REPORT ON 1982 DIAMOND DRILLING PROGRAMME MACKLEM AND BOND TOWNSHIPS PROPERTY, ONTARIO, FOR GOLDEIDT EXPLORATIONS INC.

DERRY, MICHENER, BOOTH & WAHL

R. E. Routledge

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December 1, 1982
Toronto, Ontario

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SUMMARY AND RECOMMENDATIONS

A total of 1,551 ft. of BQ diamond drilling in three holes was completed between October 11th and November 3rd, 1982 on patented claim P23055 of the Goldeidt Explorations Inc. Macklem and Bond Townships Property, Ontario. Of this, 974 ft. was cored in bedrock and 326.6 ft. was split and assayed for gold.

Drilling intersected a sequence of vertical to steeply-south dipping, thin metavolcanic flows of dominantly calc-alkaline composition. These are field termed andesites and dacites with smaller amounts of more mafic rocks including andesite-basalt and basalt (tholeiitic). Although green in colour, indicative of low grade metamorphic alteration, these rocks are quite fresh and primary volcanic structures are readily recognizable. Weak to intense post-metamorphic fracturing has occurred in two stages and fractures are filled by white, barren quartz and calcite. Pillow selvages are mineralized by pyrite which is coarsely recrystallized where quartz-calcite veinlets cross-cut pillow selvages. Quartz-calcite veinlets in fractures and mineralized selvages were examined and assayed for gold. Free gold was not observed in any of the core and assays were correspondingly not encouraging with values ranging from nil to 0.02 Au oz./ton.

As expressed in an earlier DMBW report on the property, the volcanic rocks on the property and underlying the drill area appear to correlate to the Watabeag calc-alkalic and tholeiitic volcanic complex to the east rather than the older and more favourable Deloro and Tisdale Groups of calc-alkaline and komatiitic volcanics east of Nighthawk Lake and north of the Porcupine-Destor Fault. Hence, the volcanic sequence in the area drilled does not have high potential for gold occurrences

when viewed in the context of favourable bedrock environments of the Porcupine camp.

From the results of a 1982 drilling programme, it is concluded that the bedrock source of anomalous gold disclosed in glacial drift of 1982 overburden drill holes TC-82-08 and TC-82-09 lies further north of the area diamond drilled.

In order to further follow-up the significant gold anomalies in the overburden, additional overburden drilling to the east and north of overburden holes TC-82-07, 08 and 09 is recommended to attempt to trace the east flank of the gold dispersal train (if present) northwards to source. Continued diamond drilling to test the stratigraphy for gold occurrences north of the three holes completed in the 1982 diamond drilling programme is also recommended. These two phases of additional exploration would cost approximately $100,000 and will provide additional information essential in locating the bedrock source of the gold dispersal train. This bedrock source is believed to lie between the diabase dyke located along the north property boundary and the area of 1982 drilling investigations (Map 1).

INTRODUCTION

From October 11th to November 3rd, 1982, Derry, Michener, Booth & Wahl carried out a three hole - 1,551 ft. BQ diamond drilling programme on patented claim P23055 of the Macklem and Bond Townships property of Goldeidt Explorations Inc.

The programme was implemented, under the direction of Mr. R.E. Routledge of DMBW, Toronto, to test for the bedrock source of gold geochemical anomalies in basal overburden of reverse circulation rotary overburden drill holes TC-82-08 and TC-82-09 completed in an earlier programme in 1982.

PROPERTY, LOCATION AND ACCESS - Figures 1 and 2

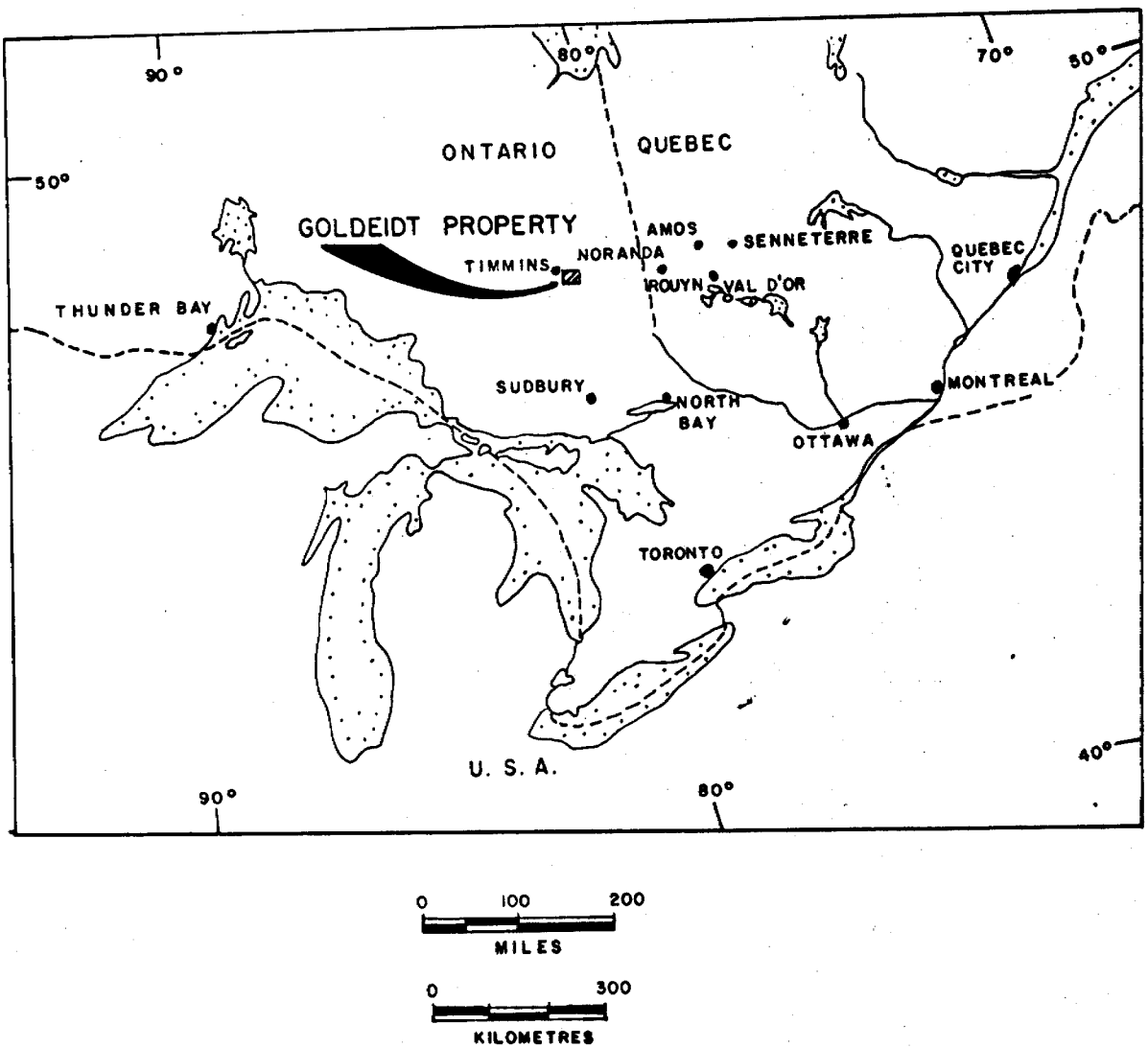
(NTS 42A7 and A10; longitude 80°47'30W - 80°54'30W; latitude 48°28'25N - 48°37'30N)

The property consists of 187 contiguous unpatented mining claims acquired directly by the company through staking and 9 patented claims held under option.

The claims are located 35 air km east-southeast of Timmins, Ontario in central Macklem and west-central Bond Townships, Porcupine Mining Division, District of Cochrane. Regularly scheduled commercial airline service is available at Timmins.

The claim group is accessible by all-weather highway #101 and the Gibson Lake road which departs south from the highway 38 km east of Timmins and traverses the east half of the property. Three kilometers south of the highway a bush road

Figure I. LOCATION OF GOLDEIDT EXPLORATIONS INC.
MACKLEM & BOND TOWNSHIPS PROPERTY



leads east of the former Miller Paving Pit 1 1/2 km to the drill site located in a north-central portion of the property.

GENERAL GEOLOGY AND PREVIOUS WORK

Regional mapping by the Ontario Ministry of Natural Resources and Ontario Geological Survey is published in Leahy (1971) and Pyke and others (1973). Geology, exploration prior to 1982 and gold mining potential of the Goldeidt property is available in detail in Routledge and Thompson (1982) filed with the Ontario Securities Commission. Routledge (1982) reports on the reverse circulation rotary overburden drilling programme carried out in the drill area during August 1982.

The drill area is blanketed by glacial overburden to depths of 176 ft. The area is located in the northeast portion of the Goldeidt property and previous to the 1982 diamond drilling programme, the underlying bedrock was known only from reverse circulation rotary drilled bedrock intersections and interpretation from regional aeromagnetic surveys and recently completed ground proton precession magnetometer surveys. This data, and mapping on a regional scale, indicates the area is underlain by calc-alkaline and tholeiitic volcanics.

1982 DRILL PROGRAMME

The objective of the drill programme was to test for the presence of gold mineralization in bedrock and to gain information on the volcanic stratigraphy for

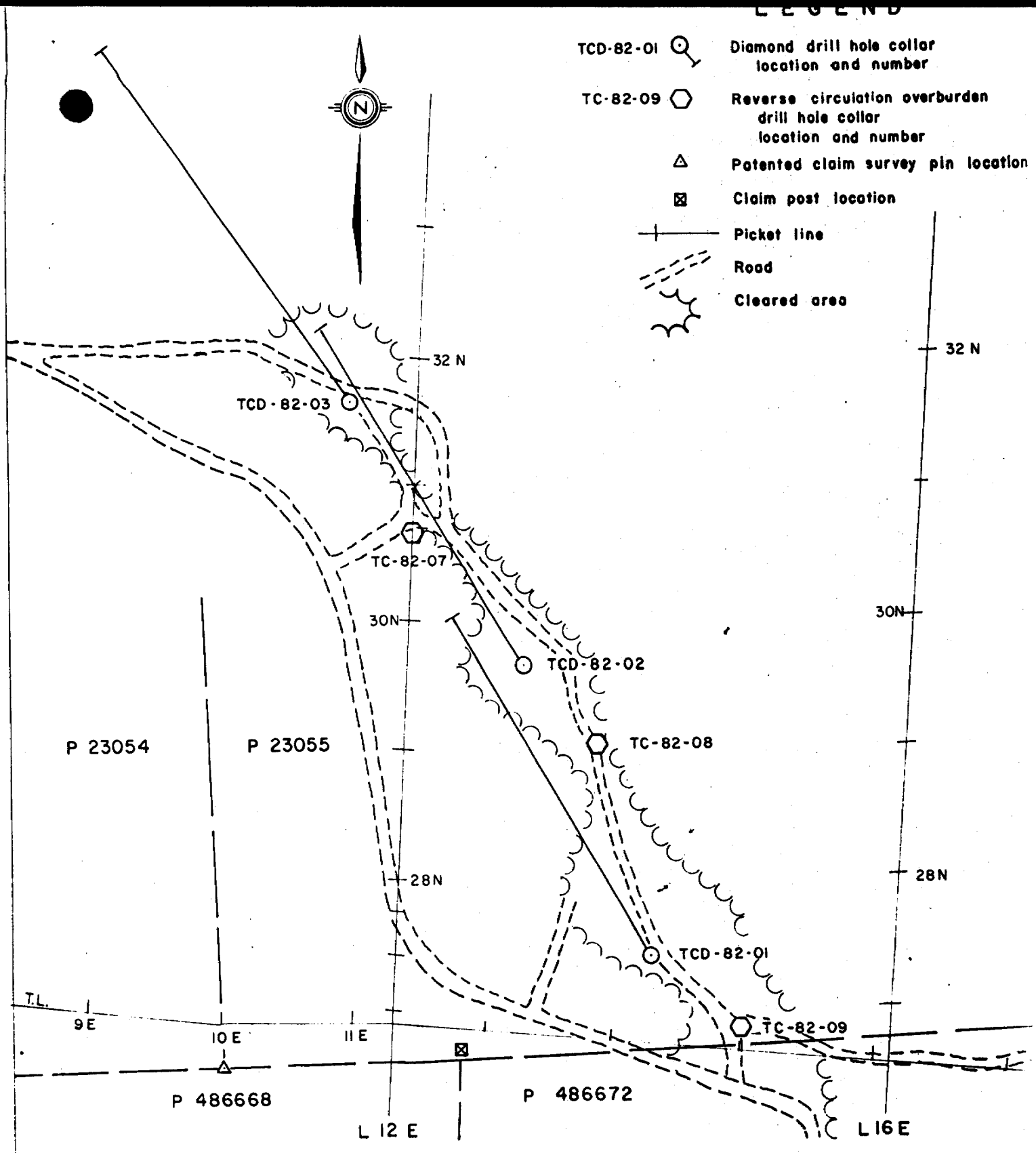
a distance of about 800 ft. up-ice to the north-northwest of overburden hole 8 (Figure 3).

Drilling was subcontracted to Heath & Sherwood Drilling of Kirkland Lake, Ontario. The BBS 17A drill, John Deere 450C tractor and ancilliary pumps and equipment was mobilized on October 12th and demobilized on November 1st, 1982.

Drill operations commenced October 14th and were shut down on October 30th, 1982. The first hole required seven days to complete because of difficult coring in broken bedrock caused by the weathering out of carbonate in fractures oriented subparallel to the dip of the hole. Drilling the remaining two holes proceeded without delay.

Holes TCD-82-01, TCD-82-02 and TCD-82-03 were collared at step outs of 233 ft. and 243 ft. on section oriented 325° Az and drilled 325° to 330° at initial dip angles of -47° to -48°. Hole 1 was spotted so as to intersect bedrock at the bottom of anomalous overburden hole TCD-82-08 and was drilled to 527 ft. Hole 2, drilled to 507 ft., penetrated bedrock at the bottom of overburden hole TCD-82-07 vertically above the termination point of diamond drill hole 1. Similarly hole 3, 517 ft., was positioned to intersect bedrock vertically above the end of diamond drill hole 2. Drill logs are attached in Appendix A.

A total of 974 ft. of BQ coring was completed of which 326.6 ft. was split and delivered for assay at Swastika Laboratories Ltd., Swastika, Ontario. At the Company's request drill core was stored at the residence of Michael Pickens (Geoex Ltd.) at Kamiskotia, Ontario.



SCALE 1"=100'

DERRY, MICHENER, BOOTH & WAHL

GOLDEIDT EXPLORATIONS INC.

Mocklem & Bond Tps. Property

LOCATION OF DIAMOND DRILL HOLES TCD-82-01 to 03

NOV., 1982	R. ROUTLEDGE	Figure 3

RESULTS OF THE 1982 DRILL PROGRAMME

Volcanic Stratigraphy of the Drill Area

Drilling intersected a sequence of thin, steeply south-dipping to vertical metavolcanic flows of calc-alkaline to tholeiitic affinity. Rocks were field identified as dominantly pillowed and amygdaloidal andesite and dacite with lesser amounts of more mafic andesite to basalt and basalt. The volcanics appear to be undeformed; however, weak regional metamorphism is evident in the slight carbonate alteration of andesite-basalt and basalt and in the saussuritization of feldspars which has imparted a green hue to the rock. Primary volcanic structures such as basal-flow accumulation of phenocrysts, autobrecciation and flow top brecciation, pillow selvages, variolites and amygdales are all readily recognizable. Individual flows are as thin as several feet and since tops are down hole, they young to the north and are overturned. As expected from the thinness of individual flows in relation to their steep dip and the comparatively wide drill hole spacing, it is not feasible to correlate individual flows and rock types between holes as these are likely discontinuous both vertically and horizontally.

Along with minor faulting, weak to intense post-metamorphic fracturing has occurred in two stages: one at 40° to 60° to core axis and a later set at 10° to 30° to core axis. Fractures are filled in the center by white, barren quartz and walled by white calcite. Deep surface weathering of fractures has occurred to 290 ft. and core breakage along fractures subparallel to the dip of the hole caused considerable drilling problems in hole #1.

In the regional stratigraphic sense, the calc-alkaline to tholeiitic volcanics in the drill area appear to correlate with the volcanics of the Watabeag volcanic complex lying to the east of the drill area rather than to the more favourable and older Deloro and Tisdale Group komatiitic to calc-alkaline volcanics comprising the Shaw Dome west of Nighthawk Lake and found north of the Porcupine-Destor Fault.

Mineralization

Pillow selvages are mineralized by finely disseminated to coarse aggregates of cubic pyrite which is recrystallized and included in quartz-calcite veins where these vein-fracture fillings intersect pillow selvages. Traces of chalcopyrite were also observed in two such intersections. Fine pyrite also occurs weakly disseminated less than 1% in the matrix of all rock types.

Intervals of mineralized core which were assayed contained: zones of high fracture density and quartz-calcite filling, individual quartz-calcite veins greater than 5 mm in thickness, abundant pyrite in pillow selvages and the intersection of quartz-calcite veins and pyritic pillow selvages. These zones were assayed under the premise that even though free gold was not observed in the core, trace amounts of free gold could occur in the quartz-calcite veining or be bound in the pyrite of pillow selvages.

Assay Results (Appendix B)

Assays were mostly nil and ranged up to 0.02 Au oz./ton. These values are not encouraging and were anticipated for this type of mineralization. Gold values

ranging from 0.002 to 0.02 Au oz./ton (62 to 622 ppb) in fresh core account for the several slightly elevated background levels up to 25 ppb Au yielded by weathered bedrock intersected and analyzed in overburden drill holes.

CONCLUSIONS

From the type of mineralization encountered in drilling, the unfavourable volcanics of the drill area and the correspondingly discouraging assay results, it is concluded that the bedrock of the drill area has no economic gold potential and the trace amount of gold in the quartz-calcite veinlets and in the volcanics cannot account for the significant gold anomalies disclosed in the basal overburden of overburden drill hole TC-82-08 and TC-82-09 located in the diamond drilling area and immediately to the south. The bedrock source of these gold anomalies must therefore lie further north of the area drilled and is still considered to lie up-ice in the area between the diabase dyke at the north property boundary and the areas drilled in 1982.

Respectfully submitted,

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December 1, 1982
Toronto, Ontario

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DIAMOND DRILL RECORD

HOLE No. TCD-82-01

CO-ORDS: 13+97E/27+42N

PROPERTY: Goldeidt Explorations Inc.

AZIMUTH: 330°

DRILL TYPE & SIZE: Boyles-BBS-17A Heath & Sherwood BQ - Wireline

LOCATION: Macklem Township, Ontario

DIP: -47°

DIP TESTS: 205° etched 60° - actual 53½
527° etched 61° - actual 54 3/4°

DATE STARTED: October 14th, 1982

ELEVATION: Datum - 7°

DATE COMPLETED: October 21st, 1982

LOGGED BY: R. E. Routledge

LENGTH: 527.0'

DATE LOGGED: October 21-22, 1982

SECTION: 325°

PURPOSE: Test stratigraphic section northwest of overburden hole TC-82-08 for source of Au geochemical anomaly in overburden.

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
0	197.0	Overburden.					
197.0	204.0	B-tricone into bedrock; 204.0'-207.0' BX standard core, weathered andesite-basalt.					
204.0	221.0	Porphyritic mafic metavolcanic-basalt; apparently massive flow with greenish to white anhedral to subhedral saussuritized plagioclase phenocrysts less than ½ mm up to 10%-15% and 1%-2% ½ to 1 mm amphibole phenocrysts (actinolite or hornblende) with epidote altered halos in a greenish-gray aphanitic matrix. Strongly fractured (blocky-broken core) and faulted with chlorite and epidote gouge and breccia zones 15°-25° to c.a. 210.0' - 1-2 mm fracture partially occupied by pyrite in anhedral masses and ½ mm cubes. 213.0'-221.0' - pervasive saussuritization. 221.0' - core fresher, more siliceous.					
221.0	287.6	Intermediate metavolcanic-andesite; similar to above but less altered. Close spaced thin fractures epidote altered with vuggy walls 55° to core axis (c.a.) at 222.0'.					

OMM 81-5-C-139
63.4116

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T					
		225.0' - green colour, epidote alteration, locally radiating 1-2mm zoisite crystals, variolitic and amydaloidal. 225.1'-233.0' - epidote and zeolite? filled fault, vuggy, curviplanar parallel shears 20° to c.a., black chlorite on slip planes. 228.2'-231.2' - brecciated with 4 mm quartz vein and S fold of fault plane at 231.2'. 229.7' - vuggy, 3 mm fracture with enhedral quartz crystals on vug walls and epidote alteration. 245.0', 248.0', 250.0', 262.0'-264.0', 267.0'-275.0' - fractured broken core. 257.2' - weathered open fractures 40°-45° to c.a. offset by opposing fractures 15°-25° to c.a. 264.0'-268.0' - longitudinal fracture parallel to c.a. 268.0' - zoisite-quartz crystallization in vug, fault plane, 45° to c.a. 268.0'+ - finer grained, less saussuritization of feldspar, no amphibole phenocrysts and slightly harder and siliceous. 287.6' - colour change to lighter apple green and very fine porphyritic or micro porphyritic texture with 10%-15% phenocryst in hard, glassy aphanitic matrix, contract broken about 50° to c.a.										
287.6	296.2	<u>Intermediate metavolcanic-andesite;</u> 293.5' - silicified and epidote altered 0.2' wide fault 50° to c.a. Minor brecciation and tension cross-fractures in fault zone.										

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
		294.8' - 1-5 mm open fractures 50° and cross-cutting 5° to c.a. 295.0'-295.5' - silicified, epidote and chlorite altered vuggy, brecciated curviplanar fault 40° to c.a. Fractured and altered to 296.0' with patchy epidote alteration of amydales to 296.2'					
296.2	369.0	Intermediate metavolcanic-andesite/dacite; light apple-greenish gray, apparently massive and aphanitic fabric with quartz (chalcedony) amygdales some of which contain pyrite centres and rims and epidote altered irregular margins. Plagioclase variolites locally, fractures 40°-55° to c.a. some of which are bleached and cut by later 10° fractures.					
		304.0'-311.0' - broken core. 296.7'-297.5', 318.5' - quartz-epidote alteration, brecciation and vuggy. 320.0' - broken core. 329.2'-331.3' - brecciated, vuggy bull white, barren quartz-carbonate vein, abundant chloritic-altered inclusions of wall rock from 330.8' to 331.3', core broken to 334.0', fractured, vuggy and epidote altered to 335.2'. Lineation of amydales and alteration shaddows 45° to c.a. with possible indication of formational dip.	1101	329.2	331.3	2.1	Nil
		343.6' - serpentinized slip, 20° to c.a. 344.6'-347.2' - shear 15° to c.a., patchy epidote alteration with possible flow contact at 347.2' at 50° to c.a. Clear quartz breccia fragments 1 mm to 1 cm and irregular quartz-carbonate veining 3-4 mm thick at 345.1'-346.1'.	1102	344.6	347.2	2.6	0.002

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
		354.0'-368.0' - pillowed andesite dacite. 350.6', 351.1' - banding and silicification of fractures 45° to c.a. 351.1', 351.9' - broken clear quartz-carbonate vein, 2 mm wide 40° to c.a. and silicified thin tension fractures 85°-90° to c.a. 353.0' - 2°-5° pyrite cubes to 3 mm developed in pillow selvage adjacent to quartz-calcite vein. 354.0' - 4 mm quartz-carbonate vein 30° to c.a. 355.5' - 2-4 mm quartz-carbonate vein cutting pillow selvage 25° to c.a. 358.3' - 1 cm quartz-carbonate vein, 30° to c.a. 359.4'-360.2' - pillow selvage and 1-3 mm quartz-carbonate vein 10° to c.a. 361.3' - 2 mm quartz-carbonate vein 35° to c.a. 363.0' - 2 mm quartz-carbonate vein 8° to c.a. extends 361.5' to 363.5. 363.5'-366.0' - hair-width quartz-carbonate veins 10°-45° to c.a. 369.0' - amydaloidal.	1103 1104 1105 1106 1107 1108	352.7 354.7 356.3 357.6 358.9 362.0	354.7 356.3 357.6 358.9 362.0 366.0	2.0 1.6 1.3 1.3 2.1 4.0	Nil Nil Nil Nil 0.002 Nil
369.0	390.6	Intermediate metavolcanic-andesite; equigranular aphanitic, light greenish-gray, apparently massive fabric, similar in colour to above unit, abundant hair-width fractures 30°-55° to c.a. cut by 10° fractures to 387.5'. 378.5'-386.7' - 5% to ½-2 mm amygdales. 375.0'-375.3' - barren, white quartz-carbonate vein with irregular contacts. 375.9'-376.8' - epidote alteration and 2-3 mm clear quartz-carbonate veinlet and silicification 25° to c.a.	1109 1110 1111 1112	369.6 374.6 379.6 384.6	374.6 379.6 384.6 388.0	5.0 5.0 5.0 3.4	Nil Nil Nil Nil

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
390.6	422.0	Intermediate metavolcanic-dacite; light apple-green, aphanitic equigranular, siliceous and hard. Lineation by quartz filled amygdales 40° to c.a.					
		389.6'-392.9' - flow breccia, epidote alteration and clear quartz carbonate vein, 30° to c.a.					
		395.0' - flow contact 45°-50° to c.a.					
		395.5'-396.4' - cumulus porphyry texture with plagioclase phenocrysts in base of flow gradational to aphanitic equigranular. Same dacite lithology.					
		Quartz carbonate veinlets 1-4 mm thick at 396.4', 396.7', 403.5' at 20° to c.a., 404.0', 405.5' at 80° to c.a., 406.3' at 30° to c.a., 410.0' fractures with carbonate fillings and rare fine pyrite, 410.3'.					
		412.0' - 0.2' band of epidote-silica alteration perpendicular to c.a. and same at 416.6' at 45° to c.a.	1113	410.0	417.0	7.0	Nil
		422.0' - top of flow, contact 30° to c.a.					
422.0	445.9	Porphyritic mafic metavolcanic basalt; porphyritic to porphyry texture to 442.6'; white plagioclase phenocrysts ½-1 mm. Ophitic texture from 438.7' to 442.6' and grain size slightly coarser but still aphanitic except for ophitic plagioclase plates up to 5 mm - sharp textural change to equigranular aphanitic 30° to c.a. at 442.6'.					
		Quartz-carbonate veins 427.9', 30° to c.a., 428.0' 4 mm thick 25° to c.a., 430.2', 431.6', 431.8', 432.9', 433.8', 436.6', 437.5', 439.2', 440.4', 440.7', 440.9', 442.0', 443.0', 443.3'.	1114 1115 1116	427.5 437.0 440.5	429.5 440.5 443.5	2.0 3.5 3.0	Nil 0.002 Nil
		445.9' - thin, sharp flow contact 25° to c.a., textural change from aphanitic equigranular to porphyritic, tops down hole.					

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
445.9	482.4	Pillowed mafic to intermediate metavolcanic-basalt; same as above, porphyry ophitic texture to 453.0' then gradational to aphanitic equigranular fabric, abundant primary gas vuggs filled with concentrically zoned quartz (chalcedony) and pillowed from 456.0'. Pyrite rims and occasional centres in larger vugs. Silicification and pyrite aggregates and cubes developed in dark pillow selvages 0.1 to 0.2' wide are common.	"	"			
		446.0'-447.0' - broken core.					
		Quartz carbonate veins at: 449.3' 1 mm 30° to c.a., 450.6' 1 mm 25° to c.a., 456.6'-456.9' selvage-clear quartz and coarse pyrite, 457.2' 4 mm quartz carbonate vein 25° to c.a., 459.6' 5 mm quartz vein 40° to c.a., 461.3' 1 cm vein 20° to c.a. and silicified shears 40°-45° to c.a., 463.4', 5 mm vein 25° to c.a., 464.4'-465.4' discontinuous 1 cm vein 80° to c.a. cross-cuts pyritized and silicified selvage, 467.7'-468.3' converging veins 25° and 10° to c.a., 470.5' 5 mm vein at 45° to c.a., 472.1', 473.0'-474.7' pyrite blebs in pillow selvage, 476.3'-476.6 vein in selvage zone 30° to c.a., 478.4' 4 mm vein 45° to c.a. cutting selvage, 479.4'-481.7' (converging) veining 20°-25° to c.a. and 3 mm vein subparallel to c.a., 482.1' 2 mm vein 35° to c.a.	1117	456.5	459.3	2.8	0.002
			1118	489.3	461.7	2.4	Nil
			1119	461.7	463.0	1.3	Nil
			1120	463.0	464.0	1.0	0.002
			1121	464.0	466.0	2.0	Nil
			1122	478.0	483.0	5.0	0.02
			1123	483.0	487.5	4.5	Nil
			1124	487.5	493.0	5.5	0.002
			1125	493.0	498.0	5.0	Nil
			1126	498.0	503.0	5.0	0.005
			1127	503.0	508.0	5.0	Nil
			1128	508.0	513.0	5.0	Nil
			1129	513.0	519.5	6.5	Nil
		482.4' - flow contact, top to base down hole, sharp with banded lower chill zone 55° to c.a.					
482.4	524.9	Pillowed mafic metavolcanic-basalt; medium greenish-gray, apparently massive, and very fine grained to aphanitic. Locally finely porphyritic with white plagioclase phenocrysts less than 0.1 mm. Irregular clear quartz amydales developed in short sections, black banded selvages generally 80° to perpendicular to c.a. and about					

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T					
		0.1' thick. Pyrite, finely disseminated less than 1% in the slightly carbonated matrix is medium to coarsely crystallized in pillow selvages or fractured with numerous quartz-carbonate veinlets of hair to 1 cm widths. 505.4'-506.1' - flow breccia, green very fine to aphanitic basalt in dark glassy matrix. 512.0'-514.3' - 8%-10% fine plagioclase lath-phenocrysts. 513.3'-513.8' - flow breccia. 520.3' - selvage and porphyry texture developed 0.4' on pillow walls. 520.3' - thin dark siliceous primary flow banding 50° to c.a. Quartz-carbonate veinlets:- 483.3'-483.9' - 5 mm veins 10° and 25° to c.a. 484.2' - pyrite in selvage. 487.5'-489.5' - 3 mm to 1 cm veins subparallel to c.a. 489.8' - pinching vein 4 mm, 15° to c.a. 491.6' - 1 cm vein, 40° to c.a. 492.6' - 1 mm, 30° to c.a. 493.8'-496.2' - 2 veins 1 cm thick 45° to c.a. and irregular discontinuous veins subparallel to c.a. 498.0'-499.2' - same with hair veins, 10° to c.a. 499.2' - 8 mm at 40° to c.a. 507.0' - irregular patches, hair veinlets parallel to c.a. 507.7', 507.9' - hair-width veins 25° and 30° to c.a. 508.4' - 2 mm veins 50° to c.a. cut selvage. 508.8'-509.4' - hair veins and patches, same at 510.3'-510.7'. 514.7' - 1 cm translucent white vein and 2-5 mm alteration on lower wall. 515.2'-519.5' - several 1 mm to 1 cm veins 20° and subparallel to c.a.										

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T					
		524.9' - sharp contact and colour change 18° to c.a.										
524.9	527.0	Intermediate metavolcanic-dacite; light apple green mottled colour with quartz amygdales and fine amphibole and quartz aggregates as phenocrysts, fine primary banding 50° to c.a.										
		525.8' - quartz-carbonate veinlet 20° to c.a.										
	527.0	END OF HOLE										

DERRY, MICHENER, BOOTH & WAHL

DIAMOND DRILL RECORD

CO-ORDS:	12+90E/29+62N		HOLE No. TCD-82-02
AZIMUTH:	330°	PROPERTY:	Goldeidt Explorations Inc.
DIP:	-47°	DRILL TYPE & SIZE:	Boyles BBS-17A BQ Wireline
		LOCATION:	Macklem Township, Ontario
ELEVATION:	Datum + 12'	DIP TESTS:	
		DATE STARTED:	October 23rd, 1982
			207' etch 60°; actual 53½°
		DATE COMPLETED:	October 26th, 1982
LENGTH:	507.0'	LOGGED BY:	R. E. Routledge
SECTION:		DATE LOGGED:	October 26th, 1982
PURPOSE:	Test for source of Au geochemical anomaly under overburden hole TC-82-07 and to northwest.		

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
0	191.0	Overburden; casing to 192.0', bedrock broken and blocky to 230.0'.					
192.0	234.0	Intermediate metavolcanic-andesite; greenish-grey, very fine grained to aphanitic equigranular and apparently massive. Locally porphyritic to variolitic and amygdaloidal. Thin 5 mm to 2 cm epidote alteration bands 45° to c.a. Fractures, subparallel to 80° to c.a. are weathered out to vuggy, weathered out amygdales - moderate to intense weathering to 223.0'. Fresh rock light apple greenish gray with hair-width 5 mm fractures filled with quartz-calcite with minor pyrite developed on walls and in adjacent wall rock. Fracture-vein orientation 40°-80° to c.a. cross-cut by later set subparallel to 10° to c.a. to form an irregular network. Few gas vugs filled with concentric-accretion zoned clear quartz (chalcedony). 233.6'-237.1' - mottled core - flow breccia and sharp but indistinct contact at 234.2' 40° to c.a.					

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
234.0	277.7	Pillowed intermediate metavolcanic-andesite-dacite; same as above more siliceous and hard. Abundant quartz-calcite veins with a density of about 1/ft. oriented 30° to 70° to c.a. and cut by thin veinlets subparallel to 10°-20° to c.a., mostly barrren. Veinlets average 2-5 mm, a few 1-2 cm widths. Occasional epidote-silica alteration in dark bands at pillow selvages 65°-90° to c.a. accompanied by minor fine pyrite disseminations.	1154	245.0	247.0	2.0	Nil
			1155	253.5	256.0	2.5	Nil
			1158	267.0	268.0	1.5	Nil
			1157	270.5	272.0	1.5	Nil
		239.7' - 0.2' accretionary white, clear quartz-epidote and purplish mineral (zeolite) as primary gas vug filling.					
		277.7' - colour change, sharp contact 45° to c.a. offset by 1 mm quartz-carbonate filled fault.					
277.7	331.1	Intermediate to mafic metavolcanic-andesite-basalt; greenish gray, apparently massive aphanitic equigranular with chlorite and carbonate alteration of matrix. Disseminated fine pyrite cubes in matrix less than 1%. Quartz-carbonate veining 2-4/ft. and generally thicker as ½-1 cm barren veins.	1156	277.0	279.0	2.0	Nil
		277.7'-284.0' - finely porphyritic with ½-1 mm fine anhedral plagioclase phenocrysts up to 5%.	1130	279.0	280.0	1.0	Nil
			1143	280.0	285.3	5.3	Nil
			1144	287.0	292.0	5.0	Nil
		277.7'-279.4' - mottled flow breccia.	1145	292.0	297.0	5.0	0.002
		279.4'-279.6' - cross-cutting quartz-calcite veinlets disseminated fine pyrite cubes in quartz and aggregates and patchy brecciation of wall rock.	1131	285.3	287.0	1.7	Nil
			1132	309.0	311.0	2.0	0.005
			1133	314.0	315.0	1.0	Nil
			1146	297.0	302.0	5.0	Nil
			1147	302.0	307.0	5.0	Nil
		285.8'-286.5' - 2 cm white quartz-calcite vein, silicification and development of pyrite in patches of quartz along fractures from 285.3' to 286.8'.	1148	307.0	309.0	2.0	Nil
			1149	311.0	314.0	3.0	Nil

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
		310.5' - 1 cm quartz-calcite vein 25° to c.a. and 3-4 mm pyrite cubes on vein wall. 314.1'-314.6' - 2 cm quartz-calcite vein, wall rock inclusions. 321.5'-327.0' - pillowed. 331.4'-332.3' - flow breccia and contact zone, sharp contact at 332.1', carbonate alteration on hanging wall.					
331.1	337.9	Pillowed mafic metavolcanic-basalt; slightly lighter green, massive, equigranular and aphanitic. 334.2'-336.3' - quartz-carbonate vein subparallel to c.a., pyrite cubes in wall rock, trace chalcopyrite. 337.0'-338.0' - silicification, rehealed brecciation and contact zone, upper contact brecciated, lower contact sharp 20° to c.a. with 3%-8% pyrite developed in breccia.					
337.9	439.4	Intermediate metavolcanic-andesite-dacite; light apple green apparently massive, aphanitic and equigranular with a very weakly carbonated matrix. Silica filled amygdales developed 2%-5%. Pillowed with local pillow margin brecciation, silicification and pyritization. Quartz-carbonate veining not well developed veinlets less than 1/ft. 339.9'-340.9' - quartz-calcite veinlets truncated by late thin veinlet/fracture at pillow breccia zone, minor pyrite in selvage and late cross fractures.	1150 1151 1152 1153 1135 1134 1136	315.0 320.0 325.0 330.0 333.9 337.0 338.5	320.0 325.0 330.0 333.9 337.0 338.5 343.0	5.0 5.0 5.0 3.9 3.1 1.5 4.5	Nil Nil Nil Nil Nil Nil Nil

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
		341.0'-342.1' - 1 cm quartz-calcite vein 15° to c.a. cuts parallel to selvage. 344.6' - barren quartz-calcite veinlet 33° to c.a. 372.0'-378.0' - larger pillow sizes or pillowing less well developed. 378.0'-385.0' - flow brecciation/pillow breccia fractured and rehealed with silica. 425.2'-425.3' - dark green gray sill (?) with pyroxene-actinolite phenocrysts, 45° to c.a. with sharp but irregular contacts. 435.2'-439.2' - fractured and rehealed with silica. Quartz-calcite veinlets:- 376.3' - 5 mm veinlets cuts pillow selvage at 25° to c.a. 377.1' - 4 mm veinlet 25° to c.a. 387.1' - 4 mm veinlet 25° to c.a. 388.0' - 5 mm veinlet 20° to c.a. cross-cuts 3 mm at 30° to c.a. 399.1' - 4 mm veinlet at 40° to c.a. 399.5' - 1 cm veinlet at 30° to c.a. and pyrite cubes on vein wall. 399.9' - 2 mm veinlet at 30° to c.a. 425.6' - 1 cm veinlet at 20° to c.a. 431.7' - 5 mm veinlet at 35° to c.a. and 2 mm veinlet at 85° to c.a. 433.6' - three 1 cm veinlets at 80° to c.a. 434.2'-434.7' - 3 veinlets 2-4 cm with pyrite cubes in wall rock.	1137	431.5	435.0	3.5	Nil
439.4	440.5	Intermediate metavolcanic-andesite or altered dacite; contacts marked by 1 cm quartz-calcite veins, upper contact at 40° to c.a., lower contact at 30° to c.a. Quartz-calcite veinlets with finely disseminated pyrite at 440.0'.	1138 1139 1140	439.2 440.9 443.7	440.9 443.7 446.6	1.7 2.8 2.9	0.005 0.002 Nil

SHEET No: .....

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
440.5	447.5	Pillowed, amygdaloidal intermediate metavolcanic-dacite; light apple green, aphanitic equigranular with well developed pyritized pillow selvages and silicified fractures with minor pyrite developed.					
443.7	447.1	Intermediate to mafic metavolcanic-andesite-basalt sill or darker coloured flow; upper contact broken, lower contact sharp 60° to c.a. 443.7'-446.9' - brecciation, silicification and white quartz veining at 444.8' to 445.2', thin quartz carbonate veins from 445.2' to lower contact.					
447.1	507.0	Amygdaloidal, pillowed intermediate metavolcanic-dacite; 451.0', 452.8', 453.5', 455.0' - pillow selvages with 5%-25% disseminated pyrite and silica filled vug at 455.2'. 462.8'-463.9' - pillow margin breccia, silicification and white quartz calcite veins 35°-40° to c.a. Quartz-calcite veins (larger than hair-width fractures):- 483.2' - 8 mm veinlet at 30° to c.a. 489.0' - 1 cm pinching veinlets at 30° to c.a. 492.9' - 1.3 cm veinlet at 35° to c.a. 495.8' - 2-5 mm at 30° to c.a. 499.0' - 5 mm veinlet at 55° to c.a. 485.0'-505.0' - massive flow, no pillows, amygdales or brecciation, possibly andesite composition, slightly darker green but no contacts observed.	1141	451.0	455.5	4.5	Nil
			1142	462.7	464.0	1.3	0.005
	507.0	END OF HOLE					

DERRY, MICHENER, BOOTH & WAHL

DIAMOND DRILL RECORD

CO-ORDS:	11+48E/31+67N		HOLE No. TCD-82-03
AZIMUTH:	325°	PROPERTY:	Goldeidt Explorations Inc.
DIP:	-48°	DRILL TYPE & SIZE:	Boyles BBS 17A BQ wire line
		LOCATION:	Macklem Township, Ontario
ELEVATION:	Datum + 13'	DIP TESTS:	197' etched 57½° - actual 50°
		DATE STARTED:	October 27th, 1982
		DATE COMPLETED:	October 30th, 1982
LENGTH:	517.0'	LOGGED BY:	R. E. Routledge
SECTION:		DATE LOGGED:	Oct. 31st - Nov. 1st, 1982

PURPOSE: Test for source of Au geochemical anomalies in overburden northwest of overburden hole TC-82-07.

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
0	176.0	Overburden; N standard drilled to 181.2', broken bedrock and weathered with vugs in veinlets to 210'.					
176.0	182.3	Intermediate metavolcanic-andesite-dacite; light greenish gray, hard, apparently massive and aphanitic equigranular. Primary flow or fractures silica healed. Sharp flow contact at 182.3' 30° to c.a., tops downhole. 181.2'-181.6' - white quartz-calcite vein parallel to core, breccia and broken.					
182.3	222.7	Pillowed intermediate metavolcanic-andesite; dark apple green at contact grading to light apple green at 185'. Apparently massive, aphanitic equigranular. Locally porphyritic with acicular laths of white plagioclase less than 15% at 185'. Variolite/amygdales alteration locally; brecciation resealed by silica at pillow margins and cubic pyrite developed in selvages 1%-5%. Hair-width to 1 cm quartz-calcite veinlets 40°-55° to c.a. Later cross-cutting veinlets 20°-30° to c.a. Most appear to be fracture fillings and zoned with calcite on walls centered by quartz. Veining density less than 1/ft.					

SHEET No.: 1 of 5

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
		Quartz-calcite veinlets (greater than 5 mm):-					
		182.6'-183.3' - 6 mm veinlets 35° to c.a. cut by 5 mm veinlets subparallel to c.a.	1160	181.2	183.0	1.8	0.002
			1159	183.0	185.0	2.0	0.002
		208.2' - 1 cm veinlets 35° to c.a. cuts pillow selvage.	1161	207.5	209.0	1.5	0.02
		211.6' - 5 mm veinlets 45° to c.a.	1162	210.7	212.0	1.3	0.002
		217.2'-223.7' - fractured and silicified - carbonated on fractures.	1163	217.2	223.0	5.8	0.002
		223.6'-224.3' - 4 cm white quartz veinlets 60° to c.a. and quartz banding at contact.	1164	223.0	225.0	2.0	Nil
223.7	240.9	Porphyritic intermediate metavolcanic-dacite; light, slightly green tinged gray apparently massive, hard, porphyritic fabric. Phenocrysts of subhedral plagioclase ½-2 mm up to 1% and finer ½ mm hornblende or actinolite phenocrysts 1%-2% in gray aphanitic siliceous matrix. Pyrite less than 1% finely disseminated in matrix.					
		239.4' - irregular flow contact about 50° to c.a. - same lithology.	1165	239.4	241.0	1.6	Nil
		239.4'-241.0' - silicification and contact at 240.9', 50° to c.a.					
240.8	311.0	Pillowed, amygdaloidal intermediate metavolcanic-dacite; light apple green aphanitic, massive. Minor disseminated pyrite in matrix and local brecciation of pillow margins. Inclusion of porphyritic dacite at 248.0' indicating a younger flow and tops downhole.					
		255.0'-262.0' - flow breccia section, possibly a thin flow.	1166	245.1	245.9	0.8	Nil
			1167	255.2	257.0	1.8	0.002
		284.0'-287.0' - silicification and massive pyrite developed at pillowed selvages, 284.4', 286.6 - faulted with quartz-calcite veinlets.	1168	257.0	262.0	5.0	0.002
			1169	262.0	267.0	5.0	Nil
			1170	284.0	287.7	3.7	0.005

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T					
		302.0' - silicification and feldspar development at pillow selvage. White quartz-calcite veinlets:- 245.5' - 2 veinlets 2 cm thick at 60° to c.a. 255.2'-256.5' - flow breccia and irregular 3-6 mm veinlets 10° to c.a. 258.9' - veinlets subparallel to c.a. 261.8' - patch of quartz-calcite. 262.0'-267.0' - veinlets filling fractures. 298.2'-299.2' - clear vein, 2 mm to 1 cm subparallel to c.a. 300.5' - irregular mass at selvage with aggregated pyrite cubes. 311.0' - sharp but indistinct silicified contact at flow top breccia 55° to c.a.	1171	298.0	302.2	4.2	Nil					
311.0	350.4	Intermediate metavolcanic-andesite; slightly darker greenish gray than dacite, massive, aphanitic and equigranular with few quartz-calcite veinlets 20°-25° to c.a. - virtually unfractured. 348.0'-350.4' - amygdale alteration developed to flow contact at 35°-45° to c.a.										
350.4	353.8	Amygdaloidal intermediate metavolcanic-dacite; dark apple green - typical, possibly pillowed, minor pyrite rimming amygdales, lower flow contact 50° to c.a.										
353.8	364.8	Same as above. Very fine-grained, equigranular and grey at base, grading to apple green. 358.4'-356.8' - quartz-calcite vein 5-6 mm at 20°-25° to c.a. Irregular flow contact 20°-30° to c.a. at 364.8.	1177	389.0	393.0	4.0	Nil					

SHEET No.: 3 of 5

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
364.8	382.5	Intermediate metavolcanic-andesite; similar to 311.0' to 350.0' but mottled. White quartz-calcite veining 45°-55° to c.a. cross-cut by later veining subparallel to 30° to c.a.	1173	365.5	367.5	2.0	Nil
			1174	367.5	372.5	5.0	Nil
			1175	372.5	377.5	5.0	0.002
			1176	377.5	382.5	5.0	Nil
382.5	386.4	Intermediate metavolcanic-dacite; typical, lower contact sharp at 25° to c.a.					
386.4	403.4	Pillowed, amygdaloidal intermediate metavolcanic-dacite; light apple green, aphanitic, siliceous, massive and pillow brecciated - typical - possibly several thin flows.					
		389.6' - 1 cm quartz-carbonate veinlet cross-cutting selvage.	1177	389.0	393.0	4.0	Nil
		391.1'-391.5' - sill or flow of porphyritic andesite.					
		391.9' - 1.5 cm quartz-calcite vein and silicification to 192.6.					
		403.4' - silicified contact.					
403.4	445.6	Intermediate metavolcanic-andesite-dacite; light gray, massive aphanitic to 412', brownish bleaching 411'-412'. Finely porphyritic with white plagioclase laths less than 1 mm in an aphanitic matrix to 406'. Gradational colour and textural change to light apple green, pillowed, fractured and silicified dacite at 412'. Close space fractures filled by quartz and calcite from contact to 412'. Silicification and quartz-calcite veins 2½-3 cm cutting pillow selvages from 413.6' to 414.0'.	1178	402.5	407.5	5.0	Nil
			1179	407.5	412.5	5.0	Nil
			1180	412.5	414.3	1.8	Nil
			1181	429.5	435.5	6.0	0.002
		Possible flow contacts at 429.8' accompanied by brecciation and silicification at 429.4' to 431.0'.					
		Silicification and development of pyrite cubes at pillow selvages and brecciation of pillow margins at 431.8', 432.7', 434.2'-435.2', 437.4', 440.9' and 441.3'.					

FOOTAGE from	FOOTAGE to	DESCRIPTION	SAMPLE No.:	FOOTAGE from	FOOTAGE to	LENGTH	Au Oz./T
		Lower contact sharp 25° to c.a.					
445.6	454.9	Porphyritic intermediate metavolcanic-andesite; massive gray, very fine grained with fine phenocrysts of hornblende-actinolite 10%-15%. Fracture-filled very thin quartz-carbonate veining with typical vein orientations. Pyrite cubes ½-2 mm disseminated in matrix approximately 1%.	1182	445.6	450.6	5.0	Nil
			1183	450.6	454.9	4.3	Nil
			1184	454.9	458.0	3.1	Nil
			1185	458.0	463.0	5.0	Nil
			1186	463.0	468.0	5.0	Nil
			1187	468.0	473.0	5.0	0.002
			1188	473.0	478.0	5.0	0.002
			1189	478.0	483.0	5.0	Nil
454..9	458.0	Intermediate metavolcanic-dacite; light apple green, fractured and silicified, upper contact 20° to core, lower contact irregular 80° to c.a.	1190	483.0	489.2	6.2	0.002
			1191	489.2	493.8	4.6	Nil
			1192	493.8	498.8	5.0	Nil
			1193	498.8	503.8	5.0	Nil
458.0	468.0	Porphyritic intermediate metavolcanic-dacite; white, subhedral to lath plagioclase 1 mm phenocrysts in aphanitic, massive matrix. Colour typical.					
468.0	493.8	Intermediate metavolcanic-dacite; typical light apple green, primary flow banding fracturing and brecciation sealed by silica 45°-55° to c.a. Typical quartz-calcite veining, intense silicification and quartz-calcite veining from 489.2'-493.8' with 4 mm cubic pyrite developed in quartz veining and silicification banding at contact zone 50°-90° to c.a.					
493.8	517.0	Intermediate metavolcanic-andesite; Indistinctly porphyritic with altered fine plagioglase phenocrysts up to 10% in massive medium green, hard matrix to 500 ft. then aphanitic and similar to andesite-dacite units. Occasional quartz-calcite vein only.					
	517.0	END OF HOLE					

APPENDIX B

CERTIFICATES OF ANALYSIS

SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 54187 Date: November 2, 1982

Received October 28, 1982 58 Samples of Split Core

Submitted by Goldeipt Exploration Incorporated, Toronto, Ontario Attn: Mr. R. E. Routledge

SAMPLE NO.	GOLD Oz./ton	SAMPLE NO.	GOLD Oz./ton	SAMPLE NO.	GOLD Oz./ton
1101	Nil	1121	Nil	1141	Nil
1102	0.002	1122	0.02	1142	0.005
1103	Nil	1123	Nil	1143	Nil
1104	Nil	1124	0.002	1144	Nil
1105	Nil	1125	Nil	1145	0.002
1106	Nil	1126	0.005	1146	Nil
1107	0.002	1127	Nil	1147	Nil
1108	Nil	1128	Nil	1148	Nil
1109	Nil	1129	Nil	1149	Nil
1110	Nil	1130	Nil	1150	Nil
1111	Nil	1131	Nil	1151	Nil
1112	Nil	1132	0.005	1152	Nil
1113	Nil	1133	Nil	1153	Nil
1114	Nil	1134	Nil	1154	Nil
1115	0.002	1135	Nil	1155	Nil
1116	Nil	1136	Nil	1156	Nil
1117	0.002	1137	Nil	1157	Nil
1118	Nil	1138	0.005	1158	Nil
1119	Nil	1139	0.002		
1120	0.002	1140	Nil		

Per G. Lebel
G. Lebel - Manager

ESTABLISHED 1928

SWASTIKA LABORATORIES LIMITED
P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

ificate No. 54209 Date: November 9, 1982

eived Nov. 3, 1982 35 Samples of Split Core

mitted by Goldeit Explorations Incorporated, Toronto, Ontario

Attn: Mr. R. E. Routledge

SAMPLE NO.	GOLD Oz./ton
1159	0.002
1160	0.002
1161	0.02
1162	0.002
1163	0.002
1164	Nil
1165	Nil
1166	Nil
1167	0.002
1168	0.002
1169	Nil
1170	0.005
1171	Nil
1172	Nil
1173	Nil
1174	Nil
1175	0.002
1176	Nil
1177	Nil
1178	Nil
1179	Nil
1180	Nil
1181	0.002
1182	Nil
1183	Nil
1184	Nil
1185	Nil
1186	Nil
1187	0.002
1188	0.002
1189	Nil
1190	0.002
1191	Nil
1192	Nil
1193	Nil

Per G. Lebel

G. Lebel - Manager

ESTABLISHED 1928

OM 81-5-C-139
63.4116

APPENDIX A

OVERBURDEN DRILL LOGS

B. & C. LTD.

DERRY, MICHENER, BOOTH & WAHL
CONSULTING GEOLOGISTS AND ENGINEERS

REVERSE CIRCULATION DRILL HOLE LOG

DATE 23 Aug 19 82
SHIFT 11:20 TO 20:40
TOTAL HOURS
CONTRACT HOURS

HOLE NO. TC-82-01 LOCATION L 8E/26+65N CLIENT: Goldeidt Expl. Inc
GEOLOGIST R. Rowledge DRILLER G. Howg BIT NO. KDDD431 BIT FOOTAGE 0-150'
MOVE TO HOLE 11:20 – 11:37 – go for water
DRILL 12:28 – 14:54 Pull rods to 15:20
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 15:20 – 15:24
ELEVATION: 0'-datum

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
	NR				
10				medium beige grey well sorted sand (beach sand?)	
20					
				beige grey sand with 5% granules	
30				fine lacustrine grey sand with occasional clay beds	
40				grey lacustrine clay with brown (oxidized) clay at base	
50				fine lacustrine grey sand	
60				fine to medium sand with few granules	
70					
80				fine to medium sand	
				wood chips	
90				fine well sorted beige grey sand very fine at 95'	
				very fine sand and silt with minor clay	

CONSULTING GEOLOGISTS AND ENGINEERS

REVERSE CIRCULATION DRILL HOLE LOG

DATE 23 Aug 1982
SHIFT
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO. TC-82-01 LOCATION 1.8E/2645N CLIENT: Goldcrest Expl. Ltd.
GEOLOGIST R. Routledge DRILLER G. Howg BIT NO. ____ BIT FOOTAGE ____
MOVE TO HOLE ____
DRILL ____
MECHANICAL DOWN TIME ____
DRILLING PROBLEMS ____
OTHER ____
MOVE TO NEXT HOLE ____

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses ppb Au	ppm Ag	Cu	Ni	Pb	Zn	As
				very fine sand and silt							
				light brown wood chips, grey clay							
				medium to coarse beige grey sand							
110				medium to fine sand							
				platy lacustrine silty clay							
				medium to coarse poor-sorted sand							
120			01	cobbly-bouldery gravel with greenish grey coarse sand matrix 5-10%	570						
				gravel of basalt pebbles, few boulders. Volumes of sediments = 90% felsic intrusives = 30%.							
			02	126' gritty grey clay, platy with occasional cobble, striated pyrite cube - 3mm	130						
			03		75						
130				130' sticky sandy plastic gritty grey clay, rare pebbles 130-133'							
			04	133-134' soft gritty grey clay	10						
				134' compact, stiff clay - varved lacustrine clays.							
			05	139' stiff fine to medium sandy grey clay	220						
140			06	140' sticky, stiff grey clay, platy with very little sand or grit	25						
			07	141' soft, sticky, plastic grey clay							
				142' stiff grey lacustrine clay	10	0.6	58	58	12	46	<1
150				144½-145½ broken rock and smooth plastic grey clay to 147'							
	150'			145' bedrock							
				147-148' white bull quartz in 1-5mm veinlets							
				- dark greenish, aphanitic, foliated mafic meta volcanic							

CONSULTING GEOLOGISTS AND ENGINEERS

REVERSE CIRCULATION DRILL HOLE LOG

DATE 23-24 Aug 19 82

SHIFT 11:30 7:15 TO 20:00 10:00

TOTAL HOURS

CONTRACT HOURS

HOLE NO. TC-82-02 LOCATION L SE/28+70N CLIENT: Goldeidt Expl Inc.

GEOLOGIST R. Routledge DRILLER G. Howg BIT NO. KODD431 BIT FOOTAGE 150'-382'

MOVE TO HOLE 15:20 - 15:24 Set up

DRILL 15:32 - 20:37 / 7:15 - 10:48 Pull rods - clean tank

MECHANICAL DOWN TIME

DRILLING PROBLEMS Rods sanded at 85' @ 16:55hrs - Pull to 16:09.

OTHER Pull up 40' at shift end on 23rd Aug - redrill 40' & continue on 24th Aug

MOVE TO NEXT HOLE 12:09 - 12:14

ELEVATION: #2+8'

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
	NR			no return	
10				brown (oxidized) medium sand	
				gritty to granular beige grey medium sand (beach sand)	
20					
				fine well sorted beige grey sand with brownish grey clay beds - lacustrine sands -	
30					
40				fine sand	
				fine sand and silt	
				brown clay	
50				fine to medium beige grey sand	
60				fine and very fine sand	
70				fine and very fine sand and silt	
				fine and very fine sand	
80					
90				fine to medium well sorted beige grey sand	
				wood chips and grey clay bed	
				very fine sand and silt	

CONSULTING GEOLOGISTS AND ENGINEERS

REVERSE CIRCULATION DRILL HOLE LOG

DATE 23-24 Aug 19 82
SHIFT
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO. TC-82-02 LOCATION L 8E/128+70N CLIENT: Goldcrest Inc.
GEOLOGIST R. Routledge DRILLER G. Hovig BIT NO. _____ BIT FOOTAGE _____
MOVE TO HOLE _____
DRILL _____
MECHANICAL DOWN TIME _____
DRILLING PROBLEMS bit failed in bedrock after drilling 191½-192'
OTHER *Samples TC-82-02-01 to TC-82-02-05 discarded
MOVE TO NEXT HOLE _____

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses ppb Au	ppm Ag	Cu	Ni	Pb	Zn	As
				fine to medium sand							
110				medium well sorted beige grey lacustrine sand							
			01*	coarse granular grey sand grades to mafic rich gravel with 35% coarse sand matrix							
120				116'-117' grey clay underlain by mafic volc. rich gravel at 117'-122' pebbles ¼ to rounded, coarse sand matrix, few cobbles. Pebbly to cobbly gravel							
			02*	122'-123' grey clay							
				124' cobbly gravel layer							
130			03*	125'-135' gritty sandy clay with slight greenish hue. Till or turbidite?							
			04*	132' quartz pebbles, 131'-135' gritty granules of mafic volcanics 135-135½							
			NS 05*	135½-137' very stiff grey lacustrine clay - super clay?							
140			NS	137½-140' clay and boulders of very fine grained porphyritic basalt with 1% cubes of pyrite.	1450						
			06	140'-146½' pebbly diamicton with greenish clay silt matrix - till or turbidite.							
				146-147' smooth, plastic grey lacustrine clay							
150				147' gritty grey clay with cobbles to 148'							
				148' grey clay - no grit - varved							
			NS	150'-152' fine sand and silt							
				152'-154' grey varved lacustrine clay							
				154'-156½ fine sand and wood chips							
160				156½-160½ grey varved clay - pebbly bed at 158½'							
			07	160½-166' gravel mafic volcanics and seds ~90% - pebbly with cobbles	>15,000						
				166-167 grey lacustrine clay grades to pebbly grey clay to gritty clay to soft gritty clay.	<200						
170			08	170' gritty clay, platy to large bolders in screen of stiff to very soft clay. pebbly sand beds 173', 175'.	550						
			09								
			10	177'-181½ green clay rich till and broken bedrock, fine to medium sand matrix, sand component increasing with depth	60						
180					255						
			11	183* cobbly, bouldery sand till	60						
			12	189* coarse mafic volcanic pebbles and cobbles and broken bedrock - no clay - green grey sand in cuttings	250						
190			13								
			14		24	0.8	81	50	12	61	<4
				192'							

CONSULTING GEOLOGISTS AND ENGINEERS

REVERSE CIRCULATION DRILL HOLE LOG

DATE 24 Aug 1982
SHIFT 7:15 TO 18:00
TOTAL HOURS
CONTRACT HOURS

HOLE NO. TC-82-03 LOCATION L8E/30+70N CLIENT: Goldeidl Expl Ltd
GEOLOGIST R. Roulledge DRILLER G. Howg BIT NO. B63430 BIT FOOTAGE 0-177'
MOVE TO HOLE 12:09 - 12:14 - Set up
DRILL 12:24 - 15:30 Pull rods
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 15:54 - 15:58
ELEVATION: #2+5'

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
10				brown (oxidized) medium sand brown gritty clay - light yellow sandy clay grades to buff yellow silt with clay matrix	
20				coarse to granular medium beige grey sand - beach deposit? - volcanics-rich to felsic intrusives - 50:50.	
30				medium to fine beige grey sand, - moderately well sorted - lacustrine - 30' - medium immature lithic sand coarsening with depth	
40				fine beige sand very fine sand and silt very fine to fine sand	
50				fine sand very fine sand	
60				grey lacustrine clay and wood chips very fine sand and silt wood chips and silt	
70				fine sand light red orange and black wood chips fine sand	
80				very fine sand and silt very fine to fine sand	
90				fine to medium sand fine sand	

CONSULTING GEOLOGISTS AND ENGINEERS

REVERSE CIRCULATION DRILL HOLE LOG

DATE 24 Aug 1982
SHIFT
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO. TC-82-03 LOCATION L8E/30+70N CLIENT: Goldcrest Expl. Inc
GEOLOGIST R. Routledge DRILLER G. Howg BIT NO. ____ BIT FOOTAGE ____
MOVE TO HOLE ____
DRILL ____
MECHANICAL DOWN TIME ____
DRILLING PROBLEMS ____
OTHER ____
MOVE TO NEXT HOLE ____

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses ppb Au	ppm Ag	Cu	Ni	Pb	Zn	As
				wood chips							
				fine sand							
110				fine to medium sand							
120				fine sand							
				wood chips							
130				131' - gravel interbedded cobbly and bouldery gravel with green gritty clay							
			01	133' white bull quartz vein fragments	995						
			02	greenish grey stiff gritty clay with pebbles interbedded with mostly grey sandy gritty clay; diamicton - tuffaceous till	285						
140			03		3400						
				144' grey platy - fissil lacustrine clay, stiff after 145'							
				152' - rounded basalt pebbles in grey, sticky plastic clay							
150			NS	153' grey silt, platy grey lacustrine clay							
				- 161' interbeds, light grey medium grey silty varves, interlayered silt-clay and clay-sand.							
160				mafic volcanic boulder							
			04	161' coarse pebbly mafic volcanic - sedi gravel, coarse greenish sand	1060						
				matrix, minor thin grey clay platelets. Occasional granular pebble of granite.	1030						
170			05	169'-172' boulders, broken bedrock, and clay - till							
			06	172' bedrock - aphanitic, dark	25	0.6	59	56	11	52	<
				greenish grey mafic meta volcanic - basalt							
				177'							
180											

REVERSE CIRCULATION DRILL HOLE LOG

DATE 24 Aug 19 82
SHIFT 7:15 TO 18:00
TOTAL HOURS
CONTRACT HOURS

HOLE NO. TC-82-04 LOCATION L8E/32+70N CLIENT: Goldenrod Exp. Inc.
GEOLOGIST R Routledge DRILLER G Howg BIT NO. B63430 BIT FOOTAGE 177'-287'
MOVE TO HOLE 15:54 - 15:58 Set up
DRILL 16:05 - 17:08 Pull to 17:25
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER Clean sed. tanks 17:25 18:00
MOVE TO NEXT HOLE
ELEVATION: #3 - 2'

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
	N.R.				
10				Light to buff brown medium, well sorted compositionally immature sand.	
20				fine to medium beige-grey sand yellow-brown (oxidized), soft, sticky, silty clay	
30				fine beige-grey lacustrine sand	
				very fine to fine sand	
40				brown - oxidized very fine sand	
				grey very fine sand	
50				grey clay bed	
				fine to medium grey sand	
60				fine sand	
70				fine to medium sand	
				fine sand wood chips	
				fine to medium sand	
80				fine sand	
90				fine to medium beige-grey sand	
				ine sand	

Hole No. | Page No

REVERSE CIRCULATION DRILL HOLE LOG

DATE 2 Aug 1982
SHIFT 7:45 TO 18:00
TOTAL HOURS ____
CONTRACT HOURS ____

HOLE NO. TC-82-04 LOCATION L 8E/132+70N CLIENT: Goldcrest Expl. Inc.
GEOLOGIST R. Routledge DRILLER G. Hovey BIT NO. ____ BIT FOOTAGE ____
MOVE TO HOLE ____
DRILL ____
MECHANICAL DOWN TIME ____
DRILLING PROBLEMS ____
OTHER ____
MOVE TO NEXT HOLE ____

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses						
					Au (ppb)	Ag (ppm)	Cu (ppm)	Ni (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
			01	fine sand 102' gravel - dominantly mafic volcanics and seds with 25% felsic intrusives and volcanics. 10-15% granules to coarse, green grey, well sorted sand matrix.	145						
			02		10	1.1	62	51	12	53	<2
110		110'		104½' bedrock - aphanitic - metavolcanic with banded 1-2 mm white to clear quartz veining. Banding of feldspar noted in several chips. Minor iron staining at surface. Composition intermediate to mafic.							

REVERSE CIRCULATION DRILL HOLE LOG

DATE 6 Aug 19 82

SHIFT 7:30 TO 17:30

TOTAL HOURS ____

CONTRACT HOURS ____

HOLE NO. TC-82-05 LOCATION L 7+90E/37+12N CLIENT: Goldfield Expl. Inc

GEOLOGIST R. Routledge DRILLER G Hoag BIT NO. B 43431 BIT FOOTAGE 312'-460'

MOVE TO HOLE 13:55 - 14:12 Setup

DRILL 14:16 - 16:15 pull to 16:35

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER Clean tanks, go for water 1635-1730

MOVE TO NEXT HOLE ____

ELEVATION: #4 + 15'

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
				organics	
				cobbly gravel	
10				brownish grey very fine sand and silt; 5% coarse sand grains and granules	
				brown very fine sand and silt, few very thin granule to coarse sand beds	
20				yellow brown clay bed	
				yellow brown silt	
30				minor clay in silt	
				sequence of interlayered pebbles and clay - end of oxidation at 37'	
40				38' grey plastic, sticky lacustrine clay and grey silt grading to very fine sand	
				fine to medium grey sand grades to fine sand - poor return	
50				coarse sand with few clay beds	
				fine to medium grey sand	
				coarse sand poorly sorted with med. to fine sand matrix or interbeds.	
60				medium sand, few coarse grains at 64'	
				medium to fine sand	
70				medium sand, few granules and coarse grains decreasing with depth	
				coarse sand, few pebbles and granules	
80				grey lacustrine clay	
				very fine grey sand and silt.	
90				grey lacustrine clay	
				fine sand grading to very fine sand and silt	
100					

Hole No. | Page No.

REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 1982
SHIFT
_____ TO _____
TOTAL HOURS
_____
CONTRACT HOURS
_____

HOLE NO. TC-82-05 LOCATION L 7+90E/37+12N CLIENT: Goldcrest Expl. Inc.
GEOLOGIST R. Routledge DRILLER G. Howe BIT NO. _____ BIT FOOTAGE _____
MOVE TO HOLE _____
DRILL _____
MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____
OTHER _____
MOVE TO NEXT HOLE _____

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses						
					ppb	ppm					
					Au	Ag	Cu	Ni	Pb	Zn	As
				lacustrine very fine sand and silt							
110				fine sand							
				very fine sand and silt							
120				thin, light grey clay layer							
				very fine sand							
				wood chips							
				fine sand							
130				wood chips							
				fine to medium sand							
140			01	medium grey-beige sand grades	25						
				to fine sand and rounded pebbles.							
			02	144½' Bedrock	17	1.0	65	66	10	34	21
	148'										
150				Hard, apple green, siliceous, aphanitic metavolcanic. White quartz veining or layering. Streaky banding of near-surface chips. Intermediate, possibly tuffaceous, volcanic.							

Hole No. | Page

REVERSE CIRCULATION DRILL HOLE LOG

DATE 17 Aug 19 82

SHIFT 7:30 TO 11:30

TOTAL HOURS ____

CONTRACT HOURS ____

HOLE NO. TC-82-06 LOCATION L 16+75 E / 22+80N CLIENT: Goldcliff Expl. Inc.

GEOLOGIST R. Routledge DRILLER G. Howg BIT NO. B63432 BIT FOOTAGE 0-166'

MOVE TO HOLE 7:50 - 8:10 Set up

DRILL 8:15 - 10:25 Pull rods to 10:53

MECHANICAL DOWN TIME ____

DRILLING PROBLEMS ____

OTHER ____

MOVE TO ~~NEXT HOLE~~ TRUCK ROAD 10:55 - 11:30

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
				0-1' yellow brown oxidized clay grey sandy, gritty lacustrine clay	
				6' - no sand or grit	
10				sticky, plastic blue grey clay	
20				silty blue grey clay - varved?	
30				progressively more silt - silt with clay beds	
40				silt	
				very fine sand and silt with very thin grey silty clay beds.	
50				silt	
				very fine sand and silt	
60				fine sand	
				very fine sand and silt	
				fine sand	
70				wood chips grey clay bed fine sand wood chips in clay and fine sand beds	
80				pebbly bed, granitics > sedis > volcanics	
90				medium well sorted beige grey sand	
				fine sand occasional pebble and wood chips	
100					

REVERSE CIRCULATION DRILL HOLE LOG

DATE 2 Aug 19 82
SHIFT
TO
TOTAL HOURS
CONTRACT HOURS

HOLE NO. TC-82-06 LOCATION L16+75E/12+80N CLIENT: Gt Nevada Expl Inc
GEOLOGIST R Routledge DRILLER G Howe BIT NO. BIT FOOTAGE
MOVE TO HOLE
DRILL
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses ppb Au	ppm Ag	Cu	Ni	Pb	Zn	As
				fine sand							
				gritty grey lacustrine clay							
110				mixed clay, sand and pebbles							
				gravel, mafic rich with coarse grey sand matrix							
			01	pebbly and granular coarse grey sand	900						
120											
130			02	medium sand, very few pebbles and granules poor return	1135						
140											
			NS	fine sand clay and wood chips							
150				fine sand - wood chips							
				beds of clay and fine sand 150'-156'							
			03	156' cobbly-pebbly till? - fine to medium greenish sand matrix very little greenish clay, rounded pebbles and cobbles of mafic volcanics washed till?? with lacustrine infilled sand?	250						
160			04		12	0.4	29	33	9	29	<1
				161'- bedrock - minor clay ground at surface. 1-2mm laths of white quartz veinfragments. 165'-166' green gritty clay - rock flour.							
170				— Dark green aphanitic, ultra mafic? to mafic volcanic.							

Hole No. | Page No.

REVERSE CIRCULATION DRILL HOLE LOG

DATE 28 Aug 1982
SHIFT 7:30 TO 17:30
TOTAL HOURS ____
CONTRACT HOURS ____

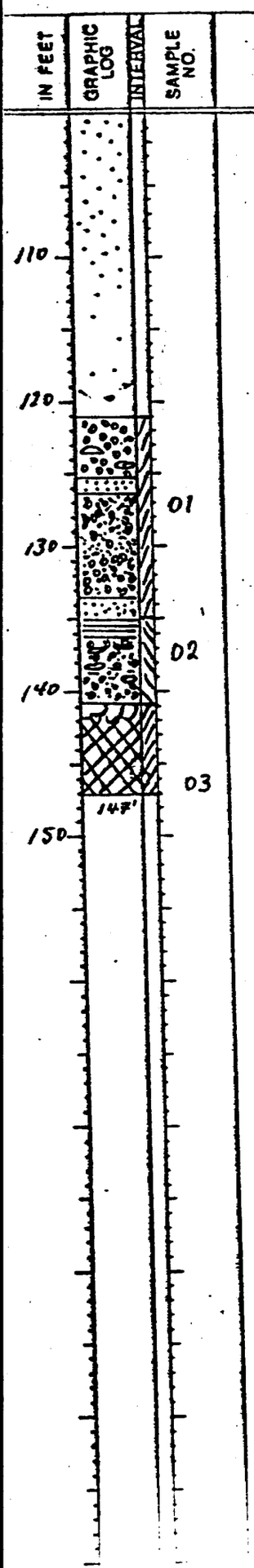
HOLE NO. TC-82-07 LOCATION L12E/30+9:N CLIENT: Goldfield Expl. Inc.
GEOLOGIST R.Routledge DRILLER G. Howg BIT NO B63431 BIT FOOTAGE 165'-312'
MOVE TO HOLE 12:06 - 12:11 Set up.
DRILL 12:17 - 13:35 Pull rods
MECHANICAL DOWN TIME ____
DRILLING PROBLEMS ____
OTHER ____
MOVE TO NEXT HOLE 13:55 - 14:12

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
				0-1' black to dark brown organics	
				1'-4' yellow brown to buff brown clay	
				4'-7½' buff brown clay	
				7½'-10½' yellow brown clay	
10				10½'-21' buff brown clay, platy and fissil at 14'-16'	
20					
				grey silt and lacustrine clay - sticky plastic clay silt	
30					
				very fine beige grey sand	
40					
				very fine sand and silt	
50				fine sand	
				fine to medium sand	
				medium sand ~10% coarse sand granis - bedded.	
60					
				fine to very fine sand	
				grey lacustrine clay	
70				fine sand - wood chips	
				grey, thin clay beds at 76' and 79'	
80					
				fine sand	
90					
100					

REVERSE CIRCULATION DRILL HOLE LOG

DATE 26 Aug 19 82
SHIFT
____ TO ____
TOTAL HOURS
____
CONTRACT HOURS
____

HOLE NO. TC-82-07 LOCATION L12E/30+70N CLIENT: Goldcliff Gold Zinc
GEOLOGIST R Routledge DRILLER G. Howg BIT NO. ____ BIT FOOTAGE ____
MOVE TO HOLE ____
DRILL ____
MECHANICAL DOWN TIME ____
DRILLING PROBLEMS ____
OTHER ____
MOVE TO NEXT HOLE ____



DESCRIPTIVE LOG

fine sand

fine to very fine sand

gravel - mixed lithology - 70% mafic volc and seds, 30% felsic intrusive - pebbly, very few cobbles
125'-126' medium to fine sand bed
126' pebbly granular medium to fine sand grades to pebbly, granular gravel with med. to fine sand matrix
130' mostly sand grades to granule gravel and 5% coarse sand matrix with platy clay beds
135' fissil, gritty, platy clay
136-140' pebbly gravel
140'-141' - broken bedrock - green clay rock flour.
141½ - bedrock - dark green intermed. to mafic metavolcanic.

Notes & Analyses	ppb	ppm					
	Au	Ag	Cu	Ni	Pb	Zn	As
	135						
	1265						
	16	0.7	91	40	11	49	42

REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 19 82
SHIFT 7:30 TO 17:30
TOTAL HOURS
CONTRACT HOURS

HOLE NO. TC-82-08 LOCATION L 13+60E / 29+00N CLIENT: Goldcrest Expl. Inc.
GEOLOGIST R. Routledge DRILLER G. Hovey BIT NO. 13 63431 BIT FOOTAGE 0-165'
MOVE TO HOLE 8:05 - 8:30
DRILL 8:30 - 11:36 Pull rods
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE 12:08 - 12:11
Elevation: 429+10'

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses
	NR			yellow brown oxidized clay - sticky and plastic	
10				silty	
20				21-23' mustard yellow clay 23'-24' brownish yellow clay 24'-31' grey, grading to dark medium grey lacustrine clay	
30				31'-34' yellow brown clay	
				fine beige-grey sand	
40				very fine sand and silt yellow brown clay and silt	
				fine sand, few coarse sand grains and clay bed at 50'-51'	
50				fine to medium sand and few coarse sand grains and granules	
60				fine sand coarsening to medium sand grey lacustrine clay	
70				fine sand	
80					
90					
100					

REVERSE CIRCULATION DRILL HOLE LOG

DATE Aug 1982
SHIFT
TO
TOTAL HOURS
CONTRACT HOURS

HOLE NO. TC-82-08 LOCATION LT3+60E/29+00N CLIENT: Goldcrest Expl Inc
GEOLOGIST R. Routledge DRILLER G. Howg BIT NO. BIT FOOTAGE
MOVE TO HOLE
DRILL
MECHANICAL DOWN TIME
DRILLING PROBLEMS
OTHER
MOVE TO NEXT HOLE
ELEVATION:

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses ppb / ppm Au	Ag	Cu	Ni	Pb	Zn	As
				fine to medium beige grey sand							
				wood chips							
				grey clay bed							
110				wood chips, clay beds in fine sand							
120				abundant wood chips.							
130				Bedded granular and pebbly gravel - medium to coarse beige-grey sand matrix - mixed lithology, dacites, intermediate volcanic and granitic cobbles, mafics 60% - felsics 40%.							
			01		1045						
140				gravelly clay diamicton, grey clay balls							
			02		325						
				139'-140' mainly fine silty clay balls, few granules - rounded to sub-angular.							
				145' + hole making water							
			03	mafic volcanic boulders, gritty green clay (flow)	240						
150				149'-150' granular - mixed lithology gravel - minor clay balls							
			04		>15,000						
				151' gravel - coarse sand matrix							
			05		3170						
				151'-153' grey clay balls and gravel - till?							
			NS	153' green clay and gravel - cobbly at 154'							
160			06	155-156' pebbly granular, mafic coarse sand - 156'-green clay - 158'-159' mafic volcanic bldr	>15,000						
			07	broken bedrock - green clay-flow, non gritty, cobbles mafic volcanic - rounded.	9	0.9	56	50	13	40	45
				164' bedrock solid. - dark, green mafic to ultramafic volcanic.							
165'											
170											

File No. | Page No.

CONSULTING GEOLOGISTS AND ENGINEERS

REVERSE CIRCULATION DRILL HOLE LOG

DATE 25 Aug 1982

SHIFT 7:30 TO 19:00

TOTAL HOURS

CONTRACT HOURS

HOLE NO. TC-82-09 LOCATION L15E/126+70N CLIENT: Goldcult Expl. Inc

GEOLOGIST R. Routledge DRILLER G. Hoag BIT NO. K000443 BIT FOOTAGE 0-177

MOVE TO HOLE 12:48 - 12:51 Set up.

DRILL 12:59 - 18:40 Pull to 19:00

MECHANICAL DOWN TIME

DRILLING PROBLEMS

OTHER - New sub. -

MOVE TO NEXT HOLE Pull rods to 8:05 - 8:05 - 8:30

ELEVATION: N10 +15'

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses ppb Au	ppm Ag	Cu	Ni	Pb	Zn	As
				0-1' black mucd - organics yellow brown oxidized clay and few pebbles							
				yellow brown clay							
10				13½-14' coarse oxidized sand							
20				18½'-27' grey laucstrine clay - sticky, stiff, non-plastic							
30				silt, clay in matrix							
				grey laucstrine clay bed							
40				very fine sand and silt							
				very fine to fine beige grey sand							
50				very fine sand and silt wood chips							
				very fine to fine sand wood chips							
60				fine to medium sand, few granules at 60'							
				medium sand, beige-grey with few coarse sand grains and granules of felsic lithics > mafic lithics							
70				fine sand thin clay beds at 76½' and 80'							
80				wood chips - fine sand very thin clay bed							
90				fine sand							
100											

Hole No. | Page

GWL

REVERSE CIRCULATION DRILL HOLE LOG

DATE 5 Aug 19 82

HOLE NO. TC-82-09 LOCATION L15E/26+90N CLIENT: Goldeidt Expl. I..

GEOLOGIST R. Routledge DRILLER G. Howg BIT NO. ______ BIT FOOTAGE ______

SHIFT

______ TO ______

MOVE TO HOLE ______

DRILL ______

TOTAL HOURS ______

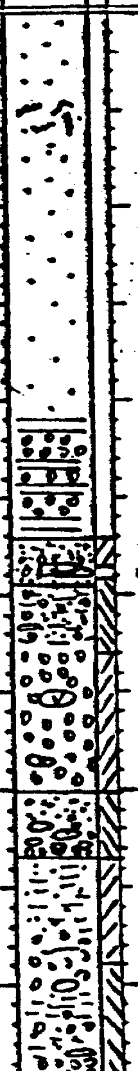
MECHANICAL DOWN TIME ______

DRILLING PROBLEMS ______

CONTRACT HOURS ______

OTHER ______

MOVE TO NEXT HOLE ______



IN FEET	SAMPLE NO.	DESCRIPTIVE LOG	Au (ppb)	Ag (ppm)	Cu (ppm)	Ni (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
		wood chips							
110		fine sand							
120		interbedded grey clay and pebbly gravel							
	01	granular coarse sand - open matrix, 10% medium to coarse sand matrix, mafic volcanics and seds 60%, felsics intrusives 40% granite boulder 128'-129'.	1890						
130	NS								
	02		145						
LR		129-133' green sandy clay with pebbles, mafic pebbles dominant, few granitic cobbles.	160						
	03	133'-140' gravel - interbedded granular and pebbly to cobbly beds with boulders, 5% coarse sand - open work - low return 85% intermediate volcs, 15% felsic.							
140	04		4055						
		140'- granular coarse sand, bouldery at 141'							
	05	143½' green clay diamicton	2410						
150		boulders black to green volcanics	715,000						
	06								
	NS	mafic volcanic boulder							
		156' gravel, mafic volcs 90%, coarse sand grades to medium sand at 160', minor grey clay at 159' - turbidite or glaciofluvial ?							
160	07		3475						
		161'-162' green smooth plastic clay bed							
		162'-165' pebbly gravel, grey medium sand matrix							
		165'-167' medium to granular grey medium sand poor return							
	08	167'-169' pebbly granular gravel, coarse to medium grey sand matrix	8185						
170			915						
	09	170' coarse granular sand							
	10	171' apple green smooth plastic clay, limonitic - weathered broken rock of boulder above clay - 170-171' - possibly altered bedrock - green clay mixed with sand.	14,400						
	11		19	0.3	54	58	12	42	<
178'									
180		175' oxidized weathered rock fragments and pebbles.							
		178' bedrock - very fine grained to aphanitic, porphyritic mafic to intermediate meta volcanic. Soft possibly altered.							

Hole No. | Page No.

REVERSE CIRCULATION DRILL HOLE LOG

DATE [redacted] Aug 1982

SHIFT 7:30 TO 19:00

TOTAL HOURS ______

CONTRACT HOURS ______

HOLE NO. TC-82-10 LOCATION L19+70E/20+00N CLIENT: Goldeidt Expl. Inc.

GEOLOGIST R. Routledge DRILLER G. Howg BIT NO. 363430 BIT FOOTAGE 289'-434'

MOVE TO HOLE 7:40 – 8:10 Set up

DRILL 8:14 – 12:20 Pull rods

MECHANICAL DOWN TIME

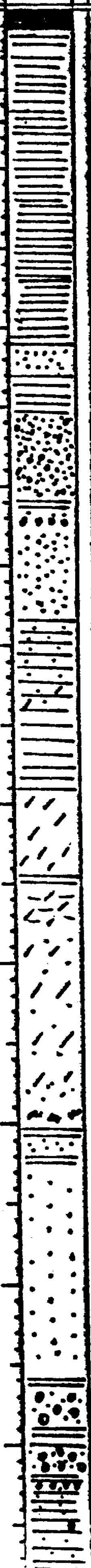
DRILLING PROBLEMS bit finished at 105'

OTHER

MOVE TO NEXT HOLE 12:48 – 12:51

ELEVATION: 31-14 + 2'

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses



dark brown, woody-peaty organics

dark brown mud & clay

10

20

grey sand

grey clay – gritty

medium to coarse grey sand with few granules

30

grey clay, – sand and pebbly bed

medium beige-grey sand

40

inter-bedded medium grey sand and sandy clay

sandy grey clay grades to silty clay and sticky plastic clay at 45'

50

silt

dark medium grey sticky clay and silt

60

silt and very fine sand

70

wood chips

sandy clay and medium sand bed

fine to very fine sand

80

grey clay bed

sandy gravel, angular volcanics/seds 70%, pebbles 30%, 60% medium sand matrix

90

grey, platy, gritty clay

gravel 90-92' sandy clay with few pebbles and granules 92'-102', clay is platy and fissile, pebbles mixed lithology and rounded – chert & fines noted.

stiff, dark blue-grey clay – no clastics – varved clay – sandy at 100' – silt-sand and clay zones

REVERSE CIRCULATION DRILL HOLE LOG

DATE 2 Aug 1982 — HOLE NO. TC-82-10 — LOCATION L 19+70 E / 20+00N — CLIENT: Goldcrest Expl. Inc.
GEOLOGIST R. Routledge — DRILLER G. Howe — BIT NO. _____ — BIT FOOTAGE _____
SHIFT _____ TO _____ — MOVE TO HOLE _____
TOTAL HOURS _____ — DRILL _____
CONTRACT HOURS _____ — MECHANICAL DOWN TIME _____
DRILLING PROBLEMS _____
OTHER _____
MOVE TO NEXT HOLE _____

IN FEET	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG	Notes & Analyses ppb Au	ppm Ag	Cu	Ni	Pb	Zn	As
				varved blue grey silty sandy clay							
				102'-103' plastic grey clay;							
				105' stiff blue grey clay							
				107' silty and plastic, sandy by 108', few granules mixed with 108'-111'							
110				111' stiff, semi-brittle blue grey and silty clay - varved							
				117' brittle, fissil, platy clay to 119'							
120				119-119½ medium sand; few granules							
				120-125 fissil, platy blue grey clay							
				125½-126 very fine sand and silt							
				126 granular gravel, few pebbles in beds of platy fissil clay							
130				130'-131' beige grey medium sand	25						
			01	131'-134' grey medium sand, occas. pebbly, few gritty grey clay beds -	70						
			02	133-133½ light green aphanitic volc. boulder	170						
			03								
			NS'	134½-138' light apple green to green grey intermed. volcanic boulder	360						
			04								
140				138-140 till - green to apple green - clay (rock flour) rich at top grades to sandy till. - 140' - gravelly to cobbly; sugary to buff white quartz clasts or veins in broken rock or boulders.	7	0.5	39	30	20	58	1
			05								
				143'							
150				140½ - bedrock - greenish grey, aphanitic intermediate metavolcanic							

Note No.

REPORT ON 1982 REVERSE CIRCULATION ROTARY OVERBURDEN DRILLING PROGRAMME - MACKLEM TOWNSHIP, GOLDEIDT EXPLORATIONS INC.

DERRY, MICHENER, BOOTH & WAHL

R.E. Routledge, B.Sc., M.Sc. (applied) F.G.A.C.

November 5, 1982
Toronto, Ontario

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APPENDICES

INTRODUCTION

From August 21st to 27th, 1982 a 10-hole dual tube reverse circulation rotary overburden drilling programme was carried out on the Macklem-Bond Township property of Goldeidt Explorations Inc. by Heath & Sherwood Drilling Limited under the supervision of Messrs. R.E. Routledge and R. Sedore of Derry, Michener, Booth & Wahl (DMBW).

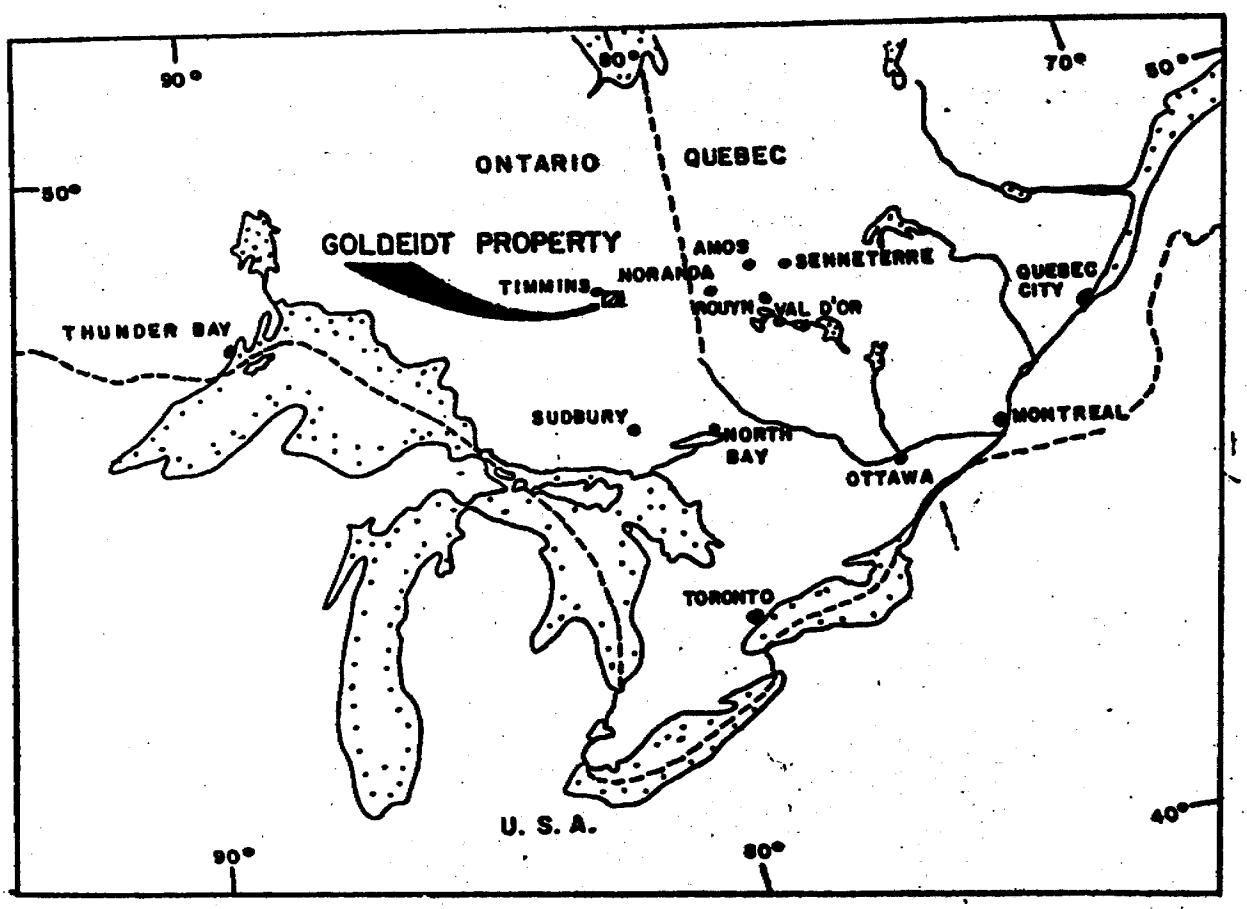
The programme was recommended by DMBW and implemented to follow up gold anomalies disclosed in basal overburden of holes TC-81-14 and TC-81-19 drilled in a previous 30-hole overburden drilling programme undertaken in October 1981.

The two-fold objective of the 1982 programme, in keeping with budgetary constraints of drilling a maximum of 10 holes, was to:-

(1) confirm anomalous values in basal overburden of the 1981 holes and verify or modify the previous interpretation of the Quaternary stratigraphy in the anomalous area, and

(2) trace the gold dispersal train up-ice to determine if the source is on Goldeidt property and if so to locate and delineate it so as to provide a diamond drill target.

Figure I. LOCATION OF GOLDEIDT EXPLORATIONS INC.
MACKLEM & BOND TOWNSHIPS PROPERTY



LOCATION AND ACCESS - Figures 1 and 2

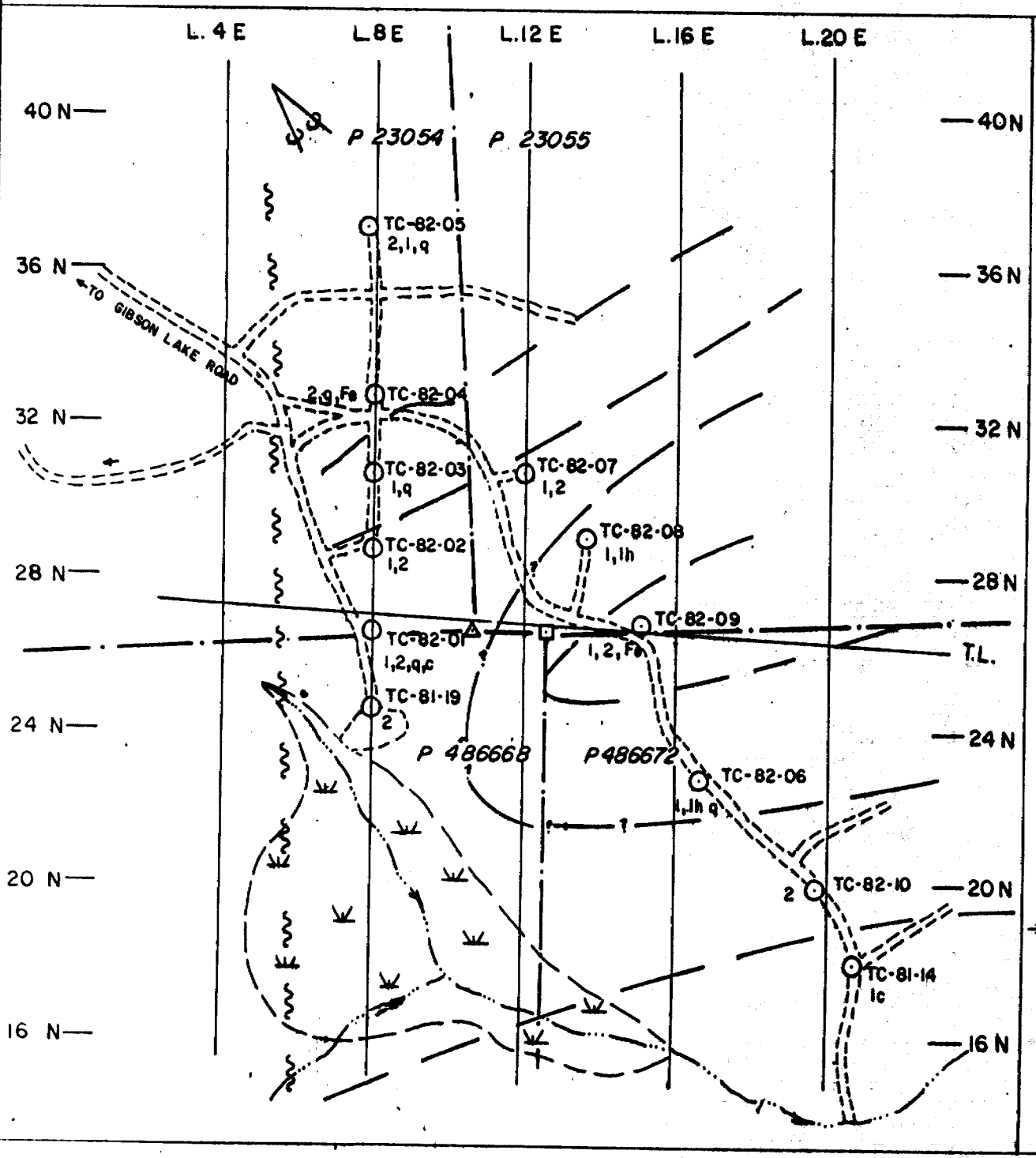
(NTS 42A10; longitude 80°47'32W - 80°54'30W; latitude 48°28'25N - 48°37'30N)

The property is located 35 km east of Timmins, Ontario, in central Macklem and west-central Bond Townships, Porcupine Mining Division, District of Cochrane. Regularly scheduled airline service is available at Timmins. The claim group is accessible by all-weather highway #101 and the Gibson Lake Road. The Gibson Lake Road departs from highway #101 at 38 km east of Timmins and traverses the east-half of the property, about 3 km south of the highway. The access road to the former Miller Paving Gravel Pit leads 1.5 km to the drill area centered at the intersections of claims P23054, P23055, P486668 and P486672. A number of old lumber haulage and skidder roads as well as newly cut north-south picket lines cut at 400 ft. intervals provide good access in the area drilled.

DESCRIPTION OF THE OVERBURDEN DRILLING PROGRAMME

Holes were spotted on the 22nd of August at 200 ft. to 400 ft. intervals north of TC-81-19 on line 8E to cover an up-ice direction from hole #19 of 1,250 ft. and north-northwest of hole TC-81-14 covering an up-ice distance of 2,350 ft. The drill area is contained by 7E to 21E; 18N to 37N. Drill hole locations are shown on Figure 3.

The Heath & Sherwood drilling equipment was mobilized from Kirkland Lake on Monday, August 23rd and demobilized on August 27th. Drilling of the 10 holes numbered TC-82-01 to 10 proceeded exceptionally smoothly with no problems or delays and production rate was 2 1/2 holes per actual drilling day. Equipment wear



LEGEND

- 2 — Intermediate metavolcanic
- 1 — Mafic metavolcanic
- 1h — Ultramafic metavolcanic
- Lithologic contact (assumed)
- Ice flow direction
- Road
- Marsh
- Stream
- Claim boundary
- TC-82-01 — Reverse circulation rotary drill hole and number
  - TC-81-19 1981 series
  - TC-82-01 1982 series
- q — Quartz veining
- c — Carbonate veining
- Fe — Limonitic weathering

0 500 1,000
FEET

DERRY, MICHENER, BOOTH & WAHL

GOLDEIDT EXPLORATIONS INC.

Macklem & Bond Tps. Property

LOCATION OF REVERSE CIRCULATION ROTARY DRILL HOLES

SEPT., 1982 | R. ROUTLEDGE | Figure 3

and used down-hole consumables was normal and adequately provided for in the budget.

A total footage of 1,575 ft. was completed of which 1,543 ft. consisted of overburden for an average overburden depth of 154.3 ft. (Appendix A). A total of 30 ft. of bedrock, averaging 3 ft. per hole, was drilled. Bit production footage averaged 315 ft.

Forty-six overburden samples were collected from the lower 50 ft. of glaciofluvial sediment and till in each hole. Glaciofluvial material was collected at plus or minus 5 to 10 ft. intervals whereas till or basal overburden was collected at less than or equal to 5 ft. intervals. Samples were shipped by bus to the Overburden Drilling Management Ltd. Laboratory in Nepean, Ontario for processing to heavy mineral concentrate (Appendix B). Three-quarter splits of heavy mineral concentrates were analyzed for gold using the fire assay and atomic absorption method with minimum detection method of 5 ppb at Bondar-Clegg & Company Ltd. of Ottawa. Minus 10 mesh bedrock cuttings were geochemically analyzed for Au, Ag, As, Cu, Ni, Pb and Zn by Technical Services Laboratories of Mississauga, Ontario (Appendix C).

R.E. Routledge of DMBW conducted binocular microscope examinations of bedrock chips and anomalous heavy mineral concentrates.

Table 1 summarizes the drill programme and a flow sheet illustrating laboratory sample processing is outlined in Figure 4.

Table 1

GOLDEIDT EXPLORATIONS INC.

Macklem and Bond Townships Property
Summary of Overburden Drilling Programme
August 21-27, 1982

Hole No.	Date	Location	Elevation (Ft.)	Footage Drilled		Depth	Samples Collected		Consumables				Rods	Super Poly 2,000 (L)
				O.B.	Bedrock		O.B.	Bedrock	Bit No./& Ftge		Sub. No./& Ftge			
* 1	23/08/82	8E/26+65N		0-145	145-150	150	6	1	K000431	150	1	150	***1 Head Rod	1
2	23-24/08/82	8E/28+70N	+8	0-191½	191½-192	192	8	1	K000431	382	1	382		1
3	24/08/82	8E/30+70N	+13	0-172	172-177	177	5	1	B63430	177	1	559		1
4	24/08/82	8E/32+70N	+11	0-104½	104½-110	110	1	1	B63430	287	1	669		½
5	26/08/82	7+90E/37+12N	+26	0-144½	144½-148	148	1	1	B63431	460	2	637		1
6	27/08/82	16+75E/22+80N	-18	0-161	161-166	166	3	1	B63432**	166	2	803		1
7	26/08/82	12E/30+70N	+14	0-146	146-147	147	2	1	B63431	312	2	489		1
8	26/08/82	13+60E/29N	+4	0-161½	161½-165	165	6	1	B63431	165	2	342		1
9	25/08/82	15E/26+70N	-6	0-176	176-177	177	10	1	K000413	177	2	177		1
10	26/08/82	19+70E/20N	-21	0-141	141-143	143	4	1	B63430	430	1	812		½
10	5 days (46½ hrs.)			1,543	32	1,575	46	10	5		2		1	9

* - Drilling order - holes 1 to 4, 10 to 7, 5 and 6.

** - Additional footage remains on bit.

*** - Used head rod.

Average bit life (4 bits) 362½'.

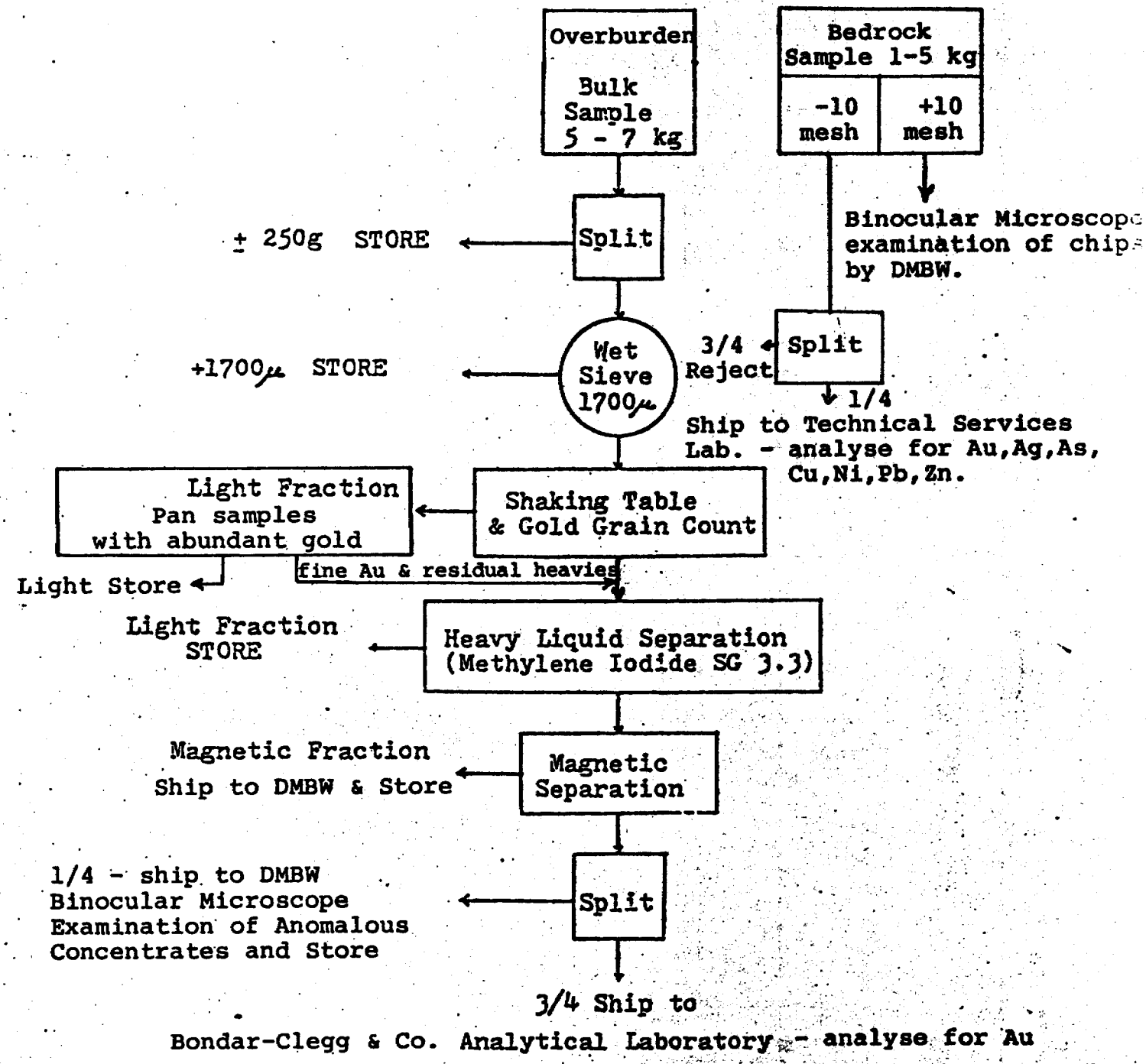


Figure 4 - Sample processing flow sheet

OVERBURDEN DRILLING THEORY, TECHNIQUE AND EQUIPMENT

Theory

In theory, subcropping concentrations of economic minerals were abraided or plucked and together with barren bedrock were incorporated within basal ice during the southerly advance of the Wisconsinan continental ice mass. This material was subsequently deposited as till from the moving sole of the glacier or transported englacially. Englacial debris was later released as terminal moraine at the glacier snout, when rates of wasting and advance at the ice-front were equal, or this debris melted out of the ice as supraglacial material or ablation till after stagnation of the ice mass during recession. This material was washed or flowed off the margin of the ice into pro-glacial lake Ojibway. Much of this debris was flushed from the glacier in glaciofluvial streams which formed eskers and esker deltas.

Ore minerals as discrete clasts or as constituents of rock fragments were dispersed and underwent communition during transport to be deposited as constituents of till called dispersal trains. The outline of these trains within a till sheet is generally a cone which expands vertically and laterally within a till sheet as distance from the parent source increases. Dispersal trains are narrow and of limited length but possess areal dimensions many times larger than the subcrop area of the parent deposit. As an exploration target, this large size of the dispersal train increases the probability of discovery of the orebody.

Depending upon local glacial history, till may have been subsequently subjected to additional transport by succeeding glacial advances or ice margin fluctuations or reworked and deposited as glaciofluvial sediments. Therefore, either

initial or resorted dispersal trains may occur at any stratigraphic position and to optimize drift exploration the entire overburden profile is sampled. Correct interpretation of the overburden stratigraphy, depositional environment and sequence of glacial events is essential in determining the significance of geochemical and heavy mineral anomalies and tracing these anomalies to source.

Technique

The dual tube reverse circulation rotary technique is designed to deliver unconsolidated material continuously while drilling through the overburden and this permits logging and interpretation of the overburden stratigraphy and uninterrupted geochemical sampling. Bedrock can also be drilled and rock chips collected, examined and analyzed.

Heavy mineral separates are prepared from bulk 5 to 7 kg overburden samples in order to concentrate weakly dispersed heavy minerals and amplify anomalies. Processing the sample in this manner effectively eliminates the "nugget effect" whereby a single or few significant ore grains are either lost in reject splits or report in retained splits to augment or "salt" the content of the analyzed reduced portion of normally processed geochemical sample. Concentration therefore retains all heavy ore minerals and is well suited to sampling immature, poorly sorted glaciofluvial sediments and tills having varied heavy mineral suites. Glaciolacustrine sediments other than beach facies are characterized by uniform suites of mainly non-opaque and non-ore heavy minerals and the source of any glaciolacustrine anomalies is virtually untraceable. Hence, glaciofluvial sediments and tills are customarily logged and sampled whereas glaciolacustrine sediments are only logged.

Equipment

The Heath & Sherwood drill employed on this programme was a unitized rig consisting of a fully hydraulic Aker Drill with 10 ft. feed and ancilliary equipment such as a "Bean" piston water pump and air compressor mounted on a GO Track GT 3000 tracked carrier. A smaller Go Track GT-1000 on which a 500 gallon tank is mounted, was used to supply water to the drill rig.

A mixture of water, under high pressure and a capacity of 20 gallons per minute, and compressed air up to 60 psi is delivered to the 3 inch tri-cone bit face through the annulus between the inner tube and the outer wall of the dual tube rods (2.75 inches diameter). A slurry of cuttings and material less than 1/2" diameter is returned to surface through the inner tube and collected from the cyclone where it is logged and sampled. Material is screened initially through a No. 12 Tyler (10 mesh - 1.7 mm) sieve and collected in 5 gallon pails. The -10 mesh sample, including fines collected in an additional overflow bucket, are sampled. The +10 m materials retained on the screens are logged and generally discarded unless base or precious metal mineralization is observed where upon the "oversize" is sampled separately and submitted for geochemical analysis.

GEOLOGY

BEDROCK GEOLOGY

Regional mapping by the Ontario Ministry of Natural Resources and Ontario Geological Survey is published in Pyke and others (1973) and Leahy (1971). Geology, previous exploration and gold mining potential of the Goldeidt property is available in detail in Routledge and Thompson (1982) filed with the Ontario Securities Commission.

The drill area is located in the northeast portion of the Goldeidt property and underlying bedrock is known only from reverse circulation drilling bedrock intersections and interpretation from regional aeromagnetic surveys and recently completed ground proton procession magnetometer surveys. Regional mapping indicates the area is underlain by calc-alkaline and tholeiitic volcanics.

Bedrock underlying the drill area is composed of equigranular, massive to foliated, light apple green to dark green, intermediate to mafic metavolcanic flows. Lithologic composition, on the basis of field identification, varies from andesite through andesite/basalt to altered (weathered) andesite or basalt and possibly to basaltic komatiite. From the evidence of "boulders" or slabs of identical composition drilled adjacent to bedrock and intersection of clay and sand-gravel filled seams, bedrock appears to be weathered, fractured and broken at surface.

Because of the deep overburden obscuring bedrock and the presence of a magnetically interpreted north-south fault on the west side of the drill area, the widths and structure of these volcanic flows cannot be resolved with any degree of

confidence. Maximum thickness of the individual flow units, determined from the hole spacings, may be in the order of 300 ft. and likely considerably less.

Thin, 3 to 5 mm clear, barren quartz veinlets, mostly composed of sugary euhedral grains, and to a lesser extent carbonate veinlets are present in much of the bedrock as thin joint/fracture or foliation fillings. Very little carbonate alteration of the volcanics has occurred. Limonitic surface weathering, possibly derived from the oxidization of minor pyrite, was observed in holes 4 and 9. No sulphide, gold indicator or gangue minerals were identified in rock chips obtained from drilling.

Gold geochemical analyses of bedrock ranging from 7 to 25 ppb indicate gold enrichment above normal background of about 6 and 9 ppb for mafic and ultramafic volcanic rocks; however, this is not anomalous in terms of economic mineralization and likely indicates the elevated level of metallogenically enriched regional gold background of the Porcupine camp. Silver, arsenic and base metals, copper, lead, nickel and zinc analyses are background. Drilling therefore apparently has not intersected the source of gold found in basal overburden.

Descriptions of bedrock chips and geochemical analyses of -10 mesh rock samples are listed in Appendices D and C respectively.

QUATERNARY GEOLOGY

Quaternary geology and stratigraphy of the north half of the property is well known on a reconnaissance scale. To date, 30 overburden reverse circulation holes have been collared at centers of 1,500 ft. (Chernis and Averill, 1982) and an

additional 10 holes were drilled in the current programme to further elucidate the stratigraphy in detail and follow-up gold anomalies encountered in holes TC-81-14 and TC-81-19.

Chernis and Averill (1982) on the basis of 30 wide spaced holes interpreted the glacial history. They postulate repeated Wisconsinan glaciations each of which eroded previous glacial materials and deposited till. Successive recessions were accompanied by the inundation of the glaciated area by lake Ojibway and deposition of glaciolacustrine sediments.

From bedrock to surface, Chernis and Averill subdivide the glacial stratigraphy into: a lower (lodgement) sandy till, lower deglacial sediments comprising grey silts and clays, a middle clayey till succeeded by an upper cobbly sandy till. This "stacked" till succession is overlain by upper deglacial sediments of esker sands and gravels and lake silts and clays. From the drill cross-sections, it is evident that complete sequence of stacked tills is preserved only on the flanks of the Fredrickhouse esker, which overlies the east-central portion of the property and the 1982 drill area. Drilling elsewhere in this region (Routledge et al, 1981) has shown that glaciofluvial esker stratigraphy beneath glaciolacustrine sand aprons flanking eskers can be complex in that rhythmic sequences of the fluvatile coarse to fine clastics and clays can resemble unsorted tills as returned in drill slurries and hence be seen as indicative of episodic glacial advances. The correct genetic interpretation is critical in predicting transport distances of dispersal trains in till or eskers and in following-up gold anomalies.

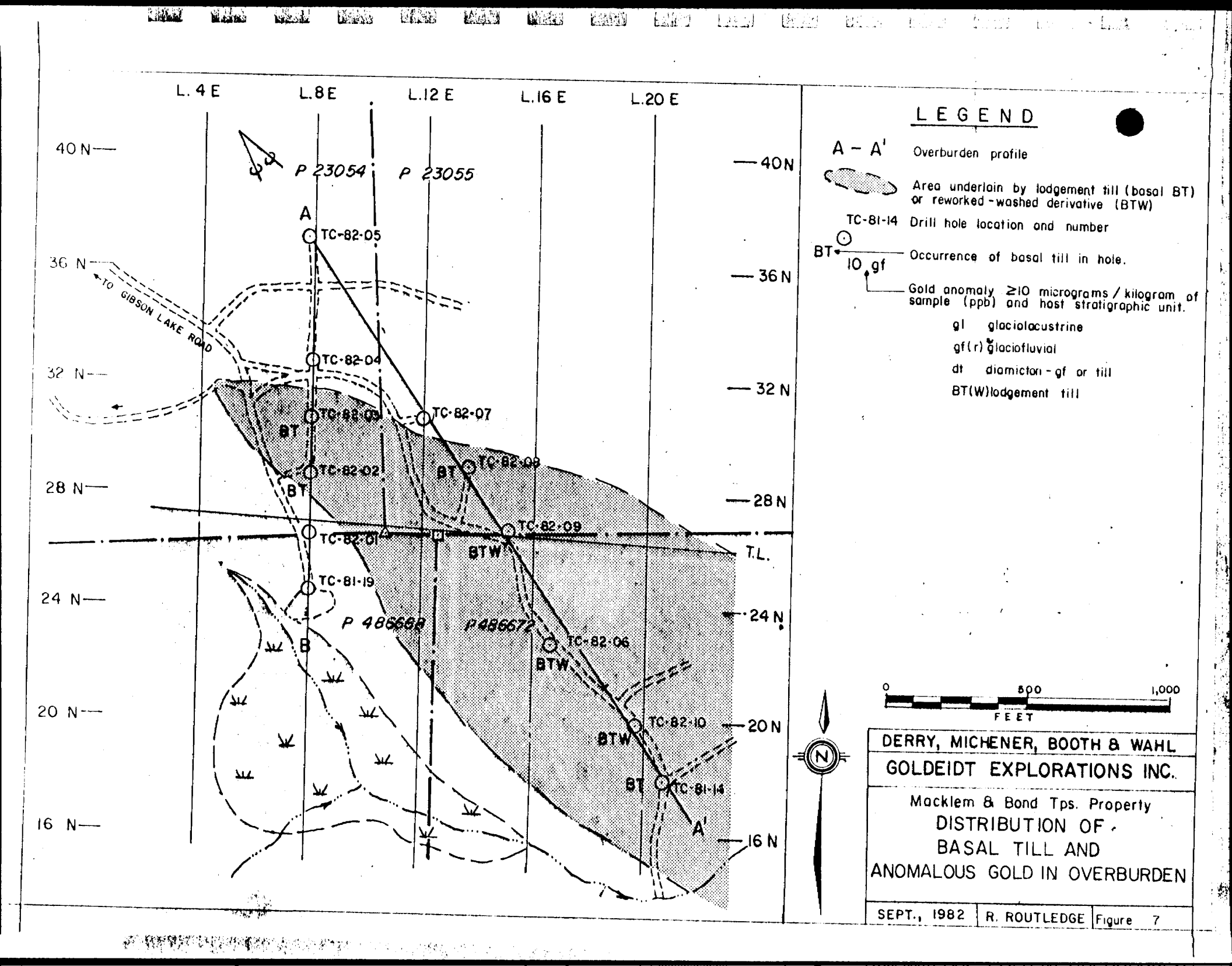
During the 1982 drill programme, particular care was exercised in logging the subtle variations and clay characteristics attributable to bedding in till-like

sediments to distinguish these from true tills. It now seems apparent that the interpretation of three existing till sheets should be revised. Detailed presentation of surface and bedrock topography and distribution of basal till is shown in Figures 5, 6 and 7 and re-interpretation of glacial stratigraphy from results of the 1982 programme is provided in overburden profiles in Figure 8.

Middle and upper tills have been re-interpreted to represent glaciofluvial gravel and sand (gf) and glaciofluvial rhythmic depositional sequences (gfr) related to esker sedimentation. These form small lenses and blankets extending in the subsurface away from the esker beneath the lacustrine sand apron. "Lower deglaciation" lacustrine silt and clays interfinger with these units and this likely occurred through the mechanism of seasonal flushes of sediments along the esker channel. (This revised interpretation agrees with regional interpretations of a single till sheet deposited in one episode of glacial advance. The later Cochrane advance documented north of the drill area is not recognized in drilling on the property). Gold or base metal anomalies within these middle stratigraphic units, specifically the 14 and 35 micro gm/kg anomalies in hole TC-81-14, are considered to be more remote from source than would be expected if these were interpreted to be upper and middle tills.

Glacial Stratigraphy

Glacial sediments of the drill area are considered to be Wisconsinan age (recession 6,000-8,000 B.P.) and are classified according to origin into major glacial units such as glaciolacustrine (gl), glaciofluvial (gf), and basal or lodgement till (BT).


L. 4 E
L. 8 E
L. 12 E
L. 16 E
L. 20 E
40 N
36 N
32 N
28 N
24 N
20 N
16 N
P 23054
P 23055
P 486668
P 486672
A
A'
B
TC-82-05
TC-82-04
TC-82-03
TC-82-07
TC-82-02
TC-82-08
TC-82-01
TC-82-09
TC-81-19
TC-82-06
TC-82-10
TC-81-14
BT
BTW
TO GIBSON LAKE ROAD
T.L.
LEGEND
A - A' Overburden profile
Area underlain by lodgement till (basal BT) or reworked - washed derivative (BTW)
TC-81-14 Drill hole location and number
BT Occurrence of basal till in hole.
10 gf Gold anomaly ≥10 micrograms / kilogram of sample (ppb) and host stratigraphic unit.
gl glaciolacustrine
gf(r) glaciofluvial
dt diamicton - gf or till
BT(W) lodgement till
0
500
1,000
FEET
N
DERRY, MICHENER, BOOTH & WAHL
GOLDEIDT EXPLORATIONS INC.
Macklem & Bond Tps. Property
DISTRIBUTION OF BASAL TILL AND ANOMALOUS GOLD IN OVERBURDEN
SEPT., 1982
R. ROUTLEDGE
Figure 7

Gray, lake bottom varved clays, oxidizing to yellow-brown at surface, and esker flanking apron sediments such as coarse to granular beach sand or lag gravel at surface, and very fine to fine sand at depth compose glaciolacustrine sediments (gl) which extend from surface to 100 ft. to 145 ft. Clay and silt at thicknesses of 12 ft. to 27 ft. underlie and interfinger with glaciofluvial materials in holes 1, 2, 3, 6 and 10.

Glaciofluvial esker material (gf) in general was deposited earlier than glaciolacustrine units and consists of well sorted coarse to medium sand, pebbly and granular sand, and cobbly to bouldery gravel composed largely of Archean metavolcanic, Temiskaming metasedimentary and lesser felsic intrusive rock types typical of the Porcupine camp. Thinly bedded rhythmic sequences of interbedded gravel, sand and silt or clay characteristic of esker delta sedimentation are further subdivided into unit (gfr). This occurs as a transition unit up to 14 ft. thick between glaciofluvial (gf) and glaciolacustrine (gl) sediments.

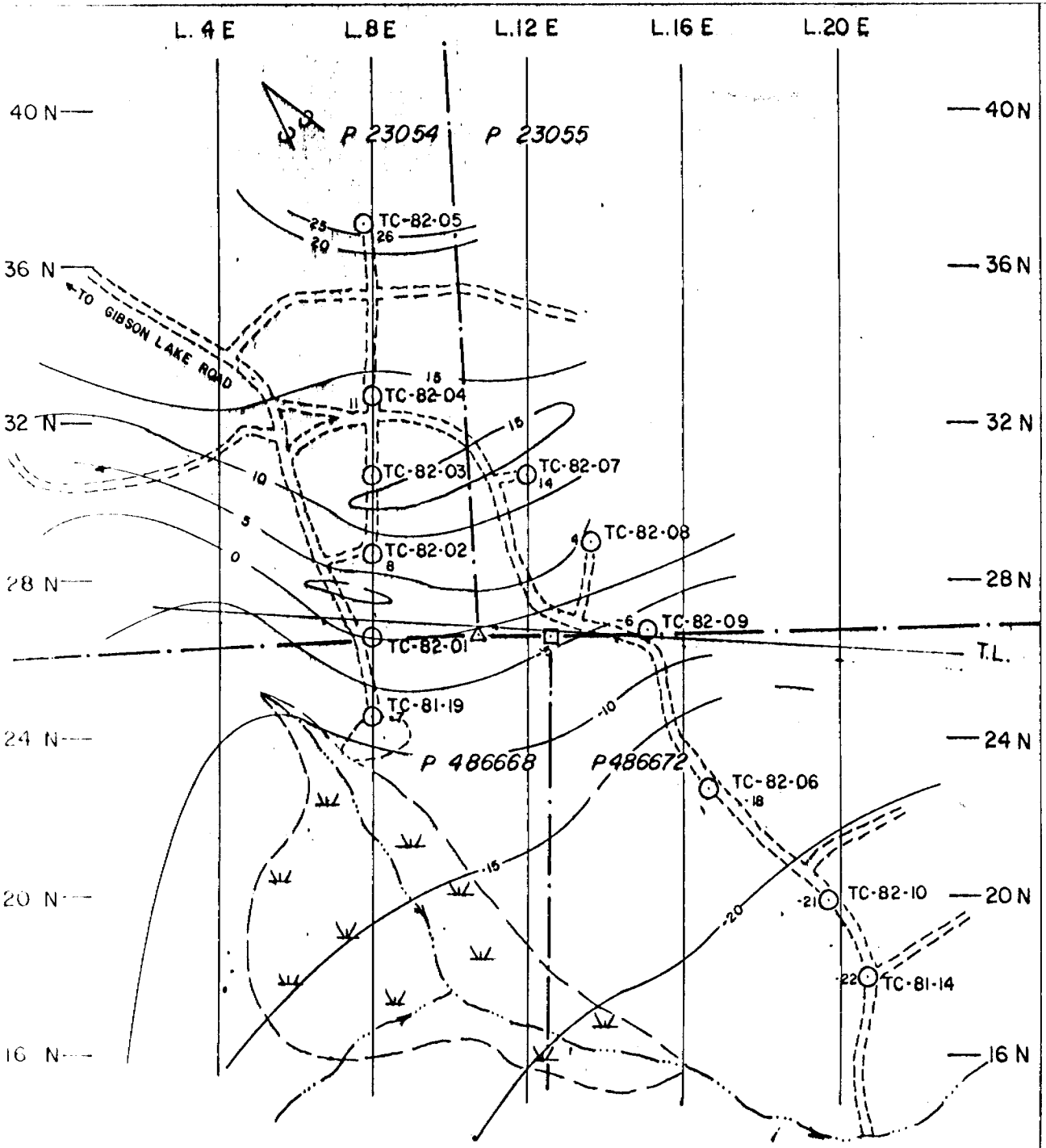
A green, pebbly to bouldery gravel unit, up to 14 ft. thick, termed "green diamicton" (dt) is so named because of abundant green clay rock flour produced from drilling altered mafic to ultramafic volcanic boulders and cobbles, likely derived from the ultramafic bedrock, lying to the north on Asarco property. The diamicton is distinguished from true till by properties such as bedding, rounding of clasts, good sorting of coarse to medium sand matrix and by correlation to glaciofluvial and glaciolacustrine units between holes which suggests that this unit is more likely related to esker sedimentation rather than the alternative interpretation of till deposition during a limited ice margin fluctuation in this area. This till-like unit could also have originated from flushes of supraglacial debris or melt-out material from the base of lifting or floating ice at the ice margin, i.e. turbidite.

From 3 ft. to 14 ft. of basal till was identified in holes 2, 3 and 8 and possibly occurs in washed or reworked form in holes 6, 9 and 10. Till is identified by poorly sorted fine to medium gray to green sand, green rock flour and grey clay-silt matrix and angular volcanic-sedimentary rock fragments in addition to rounded clasts of local bedrock debris-boulder content. Lack of bedding, mix of rock fragments and pebble shapes and nature of clay-silt component are main criteria for distinguishing the till from units of glaciofluvial, rhythmite and green diamicton material. Washed till (btw) lacks fines such as clay and silt and shows some sorting of sand matrix but rock fragment and pebble lithology and lack of bedding in addition to basal stratigraphic position suggests that fines have been washed and it is a reworked till. Basal tills appear to be present only in bedrock depressions at elevations below 130 ft. as illustrated in Figure 8. At higher elevations till may not have been deposited or alternatively, late-stage subglacial esker streams may have eroded to bedrock and removed till, or wave action from low lake levels may have washed till from bedrock at higher elevations. Distribution of till is shown in Figure 7.

GOLD ANOMALIES AND OVERBURDEN MINERALOGY

Gold Anomalies

Gold in overburden concentrates ranges from less than 5 to greater than 15,000 ppb and ten sample analyses in holes 2, 3, 8 and 9 exceeded the local anomaly threshold of 3,000 ppb (Routledge and Thompson, 1982).



LEGEND

Elevation contour
contour interval 5 ft.
0 datum at collar of hole TC-82-01

0 500 1,000
FEET

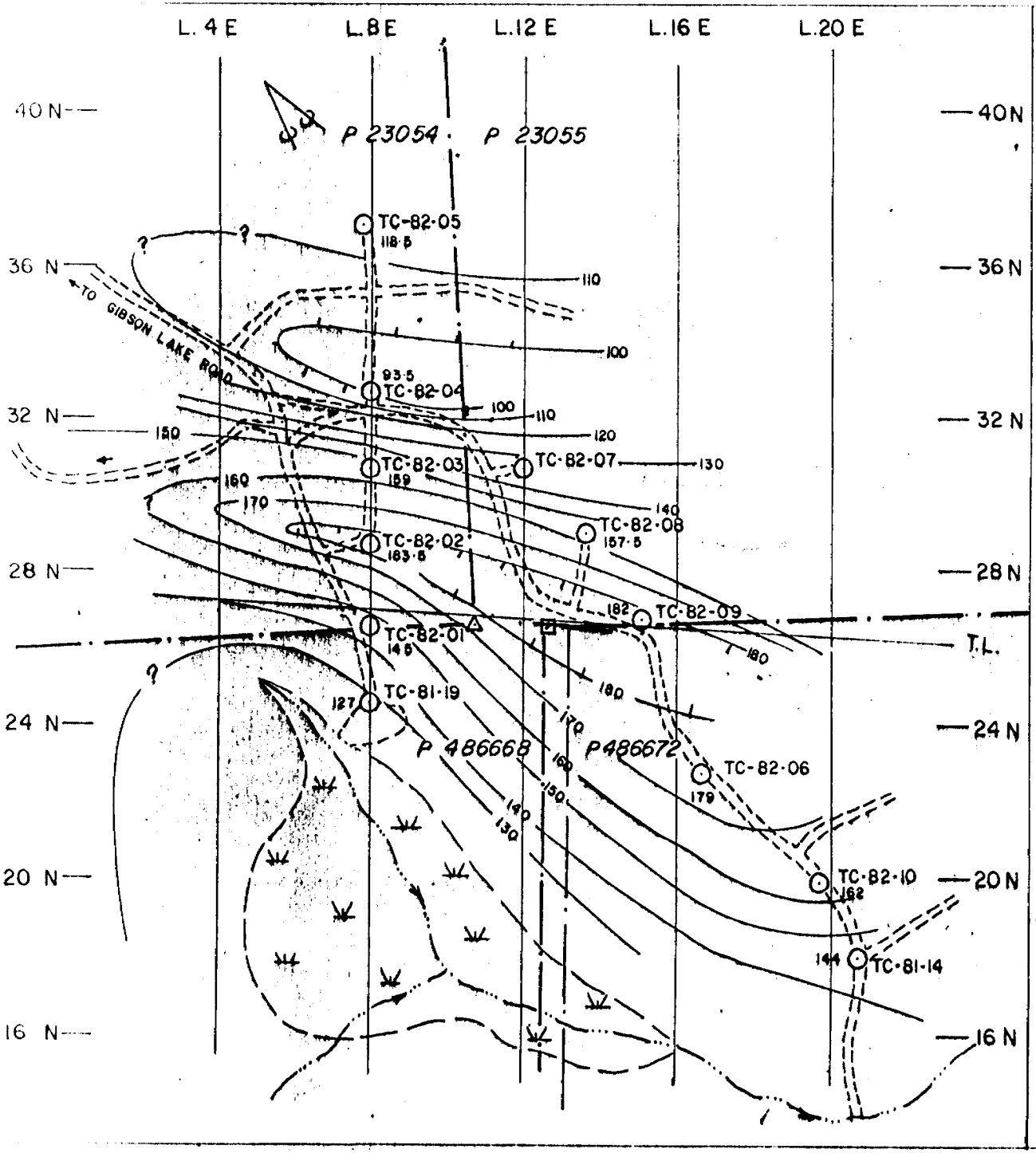
DERRY, MICHENER, BOOTH & WAHL

GOLDEIDT EXPLORATIONS INC.

Macklem & Bond Tps. Property

SURFACE TOPOGRAPHY OF DRILL AREA

SEPT., 1982 | R. ROUTLEDGE | Figure 5



LEGEND

140 — Bedrock depth contour
contour interval 10 ft.
datum elevation of 145' taken at hole TC-82-01

0 500 1,000
FEET

DERRY, MICHENER, BOOTH & WAHL

GOLDEIDT EXPLORATIONS INC.

Macklem & Bond Tps. Property

BEDROCK TOPOGRAPHY OF DRILL AREA

SEPT., 1982 | R. ROUTLEDGE | Figure 6

Concentrate mass in relation to initial sample mass has a bearing on the significance of an anomaly inasmuch as high values in a proportionately larger concentrate mass will be more reliable and significant than a smaller concentrate of similar tenor (Chernis and Averill, 1981). Anomalous samples were therefore weighted to relate values in the concentrate to the total sample size. Significant anomalies thus recognized are considered to be equal or greater than 10 micrograms per kilogram (ppb) and these values would compare to anomalous levels of gold found in soils sampled using normal procedures. Eight samples in holes 3, 8 and 9 range from 13 to greater than 47 microgram/kilogram.

Gold observed during tabling concentrates may be lost in subsequent concentrate splits and geochemical analysis splits, therefore, for samples with visible gold having concentrate tenors which are seemingly too low, an estimate of the gold content of the total sample in micrograms/kilogram (ppb) was made using calculated masses of the observed gold grains in proportion to the total sample mass. This kind of estimation is commonly practiced in placer gold grade estimation and is a valuable semiquantitative tool for gold exploration in overburden. By this method several low values have been upgraded to anomalous levels reported in micrograms/kg and termed "gold indications".

Anomalous gold and visible gold occurrences in samples are summarized in Table 2 and correlated to glacial stratigraphy in Figure 8.

Holes 2, 8 and 9 carry strong gold anomalies with gold indications in holes 3 and 7. In hole 2, the value exceeding 45 micrograms/kilogram occurs in glaciofluvial rhythmites some 27 ft. above bedrock. Gold indications are also found in the diamicton unit of hole 3, 25 ft. above bedrock. However, basal till found in both

Table 2

GOLDEIDT EXPLORATIONS INCORPORATED

Macklem and Bond Townships Property

1982 Overburden Drilling Programme

Summary of Gold Anomalies in Overburden

Hole and Sample No.	Concentrate Analysis (ppb)	Micrograms Au/ kg Total Sample (ppb)	Visible Au Grains	Grain Size and †Character (microns)		Pertinent Concentrate Characteristics	Overburden Unit
TC-82-02-07	>15,000	>45	2	200 x 400 100 x 50	a	5%-10% angular pyrite as cubes	gfr**
TC-82-03-03	3,400	4.9	0	-			dt
TC-82-07-01	135/7,100*	0.74/39*	1	400 x 250	a	3% pyrite	gf
TC-82-07-02	1,266/4,600*	4.7/17	2	250 x 100 300 x 150	d	-	gfr
TC-82-08-04	>15,000	>47	3	350 x 400 650 x 650 300 x 200	a a d	abundant magnetite, 3% pyrite, trace pyrrhotite	gfr
TC-82-08-05	3,170	3.5	1	200 x 150	a	pyrite <1%	BT
TC-82-08-06	>15,000	>17	0	-		abundant pyroxene, pyrite <1%	BT
TC-82-09-01	1,890/4,700*	5.1/13*	1	200 x 250	a	abundant magnetite	gf
TC-82-09-02	145/2,800*	0.49/9.6*	1	350 x 150	a	coarse pyrite <1%	dt
TC-82-09-04	4,055	13	0	-		1%-2% pyrite, diabase lithic fragments	gfr
TC-82-09-05	1,890	4.4	1	150 x 200	a	oxidized, 1%-2% pyrite, abundant magnetite	dt
TC-82-09-06	>15,000	>25	4	800 x 200 250 x 150 250 x 250 200 x 150	d a a a	3%-5% pyrite, quartz-pyrite clasts, 1 quartz-pyrite-gold - ¼ mm clast, abundant pyroxene	dt
TC-82-09-07	3,475	14	2	300 x 250	a	-	gfr
TC-82-09-08	8,185	26	2	500 x 250 450 x 300	d a	lithic fragments, <1% pyrite, abundant magnetite	BT
TC-82-09-10	14,400	39	4	250 x 150 400 x 300 100 x 100 300 x 150	a a a a	coarse pyrite <1%, lithic and pyroxene clasts	BT and Bedrock

* - recalculated using estimated mass of visible gold grain(s) under premise that grain(s) did not report in analyzed 3/4 concentrate split.
** - see Figure 8 for legend.
† - a = abraided; d = delicate, non-transported.

these holes is not anomalous indicating that the source of this gold may be placer in origin or weakly dispersed secondary train a considerable distance from its up-ice source. Alternatively it may be representative of the west flank of an anomaly cone rising from the gold dispersion in the lower sections of holes 8 and 9 some 500 ft. to the east.

In summary, anomalous values at the base of hole TC-81-19 (14 and 35 mg/kg) down-ice from holes 2 and 3 are found in what is considered to be glaciofluvial rhythmites correlating to stratigraphy occurring 40 ft. above bedrock in holes 1 to 3 and hence this anomaly may be either placer or a train far removed from bedrock source.

By contrast, almost the entire coarse clastic section of hole 9 exhibits visible gold, weak indications of gold or strong gold anomalies with the strongest value of 39 micrograms/kilogram found in a washed basal till unit adjacent to bedrock. Upper coarse stratigraphic units are glaciofluvials, glaciofluvial rhythmites and diamicton members extending some 45 ft. above bedrock. Continuous gold values are greater than 17 to greater than 47 micrograms/kilogram and visible gold extends in basal till (BT) and lower glaciofluvial rhythmite to 11 ft. above bedrock in hole 8. Visible gold is also found in the glaciofluvial section of hole 7 and correlates to the similar units in hole 8. Although these three holes are 1,000 to 1,500 ft. north of 1981 hole TC-81-14, in which the basal till gold value is 64.9 micrograms/kilogram, this anomaly in hole 14 may correlate to those in basal till of holes 7 to 9. The lack of gold anomalies in till in intervening holes 6 and 10 suggests the dispersal train may be spotty and weakening towards the rising bedrock surface. Gold values would be expected in upper glaciofluvial sections in these holes; however, these units are absent at the base of holes 6 and 10.

The source of the gold anomalies in holes 7 to 9 is likely directly up-ice to the NNW. The abraided nature of the gold seen during tabling suggests that gold occurs freely rather than having been transported bound in larger rock fragments and liberated during drilling. Anomalies in basal till are considered indicative of generally short transport, and gold in the free state in (glacio) fluvial gravels and sands does not move great distances and is not far removed from its original source in till released from the glacier. Elsewhere in esker terrains, studies have shown that gold transport distances are likely to have been about a mile or less (Lee, 1968). These criteria suggest there is a relatively short distance between the bedrock gold source and holes 7 to 9.

Overburden Mineralogy

Sixteen , split, non-magnetic samples of concentrates were examined from holes 2, 3, 7, 8 and 9 in which gold geochemical anomalies were disclosed or visible gold was observed during table concentration. Concentrate mineralogy is a suite typical of the Abitibi greenstone belt and consists primarily of varying amounts of the physically resistant minerals; pyroxene, garnet, epidote, zircon and minor amounts of pyrite/sulphides, hematite, ilmenite and lithic or rock fragments. Lower glaciofluvial rhythmites and basal till in hole 9 and basal till in hole 8 are enriched in pyroxene and/or lithic diabase fragments indicating local derivation from the diabase dyke immediately north of the north property boundary, a transport distance of some 3,300 ft. from these anomalous holes.

The low amounts of pyrite and other sulphides in addition to the trace of gold observed in a pyrite-quartz fragment diamicton (dt) sample TC-82-09-06, which

was taken relatively high in the stratigraphy of hole 9, indicates the source may be in part free gold in quartz veins with only minor amounts of pyrite and possibly other sulphide mineralization.

CONCLUSIONS AND RECOMMENDATIONS

The significant gold anomalies in holes 8 and 9 appear to be related to the bedrock source within a mile up-ice. Since gold in the concentrates is accompanied by an abundance of pyroxene and rock fragments correlatable to the diabase dyke north of the property boundary, the gold source may be related to quartz vein mineralization in tension fractures or in a shear zone in volcanics along the margin of the diabase dyke. However, free gold generally does not transport nearly as far as rock fragments in glaciofluvial environments and this suggests the source may be somewhat nearer to the anomalies and may indeed lie south of the property boundary. Unfortunately, glaciofluvial units and basal till are absent north of hole 7 and further overburden drilling to test this hypothesis directly up-ice of the anomalies would not be effective. Additional overburden holes drilled east of holes 7 to 9 in a northerly direction could be considered to test and sample for basal till and to possibly intersect a lateral extension of the dispersal train to the east. This would involve considerably higher risk for the expenditure than the previous set of holes. A more realistic alternative would be diamond core drilling a number of holes to test for gold in the bedrock formations north-northwest of holes 7 and 8.

Approximately 1,500 ft. of diamond drilling, at a budgeted cost of $50,000, is therefore recommended to test for bedrock gold mineralization north of the anomalous overburden drill holes.

Respectfully submitted,

DERRY, MICHENER, BOOTH & WAHL

R.E. Routledge

R.E. Routledge, B.Sc., M.Sc. (applied) F.G.A.C.

November 5, 1982
Toronto, Ontario

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APPENDIX B

LABORATORY SAMPLE LOGS

B.A.C. LTD.

List of abbreviations used on lab data sheets.

Tr	Trace
Cobs	Cobbles
Pebs	Pebbles
GCls	Gritty clay balls
SCls	Smooth clay balls
V/S	Volcanic and/or sedimentary rocks
Gr	Granitic rocks
Lime	Limestone
A	Abraded gold grain
D	Delicate gold grain
T	Transported gold grain
Qz	Quartz

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg, wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
TC-82-01-01	7.4	0.1	7.3	175.6	156.3	12.8	6.5	0	Pebs tr Lime 85% v/s 15% Gr	Unsorted grey-beige with grey clay	TILL
02	3.2	0.2	3.0	61.5	50.0	8.8	2.7	0	Cobs 95% v/s tr Lime	"	TILL
03	5.6	0.3	5.3	59.7	49.8	8.1	1.8	0	Pebs 90% v/s 1% Lime	"	TILL
04	6.2	0.3	5.9	62.2	49.1	10.5	2.6	0	Pebs 85% v/s 3% Lime	"	TILL
05	5.4	<0.1	5.4	48.8	32.6	12.7	3.5	0	Pebs tr Lime 80% v/s 20% Gr	Sorted fine → medium grey with clay	SAND
06	6.0	0.5	5.5	82.4	68.0	10.7	3.7	0	Cobs 85% v/s 3% Lime	Unsorted grey with clay	TILL
02-06	7.1	2.3	4.8	63.2	48.1	13.6	1.5	0	Cuttings 99% v/s tr Lime	Unsorted dark green chips with clay	MAINLY BOULDER
07	7.9	0.2	7.7	157.5	122.1	23.2	12.2	200×400 μ 100×50 μ Abundant	Cobs 95% v/s tr Lime	Unsorted grey green with clay	TILL
08	5.7	0.6	5.1	56.8	56.4	0.4	Few Grains	0	Cuttings 99% v/s	Unsorted chips dark green with clay	BEDROCK
09	3.4	0.2	3.2	101.3	98.6	1.8	0.9	0	"	"	BEDROCK
10	8.9	0.7	8.2	213.5	197.6	10.2	5.7	0	"	Unsorted chips - green with grey sand and green clay	BEDROCK
11	15.8	0.7	15.1	344.4	291.2	35.4	17.8	0	"	Unsorted grey green with green clay + chips	BEDROCK WITH MINOR OVERBURDEN (TILL)
12	7.8	0.1	7.7	199.6	161.2	25.3	13.1	0	"	Unsorted grey green with chips and clay	BEDROCK WITH MINOR OVERBURDEN (TILL?)
13	7.9	<0.1	7.9	219.2	187.5	20.9	10.8	0	"	"	BEDROCK WITH MINOR OVERBURDEN (TILL?)
03-01	6.4	0.4	6.0	165.4	147.1	13.1	5.2	0	Cobs 85% v/s 1% Lime	Unsorted grey with grey clay	TILL
02	6.7	0.4	6.3	119.8	100.1	15.2	4.5	0	Cobs 95% v/s tr Lime	"	TILL
03	7.5	0.4	7.1	207.7	194.4	10.2	3.1	0	"	"	TILL
04	8.0	0.5	7.5	229.5	199.5	20.0	10.0	0	"	Unsorted grey	TILL
05	5.9	0.1	5.8	176.7	161.4	9.4	5.9	0	Cuttings 99% v/s tr Lime	Unsorted - dark green chips with clay	BEDROCK

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg, wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
TC-82-01-01	2.9	0.2	2.7	73.0	57.7	12.2	3.1	0	Cobs 70% v/s 30% Gr tr Lime	Unsorted beige-grey with clay	TILL
05-01	8.0	Few Pebs	8.0	178.9	123.7	45.7	9.5	0	v/s and Quartz pebs	Sorted - fine, medium beige	SAND
-01	8.2	0.3	7.9	222.5	185.0	27.0	10.5	0	Pebs 55% v/s 40% Gr 5% Lime	Unsorted grey-beige with green grey clay	TILL
02	10.7	0.8	9.9	179.9	140.1	36.5	3.3	0	"	Unsorted grey beige with clay	TILL
03	9.2	Few Pebs	9.2	177.3	140.0	29.0	8.3	0	Pebs 99% v/s	Sorted - fine-medium grey-beige	SAND
07-01	5.4	Few Granules	5.4	92.0	54.2	29.4	8.4	400x250μ Abraded	v/s and Gr granules	Unsorted grey-beige with silt	TILL
02	5.4	0.2	5.2	70.2	45.6	19.4	5.2	250x100μ D 300x150μ D	Pebs 85% v/s 5% Lime	"	TILL
08-01	6.5	0.1	6.4	91.7	51.1	29.6	11.0	0	Granules 55% v/s 40% Gr <5% Lime	"	TILL
02	4.2	0.5	3.7	94.0	83.4	8.3	2.3	0	Pebs 80% v/s <5% Lime	"	TILL
03	4.1	<0.1	4.1	113.1	97.3	10.5	5.3	0	Granules 95% v/s 2-3% Lime	Sorted - fine - grey beige with rock chips and green clay	SAND with cobble
04	6.9	0.4	6.5	174.9	143.7	20.5	10.7	350x400 A 650x650 A 300x200 D	Pebs 90% v/s 5% Lime	Sorted - coarse with rock chips and green clay	SAND with cobble
05	9.5	0.1	9.4	40.3	25.6	10.3	4.4	200x150 A	Granules + rock chips 95% v/s Tr Lime	"	SAND with cobble
06	3.9	0.3	3.6	49.6	43.6	4.1	1.9	0	Cuttings 99% v/s Tr Lime	Rock cuttings with green clay	BEDROCK
09-01	4.7	<0.1	4.7	72.9	48.7	12.6	11.6	200x250 A	Granules	Sorted medium - fine with Gr rock chips	SAND with cobble
02	6.8	0.7	6.1	69.8	39.9	20.8	9.1	350x150 A	Pebs 70% v/s 25% Gr 5% Lime	Unsorted grey beige with silt	TILL
03	5.0	0.1	4.9	92.9	69.5	16.7	6.7	0	Pebs 60% v/s 35% Gr 5% Lime	"	TILL
04	6.9	<0.1	6.9	132.0	100.2	21.5	10.3	0	Pebs and v/s cuttings 70% v/s 30% Gr tr Lime	"	TILL
05	6.8	0.8	6.0	37.6	17.7	11.0	8.9	150x200 A	Cobs 85% v/s 5% Lime	Sorted - coarse grey-beige with rock chips	SAND
06	7.3	1.2	6.1	43.7	27.1	10.0	6.6	800x700 D 250x150 A 250x250 A 300x250 A	Pebs 90% v/s 5% Lime	Unsorted grey-beige with silt	TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED

LABORATORY SAMPLE LOG

Sample Number	Weight (kg. wet)			Weight (grams dry)				Grains	Description		Classification
	Table Split	+10 Rock Chips	-10 Table Feed	Table Conc	M.I. Lights	Non-mag	Mag	V.G.	+10	Matrix	
TC-82-09-07	8.0	<0.1	8.0		91.9	32.2	18.4	300X150 A 200X150 A	Granules 95% V/S 2-3% Lime	Unsorted grey-beige with silt	TILL
08	7.7	<0.1	7.7		106.4	24.9	15.9	500X250 D 450X300 A	Granules 15% Gr 60% V/S 25% Lime	"	TILL
09	2.7	0.2	2.5		65.2	4.8	2.9	0	Pebs 90% V/S Tr Lime	Rock cuttings green	BOULDER
10	3.8	0.3	3.5		47.2	9.5	5.7	250X150 A 900X300 A 450X150 A 300X150 A	Cuttings + Pebs 99% V/S Tr Lime	Unsorted - grey beige with silt plus green rock cuttings	TILL + BEDROCK
TC-82-10-01	7.1	<0.1			137.1	16.4	5.4	0	Granules 50% V/S 35% Gr 15% Lime	Sorted fine-medium grey-beige	SAND
02	7.4	Few Grains			81.2	19.8	6.4	0	Granules V/S	"	SAND
03	7.3	0.2			57.3	27.5	9.8	0	Cuttings - 99% V/S 1% Lime + Gr pebs	Sorted grey beige Fine-medium with V/S rock chips	SAND with cobble
04	7.7	0.5			100.0	13.3	5.2	0	Cuttings 65% V/S 35% Qz	"	SAND with cobble

APPENDIX C

GEOCHEMICAL ANALYSES

BEDROCK AND OVERBURDEN CONCENTRATES

• CHEMICAL RESEARCH AND ANALYSIS
• CONTRACT LABORATORIES

TECHNICAL SERVICE LABORATORIES
DIVISION OF BURGENER TECHNICAL ENTERPRISES LIMITED
1301 FEWSTER DRIVE, MISSISSAUGA, ONT. L4W 1A2
TELEPHONE (416) 625-1544
TELEX 06-960215

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM: Derry Michener Booth and Wahl
Suite 2302,
401 Bay St.,
Toronto, Ont. M5H 2Y4
Attention: R.E. Routledge

SAMPLE(S) OF: PULVERISED ROCK

REPORT No. T 11179

Inv.#20422

Samples	F.A./A.A. Gold (Au) ppb	Silver (Ag) ppm	Arsenic (As) ppm	Copper (Cu) ppm	Lead (Pb) ppm	Nickel (Ni) ppm	Zinc (Zn) pp
TC-82-01-07	10	0.6	<1	58	12	58	46
TC-82-02-14	24	0.8	<1	81	12	50	61
TC-82-03-06	25	0.6	<1	59	11	56	52
TC-82-04-02	10	1.1	<1	62	12	51	53
TC-82-05-02	17	1.0	<1	65	10	66	34
TC-82-06-04	12	0.4	<1	29	9	33	27
TC-82-07-03	16	0.7	<1	91	11	40	49
TC-82-08-07	7	0.9	<1	56	13	50	40
TC-82-09-11	19	0.9	<1	54	12	58	42
TC-82-10-05	7	0.5	1	39	20	30	58

Samples, Pulps and Rejects discarded after two months

DATE September 17, 1982 SIGNED Karl E Burgener

CTA

• CHEMICAL RESEARCH AND ANALYSIS
• CONTRACT LABORATORIES

TECHNICAL SERVICE LABORATORIES
DIVISION OF BURGENER TECHNICAL ENTERPRISES LIMITED
1301 FEWSTER DRIVE, MISSISSAUGA, ONT. L4W 1A2
TELEPHONE (416) 625-1544
TELEX 06-960215

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM: Derry Michener Booth and Wahl
Suite 2302,
401 Bay St.,
Toronto, Ont. M5H 2Y4
Attention: R.E. Routledge

REPORT No. T 11179

Inv.#20422

SAMPLE(S) OF: PULVERISED ROCK

Samples	F.A./A.A. Gold (Au) ppb	Silver (Ag) ppm	Arsenic (As) ppm	Copper (Cu) ppm	Lead (Pb) ppm	Nickel (Ni) ppm	Zinc (Zn) pp
TC-82-01-07	10	0.6	<1	58	12	58	46
TC-82-02-14	24	0.8	<1	81	12	50	61
TC-82-03-06	25	0.6	<1	59	11	56	52
TC-82-04-02	10	1.1	<1	62	12	51	53
TC-82-05-02	17	1.0	<1	65	10	66	34
TC-82-06-04	12	0.4	<1	29	9	33	27
TC-82-07-03	16	0.7	<1	91	11	40	49
TC-82-08-07	7	0.9	<1	56	13	50	40
TC-82-09-11	19	0.9	<1	54	12	58	42
TC-82-10-05	7	0.5	1	39	20	30	58

Samples, Pulps and Rejects discarded after two months

DATE September 17, 1982

CTA

Bondar-Clegg & Company Ltd.
764 Belfast Road
Ottawa, Ontario
Canada K1G 0Z5
Phone (613) 237-31[illegible]
Telex 053-4455

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 11Z-1620

FROM: GOLDEIDT EXPLORATIONS INC. SUBMITTED BY: AVERILL

DATE: 24-SEP-82 PROJECT:

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
Au	5 PPB	AQUA REGIA	Fire Assay AA	-200	HEAVY MINERAL CONC.	PULVERIZE -200

REPORT COPIES TO: J. EIDT, MID. DOM. LTD.
RICK RUTLEDGE

INVOICE TO: J. EIDT, MID. DOM. LTD.

REMARKS: > MEANS GREATER THAN
< MEANS LESS THAN

DETECTION LIMITS FOR GOLD
10 gram sample: 5 ppb.
5 gram sample: 10 ppb.
1 gram sample: 50 ppb.

Sample wt. 10 g. Unless Otherwise Stated.

NOTE:
Check concentration/sample weight ratio
for effective detection level.

Bondar-Clegg & Company Ltd
760 Pembroke Street
Ottawa, Ontario
Canada K1G 4S3
Phone: (613) 237-3110
Telex: 053-4455

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 112-1620 PROJECT:

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Wt/Au GM	micrograms Au /kg of SAMPLE (ppb total sample)	NOTES
TC82-04-01-3/4H		145	9.20	0.66	
TC82-05-01-3/4H		<5		<0.03	
TC82-06-01-3/4H		900		3.1	
TC82-06-02-3/4H		1135		4.2	
TC82-06-03-3/4H		250		0.79	
TC82-07-01-3/4H		135		0.74	
TC82-07-02-3/4H		1265		4.7	
TC82-08-01-3/4H		1045		4.8	
TC82-08-02-3/4H		325	5.70	0.73	
TC82-08-03-3/4H		240	7.50	0.87	
TC82-08-04-3/4H		> 15000		>47	
TC82-08-05-3/4H		3170	7.55	3.5	
TC82-08-06-3/4H		> 15000	2.85	17	
TC82-09-01-3/4H		1890	9.00	5.1	
TC82-09-02-3/4H		145		0.49	
TC82-09-03-3/4H		160		0.54	
TC82-09-04-3/4H		4055		13	
TC82-09-05-3/4H		2410	8.15	4.4	
TC82-09-06-3/4H		> 15000	7.10	>25	
TC82-09-07-3/4H		3475		14	
TC82-09-08-3/4H		6185		26	
TC82-09-09-3/4H		915	3.45	1.8	
TC82-09-10-3/4H		14400	6.55	39	
TC82-10-01-3/4H		25		0.06	
TC82-10-02-3/4H		70		0.19	
TC82-10-03-3/4H		170		0.66	
TC82-10-04-3/4H		360	9.60	0.66	

Bondar-Clegg & Co. Ltd.
764 Belfast Road
Ottawa, Ontario
Canada K1G 0Z5
Phone (613) 237-3110
Telex: 053-4455

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 112-1607

FROM: GOLDEIDT EXPLORATIONS INC. SUBMITTED BY: AVERILL
DATE: 23-SEP-82 PROJECT:

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Au	5 PPB	AQUA REGIA	Fire Assay AA	-200	HEAVY MINERAL CONC.	PULVERIZE -200

REPORT COPIES TO: J. EIDT, MID. DOH. LTD.
RICK RUTLEDGE

INVOICE TO: J. EIDT, MID. DOH. LTD.

REMARKS: < MEANS LESS THAN
> MEANS GREATER THAN

DETECTION LIMITS FOR GOLD
10 gram sample: 5 ppb.
5 gram sample: 10 ppb.
1 gram sample: 50 ppb.

Sample Wt. 10 g. unless otherwise stated.

NOTE:
Check concentration/sample weight ratio
for effective detection level.

Bondar-Clegg & Company Ltd
760 Beaumont Road
Ottawa, Ontario
Canada K1G 0Z5
Phone: (613) 237-3110
Telex: 053-4455

BONDAR-CLEGG

Geochemical Lab Report

REPORT: 110-1607 PROJECT:

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	wt/Au GM	MICROGRAMS Au /kg OF SAMPLE (ppb total sample)	NOTES
TC-82-01-013/4H		570	9.30	1.0	
TC-82-01-023/4H		130	6.40	0.38	
TC-82-01-033/4H		75	5.65	0.11	
TC-82-01-043/4H		10	7.60	0.02	
TC-82-01-053/4H		220	9.96	0.52	
TC-82-01-063/4H		25	8.00	0.05	
TC-82-02-063/4H		1450	2.72	4.1	
TC-82-02-073/4H		> 15000		>45	
TC-82-02-083/4H		<200	0.25	<0.02	
TC-82-02-093/4H		550	1.25	0.31	
TC-82-02-103/4H		60	7.37	0.07	
TC-82-02-113/4H		255		0.60	
TC-82-02-123/4H		60		0.20	
TC-82-02-133/4H		250		0.66	
TC-82-03-013/4H		995	9.55	2.2	
TC-82-03-023/4H		295		0.69	
TC-82-03-033/4H		3400	7.15	4.9	
TC-82-03-043/4H		1060		2.8	
TC-82-03-053/4H		1030	6.60	1.7	

APPENDIX D

BINOCULAR DESCRIPTION OF BEDROCK CHIP SAMPLES

APPENDIX D

BINOCULAR DESCRIPTION OF BEDROCK CHIP SAMPLES

TC-82-01-07 - Dark greenish-grey, chloritic, very fine-grained equigranular mafic metavolcanic of basalt composition. Slight carbonate alteration of weakly foliated matrix. Thin veinlets of clear quartz and coarsely crystalline calcite 3 to 5 mm thick.

TC-82-02-14 - Medium greenish-grey, aphanitic equigranular intermediate to mafic metavolcanic. Weakly foliated.

TC-82-03-06 - Weakly foliated, dark greenish-grey, very fine-grained equigranular mafic metavolcanic of basalt composition. Thin veinlets of euhedrally crystallized clear, barren quartz.

TC-82-04-02 - Light to medium apple greenish-grey aphanitic intermediate metavolcanic. Less than 1%, 0.25 mm chloritic amphibole porphyroblasts developed in an equigranular matrix. Thin feldspar banding in several chips noted, possibly tuffaceous. Weathered surface shows minor iron staining. Veined by thin 3 to 5 mm clear, barren quartz.

TC-82-05-02 - Medium greenish-grey aphanitic to very fine-grained intermediate to mafic metavolcanic. Thin, clear quartz veinlets probably parallel to weak foliation occur as layering with streaky banding of chips near surface; possibly tuffaceous. Minor, local silicification and carbonate alteration of matrix.

TC-82-06-04 - Dark greenish-grey very fine-grained equigranular mafic metavolcanic of basaltic or basaltic komatiite composition. Abundant 4 to 5 mm thick barren, clear quartz veinlets.

TC-82-07-03 - Light apple greenish-grey aphanitic, equigranular to porphyritic, intermediate to mafic metavolcanic. Calcite developed on foliation planes. Few chlorite schist chips indicates shearing and clay developed during drilling indicates possible alteration. Composition may be altered ultramafic metavolcanic.

BINOCULAR DESCRIPTION OF BEDROCK CHIP SAMPLES

(Continued)

TC-82-08-07 - Dark greenish-grey, very fine-grained, equigranular mafic metavolcanic of basalt to basaltic komatiite (ultramafic) composition.

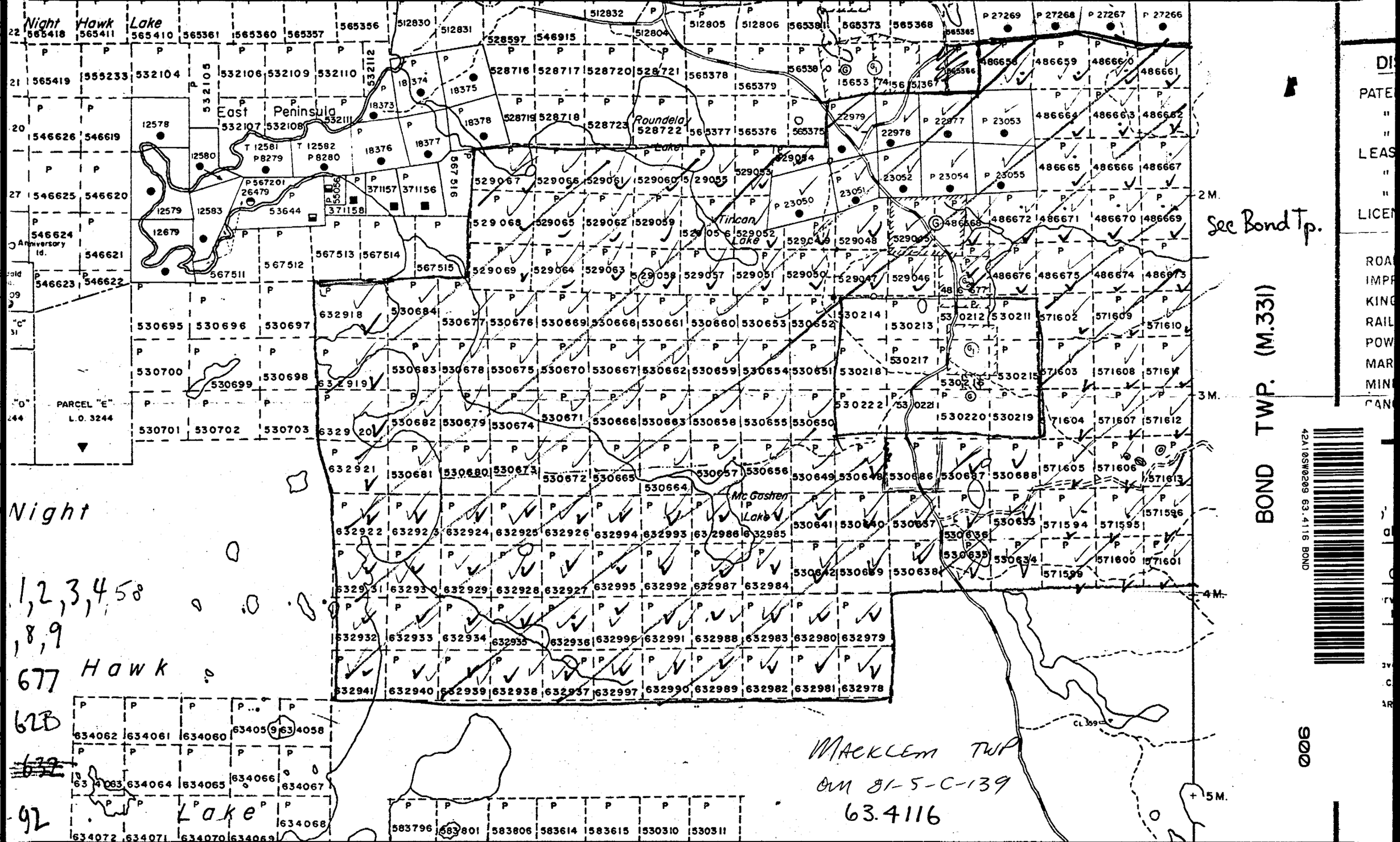
TC-82-09-11 - Medium greenish-grey, well foliated, chloritic intermediate to mafic metavolcanic. Felty equiangular matrix with less than 5% amphibole (actinolite) porphyroblasts retrograde-altered to chlorite.

TC-82-10-05 - Light greenish-grey, aphanitic, intermediate metavolcanic. Amphibole (actinolite or hornblende) occurs as porphyroblasts less than ½ mm, discontinuous streaks and banding developed parallel to weak foliation. Andesite composition.

OM81-5-C-139

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

In 2.5459 One report of E.M & MAG SURVEYS.
Report of Work # P486658 #140


Night Hawk Lake
East Peninsula
Roundelay Lake
Tincan Lake
Mc Goshen Lake
Night
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,8,9
677 Hawk
62B
92 Lake
PARCEL "E" L.O. 3244
Anniversary Id.
Sec Bond Tp.
BOND TWP. (M.331)
MACKLEM TWP
OM 81-5-C-139
63.4116
42A105W0209 63.4116 BOND
2M.
3M.
4M.
5M.

BOND TOW

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

PORCUPINE MININ

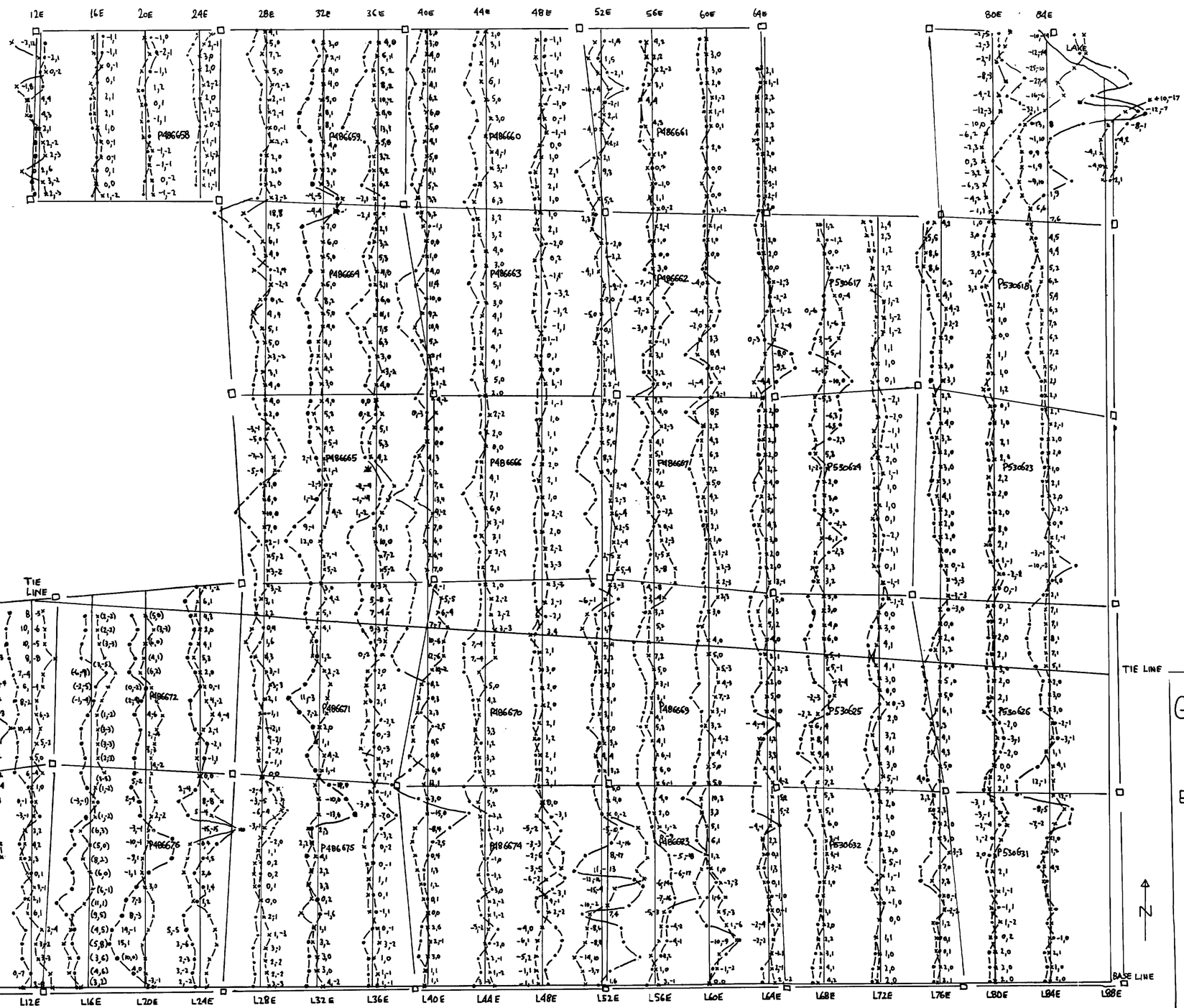
DISTRICT OF COC

SCALE 40 CHAINS TO

STOCK TWP

MACKLEM TWP.

63.4116
OM 81-5-C-139



GOLDEIDT EXPLORATION INC.

TINCAN PROJECT

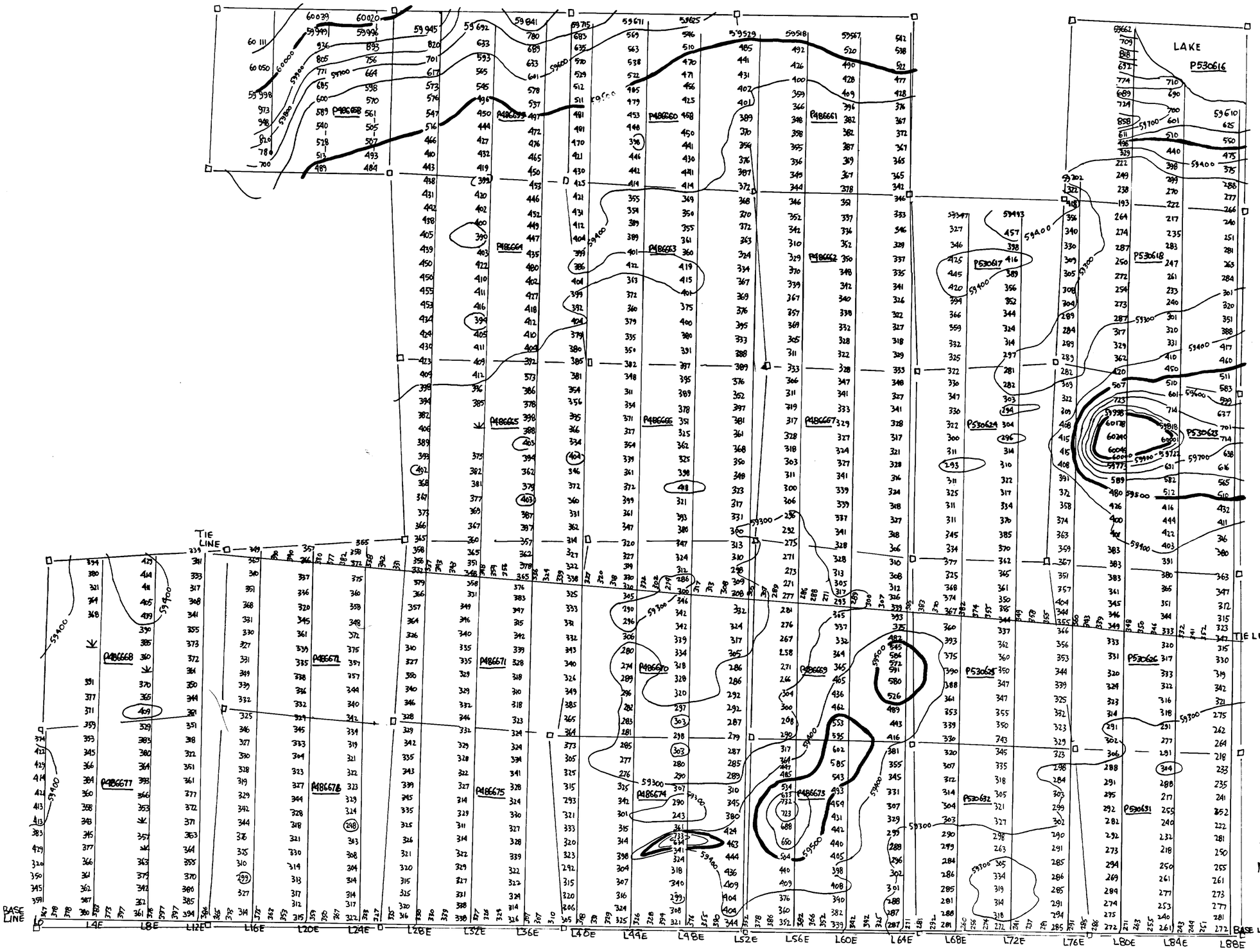
MACKLEN & BOND TPS.

ELECTROMAGNETIC SURVEY

INSTRUMENT: GEONICS EM-16
STATION : CUTLER, MAINE

SURVEYED BY : R. SIBTHORPE 3,10-82
DRAWN BY : R. SIBTHORPE 12-82
SCALE (VERT) : 1 INCH = °
SCALE (HORIZ) : 1 INCH = 400 FEET
PROFILE : IN-PHASE
QUADRATURE

R. Sibthorpe B.Sc.



GOLDEIDT EXPLORATION INC.

TINCAN PROJECT

MACKLEM & BOND TPS.

I MAGNETOMETER SURVEY

INSTRUMENT: GEONICS G-816
CONTOUR : 100 GAMMA
RANGE : 61000 GAMMAS
SURVEYED BY: J. EIDT 7-82
R. DOLEGOWSKI
DRAWN BY : R. SIBTHORPE 9-82
SCALE : 1 INCH = 400 FEET

R Sibthorpe B.Sc.