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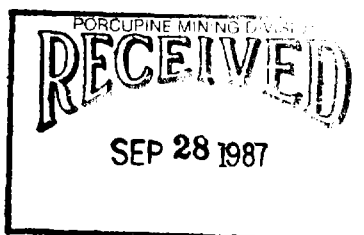
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REPORT ON THE 1986
DETOUR LAKE
WORK PROGRAM
FOR
GETTY RESOURCES LTD.

NTS 32E/13
DISTRICT OF COCHRANE

by

Dino Titaro
Senior Geologist



Report #528
February 6, 1987

Toronto, Ontario



32E13NE0029 63.4663 LOWER DETOUR LAKE

010C

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SUMMARY AND CONCLUSIONS

The Detour Lake project is located in northeastern Ontario, District of Cochrane, approximately 20 km. southeast of the Dome/Amoco Detour Lake gold deposit and 42 km. northwest of recent gold discoveries of the Casa Berardi gold camp, Quebec. The property is operated by and 100% owned by Getty Resources Limited, with the claims subject to a 10% net profits interest held by Canorex Minerals Limited.

The 1986 gold oriented exploration program consisted primarily of drill testing ground EM anomalies hosted in felsic metavolcanic rocks. Some of the anomalies have been previously drill tested (1983 and 1984) and have returned geochemically anomalous gold values up to 3500 ppb Au/0.5 m. The objective of the 1986 program was to further evaluate the anomalies in light of the recent Casa Berardi discoveries which host gold mineralization within a geological environment similar to that of the Detour Lake property.

A total of 5 core holes for 839.4 metres were completed during 1986. All of the holes successfully tested the ground EM conductors and geological setting, returning primarily geochemically anomalous (+30 ppb) gold values. One core hole returned a significant isolated gold value of 5,310 ppb Au (0.155 oz/ton) over a core length of 0.5 metres, hosted within an amphibolitic unit well uphole from a conductive zone. No other samples were taken on either side of this intercept as the original sample was taken as part of a routine sampling procedure.

The 1986 drill program has successfully tested the felsic geological environment located on the Detour Lake property, and based on the overall results no further work is recommended at this time.

RECOMMENDATIONS

Based on the lack of ore grade gold intersections within the targeted geological environment no further work is recommended for 1987. It is recommended that competitor activity in the area be monitored, and that a possible farm-out of the property be discussed with companies familiar with and presently conducting work in the Casa Berardi gold camp.

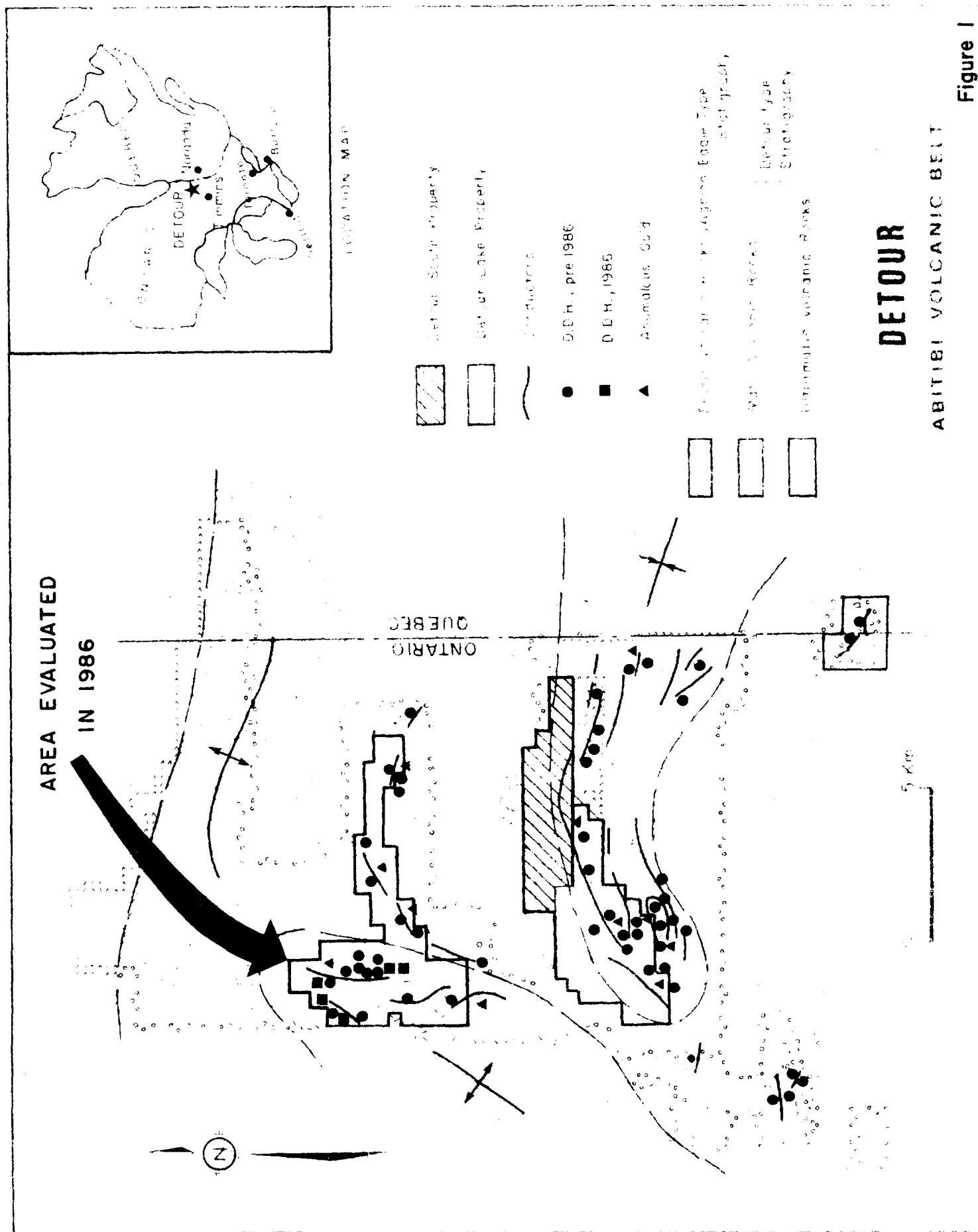
1.0 INTRODUCTION

The Detour Lake property consists of 201 claims located in northeastern Ontario, approximately 20 kilometres southeast of the Dome/Amoco Detour Lake gold deposit (32 mm tons at 0.19 oz. Au/ton) and 42 km. northwest of the recent gold discoveries of the Casa Berardi area, Quebec (Figure 1). The property is 100% owned by Getty Resources Limited (formerly Getty Canadian Metals Ltd.), with the claims subject to a 10% net profits interest held by Canorex Minerals Limited.

During the late 1960's and early 1970's previous non-Getty drilling on the property conducted during massive sulphide exploration programs confirmed the presence of favourable volcanic/sedimentary stratigraphy and indicated zones of anomalous gold content. Intensive airborne and ground geophysical, geochemical and geological programmes were conducted by Getty Canadian Metals Ltd. over the entire project area from 1981 to 1984 (no work carried out during 1985). The 30 most promising target areas were tested by the completion of 50 diamond drill holes (8,335 metres). Although no ore-grade intercepts were encountered, coincident gold, boron and arsenic anomalies associated with stratabound sulphides were detected within 2 distinct geologically favourable environments;

- a) cherty sulphitic tuffs hosted by ultramafic to mafic volcanic flows, having the potential for Detour-type gold mineralization.
- b) graphitic felsic volcanic tuffs with potential for Casa Berardi/Agnico-Eagle type gold mineralization.

Details on the exploration history of the property, geological setting and exploration results have been given by Brereton (1982), Siriunas (1982) and Sutherland (1984).



2.0 LOCATION AND ACCESS

The Detour Lake property is located approximately 144 km. northeast of the town of Cochrane, District of Cochrane, in northeastern Ontario (NTS 32 E/13) and 20 km. southeast of the Detour Lake mine site. Access to the property's camp site at Atkinson Lake can only be obtained by fixed or rotary wing machines either from Cochrane, Detour Lake Mine site or Lac Gagnon, Quebec. The Detour Lake Mine site can be reached by an all-weather road from Cochrane, and the Lac Gagnon site by gravel road from LaSarre, Quebec.

3.0 1986 EXPLORATION PROGRAM

3.1 INTRODUCTION

Based on the recent discoveries in the Casa Berardi area (Teck/Golden Hope/Golden Group's Estrades property with present reserves of 2.7 mm tons of 0.13 oz. Au/ton, 3.13 oz. Ag/ton, 7.39% Zn and 0.08% Cu), located 42 km. to the southeast of the property, in which ore grade gold mineralization is associated with graphitic tuffs hosted in felsic metavolcanic rocks, an environment analogous to the detour Lake property, further exploration work was deemed to be warranted. Ground geophysical anomalies hosted within felsic metavolcanic rocks, similar to the Casa Berardi geological environment, occur on the property west of Vandette Lake (Figure 2).

The geophysical anomalies (H.L.E.M.) appear to outline an antiform structure that plunges to the north. Portions of this structure were drill tested during 1983 with a widely spaced drill program. Core hole DL-83-51 (Figure 2) intersected gold values of 3500 ppb Au/0.5 m. and 2400 ppb Au/0.5 m. at the upper and lower contacts of a magnetite-bearing chert hosted in a sequence of felsic metavolcanic rocks. Anomalous gold values of 550 ppb Au/0.5 m. and 2000 ppb Au/0.5 m. were also encountered in similar geological environments in holes DL-83-46 and DL-83-29, respectively (Figure 2).

Because of the anomalous gold values hosted in a geological environment similar to the Casa Berardi area a 1986 exploration program consisting primarily of additional drill testing of the ground H.L.E.M. anomalies was carried out. A small 6 line km. program of grid establishment and H.L.E.M. survey was also carried out to tie in an area of ground located between two H.L.E.M. anomalies (Figure 2).

A.C.A. Howe International Ltd. was commissioned to carry out the 1986 exploration program for Getty Resources Limited. The field program commenced on Nov. 24, 1986 and was completed on December 12, 1986.

3.2 1986 FIELD PROGRAM

A) Grid Establishment and Ground Geophysics

During the latter part of November 1986, Exsics Exploration Limited established a grid and carried out a Max Min II H.L.E.M. survey west of Vandette Lake. A 6 km. grid was established to cover the previously unsurveyed area between grids 12 and 10 (Figure 2). The north-south baseline of grid 12 was extended from L8+00S to L14+00S. Crosslines were turned off of this baseline at 100 metre intervals and cut to 1000 m. W at an azimuth of 270 .

The ground survey consisted of a 6 line km. MaxMin II H.L.E.M. survey using a 150 metre coil separation and recording frequencies at 1777 and 444 hz. Details of the geophysical survey and results are outlined under separate cover by Exsics Exploration Limited found in Appendix A. The survey data was reviewed and interpreted by Mr. G. Burton, who is an independent geophysical consultant. A synthesis of Mr. Burton's interpretation of the survey data is shown in Figure 2.

The survey was successful in delineating two distinct conductive zones. A relatively short (600 m.) and wide (30-40 m.) conductor was outlined between lines 8+50S and 13+50S. This conductor is strong and appears to be between 30 and 40 metres below surface and dipping to the east at approximately 45°. Immediately west of this conductor is a second conductor, 300 m. long centred between lines 11+50S and 14+50S, displaying the same geophysical characteristics as the eastern conductor.

B) Diamond Drill Program

During the 1986 drill program 5 core holes, designated DL-86-52 to 56, were completed for 839.4 metres. The location of the completed core holes is shown in Figure 2, 3 and 4. Illustrative cross-sections for each of the holes are shown in Figures 5 to 9,

inclusive. The core logs for all of the completed holes are found in Appendix B.

Table I summarizes the 1986 drill program. A brief description of the 1986 drill results on a per hole basis is outlined below.

DL-86-52

Purpose/Target Description

DDH DL-86-52 was drilled to test the down-dip continuity of anomalous gold mineralization (3500 ppb Au/0.5 m.) encountered in core from hole DL-84-51. Collared at 5+00N/9+00W (Grid C-12), DL-86-52 was positioned 50 m. grid W of DL-84-51.

Drill Hole

Drilled to a length of 176.78 m., DL-86-52 intersected two conductive zones from 28.93 to 29.45 m. and 103.6 to 105.18 m. The former is weakly conductive and comprised of 10-20% po and 3-5% py. The latter conductive zone was confined to a highly altered, locally graphitic, argillaceous metasediment and consisted of 25-60% po, and approximately 10% py whose habits suggest significant solution brecciation and stratiform banding. Immediately below, this zone lies a non-magnetic, locally graphitic recrystallized chert locally containing 15-20% po within solution bands, subparallel to the attitude of the chert unit.

The lithology above the second conductive zone is composed essentially of garnetiferous, argillaceous (epiclastic?) metasediments intercalated with minor felsic tuffaceous horizons. Below the conductor/chert unit the hole was dominated by interbedded felsic tuffs and felsic lapilli tuffs.

TABLE I
1986 DETOUR LAKE DRILL PROGRAM

HOLE NO.	GRID	CO-ORDS	DIP	Az	LENGTH	PURPOSE/ TARGET DESCRIPTION	REMARKS
DL-86-52 Nov. 24-27/86	C-12	5+00N 9+00W	-50°	090°	176.78 m.	- test conductors C-12B & C-12D, approx. 250 m north of hole DL-83-51 which intersected 3500 ppb Au/0.5 m.	- intersected sulphide-rich (20-30% po>>py) graphitic metased 103.6-105.18 m; banded sulphide-rich (<10-20% po), non-magnetic chert 105.18-108.18 m. Interpreted as conductor C-12D. In conjunction with DL-84-51 (50 m.E @ 090): chert horizon dips @ -45°W.
DL-86-53 Nov. 27-29/86	C-12	7+60N 7+50W	-50°	135°	172.82 m.	-test the down-dip continuity of the stratigraphy and anomalous Au values intersected in hole DL-83-51	-intersected sulphide-rich (20-35% po>>py) graphitic schist 79.58-81.27 m; banded, magnetitic chert 126.1-137.17 m; 125.18-127.61 m (above and below upper contact) sulphide-rich (25-40% pa, py) solution infilling and veining, ± graphite. Interpreted as intersecting both C-12B (upper) and C-12D(lower) conductors.
DL-86-54 Nov. 30- Dec. 3/86	C-12	8+50N 5+40W	-50°	180°	195.07 m.	-test the nose area of an interpreted anticlinal structure plunging to the north, located approx. 400m NE of hole DL-83-51	-intersected weak to moderate conductive interval from 92.66-93.57 m, <10-15% po>>py within graphitic meta-argillite. Apparently intersected portion of conductor C-12B. Chert horizon was not intersected, suggesting pinch-out.
DL-86-55 Dec. 4-5/86	C-12	7+00S 1+50W	-50°	270°	99.66 m.	-test the southerly strike continuation of conductor C-13, approx. 300 m. south of DL-83-46 which intersected 550 ppb Au/0.5 m within a magnetite bearing chert.	-intersected banded magnetitic chert horizon 32.4-46.97, local argillaceous lenses carry 5-20% po>py; weak conductive zone from 53.53-56.29 m within graphitic meta-argillite, minor po.py. Suggests a thinning of easterly dipping chert horizon towards antiform and presence of a diffuse, C-13 conductor.

HOLE NO.	GRID	CO-ORDS	DIP	AZ	LENGTH	PURPOSE/ TARGET DESCRIPTION	REMARKS
DL-86-56 Dec. 6-9/86	C-12 (1986 Exten- sion)	12+00S 0+80W	-45°	270°	195.07 m.	-test a relatively short (600 m) and wide (30-40 m) H.L.E.M. conductor de- lineated during the 1986 geophysical program.	-intersected sulphide-rich (20-60% po>>py) ribbed, non-magnetitic chert from 68.68- 77.72 m. - intersected granitoid intrusive 105.39-167.09 m, minor disseminated po, py. Conductive zone within 45-50°E dipping chert horizon, width of surface conductor pos- sibly related to surface, lateral extension of chert.

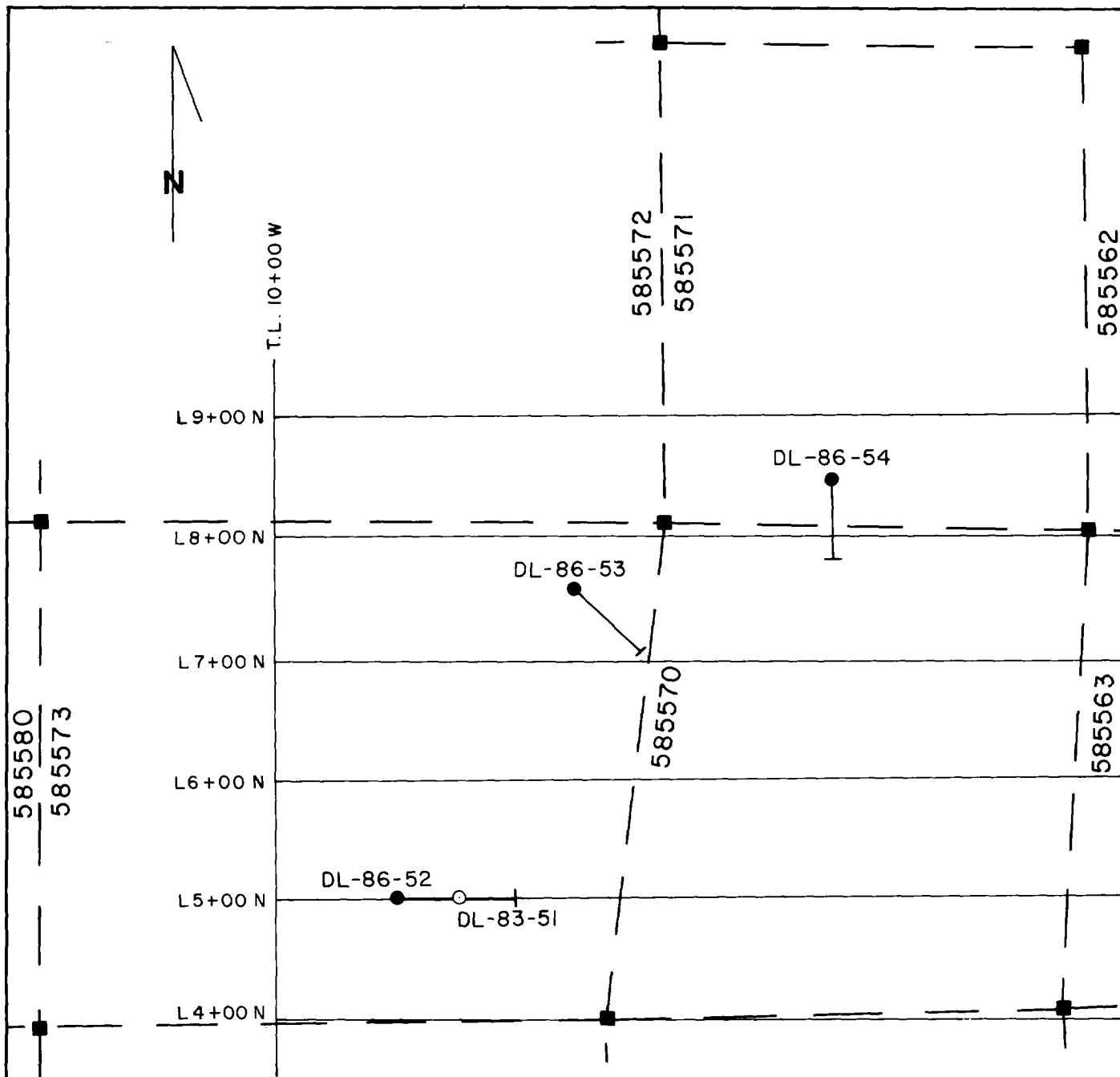


Figure 3

SYMBOLS

- 1986 Core Holes
- Pre-1986 Core Holes
- Claim Post & Line

Scale
0 100 200m

GETTY RESOURCES LIMITED DETOUR LAKE PROJECT

VANETTE LAKE 1986 DDH LOCATIONS

Drawn by:	Date:	Draw'n No.:
Check'd by:	N.T.S.:	Scale: 1:5000

A.C.A. HOWE INTERNATIONAL LTD.

Results

The initial interpretation of the mineralized stratigraphy (conductor/chert) suggested that this zone was near vertical to steeply dipping to the west. With the completion of core hole DL-86-52 it appears as if the stratigraphy is dipping to the west at approximately 45° and that the conductive zone is related to the surface conductor C-12D. The only significant analytical result from this hole is a geochemically anomalous gold value of 195 ppb Au/0.85 m. within the conductive zone from 103.99 to 104.85 m.

DL-86-53

Purpose/Target Description

DL-86-53 was drilled to test the possible 250 m. continuation of the mineralized interval outlined in DL-83-51, as well as testing for the presence of conductive zones C-12B and C-12D.

Drill Hole

Collared at 7+60N/7+50W, DL-86-53 was drilled to a length of 172.82 m. Two conductive zones were intersected, as well as a 9.5 m. section of recrystallized, magnetic, banded chert.

The upper conductive zone, occurring from 79.58 to 81.27 m, consisted of a graphitic argillaceous schist containing 20-35% po, minor py, and tr. galena (?). The sulphide mineralization is conformable to the schistosity and infers two periods of fluid solution injection.

A lower conductive zone was intersected from 125.18 to 127.61 m., conforming to an altered, locally graphitic section transitional to the felsic tuff/recrystallized chert contact. This mineralized zone consists of major fluid infilling, carrying from 25-30% py and

35-40% po. Within the upper 1.5 m. of the recrystallized chert, (126.1-127.61 m.), sulphide-rich zones (10-25% po) occur within conformable lenses and locally fluid brecciated areas.

A banded, magnetitic recrystallized chert horizon extends from 126.1 to 137.17 m. This section is locally graphitic and contains some 2-5% disseminated po and py.

The lithology above the upper conductive zone is dominated by garnetiferous argillaceous (epiclastic?) metasedimentary units. Between the conductive zones is a quartz porphyry overlying a siliceous felsic tuff. Below the chert horizon a mixed assemblage of felsic tuffs and felsic Lapilli tuffs was encountered.

Results

The lower conductive zone is interpreted to lie on-strike and down plunge of the conductive zone encountered in DL-86-52. The chert horizon in DL-86-53 also corresponds to the on-strike and up-plunge equivalent of the auriferous chert horizon in hole DL-83-51.

No significant analytical results were obtained in either of the conductive zones. A geochemically anomalous gold value of 285 ppb Au/0.8 m. was encountered from 90.2 to 91.0 m. at the contact of a quartz porphyry and felsic tuff.

DL-86-54

Purpose/Target Description

Based on the results of DDHs' DL-86-52 and -53, DL-86-54 was drilled to delineate the nose of a plunging anticlinal fold as interpreted through the 'pinching-out' of conductors C-12 B, C, D (Figure 2).

Results of previous drill hole information inferred the presence of a northerly trending antiform feature. Information obtained during the 1986 drill program suggested an increase in depth between the base of the garnetiferous metasediment and the conductive zone / chert horizon towards the nose of the fold, indicating a structural deepening and possibly explaining the 'pinching out' surface expression of the above EM conductors.

Drill Hole

Collared at co-ordinates 8+50N/5+40W DL-86-54 was drilled to a length of 195.07 m. A weak conductive zone was encountered from 92.66 to 93.57 m., comprised of a graphitic meta-argillite lying within a monotonous section of felsic tuffs and garnetiferous argillaceous metasedimentary rocks. The sulphide mineralization in this zone is comprised of 10-15% po and py that is spatially related to chloritic lenses subparallel to the argillaceous schistosity within zones of fluid solution brecciation.

Lithologically, DL-86-54 contained rock units similar to the previous holes, but instead of a large scale transition from argillaceous metasediments to felsic tuffs the overall sequence was much more intercalated.

Results

It is interpreted that the conductive zone encountered in this hole corresponds to the upper conductive zones found in core holes DL-86-52 and 53, (C-12B) and that the lower conductive zones from those holes pinch out prior to hole DL-86-54.

Only one significant gold assay was encountered in this hole within an amphibolitic unit well up hole from the conductive zone which returned 0.155 oz. Au/ton/0.5 m. from 37.9 to 38.4 m.

DL-86-55

Purpose/Target Description

DL-86-55 was drilled to test the southerly extension of conductor C-13, which had previously marked the location of anomalous Au values within holes DL-84-29, and 46 (2000 ppb Au/0.5 m. and 550 ppb Au/0.5 m, respectfully, hosted within a chert horizon) located on the eastern flanks of the northerly striking antiform. DL-86-55 was drilled to test for a general thickening trend of the host chert horizon towards the south.

Drill Hole

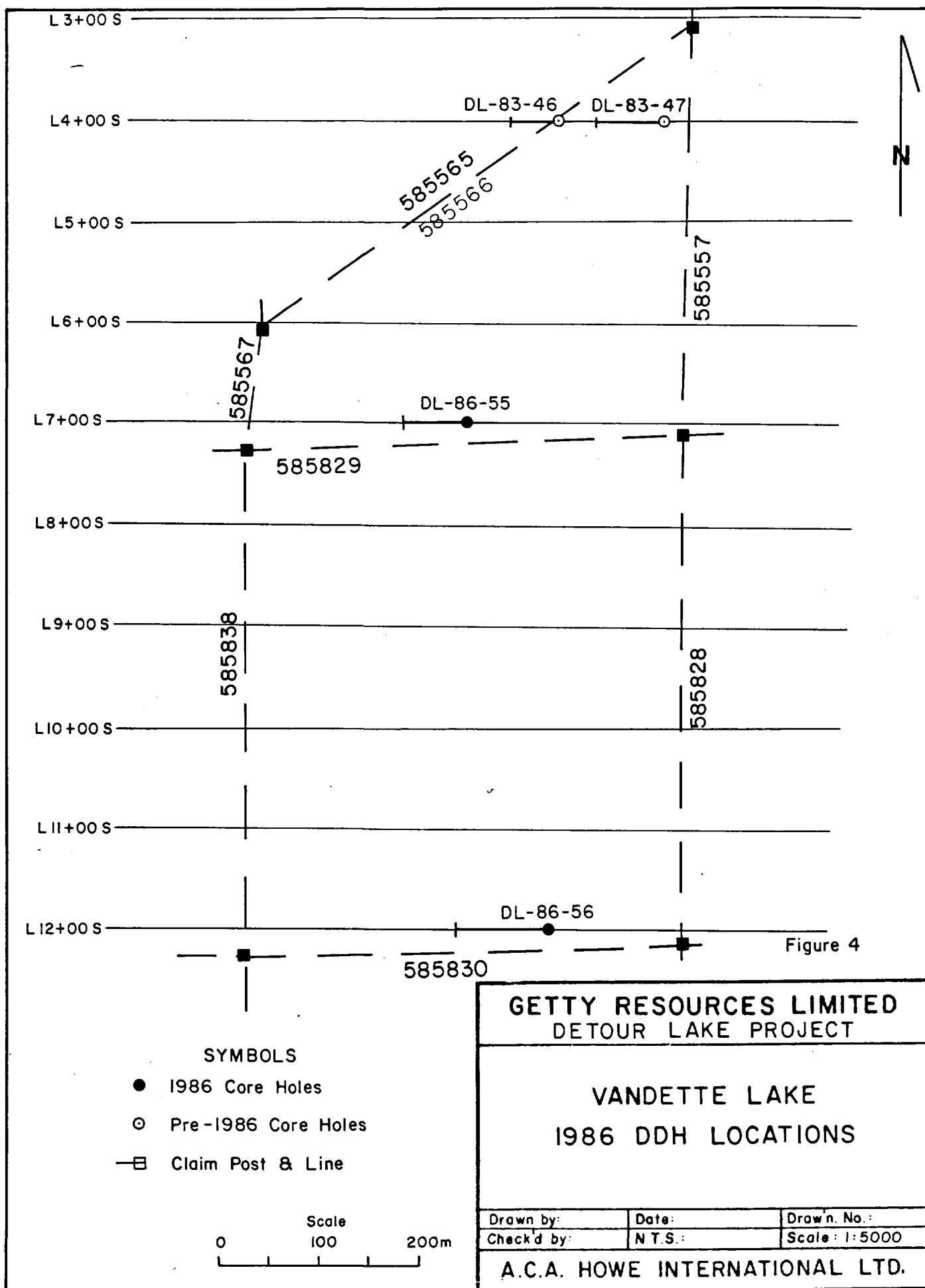
Located at co-ordinates 7+00S/1+50W, DL-86-55 was drilled to a length of 99.66 m.

Some 14.5 m. of banded magnetitic recrystallized chert was intersected from 32.4 to 46.97 m. The chert section contained numerous, conformable argillaceous lenses from 1 to 15 cm. wide which locally contained 5-20% po and py. A weakly conductive zone was delineated at 53.53 to 56.29 m. and consisted of a locally graphitic, magnetic, meta-argillite comprised of 2-3% po and py.

Except for those zones described above the core from DL-86-55 was dominated by intercalated felsic tuffs and felsic Lapilli tuffs, along with thin zones of quartz porphyrys.

Results

It is interpreted that the conductive zone encountered in core corresponds to surface conductor C-13 and dips approximately 30° to the east.



A geochemically anomalous gold value of 145 ppb/1.0 m. was encountered from 44.5 to 45.5 m. adjacent to the lower contact of the chert horizon.

DL-86-56

Purpose/Target Description

As a result of 1986 MaxMin II H.L.E.M. survey over the southern extension of grid C-12 a significant conductive zone was outlined, centred between lines 8+50S and 13+50S. Core hole DL-86-56 was positioned to test this anomaly on the eastern flank of the antiform (Figure 2).

Drill Hole

DL-86-56 was collared at 12+00S/0+80W and drilled to a length of 195.07 m.

Significant sulphide mineralization was encountered between 68.68 and 77.72 m. comprised of 20-60% po and py. Hosted within a highly altered, non-magnetic chert. The sulphide mineralization appears to be generally stratiform and conformable, with mineralizing fluids producing abundant infilling and brecciation.

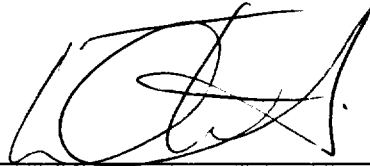
A granitoid intrusive of granodioritic to quartz-dioritic composition was intersected from 105.39 to 167.09 m. containing local quartz veining (7% po,py) and 2-3% disseminated sulphides.

Above the conductive zone, DL-86-56 consisted largely of felsic tuffs. Below the conductive zone and the granitoid intrusive the hole was dominated by garnetiferous meta-argillites.

Results

It is interpreted that the conductive zone encountered in core corresponds to the surface H.L.E.M. anomaly, and dips approximately 30°E and thinning at depth. A geochemically anomalous gold value of 780 ppb/1.0 m. was encountered within the conductive zone from 75.7 to 76.7 m.

Respectfully submitted,
A.C.A. HOWE INTERNATIONAL LTD.

A handwritten signature in black ink, appearing to read 'Dino Titaro', written over a horizontal line.

Dino Titaro, Senior Geologist

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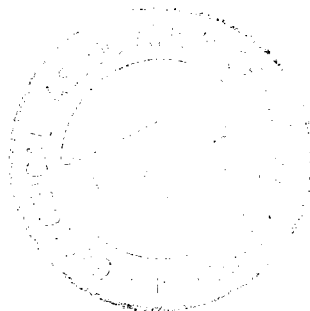
CERTIFICATE

I, Dino Titaro, of 228 Wales Crescent, Oakville, Ontario, hereby certify that:

1. I am and have been employed since 1986 as a geologist by A.C.A. Howe International Ltd., Mining and Geological Consultants with offices at Suite 400, 199 Bay Street, Toronto, Ontario, M5J 1L4.
2. I am a graduate of Brock University, St. Catharines, Ontario, with a Honours Bachelor Science (1976) degree in geology and of the University of Western Ontario, London, Ontario, with a Masters of Science degree (1980) in geology.
3. I am a Fellow of the Geological Association of Canada and a member of the Mining Society (CIMM).
4. I have practiced my profession in excess of ten years.
5. This report is based on data supplied by Getty Resources Limited and work carried out on the property for Getty between November and December, 1986.
6. I have no interest, or have had any interest, in Getty Resources Limited.

Toronto, Ontario
February 6, 1987

D. Titaro, B.Sc., MSc.
A.C.A. Howe International Ltd.



Appendix A
1986 Geophysical Report

GEOPHYSICAL REPORT

ON

VANDETTE LAKE PROJECT

Lower Detour Area
Northeastern Ontario

FOR

A.C.A. HOWE INTERNATIONAL LIMITED

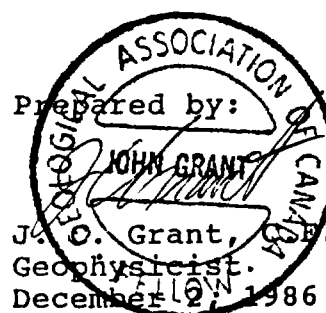


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INTRODUCTION

The following is a brief report of the results of a MaxMinII survey carried out on 6 kilometers of cut grid on the Vandette Lake Area Project. The survey, completed during the latter part of November 1986, was to determine the extent and strike direction of two conductive zones striking north and southwest from this new grid.

PROPERTY LOCATION AND ACCESS

The grid is located approximately 75 miles northeast of Cochrane and 10 miles southeast of the Detour Lake Mine site (refer to NTS 32E, Upper Hurricanaw River Map).

Access to the property was by helicopter, approximately 50 minutes, from Cochrane. An alternate route would be to travel Highway 101 west to Duparquet, Quebec, then north by LaSarre to the Selbaie Mine road. This gravel road will take you to the landing site at Lac Gagnan. From this point, a short helicopter ride will bring you to the grid.

LINECUTTING

A six kilometer grid was established to cover this extension. The original north south baseline was extended from L800MS to L1400MS. Crosslines were then turned off of this baseline at 100 meter intervals and cut to 1000MW. All of these crosslines were chained at 25 meter intervals.

GEOPHYSICAL PROGRAM

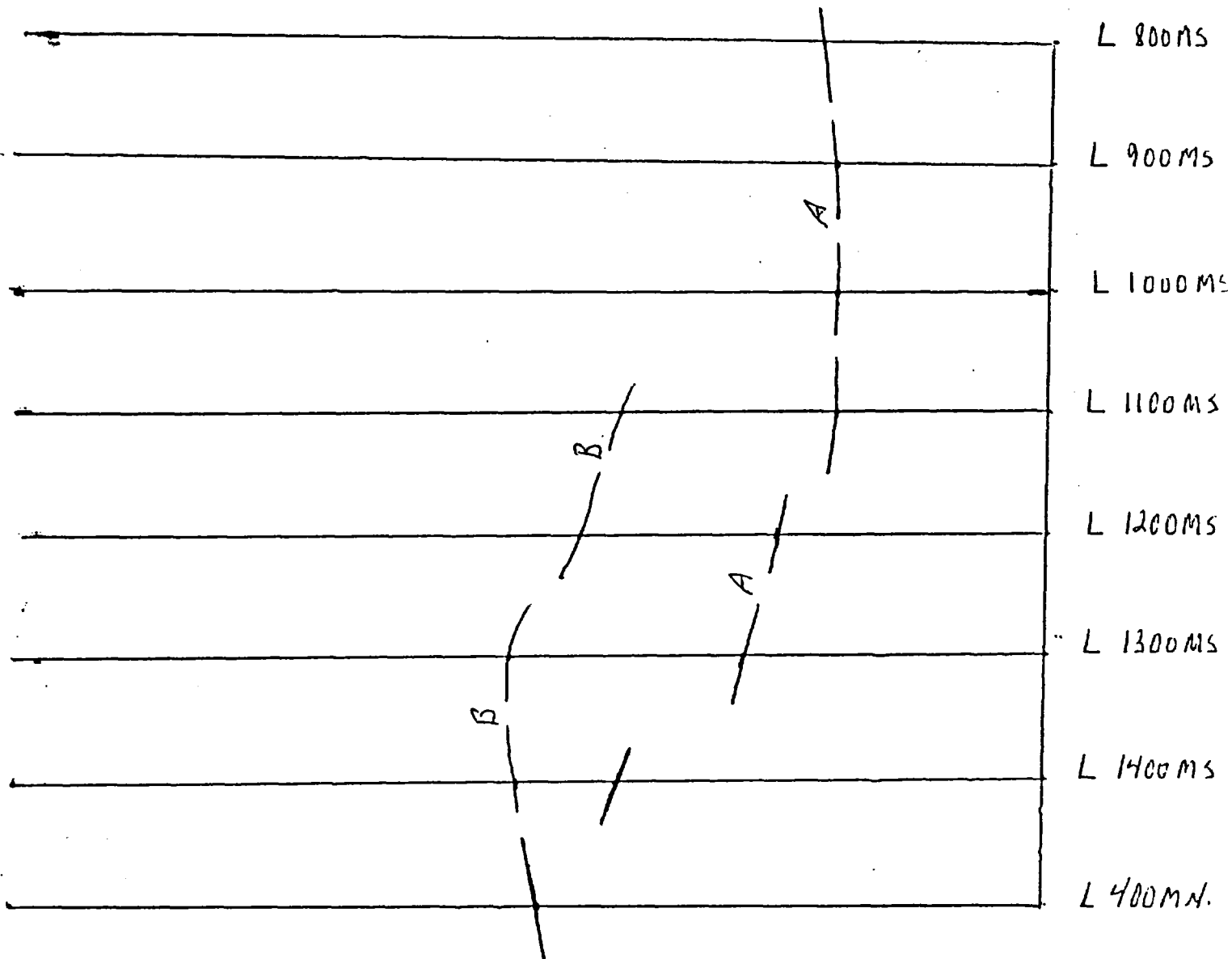
This program consisted of surveying the cut lines with the Apex MaxMinII system using a 150 meter coil separation and recording two frequencies at each station (1777 and 444hz). The coil separation of 150M would result in a search depth of 75 - 80 meters with side seeking abilities of 75 meters.

SURVEY RESULTS

The survey was successful in outlining two distinct conductive zones. Each of these zones will be discussed in detail below.

ZONE A

This zone strikes across lines 900MS to 1300MS at 200MW. It is the extension of that zone located earlier which began on L200MN and extended as far as L800MS.



0 100 M 300 M

VANETTE LAKE PROJECT
LOWER DETOUR AREA.

GRID LAYOUT.

The zone is representative of a good shallow conductor with a conductivity value of 20 mhos at a depth range between 15 to 28 meters.

The zone may in fact extend as far as line 1400MS but appears to have been faulted to the southwest.

ZONE B

This zone strikes across lines 1400MS to 1100MS at 400MW. It is most probably the north extension of that zone striking from L0+00 to L400MN of a previous survey.

The zone is a good, relatively shallow conductor with good widths of 20 meters. The zone has a conductivity range of 14 to 18 mhos and is at a depth of 15 to 30 meters.

Due to the closeness of the two zones, the dip direction is not evident. However, pass drilling was done from the south, suggesting a south dip.

RECOMMENDATIONS AND CONCLUSIONS

Both of the conductive zones represent two good, separate zones under relatively shallow overburden.

The survey was successful in extending the two previous zones and detailing their strike directions.

If drilling is required, lines 1200 or 1300MS should be considered, as one set-up would result in intersecting both zones.

CERTIFICATE

I, John C. Grant, hereby cerfity that:

- 1) I am a graduate geophysicist (1975) of the three year program in Geological Technology at Cambrian College of Applied Arts and Technology, Sudbury Campus. I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited (5 years), North Bay office, and as Exploration Manager and Geophysicist for Exsics Exploration Limited from 1980 to present.
- 2) I am a Member of the Certified Engineering Technologist Association since 1984.
- 3) I am a member of the Geological Association of Canada.
- 4) I have been actively engaged in my profession for the last eleven (11) years, including all aspects of exploration studies, surveys and interpretations.
- 5) I have no specific or special interest in the described property. I have been retained as a Consulting Geophysicist for property appraisal.

John Charles Grant, C.E.T. F.G.A.C.



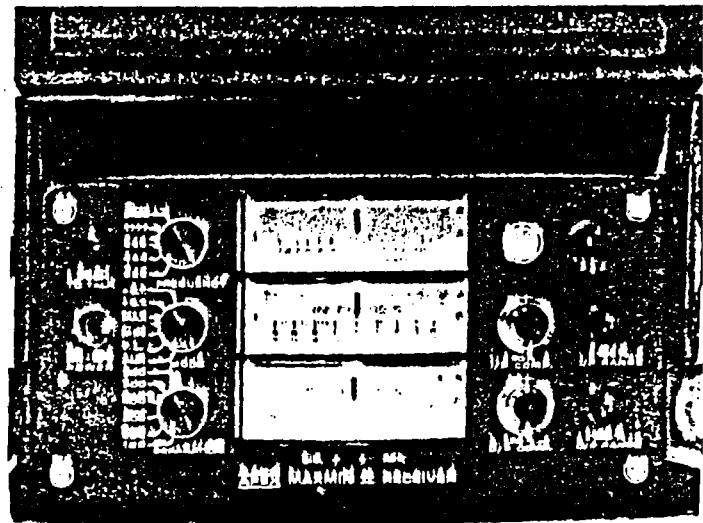
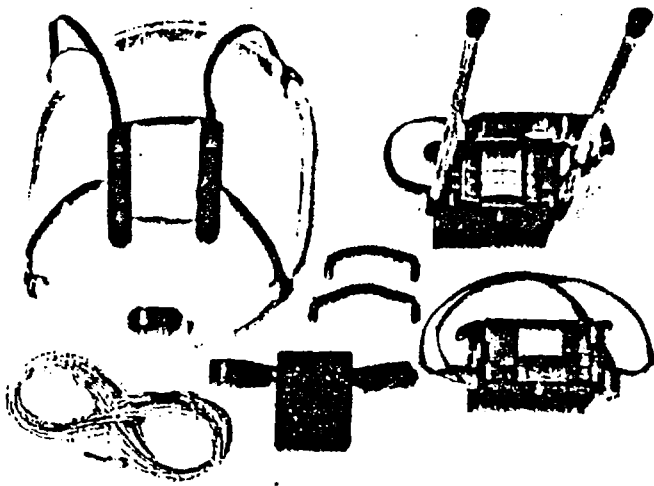
APPENDIX 'A'

APEX

MAXMIN II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.





SPECIFICATIONS :

Frequencies:	222, 444, 888, 1777 and 3555 Hz.	Repeatability:	±0.25% to ±1% normally, depending on conditions, frequencies and coil separation used.
Modes of Operation:	<p>MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference cable.</p> <p>MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.</p> <p>V.L.: Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.</p>	Transmitter Output:	<ul style="list-style-type: none"> 222 Hz : 220 Atm² 444 Hz : 200 Atm² 888 Hz : 120 Atm² 1777 Hz : 60 Atm² 3555 Hz : 30 Atm²
Coil Separations:	25, 50, 100, 150, 200 & 250m (MMI) or 100, 200, 300, 400, 600 and 800 ft. (MMIF). Coil separations in V.L. mode not restricted to fixed values.	Receiver Batteries:	9V trans. radio type batteries (4). Life: approx. 35 hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.
Parameters Read:	<ul style="list-style-type: none"> In-Phase and Quadrature components of the secondary field in MAX and MIN modes. Tilt-angle of the total field in V.L. mode. 	Transmitter Batteries:	12V 6Ah Gel-type rechargeable battery. (Charger supplied).
Readouts:	<ul style="list-style-type: none"> Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary. Tilt angle and null in 90mm edgewise meters in V.L. mode. 	Reference Cable:	Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.
Scale Ranges:	<p>In-Phase: ±20%, ±100% by push-button switch.</p> <p>Quadrature: ±20%, ±100% by push-button switch.</p> <p>Tilt: ±75% slope.</p> <p>Null (V.L.): Sensitivity adjustable by separation switch.</p>	Voice Link:	Built-in Intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.
Readability:	In-Phase and Quadrature: 0.25 % to 0.5 % ; Tilt: 1%.	Indicator Lights:	Built-in signal and reference warning lights to indicate erroneous readings.
		Temperature Range:	-40°C to +60°C (-40°F to +140°F).
		Receiver Weight:	6kg (13 lbs.)
		Transmitter Weight:	13kg (29 lbs.)
		Shipping Weight:	Typically 60kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification

APEX

PARAMETRICS LIMITED

200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

Phone: (416) 495-1612

Cables: APEXPARA TORONTO

Telex: 06-966773 NORDVIK TOR

Appendix B
1986 Core Logs

GETTY RESOURCES LIMITED

Hole Number

DL-86-52

DRILL HOLE LOG

Property Detour Lake
 Location 5+00N/9+00W
 Grid C-12
 Latitude
 Departure

Core Size BQ
 Elev. Collar 920
 Bearing 580 ft
 Dip 50°
 Length 176.78 m
 Horiz. Trace 97.6 m
 Vert. Trace 147.35 m

Starting Date Nov 24/86
 Completion Date Nov 27/86
 Date Logged Nov 24-27/86
 Logged By B. Harmer

Page 1 of 22

Dip Tests		
Depth	Read	Actual
Collar	11.07 m	-50°
1) 30.48		-54°
2) 60.96		-56°
3) 91.44		-55°
4) 121.92		-57°
5) 152.4		-57°
6) 176.78		-57°

FROM (METRES)	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY
				FROM	TO		
		DL-86-52					
		Box (1) 14.07-20.00 Box (13) 84.43-90.45 Box (25) 155.09-161.12					
		(2) 20.00-25.93 (14) 90.45-96.36 (26) 161.12-166.90					
		(3) 25.93-31.81 (15) 96.36-102.23 (27) 166.90-173.08					
		(4) 31.81-37.80 (16) 102.23-108.12 (28) 173.08-176.78					
		(5) 37.80-43.65 (17) 108.12-113.96 E.O.H.					
		(6) 43.65-49.67 (18) 113.96-120.00					
		(7) 49.67-55.47 (19) 120.00-126.82					
		(8) 55.47-61.12 (20) 126.82-132.79					
		(9) 61.12-66.98 (21) 132.79-137.73					
		(10) 66.98-72.87 (22) 137.73-143.66					
		(11) 72.87-78.72 (23) 143.66-149.37					
		(12) 78.72-84.43 (24) 149.37-155.09					

Core axis = 0

50° to ca

GETTY RESOURCES LIMITED
DRILL HOLE LOG

Page 2

Hole Number

DL-86-52

FROM (m)	TO (m)	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH (m)	ASSAY			
				FROM (m)	TO (m)		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
0	14.07	overburden - apparently some large boulders!								
14.07	15.11	STRIPED FELSIC TUFFACEOUS UNIT								
		- distinct alteration banding observed within felsic								
		to intermediate unit; obs'd 60° to c.a.; non-magnetic								
		- highly silicified dk grey and wkly altered H. grey bands.								
		- few 1 cm thick gtz bands parallel to banding; contain flakes chl. ^{or} urox								
		- unit wkly frd; add fr's @ 20° contain 1-2% pyrite, some chl.								
		sericite, +/- carbonates								
		- boulders base, ~15.0m, becoming wkly garniferous; sharp basal contact	56451	14.6	15.1	0.5	NIL	NIL	17	18
15.11	19.08	GARNETIFEROUS (TUFFACEOUS) METASEDIMENT								
		- dk grn - to - grey mafic; mod. hardness; modly chloritic								
		throughout; occasional foln trend @ 60°; soft sed slumping								
		- unit wkly to modly magnetite throughout; 1-3% po, <1% py								
		evenly dis'd, few thin pyritiferous +/- po microfrs.								
		- appears to be a wk, contorted banding though no distinct att.								
		although chl's throughout, finer gr'd chloritic, mafic mudstone while								
		more felsic lenses; ^{chl} and ^{po} #, more sawtooth felsic grains & generally								
		higher % .2-.4 cm garnet blobs. (~10-15% distribution)								
		- occ's'l felsic tuffaceous frags <1-2mm. weak preferred orientation								

BAA

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Ag (ppm)	Cu (ppm)	Zn (ppm)	
		and tend to occur within more felsic groundmass/matrix ex 18.5 m.	56452	17.5	18.0	0.5m	NIL	89	52	
		- few 1-3 mm glz stringers, @ 25°, + 2-4% vein po 1/- destd py.								
		- @ ~ 18.7 m, garnet content incr. (~25-30%), unit more uniform in fabric								
		- section w/ky fr's, frs: chl, + CO ₂ , po, py, sericite, tend 20-30°								
19.08	20.47	Feldspar Porphyre Dyke								
		dark grey, mod'ly siliceous, equigranular habit within								
		interv. groundmass; 40-50% 1-5 mm an-subhedral feldsp. porphs.	56453	19.5	20.0	0.5m	NIL	28	69	
		- unit contains a lineation parallel to c.a. (0°), faint fln 60°								
		- ≤ 1% destd po, py throughout								
		from 20.27 - 20.37 - lens of contorted, fragmented Striped Felsic								
		Tuffaceous? Unit, trending @ 60-65°								
20.47	23.4	STRIPED FELSIC TUFF								
		- similar to that 14.07-15.11 m; sharp upper @ lower contact, 65-70°								
		- interval not as siliceous, while band of alteration banding more distinct,								
		trending @ 60°; more siliceous zones much less abundant, contain m-c. biotite.								
		- banding represented by felsic content and grain size: finer gr'd, more siliceous								
		darker bands .2-2 cm thick vs more felsic, tuffaceous mat'ls, f-m gr'd								
		some lapilli sized feldsp. grns, mod'ly alt'd - ser ^{-saw} . Chlorite present in both.								
		- thin siliceous microfo x-cut banding; trend 40°, carry 1-2% grain py, tr po.								

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DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		unit Wkly frd, 40-60°; fr surfs: calc, ser, minor CO ₃ . Few 0°-10° reheated frs ~ silice-epidote. Few stretched garnets, 11 folia thin lens of FELDSPAR ADICHT. DYKE 21.7 - 21.75m; contact @ 45°	56454	22.0	22.75	0.75m	NIL	NIL	10	27
23.4	24.27	FELDSPAR PORPHYRE DYKE								
		- sharp upper & lower contact @ 65°								
		- similar to 1908 - 20.47								
24.27	27.51	STRIPED FELSIC TUFF								
		- similar to 20.47 - 23.4; drk gry & med gry-grn banding, trends @ 40 to 60°; banding both uniform & places contorted, especially apparent within								
		lighter, less siliceous horizontal lenses								
		- below 25-13 unit appears slightly more wavy in colour & as lenses, pods of drk grn, chloritized mat'l (seen as discontinuous bands trending 60-90°)	56455	26.51	27.01	0.50m	NIL	NIL	6	33
		more noticeable; within same zone garnet contact (<10%, 1-3mm)								
		more apparent; chloritic veinlets obs'd trending ~ 40° carry 1-2 mm garnets.								
27.51	34.14	GARNETIFEROUS METASEDIMENTARY UNIT								
		- fairly sharp 65-70° upper contact								
		- a f. gr'd drk gry to drk grn argillaceous metased. Contains ~ 3-5% m-c pinkish anhedral garnets. Matrix primarily chloritic								
		with bio & amph. grins. Matrix & ~ 20% feldspar grains - Koolinized, sauss'd								

B44

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY				
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	Au checks (ppb)
		Unit contains schistose fabric trending 65°; banding is recognized with respect to chloritic content. Whitish alteration lenses observed to contain <1-2% po, tr py - obs'd as stringers, white sub-parallel to 65° foln. Garnetiferous lenses generally confined to lighter, more felsic zones; also more altered & sericitic, areas containing higher concentrations of garnet - contorted appearance.									
		28.41 - 28.93 - lens of altered Fiddler Porphyry Dyke wall - here undergone some sericitic alteration; chloritic grains reveal a wk to mod foln of 50-60° upper contact @ 60° lower contact @ 30° contains 1-2% deformed grns pot py ≤ 1mm.	56456	28.41	28.93	0.5	NIL	NIL	31	68	
		28.93-29.45 m: highly altered, contorted interval ~ <u>CONDUCTIVE</u> zone - containing ~ 10-20% po, 3-5% py, chlozo?.	56457	28.93	29.43	0.5	25	1.4	379	91	20,30
		Mineralization resembles breccia-filling; contains minor amounts of graphite. From 29.1 - 29.19, chloritic zone containing ~ 20-30% po & py - foliation preserved - resembling fluid breccia.	56458	33.5	34.01	0.5	NIL	NIL	37	148	
		Below 29.45 m, return to more familiar GARNETIFEROUS METASEDIMENT; unit appears much more chloritic and argillitic while garnet content, 1-4 mm equigranular blobs, 20-35%, has increased. Banding & foliation is preserved.									

B4.

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		Chloritic, garnet-rich zones contain sub-parallel lenses of 2-5% po, py.								
		With depth, interval containing sub-parallel, more siliceous bands 1-5 cm in thickness. These also are generally more felsic, slightly contorted & garnet bearing.								
		Lower contact @ 40'								
34.14	36.98	(STRIPED) FELSIC TUFFACEOUS METASEDIMENT a med. grn-grn, f gtd intercalated felsic tuff & argillaceous metased. Unit is wk to modly alt'd throughout; more felsic, tuffaceous horizons modly to stilly gneissic; metased. horizons contain chl, bio +/- garnet - contains a wk to mod. schistose fabric, fol'n @ 65° Composed essentially of chl, bio, qtz, small feldsp. (<1-3mm), minor garnet. Striped in appearance due to intercalated, tuffaceous & darker chl's argillaceous layers; no set banding intervals.								
		- 1-2% dss'd po, py								
		- wkly fld, sub-parallel to fol'n; surfs: (quartz, chlorite, kaolin, py, paste)								
		- gradual lower contact @ 55°	56459	35.0	35.5	0.5	NIL	NIL	15	28
36.98	42.23	CHLORITIZED INTERCALATED FELSIC TUFF & METASEDIMENT a mod-stilly silicified, drk grn chloritized metasediment - metagneissic?								

BHT

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Cu (ppm)	Zn (ppm)	
		unit is f grid though contains c-ve clasts of qtz & f-m grid feldsp frags. (~30%) which are generally well-sitly etched								
		Intervals within unit resemble felsic tuffaceous mat'l but are invariably cut by chloritizing spines - minor brecciation. Tuffaceous intervals contain stretched feldsp. grains @ 90°								
		- no definite banding or fol'n obs'd due to solution activity	56460	39.0	39.5	0.5	NIL	152	48	
		- contains local Fe-rich horizons - purplish hue - hosts on occasion 5-10%, 1-2 mm garnets.								
		- locally a wk fol'n is obs'd within siliceous zones @ 60-65°								
		- unit is strongly indurated								
		- contains ~1-2% desced po. tr. py; local po obs'd within garnetiferous intervals bounded by chloritic solution filling ex 39.16m								
		- top & bottom of unit are garnetiferous.								
42.23	42.95	FELDSPAR PORPHYRE DYKE	56461	42.0	42.5	0.5	NIL	210	75	
		- similar in composition to previous; here porphs. are generally smaller 1-3mm; unit appears more siliceous & has undergone chloritic alteration.								
		- a faint oblique of chlorite grains @ 65°								
		- a gradational but distinct lower contact @ 80°								

344

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al ₂ O ₃ (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
42.95	45.83	GARNETIFEROUS (EPICLASTIC) METASEDIMENT - gray-green-purple above, f-m gr'd, mod'ly siliceous - fol'n is poorly developed, where obs'd occurs as chlc alignment 50-70° - unit has a non-uniform banding through the spatial relationship of mod'ly chlc alteration lenses, which have alt'd the Fe-rich, 1/2 bio, more felsic lenses. - garnets, 10-35%, range from <1-3 mm, have no preferred orientation or location - 1-3% destd pyro throughout; occ'l porphy lenses obs'd adj't to chloritic fluid alteration, also assoc'd with local barite concentrations.	56462	43.8	44.5	0.7	NIL	NIL	43	108
45.83	46.64	SILICEOUS FELDSPAR PORPHYRE DYKE - similar to previous - unit mod'ly siliceous throughout - ~ 30-40% feldsp. porphs. <1-3 mm - < 5% qtz aug.	56463	46.0	46.5	0.5	NIL	0.2	48	68
		- unit wx-mod'ly chloritized, wx preferred alignment ~70-75° - 3-5% destd po.py throughout; few selected microfs. carry ~5% po								

BHT

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY		
				FROM	TO				
46.64	82.14	GARNETIFEROUS (EPICLASTIC) METASEDIMENT - similar greenish-grey-purple assemblage, mostly siliceous - from 46.64 to 49.1 m - 30-40% garnet content < 1-6 mm, fairly evenly distributed. - colour banding is present though no obvious relationship is evident, - garnets do not appear to be associated with any particular band i.e. chloritic vs. more Fe-rich. Biotite, omph. locally obs'd, related to garnetiferous areas. - wky fld, 35-45°; fr. surfs - K-feld, sericite, minor CO ₂ , smear py - < 1-2% py, generally contained within chloritic-rich lenses and alteration fluids. Below 49.1 m garnet content falls as unit becomes more argillaceous in nature. Garnets cluster within more ferro-magnesian rich bands; and as isolated blebs. - features related to soft sediment deformation obs'd, these tend to be somewhat more siliceous. - banding observed locally, trends 70-80° - rather monotonous sequence continues - < 1% dehd py, po obs'd locally							

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		- occ'l 1-3% po.py contained adjacent to Qtz-chlorite alteration lenses & locally obs'd about micro-breccia frags.								
		- unit locally strongly siliceous, in areas of re-healed microfractures; Qtz vein @ 1-2 mm grs py & po @ 54.74								
		- locally folded \perp core axis	56464	54.5	55.0	0.5	NIL	NIL	111	59
		- similar unit continues with depth; banding associates with alteration	56465	59.9	60.4	0.5	NIL	NIL	101	58
		- alteration zones consisting of Qtz-chl +/- epidote appear more prominent below 61.5 m; these appear to be fluid intrusions & micro-breccia fillings. These light bands have no consistent attitude and generally carry from <1-10% po, minor py vein mat'l plus varying amts of CO ₂ ex 71.7m. These zones can vary from 1-10 cm in thickness & may constitute ~ 10% of rock column.	56466	64.4	65.0	0.6	NIL	NIL	133	70
		- there exist a few biotite rich lenses, sub-parallel to locally preserved 70° foliation, some lenses trending 50°	56467	70.0	71.0	1.0	NIL	NIL	139	68
		- v-f g'd anhedr. garnets appear locally dispersed; as do concentrated clusters of garnetiferous mat'l assoc'd with chloritic fluid veins. These clusters usually carry less 1-2% po +/- py.								
		- wKly f'd, ~20°; fr. surfs: sericite, chlorite, +/- py								
		- possibly minor tuffaceous laminae (?)								

BA

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		At ~ 30m general incr. in garnet content ~ 40% ± 1-3mm. Garnets habit both Fe-rich & chl-rich bands, no apparent preference. Banding appears more regular.	56468	80.2	80.7	0.5	NIL	0.2	114	57
		At base of unit: from 82.06-82.14 exists a black, dense - compressed ash? - schistose @ 65°, some graphite.								
		Contains ~ 10-20% fine laminae po. to py. A few glass shards?	56469	81.64	82.14	0.5	10	NIL	74	86
82.14	82.34	INTERMEDIATE DYKE								
		- thin lens of v. g'd dyke mat'l - equigranular - med. dk. gry-grn. i								
		- subtle porphyroclasts of 1-1.5mm altered, antedated feldspar								
		upper contact - 70°								
		- consists of gte, feldy, ferromags. lower " - 95°								
		- 3-5% finely decem'd po & py; generally larger in size than matrix								
82.34	82.69	QUARTZ / FELDSPAR PORPHYRE DYKE (INTERMEDIATE)								
		- mod. str'ly siliceous, med gry-grn f-mc g'd, porphyritic								
		- ~ 30-35% porph. i; ~ 10% f white, altered feldspar antedated fings								
		(~ 1-3 mm) ~ 25% f-m, pale, subrounded gte grains								
		- ground mass essentially gte, feldsp, chl, bio.								
		- 1-3% decem'd py, to po.								
82.69	82.9	GRAPHITIC SCHIST - possibly equivalent to base of above metam'd unit.								

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY				
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	As (ppb)
		Unit is a f. grid black, well foliated argillaceous graphitic schist, fol. @ 65°	56470	82.14	82.9	0.76	NIL	NIL	86	84	
		- contains fine siliceous stringer lenses parallel to fol. n									
		- 5-7% po; occurs adjacent to or associated with above siliceous stringers.									
82.9	103.6	STRIPED FELSIC TUFF									
		as before. lt. med drk gry, modly siliceous, f. m. grid									
		- alternating alteration banding: darker bands more siliceous, lighter bands (suss?) generally more altered & tend to host majority of alteration veining & sulphides									
		- contains ~ tuffaceous layering, where observed results in stretched, preferred orientation which may also coincide with the above alteration banding, where present tends @ 65-70°. Composed of 20-30% lapilli size feldspar porphs, subparallel to tuffaceous attitude. Largely distributed throughout.	56471	87.9	88.4	0.5	20	NIL	112	163	20,20
		- unit contains 210-15% f. lites biotite, oriented along fol. n									
		- unit very competent, w/ky f. d. (@ 20°, 40°, 80°); fr. surfs: chl, py, f. lites	56472	93.7	94.4	0.7	NIL	NIL	9	30	
		Quartzite, minor cor, silica; few reheated f. lites - generally qtz-chl +/- biox									
		± 3% veinlike py, po.	56473	97.0	97.6	0.6	NIL	NIL	11	46	
		- sequence continues at depth.									
		Zone from 98.42 - 99.04 - appears much more altered									
		than normal. Hosts high frequency # of re-heated microf. of chl, qtz - po, py stringers.									

BA

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY					
				FROM	TO		As (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	As check (ppb)	
		plus portions of pinkish-orange feldsp. ground mass, minor epidote(?)										
		- @ 99.7 m tuffaceous fcl'n @ 70'										
		- interval between 99.67 & 100.4 contains a slightly higher % of	56474	99.85	100.37	0.52	NIL	NIL	24		137	
		above mentioned siliceous vein lenses, carry bio, feld, chl & \approx 5% po, py										
		trend sub-parallel to fcl'n.										
		102.38 - 102.76 - thin zone of interbedded to felsic dyke mat'l (viscous)										
		of f.g'd massive mat to dk grey, composed of silica, feldsp, phlogopite(?) bio										
		& contains 3-7% dess'd py, po as well as po, py within quartz-chl-bio										
		microfrs. Contacts fairly sharp @ 75-80°. Lower contact contains										
		concentration of po grains \leq 1mm \sim 10%										
		102.76 - 102.94 - broken & bleached rock										
		102.96 - 103.04 - conformable altered zone - mod-stily										
		siliceous & chloritic carrier \sim 20-25% dess'd po.										
103.6	105.18	CONDUCTIVE ZONE - hosted within a contorted, highly	56475	103.59	103.99	0.4	10	NIL	13		44	
		altered metasedimentary unit	56476	103.99	104.84	0.85	195	4.1	141		55	210, 180
		103.6 - 103.99 - chloritic, siliceous, mod-stily altered & contorted	56477	104.84	105.15	0.31	30	2.5	195		1150	
		contains minor graphitic lenses; any fcl'n has been disrupted.	56478	105.15	105.55	0.4	10	1.7	228		240	
		contains \sim 30% po stringer/alteration bands.	56479	105.55	106.11	0.56	NIL	1.0	102		143	
		103.99 - 104.84 m - black graphitic zone, highly brecciated 'core'	56480	106.11	106.62	0.51	50	0.3	64		54	

BA.

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		~30-35% po as stringers subparallel to 70° foln, as breccia-fill & as distinct blocks.								
		104.84 - 105.18 - breccia fill, clasts brecciated & folded country rock								
		Containing ~65% po as matrix mat'l								
105.10	108.18	RECRYSTALLIZED CHERT	56481	106.9	107.4	0.5	NIL	0.4	57	49
		It to med grn, strongly siliceous, f-m grid & massive, wk-medly chlt.	56482	107.4	107.9	0.5	NIL	0.4	34	47
		is highly altered & intruded by Qtz-chl - mineralizing softw % squeakable	56483	108.2	108.7	0.5	NIL	0.2	39	31
		Contains <15-20% banded po lenses obs'd randomly throughout.								
		minor py. Sphs. occ'lly obs'd as fine dissems in intervals where above banding is absent. Banding roughly trending at 70-80°								
		106.97 - 107.52 m - highly brecciated interval, intruded by graphitic-chloritic fluid; garnetiferous mat'l apparently also mobilized								
		- contains <10% po, minor py within conformable stringers & adjacent to brecciated country rock frags.								
		below 107.52 return to above cherty unit; still								
		contains Qtz-chl-po stringers but to a lesser degree; some garnetiferous mat'l now obs'd. Po, py constitute ~10%								
		No magnetic horizons.								

B.H.

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Alc (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
108.18	114.2	INTERMEDIATE TUFFACEOUS METASEDIMENT upper contact transitional at 65° Unit is med-dark gray, f-m gr'd, banded with a mod foln @ 70°. Top of section more argillaceous than base. Remains mod-st'ly siliceous. Banding revealed through alternate Qtz-chl-bio. 1/2 CO ₂ 1/2 1-5% ppy alteration vs more silicified gray. tuffaceous horizons, which trend sub-parallel to foln. The above alteration lenses generally destroy foln ~23% blueish qtz-eye'd obs'd (from 108.44-110.0 - thin interval composed of f-m gr'd dark grn-gr'y, mod-st'ly siliceous INTERMEDIATE PORPHYRYTIC DYKE: composed of feldsp, qtz, bio, amph, groundmass; ~20-25% comprised of small phenocrysts of subrounded qtz (gray) and (<1mm) altering pale-white feldsp. - unit fairly massive - <1-3% dissolved py - TOP CONTACT SHARP @ 40°; Bottom contact sharp @ 30°. At 110.0 resume previous unit: Contains <10% mafic ferromagnesian rich bands, these tend to host	55485	110.15	110.65	0.5	NIL	0.5	64	87

BT

GETTY RESOURCES LIMITED
DRILL HOLE LOG

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Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Pb (ppb)	Ag (ppm)	Cu (ppm)	Au check (ppb)
		<1-5 mm anhedral garnets (isolated & in clusters) - <2% dend. outpts. At around 113.19m unit becomes more siliceous & indurated, becoming more felsic and tuffaceous								
114.2	114.85	INT. TO MAFIC BIOTITIC PORPHYRITIC DYKE - dk grey-grn, f-m gr'd, mod-str'y siliceous - ~10-15% 1-2 biotite phenocrysts - ~5% white qtz-eye - contains varying siliceous alteration, carries 2-4% dend'd & isolated blebby; minor chl.; bleached microfts @ 20-30° - a weak alignment of br. flakes at 60°	56486 56487	114.1 114.9	114.6 115.4	0.5 0.5	10 5	NIL 0.2	44 49	79 71
114.85	117.6	CHLORITIC / GRAPHITIC GARNETIFEROUS METASED. - vf-c gr'd, dk grn to black with 20-30%, <1-5 mm garnets. These garnets vary from equigranular - oblate-stretched. - unit mod'ly fol'd within more argillaceous lenses, otherwise disrupted by garnets. Below 115.65m, unit no longer graphitic nor does it appear as leached; section remains mod-str'y chloritized but is also now mod'ly siliceous as well as containing ~20% f. anhedral blebs of altering (sauss'rd) feldsp & qtz								

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DRILL HOLE LOG

Hole Number

DL - 86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
117.6	118.42	Garnets as numerous as are intervals of chlc attention; QUARTZ - BIODITE PORPHYRE (SILL) upper contact sharp @ 90°; lower contact @ 80° unit is f-vc gr'd, dark grey matrix contains ~ 30% ±-5 mm subrounded white glz porphs & ~ 10-15% halloes of porph? recrystallized? bio & hornblende; minor pinkish feldsp. Grnd Mass is still siliceous. - massive, no fol'n - appears devoid of sulphides.	56488 56489	117.3	117.8	0.5	NIL	NIL	48	89
118.42	123.74	STRIPED FELSIC TUFF - similar to above; here contains ~ 3% altered subhedral Feldsp. crystals, buffaceous banding @ 70°, also apparent with biotite alignment; phlogopite (?) also well represented. - contains ~ 1% white vf glz. eyes. from 119.23 to 121.26 m - a strongly siliceous, dark grey interval; similar comp'n though contains ~ 5% vf-f subrounded gins feldsp. phenocrysts & ~ 10% subrounded glz gins. - ~ 1% desulph. ~ fairly massive. Below 121.26m return to more familiar striped felsic tuff ~ 2-3% vf-f subrounded bluish glz-eyes.	56490	122.0	122.5	0.5	NIL	NIL	20	77

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DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Ag (ppm)	Cu (ppm)	Zn (ppm)	
		Contains local zones of chloritic-sericitic alteration, generally conformable to 70° folia & tuff layering.								
		with depth hosts 15-20% lapilli sized felsic frags.								
123.74	131.3	- gradual transition into FELSIC LAPILLI TUFF	56491	129.2	130.0	0.8	NIL	35	53	
		- lt grey to beige-white f-m gr'd mud-sty siliceous								
		- contains minor ferromagnesian: chl, white mica,								
		- very competent, w/ly fld @ 30-40°, fr'surfs. rehealed:								
		qtz, chl + 1- minor CD3, +/- 2% py, po stringers.								
		- local chloritic alteration, with Qtz + sericite carry 1-3% deas'd sulph.								
		- ≤ 5% rounded, clear to bluish gty-eyes, in places up to 10%								
		- ≤ 1% deas'd sulphs, fine disseminations of c. py blebs.								
		- unit locally altered, resembling STRIPED FELSIC TUFF,								
		generally dark grey bands reveal mod-st silicification.								
		- ~ 30% lapilli sized altered felsic frags								
131.3	133.68	SILICEOUS QUARTZ PORPHYRE	56492	132.25	132.75	0.5	NIL	14	55	
		- med-drk gry, intermediate comp'n, sill-like intrusive?								
		- sharp 80° contacts								
		- composed primarily of Qtz - feldsp - chl - bio. with								
		25-35% 1-3 mm subrounded whitish-gray quartz porphs.								

Bt.

DRILL HOLE LOG

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		- minor, <5%, salmon feldsp. frags.								
		- massive unit, ~ 1-3% destd py								
133.68	134.49	FELSIC LAPILLI TUFF								
		- similar to above, here appears somewhat contorted;								
		- contains re-healed microfrs: 20-40°, contain Qtz-chl-								
		bio. + 5-10% porphy as vein fill mat'l.								
134.49	134.72	SILICEOUS Quartz Perphyre								
		- same as above								
		- upper & lower contacts sharp @ 30-35°								
134.72	135.96	SILICEOUS FELSIC LAPILLI TUFF	56493	136.5	137.1	0.6	NIL	NIL	23	72
		- same as above; from 134.72 - 135.12 - med to drk								
		alteration band, @ 60°, intruded by conformable, 1-2 cm								
		qtz-chl alteration lenses; interval: 2-3% destd sulphs.								
135.96	136.91	similar SILICEOUS Quartz Perphyre								
136.91	149.38	SILICEOUS FELSIC LAPILLI TUFF	56494	139.29	140.0	0.71	NIL	NIL	29	81
		similar to that 123.74 - 131.3	56495	148.3	148.8	0.5	NIL	NIL	16	60
		- obs'd to contain re-healed chloritic microfrs, 0-20°								
		- remains strongly siliceous, generally massive								
		- < 3% destd sulphs.								

BHA

DRILL HOLE LOG

Hole Number

DL - 86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY		
				FROM	TO		As (ppm)	Ag (ppm)	Zn (ppm)
149.38	149.7	INTERMEDIATE METAVOLCANIC (?)							
		- dark grn, f-m gr'd, mod'ly siliceous, massive							
		- composed of Qtz-feldsp-bio-chl.; mod'ly conformable @ 80°							
		- massive, crystalline; 30-35% ± 1mm phenocrysts bio-grt, feldsp.							
		- unit has undergone siliceous alteration +/- chloritic;							
		contains ~ 3-5% finely disseminated py, minor po.							
149.7	150.9	ALTERED/BRECCIATED FELSIC TUFF	56496	150.0	150.7	0.7	NIL	NIL	61
		- unit apparently was a mod. siliceous felsic							
		~ Lepilli Tuff; since undergone siliceous & chl'ic alt' in places causing fluid brecciation; breccia & highly contorted alteration zones wk-mod'ly CO ₃ ; minor amounts salmon feldsp.							
		- unit contains ~ 5% 70° silica-chlorite veins which carry 7-10% py; interval contains ~ 3% disseminated po.py.							
150.9	156.04	INTERMEDIATE METAVOLCANIC (?)	56497	153.7	154.2	0.5	NIL	0.4	118
		- similar in fabric & comp'n to 149.38-149.7	56498	155.8	156.3	0.5	NIL	NIL	82
		- interval contains a few widely separated, 50°, 1-3cm Qtz-chl - adj't 5-10% py veins.							51
		- 3-7% disseminated pyrite, tend to incr. towards above zones.							

BHA

Hole Number

DL-86-52

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		A _u (ppm)	A _g (ppm)	Cu (ppm)	Zn (ppm)
156.04	157.04	SILICEDUS FELSIC LAPILLI TUFF - upper contact @ 50°, subparallel to 55° tuffaceous layering; similar unit as above: slightly more grins bio # white mica (1) as well as patched ch's alteration (conformable to wk. feldsp.) ~ 3% whitish ± 1mm qtz-eyes - contains < 1-3% destd sulphs.								
157.04	161.19	INTERMEDIATE QUARTZ PORPHYRE DYKE - dark gr'n, granoblastic texture - qtz porphs ~ 25-30°, subrounded, 1-3mm, ~ 3% white qtz-eyes; minor ~ 10% smaller ± 1mm porphs of alt'd feldsp. - ground mass intermed to mafic ~ bio, chl, amph, silica - contains a few 3-8 cm intervals of siliceous lapilli tuff - strongly siliceous and massive - 1-2% destd sulphs. - lower contact sharp @ 45°	56499	158.8	159.3	0.5	NIL	NIL	20	52
161.19	176.78	FELSIC LAPILLI TUFF / STRIPED FELSIC TUFF interbedded units, described earlier. - similar composition, vary with respect to alteration banding - 20-30% lapilli feldsp. grains, sub-rounded, stretched	56500	164.3	165.3	1.0	NIL	NIL	13	14

B4

[illegible]

B. Halverson.

DRILL HOLE LOG

Property
 Location
 Grid
 Latitude
 Departure

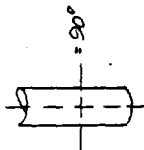
Core Size
 Elev. Collar
 Bearing
 Dip
 Length
 Horiz. Trace
 Vert. Trace

Starting Date
 Completion Date
 Date Logged
 Logged By

page 1 of 13.

Dip Test		
Depth	Angle	
	Read	Actual
Collar		-50°
72.2		-52°
30.48 m		-54°
60.96 m		-53°
91.44 m		-55°
121.92 m		-54°
152.4 m		-56°

FROM (metres)	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY	
				FROM	TO			
		Base (1) 8.93-14.86 Base (2) 79.50-85.13 Base (3) 150.02-155.85						
		(2) 14.86-20.66 (14) 85.13-91.15 (26) 155.85-161.68						
		(3) 20.66-26.52 (15) 91.15-97.03 (27) 161.68-167.61						
		(4) 26.52-33.00 (16) 97.03-102.85 (28) 167.61-173.82						
		(5) 33.00-38.95 (17) 102.85-108.81 End of Hole						
		(6) 38.95-44.81 (18) 108.81-114.71						
		(7) 44.81-50.70 (19) 114.71-120.71						
		(8) 50.70-56.47 (20) 120.71-126.55						
		(9) 56.47-62.14 (21) 126.55-132.57						
		(10) 62.14-68.03 (22) 132.57-138.71						
		(11) 68.03-73.71 (23) 138.71-144.19						
		(12) 73.71-79.50 (24) 144.19-150.02						



DRILL HOLE LOG

Hole Number

DL-86-53

FROM (m)	TO (m)	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH (m)	ASSAY			
				FROM (m)	TO (m)		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
0	8.93	overburden								
8.93	41.77	ARGILLACEOUS METASEDIMENT								
		dark green, f-m gr'd, generally mod'ly sorted, mod'ly siliceous, locally mod'ly chloritized argillaceous meta-sed.; w/ky feld @ 50-60°								
		contains 1-10 cm thick lenses of arkose - mudstone								
		locally & randomly dispersed are garnetiferous-rich zones, ~10-20%	56252	11.0	11.7	0.7	NIL	NIL	102	31
		<1-2 mm, as isolated grains for concentrated zones subparallel to fol'n								
		Unit has undergone some secondary chloritization @ 50°								
		few scattered qtz stringers, conc ~3% by 1/4-60x, sericite; ~1% dense subls								
		with depth ~15 m - general clustering of garnetiferous-rich zones,								
		sericite by chloritic argillaceous horizons.	56253	18.5	19.2	0.7	NIL	NIL	94	73
		several intervals intruded by 2 nd arg silicification - generally conformable								
		but also causing some brecciation exs. 21.6 - 22.03	56254	21.5	22.5	1.0	NIL	NIL	227	43
		22.4 - 23.1 } include chloritic								
		23.69 - 24.0 } occasional								
		25.38 - 25.97 } CO ₂ alteration, 2-5% po, py.	56255	25.3	26.1	0.8	NIL	NIL	150	87
		By argillaceous horizons contain some biotite, white lenses or beds of arenaceous / arkose mat'l more frequent - moving down into shallower facies; argillaceous horizons are still quite evident.								

PH

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		29.0-30.11 highly fld. broken rock. 65-70% recovery	56256	30.9	31.4	0.5	NIL	NIL	73	51
		- brownish garnetiferous - rich & drk green chloritic argillaceous zone								
		banding obs'd from ~ 31.0-32.5; below garnets isolated blobs								
		randomly dispersed.								
		- 1-2 cm thick gte stringers sub-parallel to fol'n								
		- from 33.37-34.0 - section invaded by gte/cbl/CO ₂ altering solns	56257	33.1	34.1	1.0	NIL	NIL	44	72
		tend to be conformable; occ'l 2-3% sulph. (poppy)								
		- mottled brownish-greenish banding continues with depth; <10% f								
		gtd altered feldsp. frngs dispersed - some are flt & stretched, possibly								
		indicating some tuffaceous deposition ex. 39.2m								
		a very weak banding/fol'n of 65° is maintained locally.								
		unit w/ly fld. & swmp: all, sericite, +/- CO ₂ , minor py., frnd 0-20°								
41.77	43.29	SILICEOUS FELSIC QUARTZ PORPHYRE DYKE	56258	42.1	43.0	0.9	50	NIL	19	34
		- sharp upper contact @ 55° - 1cm gte lens, minor sulphs.								
		- H to med gr, f-m gtd, strly siliceous, porphyritic dyke, rock								
		- contains - a very evenly distributed ground mass (felsic)								
		- <10% <1mm altering feldsp. frag								
		- <10% <1-3mm sub-rounded white gte porph								
		- a weak alignment of albite-rich areas @ 50°								

BH

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Ag (ppb)	Cu (ppm)	Zn (ppm)	Au check (ppb)
		- contains a couple of 20% qtz/chl/epidote stringers, carry ~3% py, po								
		- few microfr: relaxed: py, chl, kaolinite?, sericite, H ₂ O ₂ , <2-3% py								
43.29	71.58	return to familiar brownish-greenish stippled								
		(GARNETIFEROUS) ARBOLLACEDUS METASEDIMENT, more felsic								
		61 earlier described: brownish Fe-rich areas can carry ~5% chert po, py. ←								
		- contains scattered concentrated bands of ~30% chl-2mm pinkish-brown garnet								
		- contains occ'l 60° qtz/chl/~3-5% py stringers;								
		- 45.47 - 45.61 m - zone of qtz/chl invasion, minor sulphs @ 65°	56259	45.3	46.0	0.7	90	173	27	90,90
		- 45.61 - 45.72 - recrystallized 'thermal contact' zone rich in chl/biot/qltz/ amph. & contained 5-7% po, py.								
		- few thin siliceous horizons obs'd								
		- few zones of soft sed. slumping.								
		- similar sequence continues at depth								
		- a less chloritic, more brownish slightly coarser gr'd interval								
		unconformities @ 55.48 m; unconformable surf @ 75°; above this	56260	49.7	50.2	0.5	NIL	131	70	
		5-7 cm band of siliceous/chl's alteration carrying 5-7% po, py,								
		- this interval appears mined argillaceous - arkosic - arenaceous; poorly								
		bedded - massive; slight clay alignment @ 70°; contains thin 1-4 cm	56261	55.1	56.1	1.0	NIL	102	79	
		zones of ~5% chert po, py; a few breccia zones - chl's infilled								

BHT

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		with depth contains more qtz/lellorite 'solution-breccia' zone, 2-3% dissolved sulph. ex 56.97m.	56262	56.8	57.8	1.0	NIL	NIL	88	57
		highly folded zone 56.99-57.35m - f. sulph. cl. Koolin, minor Qz								
		zone ends ~ 57.37m; return to normal stipple banded brown/green interbedded inclined unit; chl's bands reveal alignment @ 45°								
		unit mostly siliceous throughout; garnet content down dramatically								
		abundant secondary chl's alteration; brownish more felsic								
		more clastic mat'l contains numerous fine microveinlets of ~2-10% py, minor py sub-parallel to 70° folm cleavage								
		minor talcaceous horizons; few vc grains salmony folios	56263	65.1	66.0	0.9	NIL	0.3	60	69
		brownish Fe-rich mat'l definitely sulphide enriched' (to 67.75m)	56264	66.6	67.1	0.5	NIL	NIL	58	119
		at ~ 66.25m - much more low energy env't, brownish siltstone	56265	67.1	67.9	0.9	NIL	NIL	87	81
		ob'd to contain ~5% po py (muscovite?) in thin stringers & isolated grms. Hosts 1-8 cm zones of qtz/chl/minor Qz alteration - resulting in a mixed contorted fabric (@ 60-65°), tends to be enriched in sulph. content	56266	69.18	70.18	1.0	NIL	NIL	64	93
		With depth 'greywacke'-type unit appears more siliceous and somewhat more contorted. - as if highly folded.								
		Zoned of Qtz-chl-y-bio, occur dispersed randomly throughout								

Bt.

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		Oriented 30-40, 60-70°. These zones carry ~10% py. po. The unit itself contains <1.5% sulphide. Both within of micro-veinlets & less as distinct blobs.	56267	72.63	73.63	1.0	NIL	NIL	71	77
		With depth unit becomes more 'banded' & further suggests a primary chalc.								
		alteration to the rock. Sub-parallel flm @ 65°	56268	75.15	76.15	1.0	NIL	0.2	89	69
		By 70.8 bands more pronounced & regular & containing a higher % ~8-10% of po > py.								
		79.3-79.5 - conformable (70°) lens of sulphide-rich gtz.								
		appears as if may have been a silica rich gtz; 10-15% po > py.								
		- base of metased. unit @ 79.58m trend 85°	56269	79.08	79.58	0.5	NIL	0.4	111	45
79.58	81.27	CONDUCTIVE ZONE	56270	79.58	80.08	0.5	NIL	0.8	114	620
		- of metased origin? unit now a sulphide/graphite rich	56271	80.08	80.58	0.5	30	1.6	356	2490
		schist trending @ 55°. Contains 20-35% po >> py	56272	80.58	81.08	0.5	90	2.9	863	2540
		possibly some minor galena. Sulphides primarily conformable to	56273	81.08	81.58	0.5	30	1.5	280	1010
		schistosity as a fluid but also obs'd as preferred oblate blocks. Appears to be a injector periods. Some brecciation infilling a same met/								
81.27	82.06	gradual transition back into finely banded familiar metased (described above); have much more altered appearance as contains ~20% po > py with similar habit as in	56274	81.58	82.28	0.7	NIL	0.5	144	1730
		CONDUCTIVE ZONE (55°); generally more schistose and hosts								

BHT

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		a higher % of conformable qtz lenses								
82.06	90.32	sharp, 45° trending contact with Quartz Porphyry Dyke								
		med grey, f-m gr'd med-stilly siliceous, massive	56275	87.5	88.2	0.7	NIL	NIL	37	960
		felsic to sub-intermediate groundmass; <1mm lath-like bld (10-15%)								
		~25-35% Subrounded to angular qtz porph; <1-3mm in size,								
		white, minor blue or clear								
		1-3% dec'd py >> po throughout								
		8775-88.24 m - siliceous alteration, recrystallization of								
		groundmass & bld.								
		8777-87.86 m - qtz vein + clld bld + 2-3% py @ 45°	56276	90.2	91.0	0.8	285	0.9	115	39
90.32	91.6	at 90.32 m unit 'suddenly' becomes strongly siliceous								
		& altered; (possibly a transition zone between porphyry								
		& underlying felsic tuff.) ~ blk. med chloritic alteration								
		unit contains bld.-rich stringers: carry 10-15% po >> py								
		(0° & 50°)								
91.6	125.18	SILICEOUS ((STRIPED) FELSIC TUFF								
		- typical section of lt grey - massive alteration banded								
		felsic tuff; contains ~ 30% 1-2 mm lapilli-sized								
		altering felsic. gr's, subrounded. These are more apparent								

BHT

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Cu (ppm)	Zn (ppm)	
		within the darker, more siliceous bands. Locally tuffaceous layering can be obs'd @ 60° to 20°	56277	95.5	96.3	0.8	NIL	13	39	
		- locally vertical chl'c/gtz microfoss. +/- bio & carry <1-5% vein py > po								
		- the unit itself contains ~ 41-3% hard subcls.								
		- monotonous banded sequence continues at depth, mod to str'ly siliceous at depth; unit maintains 0° lineation	56278	99.0	99.5	0.5	NIL	11	18	
		- gtz rich zone 103.11 - 103.22 trending 55°; chl & bio, carried ± 3% deas'd py > po, sub-parallel 'fl'n'	56279	108.0	108.5	0.5	NIL	11	28	
		- grns phlogopite obs'd locally	56280	111.3	111.8	0.5	NIL	27	80	
		- unit very competent, v'ly fld @ 20-30°; fr sufs: chl, sericite, kaolin, +/- CO ₂ , py 'paste'	56281	117.0	117.5	0.5	NIL	13	41	
		- wk: mod'ly chl'g'd zone 117.95-118.2 m. trending ~ 80°								
		- <1% isolated white-blues gtz eyes, clas'd.								
		- beginning ~ 117.0 m: isolated intervals of gtz porphyritic mat'l although no evidence of litho-contacts; unit strongly siliceous. ex 118.7 m. - these porphyritic lenses appear somewhat recrystallized								

B4

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY				Au check (ppt)
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	
		121.0m interbedded banded felsic & siliceous lapilli tuff continues at depth; unit remains most to st'ly siliceous; lensing alignment & tuffaceous lagging intermittent @ 65°									
		- local sections appear weakly vbl'g	56282	123.1	123.6	0.5	NIL	NIL	7	62	
		At 123.23m unit appears somewhat more bleached (although still siliceous); marked by fine teluric lenses trends ~ 90°									
		Minor solution cavity pitting @ ~ 2% devid po-py. Contains few (reheated) qtz/cr/1/2 bio + ~ 2-3% py > po microfrs. @ 0-20°									
		@ 126.26 - 126.27 highly siliceous lens @ 75-80°									
125.18	126.1	CONDUCTIVE ZONE									
		a highly altered (siliceous & sulphide min'zation) &	56283	124.74	125.18	0.44	NIL	NIL	10	55	
		contorted (solution brecciation) interval within fls	56284	125.18	126.1	0.92	10	1.7	78	39	
		above tuffaceous unit									
		125.18 - 125.38 - somewhat graphitic ~ 25% - 30% py > po									
		125.38 - 126.1 - largely sulphide sol'n infilling ~ 35-40% po >> py									
		sp-up fragments appear cherty ~ chert unit commencing then									
		~ 125.64 m ←									
126.1	131.17	RECRYSTALLIZED CHERT	56285	126.1	127.1	1.0	20	0.6	39	16	
			56286	127.1	128.1	1.0	20	1.4	72	10	30, 10

B4

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		a f grid, strongly siliceous 'sugary' textured chert, it is med. gr.	56287	128.1	129.1	1.0	NIL	0.4	27	6
		locally brecciated at top of section; down section invaded by	56288	129.1	130.1	1.0	NIL	0.3	18	7
		numerous gtz/chl/sulphide bands/lenses ~ where regular trend 65-70°	56289	130.1	131.1	1.0	NIL	0.3	17	4
		also many alteration/mineralized veins trend 0-10, 20-40° Almost all such	56290	131.1	132.1	1.0	NIL	0.4	22	6
		veining carries <10-25% ^{Fe} . This highly alt'd, min'g'd section	56291	132.1	133.1	1.0	10	0.4	24	13
		gradually dies out ~ 127.61m	56292	133.1	134.1	1.0	NIL	0.6	31	15
		Below 127.61m cherty interval appears more regularly banded	56293	134.1	135.1	1.0	NIL	0.4	20	13
		although local veining/alteration, similar to above, is obs'd.								
		Banding is generally marked by both gtz/chl & dense magnetite								
		rich lenses/bands trending 65-70°. Some 1-2 mm garnets are								
		also present locally (ex fr. surfs.)								
		Unit contains ~ 2-5% dense subhedral & po>py within microfr/micro								
		veinlets. Cherty unit remains recryst'g'd & sugary								
		Local, minor whips graphite present								
		Below 133.2 garnetiferous bands, adj't to microfrs, more apparent								
		but constitute only ~ 5% section.								
		Below 135.5 section appears somewhat more argillaceous, fin	56294	135.1	136.1	1.0	10	0.2	31	137
		much better defined locally; grades into buffaceous zone to 133.3m	56295	136.1	137.1	1.0	10	0.6	48	135
		Minor magnetite & local graphitic horizons present								

BA

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY				
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	As chalc (ppb)
137.17	138.18	fairly sharp ~80° transition into an INTERMEDIATE FELDSPAR PORPHYRE DIKE; mod. stilly siliceous, v. fine gr'd, ~20% ≤ 1mm angular altered feldspar frags within intermediate-felsic ground mass. Some alignment of porphyic fragments, obs'd locally @ 65°.	56296	137.1	137.77	0.67	NIL	NIL	35	112	
		≤ 1% disseminated sulphides.									
138.18	144.51	Return to familiar RECRYSTALLIZED CHERT unit; similar to banded variety described up section; local magnetite & graphite here locally concentrated, contains ~30% py/cyl/sulphide lenses ranging from 1mm to 5-6cm in thickness. These can carry ~20% po > py.	56297 56298 56299	139.0 142.0 143.0	140.0 143.0 144.0	1.0 1.0 1.0	NIL NIL 30	NIL NIL 0.4	15 15 14	6 7 15	
144.51	146.29	INTERMEDIATE ARGILLACEOUS TUFF - f.g'd, mod to dk gr'n, modly siliceous & chlc - chlc gr'd mass, ~20% altering tuffaceous feldspar frags < 2mm tend to be somewhat stretched, wk to mod. alignment; 15-20% aligned bio gr'd, < 1-2 mm; also wk to mod alignment 70-75° unit has undergone strong chlc alteration, usually associated with pyx.	56300	145.0	145.5	0.5	25	NIL	4	59	30, 20
		- < 1-2% disseminated pyx.									
146.29	152.6	a reasonably sharp 70° contact into an Interbedded FELSIC TUFF and CHLORITIC / GARNETIFEROUS METASEDIMENT	56301	147.3	148.3	1.0	20	1.0	48	46	

B4.

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		Majority of section composed of a dk grn mottled pink garnetiferous argillite; mod-stily chloritic; argillaceous unit contains few								
		1-10 cm thick light grey, mod-stily siliceous felsic tuffaceous horizons.								
		Fol'n mod to well defined in both trends @ 60°								
		Chloritic argillite contains 15-30% 1-3 mm anhedral garnet; in banded clusters or as individual grains; unit carries <5-10% po>py, found largely within garnetiferous zones and within silica (qtz) ch. veins subparallel to fol'n; (Possibly a few flakes graphite).								
		Lighter tuffaceous horizons contain mod qtz/chl alteration, <3% scattered garnets, 1-5% po>py both as descl'gins & assoc'd with contained qtz/chl alteration lenses, stringers, bio.	56302	150.2	150.7	0.5	NIL	NIL	17	61
		At ~151.0m intercalated nature of deposition more regular	56303	152.0	152.8	0.8	NIL	NIL	24	179
152.6	155.85	a gradual transition into STRIPED FELSIC TUFT from about 152.6 to 152.8 unit contains intercalated argillaceous mat'l but by 153.0 resembles familiar 'self'								
		Alteration banding well represented: altered lt. grey-grn bands vs mod to stily siliceous med grey bands; few modly spicified sections.								
		- 20-25% leucite feldspar particles								
		- <5-7% 1mm sub-angled clear to bluish qtz eyes - distributed throughout.								

B4.

DRILL HOLE LOG

Hole Number

DL-86-53

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Ag (ppm)	Cu (ppm)	Zn (ppm)	
155.85	172.82	generally $\leq 3\%$ destd sulphs. pyro, as well as assoc'd with gradual transition into Siliceous (Felsic) Lappili Tuff transition worked by qtz/chl veining & microfracturing. fl grey/beige; f-m gr'd; contains minor bio, white-mica - dispersed throughout. Numerous microfoss containing chl/qlz/miner cdx, 2-5% pyro, & biotite. $\leq 2\%$ destd sulphs; few conformable 2-3 cm qtz bands. 5-10% $\leq 1\mu m$ sub to rnd'd white-blueish qtz eyes. scattered drk grey siliceous alteration bands 1-2 cm wide. local banding & tuffaceous layering obs'd @ 65-70° 165.48 - 165.73 } sharp 80° contact with we'd gr'n. f. gr'd massive, modly chlc 166.34 - 166.65 } intermediate dyke wall, $\leq 2\%$ reddish feldsp frags. 171.2 - 171.42 } $\leq 2-3\%$ destd py	56304	154.7	155.5	0.8	NIL	NIL	21	126
			56305	159.0	160.0	1.0	NIL	NIL	14	52
			56306	161.7	162.7	1.0	NIL	NIL	20	18
			56307	166.2	166.8	0.6	NIL	NIL	27	59
			56308	169.2	170.2	1.0	NIL	NIL	19	73
		~ 168 m a general increase in mafic mineral content & slight incr. in contained pyro to $\leq 5\%$. Interval from 168.0 to 170.1 generally altered & contrasted in appearance. Sulphides appear spatially related to chl/bio rich zones, stringers.								
		END OF HOLE 172.82 m								
		$\geq 95\%$ core recovery								
		- 57 samples								

B. Harrington

DL-86-4

Starting Date Nov 30/86
Completion Date Dec 3/86
Date Logged Dec 1 - 3/86
Logged By B. Harrison

Date Logged *Dec 1 - 3/86*
 Logged By *B. HAMMON*

Logged By : y.y.z

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Starting Date Nov 20/86
Completion Date Dec. 3/86
Date Logged Dec. 1 - 3/86
Logged By B. Ann Wilson
page 1 of 16

FROM (metres)	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY		
				FROM	TO				
		Box (1) 8.53-14.39 Box (2) 27.28-85.04 Box (3) 150.37-156.18							
		(2) 14.39-20.1 (14) 85.04-90.85 (26) 156.18-162.18							
		(3) 20.1-26.04 (15) 90.85-96.83 (27) 162.18-168.07							
		(4) 26.04-31.88 (16) 96.83-102.78 (28) 168.07-173.68							
		(5) 31.88-38.19 (17) 102.78-108.32 (29) 173.68-179.5							
		(6) 38.19-43.96 (18) 108.32-114.43 (30) 179.5-185.5							
		(7) 43.96-50.07 (19) 114.43-119.47 (31) 185.5-195.07							
		(8) 50.07-56.30 (20) 119.47-126.52 (32)							
		(9) 56.30-62.18 (21) 126.52-132.44 (33)							
		(10) 62.18-67.82 (22) 132.44-138.35 (34)							
		(11) 67.82-73.73 (23) 138.35-144.27							
		(12) 73.73-79.28 (24) 144.27-150.34							

GETTY RESOURCES LIMITED

DRILL HOLE LOG

Hole Number

D-86-54

FROM (m)	TO (m)	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH (m)	ASSAY				
				FROM (m)	TO (m)		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)	
0	8.53	overburden									
8.53	18.6	dk green, f.gid ~ massive, modly siliceous throughout, mod. strongly chlc. IMF to INTERMEDIATE FLOW(?); probably horizons of intercalated chlc. metaseds. - obs'd through occ's! chloritized/foliated intervals. Where present foln modly developed @ 60-70° Unit contains numerous, conformable 1-4 cm qtz/chl/1/2 CO ₃ / <1-5% pyrope lenses. many 10-30 siliceous microfis/stringers (<1mm) - randomly dispersed, some carry ~5% pyrope occ's! minor brecciation assoc with the above lens stringers Unit contains 41-5% clastic sulph. pyrope from v. of giss to fragmented, 1.2 mm isolated gins Unit wk-modly fld, 10-30% fr. sulph. chl, qtz, 1/2 CO ₃ , 1/2 sericite, ~1-2% py. with depth, gins size appears to be slightly coarser; thin bio-rich zones obs'd. oriented ~ 65° towards 18.4 m. few argill. up-up chlc's observed, oriented sub-parallel to 65° foln. gradual transition into a chlc. dk green, mottled brown (marked) CHLORITIC ARGILLACEOUS METASEDIMENT f.gid, modly siliceous, w/ky banded, quite similar in comp'n to above unit but reveals more ^{soily} brecciation, alteration banding; appears to have undergone a Fe-rich (brown) & chlc (green) alteration numerous qtz/siliceous up-up chlc's @ 65-70° few frag. old feldsp (<1m-2cm) (<1mm)	56309	10.4	11.2	0.8	80	0.4	125	40	
18.6	26.1		56310	18.9	19.9	1.0	20	NIL	79	115	

Bd

DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		contains numerous ≤ 1 cm qty bands, subparallel (65°) to $\sim 90^\circ$								
		containing $\leq 1-3\%$ py, usually as disseminated grains conc'd within 1-3cm zones, tend to be comparable to fl'n								
		~ 20 m unit hosts $\sim \leq 10\%$ ≤ 1 mm angular frags of alt'd feldsp. tend to lie subparallel to bedding, fl'n. also bio.-rich aggregates.								
		from 21.37 - 23.43 m - massive, more ch'ic zone with w'ly elongated 65-70° bio. frags.								
		below 23.43m return to above unit, alt'd feldsp. frags & biotite/pods bio. frags evenly distributed.								
		contains $\sim \leq 3\%$ disseminated py. grains								
		cut by small qty lenses, 30-60°, contain large vein clefts py. $\sim 5-7\%$	56311	25.0	25.6	0.6	160	NIL	78	61
26.1	28.71	gradual transition to f'm g'd mafic-INTERMEDIATE ANHEDRITE	56312	28.2	28.9	0.7	110	NIL	101	120
		mod'ly siliceous, med-dark mottled green; mod'ly ch'ic, evenly distributed								
		coarser feldsp. & mafic (ferromag. amphib) g'nd $\sim 30\%$ in ch'ic matrix								
		(amphibolitized metabased?) - fairly massive texture.								
		contains 2-3% disseminated py. po.; 50-60° frs contain 10-20% py > po								
		outer margin of unit slightly more siliceous.								
28.71	30.12	gradual return to chloritic ALKALINE METASILTSTONE								
		similar to Actinolite metabased, but less argillitic - a coarser gr'd texture								
		contains numerous f'g/chl-rich lenses/bands @ 70-75°; these								
		generally are enriched in sulph. $\sim 5\%$ disseminated py. po. (sub-parallel fl'n)								

BA

DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY				Au check
				FROM	TO		Au (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)	
30.12	31.24	sharp 15° contact with lens of INTERMEDIATE QTZ/AMPH. PORPHYRY DYKE - stily siliceous, massive, f.gid ~ 45% sub-md qtz & andic latites, alt'd feldsp. grains in f.gid cryst. matrix; unit contains ~ 3% destd py.	56313	30.6	31.4	0.8	NIL	NIL	42	57	
31.24	37.19	return to familiar ARGILLACEOUS METASILTSTONE - still mod-stily chlc. - dk grn, mod'ly chlc throughout; intermediate composition. - contains numerous, randomly dispersed, qtz-rich + chlc stringers (≤ 1cm thick) these trend subparallel to weak alignment @ 50-65° & stringers are quite contorted, folded; contain minor clz. - contains occ's'l microfoss which carry ~ 3-7% py > 20; remainder of unit contains ~ 2% destd sulpho (py > 20). with depth ~ 36.3m mafic grain become more distinct & est qid (1-1.5mm) weakly aligned @ ~ 60°	56314	32.3	37.9	0.6	20	NIL	35	41	
37.19	43.6	a gradual transition into what may be a chloritic AMPHIBOLITE (flow?) - owing to mafic grn, possibly some flow breccia zones. Very similar to the above unit but the fabric is more massive & significant may be flow related ~ amphibolitic. (Not quite sure!). - 42-5% destd py > 20; few sulphides observed within microfoss - at 43.28m - 25° chl/Qtz vein ~ 1.5cm width ~ 10-15% py (minor Fe-rich feldsp in vein).	56315	37.9	38.4	0.5	0.155 03/ton	0.9	200	19	03/ton 0.145, 0.16, 0.17, 0.15,
			56316	42.9	43.5	0.6	100	0.3	171	33	

BM

DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Au (ppm)	Cu (ppm)	Zn (ppm)
43.6	47.13	gradual transition back to familiar ARGILLACEOUS META-SILTSTONE - Similar to block 18.6 - 26.1, 23.71-30.12, 31.24-37.19 m At 44.63 m unit becomes somewhat tuffaceous; intercalated tuffaceous horizontal banding @ 70-75° - giving somewhat of a conchoidal appearance; brown-green mottled banding is obsid within this section - undergo chert / qtz alteration. Section contained 5-7% po>py. Muds scattered were siliceous. stop 80° contact with QUARTZ (FELSIC) Porphyre Dyke. - m. gr. med to dk gray, med-stly siliceous; contains ~ 25-30° s1-2 mm sub-rndd white - cloudy qtz porphs, ~ 15% sub-rndd alt'd felsic gr. (locally appear Fe-rich) - Or. interbed. to felsic gneiss containing bio (locally prefered @ 70-80°) - unit contains < 3-5% chert py>>po	56317	47.85	48.5	0.65	NIL	NIL	67	39
48.25	51.01	return to familiar ARGILLACEOUS METASEDIMENT - similar to above, here more massive, med-st siliceous, banding absent, a general decol. in argillaceous rich zones. (alt?) Toward's base beds numerous sporadic qtz / CO ₂ minor chert stringers (< 1cm) these are quite conchoidal & foliated. Unit contains 3-7% po>py rich ground - dissemin 50.7 is base unit much more argillaceous, more finely banded, 75-80° folia.								

BA

DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
51.01	53.76	sharp 60° contact with Qtz/FELSIC PORPHYRE DIKE - similar to 47.13 - 48.25 m. - again ~20-30% subvolcanic to subvolcanic porphy of Qtz (65%) & altering feldspar (35%) - mafic rich aggregates < 8% - 2-4% disseminated pyro - highly altered subvolcanic ARGILLACEOUS METASEDIMENT (ALTERED) - possibly interbedded argillaceous metabasaltstone? - fine mottled grn-grey - dark brown, non-argillaceous zones - w/ mottled sericitic - 20% grey chlc alteration - unit appears vividly bleached; contains ~3% disseminated pyro - contains 2-3 mm conchoidal Qtz/chl/ID3 stringers 75-90° minor sub-hrs. - argillaceous @ 65°	56318	52.5	53.0	0.5	NIL	NIL	41	77
53.76	53.43	sharp 90° contact with strongly siliceous, w/ly alteration banded SIL. FELSIC LAPILLI TUFF, intercalated with STRIPED FELSIC TUFF. - ~20% Lapilli sized feldspar frags, ~10% sub-rounded 1-2 mm Qtz frags (?) - bio. & white mica represented; fairly massive w/ly elongated ~80-90° - contains ~2-5% disseminated py (cf. diss. to isolated emb.!). - sharp return to ALTERED ARGILLACEOUS METASED - as above.	56319	54.7	55.3	0.6	NIL	NIL	53	69
54.93	57.21									

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DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al ₂ O ₃ (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		- more contact altered than above since contains higher % Qtz / Chl / CD3 alteration. Porphyry 0.3-1.5 cm. ~ 10% mostly carbonitized.								
		- fairly soft & altered; contains <3-4% deacid sulphides; pyrite into goethite.	56320	56.7	57.5	0.8	NIL	NIL	69	72
		- well banded near base @ 60°. Few deacid 1-2 mm grains.								
58.94		sharp 60° contact with SILICEOUS FELSIC TUFF (1/4 STRIPED)								
		similar to striped unit, here alteration banding not so well defined; mud grey silty siliceous; f. qtz - fairly massive, most of the rounded layering; contained 15-20% f. feldspar chl/bio (individual & aggregated); occasional pink-orange feldspar.								
		from 60° to 10 cm qtz leucized, carry ~5% py; generally ~3% deacid porphy ~7% white qtz-eyes								
		58.70 - 58.94 m - 75-80° bull qtz vein; chlc halo; minor po								
58.94	63.28	gradual transition into f. qtz - Amph Porphyry / Dyke; drk grey	56321	59.64	60.15	0.5	NIL	NIL	25	55
		metavolcanic unit contained ~15% <1.5 mm sub-rounded qtz porphyry; mostly of porphy well in wtkly aligned, 80-90°, amphib/bio grains & aggregates.								
		- contains <3% deacid sulphides; mud strongly siliceous	56322	62.5	63.0	0.5	NIL	NIL	17	50
		- good mass is siliceous & primary of felsic comp.								
		At ~60.6 m unit no longer as porphyritic; much higher % similar felsic								
		grind mass. H ₂ O content down, as does in size & % above mafic grind.								
		refers more felsic; mud-sty siliceous; <5% <1 mm white-grey qtz-eyes.								

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DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (gpt)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		some 20% chlc alteration, Fe-sts ~ 60% (as do some ferromag. gns).								
		generally 2-3% Fe-sts > po.								
63.28	74.1	fully sharp 75° contact with SILICEOUS FELSIC TUFF - similar to								
		57.21 - 58.94 m; this interval contains higher % Cu / minor Qtz / minor Qz ± 15%	56323	68.0	69.0	1.0	45	0.3	75	22
		vein sulphs (py > po) + mainly cov re-heated microfs. (0-30°) & stringers.								
		vein v. sh. silicified; contains numerous 2-6 cm, 20° Qtz veins & associated								
		with chl, contains ~ 7% aggregates of po > py.								
		15-25% lath-like sized feldsp. frags, 10-25% ferromag. flakes, 10% sub-mtd								
		qtz porphs.								
		from 71.53-73.16 m sharp 30° contact with calcareous, chlc intermediate								
		f. gnd dyke - 3% m-ve gnd sulph. (py) aggregate gns. - dispersed throughout								
		from 73.88-74.1 felsic tuff unit becomes very porphyritic								
		10-mthg 20-35% sub-mtd Qtz PORPHYRE - very siliceous & no definite contact.								
		minor dark silts.								
74.1	79.14	sharp 55° contact with INTERPRETTED FELSIC TUFF &	56324	71.1	71.7	0.6	NIL	0.2	52	117
		GARNETIFEROUS (ECLASTIC ?) METASEDIMENT.								
		Dk grey gny with mtd to dk grey lenses. F-m gnd, modly chlc throughout								
		lenticular lenses w/ky scintic (more altered than argillaceous material.)								
		Wk to mod 60° foln developed. (quartz (tuffaceous) lags, chlc alteration)	56325	74.65	75.65	1.0	20	0.4	71	162

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DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		~ 10-15% 5/mm garnets, as individual grains or as concentrations; subparallel folia; bedded within more chlc, bioic lenses.								
		- contains $\leq 5\%$ blue-grey rutile gtz eyes (?)								
		- contains $\leq 3-5\%$ subharp poopy; numerous sporadic concentrations of vein mineralization, as fine stringers subparallel to folia.								
		- ore's l. 2-4 mm gtz lens (subparallel) - minor sulphide with all.								
		(All ~ 78.0 m unit becomes somewhat foliated & much more massive, cryptine in folia & texture ~ V. strongly siliceous, mottled	56326	78.1	78.6	0.5	NIL	NIL	18	29
		} green brown ~ carbonaceous? siltstone; minor chlc whiskers								
		4-3% disseminated sulphur (pyro).								
79.14	82.97	sharp 80-85° contact with QUARTZ BARPHYRE (DYKE?)								
		- med grey, fine-grained, med siliceous throughout								
		- 25-30% 1-3 mm subharp - subrounded gtz porphy, $\leq 15\%$ f. folia sp.								
		gtns; ground mass intermed - felsic comp'n; massive								
		- 1-3% disseminated sulphur (pyro)	56327	82.47	82.97	0.5	NIL	NIL	23	68
82.97	85.95	return to familiar INTERBEDDED FELSIC TUFF & ARGILLACEOUS METASEDIMENT - as at 74.1-79.14 m; but here is	56328	82.97	83.47	0.5	10	0.2	139	57
		non-granoblastic - resembling more an argillite								
		- unit locally contains alteration banding as in SERPENTINIZED FELSIC TUFF								

BA

GETTY RESOURCES LIMITED

DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		contains 2-7% deacid sulphur porphy; occurs as fine disseminated, not evenly distributed, but no definite association, possibly with more sulphurous horizon containing albite alteration bands (?).								
		- bearing subparallel local chloritic zones @ ~70°.								
85.95	86.71	same 80-85° contact with QTZ/FELDSPAR PORPHYRE DYKE. AS described 79.14-82.97m; here contains higher % sodium feldsp. porphs. and is generally more strongly siliceous. Contains ~1-3% deacid sulphur.	56329	85.7	86.3	0.6	NIL	NIL	66	161
86.71	92.66	similar to 82.97-85.95m; but here resembles a familiar alteration banded - STRIPED FELSIC TUFF intercalated with GARNETIFEROUS (phic) AGILLACEOUS METASEDIMENT. - not to dark grey, only modly siliceous; banding where regular, trends @ 75-80°.	56330	88.5	89.0	0.5	NIL	0.3	87	91
		beginning ~21.2m non tuffaceous intervals - are dominantly argillaceous & contain 1-15% f <1-2mm garnets								
		- contains 3-7% deacid porphy. usually found adjacent to								
92.66	93.57	POOR TO MODERATE CONDUCTIVE ZONE - OCCURRING within the above unit.	56331	92.55	93.55	1.0	20	1.8	43	1060
		- dark grey to black granitic metased.; contains <10-15% porphy								
		which occur subparallel to and to mod schistose foln ~70° & within								
		thin conical folded albite rich rocks; minor sulphide fluid breccia.								

Bd

DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY						
				FROM	TO		Al (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	As check (ppb)		
95.57	95.53	light to black GARNETIFEROUS ARGILLACEOUS METASEDIMENT interbedded with BANDED FELSIC TUFF - similar to above but mostly of section is dark to black GARNET. METASED. - similar to ~ porphyritic zone but only 5-9% po>py (of above habit). Fe-rich chlc zones @ 70" can contain $\leq 40\%$ 1-2 mm garnet masses											
		- unit does contain finely dispersed granulate, located as thin film on argillaceous foln surfs.											
95.33	105.53	mod. sharp transition @ 70" to familiar STRIPED FELSIC TUFF # 101.88 - 102.78 m which contains 1-4 cm lensed garnetiferous argillite ex. 97.2.8, which here carries minor granulate & ~ 20% po>py, as fluid solns ranging from banded @ 55" to highly exorted; these mineralized interbeds are generally stily siliceous compared to adj't FELSIC TUFF Section from 98.64 - 100.88 m appears somewhat porphyritic where 1-2 mm qtz fangs (subvoids) are observed. The zone is strongly siliceous; porphyritic well sand assoc'd with 50-70" silica stringers / ≤ 1 cm lenses pin many across the porphic fangs; are spatially restricted by these 'feeders'?	56332 56333	97.4 101.7	98.1 102.4	0.7 0.7	115 20	0.7 0.7	65 76	71 103	160.70		
		INTERCALATED STRIPED FELSIC TUFF & GARNETIFEROUS ARGILLACEOUS											
		METASED. continues @ depth.											

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GETTY RESOURCES LIMITED
DRILL HOLE LOG

Page 12.....

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		A _u (ppb)	A _g (ppm)	Cu (ppm)	Zn (ppm)
		102.7 mod. siliceous, fine grained								
		102.68-105.53 m - white granular to argill. material, fine grained, 1-2 mm zones of white, waxy granitic, argill. material, 10-15% of 1-2 mm hard bits to bedded to chlc sections, minor bituminous horizons.	56334	102.6	103.3	0.7	60	0.2	19	121
		- layering @ 70-75° ± 5% lapilli frags within talaceous zones								
		- unit contains <5-7% po>py, dominantly within garnet/chl lenses								
105.53	108.82	modly sharp 90° contact with STRIPED FELSK TUFF								
		- lt. med gry. f-m grd. modly siliceous, alternating alteration banding								
		- <10-15% lapilli frags. ± 5% blue gry. glz-eyed, dispersed throughout	56335	107.2	108.2	1.0	30	0.8	89	29
		- 1-3% desid po>py, localized more towards mafic units (bio) ~ @ 70-75° P								
		along chlc microfys. @ 20-30°								
		- few 1-2 cm chl'z'd argill. bands: 15-25% 1-2 mm garnets ± 3-7% desid po>py								
		- 107.27-107.77 m - alt'd, reheated microfol zone, 10-20% py>po, as seen west								
		- trending 0° P folded to 60° subparallel, conformable bands, local sel in pitting								
		MINOR sulphides (massive) P COs								
108.82	117.16	gradual transition to GARNETIFEROUS ARGILLACEOUS METASED.	56336	108.6	109.2	0.6	NIL	NIL	25	72
		- as above - with minor intercalated STRIPED FELSK TUFF								
		- sulphides: similar habit								
		- by 116.2 m two units reg'ly banded (1-5 cm zones) @ 65°	56337	116.6	117.3	0.7	NIL	NIL	33	106

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DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY					
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	Au check (ppb)	
117.16	117.95	gradual transition to STRIPED FELSIC TUFF - 10% banding at 65° - contains 5-7% unevenly distributed 1-2 mm garnets.										
117.95	121.39	gradually becoming more st'ly siliceous, lt. gry. FELSIC LAPILLI TUFF f-m gr'd unit w/ly sericitic throughout, <15% f. blue-gry qtz-eyes - siliceous breccia @ 70°, 10-15% chl/bio/white mica gr's w/ly aligned ≤ 3% py > 10% destd. - contains few dr. gry 1-3 cm, conformable, siliceous lenses										
121.39	122.73	sharp 75-80° contact with felsic Quartz Porphyry (Dyke) mod. gry. f-m gr'd. st'ly siliceous 25-30% 1-4 mm subround-obl. qtz porphs.; <10% bio, amph. gr's - outer margins of porph. unit ~ pelitic = numerous hairline calcareous mineralizers @ 35-40°; ≤ 3% destd py - generally isolated crystals.	56338	121.0	121.8	0.8	5	0.2	24	76	10, NIL	
122.73	145.38	sharp return to STRIPED FELSIC TUFF / FELSIC LAPILLI TUFF mod-st'ly siliceous, lenses w/ly sericitic - few ≤ 5 cm chl & garnet's lenses, tend to be more siliceous - occ's'l qtz lenses + bio. ~ 70-80° ~ 126 m more resembling STRIPED FELSIC TUFF - 10% lapilli frags. & ~ 10% evenly distributed greyish qtz-eyes	56339	124.2	124.7	0.5	NIL	NIL	50	123		
			56340	130.2	130.7	0.5	NIL	NIL	29	97		

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DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		<5-7% po py located within argillaceous-garnetiferous bands	56341	131.8	132.3	0.5	NIL	0.3	31	103
		unit $\leq 1\%$ destd py.	56342	134.7	135.2	0.5	NIL	NIL	22	73
		banding of buff. layering @ 70° ~ conformable	56343	136.3	136.8	0.5	NIL	0.2	12	67
		a number of thicker sections of garnetif-argillite.	56344	138.4	139.0	0.6	NIL	NIL	21	109
		131.03 - 131.69, 132.3 - 132.92, 134.96 - 135.67, 136.94 - 138.88	56345	141.7	142.2	0.5	NIL	NIL	15	72
		20-60% garnets, $\pm 1-3\text{mm}$, begins aligned @ 70-75°								
		$\leq 2\%$ destd py. $\leq 3\%$ po within chl'ic zones (bands, microtes.)								
145.38	150.91	gradual transition into mod. str'ly siliceous, uniform & regular								
		STRIKED FELSIC TUFF, trend @ 70°								
		15-20% lapilli sized frags, stretched @ 70°, 10-15% gtz-eyes								
		$\leq 2\%$ destd py.								
		150.7 - 150.8 a few conformable garnetif. bands ~ 3% destd po py	56346	147.7	148.2	0.5	NIL	NIL	23	56
150.91	162.03	gradual 70° contact with SILICEOUS FELSIC LAPILLI TUFF	56347	150.5	151.2	0.7	NIL	0.2	34	275
		- pale white to lt. gray f-c grid.								
		~ 30% lapilli sized, mod.ly alt'd throughout ~ sericitized								
		few rnd'd & stretched gtz. blebs ~ 65-70°, $\leq 10\%$ gtz-eyes								
		Siliceous matrix - minor ferrowag/mucaceous components ($\leq 2\%$)	56348	159.85	160.35	0.5	NIL	NIL	14	11
		numerous 1-1.5 cm conformable gtz bands, minor $\leq 1-3\%$ destd py								
		- w/ltly fld @ 20-40° fr. surfs: sericitic, minor chl. h. py.								

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DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY				
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	
162.03	162.81	Sharp 90° contact with INTERMEDIATE DYKE - drk gray-grn v. f. g. d. mod. st. siliceous, massive ~ 3% clotted py. ~ isolated porphy. cubes ~ 15% 1mm ell'd feldsp. frags., 1-15mm sub-rounded gtz blebs. Return to previous SILICEOUS FELSIC LAPILLI TUFF	56349	162.6	163.1	0.5	NIL	NIL	19	87	
162.81	171.32	60 at 150.91-162.03 m; contains a few more gtz/lehl stringers 0-10% which carry 3-5% py flakes few bio. aggregates, with clotted more mag. grains below 171m, contains higher % 70' gtz/lehl stringers; 1-3% clotted py Return to intercalated STRIPED FELSIC TUFF & GRANITIFEROUS ANGILLACEOUS METASEDIMENT	56350 56351 56352	167.0 169.9 171.2	167.5 170.4 171.8	0.5 0.5 0.6	NIL NIL NIL	NIL NIL 23	17 9 107	57 12 107	
171.32	185.8	Similar to 126 - 145.5; dominantly STRIPED FELSIC TUFF Contains 1-5cm lensed chl/legrill mat'l ~ 5-20%, 1-2mm garnet blebs - below ~ 179m more alt'd appearance: lighter bands w/ly white, while garnets appear leached & beige; drk bands remain siliceous, with a slight brownish Fe-oxidized tint. ~ 2-5% clotted py > 200 - w/ly f. d. for surfs: var. sil, chl, sericite +/- 20%	56353	177.1	177.7	0.6	NIL	NIL	25	108	108
			56354	183.0	183.7	0.7	NIL	NIL	14	65	65

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GETTY RESOURCES LIMITED

DRILL HOLE LOG

Hole Number

DL-86-54

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
185.8	188.61	gradual transition into a SILICEOUS 'OTZ BRECCIA' FELSIC LAPILLI TUFF								
		- contains 25-30% glz-bldgs (gry)	56355	187.5	188.0	0.5	NIL	NIL	5	22
		- 'reactive' sub-irradiated to white glz bldgs < 1-3mm; flow of till around larger grins								
		- full layering of wk-mod. alignment of glz bldgs @ 70-75°	56356	190.4	190.9	0.5	NIL	0.2	47	96
		- contains < 10% chl/bld. grins, preferred lineation subparallel to ca.								
		- local till gry siliceous alteration bands, < 1-3% classed py>po								
188.61	195.07	mod. sharp 75° contact with intercalated STRIPED FELSIC TUFF								
		of SILICEOUS METASILTSTONE								
		mod. dk gry-grin, fm grt, mod. stly siliceous								
		- regly banded, wk to mod. folia @ 70°								
		- garnetif. zones appear beige-yellow ~ leached? contorted								
		- locally sericitized								
		- wkly frd, fr subs: chl / +/- CO ₂	56357	193.5	194.1	0.6	NIL	NIL	7	63
		- < 1-3% classed py>po; few local py>po aggregates associated								
		gla chl. microps.; few conformable CO ₂ lenses + chl + 2-3% isolated py-grin								
		END OF HOLE 195.07 m								
		> 95% core recovery								
		40 Samples.								

B-HANUCAN

GETTY RESOURCES LIMITED

Hole Number

DL-86-55

DRILL HOLE LOG

Property DETONIA LAKE
 Location 3100 S / 1450 W
 Grid C-12
 Latitude
 Departure

Core Size 7/8
 Elev. Collar 2790
 Bearing Az 279°
 Dip 50°
 Length 99.66 m
 Horiz. Trace 57.2 m
 Vert. Trace 81.2 m

Starting Date Dec. 4/86
 Completion Date Dec. 5/86
 Date Logged Dec. 5-6/86
 Logged By B. HAMMISON

page 1 of 8

Dip Tests		
Depth	Read	Angle
Collar		
9.7 m		-56°
30.48		-54°
60.96		-55°
91.44		-55°

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY		
				FROM	TO				
(metres)		1 7.03-13.04 60.13 77.90-83.76							
		2 13.04-18.95 14 83.76-89.62							
		3 18.95-24.81 15 89.62-95.39							
		4 24.81-30.79 16 95.39-99.66 End of Hole							
		5 30.79-36.67							
		6 36.67-42.52							
		7 42.52-48.39							
		8 48.39-54.29							
		9 54.29-60.14							
		10 60.14-66.14							
		11 66.14-72.10							
		12 72.10-77.90							

DRILL HOLE LOG

Hole Number

N-83-55

FROM (m)	TO (m)	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH (m)	ASSAY					
				FROM (m)	TO (m)		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	Au check (ppb)	
0	7.06	overburden										
7.06	9.11	SILICEOUS FELSIC LAPILLI TUFF - st'ly siliceous sf-m gsd, beige to lt grey - ~ 30% lapilli-sized feldsp. grains - varying alteration stages - ± 1-2% f. diss'd py. - contains few pellets Fe-pyrite alteration; numerous barite xls ~ qtz / ell / 1/4 - 1/2 mm - fairly massive, some butteous layering @ 60°										
9.11	11.06	sharp 30° contact with INTERMEDIATE TO FELSIC DYKE - upper contact marked by 2-3 cm qtz veils below 3-7% 1-3 mm py grains - lt-med grs-grs, sf-m gsd, st'ly siliceous - 10-15% ± 1 mm submd qtz blebs; and more barite, encl, feldsp. sz - qtz grs & small phenocrysts; massive; crystalline - ± 1% diss'd py	56358	10.7	11.4	0.7	230	0.2	49	97	210,250	
11.06	22.71	sharp 60° contact back into similar SILICEOUS FELSIC Lapilli Tuff; contains some alteration banding associated with STAINED FELSIC TUFF - here unit appears little more and though st'ly siliceous - some more silty barite masses (some pyrite identified)										

DRILL HOLE LOG

Hole Number

DL-86-55

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		Thin, often congl. 2-3" py & po in many frs. quartz 60% Fe	56359	18.0	18.7	0.7	NIL	NIL	18	89
		± 1-1.5 cm qtz sh. & ss, subparallel	56360	19.6	20.1	0.5	NIL	NIL	21	56
		higher % lapilli frag. 1-2 mm. (i.e. slightly larger in comp. than)								
		very variegated chle & Fe - not alteration - giving a mottled brown - brown								
		mottled appearance & locally, i.e. 3% white - grey qtz eyes.								
		fragments - qtz porphyrite 1-3 mm. rounded, chle black								
		with dark grey to white lenses, associated with sericite alteration, with								
		dark, generally, more chle - and greenish tint								
22.71	23.80	change to contact with intermediate CHALKITE PORPHYRY (?) (see column 6)	56361	22.3	23.1	0.8	NIL	0.2	36	84
		ch. & v. gr. and dr. gr. and silty siliceous unit, w. v. feld. chle								
		ch. & v. gr. 1-2.5 mm chle to grey (argillaceous) black, local a slight								
		rounded fragments @ 20-30"								
		10% grey ptz eyes (not abundant qtz grains)								
		not contained 3-5% dark py								
23.80	31.67	change to columnar Banded Tuff / SILICEOUS								
		LAPILLI TUFF - at 11.06 - 22.71 - siliceous matrix	56362	28.07	28.9	0.83	NIL	0.2	30	83
		alteration appearance - micaceous chle & purple - brown Fe and R								
		grey & black buffaceous layering 50-70"								
		congl. - rounded and chle nodules - various alterations								

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DRILL HOLE LOG

Hole Number

DL-86-55

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
31.67	32.4	Highly alt'd. siliceous transition zone. Appears to be a dense, dark grey of f-gid argillaceous unit which has been intruded by qtz rich + chl alteration. zone appears widely contorted. fidd. zone is mostly fill, very blocky between 31.95 - 32.07 m. locally contained 5-10% chert py. py also occurs as large isolated angular grains among all qtz veins. - a rough 80° trend	56363	31.5	32.5	1.0	50	0.7	125	331
32.4	46.97	good transition into RECRYSTALLIZED BANDED MAGNETIC CHERT - dense - a red-dark grey-green fine grained recrystallized texture - appears composed primarily of qtz (both in grid & at - optically glassy) with extensions of amorphous	56364	32.5	33.5	1.0	NIL	0.5	53	15
			56365	33.5	35.5	2.0	20	1.0	99	24
			56366	35.5	36.5	1.0	NIL	0.5	66	97
			56367	36.5	37.5	1.0	NIL	NIL	21	127
			56368	37.5	38.5	1.0	30	0.7	98	49
			56369	38.5	39.5	1.0	NIL	0.3	48	31
			56370	39.5	40.5	1.0	NIL	0.5	105	33
			56371	40.5	41.5	1.0	30	0.9	181	74
			56372	41.5	42.5	1.0	NIL	0.3	35	60
			56373	42.5	43.5	1.0	30	1.4	166	31

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DRILL HOLE LOG

Hole Number

DL-86-55

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		- unit contains $\leq 10-15\%$ $\leq 1-3$ mm subrounded to oolitic glz flakes; these glz are secondary in origin and are randomly dispersed; these have altered to chlorite, largely & some are oriented subparallel to 70-90°								
		- contains $\leq 15\%$ bio chl; usually in the form of isolated grains or / or aggregates; tend to lie @ 70-90°								
		- unit cut by numerous 1-2 cm glz bands \pm chl; also contains $\leq 1-2$ cm chloritic lenses + CO ₂ dispersed throughout; these generally trend 80-90°								
		contain $\leq 5\%$ garnets, $\leq 3\%$ py. locally adjacent sericitic alteration.								
		- contains $\leq 2\%$ deid py, ft, po								
		- 512-5133 - glz vein, minor chl & oolitic clusters of 10% po + py. (poor construction)								
53.53	54.29	sharp 75° contact with MAGNETIC GRANULITEOUS METASEDIMENT to block								
		- mt-dk green f-m qid, wk-wet, siliceous, mod by chl & minor graphite								
		- mod. well developed folm (chl) @ 65°, schistose; chl/bio flakes	56.380	54.28	54.93	0.65	20	NIL	71	291
		(1-20-25%) aligned; graphitic lenses (blocks) also subparallel.	56.381	54.93	55.64	0.71	30	NIL	38	353
		- $\leq 10-20\%$ 1 mm blobs glz & chl & feldsp glz; sub-rounded								
		- $\sim 20\%$ bi-modal garnets, prefers more chl & pyrox $\sim 15\%$ orthopyrox glz								
		- $\sim 2\%$ deid py, bio, schistose 2-5% po py								
		- below ~ 54.0 m unit observed to contain 1-2 cm bands of magnetite @ 65-70°								

B4

DRILL HOLE LOG

Hole Number

DL-86-55

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
56.29	70.70	From 55.64-56.29 moderately well indurated, white, if granite desired & absence of quartzite								
		56.29-70.70 contact with a STRIPED FELSIC / QUARTZITE (2)								
		moderate grey, f-c gnd, massive, crystalline texture (unindurated)	56382	55.64	56.64	1.0	NIL	NIL	23	82
		~15-20% <1-2 mm subrounded to angular qtz grains (qtz eyes?); calcite to grey-ble tint; quartz distinct throughout								
		~8% mafic grains in cll, bio amphibole, evenly dispersed, white	56383	62.1	62.9	0.8	NIL	0.4	241	63
		hydrothermal altered @ 70-80°; 15-20% biotite, quartz, feldspar, pyroxene								
		feldspar gnd, white, f-c gnd, massive, crystalline texture (unindurated)								
		contains numerous, randomly dispersed, chlorite lenses: 1-2 cm, 70°; 8								
		hydrothermal: these are generally granitic in nature & carry ~2-3% dissolved pyroxene								
		as fine blebs to 3 mm crystals, usually parallel to the qtz stringers. Other than these all the zones: ~3% pyroxene								
		qtz veins @ 62.8 m carries ~20% massive pyroxene, feldspar @ 40°	56384	69.3	69.8	0.5	NIL	0.2	54	55
70.70	71.51	sharp 50° contact with QUARTZ / FELSIC / QUARTZITE								
		moderate grey, f-c gnd, mod-sty, gneissoid, massive - crystalline								
		~20-30% qtz & feldspar porphy. Feldspar gnd, all id, subangular								
		~1 mm; qtz gnd subrounded, 1-3 mm. Feldspar gnd, massive	56385	71.5	73.5	1.0	NIL	0.2	15	53
		~15% mafic minerals: cll, bio, hornblende								

BH

Hole Number

DL-86-55

Ed. Arneson.

DL-86-56

DRILL HOLE LOG

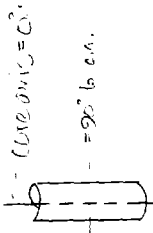
Property DETOUR LAKE
 Location 12100 S. / 0180 W.

Core Size 20
 Elev. Collar 12100
 Bearing 12100
 Dip 45°
 Length 125.07 m
 Horiz. Trace 130.8 m
 Vert. Trace 145.2 m

Starting Date Dec 6/86
 Completion Date Dec 9/86
 Date Logged Dec 7-9/86
 Logged By B. H. McElroy
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Dip Test -		
Depth	Angle	
	Read	Actual
Collar		-45°
11.27		-48°
30.98		-47°
60.96		-47°
91.44		-47°
121.92		-50°
152.4		-49°
182.68		-48°

FROM (metres)	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY	
				FROM	TO			
		Box 1 101.39-16.78 00114 87.29-92.96 Box 2 163.86-169.77						
		2 16.78-22.76 15 92.96-98.98 28 169.77-175.34						
		3 22.76-28.53 16 98.98-104.87 29 175.34-181.32						
		4 28.53-34.51 17 104.87-110.81 30 181.32-187.35						
		5 34.51-40.25 18 110.81-116.68 31 187.35-193.18						
		6 40.25-46.23 19 116.68-122.49 32 193.18-195.07						
		7 46.23-51.91 20 122.49-128.41 End of Hole						
		8 51.91-57.67 21 128.41-134.23						
		9 57.67-63.57 22 134.23-140.11						
		10 63.57-69.45 23 140.11-146.09						
		11 69.45-75.34 24 146.09-151.93						
		12 75.34-81.38 25 151.93-157.99						
		13 81.38-87.29 26 157.99-163.86						



GETTY RESOURCES LIMITED

DRILL HOLE LOG

Hole Number

DL-86-56

FROM (m)	TO (m)	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH (m)	ASSAY			
				FROM (m)	TO (m)		Al (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
0	10.79	Overburden								
10.79	43.52	Monotonous sequence of STRIPED FELSIC TUFF								
		f-m gr'd, mod'ly siliceous, brown-brown to med-dark grn-gr'y	56401	12.6	13.2	0.6	NIL	NIL	16	45
		- alternating alteration banding prominent - lighter bands:-								
		Sericitic, chloritic; dark bands: siliceous - banding attitude ~75-90°	56402	21.0	21.7	0.7	NIL	NIL	18	56
		- Unit contains ~15% lapilli sized altering feldsp. frags. & ~15%								
		<1-3 mm subrounded to subangulr qtz grains, some are stretched, oblate	56403	26.0	26.8	0.8	NIL	NIL	27	54
		subparallel to 90° trend. ~10% white qtz-eyes randomly dispersed throughout								
		- Unit contains ~20% mafic grains - chl/biot bands ~w/ly aligned	56404	32.15	33.15	1.0	NIL	NIL	44	63
		subparallel to ~90° trend								
		~25% desid py>>po, usually abraded as ~2mm grain clusters within								
		chlc/bio. pods & av isolated subhedral crystals of CD3.								
		Numerous qtz/chl stringers found @ 0-50 (primarily 20-30°)								
		less frequent % of qtz lenses @ 45-60° ex 37.28m,								
		often chlc, tr CD3, & epidote & ~7% py>po matrix								
		- unit w/ly fld 30-60°; fr. surfs: chl, sericite, py, po, minor CD3								
		- few chlc lenses strongly sericitic ~ bleached appearance								
		- similar sequence continues with depth								
		- alternating alteration banding well represented								

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DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al (ppm)	As (ppm)	Cu (ppm)	Zn (ppm)
		- phenocrysts of Qtz & feldspar amount $\approx 20\%$ of unit; these <1-3mm fragments are distributed throughout - fairly evenly.	56405	37.6	38.2	0.6	NIL	NIL	27	49
		- unit breaks numerous white lenses of microfs which generally are associated with an increase $\approx 5\%$ of substitution PL_{100} (tr.CO ₃)	56406	39.0	39.9	0.9	NIL	NIL	31	52
		- few zones of FELSIC LAPILLI TUFF								
43.52	44.05	sharp contact with ARGILLACEOUS METACLASTIC f. g. & m. green, chlc. mostly siliceous; w. & f. fold @ 80°; fairly massive; contains a few $<10\%$ siliceous felsic clasts - contains a few chlc microfs tr.CO ₃ locally metamict filling - $\approx 3\%$ destd py.	56407	43.4	44.2	0.8	NIL	NIL	48	64
44.05	49.61	return to familiar STRIPED FELSIC TUFF (SILICEOUS). Very similar to 10.79 - 13.52 section, although unit now appears slightly more siliceous (Darker), lighter in colour (no dk grey siliceous bands are less numerous) Around 46.0m unit looks a mixed of 10.20 - like whips of Qtz stringers. These stringers occur fairly regularly but are also concentrated locally. This is distinct from 10.20 Heterogeneous / matrix fragmentary								

B4

DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		48.6 - 48.76 m - interval containing 2, 2-4 cm qtz veins; has caused brecciation; high density of above breccia qtz stringers. - well developed porphyritic clasts are observed.								
49.61	50.22	sharp 80-90° contact with similar ARGILLACEOUS METASILTSTONE as 43.52-44.05 m but from 49.74-49.98 has been invaded by a siliceous QUARTZ PORPHYRE (DYKE) f-c qtz, med gny, contains 20-40% <1-4mm subrounded qtz. porphs. - massive, crystalline; grind mass felsic (some saussurite) and siliceous. <2% py (descend) - few porphyritic clasts at base of Metased.	56408	49.4	50.3	0.9	10	NIL	53	65
50.22	67.78	return to familiar STRIPED FELSIC TUFF - as 44.05 - 49.61 m a zone from 50.77 - 51.67 is strongly silicified, resembling one extensive drk gny alteration band. - fine whisks of 10-20" qtz stringers still represented & also cut above siliceous interval. - interval from 51.91-53.5m hosts a distributed, 0-10" qtz vein (one side of core); not a solid vein but an injected solution causing brecciation. Few rocklets <1-2mm subrounded py grains observed; vein associated with minor alteration.								

B4

DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		This qtz vein appears the source of numerous barite stringers of qtz (mentioned previously) - which emanate from it at various attitudes, while also offsetting others - pulses.								
		By 53.24m have returned to familiar sequence; a significant drop in qtz stringers... but still present	56409	52.0	53.0	1.0	NIL	NIL	46	33
		By 59.7m above mentioned barite qtz stringers have increased, occupying <5% rock volume. Unit host <2-3% finely disseminated	56410	59.4	60.0	0.6	NIL	NIL	11	47
		By 64.72-65.48m - consists of an interbedded felsic buff & argillaceous metased. - wk-motly schistose fabric trending 80° at 65.18 argillaceous interval, wkly chlorite, ~3cm wide contains 3-5% inconspicuous po. Otherwise unit contains 3-5% po c laminae bands	56411	64.0	64.72	0.72	NIL	NIL	15	55
		Below 65.48m return to STRIPED unit; is mostly siliceous; appears wkly bleached & is wk-motly sericitic - wkly schistose (see 65°) Contains a slightly higher % of 1-2cm conformable, itz lenses	56412	64.72	65.72	1.0	NIL	0.2	47	81
63.28	68.46	gradual 85° contact with SILICEOUS QUARTZ PORPHYRE f-c gnd, lt-med grey-brown, felsic gnd mass; contains 25-35% sub-undd qtz (purple) <1-3mm in size & 10-15% feldsp. frags (all local)	56413	66.7	67.7	1.0	NIL	NIL	22	58
		Few chlc. inclusions; high gnd. quartz/bad aligned @ 85-90°	56414	67.7	68.7	1.0	NIL	NIL	21	56

BHT

DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY				
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)	Am checked (ppb)
		- < 2% de-sil py									
68.46	68.68	subtle 90° contact with interbedded ARGILLACEOUS MUDSTONE									
		and Felsic Tuff - similar to 64.72-65.48 m - mostly ch'z'd									
		throughout, stilly siliceous & carries 3-7% interlaminae po>py (stakebound)									
68.68	77.72	gradual 85-90° contact with <u>conductive zone</u> - host unit	56415	68.7	69.7	1.0	45	1.1	39	47	60, 30
		appears to be a highly acid, siliceous chert & g'd. sugary	56416	69.7	70.7	1.0	NIL	NIL	31	42	
		Hgm. being - nitrid appearance	56417	70.7	71.7	1.0	NIL	NIL	21	19	
		unit has been reworked by ch'z/g'z/po>py mineralizing solns	56418	71.7	72.7	1.0	NIL	NIL	24	14	
		which appear both stibiform 60-80° as well as solution rounded	56419	72.7	73.7	1.0	50	NIL	18	12	
		micronized brecciation, 20-60° to po>py.	56420	73.7	74.7	1.0	NIL	0.5	29	17	
		- contains numerous 20-30' ch'c. nodules and abundant, conformable	56421	74.7	75.7	1.0	30	0.6	27	20	
		siliceous calc breccia - generally quite irregular & contorted.	56422	75.7	76.7	1.0	780	0.3	24	36	740, 820
		appears to have been more than one mineralizing event as even	56423	76.7	77.7	1.0	10	0.8	31	12	
		some of the breccia flow & in some cases chert fragments have									
		become mineralized.									
		75.90-76.49 - zone of ch'z'd metasilstone, stilly siliceous									
		from 43' v. to 15' - iron mineralized!									
		with chert - top section @ 80-85; bottom @ 60°									

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GETTY RESOURCES LIMITED

DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
77.72	79.52	sharp 80° contact with interbedded Argillaceous Metasiltstone & siltstone - f. gld, med grey gr. mostly fol. d @ 75-85°								
		- samples to section 64.72-65.48 m. contains 3-7% finely laminated pyroclastics conformable to argillaceous siltstone - few pyroclasts in 20° silt. microf. s.	56424	77.7	78.52	0.82	NIL	NIL	42	66
78.52	79.25	85-90° sharp contact with Siliceous Quartz Porphyry	56425	78.52	79.52	1.0	NIL	NIL	13	56
		- as at 67.28-68.46 m.								
		- ≤ 2% finely bedded py. - few blebs ≤ 1mm po at lower contact								
79.25	79.73	- sharp 80° contact with similar Argillaceous Metasiltstone								
		- does not appear to contain tuffaceous lenses; generally fairly massive								
		through chlc argillaceous lenses fol. d @ 80-90°								
		- contains ~ 5-10% ≤ 1mm glz clasts and a tract of isolated garnet blebs								
		- few white microf. very minor (<1-3%) py while 1 cm								
		glz band carries few isolated po blebs								
79.73	82.3	fairly sharp 75° contact with AMPHIBOLITIZED META ARGILLITE								
		med grn, f-c gld; fairly massive but chlc argillaceous horizontal								
		reveal a med. 75° foln.								
		mod. chlc throughout; chlc microf. dispersed throughout								
		- pit contains ~ 20-25% 1-2mm equiaxed amphibol (hor. blebs)								
		grn								

B4

DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		As (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		Unit contains 3-5% py>20 - divided fine conformable whisks & st/cht to								
		In argillaceous lenses & as fine disseminated within 'unfossilified' intervals								
		+ with drk below 81.5 m unit much more argillaceous, inclusion < 3-7% py>20								
		argillaceous conformable whisks; few gl/cht/minor CO ₂ lenses (<1cm)								
		- occasl glz lenses, subparallel to foln, carry < 3% 1-2 mm pe bltbs.	56426	82.0	82.5	0.5	NIL	NIL	45	42
82.3	94.4	gradual transition into BANDED GARNETIFEROUS ARGILLACEOUS								
		MEIA-SILTSTONE - unit if 4-m grd, mod sorted, modly siliceous								
		- over its 'banded' nature through alternating alteration:	56427	84.9	85.4	0.5	NIL	NIL	51	84
		mod-dk grn chlc alteration vs purple-brown Fe-rich								
		alteration ~ modly siliceous-throughout.	56428	89.3	89.9	0.6	NIL	NIL	87	85
		- contains < 5-15% ± 2 mm anhedral garnets / isolated grains →								
		clusters). There appears a slight preference for more Fe rich zones								
		but by no means restricted.								
		- unit wk modly fcll @ 80-90°								
		- carries < 1% disseid py.								
		at 94.39 m - unit contains some aligned pyritic fips!								
		car a shadly higher % < 1-3% disseid py (< 1mm)								
94.4	95.35	A transition zone: above molased unit becomes more siliceous	56429	94.4	95.4	1.0	70	0.7	207	87
		alt'd and contorted in appearance.								

BA

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		zone invaded by silicifying qtz-rich solutions at various altitudes. Relict lenses of metased. are chlc & siliceous; appear to carry higher % ~ 3-10% < 1.4mm pellets? of po=py. Highly distorted. Similar vein-like concentrations of sulphur assoc'd with 30-40° chlc microfossils/veinlets within siliceous domain.								
		With depth small aggregates of igneous qtz grains (1-2mm) more common, inc. in bio gen content, scattered garnets.								
9535	10539	gradual transition to "GRANITOID INTRUSIVE" ^{to phaneritic, porphyritic} - granitic, phaneritic, mesocratic-leucocratic, f-mc gtd. - possibly of granodiorite, qtz-diorite, qtz-monzonite comp'n - essentially monzonitic	56430	95.4	96.4	1.0	10	0.2	66	68
			56431	98.0	98.9	0.9	NIL	0.3	89	57
		> 15% qtz	56432	100.7	101.7	1.0	NIL	0.2	87	77
		20-25% K feldspar > plag. feldspar bio. hornblende > 10-15%	56433	103.8	104.5	0.7	10	0.4	90	81
		from 29.7 to 105.39 contains, in places, remnants of qtz porphyry but hard to say.								
		unit contains < 2-5% desid po=py								
		unit contains numerous siliceous chlc bands which carry < 10% po=py								

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DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Au (ppb)	Ag (ppm)	Cu (ppm)	Zn (ppm)
105.39	107.09	gradual transition out of ~transition zone ~ into <u>Granitoid Intrusive unit.</u>								
		Similar to described earlier - a 4-mic g'd Intrusive of Granodioritic, Qtz - Dioritic or Qtz-monzonitic composition (too much qtz I think for monzonite!!)								
		- appears composed of diff phases/zones, ie some definitely plagioclase while other zones plagioclase to porphyritic (less to content, finer gr'd)								
		- bio + chl + major mafic mineral								
		- unit contained <1-3% destd po+py grain ≤ 1mm.								
		- massive, crystalline, non-fold	56434	105.45	105.95	0.5	NIL	0.4	92	66
		- mic'd f'm qtz/chl. microfs @ 30-50'	56435	110.0	110.5	0.5	NIL	NIL	74	64
		- with depth unit very similar ~ a few grain size/textural variations but composition & fabric remain the same.	56436	114.0	114.7	0.7	NIL	NIL	43	79
		- local aphy microfs/stringers carry py mineralization exs - 10-30'	56437	116.45	117.25	0.8	NIL	NIL	204	55
		115.11, 110.23, 116.6, 117.0, 123.1	56438	122.5	123.3	0.8	10	NIL	120	74
		- local aphy alt'd lens from 122.6-122.63 carries 5-7% py (dressed)								
		- unit well g'd if surp: chl, qtz, pyrite, pyrite, minor Fe-oxides								
		- same unit continues at depth								

B.H.

DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Ag (ppm)	Cu (ppm)	Zn (ppm)	Am check (ppm)
		a fairly consistent 2-5% chert po = py.								
		- Unit contains numerous qtz +/- chert veinlets, oriented 10-50°; a few of these appear as folded portions, exs: 131.66,	56439	131.55	132.55	1.0	NIL	63	69	
		132.42, 137.9 - 138.3, 140.1 - 140.22, 142.35 - 142.42,	56440	137.8	138.3	0.5	NIL	152	40	
		143.44, 143.8, 143.94 - 144.3, 145.93, 146.35 - 146.55,	56441	142.2	142.7	0.5	30	65	41	
		↑ these generally carry 2-5% po = py.	56442	143.7	144.5	0.8	NIL	102	42	
		155.5, 166.65, 157.16, 161.96 - 162.11 (20-25% po = py)	56443	146.25	146.75	0.5	20	89	39	
		a rather sharp but vague contact between GRANITOID INTRUSIVE	56444	155.2	155.7	0.5	10	107	59	
167.07	189.7	and GRANITIFEROUS ARGILLACEOUS METASILTSTONE - metabasite gneiss, 56446	56445	156.6	157.3	0.7	95	108	63	90,100
		1-2% qtz, appears mid-well sorted except for contained garnets & fsp; 56447	56446	161.8	162.3	0.5	70	968	63	
		appears chloritic but is strongly siliceous throughout - quite massive, dev. so, recrystallized	56448	166.77	167.77	1.0	110	115	63	100,120
		a general contorted appearance: from fluid solution alteration -		169.8	170.6	0.6	NIL	127	56	
		siliceous fluids +/- chlorite carrying various amounts of subhedral								
		1) Chloritic/qtz veinlets +/- tr. epidote, very minor CO ₂ locally								
		2) Fe-rich +/- chloritic solution carrying various amounts of goethite/ferrow								
		met. l. - either as individual 1-4 mm subhedral grains or as 2-5 cm clusters								
		allowing fluids invade through many attitudes, no general trend(s).								
		- Unit contains appreciable (< 10%) of granitic fsp (xenoliths)								
		these are obsid throughout and range from < 1-2 mm fsp 666w	56449	177.0	178.0	1.0	NIL	132	45	

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DRILL HOLE LOG

Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Al (ppm)	Ag (ppm)	Cu (ppm)	Zn (ppm)
		to 5-8 cm granitoid cobbles (ex 178.9 m)	56450	179.0	179.5	0.5	NIL	NIL	126	46
		- cobbles < 10-15% irregular fls given < 1-2.5 mm in size - very sparse								
		- granitic								
		- fairly sporadic distribution of sulphides present throughout								
		trace of no major concentration - generally < 2-7% Pb is								
		generally more abundant than py.								
		- Sulphides occur from thin massive veins (ex 174.45) - as fine								
		disseminations within contact altered zones - marginal to								
		both fls and granitoid frags (some replacement also obs'd) - present								
		within siliceous, chloritic & Fe-rich gneissiferous zones - along								
		fresh fr. surfaced.								
		- unit remains similar with depth								
		- by ~ 188.4 m - a general decr. in garnet content								
		- granitoid frags and granitoid lenses (1-4 cm) still obs'd ex 191.8 m	55001	185.3	186.4	1.1	NIL	NIL	133	50
			55002	189.35	190.15	0.8	NIL	NIL	84	53
189.7	189.94	sharp 90° contact with Granitic/Porphyro Silic(?)								
		- resembles a familiar intermediate to felsic Qtz porphyro								
		but here also more a granitic texture								
		- 20-30% < 1-2.5 mm irregularly shaped to subrounded Qtz porphs.								

BA

GETTY RESOURCES LIMITED
DRILL HOLE LOG

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Hole Number

DL-86-56

FROM	TO	DESCRIPTION	SAMPLE NUMBER	METRES		CORE LGTH	ASSAY			
				FROM	TO		Ag (ppm)	Cu (ppm)	Zn (ppm)	Au check (ppt)
		- midly alk. but mod. silty siliceous throughout								
		- contains ~10-20% ferromagnesian grs, some 1-3 mm (calc?)								
		- aggregated; feldspar appears generally restricted to grain mass.	56003	191.9	192.6	0.7	NIL	86	42	
		- contains 2-3% pyro, usually in local clusters								
189.94	192.22	return to (GARNETIFEROUS) ARGILLACEOUS / METASILTSTONE								
		- very similar to above (187.07-189.7); contains numerous								
		granitic frags & lenses								
		- maintains local Fe-rich bands but they are seldom								
		quartziferous								
		- still modly alt'd ~ siliceous / chloritic zones								
		- habit of subhedral similar to above interval (187.07-189.7)	56004	194.0	194.8	0.8	NIL	106	24	290,240
192.22	195.07	gradual, subtle transition into Intermediate Qtz Porphyre								
		- med. alk. gr. f. #c. gr. d. mod. silty siliceous ~ massive, crystalline								
		- 20-25% irregularly shaped Qtz grs gr. d. < 1-5mm								
		no preferred orientation								
		- gr. d. mass appears intermediate in composition; gr. d. mass								
		(amph, ~ bio, chl) undergo moderate alkalic alteration								
		- one can also observe clusters of porphyritic Qtz (8:1)								
		≤ 5% blue-grey and Qtz-eyes.								

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[illegible]

BAZALU



32E13NE0029 63.4663 LOWER DETOUR LAKE

900

September 25, 1987

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

Attention: Mr. B. Hanley

Re: Report of Work P-585573 et al
Detour Lake Area

Dear Mr. Hanley:

Enclosed are Reports of Work for diamond drilling and assaying on P-585573 et al along with two copies of the relevant technical reports and mylar copies of maps. Although the mining claims involved (including other contiguous claims held by Getty) have already had the maximum required assessment work applied to them, we felt it would be appropriate to file the technical report to provide a complete picture of the work performed to date on the claims. The technical report also includes information on a geophysical survey for which a Report of Work will not be filed inasmuch as the maximum allowed geophysical credits have already been applied to the claims.

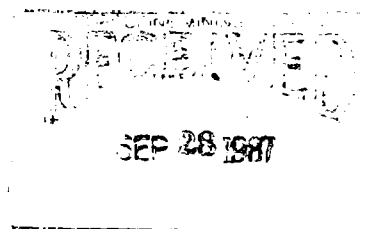
We trust you will find the enclosed to be satisfactory.

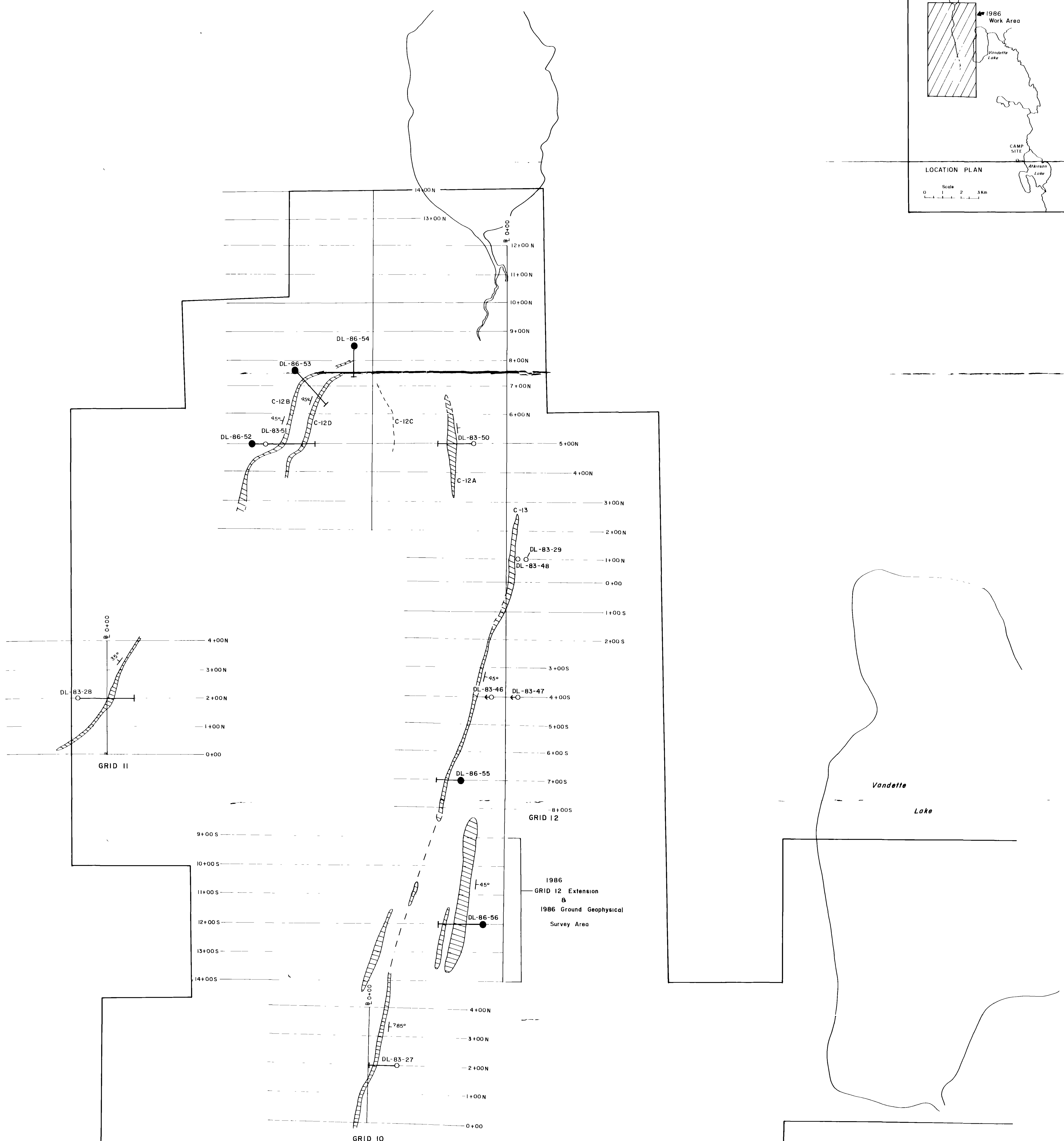
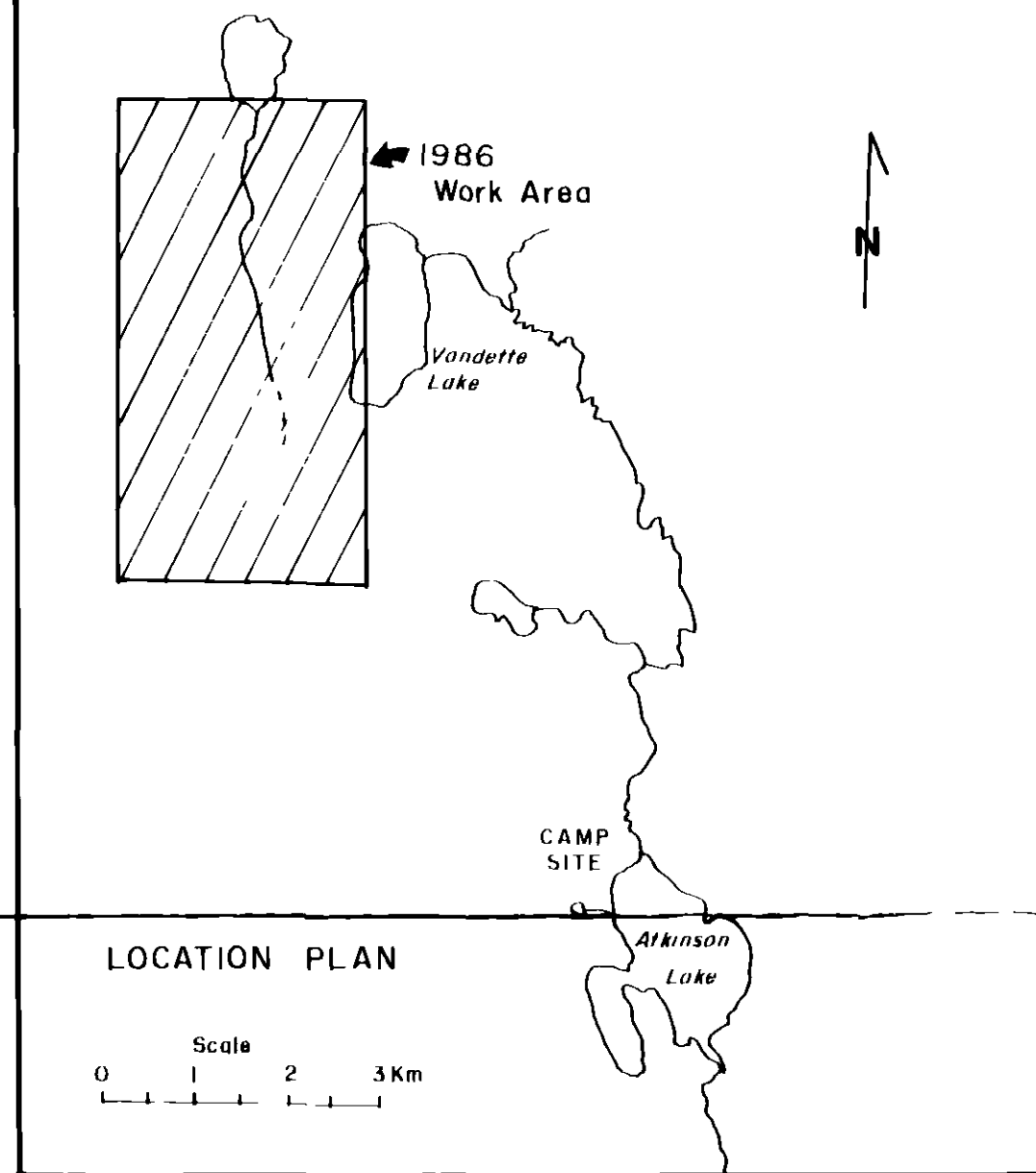
Yours very truly,

GETTY RESOURCES LIMITED

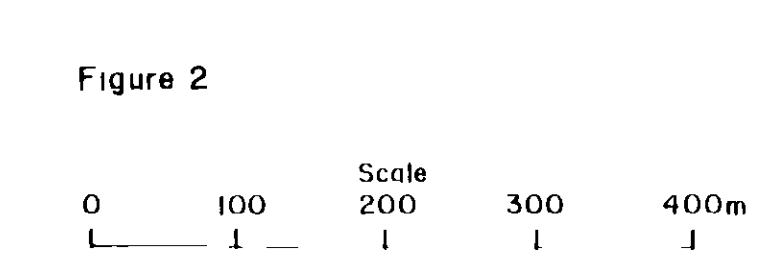
Dennis R. Dash
Manager, Contracts and Administration

DRD:tmv
Encls.





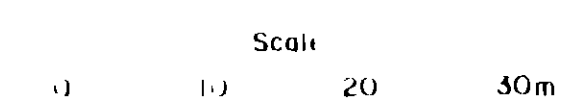
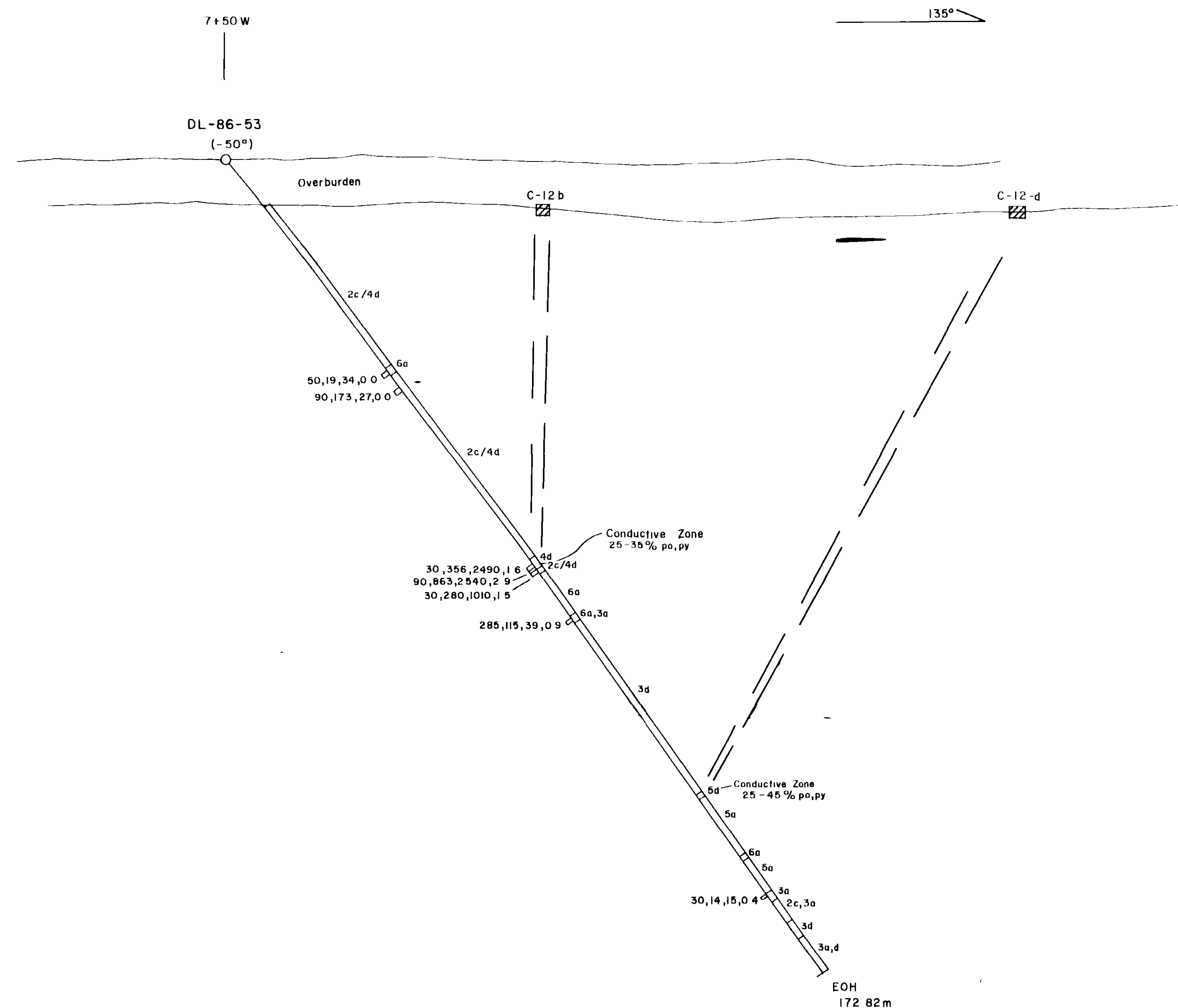
- SYMBOLS
- Property Boundary
 - 1986 Completed Core Holes
 - Pre 1986 Core Holes
 - Grid Lines
 - Max Min H.L.E.M. Conductor with strike & Dip indicated and Conductor designation



GETTY RESOURCES LIMITED DETOUR LAKE PROJECT		
1986 WORK AREA		
DRAWN BY	DATE	DRAWN No.
CHECKED BY	NTS	SCALE 1:5000
ACA HOWE INTERNATIONAL LTD.		



63.463



LEGEND

- 6** FELSIC INTRUSIVE ROCKS
 - a Feldspar porphyry
- 5** CHEMICAL METASEDIMENTARY ROCKS
 - a Chert, cherty interflow tuff
 - b Sulfide facies iron formation
 - c Garnet bearing
 - d Graphitic metasediments ± sulfides
- 4** METASEDIMENTARY ROCKS
 - a Siliceous siltstone ± biotite
 - b Greywacke / siliceous greywacke
 - c Conglomerate
 - d Mudstone / argillite
 - e Debris flow
- 3** INTERMEDIATE TO FELSIC METAVOLCANIC ROCKS
 - a Tuff / tuff breccia / lapilli tuff
 - b Breccia
 - c Tuffite
 - d Stripped felsic rock
 - e Green altered rock
 - f Fragmental flow / porphyry / crystal tuff
 - g Quartz-eye porphyry
- 2** MAFIC TO INTERMEDIATE METAVOLCANIC ROCKS
 - a Tuff
 - b Amphibolite
 - c Epiclastic metasediments / tuff
- 1** ULTRAMAFIC METAVOLCANIC ROCKS
 - unsubdivided

NOTE Order of rock type does not imply age relationship

✓ Sample Interval Au(ppb), Cu(ppm), Zn(ppm), Ag(ppm)
Only Au values ≥ 30ppb are recorded

▨ TEM Conductor

— Conductive Zone

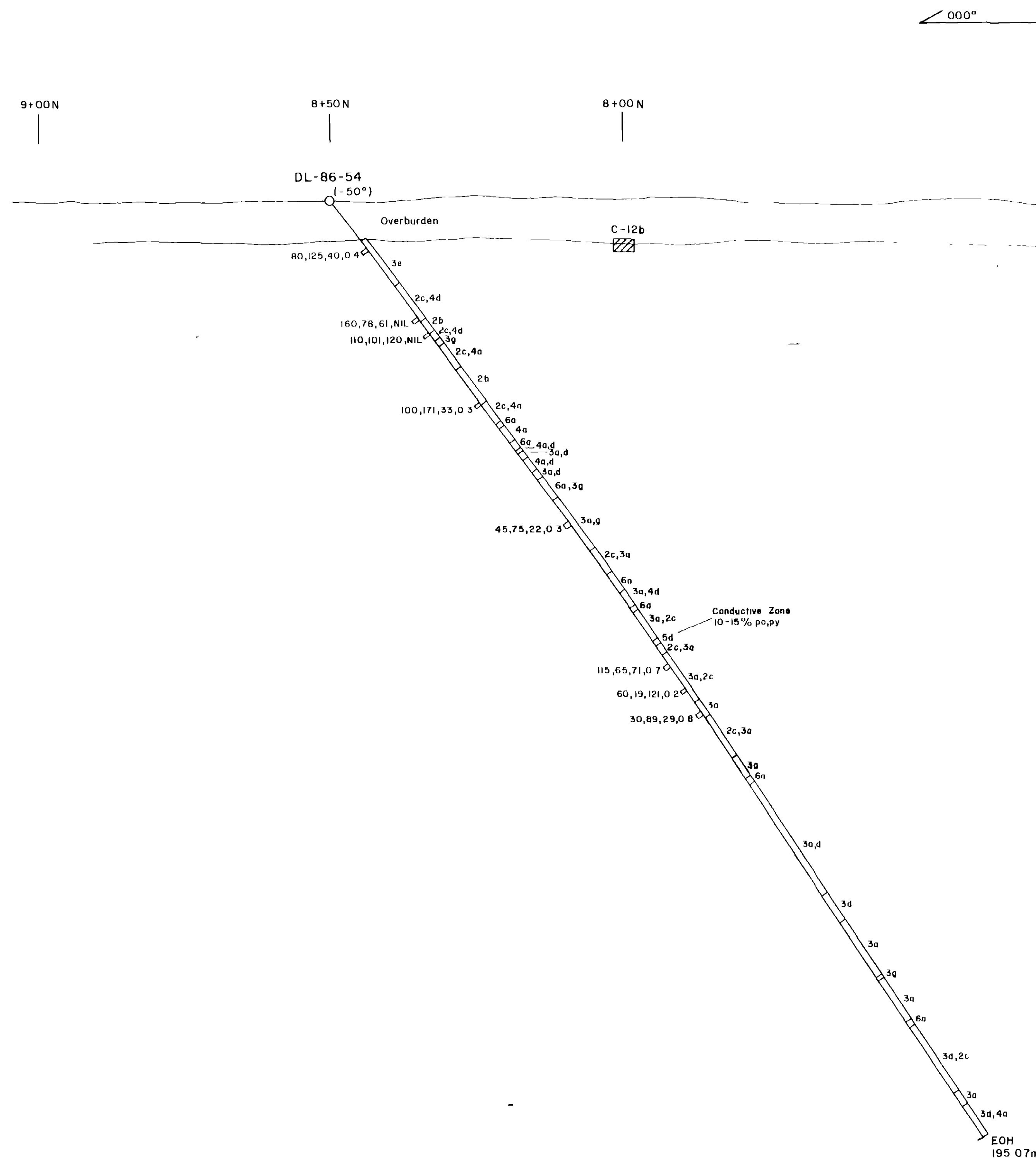
Figure 6

GETTY RESOURCES LIMITED
DETOUR LAKE PROJECT

GRID 12
SECTION DL+86-53

DRAWN BY	DATE	DRAW'G No.
CHECK'D BY	NTS 42F/13	SCALE 1:500
ACA HOWE INTERNATIONAL LTD.		





- LEGEND
- [6] FELSIC INTRUSIVE ROCKS
a Feldspar porphyry
- [5] CHEMICAL METASEDIMENTARY ROCKS
a Chert, cherty interflow tuff
b Sulfide facies iron formation
c Garnet bearing
d Graphitic metasediments ± sulfides
- [4] METASEDIMENTARY ROCKS
a Siliceous siltstone ± biotite
b Graywacke / siliceous graywacke
c Conglomerate
d Mudstone / argillite
e Debris flow
- [3] INTERMEDIATE TO FELSIC METAVOLCANIC ROCKS
a Tuff / tuff breccia / lapilli tuff
b Breccia
c Tuffite
d Stripped felsic rock
e Green altered rock
f Fragmental flow / porphyry / crystal tuff
g Quartz-eye porphyry
- [2] MAFIC TO INTERMEDIATE METAVOLCANIC ROCKS
a Tuff
b Amphibolite
c Epiclastic metasediments / tuff
- [1] ULTRAMAFIC METAVOLCANIC ROCKS
unsubdivided

NOTE: Order of rock type does not imply age relationship

✓ Sample interval: Au(ppb), Cu(ppm), Zn(ppm), Ag(ppm)
Only Au values ≥ 30ppb are recorded

V/A TM inductor

Conductive Zone

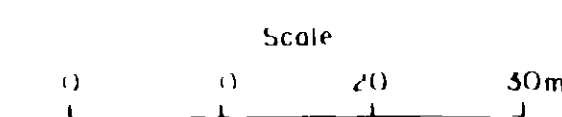
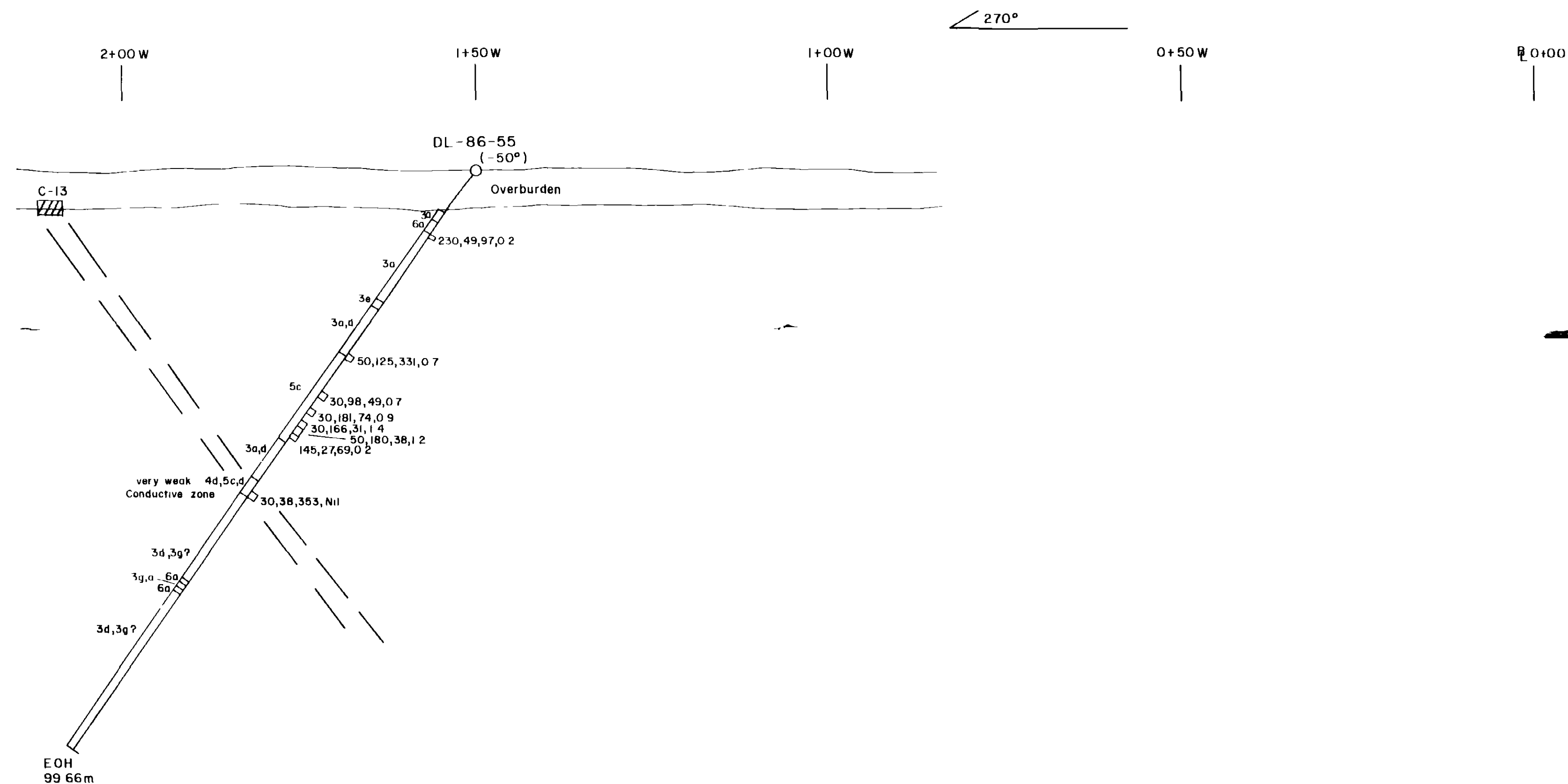


Figure 7

GETTY RESOURCES LIMITED DETOUR LAKE PROJECT		
GRID 12 SECTION DL+86-54		
DRAWN BY	DATE	DRAW'G No
CHECK'D BY	NTS	SCALE 1:500
ACA HOWE INTERNATIONAL LTD.		





- LEGEND
- 6 FELSIC INTRUSIVE ROCKS
a Feldspar porphyry
- 5 CHEMICAL METASEDIMENTARY ROCKS
a Chert, cherty interflow tuff
b Sulfide facies iron formation
c Garnet bearing
d Graphitic metasediments ± sulfides
- 4 METASEDIMENTARY ROCKS
a Siliceous siltstone ± biotite
b Graywacke / siliceous graywacke
c Conglomerate
d Mudstone / argillite
e Debris flow
- 3 INTERMEDIATE TO FELSIC METAVOLCANIC ROCKS
a Tuff / tuff breccia / lapilli tuff
b Breccia
c Tuffite
d Stripped felsic rock
e Green altered rock
f Fragmental flow / porphyry / crystal tuff
g Quartz-eye porphyry
- 2 MAFIC TO INTERMEDIATE METAVOLCANIC ROCKS
a Tuff
b Amphibolite
c Epiclastic metasediments / tuff
- 1 ULTRAMAFIC METAVOLCANIC ROCKS
unsubdivided
- NOTE Order of rock type does not imply age relationship
- Sample interval Au(ppb), Cu(ppm), Zn(ppm), Ag(ppm)
Only Au values ≥ 30ppb are recorded
- ZZZ M : ductile
- Conductive Zone

Scale
0 10 20 30m

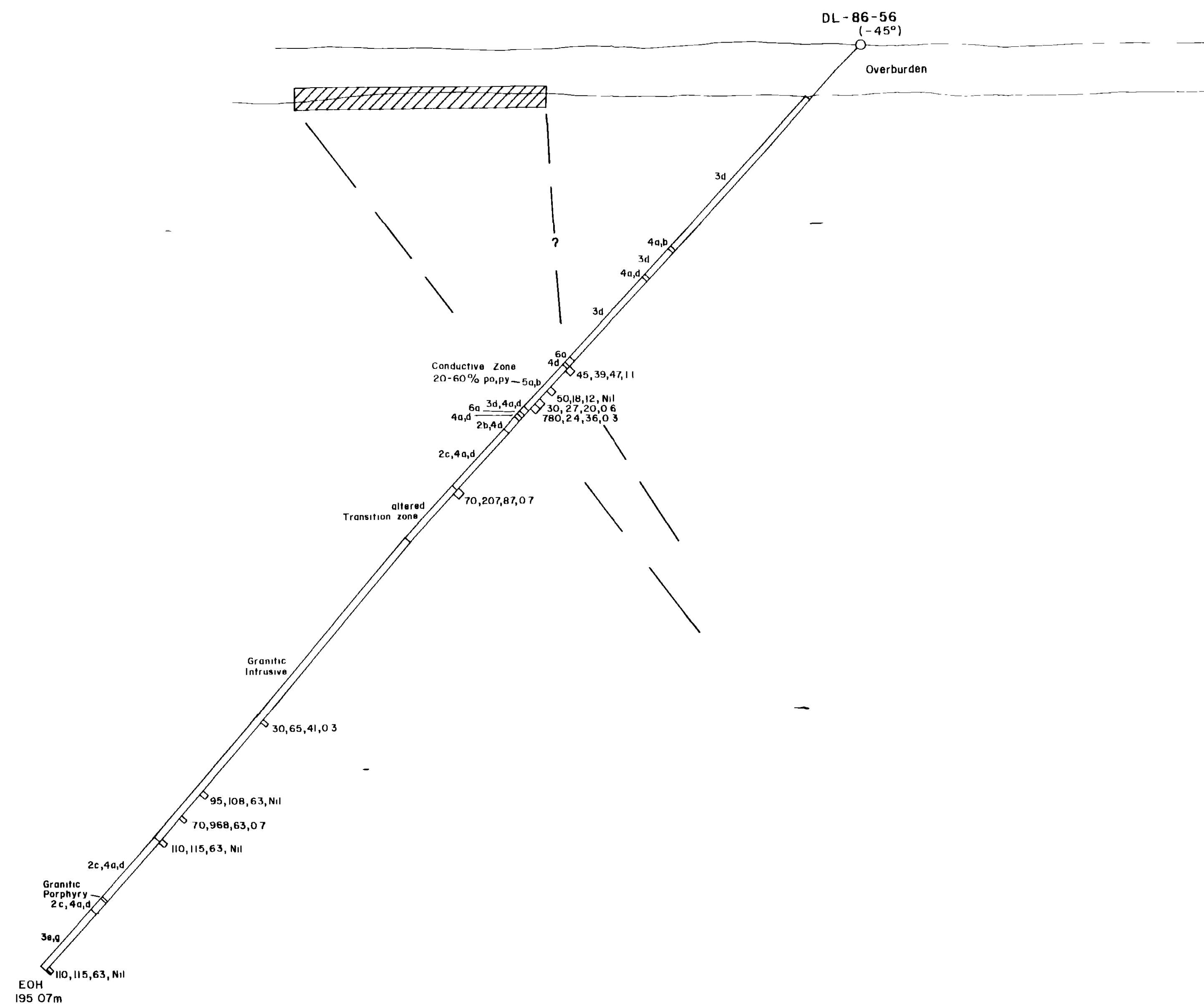
Figure 8

GETTY RESOURCES LIMITED
DETOUR LAKE PROJECT

GRID 12
SECTION 7+00 S
(looking North)

DRAWN BY	DATE	DRAW'G No
CHECK'D BY	NTS	SCALE 1:500
ACA HOWE INTERNATIONAL LTD.		





- LEGEND
- [6] FELSIC INTRUSIVE ROCKS
 - a Feldspar porphyry
 - [5] CHEMICAL METASEDIMENTARY ROCKS
 - a Chert, cherty interflow tuff
 - b Sulfide facies iron formation
 - c Garnet bearing
 - d Graphitic metasediments ± sulfides
 - [4] METASEDIMENTARY ROCKS
 - a Siliceous siltstone ± biotite
 - b Graywacke / siliceous graywacke
 - c Conglomerate
 - d Mudstone / argillite
 - e Debris flow
 - [3] INTERMEDIATE TO FELSIC METAVOLCANIC ROCKS
 - a Tuff / tuff breccia / lapilli tuff
 - b Breccia
 - c Tuffite
 - d Stripped felsic rock
 - e Green altered rock
 - f Fragmental flow / porphyry / crystal tuff
 - g Quartz-eye porphyry
 - [2] MAFIC TO INTERMEDIATE METAVOLCANIC ROCKS
 - a Tuff
 - b Amphibolite
 - c Epiclastic metasediments / tuff
 - [1] ULTRAMAFIC METAVOLCANIC ROCKS
 - unsubdivided
- NOTE: Order of rock type does not imply relationship
- Sample Interval Au (ppb), Cu (ppm), Zn (ppm), Ag (ppm)
 Only Au values ≥ 30ppb are recorded
- ZZZEM conductor
- Conductive Zone

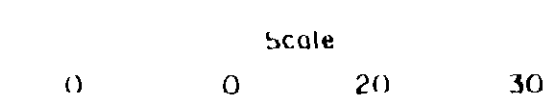


Figure 9

GETTY RESOURCES LIMITED DETOUR LAKE PROJECT		
GRID 12 EXT SECTION 12+00 S (looking North)		
DRAWN BY	DATE	DRAW'G No
CHECK'D BY	NTS	SCALE 1:500
ACA HOWE INTERNATIONAL LTD.		



(L800mS)

L900mS

L1000mS

L1100mS

L1200mS

L1300mS

L1400mS

(L400mN)

MAX MIN II
FREQUENCY 1777

800MW

700MW

600MW

500MW

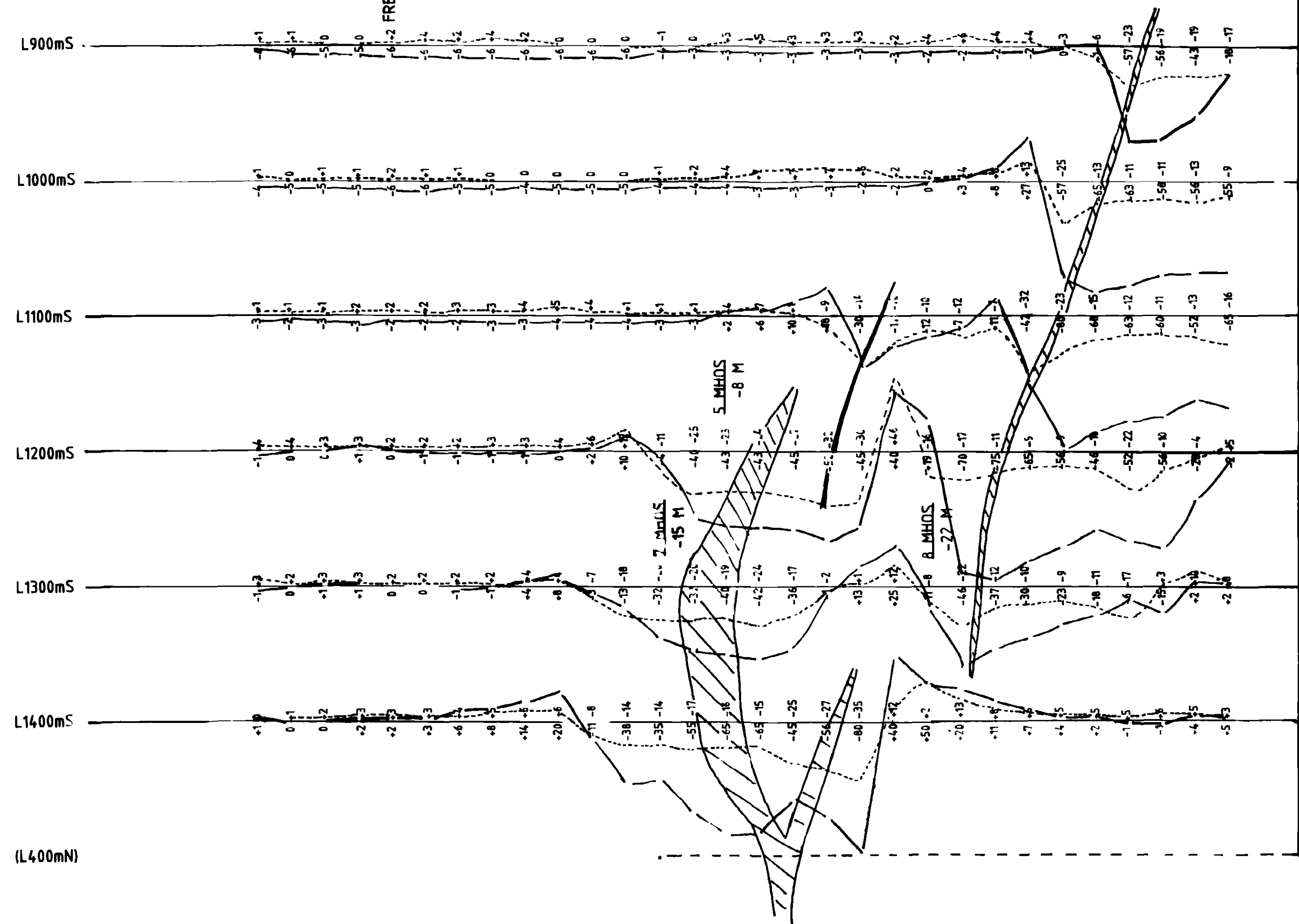
400MW

300MW

200MW

100MW

BL360°



MAX MIN II
FREQUENCY 444

800MW

700MW

600MW

500MW

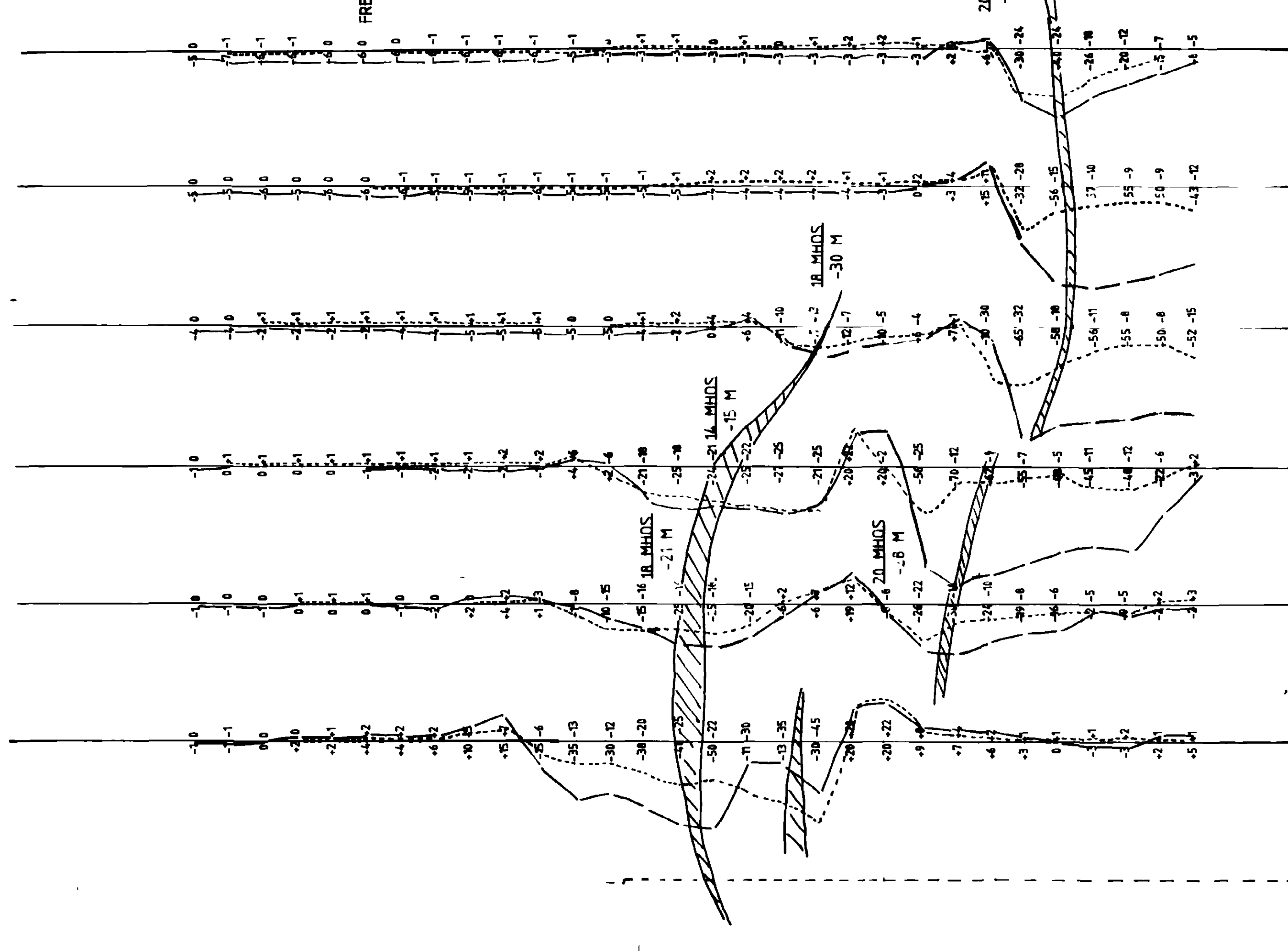
400MW

300MW

200MW

100MW

BL360°



LEGEND

UNIT: APEX, MAX MIN II SYSTEM

FREQUENCY 1777 & 444 HZ.

COIL SEP 150 METERS

INPHASE ———

OUT OF PHASE - - - -

CONDUCTOR AXIS

MHD VALUE 20 MHDS

DEPTH -30 M

OPERATORS Rx JC. GRANT

Tx WN PEARSON

OLD GRID
LINE: - - - -

CLIENT GETTY MINES LTD.

PROJECT: VANDETTE LAKE WEST.

SURVEY HORIZONTAL LOOP

DATE: NOVEMBER 25 1986

SCALE: 1 2500

PLOTTING: HJ. PEARSON

INTERPRETATION: JC. GRANT



3213NE0028 63 4683 LOWER DETOUR LAKE

260

63-4663