrix (20-30% quartz grains) - quartz grains milky white (95%) and blue transparent quartz "eyes" (5%) with concoidal fracture, no cleavage. - sub-rounded to sub-angular, moderately well sorted - matrix supported - quartz veining (1-5mm quartz veins) barren - very fine grained pyrite constitutes up to 1%. Occurs as disseminated, euhedral cubes in matrix and smeared along shear planes - soft (3.5-4.0) - no carbonatization.	
130				
140				
150				

DATE Feb 24, 1986 HOLE No. GAO-30 GEOLOGIST _____ DRILLER _____

HOLE LOCATION L46E 23+50S

BIT No. CB 67738 FOOTAGE ON BIT _____

HOURS MOVE _____ HOURS DRILL _____ OTHER _____

START 11:20

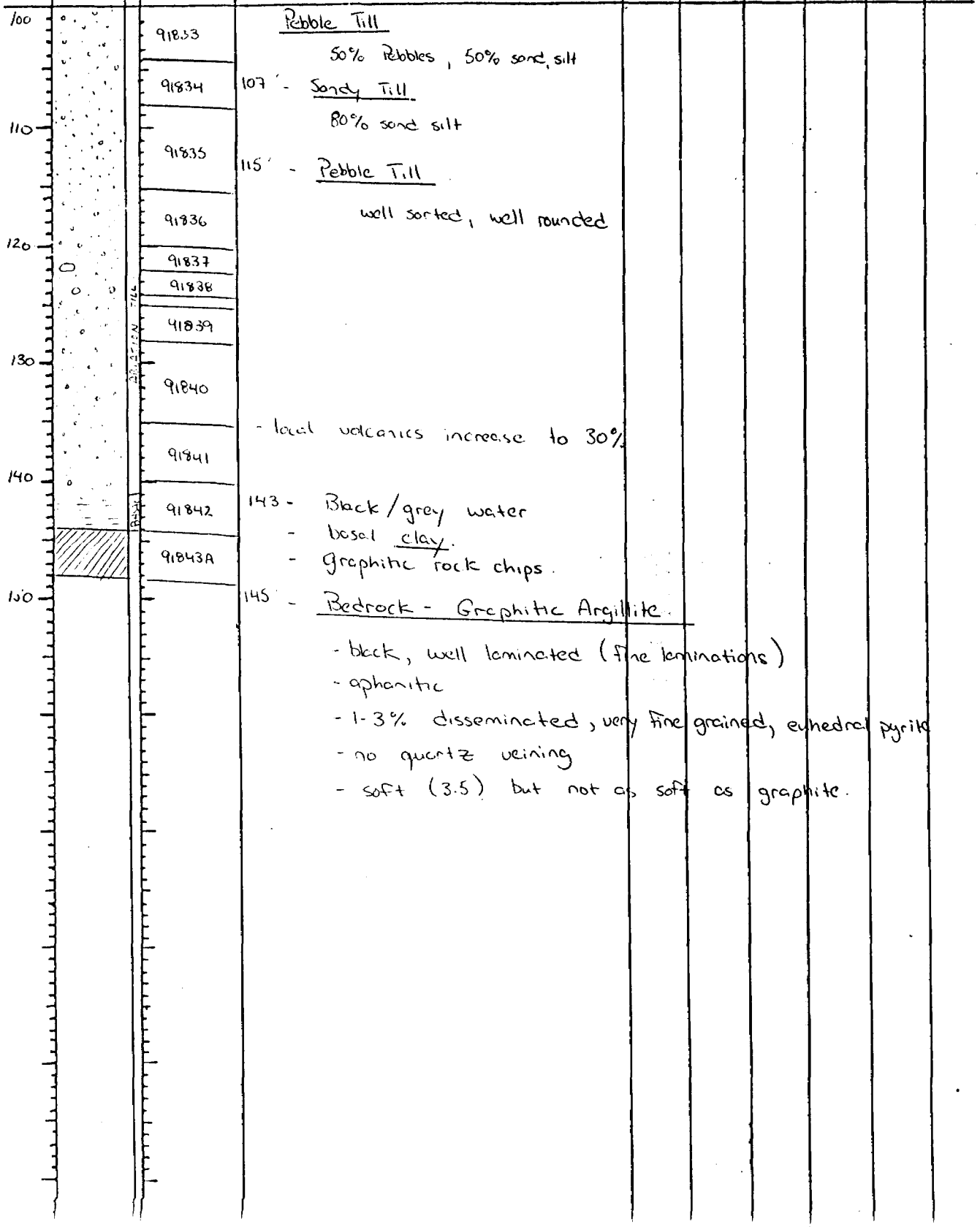
DEPTH	GRAPHIC LOG	SAMPLE No.	DESCRIPTIVE LOG	ANALYSES
0				
10			8'- Clay - hard, brown, gritty.	
			11'- Clay - soft, grey, pure.	
20				
30				
40				
50				
		91823	53'- Gravel Till	
		91824	- 15% cobbles, 40% Pebbles, 45% sand, silt, clay	
60		91825	- subrounded, unsorted	
		91826	- 10% local volcanics and sediments.	
70		91827		
		91828	limited sorting - grading from pebble till to gravel till	
80		91829		
		91830	locals increase to 20%	
90		91831		
			94'- Pebble Till	
		91832	60% pebbles, 40% sand, silt, clay.	
100				

DATE Feb 24, 1986 HOLE No. GAO-30 GEOLOGIST RA RN DRILLER ML

HOLE LOCATION

BIT No. FOOTAGE ON BIT

HOURS MOVE HOURS DRILL OTHER



********** OVERBURDEN EXPLORATION SERVICES LTD. **********

L A B O R A T O R Y R E P O R T

Notes

1) Bulk, +10 Mesh, and Table Feed weights are reported in kg (wet).

2) Mag, Non Mag and M.I. weights are reported in grams (dry).

3) Panning results (see separate sheet), as prepared by R. Maass, are percentage estimates of the table concentrates.

Sample No.	Bulk	+10 Mesh	Table Feed	TableConc	Mags	NonMags	M.I.Heav	M.I.Lites	V.G.Table	V.G.Pan	Other Remarks
91653	15.33	.83	14.50	24.69	9.52	15.17	9.98	5.19			
91654	11	.59	10.41	131.29	8.29	123	14.51	108.49			
91655	8	.47	7.53	25.38	7.90	17.48	12.05	5.43			
91657	17.61	.03	17.58	55.60	16.57	39.03	31.49	7.54			
91658	6.95	.30	6.65	22.57	5.98	16.59	12.01	4.58			
91659	12.49	.12	12.37	45.67	11.97	33.70	17.60	16.10			
91662	10.22	.17	10.05	30.25	12.57	17.68	11.55	6.13			
91663	5.15	.21	4.94	43.99	11.72	32.27	11.86	20.41			
91665	8.82	.02	8.80	35.22	10.19	25.03	8.10	16.93			
91667	14.30	.03	14.27	32.39	13.98	18.41	12.25	6.16			
91668	14.34	.31	14.03	42.65	15.31	27.34	17.75	9.59			
91669	16.67	.06	16.61	45.14	15.79	29.35	15.11	14.24			
91670	15.58	.05	15.53	41.39	13.19	28.20	18.46	9.74			
91671	16.03	.05	15.98	44.18	17.18	27	19.94	7.06			
91672	18.47	.13	18.34	42.72	12.08	30.64	17.59	13.05			
91673	16.80	.17	16.63	64.06	17.71	46.35	28.81	17.54			
91674	14.73	.02	14.71	75.53	19.40	56.13	23.69	32.44			
91675	10.10	.04	10.06	68.47	25.54	42.93	15.43	27.50			
91676	7.18	.02	7.16	30.56	8.44	22.12	10.10	12.02			
91677	4.25	.06	4.19	21.81	3.50	18.31	10.11	8.20			
91678	7.19	.06	7.13	36.56	7.82	28.74	15.85	12.89			
91681	7.46	.03	7.43	53.99	9.84	44.15	28.22	15.93			
91682	16.28	.07	16.21	93.28	24.68	68.60	34.64	33.96			
91683	16.39	.11	16.28	158.71	19.09	139.62	59.81	79.81			
91684	10	.46	9.54	77.60	10.41	67.19	29.04	38.15			
91685	11.87	.35	11.52	122.85	14.55	108.30	43.01	65.29			
91686	10.09	.10	9.99	71.50	12.26	59.24	27.08	32.16			
91687	19.37	.15	19.22	58.96	10.96	48	19.12	28.88			
91691	10.52	.06	10.46	113.09	11.64	101.45	31.78	69.67			
91692	9.19	.29	8.90	80.59	10.14	70.45	22.48	47.97			
91693	11.61	.18	11.43	60.77	15.99	44.78	21.50	23.28			
91694	7.94	.12	7.82	80.67	10.36	70.31	24.65	45.66			
91701	11.12	.11	11.01	91.28	30.26	61.02	33.62	27.40			
91702	15.48	.10	15.38	116.66	35.91	80.75	34.30	46.45			
91710	5.30	.05	5.25	73.89	6.70	67.19	16.39	50.80			
91711	4.82	.06	4.76	32.81	2.94	29.87	9.65	20.22			
91712	14.47	.21	14.26	82.53	37.93	44.60	21.59	23.01			
91713	7.87	.02	7.85	40.96	5.96	35	13.50	21.50			
91714	12.69	.05	12.64	49.54	16.18	33.36	17.56	15.80			
91715	9.74	.08	9.66	57.60	20.48	37.12	19.41	17.71			
91716	15.18	.33	14.85	126	48.90	77.10	34.71	42.39			
91717	16.21	.13	16.08	67.75	21.72	46.03	27.32	18.71			
91718	9.35	.07	9.28	29.53	9.53	20	10.76	9.24			
91719	17.09	.07	17.02	72.90	13.97	58.93	17.81	41.12			
91720	15.95	.03	15.92	160.36	25.91	134.45	45.88	88.57			
91721	5.07	.03	5.04	176.92	28.49	148.43	50.14	98.29			
91730	4.50	.05	4.45	106.38	6.32	100.06	19.80	80.26			
91731	6.68	.03	6.65	103.93	11.79	92.14	35.48	56.66			
91732	5.98	.03	5.95	49.59	12.40	37.19	28.32	8.87			
91733	6.25	.03	6.22	43.96	9.36	34.60	23.28	11.32			
91734	8.62	.10	8.52	73.39	15.10	58.29	40.88	17.41			
91735	14.96	.08	14.88	114.27	37.37	76.90	58.19	18.71			

Sample No.	Bulk	+10Mesh	TableFeed	TableConc	Mags	NonMags	M.I.Heav	M.I.Lites	V.G.Table	V.G.Pan	Other Remarks
91736	7.25	.01	7.24	66.81	12.58	54.23	34.24	19.99			
91737	10.55	.02	10.53	96.72	22.63	74.09	55.61	18.48			
91738	15.42	.05	15.37	161.48	16.75	144.73	65.09	79.64			
91739	4.03	.05	3.98	56.44	2.36	54.08	15.36	38.72			
91740	5.68	.14	5.54	101.42	28.62	72.80	48	24.80			
91742	21.10	.24	20.86	103.82	20.74	83.08	61.70	21.38			
91743	17.85	.05	17.80	68.02	17.10	50.92	32.61	18.31			
91745	17.25	.31	16.94	154.49	22.34	132.15	96.02	36.13			
91746	16.94	.10	16.84	202.27	25.54	176.73	96.10	80.63			
91748	16.90	.22	16.68	97.82	31.04	66.78	52.90	13.88			
91749	19.53	.11	19.42	132.39	43.73	88.66	62.11	26.55			
91756	9.55	.04	9.51	70.02	6.62	63.40	36.29	27.11			
91757	15.93	0	15.93	127.33	11.50	115.83	73.59	42.24			
91758	16.82	.01	16.81	176.23	18.80	157.43	83.93	73.50			
91759	17.29	.02	17.27	108.46	15.56	92.90	74.74	18.16			
91760	14.46	.02	14.44	179.21	12.01	167.20	59.31	107.89			
91761	12.05	.02	12.03	165.24	13.49	151.75	58.07	93.68			
91762	14.23	.15	14.08	210.78	9.12	201.66	61.59	140.07			
91763	16.75	.15	16.60	251.96	15.26	236.70	80.41	156.29			
91764	7.85	.09	7.76	75.18	5.23	69.95	30.72	39.23			
91766	15.57	.13	15.44	88.67	22.79	65.88	34.38	31.50			
91768	14.11	.06	14.05	130.64	15.81	114.83	43.98	70.85			
91769	17.13	.07	17.06	347.38	28.86	318.52	71.21	247.31			
91770	16.29	.13	16.16	73.49	20.66	52.83	36.69	16.14			
91771	5.05	.03	5.02	93.42	7.23	86.19	17.29	68.90			
91773	4.20	.04	4.16	71.04	4.94	66.10	15.92	50.18			
91779	18.07	.15	17.92	215.12	36.41	178.71	84.82	93.89			
91780	15.72	.04	15.68	185.05	36.36	148.69	63.05	85.64			
91781	9.54	.05	9.49	117.24	19.29	97.95	35.12	62.83			
91782	5.36	.17	5.19	37.62	2.46	35.16	9.08	26.08			
91783	9.17	.43	8.74	86	4.78	81.22	20.30	60.92			
91784	16.85	.48	16.37	113.63	17.98	95.65	51.93	43.72			
91785	15.62	.62	15	159.04	31.38	127.66	59.15	68.51			
91786	15.88	.14	15.74	107.68	13.59	94.09	34.23	59.86			
91787	18.03	.02	18.01	121.16	14.16	107	45.29	61.71			
91788	10.73	.02	10.71	75.13	9.47	65.66	29.39	36.27			
91790	18.18	.11	18.07	179.75	18.66	161.09	43.98	117.11			
91791	12.94	.06	12.88	133.77	15.18	118.59	41.93	76.66			
91792	12.87	.03	12.84	196.56	23.51	173.05	50.98	122.07			
91793	11.47	.04	11.43	147.72	16.43	131.29	57.97	73.32			
91794	15.30	.02	15.28	230.62	22.18	208.44	70.43	138.01			
91795	12.43	.21	12.22	160.81	14.42	146.39	41.23	105.16			
91796	14.33	.06	14.27	177.12	25.43	151.69	51.27	100.42			
91798	10.30	.11	10.19	185.77	17.76	168.01	78.69	89.32			
91799	15.70	.19	15.51	225.63	25.53	200.10	91.03	109.07			
91800	14.46	.80	13.66	147.75	24.23	123.52	62.95	60.57			
91801	14.32	.15	14.17	119.05	20.95	98.10	62.75	35.35			
91802	12.51	.03	12.48	144.91	18.06	126.85	74.85	52			
91803	9.87	.03	9.84	113.21	12.86	100.35	51.61	48.74			
91804	11.27	.03	11.24	101.17	14.79	86.38	46.39	39.99			
91805	13.09	.11	12.98	161.46	18.31	143.15	71.07	72.08			
91806	10.20	.06	10.14	108.83	13.06	95.77	59.69	36.08			

Sample No.	Bulk	+10Mesh	TableFeed	TableCon	Mags	NonMags	M.I.Heav	M.I.Lites	V.G.Table	V.G.Pan	Other Remarks
91807	9.82	.02	9.80	122.72	13.40	109.32	66.28	43.04			
91808	4.86	.04	4.82	60.65	4.54	56.11	25.43	30.68			
91809	10.63	.08	10.55	143.49	13.02	130.47	73.86	56.61			
91821	11.67	.06	11.61	137.98	17.55	120.43	76.51	43.92			
91822	12.35	.01	12.34	133.69	20.30	113.39	64.68	48.71			
91833	13	.15	12.85	91.42	17.20	74.22	51.82	22.40			
91838	6.84	.01	6.83	48.53	6.13	42.40	28.71	13.69			
91839	7.31	.01	7.30	110.32	10.03	100.29	27.19	73.10			
91840	7.78	.03	7.75	67.25	7.94	59.31	38.08	21.23			
91841	11.80	.04	11.76	150.04	22.59	127.45	45.44	82.01			
91842	14.84	.09	14.75	84.79	10.77	74.02	47.17	26.85			
91843	8.99	.20	8.79	71.74	10.58	61.16	29.92	31.24			
91844	13.81	.03	13.78	125.47	20.63	104.84	53.51	51.33			
91845	12.71	.03	12.68	209.41	24.39	185.02	92.23	92.79			
91846	13.30	.12	13.18	130.67	21.97	108.70	80.34	28.36			
91847	14.11	.06	14.05	207.08	33.29	173.79	92.16	81.63			
91850	1.88	.01	1.87	65.87	5.08	60.79	16.92	43.87			
91851	1.97	.01	1.96	39.02	12.49	26.53	10.50	16.03			
91864	9.98	.02	9.96	145.41	15.04	130.37	66.84	63.53			
91865	9.43	.02	9.41	193.02	34	159.02	105.43	53.59			
91866	10.05	.03	10.02	133.16	15.46	117.70	53.74	63.96			
97867	15.15	.10	15.05	98.11	26.06	72.05	51.22	20.83			
91868	12.92	.16	12.76	96.10	18.07	78.03	56.69	21.34			
91869	14.91	.03	14.88	140.47	22.09	118.38	82.72	35.66			
91870	15.64	.03	15.61	106.57	22.57	84	62.47	21.53			
91871	11.54	.04	11.50	56.72	16.12	40.60	23.91	16.69			
91872	13.33	.16	13.17	193.09	17.30	175.79	97.83	77.96			
91873	12.72	.07	12.65	170.15	16.30	153.85	46.50	107.35			
91874	11.17	.03	11.14	91.27	18.38	72.89	44.90	27.99			
91882	13.90	.04	13.86	91.46	19.77	71.69	44.79	26.90			
91883	13.05	.03	13.02	165.18	14.47	150.71	53.96	96.75			
91884	12.48	.02	12.46	167.48	18.86	148.62	77.17	71.45			
91885	11.24	.11	11.13	104.80	11.27	93.53	47.29	46.24			
91886	10.62	.05	10.57	75.25	8.81	66.44	25.60	40.84			
91887	14.23	.04	14.19	186.56	25.93	160.63	67.57	93.06			
91888	12.97	.04	12.93	198.32	20.08	178.24	55.50	122.74			
91889	13.61	.02	13.59	131.33	34.98	96.35	44.40	51.95			
91890	6.31	.02	6.29	103.26	8.46	94.80	38.65	56.15			
91891	14.37	.02	14.35	203.61	21.16	182.45	79.57	102.88			
91893	12.10	.06	12.04	194.50	17.07	177.43	58.44	118.99			
91894	13.97	.07	13.90	187.87	22.84	165.03	65.11	99.92			
91895	6.71	.08	6.63	122.53	9.69	112.84	33.59	79.25			
91896	15.13	.25	14.88	159.05	23.79	135.26	54.45	80.81			
91898	12.63	.11	12.52	84.54	24.45	60.09	40.16	19.93			
91899	15.48	.15	15.33	163.34	29.08	134.26	75.24	59.02			
91900	14.08	.30	13.78	147.54	16.04	131.50	117.73	13.77			
91901	10.83	.19	10.64	152	32.24	119.76	105.13	14.63			
91902	11.24	.35	10.89	106.04	26.91	79.13	69.02	10.11			
91903	10.34	.07	10.27	104.76	14.17	90.59	70.07	20.52			
91910	13.62	.09	13.53	118.82	19.76	99.06	85.37	13.69			
91911	11.68	.08	11.60	135.55	23.12	112.43	90.91	21.52			
91912	14.47	.01	14.46	209.79	25.99	183.80	64.72	119.08			

Sample No.	Bulk	+10Mesh	TableFeed	TableConc	Mags	NonMags	M.I.Heav	M.I.Lites	V.G.Table	V.G.Pan	Other Remarks
91913	10.37	.03	10.34	112.52	23.80	88.72	35.71	53.01			
91914	8.74	.09	8.65	87.18	12.29	74.89	35.95	38.94			
91915	10.01	.21	9.80	50.68	9.79	40.89	29.33	11.56			
91916	12.88	.11	12.77	170.27	17.39	152.88	77.08	75.80			
91917	12.81	.05	12.76	173.91	15.03	158.88	55.29	103.59			
91918	13.49	.03	13.46	184.96	16.60	168.36	58.56	109.80			
91919	11.44	.06	11.38	183.92	16.60	167.32	63.29	104.03			
91920	11.14	.18	10.96	78.80	17.87	60.93	46.27	14.66			
91921	11.03	.02	11.01	134.50	16.13	118.37	55.01	63.36			
91923	8.62	.04	8.58	117.54	11.92	105.62	51.86	53.76			
91924	13.66	.06	13.60	206.86	19.97	186.89	83.19	103.70			
91925	14.85	.16	14.69	300.83	21.76	279.07	85.23	193.84			
91926	12.57	.03	12.54	187.45	17.81	169.64	68.14	101.50			
91927	12.49	.06	12.43	232.03	19.43	212.60	34.40	178.20			
91928	14.14	.05	14.09	184.11	22.48	161.63	71.17	90.46			
91929	12.46	.31	12.15	237.92	16.76	221.16	73.76	147.40			
91930	11.49	.07	11.42	204.26	15.06	189.20	95.77	93.43			
91931	14.23	.09	14.14	277.70	19.51	258.19	108.88	149.31			
91932	13.84	.02	13.82	192.41	15.87	176.54	73.69	102.85			
91933	14.11	.10	14.01	223.18	18.62	204.56	91.10	113.46			
91934	11.59	.07	11.52	195.28	15.31	179.97	77.31	102.66			
91935	13.17	.03	13.14	221.93	16.13	205.80	95.30	110.50			
91936	12	.18	11.82	91.20	15.12	76.08	43.17	32.91			
91937	11.61	.02	11.59	172.09	16.27	155.82	72.64	83.18			
91938	9.54	.15	9.39	139.79	13.75	126.04	64.32	61.72			
91939	14.33	.15	14.18	175.46	24.27	151.19	82.24	68.95			
91940	14	.05	13.95	150.08	21.16	128.92	78.48	50.44			
91941	12.11	.13	11.98	135.40	15.72	119.68	72.93	46.75			
91942	15.48	.51	14.97	195.95	14.15	181.80	106.95	74.85			
91944	9.59	.10	9.49	124.34	15.35	108.99	46.38	62.61			
91945	13.08	.05	13.03	166.67	20.82	145.85	80.73	65.12			
91946	11.48	.18	11.30	158.05	17.50	140.55	69.42	71.13			
91947	11.58	.02	11.56	110.04	8.53	101.51	46.82	54.69			
91948	12.15	.01	12.14	157.36	10.76	146.60	63.79	82.81			
91949	12.38	.05	12.33	107.14	11.02	96.12	65.64	30.48			
91950	11.72	.01	11.71	108.88	14.22	94.66	79.02	15.64			
91951	14.98	.05	14.93	209.16	20.05	189.11	116.95	72.16			
91952	14.07	.07	14	173.13	19.85	153.28	80.68	72.60			
91953	15.14	.15	14.99	182.60	19.81	162.79	98.43	64.36			
91954	12.81	.06	12.75	162.16	13.56	148.60	70.75	77.85			

OVERBURDEN EXPLORATION SERVICES LTD.
P.O. BOX 1044
33 IROQUOIS ROAD
TIMMINS, ONTARIO

GOLD GRAINS OBSERVED ON SHAKER TABLE AND SUPERPANNER

Sample Number	No. of Gold Grains	Sulphides Observed	+10 Mesh Lithology Estimate
91653	NO V.G.	< 1% SUBHED. PY.	
54	"	"	
55	"	"	
57	"	"	
58	"	"	
59	"	"	
62	"	"	
63	"	"	
64	"	"	
67	"	"	
68	"	"	
69	"	"	
70	"	"	
71	"	"	
72	"	"	
73	"	"	
74	"	"	
75	"	"	
76	"	"	
77	"	"	
78	"	"	
81	"	"	
82	"	"	
83	"	< 1% SUBHED. PY. AND CUBIC PY.	
84	"	< 1% SUBHED. PY.	
85	"	"	
86	"	"	
87	"	"	

GOLD GRAINS OBSERVED ON SHAKER TABLE AND SUPERPANNER

Sample Number	No. of Gold Grains	Sulphides Observed	+10 Mesh Lithology Estimate
91691	NO V.G.	<1% SUBHED. PY.	
92	"	"	
93	"	"	
94	"	"	
91701	"	"	
02	"	"	
10	"	"	
11	"	"	
12	"	"	
13	"	"	
14	"	"	
15	"	"	
16	"	"	
17	"	"	
18	"	"	
19	"	"	
20	"	"	
21	"	"	
30	"	"	
31	"	"	
32	"	"	
33	"	"	
34	"	"	
35	"	"	
36	"	"	
37	"	"	
38	"	"	
39	"	"	

GOLD GRAINS OBSERVED ON SHAKER TABLE AND SUPERPANNER

Sample Number	No. of Gold Grains	Sulphides Observed	+10 Mesh Lithology Estimate
91785	NO V.G.	< 1% Py.	
86	"	< 1% Py.	
87	"	< 1% Py.	
88	"	< 1% Py.	
90	"	< 1% Py.	
91	"	< 1% Py.	
92	"	< 1% Py.	
93	"	< 1% Py.	
94	"	< 1% Py.	
95	"	< 1% Py.	
96	"	< 1% Py.	
98	"	< 1% Py.	
99	"	< 1% Py.	
800	"	< 1% Py.	
01	"	< 1% Py.	
02	"	< 1% Py.	
03	"	< 1% Py.	
04	"	< 1% Py.	
05	"	< 1% Py.	
06	"	< 1% Py.	
07	"	< 1% Py.	
08	"	< 1% Py.	
09	"	< 1% Py.	
21	"	< 1% Py.	
22	"	< 1% Py.	
33	"	< 1% Py.	
38	"	< 1% Py.	
20	"	< 1%	

GOLD GRAINS OBSERVED ON SHAKER TABLE AND SUPERPANNER

Sample Number	No. of Gold Grains	Sulphides Observed	+10 Mesh Lithology Estimate
91840	NO V.G.	< 1% Py.	
41	"	"	
42	"	"	
43	"	"	
44	"	"	
45	"	"	
46	"	"	
47	"	"	
50	"	"	
51	"	"	
64	"	"	
65	"	"	
66	"	"	
67	"	"	
68	"	"	
69	"	"	
70	"	"	
71	"	"	
72	"	"	
73	"	"	
74	"	"	
82	"	"	
83	"	"	
84	"	"	
85	"	"	
86	"	"	
87	"	"	
88	"	"	

GOLD GRAINS OBSERVED ON SHAKER TABLE AND SUPERPANNER

Sample Number	No. of Gold Grains	Sulphides Observed	+10 Mesh Lithology Estimate
91889	NO V.G.	< 1% Py.	
90	"	"	
91	"	"	
93	"	"	
94	"	"	
95	"	"	
96	"	"	
98	"	"	
99	"	"	
91900	"	"	
01	"	"	
02	"	"	
03	"	"	
10	"	"	
11	"	"	
12	"	"	
13	"	"	
14	"	"	
15	"	"	
16	"	"	
17	"	"	
18	"	"	
19	"	"	
20	"	"	
21	"	"	
23	"	"	
24	"	"	
25	"	"	

GOLD GRAINS OBSERVED ON SHAKER TABLE AND SUPERPANNER

Sample Number	No. of Gold Grains	Sulphides Observed	+10 Mesh Lithology Estimate
91926	NO V.G.	< 1% Py.	
27	"	"	
28	"	"	
29	"	"	
30	"	"	
31	"	"	
32	"	"	
33	"	"	
34	"	"	
35	"	"	
36	"	"	
37	"	"	
38	"	"	
39	"	"	
40	"	"	
41	"	"	
42	"	1-2% Py.	
44	"	< 1% Py.	
45	"	"	
46	"	"	
47	"	"	
48	"	"	
49	"	"	
50	"	"	
51	"	"	
52	"	"	
53	"	"	
<u	"		

CERTIFICATE OF ANALYSIS

TO: GLEN AUDEN RESOURCES
ATTN: ROBERT K. ABERNETHY
P.O. BOX 1637
TIMMINS, ONTARIO
P4N 7W8

CUSTOMER NO. 1281

DATE SUBMITTED
22-MAY-86

REPORT 28177

REF. FILE 23565-D2

196 HEAVY MINERALS

WERE ANALYSED AS FOLLOWS:

	METHOD	DETECTION LIMIT
AU PPB	NA	5.000
NA %	NA	0.050
CA %	NA	1.000
SC PPM	NA	0.100
CR PPM	NA	10.000
FE %	NA	0.020
CO PPM	NA	5.000
NI PPM	NA	200.000
ZN PPM	NA	50.000
AS PPM	NA	2.000
SE PPM	NA	5.000
MO PPM	NA	5.000
AG PPM	NA	5.000
SB PPM	NA	0.200
BA PPM	NA	100.000
LA PPM	NA	1.000
LU PPM	NA	0.100
HF PPM	NA	1.000
TA PPM	NA	1.000
W PPM	NA	4.000
TH PPM	NA	0.500
U PPM	NA	0.500
WEIGHT GM		0.010

X-RAY ASSAY LABORATORIES LIMITED

DATE 26-JUN-86

CERTIFIED BY .....

NOTE: DETECTION LIMITS ARE VARIABLE DUE TO THE NATURE OF THE SAMPLE.

SAMPLE	AU PPB	NA %	CA %	SC PPM	CR PPM	FE %
91653	40	1.00	11	93.9	670	21.9
91654	<16	0.57	6	56.3	360	11.9
91655	<22	0.17	3	73.0	480	22.1
91657	<33	0.64	9	83.6	610	22.2
91658	<25	0.20	<3	84.9	630	21.0
91659	<29	0.93	10	87.7	570	21.1
91662	<28	0.10	5	89.0	750	23.4
91663	230	0.23	<3	67.6	440	21.1
91665	<38	0.17	<6	88.6	840	22.9
91667	<46	0.12	<7	98.8	840	26.5
91668	20	0.74	<9	101.	730	24.7
91669	1500	0.17	9	92.3	720	22.3
91670	<46	1.00	<5	95.9	700	23.0
91671	<50	0.63	<6	96.7	810	25.6
91672	41	0.23	<5	87.3	600	19.4
91673	22	0.99	<6	92.9	630	19.8
91674	<40	0.94	10	93.0	650	19.2
91675	<35	0.30	9	82.3	580	18.7
91676	<25	0.25	5	77.9	530	17.1
91677	<23	0.29	7	83.2	560	17.4
91678	6	0.28	4	72.7	440	15.0
91681	310	1.50	12	80.2	500	17.1
91682	<5	1.10	6	87.1	520	18.3
91683	90	1.00	9	61.8	440	15.7
91684	25	1.10	12	81.4	510	16.8
91685	680	0.48	10	90.7	500	18.3
91686	3300	0.42	9	108.	710	23.3
91687	49	0.32	7	107.	620	24.4
91691	<26	0.49	15	87.8	600	18.9
91692	<20	0.49	7	87.6	620	19.0
91693	<21	0.42	<5	98.0	620	20.4
91694	<18	0.54	8	86.1	490	17.2
91701	18	0.34	<7	103.	690	22.0
91702	200	0.39	10	104.	570	20.5
91710	100	0.61	11	84.1	530	17.0
91711	76	0.32	4	73.5	440	14.6
91712	<19	0.38	7	98.5	540	19.2
91713	<20	0.28	<3	78.6	430	15.6
91714	<21	0.48	9	101.	590	19.9
91715	77	0.41	5	104.	600	20.2
91716	94	0.43	11	105.	590	20.7
91717	<36	0.52	<9	99.7	550	19.9
91718	<21	0.27	<1	78.4	480	16.5
91719	160	0.55	5	91.7	540	18.1
91720	<21	0.52	10	92.0	550	18.4
91721	<20	0.54	8	86.1	500	16.8
91730	14	0.69	12	77.4	490	15.4
91731	290	0.69	10	83.9	520	17.5
91732	6	0.47	7	77.7	420	14.2
91733	<18	0.55	13	77.3	450	14.2

SAMPLE	AU PPB	NA %	CA %	SC PPM	CR PPM	FE %
91734	<19	0.48	9	72.1	430	13.6
91735	<18	0.42	9	67.6	380	13.1
91736	34	0.49	5	76.5	390	14.3
91737	280	0.43	9	75.2	430	14.3
91738	<14	0.70	9	35.6	510	16.3
91739	<16	0.42	5	59.2	370	11.4
91740	<18	0.38	7	53.2	290	23.3
91742	<26	0.32	9	65.0	360	12.5
91743	<25	0.39	<1	85.8	540	17.0
91745	<28	0.27	5	52.6	280	19.2
91746	<86	0.40	<1	55.4	360	15.0
91748	16	0.24	<5	69.3	400	14.9
91749	220	0.24	<5	73.2	450	15.3
91756	29	0.46	8	80.0	430	14.5
91757	<32	0.42	<5	67.4	360	11.9
91758	<20	0.46	7	77.1	460	13.5
91759	40	0.41	7	71.0	360	12.4
91760	<24	0.52	11	56.1	360	10.2
91761	<25	0.53	8	60.8	380	11.5
91762	<25	0.59	9	57.1	290	11.3
91763	22	0.67	8	68.4	350	14.2
91764	<22	0.69	8	84.8	420	15.2
91766	180	0.37	<7	71.1	530	17.0
91768	11	0.44	5	82.8	520	16.6
91769	<29	0.40	10	65.1	370	15.0
91770	8	0.34	<5	95.7	580	18.9
91771	200	0.54	<7	79.6	430	18.3
91773	<18	0.36	5	64.7	410	15.0
91779	27	0.35	<4	77.0	450	15.2
91780	49	0.24	<5	63.8	430	14.8
91781	33	0.37	8	92.7	590	19.8
91782	5500	0.41	5	71.9	460	14.2
91783	<28	0.56	10	101.	640	18.4
91784	<18	0.44	7	81.3	490	15.7
91785	270	0.35	7	68.1	450	15.3
91786	12	0.57	<5	83.2	480	16.5
91787	19	0.51	9	79.0	470	14.6
91788	<23	0.53	7	84.0	500	16.2
91790	13	0.43	9	84.1	500	16.7
91791	25	0.44	<4	82.8	470	16.1
91792	64	0.36	7	72.1	460	14.3
91793	<24	0.31	6	61.1	350	11.0
91794	<28	0.39	12	68.4	420	12.3
91795	5	0.45	6	81.9	500	15.9
91796	77	0.35	10	69.1	350	15.7
91798	<18	0.57	7	77.1	410	14.1
91799	12	0.48	6	76.4	430	14.4
91800	18	0.40	6	62.0	340	12.2
91801	16	0.39	<4	60.7	350	11.6
91802	10	0.37	7	56.4	320	10.4

SAMPLE	AU PPB	NA %	CA %	SC PPM	CR PPM	FE %
91803	72	0.36	4	55.2	330	10.9
91804	74	0.38	<4	57.1	340	11.6
91805	40	0.44	<4	59.9	380	12.2
91806	<14	0.51	8	67.0	420	12.5
91807	10	0.43	7	57.7	310	10.8
91808	<15	0.47	7	72.7	400	12.7
91809	<14	0.51	4	66.1	330	11.6
91821	5	0.41	6	63.1	330	11.5
91822	<22	0.36	5	63.1	360	11.9
91833	<18	0.37	5	77.3	440	14.6
91838	<5	0.41	9	70.2	380	12.6
91839	<16	0.42	12	70.8	430	12.8
91840	<14	0.46	8	70.5	380	14.6
91841	<21	0.50	8	77.2	430	16.1
91842	150	0.50	6	81.7	410	14.8
91843	30	0.45	15	92.1	590	18.0
91844	<5	0.53	5	73.3	400	14.1
91845	170	0.48	<3	71.1	410	14.0
91846	<19	0.42	6	84.5	440	16.5
91847	<19	0.50	9	80.5	450	16.2
91850	4900	0.64	10	100.	660	19.4
91851	<5	0.39	5	65.5	410	12.4
91864	<19	0.58	9	72.8	400	13.1
91865	8	0.44	6	76.7	410	14.7
91866	8	0.56	7	73.4	420	14.1
91867	<19	0.45	8	83.0	400	16.7
91868	<18	0.39	9	74.2	390	14.3
91869	<5	0.51	<4	88.0	490	16.6
91870	<18	0.38	6	74.5	420	14.9
91871	<16	0.47	11	78.5	430	15.3
91872	16	0.53	9	69.8	390	13.5
91873	20	0.44	7	77.9	460	15.9
91874	18	0.38	<4	84.1	470	16.4
91882	<20	0.39	6	82.5	490	16.7
91883	180	0.33	<5	61.4	380	15.5
91884	<24	0.42	<4	63.8	360	12.3
91885	12	0.45	7	71.3	420	13.4
91886	<15	0.40	5	69.9	410	13.6
91887	21	0.39	7	75.2	450	14.8
91888	44	0.40	7	75.2	440	14.7
91889	22	0.31	4	85.1	470	16.6
91890	79	0.52	8	78.0	430	13.9
91891	<18	0.43	<3	67.2	410	12.5
91893	15	0.40	8	63.8	400	12.5
91894	<16	0.37	7	67.7	370	13.4
91895	140	0.52	10	78.7	450	15.0
91896	1400	0.43	<3	69.9	470	15.2
91898	250	0.30	10	86.8	560	18.5
91899	62	0.42	7	74.1	440	14.8
91900	66	1.10	7	58.9	360	11.9

SAMPLE	AU PPB	NA %	CA %	SC PPM	CR PPM	FE %
91901	420	0.95	7	65.9	410	13.7
91902	<23	0.67	5	72.6	470	15.4
91903	<22	1.00	5	55.8	310	10.3
91910	<31	0.85	7	61.1	360	11.9
91911	<26	1.30	6	59.5	360	12.0
91912	80	0.47	5	66.4	380	12.7
91913	30	0.45	<4	82.9	480	15.4
91914	55	0.55	8	82.0	490	14.7
91915	21	0.48	8	88.1	480	15.9
91916	<5	0.56	4	70.9	390	13.5
91917	<21	0.51	6	73.9	470	14.0
91918	<21	0.47	6	74.1	450	13.8
91919	<21	0.42	6	70.9	400	13.1
91920	36	0.38	8	79.3	460	15.2
91921	260	0.48	6	67.2	410	12.7
91923	8	0.47	5	64.8	390	12.3
91924	120	0.61	10	79.2	470	15.1
91925	86	0.62	7	80.0	490	15.4
91926	<25	0.58	8	78.8	470	14.9
91927	88	0.70	6	86.3	540	16.9
91928	39	0.53	9	77.7	470	14.8
91929	13	0.74	8	71.3	430	13.5
91930	<26	0.63	8	71.6	420	13.2
91931	18	0.69	11	68.0	420	13.2
91932	19	0.51	12	71.6	440	13.5
91933	16	0.71	9	74.2	480	14.2
91934	35	0.54	9	73.8	440	13.9
91935	30	0.71	9	76.8	460	14.1
91936	150	0.49	8	82.6	520	16.6
91937	170	0.62	8	72.7	420	14.0
91938	43	0.57	9	71.0	420	13.5
91939	25	0.55	11	70.9	410	13.6
91940	<22	0.52	9	66.9	360	12.8
91941	150	0.47	7	69.7	390	13.2
91942	110	0.54	7	56.0	320	18.7
91944	390	0.46	9	79.8	490	15.9
91945	<24	0.49	7	66.1	380	12.5
91946	320	0.55	7	75.0	460	14.4
91947	9	0.58	7	67.9	410	12.0
91948	6	0.54	7	74.5	440	13.3
91949	<22	0.46	10	72.7	410	12.8
91950	<21	0.43	5	68.3	380	12.9
91951	12	0.97	8	50.9	310	9.88
91952	<25	0.45	<3	69.6	410	13.8
91953	<24	0.51	9	76.8	420	14.3
91954	9	0.46	11	71.2	400	13.7

SAMPLE	CO PPM	NI PPM	ZN PPM	AS PPM	SE PPM	MO PPM
91653	63	<800	340	13	19	<26
91654	47	<500	290	9	<8	<7
91655	110	<600	250	30	7	<5
91657	190	<600	340	44	<27	26
91658	97	<700	400	23	<5	<5
91659	89	<500	230	26	<12	<5
91662	67	<800	280	36	<28	<5
91663	110	600	270	30	<8	6
91665	37	<200	220	<3	<40	<5
91667	69	<1200	650	14	<5	13
91668	62	<900	440	31	<27	16
91669	62	1900	240	23	<5	<5
91670	61	<500	270	<9	<12	<5
91671	64	<600	230	32	<15	<5
91672	49	<500	310	8	14	<5
91673	52	<700	500	18	<18	<19
91674	53	800	400	16	13	21
91675	53	<900	430	10	12	<19
91676	49	<700	370	12	<23	17
91677	44	<700	210	4	<14	<12
91678	49	700	540	6	11	6
91681	56	<400	290	12	<6	7
91682	56	<600	330	8	<14	<5
91683	72	<400	310	13	<8	<5
91684	46	1000	180	<5	7	8
91685	53	<300	380	4	<22	<5
91686	61	<500	380	8	<35	<5
91687	81	1100	250	11	<15	<5
91691	72	1300	320	<2	11	<14
91692	64	<600	280	2	<16	<5
91693	67	<600	220	12	<14	<5
91694	62	<600	300	4	14	<5
91701	50	<800	340	5	18	<5
91702	44	1800	430	5	<5	<5
91710	46	<500	310	2	5	<5
91711	30	<500	250	<2	<11	6
91712	47	<600	170	<2	5	<5
91713	29	<500	340	<2	<5	<5
91714	48	1000	430	<2	13	14
91715	58	1200	390	11	<10	<5
91716	45	<800	410	8	<28	<14
91717	58	<1100	390	9	42	<22
91718	50	<600	260	7	<12	6
91719	170	<300	360	8	<5	12
91720	49	<600	260	5	17	<12
91721	51	<600	430	5	<14	<10
91730	54	<500	520	4	41	<5
91731	63	<600	240	8	<14	<10
91732	46	<400	200	3	10	<5
91733	49	600	200	5	<14	<5

SAMPLE	CO PPM	NI PPM	ZN PPM	AS PPM	SE PPM	MO PPM
91734	46	<500	260	14	16	8
91735	42	<500	180	5	<6	<9
91736	42	400	290	3	<5	<5
91737	44	800	250	7	<14	<5
91738	56	<300	200	2	<6	<5
91739	38	<400	230	3	12	<5
91740	460	<500	250	21	27	6
91742	39	<700	260	9	<23	<14
91743	49	<500	390	21	<12	<5
91745	130	<700	450	200	<18	5
91746	100	<900	410	110	<29	<36
91748	45	<700	430	7	<20	<18
91749	79	<600	330	72	<5	<5
91756	36	<600	310	4	<15	<5
91757	34	<700	290	<3	16	<14
91758	37	<500	180	3	<18	<9
91759	34	<700	240	<2	22	<14
91760	31	1300	210	<2	31	<11
91761	36	<700	290	<2	<19	<14
91762	32	<700	260	4	39	<12
91763	37	<500	310	<2	<3	<9
91764	63	<700	390	<2	<5	10
91766	76	<1200	550	48	<33	<5
91768	46	<600	380	6	10	<5
91769	37	<500	200	7	60	<15
91770	58	1000	360	16	<5	<5
91771	120	2100	470	15	<12	<21
91773	69	<500	270	19	<11	<7
91779	45	<500	210	7	11	<5
91780	43	<700	310	11	<24	<14
91781	54	<200	440	15	<20	<5
91782	49	<600	210	7	<14	<5
91783	58	<900	280	4	<15	<14
91784	52	<500	240	22	<15	<5
91785	49	<700	290	14	16	<15
91786	66	<600	330	11	<23	<11
91787	54	<500	340	4	7	<5
91788	51	<700	390	5	10	<5
91790	49	800	140	9	11	7
91791	47	1000	290	4	<5	8
91792	38	<400	220	9	<12	<5
91793	29	<600	210	6	<26	<14
91794	37	<700	290	<2	<22	<14
91795	46	<600	250	4	<5	9
91796	45	<400	310	4	<9	<15
91798	41	<500	210	<2	<5	<5
91799	41	<400	370	4	<5	<5
91800	36	<600	210	3	<20	<12
91801	36	<600	190	5	<16	<11
91802	33	<500	260	3	11	<5

SAMPLE	CO PPM	NI PPM	ZN PPM	AS PPM	SE PPM	MO PPM
91803	30	<300	220	3	5	<10
91804	34	<400	290	5	6	<12
91805	36	<600	170	4	<9	<12
91806	38	<400	210	2	11	<8
91807	34	<500	260	3	<5	<11
91808	38	<400	260	3	<29	<5
91809	47	<400	180	16	<5	<5
91821	36	<400	180	3	<10	<7
91822	36	<300	70	3	10	<12
91833	39	<500	320	6	<8	<5
91838	37	<400	<50	6	<16	<5
91839	44	<400	180	16	<5	<5
91840	41	<400	290	3	38	<5
91841	50	<400	420	4	<19	<5
91842	45	<200	230	<2	<8	10
91843	52	900	590	11	<5	<5
91844	50	<300	270	6	<10	<5
91845	44	<500	330	8	<15	<5
91846	58	<500	370	15	15	<5
91847	63	<500	300	9	<10	<5
91850	55	<200	360	11	<11	<5
91851	34	300	310	<2	<5	<5
91864	40	<500	190	3	<14	<7
91865	39	<500	290	6	<5	<5
91866	50	700	310	3	<12	<5
91867	73	<500	<50	16	<9	<5
91868	50	<500	260	11	<5	<9
91869	52	<400	310	8	<5	<5
91870	47	600	230	10	<16	<5
91871	55	<400	280	8	<11	<5
91872	46	<400	360	9	<6	<10
91873	53	<500	290	11	<15	<5
91874	51	<500	250	5	<7	<5
91882	61	<500	450	6	<15	<5
91883	140	<700	310	3700	<12	<19
91884	38	<600	240	5	<21	<14
91885	42	<500	210	4	<5	<12
91886	38	<400	140	3	<12	<9
91887	41	400	370	6	<11	<5
91888	41	<400	330	6	<10	<5
91889	45	600	370	5	<12	<5
91890	40	<500	350	6	<11	6
91891	38	<400	240	3	<10	<5
91893	37	<400	240	3	<9	<5
91894	37	<400	340	6	<11	<9
91895	46	600	260	4	<12	<5
91896	45	<400	280	4	6	<5
91898	50	<600	360	9	<21	<5
91899	46	<300	320	11	<6	9
91900	37	<400	250	8	<5	<11

SAMPLE	CO PPM	NI PPM	ZN PPM	AS PPM	SE PPM	MO PPM
91901	40	1000	250	<3	<5	<12
91902	49	<400	220	9	<20	<5
91903	31	<400	360	<3	<5	<12
91910	35	600	320	<4	6	<15
91911	33	<400	260	<4	16	<15
91912	39	<400	270	6	<9	<5
91913	47	<600	270	9	<14	13
91914	44	<300	380	<4	<6	13
91915	41	800	280	<5	<16	6
91916	34	<400	200	<3	<10	<10
91917	33	<400	250	<3	<11	<12
91918	37	<400	370	<3	<7	<5
91919	30	<400	430	<3	<8	<5
91920	37	<500	230	<4	<7	<12
91921	38	<200	350	<3	<6	<5
91923	39	<400	370	6	<12	<10
91924	47	<400	320	10	<6	28
91925	49	<400	410	13	<14	<5
91926	47	<400	420	10	<12	5
91927	54	<500	350	<6	<20	11
91928	45	<400	360	8	<11	<5
91929	40	<400	360	<5	<16	<5
91930	44	<400	340	<5	<12	<5
91931	40	<400	210	<5	<10	<5
91932	40	<400	360	14	<11	10
91933	35	<400	250	<5	<14	<14
91934	40	<400	410	<5	<12	22
91935	41	<500	330	<5	<12	<5
91936	47	<500	330	<6	<11	15
91937	42	<400	300	<5	<6	5
91938	44	<400	330	8	<10	<11
91939	48	<400	360	12	<11	9
91940	41	<400	260	<4	<10	13
91941	42	<400	250	<4	<9	<11
91942	100	<300	390	68	<10	<5
91944	49	<500	450	16	<12	8
91945	40	<400	180	7	<8	<5
91946	43	<400	420	<4	<8	<5
91947	32	<500	290	9	<14	<14
91948	39	500	340	<4	<9	<5
91949	36	<400	290	8	<9	<5
91950	39	<400	420	7	<7	7
91951	32	<300	230	10	<8	<10
91952	45	<200	350	17	<16	<14
91953	47	<300	300	<5	<8	18
91954	44	<400	260	12	<14	<5

SAMPLE	AG PPM	SB PPM	BA PPM	LA PPM	LU PPM	HF PPM
91653	<5	<1.0	<800	977	6.0	220
91654	<5	<0.3	<300	117	1.2	13
91655	<5	<0.5	600	381	3.6	140
91657	<5	<0.7	700	720	5.5	220
91658	<5	<0.5	300	422	4.5	130
91659	<5	<0.6	600	669	5.1	200
91662	<5	<0.5	600	659	5.7	250
91663	<5	0.7	400	322	3.5	120
91665	<5	<0.7	300	943	6.7	440
91667	<5	<0.9	700	835	7.0	320
91668	<5	1.6	<600	1090	6.7	270
91669	<5	1.0	1400	762	5.7	300
91670	<5	1.6	<400	991	5.7	220
91671	<5	1.1	<500	1220	7.3	280
91672	<5	<0.7	400	595	4.6	260
91673	<5	<0.8	800	736	5.2	140
91674	<5	<0.8	600	784	5.2	190
91675	<5	<0.7	400	474	4.3	180
91676	<5	<0.5	700	358	3.9	120
91677	<5	<0.5	300	295	3.4	98
91678	<5	<0.3	<400	275	3.0	90
91681	<5	<0.7	500	503	4.2	130
91682	<5	<0.6	<100	604	4.4	130
91683	<5	0.5	300	394	2.8	88
91684	<5	1.5	100	514	4.0	100
91685	<5	<0.5	<600	355	3.7	94
91686	<5	0.7	<800	456	5.1	140
91687	12	0.5	<400	492	5.4	140
91691	<5	0.7	600	394	3.7	110
91692	<5	<0.4	<500	466	4.3	130
91693	<5	<0.5	<300	479	4.6	130
91694	<5	<0.4	<300	294	3.3	82
91701	<5	0.6	300	597	4.7	140
91702	<5	0.7	200	550	4.8	150
91710	<5	<0.3	<300	339	3.5	73
91711	<5	<0.4	<100	223	2.7	52
91712	<5	<0.4	<500	388	4.2	84
91713	<5	<0.4	<300	270	3.3	61
91714	<5	0.8	<100	428	4.2	110
91715	<5	0.7	600	426	4.9	110
91716	<5	0.9	200	451	4.9	110
91717	<5	<0.8	1300	1040	4.7	95
91718	<5	<0.4	400	335	3.2	85
91719	<5	0.5	600	315	3.5	85
91720	<5	<0.5	500	380	4.2	120
91721	<5	<0.4	200	346	3.3	79
91730	<5	0.4	500	239	2.9	45
91731	<5	<0.5	400	248	2.5	52
91732	<5	<0.3	<300	226	2.8	55
91733	<5	<0.4	400	242	2.5	45

SAMPLE	AG PPM	SB PPM	BA PPM	LA PPM	LU PPM	HF PPM
91734	<5	<0.4	100	211	2.3	49
91735	<5	<0.3	300	223	2.5	52
91736	<5	<0.3	400	192	2.3	44
91737	<5	<0.4	<100	251	2.6	63
91738	<5	0.4	<300	100	1.1	51
91739	<5	<0.3	<300	159	1.7	41
91740	<5	<0.4	<300	144	1.5	34
91742	<5	<0.5	<700	311	3.2	160
91743	<5	<0.2	400	425	4.3	220
91745	<21	<0.2	<700	164	2.1	54
91746	<5	<1.7	<1200	202	2.3	72
91748	<5	<0.6	<800	339	3.5	110
91749	8	<0.6	300	356	3.5	120
91756	<5	<0.5	300	321	3.0	130
91757	<5	<0.7	<100	189	2.1	64
91758	<5	0.5	700	261	3.0	100
91759	<5	<0.6	<700	174	2.2	33
91760	<5	1.0	800	192	1.9	55
91761	<5	<0.5	200	180	2.0	47
91762	<5	<0.5	<600	135	1.9	30
91763	<5	<0.4	400	176	2.0	52
91764	<5	<0.5	<400	161	1.9	45
91766	14	<1.1	<800	278	3.5	110
91768	<5	<0.5	<400	359	3.6	110
91769	<5	<0.6	<500	274	2.8	80
91770	<5	0.6	300	421	4.5	110
91771	<5	<1.1	200	293	3.1	110
91773	<5	<0.3	<100	198	2.1	76
91779	<5	<0.4	400	327	3.3	81
91780	<5	<0.5	400	324	3.0	100
91781	<5	<0.5	<100	478	4.2	140
91782	<5	<0.4	500	233	2.6	41
91783	<5	<0.6	300	296	3.5	49
91784	<5	<0.4	<300	298	2.9	50
91785	<5	<0.5	<300	334	2.7	77
91786	<5	<0.5	<500	316	2.9	64
91787	<5	<0.4	100	245	2.5	39
91788	<5	<0.5	200	241	2.8	38
91790	<5	<0.4	<300	358	3.3	70
91791	<5	<0.4	<500	353	3.6	120
91792	<5	<0.4	500	382	3.7	140
91793	<5	<0.5	<100	241	2.4	93
91794	<5	<0.6	400	238	2.4	84
91795	<5	<0.4	400	346	3.7	130
91796	<5	<0.6	200	278	2.9	100
91798	<5	<0.4	400	229	2.5	59
91799	<5	0.4	100	281	2.8	93
91800	<5	0.6	500	220	2.4	68
91801	<5	<0.2	<600	212	2.3	57
91802	<5	0.6	<300	179	2.1	57

SAMPLE	AG PPM	SB PPM	BA PPM	LA PPM	LU PPM	HF PPM
91803	<5	<0.4	300	180	2.1	53
91804	<5	<0.5	<100	210	2.1	55
91805	<5	<0.5	<300	204	2.0	44
91806	<5	<0.3	200	207	2.1	50
91807	<5	<0.4	500	179	2.1	57
91808	<5	<0.3	300	238	2.8	100
91809	<5	<0.3	100	195	2.1	66
91821	<5	0.5	300	222	2.3	74
91822	<5	<0.4	100	220	2.3	86
91833	<5	<0.3	300	294	3.0	82
91838	<5	0.5	<100	258	3.0	110
91839	<5	<0.3	300	304	2.6	66
91840	<5	<0.3	200	205	2.5	60
91841	<5	<0.4	<300	296	2.9	100
91842	<5	0.6	300	239	2.6	50
91843	<5	<0.6	800	485	4.3	120
91844	<5	<0.4	400	247	2.4	67
91845	<5	<0.4	<100	255	2.7	75
91846	<5	0.5	<500	304	2.7	70
91847	<5	<0.4	<300	324	3.0	83
91850	<5	0.7	<300	362	4.0	94
91851	<5	<0.3	<100	184	2.1	36
91864	<5	<0.4	600	217	2.5	60
91865	<5	<0.2	400	276	2.8	76
91866	<5	<0.4	500	233	2.6	64
91867	<5	0.4	<100	290	3.0	62
91868	<5	<0.4	900	258	3.0	62
91869	<5	<0.5	300	270	3.3	66
91870	8	<0.3	400	319	3.2	100
91871	<5	<0.4	<300	295	3.2	83
91872	<5	<0.2	100	252	2.8	90
91873	<5	0.4	<300	334	3.4	98
91874	<5	<0.4	<100	332	3.8	81
91882	<5	<0.5	400	331	3.6	79
91883	81	0.4	<500	245	2.6	90
91884	<5	<0.5	200	222	2.0	66
91885	<5	<0.4	400	236	2.6	70
91886	<5	<0.3	400	297	3.1	100
91887	<5	<0.4	200	314	3.0	91
91888	<5	<0.4	<400	313	3.0	93
91889	<5	0.5	800	374	3.7	120
91890	<5	0.4	<400	247	2.7	75
91891	<5	<0.4	600	244	2.4	76
91893	<5	<0.3	200	238	2.4	74
91894	<5	<0.3	<200	283	2.9	97
91895	<5	<0.5	400	281	2.9	92
91896	<5	<0.4	400	331	3.0	94
91898	<5	<0.5	300	450	4.2	110
91899	<5	<0.5	200	317	3.0	93
91900	<5	<0.4	500	224	2.2	58

SAMPLE	AG PPM	SB PPM	BA PPM	LA PPM	LU PPM	HF PPM
91901	<5	<0.5	400	286	2.7	79
91902	<5	<0.5	400	304	2.9	71
91903	<5	<0.5	400	183	2.1	65
91910	<5	<0.6	400	241	2.5	83
91911	<5	0.8	<400	238	2.4	67
91912	<5	<0.4	<200	256	2.5	88
91913	<5	<0.6	400	326	3.4	100
91914	<5	<0.6	<200	249	2.7	88
91915	<5	<0.7	300	316	3.3	120
91916	<5	<0.4	700	248	2.5	83
91917	<5	<0.5	<300	296	2.7	95
91918	<5	0.6	1100	286	2.7	87
91919	<5	0.5	600	251	2.5	67
91920	<5	0.9	300	329	3.2	97
91921	<5	<0.5	<200	270	2.5	89
91923	<5	<0.5	<300	230	2.4	70
91924	<5	<0.6	500	302	2.7	110
91925	<5	1.0	<100	308	3.0	110
91926	<5	<0.5	<100	285	2.7	85
91927	<5	<0.7	500	366	3.5	110
91928	<5	0.8	200	304	2.9	100
91929	<5	<0.5	<300	279	2.7	100
91930	<5	<0.2	300	238	2.3	88
91931	<5	<0.5	300	251	2.4	100
91932	<5	0.7	500	295	2.8	120
91933	<5	<0.6	<300	337	3.0	160
91934	<5	<0.2	600	293	2.9	130
91935	<5	<0.6	300	256	2.6	98
91936	<5	<0.6	<100	308	2.6	53
91937	<5	<0.5	<300	266	2.4	84
91938	<5	<0.2	<300	247	2.6	82
91939	<5	0.8	100	259	2.5	73
91940	<5	<0.5	200	230	2.3	75
91941	<5	<0.5	<300	218	2.3	54
91942	<5	1.9	<200	213	1.8	39
91944	<5	<0.6	300	311	3.1	84
91945	<5	<0.5	100	246	2.3	79
91946	<5	<0.5	<200	245	2.7	58
91947	<5	<0.6	<400	258	2.7	110
91948	<5	<0.5	400	220	2.3	65
91949	<5	<0.5	<200	217	2.1	67
91950	<5	<0.4	<300	227	2.2	79
91951	<5	<0.4	<300	203	1.9	75
91952	<5	<0.5	<100	300	2.9	110
91953	<5	<0.5	<100	261	2.7	94
91954	<5	<0.5	300	256	2.6	110

SAMPLE	TA PPM	W PPM	TH PPM	U PPM	WEIGHT GM
91653	21	29	300.	34.9	9.96
91654	<2	7	34.0	4.6	14.6
91655	9	<6	170.	15.8	12.4
91657	7	31	200.	25.4	31.3
91658	8	9	200.	20.5	11.9
91659	13	<16	190.	23.5	17.4
91662	21	18	330.	32.5	11.6
91663	11	<6	140.	24.9	12.2
91665	21	23	480.	48.6	8.17
91667	25	24	420.	36.4	12.5
91668	27	68	340.	38.3	17.8
91669	23	21	370.	33.6	15.4
91670	19	<74	300.	38.8	18.5
91671	19	40	380.	36.2	19.9
91672	12	16	270.	29.9	17.8
91673	13	<22	210.	30.5	28.7
91674	15	<24	220.	21.5	23.8
91675	14	16	220.	23.4	15.6
91676	11	12	160.	15.4	10.4
91677	12	10	130.	13.9	10.0
91678	5	12	120.	13.3	16.2
91681	9	26	130.	22.5	28.3
91682	14	21	170.	25.7	34.7
91683	8	15	99.0	14.0	59.9
91684	10	<19	130.	23.0	29.1
91685	14	8	130.	15.2	43.0
91686	9	17	190.	20.5	26.9
91687	20	13	210.	19.0	19.2
91691	14	<7	140.	15.8	31.9
91692	12	<5	200.	14.6	22.3
91693	15	12	200.	19.0	21.5
91694	7	6	110.	11.2	24.7
91701	19	54	260.	26.8	33.5
91702	14	18	200.	21.0	34.2
91710	11	<4	110.	12.0	16.5
91711	9	12	87.0	13.5	9.98
91712	13	9	160.	16.1	21.5
91713	10	8	110.	14.2	13.6
91714	20	17	180.	18.0	17.4
91715	15	29	180.	20.6	19.4
91716	18	8	180.	18.0	34.8
91717	14	12	480.	26.7	27.2
91718	13	<6	150.	13.2	10.9
91719	8	730	120.	13.6	18.0
91720	13	12	150.	14.7	46.1
91721	10	28	130.	13.9	50.0
91730	14	13	78.0	14.5	19.8
91731	13	<6	83.0	8.5	35.6
91732	8	8	79.0	18.1	28.3
91733	12	9	79.0	10.9	23.3

SAMPLE	TA PPM	W PPM	TH PPM	U PPM	WEIGHT GM
91734	7	10	73.0	8.8	40.5
91735	8	5	83.0	9.8	58.3
91736	7	4	62.0	7.0	34.3
91737	8	<4	100.	12.2	55.5
91738	4	<4	34.0	3.7	68.1
91739	4	<5	77.0	7.9	15.7
91740	5	<4	50.0	7.2	48.1
91742	11	11	110.	16.3	61.7
91743	9	<6	170.	24.0	32.7
91745	<4	<6	58.0	8.3	95.7
91746	<5	<33	78.0	<7.9	96.1
91748	11	12	140.	10.5	52.9
91749	8	250	150.	13.7	62.1
91756	6	<6	110.	13.9	36.2
91757	6	<7	59.0	5.2	73.5
91758	8	8	98.0	13.3	83.7
91759	<4	<7	51.0	5.2	75.1
91760	<4	9	58.0	7.7	59.5
91761	6	<6	63.0	4.6	58.2
91762	6	<5	51.0	5.4	61.8
91763	6	6	63.0	5.0	80.5
91764	<4	8	54.0	6.6	30.7
91766	10	21	110.	8.5	34.7
91768	12	7	140.	12.2	44.0
91769	8	11	100.	7.3	71.8
91770	14	15	170.	18.1	36.9
91771	8	<9	120.	14.7	17.5
91773	5	8	72.0	9.6	16.0
91779	11	8	130.	14.0	85.1
91780	10	11	140.	14.4	64.1
91781	11	7	200.	18.5	35.2
91732	6	<7	85.0	10.3	9.34
91783	9	<8	100.	10.0	20.3
91784	8	11	110.	12.8	52.2
91785	10	18	130.	9.2	59.2
91786	8	15	110.	10.6	34.4
91787	10	6	83.0	9.2	45.5
91788	7	9	77.0	9.5	29.5
91790	7	11	130.	12.8	44.1
91791	7	<5	130.	14.3	41.9
91792	8	16	150.	16.2	50.9
91793	7	<6	88.0	9.5	58.1
91794	9	8	88.0	9.6	71.0
91795	13	9	130.	16.3	41.4
91796	13	16	130.	11.3	51.5
91798	9	8	77.0	10.2	79.2
91799	12	18	100.	12.4	91.5
91800	8	31	81.0	11.3	63.2
91801	5	30	73.0	10.1	63.0
91802	6	8	65.0	8.0	75.0

SAMPLE	TA PPM	W PPM	TH PPM	U PPM	WEIGHT GM
91803	12	<5	69.0	9.1	59.8
91804	10	11	80.0	12.6	54.4
91805	7	9	73.0	7.3	71.8
91806	6	7	76.0	7.9	59.6
91807	4	8	60.0	7.6	66.3
91808	6	13	85.0	12.3	25.4
91809	7	14	64.0	8.4	74.6
91821	4	7	82.0	9.6	77.0
91822	6	11	84.0	9.8	64.9
91833	13	8	110.	13.4	52.0
91838	9	12	94.0	12.5	28.6
91839	8	16	140.	12.6	27.1
91840	8	10	74.0	9.8	38.1
91841	11	18	120.	15.1	45.2
91842	7	17	84.0	6.9	47.1
91843	13	14	200.	21.4	29.9
91844	7	8	83.0	8.3	53.5
91845	6	8	96.0	8.4	92.2
91846	10	10	100.	10.9	80.2
91847	11	17	120.	11.6	92.1
91850	11	160	140.	17.6	16.9
91851	5	22	75.0	11.5	10.5
91864	8	12	75.0	9.2	66.6
91865	14	<6	100.	13.4	10.5
91866	12	10	87.0	9.5	53.9
91867	8	15	120.	9.6	51.4
91868	10	9	100.	11.2	56.7
91869	9	<7	110.	12.1	82.8
91870	11	17	130.	12.7	62.6
91871	18	13	120.	12.4	23.9
91872	9	<6	93.0	11.4	97.8
91873	11	11	130.	14.4	46.5
91874	9	30	140.	15.9	45.1
91882	13	78	140.	14.1	45.0
91883	6	<9	87.0	9.2	54.0
91884	8	10	82.0	9.0	77.8
91885	10	<6	89.0	11.1	47.2
91886	10	6	120.	15.9	25.8
91887	8	<6	120.	12.9	68.0
91888	11	11	120.	12.5	55.7
91889	12	15	150.	17.1	44.7
91890	11	<7	89.0	10.3	38.7
91891	8	<6	91.0	9.8	80.0
91893	10	<5	86.0	8.2	58.4
91894	11	7	100.	11.2	65.1
91895	11	<8	100.	10.3	33.6
91896	8	<6	130.	15.7	54.5
91898	14	16	190.	14.9	40.4
91899	14	10	130.	15.7	75.8
91900	5	11	83.0	9.4	117.

SAMPLE	TA PPM	W PPM	TH PPM	U PPM	WEIGHT GM
91901	11	15	110.	12.5	105.
91902	8	17	120.	13.8	69.4
91903	8	<11	65.0	7.7	20.6
91910	6	<14	92.0	4.6	85.0
91911	11	17	98.0	8.8	91.1
91912	8	<10	98.0	13.1	65.0
91913	12	<16	120.	14.6	36.0
91914	9	<15	89.0	10.8	36.2
91915	11	<18	110.	15.6	29.5
91916	7	15	94.0	11.4	77.5
91917	9	21	110.	11.3	55.1
91918	8	12	110.	13.9	58.8
91919	8	<11	97.0	12.2	63.2
91920	10	29	140.	13.4	46.5
91921	9	37	100.	10.7	55.1
91923	8	13	79.0	9.4	52.1
91924	9	<19	110.	13.2	83.2
91925	11	<20	110.	19.0	85.8
91926	10	<19	100.	13.3	68.5
91927	13	<25	140.	16.5	34.5
91928	10	<19	110.	14.7	41.5
91929	9	<18	97.0	13.7	74.3
91930	11	<19	81.0	9.3	95.7
91931	7	27	88.0	11.5	109.
91932	7	<18	100.	11.7	73.9
91933	10	20	120.	14.5	91.2
91934	7	<20	100.	11.8	64.5
91935	8	<21	85.0	10.2	95.5
91936	11	<22	120.	9.6	43.3
91937	8	32	95.0	9.3	73.1
91938	7	<19	88.0	12.2	64.5
91939	7	<18	95.0	11.4	82.4
91940	8	<15	80.0	8.3	79.2
91941	7	<16	74.0	7.8	73.1
91942	4	<16	55.0	5.2	107.
91944	9	25	120.	12.7	46.6
91945	11	<16	87.0	12.5	81.0
91946	10	<18	91.0	9.3	70.2
91947	7	27	93.0	15.1	46.9
91948	8	23	70.0	7.2	63.8
91949	6	<16	76.0	6.3	65.7
91950	7	<14	81.0	10.0	79.5
91951	4	21	78.0	10.3	117.
91952	8	23	120.	14.0	81.1
91953	8	<18	100.	11.1	98.8
91954	7	26	96.0	12.4	71.2

BEDROCK CHIPS

BELL-WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187, HAILEYBURY, ONTARIO TEL: 672-3107

Certificate of Analysis

NO. 1039 DATE: July 21, 1986

SAMPLE(S) OF: Rock (32) RECEIVED: July 1986

SAMPLE(S) FROM: Mr. Rob Abernethy, R. S. Middleton Exploration Services Inc.

Samp.No.	Au ppb	Cu ppm	Zn ppm	As ppm
13412		56	65	ND
91651	10	48	86	ND
91652	11	52	85	ND
91656	6	78	21	ND
91660	7	32	38	ND
91661	15	126	69	ND
91664	7	34	153	ND
91666	8	102	60	ND
91679	6	78	78	ND
91688	11	102	105	ND
91689	7	76	145	25
91695	8	76	258	ND
91703	3	40	69	ND
91722	4	42	146	ND
91741	4	40	103	34
91744	34	48	110	ND
91747	7	54	91	15
91750	8	42	115	ND
91765	66	52	87	ND
91767	6	42	89	5
91774	56	28	78	5
91789	63	34	73	ND
91797	8	64	46	ND
91810	21			
91832	7	14	41	ND
91848	6	38	122	5
91875	6	32	162	75
91892	12	42	90	ND
91905	8	8	89	ND
91922	6	26	124	ND
91943	22	40	514	30
91955	6	10	85	ND

NOTE: ND denotes not detected.

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPENSATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS.

BELL-WHITE ANALYTICAL LABORATORIES LTD.

Per

Ontario Natural Resources

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

416

The Mini

W8608.416

42H08NW0014 2.9444 BRAGG

900

Type of Survey: Reverse Circulation Overburden Drilling

Claim Holder(s): Glen Auden Resources Limited

BRAGG STWDS TWP

Prospector's Licence No.: T1915

Address: 136 Cedar Street South, P.O. Box 1637, Timmins, Ontario P4N 7W5

Survey Company: R.S. Middleton Exploration Services

Date of Survey (from & to): 06 Day 02 Mo. 86 Yr. 25 Day 02 Mo. 86 Yr.

Total Miles of line Cut:

Name and Address of Author (of Geo-Technical report): Rob Abernethy 1071 Eglinton Ave W. Apt 106, Toronto M6C 2E1

Credits Requested per Each Claim in Columns at right

Special Provisions

For first survey: Enter 40 days. (This includes line cutting)

For each additional survey: using the same grid: Enter 20 days (for each)

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

Man Days

Complete reverse side and enter total(s) here

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

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.

	Days per Claim
Electromagnetic	
Magnetometer	
Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
	780702	35
	780703	35
	780704	35
	780705	35
	780706	35
	783054	35
	790352	35
	790353	35
	790354	35
	790355	35
	790356	35
	790357	35
	790358	35
	790359	35
	796405	35
	796406	35
	796407	35
	796408	35
	796409	35
	796410	35
	796411	35
	796412	35
	796413	35

Prefix	Mining Claim Number	Expend. Days Cr.
	796414	35
	796415	35
	796416	35
	796417	35
	796418	35
	796419	35
	796420	35
	796421	35
	796422	35
	796423	35
	796424	35
	796425	35
	796426	35
	796427	35
	796428	35
	796429	35
	796430	35
	796443	35
	796444	35
	796515	35
	796516	35
	796517	35
	796518	35

Total number of mining claims covered by this report of work: 159

Expenditures (excludes power stripping)

Type of Work Performed: Overburden Drilling / Sec 77-19

Performed on Claim(s): See List 2

Calculation of Expenditure Days Credits

Total Expenditures: $93 650.69 ÷ 15 = Total Days Credits: 6245

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

Date: Aug 15 1986

Recorded Holder or Agent (Signature): Rob Abernethy

For Office Use Only

Total Days Cr. Recorded: 5805

Date Recorded: OCT 1 - 1986

Mining Recorder:

Date Approved as Recorded:

Branch Director:

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: Rob Abernethy P.O. 1637 Timmins Ont P4N 7W5

Date Certified: Aug 15, 1986

Certified by (Signature): Rob Abernethy

0382 (81/9)

Ontario Resources

(Geophysical, Geological, Geochemical and Expenditures)

The Mining Act

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 Surv[illegible]

Township or Area

Claim Holder(s) Glen Anden Resources Page 2

Prospector's Licence No.

Address

Survey Company

Date of Survey (from & to) Day | Mo. | Yr. | Day | Mo. | Yr.

Total Miles of line Cut

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

Credits Requested per Each Claim in Columns at right

Special Provisions

For first survey:
Enter 40 days. (This includes line cutting)

For each additional survey: using the same grid:
Enter 20 days (for each)

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

Man Days

Complete reverse side and enter total(s) here

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

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.

	Days per Claim
Electromagnetic	
Magnetometer	
Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	797281	35
	797282	35
	797283	35
	797284	35
	797285	35
	797286	35
	797287	35
	797288	35
	797289	35
	797290	35
	797291	35
	797292	35
	797293	35
	797294	35
	797295	35
	797296	35
	797297	35
	797298	35
	797299	35
	797300	35
	797301	35
	797302	35
	797303	35

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	797304	35
	797305	35
	797306	35
	797307	35
	797308	35
	797309	35
	797310	35
	797311	35
	797312	35
	797313	35
	797314	35
	797315	35
	797316	35
	797317	35
	797318	35
	797319	35
	797320	35
	798627	35
	798628	35
	798629	35
	798630	35
	798631	35
	798632	35

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

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

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

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	OCT 1 - 1986	
	Date Approved as Recorded	Branch Director

Date	Recorded Holder or Agent (Signature)

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

	Date Certified	Certified by (Signature)

1362 (81/9)

Ontario Natural Resources

(Geophysical, Geological, Geochemical and Expenditures)

The Mining Act

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

Type of Survey | Township or Area

Claim Holder(s)
Glen Anderz Resources Ltd. Page 3 | Prospector's Licence No.

Address

Survey Company | Date of Survey (from & to) Day | Mo. | Yr. Day | Mo. Yr. | Total Miles of line Cut

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

Credits Requested per Each Claim in Columns at right

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

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

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

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: S ÷ 15 = Total Days Credits

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

Date | Recorded Holder or Agent (Signature)

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
	798633	35		798664	35
	798634	35		798665	35
	798635	35		798666	35
	798636	35		798667	35
	798637	35		798668	35
	798638	35		798669	35
	798639	35		798670	35
	798640	35		798671	35
	798641	35		798672	35
	798642	35		798673	35
	798643	35		798674	35
	798644	35		798675	35
	798645	35		798676	35
	798646	35		798677	35
	798647	35		798678	35
	798648	35		798679	35
	798649	35		798680	35
	798650	35		798681	35
	798651	35		798682	35
	798652	35		798683	35
	798661	35		798684	35
	798662	35		798685	35
	798663	35		798686	35

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

For Office Use Only

Total Days Cr. Recorded | Date Recorded OCT 1 - 1986 | Mining Recorder

Date Approved as Recorded | Branch Director

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

Date Certified | Certified by (Signature)

Ontario Natural Resources

(Geophysical, Geological, Geochemical and Expenditures)

The Mining Act

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

Type of Survey	Township or Area
Claim Holder(s): Glen Auden Resources Limited Page 4	Prospector's Licence No.
Address	
Survey Company	Date of Survey (from & to) Day / Mo. / Yr. — Day / Mo. / Yr. ; Total Miles of line Cut
Name and Address of Author (of Geo-Technical report)	

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Airborne Credits		Days per Claim
Note: Special provisions 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.
	798726	35
	798727	35
	798728	35
	798729	35
	798730	35
	835778	~~45~~ 60
	835791	~~45~~ 60
	835792	~~45~~ 60
	835793	~~45~~ 60
	835794	~~45~~ 60
	835795	~~45~~ 60
	835796	~~45~~ 60
	835797	~~45~~ 60
	842592	35
	842593	35
	842594	35
	842595	35
	842596	35
	842597	35
	842598	35
	842599	55
	Total	6245

[illegible]

approved 11/1/86 — 5805, 440

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

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

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

Date	Recorded Holder or Agent (Signature)

For Office Use Only

Total Days Cr. Recorded	Date Recorded: OCT 1 1986	Mining Recorder: [signature]
	Date Approved as Recorded	Branch Director

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

Date Certified	Certified by (Signature)

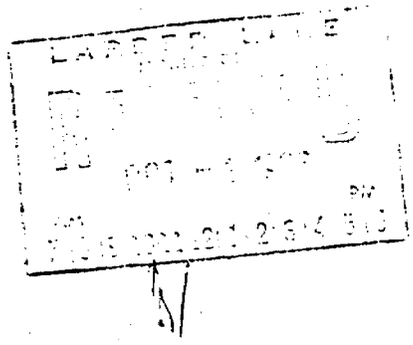
1362 (81/9)

LIST A.

Glen Auden Resources Limited

List of claims on which work was performed.

GAO-01	-	796414	GAO-28	-	842598
GAO-02	-	796411	GAO-29	-	842598
GAO-03	-	796407	GAO-30	-	842597
GAO-04	-	796427			
GAO-05	-	780702			
GAO-06	-	780704			
GAO-07	-	780704			
GAO-08	-	790357			
GAO-09	-	798640			
GAO-10	-	798640			
GAO-11	-	798640			
GAO-12	-	783054			
GAO-13	-	790353			
GAO-14	-	790353			
GAO-15	-	835795			
GAO-16	-	835794			
GAO-17	-	835793			
GAO-18	-	797317			
GAO-19	-	835778			
GAO-20	-	835791			
GAO-21	-	835796			
GAO-22	-	797289			
GAO-23	-	797292			
GAO-24	-	835797			
GAO-25	-	835797			
GAO-26	-	797303			
GAO-27	-	798645			



November 10, 1986

Your File: 416/86
Our File: 2.9444

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

RE: Assaying submitted under Section 77(19) of the Mining Act R.S.O. 1980 on Mining Claims L 780704, et al, in Tweed Township

---

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

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

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc
cc: Glen Auden Resources Limited
136 Cedar Street South
P.O. Box 1637
Timmins, Ontario
P4N 7W8

Rob Abernethy
P.O. Box 1637
Timmins, Ontario
P4N 7W8

Resident Geologist
Kirkland Lake, Ontario

Encl.

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File: 2.9444

Date: November 10,1986

Mining Recorder's Report of Work No.: 416/86

Recorded Holder: GLEN AUDEN RESOURCES LIMITED

Township or Area: TWEED TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	$93,680.69 SPENT ON OVERBURDEN DRILLING AND ASSAYING SAMPLES TAKEN FROM MINING CLAIMS:
Electromagnetic _____ days	L 780704-05
Magnetometer _____ days	783054
Radiometric _____ days	790352-57
Induced polarization _____ days	796407-11-14-27
Other _____ days	797289-92
Section 77 (19) See "Mining Claims Assessed" column	797303-04-17
Geological _____ days	798640
Geochemical _____ days	835778-91-92-94-96-97
Man days ☐ Airborne ☐	842597-98
Special provision ☐ Ground ☐	6245 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O 1980.
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

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

No credits have been allowed for the following mining claims

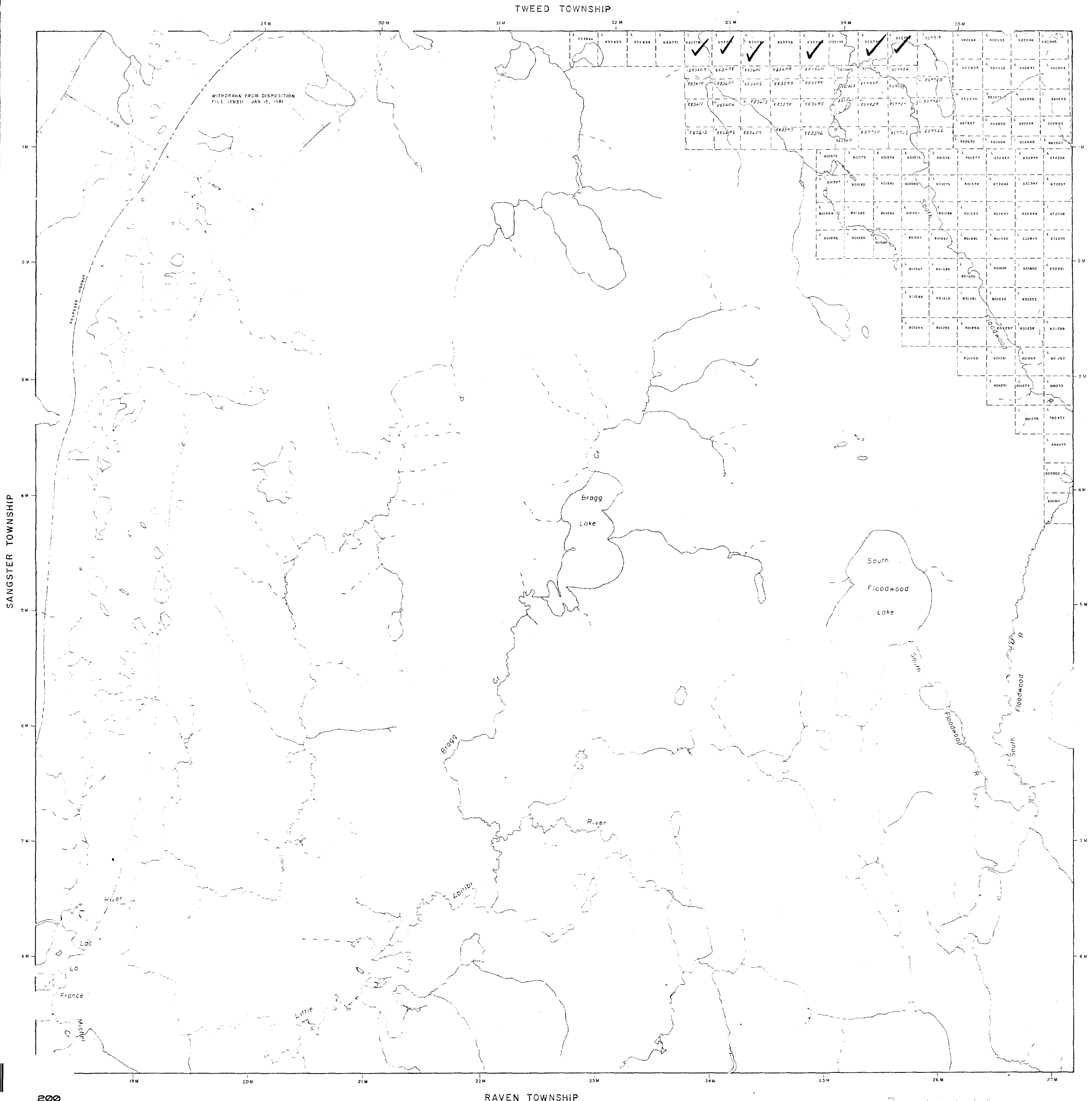
☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 30; Geological - 40; Geochemical - 40; Section 77 (19) - 30.

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



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	⊙
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

SCALE

500 0 500 1000 Metres

0 ½ 1 Mile

TOWNSHIP

BRAGG

M.N.R. ADMINISTRATIVE DISTRICT

COCHRANE

MINING DIVISION

LARDER LAKE

LAND TITLES / REGISTRY DIVISION

COCHRANE

Ontario Ministry of Natural Resources — Land Management Branch

Date OCTOBER 1986

Number G-3480

42H08NW0014 2.9444 BRAGG

200

TWEED

M.608
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

FEB 5 1986

LARDER LAKE MINING DIVISION

DISTRICT OF COCHRANE

Scale :- 40 Chains = 1 Inch

NOTE
400' Surface Rights Reservation around all Lakes and Rivers.

North 4°E

McQUIBBAN

BLAKELOCK

27M 28M 29M 30M 31M 32M 33M 34M 35M 36M

8M 7M 6M 5M 4M 3M 2M 1M

LUP

North Bloodwood Lake

Reed Lake

Little Reed Lake

Reed River

Bloodwood River

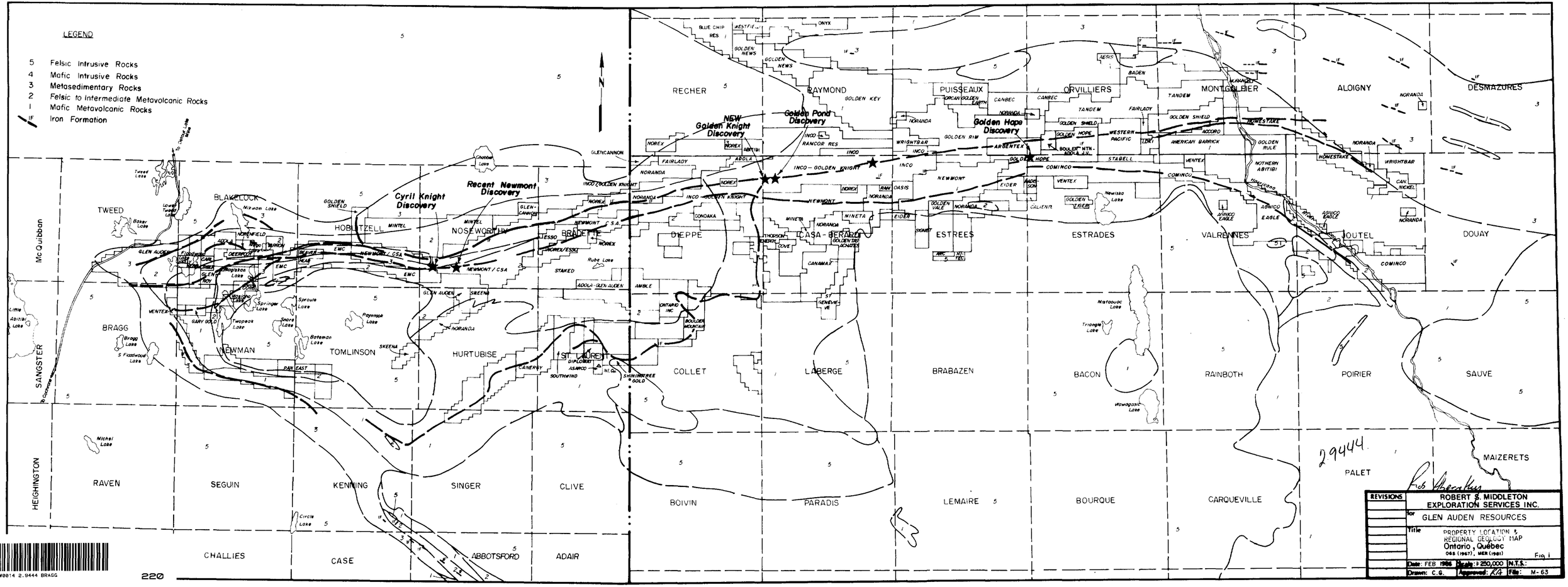
Baker Lake

Bloodwood River

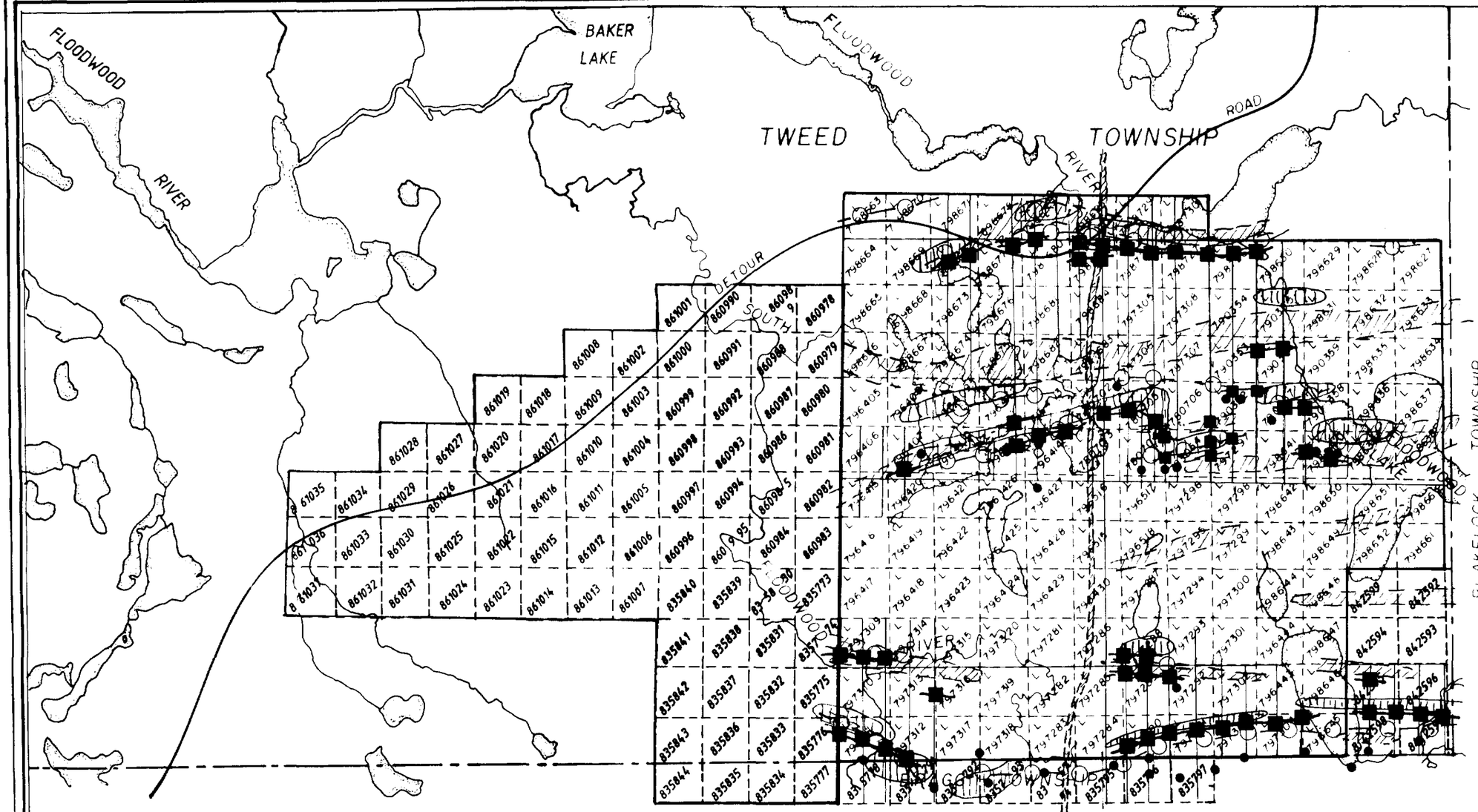
South Bloodwood River

Bloodwood Lake

BRAGG



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GLEN AUDEN RESOURCES
	Title PROPERTY LOCATION & REGIONAL GEOLOGY MAP Ontario, Québec OGS (1967), MER (1981) Fig 1
	Date: FEB 1986 Scale: 1:250,000 N.T.S.:
	Drawn: C.G. Approved: RA File: M-63



LEGEND

- Zones of high magnetic response
- Zones of low resistivity response
- Airborne conductor
- Max Min EM conductor
- Overburden drill hole

2.9444

R P BOWEN P.ENG.
GEOLOGICAL ENGINEER

for Island Canyon - Glen Auden Joint Venture

Title: Tweed Township, District of Cochrane

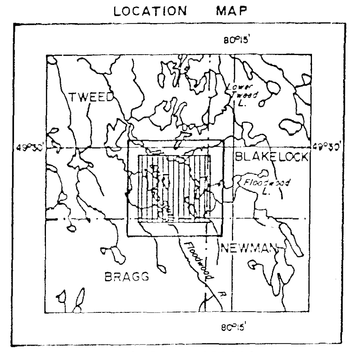
CLAIM MAP

Larder Lake Mining Division, Ontario — Fig. 2

Date: April 86 | Scale: 1" = 1/2mi | N.T.S.

Drawn: K.B. | Approved: | File

LOCATION MAP



SCALE 1:250,000

TWEED TWP

BLAKELOCK TWP

BRAGG TWP

2000 N

1500 S

0+00

798663	798670	798671	798678	798679	798686	798729	798730						
798664	798669	798672	798677	798680	798685	798728	798727	798726	798630	798629	798628	798627	
798665	798668	798673	798676	798681	798684	797305	797308	790354	790355	798631	798632	798633	
798666	798667	798674	798675	798682	798683	797306	797307	790353	790356	790359	798635	798634	
796405	796408	796409	796412	796413	780702	GAO-06 74°	780705	780706	GAO-13 100' GAO-14 115' 790352	790357	790358	798636	798637
796406	796407 GAO-03 176'	796410	796411 GAO-02 166'	796414 GAO-01 132'	780703	780704	783054 GAO-12 54'	797297	798641 GAO-08 94'	GAO-11 62' GAO-09 80'	GAO-10 34' 798640	798639	798638
796415	796420	796421	796426	GAO-04 174' 796427	796516	796517 GAO-06 97'	797286 GAO-07 73'	797298	798642	798650	798651	798666	
796416	796419	796422	796425	796428	796515	796518	797295	797299	798643	798649	798652	798661	
796417	796418	796423	796424	796429	796430	797287	797294	797300	798644	798648	842599	842592	
797309	797314	797315	797320	797281	797286	797288	797293	797301	796444	798647	842594	842593	
797310	797313	797316	797319	797282	797285	GAO-22 163' 797289	GAO-23 145' 797292	797302	796443	798646	842595	842596	
797311	797312	797317 GAO-18 155'		797318	797283	797284	797290	797291	797303	797304 GAO-21 138'	798645	842598	842597 GAO-29 122' GAO-30 148'
835778 GAO-19 102'	835791	835792 GAO-20 72'	835793 GAO-17 57'	GAO-16 120' 835794	835795	835796 GAO-15 121'	GAO-31 132' 835797	GAO-24 152' GAO-25 142'	GAO-26 170'	GAO-27 132'	GAO-28 107'		

2W 0 2E 4E 6E 22E 24E 26E 28E 30E 32E 34E 36E 38E 44E 46E 48E 50E

Rob Abernethy

GLEN AUDEN RESOURCES LTD.

TWEED TOWNSHIP AREA, ONTARIO

HOLE LOCATION MAP

2944

Figure: 2

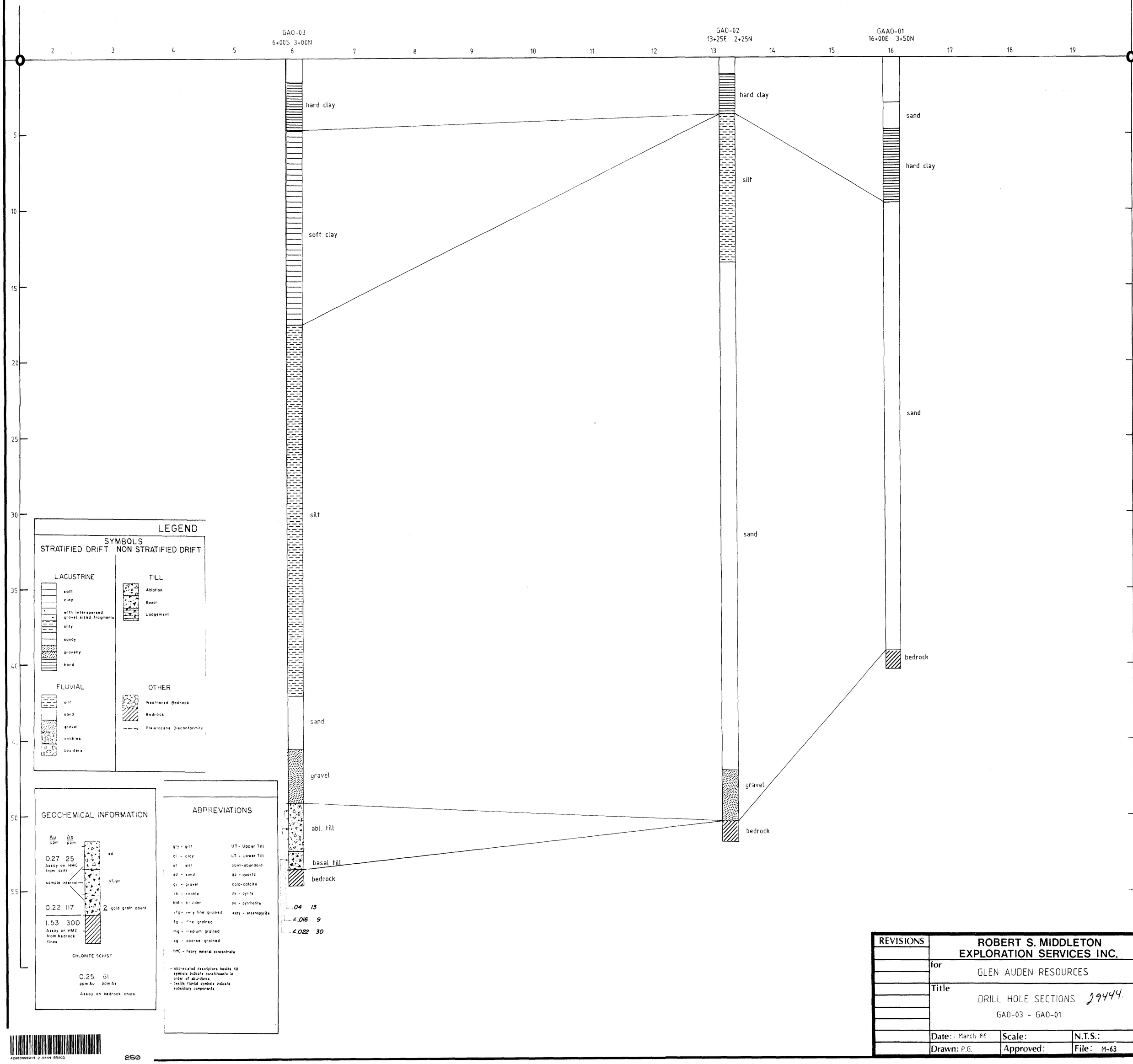
	GEOPHYSICIST: RA	DRAFTING By:
DATE: NOVEMBER 1985	JOB: M-63	

Scale 1:10000

0 1 Km

0.5 Miles

240



LEGEND

SYMBOLS

STRATIFIED DRIFT

LACUSTRINE

- soft clay
- with interspersed gravel sized fragments
- silty
- sandy
- gravelly
- hard

FLUVIAL

- silt
- sand
- gravel
- cobbles
- boulders

NON STRATIFIED DRIFT

TILL

- Ablation
- Basal
- Lodgement

OTHER

- Weathered Bedrock
- Bedrock
- Pleistocene Disconformity

GEOCHEMICAL INFORMATION

ABBREVIATIONS

gvy - gritt	UT - Upper Till
cl - clay	LT - Lower Till
st - silt	abnt-abundant
sd - sand	qz - quartz
gv - gravel	calc-calcite
cb - cobble	py - pyrite
bld - boulder	po - pyrrhotite
vfg - very fine grained	aspy - arsenopyrite
fg - fine grained	
mg - medium grained	
cg - coarse grained	
HMC - heavy mineral concentrate	

- Abbreviated descriptors beside till symbols indicate constituents in order of abundance.
- beside fluvial symbols indicate subsidiary components

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for GLEN AUDEN RESOURCES		
	Title DRILL HOLE SECTIONS 29444. GAO-03 - GAO-01		
	Date: March 86	Scale:	N.T.S.:
	Drawn: P.G.	Approved:	File: M-63

GAO-05
23+00E 7+25N

GAO-13
31+50E 7+25N

GAO-14
32+50E 7+25N

20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

0

5
10
15
20
25
30
35

hard clay
silt
sand
silt
sand
bdrk.

hard clay
silt
abl. till
bdrk.

hard clay
silt
abl. till
basal till

.100	2	.014	4
.076	<2	.290	8
<.019	<2	.006	3
<.020	<2	<.018	5
<.021	<2	.019	14
.077	11	<.018	5
.094	8	.034	3
<.036	9	.280	7
<.021	7	<.014	2
.161	8	<.016	3
<.021	5	<.018	21
<.020	5		

-5
-10
-15
-20
-25
-30
-35
-40

LEGEND

SYMBOLS

STRATIFIED DRIFT

LACUSTRINE
- soft clay
- with interspersed gravel sized fragments
- silty
- sandy
- gravelly
- hard

FLUVIAL
- silt
- sand
- gravel
- cobbles
- boulders

NON STRATIFIED DRIFT

TILL
- Ablation
- Basal
- Lodgement

OTHER
- Weathered Bedrock
- Bedrock
- Pleistocene Disconformity

ABBREVIATIONS

gty - grit	UT - Upper Till
cl - clay	LT - Lower Till
st silt	abnt - abundant
sd - sand	qz - quartz
gv - gravel	calc - calcite
cb - cobble	py - pyrite
bld - boulder	po - pyrrhotite
vfg - very fine grained	aspy - arsenopyrite
fg - fine grained	
mg - medium grained	
cg - coarse grained	

HMC - heavy mineral concentrate

- Abbreviated descriptors beside till symbols indicate constituents in order of abundance
- beside fluvial symbols indicate subsidiary components

GEOCHEMICAL INFORMATION

Au ppm | As ppm

0.27 25 — Assay on HMC from drift — sd

sample interval — st,gv

0.22 117

2 gold grain count

1.53 300 — Assay on HMC from bedrock fines

CHLORITE SCHIST

0.25 61
ppm Au ppm As

Assay on bedrock chips

R.S. Abernethy

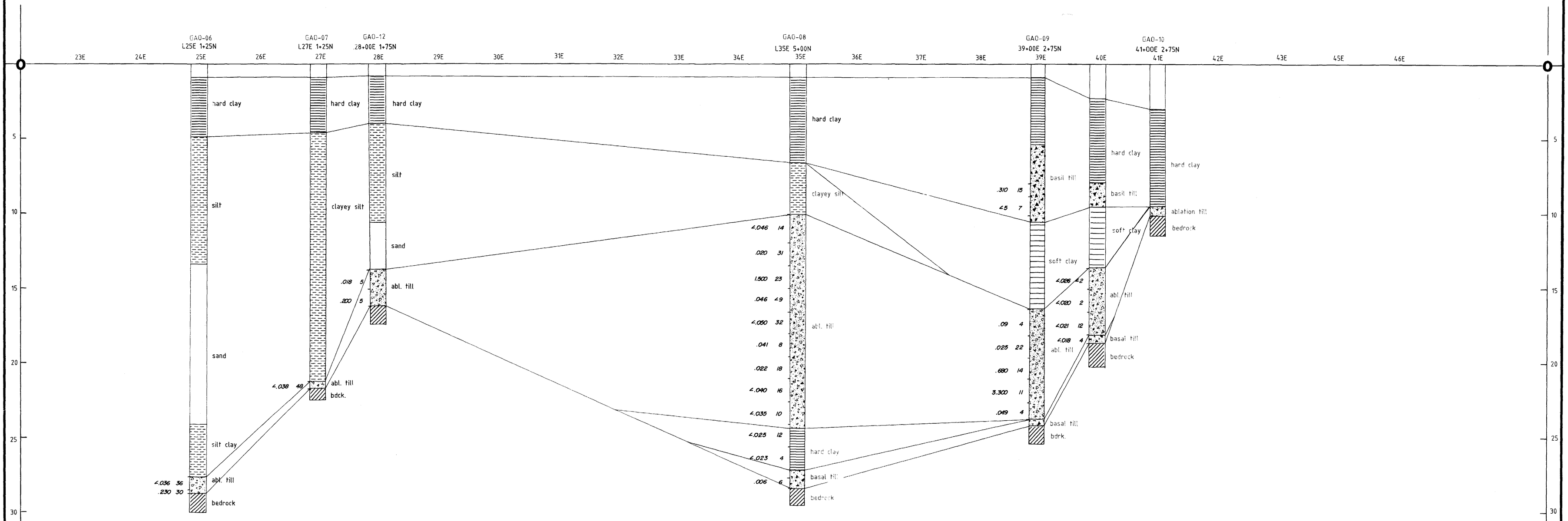
ROBERT S. MIDDLETON EXPLORATION SERVICES INC.

CLIENT: GLEN AUDEN RESOURCES

DRILL HOLE SECTIONS 2.9444.

GAO-05 - GAO-14

DATE: March 84	SCALE:	N.T.S.
DRAWN: E.T.	APPROVED: RA	FILE: M-63



LEGEND

SYMBOLS

STRATIFIED DRIFT

LACUSTRINE
- soft clay
- with interspersed gravel sized fragments
- silty
- sandy
- gravelly
- hard

FLUVIAL
- silt
- sand
- gravel
- cobbles
- boulders

NON STRATIFIED DRIFT

TILL
- Ablation
- Basal
- Lodgement

OTHER
- Weathered Bedrock
- Bedrock
- Pleistocene Disconformity

ABBREVIATIONS

gly - grit	UT - Upper Till
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st - silt	abnt-abundant
sd - sand	qz - quartz
gv - gravel	calc-calcite
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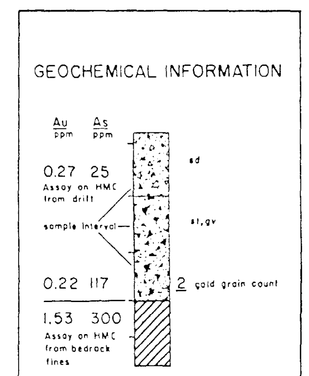
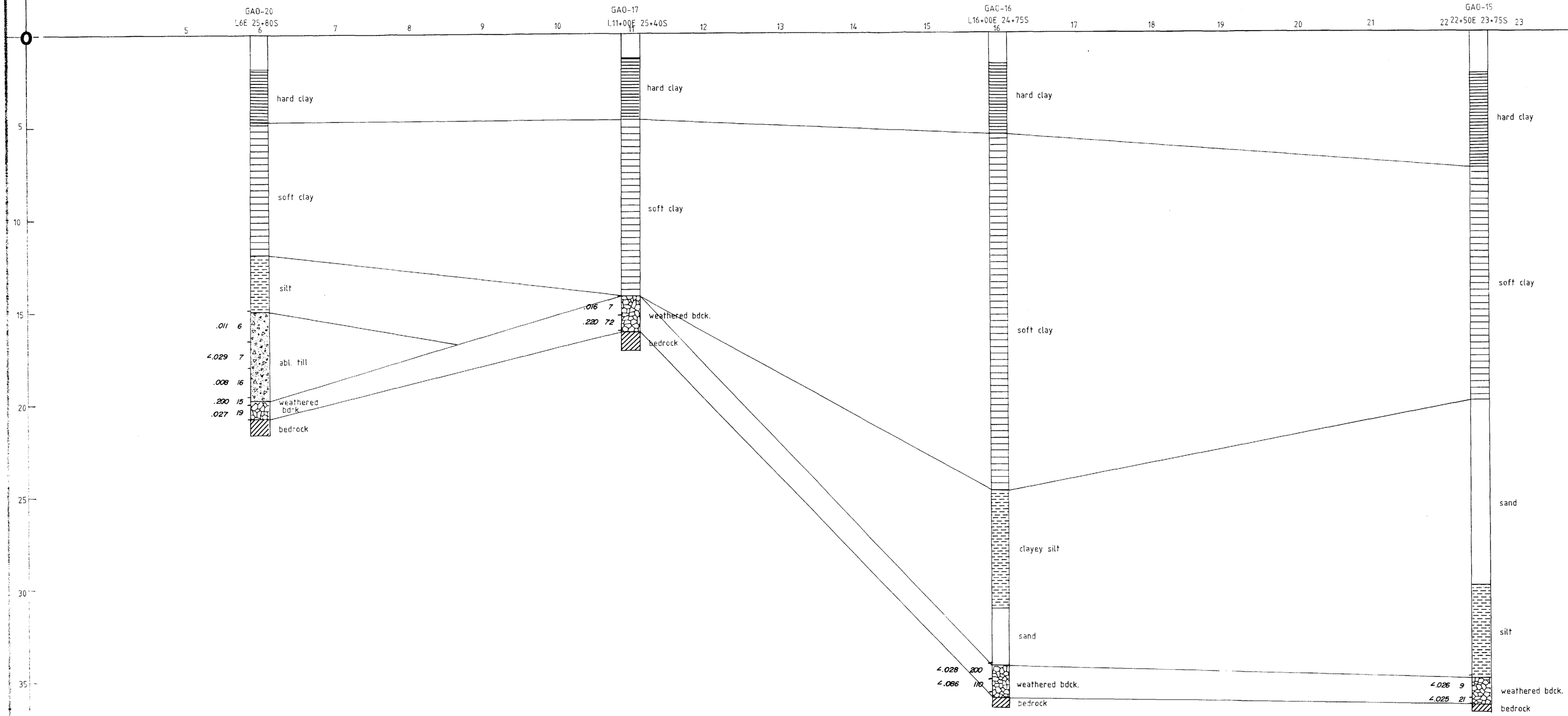
bld - boulder	po - pyrrhotite
vfg - very fine grained	aspy - arsenopyrite
fg - fine grained	
mg - medium grained	
cg - coarse grained	
HMC - heavy mineral concentrate	

- Abbreviated descriptors beside 'till' symbols indicate constituents in order of abundance.
- beside fluvial symbols indicate subsidiary components

GEOCHEMICAL INFORMATION



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for GLEN AUDEN RESOURCES
	Title DRILL HOLE SECTIONS 2.9444
	GAC-06 - GAC-10
	Date [illegible] Scale N.T.S.
	Drawn P.G. Approved RA



LEGEND

SYMBOLS

STRATIFIED DRIFT

LACUSTRINE
- soft clay
- with interspersed gravel sized fragments
- silty
- sandy
- gravelly
- hard

FLUVIAL
- silt
- sand
- gravel
- cobbles
- boulders

NON STRATIFIED DRIFT

TILL
- Ablation
- Basal
- Lodgement

OTHER
- Weathered Bedrock
- Bedrock
- Pleistocene Disconformity

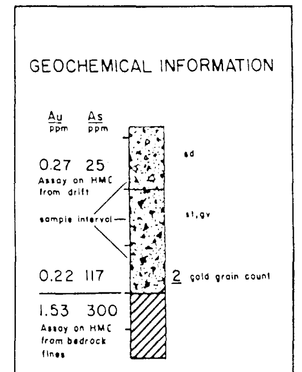
ABBREVIATIONS

gty - gritty	UT - Upper Till
cl - clay	LT - Lower Till
st - silty	abnt - abundant
sd - sandy	qz - quartz
gv - gravelly	calc - calcite
cb - cobbly	py - pyrite
bld - bouldery	po - pyrrhotite
vfg - very fine grained	aspy - arsenopyrite
fg - fine grained	
mg - medium grained	
cg - coarse grained	

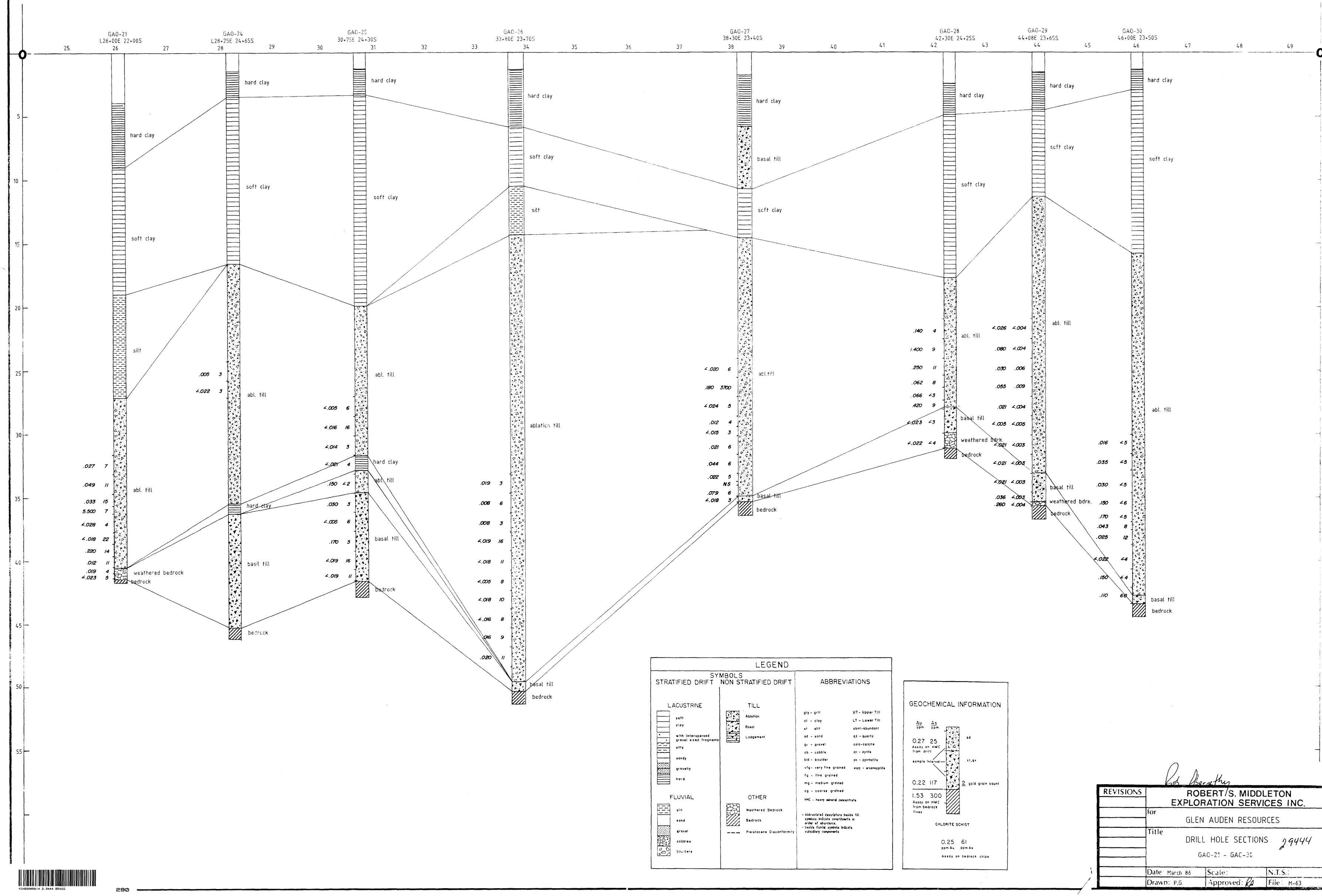
HMC - heavy mineral concentrate

- Abbreviated descriptors beside Till symbols indicate constituents in order of abundance.
- Beside fluvial symbols indicate subsidiary components

GEOCHEMICAL INFORMATION



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for GLEN AUDEN RESOURCES		
	Title DRILL HOLE SECTIONS 29444 GAO-20 - GAO-15		
	Date: March 86	Scale:	N.T.S.:
	Drawn: P.G.	Approved:	File: M-63



LEGEND

SYMBOLS

STRATIFIED DRIFT

LACUSTRINE
- soft clay
- with interspersed gravel sized fragments
- silty
- sandy
- gravelly
- hard

FLUVIAL
- silt
- sand
- gravel
- cobbles
- boulders

NON STRATIFIED DRIFT

TILL
- Ablation
- Basal
- Lodgement

OTHER
- Weathered Bedrock
- Bedrock
- Pleistocene Disconformity

ABBREVIATIONS

gty - gritt	UT - Upper Till
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gv - gravel	calc-calcite
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vfg - very fine grained	aspy - arsenopyrite
fg - fine grained	
mg - medium grained	
cg - coarse grained	
HMC - heavy mineral concentrate	

- Abbreviated descriptors beside till symbols indicate constituents in order of abundance.
- beside fluvial symbols indicate subsidiary components

GEOCHEMICAL INFORMATION

Au ppm / As ppm

0.27 25 — Assay on HMC from drift — sd

sample interval — st,gv

0.22 117 — 2 gold grain count

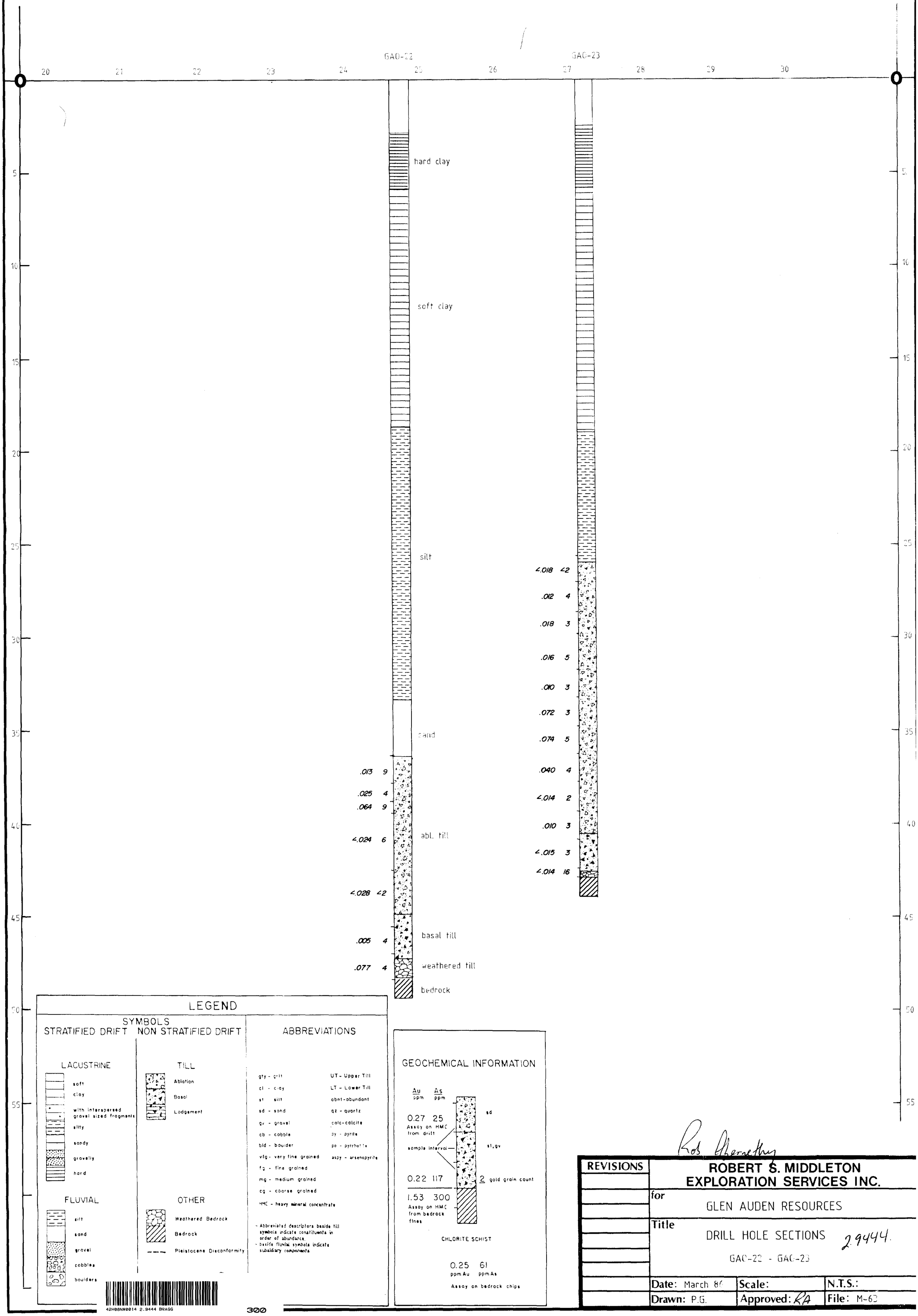
1.53 300 — Assay on HMC from bedrock fines

CHLORITE SCHIST

0.25 61 — ppm Au ppm As — Assay on bedrock chips

Rob Berathy

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for GLEN AUDEN RESOURCES		
	Title DRILL HOLE SECTIONS 29444 GAO-21 - GAO-30		
	Date March 86	Scale:	N.T.S.
	Drawn: P.G	Approved: RB	File: M-63



LEGEND

SYMBOLS

STRATIFIED DRIFT

LACUSTRINE

soft
clay
with interspersed gravel sized fragments
silty
sandy
gravelly
hard

FLUVIAL

silt
sand
gravel
cobbles
boulders

NON STRATIFIED DRIFT

TILL

Ablation
Basal
Lodgement

OTHER

Weathered Bedrock
Bedrock
Pleistocene Disconformity

ABBREVIATIONS

gty - gritty
cl - clay
st - silt
sd - sand
gv - gravel
cb - cobble
bld - boulder
vfg - very fine grained
fg - fine grained
mg - medium grained
cg - coarse grained
HMC - heavy mineral concentrate

UT - Upper Till
LT - Lower Till
abnt - abundant
qz - quartz
calc - calcite
py - pyrite
po - pyrrhotite
aspy - arsenopyrite

- Abbreviated descriptors beside till symbols indicate constituents in order of abundance.
- beside fluvial symbols indicate subsidiary components

GEOCHEMICAL INFORMATION

Au ppm | As ppm

0.27 25 — Assay on HMC from drift — sd

sample interval — sl,gv

0.22 117 — 2 gold grain count

1.53 300 — Assay on HMC from bedrock fines

CHLORITE SCHIST

0.25 61
ppm Au ppm As
Assay on bedrock chips

Rob Abernethy

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for GLEN AUDEN RESOURCES		
	Title DRILL HOLE SECTIONS 2.9444. GAO-22 - GAO-23		
	Date: March 86	Scale:	N.T.S.:
	Drawn: P.G.	Approved: RA	File: M-62