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SURFACE GEOLOGY OF THE CAMFLO MINES PROPERTY

HARKER AND HOLLOWAY TOWNSHIPS, NORTHEASTERN ONTARIO

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# Surface Geology of the Camflo Mines Property Harker and Holloway Townships, Northeastern Ontario

#### INTRODUCTION

A mapping project in the central portion of Harker and Holloway Townships, northeastern Ontario, was carried out during the period of June to October, 1983 by the writer and Sean Trueland for Camflo Mines Limited (Toronto). Mapping was carried out at a scale of 1:2500 (metric) on a grid utilizing 50 meter line separation picketed every 25 meters. 100 meter grid line separation was used on the Canamax Option and the South Camflo claim group. Additional detailed mapping at a scale of 1:250 metric was carried out on the Hennessy Option and Canamax trench area.

For the sake of simplicity, this report has been subdivided into six sub-reports including the Camflo East and Cahill properties; the Hennessy Option; Lenora and Lost Treasure Options; the Newmex Option; Canamax Option and Camflo South claims; moving from east to west. The total length of the mapped properties is approximately eight kilometers separated by the McDermott, Demers and Mining Corp. properties which were not mapped. Because this report deals solely with the geology of the properties, previous history including previous work done on the individual properties has been omitted. At the end of this report the writer has attempted to briefly correlate all the properties in a regional sense.

## (1) Cahill and Camflo East Claims

This area comprises two Camflo Mines claims (L 616488, L616489) and the Cahill patented claim (optioned in 1983). Mapping was carried out at a scale of 1:2500 metric using a grid cut in 1981 with 50 metre separation between lines. Many of the lines have grown over and pickets were missing making outcrop control difficult. Surface exposure is only about 5%, confined to small ridges.

#### Geology

Only a few outcrops were found on these claims. The rock types include dark to light green coloured, fine grained, sheared, brecciated basalts and sediments ranging from dark magnetic to grey cherty rocks and argillites.

The basalts are strongly sheared and brecciated, the breccia probably being tectonic in origin as the fragments are angular to subangular with the matrix being filled by quartz. Shearing is strong enough to obscure all primary volcanic features although possible relic pillow selvages are found on the Cahill property. The selvages may indicate flow tops to the south. All of the volc ics are cut by small pink and white carbonate and quartz-carbonate stringers.

The sediments range from black to grey locally magnetic cherts to finely laminated argillic sediments. Bedding of the argillites strike roughly east-west and dip steeply to the south or are vertical.

#### Structure

The intense shearing of the volcanics would indicate that a fault probably runs north of the baseline. This would be a strike fault oriented east-west and may be a continuation of the Consular-Ben Arch-McDermott Fault, thought to run north of the McDermott property (Satterly, 1953). Shearing of the sediments on the east claim vary from a north-south direction to an east-west direction. Folding, probably drag folding of these rocks may have been caused by cross faulting. The shearing in this area has obscured the primary bedding making further structural information a matter of conjecture.

## Mineralization

Little mineralization of any consequence was found on these properties. The volcanics carry trace amount of sulphides and quartz veining in the brecciated volcanics revealed no sulphides. Up to 5% finely disseminated sulphides were found in the laminated argillites, however, no assay data is available on these rocks.

#### (2) Hennessy Property

The Hennessy property consists of five patented claims optioned by Camflo Mines Limited in 1981. Mapping was carried out at a scale of 1:250 using grid lines picketed every 25 meters separated by 50 meters. In addition, a detailed map (1:100) and chip sampling over one meter intervals was made of trench #7 (on line 5+00 E).

#### Geology

Rock types on the property consist of intensely sheared basaltic to andesitic volcanics which have been both silicified and brecciated. A syenite dyke (feldspar porphyry) cuts across the north part of the property. The dyke is a fine grained purple rock averaging two meters in width pinching out to 0.5 meters wide at the west end of the property. The contact zone of the syenite-volcanic is silicified and brecciated for a distance of one meter on the south side of the dyke. In addition to this zone a more extensive zone of silicification and brecciation was found in trench #8 which does not appear to be related to the dyke.

#### Structure

All of the mapped volcanic rocks on the property are intensely sheared and filled with white to pink carbonate stringers with lesser amounts of quartz. The shearing is intense enough to obscure all primary volcanic features although possible relic pillow sutures may be found in many of the trenches. The sutures indicate that flow tops are to the south and dip steeply to the south. The shearing is thought to be caused by the Consular-Ben Arch-McDermott Fault, an east-west trending strike fault. Numerous cross faults striking north, of both left and right hand lateral motion were found. Offsetting on these cross faults is limited to a maximum of five meters with an average offset of a meter or less. The cross faults post-date the mineralization.

#### Mineralization

There appears to be two zones of mineralization on the property. The first is a narrow zone (one meter) of silicification and brecciation on the hanging wall side of the syenite dyke, and may be due to the intrusion of the dyke itself. In the past, this zone has been the one in which previous trenching and pitting had been confined to. Values of up to 0.18 oz/ton Au have been reported from this zone. Mineralization consists for the most part of finely disseminated pyrite (up to 8% total rock compostion) in the silicified and brecciated zones. The syenite itself contains trace sulphides with the exception of sporadic zones of which the writer terms a syenite pegmatite. A sample of this rock contained 10% pyrite and ran 0.16 oz/ton Au. These zones are never more than 20 centimeters wide with a strike length of only a few meters.

A second zone appears to exist at least five meters south of the contact zone of the syenite. Due to cross faulting, the zone is exposed only in trench #8. This zone appears to be much more extensive than the one associated with the syenite dyke. This zone consists of a much more intensely brecciated and silicified rock with numerous quartz veins and pods. Mineralization is similar to that of the zone contacting the syenite, with finely disseminated pyrite with a maximum of 10% of the total rock composition. A grab sample from this zone ran 0.11 oz/ton Au.

In trench #6, a small (20 centimeter wide) zone of pyritiferous cherty rock was found, persisting for at least 10 meters along strike.

A grab sample of this rock gave only trace values of gold.

## (3) Lenora and Lost Treasure Properties

The Lost Treasure and Lenora Options (optioned by Camflo 1982) were mapped at a scale of 1:2500 metric on a grid with line spacing at 50 meter intervals. The map area lies roughly from the Harker-Holloway Township Line to 22+00 W. Exposure on this section is probably the best over the entire property, such that individual basaltic flows may be traced over a distance as great as 200 meters.

## Geology

Rock types in this area are for the most part fine to medium grained basaltic flows, often showing well developed pillows and flow breccia. The coarser grained basalt takes on a diabasic texture and may be sills, however, the grain size is the only criteria on which to base this. It is more likely that the diabasic texture is due to a slower cooling rate in the interior of the flow, the crystallized flow top providing a thermal blanket. The pillows indicate that the flow tops are to the south and that the volcanics dip steeply to the south. Within the flows narrow cherty pyritiferous sediments occur, generally striking east-west, dipping an average of 80° to the south.

A large mass of magnetic, coarse grained "gabbro" was found in the vicinity of the baseline between 4+50 W and 9+00 W extending up to 250 meters south of the baseline. The mass varies from medium grained ophitic to coarse grained amphibole-rich "gabbro" cut by lamprophyre and syenitic dykes. The mass may be interpreted by two means, the first being that the mass may be an intrusive (supported by intense

shearing around the perimeter of the mass) on a "baked" and secondly as a recrystallized flow with a large syenitic body lying at depth (supported by the syenite dykes). Smaller offshoot dykes of this mass vary from dioritic to granodioritic in composition, and may be found in the vicinity of the pit at 9+50 W.

#### Structure

As previously stated, both the volcanics and sediments generally strike east-west and dip steeply to the south. The entire area has undergone shearing and faulting. Topographic depressions between large outcrops have been interpreted to be caused by localized faulting. Individual flows have been offset by cross faulting with a maximum offset of ten meters. This appears to conform to the general cross faulting of the area (as seen on properties both to the east and the west). The Consular-Ben Arch-McDermott Fault is thought to pass through the property though its exact location is difficult to assertain. It may lie along the contact of the magnetic "gabbro" or north of the outcrop at 9+50 W, 2+00 N in a topographic low. Because it is a strike-slip fault, measureable offsets could not be found.

#### Mineralization

Pits and trenches on the property have been confined to three areas:

- (1) Flow breccias in which sulphide mineralization has occurred between the breccia fragments.
- (2) Quartz veining in the volcanics.
- (3) Over silicified sulphide-bearing cherty sediments.

Grab samples taken by the writer over the flow breccia zones showed only trace to 0.01 oz/ton Au. Grab samples taken by Sean Trueland over the cherty sediments gave trace values of gold. Quartz vein samples with up to 5% chalcopyrite taken from the pit at 9+50 W gave 0.01 oz/ton Au.

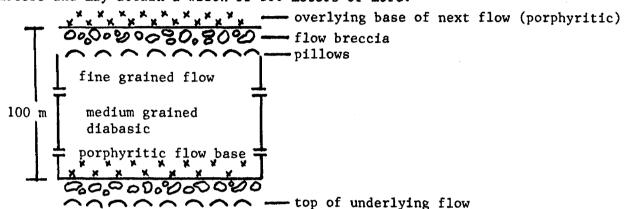
## (4) Newmex Option

The Newmex Option comprises ten patented claims optioned by Camflo Mines in 1983. Much of the area is overlain by a sand plan limiting exposures for the most part to the east portion of the property near the Teddy Bear Creek. The area was mapped at a scale of 1:2500 metric using lines spaced at 50 meter intervals, picketed every 25 meters. Mapping at this time is only 80% complete and bedrock exposures west of line 35+00 W should be mapped at a later date. Rock types in this area include dark to light green coloured basaltic flows varying from fine to medium grained size; syenitic and diabasic dykes; sulphide-rich silicified and brecciated sediments; argillic sediments and possible carbonates.

## Geology Property of the Control of t

The volcanics on the property are dark to light green basalt (possibly andesitic) flows, often pillowed, flow brecciated and porphyritic. The porphyritic texture generally occurs at the base of the flow showing well developed euhedral to subhedral phenocrysts of plagioclase feldspar set in a fine grained matrix of plagioclase and pyroxene. The porphyritic texture then grades into a medium grained

diabasic texture and finally a fine grained flow top, occasionally showing well developed pillow sutures and flow breccia. The pillows and flow breccia do not necessarily accompany each flow due to lack of exposure. Individual flows may be traced over a strike length up to 150 meters and may attain a width of 100 meters or more.



Two diabase dykes were found cutting a fine grained brecciated flow in the northeast part of the property. The dykes generally strike north-south and are of medium to coarse grained texture consisting of lath-like plagioclase phenocrysts set in a fine grained plagioclase/pyroxene matrix. The centre of these dykes is often coarse grained. On surface, these dykes outcrop as narrow linear ridges roughly convex in nature.

Two narrow syenite dykes strike across the north part of the property, roughly east-west in orientation dipping steeply south. The dykes are parallel to each other and are separated by a narrow 20 centimeter wide zone of meta-sediments. The dykes themselves are roughly one meter wide and may be traced for up to 300 meters. To the east and west, only one dyke was found but is probably a continuation of the same intrusive. The dykes are purple to dark red in colour, fine grained with small phenocrysts of feldspar throughout, they have previously been termed a feldspar porphyry. The dykes appear to have

been intruded along a plane of weakness separating the volcanics to the south and sediments to the north. The dykes are not mineralized with sulphides.

Three types of sediments were found on the property. The first type is a carbonate-looking rock found on the extreme north part of the Demers property. They vary from pyritic cherts to a dark purple rock closely resembling a carbonate, they do not however, react with acid. Some argillic sediments were found interbedded with the cherts. In this area, the sedimentary/volcanic contact is characterized by a narrow zone of black, possibly tuffaceous volcanics containing up to 15% sulphide stringers. The bedding of the sediments varies from an east-west strike dipping steeply south to a northeast-southwest strike indicating that the sediments have probably been drag folded.

The second sedimentary type rock is a poorly exposed schistose rock found in contact with the syenite dykes. The schistosity may represent primary bedding striking east-west dipping vertically to steeply south. This zone of sediments may be traced only 150 meters in strike length.

The third type of sediment is a dark purple silicified, partially brecciated rock containing up to 15% sulphide, normally finely disseminated throughout. The sulphides appear as bands within the rock and may conform to the original bedding of the rock. It is thought by this writer that the rock may have originally been a dirty sandstone in lithology. At this point it may be noted that the colour and in places the texture, are similar to those found on the McDermott zone and they may be related to each other.

#### Structure

Rocks on the northeast part of the property are strongly sheared in an east-west direction indicating that a major east-west striking fault exists north of the property. The Imperial Fault is thought to run north of the property (Satterly, 1953) but the rock types found in this area are similar in lithology to those found further to the east. It may be possible therefore to continue the Consular-Ben Arch-McDermott Fault through this area. Another strike fault is thought to pass through the Demers property separating the north contact of the sediments from the volcanics (Satterly, 1953), however, this writer found no indication of this fault.

Cross faulting has occurred throughout the entire property though offsetting of both right and left hand lateral motion is confined to an average of a few meters. One larger left hand lateral fault was found offsetting the Demers sediments by 50 meters and causing the sediments to be drag folded.

#### Mineralization

Sulphide mineralization was found in the Demers sediments, sediments adjacent to the syenite dykes and in the silicified brecciated sediments further to the west. The syenite dykes themselves do not carry any sulphides. The Demers sediments gave no gold values as did the volcanics in contact with the sediments. Three grab samples from the syenite/sedimentary contact zone (lines 29+60 W, 4+30 N) gave two values of; 0.01 oz/ton Au and 0.03 oz/ton Au. These samples were taken from Canamax trenches over the contact zone. Samples of the pyritiferous silicified brecciated sediments on line 33+50 W, T.L.North

gave only trace values of gold. Samples of mineralized pillow sutures showing epidote alteration and quartz veining with up to 5% sulphides gave only trace gold values.

#### (5) Canamax Option

The Canamax Option consists of eight patented claims optioned by Camflo Mines Limited in 1983. Surface bedrock exposure is generally limited to the south portion of the property west of Imperial Lake where extensive logging and subsequent erosion of the overburden has exposed the bedrock. A large area of swamp lies north of this area along the baseline. Mapping was done at a scale of 1:2500 metric along lines spaced at 100 meters and picketed every 25 meters. Trenched areas in the southwest corner were mapped at a scale of 1:250 metric and then transferred to the 1:2500 scale map. Rock types in this area include dark green massive basalt flows, often brecciated, small syenite dykes and sediments ranging from argillites and greywackes to carbonaceous pyritic sediments and cherts. Small zones of silicified tuff(?) were found overlaying these sediments.

#### Geology

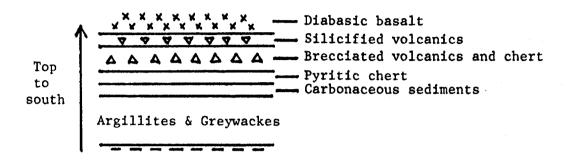
The volcanics of the map area consist for the most part of dark to light green, fine to medium grained basalts, often flow brecciated and porphyritic. Some rock resembling agglomerate rock was encountered but it is probably a flow breccia with hyaloclastite fragments giving the rock an appearance of containing fragments of different compositions.

The flow sequences are typical of those found to the east and north in the Newmex Option; consisting of a porphyritic basal flow member grading into a medium grained diabasic texture and finally a pillowed top with extensive flow breccia. The pillows indicate that the flow tops are to the south. Individual flows may be mapped along a strike distance of up to 200 meters with a thickness of up to 200 meters, including the flow breccias which may obtain a thickness of up to 50-75 meters.

The sediments consist of a sequence of laminated argillites and greywackes with individual bed thicknesses of a few centimeters. The greywacke beds are generally wider than the argillic beds with the overall sequence probably representing a turbidite-type of deposit. The bedding of the argillites and greywackes is roughly east-west dipping steeply to the north. The bedding dips close to vertical as one moves south towards the sedimentary/volcanic contact, a distance of roughly 15 meters. Tops of the individual beds are to the south as determined by numerous measurements of graded beds. Initially it was thought by the writer that the sediments may have been overturned, however, the north dipping sediments are probably a localized feature, perhaps caused by rotation of the sediments along a strike fault (Al Workman, p.communication).

The argillites and greywackes then grade from bottom to top into a narrow 20 centimeter wide zone of pyritic carbonaceous to graphitic sediments dipping vertically. These in turn grade into a narrow zone (15 centimeters wide) of cherty sediments which are overlain unconformably by brecciated cherty volcanics with a quartz matrix

carrying magnetite, pyrite, galena and chalcopyrite. Overlaying the brecciated chert is a narrow zone of silicified volcanics possibly tuffaceous followed by massive diabasic basalt.



Small syenite dykes up to one meter wide were found in the southwest part of the property. They strike roughly east-west, their mappable length is limited due to lack of exposure. These dykes may be offshoots of a large syenite body located to the east in Garrison Township.

#### Structure

No major strike faults were found in the area although brecciation in the volcanics and cherts would suggest that a strike fault exists at the sediment/volcanic contact. This fault may also have caused rotation of the sediments giving them a north dip of the bedding. One cross fault was found offsetting the sediments, the fault is a left hand lateral type striking roughly north-south with an offset of only a few meters.

#### Mineralization

The basaltic flows carry only trace amounts of sulphides and were not assayed. The carbonaceous sediments, cherty sediments and brecciated cherts and silicified volcanics gave values of 0.02 oz/ton Au, 0.01 oz/ton Au and 0.01 oz/ton Au respectively. No samples were run for lead or copper.

## (6) Camflo South Claims

The Camflo South claims consist of 16 unpatented claims staked in 1982. The far east claims were mapped on the same base sheet as the Lenora and Lost Treasure Options at a scale of 1:2500 using lines spaced at 50 meter intervals with 25 meter pickets. The eight claims to the west were mapped at a scale of 1:2500 using lines spaced at 100 meter intervals picketed every 25 meters. 90% of the area lies in swampy lowlands with a few expsures along the south tie line and south-south tie line. Rock types include diabasic basalt, locally variolitic, pillowed and sheared, and cherty sediments which may be rhyolitic volcanics.

#### Geology

The volcanics are for the most part dark green, fine to medium grained basalt. One outcrop of variolitic pillows gave the flow tops to the south and dipping 60° south. South of the south-south tie line, an outcrop of sheared variolitic basalt was found with a shear orientation roughly northeast-southwest with a vertical dip.

One outcrop of cherty sediments or flow banded rhyolite was found at L 31+00 W, south tie line. No significant mineralization was found on this map area.

#### REGIONAL GEOLOGY

A linear ridge striking roughly east-west was found to be more or less continuous from the far east claims to the Newmex Option. The volcanic geology along this ridge varies little with the north face of this ridge being consistantly sheared. The writer would place the Consular-Ben Arch-McDermott Fault along the north part of this ridge at least as far as the Newmex Option. Cross faulting is generally of the left hand lateral type and appears to displace blocks to the south as one moves east to west. This cross faulting probably postdates major strike faults. The writer has noted that the joint pattern on the McDermott mineralized zone and the Hennessy zone are very similar as are the rock types associated with the two zones. The two zones are probably part of the same rock sequence. Laminated chloritic/carbonate rocks found in the bottom of drill core on the Lenora/Lost Treasure properties are identical to those found on the footwall side of the McDermott zone and are probably of the same sequence.

## REFERENCES

Satterly, J., Geology of Harker Township, Ontario Department of Mines,
Volume LX, Part VII, 1953

Satterly, J., Geology of the North Half of Holloway Township, Ontario Department of Mines, Volume LXII, Part VII, 1953

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# McDERMOTT PROJECT GEOLOGY AND GOLD MINERALIZATION WESTERN HOLLOWAY TOWNSHIP

A.W. Workman

October 4, 1983



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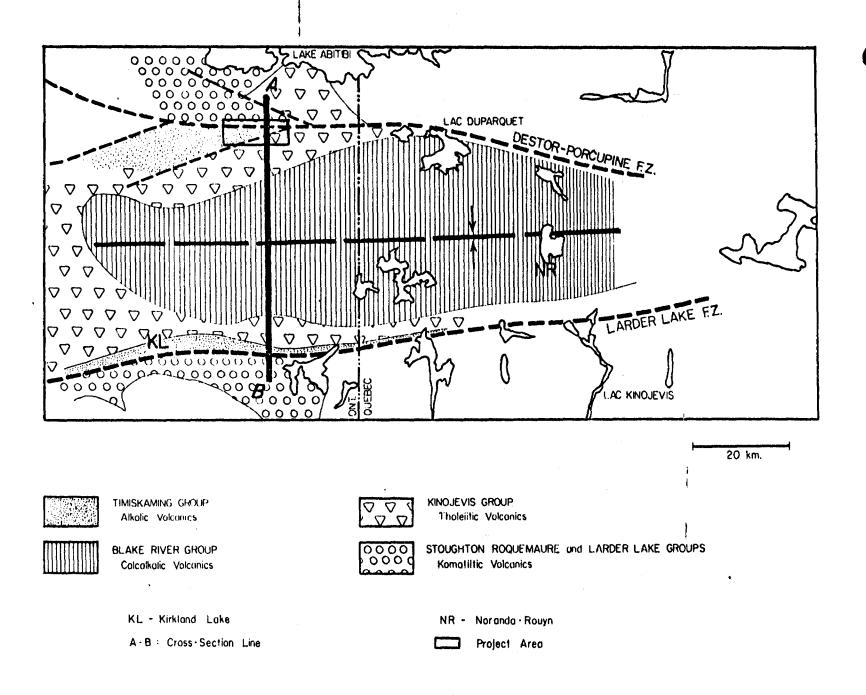
#### 1.0 INTRODUCTION

#### 1.1 Location

The area of interest on the McDermott Project is a block of ten patented claims in Holloway Township - the McDermott Block. The adjoining four claims of the Hennessy Property are of secondary interest. The project area, as a whole, extends east-west approximately 11,000 meters over various additional blocks of Camflo-staked and optioned ground. A block of land optioned from Lenora Exploration Limited is considered to be promising. The project area is located in Figure 1.

## 1.2 General Geology

The study area is underlain by Archean rocks of the Kinojevis Group. These rocks are dominantly tholeitic basalts with lesser amounts of argillite, cherty chemical sediments, and wacke. Tuff, carbonaceous sediments and iron formation are noted on a limited basis. These rocks strike approximately 080° and dip 50-90° south. Steeper dips are favoured. The Destor-Porcupine Fault Zone strikes east-northeasterly across the sequence on the northern edge of the area of interest. A number of hinge faults strike south to southwesterly from the Destor. One of these, the McDermott Fault, traverses the northern part of the McDermott-Hennessy Properties. Gold mineralization has been found in rocks to the south of this fault.



Schematic of Geology in McDermott Project Area (after Jensen et al.)

## 1.3 Project Status

As this report is written, 38 drill holes totalling 4,070.73 meters (1981-1983), have been drilled by Camflo on the McDermott-Hennessy Properties. The Company has also drilled four holes totalling 608.28 meters on the Lenora Property. A breakdown in drill hole data is given in Table 1. On the McDermott patented claims, approximately 275,000 tons of drill-indicated mineralized rock grading 0.095 oz/ton have been outlined to a depth of 50 meters (164 feet). Despite mixed drilling success to date, the zone remains open at depth and along strike. Five additional holes totalling 570 meters (1,837 feet), are planned to evaluate various orientations of the gold-bearing zone within the sedimentary sequence.

The geological mapping has complemented the diamond drilling programme by confirming that the McDermott sedimentary horizon is continuous through to the Lenora Property and indeed, onto the Canamax Option. A second sequence on the Newmex Option bears a striking visual resemblance to the McDermott style lithology, alteration and pyrite mineralization. The originally suggested strike length of 10,000 feet for the potential gold bearing strata has been increased to being in excess of 15,000 feet; from roughly 13+00 E to at least 32+00 W. The same horizon can be traced, if lower potential(?) is considered, for well over 25,000 feet. It extends from the western edge of the Amax Option, across the McDermott Property, and onto the Ghostmount Property.

Geophysical data is not as yet totally compiled.

TABLE 1 : DIAMOND DRILL HOLE DATA

D.H.	LONGITUDE	LATITUDE	BEARING (AZ.º)	LENGTH DIP METERS (FEET)			COMMENTS
Mc 81-1	10+00 E	0+50 S	350	-550	137.77	(452.0)	
81-2	8+50 E	1+00 s	350	50	188.67	(619.0)	
81-3	11+50 E	1+00 S	350	50	152.40	(500.0)	
81-4	10+00 E	0+75 S		60	121.92	(400.0)	
81-5	10+50 E	0+75 S	350	55	137.16	(450.0)	
81-6	11+00 E	0+75 S	350	50	124.05	(407.0)	•
81-7	12+00 E	0+75 S	<b>35</b> 0	50	216.10	(709.0)	
81-8	13+00 E	0+60 S	350	50	155.45	(510.0)	
81-9	9+50 E	0+60 s	350	50	107.29	(352.0)	
81-10	7+50 E	0+60 s	350	45	122.83	(403.0)	
81-11	7+00 E	0+60 s	350	45	107.59	(353.0)	
81-12	8+00 E	0+60 S	350	45	107.90	(354.0)	
82-13	6+50 E	0+60 S	<b>3</b> 50	45	107.59	(353.0)	
82-14	6+00 E	0+60 s	350	45	123.44	(405.0)	HENNESSY OPTION
82-15	5+00 E	1+00 S	350	45	137.77	(452.0)	HENNESSY OPTION
82-16	4+00 E	0+60 s	350	45	109.73	(360.0)	HENNESSY OPTION
83-17 1	10+12.5E√	0+38 S	344	50	60.05		
83-18	9+87.5E	0+38 S	344	50	60.05	(197.0)	
83-19	9+75 E	0+35 S	344	45	52.43	(172.0)	
83-20 √	9+75 E	0+46 S	344	65	72.24	(237.0)	
83-21	9+62.5E	0+33 S	344	50	60.05	(197.0)	
83-221/	9+50 E	0+36 S	344	45	61.26	(201.0)	
3-23	9+37.5E	0+30 S	344	45	60.05	(197.0)	
83-24	9+25 E	0+50 S	344	55	92.66	(304.0)	
83-25 √	9+25 E	0+37 S	344	45	60.96	(200.0)	
83-26 V	7+75 E	0+40 S	344	60	91.65	(300.7)	
83-27 √	7+75 E	0+30 S	344 (	45	61.26	(201.0)	
83-28	7+62.5E	0+28 S	344	45	61.26	(201.0)	
83-29	7+50 E	0+26 S	344	45	61.26	(201.0)	
83-30	7+37.5E	0+24 S	344	50	69.22	(227.0)	
83-31 🗸	7+25 E	0+36 S	344	60	96.62	(317.0)	
83-32	7+25 E	0+24 S	344	50	66.14	(217.0)	
83-33	7+87.5E	0+40 S	344	50	63.09	(207.0)	
83-34 /	8+12.5E	0+50 S	344	50	62.80	(206.0)	
83-35	8+00 E	0+60 S	344	60	91.74		
83-36	10+25 W	1+30 S	344	65	175.87		LENORA OPTION
83-37	10+00 W	0+69 S	344	65		(451.0)	LENORA OPTION
83-38	14+00 W	0+35 S	344	45	106.98	•	LENORA OPTION
83-39 /	12+75 W	0+25 S	344	45	91.74		LENORA OPTION
83-40	10+00 E	1+30 S	344	70	218.87		
83-41	9+50 E	1+15 S	344	70	203.29		
83-42	7+50 E	0+75 S	351	70	186.12	(610.6)	
83-43/	9+50 E	0+72 S	344	70			
83-44	10+25 E	0+70 S	344	65			
83-45	8+87.5E	0+64 S	344	65			•
83-46	7+75 E	0+65 S	344	65			•
83-47	7+25 E	0+62 S	344	65			

#### 2.0 GEOLOGY

## 2.1 Regional Geology - A History

The Archean stratigraphy (1) for Holloway Township is as follows:

UPPER SUPERGROUP

Timiskaming Group Blake River Group

Kinojevis Group

Stoughton Roquemaure Group

LOWER SUPERGROUP

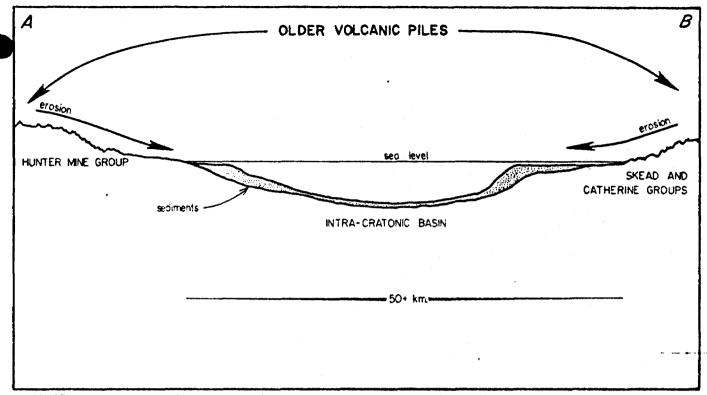
Porcupine Group Hunter Mine Group Wakewada Group

A simplified schematic diagram (Figure 1) locates the project area within the regional geology. The two supergroups represent successive volcanic cycles from ultrabasic komatiitic volcanism to acid calcalkaline volcanism. Each cycle is topped by a sedimentary sequence. The gold mineralization of interest in Holloway and Harker Townships is hosted by Kinojevis rocks. Specifically, the host is a sedimentary sequence within the tholeitic volcanics. As such, the sediments reflect a major hiatus in volcanic activity.

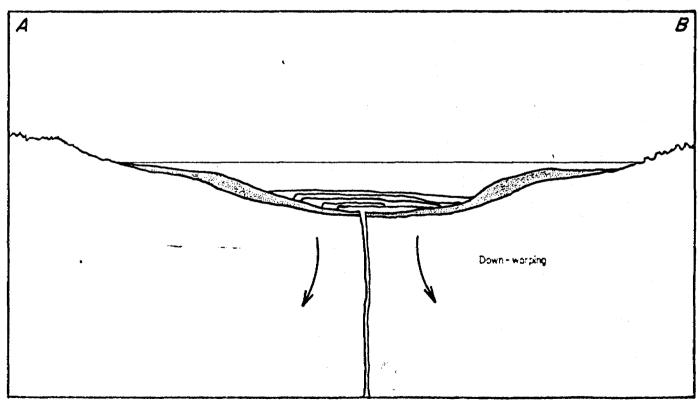
(1) After L.S. Jensen, 1980.

The upper supergroup represents a series of rocks which were deposited in an east-west trending basin. The sequence of events is depicted graphically in six stages in Figures 2-1 to 2-3. This progression is based upon L.S. Jensen's model which has been modified by this author to fit the scenario envisioned for the McDermott project area.

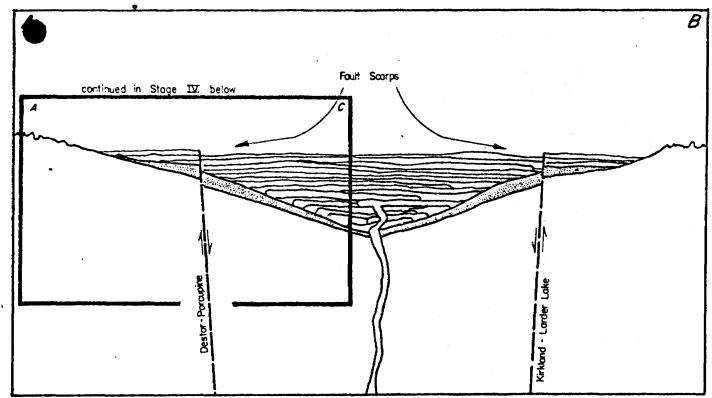
In the beginning, a deep crustal rift must have developed to allow mantle derived magma to come to the surface. The weight of these komatiltic volcanic flows depressed the crust to such a degree that boundary faults developed on the north and south flanks of the basin. Ultrabasic volcanism gave way to tholeiitic volcanism, more from eruptive centres than from a mid-basin rift. With further depression, much of the downwarp was taken up in the faults and the basin became a rapidly subsiding graben. As a result of this movement, the Destor-Porcupine Fault on the north flank, and the Kirkland Lake-Larder Lake Fault on the south flank proliferated into wider fault zones. At some point, the rate of extrusion must have greatly diminished (Stage IV), and sedimentation took over. A layer of sediments, probably in the form of deltaic, channel and shelf deposits were formed. A sizeable tuffaceous component is known to exist in some of these rocks. Siliceous chemical sediments were depositied as thin crusts, perhaps capping individual sedimentary cycles. They may have been precipitated from silica-saturated waters evolved during compaction from the sediments themselves. Gold was



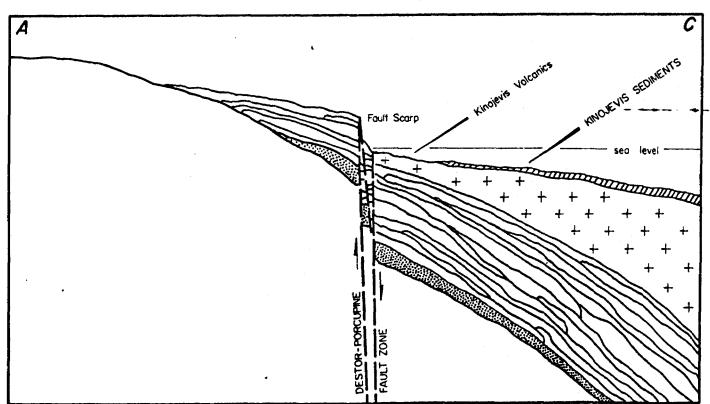
STAGE I: Deposition of Porcupine Group Sediments Within on Intro-crotonic Bosin



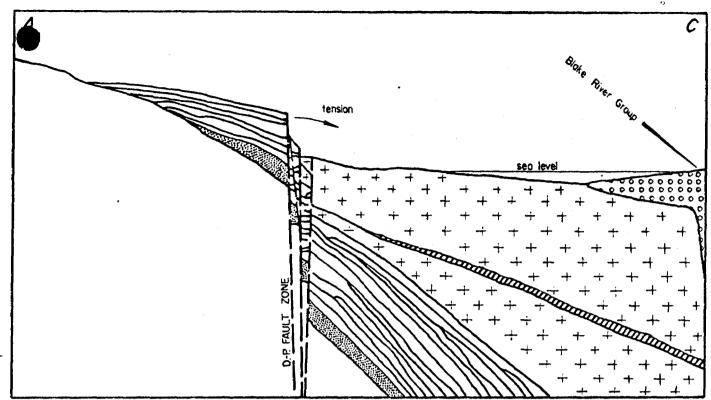
STAGE II: Extrusion of Stoughton Requemoure Komotilitic Volconics From Deep Crustol Froctures initiation of Bosinal Subsidence.



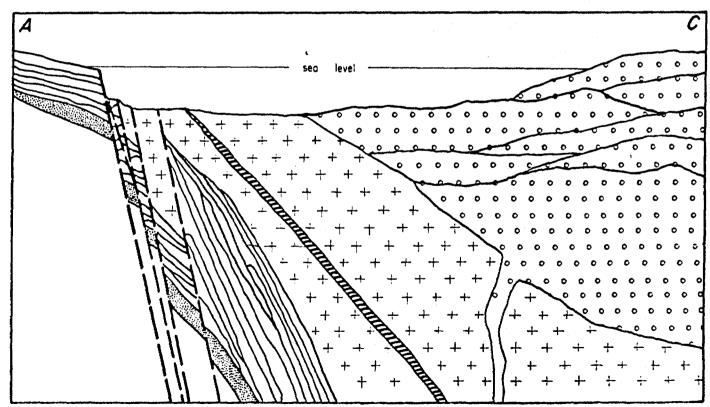
STAGE III: Continuing Komatiito Volcanism and Crustal Depression Creates A Rapidly Subsiding Graben. The flanks of the 'Synctinorium' (Jenson, 1980), Are Bounded on the North and South by the Destor-Porcupine and the Kirkland Lake-Larder Lake Fault Zones, Respectively.



STAGE IV: Transition From Komatitic to Tholeitic Volcanism — Deposition of the Kinojevis Group. Thick (100m.), Sequences of Sediments Are Deposited During Breaks in Eruptive Activity. With Constant Reworking of Sediments, Gold is Concentrated in Fluvial and Deltaic Environments, and Eventually, in Local Basins. Graben Subsidence Continues.



STAGE V: Accelerating Subsidence Applies Tension to the Destor-Porcupine Foult Zone. Burial of the Kinojevis Sediments by Kinojevis Volcanics and High Crustal Heat Flow Produces Local Carbonatization and Silicification. Gold Undergoes Limited Redistribution Under Locally Produced Hydrothermal Conditions. Offshore, Island-arc Calc-Alkaline Volcanism (Blake River Group), Begins From a Rising Magma Chamber.



STAGE XII: With Continued Extrusion of the Blake River Group, Inward Collapse of the Graben Produces Dilation of the Destor-Porcupine Foult Zone. A Second Basin Forms to the North of the Growing Island-arc Volcanic Pile.

Timiskaming Sediments Are Deposited. The Collapse is a Time of Hydrothermal and Granitic intrusive Activity.

concentrated in detrital form in lower parts of the sedimentary basin or basins. The eventual burial of these sediments in a region of high heat flow, would have subjected them to localized hydrothermal conditions as pore fluids were evolved. This led to general silicification, pyritization, feldspathization and limited re-distribution of gold. With continued volcanism and subsidence, the rock sequence tilted more and more into the graben. Melting at depth of lower stratigraphic sequences produced magmas of "granitic" composition which erupted on surface as island-arc type calc-alkaline volcanism. Depletion of the magma chambers and the weight of the 20-30 km of collected volcanics caused the graben to collapse inwards. Dilation of the boundary faults, such as the Destor-Porcupine, allowed Timiskaming rocks to collect in a second generation graben. Within the fault zones, much hydrothermal activity altered the Timiskaming assemblage and introduced gold locally in vein systems (eg. Teddy Bear Property).

## 2.2 Genesis of Gold Mineralization

A number of authors have expounded hypotheses about gold mineralization which emphasize the importance of magmatically derived hydrothermal fluids in the leaching of gold from source rocks, with subsequent transportation and re-deposition as ore. These authors include Pyke, Karvinen, Jensen and Fyon. Their gold sources range from volcanic rocks to carbonaceous sedimentary sequences. Gold is released due to carbonatization or remelting and concentrated later.

In the wake of Hemlo, a number of individuals have noted the importance of fossil placers as a gold concentrating mechanism. The Hemlo deposit is hosted by a sandstone or wacke type sequence. Although hydrothermal effects are noted in part of the stratigraphic sequence, along with large quantities of diagenetic(?) pyrite, the gold is not spatially related to these features. Furthermore, the alteration could be explained solely by diagenetic processes. Economic gold concentrations are confined to saucer-like depressions interconnected down-dip along the host formation. Gold was concentrated in hollows and channelways on a shelf. Much lower gold values are found atop the shelf itself although these sediments are texturally very similar.

## 2.3 The McDermott Concept

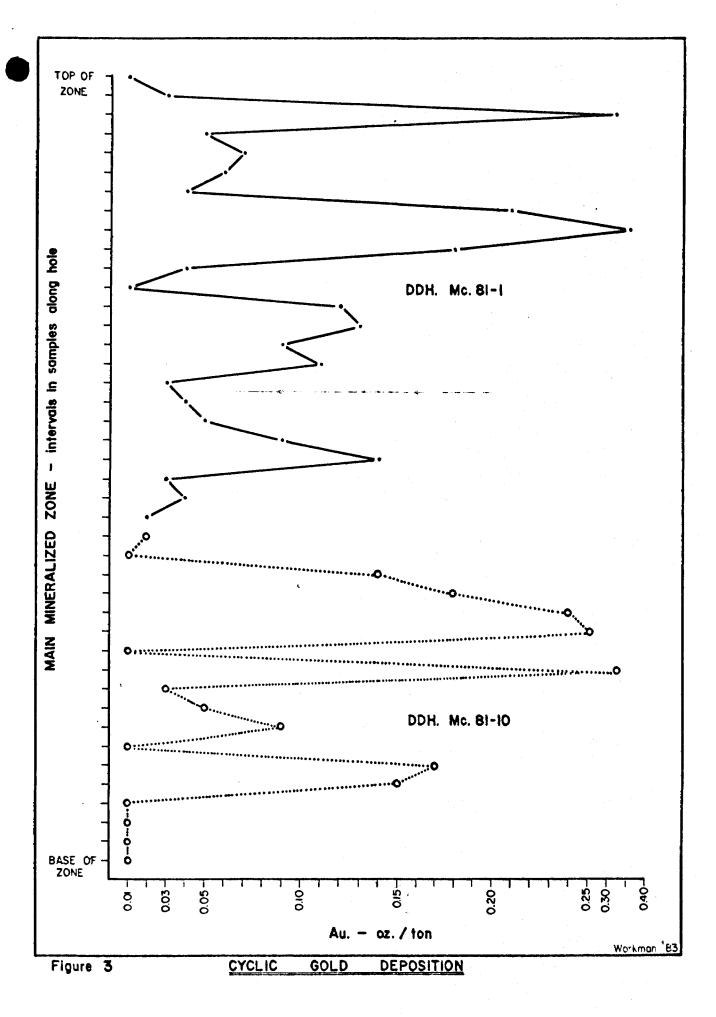
The concept of gold genesis has undergone a transformation during the past six months. Quite independent from Hemlo, the new model bears a similarity not appreicated until the author was recently shown Hemlo data by Noranda staff.

The original McDermott concept was that of a brecciated basalt, proximal to the Destor-Porcupine Fault Zone, having undergone hydrothermal alteration (silicification etc.), and mineralization (gold-pyrite). Hydrothermal fluids would have evolved at depth from a magmatic source and presumably ascended to surface along channelways provided by the Destor-Porcupine Fault Zone and numerous suspected cross-faults. This model has been favoured by many other workers to explain a host of Abitibi Belt deposits.

With the McDermott Property geology now better understood, a new model incorporating aspects of the old mechanism is proposed. As with all concepts, the new theory builds upon the foundations laid by Gilles Tousignant and Claude Durocher.

The author believes that the McDermott, Hennessy and Lenora mineralization is confined to several cycles within a single sedimentary sequence. These strata were not previously defined within Holloway Township although a diamond drill hole on the Ghostmount Property southwest of Holloway Lake may have intersected the assemblage. The build-up of at least 100 meters of sediment reflects a major cessation in basaltic volcanism.

Gold is found in concentrations up to 0.71 oz/ton but, more normally, up to 0.30-0.35 oz/ton. The host rock is usually, but not always, intensely silicified. Good gold values (0.101/4.85 meters) were found in chloritized, weakly silicified, laminated sediments on the Lenora Property in D.D.H. 83-39. Highest grades are normally associated with "feldspathized" rock. The host may or may not be brecciated. Within brecciated rock, silicification is usually penetrative into very angular fragments and proportional in strength to the degree of brecciation. Intense silicification is frequently noted in non-brecciated sequences. Pyrite content partly reflects the degree of silicification with highest concentrations approaching 20% in feldspathized rock. Best gold values to date are 0.123/12.00 meters; 0.141/9.00 meters and 0.074/27.5 meters, true widths.

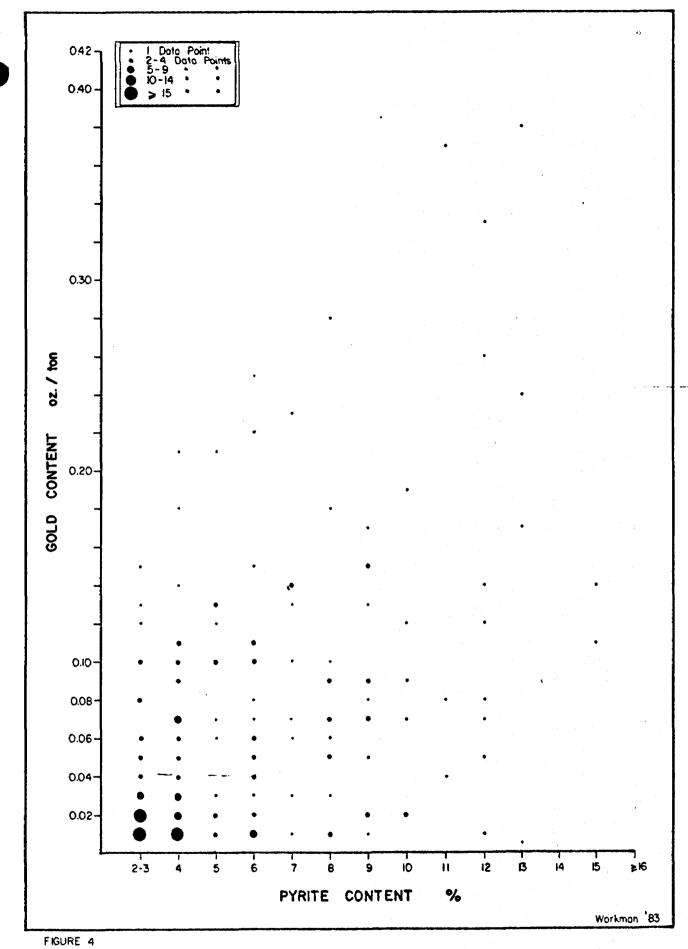


A plot of gold content along a drill hole indicates that gold content is cyclical with peaks in the 0.13-0.30 oz/ton range (see Figure 3). This feature is thought to represent individual depositional cycles, perhaps within a distal deltaic complex. The presence within the bedding, of thin cherty bands, often brecciated prior to overall silicification, indicates that the depositional environment is somewhat distal from the source of detrital material while remaining within the shelf regime.

A broad correlation is noted between estimated pyrite content and gold concentration. Much of the pyrite is thought to be diagenetic - formed during compaction and lithification from evolved pore fluids. Some of the gold has, no doubt, been locally re-distributed by these heated fluids. It may be contained within the pyrite crystal lattice. However, from personal observation, it is known that some of the mineralization is in the form of free gold. The pyrite-gold relationship is suggested in Figure 4.

Evidence of non-magmatic hydrothermal activity is provided by:

- (1) extensive, often extreme silicification of fracture boundaries, dilatant breccia zones and laminated, non-brecciated sediments;
- (2) the presence of coarse clots of pyrite (up to 1.5 cm) in rock with abundant very finely (0.1 mm) disseminated pyrite;



GOLD vs. PYRITE CONTENT

Scatter Diggram Based On 210 Data Points From

Scatter Diagram Based On 210 Data Points From DDH.'s Mc. 83-23 to 83-35 inclusive.

- (3) aphanitic, hematite-rich silicified sediments with little pyrite; probably reflecting a lack of sulphur bearing fluids to reduce iron; and,
- (4) sericite alteration of feldspar (from thin section).

Lack of a well developed vein system suggests that hydrothermal activity was limited, and, probably consisted of slow fluid migration through the sedimentary pile. Fluid temperatures were probably less than 200° C.

### 3.0 CONCLUSIONS

Much data is yet to be fully evaluated in light of a relatively new concept of gold mineralization and regional geology. The following statements are made with, at this time, a relative degree of certainty.

- (1) Gold mineralization is stratabound within a sedimentary sequence belonging to the Kinojevis Group.
- (2) The sediments are at least 100 meters in thickness and have a strike length in excess of 15,000 feet, extending past the Lenora Property.
- (3) The sediments are composed of argillites, wackes and cherty chemical sediment. Tuffaceous content is probably significant.
- (4) Gold was probably deposited in a cyclic pattern during normal sedimentary pulses.

- (5) A hydrothermal overprint is imposed on much of this sequence of sediments - probably a combined result of high crustal heat flow and dewatering of the sedimentary pile.
- (6) There is a general association between high pyrite contents and high gold values but regional variation is noted.
- (7) The Lenora Property sediments <u>seem</u> to be less affected by hydrothermal alteration while still having significant gold values.
- (8) The sedimentary sequence is in an environment very similar to the Hemlo Deposit.

### 4.0 RECOMMENDATIONS

The following recommendations are made based upon gaps in data or understanding as of October 1983.

- (1) All 1981-1982 drill core should be re-logged to put the stratigraphy and subjective descriptions into a common framework. This should also include a cursory re-examination of holes which were logged by the author prior to definitive labelling of the sedimentary sequence.
- (2) Examination of all mineralized sequences to determine that no potential mineralization has been missed.
- (3) Extensive fill-in sampling should be carried out on available Lenora core from 1958 and 1983 drilling.

- (4) Level plans should be prepared for the Lenora mineralized zone.
- (5) A series of samples taken from drill core across the McDermott zone should be thin sectioned to provide detailed geological and geochemical data. This should also be carried out on the Lenora rocks for comparison purposes (much of this sampling has been done).

For the project as a whole, there is an obvious lack of fault data. Many displacements are guessed at but are not even defined at the most rudimentary level. This is in part due to the position of the V.L.F. transmitter stations which do not allow coupling with NE-SW structures. To augment existing data, two further recommendations are made.

- (6) Landsat imagery at a scale of 1:250,000 utilizing bands
  5 (green), 7 (red) and 8 (near infra-red), should be
  used to determine lineament directions and positions.
- (7) Define areas of primary sturctural interest and locate a portable V.L.F. transmitter to couple with suspected conductors. This might also be used to trace the mineralized sedimentary sequence.

A.W. WORKMAN

October 4, 1983

#### MEMORA



TO : Dit Holt - Gilles Tousignant

FROM: Al Workman

DATE: November 7, 1983

RE: Addendum to the report:

McDERMOTT PROJECT GEOLOGY AND GOLD MINERALIZATION

WESTERN HOLLOWAY TOWNSHIP

October 4, 1983

Fine diamond drill holes have been completed since the writing of my October report. These holes were drilled as follows in Table 1.

<u>Hole</u>	<u>Line</u>	Departure	Bearing	Dip	Length
43	9 + 50 E.	0 + 72 S.	3440	-700	118.14 m (387.6')
44	10 + 25 E.	0 + 70 s.	3440	-650	118.67 m (389.3')
45	8 + 87.5 E.	0 + 64 S.	3440	-650	111.86 m (367.0')
46	7 + 75 E.	0 + 65 S.	3440	-650	111.86 m (367.0')
47	7 + 25 E.	0 + 62 s.	3440	-650	120.30 m (394.7')

A total of 580.83 meters (1,905.6') were drilled in these holes. With the exception of hole Mc. 83-45, all holes intersected good gold values over appreciable widths. These values are given in Table II. The third hole was drilled in an area where little previous drilling has been done. It is within the realm of possibility that it may have intersected better values in the "zone" should it have been placed so as to ensure a deeper intersection.

<u>Hole</u>	Gold Mineralization (oz./ton)			
Mc. 83-43	0.137/10.71m (35.1') or 0.098/24.27m (79.6')			
Mc. 83-44	0.193/6.88m (22.6') or 0.107/15.70m (51.5')			
Mc. 83-45	0.075/2.17m (7.1')			
Mc. 83-46	0.115/4.33m (14.2') and 0.102/3.17m (10.4')			
Mc. 83-47	0.172/7.13m (23.4') or $0.104/14.22m$ (46.7')			

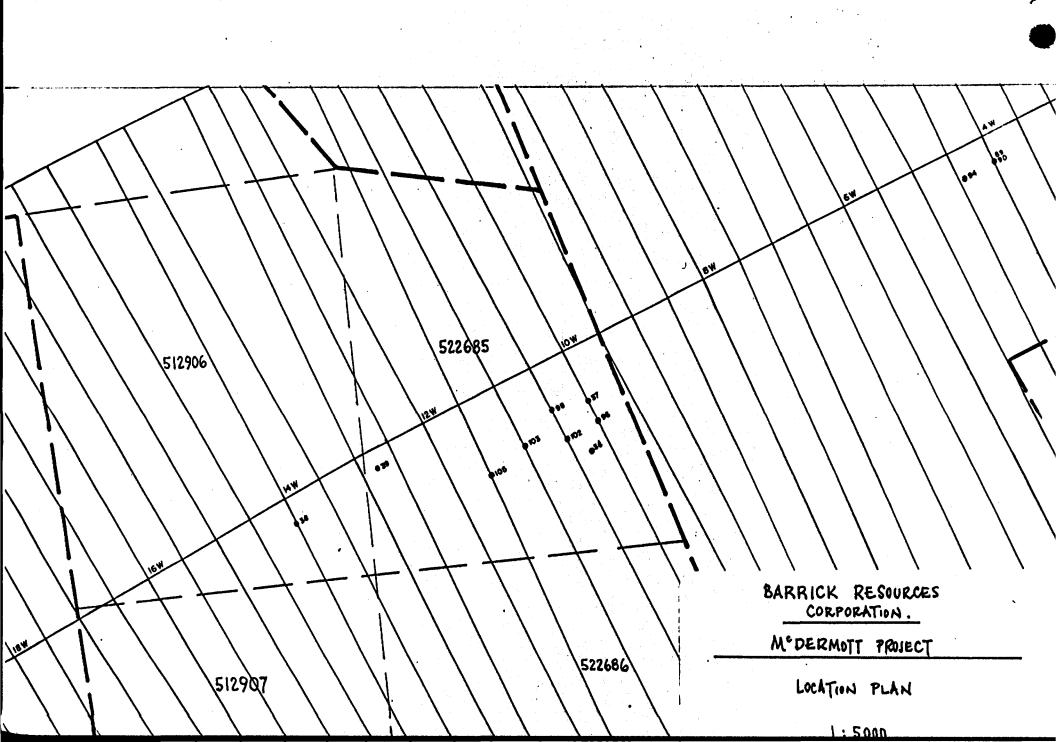
These holes have confirmed that economic gold mineralization is continuous within the plane of the Main Mineralized Zone (ie. the silicified and transitional zones) inasmuch as it has been explored. Mineralization pitches across the plane of the zone. From the higher grades found near surface, there appears to be both easterly and westerly rakes. This is true for "zone I" in the region of 7 + 50 E., and "zone II" in the area near 9 + 50 E. The westerly plunge seems to produce better mineralization, but this observation may be due to biased hole distribution. The most attractive areas for additional drilling are between lines 6 + 50 E. and 7 + 00 E. and between lines 8 + 75 E. and 9 + 50.

Drillng should attempt to intersect the favourable sequence at approximately 125 - 150 meters down the plane of the zone.

At the present, the zones are open with regards to all pitch possibilities. Grades appear to be sustaining themselves, and perhaps improving locally. Six additional holes are now being drilled on "Zone I" to test the various attitudes of the zone. No assay data is available for comment at the time of writing.

A.W. Workman

7-11-83



32D12SE0044 63.4297 HOLLOWAY

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# PROJECT #135

HARKER AND HOLLOWAY TOWNSHIPS, ONTARIO

Camflo Mines Limited December 5, 1983

Al Workman Gilles Tousignant Meredyth Holt

#### INTRODUCTION:

Recent diamond drill results in conjunction with the geological mapping and geophysical surveys carried out during the field season have prompted a preliminary investigation of the "ore potential".

Rather than generalize, and accepting the fact that the grade and tonnage determinations in themselves are inconclusive at this early stage of development, it was decided that detailed measurements and calculations were warranted with regard to further work programs and property option commitments for 1983 and 1984.

### SUMMARY AND CONCLUSIONS:

Beginning in October 1981, Camflo Mines Limited have now drilled a total of 53 diamond drill holes; 45 of which were drilled on the McDermott property, four on the Hennessy property and four on the Lenora property.

The 1983 diamond drill program was mainly confined to a continuous strike length of approximately 1050 feet (325 meters), of which, shallow but fairly detailed drilling covered the east and west sections (combined strike length of approximately 600 feet (183 meters). The mineralized sediments (zone) are known to continue along strike for a minimum distance of at least 10,000 feet (3048 meters) as indicated by very limited shallow drilling and surface mapping.

#### GEOLOGY AND GOLD MINERALIZATION:

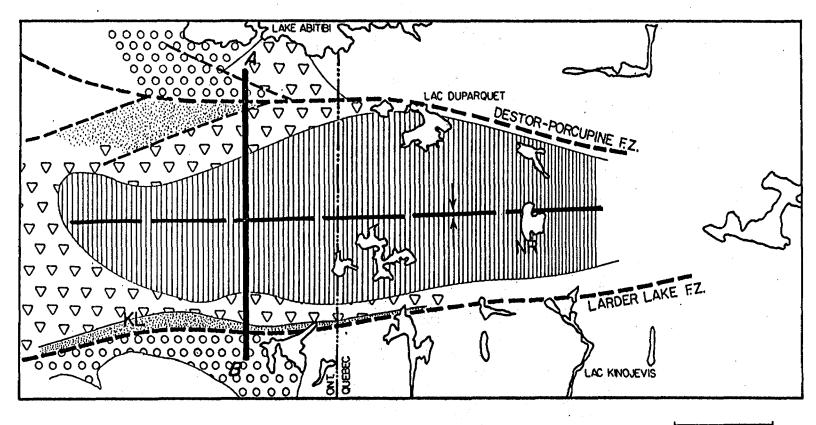
(By A. Workman)

#### Property

The main area of interest on the McDermott Project at the present time is a block of ten patented claims in Holloway Township referred to as the McDermott Property. The adjoining four claims of the Hennessy Property are of secondary interest. The project area as a whole, extends both to the east and west for approximately 11,000 meters (36,080 feet) over various additional blocks of Camflo-staked and optioned ground. A block of land optioned from Lenora Exploration Limited is considered to be promising. The project area is located in Figure 1.

### General Geology

The study area is underlain by Archean rocks of the Kinojevis Group. These rocks are dominantly tholeiitic basalts with lesser amounts of argillite, cherty chemical sediments, and wacke. Tuff, carbonaceous sediments and iron fomration are noted on a limited basis. These rocks strike approximately 080° and dip 60-90° south. Steeper dips are favoured. The Destor-Porcupine Fault Zone strikes east-northeasterly across the sequence on the northern edge of the area of interest. A number of hinge faults strike south to southwesterly from the Destor. One of these, the McDermott Fault, traverses the northern part of the McDermott-Hennessy Properties. Gold mineralization has been found in rocks to the south of this fault.



20 km.



TIMISKAMING GROUP Alkolic Volconics



BLAKE RIVER GROUP Colcolkolic Volconics



KINOJEVIS GROUP
Tholeiitic Volconics



STOUGHTON ROQUEMAURE and LARDER LAKE GROUPS Komalilitic Volconics

KL - Kirkland Lake

A-B: Cross-Section Line

NR - Noranda · Rouyn

. Project Area

Schematic of Geology in McDermott Project Area (after Jensen et al.)

FIGURE 1

The geological mapping has complemented the diamond drilling programme by confirming that the McDermott sedimentary horizon is continuous through to the Lenora Property and indeed, onto the Canamax Option. A second sequence on the Newmex Option bears a striking visual resemblance to the McDermott style lithology, alteration and pyrite mineralization. The originally suggested strike length of 3048 meters (10,000 feet) for the potential gold bearing strata has been increased to being in excess of 15,000 feet; from roughly 13+00 E to at least 32+00 W. The same horizon can be traced, if lower potential(?) is considered, for well over 25,000 feet (7620 meters). It extends from the western edge of the Amax Option, across the McDermott Property, and onto the Ghostmount Property.

Geophysical data is not as yet totally compiled.

## Regional Geology

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sedimentary basin or basins. The eventual burial of these sediments in a region of high heat flow would have subjected them to localized hydrothermal conditions as pore fluids were evolved. This led to general silicification, pyritization, feldspathization and limited re-distribution of gold. With continued volcanism and subsidence, the rock sequence tilted more and more into the graben. Melting at depth of lower stratigraphic sequences produced magmas of "granitic" composition which erupted on surface as island-arc type calc-alkaline volcanism. Depletion of the magma chambers and the weight of the 20-30 km of collected volcanics caused the graben to collapse inwards. Dilation of the boundary faults, such as the Destor-Porcupine, allowed Timiskaming rocks to collect in a second generation graben. Within the fault zones, much hydrothermal activity altered the Timiskaming assemblage and introduced gold locally in vein systems (eg. Teddy Bear Property).

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### The McDermott Concept

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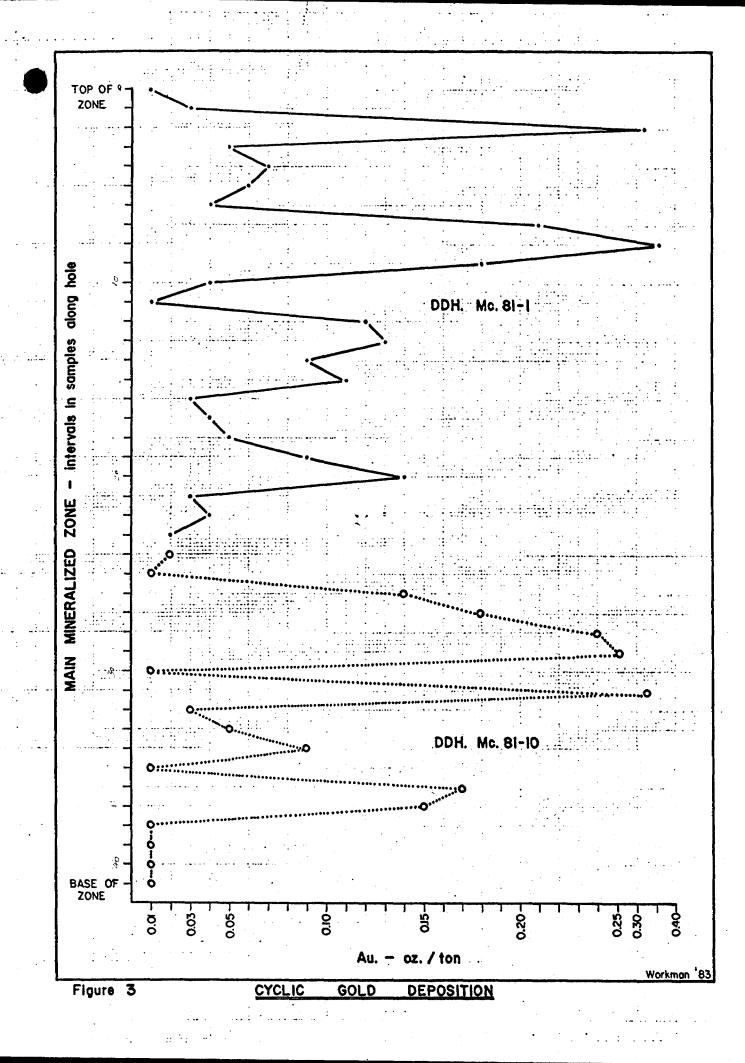
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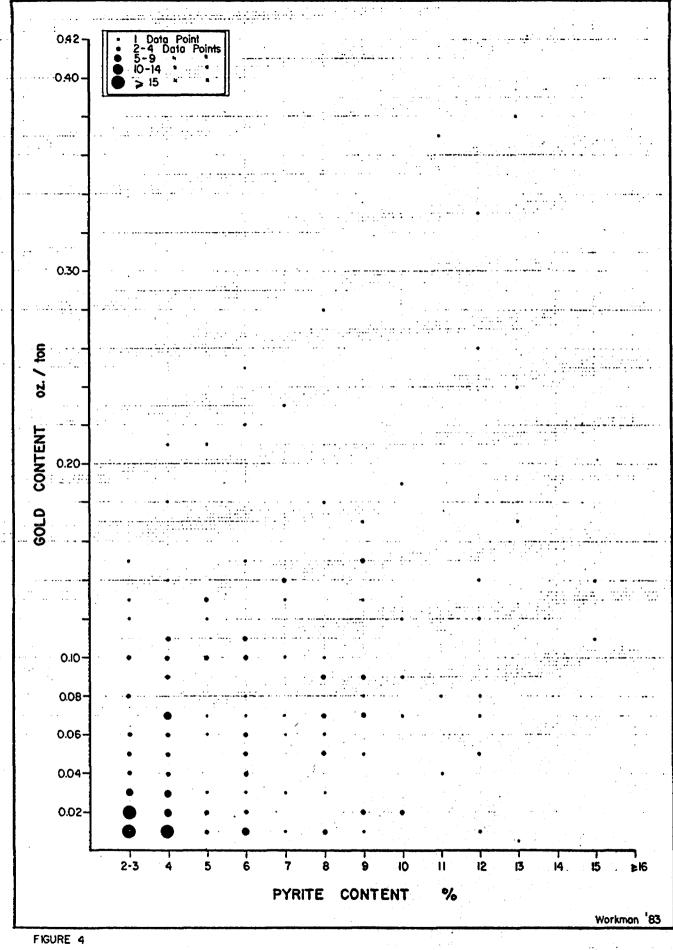
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A plot of gold content along a drill hole indicates that gold content is cyclical with peaks in the 0.13-0.30 oz/ton range (see Figure 3). This feature is thought to represent individual depositional cycles, perhaps within a distal deltaic complex. The presence within the bedding, of thin cherty bands, often brecciated prior to overall silicification, indicates that the depositional environment is somewhat distal from the source of detrital material while remaining within the shelf regime.

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GOLD vs. PYRITE CONTENT

Scatter Diagram Based On 210 Data Points From DDH.'s Mc. 83-23 to 83-35 inclusive.

Evidence of non-magmatic hydrothermal activity is provided by:

- (1) extensive, often extreme silicification of fracture boundaries, dilatant breccia zones and laminated, non-brecciated sediments;
- (2) the presence of coarse clots of pyrite (up to 1.5 cm) in rock with abundant very finely (0.1 mm) disseminated pyrite;
- (3) aphanitic, hematite-rich silicified sediments with little pyrite; probably reflecting a lack of sulphur bearing fluids to reduce iron; and,
- (4) sericite alteration of feldspar (from thin section).

Lack of a well developed vein system suggests that hydrothermal activity was limited, and, probably consisted of slow fluid migration through the sedimentary pile. Fluid temperatures were probably less than 200° C.

#### Paleo Basin

An isopach map was produced to illustrate the relationship between the thickness of the sedimentary sequence and the gold content of the 'Main Mineralized Zone' within this section. The zone is geologically defined as an altered sequence (principally silicified), of sedimentary rocks. This zone carries highly anomalous and remarkably continuous gold values. The sediments are contained within the Kinojevis Group volcanics.

Most diamond drill holes were collared into basaltic volcanic rocks in the hanging wall of the zone. Somewhat fewer of the holes actually transected the entire sedimentary sequence to terminate in footwall volcanics. Where data allows, projections of the contacts were made and the thickness of the sediments was measured. These thicknesses were measured by section and by level and plotted on a longitudinal section in the plane of the ore zone. The contoured values were then compared to a previously drafted longitudinal of grade x width values.

It is readily evident from the sedimentary isopach, that the sediments are thicknening to the south. The deduction follows that an ancient shoreline existed to the north, and that the sediments developed as a clastic wedge in a generally southerly direction. Local irregularity is attributable to local highs (perhaps offshore islands), in the volcanic basement. The development of this paleobasin is in keeping with general geological models advocated for this region by Jensen, Hinse and, with some modifications, by this author.

A comparison of the thickness isopach to the grade x width contours indicates that the bulk of the "potential ore" is found where the sediments are relatively thick. In fact, drill holes which did not intersect good mineralization, cna be seen to have hit local highs in the volcanic basement where the sedimentary rocks are attenuated over 50% thickness; for example, Hole 83-42.

These findings do much to prove the existence of a basin lying to the south, southwest and southeast (down-dip), from present drilling. As strata are probed deeper in the basin, gold values should become more regular in grade and in width.

### Discussion

Much data is yet to be fully evaluated in light of a relatively new concept of gold mineralization and regional geology. The following statements are made with, at this time, a relative degree of certainty.

- (1) Gold mineralization is stratabound within a sedimentary sequence belonging to the Kinojevis Group.
- (2) The sediments vary in thickness up to at least 100 meters and have a strike length in excess of 15,000 feet, extending past the Lenora Property to the southwest.
- (3) The sediments are composed of argillites, greywackes and cherty chemical sediment. Tuffaceous content is probably significant.
- (4) Gold was probably deposited in a cyclic pattern during normal sedimentary pulses.
- (5) A hydrothermal overprint is imposed on much of this sequence of sediments. This is probably a combined result of high crustal heat flow and dewatering of the sedimentary pile.
- (6) There is a general association between high pyrite contents and high gold values but regional variation is noted.
- (7) The Lenora Property sediments seem to be less affected by hydrothermal alteration while still having significant gold values.

- 12

TABLE 1 : DIAMOND DRILL HOLE DATA

						100	+
	LONGITUDE	LATITUDE	BEARING (AZ.º)	DIP	LENG METERS (		COMMENTE
D.D.H.	LONGITODE	LATITODE	(AZ.~)	DIT	METERS (	(LDDI)	COMMENTS
Mc 81-1	10+00 E	0+50 s	350	-550	137.77		
81-2	8+50 E	1+00 S	350	50	188.67	(619.0)	
81-3	11+50 E	1+00 S	350	50	152.40		A CONTRACTOR OF THE STATE OF TH
81-4	10+00 E	0+75 S		60	121.92	(400.0)	
81-5	10+50 E	0+75 S	350	55	137.16		
81-6	11+00 E	0+75 S	350	50	124.05	(407.0)	
81-7	12+00 E	0+75 S	350	50	216.10	(709.0)	·
81-8	13+00 E	0+60 S	350	50	155.45		,
81-9	9+50 E	0+60 S	350	50	107.29	(352.0)	•
81-10	7+50 E	0+60 s	350	45	122.83	(403.0)	
81-11	7+00 E	0+60 s	350	45	107.59		
81-12	8+00 E	0+60 S 0+60 S	350	45 45	107.90	(354.0)	Maramaan obu
82-13	6+50 E		350	45	107.59		HENNESSY OPT
82-14	6+00 E	0+60 S 1+00 S	350 350	45	123.44	(405.0)	HENNESSY OPT
82-15	5+00 E	_	350 350	45	137.77		
82-16	4+00 E 10+12.5E	0+60 s	350	45	109.73		HENNESSY OPT
83-17		0+38 S	344	50	60.05	•	
83-18	9+87.5E	0+38 S	344	50	60.05		
83-19	9+75 E	0+35 S	344	45	52.43	•	
83-20	9+75 E	0+46 S	344	65 50	72.24	(237.0)	
83-21	9+62.5E	0+33 S	344	50	60.05	•	•
83-22	9+50 E	0+36 S	344	45	61.26	(201.0)	* * *
83-23	9+37.5E	0+30 S	344	45	60.05		-
83-24	9+25 E	0+50 S	344	55 45		(304.0)	
83-25	9+25 E	0+37 S	344	45	60.96	(200.0)	
83-26	7+75 E	0+40 S	344 344	60 45	91.65	•	
83-27	7+75 E 7+62.5E	0+30 S 0+28 S	344	45 45	61.26 61.26		
83-28 83-29	7+50 E	0+26 S	344	45	61.26		
83 <b>-</b> 29	7+37.5E	0+24 S	344	50	60:22	(227.0)	
83-31	7+25 E	0+36 S	344	60		(317.0)	•
83-32	7+25 E	0+24 S	344	50	66.14	(217.0)	
83-33	7+87.5E	0+40 S	344	50	63.09	(217.0)	
83-34	8+12.5E	0+50 S	344	50	62.80	(206.0)	
83-35	8+00 E	0+60 S	344	60	91.74	(301.0)	
83-36	10+25 W	1+30 S	344	65	175.87		LENORA OPTIO
83-37	10+00 W	0+69 S	344	65	137.46	(451.0)	LENORA OPTIC
83-38	14+00 W	0+35 S	344	45	106.98	(351.0)	LENORA OPTIC
83-39	12+75 W	0+25 S	344	45	91.74	(301.0)	LENORA OPTIC
83-40	10+00 E	1+30 S	344	70	218.87	(718.0)	DDNORM OF 120
83-41	9+50 E	1+15 S	344	70	203.29		•
83-42	7+50 E	0+75 S	351	70	186.12	(610.6)	1
83-43	9+50 E	0+72 S	344	70		(387.5)	
83-44	10+25 E	0+70 S	344	65	118.67	(389.2)	•
83-45	8+87.5E	0+64 S	344	65	111.86	(366.9)	
83-46	7+75 E	0+65 S	344	65	111.86	(366.9)	
83-47	7+25 E	0+62 S	344	65	120.30		
83-48	10+25 E	0+100s	344	65	145.08	(475.9)	
83-49	10+00 E	0+93 S	344	60	139.46		
83-50	9+75 E	0+75 S	344	65	109.27	• •	
83-51	9+75 E	0+94 S	344	65	140.51	•	
83-52	9+25 E	0+70 S	344	65	182.88		
83-53	9+25 E	0+95 S	344	70	131.37		,
00 00	7123 B	0175 5	J44	70	131.3/	(430.7)	

### DISCUSSION

- (1) With reference to the longitudinal section it can readily by observed that for a limited strike length of 1060 feet (323 meters), from 7+12.5 m to 10+37.5 m and to a maximum vertical depth of only 150 meters (492 feet) that 40 holes have tested only about 40% of this part of the zone to an average depth of approximately 55 meters (180 feet).
- (2) With the gold bearing sedimentary zone having a known strike length of greater than 15,000 feet (4572 meters) it is highly likely that it will extend to a depth of at least 4-5,000 feet (1219-1524 meters).
- (3) The tonnage potential is becoming increasingly attractive in light of the second and third stage drilling results. It becomes mainly a question of grades, from which our preliminary "ore" calculations are most encouraging.
- (4) Along strike to the east and west of the holes that have been used for the calculations, earlier shallow reconnaisance drilling for a distance of about 1,000 feet (305 meters) in both directions intersected the mineralized zones. Although the values were generally low, it is now known that these areas warrant considerably more drilling, particularly at depth. Re-logging of the older reconnaisance holes will give us a much better understanding of the down-dip potential.

### CONCLUSIONS AND RECOMMENDATIONS:

- (1) As stated earlier in placing the emphasis on the fact that we are dealing with a sedimentary stratabound deposit, the property has unusually good potential within the present boundaries of the properties either held under option or staked by Camflo Mines.
- (2) Quite obviously the location is ideal from a standpoint of infrastructure and possible early custom milling.
- (3) It is strongly recommended that a major diamond drilling program commence in February or March 1984, pending the availablity of funds.
- (4) With the geophysical, geochemical and geological mapping now completed for all practical purposes systematic drilling is the only means of determining the overall size and grade of the gold deposit(s).

### (5) Program Costing:

(A) A Major Diamond Drill Program excluding the drilling already completed and covering a strike length of 3,000 feet (914 meters) to a depth of 1,000 feet (305 meters) would cost approximately \$933,000. With OMEP funding the cost would be reduced to approximately \$700,000. (B) A Minimal Diamond Drill Program excluding the drilling already completed and covering a strike length of 1,200 feet (366 meters) to a depth of 1,000 feet (305 meters) would cost approximately \$484,000. With OMEP funding the cost would be reduced to approximately \$363,000. Included in the Minimal Program the cost to drill to a depth of 750 feet (230 meters) is estimated to be \$328,000. With OMEP funding this would be reduced to \$246,000.

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REPORT ON A

MAGNETOMETER SURVEY

IN

HARKER TOWNSHIP

LARDER LAKE MINING DIVISION

By: Gilles Tousignant, Ing.

March 26, 1984

·0183-6-C-34

### I. INTRODUCTION

The nine mining claims numbered L598857 to L598859 inclusive, and L598871 to L598873 inclusive, L610804, L610805 and L610953, located in Harker Township, Larder Lake Mining Division, were optioned by Camflo Mines Limited from Johns Manville Co. Ltd.

1.

The center of this claim group is located 32 miles east of Matheson, 1.5 miles south of Highway 101, and 6000 feet west of the Harker - Holloway Township line. It covers part of the former Toronto Harker and Consular Harker properties. It is accessible from the north by a trail leading from Highway 101 to the adjoining Lenora property, or from the west by a bush road that leads to the Harker Gold Mine property, and passes .5 miles west of the west boundary.

### II. GEOLOGY

The area is underlain by Keewatin sediments and volcanics, cut by Pre-Algoman basic and ultrabasic intrusives.

The volcanic rocks are basic to intermediate in composition, and are found as massive, fine to coarse grained flows, as pillow lavas, or as pillow or flow breccias with thin bands of associated pyroclastics. The formations are stricking from 70° to 90° east, with a steep south dip, and the tops are facing south.

The intrusive rocks are usually diabasic in composition, and are often found as sills; however, the coarse grained center of flows have often been mistaken for diabasic intrusives, both the lavas and the sills being similar in composition. Minor syenitic dikes are also present, but they are usually of limited width and length. One major syenitic dike is interpreted in the central - western part of the Harker Township.

The few outcrops found on the property have been classified as basic to intermediate volcanics, sometimes pillowed, tops facing south, and with a steep south dip. Two strike faults, the Imperial fault to the north and the Ghostmount fault to the south have been inferred by the previous workers.

The major Porcupine - Destor fault lies one mile north of the property.

#### III. MAGNETOMETER SURVEY

17.7 miles of lines were cut and chained on the property, and a detailed ground magnetometer survey was completed, with readings taken at 25 meter intervals, and at 12.5 meters where anomalous, along lines 50 meters apart.

The instrument used was a scintrex M.P.-2 proton magnetometer, in conjunction with a compatible base station. Combined operator, instrument and recorder errors give a reliability of ± 10 gammas on individual readings.

The contoured residual values (total field minus 58,000 gammas) are shown on the accompanying map.

The major feature in the area, as shown by the survey, is the strong magnetic axis outlined in the south part of the property. This axis is oriented N.70°E., parallel to the interpreted and mapped lava flows, and is thought to reflect the presence of magnetic flows.

The strike of this strong axis is the same as the weaker axes to the north, which are due to less magnetic andesitic or basaltic flows, with the weaker zonespossibly showing interbedded sediments or tuffs.

From the continuity of the magnetic axis, we assume that there are no major structures cross-cutting the property. The weakening of certain strong

axes as we go from west to east is coincidental with the outcropping area, and is probably due to the deepening of the overburden.

### IV. CONCLUSION

The magnetic survey on this property confirms the general trend of the geological formation in this area, as outlined by Satterly in his report, and shows the presence of magnetic flows to the south.

Gilles Tousignant, Ing.

### CERTIFICATE OF QUALIFICATION

- I, GILLES TOUSIGNANT, of 245 rue Canadienne, Val d'Or, Quebec, do hereby certify that:
- 1.- I am a graduate of l'Ecole Polytechnique de Montreal, having received the degree of Bachelor in Applied Science, major in geology, in 1973.
- 2.- I have, since graduation, practised in the fields of mineral exploration, development and mining.
- 3.- I am a member of 'L'Ordre des ingénieurs du Québec'.
- 4.- I am employed by Camflo Mines Limited, and I have a personal knowledge of the work performed and described in this report.

Dated this 26th day of March 1984.

Gilles Tousignant, ing.

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# A PROGRESS REPORT ON

# LENORA OPTION GOLD MINERALIZATION,

### GEOLOGY AND GEOPHYSICS

by A.W. Workman

May 22, 1984

OM83-6-C-34

TABLE (



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Recommended Drilling for Lenora Option

### 1.1 Purpose:

The intent of this report is to update the reader as to the status of the Lenora Option in terms of expenditures, and the current geological thinking as regards to the property. Past and present work have been summarized and recommendations for future work have been made.

### 1.2 Summary:

The Lenora Property is located in Harker Township, Ontario, approximately 30 miles east of Matheson. It can be reached via a winter road extending about 0.5 miles south of Hwy.#101. It consists of six unpatented claims registered to Mr. R.J. Kasner of Lenora Explorations Limited.

## 1.3 General Geology:

The property is underlain for the most part by rocks of the Kinojevis Group. These rocks are dominantly basaltic volcanics and are Keewatin in age. They are cut, if not actually bounded, to the north by the Destor-Porcupine Fault Zone. The strata strike approximately 070° Az. and dip steeply south. Within the volcanics, a sedimentary horizon has been defined. It is conformable to the volcanics and is about 50-100 meters in thickness. The formation is composed of siltstones and argillites with varying amounts of tuffaceous input. Gold mineralization has been detected within this sequence.

The Kinojevis rocks are intruded by younger dykes and sills of mafic composition. Hornblende-biotite lamprophyres and pyroxenites have been mapped in the field. These rocks are highly magnetic and correlate well to a regional magnetometer survey carried out by Camflo Mines Limited personnel. A few narrow syenitic dykes have been noted locally within some diamond drill holes.

### 1.4 Previous Work:

During the 1940's and 50's, exploration work in the form of prospecting, trenching and diamond drilling was carried out on the property. In part due to a general lack of outcrop, the work concentrated on the north-central part of the property. Gold values in the 0.10 oz/ton range were detected in trenches. Diamond drilling was carried out in the late 1950's. Pack-sack (x-ray), drill core and AQ core was recovered. Values up to 0.21 were reported by D.F. Hurd from a section average of 0.077 oz/ton over 48.0' (resampling in 1973). A summary of the initial assay results from "silicified volcanics" is given in Table #1 (G.M. Hogg, Consulting Report to Lenora Explorations, 1981).

In his 1981 consulting report, G.M. Hogg concluded that "one, and possibly two linear gold-bearing zones have been shown to exist on the Lenora Exploration Harker Township Property". He went on to state that the strata "exhibit the characteristics of a weakly disturbed gold concentration of paleobasinal origin", and further that "an auriferous zone of substantial thickness extends over a distance of a least 1,300' in the Lenora baseline area, but it's character and grade are uncertain".

TABLE #1

1958 Diamond Drilling - Assay Results

D.D.H.	Sampled Length	Au (oz/ton)
Pack-sack #1	45.1' (including 28.2' of 0.131)	0.101
Pack-sack #2	35.0' (including 25.0' of 0.134)	0.103
Hole #5	14.0'	0.058
Hole #8	3.0'	0.090
Hole #9	3.0'	0.250
Hole #10	17.0' (including 6.0' of 0.240)	0.101

## 1.5 Current Status:

During 1983, the Lenora Property was geologically mapped and was surveyed by proton magnetometer and by Geonics E.M.16. During late July and throughout most of August, four diamond drill holes were completed by Camflo Mines for a total of 512.05 meters (1,680 feet).

Total expenditures on the Lenora claims are broken down as follows:

Geophysics	\$14,500.00
Geological Mapping (20 man-days @ \$20.00/day) (20 man-days @ \$65.00/day)	1,700.00
Diamond Drilling	13,566.10
Supervisory, Drafting (40 man-days @ \$30.00/day)	1,200.00
Total Expenditures (May 15, 1984)	\$30,966.10

### 2.0 GEOLOGICAL MAPPING

#### 2.1 Introduction:

The Lenora Property was mapped at a scale of 1:2500 by Camflo crews. Their work was an extension of work initiated on properties lying east of the Lenora claim block. Partial coverage was given the western part of the claim block due to a general scarcity of outcrop. Work was centred on the area known through drilling to have gold-bearing strata.

### 2.2 Lithologies:

No natural exposures of the gold-bearing sediments are exposed. Two trenches near the baseline at 12+50 W and 13+00 W were excavated prior to Camflo's work. The trench at 0+20 N, 12+50 W contains fine grained, possibly sheared sediments resting upon basaltic volcanic rocks. The sediments strike 062° Az. and dip 78° south. A second trench in the same area on line 13 W, contains purple-grey silicified sediments which have no apparent structure aside from brecciation. They carry low but anomalous pyrite contents of 2-5%.

The remainder of outcrops on the Lenora property consist of fine to medium grained massive basalts. In general, they are dark green in colour, are non-magnetic, non-carbonatized and are not silicified. Flow contacts are marked by strong epidotization. Thin (less than 10 meters thick), tuffaceous horizons have been interpreted as inter-flow sediments. These are often silicified. They conform

roughly to northeasterly strikes and dip steeply south. No evidence has been found either on surface, or indeed, in drill holes to indicate overturning.

The volcano-sedimentary sequence is cut by intrusive bodies of mafic to ultramafic composition. Observed and thin-sectioned lithologies include biotite lamprophyre, phases of hornblende gabbro and (clino) pyroxenite. These bodies may be measured in tens and hundreds of meters in size. On a smaller scale, narrow syenitic dykes less than 1 meter in width, have been noted locally.

The Destor-Porcupine Fault Zone strikes approximately 075° Az. across the north part of the property in the vicinity of the trenches and drilling. Shearing noted within volcanic and possibly within sedimentary rocks, is a likely consequence of this fault zone. A few smaller faults striking more north-southerly are expected to cross the baseline in the vicinity of the trenches. The most noteworthy of these crosses the baseline near the eastern property boundary. Another fault, defined by drilling, crosses the baseline at about 10+25 W. It also strikes nearly grid-north (344° Az.).

To summarize the geology, surface work has indicated a volcano—sedimentary sequence, striking east-northeasterly with steep southerly dips and south tops. This data is in keeping with the general concept of a rapidly subsiding paleobasin to the south and a boundary fault (dilatant hinge-type) zone just to the north of the Lenora Property. The gold-bearing sedimentary sequence, although seldom seen on surface, represents a considerable hiatus in volcanic extrusive activity. Even

at relatively high sedimentation rates of 25 cm/1,000 yrs (eg. Ouchita Basin), this period would be 400,000 years; more than ample time to form considerable detrital type (placer) gold deposits as ore in themselves or as a source bed for epigenetic deposits. At a rate of 5.6 cm/1,000 years, (Witwatersrand) this period would be approximately 1.8 M.

#### 3.0 GEOPHYSICS

#### 3.1 Introduction:

During the summer of 1983, 11 line miles of grid were cut and then surveyed with both proton magnetometer and Geonics E.M.16. The grid—north orientation was 344° Az. with a baseline at 074° Az. Control on magnetometer data was provided through a base station in Rouyn, Quebec. The V.L.F. survey was conducted using the Cutler, Maine (NAA) transmitter station. All data was plotted on 1:2500 base maps.

#### 3.2 Magnetometer Survey:

Magnetometer data indicates a broad zone of relatively flat (400-600 gammas) magnetic relief lying north of the baseline. This is interpreted to reflect the magnetically uniform and altered rocks of the Destor-Porcupine Fault Zone. South of the baseline, a magnetic high up to 3,225 gammas reflects a pyroxenitic to dioritic intrusive body. The anomaly is elongated at 070° Az. The intrusive is an extension of a much larger body located on the Lost Treasure property. Farther south, in the vicinity of 4+00 S, a zone of high magnetic relief (700-4600 gammas), is found. This is interpreted to represent

a particularly magnetic suite of Kinojevis volcanic rocks. The anomalous zone has a regional trend of 075° Az. and conforms to a known volcanic stratigraphic orientation.

#### 3.3 V.L.F. Survey:

The E.M.16 survey has revealed several strong conductive zones striking approximately 110° Az. across the Lenora property. One of the best of these is located on line 16+00 W at 1+60 S. Locally, the conductors exhibit left handed displacement of up to 50 meters. The conductors are of an orientation which is difficult to interpret, because they neither conform to stratigraphic orientation nor do they parallel any known fault orientation.

#### 3.4 Conclusions:

Magnetic surveys have proven useful in the delineation of intrusive bodies. A magnetic low was expected over the targeted sedimentary horizon, but, due to the high magnetics of the pyroxenites, the sediments are probably being obscured. The V.L.F. (E.M.16) survey has indicated the presence of east-southeasterly trending conductors of unknown afiliation. These are similar to conductors discovered on other properties and Camflo options in the area and remain an enigma. However, the offset noted on these conductors conforms to regional norms measured in outcrop and in drilling.

#### 4.0 DIAMOND DRILLING

#### 4.1 Previous Drilling:

Ten AQ diamond drill holes in addition to several pack-sack holes were completed on the Lenora Property during the late 1950's. Of these, six AQ diamond drill holes were available for re-examination by Camflo personnel. Although some drill core was missing, probably reflecting previous sampling, the core was generally complete enough to be log-able. Sufficient depth markers were readable to allow for reliable litho-stratigraphic evaluation.

Examination and re-assaying of core revealed that gold mineralization is hosted by a sedimentary horizon. This formation is visually identical to the McDermott formation and is (likewise) probably tuffaceous in origin. The sediments are underlain and overlain by basaltic volcanic rocks. The volcanics are thought to belong to the Kinojevis Group.

The best intersections in the 1958 drilling, insofar as can be supported by Camflo's resampling are listed in Table #2. It should be remembered that missing core may in part have contained gold values.

#### 4.2 Present Drilling:

Four diamond drill holes totalling 511.05 meters (1,676.7), were completed during late July and August 1983. The intent of this drilling was to prove up the grades previously reported from the early

TABLE #2

Gold Bearing Intersections From 1958 Drilling

D.D.H.	Interval (m)	Width (m)	Au (oz/ton)
58-1	76.20 - 79.25	3.05	0.055
	83.21 - 87.48	4.27	0.047
58-2	88.39 - 91.44	3.05	0.020
58-3	trace levels	only	•
58-4	0.01 - 0.02 leve	els only	•
58-5	72.24 - 73.46	1.22	0.040
58–6	18.29 - 24.08	5.79	0.041

drilling. Furthermore, Camflo intended to test the down-dip continuity of the gold mineralization although the exact host formation was unclear at the time. The holes are summarized in Table #3.

The most interesting and continuous gold mineralization was found in weakly altered (brecciated, silicified, carbonatized) pyrite-bearing sedimentary rocks. These rocks are often laminated but always have some degree of preferred parting due to a foliation. Pyrite contents, while generally low in the 1-5% range, do seem to have a bearing on gold concentration in the same manner as evidenced on the McDermott Property.

#### 4.3 Compilation of Lenora Drill Data:

All past and present drill log data was plotted on 1:250 (metric) scale sections. Few sections have more than one drill hole. Down-dip projections were made using regional norms and known bedding attitudes. The geology was compiled on a -50 meter level plan. The stratabound relationship of mineralization to bedding is known from our experience within the confines of the Hennessy-McDermott properties. Using available dip information, mineralized sections were also transferred to the -50 meter level plan.

On the -50 level, the sedimentary formation strikes approximately 085° Az. and crosses the baseline between the 14+00 W and 10+00 W sections (Camflo Grid). It dips steeply south at 75-85° and ranges in thickness from 17 to well over 50 meters. The thickness is poorly defined since many holes were terminated before intersecting footwall

```
Mc. 83-36 (line 10+25 W
                            1+30 S
                                      -650 N)
      0.00 - 10.36
                      Overburden
     10.36 - 33.25
                      Basalt - silicified, minor sub-lapilli tuff
     33.25 - 64.93
                      Basalt - massive flow
     64.93 - 111.44
                      Mafic Intrusive - hornblende rich
    111.44 - 113.14
                      Basalt - variably brecciated, later silicified
    113.14 - 124.65
                      Basalt - highly silicified breccia
    124.65 - 138.65
                      Basalt - massive flow
                      Diorite - often porphyritic
    138.65 - 170.40
                      Andesite - possibly basalt, massive
    170.40 - 175.87
    175.87 meters
                      End of Hole
    Gold Mineralization 111.44 - 115.69 (4.25 m)
                                                    0.037 \text{ oz/ton}
                         124.20 - 124.63 (0.43 m) 0.120 oz/ton
Mc. 83-37 (line 10+00 W
                            0+69 S
                                      -650 N
      0.00 - 15.85
                      Overburden
     15.85 - 32.65
                      Basalt - massive, locally silicified breccia
     32.65 - 67.25
                      Diorite - medium to coarse grained
     67.25 - 125.50
                      Basalt - massive, flow brecciated, locally
                        silicified
    125.50 - 127.10
                      Fault Zone - sheared core, minor clay
    127.10 - 137.46
                      Sediments - moderately to strongly silicified
                        breccia locally
                      End of Hole
    137.46 meters
    Gold Mineralization 137.00 - 137.46 (0.46 m) 0.080 oz/ton
Mc. 83-38 (line 14+00 W
                            0+35 S
                                      -450 N)
      0.00 - 25.87
                      Overburden
     25.87 - 68.00
                      Basalt - pillowed flow
     68.00 - 86.96
                      Diorite - porphyritic locally
     86.96 - 106.98
                      Sediments - laminated, irregularly silicified
                        and brecciated
    106.98 meters
                      End of Hole
                          90.00 - 91.05
                                         (1.05 m) 0.115 oz/ton
    Gold Mineralization
                          95.04 - 96.50
                                           (1.46 m) 0.130 oz/ton
                          99.84 - 101.05 (1.21 m) 0.121 oz/ton
                                      -450 N)
Mc. 83-39 (line 12+75 W
                            0+25 S
      0.00 -
               1.55
                      Overburden
      1.55 - 40.85
                      Basalt - pillowed flows
     40.85 - 55.09
                      Diorite - porphyritic centre core
     55.09 - 59.45
                      Basalt - pillowed, brecciated locally
     59.45 - 91.74
                       Sediments - variably silicified and brecciated
                        with up to 10% pyrite
     91.74 meters
                      End of Hole
                           66.10 - 73.18 (7.08 m) 0.080 oz/ton
    Gold Mineralization
                           (includes 4.11 m @ 0.107)
74.65 - 79.35 (4.70 m) 0.071 oz/ton
                             (includes 1.00 m @ 0.190)
```

84.83 - 90.83 (6.00 m) 0.060 oz/ton

(includes 1.00 m @ 0.120)

volcanics. The formation has probably undergone offset along a cross-fault near the baseline at 10+25 W. Displacement is left-handed and totals about 30 meters.

The best continuity of gold mineralization as well as the highest overall grades are found between the 14+00 W and 12+00 W sections. However, much core was missing from the 10+00 W - 10+50 W area where high grade intersections were previously reported. Camflo drilling in this area failed to intersect the favourable horizons, in part due to uncertainty surrounding the original hole locations.

The gold is hosted by variably silicified rocks which seem to be enriched in pyrite. The silicification is penetrative into formerly carbonatized beds and breccia zones. The original degree of carbonatization, while localized, may have been quite high. The silicifying agent was also responsible for the addition of pyrite, and probably, gold. With ongoing alteration, sericite developed. It is in sericitized and silicified rock that the highest gold and pyrite contents are noted.

#### 5.0 CONCLUSIONS

Although a limited amount of work (petrographic) is ongoing at the moment of writing, our present understanding of the Lenora option geology and mineralization can be summarized as follows:

(i) The gold is hosted within an altered (chloritized, carbonatized and silicified) sedimentary sequence. It is located within the dominantly volcanic regime of the Kinojevis Group.

- (ii) The degree of alteration, while lower than that observed in McDermott rocks, is essentially of the same character. Silicification has invaded formerly carbonatized breccia zones and lamination sets. Sericitization developed with on-going alteration probably with higher temperatures (greater than 175°C). Pyrite and gold were likely added throughout the cycle but increased with increasing temperatures (therefore being highest in sericitized rock).
- (iii) Average pyrite content in the 2-4% range is much lower than in McDermott mineralization. The relationship of gold to pyrite content may be somewhat looser reflecting lower (overall) alteration levels.
- (iv) The McDermott-Hennessy-Lenora sedimentary formation is one and the same. It is highly tuffaceous on the former properties and there is presently no reason to suspect a difference on the Lenora.
- (v) Although the gold was probably syngenetic initially, sufficient alteration and ground preparation exists to suggest epigenetic activity to be the major mineralizing process.
- (vi) The best gold values were encountered west of line 12+50 W and east of line 10+50 W. These are areas where the sedimentary formation undergoes thickening.

#### 6.0 RECOMMENDATIONS

In light of what has been learned from the more exhaustive work on the McDermott Property, and taking into account our current understanding of the Lenora Property, the following recommendations are made.

- (i) Two diamond drill holes should be cored on each 50 meter section, where one or more presently exist. A 300-400' hole should be complemented with a 500-600' hole. The area from 9+00 W to 15+00 W should be investigated to a vertical depth of 400-500' with a total of 3,265 meters (10,712') of drilling. A shortened programme convering 9+50 W to 14+50 W is also possible. This would total 2,420 meters (7,940'). The drilling proposal is outlined in Table #4.
- (ii) A longitudinal section should be produced as drilling evolves.

  This will enable the orientation of the zone to be ascertained within the plane of the sedimentary formation.
- (iii)An isopach longitudinal should be prepared to investigate the thickness of the sediments. Gold intersections should be compared to this isopach to determine if any correlation exists.

A.W. Workman

TABLE #4 - RECOMMENDED DRILLING FOR LENORA OPTION

D.D.H.	Section	Location	Dip	Length(m)
1 *	9+00 W	0+75 S	-550	170
	•	0+40 S	-450	110
2 * · · 3	9+50 W	0+75 S	-550	170
4		∘ 0+40 S	-450	110
5	10+00 W	1+00 S	-600	185
6	10+37.5 W	1+00 S	-600	185
7	11+00 W *	1+00 S	-600	165
8		0+50 S	_450	100
9 *	11+50 W	1+00 S	-600	165
10 *		0+50 S	-450	100
11	12+00 W	0+60 S	-600	135
12	12+50 W	0+25 S	-450	110
13		0+60 S	-600	180
14	13+00 W	0+25 S	<b>-4</b> 50	110
15		0+60 S	-600	180
16	13+50 W	0+20 S	<b>-45</b> 0	110
17		0+55 S	<del>-</del> 60°	180
18	14+00 W	0+50 S	<b>-60</b> °	200
19	14+50 W	0+45 S	<b>-60</b> °	190
20		0+20 S	<b>-45</b> 0	110
21 *	15+00 W	0+45 S	-600	190
22 *		0+20 S	<b>-45</b> 0	110
			•	3,265 m
				(10,712 ft)

<sup>\*</sup> denotes deleted holes in shortened programme

32D12SE0044 63 4207

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CAMFLO MINES LIMITED

GEOPHYSICAL SURVEY

ON THE

'WEST BLOCK' PROPERTY

HARKER TOWNSHIP, ONTARIO

LARKER LAKE MINING DIVISION

June 1984

Gilles Tousignant, ing. geol.

OM83-6-C-34



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#### I. Introduction

The 'West Block' property of Camflo is located in the central-western part of Harker Township, Northeastern Ontario, Larder Lake Mining Division.

This area is 32 miles east of Matheson, via highway 101, and 2 miles south of the main road. It is easily accessible by secondary timber roads that border it in the east, south and west.

It includes 30 contiguous, unpatented mining claims, numbered from L641387 to L641416, staked for Camflo Mines Limited in February 1982.

#### II. Regional Geology

Most of the area is underlain by Kewatin volcanics and sediments, cut by basic and ultra basic intrusives, and by an algoman(?) syenite intrusive in the central-western part of the township.

The volcanic rocks are basic to intermediate in composition, and are found as fine to coarse grained flows, as pillow lavas, or as flow and pillow breccias, with thin bands of associated pyroclastics.

Sediments, ranging from argillites to greywackes, sometimes silicified, carbonated and sericitized, and cherty horizons are sometimes intercalated between the different flows. They vary in thickness from a few meters to a few hundred meters. The strike of the different formations goes from N85°E to N60°E, with the tops facing south and a steep south dip.

North of the township, and not outcropping, is a sedimentary unit in contact with the volcanics. along the inferred location of the major Porcupine-Destor fault zone. These sediments, based on the observations made in the adjoining townships, are greywacke, slate, conglomerate and iron formations.

The intrusives are usually diabasic and are often found as sills. Sometimes, however, the coarse grained center of flows can be mistaken for diabasic or dioritic sills, both the lavas and the intrusives being very close in composition. Some north-south, quartz-diabasic dykes were reported by Satterly.

North of the township and of the sediments lies a rhyolitic band, and the Ghostmount ultramafic complex, which is thought by many to be the possible source for the gold found south of the Porcupine-Destor fault.

The main structural feature of the area is the east-west trending Porcupine-Destor fault zone, which is presumed to cross the north part of the township, along the sediments - volcanic contact. The exact location of the break is unknown, due to the lack of exposure, but it has probably been intersected in some diamond drill holes. Many subsidiary strike faults, trending N75°E, are reported and are probably related to the main break.

#### III. Geology of the Property

Very little is known about the geology of the property, because it is almost completely drift covered. From the geology of the adjoining properties and from the geophysical interpretation, it can be assumed that it is for the most part underlain by basic volcanics. A sedimentary horizon, composed of greywacke and arkose, crosses the south part of the property, but is not outcropping.

Finally, the north-eastern part of the property is underlain by a syenitic intrusive, pink to red in color, from fine to coarse grained, and sometimes quite magnetic. It is locally mineralized with finely disseminated pyrite, but no gold values were reported up to now in this particular intrusive. It could be related to the major intrusive in Garrison Township, around which a few, small ore bodies were mined.

#### IV. Work Done by Camflo Mines Limited

The following work was completed on the property in 1983:

#### 1 - Line Cutting

30 km. of lines were cut on the property, as lines 100 meters apart, with a station every 25 meters along the lines; a 2.4 km. eastwest base line was cut south of the block, and a tie line north of the block.

#### 2 - VLF Survey

A VLF survey was conducted along these lines, using a Geonics EM-16 instrument. The transmitter was the Cutler Station, (NAA) with a 17.8 KHz frequency. All the readings were taken facing north-east, with the positive reading indicating the instrument was pointing north-east and a negative reading when it was pointing south-west. The readings were taken as percentage (i.e. slopes) and used as such for the profiles, but were converted to degrees to calculate the Fraser filter values.

There are 30 VLF anomalies, whose axes have been shown on the accompanying map, and are numbered from 1 to 30. There are also some low response areas, where conductive overburden prevented any penetration to the bedrock.

The anomalies are mostly poor conductors, reflecting the overburdenbedrock effect much more than any real bedrock conductor. They might, indirectly, show geological contacts between two different units, or be the expression of shear zones. The general attitude of the anomalies, (south-east to north-west) shows a series of north-northeast trending cross faults, which are confirmed by the magnetic survey. The following is a description of the individual anomalies:

Anomaly #	Comments	Priority
1	Weak conductor, 400 m. long; east-west trending, showing a strong but wide cross over. Part of it is out of the property. Check boundaries.	3
2	Very weak anomaly, 800 m.+long, wide cross over with // quadrature response. Parallel but not coincident with a low magnetic axis 50 m. to the north. To be checked.	2
3	Strong, generally wide cross over, with inverse quadrature, showing a good conductor and coincides with a low mag axis. Should be checked further, especially on line 1+00W. Possibly outside of the property.	2
4	Weak, very wide cross over: overburden	4
5	Very weak, 250 m. long anomaly, very wide cross over, with reversed quadrature. The anomaly axis is doubtful. Check in the field.	3
6	Weak and sometimes very wide cross over, with parallel quadrature cross over. Overburden.	4
7	300 m.+ long, best on line 6+00W, more or less coincident with a low mag. axis. Check in the field.	3
8	Wide, weak to very weak anomaly, 1500 m.+ long, crosses most of the property; even if th east part of the anomaly is almost coincident with a low mag. axis, it is probably due to overburden. (Valley?)	4 e
9	700 m. long anomaly, parallel to #8. Weak wide cross over, with parallel quadrature cros over, except on line 13+00W, where it looks better. It is striking across the magnetic trend.	<b>3 3 5 3</b>
10	Weak and very wide cross over, often with parallel quadrature response. 1400+ m. long parallel to anomaly #8, east part coincident with a low mag axis. Overburden effect? Check in the field.	3

Anomaly #	Comments	Priority
11	Wide cross over, but with reversed quadrature cross over. Best on lines 5W and 8W. 350 m.+ long. Check in the field.	2
12	Could be the continuation of #11, 150m. long. Very wide cross over, multiple conductors. To be checked.	3
13	Weak anomaly, 150 m. long, no coincident quadrature variation, probably overburden.	4
14	Weak, very wide cross over, with weak sometimes parallel quadrature response; 500 m. long. Central part is almost coincident with a magnetic axis. Could be geological contact.	3
15	Very poor anomaly 400 m. long, wide and/or weak cross over, often with parallel quadrature response. Almost parallel to #14 anomaly.	4
16	Fair to weak anomaly, 300 m. + long, wide cross overs; conductive overburden.	4
17	100 m. + anomaly, parallel to magnetic trend weak quadrature response, possible outcrop area. Check in the field.	3
18	Very weak, 500 m. + long anomlay, wide cross over, with frequent parallel quadrature response.	4
19	200 m. long, good cross overs, but with parallel quadrature, corresponds to a low mag. Possibly geological contact. Check.	2
20	400 m. long, weak to fairly strong, but wide cross over, with inverse quadrature, the west part coincides with a high mag anomaly. To be checked in the field.	2
21	200 m. long, fair to weak cross over, possibly joins #20, best on line 14+00W, where it is coincident with a low mag axis. Check in the field.	2
22	300 m. long, parallel to #23 and partly masked by it; parallel quadrature response. Overburden effect.	ed 4

Anomaly #	Comments	Priority
23	400 m. long, weak and usually wide to very wide cross over, no magnetic coincident. Overburden.	4
24	300 m. long, weak and wide cross over.	4
25	100 m. +, strong in phase and weak quadrature response, corresponding to a higher mag axis. To be checked.	2
26	200 m. long, weak and wide cross over, with parallel quadrature cross over. Coincident with a weak mag axis. Possible geological contact.	<b>3</b>
27	400 m.+ long, strong but wide cross over, trends across the mag axis.	1. <b>3</b>
28	400 m.+, strong but wide cross over, paral- lel quadrature response; overburden.	4
29	300 m.+, weak and wide cross over, parallel quadrature. Poor conductor. Overburden.	4
30	300 m.+, weak to strong, but wide cross over. Shear zone?	<b>3</b>

As can be seen, no anomaly is classified as being a first priority anomaly. None of these would justify diamond drilling based on the EM-16 survey only.

The second priority anomalies are worth being checked in the field, and could justify the use of a more sophisticated method.

The third and fourth priority anomalies do not present too much interest, even if a check in the field can be useful in some cases.

#### 3 - Magnetic Survey

A magnetic survey was conducted along the same grid, with readings taken every 25 m. along the lines, and at 12.5 m. intervals where anomalous values were encountered.

The instrument used was a MP-2 proton magnetometer from Scintrex, and the diurnal corrections were made by comparing with a compatible base station. The total field was measured, and the values, minus 58,000 were plotted on the accompanying map. Total instrument and operator's error is less than 10 gammas.

The highly magnetic horizon shown on the contoured map, south of the property, is interpreted as being the continuation of the magnetic flows found south of the McDermott Property. The lower values north of the horizon represent the sedimentary horizon that is the continuation of those found on the old Imperial Reserve (Canamax) and Demers properties. North of the sediments, more or less magnetic volcanic flows are present, with the syenite intrusion, which is reported to be magnetic, showing in the north-east corner of the property.

The magnetic axis also shows a series of north - north-east cross faults, with a left hand movement. Even if individually these displacements are small, the overall result is not negligeable.

#### V. Conclusion

The geophysical surveys, and particularly the mag survey, are a big help in understanding the geology of this area, and confirm the geology as shown on Satterly's map.

The VLF survey, on the other hand has to be used with care, as the conductive overburden can give surface anomalies, and mask the real conductor. However, it can still be useful for structural and geological interpretation.

Any diamond drilling in this area should be based mostly on the magnetic and geological interpretation, unless a more sophisticated geophysical survey gives more reliable anomalies.

Respectfully submitted,

Gilles Tousignant, ing. geol.

June 14, 1984

#### CERTIFICATE OF QUALIFICATION

- I, Gilles Tousignant, of the city of Val d'Or, province of Quebec, do hereby certify that:
- I graduated from l'Ecole Polytechnique de Montréal, in 1973, with a B.A.Sc in geology.
- I am a member of the Quebec Order of Engineers.
- Since 1973, I have been involved in mineral exploration, development and production with various companies.
- I am employed by Camflo Mines Limited as Project Manager.
- I supervised and I had personal knowledge of the various surveys conducted in 1983 on the company's property in Harker Township, North-eastern Ontario.

Gilles Tousignant, ing. geol.

June 11, 1984

# CAMPS

# HARKER-HOLLOWAY

Exploration, mainly for gold, in the Black River — Matheson area of Ontario indicates more potential just below the surface.

By Patrick Whiteway

rom the air it's just a flat, swampy plain with just a few outcrops here and there. But like a giant magnet, it's attracting considerable attention from junior and major mining companies alike because of the high potential for finding gold. But since the last glaciers, which receded about 20,000 years ago, left behind a heavy blanket of largely clay overburden which can be up to 100 m thick in places, these companies are starving for information due to a lack of adequate geological maps. Therefore, what lies just below the surface has barely been glimpsed.

The area is the southern part of the Abitibi Greenstone Belt — a roughly linear package of volcanic and sedimentary rocks that most geologists believe was a break in one of the original sialic protocontinents that emerged from the Earth's supple crust 2.5 billion years ago during the Archean Era in Precambrian times — that comprises the Black River-Matheson (BRIM) area of northeastern Ontario, south of Lake Abitibi.

In the thinly covered eastern part where about 25% of the bedrock is exposed, compared to just 5% in the western half, Barrick Resources and Canamax Resources have discovered three potentially minable zones of gold mineralization, setting off a rush of staking along strike in Harker and Elliott twps. to the southwest and down dip in Holloway Twp. Barrick has successfully blocked out indicated reserves of 1.3 million tons

grading 0.18 oz gold per ton in three zones from drilling that was done on the company's McDermott property in Harker and Holloway twps early last year.

Canamax Resources on the other hand has drilled its Mattawasaga and East Zones from surface in nearby Holloway Twp and also intends to go underground to open up the zone to determine if it is minable and for a metallurgical sample prior to a feasibility study.

Closer to Timmins, but in the same BRIM area, St Andrew Goldfields has been carrying out underground exploration of a gold deposit in Stock Twp (just off the accompanying map to the west) for some time and a private company, Maude Lake Gold Mines has opened up a zone of mineralization in Beatty Twp to the east.

But despite these exploration successes, it's an ongoing survey by Ontario Geological Survey (OGS) geologists, funded jointly by the Ontario Ministry of Northern Affairs and Mines and the Ministry of Natural Resources, that has the greatest potential for lifting the veil on this emerging exploration area. They are providing the comprehensive data base needed to get more companies involved in the area.

As a result of four years of work so far, which has included airborne magnetic and electromagnetic surveys and extensive drilling and trenching, 20-odd companies are actively exploring and/or drilling anomalous bedrock conductors in the search for gold in the huge BRIM area. Major

companies include Placer Developments, Cominco, Inco Ltd. (through subsidiary Canico), Noranda, Sherritt Gordon, Lacana and Pamour Porcupine. Exploration is currently at such a feverish pitch that some programs have been forced to go on hold because of a shortage of available drills

OGS geologists have been using a rotasonic drill, which uses vibration and rotation to advance the bit, operated by Midwest Drilling to investigate bedrock geology. Since the drill uses no drilling fluid, relatively undisturbed samples of both overburden and bedrock can be recovered. The drilling, scattered over the entire 40-township area, will result this year in detailed maps of the Precambrian geology of three townships — Beatty, Munro and McCool and a map compiling the Precambrian geology of the entire area, straddling highway 101 from Timmins, east to the Ontario/Quebec border, is expected later in the year.

At the office of the resident geologist in Kirkland Lake, recently appointed economic geologist A.C. Bath is compiling a locally accessible computerized data base of assessment files, core and rock samples, mineral showings and reference literature as another part of the government program. The program is expected to last another five years.

Much of this work, the results of which are anxiously awaited by prospectors and junior mining companies in particular, is concentrated on backhoe and drill samples of the gla-



cial deposits of till that blanket the area. Because of the heavy overburden, government geologists are attempting to develop new and effective exploration strategies. One is to compile data on the stratigraphy, distribution, thickness, structure, mineralogy and geochemistry of the till deposits — looking for traces of mineralization that has been smudged across the ground by the last great glaciers.

Since the direction those glaciers moved in is fairly well known, trace amounts in the till may lead geologists back to the original deposit. One iunior company. Bay Resources & Services, has identified several areas on their 104-claim property in Warren and Milligan twps where free gold occurs in significant concentrations in the Munro Esker, a glacial feature that bisects the BRIM area by a line from the western shore of Lake Abitibi, south into Thackeray Twp. The company hopes to find enough gold in the linear, bell-shaped ridge to justify a placer gold mining operation, according to president Camille Lamer. One such operation was running intermittently for two years near Fade Lake, 16 km south, according to OGS engineering geologist C. L.

Another hopeful exploration technique is using improved magnetometer surveys to detect pods of intensely carbonatized ultramafic rocks known to host economic gold deposits in the area.

The center of attraction in the bedrock below the overburden is two major structural breaks known to be associated with mineralization in the Timmins mining camp, namely the Destor-Porcupine and Pipestone Fault Zones — two planar zones of brittle deformation which snake their way across the area from east to west. Veins of quartz-carbonate within various carbonate-, sericite-, chlorite-, talc- and serpentine-bearing shists rocks that have been pressed and baked at various temperatures and pressures over geological time have been found to contain native gold and gold associated with pyrite in the immediate vicinity of these fault zones.

The gold mineralization on the Barrick property, however, is a whole new ball game. Hosted in the dark black tholeiitic basalts in what is known as the Kinojevis Group, the gold there occurs in the native state and on pyrite confined to what project geologist A. W. Workman, calls "pods occurring within pale purple hematitic, pyritic, carbonatized, and silicic rocks of controversial orgin."

With the Kinojevis Group rocks and interbedded sediments apparently occuring both north and south of the Porcupine-Destor Fault zone and its associated splays, much of the exploration work in the area has concentrated on confirming the apparent continuity of this tholeitic unit. If successful, this would indicate that gold mineralization analo-

gous to the Barrick discovery could occur for a distance of 50 km, according to OGS economic geologist Bath.

Metallogenetic studies of the high grade Croesus gold deposit, a former producer, located north of the Porcupine-Destor Fault in Munro Twp. show that free gold in economic concentrations occurs in strongly foliated and metamorphosed, pyritic pillow basalts — of a kind analogues to those found at modern day ocean floor spreading centres. Here, basalts are fractured when they cool from the molten state in seawater and are sheared and altered by subsequent tectonic movements, providing passageways for gold bearing, silicaterich hydrothermal solutions, possibly derived from huge volumes of ocean water circulating through the fractured basaltic flows, to travel and subsequently solidify. The volcanid units are eventually buried and compressed by sediment derived from the more quartzofeldspathic rocks on the continents. During Archean times, this type of activity may have taken place in intracontinental oceanic basins over plumes or hot spots in the underlying mantle, like those postulated by Precambrian geologists studying the Abitibi greenstone belt.

At the St Andrew Goldfields deposit in Stock Twp, 50 km east of the city of Timmins, gold occurs in a 100-m wide massive and pillowed massive metavolcanic unit that can be traced to the Porcupine-Destor Fault

located to the north of the deposit, according to OGS geologist John Mal The mineralization is associated with a system of parallel quartz weins in the highly sericitized rock unit. Gold reserves in this developing mine are about 1.5 million tons grading 0.13-0.15 oz gold per ton, yet the company, 66%-held by Quebec Sturgeon River Mines, has held off on a production decision for some time now.

The fourth known gold deposit in the area and the largest producer so far, is the 400-ton-per-day Ross mine is Hislop Twp. Held by Hollinger Consolidated Gold Mines from 1935 to 1976, the mine has subsequently been taken over by today's operator Pamour Porcupine Mines. While considerable controversy exists over the relationship of this deposit to the local lithology, most geologists agree that the rocks in the area have suffered considerable metasomatic alteration. Nine different types of chemical alteration have been confirmed in the vicinity of the mine. Ore mined so far has averaged 0.17 oz gold and 0.28 oz silver per ton.

Another, smaller deposit in the BRIM area that has already yielded gold is the Murphy Pit in Garrison Twp. Kerr Addison Mines mined 65,000 tons of ore from the pit grading 0.13 oz gold per ton in 1981 and the company is currently investigating other gold showings in the immediate area.

With the success of these activities prospectors and mining company geologists eagerly await the pending publication of drill and trenching results from the government's BRIM program. As these results become available, one can expect the BRIM area to become an even more attractive exploration Meca in the years ahead. Under that blanket, there's a mining camp somewhere.

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# TIMMINS AND POINTS EAST

This famous old camp keeps coming up with new mines.

By Kerry Knoll

I has been called the grandaddy of Canadian gold camps. And historically it has been one of the best places to look for gold, having had some 30 mines over the years. While most of these were found before the Second World War, new deposits continue to be outlined by those who believe that the old gold camps are the best places to look.

So far in the 1980s Kidd Creek Mines has come up with the Hoyle Pond and Owl Creek mines, out behind its smelter complex. Both of these have made money for their owner, but the two other tries at mines didn't make it. Asarco's little mine at Nighthawk Lake didn't work out because of the falling gold price when it began production in 1984. The Carshaw project southeast of town, failed because of the lack of ore, though they are still trying there.

Now there are five other underground projects under way in the camp, two of them by St Andrew Goldfields just east of town. The Stock project has been an on-and-off situation since the early 1970s, but it finally looks as though they are close to a mine. Back in town, the Bell Creek operation of Canamax is just about ready to go ahead and start mining. The nearby Tisdale project looks as though there is lots of work to do before a decision can be made. Vedron is finally getting its shot at going underground.

Timmins, Ont., is known for having lots of custom milling capacity available for any small producer that might want to get started without a



Bell Creek high grade.

mill of its own. Pamour has been the main facility in past years, but in recent times four new mills have been constructed in town — oddly enough, there are more mills than new mines. Pamour opened up its 250-ton-per-day custom mill; Asarco put up a 300-tpd mill on its Nighthawk property which is now milling Owl Creek ore; one of the Pat Sheridan companies, Diepdaume Mines, put up a 600-tpd mill; and the privately-owned Gail Resources put together a 500-tpd mill on

its Carshaw property. On top of that, Kidd put a 300-tpd gold circuit into its smelter. While this situation is an obvious ringer for the cliché about putting the cart before the horse, it is reasonable to assume that some of the underground projects will be making mines and that some of the mills may be needed. Or will they? Canamax has indicated a preference for building yet another mill and Vedron plans to ship all the way to Belmoral at Val d'Or. All of this represents a

Andrew has always been interested in developing other deposits in the area. ecently acquired a large block of ound from Labrador Mining and Exploration which covers about 12 miles of the Porcupine-Destor Fault and includes two promising gold showings. One, known as the Porphyry zone, is the subject of a second underground project initiated this summer by the company in a 50% joint venture with Esso. J. S. Rednath was just completing the surface installations and shaft collar on the project at the time of my visit while Ross Finlay will be handling the underground on both projects. The \$4.5-million project will see a 3-compartment shaft go down to 565 ft with three level stations cut at 125-ft intervals. Underground work will consist of 1,000 ft of crosscutting and drifting on the first and third levels, with another 300 ft of raising and 5,000 ft of underground drilling.

This is one of those cases where a company has made the decision to go underground without having blocked out any reserves in the approved fashion — a typical 1980s gold exploration

program. Not that it is a grassroots program, either. Previous operators have drilled about 60,000 ft on the property, coming up with a large number of high grade intersections. The problem is putting the structure together from surface drilling, which is why the underground program is necessary.

#### Harker-Holloway

It isn't very often that somebody comes up with a new camp. In the last while there has been the Dovon-Bousquet developed by Lac Minerals, and, of course, the Hemlo and Casa Berardi plays, But there is every indication that a new camp is in the making in the now-famous Harker-Holloway twps. north of Kirkland Lake. The property is about an hour drive east of the Timmins city limits. and though not a part of that camp, it is located on the Porcupine-Destor Fault. While operator American Barrick Resources has to be given credit for the discovery, the guys on site like to credit the old prospectors, who first discovered a gold showing there in 1919. McDermott Mines was

incorporated to examine the prospect in 1937 and the company eventually found its way into the Camflo group. There it sat with its property for 30 long years before Camflo finally started drilling, leaving the old company with a 15% net profit interest. Every discovery has a story behind it and the story of this one has to be the persistence of Camflo back in 1982 when the company was falling apart under a heavy debt load. Somehow the exploration crew was able to convince management to keep going on the McDermott and the faith paid off. After two years of quiet work the company finally announced what it thought to be a major discovery in late 1983. Although work never really stopped, news of the discovery was buried for the next year in the tangle of the company's merger with American Barrick. Finally reserves were announced - 1.3 million tons grading 0.18 oz. These have since been increased to 2.84 million tons grading 0.197 oz and the company is talking production, starting in 1988, of up to 100,000 oz per year. The production \rate has not yet been set, but it will

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likely be 1,000-1,500 tons per day to start.

he deposit isn't exactly a part of the Porcupine-Destor Fault, Rather, it seems to be a splay off the fault. located about 700 m south. Gold mingalization is hosted within a zone of deformation and is 5-100 m thick. Within that are a number of highly breediated, silicitied, and carbonitized zones. This makes about half of the deformation zone. The gold is closely associated with pyrite. Both the footwall and hangingwall are comprised of iron-rich thoeliitic basalts. The structure is sheet-like in nature and has been traced across a 4,000-ft strike. It remains open at a depth of 1,500 ft.

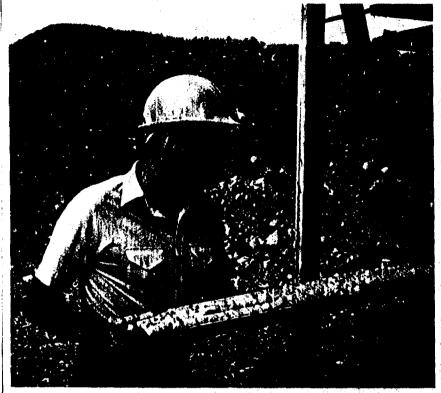
Taking its time like a good major, the decison to go underground wasn't made until last year, with the shaft being collared in November. It was sunk to 400 m with two crosscuts being driven on the 150-m and 350-m levels, for total lateral development of 2,000 m.

Although the company likes to remain conservative by saying it is not yet committed to building a mine there, a project is almost certain to go ahead and be producing by 1988. The company just wants to have a look at the orebody first. But it has a pretty good idea what it is going to find, having drilled 283 holes so far. The first look will come from the crosscut on the 150-m level. As General Manager Michelle Sirois puts it: "If we prove it up on that level we can go into production." Sirois was mine manager on the Camflo in Val d'Or but is now devoting most of his time to this project. He says about 300 m of drifting along with underground drilling should do the trick. That is scheduled to be completed by the end of October (the company was not yet in ore at the time of my visit). "We would then start building the surface installations," he adds. He says the reserve figures are very conservative and that he expects they will be increased by the work on the 350-m level.

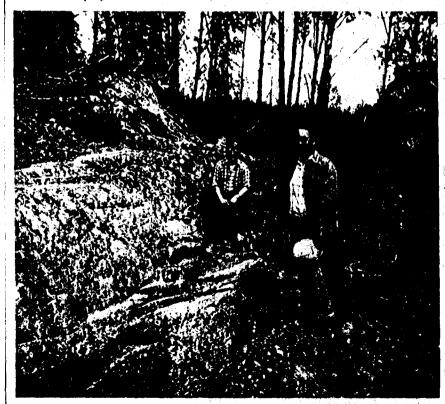
When I referred earlier to the Harker-Holloway area as a camp, I had some justification. Another deposit, which may be the eastern extension of the McDermott, is being drilled off by Canamax and partner Procan Exploration. Known as the Matheson project, it has published reserves of 578,000 tons grading 0.246 oz. An underground program is being considered for next year.

And to the west of the McDermott deposit, Barrick is drilling the Worvest property it has under option from

Lenora Explorations. A number of drill holes have been completed extending the zone to a depth of about 1,000 ft and across a 600-ft strike length, open to the west.



St Andrew's chief geologist, Otto Zavesiczky, showing off some high grade core on the Stock project.



American Barrick's regional exploration manager, Gilles Tousignant (right) with senior geologist Al Workman on the McKenna Fault, which acts as the hangingwall.

32D12SE0044 63.4297 HOLLOWAY

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NAME OF	PROPERTY	McD	ERMOTT			,
HOLE NO.	Mc83-17	LENGTH6	0.05 m			
OCATION						
ATITUDE	10 + 12.5 E	DEPARTURE .	0 ± 38	S		,
LEVATION		AZIMUTH	3440	DIP	~50°	
	4-5-83					

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	50°				
20.5m	49 <sup>0</sup>				
60.05	480				

HOLE NO. MC83-17 SHEET NO. 1.01 5
REMARKS Units in metric
whole core sent to assay
B.Q. Core

LOGGED BY A.W. Workman

TARTED	4-5-	33 FINISHED 6-5-83				•		2000.			WORKMan
FO	OTAGE	DESCRIPTION		-	SAMPI	LE				ASSAY5	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ, TON
0	15.39	CASING									
15.3	923.13	ANDESITE							-		
		Yellow green to dark green, aphanitic to very fine grained. Thin flow laminations at 60°-70° to the core axis. Moderately well fractured with quartz and relatively minor carbonate in stringers. Carbonate (calcite) is confined to narrow fractures which crosscut the earliest fracturing. Zone is variably silicified. Lighter green areas are more strongly altered. Abundant very finely disseminated pyrite throughout.									
		15.39 - 16.92 - highly fractured, broken core C	001		21.58	23.10	1.52 (5')			0.08	) 0045
		16.92 - 17.53 - moderately silicified, weakly chloritized 7-8% pyrite.	002		23.10	24.38				0.01	)14.2
		17.53 - 19.35 - less silicified, moderately chloritized	003		24.38	25.91	1.53			0.04	
		15% quartz stringers, displaced across micro fractures, 2-4% pyrite.	004		25.91	27.43	1.52			0.01	
7			005		27.43	27.95	1.			0.02	·
			006		27.95	29.47	(1.7') 1.52			0.02	
		21.55 - 23.13 - similar to 17.53 - 19.35 - strongly	007		29.47	30.02	0.55			0.02	-
		silicified locally, 23 m. flow foliation at $45^{\circ}-50^{\circ}$ .	800		30.02	31.36	1.34 (4.4')			0.01	
23.13	324.38		009 010		31.36 32.89	32.89 34.17	1.53		i	0.02 trace	
		Dark green, fine grained, weakly to strongly fractured moderately chloritized. Abundant pyrite along fractures Trace amounts disseminated finely in rock. Fractures filled with quartz and carbonate. Massive flow.					(4.2')		-		

HOLE NO. MC83-17 SHEET NO. 2 Of 5

ASSAYS SAMPLE FOOTAGE DESCRIPTION FOOTAGE % SULPH. NO. OZ TON OZ/TON TOTAL FROM 24.38 34.17 0.01 MAIN MINERALIZED ZONE C 011 34.17 35.27 1.10 (3.6')The rock is variably silicified. The zone is composed 012 35.27 35.63 0.36 0.01 of a strongly silicified upper member which is intensely (1.2')brecciated with high pyrite contents. This member may 0.01 013 B5.63 B6.09 0.46 extend up into the overlying basalt. The lower member (1.5')is a more irregularly brecciated and weakly silicified B6.09 B6.76 0.67 0.01 014 Alteration remains high in zones of intense basalt. (2.2')brecciation. Overall pyrite contents are lower in this 015 B6.76 B8.22 1.46 trace member. (4.8')88.22 89.47 1.25 0.03 016 24.38 31.36 SILICIFIED ZONE (4.1')39.47 41.00 1.53 017 0.03 Dark grey to greenish grey, aphanitic with minor ash-fall (5.0')tuff in bands up to 2 cm. thickness. Silicification is 018 41.00 42.21 1.21 0.02 variable - moderate to intense, and is proportional to the (4.0')degree of brecciation and mylonite development. 42.21 42.98 0.77 0.04 highly silicified zones resemble quartz veins. Pyrite (2.5')content is 3-8% both as clots in and along fractures and 42.98 43.89 0.91 0.05 as a fine dissemination. Abundant quartz stringers cut (3.0')breccia zones and carbonate common in micro-fractures. 43.89 45.42 1.53 0.02 021 (5.0') 24.38 - 25.91 - grey to green-grey, strongly silicified. 45.42 46.94 1.52 0.03 022 25.91 - 27.95 - grey-green to grey, weakly silicified, tuff band at 26.21 m. cutting at 45°. 46.94 48.46 1.52 023 0.02 27.95 - 30.02 - grey, strongly silicified, 3-5% pyrite. 30.02 - 31.36 - pale green to grey-green, moderately to 48.46 49.98 1.52 0.03 024 weakly silicified. Minor amounts of tectonic breccia, strongly fractured. 49.98 50.90 0.92 0.03 025 Possible flow contact at 31.36 m. Flow (3.0') foliation at 60°-70° to core axis. 0.04 50.90 52.67 1.77 026 (5.8') E31.36 34.17 BASALT Grey-green, grey locally, fine grained, moderately chloritized and weakly to strongly silicified. Silicification is strongest in grey mylonitic zones near

McDERMOTT NAME OF PROPERTY\_\_\_

HOLE NO. MC83-17 SHEET NO. 3 of 5

F00	DESCRIPTION				SAMPL	.ε	ASSAYS					
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ, TON	
	-	major fracture systems. The breccia pre-dates later C fractures which are quartz and carbonate filled. Some zones of strong silicification are located at 31.59 - 31.65, 31.97 - 32.00, 32.28 - 32.64, 32.77 - 32.80, and 33.83 - 34.17. Pyrite content averages 5-7%. A flow foliation at 33.83 dips 60° to the core axis.	027 028 029		52.67 53.43 54.96	54.96	(2.5') 1.53			0.07 0.01 0.01		
34.17	36.09	BASALT										l
		Grey-green to dark green, fine grained, weakly silicified and weakly to moderately fractured. Magnetic. A 3 cm. quartz vein is located at 35.36 which has invaded the basalt over a 50 cm. interval. The flow is massive and moderately chloritized. Pyrite is found as fine disseminations and as 1-2 mm. cubes - 2-3% content.									-	
36.09	39.47	SILICIFIED ZONE										
•	-	Dark grey to greenish grey, pale green towards base. Silicification marked by a 3 cm. grey band cutting sharply across core. Zone is variably silicified - includes several weakly silicified basalt zones (e.g. 37.89 - 38.19), degree of silicification is proportional to mylonite development. Fractures often rimmed with grey silicified bands. All fractures quartz-filled with minor carbonate in micro-fractures. Weakly silicified rock is weakly magnetic - remainder is not.										
		36.09 - 36.76 - strongly silicified, 3-5% py. 36.76 - 38.22 - weakly silicified, 1-3% py. 38.22 - 39.47 - strongly silicified, 3-5% py, tr. cpy.										
39.47	43.89	BASALT		-								
		Dark green, fine grained, med. grained locally, moderately fractured and moderately chloritized. Strongly silicified locally around fractures. White and pink quartz in fractures - minor carbonate.		-								

MCDERMOTT NAME OF PROPERTY.

HOLE NO. MC83-17

SHEET NO. 4 of 5

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM то OZ/TON OZ TON TOTAL 39.47 - 42.21 - moderately fractured, chloritized, weakly magnetic. 42.21 - 42.98 - strongly silicified, up to 10% py., trace cpy. minor hematite, flow foliation at 50° to the core axis. flattened vessicules at 42.89. 42.98 - 43.89 - moderately chloritized, weakly silicified 3-4% pyrite. 43.89 50.90 ANDESITE Medium green to dark green, fine to coarse grained, moderately chloritized - may be altered basalt. Evenly textured for short intervals. Moderately fractured throughout - mostly quartz in fractures. Fractures are late stage - very angular - may be due to shrinkage. Lowermost 1.5 - 2.0 metres is coarser grained with dark needle - like xls. (pyroxene ?). 1% very finely disseminated pyrite. Zone ends at top of underlying flow marked by hyaloclastite. \$ 50.90 52.67 SILICIFIED FLOW - LOWER MINERALIZED ZONE Light green to dark green with grey zones, fine grained to aphanitic. Flow is marked by hyaloclastite top and vessicules up to 7 mm. Rock is chloritized and subsequently silicified. Flow may have been pillowed. so, rims are strongly chloritized. Some fragments are epidotized. Rock is moderately silicified but not brecciated. It is strongly fractured with quartz in fractures. 3-5% pyrite very finely disseminated through zone. □ 52.67 60.05 ANDESITE A medium green extension of the overlying silicified flow.

MCDERMOTT NAME OF PROPERTY

HOLE NO. \_\_MC83-17

SHEET NO. 5 of 5

SAMPLE FOOTAGE ASSAYS DESCRIPTION FOOTAGE FROM TO OZ/TON OZ/TON TO TOTAL This rock is not silicified - pillowed to a depth of 53.4 metres - below rock is massive flow. It becomes medium to coarse grained with 1-3 mm. dark needles (pyroxene?). Fracturing is moderately developed with quartz infilling of voids up to 1 cm. Less than 1% pyrite is present as very finely disseminated blebs and as 1-2 mm. cubes. Pyrite xls show minor tectonic brecciation. 60.05 END OF HOLE Footage Hole No. Mc83-17 Length 60.05 m. 50° dip Latitude:10 + 12.5 E Departure: 0 + 38 S 30.5m 490 Asimuth: 3440 Dip: -500 60.05 480 Started: 4-5-83 Finished: 6-5-83 Remarks Units in metric. Whole bore sent to assay B.Q. Core. Logged by: A.W. Workman

NAME OF	PROPERTY	MCDERMOTT			
HOLE NO.	Mc83-18	LENGTH	60.05 m	<del></del>	•
LOCATION					
LATITUDE	9 + 87.5 E	DEPARTURE	38 m S		
ELEVATION	9 + 87.5 E	AZIMUTH	3440	DIP	-50°
	9-5-83				

FOO	TAGE	DIP	AZIMUTH	FOOTAGE	OIP	AZIMUTH
	)	-50 <sup>0</sup>				
30.	m	-48 <sup>0</sup>				
60.	05	-48 <sup>0</sup>				

whole core sent for assay B.Q. Core

LOGGED BY A.W. Workman

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS					
FROM	то	DESCRIPTION		% SULPH IDES	FROM	FOOTAGE TO	TOTAL	%	7.	0Z/TON	OZ/TON	
0	10.36	CASING	030		14.11	15.64			·	trace		
10.36	33.07	MAIN MINERALIZED ZONE	031 032		15.64 17.16					0.01	-	
		This zone consists of a central highly silicified member flanked by more variably silicified and chloritized volcanic rocks. Silicification is proportional to the	033 034			19.11	(1.4') 1.52		5 18	0.08		)
		degree of brecciation and mylonite formation.	035		ļ		(1.8') 1.52		5	0.06	) )	) ) 0.
10.36	17.16	BASALT	036 037		21.18 22.71	22.71	1.53		5 5	0.07	)	) 31
		Dark green, fine grained, massive flow, moderately to strongly chloritized. Highest alteration along narrow shear planes, (e.g. 17.04 m.). Zone is strongly	038 039 040		24.23 25.76 27.28	27.28	1.53 1.52 1.22		5 5 4	0.15 0.09 0.01	0.0 50.	72) 8
		fractured with quartz and pink carbonate veining in breakages. Some fractures contain rust - weathering of pyrite. Flow banding at 12.47 dips 70° to the core axis Pyrite content is variable up to 5% averaging 2%. Rock becomes weakly silicified towards the base.	042		28.50 30.02 31.55	31.55	1.53		5 5 5	0.01 0.10 0.07	) ) )	
	15.94 - 17.16 - weakly silicified, well developed		044 045		33.07 34.59				·	0.01		
7.16	28.50	SILICIFIED ZONE										
		Yellow-green to grey-green becoming grey where most strongly silicified-Aphanitic. Generally unstructured and intensely brecciated. Very fine mylonite development common in silicified rock. Fragments are angular and average less than 2 mm. in size locally. Average size is 2-5 mm. Flow foliation is noted locally in areas of weaker brecciation. Locally alteration										
		is so intense the rock resembles a quartz vein. Visible gold may (?) be present as 0.5 mm. blebs at 25.76 and 26.67 m.	·	•								
		17.16 - 17.59 - dark grey-green, well foliated and sheared - possible fault at 17.59 m.,										

McDERMOTT

HOLE NO. MC83-18

\_\_\_\_\_ SHEET NO. 2 of 4

FOOTAGE	DESCRIPTION.			SAMPLE					ASSAYS				
FROM TO	DESCRIPTION	NO.	% SULPH	50014	FOOTAGE		7,	7.	OZ/TON	OZ TON			
	weakly to moderately silicified, clay on fault plane, 2-5% Py.  17.59 - 19.66 - pale green, highly silicified and brecciated 10-15% Py. Possible fault at 18.53 m  19.66 - 22.71 - grey, intensely silicified and brecciated, flow foliation was well developed at 45° to the core axis. Minor chlorite along foliation. Abundant 5 mm. thick underformed quartz stringers 5-7% pyrite.  22.71 - 27.28 - very intensely silicified - 10% Py. tr. Cpy. minor visible gold?		IDES	FROM	TO	TOTAL	7.		02/10N	02,100			
33.07	27.28 - 28.50 - green-grey, intensely silicified, becoming variable and medium grained; 3-5% Py.  BASALT  Dark green to grey, aphanitic to fine grained and variably silicified. Numerous highly fractured zones of microbreccia cut the core at sharp angles (500-800). These												
	zones are grey and intensely silicified. Fragments are firm less than 1 mm. to 1 cm. in size, very angular, fine grained matrix (gouge) around fragments contains up to 50% Py. locally. Unsilicified basalt is moderately chloritized and contains abundant altered glass shards. Weakly to moderately fractured - filled with white and pink carbonate. Quartz also present but not as common. Average 3-5% Py. Non-silicified rock is weakly to moderately magnetic. Strongly brecciated and silicified zones are located at: 29.11-29.26, 30.05-30.11, 31.06-31.18 31.30-31.49, 32.13-32.22, and 32.40-32.77. In total the zone is 20% intensely silicified. A 15% pyrite content is noted at 32.16 m.												

NAME OF PROPERTY\_\_\_\_\_\_MCDERMOTT

HOLE NO. MC83-18

SHEET NO. 3. Of 4

F00'	TAGE				SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	•	OZ/TON	OZ/TON	n
33.07	43.53	BASALT										
		Dark green, fine grained becoming medium grained locally. Moderately chloritized. Some weak silicification locally near margins of zone. Unstructured and massive. Moderately fractured with white and pink carbonate on surfaces. Little carbonate in matrix of the rock. Weakly to moderately magnetic. Weakly silicified zones have increased pyrite content - up to 5% locally whereas zone averages 1-2%.										
43.53	50.29	BASALT				-						
		Dark green, fine to very fine grained. Rock is becoming weakly silicified locally. Moderately chloritized. Thin sections of strong brecciation are grey and intensely silicified (e.g. 43.53-44.07). Rock is moderately magneti Zone is moderately fractured with infilling by pink calcite and minor quartz. A crude flow foliation is developed locally at approximately 45° to the core axis - very indistinct.										
50.29	53.95	ANDESITE					-					
53.95		Zone is marked by a 1.3 m. hyaloclastite top. The rock is medium open and fine grained with strongly chloritized parting surfaces - shears. Light colouration may be due to underlying silicified zone. The base of this zone may be a flow bottom. It is highly fractured with abundant quartz incorporating 50% of the rock volume. Except for the base of this zone, carbonate fills fracture openings. An irregular flow (?) foliation in the hyaloclastite cuts core at 40° to the core axis.  LOWER MINERALIZED - SILICIFIED ZONE										
		Dominantly grey with greenish-grey zones, aphanitic, highly silicified rock. Intensely brecciated on a very										

FORM

NAME OF PROPERTY\_\_\_\_\_MCDERMOTT

HOLE NO. MC83-18

SHEET NO. 4 Of 4

FOOT	AGE				SAMP	E				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH IDES	FROM	FOOTAGE TO	TOTAL	7.	۳,	OZ/TON	OZ, TON	
		rock is moderately fractured with quartz in main fractures	046 047 048		53.95	55.47	1.52 1.52 1.62			0.01	)	
		53.95 - 55.47 - mixed breccia and weakly silicified rock; 3-5% Pyrite	049		57.09		(5.3')			0.04	)	)35 ).0
		55.47 - 57.09 - grey brecciated zone - more typical of mineralized rock, includes narrow zones up to 8 cm. of non-brecciated, weakly silicified rock. Zone has a crude fabric at 500-600 to the core axis.  Abundant late cross-cutting quartz stringers. 5-7% Pyrite.	050		58.52	50.05	1.53			0.03	)	
57.09	60.05	BASALT										
		Mixed dark green and locally grey-green weakly silicified rock. Aphanitic to fine grained. Unsilicified rock is moderately chloritized. Moderately magnetic. Massive flow. Possibly vessicular over 10 cm. at 57.55.  Moderately fractured becoming strong locally-filled with white and pink carbonate. Pyrite content is 1-2% as fine disseminated blebs and accumulations of blebs up to 6 mm.				-						
	60.05	END OF HOLE - CASING PULLED			•							
		Hole No.: Mc83-18 Length: 60.05m Latitude: 9 + 87.5 E Departure: 38 m S Started: 9-5-83 Azimuth: 344° Dip:-50° Finished: 11-5-83			Footag 0 30 m 60.05 REMARK	-50° -48° -48°						
			Unit	1	meter	+	ole co	re se	nt fo	r assa	y B.	Core
i								Logg	ed by	A.V	7. Wo	kman.

NAME OF PROPERTY	McDERMOTT	
	LENGTH52.43_m	_
LOCATION		
	DEPARTURE _0 + 35 m S	
	AZIMUTH 344° DIP - 45°	
	FINISHED13-5-83	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
_	-450				
52.4	-46				

HOLE NO. MC83-19<sub>SHEET NO.</sub> 1 of 4

REMARKS Units in meters
whole core sent for assay
BQ Core

LOGGED BY \_\_\_ A.W. Workman\_

FOO:	TAGE	DESCRIPTION			SAMP	LE				SSA	Y S	
FROM	то	DESCRIPTION	NO.	SUL PH- IDES	FROM	FOOTAGE TO	TOTAL	36	%	oz/ton	OZ/TON	
, 0	10.52	CASING										
10.52	31.03	MAIN MINERALIZED ZONE					í.					
10.52		This section is composed of a variably silicified upper member (Basalt) and an intensely silicified lower member. Alteration is usually directly proportional to the degree of brecciation. Non-silicified rock is generally moderately chloritized. Pyrite content increases in silicified rock.  BASALT										
			051		10.64	12.16		-		0.01		
	·	moderately fractured. Almost all fractures filled with white and pink carbonate. Minor quartz stringers up to 2 mm. width. A crude foliation (flow?) has developed throughout zone at 60° to the core axis - rock parts easily along chloritized surfaces. Few zones of intense brecciation are grey and intensely silicified - largest at 13.5 - 13.65. Average pyrite content in the basalt is 1%. In silicified zones this level rises to 2-3% with a trace of cpy.	052		12.16	13.69	(5.0° 1.53			trace		
L3.69	31.03	MAIN SILICIFIED ZONE			-	•	·					
		brecciated and mylonitized, and strongly silicified.	053 054 055	1	15.21	16.73	1.52 1.52 1.53	0.04	) <u>0.0</u> ) 4.5	<u>63</u> 70	·	

FORM

HOLE NO. MC83-19

SHEET NO. \_\_\_ 2 of 4

FOOTAGE		DESCRIPTION			SAMP	L.E				ASSAYS	
FROM TO		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON
	This is most apsilicification fills voids loomoderately deventation fractures with microfractures syenitic dykes 14.55. It can amounts althoughigher amounts offset by minor 13.69 - 15.21:	liated matrix - possible fault zones. C pparent in the uppermost 1.5 meters where tends to be lower. Cream coloured silica cally in breccia zones. Fracturing is eloped. Quartz commonly fills the main carbonate in a separate set of (later?) . Several dark pink, aphanitic, massive are located at 14.2 - 14.3 and 14.5 - rries no appreciable sulphide above trace gh the margins of the silicified rock carry than normal - about 15%. The dyke is r microfractures.  moderately silicified, contains some green chloritized zones which are weakly silicified - 2-3% Py.  grey, intensely brecciated and strongly silicified, mylonitic at 16.55, fine chlorite between silicified angular 0.5 - 1.0 mm. fragments - fault?	056 057 058 059 060 061 062 063 064 065		18.26 19.54 21.06 22.59 24.11 24.63 26.15 27.68 29.20	19.54 21.06 22.59 24.11 24.63 26.15 27.68 29.20 30.72	1.52 1.52 1.53 1.52 0.52 1.52 1.53 1.52 1.52	0.02 0.04 0.03 0.01 0.03 0.02 0.01 0.08 0.08 NOTE Correappl:	*	in f Sampl leng	6.5'
	18.26 - 19.54:	6-8% average pyrite content.  grey strongly brecciated and silicified weakly silicified locally with numerous 1-3 cm. chloritized seams - well foliated at 17.5 m. at 60° to core axis.		•							

NAME OF PROPERTY\_

HOLE NO. MC83-19 SHEET NO. 3 OF 4

F001	TAGE				SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	OZ/TON	OZ, TON	
		24.63 - 31.03: moderately to strongly silicified - angular breccia fragments are set in a white to pink siliceous matrix. Minor zones of green unaltered rock. Breccia- tion is on a coarser scale than is normal 5-7% Pyrite - some fragments are magnetic										
31.03	40.11	BASALT										
		weakly chloritized with localized silicification in	066		31.03		1					
		brecciated rock in the upper 1 - 1.5 meters. Pink and white carbonate fills moderately developed fractures. The zone is vessicular at a number of levels possibly reflecting numerous 3-4 m. thick flows. Abundant 1-2 mm. black glass shards are observed. Less than 1% pyrite as blebs up to 1 mm. Below 39.6 m. the flow is weakly silicified.	067		32.06	33.59	1.53					
40.11	46.06	LOWER MINERALIZED ZONE						·				
·		This zone is composed of an upper strongly silicified unit and a lower more variably silicified member. Silicification and pyrite content are highest in strongly brecciated rock.										
40.11	41.48	SILICIFIED ZONE								·		
40.11		Grey to greenish grey, intensely brecciated and strongly silicified, aphanitic, with 1-3% pyrite. Minor greenish weakly silicified and moderately chloritized zones. A 10 cm. zone contains vessicules at 41.15 m rock originally a basalt (?). The zone is strongly fractured with quartz and minor carbonate in fractures.	068 069 070 071 072 073		37.06 38.58 40.11 41.48 43.01 44.53	40.11 41.48 43.01 44.53	1.53 1.39 1.53 1.52					

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC83-19 SHEET NO. 4 Of 4

					·			3/10				
F00	TAGE	DESCRIPTION			SAMP	LE				ASSAYS	· .	
FROM	то	SESSION TION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7,	OZ/TON	02/TON	
41.48	46.06	BASALT										
		Dark green, fine grained with 10% grey brecciated silicified zones. Medium grained with depth, weakly to moderately chloritized overall. Flow breccia developed locally, non-silicified, with round to sub-round fragments of basalt up to 2.0 cm. Minor flow foliation developed locally at 60° - 65° to the core axis, (e.g. 44.5 m).  42.00: chloritized shear with 30% pyrite over 2 cm. section - cuts core axis at 40°										
46.06	51.18	Major silicified zones located at 42.18 - 42.25, 44.78 - 44.87, 45.02 - 45.26 and 45.60 - 45.75 m.										
	52.43	filling with minor quartz stringers locally associated	·		46.06	47.58	1.52					
		50.53 m : clay seam - fault			•							
51.18	52.43	ANDESITE										
		Light to medium green, fine grained with a weakly developed flow foliation at 51.5 m. of 45° to the core axis. The rock is weakly fractured with carbonate in the fractures, non-magnetic, moderately chloritized and non-silicified. Up to 1% finely disseminated pyrite is found locally.		•							-	
		52.43 END OF HOLE - CASING PULLED										

NAME OF	PROPERTY	McDERMOTT			_
HOLE NO.	Mc. 83-2	0 LENGTH			_
LOCATION					_
LATITUDE	9 + 75 E	DEPARTURE 0 + 46 S			_
ELEVATION		AZIMUTH3440	DIP	-65 <sup>0</sup>	_
STARTED _	13-5-83	FINISHED <u>17-5-83</u>			_

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-65°				
66.14	<b>-</b> 62°				

HOLE NO.MC.83-20<sub>SHEET NO.</sub> 1 OF 7
REMARKS CORE SPLIT

BQ core

NOTE: From 66' marker to 74' marker is 7.3' of core

LOGGED BY A.W. WORKMAN

	T A G.E	5 T C C D I D T I C W	#		SAMP	LE			A	SSA	Y 5	
FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	oz/ton	
0	12.93	CASING - OVERBURDEN									·	
12.93	27.89	BASALT										
		Dark green to grey-green, fine grained, needle texture locally (1-3 mm amphiboles), and with well developed foliation at 45-50 to the core axis. Abundant (10%) quartz stringers which are lensitic and pinch and swell along the foliation. The rock is weakly to moderately fractured with mostly white carbonate as fracture filling - remainder is quartz and minor hematite. Rock is moderately chloritized and very weakly magnetic locally. Grey silicified bands are noted locally and carry up to 1% pyrite. They are 2-5 cm in thickness and related to zones of microbreccia. The rock becomes increasingly fractured and vuggy with depth - particularly below 23.5 m.	075 076 077 078 079 080 081 082 083 084		22.35 23.67	15.93 17.53 19.03 20.53 22.35 23.67 25.17 26.62 27.89	1.50 1.60 1.50 1.50 1.50 1.32 1.50 1.45 1.27	(act		0.01 Trace Trace Trace 0.01 0.01 0.01 0.02 0.01		
		14.26, 16.06 and 17.64 m: narrow silicified zones										
		13.56: ground core - possible minor fault										
		23.62 - 24.17:  strongly sheared and intensely chloritized - probable fault at 23.77 m; bordering rocks are more strongly chloritized										

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC. 83-20 SHEE

SHEET NO. 2 OF 7

FOOT	AGE				SAMPL	Ε				ASSAY	s	
FROM	то	DESCRIPTION	ΝО.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
27.89	52.43		086 087 088 089 090 091		29.85 31.35 32.72 34.22		1.50 1.37 1.50 0.98			0.02 0.02 0.01 0.01 0.01 0.12		
27.89	28.47	Dark to medium green, well foliated, strongly chloritized with approximately 50% 3-15 mm nodular bands of intensely silicified rock. The silicified bands are purple-grey in colour with cream coloured rims, and are oriented along the flow foliation. Finely disseminated pyrite - 1-3% with traces of chalcopyrite in narrow micro-fractures. Silicified zones are frequently offset along narrow fractures, which are chlorite filled.	092 093 094 095 096 097 098		37.60 39.03 40.53 42.03 42.48	37.60 39.03 40.53 42.03 42.48 43.13 44.26	1.43 1.50 1.50 0.55 0.65		0.09 4.98	0.01 (0.11 (0.02 (0.14 (0.08 0.02 0.01	)	0.07 7.38
28.47	44.26	Pale green to green-grey, aphanitic, strongly silicified breccia zone. Fragments are 0.5 mm to 1.0 cm and are very angular. They are generally grey and set in a lighter coloured matrix of silica. The rock is moderately to strongly fractured with quartz in main fractures. Micro-fractures and fractures in weakly silicified rock are carbonate filled. The zone from 35.23-36.10 m reflects a major fault. The breccia is intensely fractured, actually re-brecciated and set in a foliated intensely chloritized matrix. Fragments of silicified breccia up to 10 cm are noted. Some smaller fragments are lensitic and oriented along										

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC.83-20 SHEET NO. 3 OF 7

F00	TAGE				SAMPL	E		1		ASSAY	s	
FROM	то	DESCRIPTION	NO.	% SULPI	FROM	FOOTAGE TO	TOTAL	7.	7	OZ/TON	OZ/TON	
28.47	44.26	the shear - foliation direction. The zone contains 3-5% pyrite.		1003	- room		10174		·			
		28.47 - 35.23: intensely silicified breccia, 1-2% pyrite, chloritized fracture system (faults?) at 30.18 m, 30.85 and fr 33.53-34.20 m. Definite chloritize fault at 45° to core axis at 28.56 Zone includes a dark reddish-pink, aphanitic intrusive (?) at 29.05 - 29.08 and 29.14-29.17 mSYENITE?	om d									
		35.23 - 36.10: sheared silicified breccia at 40° the core axis. Ground mass around breccia fragments is a semi-foliate chloritized mylonite. The zone is similar to parts of 12.8-27.9 and contains more pyrite than the overlying section - 3-5%. Chloritized planes are often 25% covered with the films of chalcopyrite. Fault at 36 as a narrow chloritized mylonite section.	d hin									
		36.10 - 38.50: grey to green-grey, strongly silicitied and brecciated with minor gree chloritized zones locally developed Silicified rock carries 3-5% pyrite chloritized zones - 1-2%. Up to 2% chalcopyrite locally (eg. 37.19). Chloritized seams have a moderate foliation (40° at 39.2 m) and become more common down-hole. Generally, angular breccia fragments make up 90% of the rock volume. Occasional only 10% with 90% silicified mylonimatrix - faults? - hydrothermal channelways?	n, ,									

NAME OF PROPERTY MCDERMOTT

HOLE NO. Mc.83.20

\_\_\_\_\_ SHEET NO. 4 OF 7

F001	TAGE				SAMPL	E				ASSAY	s	
FROM	то	DESCRIPTION	NO.	% SULPH		FOOTAGE		7,	T .	OZ/TON	OZ/TON	
FROM			70.	IDES	FROM	ТО	TOTAL	1		02,108	02/108	
28.47	44.26	38.50 - 44.26: green, chloritized, non-silicified zones become more abundant - minor carbonate in micro-fractures, slightly higher pyrite content - up to 7%. Major chloritized zones at 38.62-38.71, 39.41-39.87, 40.90-41.18 and 41.54-41.57.										
44.26	52.43	BASALT										
		Grey-green to dark green to grey locally, fine c grained and moderately chloritized. Moderately magnetic. Silicification has occurred along fractures and is best developed in breccia zones. Fractures are rimmed with 1-3 mm grey silicified halos. Dilatant zones in fracture systems are most strongly altered. Angular fragments in silicified breccia zones are up to 5 cm in size - major zones at 45.66-45.84 and 46.42-46.60 m. Up to 50% of the rock volume in this unit is silicified. Pyrite averages 2-3% but ranges 1-7%. An 8 mm tuff band at 51.60 cuts the core axis at 35°.	099 100 101 102 103 104		45.76 47.26 48.76 50.20	45.76 47.26 48.76 50.20 51.31 52.43	1.50 1.24 1.11			0.07 0.01 0.01 0.01 0.02 0.01		·
52.43	54.21	BASALT										
		The upper contact is gradational into the overlying C. silicified basalt. This unit is dark green, fine grained, weakly to moderately chloritized, and moderately magnetic. This is a zone where the percentage silicified rock rapidly decreases to 0% from about 20% above.	105 106			53.32 54.21				Trac Trac		•
54.21	60.59	LOWER MINERALIZED ZONE						-				
		The rock is grey, often with a purple tint, aphanitic, moderately to strongly fractured and intensely brecciated. Breccia is intensely silicified and averages 5-7% pyrite. Up to 15% pyrite is found	107 108 109 110		55.71 57.21	55.71 57.21 58.71 59.71	1.50			Trac 0.01 0.01 0.01	1	

MCDERMOTT NAME OF PROPERTY\_\_\_\_

HOLE NO. MC. 83. 20 SHEET NO. 5 OF 7

F00	TAGE					SAMPL					ASSAY	S	
FROM	то	DESCRIPTION		NO.	% SULPH		FOOTAGE		7,		OZ/TOM	OZ/TON	
- ROW				10.	IDE5	FROM	ТО	TOTAL			02/108	02/100	<b> </b>
54.21	60.59	locally. The zone contains 3% dark green, chlor- itized bands of basalt - non-silicified. Quartz is the dominant fracture filling with carbonate in micro-fractures.	C	111 112		i	60.16	0.45		-		) 0.0	
		58.00 - 60.59: zone contains 6% chloritized green basalt								-			
		59.89 - 60.62: 7-8% pyrite as fine dissemination and as 1-2 mm cubes - 15% pyrite locally.											-
	·	60.11 - 60.16: narrow silicified mylonite seams at 50° to core axis - faults?	:										
		60.44: chloritized shear at 25° to core as	is							-			
60.59	60.90	INTRUSIVE											
		Pale green, aphanitic with abundant angular chlor- itized fragments of silicified volcanic. Chlorite developed in weak to moderate fracturing. Resemble a chilled flow margin. Carries trace of pyrite.		113		60.59	60.90	0.31			0.01	٠.	
60.90	63.09	BASALT			-								
		Dark green, fine to medium grained, moderately chloritized with a weak flow foliation developed throughout. Some zonation of grain size along a weak foliation at 30°-35° to the core axis. Unit carries 1-2% pyrite, and is weakly to moderately fractured with quartz and minor carbonate in fractu	c	114 115			62.00 63.09				0.01 0.01		
		Foliation is highlighted locally by 1-5 mm quartz stringers and lensitic bodies along the mineral alignment. These areas, relatively rich in quartz carry higher pyrite contents - 3-5%.			•								
		•									1 1		

NAME OF PROPERTY MCDERMOTT

HOLE NO. Mc.83.20

SHEET NO.

6 OF 7

F00	TAGE				SAMPL	.E		]		ASSAY	5
FROM	то	DESCRIPTION	ΝО.	% SULPH	FROM	FOOTAGE 10	TOTAL	7,	7.	OZ/TON	OZ/TON
63.09	63.79	SILICIFIED ZONE  Grey to blue-grey, aphanitic, moderately to strongly C. silicified and moderately brecciated. Some relic flow banding is observed at 63.55 m which cuts at 35 to the core axis. Fracturing increase towards the base of the zone, and chlorite begins to appear in fractures at 63.0 m.	116			63.79	0.70			0.08	
53.79	65.78	PORPHYRITIC INTRUSIVE  The overlying zone is cut off sharply by a pale green, medium to coarse grained intrusive. It carries round to sub-round quartz crystals up to 3 mm. in size. Some dark needle-like crystals are noted locally (hornblende?). The groundmass is moderately chloritized. A trace of pyrite is found locally.	117 118	1	63.79 64.78	64.78 65.78				0.01	
55.78	66.54	Dark green, fine grained, strongly chloritized, C. moderately to strongly fractured. Patches of grey silicified rock, 1-2 cm in thickness, are found locally - especially near the overlying intrusive. Foliation, may be shearing, at 30° to core axis.	119		65.78	66.54	0.76			0.01	
56.54	67.09	Dark grey with purple tint, aphanitic, moderately C. brecciated with 5-7% pyrite, mostly filling dilatant zones between fragments or in fracture systems. A foliation, perhaps due to shearing is observed at 66.9 m at 35 to the core axis. This rock is not normally observed at this depth.	120		66.54	67.09	0.55			0.12	

MCDERMOTT NAME OF PROPERTY.....

HOLE NO. \_\_\_\_\_\_ MC.83.20 \_\_\_\_\_\_ SHEET NO. \_\_\_\_ 7 OF 7

FOOTAGE SAMPLE ASSAYS DESCRIPTION FOOTAGE % SULPH OZ/TON OZ/TON FROM то IDES FROM TOTAL 67.09 72.24 ANDESITE 67.09 68.59 1.50 Medium green, fine to medium grained, moderately 121 0.01 68.59 70.09 1.50 70.09 71.17 1.08 122 0.04 chloritized, massive flow. Minor zones of grey 0.01 silicified rock (eg. 68.7-68.8) locally. Silicified 123 71.17 72.24 1.07 0.01 rock is confined to an upper, more strongly fractured 124 part of this zone - that is, above 69 m. Below this point the andesite is weakly fractured and weakly to moderately foliated. The rock parts easily at  $35^{\circ}-40^{\circ}$  to the core axis. 72.24 END OF HOLE CASING PULLED

NAME OF	PROPERTYMC	Dermott
HOLE NO.	Mc. 83-21	LENGTH 60.05 m
LOCATION		
LATITUDE	385 ?	_ DEPARTURE 9 + 62.5 E ?
ELEVATION		_ AZIMUTH <u>344<sup>0</sup></u> DIP <u>-50<sup>0</sup></u>
STARTED _		_ FINISHED

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	50°				
60.05	48 <sup>0</sup>				

HOLE NO. MC. 83.2 SHEET NO. 1 OF 5

REMARKS Whole core sent

for assay
all units in metric
BQ CORE

LOGGED BY A.W. WORKMAN

F 0 0 1	FAGE				S A M P	LE			,	SSA	Y S	
FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	36	%	OZ/TON	oz/ton	
0	9.81	CASING - OVERBURDEN										
9.81	15.97	BASALT									}	
		Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm grey, moderately silicified zones parallel to flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately silicified.  12:50 m: flow (?) lamination at 40°-50° to core axis	c.12 12 12 12 12 13	5 7 8 9	9.82 10.82 11.82 12.83 13.83 14.97	12.83 13.83 14.97	1.00 1.00 1.00 1.14	actu	lly	Trace Trace 0.005 Trace Trace		-
L5 <b>.</b> 97	37.49	MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified member which grades down into a strongly silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.	13:		15.97 16.97					Trace		

NAME OF PROPERTY MCDERMOTT

HOLE NO. Mc. 83-21

\_\_\_\_\_ SHEET NO. 2 OF 5

F00	TAGE				SAMPL	E				ASSAY:	3	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
15.97	20.60	SILICIFIED BASALT		1023								
		The zone begins as a dark green, fine grained very C weakly magnetic rock with up to 50% green-grey, aphanitic, strongly silicified and brecciated rock. The grey zones increase in number and degree of alteration down-hole.	133 134 135		17.97 18.99 19.99	19.99	1.00			0.04 0.03 0.03		
		16.37 : chloritized fault with chlorite developed along fractures penetrating silicifed zones - movement at 70 to core axis										
		17.47 - 17.77: pinkish-red aphanitic intrusive - siliceous, cataclastic near contacts, may cut at 60° to core axis-SYENITE?		-								
20.60	34.11	MAIN SILICIFIED ZONE										
		Grey, aphanitic, intensely brecciated and strongly C silicified. Breccia consists of angular, 0.5 mm to 1.5 cm fragments which may be outlined by narrow cream coloured reaction halos. An average 1-3% pyrite is observed with up to 10% locally. Weakly to moderately fractured with quartz in major fractures and carbonate in micro-fractures. Non-magnetic.  20.60 - 26.09: 1-3% pyrite, relic flow banding at 45° to core axis at 23.6 m	136 137 138 139 140 141		22.10 23.10 24.11	22.01 22.10 23.10 24.11 25.12 26.12	0.09 1.00 1.01 1.01			0.01 0.02 0.10 0.09 0.07 0.04	5	
		mylonitization of silicified rock with chlorite in fractures - most likely a fault in chloritized seam at 26.09 m - movement at 45° to core axis - possible bedding fault										

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC. 83-21 SHEET NO. 3 OF 5

F	OOTAGE			-	SAMPL	Ε				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
		26.09 - 30.88: more highly silicified zone with 5-7% pyrite  30.88 - 31.49: some green, chloritized and weakly silicified rock in 2-4 cm bands - zone is at least 50% silicified. Possible flow foliation at 60° to core axis. Up to 3% pyrite.	142 143 144 145 146 147 148	And the first the second secon	27.13 27.98 28.99 29.99 30.88	27.13 27.98 28.99 29.99 30.88 31.49 32.43	0.85 1.01 1.00 0.89 0.61			0.34 0.10 Trac 0.01 0.01 0.04	e	
		31.49 - 32.43: FAULT ZONE - highly fractured with 30% dark green chloritized non-silicified rock. Chloritized mylonite at 32.03 - 32.35. Grey silicified rock in this zone is strongly fractured with chlorite in fractures.										
		32.43 - 34.11: grey with purple tint, very highly brecciated and intensely silicified with average 7-9% pyrite and up to 10% locally. The lower 20 cm is strongly fractured with mylonite and chlorite in fractures.	149 150		32.43 33.27	33.27 34.11				0.03		
34.	37.49	Grey to grey-green, aphanitic to fine grained, c.	151 152 153		34.11 35.11 36.11	36.11	1.00			0.02 0.03 0.20		
		the overlying breccia and non-brecciated rock beneath. The zone becomes pale green at 35.66 m. Silicified zones are found at 35.02-35.11, 35.33-35.72, 36.12-36.20, 36.58-36.79, 36.91-37.12, 37.22-37.25 and 37.37-37.46; totalling 57% of the unit. In these zones, sub-angular medium to dark green 1-3 cm breccia fragments are set in a grey strongly silicified	154	•	36.80					0.01		

NAME OF PROPERTY MCDERMOTT

HOLE NO. Mc. 83-21

SHEET NO. ...

4 OF 5

F007	TAGE		<u>L</u>		SAMPL					ASSAY	5	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	- 2	%	OZ/TON	DZ/TON	
		mylonitic matrix. Fragments are only very weakly silicified. Rock is moderately fractured with pink quartz in main fractures and carbonate in microfractures. Pyrite contents average 3-5% as a very fine dissemination and, locally, as 1-2 mm cubes. Flow banding is observed locally; 37.19 m: 50 to core axis.		1023								
37.59	48.10	ANDESITE										
		Medium green, fine to medium grained, weakly to moderately fractured, non-magnetic, massive flow. Quartz fills fractures above 38.25 m. Carbonate filling is dominant below 39.6 m. Fractures are very angular and no evidence of slippage is observed - may be due to shrinkage. The flow is non-silicified generally, but becomes weakly and increasingly silicified below 45.42 m. Pyrite content averages less than 1%.  37.49 - 45.42: weakly to moderately chloritized  45.42 - 48.10: narrow grey silicified breccia zones at 45.63-45.77, 46.66-46.74 and 47.46-47.58 m.	155 156 157 158 159 160 161 162 163 164 165		37.49 38.50 39.50 40.50 41.50 42.50 43.50 45.50 46.50 47.50	39.50 40.50 41.50 42.50 43.50 44.50 45.50 47.50	1.00 1.00 1.00 1.00 1.00 1.00 1.00	(act	uall	y) 0.0 0.01 0.01 0.01 0.01 Trac 0.02 0.02		
48.10	49.53	LOWER MINERALIZED ZONE			·		·		-			
		The unit is composed of dark grey to grey-green, caphanitic moderately to very strongly silicified with minor zones of green, weakly silicified rock. Degree of silicification is proportional to the extent of brecciation. Breccia fragments are extremely angular, frequently mylonitic and are set in a silica matrix. The moderately developed fractures were later developed and are generally quartz-filled with pink carbonate in narrow micro-fractures. Pyrite content averages 3-5%. This zone is more	166 167		48.10 48.81		ł .			0.14 0.01		

NAME OF PROPERTY MCDERMOTT

HOLE NO. Mc. 83-21

SHEET NO. 5 OF 5

F00	TAGE				SAMPL	E		Į.		ASSAY	s
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	*	*	OZ/TON	OZ/TON
		weakly silicified than would be expected judging by what was encountered in other holes.									
49.53	60.05	ANDESITE									
		Medium green, fine to medium grained becoming coarser down-hole. The uppermost 1.5 m is strongly silicified locally over 2-5 cm zones. These zones are grey, and brecciated similar to the overlying unit. The flow is non-magnetic. Up to 1% very finely disseminated pyrite is found throughout the zone. The rock is moderately fractured with dominantly white and pink carbonate filling. Flow banding is observed locally: 45° at 51.5 m and 40° at 54.6 m.	c168 169 170 171 172 173 174 175 176 177		50.53 51.54 52.54 53.54 54.54 55.54 56.54 57.54 58.54	50.53 51.54 52.54 53.54 54.54 55.54 56.54 57.54 58.54 59.54 60.05	1.00 1.00 1.00 1.00 1.00 1.00 1.00	(act	•	0.02 y) Tr 0.01 0.01 0.01 Trac Trac 0.04 0.01	ace e e
		CASING PULLED									
							•				
		- -			·						
					•						
											-
,											
				-							
									-		

NAME OF	PROPERTY M	CDERMOTT
HOLE NO.	Mc-83-22	LENGTH 61.26 meters
LOCATION		
LATITUDE	0+36S	DEPARTURE
ELEVATION		DEPARTURE9+50E
		FINISHED 24-5-83

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45 <sup>0</sup>				
61.26	-44 <sup>0</sup>				

HOLE NO. MC-83-22 SHEET NO. 1 OF 7

LOGGED BY S.M. Trueland

	F001	TAGE	DESCRIPTION			SAMP	LE			A	SSAY	' S	<del></del>
	FROM	то	DESCRIPTION	NO.	% SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	OZ/TON	
	0	9.54	CASING										
	9.54	12.92	BASALT:										
EM, 6-1168			Dark green fine grained, moderately fractured, slightly brecciated rock. Slightly to moderately chloritized and carbonatized. Dominantly white carbonates (10-15%), with some areas of pink, filling fractures 1-10 mm in size with the majority making an angle of 50-70 to the core axis. Pyrite - zero to trace.	C201 202 203 204	-	10.30 11.13	10.3 11.13 12.07 12.92	1.00 0.94			Trace Trace Trace Trace		
·			11.58 - 11.83: Core fragmented and broken, possible fault.				-				-		
	12.92	30.33	MAIN SILICIFIED ZONE:		·								
LANGRIDGE LIMITED,			Medium to dark grey rock with purple hue, fine grained, moderately to severely brecciated - brecciated fragments range from less than 1 mm to 2-3 cm. Infilling material is white silica with no carbonate. Infrequent isolated areas of green chloritized rock (possibly fragments) which have not been affected by silicification - these zones make up no more than 10% of main zone. Less silicification in these zones could be due to minor brecciation in these areas where the larger fragments have resisted silica infiltration. Pyrite content ranges from less than 1% (chloritized zones) up to 10-15% (intensely silicified and brecciated zones). Pyrite appears mainly disseminated with minor amounts of larger (0.5-lmm) euhedral crystals. In areas of high concentration finer subhedral crystals join together forming blebs on the order of 5-10mm in size.										-

NAME OF PROPERTY\_\_\_\_MCDERMOTT

HOLE NO. \_\_MC-83-22

SHEET NO. 2 OF 7

SAMPLE FOOTAGE ASSAYS DESCRIPTION FOOTAGE FROM то OZ/TON OZ/TON TOTAL 12.92 - 14.78: YELLOWISH-GREEN SILICIFIED ZONE (2% Py.) Pale yellowish-green, fine grained, 12.92 13.72 0.79 0.01 205 moderately brecciated and silicified 13.72 14.78 1.07 206 Trace rock - this marks the beginning of the 2% main silicified zone. It is distinctly harder than the chloritized/carbonitized zone above. The brecciated fragments are angular to subangular ranging from less than 1mm to 2cm in size and are infilled with siliceous material. The silicified zone seems to have a gradational contact, starting as a light yellowish green rock and gradually becoming the characteristic dark grey with purple hue rock. The pyrite is disseminated with some areas of quartz veining control. Pyrite content increases with depth from less than 1% to 5% with an average of 2%. 14.78 - 15.09: FELSIC DIKE 14.78 15.09 0.30 0.03 Silicified zone abruptly interrupted by 207 light pink aphanitic to fine grained, very hard rock. Moderately fractured less and slightly brecciated. Fractures than 1% mainly filled with clear siliceous material while brecciated fragments are surrounded by white siliceous material. 2mm wide quartz-filled fractures @15 to core axis, other fracturing is more random and variable. Minor disseminated pyrite, less than 1%.

McDERMOTT NAME OF PROPERTY\_\_\_\_

\_\_\_\_\_ SHEET NO. \_\_3\_OF\_7\_

F00	TAGE		DECORIONION			SAMP	LE				ASSAYS	
FROM	то	·	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	*	OZ/TON	OZ/TON
		15.09 - 20.65:	SILICIFIED BASALT-PURPLE HUE (5% PYRITE)	209		15.09 15.85	15.85 16.61	0.76 0.76			0.02	
			Silicified zone, fine grained dark grey rock with purple hue. Moderately to severely brecciated with pyrite content averaging 5%.	210 211 212 213 214		16.61 17.37 18.14 18.90 19.66	18.14 18.90 19.66	0.76 0.76 0.76			0.01 0.02 0.01 0.02 0.02	
		20.65 - 20.73:	TUFF? OR FAULT?  Core composed of small (0-2mm) well rounded fragments. Core fragmented and broken - possible fault.  (Py.)									
		20.73 - 21.12:	LIGHT GREY ROCK WITH YELLOW HUE (10-15%)  Significant increase in pyrite content 10-15%. Quartz stringers are wider in this zone - possible result of tensile forces allowing free movements of fluids		10- 15%	20.73	21.12	0.40			0.34	
		21.12 - 22.19:	Rock becomes medium to dark grey. 2-5% pyrite.	216	2-5	21.12	22.19	1.07	·		0.10	
	·	22.19 - 23.26:	DARK GREY PURPLE HUE (PYRITE 3-5%) Narrower stringers of white siliceous	217		22.19	22 59	0.76			0.05	
			material. Brecciated fragments seem less distinct and have a more foliated appearance at approximately 60-70 to core axis. Foliation and narrower stringers seem to indicate application of compressive stresses. Pyrite 3-5%.	218		22.59					0.02	
٠	,											
		·			₹.		·					

HOLE NO. MC-83-22

SHEET NO. 4 OF 7

FOOT	AGE		DESCRIPTION			SAMPL	.E				ASSAYS	· · · · · · · · · · · · · · · · · · ·	
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	76	%	OZ/TON	OZ/TON	
		23.26 - 23.71:	LIGHT GREEN ROCK - POSSIBLE FAULT  Light green, fine grained rock. Brecciated fragments are more well developed	219	1-2%		23.71	0.46			0.01		
			Core is fragmented and broken at 23.53m which could possibly be a fault. Lower pyrite content in this interval - 1-2%.										
-		23.71 - 24.02:	SILICIFIED BASALT WITH PURPLE HUE	220	3-5%		24.02	0.30	·	ļ   	0.09		
			Same as interval 22.19-23.26m with disseminated pyrite with local concentrations or blebs - 3-5%.		3-5%								
		24.02 - 27.43:	SILICIFIED BASALT WITH CHLORITE-RICH ZON	ES (2	<u>용)</u>								
		·	Silicified zone, more distinctly brec- ciated with good angular fragments being visible. White siliceous material randomly infills without well-developed foliation. In some locations silici- fication is not as intense indicated by	221 222 223 224		24.02 24.93 25.85 26.76	25.85	0.91 0.91			0.05 0.04 0.11 0.23		
			the medium to dark green chloritized zones which comprise approximately 20% of the interval. These zones range from 1-2cm up to 10-15cm and are softer than the silicifed zone. The presence of		5-7%								
			these chloritized zones indicates that the main silicified zone is nearing the end. Pyrite content; less than 1% up to 15% with an average throughout of 5-7%.				·	-					
		27.43 - 28.04:	TUFF? OR FAULT?						·				
			Interval with larger grain size. Fragments are more well rounded and consist of quartz, feldspar and mafic minerals - area of slight magnetism - more abundant white silica - fault or tuff(?)	225	•	27.43	28.04	0.61	e .		0.04		

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-22 SHEET NO. 5 OF 7

FOOTAGE	PECCHIPTION		·-	SAMP	LE				ASSAYS	
FROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	02/TON
	28.04 - 30.33: SILICIFIED BASALT WITH CHLORITE ZONES  Same rock type as interval 24.02-27.43m. Pyrite content increases from 28.65- 28.96m to 10% with average over the interval of 5%.	226 227 228	ŀ	28.96	28.96 29.87 30.33	0.91			0.10 0.09 0.02	
30.33 30.66	TUFF? OR FAULT?					in I				
	Light green, medium grained rock with well-rounded fragments of quartz and feldspar.	229		30.33	30.66	0.33	-		Trace	
30.66 57.00	BASALT					'				
	Medium green, aphanitic to fine grained rock. Carbonate present as stringers up to 5-10%. The zone has small bands of brecciated and siliciified material characteristic of the main zone, 2-10cm wide and comprising no more than 10% of the interval. Pyrite is less than 1%.  30.66 - 35.91: BASALT									
	Carbonate - 5-10%. Pyrite - less than 1%.	230 231 232 233 234 235		31.58 32.49 33.41 34.32 35.23	31.58 32.49 33.41 34.32 35.23 35.91	0.91 0.91			0.00 0.00 0.07 0.01 0.00 Trace	5
	Medium grained, medium green rock.  Prismatic amphibole crystals. Pyrite 0-0.5%.	236	less than		36.70	0.79	,		0.04	

MCDERMOTT NAME OF PROPERTY\_\_\_

HOLE NO. \_\_\_\_\_\_\_ SHEET NO. \_\_\_\_\_

6 OF 7

FOOTAGE SAMPLE ASSAYS DESCRIPTION FOOTAGE NO. FROM то OZ/TON OZ/TON то TOTAL 0.04 36.70 37.28 0.58 36.70 - 37.28: Moderately silicified and brecciated. C 237 2-5% carbonates. Up to 1% pyrite. 38.19 - 38.37: Strongly brecciated and silicified. 37.28 38.37 1.10 C 238 38.37 39.20 0.82 Trace 2-5% pyrite. 239 39.20: Core broken and fragmented, possible fault. 0.005 39.20 - 47.03: Carbonate stringers and veining more C 240 39.20 40.11 0.91 0.005 abundant, 15-25%. 40.11 41.03 0.91 241 41.03 41.18 0.15 0.15 242 0.02 41.18 42.09 0.91 243 Trace 42.09 43.01 0.91 244 0.005 43.01 43.92 0.91 245 0.005 43.92 44.84 0.91 246 0.005 247 44.84 45.75 0.91 0.02 45.75 46.36 0.61 248 0.005 249 46.36 47.03 0.67 Trace 47.03 - 47.85: Carbonate stringers almost absent, 2-5%. 250 47.03 47.85 0.82 0.01 47.85 - 49.77: Carbonate stringers 5-10%. Tuffaceous 251 47.85 48.77 0.91 0.02 bands 1-10cm in size comprise 5-10% of 48.77 49.77 1.00 252 core. 0.005 49.77 - 57.00: Bands of carbonates wider with zones of 49.77 51.00 0.91 |51.00 |51.91 | 0.91 Trace carbonate-free basalt at 50.22-50.38m 254 51.91 52.82 0.91 Trace 255 and 51.22-51.66m. 52.82 53.74 0.91 Trace 256 Trace 53.74 54.65 0.91 257 258 54.65 55.56 0.91 Trace Trace 259 55.56 56.47 0.91 Trace 56.47 57.00 0.53 260

McDERMOTT NAME OF PROPERTY\_

HOLE NO. \_\_\_\_MC-83-22

SHEET NO. 7 of 7

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE NO. FROM OZ/TON OZ/TON TO TOTAL 57.00 59.65 INTRUSIVE -- DIABASE(?) 57.00 57.91 0.91 57.91 58.83 0.91 Trace Light to medium green, medium grained rock with 261 Trace prismatic amphibole crystals. Carbonate stringers 1-3%. 262 Trace 58.83 59.65 0.82 263 59.65 61.26 BASALT Carbonate stringers less than 1%. 264 59.65 60.56 0.91 Trace Trace 265 60.56 61.26 0.70 61.26 meters END OF HOLE CASING PULLED WHOLE BO CORE SENT FOR ASSAY

NAME OF	PROPERTY	McDERMOTT
HOLE NO.	Mc-83-23	LENGTH 60.05 meters
LOCATION		
LATITUDE	9+37.5E	DEPARTURE 30S
ELEVATIO	N	AZIMUTH 344° DIP -45°
STARTED.		FINISHED 26-5-83

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45 <sup>0</sup>	344 <sup>0</sup>		7	
60.05	~45°				

HOLE NO. MC-83-23HEET NO. 1 OF 9
REMARKS Second hole logged
by S.M.T.

LOGGED BY S.M. Trueland

ſ	FOOT	FAGE			<u></u>	SAMP	LE			, , , , , , , , , , , , , , , , , , ,	SSA	Y S	
	FROM	то	DESCRIPTION	NO.	% SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	oz/ton	
	0	6.70	CASING										
	6.70	27.28	MAIN SILICIFIED ZONE										
TED,			Fine grained, dark grey with purple hue, moderately to intensely brecciated rock. Brecciated fragments range from less than 1mm to 2-3cm and are angular to rounded. Rock is carbonatized from 6.70-18.81m decreasing in content with depth. Carbonates are absent from the highly silicified zone beginning at 18.81m. Chloritization of narrow zones (also from 6.70-18.81m) indicates the beginning of the silicified zone. Chlorite content also decreases with depth. Infiltration of siliceous material is in a random fashion throughout the silicified zone. Quartz veinlets range in size from less than 1mm to 1cm and have been introduced in more than one event as some veinlets cross-cut older brecciation and veinlets. The core is magnetic from 21.59-24.38m within the most highly silicified zone. Pyrite content ranges from less than 1% in chlorite-rich zones up to 10-15% in intensely brecciated and silicified zones. In areas of low concentration the pyrite usually appears finely disseminated while larger euhedral grains appear more frequently as concentration rises. In areas of intense brecciation a slight foliation appears at 55-65 to the core axis.										
TW.		·	6.70 - 11.54: SILICIFIED ZONE WITH CARBONATE CHLORITE Z	NES	(10-	20%)							
LANGRIDGE			green with purple hue. Fine grained rock	266 267 268	•	7.70	7.70 8.72 9.70	1.00	-	• •			

NAME OF PROPERTY MCDERMOTT

HOLE NO. \_\_\_MC-83-23

2 OF 9 SHEET NO. ...

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE NO. τo FROM OZ/TON OZ/TON FROM TOTAL and brecciated-silicified zones with the 10.70 269 9.70 1.00 b.005 chlorite-carbonate zones making up 270 10.70 11.54 0.84 þ.005 approximately 10-20% of the total zone. Carbonate values increase to 10-15% in the chloritized values and is absent from the intensely brecciated and silicified zones. In some zones of brecciation the fragments are large, 3-10mm with no apparent foliation while in other areas the fragments are not quite as large, less than 1 to 3mm and there is a slight foliation. These foliated zones indicate a compressive shear force versus a tensile force in the areas of large brecciated fragments. The siliceous material infills around the brecciated fragments through microfractures and narrow (1-3mm) veinlets. The pyrite content ranges from less than 1% to 3-5% with an average value of 2%. There is a possible fault at 11.46 m. 11.54 - 13.93: Rock becomes a dark grey with purple hue. 11.54 12.53 271 1.00 0.02 Carbonate veinlets become wider, 5mm, but 12.53 13.53 0.03 1.00 272 are less abundant, making up 5-10% of 273 13.53 13.93 0.40 0.02 total zone. Brecciation is not as intense. Pyrite is finely disseminated, trace to 1%. less than 1% 13.93 - 18.30: SILICIFIED ZONE WITH CHLORITE ZONES (10%) Rock still dark grey with purple hue. 274 13.93 14.90 1.00 0.01 Micro-fractures and stringers more abun-275 14.90 15.88 1.00 0.01 dant with a slight foliation at 50-70° to 0.01 276 15.88 16.88 1.00 core axis. Still small zones of non-16.88 17.88 1.00 0.01 277 silicified rock comprising up to 10% of 17.88 18.30 b.005 0.42 zone. Carbonate content decreased with an less overall abundance of approximately 1%. than Pyrite content is less than 1%. 1%

NAME OF PROPERTY MCDERMOTT HOLE NO. MC-83-23 SHEET NO. 3 OF 9

F001	TAGE	,	DECORPTION			SAMPI	_E				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	0Z/TON	OZ/TON	
		18.30 - 18.80:	TUFF OR FAULT  Light to medium green, medium grained rock composed of less than 1mm to 3mm well-rounded grains or fragments at the top and bottom of the zone with larger 3-6mm angular fragments in the middle of the zone - TUFF OR FAULT - pyrite is not visible.  SAMPLE TAKEN 18.62-18.68m (angular	279		18.30					0.02		
		18.80 - 19.05:	GREY-BROWN YELLOW HUE SILICIFIED ZONE  Light grey-brown with yellow hue. Fine grained, intensely brecciated and silicified. Slight foliation at 50-65 to core axis. Pyrite content significantly increases in this interval to 10-15%. The same zone appears in hole Mc-83-22 at 20.73-21.12m.  SAMPLE TAKEN 18.80-18.90m.	280	10- 15%	18.80	19.05	0.24			0.33		
		19.05 - 19.51:	Core becomes medium grey with brecciated fragments still light grey-brown with yellow hue. These fragments constitute approximately 40-50% of the interval. Very distinct contact with above interval Pyrite content 5-7%.		5-7%	19.05	19.51	0.46			0.05		
		19.51 - 19.81:	Band of tuff (or fault). Fragments are less than 1mm to 10mm with small fragments dominating. No visible pyrite.	282	0%	19.51	19.81	0.30			0.01		

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-23 SHEET NO. 4 OF 9

FOOTAGE	,	DESCRIPTION	ĺ		SAMPL	-E				ASSAYS		
FROM TO		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	0Z/TON	OZ/TON	
	19.81 - 21.59:	TYPICAL SILICIFIED ZONE (PURPLE HUE)  Typical dark grey, purple hue rock. Brecciation light to moderate. Fracture less abundant with more regular quartz veins 1-5mm wide. Within quartz veins brecciated fragments are more abundant. Light brown alteration halos associated with some quartz veins while some veinlets infilled with light brown siliceous material. Finer micro-fractures, random throughout interval. Veinlets cut core axis at 30-45 with some clean white quartz veinlets running parallel to the core axis. Pyrite content ranges from less than 1% to 15% with an average concentration of approximately 7%.		7%			1.00 0.79			0.10		
	21.59 - 24.38:	SAMPLE TAKEN 20.57-20.65m.  SILICIFIED ZONE: MAGNETIC  Dark grey, purple hue rock. Fracturing becomes more abundant and larger. Alteration halos not visible. Core is magnetic throughout entire interval. Pyrite content is 2-4%.	285 286 287	2-4%	21.59 22.57 23.57	23.57	1.00			0.03 0.02 0.08		
	24.38 - 26.91:	Dark grey rock with purple hue, non-magnetic over this interval. Small chlorite-rich zones appear and comprise 5% of interval with greater abundance down hole. Some areas of intense brecciation and silicification. Pyrite content 1-2%.	288 289 290	1-2%	26.38	26.38	1.00			0.06 0.02 0.18		

FORM Z

McDERMOTT

HOLE NO. \_\_\_\_\_MC-83-23 \_\_\_\_\_ SHEET NO. \_\_\_ 5 OF 9

F001	TAGE				SAMPI	E	·····			ASSAYS	······································	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	
		26.91 - 27.28: GREY-BROWN YELLOW HUE SILICIFIED ZONE  Rock grey-brown with yellow hue, similar to interval 18.80-19.05m. Pyrite conten 7-8%. End of main silicified zone.	291		26.91		0.36			0.21		
27.28	60.05	BASALT WITH SILICIFIED ZONES (1-2%)  Light to dark green, aphanitic to medium grained rock. Intervals of silicification and brecciation from 1-2cm up to 1 metre. These intervals constitute 1-2% of the entire basalt interval. Carbonatization becomes present directly below 27.28m and throughout the interval averages approximately 10%. Pyrite content varies from 0 in some carbonatized-chloritized zones to 5-10% in silicified and brecciated zones.	1								-	
		27.28 - 28.13: TUFF OR FAULT  Light to medium green, fine to medium grained rock with larger fragments at 27.86m. Foliation present (measurement not taken). Pyrite absent.	292	0%	27.28	28.13	0.85			0.02		
					28.13 28.83					0.02 0.005		
	·											

MCDERMOTT

HOLE NO. MC-83-23

SHEET NO. 6 OF 9

F00	TAGE		DESCRIPTION			SAMP	LE				ASSAYS		
ROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	
-		29.57 - 33.10:	Medium to dark green, fine to medium grained rock. Possibly the centre of a flow where crystals were able to form due to slow cooling. Carbonate content 5%. Magnetic band at 31.70m making an angle of 30 to core axis. 0 to trace pyrite.	295 296 297 298		31.57 32.77	30.57 31.57 32.77 33.10	1.00			Trace Trace Trace Trace		
		33.10 - 37.50:	Fine to medium grained basalt with greater amounts of carbonate stringers - approximately 10% - stringers lmm to lcm wide and are emplaced in irregular pattern with the majority making an angle of 80-90 to core axis. Slight foliation over 20cm making an angle of 40 to core axis (36.05-36.27). Pyrite content up to 1-2% averaging less than 1%.	302 303		•	35.13 36.13 36.85	1.00 1.00 0.70			0.005 Trace Trace 0.005 Trace		
		37.50 - 37.89:	Medium grained, brownish-green rock. Moderately brecciated with fragments no larger than 2-3mm. Some grains are well rounded - possibly tuffaceous. Carbonate stringers absent from this zone. Pyrite content slightly increased 1-2%. SAMPLE TAKEN 37.72 - 37.78.	•	1-2%	37.50	37.89	0.39			0.005		
	•	37.89 - 38.77:	DIABASE??  Medium grained, medium green rock.  Carbonate content 10%. Core similar to interval 33.10-37.50m, but grain size is considerably coarser. Prismatic amphiboles - could be considered to be	305	less than		38.77	0.88	,	į	Trace		•

McDERMOTT NAME OF PROPERTY\_

HOLE NO. MC-83-23

\_\_\_\_\_ SHEET NO. 7 OF 9

FOOTAGE			DESCRIPTION	SAMPLE					ASSAYS			
ROM T	0		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON
			diabasic. Pyrite content 0-1%, averages less than 1%.									
ļ		38.77 - 39.24:	BASALT									
			Medium green, fine to medium grained rock Less carbonates in this interval, which gives the division. Grain size smaller than above interval, but there is a gradational decrease in grain size. Carbonates less than 5%. Pyrite less than 1%.	306	less than	\$	39.24	0.46	·		Trace	
·		39.24 - 39.64:	SHEARED BASALT									
			Well foliated and moderately sheared basalt. Grain size not distinguishable. Foliation makes an angle of 45° to core axis. More intensely sheared at top of interval (39.24m). Moderately sheared at bottom of zone. Pyrite absent from this interval.	307	0%	39.24	39.64	0.37			0.005	
		39.64 - 40.97:	LIGHTLY SHEARED BASALT									
			Basalt slightly foliated (not as intensely as zone above). Foliation makes an angle of 40 with core axis. Pyrite absent. Clay material in fracture 40 to core axis at 40.23m, possible fault.	308 323	0%		40.33 40.97				Trace	
		40.97 - 42.06:	BASALT					÷				
			Medium green, fine to medium grained rock no foliation. Carbonate stringers comprise 5% of interval. Grain size becomes finer with depth. Pyrite content up to 5%, averages 1%.	,309	1%	40.97	42.06	1.10			Trace	

NAME OF PROPERTY\_

HOLE NO. MC-83-23

SHEET NO. 8 OF 9

FOO	TAGE		DECORIDATION	SAMPLE						ASSAYS				
FROM	то	,	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	74	OZ/TON	OZ/TON		
		42.06 - 44.90:	BASALT WITH SILICIFIED ZONES (5%)											
			Fine grained, medium to dark green rock. Silicified zones 2-10cm wide comprising not more than 5% of zone. Wider zones have light brownish-yellow colour, moderately to severely brecciated. Pyrit up to 2% in silicified-brecciated zones and 0 to trace in chlorite zones. Carbonate content 3-5% as lmm-15mm wide stringers in chlorite zones.	310 311 312 e		1	44.06	1.00			Trace 0.005 Trace			
		44.90 - 45.48:	TUFF??  Fine to medium grained with grains 1-3mm in size within a finer matrix. Carbonate stringers less abundant making up less than 1% of interval. Quartz vein cuts		Trac	44.90 e	45.48	0.58			0.005			
		45.48 - 46.36:	across zone at 45.20m at 90° to core axis. Pyrite 0 to trace.  BASALT (BLACK VEINLETS)					·						
•			Fine grained, light green basalt fractured in regular pattern at an angle of 60-70 to core axis. Fractures are less than lmm wide and are filled with black material. Minor veins containing pyrite - trace throughout.	314	Trac	45.48 e	46.36	0.88			0.005			
		46.36 - 47.06:	SILICIFIED ZONE (BROWNISH-YELLOW FRAGS.)											
;			Brecciated and silicified zone. Carbonate within rock up to 3-5%. Brecciated fragments, 1-4mm, have brownish-yellow colour. Pyrite content increases greatly in this interval, 5-10%.	315	5-10 ·	46.36 %	47.06	0.67	-		0.02			

HOLE NO. MC-83-23 SHEET NO. 9 OF 9

FOOTAGE		DESCRIPTION			SAMP	LE	ASSAYS					
FROM TO			NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7,	OZ/TON	OZ/TON	
	47.06 - 55.40:	BASALT WITH SILICIFIED ZONE (1%)  Basalt with 5% carbonates as stringers.  Narrow 1-3cm silcified zones not comprising more than 1% of interval. At 50.93m hematite (specular) vein containing chalcopyrite which makes angle of 30 with core axis. Minor pyrite in silcified zones, trace in basalt.	316 317 318 319 320 321 322 324 325		47.06 48.01 49.09 50.09 51.00 52.00 53.00 54.74	49.09 50.09 51.00 52.00 53.00 54.00 54.74	1.00 1.00 1.00 1.00 1.00 1.00			Trace Trace Trace Trace Trace Trace Trace Trace	-	
	55.40 - 56.11:	LOWER MINERALIZED ZONE (SILICIFIED ZONE WITH BROWNISH-YELLOW FRAGMENTS)  Brecciated silicified zone with brownish yellow fragments similar to interval 46.36-47.06m. Pyrite content increases dramatically to 10-15%.	326	Trac	55.40	56.11	0.76			0.075		
	56.11 - 60.05:	BASALT  Basalt with 1-3cm wide zones of darker rock. In these zones pyrite content increases to 1-2% from 0 to trace throughout the rest of the rock. In the last 0.46m of the interval the rock becomes coarser grained gradually and a lighter green in colour. Possibly gradational contact with new rock type but since it constituted such a small amount of the core it was not noted. Carbonate stringers up to 2-3% of core.  END OF HOLE CASING PULLED  Whole BQ core sent in for assay.	1		56.11 57.11 58.11 59.11	58.11 59.11	1.00			Trace Trace Trace Nil		

NAME OF	PROPERTY	McDerr	nott			
	Mc-83-24		92.66 met	ers		
LOCATION						
LATITUDE	0+50 S	DEPARTURE	9+25 E			
ELEVATION	N	AZIMUTH	344 <sup>0</sup>	_ DIP	~55 <sup>0</sup>	
	May 27, 198					

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	<b>-</b> 55°				
91.44	-52°				

HOLE NO. MC-83-24 SHEET NO. 1 OF 7
REMARKS BO Core

LOGGED BY A.W. Workman

F00	TAGE	DESCRIPTION			SAMP	LE		ASSAYS				
FROM	то	DESCRIPTION	NO.	SULPH-	FROM	FOOTAGE TO	TOTAL	36	75	OZ/TON	oz/ton	
0	8.90	OVERBURDEN										
8.90	14.30	BRECCIATED BASALT										
		Medium green, fine grained to aphanitic, moderately to strongly brecciated and very weakly silicified locally. Breccia fragments are 0.1-5.0mm in size and are concentrated in zones with a fabric at 40° to the core axis. Intense brecciation is often accompanied by silicification and 3-5% pyrite contents; average content is 1-2%. Silicification increases in the lower part of the section. The zone is moderately fractured with hematite and white carbonate in fractures. These fractures, at least in part, post-date brecciation. Micro-fractures at 11.30-12.50 meters are faults with 1-2cm displacement.  12.00 - 14.30: increased brecciation and silicification, up to 20% pyrite in 2-3cm seams of breccia - some lcm aggregates of fine pyrite crystals. Breccia foliation at 25-30° to the core axis at 13.20 m.	331 332 333 334 335 336		8.90 9.90 10.90 11.90 12.90 13.90	10.90 11.90 12.90 13.90	1.00 1.00 1.00 1.00			0.01 tr. tr. 0.01 0.01		
14.30	24.56	SEDIMENTS					·				-	
		Medium to dark green, fine to very fine grained with 1-5cm zones of grey brecciated and silicified rock. The zone is generally weakly to moderately chloritized. Silicification seems to be penetrative and is imposed upon chlorite alteration along narrow fractures. The strongest silicification is closest to these fractures. Bedding laminations are well developed locally (eg. 45° at 14.90 meters). Pale green silicified rock is often found within the laminations - this colouration may reflect sericitization and carries 8-10% pyrite. The rock is generally moderately fractured with quartz and	337 338 339 340 341 342 343		14.30 15.30 16.30 17.30 17.70 18.70 19.70	17.30 17.70 18.70 19.70	1.00 1.00 0.40 1.00 1.00			######################################		

NAME OF PROPERTY McDermott

HOLE NO. MC-83-24 SHEET NO. 2 OF 7

FOOTAGE	DECONICIONAL			SAMP	LE		ASSAYS					
FROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ, TON		
	carbonate filling. Carbonate is dominant in non-silicified rock.  14.65 - 14.92: yellow-green silicification with 8-10% pyrite; intensely brecciated.  14.92 - 15.03: reddish-brown, aphanitic, siliceous zone - carries 5-7% pyrite as 1-2mm cubes. Rock near the contacts of this zone is strongly laminated at 55° to the core axis.  15.03 - 17.70: poorly brecciated but well laminated and chloritized. Minor silicification locally along 1-3cm bands and lenses - about 25% silicified breccia in section. Laminations are developed at 45° to the core axis.  17.70 - 24.56: possible intrusive(??) or chloritized sediments - weakly brecciated but strong locally along some fracture systems. Some pale green breccia is supported in a green chloritic matrix. Minor grey silicified zones are noted. Unaltered rock is characterized by 1-3mm black blebs - altered glass shards? Numerous micro-faults cut the core axis at 30° with up to 2cm of displacement. If this section is intrusive, a sedimentary xenolith is noted at 20.42-20.93 meters. Bedding in this fragment is carbonatized, locally silicified and tends to be chaotic. A second possible xenolith is noted at 22.48-23.25 meters. It is possible that this section is actually interflow sediment rather than intrusive.	344 345 346 347 348			23.99	1.00 1.00 0.57			tr. 0.01 0.01 0.01 0.02			
24.56 25.24	SEDIMENTS  Grey to greenish-grey, fine grained to aphanitic and strongly brecciated. Angular fragments, 0.5mm to 3cm, are grey and intensely silicified. The larger fragments are greenish indicating less effective silicification (silica penetration). The breccia matrix is very siliceous - essentially quartz. The rock is moderately fractured with quartz and carbonate filling. Silica is dominant in zones of silicification. Pyrite, finely disseminated, averages 1%.			24.56	25.24	0.68			0.01			

FORM

HOLE NO. MC-83-24 SHEET NO. 3 OF 7

F001	AGE	DESCRIPTION			SAMPI	LE				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ, TON
5.24	28.24	SEDIMENTS							·		
		Light to dark green, fine grained and moderately chloritized, non-brecciated becoming moderately brecciated towards the base. Brecciation is gradational into the underlying zone. Dilatant zones along fractures up to 2cm in width are carbonate filled. Silicification is relatively rare but may be found in fractured zones up to 3cm in width. The rock is well laminated locally -65-70° at 27.95 meters. The zone averages 0-1% pyrite.	350 351 352		26.24	26.24 27.24 28.24	1.00			0.01 0.01 0.01	
3.24	31.24	SEDIMENIS									
		silicified zones. Alteration is very strong but limited to narrow	353 354 355		29.24	29.24 30.24 31.24	1.00			tr. 0.02 tr.	
1.24	58.58	MAIN MINERALIZED ZONE									
		The zone is composed of several highly silicified sections separated by similar but less completely silicified rock. Pyrite content probably averages about 3% but ranges from 1-10% with up to 1% chalcopyrite locally. Silicification is best developed in intensely brecciated rock. Because of the breccia developed above this zone, and the spotty silicification associated with it, the upper contact of this unit may extend higher than is indicated herein.			•						

FORM :

NAME OF PROPERTY\_\_\_\_\_\_McDermott

HOLE NO. MC-83-24 SHEET NO. 4 OF 7

ſ	F001	TAGE	DESCRIPTION  TRANSTITIONAL SILICIPIED SEDIMENTS			SAMPI	-E		ASSAYS					
	FROM	то			% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	OZ/TON	02/TON		
	31.24	32.60	TRANSITIONAL SILICIFIED SEDIMENTS											
				356 357		31.24 32.34	32.34 32.60				0.05 0.04			
	32.60	42.84	MAIN SILICIFIED ZONE - UPPER PART											
LANGRIDGE LIMITED - TORONTO - 366-1168			and brecciated. Breccia fragments are 0.1mm to 1.0cm in size and are highly angular. The matrix tends to be cream coloured and is essentially quartz. Bedding laminations are present in the uppermost 0.75m of the zone, and although strongly brecciated, is	359 360 361 362 363 364 365 366 367 368	3-5 6-8 7 1-3 3-5 3-5 3-5	33.60 34.60 35.60 36.60 37.60 38.60 39.60 40.60	35.60 36.60 37.60 38.60 39.60 40.60 41.60 42.22	1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.62			0.21 0.23 0.14 0.10 0.06 tr. tr. 0.02 0.01 0.01			
LA														

NAME OF PROPERTY MCDermott

HOLE NO. MC-83-24 SHEET NO. 5 OF 7

								<del>,</del>				
F001	AGE	DESCRIPTION	<b>!</b> _		SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
		39.90 - 40.65: abundant cream and yellowish silicified matrix to breccia fragments - frequently mylonitic. Yellowish zones carry up to 10% pyrite. A chloritized shear is located at 39.90 meters.  40.65 - 41.84: 2-4% pyrite. A 2cm pink carbonate vein is located at 40.90-40.95 meters.  41.00 - 41.08: 3cm chloritized mylonitic seam at 45° to the core axis - fault.  41.84 - 42.84: rock is 50% chloritized sections, remainder is moderately to strongly brecciated and silicified. A minor fault at 70° to the core axis is noted at 41.23 meters.  TRANSITIONAL SILICIFIED SEDIMENTS										
42.84	46.69											
		variably silicified. Silicification is controlled by brecciation. Some carbonatization is noted. Pyrite content ranges from 1-3%. 42.84 - 43.35: very weakly brecciated, 1% pyrite. 43.35 - 46.69: alternating grey silicified rock and green non-	371 372 373	1 2-3 2-3 2-3 2-3 2-3	43.35 44.35		1.00 0.22 0.31 1.00			0.01 0.01 0.07 0.02 0.01 0.03		
16.69	58.58	Purple-grey, aphanitic, intensely silicified breccia accounts for 80-90% of this section. Green chloritized seams make up the remainder. Within silicified rock, cream to yellow coloured zones are common and reflect higher degrees of brecciation and silicification (also sericitization). Fragments are lmm to 2cm in size and are highly angular. The zone averages 3-5% pyrite and a central zone from 48.00-51.00 meters averages 5-7% pyrite. Sulphide is generally confined to the matrix of the breccia and is much less abundant within fragments. Well developed laminations are noted										

OGE LIMITED - TORONTO - 366.11

MC-83-24 SHEET NO. 6 OF 7

FOOTAG	€E.	DESCRIPTION  NO. SULPH FOOTAGE  IDES FROM TO TO								ASSAYS	
FROM	то	DESCRIPTION	NO.		·		TOTAL	- 7	7.	OZ/TON	OZ TON
	50.25: 50.94 - 51.30	increases to 25-30% of the unit. The degree of silicification and intensely brecciated rock remains extremely high. Pyrite averages 3-5% and a trace of	384	1-3 3-5 5-7 5-7 3-5 1-3 1-3 3-5 3-5 3-5 3-5	53.79 54.79 55.79 56.79	47.79 48.79 49.79 50.79 51.79 52.79 53.79 54.79 55.79 56.79 57.79 58.58	1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00			0.02 0.02 0.22 0.15 0.01 0.02 0.01 0.01 0.02 0.03	
58.58 62	The zone begins axis - very regreen becoming grained. The silicification averages 5-79 degree and the underlying underlying underlying underlying axis.	ins at a chloritized seam (fault?), at 80° to the core minor movement, if any, is noted. The rock is darking medium green locally and is fine to very fine a section is locally brecciated and greyish on is found in brecciated sections. Silicified brecciated pyrite whereas non-silicified rock carries 1-3%. The he amount of silicification decreases down-hole into the mit. The rock is non-magnetic. It is well laminated g. 45° at 61.70 meters).			58.58 59.58 60.58 61.58 62.22	59.58 60.58 61.58 62.22 62.86	1.00 1.00 0.64			0.04 0.03 0.01 0.04 0.01	
62.86 77	moderately fr moderate carl carbonate dor bedding lamin	occasionally light green, fine grained and weakly to ractured. Lighter colouration is due to weak to bonatization. Most fracture filling is quartz with minant in the micro-fractures. A well developed set of nations at 45° to the core axis is noted throughout. In the averages 1% with up to 2% locally. At one point of									

HOLE NO. MC-83-24 SHEET NO. 7 OF 7

F00	TAGE	DECORPTION	SAMPLE  NO. SULPH, FOOTAGE							ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ, TON	
		narrow seams of silicified breccia are noted locally. 68.66 - 69.17: major breccia zone - strongly silicified from 68.66- 69.02 meters with 1-3% pyrite and a trace of	410		62.86 63.86 64.86 65.86	63.86 64.86 65.86 66.86	1.00			0.01 0.01 tr. tr.		
		are weakly to moderately silicified.  76.02 - 77.06: deep reddish tone - tuffaceous? Laminations are	411 412 413 414		66.86 67.86 68.66 69.17	67.86 68.66 69.17 70.17	0.80 0.51 1.00			tr. tr. tr.		
77.06	83.20	noted locally - 70° at 76.65 meters.  BASALT	415 416 417 418		70.17 71.17 72.17 73.17	71.17 72.17 73.17 74.17	1.00			tr. tr. tr.		
		Dark green, fine grained massive flow. Minor hyaloclastite and some vesicules are noted near the upper contact. The rock is non-magnetic.	419 420 421 422		74.17 75.17 76.17 77.17	75.17 76.17 77.17 78.17	1.00			tr. 0.08 0.01 tr.		
83.20	86.25	SEDIMENTS	423		79.17	80.17				tr.		
		Dark green, fine to very fine grained and well laminated. The section becomes more poorly laminated down-section but retains a	424		81.17	82.17	1.00			0.01		
		sense of parting parallel to bedding with depth.  84.40: laminated at 45-50° to the core axis.	425		83.17					0.01		
86.25	92.66	BASALT	426 427		85.17 87.17	86.17 88.17				0.01		
86.25	-	Medium to dark green, very fine grained with locally developed aphanitic silicified breccia in 5cm seams. The uppermost part is massive with pillows developing below 91.17 meters.	428		89.17		-	·	-	0.01		
		hassive with pillows developing below 71417 heters.	429		91.17	92.66	1.49			0.01		
1						-						
		92.66 meters END OF HOLE	:									
		CASING PULLED	!			·						
·			:									

NAME OF	PROPERTY	McDERMOTT			
HOLE NO.	Mc-83-25	LENGTH 60.96 m			
LOCATION					
ATITUDE	925 E	DEPARTURE 0+37 S			
ELEVATION		AZIMUTH 344 <sup>0</sup>	DIP	-45 <sup>0</sup>	
	07-06-83	FINISHED09-06-83			

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45 <sup>0</sup>				
60	-39°				

HOLE NO. 83-25 SHEET NO. 1 OF 5 REMARKS Whole core sent for assay. BQ CORE.

LOGGED BY A.W. WORKMAN

		07-0	00-83 FINISHED 09-06-83	II					1			
			DESCRIPTION		9%	SAMF	FOOTAGE		<b>  </b> -		SSA'	
	FROM	то		NO.	SUL PH	FROM	TO	TOTAL	76	%	OZ/TON	oz/ton
	0	7.92	OVERBURDEN							·		
	7.92	10.80	BASALT									
EM, 6-1168			Dark green, fine grained, moderately to highly fractured with white and pink carbonate in fractures - tensional not shearing induced. Carries 1-2% very finely disseminated pyrite.	457 458 459		8.92	8.92 9.92 10.80	1.00			0.01 0.01 tr.	
	10.80	14.60	FOLIATED BASALT		  -  -  -							
			Dark green, fine grained, well foliated basalt - 40-45° to the core axis throughout. The zone contains an increasing number of 3-5 cm silicified patches - grey, harder than chloritized basalt. Silicification may be micro-breccia related - difficult to distinguish fragments due to colouration. Zones carry up to 5% pyrite over the 1-2% average. Micro-faults often cut off silicification along narrow fractures. Rock generally is moderately to highly fractured - dominantly carbonate filled in non-silicified rock - quartz in remainder.	460 461 462 463 464	·	10.80 11.80 12.73 12.95 13.95	12.73 12.95 13.95	0.97 0.22 1.00			0.01 0.01 tr. 0.01 0.01	
۵,			12.73 - 12.95: Mafic intrusive (?) - very fine grained, chloritized strongly and only weakly fractured.									
LIMITED	14.60	18.00	BRECCIATED BASALT						-			
LANGRIDGE L			Grey to greenish grey, frequently green, fine grained lava. This unit has been fractured by a syenitic intrusive. However, the brecciation and silicification in this zone probably is not genetically related to the in-	465 466 467 468		14.60 15.50 15.65 16.65	15.65 16.65	0.15 1.00		•	0.01 0.01 0.01 0.01	

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-25 SHEET NO.

2 OF 5

FOOTAGE	DESCRIPTION			SAMPL	-E				ASSAYS		
FROM TO	DESCRIPTION	NO.	% SULPH IDES	FROM	FOOTAGE TO	TOTAL	7,	7.	02/TON	OZ/TON	
	trusive. The breccia is strongly sheared with chlorite developed in the fractures. A shear foliation has developed locally at 45-50° to the core axis - eg. 16.20m A 2cm clay seam at 16.05 designates a major fault plane at 70° to the core axis. Average pyrite content is 4-5% with up to 7% locally, mostly near the intrusive.  15.50 - 15.65: SYENITE - reddish, strongly silicified intrusive, barren of pyrite, also at 17.86-17.93 and 17.42-17.46 m.			17.65	18.00	0.35			0.06		
3.00 42.12	MAIN MINERALIZED ZONE  The zone is composed of an upper strongly silicified breccia member, a middle variably silicified but non-brecciated member and a lower silicified breccia zone. In general, pyrite contents average 5-7%, but, contents above 10% are noted, particularly in yellowish feldspathized (?) breccia.										
3.00 31.55	1-10mm - very angular and often can be re-assembled. Breccia is strongly silicified and contains an average of 5-7% pyrite. The breccia is frequently feldspathized to a yellow-cream colour - these zones carry 10-15% pyrite and up to 20% locally. Yellowish alteration is penetrative into breccia fragments as evidenced by rim alteration locally. The zone contains abundant chloritized seams below 24.00 metres. It is moderately to strongly fractured with quartz as a fracture filling.	471 472 473 474 475 476 477	5-7 3-5 1-3 1-3 1-3 (	22.00 23.00	20.00 21.00 22.00 23.00 24.00 25.00 core a 26.00 27.00	1.00 1.00 1.00 1.00 1.00 1.00 ctuall 1.00	y)		0.08 0.05 0.03 0.01 0.01 0.02 0.01		

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-25

SHEET NO. 3 OF 5

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM TO OZ/TON OZ/TON TOTAL 20.00 - 21.00: 3-5% pyrite, trace chalcopyrite. 21.00 - 21.35: minor 1-5mm chloritized seams. 24.00 - 27.00: rock is 25-30% chloritized seams largest at 26.48-26.90m. Abundant pink quartz and some carbonate in fractures within quartz stringers. Silicified rock carries 5-7% pyrite vs. 1% in chloritized zones. All rock rypes strongly brecciated. 25.85-26.15: lost core. 26.33: pale green, glassy, lenticular vesicules - flow top? 27.00 - 28.00: strongly silicified - 5-7% pyrite; up to 10% locally. foliation at 40° to core axis. 27.50: 0.01 28.0029.00 1.00 28.00 - 29.09: rock is 50% chloritized in a zone near 480 0.01 a pale grey, aphanitic and porphyritic 481 29.0030.00 1.00 0.01 30.0081.0011.00 intrusive at 31.05-31.12. Intrusive 482 is barren of sulphide and dips at 45-50 483 0.02 31.0031.55 0.55 to the core axis - corresponds to zone at 45.75-46.00m in Mc-83-24. 29.09 - 31.55: becoming better brecciated - strongly silicified. 31.55 37.55 SILICIFIED BASALT 0.05 Grey to greenish-grey, moderately brecciated, intensely 484 31.5532.55 1.00 silicified well-foliated rock. The grey silicified rock 485 32.5533.55 1.00 0.04 alternates with 1-3mm cream colour feldspathized(?) 33.5534.55 1.00 0.06 486

)

NAME OF PROPERTY MCDERMOTT

HOLE NO. \_\_\_\_MC-83-25

\_\_\_\_\_ SHEET NO. 4 OF 5

ſ	F001	TAGE	DESCRIPTION			SAMPI					ASSAYS		
	FROM	то	. DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
			bands. The zone carries 25-40% chloritized rock. The banding is concordant to the foliation. The foliation is likely a primary structural feature at 75° to the core axis. Chloritized rock carries 3-5% pyrite whereas silicified rock carries 5-9%.	487 488 489 490		34.55 35.55 36.55 37.15	36.55 37.15	1.00			0.13 0.07 0.03 0.01		
			34.55 - 34.70: strongly chloritized shear zone at 75° to the core axis; mylonitic silicified fragments in strongly chloritized fault gouge.										
			37.05 - 37.55: 50% chloritized zones.	-									
	37.55	42.12	MAIN SILICIFIED ZONE - LOWER PART						·				
8			The zone is composed of grey intensely brecciated and strongly silicified rock with minor green-grey, fine grained weakly brecciated and chloritized rock. The zones are irregular and do not have a consistent relationship in terms of thickness or apparent orientation to the core axis. The chloritized zones are found in zones up to 10cm thickness accounting for 20-30% of the section. Parting is well developed.	491 492 493 494 495		37.75 38.75 39.75 40.75 41.44	39.75 40.75 41.44	1.00 1.00 0.69			0.02 0.01 0.01 0.03 0.03		
6-116	42.12	45.20	BASALT				-						
ORONTO - 36			Dark green, fine grained, moderately to strongly fractured. Fracturing is tensional and is carbonate filled. Zone contains minor grey silicified breccia - less than 5% of section.	496 497 498		42.12 43.12 44.12	44.12	1.00			0.01 0.01 0.01		
7-0	45.20	46.16	LOWER MINERALIZED (SILICIFIED) ZONE										
LANGRIDGE LIMITE			Dark greenish-grey, aphanitic and intensely silicified in highly brecciated zones. Fragments are extremely angular. The zone also contains appreciable (30-50%) chloritized and silicified, weakly brecciated rock. The degree of silicification is not as high as in this zone	499		45.20	46.16	0.96			0.03		-
4								-			·		

NAME OF PROPERTY MCDERMOTT

HOLE NO MC-83-25 SHEET NO 5 OF 5

F00	TAGE			-	SAMP	LE				ASSAYS	
ROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON
		on sections to the east. Pyrite content also lower at trace to 2%.				,					
6.16	60.96	SEDIMENTS									
		The zone starts at an intensely chloritized seam, cutting the core axis at 60°. The rock is typically medium green, fine to medium grained with abundant randomly oriented tensional fractures. The bedding is well-developed locally: 50° at 48.7m., 75° at 53.5m, and, 40° at 55.2m. The rock carries pyrite up to 1%. Dark green chloritized zones appear to increase in number down-hole. The base of the hole is mod. carbonatized locally. Non-magnetic throughout.	501 502 503 504 505 506	-	47.16 48.16 50.16 52.16 54.16 54.70 55.23 57.00	47.16 48.16 49.16 51.16 53.16 54.70 55.23 56.00 58.00 60.00	1.00 1.00 1.00 0.54 0.53 0.77 1.00			0.01 0.02 0.01 0.01 0.01 0.01 0.01 0.01	
		54.70 - 55.23: grey-green, weakly silicified breccia zone.	309		39.00	80.00	1.00			0.01	
		60.96 metres END OF HOLE CASING PULLED									
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NAME OF	PROPERTY	McDERMOTT
HOLE NO.	Mc-83-26	LENGTH 91.65 meters
LATITUDE	7+75 E	DEPARTURE
ELEVATION		AZIMUTH 344° DIP -60°
		FINISHED 10-07-83

FOOTAGE		1 1	FOOTAGE	DIP	AZIMUTH
0	-60°				
91.44	-54°				

HOLE NO. MC-83-2 SHEET NO. 1 OF 8

REMARKS BO CORE

Core split for assay.

LOGGED BY A.W. WORKMAN

FOC	TAGE				S A M P	LE			, p	SSA	Y S
FROM	1 то	DESCRIPTION	NO.	% SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	oz/ton	oz/ton
0	12.06	OVERBURDEN									·
12.0	6 19.28	BASALT									
		Dark green, fine to medium grained, gabbroic textured rock - not ophitic. Pyroxenes and other mafics comprise 70-80% of the rock volume; feldspar and quartz 20-30%. Mafics are fresh with minor epidotization locally. Generally unstructured with fine grained phases irrequiarly distributed. Minor silicification locally - texture becomes hazy; perhaps related to weak brecciation Carries up to 1% pyrite as a fine dissemination. Below 15.80 m, rock contains 1-3mm black chloritized blebs, may be chloritized micro-xenoliths of wall rock. Moderately fractured with carbonate in fractures. A trace of chalcopyrite is noted locally in these fractures, along with quartz and hematite. The lower contact is highly debatable. A moderately silicified, vaguely textured zone at 19.20-19.28 seems appropriate.	510 511 512 513 514 515 516		13.06 14.06 15.06 16.06 17.06	13.06 14.06 15.06 16.06 17.06 18.06 19.28	1.00 1.00 1.00 1.00			0.01 0.01 Trace Trace Trace	
19.2	8 22.25	BASALT			-				<del>.</del>		
		chloritized glassy top. The upper 0.5 m is amygdaloidal with vesicules squashed along a plane at 40 to the core axis (±5°). The rock contains minor grey, silicified breccia zones up to 3cm in width containing 1-2% pyrite. The unit is highly fractured and 20-30% of the rock	517 518 519 520 521 522 523 524 525 526 527		21.28 22.28 23.28 24.28 25.28 26.28 27.28 28.28	21.28 22.28 23.28 24.28 25.28 26.28 27.28 28.28 29.28	1.00 1.00 1.00 1.00 1.00 1.00			Trace Trace 0.01 0.01 Trace Trace Trace 0.01 0.01 0.01	

NAME OF PROPERTY 2 OF 8 HOLE NO. \_\_\_\_\_MC-83-26

SHEET NO.

SAMPLE FOOTAGE ASSAYS DESCRIPTION FOOTAGE NO. FROM то OZ/TON OZ. TON IDES TO TOTAL 21.09 - 21.12: green clay seam - FAULT at 45-500 to the core axis. 22.25 | 30.30 SEDIMENTS Dark green, fine to very fine grained and well foliated/laminated  $(45^{\circ})$  to the core axis at 26.00 m; 50-60° at 28.25 meters). Minor seams of silicified breccia locally. 24.00 - 25.61: abundant pale yellow to cream coloured feldspathized(?) zones; 1-2% pyrite, pale grey 'speckles' - altered crystals. 26.74 - 26.81: intensely silicified breccia zones, 5-7% pyrite, 1% chalcopyrite. 30.30 49.02 MAIN SILICIFIED ZONE 30.30 | 30.70 | 0.40 0.04 31.70 b.01 Grey-green to purplish-grey, fine grained to aphanitic. The zone 30.70 1.00 31.70 | 32.70 0.01 appears to be very finely laminated throughout on a 0.1-0.5mm scale. 1.00 However, the laminations are only apparent where the sediments are 32.70 33.70 1.00 0.01 chloritized or feldspathized. Alteration highlights the bedding. 0.01 33.70 | 34.70 1.00 The uppermost part is grey-green and weakly to moderately silicified 601 35.50 b.26 34.70 0.80 35.50 35.75 0.04 or alternately, moderately chloritized. Alteration has 0.25 0.05 preferentially affected alternating laminations. Quartz veins 603 35.75 36.75 1.00 cutting this rock are bounded by yellowish reaction halos. Pyrite 604 36.75 37.75 1.00 0.10 38.75 contents up to 20% are noted. Average content may be 5-7%. 37.75 1.00 **0.17** 0.12 38.75 | 39.75 NOTE: The upper zone of "Transitionally Silicified Sediments" is 1.00 **b.01** approximately lcm in thickness. It is composed of cherty 39.75 40.75 1.00 608 40.75 | 41.75 | 1.00 0.02 and chloritized laminations. 609 41.75 42.75 1.00 tr. 30.30 - 30.70: pale grey-green zone with a strongly brecciated 42.75 | 43.75 | 1.00 vellow-cream coloured base - laminated at 550 to tr. core axis.

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-26 SHEET NO. 3 OF 8

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH FOOTAGE OZ/TON FROM TO FROM TOTAL Trace 43.75 44.75 1.00 30.70 - 31.60: purple-grey with yellowish reaction 611 0.01 44.75 45.75 1.00 zones around quartz veins at 31.00, 612 Trace 45.75 46.75 1.00 31.10-31.20 and 31.30. Laminations at 613 0.005 40° to core axis. 3-5% pyrite. 46.75 47.75 1.00 614 31.60 - 32.15: weakly silicified, weakly chloritized. 32.15 - 36.25: intensely silicified and moderate to strong brecciation; may average 8% pyrite but ranges from 10-15% in the upper part to 1-3% at 35.00-36.30 increasing to 5-7% at 36.30-36.95 and 10-15% at 36.95. 33.15 - 33.22: quartz vein appears to mark a tectonic event - rock is broken into 2-5cm semirounded fractured fragments. Above this zone and below, the rock is intensely brecciated and more strongly silicified. 34.25 - 34.35: same as 33.15-33.22 m. 35.50 - 35.72: FAULT ZONE - large scale (2-5cm) fragmentation of breccia with surrounding chloritized mylonitic gouge. At least 5cm of clay at 35.66 m - ground core makes interval uncertain. 35.95: minor chloritized fault. 36.25 - 40.00: sed. lamination becoming apparent, brecciation lowering to weak locally, silicification remains very strong. 36.30 - laminated at 45-50° to core zone from 36.95 to 38.20 carries 10-15% pyrite. 38.20 - 40.00: 1-3% pyrite. 40.00 - 40.50: 5-7% pyrite.

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-26

SHEET NO. 4 OF 8

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM TO OZ/TON 02/TON TO TOTAL IDES 40.50 - 41.35: 1-3% pyrite. 40.59 - 41.20: abundant chloritized stringers across 0.75 m - fault at 40.79 with carbonate cemented breccia. 41.35 - 41.77: less fractured, strongly brecciated and silicified, non-laminated - 5% pyrite. 41.77 - 43.00: vaguely laminated, strongly brecciated  $42.70 - 45^{\circ}$  to core axis. 43.00 - 43.65: hematitic chloritized seams parallel to laminations - 50% of section, laminations at 40-45° to core axis. 43.65 - 44.73: 10-20% chloritized seams - 5% pyrite, trace chalcopyrite - ends at a silicified seam indicating minor fault. 10.005 44.73 - 47.84: intensely brecciated and strongly sili-47.75 48.50 0.75 615 0.71 cified; 3-5% pyrite, trace chalcopyrite 48.50 49.02 0.52 616 - laminated locally at 45° to core axis. 2cm breccia seam carries 40% pyrite, 47.84: marks top of a sheared chloritized zone, carries some mylonite. 47.92 - 47.96: pink quartz vein - barren of pyrite. 47.96 - 48.75: intensely brecciated; 1-2% pyrite, trace of chalcopyrite. 48.75 - 49.02: 5-7% pyrite. w 49.02 57.56 VARIABLY SILICIFIED SEDIMENTS This zone is composed of rocks that are essentially the same as the overlying section. Degree of silicification

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-26

SHEET NO. 5 OF 8

F00	TAGE	DESCRIPTION			SAMPI					ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
1	57.56 inued)	variable but generally related directly to degree of brecciation. The zone is cut by many green chloritized	619 620 621 622 623 624 625 626		50.00 50.42 51.42 52.42 53.30 54.18 55.18 55.87	50.00 50.42 51.42 52.42 53.30 54.18 55.18 55.87 56.56 57.56	0.42 1.00 1.00 0.88 0.88 1.00 0.69 0.69			0.005 0.005 0.005 Trace 0.02 0.005 0.005 0.03 0.04 Trace		
		50.42 - 54.18: 50% chloritized seams, strongly fractured with carbonate cement. Quartz in micro-fractures within carbonate; 1-3% pyrite as a very fine grained dissemination or as 1-2mm striated cubes.  53.20 - laminations at 40° to core axis.  54.18 - 57.56: 10-15% chloritized seams which appear to cut off small felsic stringers in coreseams may be along minor faults.  55.95 - laminations (?) at 40-50°.			·							
מסמים ביים ביים ביים ביים ביים ביים ביים ב		55.95 - 56.00: 10% pyrite.  56.20 - 56.25: dark green 'bed' of sediment (?) contains sub-rounded fragments up to 2mm - matrix is very fine grained, strongly chloritized with 1-3mm black chloritized glass shards; dips 60 to the core axis.										
57.56	66.86	Dark to medium green, fine to very fine grained, strongly chloritized with very fine, often indistinct laminations. The rock is generally well parted along a	÷									

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NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-26 SHEET NO. 6 OF 8

FOO	TAGE	DESCRIPTION			SAMPI	-E				ASSAYS	<u>`</u>	
FROM	то	DESCRIPTION	NO.	% SULPH IDES	FROM	FOOTAGE TO	TOTAL	7.	76	OZ/TON	OZ, TON	
		cleavage parallel to the laminations. Minor moderately silicified breccia is noted locally - generally above 59.70 meters. The rock is strongly carbonated along narrow fractures parallel to and cross-cutting the laminations.  60.75: wispy laminations at 40-45° to core axis 62.85: wispy laminations at 45° to core axis.	627 628 629 630 631 632 633 634 635		57.56 58.56 59.56 60.56 61.56 62.56 63.56 64.56 65.56	59.56 60.56 61.56 62.56 63.56 64.56 65.56	1.00 1.00 1.00 1.00 1.00			0.005 0.005 Trace Trace Trace Trace 0.005 0.02	·	
		63.25 - 63.63: medium grained with up to 3% pyrite. 63.63 - 63.89: moderately to strongly silicified. 63.89 - 64.85: well laminated, brecciated locally, 1% pyrite throughout. 64.85 - 65.28: several 2-3cm pink quartz veins with minor carbonate - no pyrite.	033				1.30					
0NTO - 366-1168	68.14	SILICIFIED SEDIMENT  Green-grey, very fine grained, moderately to strongly silicified, moderately brecciated locally - generally weak brecciation as indicated by a generally well laminated fabric. Silicification is best developed in alternating laminations - reflection of original composition. 3-5% pyrite. Up to 8% locally in strongest silicified zones.	636 637		66.86 67.50					0.02		
LANGRIDGE LIMITED - TOR	86.90	Light to medium green, fine to medium grained; very thin (0.5-1.0mm) laminations are indistinct but sharp locally. Rock is partially carbonatized with carbonate patches feathering out along the laminations. Numerous pink silicified zones up to 8cm thickness are irregularly			69.14 70.14 71.14 72.14	70.14 71.14 72.14 73.14	1.00			Trace Trace 0.01 Trace Trace Trace		

HOLE NO. MC-83-26 SHEET NO. 7 OF 8

FOO	TAGE	DESCRIPTION			SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	OZ/TON	OZ/TON	
	86.90 inued)	Most are brecciated, and may contain higher pyrite contents than average; eg. 3% versus 1% average.  73.47: laminations at 50° to core axis.  83.85: laminations at 50° to core axis.	644 645 646 647 648 649		74.14 75.14 77.14 79.14 81.14 83.14	76.14 78.14 80.14 82.14	1.00 1.00 1.00 1.00		İ	Trace Trace Trace Trace 0.01		
		93.91 - 85.91: possible basalt flow - brecciated, sil. and epid. 1 laminations at 45 to core axis. loc. 1 l	650 651		85.14 86.14					0.01		
86.90	87.90	BASALT			86.90	87.90	1.00			0.01		
87.90	89.25	Medium green, fine grained, thinly laminated locally, well parted parallel to laminations. Angle of laminations is highly variable from 40-70° to the core axis.	653	•	87.90	89.25	1.35			0.01		
1	91.65	Medium green, fine grained to aphanitic, chloritized. Narrow 5cm flow top breccia marks top of unit. Flow is possibly vesicular from 89.40 to 89.60 m. Interior of flow is finely brecciated. A second flow-top is noted by breccia at 90.54-90.62. Matrix to breccia is quartz. Zone 91.00-91.30 is vesicular, and possibly pillowed.	654 655 656		89.25 90.25 90.95	90.95	1.00 0.70 0.70		-	0.01 0.01 0.01		

NAME OF PROPERTY MCDERMOTT
HOLE NO. MC-83-26 SHEET NO. 8 OF 8

FOOT	AGE						T		SAMP	LE				ASSAYS		
<del></del> -			DESCRIF	PTION			NO.	% SULPH		FOOTAGE		<del>                                     </del>	T	<del>,</del>	, <u>.</u>	Т
ROM	то						NO.	IDES	FROM	ТО	TOTAL	7	7.	OZ/TON	OZ/TON	$\downarrow$
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NAME OF PR	OPERTY	McDERMOTT
HOLE NO.	Mc-83-27	LENGTH 61.26 meters
LOCATION _	,	
LATITUDE	7+75 E	DEPARTURE
ELEVATION		AZIMUTH 344° DIP45°
STARTED	0-06-83	FINISHED <u>13-06-83</u>

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45°				
60.96	-42 <sup>0</sup>				

HOLE NO. MC-83-27 SHEET NO.

Whole core sent for assay.

LOGGED BY A.W. WORKMAN

DESCRIPTION			SAMP	LE				SSA	Y S
DESCRIPTION	NO.	SULPH IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	oz/ton
OVERBURDEN									
SEDIMENTS	_								
Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition - that is, re-crystallization of quartz-rich layers.	534		13.80 14.80 15.80 16.80	14.80 15.80 16.80 17.80	1.00 1.00 1:00 1.00			0.01 0.01 0.01 0.01 0.01 0.01	
13.35: laminations at 30° to core axis.		ř							
13.75: laminations at 45-50° to core axis.									
14.70: laminations at 25-35° to core axis.									
16.80 - 17.50: abundant quartz-carbonate veining.						·		·	
17.70 - 18.75: strongly chloritized section with 30% silicified breccia.					·				
MAIN MINERALIZED ZONE						1			
The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of chalcopyrite.									
5	OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition - that is, re-crystallization of quartz-rich layers.  13.35: laminations at 30° to core axis.  13.75: laminations at 45-50° to core axis.  14.70: laminations at 25-35° to core axis.  16.80 - 17.50: abundant quartz-carbonate veining.  17.70 - 18.75: strongly chloritized section with 30% silicified breccia.  OMAIN MINERALIZED ZONE  The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of	O OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition - that is, re-crystallization of quartz-rich layers.  13.35: laminations at 30° to core axis.  14.70: laminations at 45-50° to core axis.  14.70: laminations at 25-35° to core axis.  16.80 - 17.50: abundant quartz-carbonate veining.  17.70 - 18.75: strongly chloritized section with 30% silicified breccia.  MAIN MINERALIZED ZONE  The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. 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The range is 1-8% with traces of	O OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition - that is, re-crystallization of quartz-rich layers.  13.35: laminations at 30° to core axis.  14.70: laminations at 45-50° to core axis.  16.80 - 17.50: abundant quartz-carbonate veining.  17.70 - 18.75: strongly chloritized section with 30% silicified breccia.  MAIN MINERALIZED ZONE  The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of	OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting of quartz-rich layers.  13.35: laminations at 30° to core axis. 13.75: laminations at 45-50° to core axis. 14.70: laminations at 25-35° to core axis. 16.80 - 17.50: abundant quartz-carbonate veining. 17.70 - 18.75: strongly chloritized section with 30% silicified breccia.  MAIN MINERALIZED ZONE  The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of	DESCRIPTION  NO. SUPPL FROM TO TOTAL  C  C  12.80 13.80 1.00 13.80 14.80 1.00 15.34 13.80 14.80 1.00 15.35 14.80 15.80 16.80 1.00 15.36 15.80 16.80 1.00 15.36 15.80 16.80 1.00 15.37 16.80 17.80 18.75 16.80 17.80 18.75 13.35: laminations at 30° to core axis. 13.75: laminations at 45-50° to core axis. 14.70: laminations at 25-35° to core axis. 16.80 - 17.50: abundant quartz-carbonate veining. 17.70 - 18.75: strongly chloritized section with 30% silicified breccia.  MAIN MINERALIZED ZONE  The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of	OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting ing original composition - that is, re-crystallization of quartz-rich layers.  13.35: laminations at 45-50° to core axis.  14.70: laminations at 25-35° to core axis.  16.80 - 17.50: abundant quartz-carbonate veining.  17.70 - 18.75: strongly chloritized section with 30% silicified breccia.  MAIN MINERALIZED ZONE  The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of	OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition - that is, re-crystallization of quartz-rich layers.  13.35: laminations at 30° to core axis.  14.70: laminations at 45-50° to core axis.  16.80 - 17.50: abundant quartz-carbonate veining.  17.70 - 18.75: strongly chloritized section with 30% silicified breccia.  MAIN MINERALIZED ZONE  The zone is composed of a variably silicified and brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of	OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition - that is, re-crystallization of quartz-rich layers.  13.35: laminations at 30° to core axis.  14.70: laminations at 45-50° to core axis.  14.70: laminations at 25-35° to core axis.  16.80 - 17.50: abundant quartz-carbonate veining.  17.70 - 18.75: strongly chloritized section with 30% silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey feldspathized rock. The range is 1-8% with traces of

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC. 83 - 27 SHEET NO. 2 of 6

F00	TAGE	DESCRIPTION			SAMPL					ASSAYS		
FROM	то		NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	
18.75	20.29	SILICIFIED SEDIMENT  The rock is pinkish-green to grey-green, fine grained with 40 - 50% grey silicified zones up to 10 cm. in thickness. Silicification occurs in locallized breccia zones. The remainder of the section is moderately chloritized. Some pink feldspathization is associated with slicified	539 540			19.52				0.02		
20.29	39.64	rock.  20.00 - 20.29: strongly chloritized. The rock is well laminated throughout at 30 - 500 to the core axis. Pyrite averages less than 1% with 1 - 2% in silicified zones.  MAIN SILICIFIED ZONE									,	
		Zone begins at a very sharp contact - probably a fault at 85° to the core axis. Displacement likely minor. Dark grey to bluish-grey, aphanitic to very fine grained, intensely brecciated with fregments 0.1 mm. to 3 mm. in size. Very strongly silicified with sedimentary laminations visible only locally, (eg. 20.40 - 20.50: 45 - 50° to core axis). A syenite dike intrudes the sequence at 21.77 - 22.01 but narrow syenitic veimlets cut at 21.23 - 21.25, 21.70 - 21.75 and 22.72 - 22.77. It is dark red, aphanitic, strongly brecciated and highly siliceous.	542 543 544 545 546 547	1-2 2-3 1	22.29 23.29 24.29 25.15	22.29 23.29 24.29 25.15 26.00 26.73	1.00 1.00 1.00 0.86 0.85 0.73			0.01 0.01 0.01 0.01 0.01 0.08 0.14		
		20.75 - 20.96: FAULT ZONE- 1 cm. clay and mylonite seam - surrounding rock is strongly fractured with chlorite in openings  22.29 - 23.10: 10% crean coloured feldspathized rock with 5 - 7% Pyrite locally; av.=2-3%  23.10 - 26.00: dark grey silicified rock  26.00 - 27.46: Brecciated feldspathized rock							•			

McDERMOTT NAME OF PROPERTY\_\_

HOLE NO. MC-83-27 SHEET NO. 3 of 6

F001	TAGE	DESCRIPTION		. •	SAMP	-E				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	Τ
		27.46 - 29.85 : variable feldspathization - mostly along fracture systems, laminated at 50-60	550	3-5 3-5	28.46	28.46 29.46	1.00			0.09 0.04 0.01		
		29.85 - 30.30 : strongly fractured fault zone - chloritized planes at 30.25 m.		3-5 3-5		30.30 30.75				0.01		
		30.30 - 30.75 : INTRUSIVE - light grey matrix to 1-2 mm. dark green, foliated chloritized mafic minerals at 60° to the core axis	554 555	1-3 3-5 3-5 3-5	30.75 31.75 32.75	31.75 32.75 33.75 34.77	1.00 1.00 1.00			Trace Trace 0.03	•	
		30.75 - 34.77: coarsely brecciated with angular .5-15 mm. fragments, local feldspathization, intensely silicified 3-5% pyrite, 7% locally. Lower 10 cm. is magnetic.	557 558 559	1 1 3-5 3-5	34.77 35.45 36.13 37.13	35.45 36.13 37.13 38.03 38.54	0.68 1.00 0.90			0.01 0.01 0.03 0.01 0.01		
		34.77 - 36.13: dark green, medium to coarse grained intrusive. Carries 20-30% pink angular to sub-angular, fragments of syenitic (?) wall rock. Moderately magnetic. Corresponds to 49.3-50.5 in hole 83-26. Carries 1% pyrite, trace of chalcopyrite locally. Lower		1-3		39.64				0.01		
		contact sharp at 65° to core axis. 36.13 - 38.03 : same as 30.75-34.77 - 3-5% pyrite,							i			
		irregularly feldspathized  38.03 - 38.54: INTRUSIVE - probably same as  34.77-36.13, fragments are dark green, groundmass is pinkish-green biotite? - now chloritized		-								
		38.54 - 39.64: same as 30.75-34.77 - coarsely brecciated with mylonitic phases. local feldspathization, 1-3% pyrite		. <b>.</b>								
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McDERMOTT

SHEET NO.\_\_

4 of 6

FOOTAGE		DESCRIPTION			SAMPI	LE				ASSAYS	
FROM TO		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON
39.64 45.	The zon rock cu The dan penetra later In this appears	SILICIFIED SEDIMENT  ne is composed of a varying amount of chloritized atting brecciated and strongly silicified rock.  ck green chloritized zones seem to have ated into dilatant zones after the breccia was re-brecciated - probably a result of faulting.  s case, the silicification and brecciation to pre-date the dark green rock. This is eserved above 41.63 metres. The silicified rock	564 565 566 567 568 569	1-2 1 1-2 1 1-3	39.64 40.63 41.63 42.57 43.28 43.63 44.71 45.30	41.63 42.57 43.28 43.63 44.71 45.30	0.94 0.71 0.35 1.08 0.59			Trace Trace Trace 0.11 0.01 Trace	
	is high 39.64 - 41.63 -	1 day brecciated and often mylonitic.  41.63: 50% chloritized zones, 1-2% pyrite  42.57: minor pink feldspathization at 41.76-41.86; zone carries an average of 20% chloritized seams  45.30: dark grey to greyish-green often green variably silicified transition to non-silicified, non-brecciated rock. Silicified breccia at 43.28 - 43.63, 44.71 - 45.30. Some irregular laminations at 43.58 m.	571		46.07					Trace	
5.30 46.8	Medium wispy l Parting Moderat dominan	SEDIMENTS  to dark green, fine to very fine grained, vague, aminations (.15 mm. scale), locally.  g is very well developed parallel to laminations. sely carbonatized. Moderately fractured - atly quartz filled. Carbonate in micro-fractures laminations at 65° to core axis	573 574	1 1 1	46.85 47.85 48.85 49.85 50.85 51.85 52.85 54.85 56.85	48.85 49.85 50.85 51.85 52.85	1.00 1.00 1.00 1.00 1.00 1.00 1.00			Trace Trace Trace Trace Trace 0.01 0.01	

NAME OF PROPERTY McDermott

HOLE NO. Md-83-27

SHEET NO. 5 of 6

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH. FOOTAGE FROM OZ/TON OZ/TON IDES 46.85 48.38 SILICIFIED SEDIMENTS Green to greenish-grey, variably brecciated and silicified. Some moderate to strong silicification locally: 46.90-46.95; 47.39-47.48; 47.59-47.62; 47.70-47.75 and 48.30-48.33. Total silicified content is 16%. 48.38 57.85 SEDIMENTS Medium to dark green fine to medium grained, laminated and locally graded bedding. Coarser grained sections may be greywacke. Finer sections are argillitic. Below 50.00 m, the rock becomes better laminated. Some soft sediment deformation is noted locally. Silicification has occurred locally along preferred laminations. 3cm pink quartz vein - barren of pyrite. 48.59: 48.38-48.65: medium to coarse grained, graded bedding tops up. Average grain size at 48.38 is 0.2mm, vs 1.0mm at 48.65; grain size ranges from 0.1 to 3mm. 50.00-57.85: well laminated but irregularly developed brecciation makes orientation indistinct - 70% to core axis at 50.50m. Below 51.00 the zone is very well laminated and well parted parallel to the laminations: 70° to core at 51.20m. Some tensional fracturing across laminations. Weakly silicified at 52.05-52.70. Moderately carbonatized locally. 1% pyrite. 57.85 58.75 SILICIFIED SEDIMENT 581 1-3 57.85 58.75 0.90 0.06 Grey, well siligified, brecciated locally, well | 582 | 1 | 58.75 | 59.75 | 1.00 0.01 laminated at 45° to core axis. Carries 1-3% pyrite, up to 5% locally in association with guartz veining -1 | 59.75 | 60.97 | 1.22 0.01 **i**583 l 584 Trace 60.97 61.260.29 eg. 58.05-58.10 m. 0.01

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-27 SHEET NO. 6 Of 6

				OLE N	o. <u>Mo</u>				EET NO.		
FOOT	AGE	DESCRIPTION			SAMP	LE				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	%	OZ/TON	OZ/TON
58.75	60.97	SEDIMENT									
		Medium green, fine grained, thinly laminated. Well parted. Moderately carbonatized. 59.80 - laminations at 60° to core axis 60.97 - laminations at 60° to core axis									
60.97	61.26	BASALT ?									
		Dark green, fine to very fine grained, non-laminated, weakly to moderately fractured with carbonate cement. Moderately chloritized. Rock type questionable.							•	•	
	61.26	END OF HOLE - CASING PULLED					-		:		
·								·			

NAME OF	PROPERTY	McDERMOTT	
and the second s		LENGTH 61.26 m	
LOCATION	,		
LATITUDE	7+62.5 E	DEPARTURE 0+28 m S	
ELEVATION		AZIMUTH 344° DIP -45°	
		FINISHED 15-06-83	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45°				
61.26	-42 <sup>O</sup>				

HOLE NO. MC-83-28HEE REMARKS BQ CORE
Whole core sent for assay.

LOGGED BY A.W. WORKMAN

										<u>-</u>	
FOO.	T A G E	DESCRIPTION			SAMP	LE			A	5 5 A 1	/ S
FROM	то	DESCRIPTION	NO.	SÚLPH IDES	FROM	FOOTAGE TO	TOTAL	36	%	oz/ton	OZ/TON
0	14.04	OVERBURDEN									
14.04	19.25	SEDIMENT									
	·	Dark to medium green, fine to medium grained and generally well laminated. Above 16.00 m rock is non-laminated, very highly chloritized and medium grained. Sediments carry 1% pyrite with 2% locally.	586 587 588	Tr. 1 1	14.04 15.04 16.04 17.04	16.04 17.04 18.04	1.00 1.00 1.00			0.01 0.01 0.02 0.01	
		17.00: laminations at 70° to core axis.	589 590	1	18.04 19.04	19.04 $20.04$	1.00			Trace	
		17.75 - 18.00: very convolute laminations at 45-50° - soft sediment deformation.		-							
		19.00: laminations at 40° to core axis.									
19.25	51.80	MAIN MINERALIZED ZONE	-								
·		The zone is composed of a variably silicified upper member. Silicification is preferentially located along certain sets of laminations. This member is coarsely brecciated. The main central member is strongly brecciated and intensely silicified. A lower member, below 48.85 meters, is composed of alternating silicified and chloritized zones.									
19.25	21.70	SILICIFIED SEDIMENTS	-	•						·	
		The rock is yellow-green to cream coloured, often grey and fine grained to aphanitic. It is well laminated but individual beds or sets of laminations have been brecciated - rip up clasts? Material filling voids is	591 592			21.04 21.70	1.00			0.005 0.01	

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-28 SHEET NO. 2 OF 5

FOOTAGE	DECORPORA			SAMP	LE				ASSAYS	
FROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7,	OZ/TON	02/TON
	strongly chloritized. The zone, with the exception of the breccia matrix, is strongly silicified. A sense of the laminations is lost at 21.20 meters, where the rock becomes strongly brecciated and very highly silicified, but with 50% chloritized seams.		And the second s							
	20.80: laminations at 30° to core axis.						ļ.,			
21.70	MAIN SILICIFIED ZONE									
	Dark grey to purple-grey with minor yellow-grey felds- pathized(?) zones. Aphanitic, intensely brecciated. No sense of laminations except vaguely at 24.4 m (60° to core axis). Very strongly silicified. Breccia frag- ments are less than lmm to 3mm in size. Larger frag- ments can often be re-assembled - some up to several cm. Fracturing is moderate to strong. Some fractures in fragments, not matrix, pre-dates brecciation. Several stages of fracturing is noted after brecciation. Frac- tures are silica filled and often have cream coloured reaction halos. Pyrite content averages 5% but contents up to 15% are noted - usually associated with feldspath- ized zones.  22.60 - 22.65: fault zone - intense fracturing and chloritization - minor movement.  22.90: 3cm syenitic zone identical to dykes in other DDH.  24.00 - 24.97: feldspathized - yellowish, averaging 8-10% pyrite with 15% maximum.  24.97 - 26.82: purple-grey, 5% pyrite.  24.50 - 31.30: brecciation diminishes and a sense of laminations returns: 60° to core axis at 26.25 m.	594 595 596 597 598 690 657 658 669 661 662 663 664	1-3 5-7 8-10 5-7 8-10 7-9 3 1-3 1-3 1-3 5 3-5	22.70 23.70 24.70 25.70 26.70 27.70 28.70 29.70 30.70 31.70 32.70 34.70 35.70 36.70	22.70 23.70 24.70 25.70 26.70 27.70 28.70 31.70 32.70 34.70 35.70 37.45 38.30	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			0.005 0.005 0.005 0.02 0.02 0.08 0.01 0.04 0.02 0.03 0.02 0.02 0.04 0.13 0.05 0.02	) ) 0.13 \$ 2.00

NAME OF PROPERTY\_\_\_\_MCDERMOTT

HOLE NO. MC-83-28

SHEET NO. 3 OF 5

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE то FROM OZ/TON OZ/TON FROM TOTAL 26.82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains. possible laminations at 50° to core axis. 28.00: 28.53: pyrite content drops sharply to 1-3%. 31.30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecciated rock. Fractures strongly chloritized. 34.85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized - carries pink fragments possibly a mylonite zone? 35.62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicified. 0.02 38.30 - 39.38: 40% dark green chloritized seams 1-2% 666 1-2 38.30 39.38 1.08 0.07 667 3-5 39.38 40.38 1.00 pyrite, trace chalcopyrite. 0.06 668 3-5 40.38 41.38 1.00 669 2 41.38 42.38 1.00 0.01 39.38 - 44.75: as at 35.62-38.30 m; minor 1-5mm quartz 0.02 670 2 42.38 43.38 1.00 veining with carbonate in micro-fractures 0.03 671 2 43.38 44.06 0.68 1-5% pyrite (av. 2%) with up to 1% 0.02 chalcopyrite locally. 672 2 44.06 44.75 0.69 0.01 673 Tr. 44.75 45.54 0.79 0.01 44.75 - 45.54: INTRUSIVE - dark green, fine to medium 674 1-2 45.54 46.52 0.98 0.005 grained, carries pinkangular fragments 675 1-2 46.52 47.50 0.98 0.005 up to 8mm in size - correlates to simi-676 1 47.50 47.98 0.48 677 1-2 47.98 48.85 0.87 0.10 lar zone in DDH #26 and #27. Magnetic. 45.54 - 47.50: irregular feldspathization along fracture systems - strongly brecciated and silicified; possible laminations at 47.54 m at 65° to core axis.

ANGRIDGE LIMITED

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-28

SHEET NO. 4 OF 5

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE FROM TO OZ/TON OZ/TON IDES TO TOTAL 47.50 - 47.98: dark green chloritized zone, coarse grained sediment or mylonite? Grain size 1-4mm (av. 1-2 mm). Black chloritized grains may have been biotite --INTRUSIVE? Non-magnetic. 47.98 - 48.85: strongly silicified and brecciated. 48.85 51.80 SILICIFIED SEDIMENTS The zone is composed of an alternating sequence of dark green chloritized rock and grey, silicified and brecciated rock. Chloritized rock is often sheared. Silicified rock carries 2-5% pyrite. 48.85 - 49.28: chloritized, very weakly silicified. 48.85 49.85 1.00 0.01 678 679 49.85 50.8d 0.95 0.01 49.28 - 50.18: variably silicified, 70% chloritized 0.01 50.80|51.8d 1.00 680 and weakly sheared. 50.18 - 50.60: strongly silicified. 50.60 - 51.30: chloritized zone. 51.30 - 51.80: moderately silicified, weakly brecciated. 51.80 61.26 SEDIMENTS 0.01 Medium green to grey-green, fine to very fine grained 1-3|51.80|52.80|1.00 681 and generally well laminated throughout. Moderately 1-3|52.80|53.80|1.00 0.01 682 0.01 chloritized. Carries 1-3% pyrite as a very fine dis-1-3|53.80|54.8d 1.00 683 semination and as 1-2mm cubes. Some localized silici-0.01 684 1-3|54.80|55.42|0.62 0.01 fication along preferred laminations above 60.0 m in 3-5 55.42 56.14 0.72 0.01 the hole. 1-3 56.14 57.14 1.00 0.01 687 1-3 57.14 58.14 1.00 0.01 54.80 - 56.14: zone of pink and white carbonate vein-688 58.14 59.14 1.00 ing - minor silicified zone at 55.09 -59.14 60.14 1.00 0.01

McDERMOTT

HOLE NO. MC-83-28

5 OF 5

FOO	TAGE		DESCRIPTION			SAMPL					ASSAYS	
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	74	OZ/TON	OZ/TON
		56 50 - 56 72	55.20 and widespread silicification between 55.42 and 56.14 with up to 10% pyrite. Contains 50% carbonate veining. ground core - strongly chloritized	690 691		60.14 60.71	60.71 61.26	0.57 0.55			Trace Trace	
		30.39 - 30.72:	possibly a fault zone.									
		59.90:	laminations at 55° to core axis.									
		61.26	END OF HOLE CASING PULLED									
						-						
	-											
		-										
							,			·		
				٠								
										•		

NAME OF	PROPERTY	McDERMOTT	
		LENGTH 61.26 meters	
LOCATION			
LATITUDE	7+50 E	DEPARTURE 0+26 S	
ELEVATION		AZIMUTH 344° DIP	-45°
		FINISHED _17-07-83	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45°				
61.26	-39 <sup>0</sup>				

HOLE NO. MC-83-29 SHEET NO. 1 OF 6

REMARKS BQ CORE
Whole core sent

for assay.

LOGGED BY A.W. WORKMAN

F 0 0	TAGE	DESCRIPTION			SAMP	LE			A	SSA	Y S
FROM	то	DESCRIPTION	NO.	SUL PH- IDES	FROM	FOOTAGE TO	TOTAL	75	彩	OZ/TON	oz/ton
0	19.00	OVERBURDEN									
19.00	20.15	SEDIMENT		-							
		Dark to medium green, fine grained with minor siliceous sub-angular fragments up to 2cm in size. Well laminated with individual laminations slightly deformed around clasts. Original composition probably alternating quartzitic and argillitic beds. Weakly to moderately fractured - quartz and minor carbonate in-filling. Weakly silicified along certain laminations. Moderately to strongly chloritized.		1-2	19.00	20.15	1.15	·		tr.	
		19.30: laminations at 60° to the core axis.									
20.15	46.23	MAIN MINERALIZED ZONE		·				·			
		The zone is composed of a thin upper member which marks the change from very weakly silicified, non-brecciated rock to a more highly silcified, and highly brecciated rock which forms the central member. It is underlain by a basal member which is characterized by alternating horizons of chloritized and silicified rock. The rocks in this zone were originally sediments.	693		20.15	21.30	1.15			tr.	
20.15	21.30	SILICIFIED SEDIMENT						·			
		The rock is greenish-grey to grey, fine grained and thinly laminated. Laminations are 1-3mm in thickness and are strongly broken. The resulting fragments are highly silicified and set in a green chloritic matrix. Fragments up to 5cm are noted. Below 20.70, the rock	-					·	•		

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-29

SHEET NO. 2 OF 6

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE NO. FROM TO OZ/TON OZ/TON IDES TOTAL becomes intensely brecciated and the percentage of chloritized groundmass diminishes. The laminations fade as silicification increases. 21.30 42.58 MAIN SILICIFIED ZONE 694 2-4 21.30 22.30 1.00 0.02 Dark grey to bluish-grey, cream to honey coloured 2-4 | 22.30 | 23.30 | 1.00 0.03 locally - perhaps as a result of local feldspathization. 2-4 23.30 24.30 1.00 0.06 Very fine grained to aphanitic, moderately brecciated 3-5 24.30 25.10 0.80 0.01 becoming better brecciated with depth. Very strongly 1-2 25.10 26.10 1.00 0.01 silicified throughout. A vague sense of lamination is 1-2 26.10 27.10 1.00 0.01 present locally. Feldspathization seems to be fracture 3-5 27.10 27.75 0.65 0.18 controlled. Tight fracture systems often have 5-10mm 5 27.75 28.3d 0.55 honey coloured halos. Pyrite content averages 2-4%, 0.12 702 3-5 28.30 28.80 0.50 0.06 feldspathized zones usually contain more pyrite - 5-7%. 5-7 28.80 29.65 0.85 Pyrite occurs as a very fine dissemination, as 1-2mm 0.07 3-5 29.65 30.5d 0.85 cubes and as 5mm aggregates of grains. Occasionally 0.07 it fills small fractures - often associated with chlorite 705 5-7 30.50 31.42 0.92 0.04 1-3|31.42|32.23 0.81 0.01 and minor chalcopyrite. 1-2 32.23 32.93 0.70 707 0.01 5-7 32.93 33.73 0.80 0.10 21.30 ~ 24.10: brecciated weakly. Some sense of lam-5-7 33.73 34.53 0.80 ination at 50-65 to core axis; 2-4% 0.11 4-6 34.53 35.53 1.00 0.07 pyrite. 3-5 35.53 36.53 1.00 0.05 3-5 36.53 37.53 1.00 0.07 24.75 - 25.10: more strongly fractured, chlorite in 1-3 37.53 38.53 1.00 713 0.06 very tight fracture systems with halos 1-3 38.53 39.53 1.00 0.02 of feldspathization penetrating into 714 1-2 39.53 40.53 1.00 0.02 rock. 1-2 40.53 41.53 1.00 0.01 3-4 41.53 42.58 1.05 0.10 25.10 - 27.75: rock becoming moderately brecciated; some vague laminations at 60-70° to the core axis. 27.75 - 28.30: rock is 50% feldspathized to a cream or honey colour - 5-7% pyrite locally. 28.30 - 30.50: light grey fragments up to 1cm in a dark grey matrix - strongly brecciated, strongly silicified; 3-5% pyrite.

LANGRIDGE LIMITED - TORONTO

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-29

\_\_\_\_\_ SHEET NO. 3 OF 6

FOOTAGE					SAMP	LE				ASSAYS		
FROM TO	7	DESCRIPTION	NO.	% SULPH,	FROM	FOOTAGE	TOTAL	1 7	7,	OZ/TON	OZ/TON	
	30.50 - 31.42:	brecciation decreases to moderate, rock is well laminated, highly silicified, 5-7% pyrite; laminations at 75-85° to core axis at 30.60 m - individual laminations are brecciated along bedding to produce blocky 1-2mm x 5-6mm clasts.		1023								
	31.26:	very well laminated at $60-65^{\circ}$ to core axis.									-	
	31.42 - 31.85:	highly brecciated, intensely silicified; 1-3% pyrite.										
	31.85 - 32.23:	breccia is very finely re-brecciated on a 1-5mm scale and enclosed in a dark green chloritized groundmass, the zone is 70-80% clasts and may be an INTRUSIVE - upper contact is sharp at 80°; the lower contact is sharp at 40°: a 7cm fragment of sheared chloritized breccia is noted at 31.92-31.99 m - sheared at 70-80° to core axis.										
	32.23 - 32.93:	breccia; same as 31.42-31.85 m.									·	
	32.93 - 34.53:	cream coloured feldspathized; moderately brecciated in upper 30cm becoming laminated at 33.23 m - 65-75 to core axis at 33.40 m; 30-40 at 34.35 m. Pyrite content 5-7%, up to 2% chalcopyrite.										
	34.53 - 36.43:	well laminated, dark grey, very highly silicified, bedding at 55 to 65 throughout, 1-3% pyrite, 1% chalcopyrite					·					
	36.43 - 38.00:	moderately to highly brecciated, possibly feldspathized weakly, highly silicified, 3-5% pyrite.							-			

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-29

SHEET NO. 4 OF 6

F00	TAGE				SAMP	ΓĘ				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	GZ/TON
		38.00 - 39.63: laminated with highly brecciated sections - 60-65 to core axis at 38.50 m.					·				
		39.63 - 41.43: same as 36.43-38.00 m.									
		41.43 - 41.98: weakly to moderately feldspathized, up to 6% pyrite.									
		41.98 - 42.58: grey, strongly brecciated and highly silicified - breccia is re-brecciated into 1-2cm fragments less than lmm, silica stringers in fractures. Fractures have feldspathized halos.		-							
2.58	45.11	INTRUSIVE ZONE									
		The zone is characterized by red to pinkish-red, syen- itic(?) intrusive cutting moderately to strongly chlor- itized green sediment. The intrusive has incorporated a large volume of wall rock. The magma is strongly brecciated and has a cataclastic texture. It is very siliceous as opposed to the sediment xenoliths (50-60% of rock volume). The syenite carries 5-7% pyrite which was probably acquired from the sediments. The upper contact is strongly broken but a contact at 44.17 m is at 50 to the core axis.	718 719 720 721				0.80		-	0.08 0.06 0.01 0.18	
	·	42.58 - 43.45: chloritized xenoliths.									
		43.45 - 44.17: intensely silicified xenoliths.				2					
		44.17 - 44.41: dark green, laminated sediments.									
		44.41 - 44.81: mylonitic, strongly chloritized zone, several barren quartz stringers FAULT?					•				
		44.81 - 45.11: pinkish-red brecciated syenitic dyke - similar to 42.58-44.17 m except only 5% fragments.									

ANGRIDGE I IMITE

NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-29

SHEET NO. 5 OF 6

F00	TAGE	SAMPLE							ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TON	OZ/TON
45.11	50.65	SILICIFIED SEDIMENTS									
		Medium to dark green, fine to medium grained, occasionally coarse grained, locally silicified sediments. Moderately chloritized. Silicified zones are usually intervals of less than 15cm which are moderately to strongly brecciated. These zones are grey in colour and contain 1-3% pyrite above the average of less than 1%.  45.11 - 45.55: 1-3mm syenitic stringers.	722 723 724 725 726 727 728 729	\ \ 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	45.11 45.55 46.23 47.23 48.23 49.23 50.23 51.23	46.23 47.23 48.23 49.23 50.23 51.23	0.68 1.00 1.00 1.00 1.00	·		0.01 0.09 0.01 0.01 0.02 0.01 0.01	
		45.55 - 46.23: begins at a sharp 45° contact - possible fault, rock is strongly brecciated and weakly to strongly silicified.									
		46.23 - 50.65: generally chloritized but contains 13.5% silicified breccia bands; eg. 46.52-47.00 47.14-47.24; 49.00-49.25; 49.55-49.85; and 50.60-50.65. Laminated below 47.60. (75° at 49.15 and 75-80° at 50.80 m).	•								
52.23	53.63	LOWER MINERALIZED ZONE	-								·
		Dark greenish-grey, often blue-grey, moderately to strongly brecciated, very highly silicified in 60% of section, especially 52.35-52.78 m. Laminated at 65-75 to core axis (eg. 53.50 m.). Below 52.78 m, silicification has penetrated selected laminations perhaps because of original composition. Carries 2-3% pyrite.	730 731		52.23 52.93					0.01	
53.63	61.26	SEDIMENTS			-						
		Dark to light green, fine to medium grained, well parted. Weakly to moderately well laminated. Moderately carbonatized locally. An 8cm pink carbonate vein is found at 55.67-55.75 m dipping 60 to core axis - carries 1% chalcopyrite.	732 733 734 735 736		53.63 54.63 56.63 58.63 60.63	55.63 57.63 59.63	1.00 1.00 1.00			0.01 0.01 0.01 0.01 0.01	
-				-					-		
							I	İ			

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NAME OF PROPERTY MCDERMOTT

HOLE NO. MC-83-29

SHEET NO. 6 OF 6

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM 02/TON OZ TON TOTAL laminated at 60° to core axis. 56.02: laminated at 85-90° to core axis. 58.90: 60.37 - 60.41: quartz vein, 1% pyrite. 60.66 - 61.26: beginning at a strongly chloritized seam. texture is different, non-laminated, possibly coarser non-structured sediment - clasts up to 3mm. 61.26 END OF HOLE CASING PULLED

GRIDGE LIMITED - TORONTO -

NAME OF	PROPERTY _	McDERMOTT	_
HOLE NO.	Mc-83-30	LENGTH 69.22 meters	_
LOCATION	·	·	_
		DEPARTURE 0+24 S	
ELEVATION		DEPARTURE 0+24 S AZIMUTH 344 DIP -500	
		FINISHED 23-06-83	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-50 <sup>C</sup>				
69.22	-49				

HOLE NO. MC-83-3 CHEET NO. 1 OF 8

REMARKS BO Core

Whole core sent for assay.

LOGGED BY A.W. Workman S. Trueland

FOOTAGE		TAGE	DESCRIPTION	SAMPLE				ASSAYS				
FROM TO	DESCRIPTION	NO.	SULPH-	FROM	FOOTAGE TO	TOTAL	%	%	oz/ton	oz/TON		
	0	17.42	OVERBURDEN									
1:7	.42	19.65	SEDIMENTS									
			Dark green, fine to medium grained, well laminated with selective carbonatization along certain laminations.	C737	1	17.42	18.42	1.00			0.01	
			This highlights the fine 0.5mm scale bedding. Moderately to strongly chloritized and well parted on chloritized	738	-1	18.42	19.42	1.00			Trace	
			planes parallel to laminations. Some 1-2cm flexures in laminations indicate soft sediment deformation. Contact with underlying silicified sediments is gradational. Occasional pink carbonate veins up to lcm cross-cut	739	1	19.42	20.55	1.13			Trace	
			laminations. Zone contains up to 1% pyrite.					   				
			18.00: laminations at 50-60° to core axis.			~						
			19.15: rippled laminations at 45° to core axis.									
19	. 65	20.55	SILICIFIED SEDIMENTS									
			Greenish-grey to grey locally. Aphanitic to fine grained with preferential silicification of selected laminations. Silicification is found as 0.5-1.0cm bands initially but increases with depth.					·				
			20.48 - 20.53: yellow limonitic banding.									
			20.40: laminations at 45° to core axis.									ļ !
201												

NAME OF PROPERTY McDermott

HOLE NO. \_\_MC-83-30

SHEET NO. 2 OF 8

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM OZ/TON OZ/TON TOTAL 20.55 | 49.65 | MAIN SILICIFIED ZONE Grey to purple-grey, aphanitic to very fine grained; generally laminated but intense brecciation often masks structure. Local zones of yellow to cream coloured feldspathization. Pyrite content is variable (2-15%) but is always higher in feldspathized rock. Very strongly silicified throughout regardless of degree of brecciation. Trace 20.55 - 21.25: grey, very highly silcified, locally C740 1-3 20.55 21.50 0.95 feldspathized, coarsely brecciated with Trace 2-4cm angular fragments; some very tight 7418-10 21.50 22.32 0.82 chloritized fractures. 2-3% pyrite Tr. throughout. сру Trace 742 3-5 22.32 23.32 1.00 21.25 - 21.67: mylonitic fault zone - green strongly Tr. chloritized and foliated at 45-50 to сру the core axis. Trace 743 3-5 23.32 24.32 1.00 21.67 - 22.32: cream coloured feldspathized rock, feld-Trace spathization introduced along fractures. 744 7-9 24.32 25.32 1.00 Pyrite content is 8-10% with up to 12% locally. Well laminated at 45° to the core axis. 22.32 - 25.32: purple-grey, very finely brecciated with 1-2% hematite in very narrow (less than 0.1mm) parallel seams. 3-5% pyrite as very fine dissemination and as 2-4mm clots of crystals. 23.00: laminations at 40-45° to core axis. 24.00: increasing feldspathization.

RIDGE LIMITED - TORONTO - 36

McDermott

HOLE NO. MC-83-30

SHEET NO. 3 OF 8

FOOTAGE		DESCRIPTION	1		SAMPL	-E				ASSAYS	
ROM TO		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON
	25.32 - 28.22:	zone of greater than 50% feldspathization along fracture systems which post-date the brecciation event. Well laminated locally (eg. 25.50:laminations at 60-70 to core axis). Laminations can usually be distinguished even in breccia due to coarseness of brecciation. 10-15% pyritup to 20% locally.	746 747	10-15	25.32 26.32 27.32	27.32	1.00			Trace 0.17 0.02	
	25.85 - 26.03:	brecciated intrusive(?), strongly chlor- itized microfracturing, pinkish-green colour, 1% pyrite.							-		
	28.22 - 29.22:	grey with 10% cream coloured patches, moderately to strongly laminated (40-50 to core axis at 28.50). Light coloured feldspathized(?) patches contain up to 20% pyrite - zone averages 8-10%.	748	8-10	28.32	29.32	1.00			0.15	
	29.22 - 30.54:	cream to honey coloured feldspathized(?) zone, very siliceous. Pyrite averages 10-15% with up to 20% locally occuring as a very fine grained dissemination, as 2-5mm clots of grains and as lensitic stringers along sedimentary laminations (1-2mm x 5-10mm). Trace of chalcopyrite	750		29.32 30.04	İ			N.	0.38	`
	28.82 - 28.90:	chloritized mylonitic seam at 75-80° to core axis - small fault.									
	30.54 - 33.57:	strongly laminated locally and weakly brecciated - individual laminations are	751	1-2	30.87	31.87	1.00			0.01	
		broken with little subsequent rotation.  Bedding measured at 30.55 and 31.55 at  40 to core axis. Carries 1-2% pyrite,	752 753		31.87					0.01	
		up to 4% locally. Chloritized fault plane at 35-40 to core axis at 31.87-31.90. Some laminations are chloritized		1-2		33.37	0.70		-		

NAME OF PROPERTY McDermott HOLE NO. MC-83-30 SHEET NO. 4 OF 8

FOOT	TAGE		ĺ			SAMP	LE				ASSAYS		
ROM	то	DESCRIPTION	·	NO.	% SULPH	' <del>}</del>	FOOTAGE		1 ,	7	OZ/TON	OZ/TON	$\overline{}$
		and hematitic - pr argillitic (3-5% of 32.00 m, rock is wappearing syenitic	of section). Below very pink almost		IDES	FROM	To	TOTAL			027100	01) 104	
		33.00 - 33.57: 1% chalcopyrite in	chloritized fractures										İ
	-	1.5cm - 25% of roo	cely chloritized, cous fragments up to	754	1	33.57	34.52	0.95			0.04		
		present in top 20c within top 20cm of core axis. 34.84- possible fault zon	Hematite fragments are m. Fault or break interval parallel to 35.05 - gap in core - e. Contact with 35.55 is at 18° to	755	15%	34.52	35.55	1.03			0.14		
<u>.</u>		35.55 - 37.15: interval of altern	nating creamy yellow	756	7-10	35.55	36.35	0.80			0.13		
		ciated and silicif Creamy yellow zone interval. Purple with cream coloure ation. Pyrite con zones and 5% withi	es make up 30% of hue rock is brecciated ed infill. No lamin- itent 15% within cream in purple hue rock. approximately 7-10%.	757	7-10	36.35	37.15	0.80			0.07		
		tensely silicified at 55° to core axi	rock with laminations	758 759	•	37.15 38.15	1			· .	0.08		
	÷	var chere are zone	.5 01 Cleam Colouled							•			

McDermott

HOLE NO. MC-83-30 SHEET NO. 5 OF 8

FOOTAGE		DESCRIPTION	l		SAMPI	LE				AS\$AYS	
ROM TO		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ, TON
		rock, comprising 5% of interval, which is more intensely brecciated than purple hue rock.	760 761			-	1.00			0.05	
		37.40 - 37.65: interval of brecciated silicified pink (felds-pathic?) material.	762				1.30			0.04	·
	42.45 - 43.15:	mylonitic fault zone. Medium to light green, fine to medium grained rock with larger 2-4mm pink silicified fragments. Foliation at 45 to core axis. No pyrite	763	0	42.45	43.15	0.70			0.02	
	43.15 - 44.22:	dark grey purple hue rock, moderately brecciated and highly silcified. Lamination at 45° to core axis. Pyrite content ranges from 1-2% up to 8-10% with average throughout interval of 5%.	764	5%	43.15 measu	1	ı			0.01	
	44.22 - 44.80:	creamy yellow brecciated and silicified rock. No distinct laminations within interval. 3 quartz veinlets 2-4mm wide at 30 to core axis. Pyrite content 5%.	765		44.22	44.80	0.58			0.06	
	44.80 - 48.70:			3-5	44.80	45.80	1.00	3. 		0.02	-
	· ·	brecciated and highly silcified. Local- ized laminations at 60 to core axis with laminations absent in other local- ities.	l		45.80 46.80					0.01	
		45.75: lcm carbonate filled fracture followed by a 5cm chloritized zone.	1			]				0.11	
		47.25 - 47.35: 10cm wide zone of creamy yellow brecciated rock. Pyrite content varies		•							

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-30 SHEET NO. 6 OF 8

F00	rage		DECORIDATION			SAMP	-E				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	GZ/TON	
			from 2-10% with an average throughout the interval of 3-5% with trace chalcopyr	f									
		48.70 - 49.65:	interval composed of creamy yellow and dark grey purple hue brecciated and silicified rock. Laminations absent from interval. Fractures in purple hue zone infilled with cream coloured material of what appears to be alteration haloes. Pyrite present as localized highs in areas of cream coloured rock, 5% averagend of main silicified zone.	s	5%	48.70	49.65	0.95			0.13		
9.65	56.68	SILICIFIED SEDIM	MENTS: TRANSITION ZONE										
		sediments. At the is dominant while abundant lower of characterized by with pinkish fractiones softer and to core axis. It	from main silicified zone to chloritize the top of this interval silicification the chloritized sediments become more down in the interval. Silicified zone intense brecciation and silicification agments within the rock. Chloritized thave a well defined lamination at 40-6 by the content throughout zone averages chlorite zones of 1% and highs in sil-										
	·	49.65 - 51.10:	Silicified and Brecciated Rock (65% of interval)										
•			Silicified and brecciated rock makes up 65% of interval. Chloritized zone (35%)		3-5	49.65	50.45	0.80			0.09		
			have laminations 60° to core axis.Pyrit content 3-5% with trace chalcopyrite.		3-5	50.45	51.10	0.65			0.01		
		51.10 - 51.60:	<pre>Intrusive?/Fault Zone?</pre>										
		. ·	light green-grey, medium grained rock composed of quartz, feldspar, biotite							-			

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-30 SHEET NO. 7 OF 8

F00	TAGE				SAMPI	E				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH IDES	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ. TON	
		(Continued) within a finer light grey groundmass.  (Continued) Could this be a fault zone or an intrusive? Laminations at 60 to core axis with contact at bottom of the interval with the sediments at 70 to core axis Pyrite nil within this zone.	' '	nil	51.10	51.60	0.50			0.01		
		51.60 - 56.68: 50% Silicified Zone										
		silicified zones comprise 50% of interval and are more dominant towards the	- 774		51.60	52.60	1.00			0.01		
		top of the zone. Chloritized rock more dominant towards the bottom of the zone			52.60	53.60	1.00			0.14		
		Pyrite content is finely disseminated within the sediments and consistent	776		53.60	54.60	1.00			0.10		
		throughout. Pyrite averages 5% throughout. Laminations at 50-60 to core ax	n- 777		54.60	55.60	1.00			0.01		
		Laminations: C774 60° to core axis C775 45° to core axis C776 50° to core axis C777 60° to core axis C778 55° to core axis	778		55.60	56.68	1.08			0.01		
56.68	69.22	SEDIMENTS										
		Non-silicified rock assumed to be sediments. Carbonate filled fractures become more abundant with depth. Lam-		<b>&lt;1</b> %	56.68	57.68	1.00			0.01		
		inations vary from 40-60° to core axis and are more weldeveloped locally. Lower silicified zone not present	L1 <b> </b> 780	Tr.	57.68	58.68	1.00	-		Trace		
		this hole. Lamination at bottom of the hole not as apparent. Could be basalt?	781	Tr.	58.68	59.60	1.00	meas	ured	Trace		
		Carbonate veins: -59.45m at 15° to core axis, 1-1.5cm	782	Tr.	59.60	60.60	1.00		-	Trace		
		wide with xenoliths60.44m lcm wide at 15° to core axis.	783	Tr.	60.60	61.60	1.00			Trace		
		-69.30m 2cm wide at 80° to core axis.	784	Tr.	61.60	62.50	1.00	meas	ured	Trace		
		7cm wide silicified, brecciated zone at 68.70.	785	Tr.	62.50	63.50	1.00			Trace		
					-		-		-			

NAME OF PROPERTY McDermott HOLE NO. MC-83-30 SHEET NO. 8 OF 8

F00	TAGE	, DECORPORTION			SAMP	LE				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH		FOOTAGE		7,	٦,	OZ/TON	OZ, TON
····				up to	FROM	то	TOTAL		•		
6.68	69.22	cont.	786		63.50					Trace	
			787		64.50					Trace	
			788 789		65.50			ĺ		Trace Trace	ļ
			İ		67.50		_			Trace	
			791		68.50					0.08	
	69.22	END OF HOLE									
		BQ CORE - WHOLE CORE SENT FOR ASSAY						·		·	
		REPORTED HOLE TERMINATION AT 70.12 MEASURED END AT 69.22									
		THE CHIES HODE ISHTERITION III , 0.12 IBROUND BRO AT 07.22									
		INTERVAL 0 - 34.52: logged by A.W. Workman									
		34.52 - 69.22: logged by S. Trueland			-					·	
							-				
			·	-							
	-			-		·					
- :				-							
									•		

NAME OF	PROPERTY	McDermott				
HOLE NO.	Mc-83-31	LENGTH	96.62 mete	rs		
LOCATION						
LATITUDE	7+25 E	DEPARTUR	E0+36_S_			
ELEVATION		AZIMUTH _	344 <sup>0</sup>	_ DIP	-50°	
		FINISHED_				

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-50°				
96.6	-56 <sup>0</sup>				·

HOLE NOMC-83-31 SHEET NO. 1 OF 8
REMARKS BQ CORE
Whole core sent

Whole core sent for assay. Casing pulled.

LOGGED BY A. Workman, S. Trueland

	F 0 0 1	AGE	DESCRIPTION			S A M P	LΕ			A	SSA	Y S
	FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	36	%	OZ/TON	oz/ton
	0	18.29	OVERBURDEN				-					
:	18.29	24.39	core badly ground with some continuous sections - assumed to be bedrock.	,								
	L8.29	27.22	GABBRO									
			Medium green, fine to medium grained rock composed of C	792		18.29	19.29	1.00			0.01	
			30% felsic minerals - principally quartz and feldspar; and 70% mafics, chiefly pyroxene. Numerous light green	793	-	19.29	20.29	1.00			0.01	
			and 70% mafics, chiefly pyroxene. Numerous light green siliceous bands, 2-4mm wide cut core at 45°. Grain size increases down-hole to lower contact at 45° to core axis.	794		20.29	21.29	1.00			0.01	
			Hematite coating on fractures between 21.04 and 24.55 m.	795		21.29	22.29	1.00			0.01	
			Pyrite contents up to 2% are noted locally but average	796		22.29	23.29	1.00			Trace	
			less than 1%.	797		23.29	24.29	1.00			Trace	
				798		24.29	25.29	1.00			Trace	
				799		25.29	26.29	1.00			Trace	1.
				800		26.29	1				Trace	-
١,		40.50						,	·			
4	27.22	42.60	SEDIMENTS	*N	OTE:	CHANGE	OF P	EFIX I	ETTER	SERI	ES.	
			Medium to light green, fine to medium grained well-lamin-	A801		27.22	28.22	1.00	í.		Trace	
			ated locally; grains tend to be well-rounded. Abundant carbonate stringers along laminations - occasionally	802		28.22	29.44	1.22			Trace	
	}		cross-cutting. Moderately brecciated locally with angula	803		29.44	30.44	1.00			Trace	-
			fragments up to lcm. Generally non-silicified but weak to moderate silicification noted locally in the base of	804		30.44	31.44	1.00		-	Trace	-
1				805	•	31.44					Trace	
	Í			806		32.44	33.44	1.00			Trace	
										•		
	}		·									

NAME OF PROPERTY McDermott HOLE NO. MC-83-31 \_\_\_\_\_ SHEET NO. 2 OF 8

			Ŧ					1				
FOOT	TAGE		<u></u>	T = 2 =	SAMPI			·	<del>,</del>	ASSAYS		<b>,</b>
FROM	то		NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
		27.22 - 31.07: laminated section with some brecciation at 28.22-28.55 m.	A807		Ì		1.00		,	Trace	į.	
		28.44 - 28.76: fault zone(?) - rubble for core - abundant carbonate fracture filling below; 1-5mm breaks at angles of 10-20 and 80 to core.	809 810		35.44	36.44 37.44	1.00			Trace		
		and 80° to core.	811		37.44	38.44	1.00			0.01		
		31.07 - 36.53: weakly laminated locally, carbonate stringers at 70-80 to core axis; pyrite	812		38.44	39.44	1.00			0.01		
		stringers at 70-80° to core axis; pyrite content averages less than 1% (local	i .	l		1	1.00			0.01		
		highs of 2%).	814			41.44				0.01		
		36.53 - 42.60: well laminated at 30-60° to core axis, weakly brecciated locally. Laminations 1-5mm thick with minor preferential silicification of individual bands.	815		41.44	42.44	1.00			0.01		
42.60	64.66	MAIN MINERALIZED ZONE								, ,		
-		The zone is composed of a narrow upper transition zone between non-silicified sediments and highly silicified rock. The latter zone is intensely brecciated locally with pyrite contents up to 15%. A few chloritized fault zones are observed locally to intersect the silicified member. The lower part is a gradual transition back to non-silicified sediments. Some high pyrite contents are observed in association with strong silicification.										
12.60	42.87	SILICIFIED SEDIMENT			•							
	,	Dark green to greenish grey, moderately to strongly laminated with increasing silicification of individual laminations then broader 1-5cm zones. Up to 2% pyrite.	816		42.44	42.87	0.43			ô.01		
				•								

HOLE NO. MC-83-31 SHEET NO. 3 OF 8

F001	AGE				SAMP	LE	<u>.                                    </u>			ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	%	OZ/TON	OZ/TON	
42.87	57.90	MAIN SILICIFIED ZONE  Grey with purple hue, yellow to cream locally, aphanitic										•
		to fine grained, very intensely silicified rock.  Brecciation is not ubiquitous throughout zone but is well developed locally. Laminations at 35-55 are developed throughout zone but are frequently masked by brecciation. Purple hued and cream coloured rock is highest in pyrite content with many zones of 10-15%. Average content is probably 6-8% for the entire silicified zone.										
-			817		42.87	43.87	1.00			0.01		
		rock, well laminated at $45-50^{\circ}$ to the core axis with purple coloured rock as	818		43.87	44.87	1.00	}		0.14		
	45	inter-lamination highlight. Cream colour tends to infiltrate around dark fragments in breccia zones - lighter	819		44.87	45.74	0.87			0.10		*
		colour may be due to feldspathization.  45.74 - 46.44: medium green, medium to coarse grained, mylonitic zone with sub-round to round fragments, 1-4mm in size with a few in the cm range. Foliated at 40 to the core axis. No sulphide present.	820	0	45.74	46.44	0.70			0.01		
		46.44 - 49.47: intensely brecciated, generally cream	821		46.44	47.44	1.00			0.01		
	coloured with some grey-purple fragments up to 2cm in size. Laminations are masked and not well exhibited but make an angle of 45-50 to the core axis. Pyrite averages 1-2% and ranges as high as 5%.	E		47.44					0.01			
		49.47 - 49.82: mylonitic fault zone - chloritized zone with 2-6mm brecciated fragments - minor hematite staining.	823		48.44	49.82	1.38		•	0.01		

NAME OF PROPERTY McDermott

HOLE NO. \_\_MC-83-31

SHEET NO. 4 OF 8

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM OZ/TON FROM TOTAL 49.82 - 52.07: dark grey, purple hued, strongly brecciated individual laminations oriented at 50° to core axis. 5% pyrite. 0.01 5 49.82 50.82 1.00 824 52.07 - 53.96: greenish pink, medium grained with laminations at 35-40° to the core axis. 0.10 Composed of quartz, feldspar and altered, 825 50.82 51.82 1.00 0.13 5 | 51.82 | 52.07 | 0.25 chloritized, mafic minerals. Intensely silicified. Average 10-15% pyrite. Laminations are frequently convoluted. 0.01 827 10-15 52.07 53.07 1.00 53.96 - 55.13: green, medium to coarse grained, 60-70% mafic minerals, with 1-4mm pink grains, 0.08 828 10-15 53.07 53.96 0.89 probably intrusive. No apparent pyrite. 0.01 Weakly foliated. 53.96 55.13 1.17 0.12 55.13 - 55.78: same as 52.07-53.96 55.13 55.78 0.65 10 well-laminated with 10% pyrite, very finely disseminated and concentrated along laminations at 50° to core axis. 55.78 - 55.84: chloritized mylonite - fault. 0.19 55.84 - 57.90: cream-brown rock becoming grey to purple-831 10 | 55.78 | 56.78 | 1.00 grey with depth. Not well laminated - locally at 50-60 to core axis. Average 0.02 832 10 56.78 57.90 1.12 10% pyrite - up to 15% locally concentrated along laminations. 57.90 64.66 SILICIFIED SEDIMENT Grey to dark greenish-grey, aphanitic to fine grained, well laminated but intensely brecciated locally. The rock is essentially a continuation of the overlying sidicified zone but with increasing non-sidicified and strongly chloritized rock. Chloritized laminations make up 20-25% of the zone, often as 10-15cm sections. An average pyrite content of 5-6% is noted with a range of

NAME OF PROPERTY\_\_\_\_MCDermott

HOLE NO. MC-83-31

\_\_\_ SHEET NO. 5 OF 8

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM OZ/TON OZ/TON TOTAL 57.90 64.66 3-15%. Pyrite is present as a very fine dissemination, as 1-3mm cubes in carbonate filled fractures, and as clots of grains and crystals up to lcm in size. \*NOTE:C-SERIES SAMPLES 58.05: laminations at 45° to the core axis. C 901 8-10 57.90 |58.90 | 1.00 0.05 0.11 902 3-5 58.90 59.90 1.00 58.98 - 59.20: ground core - strongly chloritized and 0.06 903 5-7 59.90 60.90 1.00 apparently sheared at 50-55 to the core axis; 1-3% pyrite. 0.07 904 7-9 60.90 61.90 1.00 laminated at 30° to core axis. 0.03 60.50: 905 7-9 61.90 62.90 1.00 0.14 906 10-15 62.90 63.90 1.00 62.10 - 62.17: red siliceous zones - syenitic(?) with 20% pyrite in a 2cm zone along each contact. 62.90 - 63.66: very strongly silicified - resembles main silicified zone; very finely brecciated with 1-3mm fragments in a cream coloured feldspathized(?) rock. Pyrite content is 10-15% - mostly in the matrix between fragments - minor graphitic partings. 63.52 - 63.60: syenite - red, aphanitic, 5% pyrite, conchoidal fracture. Siliceous sediment? 64.66 78.74 SEDIMENT 0.12 Dark green, fine grained, moderately chloritized rock, 907 15-20 63.90 64.66 0.76 with selective grey silicification of less than 30% of 0.01 908 1-3 64.66 65.66 1.00 laminations. Amount of silicification rapidly decreases 0.01 with depth. Generally well laminated but brecciation is 909 3-5 65.66 66.66 1.00 widespread and destroys or masks structure. Silicified 0.01 910 1-3 66.66 67.66 1.00 zones up to 15cm are noted locally - seem to be concord-0.01 ant to laminations. Weakly to moderately fractured with 911 1-3 67.66 68.66 1.00 quartz in dilatant zones and carbonate in micro-fractures 912 1-3 68.66 69.66 1.00 0.01 Several 1-2cm carbonate veins are noted locally. Below 70.0 m, carbonate fracture filling becomes dominant. 913 1-3 69.66 70.40 0.74 Trace

ANGRIDGE LIMITED - TORONT

NAME OF PROPERTY McDermott HOLE NO. MC-83-31 SHEET NO. 6 OF 8

FOOT	rage	,	DESCRIPTION			SAMPI	LE				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
		64.80:	brecciated laminations at 30° to core axi	ì	ŀ	71.40 73.40					Trace Trace		
		69.10:	laminations at 60-65° to core axis.  moderately silicified - 5-7% pyrite.			,3.40		2.00		<u></u>	-		
		,	strongly silicified - 1-3% pyrite.										
		67.22 - 69.13:	strongly brecciated and weakly silicified	i.									
		69.72 - 69.92:	chloritized interval with 50% pinkish- red and green 1-2mm xenoliths - intrusive	?									
		69.92 - 70.40:	80% lost core.										
		72.60:	weakly laminated at 45-50° to core axis.				,						
		74.22 - 74.35:	strongly silicified.										
	, .		minor 5cm grey-green silicified zones; several 5mm thick beds of ash-fall tuff, with clasts less than 0.1mm in size - well laminated at 40 to core axis.	917	1-2	75.40 77.40 78.40	78.40	1.00			Trace Trace 0.18		
			Becoming well parted below 76.00 m.  laminations at 40° to core axis.										
		78.00 - 78.37:	DIORITE(?) - pinkish green, with well foliated mafic minerals, about 15-20% pink felsic minerals - similar zone at 77.73-77.81; all are weakly magnetic.			•							
78.74	79.42	SILICIFIED ZONE			-				v				
		inated, and non Moderately to s	aphanitic to very fine grained, well lam- -brecciated except for lowermost 10cm. trongly silicified with selective silici- ividual laminae locally.	919		78.74	79.42	0.68			0.01		

HOLE NO. MC-83-31 SHEET NO. 7 OF 8

PROM   10	FOOTAGE	055001071011			SAMP	LE				ASSAYS		
Medium green, fine grained, well laminated with minor c selective silicification of individual laminations. Minor silicified sections up to 30cm are noted locally (eg. 85.58-85.90). These sections are associated with brecciation of individual sets of laminations and are characterized by moderate to weak carbonatization. Little movement of fragments has followed brecciation. Bedding cuts the core axis at 45-65° at the core axis.  80.00: laminations at 45° to the core axis.  81.62 - 81.70: minor silicified breccia zone.  82.67: laminations at 60-65° to the core axis.  84.25: laminations at 60-65° to the core axis.  87.62 - 87.73: moderately silicified breccia zone.  88.13 - 89.06: breccjated silicified laminations at 45-55° to core axis with alternate laminations or sets of laminations or dilatant zones are strongly chloritized.  90.28: vaguely laminated at 45-50° to core axis.  94.75: laminations become highly convolute for 20-25cm then laminations are lost between 95.0-95.2 m. Rock is well parted to approximately 95.80 m. and more	FROM TO	DESCRIPTION	NO.	1	<u>'</u>	<del></del>		7,	7,	OZ/TON	OZ/TON	
Selective silicification of individual laminations. Minor silicified sections up to 30cm are noted locally (eg. 85.58-85.90). These sections are associated with brecciation of individual sets of laminations and are characterized by moderate to weak carbonatization. Little movement of fragments has followed brecciation. Bedding cuts the core axis at 45-65°.    80.00:	9.42 96.62	SEDIMENTS										
	9.42 96.62	Medium green, fine grained, well laminated with minor C selective silicification of individual laminations. Minor silicified sections up to 30cm are noted locally (eg. 85.58-85.90). These sections are associated with brecciation of individual sets of laminations and are characterized by moderate to weak carbonatization. Little movement of fragments has followed brecciation. Bedding cuts the core axis at 45-65°.  80.00: laminations at 45° to the core axis.  81.62 - 81.70: minor silicified breccia zone.  82.67: laminations at 60-65° to the core axis.  84.25: laminations at 60-65° to the core axis.  87.62 - 87.73: moderately silicified breccia zone.  88.13 - 89.06: brecciated silicified laminations at 45-55° to core axis with alternate laminations or sets of laminations or dilatant zones are strongly chloritized.  90.28: vaguely laminated at 45-50° to core axis.  94.00: laminated at 45-50° to core axis.  94.75: laminations become highly convolute for 20-25cm then laminations are lost between 95.0-95.2 m. Rock is well parted to approximately 95.80 m. and more	921 922 923 924 925 926 927 928		80.42 83.42 85.82 87.42 88.13 89.04 90.98 92.45 FOOTA BETWI (87.4 THE I	82.42 84.42 86.42 88.13 89.04 89.98 91.98 93.45 GE MA EN 28 8 - 9 IGURE	1.00 1.00 0.60 0.71 0.91 0.94 1.00 1.00 RKERS 7' and 3.57 m	307' ) ARI	RE BOX	Trace 0.01 0.03 0.01 0.02 0.01 0.01	-	
			-	•								

NAME OF PROPERTY McDermott

HOLE NO. MC-83-31

\_\_\_\_\_ SHEET NO. <u>8 OF 8</u>

F001	AGE					_					SAMP	LE			-	ASSAYS		
ROM	*^	†		!	DESCRIPT	ION			NO.	% SULPH		FOOTAGE		<u> </u>	T	Γ		1
ОМ	то	ļ								IDES	FROM	то	TOTAL	7.	7.	OZ/TON	OZ/TON	_
		95.00		a volcan tensiona	ic with l fract arse br	abund cures. recciat	ant carbo Minor no ion local	to resemble nate filled n-silici- ly. Non-										
		96.62	END OF	HOLE														
			2112 01									1		İ				
	•		CASING	PULLED				•										
								-										
			•															
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															·	l	-	

NAME OF	PROPERTY	McDERMOTT
		LENGTH 66.14 meters
LOCATION		
LATITUDE	7+25 E	DEPARTURE
ELEVATION		AZIMUTH 344° DIP -50°
		FINISHED 06-07-83

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-50°	·			
63.09	-48°				
		:		:	
		*,			

HOLE NO.MC-83-32 SHEET NO. 1 OF 7

REMARKS BQ CORE

Core split for assay.

LOGGED BY A.W. WORKMAN

	FOOT	FAGE	DESCRIPTION			SAMP	LE	<del></del>		A	SSA	r s
	FROM	то		NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	oz/ton
	0	16.76	OVERBURDEN									
	16.76	21.96	SEDIMENT									
EM. 6-1168			Dark green, fine to very fine grained, poorly to moderately well laminated. Uppermost 2.2m is non-laminated.	C801	}	16.76					0.01	-
Ē	:		Weakly carbonatized, some localized silicification with 1-2mm pyrite cubes. Pyrite content ranges from trace to	802 803	1	17.76 18.76					0.01	
ļ			18.	804	ì	19.76			,		0.01	
			19.15: poorly laminated at 35-40° to core axis.	805		20.76	1	-			0.01	
			21.06: well developed laminations at 65-75° to core axis.	806	1	21.36	21.96	0.60	-		0.01	
			21.50: laminations at 60-70° to core axis.			·						
	21.96	54.63	MAIN MINERALIZED ZONE			,			:	-		
TED,			The section is composed of an upper vaiably silicified zone underlain by a 22.69 m thick zone of intense silicification. This zone carries up to 15% pyrite locally, averaging 5-6%. The zone is brecciated irregularly throughout. It is underlain by a 9 m thick zone of variably altered sediments - a transition zone from strongly silicified to non-silicified rocks.									
LANGRIDGE	21.96	22.92	Dark grey to greenish-grey, well silicified locally, with abundant chloritized seams and fractures. Well laminated with some preferential silicification along	807	1-2	21.96	22.92	0.96		•	0.01	

HOLE NO. MC-83-32 SHEET NO. 2 OF 7

F00	TAGE	,	O.C.C.O.U.D.Y.O.U.	1		SAM!	-LE				ASSAYS	
FROM	то		DESCRIPTION	NO.	2 SULP	FROM	FOOTAG TO	E TOTAL	7.	7.	QZ/TON	GZ, TON
		certain lamina	tions. Contains 1-2% pyrite.									
		22.23:	laminations at $60^{\circ}$ to the core axis.									
<b>.</b> ;		22.80 - 22.92:	limonite filled fracture zone - core badly ground - possible fault.									
41			Minor green clay in ground core at 22.86 m.									
22.92	45.61	MAIN SILICIFIED	O ZONE :									
• .				c 808	3-5	22.92	23.92	1.00	1		0.07	
· , •			ery fine grained, highly silicified and cately well laminated on a mm scale.	809	3-5	23.92	24.92	1.00			0.02	
!		Contains high p	pyrite contents, up to 20% locally. This	810	5-7	24.92	25.92	1.00			0.01	
		zone is less co	ompetent and contains more chloritized is normally expected. Fracturing, part-	811	5-7	25.92	26.92	1.00			0.01	
		icularly the ch	nloritized set, is post-brecciation and	1	5-7	26.92	27.92	1.00			0.01	
		post-silicifica	ection.	813	3-5	27.92	28.92	1.00			0.01	
		22.92 - 24.50:	non-brecciated, cream feldspathized zones along laminations.	814	3-5	28.92	29.92	1.00			0.01	
					3-5	29.92	30.92	1.00	1		0.01	
		24.50 - 26.45:	brecciated - cream coloured zones along laminations and breccia fractures. 5-7%		3-5	30.92	31.92	1.00	į		0.04	
	·		pyrite.		3-5	31.92	32.92	1.00			0.03	
	·	23.75:	laminations at 60-70° to core axis.	818	2-3	32.92	33.72	0.80			0.04	
_		26.45 - 29.92:	weakly brecciated, sense of laminations returns.					·				
		29.92 - 33.72:	weak to moderate brecciation.									
		27.90:	laminations are variable 30-50° to axis	$\cdot$								
		29.30:	laminations at 40° to core axis.									
		29.92 - 30.92:	sample spans an 80cm breccia zone feld-spathized with up to 10% pyrite.							•		

HOLE NO. MC-83-32 SHEET NO. 3 OF 7

-001	rage					SAMPI	LE				ASSAYS		
FROM	то	,	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	T
		33.20 - 33.30:	chloritized shear. C	819		33.72					0.01		
		33.75 - 33.85:	chloritized shear.	820	-	34.82	i	ļ			0.01		
		33.85 - 34.32:	abundant chloritized fractures.	821 822	1	35.60 36.25	1	l			0.01		
		33.72 - 34.82:	INTRUSIVE - dark green, fine grained, moderately chloritized, weakly magnetic with abundant (3-5%) pink silicified xenoliths up to 5mm in size.					0.03					
	-	34.82 - 35.60:	purple grey silicified zone, abundant white carbonate stringers, 3-5% pyrite.							-			
		35.60 - 36.90:	abundant chloritized patches and fracture zones along laminations.										
		36.37:	laminations at 65° to core axis.										
		36.90 - 39.45:	moderately brecciated with 1.5cm frag- C ments, strongly silicified with few	1	1	i					0.01		
			chloritized patches. Numerous 2-3mm quartz stringers cut core axis at 20-25°		1	37.90 38.90	l i				0.01		
		· .	<pre>- post-date breccia. Occasional 5-10cm zones of extreme silicification - rock resembles quartz veins - zones carry</pre>			(30cm	lost (	core)					
	•	·	10-15% pyrite.										
	-	39.45 - 39.75:	lost core.										
		39.90 - 40.85:	intensely silicified with strong feld- C spathization from 40.37-40.85 containing 15% pyrite laminated at 50-60 to core axis.		8-10	39.90	40.85	0.95			0.07		
		40.85 - 41.00:	<pre>INTRUSIVE - dark green, moderately chloritized, non-magnetic, very similar to 33.72-34.82 m.</pre>	827	5-7	40.85	41.83	0.98		•	0.01	*.	

NAME OF PROPERTY McDermott

HOLE NO. MC-83-32

4 OF 7 SHEET NO.

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM OZ/TON OZ/TON TO TOTAL 41.00 - 41.83: strongly silicified with abundant pink carbonate stringers and veins up to 1.5cm in thickness. Pyrite content is 5-7% but up to 15% near carbonate veins. Also chalcopyrite blebs up to 1.5cm in carbonate veins. 0.02 41.83 - 42.94: INTRUSIVE - dark green, fine to medium 828 1 41.83 42.94 1.11 grained, biotite bearing very similar to 33.72-34.82 m. Carries 20% pink and green angular fragments of wall rock fragments have a tuffaceous texture locally, particularly lower in zone. Pyrite content is 1%. 0.07 42.94 - 45.61: purple-grey to cream coloured, intensely 829 10-15 42.94 43.94 1.00 silicified, strongly feldspathized(?) 0.02 830 10 43.94 44.94 1.00 from 43.20-44.56 m. with 10-15% pyrite. 831 7-9 44.94 45.61 0.67 Average pyrite content is 8-10% mostly 0.01 concentrated along laminations. Laminations well developed. Zone is not brecciated. laminations developed at 60° to core axis. 43.40: 45.61 54.63 SILICIFIED SEDIMENTS Well laminated with alternating purple-grey and dark green 1-3mm bands; fine to very fine grained. Moderately to strongly brecciated locally with angular 0.5-1.5cm fragments in a cream coloured, possibly feldspathized rock. Fractures have cream coloured halos. Zone is mostly silicified rock. Chloritized sections are limited to less than 15cm thickness at any one point. Combined, they may total 20-25% of the unit. Pyrite content averages 3-5% with up to 15% locally.

NAME OF PROPERTY McDermott

HOLE NO. MC-83-32

\_\_\_\_ SHEET NO. 5 OF 7

F00	TAGE		055001071011			SAMP	LE				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	
		45.61 - 47.13:	well laminated at 55-60° to core axis.	832	3-5	45.61	46.63	1.00			0.01		
		47.13 - 48.28:	moderately to strongly brecciated.	1	1	46.61	İ				0.01		
		47.60:	laminations at 60-70° to core axis.	834	3-5	47.61	48.61	1.00			0.01		
		48.28 - 48.43:	<pre>INTRUSIVE(?) - dark green, chloritized mylonitic zone.</pre>										
		48.43 - 48.49:	90% pink carbonate veins carrying 1% chalcopyrite blebs, 1-2mm in size and single grains up to 1.5cm in vugs - grain is triangular with sub-angular corners.										
		48.49 - 48.61:	dark green-grey, weakly chloritized.					-					
		48.61 - 49.85:	intensely silicified, often reddish C colour particularly near chloritized seam at 49.05-49.17 m. Some sections resemble quartz veins and carry 5-7% pyrite, (eg. 48.75-48.94 m). Up to 20% pyrite in lower half of zone - clots of crystals up to 1.5cm.	835 836	1	48.61 49.23		0.62			0.01		
		49.85 - 50.30:	very coarsely brecciated with 1-2cm grey intensely silicified fragments in a dark green, weakly chloritized matrix - section is 70-75% silicified. Carries 3-5% pyrite. Laminations are present but un-readable.		3-5	49.85	50.85	1.00		-	0.10		
	÷	50.30 - 51.53:	as above at 49.85-50.30 but without chloritized zones - matrix to silicified fragments is cream coloured due to	838	5-7	50.85	51.80	0.95			0.25		
			fragments is cream coloured due to feldspathization(?). Up to 15% pyrite locally.	839 840	i	51.80 52.45					0.37		
										•			

HOLE NO. MC-83-32 SHEET NO. 6 OF 7

F00	TAGE	OFTODIOTION		· · · · · · · · · · · · · · · · · · ·	SAMPI	E				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	0Z/TON	OZ/TON	
		51.53 - 53.30: same as 49.85-50.30 m.  53.30 - 53.85: INTRUSIVE - dark green, fine to medium C grained with reddish, 1-2mm siliceous fragments (xenoliths), in a moderately chloritized groundmass. Chill zone, 5cm wide, at contact dipping 60-70 to the core axis.	841	1-2	53.30	53.85	0.55			0.01		
			842	1-2	53.85	54.63	0.78			0.01		
54.63	59.33	SEDIMENTS										
		ately brecciated at top of unit generally decreasing	844 845 846	1-2 1-2 1-2	55.63 56.63	56.63 57.63 58.63	1.00 1.00 1.00			0.01 Trace Trace Trace		
59.33	60.31	LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey locally, C aphanitic to fine grained, laminated locally, moderately to strongly silicified with 10% chloritized rock. Zone	848	2-3	59.33	60.31	0.98		•	Trace		

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-32 SHEET NO. 7 OF 7

F00	TAGE				SAMP	LE		I		ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	02/TON	OZ/TON
59.33	60.31	as might be expected from other drill holes. Numerous chloritized partings. Lower contact may be a fault plane at 80 to core axis.						·			
		59.43: laminations at 45° to core axis.									
60.31	66.14	SEDIMENTS									
			C 849	1-2	60.31	61.21	0.90			Trace	
		laminated with depth. Minor narrow silicified bands locally. Pyrite content averages 1% with up to 2%	850		61.21	J .				Trace	
		locally. A pale pink quartz vein is located at 61.21-61.41 m - contacts at 45 and 55 to core axis.	851	1	61.41	1	1			0.01	
			899	1	63.41	1				0.01	
		60.31 - 62.25: minor moderate brecciation locally.	900	1	65.41	66.14	0.73				
		62.35: laminations at 65-70° to core axis.									
		63.09: laminations at 55° to core axis.									
		62.25 - 63.95: well laminated - laminations fade over 5cm sections.			: .						
		64.00 - 66.14: green, fine to medium grained, non- laminated, with abundant tensional fractures - foliation (laminations?) evident at 66.00 at 25 to core axis.									
		64.16 - 64.22: quartz-carbonate vein.				·					
		65.75 - 66.14: fractures strongly hematitized.				·					
								·			
		66.14 END OF HOLE									
	·	CASING PULLED							_		

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NAME OF	PROPERTY _	McDermott
HOLE NO.	Mc-83-33	LENGTH 63.09 meters
LOCATION		
LATITUDE	7+87.5 E	DEPARTURE
ELEVATION		AZIMUTH 3440 DIP -500
		FINISHED 11-07-83

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
_0	-50°	·			
63.00	-49°				
			:		·
,		i			

HOLE NO. MC-83-33 SHEET NO. 1 OF 7

REMARKS BQ CORE

Whole core sent for assay.

LOGGED BY A.W. WORKMAN

F	FOO'	AGE				S`A::M::P	LE	<del>=====================================</del>			SSA	/ S
	FROM	то	DESCRIPTION	NO.	SUL PH	FROM	FOOTAGE TO	TOTAL	%	%	oz/ton	oz/ton
ſ	0	14.21	OVERBURDEN									
-	4.21	22.83	BASALT									
			Dark green, fine to very fine grained, moderately to C	852	0-1	15.00	16.00	1.00			0.01	
			strongly brecciated with angular to rounded fragments up to 4cm in size. Brecciation is probably flow breccia.	853	0-1	16.00	17.96	0.96			0.01	
			The flow was generally massive; abundant tensional fractures are noted below 17.8 m. Relic vesicules are	854	5-10	17.96	18.11	0.15	:		0.01	
	·	1	found at 18.74-18.79 as 3-7mm well rounded chloritized	855	ì	18.11	ļ				0.02	
			amygdules. Some strong silicification is observed locally (eg. 15.03-15.32 m) to carry slightly higher	856	l	20.11	1				0.02	
			pyrite contents - up to 1%. Flow averages less than 1%	857	1	22.11	22.83	0.72			0.01	
			pyrite. Below 19.70 m, the rock becomes fine to medium grained and gabbroic textured - probably central flow.									
	÷		The rock does not appreciably fine towards the lower contact. Rock may be weakly sericitized locally.		·			,				
			18.59 - 18.74: 1-3mm elongated black chloritized specks possibly small vesicules.							,		
			17.96 - 18.11: breccia zone, silicified, 5-10% pyrite, 3-5% chalcopyrite - brecciation extends to 18.30 m.						-		·	
			22.35 - 22.41: highly pyritized sediment xenolith carries 20% pyrite, mostly as cubes; sediments are well laminated.						·			
300	22.83	27.90	SEDIMENTS								,	
			Dark green, fine grained, strongly chloritized and well laminated locally. Uppermost 10cm contains anomalous							•		
1												

NAME OF PROPERTY McDermott SHEET NO. 2 OF 7 HOLE NO. MC-83-33

FOOTAGE		DESCRIPTION			SAMP	LE			<del></del>	ASSAYS	
ROM TO	•	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7	7,	OZ/TON	OZ/TON
2.83 27.90	Most pyrite as 1- are strongly carbo Carbonate stringed varying angles. parallel to the la colour - possible averages 1% and re	laminations at 40° to the core axis. 2mm cubes. Locally, the laminations onatized but still contain 50% silica. rs, 1-2mm in width cut the core at The rock is easily parted along planes aminations. Cleavages have a waxy green sericite alteration. Pyrite content anges from nil to 2%. A trace of chall locally on fracture surfaces	en								
	22.83 - 24.20: we not not not not not not not not not not	ell laminated locally, some massive on-laminated fine grained sections.  recciated - angular fragments up to cm with carbonate filling large ilatant zones - micro-fractures in arbonate are silica filled. Laminated ocally - eg. 40-45 to core axis at 5.00 m.  ell laminated, non-brecciated, a lcm lot of chalcopyrite grains at 27.05m.	859 860 861 862	1 1 1	22.83 23.83 24.83 25.83	24.83 25.83 26.83	1.00 1.00 1.00			0.01 Trace Trace Trace	
\$ .	27.50 - 27.90: cc	6.52: laminations at 50-55° to axis. 6.73: laminations at 70-75° to axis. coarse brecciation similar to 24.20 - 6.45 m, some partings are slickensided lower 10cm of zone is badly ground ore with 30% recovery. 7.80 - 27.90: FAULT ZONE		2-3	27.37	27.90	0.53				

NAME OF PROPERTY McDermott

HOLE NO. MC-83-33

SHEET NO. 3 OF 7

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM OZ/TON OZ/TON IDES TO TOTAL 27.90 MAIN MINERALIZED ZONE The mineralized section lies in fault contact with overlying non-silicified sediments. It is composed of a highly silicified, usually brecciated sedimentary formation overlying a variably silicified and chloritized lower member. 27.90 44.81 MAIN SILICIFIED ZONE Purple-grey with minor green chloritized zones related to localized fault movement. Aphanitic, strongly to intensely silicified, and was originally well laminated. Bedding is marked by brecciation which is nearly ubiquitous. Breccia is well developed becoming weak locally. Fragments are angular, up to 2cm in size - can often be re-assembled. Silicification in this zone is independent of brecciation and is strongest below 31.0 m Pyrite content variable; 2-20%, averaging 5%. It is found as a very fine dissemination, as small clots of grains up to 1cm and as small cubes. Pyrite seems to replace some laminations locally or has moved into fractures along laminations. 0.04 27.90 - 28.16: intensely fractured with thin chlorite C 864 | 3-5 27.90 | 28.90 | 1.00 plates on surfaces; carries 10-12% pyrite. 0.09 865 7-9 28.90 29.90 1.00 28.16 - 29.96: intensely breggiated, some laminations locally at 45° to core axis. Trace сру 29.96 - 30.60: FAULT ZONE - green chloritized fracture 0.03 systems dips at 25-30° to core axis -1866 2-3 29.90 30.65 0.75 mylonitic locally with purple-grey, rounded silicified fragments up to 1.5cm. Fragments have honey coloured reaction rims, and carry 5-7% pyrite.

NAME OF PROPERTY McDermott HOLE NO. MC-83-33 SHEET NO. 4 OF 7

F001	FAGE		DESCRIPTION			SAMP	LE				ASSAYS	
ROM	TO		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	02/TON	OZ/TON
		pı	ntensely silicified and brecciated (urple-grey sediments, some suggestion f laminations locally, 5-7% pyrite.	867		30.65		<u> </u>			0.02	
		fi	s at 29.96-30.60 - FAULT ZONE - racturing at 45° to core axis, silici-ied fragments carry 7-9% pyrite.	868	5	31.12	31.88	0.76			0.10	
			ark purple-grey, intensely silicified,	869	5	31.88	32.88	1.00			0.21	
			yrite content variable 3-7%. Contains	870	3-5	32.88	33.88	1.00			0.21	
		Sy La 33	everal minor chloritized fracture ystems at 32.25-32.48 and 33.55-33.75. aminated locally - 45° to core axis at 3.75 m. Carbonate veining in chloritzed fracture zone.	871	2-3	33.88	34.88	1.00			0.08	·
		34.70 - 37.21: al	bundant chloritized fractures with red	872	1-3	34.88	35.88	1.00			0.05	
		_ s:	iliceous stringers at 35.50-35.60 m section has abundant ground core imilar to zone at 29.96-30.60. Moder-tely fractured with carbonate in		1-3 Trac cpy	35.88 e	36.88	1.00			0.02	
		d: - 20 c)	ilatant zones. Well laminated locally 45° at 35.00 m. Core loss is probably 0%. Zone carries 3-5% pyrite; trace halcopyrite locally, possibly associated ith carbonate stringers.		3-5	36.88	37.88	1.00			0.06	
		, to	ncreasing feldspathization(?) of rock of a cream colour, fewer chloritized ractures, pink carbonate veins at 37.88		3-5	37.88	38.71	0.83			0.07	
		38.71 - 40.15: ci	ream coloured, feldspathized rock, well	876	8-10	38.71	39.43	0.72			0.15	
		bi py ve Ui lo se	aminated in upper half and strongly recciated below 39.4 m. Contains 8-15% yrite concentrated along laminations as ery fine (less than 0.1mm) dissemination to 20% pyrite is noted locally in the ower brecciated section. Carries everal 5mm pink carbonate veins at 60° core axis.	n.	10-15	39.43	40.15	0.72			0.24	

NAME OF PROPERTY McDermott

HOLE NO. MC-83-33

SHEET NO. \_\_\_\_ 5\_ OF 7\_\_\_\_\_

F00	TAGE		DECORDATION			SAMPL	_E				ASSAYS	
FROM	то	•	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON
		40.15 - 41.05:	strongly brecciated, minor chloritized fractures with up to 1% chalcopyrite, variably feldspathized in matrix to breccia fragments - pyrite ranges 5-10%, averaging 6-8%.		6-8	40.15	41.05	0.90	-		0.13	
		41.05 - 42.03:	strongly brecciated, abundant chloritize fractures with white carbonate in-filling 1-3% pyrite, up to 10% locally as 1cm clots in chloritized dilatant zones.		2-4	41.05	42.03	0.98			0.02	·
•		42.03 - 42.67:	purple-grey breccia, few chloritized fractures.	880	1-3	42.03	42.67	0.64	·		0.02	
		42.67 - 43.46:	INTRUSIVE - dark green, fine to medium grained, well foliated (45-50 to core), mafic minerals (biotite?). Non-magnetic carries 50% xenoliths of silicified sediment. Fragments are 1-8mm in size and are well rounded. Carries 1% pyrite locally. Upper contact at 60 to core axis. Lower contact at 65 to core axis		1-2	42.67	43.46	0.79			0.01	
	·	43.46 - 43.97:	purple-grey, silicified breccia same as 42.03-42.67 m.	882	2-3	43.46	44.46	1.00			0.01	
		43.97 - 44.30:	chloritized fracture zone.									
·		·	silicified breccia becoming less silicified with depth.	883	2-3	44.46	44.81	0.35	-		0.02	
4.81	51.30	SILICIFIED SEDI	MENTS				-					
		chloritized sec with variable p up to 5% in sil	green-grey, becoming green locally in tions. Very fine grained to aphanitic yrite contents - 1% in chloritized rock, icified rock. Generally moderately to ated with angular fragments up to several								·	

HOLE NO. MC-83-33 SHEET NO. 6 OF 7

F00	TAGE				SAMP	LE				ASSAYS	<del>-</del>	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TON	OZ/TON	
44.81	51.30	cm. Silicified strongly except in green chloritized C	884	1-2	44.81	45.81	1.00			0.01		
		zones. These zones of chlorite alteration total 19% of the section and are located at: 45.23-45.30; 45.70 -	885	1-2	45.81	46.81	1.00		!	0.01		
		45.80; 46.15-46.44; 47.30-47.38; 47.86-47.95; 47.99 -	886	3-5	46.81	47.81	1.00			0.01		
		48.17; 48.42-48.62; 50.80-50.94; 51.14-51.21. Laminations are well developed locally.	i	}	47.81	1	1			0.03		
		48.53: brecciated laminations at 45° to axis.	888	1-2	48.81	<b>1</b> 9.57	0.76			0.01		
		49.57: contact between silicified brecciated sediments and intrusive - sediments become more strongly silicified 15cm from contact. Little fining of intrusive near contact at 60° to axis.							·			
		49.57 - 50.64: <u>INTRUSIVE</u> - same as 42.67-43.46; weakly magnetic.	889	1	49.57	50.64	1.07			0.01		
		50.64 - 51.30: silicified breccia with 32% green chloritized rock.	890	1-2	50.64	51.30	0.76			0.01		
51.30	63.09	SEDIMENTS			-							
			891	1-2	51.30	52.30	1.00			0.01		
		laminated but structure is locally obliterated by moderately developed brecciation. Weakly carbonatized	892	1-2	53.30	54.30	1.00			Trac	•	
	·	along certain preferred laminations and sets of bands. Minor silicification locally, weakly to moderately developed, in association with breccia zones. Average	893	1	54.30	55.25	0.95			Trac	=	
· .	·	of 1% pyrite, up to 3% with silicification. Trace of chalcopyrite on partings which are well developed parallel to laminations.					·	·				
		55.25 - 56.22: several zones of silicification, locally brecciated.	894	2-3	55.25	56.22	0.97	·		0.05		
		56.76 - 57.00: INTRUSIVE - similar to 49.57-50.64 m, very weakly magnetic.	895	2-3	56.22	57.22	1.00		•	0.02		

NAME OF PROPERTY McDermott

HOLE NO. MC-83-33 SHEET NO. 7 OF 7

FOOTAGE	DECCRIPTION	SAMPLE ASSAYS
FROM TO	DESCRIPTION	NO. % SULPH FOOTAGE COLORS FROM TO TOTAL % % OZ/TON OZ/TON
	58.00 - 63.09: parting is very well developed parallel to laminations.  58.40: laminations at 60° to core axis.  60.10: laminations at 60° to core axis.  61.35: laminations at 50° to core axis.  62.22: laminations at 55° to core axis.	896 0-1 58.22 59.22 1.00 0.01 897 1 60.22 61.22 1.00 0.04 Frace cpy 898 1 62.22 63.09 0.87 0.01
	63.05: laminations at 60° to core axis.  63.09 meters END OF HOLE  CASING PULLED	

NAME OF	PROPERTY	McDermott	
		LENGTH 62.80 meters	_
LOCATION			
LATITUDE	8+12.5 E	DEPARTURE0+50 S	
ELEVATION		AZIMUTH	
		FINISHED 15-07-83	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-50°	i		·	i
62.80	-48°	11			
,					

HOLE NO. MC-83-34 NO. 1 of 7

REMARKS BQ CORE

Core split for analysis.

LOGGED BY A.W.WORKMAN

-	FOOT	AGE	DESCRIPTION			- 54 AMM-1P	LF E	i		A	SSA	/ S	
	FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	oz/ton	
	0	21.95	OVERBURDEN				•	·	:				
	21.95	29.86	FAULT ZONE - SEDIMENTS ?										-
		·	Dark green to grey-green, fine to very fine grained rock. Strongly chloritized, weakly silicified locally. Probably an altered sedimentary (volcanoclastic?) rock.	i	1	21.95 22.95		101			Trace		
			Highly sheared and broken. Fractures are limonite coated	936	nil	23.95	24.95	1.00			Trace	1	
			occasionally hematitic. Core recovery is 70%. Possible sediment laminations at 26.90 m, dip 45-50 to the core	937	1	24.95	25.95	1.00	,		Trace		
			axis.	938		25.95			:	i	Trace		
		:	27.15 - 29.48: 45% core recovery - badly ground.	939		27.80					0.01		
			27.40 - 27.80: core lost.	940	1	29.48	30.48	1.00		-	0.01		
	29.86	31.32	28.60 - 29.48: core lost 29.60: clay filled fault zone. SEDIMENT(locally silicified)	-	-			,					4
			Dark green with grey to grey-green bands and laminations. Fine to very fine grained. Grey colouration is result of weak to moderate carbonization of selected sets of laminations. Occasional grey silicification of individual laminae. Rock is poorly laminated locally. Contains 1% pyrite - up to 2% locally as a very fine grained dissemination.	,	1	30.48	31.32	0.84			0.01		
1	31.32	53.57	MAIN MINERALIZED ZONE										
			This zone is composed of an upper variably silicified, frequently brecciated member overlying the Main Silicified Zone. This unit is strongly silicified and										

NAME OF PROPERTY McDermott HOLE NO. MC-83-34 SHEET NO. 2 OF 7

FO	OTAGE	· DESCRIPTION	T		SAMPI	_E				ASSAY5	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON
31.3	2 53.57		l .	ł	31.32	[				Trace	·
		15% pyrite - rarely 20%, and traces of chalcopyrite. It is underlain by a transitional zone of irregularly silicified and brecciated rocks.	I		32.32	i ;				Trace Trace	
31.3	2 34.62	SILICIFIED SEDIMENT	945	2-4	33.97	34.62	0.65	•		0.03	
		Dark green to greenish-grey, fine to very fine grained, well laminated but frequently brecciated rock. Breccia zones tend to be grey in colour and moderately to strongly silicified. Some selective silicification of individual laminations is noted. Laminations are 0.5-2.0mm in thickness. In weakly silicified rock, tuff(?) clasts up to 4mm are greenish grey in a green argillitic(?) matrix. Clasts have indistinct boundaries The section averages 3% pyrite, ranging 2-4%; very finely disseminated, and as 1-2mm crystals often in 1-1.5cm clusters. Trace of chalcopyrite locally.  32.05:  laminations at 40-45° to core axis - grey elongated, 2-3cm zones (clasts?) are strongly carbonatized.									
99		32.80: 1.5cm syenitic vein.									
-TORONTO - 366-1168		33.97 - 34.43: INTRUSIVE - dark green, very strongly chloritized, very weakly magnetic, red brecciated siliceous xenoliths are 50% of rock volume. Highly pyritized contacts (20%) averaging 3-4% very finely disseminated pyrite.	·								
34.62	50.98	MAIN SILICIFIED ZONE  Purple-grey locally, greenish-grey, aphanitic to very fine grained, strongly to intensely silicified. The rock is moderately to strongly brecciated. Dilatant zones in the breccia are filled with cream to light grey, occasionally white coloured silica. Fragments		•							
LANGRII		rock is moderately to strongly brecciated. Dilatant zones in the breccia are filled with cream to light grey, occasionally white coloured silica. Fragments							-		

McDermott NAME OF PROPERTY\_\_\_

HOLE NO. MC-83-34

3 of 7

F00	TAGE		DESCRIPTION			SAMP	LE				ASSAYS		
FROM	то	•	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TON	02/TON	1
34.62	50.98	grit. Some tens breccia is noted highest in very up to 20%. The mylonitic seam a	2-5mm in size often with less than 0.5mm sional fracturing which post-dates the 1 - quartz filled. Pyrite contents are finely brecciated, or mylonitic rock - zone averages 5-7%. A highly pyritized at 35.02 is displaced 6cm by a fault as at 40°. Single clots of pyrite grains noted.										
				946	5-7	34.62	35.62	1.00			0.11		
			resembles a brecciated quartz vein.	947	5-7	35.62	36.23	0.61			0.05		
			variably feldspathized yellow-grey patches, and halos around fractures. 7-9% pyrite, up to 12% locally. Tensional fractures at 60-75 to core axis are cut by chloritized fractures at 10-20 to core axis with lcm displacement.	1	7-9	36.23	36.98	0.75			0.07		
			dark grey to purple-grey, intensely brecciated, 1-2% pyrite rapidly increasing down-hole to 5-7%; very finely disseminated. Pink carbonate vein with fine quartz particules at 37.30-37.31 at 150 to core axis.		2-4	36.98	37.50	0.52			0.02		
-	`		same as 36.23-36.98 - more abundant quartz veining along tension fractures.	950	5-7	37.50	38.50	1.00	-	-	0.03		
		38.50 - 39.85:	as above - abundant chloritized fracture - average 1 per 10cm of core.	951	5-7	38.50	39.85	1.35			0.06		
		39.85 - 41.87:	variably feldspathized, intensely sil-	952	7-9	39.85	40.85	1.00			0.05		
			icified breccia; 7-9% pyrite, up to 15% locally, trace chalcopyrite. Pyrite	953	10-12	40.85	41.85	1.00	,		0.04		
			fills fractures up to 4mm wide in 10-15mm long stringers. Also clots up to 1.5cm of smaller grains. Abundant chloritized fractures.	1	10–15	41.85	42.83	0.98		•	0.05		

NAME OF PROPERTY McDermott

HOLE NO. MC-83-34 SHEET NO. 4 Of 7

F00	TAGE		DESCRIPTION			SAMP	LE				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7	7,	OZ/TON	OZ/TON	
•		41.87 - 42.83:	cream to pale yellow coloured, felds- pathized zone, strongly brecciated - fragments up to 1cm can be reassembled from finer clasts. Material in the										
			1-2mm range appears to be tuffaceous(?). Relic sedimentary laminations are observed locally (eg. 60-65° at 42.00 m and 50-60° at 42.65 m). Pyrite averages 10-15% as very fine dissemination, in clots of grains and as individual crystals concentrated along laminations.										
		42.11 - 42.33:	FAULT ZONE - abundant chloritized fractures at 70-75 to core axis, chloritized mylonite at 42.18-42.33 m.	1				·					
		42.83 - 42.85:	FAULT - dark green clay seam at 50-60° to core axis.	955	5-7	42.83	43.80	0.97			0.02		
		42.85 - 43.80:	rock becomes dark purple-grey, strongly brecciated and intensely silicified. Reddish syenitic material at 43.41-43.47 and 43.57-43.74 m.					-					
		43.80 - 44.81:	INTRUSIVE - dark green, fine grained, intensely chloritized and contains abundant (50% by volume) siliceous xenoliths - angular to sub-rounded, up to lcm in size. Intrusive contacts are chilled and extremely broken. Non-magnetic but strongly resembles magnetic dikes in other holes west of this section. May be biotitic. Up to 1% pyrite.	956	1	43.80	44.81	1.01			0.02		
		44.81 - 45.19:	greenish-grey, fine to medium grained and very finely brecciated, abundant honey coloured alteration (feldspathization?). Un-structured. Very weakly magnetic near upper contact. Average 10% pyrite. May be tuffaceous.	957	10	44.81	45.19	0.38			0.07		

McDermott

HOLE NO. MC-83-34

\_\_\_\_\_ SHEET NO. \_\_\_\_\_ 5 of 7

FOOTAGE		DESCRIPTION		SAMPLE					ASSAYS					
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON		
		45.19 - 49.91:	variably feldspathized, strong locally C in 10cm sections, appears tuffaceous	•	1	Į	1	1.00			0.02			
			locally, 3-4% pyrite, trace chalcopyrite	959	1	46.19					0.01			
			Chloritized planes cross-cut vague	960 961		47.19 48.19					0.02			
			sedimentary fabric at 10-20° angle. Weakly fractured - quartz filled.	l	1	49.19					0.02			
•		49.91 - 50.47:	moderately silicified, weakly chloritized greenish-grey in colour. Chloritized plane at 50.24 m is a fault at 80 to the core axis. Pyrite content is 3-5% with a trace of chalcopyrite on chloritized planes.		3-5 Trac cpy	þ	50.47	0.56			0.01			
		50.47 - 50.98:	as above at 45.19-49.91, few chloritized fractures; 2-4% pyrite.	964	2-4	50.47	50.98	0.51			0.01			
50.98	53.57	SILICIFIED SEDI	MENTS	·										
			Dark purple-grey, green grey and dark green, aphanitic to fine grained rock.	965	2-4	50.98	52.00	1.02			0.01			
		·.	Grey areas are strongly brecciated and moderately to intensely silicified.	966	2-4	52.00	53.00	1.00		-	0.01			
			Green zones are brecciated weakly, non-silicified but moderately to strongly chloritized. Carries 2-4% pyrite, mostly in silicified rock. Occasional quartz stringers with 1-2 mm. blebs of chalcopyrite. Lamminations are noted locally, often rippled and/or brecciated Abundant white carbonate in veins, vugs and small fractures. Acid etch indicate pink quartz occupies 50% of fracture volume. Carbonate occurs as clasts in quartz. Lower contact of zone is gradational. Silicified rock is located at: 51.05-51.10; 51.30-51.33;		2-4	53.00	54.00	1.00			0.02			
			•											

McDermott

HOLE NO. MC-83-34

SHEET NO.\_

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FOOTAGE		DESCRIPTION				SAMP	LE		ASSAYS				
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7,	7.	OZ/TON	OZ/TON	l .
			51.53-51.77; 52.00-52.02; 52.35-52.38; 53.38-53.57, totalling 21.5% of section.		IUES	FROM		10182					
		51.98:	laminations at 60° to core axis.										
		54.68:	rippled laminations at 60° to core axis										
-		55.25:	vague laminations at steep angle to core axis, at least 60'.									-	
53.57	60.23	SEDIMENTS				-							
		Medium to dark	green, fine grained, vaguely developed (oming better with depth. Silicified only		1-3	54.00	55.00	1.00			0.02		
		locally (eq. 56	.38-56.51m.), in response to locallized ay be tuffaceous. Pyrite 1-3%.	969	1-3	55.00	56.00	1.00	j		0.01		
		55.40:	laminations at 55' to core axis.	970	1-3	56.00	57.00	1.00			0.01		
		57.70 - 58.65:			1-3	57.00	57.70	0.70			Trace	·	
		37.70 30.03.	with greater than 25% of rock volume composed of siliceous reddish-pink	972	1	57.70	58.65	0.95			Trace		
		·	fragments up to several centimeters. Micaceous, possibly biotitic. Well	973	1-3	58.65	59.18	0.53			0.01		
		•	foliated at 45° to the core axis. Weakly magetic, 1% pyrite.	974	1-3	59.18	60.23	1.05			Trace		
		58.65 - 59.18:	moderately silicified breccia, 2-3% pyrite, trace chalcopyrite on chloritize fractures. Intrusives at 58.99-59.03. Same as intrusive at 58.0 m.	d	-					·		-	
	·	59.75:	becomes well parted at 60-65° to core axis along what may be a vague bedding lamination.										
								· -		•			

NAME OF PROPERTY\_\_\_\_\_McDermott

HOLE NO. MC-83-34

SHEET NO.\_\_

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FOOTAGE			I		SAMP	LE	ASSAYS				
FROM	то	DESCRIPTION	NO.	% SULPH	1	FOOTAGE	Ξ	<u> </u>	T	OZ/TON	OZ/TON
FROM	- 10			IDES	FROM	то	TOTAL	7.	7.	02/108	02,104
50.23	61.02	LOWER SILICIFIED ZONE									
		Purple-grey to greenish-grey, with medium green sections Aphanitic to fine grained, and strongly brecciated. Moderately to strongly silicified. Pyrite content averages 2-3%, as a very fine dissemination. Green sections are moderately chloritized. Weaker silicification reflects weaker brecciation.	975	2-3	60.23	61.02	0.79			0.01	
1.02	61.30	INTRUSIVE									
		Medium green, fine to medium grained. Possibly contains biotite - well developed foliation at 60-65° to core axis. Weakly magnetic. Same as zone at 57.70-58.65 m.	976	0-1	61.02	61.30	0.28			1.10	
1.30	62.80	SEDIMENTS									
		Medium to dark green, fine to medium grained, coarsening down-hole. Well laminated locally. Many carbonated filled tension fractures throughout.	ļ ·		61.30 62.05					0.01	
		62.28: laminations at 45' to core axis.			02.03	02.00	0.73				
		62.46: coarses to medium grained, unstructured, tensional fractures, occasional 1-1.5 mm. black chloritized specks - possibly devitrified shards of volcanic glass.						,			
		60 00 DVD 0D VOTD									
		62.80 END OF HOLE /								'	
		CASING PULLED						/			
		CASING PULLED									

NAME OF	PROPERTY	McDermott				
HOLE NO.	Mc-83-35	LENGTH	91.74 m.			
LOCATION						
LATITUDE	8 + 00 E	DEPARTURE	0 + 60	) S		
ELEVATION		AZIMUTH	3440	DIP	-60°	
		FINISHED _ ]				

FOOTAGE	DIP,	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-60°C			:	
91.74	-52°	11	i		
				•	

HOLE NOMC-83-35 SHEET NO. 1 of 8

PREMARKS BQ CORE

Whole core sent for Analysis

LOGGED BY A.W. WORKMAN

FOO	TAGE	DESCRIPTION		:	5 <b>S</b> ^A₩M™P	LLSE	_ :		,	SSA	Y S
FROM	то	DESCRIPTION	NO.	SUL PH- IDES	- FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	OZ/TON
0	21.95	OVERBURDEN						:			·
21.95	42.50	ANDESITE									·
		Medium to pale green, aphanitic to very fine grained, generally massive flow. Flow tops are generally brecciated and may locally show evidence of vessicules (eg. 30.95-32.48 m.). Rock is moderately chloritized but silicification is noted locally associated with small (up to 5cm.) breccia zones. These zones may carry up to 2% pyrite whereas the flow averages less than 1%. Pyrite is present as a very fine dissemination, as 1-2 mm. cubes in quartz-carbonte stringers, and occasionally as thin plates on chloritized slippage planes. The zone is moderately to strongly brecciated throughout, probably as a result of post-volcanic faulting. Many mylonitic seams and shears are noted throughout the zone. In particular, the interval 21.95 to 25.10 m. is a major fault zone, containing 25% mylonite. Core loss is estimated at 25-30%. The rock is strongly chloritized and all fractures are hematite and limonite coated. White carbonate occasional fills dilatant zones.									
		21.95 - 25.10: FAULT ZONE - intensely brecciated, strongly chloritized.									
		30.95 - 32.48: flow top breccia, rounded to sub-angular fragments up to 5 cm. X 3 cm., andesitic composition, in a finer brecciated matrix strongly chloritized, minor epidote along fractures.									

McDERMOTT

HOLE NO. \_\_MC-83-35

SHEET NO. 2 Of 8

FOOT	AGE					SAMP	LE				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH		FOOTAGE		1 7	3	OZ/TON	OZ/TON	
		33.10 - 34.10:	flow breccia- rounded, vaguely defined fragments up to 7 cm. some remelting.		IDES	FROM	то	TOTAL					
		34.25 - 34.40:	as above										
		34.65 - 35.00:	flow top breccia, same as 33.10-34.10.										
		36.20 - 36.53:	angular breccia, fragments up to 2.5 cm.				-						
	·	37.38 - 37.57:	breccia - probably flow bottom; fragment of varying lithologies are well rounded and up to 4 cm. in size.	5									
		37.57:	FAULT - mylonitic shear plane at 40° to core axis.										
		37.57 - 38.20:	flow breccia - vaguely outlined fragment up to 6 cm., well rounded, andesitic composition.										
		38.20 - 38.70:	angular fragments, often mylonitic.				-						
	•	38.70 - 38.83:	ground core - some massive; some brecciated.										
		39.05 - 39.81:	flow top breccia - sharply defined, angular fragments up to 5 cm. which are much harder than enclosing rock. Below 39.20 m., fragments are larger, less distinct and show evidence of re-melting. Minor fault plane at 39.38.			-							
		40.32 - 40.75:	small silicified zone bordering intensel silicified fracture zone at 40.53-40.58m Resembles a pale green quartz vein at 45-50° to core axis.	<b>?</b> -								·	
							-			•	-		

McDermott NAME OF PROPERTY\_ 3 of 8 SHEET NO.\_

% OZ/TON OZ/TON
0.02
0.01
0.02
0.01
0.01
0.01
0.01
-

McDermott

HOLE NO. MC-83-35

SHEET NO.\_

4 of 8

FO	OTAGE	DESCRIPTION			SAMP	LE	·			ASSAYS	-	
FROM	то	DESCRIPTION	NO.	% SULPH IDES	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	
		member overlying the main silicified zone. Both are C sedimentary in origin although the main zone does not	986	1-3	51.2	52.06	0.85			0.01		
		always exhibit recognizeable sedimentary structures or textures. Pyrite contents increase to a maximum of	987	1-3	52.06	52.91	0.85			0.01		
		12% in the main zone. It is underlain by a section of alternating silicified and chloritized rock.	988	1-3	52.9	53.76	0.85			0.01		
51.2	8 53.76	SILICIFIED SEDIMENTS										
		Dark green, aphanitic to very fine grained, moderately chloritized with abundant purple-grey strongly silicific sections. The zone is well laminated with a few medium grained, non-laminated sections. Silicification is initially confined to small zones of brecciation then expands to cover sections of non-brecciated rock. Minor pink quartz - carbonate veins up to 1 cm. thickness are noted in this unit.										
		51.28 - 51.53: very strongly silicified.										
0		52.01 - 52.66: Massive to very weakly laminated, same reddish silicified clasts up to 15 mm tuffaceous.			-			·				
366-1168	,	52.66 - 53.60: well laminated at 50° to core axis, 40-50% silicified.										
- TORONTO -		53.60 - 53.76: FAULT ZONE - post silicification brecciation, chloritized fractures; silicified fragments up to 2 cm. in size in a fractures chloritized matrix.				•						·
国 53.7	6 68.12	MAIN SILICIFIED ZONE			·			·				·
<b>7</b> 4		Dark purple-grey, aphanitic to fine grained, generally well laminated but brecciation often destroys	989	3-4	53.76	54.76	1.00			0.03		
LANGRIDGE		sedimentary textures and structures. Numerous cream coloured feldspathized (?) zones are superimposed on			54.76			,	_	0.09		
P			991	6-10	55.76	56.76	1.00			0.09		

NAME OF PROPERTY\_\_\_\_

McDermott

HOLE NO. MC-83-35

SHEET NO. 5 of 8

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE NO. то OZ/TON FROM OZ/TON IDES TO FROM TOTAL c 992 5-7 56.76 57.76 1.00 0.04 on the generally high degree of silicification. Feldspathized rock contains higher (10-12%) pyrite 993 7-9 57.76 58.36 0.60 0.05 contents, than the purple-grey rock (5-7% pyrite). Several dark green chloritized fault zones are noted. They are characterized by increased fracturing, local 994 7-9 58.36 58.96 0.60 0.06 mylonitization and the development of clay seams. faulted contact 53.76: 53.76 = 54.89: very finely brecciated, abundant slickensided, chloritized fractures carries 3% pyrite. feldspathized, occasional chloritized 54.89 - 55.23: fractures, carries 10-12% pyrite. becoming well laminated locally, 55.50 - 56.76: 995 10 | 58.96 | 59.66 0.70 0.09 purple-grey, spotty feldspathization locally, occasional chloritized 9968-10 59.66 60.36 0.70 0.10 fractures with slickensides pitching at 20° to 60°. Some individual darts up to 2 mm. - tutfaceous. Averages 7-9% pyrite as a very fine dissemination and as clots of crystals up to 4 mm. across. banded cream coloured and purple-grey 56.76 - 58.96: rock, well laminated, extremely convoluted with very tight folding - soft sediment slumping, particularly at 57.96-5816 (recumbant folds). laminations at 30° to core axis. 55.55: laminations at 45° to core axis. 58.16: 58.96 - 60.36: cream coloured, well laminated FAULT ZONE - 80% of core is badly ground - many chloritized partings at 59.80-60.05 m.

McDermott NAME OF PROPERTY\_\_\_\_ HOLE NO. MC-83-35 6 of 8

FOOT	TAGE		DESCRIPTION			SAMPI	LE.				ASSAYS		
FROM	то	•	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	%	7,	OZ/TON	OZ/TON	Г
		60.36 - 61.25:	dark grey, well laminated, locally brecciated, abundant 3mm. pink carbonat veins carrying quartz grit.	997			61.25		·		0.02		
		60.60:	<u>FAULT</u> - 5 mm. green clay seam at $60-70^{\circ}$ to core axis.										
		61.25 - 62.31:	INTRUSIVE - medium green fine to medium grained with 2-4 mm. dark green crystal - possibly chloritized biotite - carrie 10% angular fragments of silicified sediments - very weakly magnetic.	\$	NIL	61.25	62.31	1006			0.01		
	-	62.31 - 64.49:	brecciated with angular moderately feldspathized fragments in a dark	999	4-6	62.31	63.31	1.00			0.01	·	
			be re-assembled into whole rock. Relic	1000	3-5	63.31	64.31	1.00			0.01		
			laminations locally - eg. 45° to core axis at 63.80 m.			64.31		1.00			0.01		
		64.49 - 66.60:	FAULT ZONE - strongly fractured and chloritized.	1202	3-5	65.31	66.31	1.00			0.02	-	
		66.60 - 68.12:	as at 62.31-64.49 - more abundant chloritized fractures and pink	1203	2-4	66.31	67.31	1.00			0.01		
			carbonate veining. Trace chalcopyrite in carbonate.	1204	1-3	67.31	68.12	0.81			0.01		
8.12	75.76	SILICIFIED SEDI	MENT										ĺ
		Dark purple-gre	ey to green, fine to very fine grained lated zone of transition from intensely	1205	1-2	68.12	69.09	0.97			0.01		İ
		silicified rock	to non-silicified rock. Degree of and amount decrease with depth.	1		69.09					0.01		ĺ
		Silicification brecciation. A	is generally related to zones of Average 1% pyrite increases to 3% in			69.91					Trac	•	
		69.09-69.67. 69	9.91-70.72 (2 cm. chloritized mylonite	1		70.72		0.83			0.01		
	-	75.76. Many sm	maller zones are observed and total			72.81				-	Trac		

McDermott

HOLE NO. MC-83-35

SHEET NO. \_

7 of 8

F00	TAGE		DESCRIPTION.			SAMPL	E				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH,	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
		silicified rock a	accounts for 51% of the section.	1	1-2	73.90	74.92	1.02			0.01		
				1212	1-2	74.92	/5./6	0.84					
75.76	91.74	SEDIMENT			٥								
,			reen, fine grained, moderately -silicified and moderately brecciated.	1213	0-1	75.76	76.59	0.83			0.01		
		Becomes well part likely parallel t	ted at about 76.5 meters - parting is to bedding although lamination are not	1214			77.42				0.01		
	·		oove 80 meters. Irregular bedding Some pink quartz veins locally	1215							Trac	1	
	·	(eg, 81.03-81.08)	developed parallel to laminations2% with up to 3% locally.	1216		78.32					Trac	е	
		<u>-</u>		1217	0-1	79.32	80.32	1.00			0.01		
,		Ŧ c	NTRUSIVE - Medium to dark green, fine to medium grained with well developed thills at contacts. Carries 5-10% siliceous xenoliths; weakly magnetic.										
	·	81.09:	aminations at 45° to core axis.										
		m .	Eault plane at 40° to core axis seperate moderately laminated rock above from medium grained non-laminated rock below	1218	0-1	82.00	83.00	1.00	·		0.01		
		W	gradually becomes well laminated, very well parted throughout, moderately carbonatized, carbonate appears to replace selected lamination sets.										
		86.50: p	parting at 65% to core axis.								·		
,	·	87.90: c	carbonate altered laminations at 70° core axis.	1219	0-1	1	88.55	0.95			0.04		
			noderately brecciated, weakly silicifie 3-4% pyrite	d,		• (							
		• · · · · · · · · · · · · · · · · · · ·											

NAME OF PROPERTY McDermott

HOLE NO. MC-83-35

SHEET NO. 8 of 8

F00	TAGE				SAMP	LE		<del></del>	ASSAYS	<del></del>
ROM	то	DESCRIPTION	NO.	% SULPH		FOOTAGE	<del>]</del>	T -	OZ/TON	OZ/TON
			-	IDES	FROM	TO TOTAL	1 2	7.	02/100	02,10N
		89.50 - 90.25: medium grained, massive, weakly brecciated.								
		91.00 - 91.74: shearing (?) at 65° to core axis - planes of very dark green mylonite; breccia fragments increase in size away from mylonitized planes.  Graded beds (??) locally.								
		91.74: END OF HOLE					l			
		CASING PULLED					l			
		CASING FULLED								
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FORM 2

NAME OF	PROPERTYI	Lenora			 
HOLE NO.	Mc-83-37	LENGTH	137.46 meter	5	
LOCATION					 
LATITUDE	10 + 00 W	DEPARTURE	0 + 69 S		
	August 5, 1983				

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-65°				
137.46	-57°				

HOLE NO. MC-83-37 SHEET NO. 1 OF 5

REMARKS BQ Core

Split for assay.

LOGGED BY A.W. WORKMAN

FOOT	AGE	DESCRIPTION			SAMP	LE			,	ASSA	Y 5
FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	*	OZ/TON	OZ/TON
0	15.85	OVERBURDEN									
15.85	32.65	BASALT									
		Dark green, fine to medium grained, locally coarse grained, locally silicified, often associated with brecciation. Weakly to moderately tectonically brecciated locally. Weakly to moderately fractured - breaks are strongly chloritized and often hematized. Pyrite content averages 0-1% and does not seem to increase with brecciation or silicification. Up to 1% chalcopyrite is associated with quartz-carbonate veining locally (eg. 24.85-24.89 m). These veins may carry high pyrite contents - up to 40%.  18.02 - 20.40: weakly to moderately silicified.  22.82 - 23.93: weakly brecciated, moderately silicified.  23.82 - 26.20: weakly to moderately silicified; quartz-carbonate vein at 24.85-24.89 m carries 40% pyrite, 1% chalcopyrite.  28.90: carbonated shear at 40-45° to core axis carries 1% chalcopyrite.  30.20 - 30.35: weakly brecciated, moderately silicified.	C 1329 1330 1331 1332 1333 1334	0-1 0-1 0-1 2-3	19.21 22.82 23.80 24.80	24.80 25.45	1.19 0.98 1.00 0.65			0.01 tr. tr. tr. tr.	
32.65	67.25	Medium to dark green, generally medium to coarse grained with occasional fine grained phases. A zone of ground core at upper contact is thought to be the chilled margin. Some variation in texture is noted below 59 meters which may reflect proximity to the lower contact.									

HOLE NO. MC-83-37 SHEET NO. 2 OF 5

F001	rage				SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	
		32.65 - 42.20: fine to medium grained with several zones carrying pink feldspar phenocrysts up to 3mm - often sausauritized.  42.20 - 45.20: medium to coarse grained, occasionally very coarse grained in 10cm sections with crystals up to 5mm. A few quartz veins are noted at 60-70° to core axis - adjoining rock may be highly pyritized over 5cm border zones.	C									
		44.55 - 45.05: zone averages 2-3% pyrite.  45.20 - 46.15: medium grained.  46.15 - 49.20: medium to coarse grained; amphibole crystals up to 1.1cm at 47.10 m.  49.20 - 58.70: medium grained, occasional coarse grained phases; fracture surfaces are well plated with thin foils of pyrite - rock carries an average 0-1%.  58.70 - 59.10: fine, locally medium grained.  59.10 - 59.68: carbonate filled breccia zone, no pyrite observed;		2-3	44.55	45.05	0.50			tr.		
67.25	125.50	fractures in lower half are strongly hematized.  59.68 - 66.90: fine to medium grained; rapid gradational textural changes.  64.07 - 64.18; 65.01 - 65.08: fine grained, dark green intrusives - well chilled contacts at 40° to core axis.  66.90 - 67.25: sheared, silicified, epidotized zone at edge of intrusive; carries 5% pyrite, contact may be at 80-85° to core axis.  BASALT	1336	5	66.95	67.30	0.35			0.02		
		Dark green, locally grey-green, fine grained to aphanitic, often flow brecciated with angular to sub-rounded fragments up to 3cm.  Moderately to weakly chloritized. Fragments are usually harder then the matrix but of the same composition. The uppermost 1 m carries occasional highly lenticular fragments up to 1cm in size - tuff?  67.25 - 72.50: flow-top breccia.  73.15 - 74.50: strongly fractured due to shrinkage - quartz-epidote filling; very fine grained flow; rare fragments are strongly epidotized.	1337	0-1	71.50	72.50	1.00			tr.		

FORM :

HOLE NO. MC-83-37 SHEET NO. 3.0F 5

	AGE		DESCRIPTION			SAMPL	-E		[		ASSAYS		
ROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	
				İ	1023	7 1.0.1			l		1		
		74.50 - 79.62:	occasional flow breccia fragments; 1-2% pyrite in	С			}		1				ĺ
			fractures and rarely rimming fragments; moderately	1338	0-1	75.60	76.00	0.40			0.02		l
- 1			silicified at 75.60-76.00 m.						1				
- 1		79.62 - 80.35:	carries fine, 1-3mm clasts of varying lithologies -						l	l			ĺ
1			possible base of flow - strongly chloritized										ĺ
- 1			fragments.										į
1			weakly brecciated, moderately silicified.	1339			82.03			]	0.02		i
-			chloritized, moderately brecciated locally.	1340			82.63	0.60			tr.		ĺ
- 1		82.63 - 83.25:	moderately to strongly silicified; weakly to	1341	0-1	82.63	83.25	0.62			tr.		ı
			moderately brecciated - fragments exhibit lmm										ı
ĺ			reaction rims.						}				i
		I	hyaloclastite? - flow top?										
- 1		83.30 - 84.90:	moderately to strongly brecciated, fragments are										ı
			larger and less distinct (remelting) with depth and									1	i
1		<u> </u>	possibly more rounded. Sub-rounded fragments up to 10cm are noted at 84.50 m - flow breccia.		1						1		ł
		84 90 - 85 85	sub-angular fragments up to 2cm - well defined -								]		
		04.70 03.03.	lower temperature flow.										
		85.85 - 86.95:	three narrow zones of fine grained dark green rock		-							1	
			incorporated into flow - possibly sediments.									ì	i
		88.93 - 89.55:	strongly brecciated - pale green angular fragments	1342	0-1	88.80	89.30	0.50			0.01		
			in dark green matrix - weak silicification locally	1343	0-1	89.30	90.10	0.80			0.01		i
		·	(eg. 89.30-89.55 m).		.							1	
		89.55 - 91.34:	<b>9</b> , ,		Í		}					I	
			weakly brecciated, locally silicified (eg. 89.55 -	1344							0.01		ļ
	\		90.10 m). Strongly silicified at 90.80-91.34 m.	1345			91.34	0.54			0.01	.	
		91.34 - 91.94:		1346	3-5	91.34	91.94	0.60			tr.	l	
			brecciated throughout - carries 5-6% pyrite mostly		1						1	Ì	
			concentrated in fractures - average concentration						·	-		1	
		01 04 - 02 54	3-5%. moderately to strongly brecciated, irregularly	1347	3_5	91.94	92.54	0.60			tr.	-	
		91.94 - 92.34:	silicified; abundant carbonate veining with up to 6%		3-5	31.74	72.54	0.00			[ ]	İ	
			associated pyrite.							-		ĺ	
	-	92.54 - 93.60:	fine to medium grained, very weakly brecciated	1348	1-3	92.54	93.60	1.06			0.01		:
			massive flow, 1-3% pyrite.									.	
		93.60:	flow top.		.							ļ	
			-										
												}	
•								i					
1					1			;					

Lenora

Mc-83-37

SHEET NO. 4 OF 5

F00	TAGE		DECONDAIGN			SAMPL	_E				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TON	OZ/TON	
		93.83 -107.05: 107.05-108.30: 108.30-109.65: 111.30-111.50: 111.77-119.92: 119.92-120.50:	Largest fragments are well rounded and up to 4cm in size. Non-silicified; up to 7% pyrite concentrated around fragments but overall average is 3-5%. Most pyrite at 112.00-112.80 m. Some dilatant zones strongly epidotized. Possible sediments (tuff?) at 114.30-114.48 m.	1349 1350 1423 1424 1425 1426 1427 1428 1429 1430 1351	2-3 3-5 1-3 1-3	112.00 112.80 113.58 114.43 115.59 116.62 117.43 118.43 119.45 120.50 121.50	112.80 113.58 114.43 115.59 116.62 117.43 119.45 120.50 121.50 122.10	0.60 0.80 0.78 0.85 1.16 1.03 0.81 1.00 1.02 1.05 1.00			0.01 tr. tr. 0.01 0.01 0.01 0.01 0.01 tr. tr.		
		125.43-125.50:		1431 1432	•	1	123.44 124.18				0.01		
125.50	127.10	FAULT ZON	<u>E</u>		-								ı
		Strongly sheare may be sediment	d, strongly chloritized zone. Rock type indefinite - s.										
													ı

NAME OF PROPERTY\_\_\_\_\_Lenora

HOLE NO. Mc-83-37

\_\_\_\_ SHEET NO. \_\_\_\_\_ 5 OF 5

FOOTAGE	DESCRIPTION			SAMPI	_E			ASSAYS	
FROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	 7,	OZ/TON	02/TON
27.10 137.46	Dark green with white bands and lensitic laminations; fine to very fine grained. Sheared parallel to bedding at upper contact. Zone near top of unit is brecciated moderately and the matrix to the breccia fragments is moderately to strongly silicified. No pervasive silicification is noted. Selective silicification of certain laminations highlights the bedding. Individual sets of laminations are strongly brecciated below 136.49 m and set in a strongly chloritized sedimentary matrix.  127.10-132.20: brecciated, silicified matrix with very little carbonate, 0-1% pyrite.  132.20-137.46: moderately well laminated, weakly sheared - laminations at 135.40 m are at 45-50° to core	C 1563 1564 1565 1566 1567 1568 1569 1570 1354 1571	0-1 0-1 0-1 0-1 0-1 0-1 0-1 1-2 0-1	127.10 127.95 128.95 129.95 130.95 131.95 132.95 134.30 135.30 136.25	127.95 128.95 129.95 130.95 131.95 132.95 134.30 135.30 136.25 137.00	0.85 1.00 1.00 1.00 1.00 1.00 0.35 1.00 0.95 0.75	74	tr. tr. tr. tr. tr. tr. tr.	02.100
	axis.  137.46 meters END OF HOLE  CASING PULLED	1573	0-1	137.00	137.46	0.46		0.08	

FORM 2

NAME OF	PROPERTY	LENORA	_
HOLE NO.	Mc=83=38	LENGTH 106.98 meters	-
LOCATION			_
LATITUDE	14+00 W	DEPARTURE 0+35 S	_
ELEVATION		AZIMUTH 344° DIP -45°	_
		983 FINISHED August 23, 1983	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45 <sup>O</sup>				
106.90	~45 <sup>O</sup>				

HOLE NO. MC-83-38 SHEET NO. 1 OF 5

REMARKS BQ CORE

Core split for analysis.

LOGGED BY A.W. Workman

FOC	TAGE					S A M P	LE			,	ASSA	r S
FRON	1 TO		DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	OZ/TON
0	25.87		silicified volcanics similar to parts of bedrock.		.520							
25.8	7 68.00	Dark green to g fractured, with are darker gree quartz. They a material carry aggregates of c 1% pyrite in lm semi-massive fl	rey-green, fine to very fine grained, moderately abundant 1-3cm thick pillow selvages. Pillow rims in colour and are siliceous, containing 10-20% free re strongly epidotized. Rims and inter-pillow higher pyrite contents - up to 20% locally, mostly as rystals in clots up to 1cm. Pillow interiors carry m blebs. Pillows are often separated by zones of ow. Carbonate is found as calcite only in									
		27.32 - 27.88:	and occasionally in inter-pillow debris.  concentration of selvages from 4-6 pillows; 2-3%  pyrite.  dominantly massive flow.	C 1501	2-3	27.32	27.88	0.56			0.01	
			20% pyrite along a seam cutting core axis at 40-450 to core axis, actual increased pyrite is carried in a pod-like zone - may be part of flow-top.	1502	5	30.50	30.60	0.10	·		0.02	·
			pillowed zone - some hyaloclastite between pillow rims. tectonic breccia, spotty silicification, 0-1% pyrite.			30.60 31.55		0.95 0.76			0.06	
		35.02 - 35.12:	flow-top breccia - pale to medium green; relic vesicules up to lmm - angular breccia fragments up to 1.5cm can be reassembled - 20-30% pyrite along some chloritized seams as 1-3mm cubes.		-							
		36.04 - 37.00:	breccia - penetrative alteration (silicification and chloritization) rims fragments - possible flow-top breccia.					-				
			weakly silicified massive flow. pillowed sequence - selvages cut off at 39.17 by an upper part of same flow.									-

LENORA

SHEET NO. ...

2 OF 5

FO	OTAGE					SAMPI	LE				ASSAYS		
FROM	то	† .	DESCRIPTION	NO.	% SULPH		FOOTAGE		7.	7	OZ/TON	OZ/TON	
FROM				ļ	IDES	FROM	TO	TOTAL			1		
		41.00 - 42.64:	generally massive flow - minor small breccia zones locally - radiating from fracture systems - minor related silicification locally - no pyrite association.					·					
		42.64 - 44.93:	pillowed sequence - moderately to strongly silicified with 1-2mm variolites locally (eg. 43.10) anomalous number of pillow selvages between 44.50-44.90 with 5-10% pyrite in selvages.	1506			44.27	0.63			0.01 0.01 0.01		
		44.93 - 45.98:	non-brecciated massive flow.				-						
			pillowed, weakly silicified locally.  massive - minor penetrative silicification locally on a cm scale - associated with narrow fracture zones.										
		50.90 - 57.38:	pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30). Coarsely crystalline calcite in voids. Pillows have spotty silicification locally associated with 5-10cm breccia zones - no apparent increased pyrite except		2-3	51.20	51.30	0.10			0.01		
		57.38 - 58.98:											
		59.88 - 60.03:	_	1509			60.55				tr.		
1		60.03 - 62.83:	very fine grained.  pillowed - similar to 50.90-57.38 m - pillow centres are weakly brecciated, silicification is irregular.		1-2	61.45		0.69			tr.		
		62.83 - 66.70:	massive, moderately brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones.	1312	1-2	02.14	02.03	0.09			tr.		
J		66.70 - 67.20:	brecciated - strongly chloritized - near flow margin (base)?	1513	1-2	66.70	67.20	0.50			tr.		
		67.20 ~ 68.00:		1514 1515 1516	2	67.70	67.70 68.70 69.70	1.00			tr. tr. tr.		

Mc-83-38

SHEET NO.\_

3 OF 5

F001	TAGE				SAMP	LE	-			ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON
68.00	86.96	DIORITE						·			
68.00	86.96	Dark green, fine to medium grained, mostly carrying 5% strongly hematized, weakly pyritized xenoliths of moderately silicified volcanic rock. Xenoliths are usually rounded. Hematite seems to be bladed in the fragments. Fragments average lcm in size but 2cm size is common. Intrusive is weakly to moderately fractured. Breaks are chloritized and hematized with minor epidote. Feldspar crystals are weakly sausauritized. Prismatic hornblende crystals up to 1cm are noted locally. A central zone (73.18-73.70 m), is porphyritic with 1-5cm fractured feldspar phenocrysts - probably were euhedral and zoned. Abundant carbonate stringers cut core at varying angles and carry a trace of chalcopyrite. Pyrite content averages 1%. 68.00 - 69.00: fine to medium grained, up to 2% pyrite. 69.00 - 73.18: several well foliated (chloritized mica), bands up to 10cm - up to 5% pyrite locally in less than 10cm zones; abundant xenoliths. 73.18 - 73.70: porphyritic zone - 1cm hornblende crystals. 73.70 - 74.95: medium grained. 74.95 - 77.10: fine grained, abundant carbonate stringers, trace chalcopyrite. 77.10 - 77.52: mylonitic, intensely chloritized, and brecciated fault zone - carbonate in dilatant zone, carries 5-10% green breccia fragments of local origin. 81.70 - 86.60: massive, weakly fractured, medium grained; mm scale mottling - texture due to segregation of mafic and felsic components(?). Moderately chloritized. Major fractures are strongly hematized.	C 1517	0-1	86.46	86.96	0.50			0.01	
		86.60 - 86.76: moderate to strongly fractured - white carbonate filling.  86.76 - 86.96: weak to moderate brecciation - rock is finer grained - fragments up to 2cm, no subsequent movement to tension (pull-apart) - shrinkage fractures.									
				•							-

4 OF 5 HOLE NO. MC-83-38 SHEET NO.

FOOT	AGE		DECONDAIN	· ·		SAMP	LE				ASSAYS		
FROM	то	•	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7,	7,	OZ/TON	OZ/TON	1
86.96	106.98	SEDIMENTS			1023	- ROM	10	10142					
		fractured with hematized local Near upper cont decreases with "vein" filled. which some are blue-grey micro variable and do contents are up Sulphide present	redium green, fine to very fine grained, strongly quartz and carbonate in fractures. Strongly ly, especially 86.96-87.40 m carrying 5-10% hematite act, network fracturing and brecciation is strong by depth. Some dilatant zones are white carbonate Carbonate supports abundant angular fragments of volcanic. Approximately 5% are of silicified breccia. Silicification of the sediments is seen to appear to be entirely breccia related. Pyrite to 7% - associated with strong hematization.	C 1518 e 1519	0-1 5-109 Hem.		87.43 88.43			,	0.01		
		88.60 - 89.19:	white carbonate filled breccia zone - some fragment are well laminated. strongly fractured, brecciated at top,	1521	3-5	89.00	89.00 89.50	0.50		-	0.01		
			silicification is limited to breccia fragments; zor carries 3-5% pyrite, up to 7% locally with trace of chalcopyrite. Non-silicified rock is strongly chloritized. Pink "syenitic" zone at 89.42-89.52 m - cherty sediment?	1523 1524	3-5	90.00	90.53	0.53			0.02 0.08 ) 0.15 )	0.115	
	·		FAULT ZONE - chloritized breccia, mylonitic. breccia - minor silicification locally restricted t fragments; 2-4% pyrite.	1525 0 1526			91.83 92.40				0.01 0.01		
		92.40 - 92.80: 92.80 - 93.45:	weakly brecciated - several quartz-carbonate stringers sub-parallel to core axis. moderately to strongly brecciated, non-silicified, strongly fractured, moderately chloritized; strongly	1901 1902 1903		92.40 93.40 94.40	93.40 94.40 95.04	1.00		·	tr. tr. 0.01		
		93.45 - 93.52: 93.52 - 95.04:	laminated locally (93.22 - 45° to core axis), with tuffaceous appearance.  mylonitic seam - small bedding fault.  well laminated - contains several zones of what appears to be chloritized vitric tuff - fragments of to lmm. Zone from 93.97-94.06 may contain 1-5mm pumice shards in an intensely chloritized	p						:		·	
		95.04 - 96.50:	groundmass. well brecciated, moderate silicification of certain laminations, very minor carbonatization. Below 95.61, silicification of breccia is more pervasive although strongly fractured rock is chloritized.	1528	2-4 2-3 2-3	95.61	95.61 96.10 96.50	0.57 0.49 0.40			0.05 ) 0.11 ) 0.27 )	0.130 1.46	

LENORA NAME OF PROPERTY\_\_\_\_\_

HOLE NO. Mc-83-38 SHEET NO. 5 OF 5

FOOT	AGE	DESCRIPTION	Í		SAMP	_E		Į		ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	GZ, TON	
		Zone carries 2-4% pyrite and greater than 10% hematite. Some lmm laminations appear to be up 50% hematite. (95.10 m laminations at 45-500 to core axis).  96.50 - 98.15: moderately to strongly brecciated, abundant hematite, 10-20%, with 1-2% pyrite.  98.15 - 99.28: weak to moderate brecciation, on a very fine mm scale; strong selective silicification of particulaminations. Brecciation is along the lamination and the original bedding is often preserved. Hematite content is up to 10-20%, which produces purple-grey colour. Contains higher pyrite contents, 5-7%.  100.00: laminations at 60-650 to core axis.  100.40 - 106.98: weakly brecciated, well laminated, and parted parallel to bedding. Weakly hematized. Below 106.45, major fractures are strongly hematized. Rock is less well laminated below 105.30. Carbon fills most fracture systems. Zone carries up to pyrite. Minor silicification is related to individual sets of laminations. Laminations are highly convoluted locally (103.00 m) possibly due soft sediment deformation.  102.65: laminations at 600 to core axis.  104.60: laminations at 600 to core axis.  104.50: weak to moderate hematization.	1530 1531 1532 1533 1534 1534 1536 1537 1538 28 1539 1540 1541	0-1 0-1 1 5-7 5-7 5-7 1-3 1-2 1-2 1-2 1-2	96.50 97.50 98.44 99.28	97.50 98.44 99.28 99.84 100.40 101.05 101.70 102.71 103.71 104.71 105.71 106.50	1.00 0.94 0.84 0.56 0.56 0.65 1.01 1.00 1.00 0.79			0.01 0.01 0.02 0.10 0.14 0.02 0.04 0.01 0.01 0.01 0.01	0.12	(4.0'
		,106.98 meters: END OF HOLE  CASING PULLED			· · · · · · · · · · · · · · · · · · ·							

NAME OF	PROPERTY	Lenora			
HOLE NO.	Mc-83-39	LENGTH	91.74 meters		
LOCATION					
LATITUDE	12 + 75 W	DEPARTURE	0 + 25 S		
ELEVATION		AZIMUTH	344 <sup>0</sup>	DIP	-45°
STARTED _	August 26,	1983 FINISHED	August 29, 19	83	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-45°				
91.44	-49°				

HOLE NO. MC-83-39 SHEET NO. 1 0F 6 REMARKS BQ Core Split for analysis.

LOGGED BY A.W. Workman

7 0 0	TAGE	DESCRIPTION	1		SAMP	LE				SSA	Y S
FROM	то	S E S C R T F T T C R	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	oz/ton
0	1.55	OVERBURDEN						-			
1.55	40.85	BASALT (Andesite?)								-	
		Medium to dark green, fine to very fine grained, pillowed locally. Some pillowed sections are moderately silicified - possibly due to late stage circulating fluids. Selvages are filled with quartz and carbonate where voids existed. Some narrow zones are finely brecciated - late stage tectonic event. Pyrite content averages 0-1% but increases in selvages - up to 5%. Chalcopyrite is often found in carbonate filled dilatant zones.  4.90 - 6.15: abundant pillow selvages - quartz and epidote with minor carbonate in selvages, 2-3% pyrite, trace chalcopyrite.  6.36 - 7.00: strongly fractured, hematite coating of surfaces - zone is mixed flow top breccia and hyaloclastite.									
		Zone is intensely chloritized as a result of glass devitrification.  7.00 - 8.68: massive flow.  8.68 - 10.98: pillowed zone - same as 4.90-6.15 m.  10.98 - 11.62: fine to medium grained, carries rare sub-angular fragments of lava up to 2cm - no visible reaction rim or alteration of fragment.  11.62 - 13.75: fine grained, weakly brecciated; minor weak silicification in brecciated rock. Zone carries 1%			-						
		pyrite.  13.75 - 14.12: strongly brecciated with white carbonate filling. Highly angular fragments up to 2cm in size, weakly chloritized. Dilatant zone at 13.75-13.83 m is 95% carbonate filled with 1-2% chalcopyrite.  14.12 - 15.98: moderately brecciated, possibly pillowed.	C 1469	1.	13.75	14.12	0.37			0.01	

Lenora NAME OF PROPERTY\_

SHEET NO. \_

2 OF 6

Mc-83-39

HOLE NO. \_\_\_

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE NO. FROM TO 02/TON OZ TON IDES TO FROM TOTAL 15.98 - 16.51: Dioritic Intrusive - fine to medium greatned, with abundant felsic and mafic fragments. Xenoliths are well rounded. Upper contact at 550 to core; lower at 35-400 to core axis. 16.51 - 23.68: weakly brecciated, pillowed section; carries 1% 18.00 | 19.00 | 1.00 1470 0.01 pyrite, 2% in pillow selvages. Pillow rims are 1 off-set up to 6cm locally across microfaults. 23.68 - 24.78: fine grained, dioritic zone - probably not intrusive; carries fractured, pale green feldspar phenocrysts up to lcm. No pillow selvages. 24.78 - 31.26: pillowed section - abundant breccia associated with 26.95 27.38 0.43 1471 tr. pillow margins. Dilatant zones between pillows are 28.25 | 28.80 | 0.55 0.01 carbonate filled and may contain up to 5% pyrite (eg. 26.95-27.32 and 28.25-28.80 m). Rare fractured 1-5mm feldspar phenocrysts. Zone averages 1% pyrite. 31.26 - 31.42: Dioritic Intrusive: pinkish green, fine grained, chilled contacts. 31.42 - 31.95: hyaloclastite - less glassy than might be expected, intense shattering of lava then re-welding. 31.95 - 40.35: massive flow - few pillow selvages; minor intense 34.90 | 35.09 | 0.19 1473 tr. brecciation with pink quartz (silica) infilling carrying 2-4% pyrite; (eg. 34.90-35.09 and 36.35-36.50 m). Possibly vesicular at 36.50-36.80. 1474 40.35 40.85 0.50 tr. 40.35 - 40.85: very fine grained, strongly fractured and brecciated; dilatant zones are white carbonate filled. Some increase in pyrite content is noted in carbonate filled fractures and interstitially in lava. 40.85 | 55.09 DIORITE Dark green, fine to medium grained, strongly fractured with abundant pink quartz and carbonate filled fracture zones above 43.20 m. Zone also carries a few fractured silicified xenoliths of volcanic rock (presumably). These are rounded and up to 2cm in size. Margins are fine grained with a porphyritic central zone.

Lenora NAME OF PROPERTY.

HOLE NO. \_\_\_\_\_MC-83-39

SHEET NO. \_\_\_\_ 3 OF 6

SAMPLE FOOTAGE ASSAYS DESCRIPTION FOOTAGE % SULPH FROM то OZ/TON OZ, TON FROM TOTAL 40.85 - 43.20: fractured contact zone, strongly chloritized, weakly 1475 40.85 | 41.85 | 1.00 0.01 epidotized; fractures are strongly hematized carries volcanic xenoliths. 43.20 - 48.16: fine to medium grained, weakly fractured, less altered. 48.16 - 53.80: porphyritic, little increase in grain size of groundmass but carries fractured, previously 1476 0-1 | 53.00 | 54.00 | 1.00 0.01 euhedral pale green feldspars up to 1.5cm - weakly uralitized; zone is weakly fractured. 53.80 - 55.09: finer grained, abundant silicified reddish-pink, fractured xenoliths of volcanic(?) rock. Zone below a shear at 55.05 m carries larger xenoliths in 10cm+ range. Xenoliths are pinkish, silicified and weakly pyritized. 55.09 | 59.45 BASALT Medium to dark green, fine to very fine grained, strongly brecciated - cross network of fractures - epidotized. No fragment rotation is noted post-dating brecciation. Pillow selvages are noted locally (26.50-28.00). The rock is non-magnetic and weakly silicified locally. 55.09 - 56.50: massive, strongly brecciated. 1-2 55.09 | 56.09 0.01 1477 1.00 1-2 56.09 57.10 56.50 - 58.00: pillowed zone, some increased pyrite in space 1478 1.01 tr. 1-2 57.10 1479 58.10 1.00 between pillows. tr. 1-2 1480 58.10 | 58.80 | 0.70 0.01 58.00 - 58.80: possible xenoliths of sediment - reddish-green, up to 5cm in size - others are blue-grey and up to 2cm. Fragments are moderately to strongly silicified. 58.80 | 59.45 | 0.65 1481 2 58.80 - 59.45: reddish-pink, fine grained and highly silicified. tr. Carries abundant intensely chloritized, green fragments up to 2mm in size. 59.45 91.74 SEDIMENTS Dark green, fine to very fine grained, becoming purple-grey in brecciated or strongly silicified sections. The uppermost part is very poorly laminated to non-laminated. Well laminated sections are

HOLE NO. \_\_\_\_MC-83-39\_\_

\_\_\_\_ SHEET NO. \_\_\_\_4 OF 6

F00	TAGE		DESCRIPTION			SAMP	LE				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH		FOOTAGE		7.	7,	OZ/TON	OZ/TON	1
				<del> </del>	IDES	FROM	10	TOTAL	<del>                                     </del>	-	027.00	OL: IOA	
		possibly due to Several zones o	Chloritization is strong at the upper contact, the overlying lavas, but decreases with depth. f moderate to strong silicification are noted, and rite content, up to 10%, are observed. The section										
		averages 1-3% p of hematization	yrite. Purple colouration is due to varying degrees.	C	0.7	EO /E	60.00	0 55			0.01		
			strongly chloritized, weakly sheared, non-laminated; shear at 60.00 cuts core at 20°.				60.00				0.01		
		60.00 - 61.40:	purple-grey with honey coloured feldspathized				60.65				0.01		
			filling in dilatant zones and along fractures developed in breccia. Fragments are up to lcm - openings are filled with micro-breccia. Feldspathized rock carries increased pyrite - 7-9% versus an average 3-7%. Below 60.65, chloritized seams and fractures increase, degree of	1484	3-5	60.65	61.40	0.75			0.01		
			silicification decreases from strong to moderate and pyrite content falls to 3-5%. Purple colouration due to moderate hematization, also hematite seams up to 5mm.										
		61.40 - 62.22:	FAULT ZONE - intensely chloritized and strongly sheared - mylonitic from 61.68-61.88 m. Lower 34cm is strongly fractured with carbonate filling; 0-1% pyrite.	1485	0-1	61.40	62.22	0.82			0.02		
		62.22 - 62.98:	pinkish-green, weakly chloritized and weakly to moderately silicified; moderately to strongly brecciated - fragments are very angular with no subsequent rotation. Silicification is penetrative into fragments but alteration is incomplete. Zone 62.54-62.64 m is non-silicified.	1486	2-3	62.22	62.98	0.76			0.01		
		62.98 - 65.34:		1487	0-1	62.98	63.98	1.00			tr.		
		,	and moderately brecciated; laminations visible	1488		63.98		0.68			tr.		
			locally at 45° to core axis (eg. 63.22 m). 0-1% pyrite.	1489	0-1	64.66	65.34	0.68			tr.		
	·	65.34 - 66.10:	spotty silicification; moderate in strength, with weak to moderate hematization; 1% pyrite.	1490	1	65.34	66.10	0.76			0.01		
		66.10 - 66.84:	dark grey-green to grey, well laminated and weakly silicified; very minor brecciation. Carries 8-10% pyrite concentrated as a fine grained dissemination	1491	8-10	66.10	66.84	0.74			0.07		

HOLE NO. MC-83-39 SHEET NO. 5 OF 6

F00 i	TAGE		DECCRIPTION	1		SAMP	LE		I		ASSAYS		
ROM	то	- ·	DESCRIPTION	NO.	% SULPH		FOOTAGE		7.	7,	OZ/TON	OZ/TON	П
				<del> </del>	IDES	FROM	TO	TOTAL	7.	7	02/108	02/104	⊬
			parallel to the laminations in narrow seams.		ļ					-	]		
į			Bedding is at 60-70° to core axis. A fault at	1			<u> </u>						
- 1				1					1		1		
•			66.50 m cuts core at 40° and slickensides pitch 60° across plane.	<u>_</u> .					]				
- 1		66.84 - 72.06:		1402	1-3	66 01	67.04	1 00		1	0 07		
ļ		00.04 - 72.00:			1-3		67.84				0.07		
- 1			chloritized with minor 10cm weakly silicified	•	1	67.84	1				0.08		
			sections - pyrite averages 1-3% with minor increases in silicified rock. Laminations at 45-50° to core		1-2	1	1	I .			0.16		
					1		ı	1			0.12		
			•	1496	1-2	70.95	72.06	1.11	1		0.01		
}			chloritized fault zone - surrounding rock strongly brecciated and sheared.	1					l		1		
i		72.06 - 72.46:		1 407	2 -	72.06	72 46	0.40	1		0 00		
		72.00 - 72.40:	well laminated, chloritized zone; 3-5% pyrite - very finely disseminated between laminations -	1497	3-5	72.06	12.40	0.40			0.02		
			•	]		-					]		
		72.46 - 73.90:	alternating siliceous and argillitic. chloritized, moderately well laminated (73.16 at	1,00	1_2	72 //6	73.18	0.72			0.00		
-		72.40 - 73.90.	, ,				73.10				0.08		
- 1			chalcopyrite in fractures.	1477	1-2	/3.10	13.90	0.72	1		0.01		
j		73.90 - 74.11:	- ·	1500	57	72 00	74.11	0.21			0.01		
		74.11.	angular fragments up to lcm in a strongly	1300	J-/	13.90	/4.11	17.21	]		0.01		
			chloritized groundmass; 5-7% pyrite.										
		74.11 - 74.65:		15/2	1_2	7/ 11	74.65	0.54			0.03		
		74.11 74.03.	axis (eg. 74.63 m).	1545	1-3	/4-11	74.03	0.34	ì		0.03		
i		74.65 - 75.15:		1544	,	74.65	75.15	0.50			0.09		1
- 1		, , , , , , , , , , , , , , , , , , , ,	folded, often open folds along core axis.	12777	*	74.05	75.15	0.50	Ì		0.07		
		75.15 - 78.35:		1545	1	75.15	76.15	1.00	}	-	0.07		
				1546			77.15				tr.		
		78.35 - 79.35:	· · · · · · · · · · · · · · · · · · ·	1547			77.75		· ·		0.01		l
1				1548	1 1		78.35			1	0.03		ı
		79.35 - 80.70:	and the contract of the contra	1549	! ì		79.35				0.19		
			, , , , , , , , , , , , , , , , , , , ,	1550			80.00				0.01		
1				1551			80.82				0.01		l
İ			80.23 m.							-			ľ
		80.70 - 80.82:	laminated and strongly brecciated, 1-3% pyrite.		•					]			l
- 1		80.82 - 81.82:		1552	1-2	80.82	81.82	1.00			0.02		ĺ
		81.82 - 82.18:		1553		81.82		1.01			0.01		<b>}</b> -
1			sediment slumping.		.								l
-													l
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													ı

Lenora Mc - 83 - 39

SHEET NO ..

6 OF 6

F00	TAGE		DESCRIPTION	<b>[</b>		SAMP	LE				ASSAYS	
FROM	то	1	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO		7.	7.	OZ/TON	OZ/TON
		82.18 - 91.74:	massive, non-laminated, some weak foliation of chloritized clasts at 30-40° to core axis. Fractures strongly hematized from 82.18-82.90. A gradual increase in epidotization is noted, becoming pronounced below 87.50 m. Rock is medium grained and less fractured at base of hole. A 6cm sample was removed for thin sectioning.	C 1554 1555 1556 1557 1558 1559 1560 1561 1562	0-1 0-1 0-1 0-1 0-1 0-1	82.83 83.83 84.83 85.83 86.83 87.83 88.83 89.83	83.83 84.83 85.83 86.83 87.83 88.83	1.00 1.00 1.00 1.00			0.01 0.01 0.05 0.05 0.03 0.05 0.12 0.06 0.02	
		91.74 meters	END OF HOLE									
			CASING PULLED									
									<b>.</b>			
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							-	' 	·			
								•				
				·								
									·			
		\										
									·			

NAME OF	PROPERTY	McDermott	
HOLE NO.	Mc-83-40	LENGTH 218.87 meters	
LOCATION			_
LATITUDE	10 +00 E	DEPARTURE 1 + 30 S	_
ELEVATION		AZIMUTH	_
		983 FINISHED September 14, 1983	

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-70°		182.88	-59°	
45.72	-69 <sup>6</sup>		218.54	_	
91.44	-65°		_		
137.16	-67 <sup>0</sup>				

HOLE NO. Mc-83-40 SHEET NO. 1 OF 10

REMARKS BQ Core

Split for analysis

Hole drilled 7 off section.

LOGGED BY A.W. Workman

Ę	0 O T	AGE				SAMP	LE			Α	SSA	Y S
F	FROM	то	DESCRIPTION	NO.	SUL PH-	FROM	FOOTAGE TO	TOTAL	36	36	OZ/TON	OZ/TON
0	)	39.93	<u>OVERBURDEN</u>									
3	9.93	41.45	LOST CORE									
			Casing over-drilled.									
4	1.45	87.82	BASALT									
			Dark green, fine to very fine grained, generally pillowed flow with some massive zones. Lava is vesicular locally - vesicules now filled with carbonate and occasionally chlorite. Fracturing is variable - usually carbonate with hematite. Some textural changes are noted across narrow breccia or shear zones. Pyrite content averages 1% with traces of chalcopyrite. The zone is non-magnetic. 46.90 - 46.95: hematized fractures at 20° to core axis. 48.35 - 48.45: carbonate filled, coarsely brecciated zone sheared at 30° to core axis. 48.45 - 48.56: finely brecciated fault gouge; strongly chloritized. 50.35 - 51.85: strongly fractured; strongly chloritized, often sheared (20° at 51.0 m). Abundant white carbonate filled fractures. 52.30 - 57.00: relic vesicules throughout zone - carbonate filled; 10-15% 1-2cm carbonate filled fractures.	C 1574	0-1	46.00	47.00	1.00			0.01	
			55.35 - 55.45: carbonated, brecciated shear zone. 58:06 - 58.40: carbonated, breccia zone. 61.35 - 63.00: 80-90% white crystalline carbonate, with 10-20% green angular breccia fragments up to lcm in size.	1575 1576 1577 1578	0-1 0-1	57.06 58.06 58.40 61.35	58.40 59.40				0.01 0.01 0.01 tr.	
			63.00 - 87.30: medium green, pillowed section, fine grained, with locally developed vesicules up to lcm., mostly	1579 1580 1581	1-3	62.20 75.00 79.95	63.00 75.50	0.80 0.50 0.59			tr. tr. tr.	

McDermott

SHEET NO. 2 OF 10

F001	rAGE	DESCRIPTION			SAMP	LE				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7	7,	OZ/TON	OZ/TON
		from 71.30-71.71 between two fractures. Minor epidotization and occasional silicification of pillow interiors is noted. Occasional lmm hematized seams following contours of pillow selvages.  87.30 - 87.65: moderately to strongly sheared - pyrite crystals up to 8mm.	C 1582	3-5	87.30	87.82	0.52			tr.	
87.82	90.04	QUARTZ VEIN	1								
		White bull quartz, barren of sulphide; lower 28cm carries abundant 'streaks' of green sediments - preserving bedding orientation as evidenced below. Lower 'dirty' section carries 1-3% pyrite.	1583 1584 1585	0	88.79	88.79 89.76 90.04	0.97 0.97 0.28			0.01 0.01 0.01	
90.04	91.93	SEDIMENTS	]								
		Dark green, fine grained, very well laminated, possibly tuffaceous.  Moderately to strongly chloritized with 3-5% pyrite throughout.  Several quartz stringers cut core parallel to laminations.  Non-magnetic.  90.20: laminated at 55-60° to core axis.  90.95: laminated at 65° to core axis.  91.73 - 91.93: non-laminated, fine to medium grained.	1586 1587				0.93 0.96			0.01	
91.93	109.77										
		Medium to dark green, fine to very fine grained, very finely tectonically auto-brecciated. No subsequent rotation of highly angular 1-7mm fragments. Lower part is well pillowed. Some sections are medium grained and felsic - almost dioritic.  Non-magnetic. Similar to flow(s) in top of hole.  92.65 - 93.70: relic vesicules, chlorite and carbonate filled - up to lmm in size. Very weak flow foliation locally - rock may be weakly flow brecciated. Also relic pillow selvages locally. Carries 1% pyrite and 1-3% quartz stringers up to 2cm width.  93.70 - 96.72: possibly pillowed, alternating aphanitic seams with fine grained epidotized rock.  96.72 - 97.53: fine to medium grained - dioritic.		0-1 0-1	91.93 92.65	1 ł	0.72 1.05			tr. tr.	

FORM 2

NAME OF PROPERTY McDermott HOLE NO. MC-83-40 SHEET NO. 3 OF 10

FOOT	rage				SAMPL	_E				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	0Z/TON	OZ/TON	
		97.53 -106.25: pillowed section - selvages well defined and average 55cm apart. Up to 5% pyrite between pillow selvages. Pillow centres often brecciated and epidotized with minor silicification. Some increase in pyrite towards lower contact.  106.25-107.10: Zone of 40-60% clear quartz with remainder composed of epidotized volcanic rock. Quartz may have filled large dilatant zone or void between pillows then later brecciated.	C 1590	1-2	106.25	107.10	0.85			0.01		
		107.10-107.25: several pillow selvages with 5% pyrite. 107.25-109.77: variably brecciated and epidotized; locally silicified with minor epidote. Several small shears noted at 40-45° to core axis - quartz filled with	1591 1592	5 1-2	107.10					0.01 tr.		
109.77	111.73	3-5% pyrite. Shears are parallel to laminations in underlying sediments. Lowermost 12cm may actually be hematized silicified sediment.  SEDIMENTS										
		Alternating dark green and pale green laminations; fine to very fine grained and well laminated at 45-50° to core axis at 109.85 m. Small micro-faults offset banding at right angles on a mm scale. Some 'silty' zones are weakly carbonatized. Most carbonate in the zone is fracture rather than texturally controlled. Small, locally devloped, breccia zones up to 20cm in width cut across laminations. Zone is non-silicified, non-magnetic. Abundant 0.1-5.0mm carbonate stringers carry 30-50% bladed hematite crystals. Stringers are often parallel to bedding. Zone carries 0-1% pyrite.	1594	0-1	109.77 110.57 111.33	111.33	0.76	·		tr. tr. tr.		
.11.73	129.58	Medium to dark green, fine grained, moderately brecciated locally. Epidote and carbonate in fractures of breccia - fragments have undergone no subsequent movement. Zone is not pillowed but does contain some flow breccia. Section averages 0-1% pyrite in clots up to 8mm.  111.73-114.02: weakly to moderately brecciated, non-silicified. 114.02-115.45: greenish-pink, chloritic zone; fine to medium grained with a 1-2cm very fine grained upper contact	1596 1597	0-1	113.52 114.02 114.72	114.72	0.70	-		tr. tr. tr.		

HOLE NO \_\_\_\_ Mc.83-40 SHEET NO \_\_\_ 4 OF 10

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH, FOOTAGE NO. OZ/TON OZ/TON FROM TO FROM TOTAL at 800 to core axis. zone does not fine towards lower 450 contact - possibly sedimentary rather than intrusive. Carries abundant chloritized specks - 2-3mm in size. 115.45-115.67: flow-top breccia, weakly to moderately silicified, 1599 3-5 115.45 115.67 0.22 tr. carries 3-5% pyrite. 118.10-120.26: lava has incorporated numerous xenoliths of sediment tr. - well rounded with alteration rims and vaguely 1600 118.66 119.41 0.75 tr. preserved laminations. Fragments are tectonically 1601 119.41 120.26 0.85 brecciated with quartz and carbonate in tight fractures which cut both fragments and lava matrix. Both are strongly chloritized. Weakly to moderately silicified locally (eg. 119.41-120.26). tr. 120.26-121.30: medium grained matrix surrounds sub-angular to 1602 0-1 | 120.26 | 121.30 | 1.04 sub-rounded fragments up to 5cm in width and probably 5-10cm in length; 2-4mm reaction rims. Matrix is strongly chloritized. Zone is likely a flow breccia. tr. tectonically brecciated. 1603 0-1 121.30 122.07 0.77 121.30-122.07: tr. 1604 2-3 122.07-123.32: greenish-red, fine to medium grained INTRUSIVE -122.07 123.32 1.25 massive, weakly fractured, weakly magnetic, carries 1-3% pyrite but up to 10% at contacts. No chill developed at upper contact at 350 to core axis. Lower contact exhibits a well developed 25cm chill tr. zone. The lower 40cm carries several rounded to 1605 0-1 123.32 | 124.43 | 1.11 0.01 1606 0-1 124.43 125.43 1.00 sub-angular mafic xenoliths up to 2cm in size. 0.01 125.43 126.43 1.00 123.32-129.58: weakly auto-brecciated - tectonic stresses; weakly 1607 0-1 tr. 126.43 127.43 1.00 sheared locally over sections of 30-40cm at 350 to 1608 0-1 tr. 127.43 128.43 1.00 core axis. Fractures are dominantly carbonate and 609 0-1 128.43 | 129.58 | 1.15 hematite filled. Probable base of volcanic rocks. 610 0-1 129.58 146.45 SEDIMENTS Dark green to medium grey-green, fine to very fine grained and weakly to moderately chloritized. Bedding laminations are well exhibited becoming moderately developed locally. Parting is well developed parallel to the laminations. The rock is fine to medium grained locally in grey coloured zones up to 15cm in thickness. Bedding is less well developed in these 'sandy' zones. White

TORONTO - 366-1

)RM 2

McDermott NAME OF PROPERTY\_

SHEET NO. \_\_\_\_ 5 OF 10

HOLE NO. \_\_\_\_MC-83-40

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE % SULPH. NO. FROM OZ/TON OZ/TON TO TOTAL carbonate is found as a replacement feathering out along the 0-1 | 129.58 | 130.5d 0.92 laminations. Rock is weakly carbonatized. Abundant 1611 tr. 130.50 131.5d 1.00 quartz-carbonate stringers cross-cut the laminations at varying 1612 tr. angles, make up 1-5% of the section. Small shear planes parallel to 1613 0-1 | 131.50 | 132.50 | 1.00 tr. 132.50 133.5d 1.00 the laminations are often weakly hematized. 1614 tr. 129.58-134.32: weakly hematized, abundant semi-massive rock. 1615 0-1 | 133.50 | 134.32 | 0.82 tr. Hematite fracture fillings and stringers up to 8mm 1616 5-6 | 134.32 | 134.85 0.53 tr. at 132.80-133.20 m. Pyrite, 3-5% in locally developed breccia at 138.75-133.85 m. 134.32-134.85: greyish, fine to medium grained, crudely laminated at 450 to core axis. Pyrite in concentrations up to 5-6% in chloritized seams along laminations. 1617 0-1 | 134.85 | 135.85 | 1.00 tr. Selective brecciation of sets of laminations locally 1618 0-1 135.85 136.85 1.00 tr. 1619 0-1 | 137.85 | 138.85 | 1.00 alternates with non-brecciated beds - possibly due tr. 139.85 140.64 0.79 to soft sediment deformation - some weak to moderate 1620 0-1 tr. 3-5 | 140.64 | 141.38 0.74 silicification in breccia. tr. 134.85-140.64: moderately to well laminated, chloritized, non-brecciated, non-silicified. 140.64-141.38: laminations are better developed, often coarser and possibly tuffaceous (eg. 140.64-141.15 m). Locally silicified, especially 141.15-141.26 m., with increased pyrite up to 5% as very finely disseminated blebs and crystals up to 1mm. Laminations at 40-450 to core axis at 141.10 m. Zone averages 3-5% pyrite. 141.38-146.45: coarsely laminated, possibly due to original 0-1 | 141.38 | 142.40 1.02 1622 tr. texture; medium to coarse grained towards base. 1623 1 . 143.40 144.40 1.00 tr. 1624 1 145.39 146.39 1.00 Rock contains 20-30% dark green intensely tr. 1625 1-2 146.39 147.42 1.03 chloritized clasts up to 3mm in size. Clasts are tr. moderately well foliated. 146.45 165.33 MAIN MINERALIZED ZONE The zone consists of a gradual increase in silicification and brecciation with local peaks, then a gradual decline in brecciation and with it, silicification. Pyrite contents are highest where the rock is strongly brecciated and silicified. The rocks through this section are sediments although sedimentary structure is not always visible.

NAME OF PROPERTY McDermott

HOLE NO. Mc. 83-40 SHEET NO. 6 OF 10

F001	AGE	DESCRIPTION		· · · · · · · · · · · · · · · · · · ·	SAMP	LE				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7,	7.	OZ/TON	OZ/TON
146.45	148.42	TRANSITIONALLY SILICIFIED SEDIMENTS									
		Dark green to grey-green, fine to locally medium grained, well laminated but brecciation often masks structure. Brecciation is confined to single laminations and sets of laminations. Silicification is confined to breccia zones, and fractures. 146.45-147.30: fractures have flesh coloured halos which are strongly silicified. Fractures themselves are chlorite filled. 147.30-148.42: selective brecciation and silicification of certain laminations or sets of laminations up to 1cm thickness. Bedding at 45° to core axis.	C 1626	1-2	147.42	148.42	1.00			tr.	
.48 • 42	160.45	MAIN SILICIFIED ZONE									
		Grey to purple-grey, occasionally honey coloured due to feldspathization, moderately to intensely silicified and about 95% brecciated. Breccia fragments are most highly silicified and are often set in a strongly chloritized clastic matrix. In this case, silicification has preceded brecciation. Brecciation may have been due to a sedimentary process and siliceous clasts enveloped in later sediment. Fragments are extremely angular. Some zones, which may the most highly silicified, are well laminated, and non-brecciated. Pyrite content is proportional to degree of silicification and increases from an average of 3-4% to peaks of 10%.  148.42-148.72: intensely silicified fragments up to 5cm in strongly chloritized matrix.	C 1627			148.72 148.95				tr. 0.18	
		148.72-148.95: upper contact is a green clay filled fault plane - underlying rock is very well laminated at 45° to core axis, very highly silicified; feldspathized, up to 10% pyrite.	1629 1630	3-4 3-5	148.95 150.00	150.00 150.85	1.05 0.85			0.02 0.06	
		148.95-150.85: same as 148.42-148.72 m. Content of silicified fragments increases from 50% to 80%. Well laminated locally at 45° to core axis (eg. 150.25 m).	1631 1632	5-7 8 <b>-</b> 10	150.85 151.85	151.85 152.60	1.00 0.75			0.06 0.07	
								-			

FORM 2

McDermott NAME OF PROPERTY

SHEET NO. \_

7 OF 10

Mc. 83-40

HOLE NO. \_\_

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH FOOTAGE FROM TO OZ/TON OZ/TON FROM TO TOTAL 150.85-152.60: weakly brecciated, intensely silicified with 10-20% chloritized rock. Some fragments below 151.95 m are feldspathized. Zone carries 5-7% pyrite, up to 10% locally in feldspathized sections. A reddish-purple alteration or hematization is noted locally. becoming stronger with depth. 152.60-153.65: moderately to strongly brecciated, intensely 0.06 1633 5-7 152.60 153.65 1.05 silicified fragments; carries 10-20% chloritized beds; pyrite content 5-7%, well laminated locally; eq. 400 at 152.65 m. 0.04 153.65-154.65: fragments increasingly feldspathized, content of 1634 5-7 153.65 154.15 0.50 silicified fragments decreasing slightly. 5-7 154-15 154-65 0.07 1635 0.50 154.65-156.48: 25-50% silicified breccia fragments with brecciated 0.16 1636 2-4 154.65 155.65 1.00 0.10 horizons up to 10cm. Flanking horizons are 2-4 155-65 156-48 1637 0.83 non-brecciated, chloritized and very weakly silicified. Silicified breccia carries 3-5% pyrite above a 1-3% average. 156.48-158.50: dark green, weakly to moderately brecciated 0.02 throughout with white carbonate in tensional type 1638 0-1 156.48 157.50 1.02 0.01 fractures separating angular fragments up to 2cm. 1639 1-2 157.50 158.50 1.00 Generally non-laminated. Minor silicified breccia locally (eq. 157.30-157.40). 158.50-160.45: essentially same as above section but carries better 1640 3-5 158.50 159.50 1.00 tr. laminations with more widespread brecciation and 3-5 159-50 160-45 tr. 1641 0.95 silicification. Weak to moderate hematization produces a purple-grey colour locally. 160.45 165.33 TRANSITIONALLY SILICIFIED SEDIMENTS This zone is a dark green to grey green, fine grained locally brecciated and silicified transition zone from mostly silicified rock to non-silicified rock. Brecciation resembles shrinkage type fracturing (tensional). Sedimentary laminations are well developed but locally, brecciation masks structure. Pyrite content averages 1-3%, higher in silicified breccia. tr. 160.45-162.97: massive, non-silicified, very locally brecciated 1642 2-3 160.45 161.45 1643 2-3 161.45 162.45 1.00 along certain laminations. Bedding well developed tr. 2-3 162-45 162-97 locally eg. 300 to core axis at 160.50 m. Zone 1644 0.52 tr. carries 2-3% pyrite - mostly as 1mm cubes.

HOLE NO. \_\_\_\_\_\_\_Mc-83-40 SHEET NO. 8 OF 10

F001	AGE		DECORIDATION			SAMPL	"E				ASSAYS	
FROM	то		DESCRIPTION	NO.	% SULPH	,	FOOTAGE			T .	OZ/TON	07.70
- KOM					IDES	FROM	10	TOTAL	1 7	7.	02/100	OZ/TON
		162.97-164.45:	reddish-pink, intensely silicifed, syenitic(?) appearing zone - carries angular red breccia clasts up to 3cm in a strongly chloritized dark green	1645 1646	2-3 2-3	1					tr.	
		164.45-165.33:	matrix - 60-70% fragments; carries 2-3% very finely disseminated pyrite. Zone may be sediment. zone is composed of silicified breccia beds up to 3cm in a dark green chloritized, laminated sequence. Silicification is very strong to intense - abundant reddish-pink silicified beds cut core axis at 40° - very similar to overlying zone. Silicified beds are micro-brecciated with 1-3mm fragments.	1647	2-4	164.45	165.33	0.88	CTTT CORRECT WAR IN THE STREET WAS ARRESTED AND ASSESSED.		tr.	
65.33	184.60	LOCALLY S	ILICIFIED SEDIMENTS									
-		laminated. Abu sedimentary fol developed brecc (eg. 166.00-166	e to very fine grained, non-laminated to weakly ndant white carbonate replacement feathers out along iation and highlights probable bedding. Weakly ia zones up to 10cm locally are weakly silicified .05 m), greyish in colour and carry 1-3% pyrite					·				
			ge of 0-1%. Carbonate veins and stringers were r and often cut core axis at 0-5°.	c		-	·					
		165.33-167.45:	chloritized, dark green rock.	1648	I .	165.33					tr.	
1		167.45-169.34:	carries purple-grey breccia pods and lenses -	1649		166.35					tr.	
			intensely silicified with 8-10% pyrite - possibly	1650	1-2	167.35	167.87	0.52			tr.	
Į.	1		developed where bedding is brecciated due to soft	1651	1	167.87	168.87	1.00			tr.	
			sediment deformation.	1652	1-2	168.87	169.34	0.47			tr.	
		169.34-175.06:	weakly laminated becoming stronger with depth;	1653	0-1	169.34	170.53	1.19			tr.	}
-			non-brecciated and generally non-silicified to very	1654	0-1	170.53	171.43	0.90			tr.	
			weak silicification locally.	1655		171.43					tr.	
1		175.06-176.93:		1656	0-1	173.00	174.00	1.00			tr.	
1			laminated, sandy appearance, weakly silicified,	1657	0-1	174.00	175.0	1.06			tr.	1
			increased pyrite with silicification (3-5% at 175.06-175.80).	1658	2-4	175.06	175.80	0.74			0.07	-
		175.80-176.52:	INTUSIVE - green, abundant pinkish-red silicified fragments, non-foliated, magnetic.	1659	1-2	175.80	176.52	0.72			0.01	
		176.52-176.93:		1660	4-5	176.52	176.93	0.41			0.07	

McDermott

Mc.83-40

SHEET NO.

9 OF 10

FOOT	rage					SAMP	LE				ASSAYS	
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	76	7,	OZ/TON	OZ/TON
		176.93-178.44:	selective silicification of particular brecciated sets of laminations - totalling 5-10% of section.	C 1661 1662	1-3	176.93 178.00	178.00	1.07			0.01	
		178•44-179•02:	Laminated at 25° to core; averages 1-3% pyrite.  moderately to strongly silicified and brecciated; up								0.74	
		179.02-180.38:	to 5% pyrite, averaging 4-5%. dark green with 10-20% purple-grey silicified	1664	2-3	179.02	179.70	0.68			tr.	
		180.38-181.21:	pyrite, up to 4% locally. Weakly magnetic. occasional silicified brecciated laminations.	1665 1666		179.70 180.38					tr.	
		181.21-181.84:		1667		181.21					0.08	
		181.84-183.00:		1668	2-3	181.84	183.00	1.16			0.03	
		183.00-184.60:	percentage silicification decreases - some grouping of locally silicified breccia. Carries 60% silicified breccia between 184.20-184.55 with 2-4% pyrite.			183.00 184.00					0.01 0.11	
184.6	218.87	SEDIMENTS						- ·				
		well laminated Up to 4% pyrite texture may ref is weakly magne part of this zo grained sedimen the rock is non	en sandy textured, and fine grained; moderately to at 35-50° to the core axis and weakly chloritized. is observed locally. Averages 0-2% pyrite. Sandy lect a tuffaceous component. Below 185.00 m the zone tic often becoming moderately magnetic. The lower ne is composed of alternating fine and fine to medium ts. Bedding becomes variably developed. Generally, -brecciated and non-silicified. sandy, non-silicified, laminated at 35-40°. brecciatd bedding, moderately to strongly silicified, up to 5% pyrite, well laminated at 30° to core at 188.80 m.	1671	1-2 2-3	184.60 187.80	185.60 188.80	1.00 1.00			0.01 0.01	
								·				

McDermott Mc.83-40 SHEET NO. 10 OF 10

FOOTAGE		DESCRIPTION				_E		ASSAYS					
FROM TO	7	DESCRIPTION	NO.	% SULPH		FOOTAGE	****	,	7,	OZ/TON	OZ/TON		
	188.80-190.70:	fine grained, moderately laminated becoming less laminated and fine to medium grained with depth. Appears tuffaceous from 190.20-190.70 m.	1673 1674		189.70 190.20					0.01			
		fine grained, weakly laminated. fine to medium grained.	1675	1	194.00	195.00	1.00			0.01			
		grained; below 197.50 is generally fine to medium grained, weakly chloritzed; speckled with white 0.5mm clasts - possibly tuffaceous. Minor silicification associated with 1cm breccia zones	1676	1	198.50	199.20	0.70			0.01			
	200.60-201.00:	surrounding narrow fractures. minor weak silicification with associated brecciation of individual laminations; weakly laminated; 2-4% pyrite.	1677	2-4	200.60	201.00	0.40			0.01			
	201.15-202.15:	same as 191.80-200.60 m. strongly laminated, lower 10cm becomes somewhat chaotic and moderately laminated; non-silicified; 202.20 m laminated at 30-35° to core axis.	1678	1-2	201.95	202.45	0.50			tr.			
		vaguely laminated, fine to medium grained carrying 0-1% pyrite as blebs up to 1mm. Abundant barren white carbonate stringers and veins up to 1cm. A dark grey zone at 207.42-207.95 m is strongly brecciated but not silicified and no increased	1679	0-1	207•42	207.95	0.53			tr.			
	212.65-213.50:	pyrite. fine grained, well laminated at 45-500 to core axis.						·					
		fine to medium grained, poorly bedded. well laminated locally at 45-50°. well laminated at 45-50° to core axis. fine to medium grained, weakly foliated but not			-							İ	
	218.87 meters	laminated.  END OF HOLE											
		CASING PULLED		•						_			

NAME OF	PROPERTY	McDermott	· 	
HOLE NO.	Mc-83-41	LENGTH	203.30 meters	
LOCATION				
LATITUDE	9 + 50 E	DEPARTURE	1 + 15 S	·
ELEVATION	·	AZIMUTH	344° DIP	-70 <sup>0</sup>
			September 16, 1983	

FOOTAGE		FOOTAGE	DIP	AZIMUTH
0	-70°			
45.72	-70°			
91.44	-68°			
137.16	-64 <sup>0</sup>			

HOLE NO. MC-83-41 SHEET NO. 1 OF 7

LOGGED BY S. Trueland

FOO.	TAGE	DESCRIPTION			SAMP	LE				SSA	Y S	
FROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	ж	OZ/TON	oz/ton	
0	5.00	OVERBURDEN										
5.00	16.87	BASALIT										
		Medium to dark green with medium grain size (2-4mm) consisting of 70% mafics and 30% felsics. The rock is massive with minor fractures infilled with carbonate. These fractures are 3-10mm wide and are oriented at 30° and 90° to the core axis. Sulphides can be found throughout in trace amounts.										
16.87	52.50	PILLOWED BASALT	-			-						ı I
		The contact with the above flow is gradational over about 20-25cm at which point the rock becomes very fine grained and light to medium green in colour. This is a sequence of pillowed volcanics with well developed selvages which are infilled with carbonate. Amygdules are found within the volcanics in close proximity to the pillow selvages (2-10cm) and are infilled with carbonates. Hairline fractures throughout pillows have no regular orientation. Pillow breccia may be found, but is not abundant. Sulphides may be found associated with carbonates within pillow selvages.										
52.50	85.84	BASALT										
		Rock is medium to dark green and medium green. It is the same texturally as from 5.00-16.87 m. The contact with the above volcanics is abrupt and makes an angle of 10° with the core axis. Fracturing is minor and at random orientations.	-									
				-								

FORM 1

HOLE NO. Mc-83-41 SHEET NO. 2 OF 7

FOOT	AGE					SAMP	LE				ASSAYS		
FROM	то	1	DESCRIPTION	NO.	% SULPH		FOOTAGE		1 ,	7	OZ/TON	02/TON	<u> </u>
FROM	ТО	57.00:  69.64: 72.24: 74.79:  75.50: 77.15: 78.23:  80.65:  81.88 - 82.18:  82.68 - 85.84:	3cm wide olive green silicified material - looks like epidote but much harder - cuts core at 30° to core axis.  15cm wide carbonate vein at 20° to core axis.  5cm wide carbonate vein at 70° to core axis.  3-5cm wide cream coloured highly silicified material containing brecciated fragments ranging in size from 1mm to 2cm. Some carbonates found within it (fizzing from 10% HCl).  1cm wide carbonate vein at 55° to core axis.  1cm wide carbonate vein at 55° to core axis.  3cm wide cream coloured with green hue material.  Does not contain large brecciated fragments as with 74.79 meters.  1cm wide carbonate vein at 55° to core axis.  Hematite staining between carbonate and wallrock.  Sulphides present.  intensely brecciated, highly silicified rock.  Fragments are predominantly 2-3mm in size with some larger 2-5cm quartz fragments.  more abundant fractures 1-2% within the intrusive ranging in size from 2-5mm. Infilling with		TOES	81.88 82.18	81.88 82.18 83.18	1.00 0.30 1.00	7.	7,	0.01 0.01 0.01	OZ/TON	•
35.84	88.78	there are mafic wallrock upon i slight foliatio 1-2mm up to 5-1 with these frag (possibly rework	carbonates and possibly quartz. The rock has localized foliation which could be caused by shearing.  IN  sive non-mineralized bull quartz. Within the quartz	1685 1686 1687 1688	tr tr nil nil	86.35	86.85 87.35 87.85 88.35	0.50 0.50 0.50 0.50	es O.	70)	tr. tr. tr. tr.		

FORM :

NAME OF PROPERTY McDermott

HOLE NO. MC-83-41 SHEET NO. 3 OF 7

FOOT	AGE				SAMP	LE				ASSAYS	
ROM	то	DESCRIPTION	NO.	% SULPH		FOOTAGE		1 .	- 3	OZ/TON	OZ TON
8.78	89.48	SEDIMENTS		IDES	FROM	то	TOTAL				
		Medium to dark green laminated rock; locally is intensely brecciated. Brecciated fragments (2-10mm) are cream coloured as well as purple and white in colour. Purple coloured material scratches red - hematite. Euhedral pyrite crystals found within the brecciated rock as well as being finely disseminated along sedimentary lamellae. Average amount throughout is 1-2%.	C 1690	1-2	88.78	89.48	0.70			0.01	
39.48	89.93	QUARTZ VEIN									
		As from 85.84-88.78 meters.	1691	tr	89.48	89.93	0.45			0.01	
9.93	94.63	SEDIMENTS									
		Medium to dark green, fine grained, well laminated rock oriented between 40° and 60° to the core axis. The rock is locally brecciated with fragments up to 2cm in size. Sulphides are not confined to the brecciated zones, but are found throughout the interval as euhedral crystals, as well as being finely disseminated along lamellae. Hematite (purple) is found locally within some brecciated zones.  89.93 - 90.10: brecciated - fragments up to 5mm.  90.23 - 90.37: brecciated - hematite, 2cm quartz vein, cream coloured fragments (ankerite?).  90.53 - 90.60: quartz - no sulphides.  90.73 - 90.76: brecciated hematized zone.  90.97 - 91.23: quartz vein with cream coloured fragments (ankerite?) 2-5cm in size, and hematized fragments 2-4cm in size. Pyrite, localized, averages 1%.  92.37 - 92.44: quartz vein ) pyrite is concentrated within 92.77 - 92.79: brecciated ) the sediments close to the 93.12 - 93.14: brecciated ) brecciation	1692 1693 1694 1695 1696		90.82 91.82	90.82 91.82 92.82 93.82 94.64	1.00 1.00 1.00	actual	•	tr. tr. 0.05 0.01 tr.	
		·									

NAME OF PROPERTY\_\_\_\_\_\_McDermott

HOLE NO. \_\_\_\_MC-83-41 \_\_\_\_\_ SHEET NO. \_\_\_\_4 OF 7 \_\_\_\_\_

F001	TAGE	DESCRIPTION			SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	<u>'————</u>	FOOTAGE		7,	7,	OZ/TON	GZ/TON	Г
94.64	96.44	QUARTZ VEIN		IDES	FROM	то	TOTAL				02, 104	$\vdash$
		No amount   1 mm   1	C 1697 1698	1	1	95.64 96.44				tr.		
96.44	123.30	SEDIMENTS	ŀ									
		Dark green, poorly to well laminated sediments. Narrow bands of brecciation up to 15cm wide found within the sediments. These bands represent less than 1% of the zone. Carbonates fill hairline	1699 1700		96.44 97.44	97 <b>.</b> 44 98 <b>.</b> 44	1			tr.		
		fractures as well as fractures up to 1cm wide. The fractures are randomly oriented making up less than 1% of interval. Sulphides	1701		99.44	100.44	1.00			tr.		İ
		finely disseminated throughout amount to less than 1%. 112.33-112.91: sediments become more coarse grained with less	1702		100.94	101.94	1.00			tr.		
		carbonate veining. Laminations at 550 to core	1703		102.94	103.94	1.00			tr.		
		117.96: lamination at 45° to core axis. 121.00: lamination at 45° to core axis.	1704		104.94	105.94	1.00	(actual	0.78)	tr.		[
		122.00: lamination at 40° to core axis.	1705		106.94	107.94	1.00			tr.		
			1706		108.94	109.94	1.00			tr.		
			1 <b>7</b> 07		110.94	111.94	1.00			tr.		İ
			1708		112.94	113.94	1.00		-	tr.		ļ
·			1709 1710		121.30 122.30					tr.		;
23.30	147.19	MAIN SILICIFIED ZONE										
		The main silicified zone is defined by the presence of highly silicified rock, possibly tuffaceous sediments. At the top of the zone there is alternating silicified and relic chloritized intervals. Chloritized rock is medium green with 40% white sub-rounded to		•								

HOLE NO. MC-83-41 SHEET NO. 5 OF 7

FOOTAGE	DECEMBERA			SAMP	LE				ASSAYS	
ROM TO	DESCRIPTION	NO.	% SULPH	·	FOOTAGE	7074	,	7,	OZ/TON	OZ:TON
	highly silicified and are either creamy in colour (ankerite?) or dark grey with a purple hue (hematite). Brecciation is intense throughout the silicified zone. Pyrite is finely disseminated throughout, but the chloritized zone averages less than 1% while the silicified zones have up to 10% and average 5%.  123.30-123.53: chloritized interval with laminations at 30° to core axis.  123.53-123.80: cream coloured silicified zone, pyrite 3-5%.  123.80-124.47: chloritized interval, 40° to the core axis.  124.47-125.25: cream and purple hue silicified zone.  125.25-125.63: chloritized interval, 40° to the core axis.  125.63-126.18: purple hue silicified zone.  126.18-126.46: interlayered chloritized and silicified zones.  127.87-129.05: chloritized interval, 35° to the core axis.  129.05-131.00: magnetic  133.00-133.10: reddish brown fragments (hematized?) sulphides increase in close proximity.  134.05-134.42: interval of non-silicified rock with medium-coarse grains at top of interval with sub-rounded to rounded fragments at the bottom of the interval. Why are these chloritized zones not vulnerable to mineralization? Pyrite trace.  134.42-147.19: silicified rock.	1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727	tr 2-4 3-5 2-3 tr tr 6-8 3-5 5-6 2-3 8-10 tr 5 1 2-3 1-2 1 1 1-2 1	123.82 124.46 125.46 127.46 127.87 128.64 129.05 130.05 131.05 132.05 134.05 134.42 135.42 136.42 137.42 138.42 140.42 141.42 142.42 141.42 142.42 143.42	125.46 126.46 127.46 127.87 128.64 129.05 130.05 131.05 132.05 133.05 134.42 135.42 135.42 136.42 137.42 149.42 140.42 141.42 142.42 143.42 144.42	0.64 1.00 1.00 0.41 0.77 0.41 1.00 1.00 1.00 1.00 1.00 1.00 1.00	(actual		0.13 0.01 0.19 0.11 0.07 0.02 0.05 0.01 0.24 0.10	

NAME OF PROPERTY McDermott

HOLE NO. Mc 83-41 SHEET NO. 6 OF 7

FOOTAGE				SAMPL					ASSAYS		
FROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	-	7.	0Z/TON	OZ, TON	
147.19 156.88	TRANSITION ZONE							·			
	The rock alternates silicified and chloritized within this interval. The rock is still moderately to intensely brecciated. The chloritized zones are dark green with a medium-fine to coarse-fine grained appearance. The silicified zones are purple in hue to creamy in hue. The silicification represents 75-80% from 147.19-150.72 while the chloritized zones dominate 85-90% from 150.72-156.88 m. Within the upper part of the transition zone the brecciation is moderate to intense. Sulphides are more abundant in the silicified zones, up to 2%, while in the chloritized zone sulphides only reach trace amounts. Brecciation in the lower transition zone is less abundant and the presence of carbonate veining becomes dominant. Lamination within the upper zone is masked by brecciation, but in the lower zone lamellae are oriented at between 40-50° to the core axis.	C 1738 1740 1741 1742 1743 1744 1745 1746 1747		147.19 148.19 149.19 150.19 150.72 151.72 152.72 153.72 154.72 155.72	149.19 150.19 150.72 151.72 152.72 153.72 154.72 155.72	1.00 1.00 0.53 1.00 1.00 1.00		·	0.03 0.02 0.23 0.12 tr. tr. tr.		
56.88 193.72	Medium to light green, fine to coarse grained, well laminated to massive rock with carbonate veining comprising approximately 1% of interval. The carbonates lie along laminations in the well laminated rock but in a random orientation in a massive rock. Sulphides (pyrite and chalcopyrite) are trace throughout and appear very finely disseminated.  160.00: 45° to core axis, less than 1% CO <sub>3</sub> 161.00: massive, less than 1% CO <sub>3</sub> 162.00: massive, less than 1% CO <sub>3</sub> 163.00: 50° to core axis.)  164.00: 35° to core axis.)  165.00: 30° to core axis.)  167.90: carbonate vein 4cm wide at 25° to core axis.  168.00-169.77: massive, less than 1% carbonate veining.  169.77-170.67: very well laminated at 30° to core axis.  Carbonates absent.  172.98-173.08: 10cm wide brecciated band at 45° to core axis.	1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1760 1761 1762 1763 1764 1765		156.88 157.88 158.88 159.88 160.88 161.88 162.88 163.88 164.88 165.88 166.88 167.88 169.88 170.88 171.88 171.88	158.88 159.88 160.88 161.88 163.88 164.88 165.88 166.88 169.88 170.88 170.88 171.88 172.88	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	actual actual	0.77)	0.01 tr. tr. tr. tr. tr. tr. tr. tr. tr.	HOLE C SAMPLE TO BA OF HO	SE

NAME OF PROPERTY McDermott 

NAME OF	PROPERTY	McDermott
HOLE NO.	Mc-83-42	LENGTH 186.12 metres
LOCATION		
ELEVATION		DEPARTURE <u>0 + 75 S</u> DIP <u>-70°</u>
		6/83 FINISHED September 21/83

	FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
	0	-70 <sup>0</sup>		185.93	-60 <sup>0</sup>	
	45.72					
I	91.44	-67°				
	137.16	-62°				

HOLE NO. Mc-83-42 SHEET NO. 1 OF 10

REMARKS BQ Core

Split for analysis

LOGGED BY A.W. Workman

FROM         TO         .           0         13.11         OVERBURDEN           13.11         39.42         BASALT	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE		36	7/	T.,	/ /
		11			TO	TOTAL	]] ~	36	OZ/TON	OZ/TON
13.11 39.42 <u>BASALT</u>										
1 1	-									
medium grained lo frequently vesicular filled. Rock is and traces of chance is an antized, mostly are fresh to weak epidotized or sau noted which does association.  13.11 - 19.17:	een, often grey-green; very fine grained becoming ocally, probably near flow centres. Lava is ular with relic vesicules up to lcm now chlorite weakly to moderately fractured with quartz filling alcopyrite (up to 5% locally). Fractures are often y in coarser grained sections. Pyroxene crystals kly chloritized; feldspars are moderately usauritized. Locallized strong silicification is not seem to have a textural or structural very strongly silicified, non-brecciated, to weakly brecciated locally; very fine grained; possibly pillowed from 17.35-19.35 m. moderately brecciated locally in 10cm sections;	C 1779	0-1	14.18	15.18	1.00	-		0.01	
22.95 - 36.20:	dilatant zones are silica filled with 1-2% chalcopyrite. Minor local silicification (eg 20.95-21.05 m). fine to medium grained, weakly silicified locally, weakly to moderately fractured becoming strongly fractured below 35.60 m. Rock is locally brecciated and epidotized.	1780	1-2	20.88	21.62	0.74			0.01	
36.20 - 39.42: 1	fine to medium grained, strongly fractured with	1781	0-1	38.42	39.42	1.00			tr.	

NAME OF PROPERTY\_\_\_\_\_\_\_McDermott

		p									<del> </del>	
F00	TAGE	DESCRIPTION			SAMP					ASSAYS		
FROM	то		NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	%	OZ/TON	OZ, TON	
39.42	41.57	SEDIMENTS										
		Light to dark green, fine to very fine grained and well laminated inter-flow sediment. Bedding is at 45° to the core axis, but is locally cross-laminated and rarely exhibits signs of soft sediment slumping. Locally, the rock is strongly brecciated and moderately to strongly silicified with up to 15% very finely disseminated pyrite and 1-2mm cubes. Zone averages 2-4% pyrite. Sediments are epidotized and feldspathized in and proximal to breccia zones best developed above 39.96 m. Pyrite content is proportional to brecciation and alteration.  39.42 - 39.96: variably brecciated; 5-7% pyrite - up to 15% locally.  39.96 - 40.46: non-brecciated; 5-7% pyrite - mostly as a very fine dissemination.  40.46 - 41.57: well laminated, moderately chloritized. Rock has a 'sandy' appearance - possibly tuffaceous. Minor silicification in 1-3cm zones and feldspathized breccia zones. Pyrite is mostly fracture controlled.	1	5-7	39.96	40.46	0.50			tr. 0.01 0.01		
41.57	74.68	Dark green, very fine to medium grained, often ophitic textured particularly in coarser zones, and generally massive flow. The upper 15-20cm contains chloritized flattened vesicules up to 1.5mm. The axis of elongation is at 30-35° to the core axis. Largest percentage of flow is medium grained, with coarse grained phases, and very weakly magnetic. Carries abundant (3-5%) pyrite to a depth of 42.75 m. Flow averages 1%. 41.57 - 43.85: brecciated, carries 5-10cm sediment at top of flow - (infilling from above); averages 3-5% pyrite.  Vesicular flow top. 43.85 - 57.00: medium grained, coarse locally - ophitic. 57.00 - 72.36: strongly fractured with bematite and white carbonate in fractures. Rock is locally brecciated. Zone carries 2-3% hematized soft, sub-rounded fragments	1785 1786	•	41.57 42.27	42.27 42.75				tr.		

RIDGE LIMITED - TORG

F00	TAGE				SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	1 %	7.	OZ/TON	OZ, TON	
		(sediment?), below 66.85 m. Below this point, rock is more strongly brecciated with moderate epidotization.  72.36 - 72.74: strongly brecciated, moderately epidotized, non-silicified.  72.74 - 74.68: fine grained, often tuffaceous in appearance, very similar to 57.00-72.36 m - assumed to be flow.	C 1787		74.05					tr.		
74.68	82.48	Dark green, fine grained with clasts up to lmm - usually angular, non-laminated becoming weakly bedded at 80.0 m (40° to core axis). Bedding is on a 0.1-0.5 mm scale, with zones of white to grey carbonate replacement up to 5mm parallel to laminations. This reflects weak to moderate carbonatization. Zone also carries 1-5%, 1-4mm carbonate stringers parallel to laminations. Section averages 1% pyrite with up to 3% locally.  74.68 - 74.83: pinkish alteration, strongly brecciated, moderately silicified.  74.83 - 80.00: non-laminated to very weakly laminated.  80.00 - 81.00: weakly laminated at 40° to core axis.  81.00 - 82.48: well laminated at 45° to core axis.	1788 1789 1790 1791 1792 1793 1794 1795	0-2 0-2 0-2 0-2 0-2 0-2	77.68 78.68 79.68 80.68	76.68 77.68 78.68 79.68 80.68 81.68	1.00 1.00 1.00 1.00 1.00			tr. tr. tr. tr. tr. tr. tr.		
82.48	111.61	MAIN MINERALIZED ZONE  The rocks in this zone are sediments which have undergone variable breciation and silicification. The main silicified zone is overlain by a thin transition zone containing approximately 50% silicified rock; and is underlain by a wider transition zone carrying about 30-40% silicified rock. The central zone contains up to 15% pyrite associated with intensely silicified and strongly feldspathized non-brecciated rock.										
82.48	84.43	TRANSITIONAL SILICIFIED SEDIMENTS  Dark green, fine grained and chloritized with increasing purple-grey intensely silicified, weakly to strongly brecciated bands. These										

McDermott NAME OF PROPERTY\_\_\_\_ HOLE NO. Mc-83-42 SHEET NO. 4 OF 10

F00	TAGE	DESCRIPTION			SAMP	LE				ASSAYS	•
FROM	то	DESCRIPTION	NO.	% SULPH	`	FOOTAGE		1	7,	OZ/TON	OZ TON
		bands are concordant to the laminations. The bedding is well	1	IDES	FROM	ТО	TOTAL		"	35, 15.11	Rech.
		developed (35° at 82.78 m and 40-45° at 83.70 m), throughout but often disrupted by brecciaiton. Purple hue is due to moderate hematization and is strongest in strongly brecciated rock. Breccia fragments are highly angular and often laminated. They may be rip-up clasts.	C								
		82.48 - 83.65: rock is less than 40% silicified. 83.65 - 84.43: rock is 60-65% silicified.	1796 1797	2-3 3-4		83.38 84.43	1			tr.	
84.43	106.77	MAIN SILICIFIED ZONE									
		Purple-grey, aphanitic to fine grained, intensely silicified with abundant honey coloured sections reflecting feldspathization, (?). Degree of alteration does not appear to be dependent upon brecciation. Purple hue is best developed in intensely brecciated rock, and is attributable to moderate hematization. Brecciation is absent in some sections. Pyrite content averages 5-6% and ranges from 2-15%. Bedding laminations are well displayed in non-brecciated, often feldspathized zones. The zone is		-							
٠		non-magnetic.  84.43 - 85.07: highly tuffaceous, clasts up to 2mm, laminated matrix wraps around some fragments. Clasts are strongly foliated along laminations at 40° to core axis. Carries 3-4% very finely disseminated	1798	3-4	84.43	85.43	1.00			0.01	
	-	pyrite.  85.07 - 86.33: strongly brecciated; honey coloured angular fragments in purple-grey matrix.	1799	3-5	85.43	86.43	1.00			0.01	
		86.33 - 86.86: relic laminations are visible through breccia at 40-45° to core axis. Zone carries abundant reddish breccia clasts up to 1cm at 86.65-86.80 m. Abundant chloritized shear planes at 86.80-86.86 m -	1800							0.03	
	·		1920 1921	3-4 3-5	87.66	87.66 88.66	1.00			0.01	0.01
		at 45° to core axis at 88.35 m.  89.53 - 89.86: abundant chloritized fractures due to minor fault movement - rock strongly feldspathized. Minor green clay associated with faulting.	1922 1923	3-5 2-3	88.66 89.53	89.52 89.86				0.01	0.02

F00	TAGE		DECORIDATION			SAMP	LE				ASSAYS	•
FROM	то	<b>1</b> ·	DESCRIPTION	NO.	% SULPH		FOOTAGE		1 ,	7,	OZ/TON	OZ, TON
KOM	ļ			<b>!</b>	IDES	FROM	то	TOTAL	*	7	02/100	02,104
				jc .	1		1					Rech.
		89.86 - 91.95:							1			0.07
			broken, carries 5-6% pyrite well laminated at 40°	1925	5-6	91.03	91.95	0.92	j		0.02	0.08
			to core axis.	l			Ì		İ			Ì
		91.95 - 92.89:	pale green, with dark green chloritized fractures -	1926	1-2	91.95	92.89	0.94	l	İ	0.01	0.01
			often mylonitic, probable intrusive carries abundant	ł		1						
			silicified breccia fragments of wall rock - possibly	1								
			biotitic. (NOTE: Zone is same as weakly magnetic	1		1					İ	
			intrusive in other holes).	l				[	İ	İ	İ	
	i	92.89 - 94.35:	dark purple-grey with 20-30% honey to cream coloured	1927	4-5	92.89	93.57	0.68			0.02	0.02
			feldspathized laminations at 40° to core axis -	1928		93.57	94.35	0.78			0.05	0.01
			very well laminated at base.									
		94.35 - 95.22:	rock becoming increasingly feldspathized along	1929	5-6	94.35	95.22	0.87			0.12	0.03
			certain sets of laminations. Bedding at 35-400 to	1					İ			1
			core throughout.	l					•			
		95.22 - 97.42:	intense feldspathization (90-100%) of rock;	1930	10-12	95.22	96.20	0.98			0.07	0.03
			generally well laminated with up to 15% pyrite	1931	8-10	96.20	96.62	0.42			0.09	0.04
			concentrated along laminations. Some blue-grey	1932	9-10	96.62	97.42	0.80			0.05	0.05
			quartz infilling of voids near base with little							·		,
			contained pyrite.	l								'
		97.42 - 97.60:	strongly chloritized, medium grained possibly	1933	0-1	97.42	97.60	0.18			0.01	0.02
			mylonitic (fault?) zone. Well foliated at 40-450									
			to core axis, parallel to lamination in silicified	1								
			sediment.				1					
		97.60 - 97.88:	strongly feldspathized; 8-10% pyrite.	1934	8-10	97.60	97.88	0.28			0.01	1
		97.88 -100.50:	spotty feldspathization along fractures - 10-20% of	1935	1-2	97.88	98.75	0.87			0.02	
		•	rock volume; remainder is purple-grey, well	1936	2-4	98.75	99.75	1.00			•	0.005
			laminated locally (50-60° at 98.78-99.04 m).	1937	2-4	99.75	100.50	0.75			0.01	0.005
			Degree of feldspathization decreases with depth.	1 .							·	
		100.50-100.98:	laminations at 450 to core axis are highly	1938	0-1.	100.50	100.98	0.48			0.01	0.01
			convoluted locally - non-silicified.	l ·								
		100.98-101.98:	purple-grey, with spotty honey coloured	1939	4-6	100.98	101.98	1.00			0.01	0.02
			feldspathization containing 7-9% pyrite above	ł	1							
			average of 4-6%. Moderately laminated at 40-50°									
			to core axis. Pyrite found in lcm clusters of lmm		1				·			
			cubes and as a very fine dissemination.		1							
		101.98-103.16:		1940		101.98					0.01	
			pyrite in clots and very finely disseminated.	1941	3-5	102.62	103.16	0.54			0.01	0.01
			• · · · · · · · · · · · · · · · · · · ·	1								
į												
	1	1		1	I	ı	1	İ	r 1		I	1

HOLE NO. MC-83-42 SHEET NO. 6 OF 10

FOOT	AGE		DESCRIPTION .			SAMPL	-E				ASSAYS	<u> </u>
	то		DESCRIPTION	NO.	% SULPH	` <del></del>	FOOTAGE		7,	7,	OZ/TON	OZ/TON
FROM	10	· · · · · · · · · · · · · · · · · · ·	<u>·                                      </u>	├	IDES	FROM	то	TOTAL		-	02/10#	02/104
			Initially feldspathization is ubiquitous then becomes irregular and fracture controlled below 102.62 m.	С		-						Rech.
	,	103.16-105.74:		•	1	103.16	I		1		tr.	0.005
			strong feldspathization associated with fractures.		2-3	1					tr.	0.01
			Contains a few chloritized seams locally which are non-silicified (eg. 103.18-103.21, 103.45-103.48, 103.68-103.71, 104.01-104.08 m). Zone is 95% silicified, weakly laminated: 45° at 104.60 and 35° at 104.96 m.	1944	2-3	105.13	105.95	0.82			tr.	0.005
		105.74-106.15:			1-3	105.95	106.77	0.82			tr.	0.01
		106.15-106.57:										
		106.57-106.77:		1								
		100.37 100.77.	silicified, non-chloritized, non-brecciated, non-feldspathized.									
106.77	111.61	TRANSITIO	NAL SILICIFIED SEDIMENTS									
		zones up to 25c silicified rock intense breccia Quartz is found	y with abundant dark green chloritized seams and m. Zone is about 25% chloritized. Purple hue in is due to hematization. Silicification is due to tion usually associated with fracture systems. infilling voids and fractures up to lcm wide. Rock									
			ed locally (eg. 450 at 105.87 m). Zone carries	1774	1	t I					tr.	
			to 5% locally associated with local	1775	2-3	107.77	108.93	1.16			tr.	
		feldspathizatio	pinkish-green, fine to medium grained INTRUSIVE - carries abundant (10%), green chloritized	1776	1-2	108.93	109.43	0.50			tr.	
			sub-angular xenoliths up to 2cm, weakly magnetic, biotitic? Zone carries 30% pink fragments in 0.5-1.0mm range - feldspar?									
		109.43-111.61:	well laminated - 40-45° at 109.85 m. Lower 1.0 m is 70-80% chloritized as silicification decreases with depth.			109.43					tr.	

McDermott NAME OF PROPERTY

HOLE NO. \_\_\_\_\_MC-83-42 SHEET NO. \_\_\_\_ 7 OF 10 SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE % SULPH FROM OZ/TON OZ. TON TOTAL IDES FROM 111.61 124.17 SEDIMENTS Medium to dark green, fine grained and finely laminated on a mm scale. Contains a few 1-5cm sections of brecciation which are moderately to strongly silicified. Laminations are distinguishable locally at 45-500 to core in the upper half of the section, and at 40-450 in the lower part. Rock is weakly to moderately fractured with infilling by carbonate containing quartz debris and 5-10% hematite. Sediments are weakly chloritized and moderately carbonatized. Parting is well developed parallel to laminations. Zone averages 1-2% pyrite, with 3-7% in silicified rock. Silicified rock comprises 5% of the section, the largest zone being at 115.71-116.17 m (moderately to strongly brecciated). Pyrite is noted as a very fine disemination and as clots of grains up to 3mm. 111.61-115.12: well laminated at 40-50° to core axis. 111.61 112.61 1.00 1946 tr. 115.12-115.30: fine to medium grained, chaotic, non-laminated. 1947 112.61 113.61 1.00 tr. 115.30-115.71: moderately well laminated at 40°. 1948 113.61 114.66 1.05 tr. 115.71-116.17: weakly to moderately brecciated in 80-90% of 3-4 | 114.66 | 114.91 1949 0.25 0.01 1950 section. Strong silicification of lamination sets 114.91 115.71 0.80 tr. 1951 up to 5mm. Bedded at 400 to core axis. 2-3 | 115.71 | 116.17 0.46 tr. 116.17-118.03: well laminated, moderately carbonatized locally. 1952 0-1 | 116.17 | 117.16 0.99 tr. 118.03-118.72: strongly brecciated, weakly silicified. Brecciation 1953 0-1 | 117.16 | 118.03 0.87 tr. is confined to ripping apart of individual cherty 1954 | 2-3 | 118.03 | 118.72 | 0.69 0.05 laminations in chloritized groundmass. Relic 1955 118.72 119.75 1.03 0.01 bedding at 400 to core axis. 1956 0-1 | 119.75 | 120.75 | 1.00 0.01 -366-1 well laminated at 450 to core; locally silicified, 118.72-122.35: 1957 0-1 | 120.75 | 121.75 | 1.00 0.01 minor brecciation. Moderately carbonatized -1958 0-1 | 121.75 | 122.75 | 1.00 tr. carbonate replacement feathering out along 1959 1-3 | 122.75 | 123.50 0.75 tr. 3-5 | 123.50 | 123.92 | 0.42 laminations increasing below 120.75 m. 1960 0.03 122.35-122.80: weakly laminated. 1961 1-2 | 123.92 | 124.17 0.25 0.01 122.80-124.17: well laminated, weakly brecciated with associated silicification; carbonatized at 123.65-123.82 m. Zone carries 3-5% very finely disseminated pyrite. Up to 5% locally along laminations near breccia. Fractures below 123.85 m are strongly hematized.

McDermott NAME OF PROPERTY. Mc - 83 - 428 OF 10

HOLE NO. \_

SHEET NO

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH. FOOTAGE FROM то OZ/TON OZ TON TO TOTAL FROM 124.17 132.98 BASALT (with sediments) Dark green, aphanitic to fine grained, weakly pillowed flow with moderate brecciation throughout. Localized silicification is noted along 1-2cm epidotized, bands of breccia, probably pillow selvages. Fractures are strongly hematized, dilatant zones are carbonated. Pyrite content averages 1% with 2% in selvages. Section contains 1.33 m of sediment below 129.36 m. Probably deposited during a hiatus in extrusiion. The lower contact of the sediments is uncertain. 124.17-129.36: Basalt - as described. 129.36-130.69: Sediment - dark green, fine to very fine grained, 1962 1-3 129.36 130.01 0.65 0.02 well laminated at 40-450 to core axis, crudely 1963 130.01 | 130.67 | 0.66 tr. bedded at base, 1-2% pyrite, weakly silicified locally. 130.69-132.98: Basalt - probably not pillowed, flow base designated at a 1.5cm quartz vein. 132.98 140.45 SEDIMENTS Medium to dark green, fine to very fine grained, non-silicified but moderately brecciated locally (eg. 133.92-134.11 and 134.38-134.44). Minor increased pyrite is noted in association with brecciation. The rock is crudely foliated in the uppermost 35cm becoming well laminated at 134.10 m. Zone averages 0-1% pyrite with up to 3% in brecciated rock. 132.98-136.50: generally well laminted; 55-60° at 134.10 and 0-1 | 133.50 | 134.50 | 1.00 1964 tr.  $60^{\circ}$  to core axis at 135.50 m. 135.50 136.50 1.00 1965 1-2 tr. 136.50-137.50: weakly to moderately brecciated along single 136.50 137.25 0.75 1966 0-1 0.01 137.25 137.60 0.35 laminations. 0.01 1967 137.60 137.93 0.33 137.50-137.93: moderately laminated at 650 to core, very weakly 1968 1-2 0.01 brecciated locally. 137.93-138.23: weakly to moderately brecciated, minor 137.93 138.50 0.57 1969 0-1 0.01 silicification. 138.23-139.29: weakly laminated, abundant carbonatization. 0.01 1970 0-1 138.50 139.29 0.79 139.29-139.61: dark grey to purple-grey, strongly silicified, 971 3-5 139.29 | 139.61 | 0.32 0.01 brecciated locally with 3-5% pyrite. Laminated at  $60-65^{\circ}$  at 139.40 m. 139.61-140.45: well laminated at 55-60°; lower 15cm is strongly 1972 1-2 139.61 140.45 0.84 tr. carbonatized.

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-42 SHEET NO. 9 OF 10

F	OOTAGE				SAMPL	-E				ASSAYS		
FRO		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	3	OZ/TON	OZ/TON	
140 140		Medium to dark green, often pale green, fine to medium grained, locally aphanitic especially near upper contact. Flow is pillowed with lcm selvages marking pillows which must be about 1 m in size. Selvages carry up to 5% pyrite. Several samples taken at points of intersection of three selvages. Pillow centres are strongly silicified and often epidotized, and may be brecciated locally (eg. 143.10-143.65). Rock is moderately fractured throughout. Flow is non-magnetic.  140.45-141.20: chloritized vesicules up to 2mm.  141.20-143.75: pillowed, generally silicified, minor breccia.  143.75-145.25: massive, minor breccia, hematized fractures.  145.25-145.51: vesicular flow top.  145.51-145.71: very glassy, locally vesicular, brecciated with epidotized hyaloclastite, zone ends at a pillow selvage.  145.71-146.48: pillowed.  146.48-146.71: SEDIMENT - dark green, fine grained, well laminated at 50-550 to core axis, chloritized, local strong silicification.  146.71-148.81: possibly pillowed, strongly sheared at 350 to core at 148.75-148.83 m possibly marking flow base. Zone above is fine to medium grained.  148.83-150.20: very fine grained.  150.20-153.35: weakly to very strongly vesicular.  weakly to very strongly vesicular.  weak to moderate brecciation with black chlorite in dilatant zones up to lcm in width. Auto-breccia	C 1973 1974 1975 1976 1977	5 5 1-2 3-5		142.11 142.76 143.65 145.71	0.10 0.10 0.55 0.20		7.	T		
LANGRIDGE LIMITED - TORONTO		fragments are very angular, have undergone very little rotation movement, and are weakly vesicular.  155.75-156.57:  Sediment(?), weakly laminated, moderately foliated and well parted.  156.57-157.58: lava is unstructured.  SEDIMENT - well laminated becoming somewhat chaotic at base; minor grey intense silicification with up to 10% pyrite over 1-2cm. Zone averages 1-3% pyrite. Bedding at 40-45° to core axis.	1979	3-5	155.75 157.58 158.29	158.29	0.71			0.01 tr. tr.		
LAN												

McDermott Mc - 83 - 4210 OF 10 SHEET NO.\_

F001	rage		CESCRIPTION			SAMP	LE				ASSAYS	· <del>-</del>
FROM	то	1	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE To	TOTAL	7.	7,	OZ/TON	OZ TON
		158.98-160.87:	lava is massive and vesicular above 160.40 m. Lower 15cm is strongly epidotized, silicified breccia.		IDES	FROM	10	TOTAL	·			
160.87	162.00	SEDIMENTS										
		axis. Upper 30	e grained, well laminated locally at 50-60° to core -40cm is weakly to moderately silicified. Carries where silicified.	C 1981	1-3	160.87	162.00	1.13			tr.	
162.00	186.12	ANDESITE										
		vesicular, non- brecciated loca basalt in origin up to lmm. Roci 169.33 m. 162.00-162.20: 162.20-162.75:	green, aphanitic to fine grained, and often silicified to moderately silicified. Strongly lly. Non-magnetic. Section is probably altered nal composition. Zone averages 1-3% pyrite as blebs k fines below 169.25 and a flow contact is noted at vesicular, massive flow. fine, locally medium grained.									
		1	cubes up to 5mm.  flow contact.  vesicular massive flow.  pillowed flow - coarsely brecciated locally, weak to locally strong silicification throughout.			162.75					tr.	
			Pillows contain poorly formed variolites.									
		186.12 meters	END OF HOLE									
		·	CASING PULLED									
	!											
						·					,	

NAME OF	PROPERTY	McDermott				
HOLE NO.	Mc-83-43	LENGTH	118.14 mete	rs	,	
LOCATION		· · · · · · · · · · · · · · · · · · ·				
LATITUDE	9 + 50 W	DEPARTURE	0 + 72 S			
ELEVATION		AZIMUTH	344 <sup>0</sup>	DIP .	-70°	
		1983 FINISHED				

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-70°				
87.48	-66°				
118.10	-64				

HOLE NO. Mc-83-43 SHEET NO. 1 OF 7

REMARKS BQ Core

Split for assay.

Casing pulled.

LOGGED BY A.W. Workman

	F001	TAGE				SAMP	LE			A	SSA	/ S
	FROM	то	DESCRIPTION	NO.	SUL PH	FROM	FOOTAGE TO	TOTAL	36	35	oz/ton	OZ/TON
	0	12.80	OVERBURDEN									
	12.80	32.71	BASALT									
EM. 6-1168			Grey-green, fine to medium grained, ophitic to sub-ophitic textured. Generally weakly fractured, uniformly textured and massive. White carbonate veins are observed locally with 10% quartz debris (eg. 24.22-24.42 m). Lava tends to be finer grained below 29.70 m, brecciated and locally silicified. Silicification is generally acompanied by epidotization. A chilled lower contact is observed at 32.50-32.71 m. Zone carries an average 0-1% pyrite.	C 1984	0-1	31.71	32.71	1.00			tr.	
	32.71	34.46	SEDIMENTS						·		·	
			Dark green, fine to very fine grained, often aphanitic and moderately epidotized, especially near upper contact. Well laminated with many strongly brecciated zones.  32.90: laminations at 30° to core axis.  33.06 - 33.31: 7-9% pyrite as very fine dissemination and 1-2mm cubes. Rock also moderately hematized along laminations.	1985	5	32.71	33.45	0.74			tr.	
			33.45 - 34.46: weakly laminated, abundant breccia.	1986	1-3	33.45	34.46	1.01			tr.	
	34.46	42.97	BASALT									
LANGRIDGE LIMITED,		·	Dark green, fine grained to aphanitic, pillowed with abundant selvages up to 1 m apart. Pillow rims are enriched in pyrite, and may be silicified locally. Basalt averages 1-2% pyrite.  39.30 - 40.30: Intrusive 7 pinkish-green, fine grained to aphanitic with a central porphyritic zone from 39.55-39.85 m.  Carries euhedral pink feldspar phenocrysts up to 2mm. Rock is very weakly magnetic, and carries basalt xenoliths up to 5cm. Contacts are sharp at 30° to core axis.									

McDermott

HOLE NO. \_\_\_\_\_MC-83-43

SHEET NO. \_\_\_\_ 2 OF 7

e - up to 5-7%  ly to strongly	C 1987 1988 1989 1990	1-3 1-3 2-4	42.97 43.90 44.90 45.90	44.90	0.93 1.00 1.00 0.71 0.69	76	74	tr. tr. tr. tr.	OZ/TON
t of bedding angles ngly silicified -scale lenses of ations are axis.  scale. Thinnest - up to 5-7%	C 1987 1988 1989 1990	1-3 1-3 2-4	43.90 44.90 45.90	44.90 45.90 46.61	1.00 1.00 0.71			tr. tr.	
t of bedding angles ngly silicified -scale lenses of ations are axis.  scale. Thinnest - up to 5-7%	C 1987 1988 1989 1990	1-3 1-3 2-4	43.90 44.90 45.90	44.90 45.90 46.61	1.00 1.00 0.71			tr. tr.	
ly to strongly									1
								1	į
	1	1	ŧ.						
d with pyrite cubes	1993 1994 1995 1996	1-2 1-2 1-2	49.30 51.20 54.20 58.21	50.30 51.60 55.20 58.71	1.00 1.00 0.40 1.00 0.50 0.27			tr. tr. tr. tr. tr.	
±									
seams in lower half	1998	2-3	58.98	59.48	0.50			tr.	
noderately to ciated locally. as a very fine		•	-						
i i i i i i i i i i i i i i i i i i i									
2	iated locally.	iated locally.	iated locally.	iated locally.	iated locally.	iated locally.	iated locally.	iated locally.	iated locally.

F00	TAGE	DESCRIPTION			SAMPI	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULP	FROM	FOOTAGE TO	TOTAL	7.	%	OZ/TON	OZ/TON	
		59.48 - 60.31: moderate to strong silicification in local breccia zones. Abundant pink quartz veins up to 10cm. Up to 10% pyrite cubes. Strongly chloritized and epidotized. Sheared locally. Laminated at 40° to	C 1999	5-7	59.48	60.31	0.83			0.01		
		core axis.  60.31 - 60.81: white to pinkish-white quartz vein with abundant dark green debris from wallrock.			60.31 IO #2200					0.01		
		60.81 - 63.86: abundant silicification near pinkish quartz veins u to 7cm. Rock is well laminated locally below 61.30 but structure is often masked by brecciation.	2201	2-3 1-3	60.81	61.76 62.76 63.31	0.95 1.00			0.01 tr. 0.01		
		Bedding often incorporates cherty fragments up to lcm in an argillitic matrix.  61.35: laminated at 45° to core axis.  63.50: laminated at 45-50° to core axis.	2204	1-3	63.31	63.86	0.55			0.01		
3.86	100.03	MAIN MINERALIZED ZONE										
		This section is composed of three memebers; an upper variably silicified zone, a central strongly silicified and locally feldspathized member, and a broad lower zone of irregular breccia-controlled silicification. Pyrite contents are highest in feldspathized sections of the central member.										
.86	65.34	SILICIFIED SEDIMENTS										
		Dark green, fine grained, generally well laminated and chloritized with abundant moderately to strongly silicified zones. Silicification begins as halos surrounding microfractures. As fracturing increases with depth to form a network silicification is more highly penetrative into formerly chloritized rock. Some intense feldspathization in lower half of interval. Zone carries 25-50% silicified rock and 1-3% pyrite. The lower 10cm is a fault zone carrying 5-7% pyrite. Shearing is noted at 45° to core axis along a low clay plane.	2205 2206	4	63.86 64.60		0.74 0.74			0.01 tr.		
		along a lcm clay plane.										

NAME OF PROPERTY McDermott

HOLE NO. MC-83-43 SHEET NO. 4 OF 7

F00	TAGE	DESCRIPTION			SAMP	LE			-	ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7,	7,	OZ/TON	OZ/TON	
65.34	80.56	MAIN SILICIFIED ZONE		1023	T KOM		10122					
•		Honey coloured to purple-grey, very fine grained to aphanitic, we laminated but vague due to strong brecciation. Zone is strongly intensely silicified. Honey coloured zones are feldspathized and carry up to 20% pyrite locally. Darker rock is weakly to moderate hematized, and carries up to 10% pyrite - usually as a very fine dissemination. Zone averages 5% pyrite.	:0									
		65.34 - 65.63: strongly brecciated with chloritized fractures, strongly feldspathized but only 1-3% pyrite.	2207			65.63				0.02		
		65.63 - 66.14: weakly brecciated, strongly silicified and feldspathized with 10-15% pyrite.	2208	10-15	65.63	66.14	0.51			0.18		
		66.14 - 66.76: strongly brecciated and feldspathized.	2209	2-4	66.14	66.76	0.62	l		0.08	ļ .	
]		66.76 - 68.56: purple-grey, moderately to strongly brecciated	2210	3-5	66.76	67.66	0.90	1	1	0.06		
		intensely silicified, up to 5% fine pyrite.		2-4		68.56		1		0.14		
		68.56 - 69.50: carries 10% dark green, chloritized seams, zone becoming moderately feldspathized.	2212			69.50				0.09		
		69.50 - 70.07: honey coloured with abundant chloritized and hematized fractures.	2213	1-3	69.50	70.07	0.57			0.18		
		70.07 - 71.93: purple-grey, honey coloured locally; intensely	2214	4-5	70.07	70.67	0.60	1	ļ	0.04	1	
			2215			71.29	0.62	İ		0.13		
		silicified and moderately to strongly brecciated.		3-5		71.93	0.64	l	İ	0.06		
		Up to 7% pyrite locally.				. ,		l		0.01	•	
	- . ·	71.93 - 72.55: dark green, fine grained, with abundant pink silicified clasts up to 3mm. Non-magnetic. Lower 30cm is poorly bedded with cherty fragments in chloritized matrix oriented at 45-50° to core axis. Lower contact consists of siliceous angular fragments being ripped up and 'rafted' into this interval.		0-1	71.93	72.55						
	-	72.55 - 73.26: honey coloured to pale purple-grey, aphanitic strongly brecciated, intensely silicified. Up to 20% pyrite (with 1% chalcopyrite associated with pink carbonate stringers). More strongly breccia below 73.01 m.	2219	15 10-15		73.01 73.26	0.46 0.25			0.28		
	·	73.26 - 73.93: intensely silicified breccia with angular purple fragments in a cream-grey matrix.	2220	7-9	73.26	73.93	0.67			0.17		

HOLE NO. MC-83-43 SHEET NO. 5 OF 7

TROM   10	ASSAYS				_E	SAMPL		l	DESCRIPTION	AGE	F00
73.93 - 74.24: moderately well laminated, weakly brecciated intensely stlicified; 5-10% chloritized laminations.  74.24 - 74.92: intensely stlicified throughout, well laminated at 45-50° to core axis. Cream to white coloured feldspathization.  74.92 - 75.40: weakly brecciated, well laminated at 60-70° to core axis locally.  75.40 - 75.80: intensely stlicified, feldspathized.  75.80 - 76.34: as above, less pyrite.  76.34 - 76.62: slight greenish tint due to chloritization pervades the zone. Zone is moderately to strongly stlicified.  76.62 - 77.07: well laminated at 45° to core axis, weakly brecciated, strongly stlicified.  77.07 - 78.17: strongly stlicified but carries 10-15% chloritized seams.  78.17 - 80.56: strongly silicified, moderately to strongly preciated with 5-6% pyrite. Stlicification is penetrative from openings in breccia into fragments. Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  81.10.03  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed stlicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicified sections and percentage stlicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	OZ/TON OZ/TON	7,	7.			FROM	' <b>}</b> -	NO.	DESCRIPTION	то	FROM
laminations.  74.24 - 74.92: intensely silicified throughout, well laminated at 45-500 to core axis. Cream to white coloured feldspathization.  74.92 - 75.40: weakly brecclated, well laminated at 60-70° to core axis locally.  75.40 - 75.80: intensely silicified, feldspathized.  75.80 - 76.34: as above, less pyrite.  76.34 - 76.62: slight greenish tint due to chloritization pervades the zone. Zone is moderately to strongly silicified.  76.62 - 77.07: well laminated at 45° to core axis, weakly brecclated, strongly silicified.  77.07 - 78.17: strongly silicified but carries 10-15% chloritized brecciated, strongly silicified but carries 10-15% chloritized semms.  78.17 - 80.56: strongly silicified, moderately to strongly silicification is penetrative from openings in breccia into fragments.  79.30 m), totalling 5-10% of section.  20.56 100.03 SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock decrease with depth. Pyrite content is higher in silicified rock up to 100% locally, over the average 2-3%. Pyrite occurs as a very	0.11							C 2221	moderately well laminated, weakly brecciated		
45-50° to core axis. Cream to white coloured feldspathization.  74.92 - 75.40: weakly brecciated, well laminated at 60-70° to core axis locally.  75.40 - 75.80: intensely silicified, feldspathized.  76.34 - 76.34: as above, less pyrite.  76.34 - 76.62: slight greenish tint due to chloritization pervades to silicified.  76.62 - 77.07: well laminated at 45° to core axis, weakly silicified.  77.07 - 78.17: strongly silicified but carries 10-15% chloritized seams.  78.17 - 80.56: strongly silicified, moderately to strongly brecciated with 5-6% pyrite. Silicification is penetrative from openings in breccia into fragments. 2231 4-6 79.20 79.86 0.66 Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock decrease with depth. Pyrite content is higher in silicified rock up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.23			0.60	74 02	74.24	0 10	222	laminations.		
core axis locally.  75.40 - 75.80: intensely silicified, feldspathized.  75.80 - 76.34: as above, less pyrite.  76.34 - 76.62: slight greenish tint due to chloritization pervades the zone. Zone is moderately to strongly silicified.  76.62 - 77.07: well laminated at 45° to core axis, weakly brecciated, strongly silicified but carries 10-15% chloritized seams.  78.17 - 80.56: strongly silicified, moderately to strongly seams.  78.17 - 80.56: strongly silicified, moderately to strongly brecciated with 5-6% pyrite. Silicification is penetrative from openings in breccia into fragments. Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspath/zation. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.23			0.00	74.92	14.24	3-10		45-50° to core axis. Cream to white coloured		
75.80 - 76.34: as above, less pyrite. 76.34 - 76.62: slight greenish tint due to chloritization pervades the zone. Zone is moderately to strongly silicified. 76.62 - 77.07: well laminated at 45° to core axis, weakly brecciated, strongly silicified. 77.07 - 78.17: strongly silicified but carries 10-15% chloritized seams. 78.17 - 80.56: strongly silicified, moderately to strongly spenctrative from openings in breccia into fragments. Zone carries minor chloritized cock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.11	}					1		core axis locally.		
76.34 - 76.62: slight greenish tint due to chloritization pervades the zone. Zone is moderately to strongly silicified.  76.62 - 77.07: well laminated at 45° to core axis, weakly brecciated, strongly silicified.  77.07 - 78.17: strongly silicified but carries 10-15% chloritized seams.  78.17 - 80.56: strongly silicified, moderately to strongly prenetrative from openings in breccia into fragments.  Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.08		1						•		
the zone. Zone is moderately to strongly silicified.  76.62 - 77.07: well laminated at 45° to core axis, weakly brecciated, strongly silicified.  77.07 - 78.17: strongly silicified but carries 10-15% chloritized seams.  78.17 - 80.56: strongly silicified, moderately to strongly brecciated with 5-6% pyrite. Silicification is penetrative from openings in breccia into fragments. Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.11		i '					8 1	, , , ,		
brecciated, strongly silicified.  77.07 - 78.17: strongly silicified but carries 10-15% chloritized seams.  78.17 - 80.56: strongly silicified, moderately to strongly brecciated with 5-6% pyrite. Silicification is penetrative from openings in breccia into fragments.  Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.03			0.28	76.62	76.34	1-2	2226	the zone. Zone is moderately to strongly		
seams.  78.17 - 80.56: strongly silicified, moderately to strongly brecciated with 5-6% pyrite. Silicification is penetrative from openings in breccia into fragments. Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  2232 4-6 79.20 79.86 0.66 79.86 0.70  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.10						1		brecciated, strongly silicified.		
brecciated with 5-6% pyrite. Silicification is penetrative from openings in breccia into fragments. Z231 4-6 Z231 Z231 Z231 Z231 Z231 Z231 Z231 Z231	0.06			1.15)	asures	(me	.		seams.		
Zone carries minor chloritized rock (eg. 78.90 - 79.03 m), totalling 5-10% of section.  SILICIFIED SEDIMENTS  Alternating medium to pale green, and honey coloured to grey-green (minor purple-grey) rock. Green rock is chloritized. Grey to purple-grey colouration is due to variably developed silicification. Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.04 0.11 0.01	k		0.35	79.20	78.85	2-4	2230	brecciated with 5-6% pyrite. Silicification is		
Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very	0.21	, ,	-						Zone carries minor chloritized rock (eg. 78.90 -		
Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very						i			) SEDIMENTS	100.03	).56
Lighter colours reflect feldspathization. Rock is fine to very fine grained. Silicification is related to brecciation and is penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock up to 10% locally, over the average 2-3%. Pyrite occurs as a very						-			rey) rock. Green rock is chloritized. Grey to		
penetrative outwards from fracture networks. In general, the thickness of silicified sections and percentage silicified rock decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very						ĺ			reflect feldspathization. Rock is fine to very fine		
decrease with depth. Pyrite content is higher in silicified rock - up to 10% locally, over the average 2-3%. Pyrite occurs as a very			1			1		1 1			
up to 10% locally, over the average 2-3%. Pyrite occurs as a very		1					1	1 )	licified sections and percentage silicified rock		
			1						·		
fine dissemination and as cubes up to 2mm in size.			1				. }				-
			1						ion and as cubes up to 2mm in size.	I	
			1					'			
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			<b>i</b> '	1							

McDermott NAME OF PROPERTY..... HOLE NO. Mc-83-43 6 OF 7

SHEET NO.

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE то FROM OZ/TON OZ TON IDE5 FROM TO TOTAL 0.01 80.56 - 81.61: 20% chloritized seams. 2233 | 2-4 80.56 81.61 1.05 81.61 - 83.37: strongly brecciated and strongly chloritized with 2234 82.45 3-5 81.61 0.84 0.03 2235 1-3 82.45 83.09 0.64 0.04 50% silicified, honey coloured to white seams -2236 0.13 resemble quartz veins. 5-7 83.09 83.37 0.28 83.37 - 84.43: pale green with 50% intensely silicified breccia. 2237 2-3 83.37 84.43 1.06 0.05 2238 84.43 Silicified fragments are purple-grey in honey 0-1 85.05 0.62 0.01 coloured matrix. Percentage silicification 2239 85.35 0.30 2-3 85.05 0.02 2240 0-2 85.35 86.35 0.10 1.00 decreases with depth. 84.43: rock above is 40% silicified whereas zone below is 2241 87.15 1-2 86.35 0.80 0.04 1)0.095 2242 87.75 30% silicified. 3-5 87.15 0.60 0.16 ) 4.4 84.43 - 85.05: chloritized, non-structured. 2243 1-2 87.75 88.75 1.00 0.07 (14.4') 2244 85.05 - 87.75: section is 50% silicified with major silicified 0.12 1-3 88.75 89.75 1.00 2245 0.01 1-2 89.75 90.65 breccia zones at 85.05-85.35, and 87.15-87.75 m. 0.90 87.75 - 90.65: section is less (10%) silicified with some increased 2246 1-2 90.65 91.65 1.00 0.01 2247 pyrite in altered rock. 1-2 91.65 92.65 1.00 0.01 90.65 - 97.37: weakly foliated but non-laminated, weakly to 2248 1-2 92.65 93.25 0.01 0.60 2249 moderately fractured, with white carbonate filling 1-2 93.25 93.85 0.60 0.01 2250 0.13 tensional breaks. Local silicified breccia totals 4-6 93.85 94.39 0.54 2251 1-2 94.39 95.27 0.01 10% of section. Fractures commmonly have lcm thick 0.88 2252 95.27 grey silicified halos. Where fractures are very 1-2 96.18 0.91 0.01 close, rock has a brownish tint. Major silicified 2253 2-3 96.18 96.50 0.32 0.01 2254 zones are noted at 93.85-94.39, 96.18-96.50 and 1-2 96.50 97.37 0.87 0.01 2255 96.94-97.08 m. 2-3 97.37 98.27 0.90 0.04 2256 1-2 97.37 - 100.03: as above but with several wider silicified zones at 98.27 98.97 0.70 0.02 97.37-98.27 and 99.67-100.03 m. Below 98.27 m. 2257 1-2 98.97 99.67 0.70 0.01 percentage of silicification decreases markedly. 2258 2-3 99.67 100.03 0.36 0.15 Rock becomes well laminated on a 0.1-0.5mm scale, at 450 to core axis. 100.03 118.14 **SEDIMENTS** Medium to dark green, fine to very fine grained, locally laminated becoming better bedded with depth. Well parted parallel to laminations or foliation. Abundant (10-20%), white carbonate filled tensional fractures. Occasional pink carbonate and quartz filled veins up to lcm wide. Rare greyish silicified breccia zones are noted locally up to 2cm in width. Zone averages 1-2% pyrite. Section at 106.87-107.73 m is weakly brecciated, moderately silicified locally with 3-5% pyrite. May be equivalent to the "lower mineralized zone".

NAME OF PROPERTY McDermott HOLE NO. Mc-83-43 SHEET NO. 7 OF 7

FOOTA	GE		DECCRIPTION			SAMPL	.E				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	
FROM	TO	101.90: 107.75: 108.25: 108.80: 106.87-107.73:  110.20: 111.35: 111.55-111.80: 111.95: 112.50: 115.00: 117.50: 118.05-118.14:	laminations at 45° to core axis. laminations at 35-40° to core axis. laminations at 25-30° to core axis. bedding laminations at 55-60° to core axis. moderate local silicification in breccia zone with 3-5% pyrite. laminations at 40° to core axis. laminations at 45° to core axis. moderately to strongly silicified. laminations at 25-40° to core axis. non-laminated but well foliated. laminations at 45° to core axis. foliation at 45° to core axis. weakly brecciated, weakly silicified with 2-3% pyrite.  END OF HOLE CASING PULLED	C 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270	1-2 1-2 1-2 1-2 1-2 3-5 1-2 1-2 2-3 3-5 1-2 1-2 1-2	101.03 101.85 103.85 106.12 106.87 107.73 109.85 110.80 111.55 111.80 113.50	101.03 101.85 102.85 104.85 106.87 107.73 110.80 111.55 111.80 112.40 114.25 116.04	0.82 1.00 1.00 0.75 0.86 1.00 0.95 0.75 0.25 0.60 0.75 0.68	7.	7.	0.01 0.01 0.01 0.01 0.06 0.01 tr. 0.08 0.01 0.02 0.01	OZ. TON	

NAME OF	PROPERTY	McDermott	
		LENGTH 118.67 meters	_
OCATION			
ATITUDE	10 + 25 E	DEPARTURE 0 + 70 S	
LEVATION		AZIMUTH344 DIP650	
		983 FINISHED October 13, 1983	

FOOTAGE			FOOTAGE	DIP	AZIMUTH
0	-65°	1			
30.48	-63				
109.73	-58°				

HOLE NO.Mc-83-44 SHEET NO. 1 OF 8

REMARKS BQ Core

Split for assay

Casing pulled

LOGGED BY A.W. Workman

FOO	TAGE	DESCRIPTION			SAMP	LE	:			4 5 5 A	Y S	
FROM	то		ΝО.	SÚĽ PH- IDES	FROM	FOOTAGE TO	TOTAL	. 36	36	oz/ton	OZ/TON	
o	28.04	OVERBURDEN										
28.04	31.56	BASALT										
		Medium to dark green, fine grained, weakly to moderately fractured with 1-5mm width carbonate stringers in tensional fractures. Carries occasional pale green, weakly epidotized rounded fragments of flow breccia, up to 2cm in size, below 30.25 m. Rocks are non-magnetic and average 0-1% pyrite.										
31.56	32.50	SEDIMENTS							-			í
		Dark to pale green, fine grained becoming aphanitic, re-crystallized and strongly silicified in the uppermost 25cm. This zone carries 3-4% pyrite - probably a result of migration with overlying basalt. Well laminated at 25-40° to core axis. Lowermost 10cm carries 50% magnetite seams along laminations and is moderately magnetic. Zone as a whole, is non-magnetic and averages 2-3% pyrite. The lower contact is at 45° to the core axis.										
32.50	34.18	BASALT										-
		Dark green, fine to medium grained, fining towards the lower contact. Rock is weakly fractured with white carbonate filling tensional fractures. The flow is massive and averages 0-1% pyrite. The lower contact is at 25° to the core axis. The flow is										
		non-magnetic.										

McDermott NAME OF PROPERTY 2 OF 8

SHEET NO. \_

Mc - 83 - 44

HOLE NO. \_\_

SAMPLE ASSAY5 FOOTAGE DESCRIPTION FOOTAGE % SULPH FROM TO OZ/TON OZ/TON FROM TOTAL 34.18 52.98 SEDIMENTS Dark green, fine to very fine grained, crudely laminated becoming well laminated locally with alternating grey cherty seams and green chloritized argillitic rock. The uppermost 25cm carries abundant magnetite between laminations. The rock is weakly carbonatized. A series of quartz veins cut the zone between 45.13-47.05 m. Below this vein, the sediments are strongly tensionally fractured with abundant white to pink quartz stringers in openings. Zone averages 1106 1-2 34.18 34.93 0.75 1-2% pyrite. The rock carries some cherty breccia fragments which 0.01 seem to have been dumped into green argillitic sediments - probably rip-up clasts. 34.18 - 37.60: dark green, abundant cherty rip-up fragments. |1107 | 1-2 | 37.90 | 38.55 | 0.15 0.65 37.60 - 38.55: 40-60% of the laminations are cherty, zone may be graded on a micro-scale, laminations at 45-50° to core axis. 38.55 38.90 0.01 0.35 1108 1-2 38.55 - 38.90: same as 34.18-37.60 m. 38.90 39.50 tr. 1109 1-2 0.60 38.90 - 39.50: 20-30% cherty laminations at  $45^\circ$  to core axis. 39.50 - 41.40: zone becomes crudely laminated and fine to medium 41.09 42.09 1.00 grained. Bedding at 40-450 to core. White quartz 1110 1-2 tr. vein at 41.77-41.83 m. 41.40 - 41.96: finely laminated (no cherty material), at 650 to core axis. crudely laminated, fine grained, moderately 41.96 - 45.13: 43.09 44.09 1.00 1111 1-2 tr. chloritized. 1.04 1112 1-2 45.13 46.17 tr. 45.13 - 47.05: quartz vein system carries sediment xenoliths at 0.08 1113 2-3 46.17 47.05 0.88 45.43-45.61 and 46.06-46.26 m which carry 2-3% pyrite cubes up to 1cm. 47.05 0.01 47.85 0.80 1114 1-3 crudely laminated to non-laminated, strongly 47.05 - 52.98: 50.90 0.75 tr. tensionally fractured with pink quartz filling. 1115 1-3 50.15 51.68 Abundant white to pink quartz veins and stringers up 1116 1-2 52.33 0.65 tr. to 7cm width. Silicified sediment near vein margins 1117 52.33 52.98 0.65 tr. 1-2 carries increased pyrite contents (3-4% locally). Veins carry rare 1-3mm chalcopyrite blebs.

McDermott NAME OF PROPERTY

SHEET NO.

3 OF 8

HOLE NO. \_\_\_\_\_MC-83-44

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH FOOTAGE FROM OZ/TON OZ/TON TO TOTAL 52.98 | 57.47 TRANSITIONAL SILICIFIED SEDIMENTS Pale green to dark green, becoming light grey where silicified, fine to very fine grained, often aphanitic, well laminated locally. Silicification is controlled by selected beds or sets of laminations initially. With increasing brecciation in the lower half, silicification is more widespread. Strongly silicified sections are noted at 53.86-53.94, 55.92-56.10 and 56.16-56.48 m. The last two intervals carry 3-5% pyrite versus a zone average of 1-3%. 2273 | 2-4 | 52.98 53.75 0.77 tr. 1-3 | 53.75 | 54.50 | laminations at 45-500 to core axis. 2274 0.75 tr. 53.75: 2275 54.50 | 55.30 | 0.80 1-3 tr. 55.10: laminations at 450 to core axis. 2276 1-3 55.30 56.01 0.71 tr. 56.53 - 56.55: mylonitic fault zone at 650 to core axis. 56.76 0.01 56.55 - 57.47: moderately to strongly brecciated and moderately to 2277 2-4 56.01 0.75 2278 2-4 56.76 57.47 0.71 0.01 intensely silicified - fractures are chloritized. 57.47 61.23 SILICIFIED ZONE Honey coloured to grey and dark purple-grey, aphanitic and originally laminated (sediments). Strong brecciation masks the structure. Pyrite concentrations along fractures possibly indicate original bedding attitude. Up to 15% pyrite is noted as a very fine dissemination and as 1mm blebs. Some pyrite fills voids in breccia as 1cm x 2cm clots. 2279 10-12 57.47 | 58.45 0.15 0.98 57.47 - 59.75: intensely silicified, moderately to strongly 0.12 2280 10 58.45 | 59.20 0.75 brecciated, glassy (chemical sediment?). 2281 7-9 0.01 59.20 | 59.75 | 0.55 59.75 - 60:29: carries chloritized fractures but zone intensely 2282 5-7 59.75 60.29 0.54 0.01 silicified; 20cm ground core at 59.85-60.05 m. 0.03 2283 15 60.29 | 61.23 | 0.94 60.29 - 61.23: reddish-pink to pinkish-grey, aphanitic, strongly fractured - chemical sediment? would have been called syenitic previously, carries 10-20% pyrite. 61.23 | 65.93 TRANSITIONAL SILICIFIED SEDIMENTS Dark green, fine grained chloritized rock with many grey-green, aphanitic, silicified sections. These sections account for 35-40% of the zone. Major examples are found at 61.95-62.15, 62.31-62.44, 64.44-64.54 and 65.54-65.70 m. Pyrite content is variable, averaging 2-3% and highest in silicified rock. Non-magnetic.

NAME OF PROPERTY McDermott

HOLE NO MC-83-44

SHEET NO. 4 OF 8

FOOT	AGE	,	DESCRIPTION			SAMP	LE.				ASSAYS	
FROM	то		DESCRIPTION	NO.	% SULPH	·	FOOTAGE		7.	%	OZ/TON	GZ/TON
		61.95 - 62.15: 62.15 - 64.44: 64.44 - 64.54: 64.54 - 65.54:	pervasive moderate silicification. reddish-pink, intensely silicified - resembles 60.29-61.23 m section. same as 61.23-61.95 m. moderately brecciated, strongly silicified, 3-5% pyrite. same as 61.23-61.95 m. weakly brecciated, intensely silicified, 7-9% pyrite; fault plane at 30° to core axis at 65.54 m slickensides pitch 30°. strongly brecciated, intensely silicified, silica infilling of voids is emanating up from underlying	2285 2286 2287	3-5 1-3	61.95 62.90 63.80	61.95 62.90 63.80 64.55 65.25 65.93	0.95 0.90 0.75	7-		0.02 0.01 0.02 0.02	
5.93	73.17	Dark purple-gre greyish-green, generally inten lighter coloure some weakly devrarely visible	y to honey coloured and aphanitic, with several dark very fine grained chloritized zones. Rock is sely silicified and is locally feldspathized in d sections. The zone is strongly brecciated with eloped breccia locally. Bedding laminations are as fragmented relics. Pyrite content averages 4-6% dissemination and as clots up to 5mm. The zone is					·				
-		65.93 - 66.29:	reddish-pink zone, similar to 60.29-61.23 with 7-9% pyrite mostly as fracture filling, resembles a quartz vein - lower contact is gradational.								tr.	
			strongly brecciated, may originally have been laminated (relics visible locally); carries 5-7% pyrite as fine dissemination and as clots up to 3mm in matrix to very angular fragments, feldspathization appears to radiate into rock from post-breccia, silica filled fractures.	2291			67.11				0.04	
		67.11 - 67.72: 67.72 - 68.16:	honey coloured, assumed feldspathized, possibly micro-brecciated(?) purple-grey breccia, intensely silicified, 3-5% pyrite - some as fracture filling.	2292		67.11			·		0.24	

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-44 SHEET NO. 5 OF 8

FOO	TAGE		2552217-101			SAMPL	E				ASSAYS		
FROM	то		DESCRIPTION	ΝО.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	DZ/TON	OZ/TON	
					1023	T NOM	10	10172			<del> </del> -		
		68.16 - 69.60:	purple-grey breccia fragments are penetrated by feldspathization - dilatant zones are also honey coloured - up to 7% pyrite.	2294 2295	1		68.90 69.60				0.12		
		69.60 - 70.20:	as above - increased feldspathization and up to 10% pyrite locally.	2296	6-8	69.60	70.20	0.60			0.10		
		70.20 - 70.88:		2297	3-5	70.20	70.88	0.68	·		0.01		
		70.88 - 71.79:	honey coloured, reddish-pink locally (71.28-71.50) similar to other reddish zones. Relic laminations visible locally, zone carries 10-12% pyrite and 10-20% white free quartz filling voids - silica dumping(?).		3	70.88	1 1				0.01		
		71.79 - 72.03:		2300	1-2	71.79	72.03	0.24			0.01		
		72.03 - 72.62:	dark purple-grey breccia fragments; intensely silicified with up to 20% pyrite locally, never less than 10%; no coarse clots, mostly very finely		10-15	72.03	72.62	0.59			0.69		
0		72.62 - 73.17:	disseminated and 1-2mm blebs. dark purple-grey breccia with abundant chloritized fractures; strongly silicified, carries up to 10% pyrite locally. Lower contact is a very short transition over 1-2cm.	1102	5-6	72.62	73.17	0.55			0.16		
73.17	80.18	TRANSITIO	NAL SILICIFIED SEDIMENTS										
ANGRIDGE LIMITED TORONIO 33		to moderately c noted locally i bedding laminat is observed wit sections may be The uppermost 2 single section generally evenl	lark grey-green, fine to very fine grained and weakly chloritized. Many intensely silicified sections are in seams up to 5cm parallel to a crudely developed ion. Pyrite content is 3-5%. Some general decrease th depth. The rock is locally brecciated, and these more strongly silicified than is generally the rule. In of the zone are 40% silicified sections with no greater than 5cm in length. Pyrite content is y distributed in this section, with local increases trow silicified zones.	ĺ	4-6 4-6	73.17 73.67 74.17 74.72	74.72	0.50 0.55			0.01 0.01 tr. tr.		
110			4				·						

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NAME OF PROPERTY McDermott

HOLE NO. \_\_\_\_MC-83-44

SHEET NO. 6 OF 8

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH, FOOTAGE FROM то OZ/TON OZ/TON FROM TOTAL 75.05 - 75.80: moderately chloritized, possibly weakly laminated, 1160 2-4 75.05 75.80 0.75 tr. 2-4% pyrite in silicified sections - as clots up to 1cm. 75.80 - 77.08: strongly silicified breccia, less than 10% 11161 3-5 75.80 76.44 0.64 tr. chloritized. 1162 3-5 76.44 77.08 0.64 tr. 1163 2-4 77.08 77.73 0.65 0.01 77.08 - 78.40: mixed silicified and chloritized rock. 77.73 78.40 - 78.87: moderately silicified and brecciated, abundant 1164 2-4 78.40 0.67 0.06 3-5 1165 78.40 78.87 0.47 tr. chloritized seams. 2-3 78.87 79.71 - 80.18: 70% purple-grey intensely silicified breccia with up 1166 79.71 0.84 tr. 79.71 | 80.18 | 1167 0.37 to 7% pyrite. tr. 80.18 | 94.67 LOCALLY SILICIFIED SEDIMENTS 80.93 0.75 Dark green, fine grained with 16% purple-grey to grey-green 1168 1-3 80.18 tr. 80.93 1119 1-2 81.84 0.91 brecciated and silicified sections. Strongest silicification is tr. reflected in purple tinted rock. Rock has a poorly developed 1120 1-2 81.84 82.84 1.00 tr. 82.84 foliation or crude bedding lamination locally. Narrow silicified 1121 1-2 83.84 1.00 tr. 1122 1-2 83.84 84.84 1.00 breccia seams may be parallel to the original bedding (eg. 40-450 tr. at 82.75 m). The largest silicified zones are located at 83.88 -1123 1-2 84.84 85.79 0.95 tr. 1124 2-3 85.79 86.50 0.71 84.01; 85.79-86.02; 86.22-86.50; 86.85-86.96; 88.38-88.73; and tr. 86.50 87.48 1125 1-2 0.98 tr. 90.67-90.84 m. The section from 85.79-88.73 m is 38.5% silicified 1126 87.48 88.38 0.90 zones. The rock averages 1-2% pyrite but silicified rock may carry 1-2 tr. up to 5% pyrite locally. Lack of well developed bedding may point 1127 2-3 88.38 88.73 0.35 tr. 1.00 1128 1-2 88.73 89.73 tr. to rapid deposition of this unit. 1-2 1129 89.73 90.67 0.94 tr. 1130 1-2 90.67 91.20 0.53 tr. 1131 1-2 91.20 92.20 1.00 tr. 1-2 0.77 1132 92.20 92.97 tr. 1-2 1133 92.97 93.97 1.00 tr. 1134 1-2 93.97 94.67 0.70 tr. 97.20 94.67 LOWER SILICIFIED ZONE 1135 2-3 94.67 95.67 1.00 tr. The rock is purple-grey with minor cream coloured intervals; and 1136 2-3 95.67 several dark green chloritized intervals (eg. 94.88-95.00 and 96.40 0.73 tr. 1137 1-2 97.20 0.80 96.62-97.18 m). The zone is strongly brecciated and, except for 96.40 tr. chloritized zones, is intensely silicified. Lighter hued rock may be due to feldspathization. Chloritized intervals total 40% of the zone.

SACE - CATIMIT ASCINED

FORM :

McDermott HOLE NO. MC-83-44

SHEET NO. \_\_\_\_\_ 7 OF 8

FOOTAGE	DESCRIPTION			SAMP	LΕ				ASSAYS		
FROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TOM	OZ/TON	
97.20 111	SEDIMENTS										
	Medium to dark green, fine grained, generally non-laminated but well parted locally. Locally brecciated sections are the sites of subsequent moderate silicification. The rock is weakly fractured. Fractures often have 1-2mm silicified halos and are quartz filled. White carbonate content in fractures may increase with depth. Pyrite content averages 0-1% with up to 5% in silicified breccia (eg. 100.18-100.38; 100.91-100.94 m).  97.20 -104.37: chloritized with rare silicified sections.  104.37-105.06: purple-grey to cream coloured, strongly brecciated cherty fragments set in a medium green argillitic(? matrix. Purple tint in uppermost 25cm may be due to subsequent silicification. Carries 3-5% pyrite.  105.06-107.04: weakly to moderately laminated (eg. 55° to core axis at 105.15 m).  107.04-107.36: 50-60% cherty laminations at 35-40° to core axis.  107.36-111.55: moderately to well laminated with 10% cherty laminations: 55° to core axis at 107.90 m and 40-45° to core axis at 110.40 m.	C 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147	3-4 1-2 1-3 1-3 2-4 0-1 1	98.22 99.23	102.92 104.37 105.06 105.86 107.36	1.01 0.74 0.63 0.82 0.50 0.50 0.69 0.80 0.32			tr. tr. 0.01 0.15 0.01 0.01 tr. tr. tr.		-
111.55 118	The zone is composed of grey to purple-grey angular cherty fragments which are set in a medium green, fine grained chloritized matrix. These sections alternate with well laminated zones composed of intercallated grey cherty laminations and green chloritized laminations. The fragmental zones have probably been brecciated through rip-up action by high energy sediment flow (turbidite?). Localized subsequent silicification is noted, often with elevated pyrite contents (3-5%). Average pyrite content is 1-3%. Laminations are well preserved except where the rock is strongly brecciated. lll.55-ll2.10: brecciated cherty beds, chloritized matrix. ll2.10-ll2.85: well laminated at 60° to core axis. ll2.85-ll3.22: brecciated, weakly to moderately silicified.	1149	2-3	111.55 112.10 112.85	112.85	0.75			tr. tr.		

NAME OF PROPERTY..... McDermott

HOLE NO. \_\_\_\_\_ MC-83-44

SHEET NO. 8 OF 8

SAMPLE FOOTAGE ASSAYS DESCRIPTION FOOTAGE % SULPH. FROM то OZ/TON OZ/TON FROM TOTAL 11152 | 0-1 | 113.22 | 113.72 | 113.22-113.72: mostly green chloritized rock, few cherty 0.50 tr. laminations. 3-4 113.72 114.60 113.72-114.60: strongly brecciated, moderately silicified. 1153 0.88 0.01 2-3 114.60 115.18 0.01 1154 0.58 114.60-115.18: moderately brecciated, very weakly silicified. 1-2 115.18 115.85 115.18-115.85: well laminated at 500 to core axis, strongly 1155 0.67 0.01 brecciated locally. 1156 1-2 115.85 116.31 115.85-116.31: well laminated, few brecciated zones, 30% cherty 0.46 tr. laminations. 1157 2-3 116.31 116.82 116.31-116.82: strongly brecciated, cherty laminated zone; 4-6% 0.51 tr. pyrite locally. 1158 1-2 116.82 117.74 0.92 116.82-117.74: weakly laminated, well parted, few cherty tr. laminations, bedding at 40-450 at 116.85 m. 1159 1-2 117.74 118.67 117.74-117.92: cherty beds up to lcm, argillitic chloritized rock 0.93 tr. is very weakly laminated. 117.92-118.67: medium green, chloritized rock, weakly laminated becoming better laminated with depth - 400 to the core axis. 118.67 meters END OF HOLE CASING PULLED

NAME	OF	PROPERTY	McDermott
			LENGTH 111.86 meters
LOCAT	ION		
LATITU	JDE	8 + 87.5 E	DEPARTURE64 + 00 S
ELEVA	TION	·	AZIMUTH
START	FD	October 13, 19	83 FINISHED October 17 1983

FOOTAGE	DIP	AŻIMUTH	FOOTAGE	DIP	AZIMUTH
0	-65°				
30.48	-65°				
111.86	-61°				

HOLE NO. Mc-83-45 SHEET NO. 1 OF 8

REMARKS BQ Core

Split for assay
Casing pulled

LOGGED BY A.W. Workman

	FOO	TAGE	DESCRIPTION			SAMP	LE			. A	SSA	Y S	
	FROM	то	DESCRIPTION	NO.	SUL PH-	FROM	FOOTAGE TO	TOTAL	%	**	OZ/TON	OZ/TON	
	0	11.30	OVERBURDEN										
	11.30	27.57	ANDESITE (BASALT ?)										
EM. 6 - 1168			Medium to light grey-green, fine grained to aphanitic and non-magnetic. The section is a series of flows which are generally flow brecciated with rounded fragments up to 5cm. These fragments are mostly etched with reaction rims and are of slightly varying colour (composition?). Flow bottoms are well chilled. Flow tops are denoted by angular breccia zones where fragments are set in a strongly chloritized glassy matrix.  11.30 - 16.03: flow brecciated.  16.03 - 20.70: aphanitic, tectonically brecciated, minor flow breccia locally - irregularly epidotized below 20.00 m.  20.70 - 21.18: flow top breccia, angular fragments up to 3cm.  21.18 - 24.50: flow brecciated - some massive flow locally.  24.50 - 26.50: may be pillowed - vague selvages.  26.50 - 27.57: massive flow - flow brecciated locally; lower contact at 40-45° to core axis.										
	27.57	28.81	SEDIMENTS				-						
DGE LIMITED,				C 1169 1170		27.57 28.18			·		0.01 0.01		
LANGRIC	i												

McDermott NAME OF PROPERTY. SHEET NO. 2 OF 8 Mc - 83 - 45

HOLE NO. \_

AL	7.	. 7.	OZ/TON	OZ TON	

NAME OF PROPERTY. McDermott 3 OF 8

SHEET NO. \_\_

HOLE NO. \_\_\_\_MC-83-45

SAMPLE FOOTAGE **ASSAYS** DESCRIPTION FOOTAGE FROM OZ/TON OZ/TON FROM TOTAL 52.15 | 59.55 **SEDIMENTS** Dark green, fine to medium grained, variably laminated - from poor to excellent. Bedding locally exhibits signs of soft sediment deformation. Carbonatization is weakly developed locally and feathers out along the laminations. The zone averages 0-1% pyrite as a very fine dissemination and as occasional blebs up to 1 cm. elongated along laminations. 52.15 - 52.30: abundant quartz (replacement?) filling voids up to 1171 0-1 52.15 53.15 1.00 0.01 3 cm. roughly parallel to bedding. 52.30 - 52.70: well laminated at 30° to core axis: moderately chloritized. 52.70 - 55.53: poorly laminated with minor carbonatization along a well developed foliation at 450 to core axis. 1172 0-1 53.15 54.15 1.00 0.01 Rare laminated sections up to 10 cm. (53.95-54.05). 1173 0-1 54.15 55.15 1.00 0.01 h174 | 0-1 | 55.15 | 56.10 | 0.95 at 550 to core. Section of ground and lost core 0.01 at 53.95-54.10 meters. 55.53 - 57.90: moderately well laminated becoming better laminated with depth. Bedding is highlighted by 1175 0-1 | 56.10 | 57.00 | 0.90 10.01 1176 0-1 57.00 57.90 carbonatization of selected sets of laminations. 0.90 tr. Occasional silicified patches up to 2 cm. with elevated pyrite (1-3%) above the average. Laminations at  $45-50^{\circ}$  to core at 55.60 m. and 45° at 57.90 m. 57.90 - 58.35: chloritized, strongly fractured, micro-faults 1177 | 0-1 | 57.90 | 58.75 | 0.85 tr. parallel to core axis. 58.35 - 59.55: very well laminated at 55° to core axis at 58.70 m 1178 | 0-1 | 58.75 | 59.55 | and 450 at 59.20 m. 0.80 tr. 59.55 92.55 MAIN MINERALIZED ZONE The zone is composed of an upper member which is variably silicified, a more strongly and broadly silicified middle member and a lower variably silicified member. The central member, the "main silicified zone", is altered in response to brecciation. Little or no silicification is noted apart from breccia zones. These zones carry elevated pyrite contents of up to 10% locally.

HOLE NO. \_\_\_\_\_MC-83-45 SHEET NO. 4 OF 8

59.55 61.59 Da		SAMPLE						ASSAYS				
ROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON		
	Average pyrite content in altered rock is 2-4%. Silicification and brecciation is not as widespread nor as strong as is normal for this zone.		1903	1,000		- NOTING						
9.55 61.59	TRANSITIONAL SILICIFIED SEDIMENTS											
	Dark green, very fine to fine grained and weakly to moderately laminated. The zone carries abundant cherty fragments (chemical sediments?) roughly oriented parallel to bedding. Zone averages 1% pyrite as blebs up to lmm.  59.55 - 60.03: abundant cherty fragments set in a chloritized, fine grained matrix. Some bedding laminations are still visible in the fragments.	C 1179	0-1	59.55	60.03	0.48			0.01			
					61.30				0.01 tr.			
1.59 89.51	MAIN SILICIFIED ZONE											
	Dark purple-grey, with abundant (about 30%) dark green chloritized sections. Brecciation controls the degree of silicification present in this zone, and this in turn is reflected in purple tinted rock. Locally, especially near or in major fracture zones, a honey coloured alteration (feldspathization?)dominates the highly silicified sections. Silicified rock carries elevated pyrite contents (average 2-4%), mostly as a fine dissemination in the matrix to highly angular breccia fragments. The zone, as a whole averages 1-3% pyrite with highest levels approaching 10% in feldspathized rock. Because of the lack of widespread brecciation, large sections of non-silicified and chloritized rock are found in the main zone. This is abnormal in a general sense, and may reflect a 'local' anomaly. The rock is non-magnetic.											

NAME OF PROPERTY McDermott

HOLE NO. MC-83-45

SHEET NO. 5 OF 8

FOOTAGE SAMPLE **ASSAYS** DESCRIPTION % SULPH FOOTAGE FROM то % OZ/TON OZ/TON TOTAL TO 1182 61.59 62.45 61.59 - 61.99: cream coloured, strongly silicified becoming more 1-3 0.86 tr. purple-grey coloured. purple-grey, intensely silicified, strongly 61.99 - 63.00: 1183 2-3 | 62.45 | 63.00 | brecciated honey coloured halos surround fractures 0.55 tr. cutting breccia. 63.00 - 63.69: 25% honey coloured 'feldspathized' rock with up to 1184 3-5 | 63.00 | 63.69 | 0.69 0.02 7% pyrite; foliation at 500 to core axis visible locally - chloritized patches. 2-3 | 63.69 | 64.50 | 0.01 63.69 - 65.02: abundant white siliceous filling around grey breccia 1185 0.81 65.02 0.01 2-3 64.50 0.52 fragments; abundant chloritized fractures. 1186 65.02 - 65.50: abundant chloritized 'patches' up to 8cm where 1187 1-2 65.02 65.50 0.48 0.01 purple-grey silicification has not penetrated; that is, the rock has not been brecciated to provide channelways. 2-3 | 65.50 | 66.30 | 65.50 - 66.30: same as 61.99-63.00 m. 1188 | 0.80 tr. 1-3 66.30 67.12 66.30 - 67.12: carries 10% chloritized rock. 1189 0.82 tr. 1-2 67.12 68.19 67.12 - 68.19: intensely brecciated locally but carries 70% 1190 1.07 tr. non-brecciated, non-silicified rock. 68.19 | 68.65 68.19 - 68.65: purple-grey, intensely silicified breccia. 1191 2-4 0.46 tr. 68.65 - 70.15: same as 67.12-68.19 - 50% chloritized non-silcifiled 1192 68.65 69.47 1-3 0.82 tr. 1-3 sections; carries white quartz grains up to lmm 1193 69.47 | 70.15 0.68 tr. (tuff?), parallel chloritized and silicified breccia seams may reflect original bedding - 400 to core axis at 68.75 m; 45° at 69.83 m. 1194 2-4 70.15 71.05 0.90 0.02 70.15 - 71.05: intensely silicified breccia, 5-10% chloritized zones; honey coloured halos near major fractures carry up to 7% pyrite locally. 1195 1-3 71.05 71.75 0.70 0.01 71.05 - 71.75: same as 68.65-70.15 m. 1-2 71.75 72.54 71.75 - 73.02: 95% chloritized; 5% silicified breccia, generally 1196 0.79 tr. well foliated/laminated at 40-50° at 72.15 m. Silicified breccia carries 3-5% pyrite, overall average 1-2%. 73.02 - 73.28: same as 71.75-73.02 with 50% silicified breccia. 1197 1-2 72.54 73.02 0.48 tr. 1198 1-2 73.02 74.05 1.03 73.28 - 73.50: INTRUSIVE - dark grey-green, abundant green tr. chloritized blebs up to 2mm (biotite?), and occasional pink siliceous xenoliths up to 5mm. Carries 0-1% pyrite. Non-magnetic. White 2-3mm feldspar phenocrysts locally.

NAME OF PROPERTY McDermott

FOOT	TAGE			l		SAMPI	_E		I		ASSAY\$		
	70	•	DESCRIPTION	NO.	% SULPH		FOOTAGE		1	T	T		Τ_
ROM	то				IDES	FROM	то	TOTAL	7.	7.	OZ/TON	OZ/TON	$\perp$
									]		1		
		73.50 - 74.05:	generally well laminated with 30-50% silicified						1				1
			laminations or sets of laminations. Also carries						I	1.			-
İ			breccia controlled silicification. Bedding at 450						1				١
			at 74.50 m.	C			1						
1		74.05 - 74.70:	amount of silicified rock increases to 80% as	1199	2-3	74.05	74.70	0.65			tr.		l
Į			the level of brecciation increases.			Ì			l				
[		74.70 - 76.30:	chloritized, well laminated with siliceous cherty	1200	1-2	74.70	75.66	0.96	1		0.01		
ì			laminations; up to 5% silicified breccia,							1	1		
I			laminations at 45° at 75.00 m. Several	2301	1-2	75.66	76.30	0.64	ĺ		0.01		
- 1			de-watering channels are strongly silicified and								]		
			indicate TOPS UP (eg. 76.08 m).	2302	2-3	76.30	76.72	0.42			0.01		
		76.30 - 77.72:	75% strongly silicified breccia, locally laminated.	2303	1-2	76.72	77.72	1.00		ľ	0.01		
l		77.72 - 77.93:		2304		77.72	78.20	0.48	Ì	1	0.01		Ì
- 1		// 1/2 // 1/33.	pyrite locally in clots up to 1.5cm.										
		77 93 - 78 20.	40-50% silicified breccia; 50-60% chloritized										1
- 1		17.95 - 70.20.	sections - less brecciated than above zones.				ĺ		Į.				
		70 20 70 75.	similar to 71.75-73.04 m, very little silicified.	2305	1-2	78,20	78.75	0.55	1		tr.		
- 1			sharply transitional (across 5cm), into intensely	2306			79.35		1		0.02		
1		10.13 - 19.33:	silicified and strongly brecciated rock. Major	2300		70.75			l				
l			fracture systems are white quartz filled with								1		
- 1			is the systems are write quartz riffed with						l				
[			'feldspathized' halos. These halos carry 5-7%				ļ ļ		l	l			l
- [	•		pyrite and up to 10% locally.	2307	2-4	79.35	79.77	0.42			0.01		
i	•	79.35 - 79.77:	same as 78.75-79.35 - very little 'feldspathized'	2307	2-4	19.33	' ' ' '	0.72	· .		0.02		
Ī			rock.	2200	16	70 77	80.38	0.61		]	0.05		
-		79.77 - 80.00:	purple-grey intensely silicified breccia with pyrite	2300	4-0	/9.//	00.30	0.01			0.03		
1			in clots up to 1.5cm and fracture filling.							1			1
[			as above, very finely disseminated pyrite.	2200	1 2	00 20	81.23	0.85	1	1	tr.		
]		80.38 - 82.11:	60% dark green, chloritized rock.		1-2	ı	82.11	0.88		1	tr.		
		82.11 - 83.59:	60% dark purple-grey silicified breccia with 40%		1-2		82.85			1	tr.		
1			chloritized patches. Minor fault zone at		1-3		1 I				tr.		
- 1			83.25-83.52 - sheared at 450 to core axis.		1-3					1	0.03		1
1		83.59 - 85.83:	strongly brecciated, intensely silicifed with 5%		2-4						0.01		
		ľ	green chloritized patches, minor	2314	2-4	85.14	85.83	0.09	<b>'</b>		0.01		
'			'feldspathization'.			05 00	00.11	0.00	1		0.01		
		85.83 - 86.11:	weakly brecciated, moderately chloritized with only	2315	0-1	85.83	86.11	0.28	l		0.01		l
			10% silicified sections.	'									
	1								•			•	
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NAME OF PROPERTY McDermott HOLE NO. \_\_\_\_Mc-83-45 SHEET NO. \_ 7 OF 8

SAMPLE FOOTAGE **ASSAYS** DESCRIPTION FOOTAGE % SULPH FROM ΤO OZ/TON OZ:TON FROM TOTAL 86.54 0.43 0.01 86.11 - 87.08: intensely silicified breccia, 5% chloritized rock. 2316 3-5 86.11 2317 7-9 86.54 87.08 0.54 0.22 Pyrite in clots up to 1cm. Increasing 'feldspathization' below 86.54 m. Up to 12% pyrite locally. 87.08 - 87.33: tensional fracturing and brecciation - white silica 2318 1-3 87.08 87.72 0.01 infilling. 0.64 0.01 87.33 - 89.51: silicified breccia; 10-20% green, chloritized rock - 2319 2-3 | 87.72 | 88.36 | 0.09 mostly above 87.72 m. Carries 4-5% pyrite in clots 2320 4-5 | 88.36 | 88.71 | 0.35 88.71 | 89.51 0.80 0.01 2321 1-3 up to 2cm between 88.36 and 88.71 m. 89.51 92.55 TRANSITIONAL SILICIFIED SEDIMENTS Zone is generally dark green, fine grained and non-laminated initially becoming better bedded with depth as cherty seams increase in percentage. Carries numerous intensely silicified breccia zones up to 5cm in width. The number and size of silicified zones decrease with depth. Upper contact of zone is possibly sheared at 580 to core axis at 89.58 m. 0.01 89.51 - 91.45: 5% silicified intervals with 3-4% pyrite locally 2322 1-2 | 89.51 | 90.33 | 0.82 1-2 | 90.33 | 91.45 0.01 (91.23-91.34). Weakly laminated at 500 to core 2323 1.12 axis. Moderately carbonatized locally. 3-4 | 91.45 | 92.30 | 0.85 91.45 - 92.03: abundant cherty fragments and silicified sets of 2324 tr. laminations; 3-4% disseminated pyrite. 92.03 - 92.30: 50% silicified breccia; 3-5% pyrite. 2325 3-5 92.30 92.55 0.25 0.05 92.30 - 92.55: 75% brecciated cherty laminations with chloritized intercalated laminations. 92.55 | 111.86 SEDIMENTS Dark green and fine grained with abundant white quartz along laminations - probably a replacement. Rock is weakly to moderately carbonatized below 95 m. A well developed parting parallel to a vague foliation indicates the bedding orientation. Acid etching of core is required (in the uppermost part), to highlight the laminations: 550 to core axis at 92.75 m and 500 at 94.35 m. A 2cm breccia zone at 92.82 is moderately silicified and is the lowest detected. Section averages 1% pyrite as blebs up to 1mm.

NAME OF PROPERTY McDermott

HOLE NO. \_\_\_\_ MC-83-45

SHEET NO. 8 OF 8

F001	TAGE					SAMP	E				ASSAYS	
FROM	τ0	1	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	-:-	7.	OZ/TON	OZ/TON
				c	1025							
		92.55 - 94.50:	weakly laminated.	2326	1-2	92.55	93.33	0.78	l		tr.	
			very finely laminated on a 0.1mm scale.	2327	1	93.33	94.35	1.02	'	1	tr.	
			finely laminated, moderately carbonatized.	2328	1	94.35	95.22	0.87	1	}	tr.	
			laminated at 40° to core axis.	2329	1	95.22	96.12		1		tr.	
		100.75-101.10:	elongated nodular texture - probably diagenetic	2330	1	96.12	97.12	1.00			tr.	
		101 10 105 15.	growth of silica.	2331	0-1	97.77	98.69	0.92			0.01	
			vaguely laminated.	2331	0-1	37.17	30.03	0.72			0.01	
		103.13-103.63:	abundant tensional fractures; quartz-carbonate filled.	2332	0-1	99.67	100.67	1.00			0.01	
		106.83~108.90:	light green, very fine grained, very finely									
			laminated; 30-35° at 108.70 m.	2333	0-1	101.67	102.67	1.00			0.01	
		108.90-109.13:	tuffaceous - light green clasts of mostly ash size, dark green chloritized matrix.	2334	0-1	103.80	104.80	1.00	ł	ĺ	0.01	
		109.54-110.17	several narrow breccia zones with 2-3% pyrite -	12334	0 1	103.00	104.00	1.00	İ			
		103.34 110.17.	probably tuffaceous at 109.75-109.85 m.	2335	0-1	105.80	106.45	0.65	1		0.01	
		110-17-111-86:	very finely laminated; carbonatized locally.							ŀ		
			110.55 m: 45° to core axis.	2336	0-1	108.81	109.54	0.73	İ		0.01	
			111.55 m: 55° to core axis.	2337		109.54			1	1	0.01	
				2338	0-1	110.17	110.75	0.58	Ī		0.01	
									· ·			
				1								
		111 06	END OF HOLF								ļ	
		111.86 meters	END OF HOLE							1		
	-		CASING PULLED	•								
		-	ORDING TOUBLE		-				Ì			
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NAME OF	PROPERTY	McDermott				
		LENGTH	111.86 mete	ers		_
LOCATION		· · · · · · · · · · · · · · · · · · ·		_		
LATITUDE	7 + 75 E	DEPARTURE	0 + 65 E			
ELEVATION		AZIMUTH	344 <sup>0</sup>	_ DIP .	-65°	
		1983 FINISHED				

FOOTAGE		AZIMUTH	FOOTAGE	OIP	AZIMUTH
0	-65°				
30.48	-63°				
111.86	-59°				

HOLE NO. MC-83-46 SHEET NO. 1 OF 6
REMARKS BQ Core
Split for assay.

LOGGED BY A.W. Workman

FOOTAG	DESCRIPTION			SAMF	LE				A S S A	Y S
FROM TO		NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	%	OZ/TON	OZ/TON
0	OVERBURDEN									
56.20	BASALT									
	Medium to dark green, aphanitic to medium grained, strongly brecciated due to tectonic activity to a depth of 34.40 m and irregularly throughout the section. A large portion of these lavas are flow brecciated as indicated by rounded, silicified fragments up to 5cm in size. Rock is non-magnetic and averages 0-1% pyrite as 0.1-1.0mm blebs.  - 28.65: core badly ground.  28.65 - 34.40: angularly brecciated, flow breccia locally visible. About 0.85 m of core ground and lost between 26.52 and 28.65 m.  34.40 - 36.10: fine to medium grained.  36.10 - 37.10: flow breccia.  37.10 - 38.32: massive, fine to medium grained.  38.32 - 39.80: flow brecciated, 5-10% silicified fragments up to 2cm; rare to 5cm.  39.80 - 40.10: very fine grained flow.  40.10 - 40.50: SEDIMENTS - dark green, very fine grained and weakly foliated with minor silicification in uppermost 5cm. Averages 2-3% pyrite.  40.50 - 45.95: fine to medium grained, sub-ophitic textured, becoming coarse grained locally (eg. 42.30-43.35). Strongly sheared and moderately silicified from 43.55-43.75 m carrying 3-5% pyrite. Narrow clay seam at 44.65 marks a minor fault - local shearing at 500 to core axis.  45.95 - 46.20: tectonically brecciated, epidotized; angular fragments up to 1cm.	С	1-3	40.10	40.50	0.40			tr.	

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-46 SHEET NO. 2 OF 6

F00	TAGE				SAMP	PLE		1		ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TON	OZ/TON	
		46.20 - 47.07: medium-coarse grained, massive.  47.07 - 47.95: intensely silicified breccia, epidotized - probably flow-top breccia below apparent flow contact at 47.18 m.  47.95 - 51.15: fine to very fine grained, abundant tight epidotized ladder-type shrinkage fractures.  51.15 - 52.35: several silicified and epidotized patches, some breccia; pillow rims?  52.35 - 56.20: tectonically brecciated flow breccia - confused texturally - generally fine to very fine grained, abundant shearing at varying angles.										
56.20	61.59	Medium to dark green, fine to very fine grained; crudely laminated on a 1-2mm scale highlighted by 10-15% moderately carbonatized laminations and seams parallel to the bedding. A semi-nodular texture is observed locally, possibly diagenetic silica.  56.20 - 57.80: well laminated with 5-10% hematized 1-2mm seams, bedding at 45° at 57.00 m and 30-35° at 57.80.  57.80 - 58.30: well laminated with nodular texture locally.  58.30 - 59.90: crudely laminated, weakly carbonatized with abundant cherty fragments and brecciated cherty laminations locally.  59.90 - 61.59: well laminated at 50° to core axis.	2341 2342 2343 2344	1-2 1-2 1-2 1-2	56.20 57.20 58.15 59.05 59.85 60.90	58.15 59.05 59.85 60.90	0.95 0.90 0.80 1.05			0.02 0.01 0.01 0.01 0.01		
61.59	91.84	MAIN MINERALIZED ZONE  The main zone is composed of three sub-sections; the upper section is a variably silicified zone where alteration is limited to breccia zones. Cherty beds, although brecciated and set in a chloritized groundmass, are in much evidence. These are chemical sediments. The middle section, the 'main silicified zone', is intensely silicified and strongly brecciated. Some non-brecciated lapilli tuff is in evidence. Small localized fault zones are chloritized along radiating fractures. The lower member of this section is a chloritized zone carrying 15% silicified breccia.										

E08.4

NAME OF PROPERTY\_\_\_\_\_ McDermott HOLE NO. MC-83-46 SHEET NO. 3 OF 6

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH. FOOTAGE NO. FROM OZ/TON OZ TON FROM TOTAL 61.59 | 63.42 TRANSITIONAL SILICIFIED SEDIMENTS Dark green, fine to very fine grained and chloritized with abundant grey to mauve cherty fragments. These clasts are sub-rounded, often 2346 | 1-2 | 61.59 | 62.04 | 0.45 ltr. 1-2 | 62.04 | 62.65 | 0.61 2347 ltr. lensitic, and larger fragments up to 6cm in size often have a 2348 | 1-2 | 62.65 | 63.42 | 0.77 tr. nodular texture internally - diagenetic silica(?). Smaller fragments resemble rip-up clasts. Upper contact is parallel to bedding at 45-500 to the core axis. The greatest percentage of clasts are within 28cm of the upper contact. The lower contact is masked by abundant carbonate stringers and a 2mm plate of carbonate beneath lowest lamination. Contact is gradational rather than structural, but is nonetheless very sharp. The zone averages 1-2% pyrite as blebs up to 1mm. MAIN SILICIFIED ZONE 63.42 | 85.99 Greenish-grey becoming purple-grey below a fracture system at 64.33. Two textures are in evidence: ash and lapilli tuff clasts up to 1cm set in an aphanitic matrix - the whole being intensely silicified; and, strongly brecciated rock with an aphanitic filling in dilatant zones, also intensely silicified. Tuffaceous material is of varying lithologies, many of the clasts are extremely angular. Some vitric tuff with relic vesicules, partly outlined, are in evidence. Honey coloured 'feldspathization' invades purple-grey zones and feathers out along bedding laminations locally. These zones carry increased pyrite contents generally confined to matrix rather than fragments. The rock is weakly to moderately laminated locally (eg. 500 at 63.42 m), often with hematite concentrated between laminations. 63.42 | 64.18 63.42 - 64.49: weakly laminated tuffaceous zone, clasts are pink, 2349 6-8 0.76 tr. white and light green, up to 2cm locally. Pyrite up 2350 3-5 64.18 64.50 0.32 0.01 to 8%; very finely disseminated in matrix to 64.50 | 65.40 0.90 0.01 2351 3-5 fragments. Chloritized fracture zones at 0.04 4-6 0.90 64.18-64.33 m. Minor vitric tuff. 2352 65.40 | 66.30 | 2353 1-3 0.33 0.06 honey coloured alteration invades purple-grey rock 66.30 | 66.63 64.49 - 68.95: 0.08 3-5 66.63 0.77 2354 67.40 along laminations - feathering out; expands into 0.16 intensely brecciated zones. Brecciation is moderate 2355 3-5 | 67.40 | 68.20 0.80 0.01 68.20 68.95 0.75 becoming strong below 66.14 m. Carries up to 10% 2356 very finely disseminated in lighter coloured rock. Laminations at 450 at 64.82 and 400 at 65.80 m.

NAME OF PROPERTY\_\_\_\_\_\_McDermott

HOLE NO. \_\_\_\_Mc-83-46 \_\_\_\_\_\_SHEET NO. \_\_\_\_4\_UI' 6

		ł	DECCRIPTION	ł		SAMPI			1		ASSAYS	
ROM	то	<b>1</b> ·	DESCRIPTION	NO.	% SULPH	·	FOOTAGE		1 7	7	02/TON	OZ TON
1,0			· · · · · · · · · · · · · · · · · · ·	C	IDES	FROM	то	TOTAL	<u> </u>	<del>                                     </del>	027108	02.104
		68.95 - 69.80:	95% honey coloured 'feldspathized' rock with	2357	4-6	68.95	69.80	0.85	1		0.15	
			abundant chlorite in tight fracture systems and		Ì		1		1			
			between fragments in breccia. Lower contact is a	•						l		
			2cm green clay seam - fault plane at 45-550 to		İ							
			core axis. A zone of intense fracturing extends						1	ĺ	1	ĺ
			0.5 m above fault plane.						1		1	
		69.80 - 70.60:	rock was strongly 'feldspathized' but intense	2358	2-3	69.80	70.60	0.80	1		0.03	}
			fracturing has created 20-30% green mylonitic seams.	ļ							}	
		}	Greenish sheared zone at 69.80-70.05 m.									
		70.60 - 72.24:	dark purple-grey, aphanitic, intensely silicified,	2359	1	1	71.42	0.82	1		tr.	
			moderately to strongly brecciated.	2360				0.82	Ī		tr.	
		72.24 - 73.78:	, , , , , , , , , , , , , , , , , , , ,			1		0.80	1		tr.	
-			not as high but still very strong. Spotty	2362	1-2	73.04	73.78	0.74			tr.	
- 1			'feldspathization' locally with 3-4% pyrite locally;									
1		70 70 74 75	average content is 1-2%.		1				1			
j		/3./8 - /4.55:	INTRUSIVE - grey to grey-green, fine to medium	2363	0-1	73.78	74.73	0.95			tr.	
ı			grained with abundant grey silicified xenoliths						İ			
. [			concentrated near upper contact (floatation?);		1	-			l			
- 1		74.55 - 77.28:	weakly magnetic locally.		1					l		
		14.33 = 11.28:		2264	7.0	7, 70	3- 46	. 70				
1						74.73			j ·		0.24	
1			locally. Purple-grey zones carry 2-4% but as little as 1% is observed. Relic laminations are visible		1			0.70	I		0.12	
1				2366 2367		76.16 76.87	77.28	0.71 0.41	ļ		0.19	
1			76.75 m.	2307	1-9	10.01	11.20	0.41	1		0.17	-
].		77.28 - 78.15		2368	2-3	77.28	70 15	0.87	l		0.02	
l		78.15 - 78.75		2369	1	78.15		0.60		-	0.02	
ſ				2370		78.75		0.31	l		0.02	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	pyrite in matrix to fragments.	2370		70.75	73.00	0.51			0.02	
		79.06 - 79.51:		2371	1_3	79.06	79.51	0.45	į		tr.	
1						79.51		0.56	1		tr.	
			width; also carries 20-30% silicified		~ ~	,,,,,,		5550		l		
			'feldspathized' breccia.									
1		80.07 - 81.88:		2373	1-3	80.07	80.77	0.70			tr.	
			laminations at 81.07 m at 550 to core axis; 10-20%				81.88				tr.	
- 1			chloritized seams; up to 10% pyrite locally over									
			1-5cm and rare chalcopyrite as plates in chloritized	İ								
			fractues.						<b>I</b> .			

McDermott

SHEET NO. \_\_\_\_ 5 OF 6 Mc-83-46

FOO	TAGE				SAMP	LE				ASSAYS	· · · · · · · · · · · · · · · · · · ·	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TON	OZ/TON	
		81.88 - 82.83: INTRUSIVE - dark green, fine grained, with abundant (5-10%), reddish-pink silicified xenoliths carrying greyish reaction rims. Lower contact at 55° to core axis - parallel to chloritized seams below.	C 2375		81.88					tr.		
		82.83 - 85.99: highly silicified breccia with 10-15% chloritized	2377 2378	1-3	,	84.43 85.36 easures	0.78 0.93 1.07 m			tr. tr. tr.		
85.99	91.84	Light to medium green, fine to very fine grained with abundant (15%), purple-grey, aphanitic intensely silicified breccia zones. Rock is weakly laminated at 55° to core axis. Fracturing is moderately to strongly developed with pink quartz-carbonate filling.  88.10 - 88.61: INTRUSIVE - medium green, fine to medium grained, carries 5-10% reddish-pink siliceous xenoliths. Lower contact is at 45-50° to core axis, parallel to underlying chloritized seams.  89.30 - 90.24: very few silicified sections, locally laminated (eg. 40° at 89.80 m).  90.24 - 91.84: fine grained, medium locally; graded beds at 90.35 m	2380 2381 2382 2383 2384 2385 2386 2387	0-1 0-1 0-1 1-2 0-1	86.94 87.49 88.10 88.61 89.30 90.24	87.49 88.10 88.61 89.30 90.24 91.09	0.95 0.55 0.61 0.51 0.69 0.94 0.85 0.75			tr. tr. tr. tr. tr. tr.		
LANGRIDGE LIMITED - TORONTO - 36	111.86	indicate tops up; minor cherty fragments, well laminated with cherty laminations at 40-45° to core at 90.70 m.  SEDIMENTS  Light to medium green, fine to very fine grained, generally well laminated highlighted by cherty 1-3mm laminations separating wider chloritized lamination sets. Cherty chemical sediments may comprise 50% of the rock volume over sections as great as 55cm.  Carbonatization is moderate in cherty sections, but weaker in										

McDermott

HOLE NO. MC-83-46 SHEET NO. 6 OF 6

FOOTAGE	DESCRIPTION			SAMPL	-E				ASSAYS	
то то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	OZ/TON	02/TON
	strictly chloritized rock. Carbonate alteration feathers out along the bedding. The zone is non-magnetic and averages 1% pyrite as blebs up to 2mm. 91.84 - 95.25: well laminated, up to 5% pyrite associated with cherty sections; bedding at 50-55° to core axis at 90.70 m. 95.25 - 96.07: 50% cherty laminations, minor local brecciation of cherty beds. 96.07 - 96.80: abundant brecciated cherty material - up to 2% pyrite - very finely disseminated. 96.80 -102.00: well laminated, occasional chert. Bedding at 60° to core axis at 97.05 m; 50° to core axis at 98.55 m; 50-55° to core axis at 102.00 m. 102.00-111.86: weakly to moderately laminated, spotty carbonatization. Bedding at 45° to core axis at 107.40 m; 45° to core axis at 111.50 m.	C 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399	0-1 0-1 0-1 1 1-2 0-1 0-1 0-1 0-1 0-1	91.84 92.69 93.57 94.40 95.25 95.93 96.80	92.69 93.57 94.40 95.25 95.93 96.80 97.70 98.55 100.75 103.25 106.15	0.85 0.88 0.83 0.85 0.68 0.87 0.90 0.85 1.00 1.00			tr. tr. 0.01 0.01 tr. 0.01 0.01 0.01 tr. tr.	
	111.86 meters END OF HOLE CASING PULLED									

NAME OF	PROPERTY	McDermott				
HOLE NO.	Mc-83-47	LENGTH_	120.30 meter	s		
COCATION	· · · · · · · · · · · · · · · · · · ·					
ATITUDE	7 + 25 E	DEPARTU	RE 0 + 62 S			
ELEVATION		AZIMUTH	344 <sup>0</sup>	DIP	-65°	
		1983				

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-65 <sup>0</sup>				
30.48	-64°				
121.92	-60°				

HOLE NO.Mc-83-47 SHEET NO. 1 OF 7
REMARKS BQ Core
Split for assay.

LOGGED BY A.W. Workman

FOO	TAGE	DESCRIPTION			SAM	LE				SSA	Y S	
FROM	то	DESCRIPTION	NO.	SUL PH	FROM	FOOTAGE	TOTAL	%	%	OZ/TON	oz/ton	
0	11.80	OVERBURDEN										
												l
11.80	66.95	BASALT										ĺ
		This section is composed of a series of flows. All are medium to										l
		dark green, fine to very fine grained at the margins with relatively										ĺ
		coarser grained centres. The thinner flows are flow brecciated.	l			ŀ						I
		The one thick flow seems to be massive. Rocks are weakly to										İ
		moderately chloritized, and non-magnetic. Pyrite content averages	ļļ.	i								i
		1-2% but is higher in localized 'pods' of silicified breccia.		1		1						l
		11.80 - 15.40: fine to medium grained.										ĺ
	İ	15.40 - 16.10: fine to very fine grained.						·				ĺ
		16.10 - 16.80: flow top breccia - moderately hematized fractures.	#									l
	1	16.80 - 24.00: flow breccia - aphanitic, rounded fragments up to 10cm in size have reaction rims. Matrix is composed	1									1
		of fine to very fine grained, chloritized, more										ı
		angular framgnets up to 2cm.										I
	•	24.00 - 27.05: no rounded fragments, probably tectonically	<b>]</b>	1	]					] .		ļ
		brecciated due to late flow movement. Rare zones of		1								ı
		5-10% pyrite associated with minor silicification.			]							J
		May carry some 20-50cm sections of flow breccia.										į
		27.05: flow contact.	11							1	1	ı
		27.05 - 28.85: angularly brecciated - flow top.										
	İ	28.85 - 29.60: flow breccia, rounded fragments up to 5cm.										
		29.60 - 32.32: tectonically brecciated.	1	-								
	-	32.32 - 37.20: fine grained, angular tectonic breccia - upper	[[									
	1	contact at 60° to core axis.				İ					i	
		37.20 - 39.75: very fine grained to aphanitic, sheared locally.										
		39.75 - 40.45: SEDIMENTS - strongly silicified at upper contact, weakly to very weakly laminated - well parted; up to	∥ .		1							
		5% pyrite as 1-2mm cubes.	l									
		on pyrice as a sum cupes.										
			1								ľ	
-			1									

\_\_\_\_\_ SHEET NO. 2 OF 7

FOOTAGE	DE005:57:50			SAMP	LE				ASSAYS	
70	DESCRIPTION	NO.	% SULPH	1	FOOTAGE		1	T .	1	
ROM TO		1.0.	IDES	FROM	то	TOTAL	7 7	7.	OZ/TON	OZ/TON
	40.45 - 54.55: massive flow - fine grained near upper contact (40.45-41.45), then becoming medium to coarse grained. Minor epidotized breccia - tectonic type. 54.55 - 56.25: fine to very fine grained. 56.25 - 57.55: fine to medium grained. 57.55 - 59.66: fine to very fine grained, strongly tectonically brecciated. 59.66 - 64.60: very fine grained to aphanitic, abundant silicified and epidotized breccia. Tensional fractures are common below a silicified zone at 63.09-63.38 m. 64.60 - 64.80: flow-type breccia - rounded fragments up to 5cm carry well developed reaction rims. 64.80 - 66.90: fine grained, abundant tensional carbonate filled fractures. 66.90 - 66.95: strongly brecciated and silicified - carbonate and silica in matrix to fragments. Section carries 3-49									
6 <b>.</b> 95 75 <b>.</b> 95	Medium green, fine to very fine grained, mostly well laminated on a 1-3mm scale. Wider laminations are composed of cherty material which frequently pinches and swells up to 1cm thickness. Bedding is highlighted by pale grey carbonate replacing selected sets of laminations. This carbonatization feathers out along the laminations and is weak to moderate in strength.	2503 2504 2505	0-1 0-1 0-1 0-1	67.90 68.80 69.65 70.65	68.80 69.65 70.65 71.55	0.90 0.85 1.00 0.90			tr. tr. tr. tr.	
	66.95 - 68.40: well laminated, occasional carbonatization, bedding at 45° to core axis at 67.20 m.  68.40 - 74.61: moderate to well developed laminations with occasional purple-grey hematized and carbonatized beds. Carbonate alteration dramatically increases in this section. Bedding at 71.40 m at 30° to core axis and at 73.10 m at 40° to core axis.	2506 2507 2508 2509	0-1 0-1	72.35 73.25	73.25 74.00	0.90 0.75			tr. tr. tr.	

McDermott NAME OF PROPERTY\_\_\_\_

HOLE NO. Mc-83-47 SHEET NO. 3 OF 7

F00	TAGE	DESCRIPTION		SAMPLE NO 1% SULPH FOOTAGE			ASSAYS					
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	OZ/TON	OZ/TON	
		74.98 - 75.29: abundant cherty fragments up to 3cm are lensitic in shape. Chloritized laminations wrap around fragments. Rock becomes a characteristic purple-grey colour but contains only minor weak silicification.  75.29 - 75.95: purple-grey sets of laminations up to 1cm thickness. Non-silicified, non-brecciated. Bedding at 75.70 m is at 40° to core axis.	2511	1	74.61 75.29					tr.		
75.95	111.46	MAIN MINERALIZED ZONE  The zone is composed of four sections - a variably silicified upper member; an intensely silicified central zone; a lower variably silicified member; and, at the base a second thin zone of very strong silicification (lower mineralized zone). Pyrite contents up to 12% are noted - highest in honey coloured 'feldspathized' rock. Brecciation is irregularly developed throughout the zone and has a vague control over 'feldspathization' (but not silicification, except in lower section).										
75.95	81.24	Medium to dark green, with abundant pink to light grey replacements of fine to very fine grained dark green chloritized laminations and sets of laminations. Most of this replacement is silica although some carbonate is also present. Approximately 20% of the zone is silicified sections. A reddish cherty zone is noted at 78.23-79.02 which was previously termed syenitic. Bedding is well developed locally. Major silicified horizons are noted at 76.85-76.95; 77.23-77.35; and 77.41-77.98 m.										
		75.95 - 76.85: well laminated locally with silicification confined to only thin sections.  76.85 - 78.23: silicification replaces carbonatized cherty fragments eventually coalesing into massive beds.	2513	1-2	75.95 76.97 77.60	77.60	1.02 0.63 0.63	A COLUMN TO A COLU		tr. tr. tr.		

NAME OF PROPERTY\_\_\_\_\_\_McDermott\_\_\_\_\_\_\_HOLE NO. \_\_\_\_Mc-83-47\_\_\_\_\_\_SHEET NO. 4 OF 7

SAMPLE FOOTAGE ASSAYS DESCRIPTION FOOTAGE % SULPH, NO. FROM TO UZ TON 07 / TON FRUM TOTAL С 78.23 - 79.02: reddish-pink, aphanitic, possibly laminated, 2515 3-5 78.23 79.02 0.79 tr. strongly brecciated and highly siliceous. Carries 3-5% pyrite. Highly fractured - chloritized breaks. 2516 0-1 79.02 79.74 0.72 79.02 - 81.24: chloritized with abundant siliceous (cherty), tr. fragments up to 5cm - laminated locally - core badly 2517 79.74 80.47 0.73 0-1 tr. 81.24 2518 0-1 | 80.47 0.77 ground. tr. 81.24 98.67 MAIN SILICIFIED ZONE Purple-grey, aphanitic, laminated locally, variably brecciated with abundant honey coloured 'feldspathized' sections. Pyrite contents up to 12% are noted in honey coloured rock. Purple-grey rock carries smaller amounts. Pyrite is found as a very fine grained dissemination, as clots up to 2cm and as fillings between laminations. Purple colouration is due to strong, very fine grained hematization. 81.24 - 81.97: mostly purple-grey, intensely silicified breccia. 0.29 2519 | 2-4 | 81.24 | 81.97 | 0.73 2520 | 4-6 | 81.97 | 82.37 | 0.40 0.62 81.97 - 82.37: strongly 'feldspathized' - up to 7% pyrite; averaging 4-6%, concentrated along 1-2mm seams possibly reflecting former laminations. 2521 | 1-3 | 82.37 82.37 - 83.04: honey coloured angular breccia fragments in a dark 83.04 0.67 0.08 grey matrix - hematized fractures. 0.31 83.74 83.04 - 85.45: honey coloured, moderately brecciated; strongly 2522 6-8 83.04 0.70 laminated locally. Pyrite contents up to 10% -2523 6-8 83.74 84.64 0.90 0.14 2524 7-9 84.64 85.48 0.14 0.84 often concentrated along laminations. Bedding at 550 at 84.75 m and 450 to core axis at 85.20 m. 85.45 - 86.15: intensely silicified, strongly 'feldspathized' with 2525 7-9 86.08 0.60 0.05 85.48 pyrite along well developed laminations - 550 to 2526 7-9 86.08 86.78 0.70 0.18 core axis at 85.75 m. 87.60 86.15 - 88.21: same as  $83.04-85.45 \text{ m} - \text{laminated locally } 45^{\circ}$  to 2527 7-9 86.78 0.82 0.06 2528 9-11 0.61 0.03 core axis at 87.83 m. 87.60 | 88.21 88.21 - 89.68: INTRUSIVE - dark green, fine to medium grained, 2529 88.21 88.96 0.75 tr. abundant siliceous xenoliths. Carries abundant 2530 1 0.01 88.96 89.68 0.72 1-2mm chloritized flakes - biotite? Cut by several 1-5cm quartz veins. Contains up to 1% pyrite.

TRM :

NAME OF PROPERTY\_\_\_\_\_\_McDermott

HOLE NO. \_\_\_\_MC-83-47

SHEET NO. \_\_\_\_ 5 OF 7

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH. FOOTAGE NO. FROM то OZ/TON OZ/TON TOTAL Clay seams at 88.76 and 88.81 m indicate minor faults. Core recovery in this section is 75%. purple-grey, aphanitic, laminated at 450 to core 2531 1-3 89.68 90.53 0.85 0.04 89.68 - 90.70: at 89.83 m. Bedding is increasingly disturbed by 2532 | 1-3 | 90.53 | 91.30 | 0.77 0.02 increasing brecciation with depth. same as 89.68-90.70 m but carries 10% dark green 90.70 - 91.17: chloritized and hematized patches up to 2cm in diameter. 2533 | 1-3 | 91.30 | 92.15 | 0.85 0.01 91.17 - 92.15: same as 89.68-90.70 m. 1-2 | 92.15 | 92.80 | 0.02 minor chloritized patches. Zone is increasingly 2534 0.65 92.15 - 92.65: 'feldspathized' along fracture systems. Laminated at 550 to core axis at 92.65 m. strongly brecciated, locally laminated, with 10% 92.65 - 93.30: 2535 1-2 0.01 92.80 93.30 0.50 chloritized patches up to 5cm. 2536 4-6 93.30 93.85 93.30 - 94.29: grey to purple-grey with increasing honey coloured 0.55 0.01 2537 4-6 93.85 94.29 rock in strongly brecciated zones. 0.44 0.20 2538 8-10 94.29 94.69 0.14 94.29 - 95.61: well laminated - 80% 'feldspathized' initially 0.40 94.69 95.61 2539 4-6 0.92 0.01 decreasing with depth. Chloritized seams increase to 10%. Up to 12% pyrite is carried in massively feldspathized rock. Bedding at 550 to core at 98.21 m. 95.61 109.85 TRANSITIONAL SILICIFIED SEDIMENTS Initially, the zone is purple-grey, intensely silicified and locally honey coloured with 40-50% dark green chloritized laminations. Percentage chloritized rock ranges from 25-75%. Below 99.65 m. chloritized rock is dominant although significant quantities of silicified breccia are observed below this point. Laminated rock is not silicified. The zone is generally well laminated. The rock is non-magnetic. 95.61 96.51 0.03 95.61 - 96.60: dominantly silicified rock, well bedded at 450 to 2540 1-3 0.90 0.01 2541 | 1-3 | 96.51 | 97.46 | 0.95 core axis. 1-3 | 97.46 | 98.33 | 0.01 96.60 - 99.40: chloritized with silicified breccia locally. 2542 0.87 98.33 99.23 99.40 -100.85: mostly silicified, honey coloured, brecciated rock. 1-3 0.90 tr. 2543 2-3 | 99.23 100.00 0.77 0.03 Localized increases in pyrite content to 3-4% -2544 2545 2-3 100.00 100.86 0.86 0.01 average 2-3%. Bedding visible locally - 450 at 99.40 m.

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NAME OF PROPERTY McDermott

HOLE NO. \_\_\_\_\_Mc-83-47

SHEET NO. \_\_\_ 6 OF 7

FROM TO	DESCRIPTION		SAMPLE				ASSAYS				
, ,	·	NO. SULPH FOOTAGE				NO.			0Z/TON	OZ/TON	
	100.85-101.79: chloritized, limited silicification along fractus Strongly silicified breccia at 101.55-101.73 m. 101.79-102.29: INTRUSIVE - dark green, fine grained, silicified xenoliths near upper contact, non-magnetic. Mos ground core. Lower contact at 60-65° to core axis. 102.29-103.52: same as 100.85-101.79 m. 103.52-105.76: zone is 75% strongly to intensely silicified breccia. Some sections (eg. 104.17-104.75 m) ca up to 6% finely disseminated pyrite. Laminated locally - 55° at 105.55 m. 105.76-106.79: dark green, fine grained, chloritized,	2546 2547 2548 2549 2550 2551 2552	1-2 1-2 2-3 4-6 2-4	100.86 101.78 102.28 102.99 103.52 104.16 104.74 105.75	102.28 102.99 103.52 104.16 104.74 105.75	0.50 0.71 0.53 0.64 0.58 1.01			0.01 0.01 tr. 0.01 0.12 0.11 0.02 0.01		
106.79 108.34	non-silicified, weakly developed lamination or foliation.  LOWER MINERALIZED ZONE  Honey coloured to purple-grey, intensely silicified breccia with 2-4% very finely disseminated pyrite. Minor chloritized rock at 107.15-107.48 m. A sheared, mylonitic fault zone is noted at 107.78-107.91 m. Movement has occured at 60° to the core axis. The "lower mineralized zone" might extend up to and include the silicified breccia found there.			106.79 107.77		0.98 0.57			0.01		
.08.34 120.30	Dark green, fine grained, chloritized weakly to moderately. Wel laminated sections alternate with massive and well fractured sections. Weak to moderate carbonatization highlights the beddi Single laminations are locally brecciated - up to 4% pyrite. Zo averages 1-2% pyrite.	ng.									

7AM

NAME OF PROPERTY McDermott

HOLE NO. \_\_\_\_\_\_Mc-83-47 SHEET NO. \_\_\_\_ 7 OF 7 SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE OZ/TON OZ/TON то FROM FROM TOTAL 109.20-110.40: laminated at 650 to core axis. 108.34 109.23 0.89 0.02 2556 1-2 laminated at 60-650 to core axis. 111.47: 111.65 112.65 1.00 2557 1-2 tr. laminated at 500 to core axis. 114.85: 114.65 115.65 1.00 2558 tr. 117.75-118.30: bedding at 55° to core axis. 117.65 118.55 0.90 tr. 2559 120.30: bedding at 650 to core axis. 119.32 120.3d 0.98 0.01 2560 120.30 meters END OF HOLE CASING PULLED

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NAME OF	PROBERTY	McDermott		
		LENGTH145.08 met	ers	
LOCATION				
LATITUDE	10 + 25 E	DEPARTURE	·	
ELEVATION	·	AZIMUTH344°	DIP _	-65 <sup>0</sup>
		1983 FINISHED October 29,		

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-65°				
53.34	-63°	·			
144.78	-57°				

HOLE NO. Mc-83-48 SHEET NO. 1 OF 8

REMARKS BQ Core

Split for analysis

LOGGED BY A.W. Workman

F 0 0	TAGE	DESCRIPTION			SAMP	LE			Þ	SSA	Y 5
FROM	то	D L S C K T F T T O K	NO.	SÚĽPH- IDES	FROM	FOOTAGE TO	TOTAL	%	76	OZ/TON	oz/ton
0	40.00	OVERBURDEN									
40.00	64.47	BASALT									
		Dark green, fine to medium grained, with abundant tensional fractures up to 1cm width - carbonate filled with purple-red hematite. Very little textural change apart from being finer grained below 52.20 m. Rock is massive flow, non-magnetic, non-brecciated.  40.00 - 52.20: fine to medium grained, massive flow. carries a carbonate-filled dilatant zone with abundant basaltic debris at 41.50-42.18 m. Up to 3% chalcopyrite locally, often along seams parallel to a crude foliation.  52.20 - 56.10: fine grained flow - carbonate zone at 54.92-55.10m. 56.10 - 64.47: fine to very fine grained, spotty epidotization locally; very minor fragments - rafted into flow.	C 2561	1 cpy	41.56	42.16	0.60			0.02	
64.47	69.10	White bull quartz veins up to 1.5 m thickness; carry little or no sulphide but dark green xenoliths of wall rock may be strongly pyritized and carry up to 1% chalcopyrite (eg. 65.90-66.05 m). Minor amounts of pyrite and chalcopyrite are found in green seams near the contacts within the quartz veins (eg. 64.47-64.59 m). 64.47 - 65.90: white bull quartz. 65.90 - 66.97: dark green xenolith - may be tuffaceous. Rock is highly sheared locally, but may be in original orientation. Pyritized throughout - strongest from 65.90-66.30 m.	2562	3-5	65.90	66.30	0.40			0.02	

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NAME OF PROPERTY McDermott

HOLE NO. Mc-83-48 SHEET NO. 2 OF 8

SAMPLE ASSAYS FOOTAGE DESCRIPTION % SULPH FOOTAGE FROM OZ/TON OZ/TON FROM TOTAL 66.97 - 68.27: white bull quartz, xenoliths below 68.05 m. 68.27 - 68.58: dark green xenolith - sediment?; lenticular, clastic texture. 68.58 - 69.10: white bull quartz. 69.10 | 88.11 BASALT Medium to dark green, very fine grained to fine grained, aphanitic locally, and possibly variolitic above 70.60 m. Abundant tensional fractures up to 5mm width are carbonate filled with up to 50% chalcopyrite locally (average less than 1%). Fractures below 73.90 are strongly hematized. White quartz veins are located at 69.67-69.96 m and 70.06-70.17. They carry abundant green debris from wall rock. Small quartz veins up to lcm width are common above 78.75 m. A mylonitic carbonate 'vein' dips along the core axis at 74.62-75.22 m. Below 75.90, tectonic breccia is noted locally (eg. 81.40-81.90 m). NOTE: Depth markers in core boxes 7-10 inclusive are very regular in spacing and indicate a regular core loss of 12-28cm (average 16.1cm per 3.05 m or 10'). Total loss between 69.19 and 96.62 m is 1.45 meters. These markers may be in error. Very little ground core is observed. 88.11 98.55 SEDIMENTS Medium to dark green, very fine grained to medium grained locally, very weakly laminated to non-laminated. Well parted locally along a C 88.11 | 88.91 0.01 foliation probably reflecting bedding. The upper contact is 2563 0-1 0.80 89.76 probably at a polished plane cutting core at  $48^{\circ}$  - possibly a 0.01 88.91 0.85 2564 0-1 0.77(measures 0.60)0.01 89.76 90.53 fault. Rock below shows minor pale green alteration. 2565 0-1 88.11 - 94.12: poorly foliated to well foliated and parted locally 2566 0-1 90.53 91.33 0.80 0.01 91.33 92.19 0.86 2567 0-1 tr. eg. 50° to core at 88.95 m. 94.12 - 94.14: silicified seam with green clay - FAULT, one side of 2568 92.19 93.00 0.81 0-1 tr. 0.57(measures 0.43)tr. 2569 0-1 93.00 93.57 plane is 40% covered with GOLD plates, up to lcm 2570 0-1 93.57 94.25 0.68 0.01 width.

McDermott NAME OF PROPERTY.

HOLE NO. \_\_\_\_\_\_Mc-83-48

\_\_\_\_\_ SHEET NO. 3 OF 8

F001	rage	DESCRIPTION	SAMPLE					1		ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	OZ/TON	GZ/TON
		colouration may be compositional.  96.85 - 98.35: dark green, fine grained, chloritized, poorly bedded.  98.35 - 98.55: strongly sheared, abundant polished and chlorite	2572 2573 2574 2575	0-1	95.10 95.97 96.62	95.10 95.97 96.62 97.44 98.35	0.87 0.65(m 0.82	easure	s 0.37	0.01 tr. tr. tr.	
		coated planes. Fault at 98.40 m is denoted by a 2cm green mylonitic clay seam - possibly a bedding fault.	<u> </u>								
98.55	129.45	MAIN MINERALIZED ZONE									
		The main silicified zone which forms the core of this section, is not nearly as well developed as is usual. Brecciation is not particularly strong anywhere in this zone and very few sections of significant thickness are free of chloritized, non-silicified rock. Average pyrite content, reflects the lack of substantial silicification and amounts to 3%. Up to 9% is noted locally. The upper and lower transition zones are wider than would be expected based upon the diminished thickness of the main silicified member. Therefore the alteration process has not been of sufficient duration to produce a thick central member.									
98.55	101.00	Two textural types are present - dark green, fine grained,			98.35					tr.	
		The amount of cherty beds varies throughout the zone and is often present as rounded to sub-angular fragments up to 2cm in size. Cherty sediments are well laminated locally (eg. 55° at 98.58 m). Brecciation of cherty beds may be due to rip-up action. Pyrite is present as a very fine grained dissemination.  98.55 - 99.90: cherty fragments in a green chloritized matrix.	2577 2578 2579	1	98.90 99.90 100.60	100.60	0.70			0.04 0.04 0.08	
	•.	99.90 -100.09: massive cherty sediments - chemical origin?		-					·		

McDermott NAME OF PROPERTY\_

Mc-83-48 HOLE NO. \_\_

\_\_\_ SHEET NO. 4 OF 8

FOO	TAGE		SAMPLE		DESCRIPTION				ASSAYS	;		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7,	OZ/TON	OZ, TON	
		100.09-101.00: brecciated cherty sediments in a chloritized clast matrix. Cherty fragments appear to have been rippe up from the top of the underlying zone.										Rech.
101.0	106.3	MAIN SILICIFIED ZONE										
LANGRIDGE LIMITED TORONTO 366-1168		Purple-grey to honey coloured strongly silcified and cherty sediments alternate locally with dark green chloritized sediments. Silicification is limited to breccia zones and together with cherty beds account for 80% of the section. Green chloritized rock is non-brecciated. The rock is well laminated locally. Pyrite content up to 9% is noted locally in silicified breccia, generally as a verifine dissemination with few larger clots.  101.00-101.86: massive cherty sediments, honey-grey to purple-grey in colour. Pyrite content increases from 1-2% to 2-3% in purple-grey zone at 101.28-101.55 m. Rock is moderately brecciated below 101.28 m.  101.86-103.43: honey coloured, intensely silicified with moderate brecciation. Pyrite content is higher averaging 3-5% - up to 9% at 102.79-103.04 m and up to 7% at 103.15-103.43 m. Becomes well laminated at 103.30 at 500 to core axis.  103.43-103.85: well laminated with purple-grey cherty seams and sets of laminations up to 2cm width alternate with dark green chloritized seams up to 2cm width. Rock is only 10-15% chloritized. Cherty layers are weakly brecciated locally and may carry slightly elevated pyrite contents. A minor fault plane is located at 103.63 m dipping 15-200 to the core axis. Slickensides are parallel to the core axis. Laminations at 103.80 m cut the core axis at 450. same as 103.43-103.85 m but percentage of chloritized rock increases to 50%.	C 2580 2581 2582 2583	2-3 2-3 5-7	101.86 102.33 102.79	101.86 102.33 102.79 103.43	0.47 0.46 0.64			0.11) 0.01) 0.19) 0.10)	0.102	0.14 0.06 0.17 0.09
			1					}				

McDermott NAME OF PROPERTY\_\_\_ HOLE NO. MC-83-48 SHEET NO. 5 OF 8

06.35 129.45	sil and local 104.90-106.35: the che bet is incompared to the che is in	one is approximately 80-90% chloritized rock with diceous seams up to 1cm associated with fractures of fracture networks. Rock is weakly laminated ocally. A 1cm pink carbonate vein is located at 14.30 m.  The percentage of siliceous rock increases to 80% as serty layers become more abundant. The rock is exter laminated below 105.80 m. Bedding at 105.95m at 55° to the core axis. Chloritized sections are in the lowermost 10cm.  SILICIFIED SEDIMENTS  The pally dark green fine grained and non-silicified. The section of purple-grey silicification and cherty ap 30-40% of the section. In general, confined to brecciated rock, and to narrow halos ares. Bedding is not well developed in this only exhibited where cherty laminations are repetition of cherty beds is noted locally. The a gradual increase downwards in cherty sediments	2586 2587	2-3		105.77	0.85 0.87	7.	7.	0.02 0.04 0.04	OZ, TON
06.35 129.45	sil and local 104.90-106.35: the che bet is incompared to the che is in	diceous seams up to lcm associated with fractures of fracture networks. Rock is weakly laminated cally. A lcm pink carbonate vein is located at 14.30 m.  The percentage of siliceous rock increases to 80% as certy layers become more abundant. The rock is setter laminated below 105.80 m. Bedding at 105.95m at 55° to the core axis. Chloritized sections crease in the lowermost 10cm.  SILICIFIED SEDIMENTS  The pally dark green fine grained and non-silicified. The of purple-grey silicification and cherty ap 30-40% of the section. In general, confined to brecciated rock, and to narrow halos ares. Bedding is not well developed in this only exhibited where cherty laminations are repetition of cherty beds is noted locally. The	2586 2587	2-3	104.05	104.90 105.77	0.85	7.	7.	0.02	02,100
06.35 129.45	sil and local 104.90-106.35: the che bet is incompared to the che is in	diceous seams up to lcm associated with fractures of fracture networks. Rock is weakly laminated cally. A lcm pink carbonate vein is located at 14.30 m.  The percentage of siliceous rock increases to 80% as certy layers become more abundant. The rock is setter laminated below 105.80 m. Bedding at 105.95m at 55° to the core axis. Chloritized sections crease in the lowermost 10cm.  SILICIFIED SEDIMENTS  The pally dark green fine grained and non-silicified. The of purple-grey silicification and cherty ap 30-40% of the section. In general, confined to brecciated rock, and to narrow halos ares. Bedding is not well developed in this only exhibited where cherty laminations are repetition of cherty beds is noted locally. The	2586 2587	2-3	104.90	105.77	0.87			0.04	
06.35 129.45	104.90-106.35: the che bet is income and the che is income and the che is income.  TRANSITIONAL  The zone is princip Localized sections laminations make upsilicification is consurrounding fracture region, generally oppresent. A cyclic cycles consist of a	the percentage of siliceous rock increases to 80% as the layers become more abundant. The rock is the laminated below 105.80 m. Bedding at 105.95m at 55° to the core axis. Chloritized sections because in the lowermost 10cm.  SILICIFIED SEDIMENTS  I pally dark green fine grained and non-silicified. The of purple-grey silicification and cherty ap 30-40% of the section. In general, confined to brecciated rock, and to narrow halos ares. Bedding is not well developed in this only exhibited where cherty laminations are repetition of cherty beds is noted locally. The	2587							1	
	The zone is princip Localized sections laminations make up silicification is of surrounding fractur region, generally of present. A cyclic cycles consist of a	pally dark green fine grained and non-silicified. of purple-grey silicification and cherty p 30-40% of the section. In general, confined to brecciated rock, and to narrow halos eres. Bedding is not well developed in this only exhibited where cherty laminations are repetition of cherty beds is noted locally. The									
	Localized sections laminations make up silicification is c surrounding fractur region, generally opresent. A cyclic cycles consist of a	of purple-grey silicification and cherty ip 30-40% of the section. In general, confined to brecciated rock, and to narrow halos ires. Bedding is not well developed in this only exhibited where cherty laminations are repetition of cherty beds is noted locally. The									
	This transition occ	inge back to dominantly green clastic sediments. curs over intervals up to 1 meter. nor silicification above 106.65 m then slowly	2588	2-4	106.35	107.01	0.66			0.02	
	inc	creasing brecciation allows increasing licification.	2300	2-4	100.33	107.01	0.00			0.02	
	107.01-108.01: sim		2589	2-3	107.01	108.01	1.00			0.01	
	108.01-108.97: dar loc sil		2590	1-3	108.01	108.97	0.96			0.01	
	108.97-109.97: pur		2591	3-5	108.97	109.40	0.43			0.04	

McDermott NAME OF PROPERTY\_ SHEET NO. 6 OF 8 

I I SULPHI FOOTAGE I I I I	FOOT	TAGE		DESCRIPTION SAMPLE ASSAYS									
occasional white to pink quartz seams parallel to core axis - up to 8mm width.  110.87-111.70: purple-grey with honey coloured halos around fracture systems - moderately to strongly silicified.  111.70-115.05: generally grey-green with selected silicification of localized areas (breccia), up to 35cm in thickness. 2596 1-3 112.40 113.15 0.75 0.01 112.15-112.40; 112.97-113.16; 113.72-114.11 (80% silicified); 114.45-114.83 and 114.90-115.05 m. Overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification in section is 40% overall content of silicification of silicification in section is 40% overall content of silicification of silicification in section is 40% overall content of silicification of silicificati	ROM	то	7	DESCRIPTION	NO.	1	FROM		TOTAL	7,	7.	OZ/TON	GZ/TON
110.87-111.70: purple-grey with honey coloured halos around fracture systems - moderately to strongly silicified.   111.70-115.05: generally grey-green with selected silicification of 2595   1-2   111.70   112.40   0.70   0.01   112.70-115.05: generally grey-green with selected silicification of 2595   1-3   112.40   113.15   0.75   0.01   112.70-115.112.40:   112.97-113.15;   113.72:   113.15   113.72   0.57   0.01   112.97-113.15;   113.72:   113.15   113.72   0.57   0.01   115.05-112.40:   112.97-113.15;   113.72:   113.15   113.72   0.57   0.01   115.05-116.42:   dark green;   localized purple-grey silicification is nection is 40.600   115.05-116.42:   dark green;   localized purple-grey silicification along fractures - 5% of total section.   2600   1-2   115.05   115.05   0.05   0.06   0.01   115.05-116.42:   dark green;   localized purple-grey silicification   2601   1-2   115.05   115.05   0.05			109.97-110.87:	occasional white to pink quartz seams parallel to		2-3	109.97	110.87	0.80			0.01	
111.70-115.05: generally grey-green with selected silicification of 2595			110.87-111.70:	purple-grey with honey coloured halos around fracture systems - moderately to strongly	2594	3-5	110.87	111.70	0.83			0.01	
115.05-116.42: dark green; localized purple-grey silicification along fractures - 5% of total section.  116.42-118.88: variably brecciated - pinkish to purple-grey silicification is moderate to intensely developed proportionally to degree of brecciation. Up to 3% very finely disseminated pyrite, often in fissures possibly along relic lamination noted locally (eg. 35-40° at 118.35-118.55 m). Zone is 40-50% silicified. Minor 10cm massively silicified sections.  118.88-119.48: purple-grey to honey-grey coloured, strongly silicified with 5-10% relic chloritized rock. Pale coloured zones carry 7-9% very fine pyrite. Zone is strongly brecciated centrally at 119.22-119.34 m. Well laminated throughout at 35-40° to core axis.  119.48-120.53: same as 116.42-118.88 m with few microfaults running along core axis which displace silicified seams.  120.53-120.78: mylonitic zone - angular fractured fragments up to 1cm in a chloritized matrix - voids are white carbonate filled.  120.78-122.79: same as 116.42-118.88 m - well laminated locally (30° at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty  2601 1-2 115.76 118.20 117.25 0.83 tr.  2604 1-2 116.42 117.25 118.10 0.85 tr.  2604 1-2 118.80 118.88 119.48 0.60 tr.  2605 1 18.88 119.48 0.60 tr.  2606 1-2 119.48 120.53 1.05 tr.  2607 1-2 120.53 121.41 0.88 tr.			111.70-115.05:	generally grey-green with selected silicification of localized areas (breccia), up to 35cm in thickness. Major zones of silicified breccia are located at 112.15-112.40; 112.97-113.16; 113.72-114.11 (80% silicified); 114.45-114.83 and 114.90-115.05 m.	2596 2597 2598 2599	1-3 1-2 2-3 2-3	112.40 113.15 113.72 114.30	113.15 113.72 114.30 115.05	0.75 0.57 0.58 0.75			0.01 0.01 0.01 0.06	
116.42-118.88; variably brecciated - pinkish to purple-grey silicification is moderate to intensely developed proportionally to degree of brecciation. Up to 3% very finely disseminated pyrite, often in fissures possibly along relic lamination noted locally (eg. 35-40° at 118.35-118.55 m). Zone is 40-50% silicified. Minor 10cm massively silicified sections.  118.88-119.48: purple-grey to honey-grey coloured, strongly silicified with 5-10% relic chloritized rock. Pale coloured zones carry 7-9% very fine pyrite. Zone is strongly brecciated centrally at 119.22-119.34 m. Well laminated throughout at 35-40° to core axis.  119.48-120.53: same as 116.42-118.88 m with few microfaults running along core axis which displace silicified seams.  120.53-120.78: mylonitic zone - angular fractured fragments up to lcm in a chloritized matrix - voids are white carbonate filled.  120.78-122.79: same as 116.42-118.88 m - well laminated locally (30° at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty  2600 1-2 111.41 122.20 0.79 tr.			115.05-116.42:	dark green; localized purple-grey silicification	2601	1-2							:
silicified. Minor 10cm massively silicified sections.  118.88-119.48: purple-grey to honey-grey coloured, strongly silicified with 5-10% relic chloritized rock. Pale coloured zones carry 7-9% very fine pyrite. Zone is strongly brecciated centrally at 119.22-119.34 m. Well laminated throughout at 35-400 to core axis.  119.48-120.53: same as 116.42-118.88 m with few microfaults running along core axis which displace silicified seams.  120.53-120.78: mylonitic zone - angular fractured fragments up to lem in a chloritized matrix - voids are white carbonate filled.  120.78-122.79: same as 116.42-118.88 m - well laminated locally (300 at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty  2605  5  118.88  119.48  0.60  tr.  2607  1-2  120.53  121.41  0.88  tr.  2608  1-2  121.41  122.20  0.79  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  1-2  122.20  122.27  1-2  122.20  122.27		·	116.42-118.88:	variably brecciated - pinkish to purple-grey silicification is moderate to intensely developed proportionally to degree of brecciation. Up to 3% very finely disseminated pyrite, often in fissures - possibly along relic lamination noted locally (eg.	2603	1-2	117.25	118.10	0.85				
coloured zones carry 7-9% very fine pyrite. Zone is strongly brecciated centrally at 119.22-119.34 m. Well laminated throughout at 35-40° to core axis.  119.48-120.53: same as 116.42-118.88 m with few microfaults running along core axis which displace silicified seams.  120.53-120.78: mylonitic zone - angular fractured fragments up to 1cm in a chloritized matrix - voids are white carbonate filled.  120.78-122.79: same as 116.42-118.88 m - well laminated locally (30° at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty  2008 1-2 121.41 122.20 0.79 tr.			118.88-119.48:	silicified. Minor 10cm massively silicified sections. purple-grey to honey-grey coloured, strongly	2605	5	118.88	119.48	0.60			tr.	·
119.48-120.53: same as 116.42-118.88 m with few microfaults running along core axis which displace silicified seams.  120.53-120.78: mylonitic zone - angular fractured fragments up to 1cm in a chloritized matrix - voids are white 120.78-122.79: same as 116.42-118.88 m - well laminated locally (300 at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty  119.48   120.53   1.05   tr.    2607   1-2   120.53   121.41   0.88   tr.    2608   1-2   121.41   122.20   0.79   tr.    2609   1-2   122.20   122.79   0.59   tr.    2609   1-2   122.20   122.79   0.59   tr.    2609   1-2   122.20   122.79   0.59   tr.    2609   1-2   122.20   122.79   0.59   tr.    2609   1-2   122.20   122.79   0.59   tr.    2609   1-2   122.20   122.79   0.59   tr.	-			coloured zones carry 7-9% very fine pyrite. Zone is strongly brecciated centrally at 119.22-119.34 m.		•							
120.53-120.78: mylonitic zone - angular fractured fragments up to lcm in a chloritized matrix - voids are white carbonate filled.  120.78-122.79: same as 116.42-118.88 m - well laminated locally (30° at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty 2609 1-2 122.20 0.79 tr.			119.48-120.53:	same as 116.42-118.88 m with few microfaults running	2606	1-2	119.48	120.53	1.05			tr.	
120.78-122.79: same as 116.42-118.88 m - well laminated locally (300 at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty 2609 1-2 122.20 0.79 tr.			120.53-120.78:	mylonitic zone - angular fractured fragments up to 1cm in a chloritized matrix - voids are white	2607	1-2	120.53	121.41	0.88			tr.	
			120.78-122.79:	same as 116.42-118.88 m - well laminated locally (30° at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty		1-2 1-2	121.41 122.20	122.20 122.79	0.79				
		•											

McDermott NAME OF PROPERTY\_\_\_\_

HOLE NO. \_\_\_\_\_ MC-83-48 \_\_\_\_ SHEET NO. \_\_\_ 7 OF 8

FOOTAGE SAMPLE **ASSAYS** DESCRIPTION % SULPH FOOTAGE FROM TO OZ/TON OZ/TON FROM TOTAL 122.79-124.00: dark green, minor 8mm silicifed halos around fractures. Zone includes 15cm of lost (ground) core 2610 1 |122.79 |123.34 0.55 tr. 1 123.34 124.00 0.66 at 123.18-123.33 m. 2611 tr. 1-2 124.00 124.90 dark green with 20% purple-grey silicified and 0.90 tr. 2612 124.00-129.45: 1-2 124.90 125.75 cherty fragments. Clasts appear to have (in part) 2613 0.85 tr. 0.18) 0.076 1-2 125.75 126.56 2614 0.81 been ripped up from cherty beds. The zone 0.78 0.01) | 3.021 | 126.56 | 127.34 125.35-126.01 m is 50% siliceous material. The 2615 0.01) (9.9' 2616 1 | 127.34 | 128.10 | 0.76 lower contact is a fracture system which has 1-2 128.10 128.77 0.67 0.10) undergone minor penetrative silicification. 2617 0.02 2618 1-2 128.77 129.45 0.68 129.45 138.22 SEDIMENTS 0.02 Dark green, fine grained and weakly to moderately chloritized, minor 2619 1 |129.45 |130.25| 0.80 130.25 131.09 silicification of fracture walls over 1-3mm. Minor cherty fragments 2620 0.84 tr. 1 |131.09 |131.58 up to 5cm. Zone has a tuffaceous texture locally - possibly ash 2621 0.49 tr. 2622 0-1 131.58 132.11 0.53 tr. fall. Sedimentary laminations are found in sections up to 30cm thickness (eg. 30° at 131.50 m). The rock is strongly fractured 2623 1 | 132.11 | 132.97 | 0.86 tr. 0.79 132.97 133.76 tr. 2624 locally with polished chloritized surfaces. 1-2 133.76 134.60 2625 tr. 131.58-132.11: INTRUSIVE - dark green, fine to very fine grained 0.84 2626 1-2 134.60 135.37 0.77 tr. with 10-15% reddish-pink siliceous xenoliths. Very 1 | 135.37 | 136.25 0.88 weakly magnetic. Chills are moderately well 2627 tr. 136.25 | 137.09 2628 0.84 tr. developed. 2629 137.09 | 137.62 0.53 0.01 2630 137.62 138.22 0.60 0.01 138.22 139.29 LOWER MINERALIZED ZONE 0.02 2-3 | 138.22 | 139.29 | 1.07 Purple-grey and aphanitic, strongly silicified with less than 20% 2631 grey-green moderately chloritized rock. A moderately brecciated top (138.22-138.52 m) grades downwards to a zone of alternating silicified and chloritized beds. Zone carries 2-3% finely disseminated pyrite.

McDermott

HOLE NO. \_\_\_\_\_MC-83-48\_

\_\_\_\_\_ SHEET NO. 8 OF 8

FOOT	AGE				SAMP	LE		ASSAYS				
ROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	
39.29	145.08	SEDIMENTS  Dark green, fine to very fine grained, with no silicified brecciation. Fractures have minor 1-2mm silicified halos. Minor cherty laminations are found locally in 5cm thick zones (eg. 140.26-140.31 m). These sections are the only zones of well laminated rock generally at 45° to core axis. Pyrite content is 1% as blebs up to 1mm.		1 1	139.29 140.16 140.97 143.00	140.97 141.90	0.81 0.93			0.01 0.01 0.01 0.01		
		1/5 00										
		145.08 meters END OF HOLE  CASING PULLED										
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					-							
											·	
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			-  -									
			ľ									

NAME (	OF	PROPERTY	McDermott					
			LENGTH	139.46	meters			
LOCATIO	ON	<del> </del>						
LATITUI	DE	10 + 00 E	DEPARTURE	0 +	93 S			
ELEVAT	ION		DEPARTURE	344		DIP	-65°	
STARTE	D	November 1,	1983 FINISHED	Novembe	er 4. 1	983		

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	-65°				
30.48	-62°				
139.46	-58°				

HOLE NO. Mc-83-49 SHEET NO. 1 OF 8

REMARKS BQ Core

Split for analysis

Casing Pulled.

LOGGED BY A.W. Workman

001	TAGE	B 5 6 6 B 1 B 7 1 6 W	1		SAMP	LE			,	A S S A	Y S	
ROM	то	DESCRIPTION	NO.	% SULPH- IDES		FOOTAGE		36	*	OZ/TON	OZ/TON	Τ
	19.10	OVERBURDEN	<del>  </del>	IDES	FROM	то	TOTAL	<del>  ~</del>	1	1		+
.10	58.30	BASALT										
		Medium green to grey-green, fine to medium grained massive flow.								-		
		Non-magnetic to very weakly magnetic. The base of the flow and	1									l
1		shear planes which developed during flowage are moderately	ll .								ľ	l
l		epidotized and locally silicified. The section carries 1% pyrite	1								1	l
	i	locally as blebs up to lmm.	1									ı
		19.10 - 22.70: fine to medium grained.			:							
		22.70 - 23.67: fine grained - lower half is weakly to moderately brecciated - autobreccia.			4							
		23.67 - 25.10: fine to medium grained.										
		25.10 - 26.25: medium to coarse grained.	1 .							1	1	
		26.25 - 30.37: fine to medium grained - brecciated below 30.10 m.										1
		Base is at flow contact at 45° to core axis.					l					l
1	•	30.37 - 30.80: aphanitic to very fine grained.	1									ı
1		30.80 - 31.10: fine grained.	<b>l</b> l .						-			
- 1		31.10 - 38.05: fine to medium grained.										
		38.05 - 39.00: fine grained, weakly to moderately silicified;		1							1	
:		epidotized locally.	1)									
		39.00 - 42.30: fine to medium grained.										
		42.30 - 48.00: fine grained, locally very fine; a zone of 70cm at	]									
		top of section carries abundant quartz-carbonate	]] .	1 1						]		
		veins up to 2cm at 200 to core axis.		ŧ i								
		48.00 - 49.80: fine to medium grained.										
l		49.80 - 52.00: fine to very fine grained, abundant strongly										
ľ		epiodotized flowage structures.										
		52.00 - 57.05: fine, occasionally medium grained. Zone at 55.41-		·								
ĺ		55.46 m is strongly silicified breccia (flow	∥ .	1								
. [		bottom?). Sharp contact at 55.46 m at 450 to		1								
		core axis.										
ĺ			{{									
1												
1				1								

FOOT	AGE	DESCRIPTION			SAMP	LE				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7,	7.	OZ/TON	QZ/TON
		57.05 - 58.30: fine grained with several epidotized breccia fragments up to 1cm in size. Zone is strongly fractured with quartz-carbonate veining.		1023							
8.30	61.05	QUARTZ VEIN  White bull quartz with abundant dark green xenoliths in the uppermost 13cm and the lowermost 75cm. The upper part, at the contact, carries minor 1-2mm pyritized fractures. The lower contact zone is distinguished by strong pyritization of foliated (50° to core axis) sedimentary fragments. Up to 3% pyrite is noted with occasional 1-2mm blebs of chalcopyrite.	C 2636	1-2	60.30	61.23	0.93			tr.	
61.05	68.83	good evidence of depositional laminations. The rock is weakly to moderately carbonatized on a local basis. White carbonate	2637 2638 2639 2640 2641	0-1 0-1		62.20 63.09 65.05 65.90 67.66	0.89 0.90			tr. tr. tr. tr.	
58.83	75.00	Medium green, very fine grained to aphanitic, and generally finely tectonically brecciated. Dilatant movement has allowed carbonate to fill the voids in breccia. Non-magnetic.  69.50 - 72.00 strongly fractured, occasionally brecciated with 5% intensely silicified moderately developed breccia.  72.00 - 72.63: very finely brecciated - angular chloritized fragments up to 3mm.  72.63 - 73.20: flow breccia - rounded fragments up to 7cm in size with reaction rims.  73.20 - 75.00: fine grained, weakly brecciated; pink carbonate in fractures.									

McDermott NAME OF PROPERTY\_\_\_\_ HOLE NO. \_\_\_\_\_MC-83-49 SHEET NO. \_\_\_3 OF 8

SAMPLE FOOTAGE ASSAYS DESCRIPTION % SULPH. FOOTAGE NO. FROM OZ/TON OZ/TON FROM TO TOTAL 75.00 | 83.65 SEDIMENTS Medium to dark green, fine to very fine grained; weakly to moderately foliated - often highlighted by carbonatization which 2642 0-1 75.02 | 76.07 1.05 tr. feathers out along the foliation (eg. 50-550 at 75.02 m). The 2643 0-1 76.07 76.95 0.88 tr. 0-1 2644 76.95 77.80 0.85 rock is well laminated locally becoming more strongly laminated tr. 0-1 2645 77.80 | 78.60 below 81.45 m. Minor brecciation is noted throughout the zone. 0.80 tr. 2646 0.01 75.00 - 81.45: foliated, laminated locally, weakly to moderately 78.60 | 79.40 0.80 0.01 carbonatized. Core is ground and lost at 78.45-2647 79.40 | 80.53 | 1.13 78.60 m (minor), and 79.40-79.98 m (34cm lost). (34cm ground and libst core) 0.01 2648 80.53 | 81.45 | 0.92 Bedding at 80.05 m at 600 to core axis. 81.45 | 82.32 0.01 81.45 - 83.18: well laminated throughout - alternating laminations 2649 0.87 2650 82.32 | 83.18 | 0.86 0.01 are white and siliceous, and, dark green and 2651 83.18 | 83.65 | 0.47 0.01 chloritized. Bedding at 40-450 at 81.50 m. 83.18 - 83.65: rock carries 10-15% cherty lenticular fragments up to 2cm in length oriented parallel to the laminations. The fragments are probably rip-up clasts now layered at 550 to core axis at 83.55m. 83.65 103.22 MAIN MINERALIZED ZONE This zone is composed of three sections; a thin upper transitional zone, the central 'Main Silicified Zone', and the lower transitional zone. The central zone is an intensely silicified breccia zone. The flanking members are less well silicified rocks originally very similar to the central zone. With silicification, pyrite contents increase up to 7% locally, usually as a very fine dissemination and occasionally, as clots up to 3mm. The sequence of events operating in the 'Main Silicified Zone' is: (1) brecciation and chloritization (2) penetration along fracture networks of hematite and . silica bearing fluids (3) later fracturing of silicified rocks and introduction of silica as clear, colourless quartz.

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-49 SHEET NO. 4 OF 8

FOOT	AGE		1		SAMP	LE				ASSAYS	
ROM	то	DESCRIPTION	NO.	% SULPH		FOOTAGE				27.704	67:70
ROM			-	IDES	FROM	то	TOTAL	7	*	OZ/TON	OZ, TON
33.65	84.53	TRANSITIONAL SILICIFIED SEDIMENTS			-			·			
		The rock is essentially the same as the overlying sediments but is more poorly laminated with larger cherty fragments up to 5cm in size. Fragments increase in size down-section into a massive cherty bed at 83.98-84.12 m. The matrix to the clasts is dark green, clastic and may be tuffaceous. A 2cm green clay seam (FAULT) is noted at 84.27 m cutting the core axis at 55°. Brecciation of the cherty sediments and chloritization of fractures is noted each side of the fault. Another fault zone cutting the core axis at 40-45°, is mylonitic and carries pink siliceous fragments - located at 84.43-84.53 m.	C 2652	1	83.65	84.53	0.88			0.02	
34.53	91.72	MAIN SILICIFIED ZONE									
84.53 91		Purple-grey to honey coloured, aphanitic to very fine grained, generally strongly brecciated and intensely silicified. Relic sedimentary laminations are noted locally. The section has been strongly fractured and dilatant-type movement has allowed the openings to be cemented with specularite. Intense silicification is not well developed in the section above 86.13 m. Chlorite is seldom absent from fractures.	1								
		84.53 - 84.91: fault block - silicified, intensely fractured. Some silica dumping in lowermost 20cm. Section carries 5-7% very fine pyrite above the quartz-rich zone, 1-2% below. Minor slickensides parallel to core axis, developed in fractures.	2653	3-5	84.53	84.91	0.38			0.05	
	-	84.91 - 85.59: probable fault block - highly fractured with chloritized partings. Base of section is very strongly broken.	2654	2-3	84.91	85.59	0.68			0.04	
		85.59 - 86.26: more characteristic purple-grey colour, chlorite not as common in fractures and change to specular hematite takes place at 86.13 m along single fractures. Silicification is stronger and appears to emanate from below.	2655	2-3	85.59	86.26	0.67			0.01	

NAME OF PROPERTY McDermott

SHEET NO. \_\_\_\_ 5 OF 8\_

HOLE NO. \_\_\_\_ Mc-83-49

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION % SULPH. FOOTAGE FROM тο OZ/TON OZ/TON FROM TOTAL 3: 20 86.26 - 87.76: purple-grey to mauve, intensely brecciated carrying 2656 3-4 86.26 | 87.14 | 0.88 10% hematite and 3-4% pyrite. Intense 0.13) 2657 3-5 87.14 87.76 0.62 0.01) silicification in fragments along major fracture systems and in large dilatant zones. Many small, less than lcm, zones of relic chloritized rock remain which are only partially invaded by 0.154 4.21 silicification. The zone 87.14-87.43 m is nearly completely silicified. Fractures from 87.43-87.74 m (13.81) are strongly chloritized. 3-5 | 87.76 | 88.73 | 0.21) 87.76 - 90.47: intensely silicified breccia; pale purple-grey with 2658 0.97 a moderate number of chlorite-plugged fractures -2659 2-3 88.73 89.16 0.43 0.23) 4-6 89.16 |0.15|decreasing with depth. Relic laminations visible 2660 89.75 0.59 locally: 450 at 89.65 m. 2-3 2661 89.75 90.47 0.72 0.19) 90.47 - 90.95: same as 87.76-90.47 m but with 10% green chloritized 2662 1-2 90.47 90.95 0.48 0.08 patches up to 2cm in size. 90.95 - 91.72: intensely silicified but increasing number of 2663 | 2-3 | 90.95 | 91.72 | 0.77 0.06 chloritized fractures and patches - up to 20% of section. Minor zones of silicified breccia carry 8-10% pyrite locally. 1-3 | 91.72 | 92.35 | 0.63 0.01 91.72 | 103.22 TRANSITIONAL SILICIFIED SEDIMENTS 2664 2665 2-4 | 92.35 | 92.78 0.43 0.12 The section is dark green and fine grained becoming greenish grey 2666 1-2 92.78 93.39 0.61 0.01 2-3 | 93.39 | 94.20 and often purple-grey where strongly brecciated and subsequently 2667 0.81 0.01 94.20 silicified. Silicification has altered about 50% of the section in 0.57 0.01 2668 1-2 94.77 zones up to 50cm in width. Pyrite content generally increases with 2669 2-4 94.77 95.37 0.60 0.01 2670 2-3 95.37 95.92 0.55 tr. silicification. Major silicified zones are located at 91.99-92.12; 2671 92.35-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.01-94.11; 2-3 95.92 96.83 0.91 tr. 94.14-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97.01 m. The zone 2672 0-1 96.83 97.55 0.72 tr. from 95.92-96.83 m is composed of 50% silicified breccia in 5cm 2673 0-1 97.55 98.36 0.81 tr. 2674 seams carrying 3-5% pyrite. Several sections carry high percentage 2-4 | 98.36 | 99.23 0.87 tr. silicification with 10-30% green chloritized patches. These areas 2675 1-2 | 99.23 | 100.00 | 0.77 tr. of non-silicified rock increase in size and number downhole. 2676 1-2 100.00 100.82 0.82 tr. Typical sections are located at 98.36-99.23 m; with increasing 2677 1 100.82 101.65 0.83 tr. 101.65 102.42 chloritization at 99.23-100.82 m (20-30%) and little silicification 2678 0.77 tr. (10-20%) from 100.82-103.22 m. 2679 1 102.42 103.22 0.80 tr.

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-49 SHEET NO. 6 OF 8

FOOT	AGE				SAMP	_E				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7.	OZ/TON	OZ.TON
103.22	126.38	SEDIMENTS	С		·			·			
		chloritized matrix (eg. 106.49-106.55; 108.49-108.56 and 112.05 - 112.13 m).  109.83-110.00: carries green chloritized fragments up to 3cm in networks of purple-grey silicified breccia - fracture controlled.  111.40-111.60: purple-grey silicified breccia developed in shear at 25° to core axis - carries 1-2% pyrite.  113.40-114.13: irregularly developed silicified breccia in fracture systems.  114.50-114.65: same as 113.40-114.13 m.  116.03: weakly laminated at 25° to core axis.  117.39-117.96: purple-grey, intensely silicified breccia; 1-3% pyrite as very fine dissemination and as clots up to 6mm.  117.96-126.38: occasional purple-grey silicified breccia. A zone	2689 2690 2691 2692 2693 2694	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	103.22 104.05 104.95 105.87 106.77 107.65 108.55 109.50 110.43 111.37 112.26 113.17 114.14 116.13 116.76 117.39 117.96 118.79 117.96 118.79 119.77 120.73 121.72 122.60 123.50 124.30 125.11	104.95 105.87 106.77 107.65 108.55 109.50 110.43 111.37 112.26 113.17 114.14 115.14 116.13 116.76 117.39 117.96 118.79 119.77 120.73 121.72 122.60 123.50 124.30 125.11	1.00 0.99 0.63 0.63 0.57 0.83			tr. tr. tr. 0.01 0.01 0.01 tr. tr. tr. tr. tr. tr. tr. tr. tr. tr.	
126.38	137.56	VARIABLY SILICIFIED SEDIMENTS  Zone is half dark green, fine grained and chloritized; and half siliceous material - composed of cherty beds and sets of cherty laminations. Where brecciated, the sediments are moderately to strongly silicified. Pyrite contents are higher in silicified zones. Cherty beds do not generally carry high pyrite contents. A contact between chloritized and silicified rock at 127.61 m at 450	837 838	0-1 0-1	126.05 126.66	126.66 127.20	0.61 0.54			tr. 0.09	

NAME OF PROPERTY\_

HOLE NO. \_\_\_\_\_MC-83-49 SHEET NO. \_\_\_ 7 OF 8 SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM OZ/TON OZ TON FROM TO TOTAL Rech. to core axis is very sharp and may delineate a fault at edge of 1.39 brecciation predating silicification. Larger silicified zones carry 2702 2-3 127.20 128.00 2.42) 0.80 0.09 1-2 128.00 128.80 0.11)2-4% pyrite as a very fine dissemination and as clots up to 2cm. 2703 0.80 0.03) Major zones of silicification are located at 127.20-127.30 m; 2704 1-2 128.80 129.67 0.87 0.04 127.61-128.00; 128.80-129.00; 129.17-129.67 (60% siliceous measures 0.78 m) 10.425 0.11 1-2 129.67 130.57 0.11) | 5.35fragments); 129.55-129.87; 130.25-130.45; 130.98-131.07 and from 0.90 0.02) (17.6') 0.02 approximately 131.80-131.95 m. Locally, silicification is 2-3 | 130.57 | 131.52 | 0.95 2706 0.10) 0.105 1-2 131.52 132.55 1.03 microfault controlled and offset against chloritized rock. Seldom 2707 (measures 0.78 m) do sections of solely chloritized rock exceed 15cm in thickness. The zone from 129.17-129.67 m carries 50-60% honey coloured 1-2 132.55 133.40 0.01 0.85 brecciated cherty beds in a chloritized clastic matrix. Colour of 0.01 the breccia fragments may be a degenerative result of faulting and 1-2 133.40 134.15 0.75 1 | 134.30 | 135.25 | 0.95 brecciation. The zone grades into purple-grey silicified breccia at 2710 0.01 0.02 1-2 135.25 136.25 129.67 m. Some zones of brecciated beds are convoluted and deformed 2711 1.00 2-3 | 136.25 | 136.91 0.66 0.07 2712 - possibly due to soft sediment deformation (eq. 130.00-130.45 m). 2-3 | 136.91 | 137.56 | 0.01 2713 0.65 126.38-131.95: 35-40% silicified breccia, laminated locally usually highlighted by cherty seams (450 to core at 131.00 m). Zone includes 25cm of ground and lost core between 131.60 and 132.55 m. 131.95-135.55: relatively fewer sections of significant length composed of silicified breccia. Approximately 15cm core ground and lost at 134.15-134.30 m. A 10cm section at 135.20 m is well laminated at 400 to the core axis. 135.55-137.56: equivalent to lower mineralized zone - uppermost 70cm is 50% composed of 1-3cm silicified breccia seams parallel in orientation at 300 to the core axis. The section below 136.25 m is 80-85% silicified breccia with up to 5% pyrite locally.

DIMMUND DRILL RECOKE

NAME OF PROPERTY McDermott

SHEET NO. 8 OF 8 Mc-83-49 HOLE NO. \_\_ ASSAYS SAMPLE FOOTAGE DESCRIPTION FOOTAGE NO. FROM то OZ/TON OZ/TON IDES TO TOTAL 137.56 139.46 SEDIMENTS Dark green, fine grained and chloritized, with 5-10% silicified breccia seams up to 2cm in width. The number and thickness of these 2714 1 |137.56 |138.26 0.70 tr. 1 | 138.26 | 138.91 seams rapidly decrease down-section. The rock becomes well 2715 0.65 tr. 2716 1 | 138.91 | 139.46 foliated, perhaps crudely laminated towards the base of the hole 0.55 tr. (eg.  $35^{\circ}$  to core axis at 139.25 m). 139.46 meters END OF HOLE CASING PULLED

NGBINGE I IMITED - TORONT

NAME OF	PROPERTY	McDermo	tt			
		LENGTH		ers		
OCATION			<u></u>			
ATITUDE	9 + 75 E	DEPARTURE	0 + 74 S			
LEVATIO	N	DEPARTURE	344 <sup>0</sup>	DIP	-65°	
		FINISHED				

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
_0	-65°				
30.48	-64				
109.73	-63°				

HOLE NO. Mc-83-50 SHEET NO. 1 OF 6

REMARKS BQ Core

Split for assay.

LOGGED BY A.W. Workman

FOOTAGE	DESCRIPTION			SAMP	LE			,	SSA	Y 5
FROM TO	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	36	76	OZ/TÓN	oz/ton
12.19	OVERBURDEN									
12.19 44.43	BASALT									
	Medium green, fine to medium grained with coarse and very fine grained phases. The flow is massive and unstructured. It is non-magnetic to very weakly magnetic locally.  12.19 - 32.00: fine to medium grained, occasional (less than 1%) silicified and epidotized breccia zones from 23.20-28.30 m in seams up to 10cm. Rare 1cm quartz veins.  32.00 - 35.40: generally fine grained, occasional quartz veins up to 1cm and epidotized breccia.  35.40 - 41.90: fine to medium grained.  41.90 - 43.95: fine to medium grained, increasingly brecciated with silicified and epidotized patches. Minor carbonated fractures cut quartz-filled voids. Rock is finer grained below 43.50 m.  43.95 - 44.43: very fine grained to aphanitic; 60% epidotized and silicified breccia.							-		
14.43 66.74	silicified breccia. SEDIMENTS	•	-							
	Dark green, fine to very fine grained, well laminated with many poorly laminated, weakly foliated zones. The rock is strongly brecciated locally - (eg. 48.95-49.25 m), with angular fragments supported in a white carbonate matrix. Weak ubiquitous carbonatization is noted locally. The sediments average 1% pyrite as blebs up to 1.5mm. The section is non-magnetic.	-						·		

McDermott

HOLE NO. Mc-83-50 SHEET NO. 2 OF 6

FOOTAGE					SAMP	LE				ASSAYS		
FROM TO	7	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	- 72	7.	OZ/TON	OZ/TON	
FROM TO	47.55 - 50.35: 50.35 - 51.21: 51.21 - 58.10: 58.10 - 58.75: 58.75 - 60.00: 60.00 - 60.55:	to 10% pyrite locally. Very weak general carbonatization. Minor silica dumping in large voids up to 5cm.  50.60 m - laminations at 35-40° to core axis. same as 50.35-51.21 m but very low pyrite in less well laminated sequence. White bull quartz veining at 53.81-54.25 (two veins; 18cm and 5cm). Minor quartz veining between 54.25 and 55.50 m. brecciated with pink quartz infilling - well fractured - carbonate filling. same as 51.21-58.10 m. abundant pink quartz filling dilatant voids and fractures in zone of weak brecciation. well laminated locally; increasingly brecciated, becoming strong in lower 40cm.  60.70: laminated at 50° to core axis.  63.85: laminated at 40-45° to core axis. well laminated, abundant pink quartz veining and stringers up to 1cm thick - generally parallel to bedding. Some quartz filled voids carry up to 2% pyrite as crystals up to 2mm.	C 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730	2-4 1-2 1 1 5 1 1 1 0-1 0-1 0-1 0-1 0-1 0-1 1-2 0-1	45.75 46.69 47.55 48.40 49.35 50.35 51.21 52.05 53.00 53.95 54.83 55.80 56.68 57.50 58.75 59.60 60.25 61.16 61.98 62.95 63.91		0.94 0.86 0.85 0.95 1.00 0.86 0.84 0.95 0.95 0.88 0.97 0.88 0.60 0.65 0.65 0.65 0.91 0.96 0.94 0.91		7.	tr. tr. tr. tr. tr. tr. tr. tr. tr. tr.	OZ,TON	

NAME OF PROPERTY McDermott

HOLE NO. \_\_\_\_\_\_MC-83-50

SHEET NO. \_\_\_\_ 3 OF 6

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE FROM TO OZ/TON OZ/TON TOTAL IDES TO 66.74 109.27 MAIN MINERALIZED ZONE The rocks in this section are representative of three lithological units centred on a strongly silicified central member. A thin transitional unit lying above the 'Main Silicified Zone' ends at a fault. A broad variably silicified member underlies the main zone. In general, the degree of silicification is proportional to the degree of brecciation. Pyrite contents up to 10% are noted in strongly silicified rock. Minor cherty sediments are also noted, most commonly in or near the upper transition zone. 66.74 68.35 TRANSITIONAL SILICIFIED SEDIMENTS Dark green, with 25-50% pale green siliceous laminations. Bedding 66.72 67.59 0.87 is well developed and often plastically deformed along narrow 2741 tr. microfaults parallel to core axis; displacement up to 1cm. 2742 67.59 68.35 | 0.76 tr. Siliceous cherty laminations (chemical sediments) increase down section to 60-70% at 68.00 m and massive cherty sediments at 68.20m. Zone averages 1% pyrite. 67.95: laminations at 450 to the core axis. laminations at 40-450 to the core axis. 68.15: 68.21 - 68.35: FAULT ZONE - highly sheared with chloritized planes at 45-500 to core. Zone includes a gritty green clay seam at 68.30-68.34 m. 68.35 91.04 MAIN SILICIFIED ZONE Pale honey coloured cherty sediments to purple-grey intensely silicified sediments. Aphanitic to very fine grained. Uppermost part is cherty, silicification increases downhole below 69.83 m. Minor non-silicified, relic chloritized patches are found locally in the zone. The rock is laminated locally although structure is often masked by brecciation. Alteration tends to be proportional in strength to the degree of brecciation.

ANGRIDGE LIMITED - TORON

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-50

SHEET NO. 4 OF 6

SAMPLE FOOTAGE ASSAYS DESCRIPTION FOOTAGE FROM то OZ.TON 7. OZ/TON FROM TOTAL 68.35 - 69.83: honey coloured, cherty, non-laminated sediments: 2743 1-2 68.35 69.10 0.75 0.07)strongly brecciated - chlorite and hematite in 1-2 69.10 69.83 0.73 2744 0.13)fractures around fragments. Rock is more yellow hued below 69.72 m where silicification increases. Lowermost 2cm intensely brecciated. 69.83 - 70.23: reddish-pink, aphanitic, highly siliceous zones up 2745 1-3 69.83 70.66 0.83 0.12) to 5cm - 10% of section. 70.23 - 70.66: same as 68.35-69.83 m - pyrite increases to 2-3%, moderately brecciated - relic laminations at  $35-40^{\circ}$  to core axis. 70.66 - 70.92: 2-4% pyrite, cherty sediments. 2746 | 6-8 | 70.66 | 71.24 | 0.58 0.12) 70.92 - 71.24: pale grey, resembles a quartz vein - strongly 0.124 micro-brecciated, intensely silicified with 8-10% 8.12 pyrite. (26.61) 71.24 - 71.48: purple-grey, strongly fractured, with green 2747 71.24 | 71.48 | 0.24 1 0.02) chloritized partings - 1% pyrite. 71.48 - 73.64: honey coloured to pale grey, intensely silicified, 2748 | 5-6 | 71.48 72.24 0.76 0.08) brecciated - up to 10% pyrite - very finely 72.24 2749 7-9 72.90 0.26) 0.66 disseminated and clots up to 5mm. 72.90 2750 | 5-7 | 73.64 0.74 0.17) 73.64 - 74.54: zone of green chloritized fracture fillings locally, 2751 | 3-5 | 73.64 74.54 0.09) 0.90 majority is intensely silicified breccia - up to 6% pyrite. 74.54 - 74.95: honey coloured with relic laminations at 40-45° to 2752 4-6 74.54 74.95 0.41 0.21) the core axis (eg. 74.70 m). -366-116 74.95 - 75.64: same as 73.64-74.54 m. 2753 3-5 74.95 75.64 0.69 |0.16|75.64 - 76.47: rock grades to a purple-grey colour with 10% honey 2754 3-5 75.64 76.47 0.83 0.06) coloured patches - carries 10% green chloritized rock. 76.47 - 78.54: carries 10-15% green chloritized patches up to 5cm 2755 2-4 76.47 77.20 0.73 0.01 in purple-grey intensely silicified breccia. Green 2756 2-4 77.20 77.93 0.73 0.01 zones are non-brecciated. 2-3 77.93 78.54 0.61 0.05 78.54 - 79.42: purple-grey intensely silicified with 5% chloritized 2758 5-7 78.54 79.42 0.88 0.01 rock. 79.42 - 79.96: same as 76.47-78.54 m. 2759 3-4 79.42 79.96 0.54 0.04

McDermott

HOLE NO. MC-83-50 SHEET NO. 5 OF 6

FO	OTAGE	DESCRIPTION	T		SAMP	LE			,,,,,	ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7,	7,	OZ/TON	GZ/TON	
		79.96 - 82.90: same as 78.54-79.42 - zone at 80.82-81.25 m is free of chloritized rock. Abundant white to grey free quartz in matrix to breccia fragments.  82.90 - 88.66: intensely silicified generally purple-grey breccia, honey coloured halos up to 2cm wide surround fracture systems. No zones of relic chloritized rock are observed. Abundant metallic hematite on fracture surfaces - has a bluish sheen - moly? The zone from 84.87-85.12 m carries up to 10% pyrite locally.  88.66 - 90.44: 5-10% weakly silicified and chloritized patches. Rock is generally intensely silicified and strongly brecciated; carries rare pink quartz veins up to 3c in width (eg. 89.76 m).  90.44 - 91.04: 10-15% chloritized patches - increasing in size and number with depth.	2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772	3-5 2-3 2-4 2-4 6-8 2-3 2-3 2-3 1-3 1-3	80.82 81.57 82.38 83.18 84.08 84.87 85.12 86.02 86.90 87.81 88.66 89.56	80.82 81.57 82.38 83.18 84.08 84.87 85.12 86.02 86.90 87.81 88.66 89.56 90.50	0.75 0.81 0.80 0.90 0.79 0.25 0.90 0.88 0.91 0.85 0.90	res O.	88 m)	0.01 0.01 0.02 0.04 0.01 0.03 0.03 0.04 0.02 0.02 0.01 0.01		
LANGRIDGE LIMITED - TORONTO - 366-1168	109.27		2775 2776 2777 2778 2779 2780 2781 2782 2783 2784	1-2 1-2 1-2 1-2 0-1 0-1 1-2 2-4 2-4	91.73 92.65 93.57 94.44 95.15 95.88 96.70 97.26 97.95 98.70	92.65 93.57 94.44 95.15 95.88 96.70 97.26 97.95	0.92 0.92 0.87 0.71 0.73 0.82 0.56 0.69 0.75	res O.	68 m)	0.01 0.01 0.01 0.01 0.01 tr. tr. 0.06 0.07 0.12		

HOLE NO. MC-83-50 SHEET NO. 6 OF 6

	F001	FAGE		DESCRIPTION			SAMPI	LE				ASSAYS		
	FROM	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	
			100.13-100.43: 100.43-101.12: 101.12-101.83: 101.83-102.12: 102.23-102.72: 102.72-105.70:	pyrite. silicified breccia. 50% silicified breccia in seams up to 2cm in a dark green chloritized rock. purple-grey silicified breccia - minor honey coloured halos around fractures. as at 101.83-102.12 - minor chloritization of fracture surfaces. carries 10-20% purple-grey silicified breccia; strongly fractured throughout with white carbonate in voids. White to pink silicified halos surround	2786 2787 2788 2789 2790 2791	1-2 1-2 1-2 1-2 1-2 1-2	100.13	101.12 101.83 102.72 103.65 104.54 105.15	0.99 0.71 0.89 0.93 0.89 0.61			0.01 0.01 0.01 tr. tr. 0.01 0.01	02/104	-
3			105.70-107.10:	106.55-106.63 meters). up to 10% purple-grey silicified breccia with zones at 107.10-107.30, 108.06-108.22 and 108.75-108.81	2794 2795 2796	1-2 1-2 1-2	105.70 106.58 107.10 107.90 108.60	107.10 107.90 108.60	0.52 0.80 0.70			tr. tr. 0.05 0.01 0.02		
ED - TORONTO - 366-1166			109.27 meters	END OF HOLE  CASING PULLED		-								
LANGRIDGE LIMIT					•		-							

NAME OF	PROPERTYM	cDermott			
	Mc-83-51		140.51 n	eters	
LOCATION				· · · · · · · · · · · · · · · · · · ·	
LATITUDE	9 + 75 E	DEPARTURE	0 + 94	<u> </u>	
ELEVATION	9 + 75 E	AZIMUTH	3440	DIP	-70°
	November 8, 1983				

FOOTAGE	DIP	AZIMUTH	FOOTAGE	ÐIP	AZIMUTH
0	-70°				
45.72	-67°	i			
140.21	-65				

HOLE NO.  $\frac{\text{Mc-83-51}}{\text{SHEET}}$  SHEET NO.  $\frac{1 \text{ OF } 7}{\text{Constant No.}}$ REMARKS BQ Core Split for assay.

LOGGED BY A.W. Workman

FOO	TAGE				S A M P	LE			A	S 5 A	Y S	
FROM	то	DESCRIPTION	NO.	SÚLPH- IDES	FROM	FOOTAGE TO	TOTAL	76	3%	oz/TON	OZ/TON	
•				.525			1				·	
0	4.86	OVERBURDEN					ŀ					
4.86	68.39	BASALT										
		Medium to dark green, fine to medium grained with occasional very										
	· .	fine grained and aphanitic sections. The rock is strongly							1			
		silicified and weakly epidotized locally, possibly near flow	]									
		margins, (eg. 4.95-5.50 m). The rock is non-magnetic to very weakly						·				
		magnetic. Flow(s) appear to be largely massive and unstructured.							j			
		4.86 - 10.80: fine to very fine grained										
		10.80 - 12.90: fine to medium grained.										
		12.90 - 15.25: fine to very fine grained, epidotized breccia locally.	·									
		15.25 - 17.45: weakly pillowed, fine to very fine grained.				•						
		17.45 - 17.80: aphanitic to very fine grained.										
		17.80 - 21.40: very fine grained becoming fine grained locally down										
		section. A quartz vein is located at 19.68-20.00										
		meters.										
		21.40 - 28.20: fine grained becoming evenly textured from					·					
		24.90-27.60 m; massive flow.										
	1	28.20 - 28.90: very fine grained with occasional aphanitic sections									]	
		up to 10cm thickness.	[		•							
•		28.90 - 30.70: same as 21.40-28.20 m.		.								
		30.70 - 32.50: fine to medium grained, massive flow.									]	
		32.50 - 34.50: fine grained, medium locally.										
		34.50 - 35.05: fine grained, moderately fractured with quartz										
		crystals up to 2cm in vugs along breaks.										
		35.05 - 35.45: fine to very fine grained.		.								
	1	35.45 - 36.10: brecciated with angular fragments up to 3cm in a										
		white carbonate gangue.										
	1											
:												
	1											

NAME OF PROPERTY McDermott

HOLE NO

Mc-83-51

\_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF 7

FOOT	AGE				SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE	TOTAL	7,	*	OZ/TON	OZ/TON	
		36.10 - 36.45: fine grained. 36.45 - 40.60: medium grained, massive flow. 40.60 - 42.95: fine grained, pale green, rare medium grained phases. 42.95 - 54.04: fine to medium grained, occasional red hematized fractures sub-parallel to core axis. 54.04 - 55.90: medium grained, massive flow. 55.90 - 61.58: same as 42.95-54.04 m, occasional epidotized breccia. 61.58 - 66.05: medium grained, occasional fine grained sections, occasional silicified shear planes (eg. 62.92 m at 70° to core axis). 66.05 - 68.30: fine to very fine grained.		IDES	FROM		TOTAL					
68.39	70.72	68.30 - 68.39: aphanitic, strongly silicified.  QUARTZ VEIN  White bull quartz with xenoliths of dark green sediments along the lower contact. 68.39 - 70.40: white bull quartz - trace pyrite locally. 70.40 - 70.72: abundant dark green xenoliths of sediments with pyrite crystals up to 1cm. Xenoliths average 30-4 pyrite, with up to 1% chalcopyrite.										
70.72	96.34	Dark green becoming medium green locally, fine to very fine graine The upper part of the section is not laminated visibly except wher quartz veins cut and produce sericite alteration. This localized alteration highlights the bedding. These altered zones also carry abundant pyrite crystals up to lcm in size. The rocks are moderately fractured. Voids along the fractures, often sub-parall to the core axis, are often lined with quartz crystals and red hematite. These rocks are non-magnetic, and average 0-1% pyrite.	2798 2799 2800 2801 21 2802	5 10 2-4 1-2 1-2	71.17 71.62 72.18 72.97 73.92	71.62 72.18 72.97	0.45 0.56 0.79 0.95 1.07			0.16 0.02 0.23 0.01 0.01 0.01 tr.		

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-51 SHEET NO. 3 OF 7

F00	TAGE		DECEMBER			SAMP	LE				ASSAYS		
FROM	то	·	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7	7,	0Z/TON	OZ/TON	
96.34	125.50	75.00 - 79.49: 79.49 - 79.82: 79.82 - 84.20: 84.20 - 85.60: 85.60 - 89.58: 89.58 - 96.34:	same as 75.00-79.49 m. moderately to weakly brecciated with pink carbonate filling - some fracture voids filled with quartz crystals. same as 75.00-79.49 m. rock becomes weakly laminated, moderate locally; and strongest below 92.30 m. Bedding is denoted by a moderate to strong foliation of 0.1-0.5mm clasts - may be tuffaceous. Lowermost 30cm fines - inversely graded? 89.82 m: foliation at 50° to core axis.	2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818 2819 2820	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1	77.69 78.66 79.49 80.34 81.14 82.05 83.00 83.95 84.89 85.84 86.75 87.62 88.62 89.58 90.53 91.31 92.22 93.12 94.11 94.94	76.72 77.69 78.66 79.49 80.34 81.14 82.05 83.95 84.89 85.84 86.75 87.62 88.62 89.58 90.53 91.31 92.22 93.12 94.11 94.94 95.64 96.34	0.78 0.91 0.90 0.99 0.83 0.70			tr. tr. tr. tr. tr. tr. tr. tr. tr. tr.		
		horizon with up thicker in sect strongly silici attain the typi pyrite content variably brecci	or of the zone is a variably silicified and brecciated to 80% cherty sediments. This unit is somewhat ion than might be expected. The central member, a fied breccia, is not well developed and does not cal purple-grey colour. Perhaps as a consequence, is very low, seldom over 3%. The lower member, a ated and silicified section is of normal thickness rey colouration is noted.										

NAME OF PROPERTY McDermott

HOLE NO. MC-83-51 SHEET NO. 4 OF 7

F00	TAGE	DESCRIPTION			SAMP	LE				ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	
96.34	101.03	TRANSITIONAL SILICIFIED SEDIMENTS  The zone carries 10-80% pale greenish-grey cherty rip-up clasts set									•	
		in a chloritized dark green, fine to very fine grained groundmass. Fragments range from 2mm to 5cm - larger fragments being sub-angular, smaller are generally more rounded. Average size is 1cm. Smaller clasts, less than 5mm, exhibit a weak to moderate foliation, (eg. 45-50° at 96.55 m). Some irregular bedding is noted locally, possibly reflecting soft sediment slumping.  Occasional pale green brecciated chert beds up to 2cm thickness are noted (eg. 97.34 m at 60° to core axis). Cherty sediments do not carry pyrite. The zone ends at a massive siliceous zone carrying higher and more consistent pyrite contents - 1-3% versus 0-2%.  96.34 - 98.16: cherty clasts are pale green; 11cm lost core at 97.89 meters.  98.16 - 98.17: green clay seam (FAULT), cutting core at 48°.  98.17 -101.03: cherty clasts are pale grey with purple tint.  Fragment size increases down-hole, massive chert at 99.40-99.74 m. Several other smaller massive chert beds noted locally. A general increase in pyrite is noted with depth. Pyrite is very finely disseminated.	2830 2831 2832 2833	0-1 0-1 1-2 1-2	97.10 98.16 98.80 99.74	98.16 98.80	1.05 0.64 0.94 0.57			0.01 0.01 0.02 0.01 0.01 0.02		
101.03	107.22	MAIN SILICIFIED ZONE		-								
		Pale greenish-grey to waxy-green, with occasional dark green patches and honey coloured halos around fracture systems. Silicification is controlled by broken rock and follows breccia and fracture systems. However, brecciation is irregular and silicification is seldom strong. Some cherty sediments are noted locally in the section. Up to 5% pyrite is noted locally as a very fine dissemination. Green colouration in this section may be due to sericite alteration.										
		101.03-101.63: greenish cherty sediments, rocks are weakly brecciated and strongly silicified averaging 1-3% pyrite.								"		
•												

FORM :

NAME OF PROPERTY\_

Mc-83-51

SHEET NO. 5 OF 7

	F001	AGE		DESCRIPTION			SAMPL	-E			_	ASSAYS		
FF	MOS	то		DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	
			101.63-104.25:		C 2834	1-3	101.03	101.54				0.12	Rech.	
				brecciation down section. Up to 5% pyrite locally (averages 3-4%); with some pyrite in relic bedding	•	ı	101.54		0.77	res O	60 m)	0.21		
				planes at 102.00-102.30 m. Several zones of relic chloritization remain.	2836 2837	ı	102.31		0.91 0.83			0.30		
			104.25-105.25:	same as 101.63-104.25 but with abundant chloritized fractures and broken rock between honey coloured	•		104.05					0.09		
			105.25-105.57:	chert and silicified breccia fragments. honey coloured, strongly silicified breccia with 60%			105.53		0.91 0.78			0.08	0.09	
			105.57-106.46:	dark green chloritized breccia and fractures. same as 104.25-105.25 m - occasional pink druzy										
				quartz crystals on fractures. Weakly laminated locally - 35-40° at 105.70 meters.										
			106.46-107.22:	40-50% chloritized material between silicified sections. Fractures are chlorite filled.										
10	7.22	125.50	TRANSITIO	NAL SILICIFIED SEDIMENTS										
				, moderately to strongly silicified breccia with 50%			107.00	100 14	0.92			0.02		
				ritized rock (probably non-brecciated). Brecciation network pattern which was subsequently silicified.			107.22					0.02		
			_	f the network were not penetrated by silica bearing	2844	1	109.02					0.01		
20				ighly silicified rocks carry higher pyrite contents,	2845		109.85					0.03		
0				y. Some relic laminations are noted locally (eg.	2846	1-2	110.85	111.80				0.07	}	
اة				40° to core axis).					(measu	res 0	<b>√87 m</b> )	1		
0			107.22-109.30:	approximately 50% silicified breccia with few	2847		111.80			٠		0.02	}	
1				individual sections greter than 10cm. Fluorite	2848		112.71		0.79		1	tr.		
accept of notice of				(1-2%) noted above 108.10 m - purple colour - not	2849		113.50		0.89			tr.		
[ق				previously recognized in any drill hole. Silicified			114.39		0.86		1	tr.		
5	.			zones often defined along sharp contacts	2851		115.25		0.95			tr.		
<u>-  </u>				representing alteration fronts. A radiating	2852	1-2	116.20	11/-11	0.91		.[	tr.	]	
				needle-like texture (micro-breccia?) on a lmm scale				]				ļ		
<u> </u>			109.30-116.73:	is noted locally - eg. 108.40 meters carries 25-30% silicified breccia, percentage										
ב ב	-		109.30-110.73:	decresing down-section.										
LANGRIDGE LIMITED					·									
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	ı						1			1	1	l	1 1	

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-51 SHEET NO. 6 OF 7

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE NO. FROM OZ/TON OZ TON IDES FROM 1-2 117.11 118.00 116.73-121.70: siliceous sections partly cherty sediments and part 2853 0.89 tr. 1-2 118.00 118.85 silicified. Laminated at 20-25° at 116.80 m and 2854 0.85 tr. 0.10 1-2 118.85 1119.70 0.85 at 40-45° at 117.65 m. Bedding below 118.50 m is 2855l 1-2 119.70 120.60 0.07 2856 0.90 represented by a foliation (eg. 40° at 118.80 m). 1-2 120.60 121.45 0.10 Below 118.30 m siliceous rock represents 15-20% of 2857 0.85 0-1 121.45 122.06 0.61 0.02 2858 the section - minor cherty sediments. A 2cm orange 0-1 | 122.06 | 122.70 0.01 0.64 carbonate vein is noted at 120.35 meters. 2859 0-1 122.70 123.55 0.01 2860 0.85 121.70-122.70: carries 20-30% cherty sediments, well bedded but 0-1 123.55 124.33 0.78 0.01 openly folded - slumping? Individual beds are 2861 1-2 124.33 124.96 0.04 2862 0.63 brecciated and set in a dark green chloritized 2863 1-2 124.96 125.50 0.54 0.03 clastic matrix. Bedding at 121.80 m at 400 to core axis. 122.70-125.50: same as 116.73-121.70 m. Abundant slickensided, chloritized and polished fractures. An increase in very finely disseminated pyrite is noted below 124.30 meters. 125.50 140.51 SEDIMENTS Dark green, fine to very fine grained, poorly bedded becoming well 1-2 125.50 126.35 2864 0.85 tr. bedded below 136.00 m. The zone carries 10% silicified breccia 1-2 126.35 127.30 0.95 seams up to 2cm width - probably developed along bedding planes. 2865 tr. 1-2 127.30 128.27 0.97 Pyrite is very finely disseminated and averages 1%. 2866 tr. 1-2 128.27 129.12 126.35-127.30: well laminated at 30° to core axis highlighted by 2867 0.85 tr. 0-1 129.12 130.07 2868 0.95 tr. pale grey siliceous laminations. 0-1 130.07 131.02 0.95 127.30-128.00: well foliated - chloritized mafic clasts are roughly 2869 tr. 2870 0-1 131.02 132.02 1.00 tr. aligned. percentage chert and silicified breccia decreases 132.35: 2871 0-1 133.10 133.95 0.85 sharply below this point to less than 5% of tr. section. 132.50-136.00: non-laminated, moderately fractured, cherty laminations locally - eg. 200 to core axis at 133.70-133.80 meters.

GRIDGE LIMITED - TORONTO

McDermott NAME OF PROPERTY\_\_\_\_

HOLE NO. MC-83-51 SHEET NO. 7 OF 7

SAMPLE ASSAYS FOOTAGE DESCRIPTION FOOTAGE OZ/TON OZ/TON TOTAL 136.00-140.51: moderately to well laminated. 2872 0-1 136.25 137.25 1.00 136.55 m: bedding at 25-30° to core axis. tr. 138.30 m: bedding at 450 to core axis. 139.20 m: bedding at 35-40° to core axis. 140.50 m: bedding at 30-35° to core axis. 2873 0-1 138.25 139.17 0.92 tr. 2874 0-1 139.29 140.21 0.92 tr. 140.51 meters END OF HOLE CASING PULLED

NAME OF	PROPERTY	McDermott			
HOLE NO.	Mc-83-5	2 LENGTH	183.18 т	neters	
				··-	
LATITUDE	9 + 25 W	DEPARTURE	0 + 70 \$	S	
ELEVATION		AZIMUTH	344 <sup>0</sup>	DIP	-65°
		1092			2

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
0	<b>-</b> 65°				
30.48	-64 <sup>0</sup>				
106.68	<b>-</b> 57				
182.88	-55°				

HOLE NO. MC-83-52 SHEET NO. 1 OF 8 REMARKS BQ Core Split for assay.

LOGGED BY A.W. Workman

FO	TAGE	D. F. C. D. L. D. T. L. O. V.			SAMP	LE			-	5 S A	Y 5
FRO	4 TO	DESCRIPTION	NO.	SULPH-	FROM	FOOTAGE	TOTAL	*	75	OZ/TON	OZ/TON
0	15.85	OVERBURDEN			-						
15.8	5 51.85	BASALT			,						
		Medium greyish-green, fine to medium grained massive flow. Textural variations often defined by sheared zone which were subsequently									
	·	epidotized - shear flow. Coarser grained sections are usually									
		weakly to moderately epidotized (deuteric). Rock is non-magnetic and is not carbonatized.	-								
		15.85 - 18.30: medium grained.				1					
		18.30 - 20.25: fine to medium grained, occasional epidotized									
		breccia.				ļ					
		20.25 - 20.95: fine grained. 20.95 - 21.30: aphanitic, strongly brecciated with silicified								<u> </u>	
		fragments locally.							·		
		21.30 - 21.35: ground core - possible silicified flow contact.									
		21.35 - 23.95: fine to medium grained, patchy epidotization. 23.95 - 24.95: probably Sediments - well foliated at 35-40° to									
	,	core axis; strongly chloritized and epidotized.									
		Rock carries up to 3% pyrite as clots and cubes up									
		to 2mm. 24.95 - 31.56: fine to very fine grained; occasional epidotized and				ļ					
ĺ		silicified breccia zones, usually aphanitic.			•						
		31.56 - 32.76: INTRUSIVE - greenish-pink to pinkish-green, fine to									
		very fine grained - possibly Dioritic.  32.76 - 37.49: fine to very fine grained with abundant red hematite									
		filled fractures.			-						
				ľ							
	1										
-											

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-52 SHEET NO. 2 OF 8

											·	
F00	TAGE	DESCRIPTION			SAMP	-			_	ASSAYS		
FROM	то		ΝО.	% SULPH	FROM	FOOTAGE	TOTAL	7.	7,	OZ/TON	OZ/TON	
		37.49 - 40.00: SEDIMENTS - dark green, well laminated locally at 35-40° to core axis (eg. 37.50 m). Rock is very fine grained, often brecciated. A layer of pale green ash-fall tuff is noted at 39.03-39.13 carrying clasts up to lmm. A well foliated 'tuffaceous' zon at 50° to core is located at 39.69-40.00 m.  40.00 - 40.36: flow top breccia; angular fragments.  40.36 - 41.15: variably brecciated, often with white quartz between fragments.  41.15 - 46.60: fine grained, often brecciated, occasional epidotized and silicified flow breccia fragments.  46.60 - 46.86: fine to very fine grained.  46.86 - 51.85: same as 41.15-46.40 - fines slightly towards base. Lower contact is at a strongly silicified and weakly carbonated zone.	n									
51.85	54.92	Dark green, fine to very fine grained, locally laminated, becoming better laminated with depth, below 53.17 m. The rock is moderately chloritized. Bedding is highlighted by cherty seams parallel to the laminations - up to 5mm in thickness. This is probably secondary silica - it is also found in irregularly developed cross-cutting fractures. The section carries up to 1% pyrite as a very fine dissemination. 51.85 - 53.17: poorly laminated, weakly foliated. 53.17 - 54.92: well laminated: 55° to core axis at 53.17 m and 55-60° at 54.80 meters.	C 2875 2876 2877 2878	0-1 0-1	52.55 53.39	52.55 53.39 54.27 54.92	0.84 0.88			0.01 0.01 0.01 0.01		
54.92	82.79	MAIN MINERALIZED ZONE  The zone is developed closer to the overlying volcanic-sedimentary contact than is normally observed. The upper transitional silicified sediments contain a variable amount of silicified sediments, chert and possibly carbonate (diagenetic) sediments. Because of intrusives, little is observed of the 'main silicified										

HOLE NO. Mc-83-52 SHEET NO. 3 OF 8

FOOTAGE	DESCRIPTION			SAMP	LE			-	ASSAYS		
ROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7,	OZ/TON	OZ/TON	
	zone'. The lower member, a second variably silicified zone is found below an intrusive body at 70.55-82.79 meters. The main zone and the lower transitional zone seem, from what evidence remains, to have been well developed.										
4.92   59.03	TRANSITIONAL SILICIFIED SEDIMENTS					-					
	size supported in a dark green chloritized silty groundmass. Some massive cherty beds up to 5cm are noted. Purple-grey fragments are intensely silicfied and carry 2-3% very fine pyrite.	C 2879 2880 2881 2882 2883 2884	1-2 1-2 1 1-3	56.72 57.42 58.01	56.72 57.42 58.01	0.97 0.70 0.59 0.38			0.01 0.01 0.01 tr. 0.06 tr.		
9.03 65.04	INTRUSIVE							•			
	Olive green, fine grained with green nearly acicular crystals up to 2mm. Some sections up to 20cm width near the contact, carry abundant pale waxy green siliceous phases. The rock is strongly silicified from 60.30-61.30 m and carries 1% pyrite locally as blebs up to 1mm. The rock is non-magnetic.	2886	0 0-1	59.03 59.90					tr. tr.		

ANGRIDGE LIMITED - TORONT

NAME OF PROPERTY McDermott

HOLE NO. \_\_\_\_\_\_Mc-83-52

SHEET NO. \_\_\_\_ 4 OF 8

FOOTAGE	DESCRIPTION			SAMP	_E				ASSAYS		
FROM TO	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON	
		C 2887 2888 2889 2890 2891	0-1 0-1 1	61.87	63.74	0.98 0.89 0.61			tr. tr. tr. tr.		
65.04 67.2	MAIN SILICIFIED ZONE										
	Purple-grey, intensely silicified breccia with 5% honey coloured possibly feldspathized zones bordering fractures. Zone also carries 10-15% relic dark green chloritized non-silicified rock, mostly in the lowermost 72cm. Rock contains up to 3% finely disseminated pyrite in silicified rock. No trace of relic bedding is observed.	2892 2893 2894	2–3	1	66.48	0.65			tr. 0.01 0.07		
67.20 70.5	INTRUSIVE								·		
	Identical to 59.03-65.04 meters; carries occasional quartz veins (eg. 68.38-68.50 m), with variably dipping contacts. Trace of very weak magnetism locally. Lowermost 40cm is fine grained, strongly chloritized and fractured. A well developed chill is noted at the lower contact-possibly parallel to bedding in underlying sediments.	2895 2896 2897 2898	0-1 0-1	68.00	68.00 68.95 69.78 70.55	0.95 0.83			0.01 0.01 0.01 tr.		
70.55 82.7	TRANSITIONAL SILICIFIED SEDIMENTS										
	Dark green, fine to very fine grained, well laminated locally (eg. 45-50° at 70.73 m). Abundant white free quartz filling voids. Localized zones of silicified breccia are up to 25cm in thickness, but average about 5cm. Silicified breccia is purple-grey and occasional honey coloured. Fractures are often surrounded by 1cm honey coloured halos, which are also strongly silicified. Relic green coloured rock tends to be non-brecciated and subsequently non-silicified. Up to 3% pyrite is noted in strongly altered rock. A 3cm orange carbonate vein is located at 71.68 meters.										
			•								
									1 1	1	

McDermott NAME OF PROPERTY\_\_\_\_

HOLE NO. \_\_\_\_\_MC-83-52

SHEET NO. \_\_\_ 5 OF 8

SAMPLE FOOTAGE **ASSAYS** DESCRIPTION FOOTAGE FROM то OZ/TON OZ/TON FROM TOTAL 70.55 - 74.66: section is 30-40% silicified. An intrusive is noted 2899 71.39 0.07 70.55 0.84 1-2 at 70.99-71.08 meters which is pinkish-green to 1-2 71.39 72.15 0.76 0.14 2900 72.15 73.00 2-3 0.08 2901 0.85 flesh coloured with green needle-like amphiboles(?) 0.01 2-3 73.00 73.80 up to 2mm. Also carries silicified xenoliths. 0.80 74.66 2903 2-3 73.80 0.86 0.01 siliceous component is composed of cherty fragments 72.05 - 72.15: 1-2 74.66 75.52 0.01 up to 2cm in size - supported in a chloritized silty 2904 0.86 1-2 75.52 76.06 0.01 0.54 matrix. Chloritized partings carry 1% 2905 1-2 77.00 0.03 76.06 0.94 2906 chalcopyrite. 77.77 0.77 74.66 - 76.06: zone carries 15-20% silicified breccia. 2907 1-2 77.00 0.04 1-2 78.40 0.63 0.02 76.06 - 79.20: increased silicified breccia content to 50%. A dark 2908 77.77 78.40 79.20 0.21 green intrusive is noted at 76.53-76.75 meters (same 2909) 1-2 0.80 1 79.76 0.56 0.02 as 67.20-70.55 m). 2910 79.20 0.01 2911 1 79.76 80.34 0.58 79.20 - 80.34: carries 10% silicified breccia in seams up to 5cm 80.34 81.23 0.89 0.02 thickness - also silicified halos around fractures. 2912 1-2 0.87 0-1 81.23 82.10 0.03 80.34 - 82.79: medium to pale (sericite?) green, with major 2913 2914 1-2 82.10 0.69 0.02 silicified zones at 81.00-81.17 and 82.45-82.61 m. 82.79 82.79 88.80 DIORITE Dark green to pale wax green with occasional pinkish-green 5mm wide halos surrounding fractures. The rock is generally massive and unstructured. It is very weakly magnetic locally. The intrusive has a needle-like texture locally. Crystals up to 2mm in length and accicular in habit are probably amphiboles. This texture is observed as high as 79.25 m in this hole, interzones with silicified breccia. The intrusive is not carbonatized. 82.79 - 84.15: pale waxy green, randomly oriented dark green 2915 0-1 82.79 83.69 0.90 0.01 83.69 84.20 0.01 2916 0-1 0.51 accicular needles up to 2mm. 0.01 0-1 84.20 85.00 0.80 84.15 - 85.72: darker green, rock texture with needles not as well 2917 2918 0-1 85.00 85.72 0.72 0.01 developed. 0.75 1 85.72 86.47 0.01 2919 xenolith of silicified brecciated sediment. 0-1 86.47 87.40 0.93 tr. good dioritic texture and composition and possibly a 2920 0.70 0-1 88.1d second intrusive from overlying body. Greyish-2921 87.40 tr. 0.70 tr. green, fine grained with a pinkish-green, fine to 2922 0-1 88.10 88.80 medium grained feldspathic core at 87.35-87.65 m. Strongly fractured with orange carbonate at 86.90-87.25 m. Lower contact at 200 to core axis.

McDermott NAME OF PROPERTY....

SHEET NO.\_\_\_\_

6 OF 8

Mc-83-52

HOLE NO. \_\_\_\_

SAMPLE **ASSAYS** FOOTAGE DESCRIPTION FOOTAGE % SULPH, FROM TO OZ/TON OZ/TON FROM TOTAL 88.80 109.20 SEDIMENTS 2923 89.78 88.80 0.98 tr. Dark green, fine to very fine grained, with a greyish tone in 2924 89.78 90.70 0.92 0.04 uppermost 30cm. Weakly to moderately fractured - white carbonate 2925 91.56 1 90.70 0.86 0.01 filled. Moderately to well developed bedding laminations, often 2926 91.56 92.35 0.79 0.01 with concordant 1-2cm purple-grey silicified breccia seams (5% 2927 1-2 92.35 93.30 0.95 0.04 of section above 92.70 m). The rock is moderately well parted 2928 1-2 93.30 94.23 0.93 tr. parallel to the laminations, and is non-magnetic. Weak 2929 95.08 1 94.23 0.85 tr. carbonatization is noted locally. 2930 95.08 95.85 0.03 1 0.77 92.70 - 93.55: zone contains 50% silicified breccia. 94.23 - 94.33: Diorite - fine grained, non-magnetic with contacts 2931 0-1 96.90 97.78 0.88 0.01 at 600 to core - concordant to bedding. Bedding Attitudes: 90.05 m: 40-450 to core axis. 2932 0-1 98.80 99.67 0.87 tr. 90.70 m:  $50-55^{\circ}$  to core axis. 92.00 m:  $40-45^{\circ}$  to core axis. 2933 0-1 100.65 101.54 0.89 tr. 94.75 m: 45-50° to core axis. 96.90 m: 35-40° to core axis. 0-1 102.65 103.52 0.87 tr. 101.70 m: 50° to core axis. 103.15 m: 300 to core axis. 0-1 104.60 105.47 2935 0.87 tr. 105.00-109.20: spotty carbonatization feathering out along bedding laminations. Minor cherty beds locally (eq. 107.21-2936) 0-1 106.50 107.44 0.94 0.04 107.40 m). Bedding at 109.19 m at 30° to core. 0-1 108.35 109.20 0.85 2937 0.01 9 109.20 127.46 BASALT Medium green, fine to very fine grained, massive in the upper part becoming weakly brecciated below 111.25 m. Two pilloweed sequences are noted. Pillow size is approximately 1 meter. Minor amounts of tuff and hyaloclastite are observed. The flows are non-magnetic and are not carbonatized. 109.20-111.25: massive, non-brecciated flow. 111.25-115.40: brecciated flow - angular fragments, rock is weakly epidotized. 115.40-115.61: variolite and hyaloclastite bearing zone. 115.61-116.18: Tuff - dark grey with reddish hue; ash fragments up to 4mm in a very fine grained matrix.

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-52 SHEET NO. 7 OF 8

F	OOTAGE	05005:5-15:			SAMP	LE				ASSAYS	<del>(4-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-</del>	
FROM	то то	. DESCRIPTION	NO.	% SULPI	FROM	FOOTAGE	TOTAL	7,	7.	OZ/TON	OZ, TON	
		116.18-116.23: hyaloclastite. 116.23-122.75: pale green, strongly tectonically brecciated pillowed sequence. Selvages up to 4cm in width are strongly epidotized. Pillow tops are weakly vesicular. 122.75-122.84: SEDIMENTS - well laminated at 50-55° to core. 122.84-123.35: dark green massive flow. 123.35-123.80: SEDIMENTS - moderate to well developed laminations at 45° to core axis - possibly tuffaceous. 123.80-124.50: brecciated basalt, minor hyaloclastite, moderately epidotized locally. 124.50-127.46: dark green pillowed basalt - same as 116.23-122.75		IDES	FROM	10	TOTAL					
127.4	46 132.83	Dark green, fine to very fine grained, locally very well laminated (eg. 50° at 127.72 and 132.70 m). The zone is brecciated and strongly chloritized at the upper contact. The section carries up to 1-2% very finely disseminated pyrite. Locally developed carbonatization is of moderate strength and feathers out into the laminations. Non-magnetic.  130.20-131.55: massive, non-laminated zone (silty).  132.68-132.83: ground and lost core.	C 2938 2939 2940 2941 2942 2943	1 1 1	127.49 128.35 129.16 130.04 130.96 131.83	129.16 130.04 130.96 131.83	0.81 0.88 0.92 0.87 1.00	res 0.	85)	tr. tr. tr. tr.		
LANGRIDGE LIMITED - TORONTO - 366-	183.18	Dark green, becoming pale green where strongly epidotized and moderately brecciated above 136.25 m. Several flows are noted in this section, one of which is pillowed. Flow tops are marked by angular flow top breccia. The rocks are non-magnetic and are weakly chloritized.  132.83-136.25: angular, shatter-type tectonic brecciation. Fracture systems are moderately epidotized. Fine to very fine grained.	1									

NAME OF PROPERTY McDermott

HOLE NO. Mc-83-52 SHEET NO. 8 OF 8

F00	TAGE				<b>*</b>	SAMP	LE				ASSAYS		
		-	DESCRIPTION	NO.	% SULPH,		FOOTAGE		<del>                                     </del>	1		r	ı —
FROM	TO	<u> </u>		NO.	IDES	FROM	то	TOTAL	7	7.	OZ/TON	OZ/TON	<u> </u>
	·	136.25-141.00:	fine grained and generally massive, weakly chloritized; epidotized locally in association with fractures or breccia.			·							
		141.00-149.85:											
		149.85-151.20:											
		151.20:	FLOW CONTACT	l	1			1			· ·		
		151.20-151.40:											
		151.40-154.00:											
	-	154.00-158.75:	pale greenish-grey, very fine grained becoming fine grained at 155.50 m, and almost medium grained at 158.40-158.75 meters.										
		158.75-158.78:		Ì					]	1			
		158.78-160.70:	, , , ,	l				1	l				
ĺ		160.70-171.33:								ĺ			
			centres, zone includes a brecciated but massive section at 164.50-166.08 m and strongly epidotized										
ļ			angular breccia from 169.35-171.33 meters.										
		171.33-171.55:											
		171.55-175.32:	weakly pillowed.						l .				
	•		brecciated massive flow - abundant carbonate stringers.					-					
}												1	
I													
. [		٠,											
		183.18 meters	END OF HOLE							·			
			CASING PULLED										
					ŀ								
			·										
			·									}	

FORM :

NAME OF	PROPERTY	McDermott		
		LENGTH	131.37 meters	
LATITUDE	9 + 25 E	DEPARTURE	0 + 95 S	
ELEVATION		AZIMUTH	344	-70°
STARTED	November 14, 1	1983 FINISHED	November 16, 19	983

 <del>                                     </del>	
1	

HOLE NO. MC-83-53 SHEET NO. 1 0F 6 REMARKS BO Core Split for analysis. Casing Pulled. LOGGED BY A.W. Workman

00.	TAGE				SAMP	LE				SSA	Y S	
ROM	то	DESCRIPTION	NO.	SULPH- IDES	FROM	FOOTAGE TO	TOTAL	%	75	OZ/TON	oz/ton	T
	4.23	OVERBURDEN										T
.23	68.81	BASALT							-			
		Medium greenish-grey to greyish-green, fine to very fine grained when pillowed and fine to medium grained when massive flow. The rocks are non-carbonatized and exhibit a trace of magnetism locally. The flows average 1% pyrite as blebs up to 2mm. Rocks above 36.42 m are pillowed; below are massive flows.  4.23 - 5.75: very fine grained, angularly brecciated.  5.75 - 7.70: fine grained, non-brecciated, generally massive.  7.70 - 11.45: fine to medium grained, generally massive.  11.45 - 11.95: fine grained becoming very fine grained.  11.95 - 17.75: pillowed - hyaloclastite in rims at 11.97 m and 12.35 m; not below. Rock is weakly pillowed below 15.30 m. Lower contact is arbitrary.  17.75 - 20.20: fine grained, locally epidotized and silicified brecciation; quartz veins and stringers up to 3cm.  20.20 - 28.60: pillowed, very fine grained, pillows up to 1.5m in size.										
		28.60 - 33.05: fine to very fine grained, abundant epidotized and silicified "shatter-type" brecciation. Minor flow breccia.		-			-					
		33.05 - 36.42: pillowed, very fine grained, increasingly brecciated towards base of zone.  36.42 - 39.45: massive flow, fine grained gradually coarsening down										
		section. 39.45 - 40.11: massive, fine to medium grained.		<u>.</u>								

It is non-magnetic.

McDermott NAME OF PROPERTY

HOLE NO. \_\_\_\_\_Mc-83-53 SHEET NO. \_\_\_\_2 OF 6 SAMPLE **ASSAYS** FOOTAGE DESCRIPTION % SULPH. FOOTAGE FROM OZ/TON OZ/TON TOTAL 40.11 - 41.18: massive, medium grained, weakly to moderately fractured - filled with quartz and minor white carbonate and red hematite. 41.18 - 46.50: same as 39.45-40.11 meters. 46.50 - 47.15: fine grained with increasing brecciation and fracturing; spotty epidotization, texture cloudy due to alteration - possibly uralitization. 47.15 - 49.30: fine to medium grained, massive, occasional epidotized seams up to 1cm in width. 49.30 - 50.85: fine grained, strongly epidotized. 50.85 - 54.75: massive, fine to medium grained. 54.75 - 54.85: sheared; brecciated and mylonitic. 54.85 - 63.40: massive, medium grained, sheared at 150 to core axis at 57.15 m - increased fracturing below. 63.40 - 64.07: fine grained, lower contact is sharp at a 1cm quartz-carbonate seam at 200 to core axis - minor fault. 64.07 - 65.30: very fine grained to aphanitic, flow top breccia above 64.24 m - finely brecciated below. 65.30 - 68.81: medium to coarse flow breccia - sub-rounded fragments up to 5cm in size in moderately epidotized groundmass. Below 68.35 m, fragments are elongated along shear foliation in flow at 450 to core axis. Some fragments may be derived from underlying sediments. Lowest 10cm is very fine grained to aphanitic ending at a siliceous 2cm seam. 68.81 79.50 **SEDIMENTS** Dark green, fine to very fine grained, and well laminated. Local carbonatization produces a greyish tone to the rock, and these zones 2944 | 1-2 | 68.81 69.80 0.999 tr. 2945 2-4 69.80 70.70 | 0.90 tr. carry elevated pyrite contents - up to 5%. Pyrite is noted as a 1 70.70 71.54 very fine grained dissemination and as cubes up to 1mm (eg. 69.80-0.84 tr. 71.54 72.35 0.81 70.07 moderately carbonatized). Other carbonate alteration is noted 2947 tr. as a selective replacement of alternating laminations (eq. 70.07-

70.70 meters). Rock is generally weakly to moderately chloritized.

Mc-83-53

SHEET NO. 3 OF 6

FROM TO	DESCRIPTION						K .			
		NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON
70	sediments; non-laminated locally.  76.65 - 79.50: well foliated, weakly to moderately laminated; minor brecciated rock locally - purple-grey, non-silicified, carbonated.  Bedding: 45° to core at 77.00 m.  45° to core at 77.40 m.	C 2948 2949 2950 2951 2952 2953 2954 2955		72.35 73.16 74.08 75.00 75.88 76.72 77.50 78.38 79.03	73.16 74.08 75.00 75.88 76.72 77.50 78.38 79.03 79.50	0.81 0.92 0.92 0.88 0.84 0.78 0.88 0.65 0.47			tr. tr. tr. tr. tr. tr. tr. tr.	
S		2957 2958		79.50 80.12	80.12 80.71	0.62 0.59			tr. tr.	
I for all all all all all all all all all al	It is less well laminated, and for the most part is only moderately foliated. Parting is not well developed along the foliation. The rock is moderately to strongly fractured with 5-10% quartz veining above 83.30 m. Most fractures are carbonate filled. The unit carries up to 2% pyrite locally but averages less than 1%.  88.85 - 89.30: weakly to moderately laminated at 45-550 to core.  90.70: 5cm laminated zone at 40-450 to core axis.  90.90 - 91.95: weakly to moderately carbonatized.  93.60 - 93.76: moderately carbonatized.  93.35 - 93.76: moderately to strongly fractured - surfaces are chlorite polished.	2959 2960 2961 2962 2963 2964 2965 2966 2967 2968 2969 2970 2971 2972	1-2 1 1 1 0-1 0-1 0-1 0-1	81.61 82.57 83.43 84.28 85.08 85.97 86.86 87.69 88.55 89.43 90.29 91.10 91.95	81.61 82.57 83.43 84.28 85.08 85.97 86.86 87.69 88.55 89.43 90.29 91.10 91.95 92.84 93.76	0.90 0.96 0.86 0.85 0.89 0.89 0.88 0.86 0.81 0.85 0.89 0.92			tr. tr. tr. 0.01 0.01 0.01 0.01 tr. tr.	

HOLE NO. \_\_\_\_\_MC-83-53

SHEET NO. 4 OF 6

F00	TAGE				SAMP	LE	-			ASSAYS		
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7,	7,	02/TON	OZ/TON	_
93.76	123.04	MAIN MINERALIZED ZONE										
		The main zone is composed of three members; an upper variably silicified zone carrying chert fragments and beds; a central strongly silicified member with variable relic chloritized patches; and a lower variably silicified and brecciated zone. Pyrite contents up to 10% are noted locally within the central member.										
93.76	95.36	TRANSITIONAL SILICIFIED SEDIMENTS										
		Dark green, fine to very fine grained with 10-20% pale grey to purple-grey cherty fragments up to 3cm in size. These clasts increase to 50% below 94.47 meters and have pinkish hues locally. Pyrite content is 0-1% as a very fine grained dissemination. A fault zone begins at 94.75 m and ends at a 2cm green clay seam at 95.27 m (at 47° to core axis). The zone exhibits strongly chloritized shears and some mylonite.	C 2974 2975		1	94.47 95.36				0.01		
95.36	110.13	MAIN SILICIFIED ZONE										
		The dominant lithology is honey coloured intensely silicified breccia which locally contains some purple-grey breccia. Some cream coloured cherty horizons and cherty fragments (rip-up clasts) are noted. Part of the rock was not completely silicified and these 'pods' are represented by greenish chloritized zones. Pyrite contents are generally below average for this zone although 10% pyrite is noted locally. It is present as a very fine dissemination, and as clots up to 1cm in size.  96.20 - 96.48: carries 40-50% cherty rip-up clasts in a very fine grained intensely chloritized matrix.  96.48 - 97.88: pale grey to purple-grey, intensely brecciated rock with minor green chloritized patches. Some chloritization of very tight fractures.  Silicification is weak to moderate in strength.  97.88 - 99.44: as above - some web-like epidote filling fractures - weakly silicified but increasing downhole.	2976 2977 2978 2979	1-2 1-2	96.13 96.96 97.88	96.96 97.88	0.92 0.73			0.07 0.03 0.06 0.02 0.01		
	-											

McDermott NAME OF PROPERTY\_\_\_\_\_

HOLE NO. MC-83-53 SHEET NO. 5 OF 6

FOOTAG	3E		DESCRIPTION			SAMPI	LE				ASSAYS		
FROM	то		DESCRIPTION	NO.	% SULPH IDES	FROM	FOOTAGE TO	TOTAL	7,	7.	OZ/TON	OZ/TON	
		99.44 -100.99:	honey coloured, intensely silicified; becomes greyer in tone down hole. Tight fractures carry red hematite. grey-green, weakly to moderately silicified with honey coloured intensely silicified rock in locally developed breccia and surrounding fractures as 1-3mm halos. Locally, silcified breccia seams and	2981 2982 2983 2984	1 1 1	99.44 100.17 100.99 101.79 102.62	101.79 102.62	0.73 0.82 0.80 0.83 0.40			0.01 0.01 0.01 0.01 0.01	,	
		103.00-103.66: 103.66-105.80: 105.80-107.28: 107.28-108.41: 108.41-109.45:	rock. honey coloured, strongly silicified, with 30-40% relic green chloritized patches and seams. Rock becomes greenish toned with depth.	2987 2988 2989 2990 2991 2992 2993 2994 2995	2-3 1-2 1-2 1-2 1-2 2-3 3-4 2	103.66 104.51 105.44 106.22 106.78 107.28 107.85 108.41 108.88	104.51 105.44 106.22 106.78 107.28 107.85 108.41 108.88 109.45	0.85 0.93 0.78 0.56 0.50 0.57 0.56 0.47 0.57			0.02 0.05 0.02 0.13 0.05 0.02 0.09 0.17 0.13 0.03		
.10.13 123	3.04	Dark green, fin silicified brec purple-grey loc bedding. Fract coloured reacti localized scale sections are fo (25-35% silicif 119.40-119.84 (	honey coloured, intensely silicified breccia; averaging 5-7% pyrite and up to 10% locally.  NAL SILICIFIED SEDIMENTS  e to very fine grained with up to 70% honey coloured cia zones up to 15cm in width. These zones may be ally and show some evidence of developing along the ures are often surrounded by silicified, honey on halos. The rock is well laminated on a very (eg. 40-45° at 117.62 m). Major silicified und at 110.13-110.96 (50% silicified); 111.82-115.65 ied); 116.40-117.50 (60% silicified); and, 70% silicified). Small increases in pyrite content with alteration. Up to 3% very finely disseminated	2999 3000 NOTE A 839 840	1-2 1-2 1-2 1-2: LE 1-2 1-2 1-2	110.13 110.96 111.82 112.68 TER AND 113.59 114.44 115.36 116.24 117.12	110.96 111.82 112.68 113.59 NUMBE 114.44 115.36 116.24 117.12	0.83 0.86 0.86 0.91 SERIES 0.85 0.92 0.88 0.88	CHANG	ES	0.34 0.11 0.06 0.02 0.02 0.04 0.01 0.02 0.01		

McDermott

Mc-83-53

6 OF 6

FOO	TAGE				SAMP	LE				ASSAYS	
FROM	то	DESCRIPTION	NO.	% SULPH	FROM	FOOTAGE TO	TOTAL	7.	7.	OZ/TON	OZ/TON
		pyrite is noted locally. Average content is 1-2%. The rock is non-magnetic and very weakly carbonatized locally.	A 844 845 846 847 848 849	1 1 2-3 1-2	118.03 118.94 119.84 120.72 121.67 122.27	119.84 120.72 121.67 122.27	0.90 0.88 0.95 0.60		·	0.01 0.13 0.06 0.12 0.08 0.10	
123.04	131.37	SEDIMENTS									
		Medium to dark green, fine to very fine grained, with up to 1% silicified seams (centred on fractures - reaction halos). Rare honey coloured silicified breccia zones up to 15cm are noted. Fractures within these zones are often hematized. In general, the rock is weakly to moderately chloritized, and non-magnetic. Fractures are generally carbonate filled. The rock is weakly carbonatized locally. Pyrite content averages 0-1% as a very fine dissemination.	850 851 852 853 854 855 856 857 858 859	1 1 1 1 0-1 0-1	123.04 123.90 124.80 125.68 126.55 127.37 128.22 129.08 129.97 130.55	124.80 125.68 126.55 127.37 128.22 129.08 129.97 130.55	0.90 0.88 0.87 0.82 0.85 0.86 0.89			0.01 0.01 0.01 0.08 0.06 0.01 0.01 0.01	
		131.37 meters END OF HOLE									
		CASING PULLED									
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NORTH CAMFLO MINES LTD. McDERMOTT PROJECT
HARKER & HOLLOWAY TWPS, ONT
SECTION: 10 + 25 W.
(LOOKING WEST-260°) N 00+00r CP CHALCOPYRIT
GP GRAPHITE
Hem HEMATITE
MI MAGNETITE
Py PYRITE
Po PYRRHOTITE \$ 00+09 SOUTH

32D12SE0044 63.4297 HOLLOWAY

NORTH	4975	4950	4925	4900	4875	MFLO MINES LTD.  CDERMOTT PROJECT  HARKER & HOLLOWAY TWPS. ONT  SECTION: 12 + 75 W.  (LOOKING WEST-260°)  SCALE 1:250
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						SILICIFIED  CHLORITIZED  CARBONATED  PILLOWED  BRECCIATED  FLOW BRECCIA
						C CHLORITE  F FELDSPAR  J CARBONÁTE  Q QUARTZ  V "VEIN"
\$ 00+001						IS SYENITE  ID GRANITE  2D DIORITE  3D DIABASE
						L E G E N D  V2 RHYOLITE  V4 DACITE  V6 ANDESITE  V7 BASALT  V9 TUFF

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NORTH	00009	4975	4950	4925	4900	4875	MMFLO MINES LTD.  MCDERMOTT PROJECT  HARKER & HOLLOWAY TWPS. ONT  SECTION: 14 + 00 W.  (LOOKING WEST-260°)  SCALE 1:250  O  SCALE 1:250  O  Metres  WAN BY:A.WORKMON NTS. NO. 32 D/12   PROJ. NO. P 135
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SOUTH	5000 metres	4975	4950	4925	4900	4875	4850  LEGEND  VZ RHYOLITE  V4 DACITE  V6 ANDESITE  V7 BASALT  V9 TUFF  V10 AGGLOMERATE  V12 SILICIFIED BRECC

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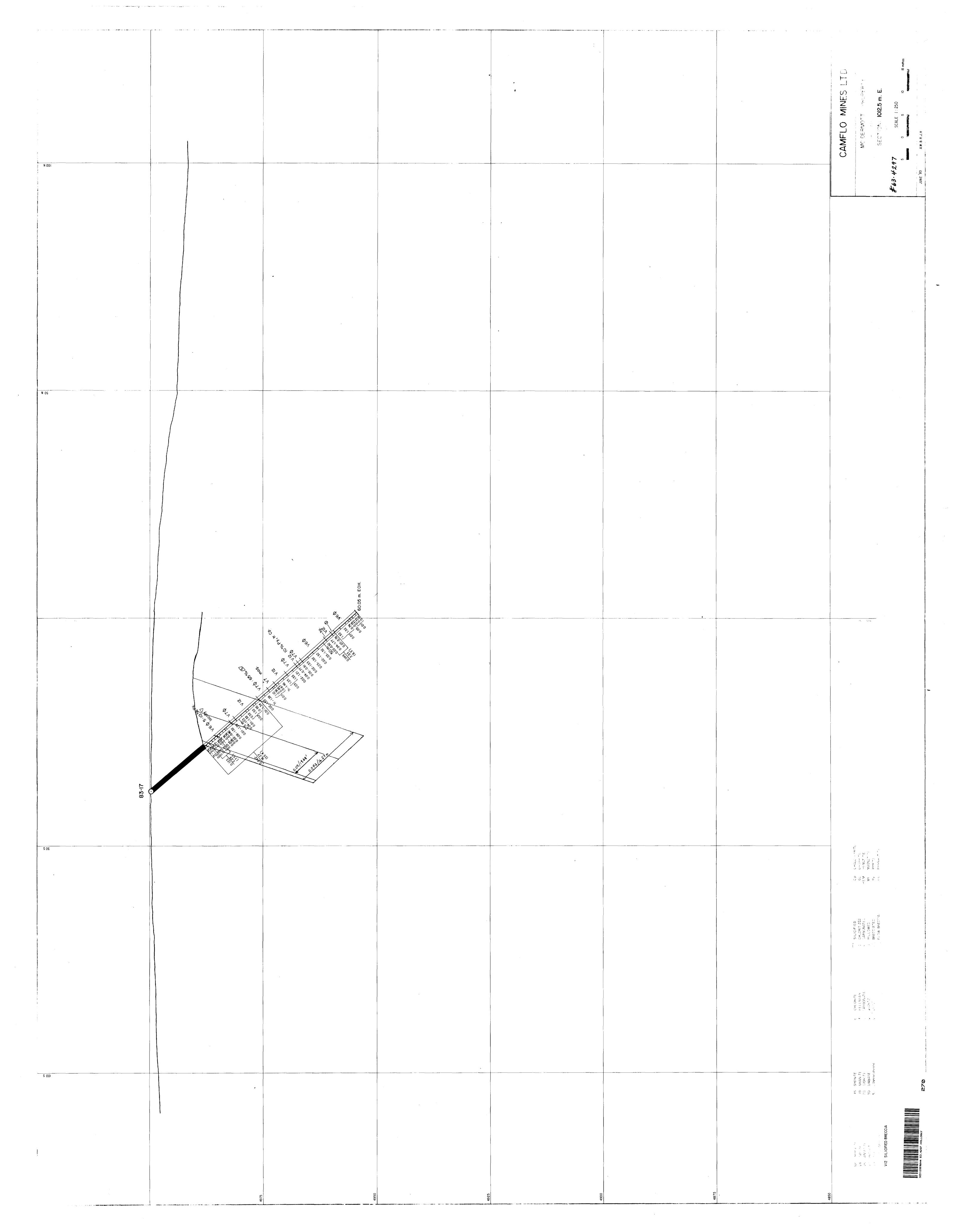
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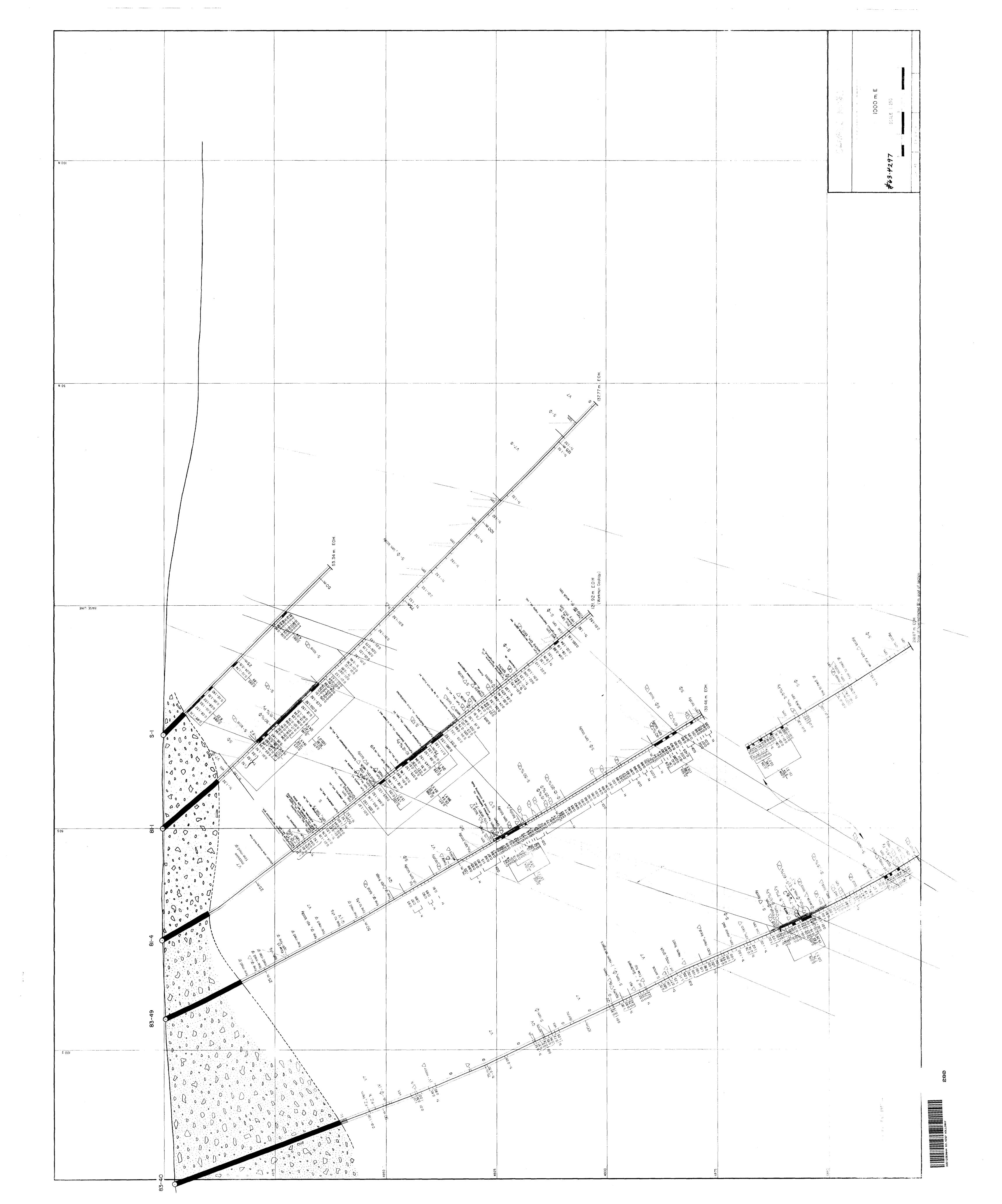
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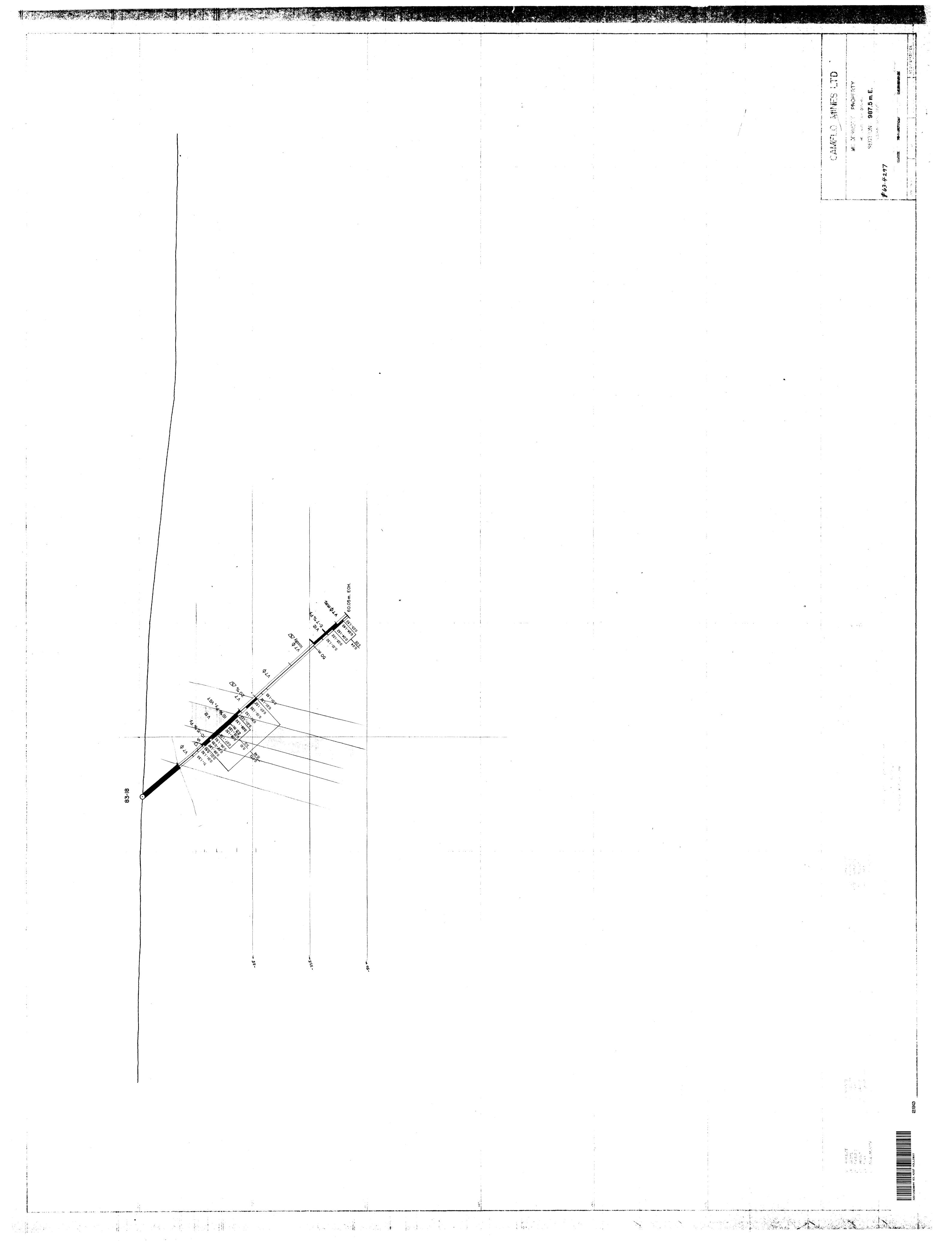
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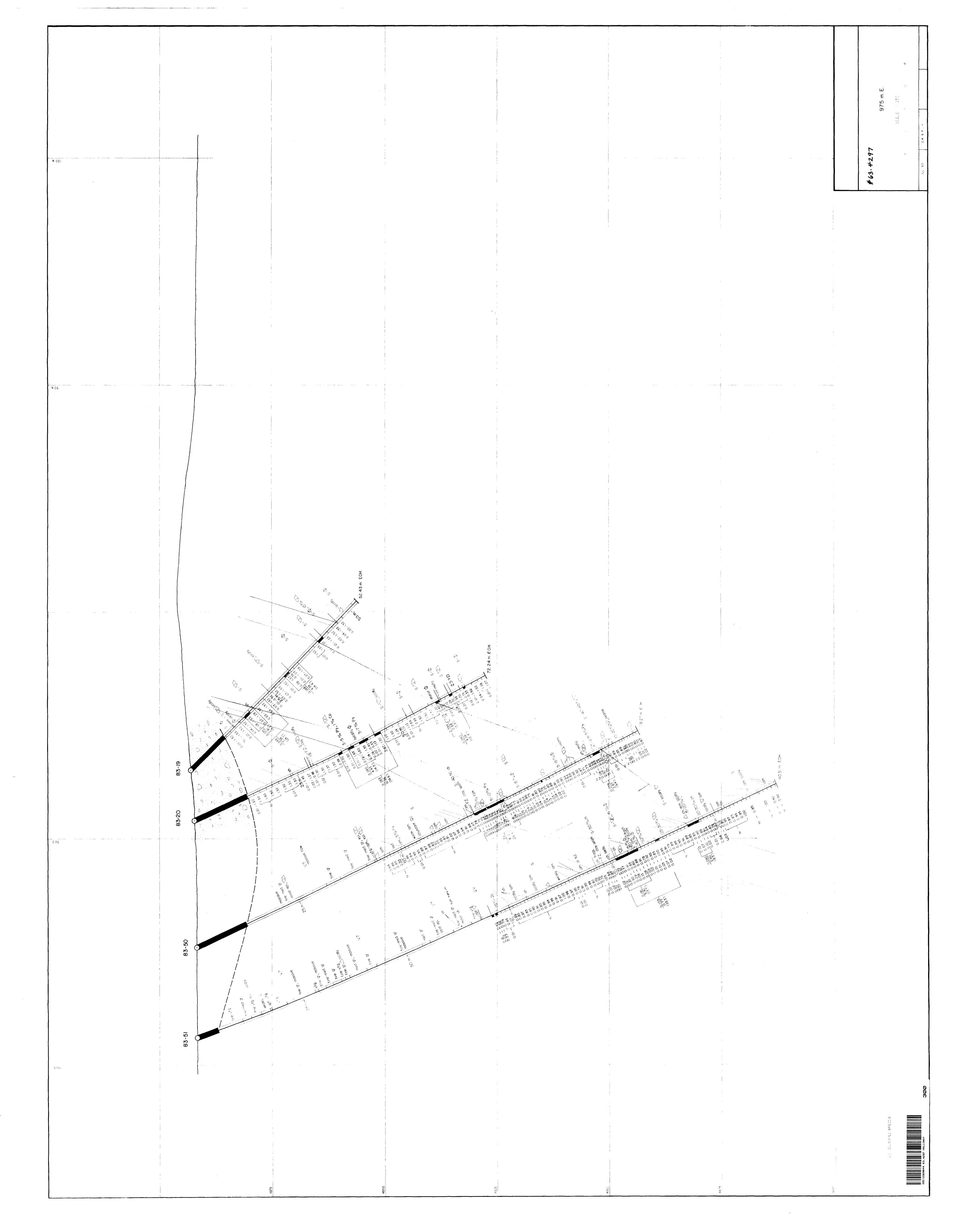
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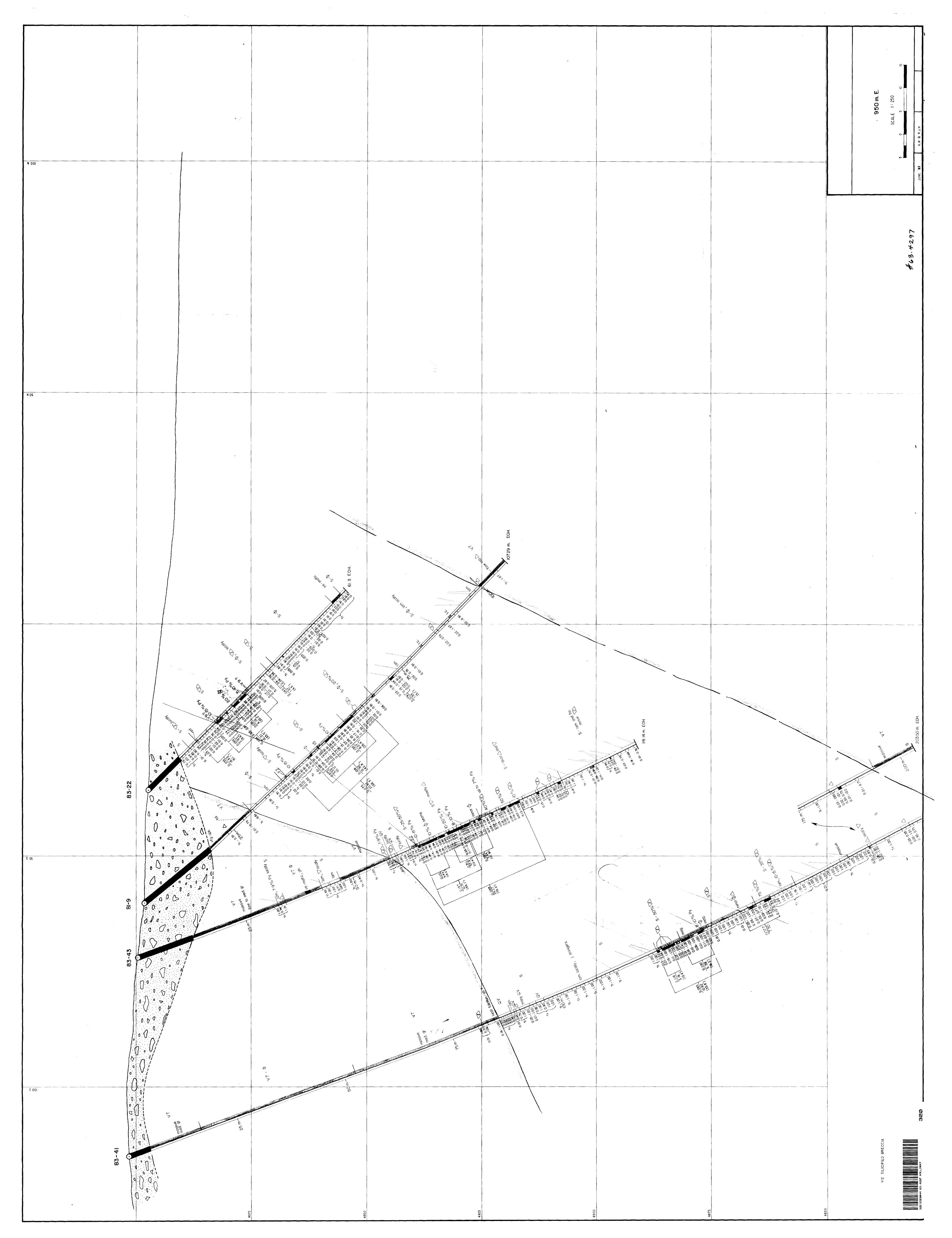








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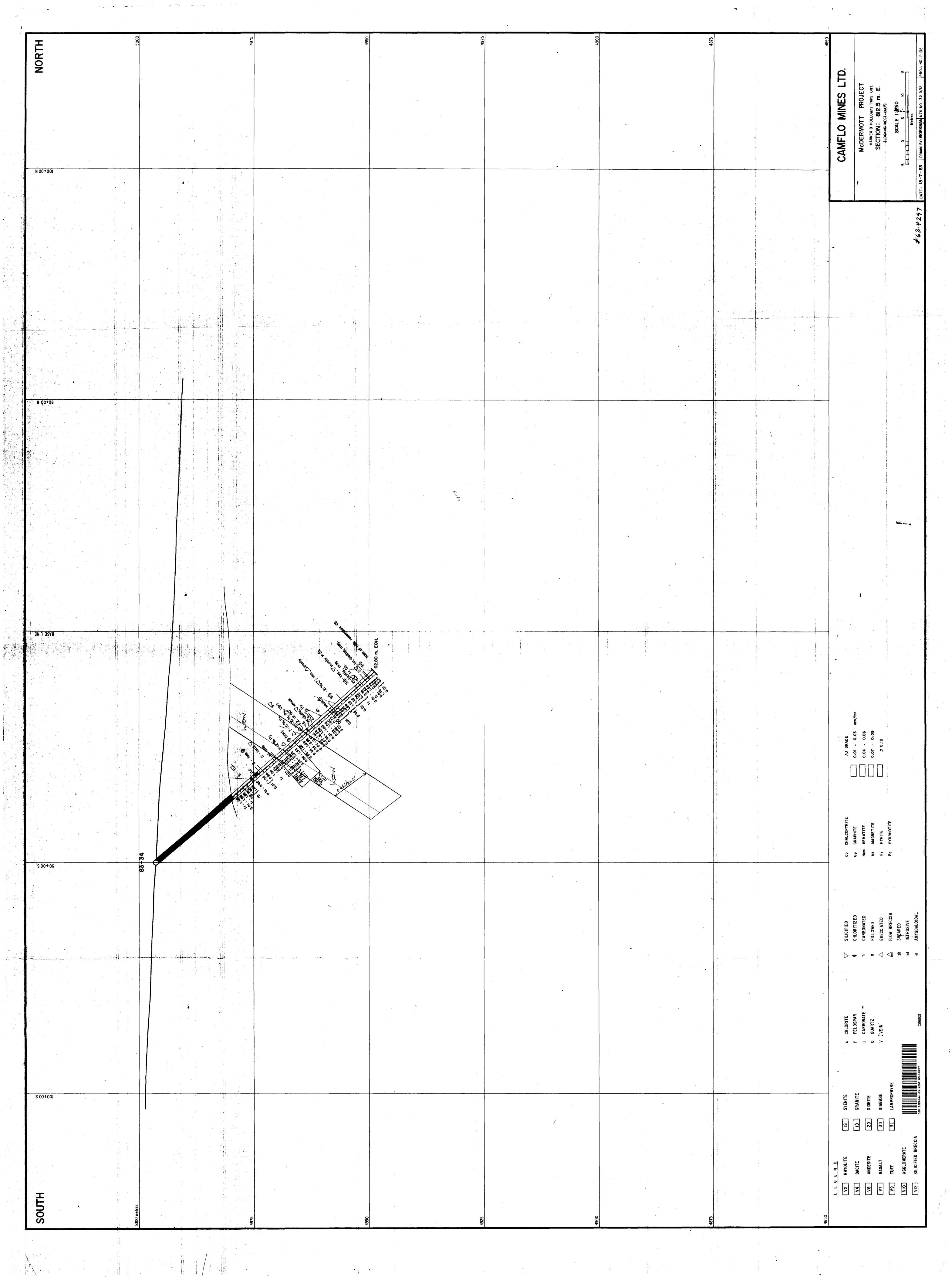


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V4 DACITE
V6 ANDESITE
V7 BASALT
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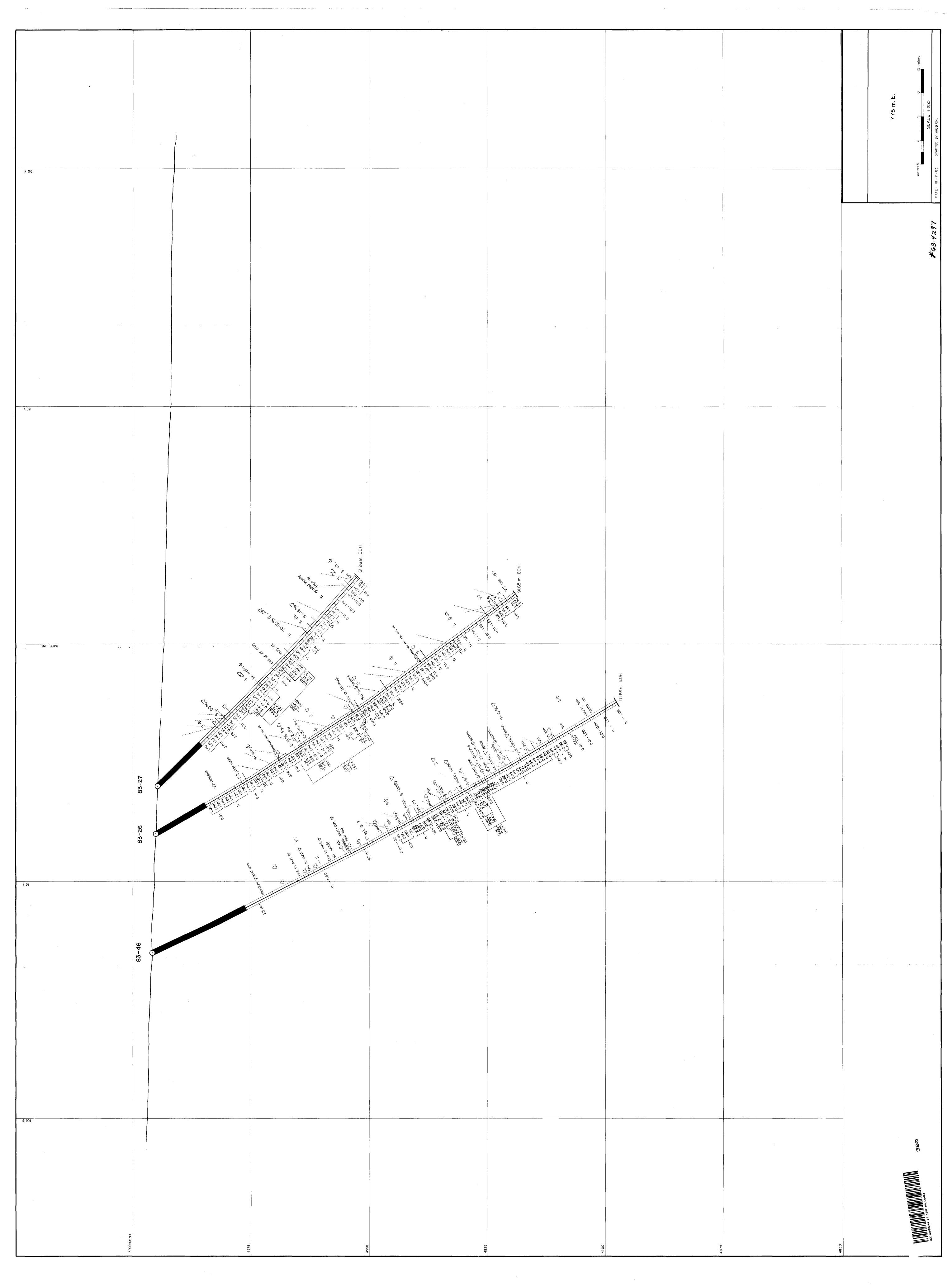
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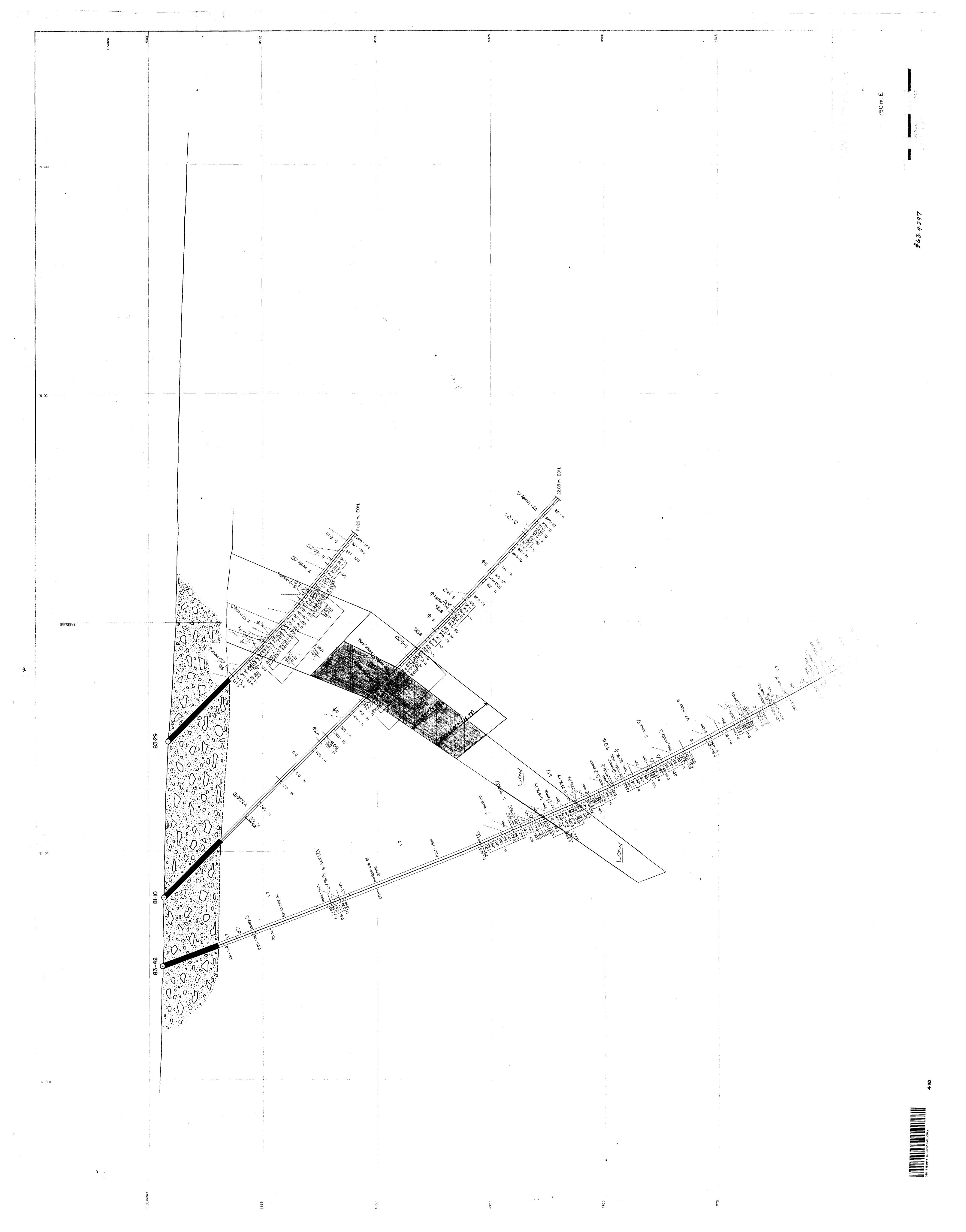


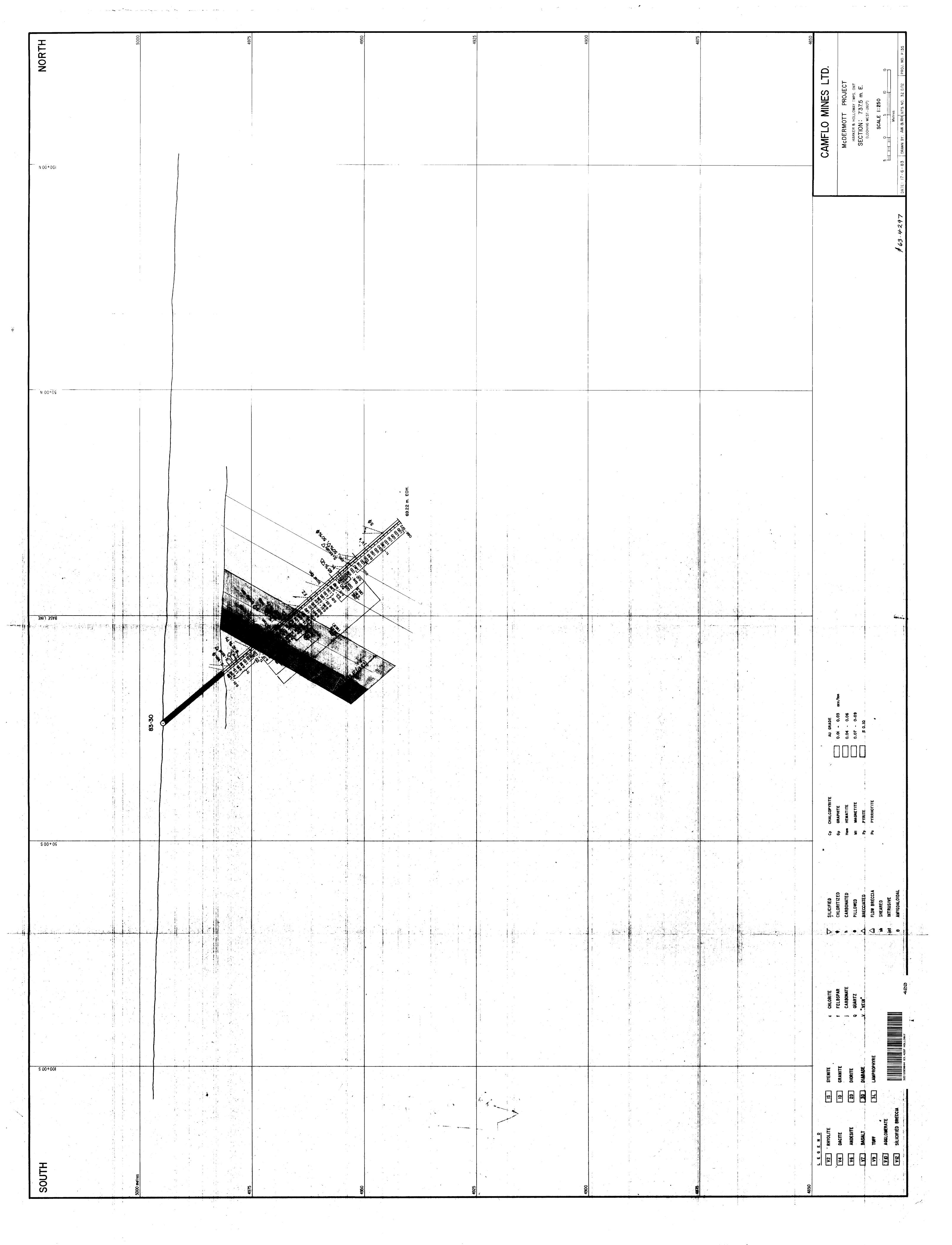
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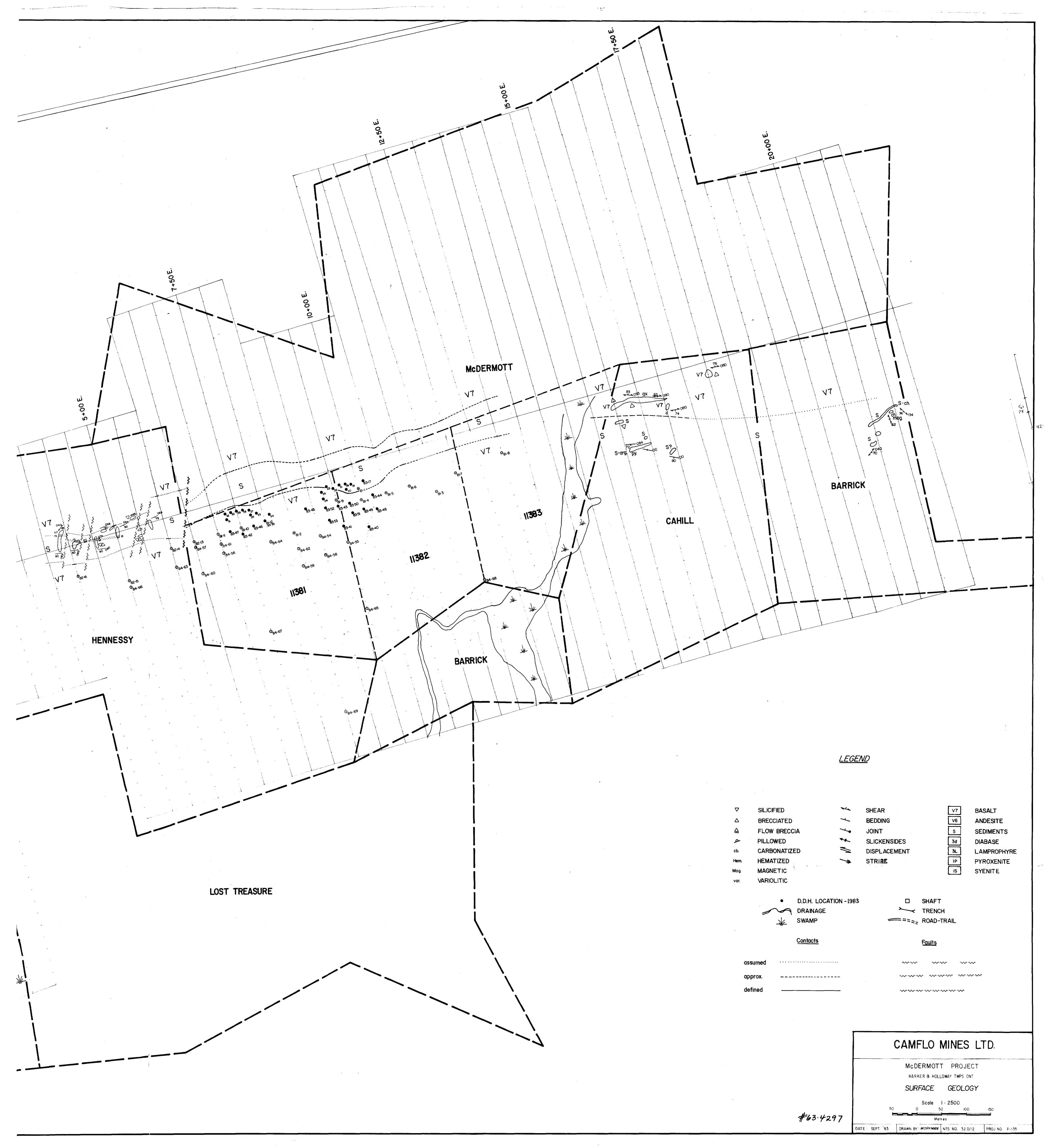


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								CAMFLO MINES LTD.  McDERMOTT PROJECT  HARKER & HOLLOWAY TWPS. ONT.  SECTION: 762.5 m. E.  (LOOKING WEST-260°)  SCALE 1:250
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			83-28					AU GRADE 0.01 - 0.03 025/ 0.04 - 0.06  0.07 - 0.03
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NORTH	2000		4 4925	4900	228	CAMFLO MINES LTD.  McDERMOTT PROJECT  HARKER & HOLLOWAY TWPS. ONT  SECTION: 725 m. E.  (LOOKING WEST-260°)  SCALE 1:250  S
						0M83-6-C-34 # 63-4297
N 00+0\$		Salo Con Sol	**************************************			
BASE LINE	Day of the state o		Toology of the state of the sta	Control of the contro		.03 ozs/ton .06 .09
\$ 00+0\$	83-3  83-3	BEST OF THE STATE				CD CHALCOPYRITE  Gp GRAPHITE  Hem HEMATITE  Mt MAGNETITE  Py PYRITE  Po PYRRHOTITE  L
	833-7-					C CHLORITE  f FELDSPAR  j CARBONATE  Q QUARTZ  Q QUARTZ  V "VEIN"  RE  S1.4297 HOLLOWAY  430
S 00+601	5000 metres	4950	4925	4900	4850	LEGEND  VZ RHYOLITE  V4 DACITE  V6 ANDESITE  V7 BASALT  V9 TUFF  V10 AGGLOMERATE  V12 SILICIFIED BRECCIA  S2DI2SE0044 6



ELEVATION LATITUDE LOC ATION HOLE NO. 7737 STARTED. RIDGE LIMITED TORONTO - 366-1168 23.1324.38 15.3923.13 FROM 0 FOOTAGE 77 47 E7 . . 15.39 MC83-17 70 10 + 12.5 E 1-5-83 Trace amounts disseminated finely in rock. Fractures filled with quartz and carbonate. Massive flow. Dark green, fine grained, weakly to strongly fractured moderately chloritized. Abundant pyrite along fractures 21.55 - 23.13 - similar to 17.53 - 19.35 - strongly silicified locally, 23 m. flow foliation at  $45^{\circ}-50^{\circ}$ . 19.35 - 21.5517.53 - 19.3516.92 - 17.53 - moderately silicified, weakly chloritized 7-8% pyrite. altered. Abundant very finely disseminated pyrite silicified. cut the earliest fracturing. Yellow green to dark green, aphanitic to very fine grained. Thin flow laminations at  $60^{\circ}-70^{\circ}$  to the core 15.39 - 16.92 - highly fractured, broken core relatively minor carbonate in stringers. throughout. axıs. (calcite) is confined to narrow fractures which cross-BASALT ANDESITE CASING Moderately well fractured with quartz and LAZIMUTH DEPARTURE LENGTH FINISHED , . Lighter green areas are more strongly 60.05 m moderately silicified, weakly less silicified, moderately chloritized 5-7% flow foliation at 21.18 m. at 50° chloritized up to 10% pyrite, average micro fractures, 2-4% pyrite. 15% quartz stringers, displaced across 344 6-5-83 DESCRIPTION 0 Zone is variably -50° Carbonate 40000 60.05 48° 20.5m 49 . C 800 004 100 90d 003 010 600 p07 005 002 z O % SULPH 30.02 27.95 | 29.47 27.43 |27.95 | 0.52 25.91 27.43 23.10 24.38 29.47 30.02 24.38 25.91 21.58 23.10 FROM SAMPLE 32.89 31.36 1.34 FOOTAGE 1.28 320128E0044 63.4287 HOLLOWA 0.55 1.53 (4.4) TOTAL LUGUED BY BANK MULKINGII e, 0.01 0.04 0.02 0.01 0.02 0.02 0.02 0.01 0.08 trace OZ · TON **ASSAYS** 07 TON

	FOOTAGE	_		ı	SA	SAMPLE					ASSAYS	
TO TO TO	$\dashv$	6	DESCRIPTION	ĕ	SULPH, FROM	ا اـ	FOOT AGE	TOTAL	.,	-	02.70N	02 TON
١ ١	-											
24.:	38 34.	.17	MAIN MINERALIZED ZONE C 0	110	34.1	17   35	5.27	1.10			10.0	
			The rock is variably silicified. The zone is composed 0.	012	35.2	27 35	5.63	0.36			0.01	
_			ecciated with high pyrite contents. This member may tend up into the overlying basalt. The lower member	013	35.6	63 36	5.09	0.46			0.01	
			ore irregularly brecciated and weakly silicified  Alteration remains high in zones of intense	014	36.0	09 β6	. 76	0.67			0.01	
		<del></del>	tion. Overall pyrite contents are lower in this	015	36.7	76 38	. 22	1.46			trace	
24.3	8 31.	ယ တ	SILICIFIED ZONE 0:	910	38.2	22 39.	. 47	1.25			0.03	
	_		v to greenish grev, anhanitic with minor ach fall	017	39.47	7   41	. 00	1.53			0.03	
			in bands up to 2 cm. thickness. Silicification is	810	41.00	0 42	. 21	1.21			0.02	
			of brecciation and mylonite development. The most	019	42.21	1 #2	. 98	(4.0')			0.04	
-			ntent is 3-8% both as clots in and along fractures and	020	42.98	ထ <del>ୟ</del> သ	. 89	(2.5') 0.91			0.05	
_			breccia zones and carbonate common in micro-fractures. 02	021	43.89	9 45	.42	1.53			0.02	
168			y to green-grey, strongly silicified.	022	45.42	2 46	. 94	1.52			0.03	19.91
366-			7.95 - 30.02 - grev. strongly silicified 3-52 pyrite	023	46.94	4.	.46	1.52		<del></del>	0.02	
<u>то –</u>			36 - pale green to grey-green, modera weakly silicified. Minor amount	24	48.46	6 49	. 98	1.52		_	0.03	
ORO			ic breccia, strongly fractured.	025	49.98	8 50	. 90	0.92			0.03	
D-1			n at 60°-70° to core axis.	26	50.90	0 52	. 67	7			0.04	
31.	36 34.	17	BASALT					(5.81)				
IGRIDGE L		70 A A	Grey-green, grey locally, fine grained, moderately chloritized and weakly to strongly silicified. Silicification is strongest in grey mylonitic zones near	_	<u>.</u>							
LA												

3 of 5

00	700			
FROM	70		NO. % SULPH	FROM TO
		r fracture systems. The breccia pre-dates later Clures which are quartz and carbonate filled. Some	027	52.67 53.43 0.76 (2.51)
		32.00, 32.28 - 32.64, 32.77 - 32.80, and Pyrite content averages 5-7%. A flow .83 dips 60° to the core axis.	029	56.
34.17	36.09	BASALT		
		Grey-green to dark green, fine grained, weakly silicified and weakly to moderately fractured. Magnetic. A 3 cm. quartz vein is located at 35.36 which has invaded the basalt over a 50 cm. interval. The flow is massive and moderately chloritized. Pyrite is found as fine disseminations and as 1-2 mm. cubes - 2-3% content.		
6.09	39.47	SILICIFIED ZONE		
<u> </u>		Dark grey to greenish grey, pale green towards base. Silicification marked by a 3 cm. grey band cutting sharply across core. Zone is variably silicified - includes several weakly silicified basalt zones (e.g. 37.89 - 38.19), degree of silicification is proportional to mylonite development. Fractures often rimmed with grey silicified bands. All fractures quartz-filled with minor carbonate in micro-fractures. Weakly silicified rock is weakly magnetic - remainder is not.		
		36.09 - 36.76 - strongly silicified, 3-5% py. 36.76 - 38.22 - weakly silicified, 1-3% py. 38.22 - 39.47 - strongly silicified, 3-5% py, tr. cpy.		
39.47 4	13.89	BASALT		
		Dark green, fine grained, med. grained locally, moderately fractured and moderately chloritized. Strongly silicified locally around fractures. White and pink quartz in fractures - minor carbonate.	<del></del>	

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HOLE NO \_\_MC83-17 NAME OF PROPERTY.

MCDERMOTT

SHEET NO.

of 5

LANGRIDGE LIMITED - TORONTO 52.67 50.90 52.67 43.89 50.90 FROM FOOTAGE 60.05 7 through zone. needle - like xls. (pyroxene ?). 1% very finely dissem-inated pyrite. Zone ends at top of underlying flow fractures. epidotized. so, rims are strongly chloritized. quently silicified. to aphanitic. Flow is marked by hyaloclastite top and vessicules up to 7 mm. Rock is chloritized and subse-Light green to dark green with grey zones, fine grained marked by hyaloclastite. Medium green to dark green, fine to coarse grained, 42.98 - 43.8942.21 - 42.98brecciated. Lowermost 1.5 - 2.0 metres is coarser grained with dark late stage - very angular - may be due to shrinkage. throughout - mostly quartz in fractures. Fractures are textured for short intervals. Moderately fractured moderately chloritized - may be altered basalt. Evenly 39.47 medium green extension of the overlying silicified flow SILICIFIED FLOW - LOWER MINERALIZED ZONE ANDESITE ANDESITE 42.21 - moderately fractured, chloritized, Rock is moderately silicified but not 3-5% pyrite very finely disseminated ŧ It is strongly fractured with quartz moderately chloritized, weakly silicistrongly silicified, up to 10% py., flattened vessicules at 42.89. foliation at 50° to the core axis, weakly magnetic. fied 3-4% pyrite. trace cpy. minor hematite, flow Flow may have been pillowed. I y chloritized. Some fragments are DESCRIPTION z o % SULPH 1063 FROM SAMPLE FOOTAGE 3 TOTAL ASSAYS 02 / TOM 62 TON

LANGRIDGE LIMITED - TORONTO - 366-1168

NAME OF PROPERTY\_\_

MCDERMOTT

	FROM	FOOTAGE	1
	70	AGE	
This rock is not silicified - pillowed to a depth of 53.4 metres - below rock is massive flow. It becomes medium to coarse grained with 1-3 mm. dark needles (pyroxene?). Fracturing is moderately developed with pyrite is present as very finely disseminated blebs and as 1-2 mm. cubes. Pyrite xls show minor tectonic brecciation.  60.05 END OF HOLE  Hole No. Mc83-17 Length 60.05 m. Latitude:10 + 12.5 E Departure: 0 + 38 S Asimuth: 344° Dip: -50° Started: 4-5-83 Finished:6-5-83		DESCRIPTION	
assits	Z O		ē ē
ш <del>г.</del>	1063		HOLE NO.
0.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	FROM	SAMPLE	l I
Remarks  Ore.	10	ہدو	MC83-17
ip Whole	101AL		
Log			ž I
Logged sent	,		SHEET NO.
- 6 - 6	02,70%	ASSAYS	9
₹.	╁	AYS	5 of
	02 701		5
Workman			

ELEVATION STARTED	9-5.	87.5 E DEPARTURE 38 m S 50. m -48 60.05 -480 60.05 -480					B.Q.	Core	A.W	Workman	
옥 <b>I</b> I				SAMPL	PLE				ASSAYS		
FROM	ō	DESCRIPTION	2 0 2 3 4	SULPH FROM	FOOTAGE	TOTAL	j.	-	02 TON	02 TON	
0	10.36	CASING	030	ի4.11	15.64	າ • - ເກ			trace		
10.36	33.07	MAIN MINERALIZED ZONE	031	15.64	1 17.16	- U 4			0.01		
		This zone consists of a central highly silicified member flanked by more variably silicified and chloritized volcanic rocks. Silicification is proportional to the degree of brecciation and mylonite formation.	$\omega \omega$	7.5	19.1	(1.4°) 1.52 0.55 (1.8°)		დ <b>ი</b>	• •		
10.36	17.16	ASALT	ມເມເມ	9.6 7.1	22.1 22.7	, . , , ,		រា ហា ហា			) 0.086
		n, fine grained, massive flow, moderately to chloritized. Highest alteration along narrow nes, (e.g. 17.04 m.). Zone is strongly	038	25.76 27.28	28.50 28.50	1.553		າ ເບ ເບ 4	0.15	0.072	
		ering of core axis	041 042 043	28.50 30.02 31.55	30.02	ຫຫຫ		ហហហ	0.10		
		15.94 - 17.16 - weakly silicified, well developed schistosity due to shearing ?	044	33.07 34.59	34.59	1.52			0.01		
17.16	28.50	SILICIFIED ZONE	_	_	_						
		Yellow-green to grey-green becoming grey where most strongly silicified-Aphanitic. Generally unstructured and intensely brecciated. Very fine mylonite development common in silicified rock. Fragments are and average less than 2 mm. in size locally									·
GE LIMITED - TO		size is 2-5 mm. Flow foliation s of weaker brecciation. Locally ntense the rock resembles a quart y (?) be present as 0.5 mm. blebs	<del></del>								
		17.16 - 17.59 - dark grey-green, well foliated and sheared - possible fault at 17.59 m.,									

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FOOTAGE		SAMPLE
FROM	DESCRIPTION	NO. SULPH FOOTAGE
	weakly to moderately silicified, clay on fault plane, 2-5% Py.	
<del></del>	17.59 - 19.66 - pale green, highly silicified and brecciated 10-15% Py. Possible fault at 18.53 m	
	19.66 - 22.71 - grey, intensely silicified and brecciated, flow foliation was well developed at 45° to the core axis. Minor chlorite along foliation. Abundant 5 mm. thick underformed quartz stringers 5-7% pyrite.	
	22.71 - 27.28 - very intensely silicified - 10% Py. tr. Cpy. minor visible gold?	
	27.28 - 28.50 - green-grey, intensely silicified, becom- ing variable and medium grained; 3-5% Py.	
8.50 33.07	BASALT	
	Dark green to grey, aphanitic to fine grained and variably silicified. Numerous highly fractured zones of microbreccia cut the core at sharp angles (500-800). These zones are grey and intensely silicified. Fragments are firm less than 1 mm. to 1 cm. in size, very angular, fine grained matrix (gouge) around fragments contains up to 50% Py. locally. Unsilicified basalt is moderately chloritized and contains abundant altered glass shards. Weakly to moderately fractured - filled with white and pink carbonate. Quartz also present but not as common. Average 3-5% Py. Non-silicified rock is weakly to moderately magnetic. Strongly brecciated and silicified zones are located at: 29.11-29.26, 30.05-30.11, 31.06-31.18 31.30-31.49, 32.13-32.22, and 32.40-32.77. In total the zone is 20% intensely silicified. A 15% pyrite content	

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MCDERMOTT

HOLE NO. MC83-18

SHEET NO.

3. of

ANGRIDGE LIMITED - TORONTO - 366-1	50.29		43.53		33.07	FROM	FOOT
57.09	53.95		50.29		43.53	10	TAGE
is marked by a 1.3 m. hyaloclastite top. The rock is medium open and fine grained with strongly chloritized parting surfaces - shears. Light colouration may be due to underlying silicified zone. The base of this zone may be a flow bottom. It is highly fractured with abundant quartz incorporating 50% of the rock volume. Except for the base of this zone, carbonate fills fracture openings. An irregular flow (?) foliation in the hyaloclastite cuts core at 40° to the core axis.  LOWER MINERALIZED - SILICIFIED ZONE  Dominantly grey with greenish-grey zones, aphanitic, highly silicified rock. Intensely brecciated on a very	ANDESITE	Dark green, fine to very fine grained. Rock is becoming weakly silicified locally. Moderately chloritized. Thin sections of strong brecciation are grey and intensely silicified (e.g. 43.53-44.07). Rock is moderately magnetic Zone is moderately fractured with infilling by pink calcite and minor quartz. A crude flow foliation is developed locally at approximately 45° to the core axis very indistinct.	BASALT	Dark green, fine grained becoming medium grained locally. Moderately chloritized. Some weak silicification locally near margins of zone. Unstructured and massive. Moderately fractured with white and pink carbonate on surfaces. Little carbonate in matrix of the rock. Weakly to moderately magnetic. Weakly silicified zones have increased pyrite content - up to 5% locally whereas zone averages 1-2%.	BASALT		DESCRIPTION
		<b>:</b>				Ž 0	
<del></del>				<del></del>		SULPH.	
·						FROM	SAMPLE
	<u> </u>					TO	
						TOTAL	
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						02/TON	ASSAYS
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NAME OF PROPERTY\_\_\_\_\_\_MCDERMOTT
HOLE NO. MC83-18 SHEET NO. 4 Of 4

LANCDIDCE //MITED = T/	DONITA	2-266 1169								
LANGRIDGE-TO	<u> ZWONIC</u>	Z = 300-1100	57.09						FROM	FOOT
	60.05		60.05					<u> </u>	70	TAGE
Hole No.: Mc83-18 Length: 60.05m Latitude: 9 + 87.5 E Departure: 38 m S Started: 9-5-83 Azimuth: 344° Dip:-50° Finished: 11-5-83	5 END OF HOLE - CASING PULLED	Mixed dark green and locally grey-green weakly silicified rock. Aphanitic to fine grained. Unsilicified rock is moderately chloritized. Moderately magnetic. Massive flow. Possibly vessicular over 10 cm. at 57.55. Moderately fractured becoming strong locally-filled with white and pink carbonate. Pyrite content is 1-2% as fine disseminated blebs and accumulations of blebs up to 6 mm.	BASALT	mineralized rock, includes narrow zones up to 8 cm. of non-brecciated, weakly silicified rock. Zone has a crude fabric at 500-600 to the core axis.  Abundant late cross-cutting quartz stringers. 5-7% Pyrite.	53.95 - 55.47 - mixed breccia and weakly silicified 0.	Section and the section of the secti	onate in microfractures. Breccia fragments are	fine scale. Breccia is angular and very hard. All C 0		DESCRIPTION
Units .			_	0	049	048	047	046	, z o	
in me	5 .				<b>57.</b>	UI UI	53.	<u>5</u> 2	OES PH	
0 30 m 60.05 REMARKS	) 			α. υ.		47	95	.43	FROM	SAMPLE
•	,	•		•	58.52	57.09	55.47	53.95	FOOT AGE	m
hole	•			-  -  -  -	<u>2</u> + 2	٠ ا	1.52	1.52	10171	
core sent			•						].	
<u>-</u>							_		,	
by fo				0.0	0.04	0.04	0.03	0.01	02. TDN	AS
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					4	<del>4</del>	<u> </u>	<u> </u>	╂	AYS
assay B.Q.Cor					20.0		<u> </u>	<u> </u>	DN 02 TON	ASSAYS

ITED - TORONTO - 366-1168

# DIAMOND DRILL RECORD

NAME OF PROPERTY	PROPERTY	MCDERMOTT		
HOLE NO.	MC83-19 LENGTH	LENGTH	52.43 m	
LOC ATION				
LATITUDE	LATITUDE 9 + 758 E	DEPARTURE	DEPARTURE 0 + 35 m S	
ELEVATION		AZIMUTH	3440 DIP	- 450
STARTED_	STARTED 11-5-83	FINISHED13-5-83	13-5-83	

			- 1
	52.4	-	FOOTAGE
	-46	-450	DIP
			AZIMUTH
			AZIMUTH FOOTAGE
			DIP
			AZIMUTH

HOLE NO. MC83-19SHEET NO. 1 Of 4
REMARKS Units in meters
Whole core sent for assay
BQ Core

BQ Core

LOGGED BY A.W. Workman

LANGRIDGE ITED	TORONTO - 366-1168	10.52	10.52	0	FROM	7) O
				י סד	и то	0 7 4
31.03		13.69	31.03	10.52	°	G E
MAIN SILICIFIED ZONE  Grey to dark greenish-grey, aphanitic, intensely brecciated and mylonitized, and strongly silicified. Locally breccia fragments 0.5 - 1 mm. are set in a	Dark green, fine grained, moderately chloritized, comoderately fractured. Almost all fractures filled with white and pink carbonate. Minor quartz stringers up to 2 mm. width. A crude foliation (flow?) has developed throughout zone at 60° to the core axis - rock parts easily along chloritized surfaces. Few zones of intense brecciation are grey and intensely silicified - largest at 13.5 - 13.65. Average pyrite content in the basalt is 1%. In silicified zones this level rises to 2-3% with a trace of cpy.	rock is gen e content in	cified upper lower member	CASING		
055 554 554	051 052				v 0	
·					SUL PH-	
13.6	12.1				FROM	S A
73 18	64 12 16 13					D L
3. 21 3. 26	3.69				FOOT AGE	m
1 1 1 5 5 5 3 2 2	1.52 (5.0) 1.53				TOTAL	
0.00					øť.	
				·-	×	
0.063 4.570	0.01				oz/	<b>88</b>
	0.01 trace				OZ/TON O	A 4
					OZ/TON	S
	-					

FROM

5

FOOTAGE

DESCRIPTION  DESCRIPTION  TABLET TO A SAMPLE  CONTRIBUTE OF THE PROPERTY OF TH
SAMPLE  SAMPLE  SAMPLE  SAMPLE  ASSAYS  18.26 19.54 1.52 0.07 0.063  19.54 21.06 1.52 0.02 0.03  59 24.11 1.52 0.03  60 24.11 1.52 0.03  61 24.63 26.15 1.52 0.03  27.68 29.20 1.52 0.03  27.68 29.20 1.52 0.03  30.72 31.03 0.76 0.08 *  Correction in foota applied - Sample was 0.76 m. in length from 95' marker is 6.5 from 95' marker.
SAMPLE ASSAYS  SAMPLE ASSAYS  ASSAYS
SAMPLE ASSAYS  PROM TO TOTAL T
ASSAYS  ASSAY
ASSAYS  1.52 1.52 1.52 1.53 0.04 1.52 0.03 1.52 0.03 1.52 0.03 1.52 0.08 1.52 0.08 * NOTE  ** NOTE  Correction in foota applied - Sample was 0.76 m. in length 102' marker is 6.5 from 95' marker.  ** From 95' marker.
* NOTE  Correction in foota applied - Sample wa 0.76 m. in length 102' marker is 6.5 from 95' marker.
ASSAYS  ASSAYS  O.063  O.063  O.70*  OZ.70*  O
ASSAYS  ASSAYS
ASSAYS  ASSAYS  ASSAYS  ASSAYS  ASSAYS  ASSAYS  ARTHUR FOOTE  BET 18 6.5
6.5 Wa 377

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LANGRIDGE LIMITED - TORONTO - 366-1168

OESCRIPTION  OESCRIPTION  OESCRIPTION  OESCRIPTION  OESCRIPTION  NO.  OR MODERATE LY TO STRONGLY SILICIFIED — ANGULAR Breccia fragments are set in a white to pink siliceous matrix. Minor zones of green unaltered rock. Brecciation is on a coarser scale than is normal 5-7% Pyrite — some fragments are magnetic fine grained, massive flow — moderately to C of oritized with localized silicification in rock in the upper 1 — 1.5 meters. Pink and of onate fills moderately developed fractures. Servessicular at a number of levels possibly	DESCRIPTION  DESCRIPTION  AND TSULPH  AND TOURN  TOURN  TOURN  AND TOURN  TOURN	DESCRIPTION  DESCRIPTION  DESCRIPTION  Angular breccia fragments are set in a white to pink siliceous matrix. Minor zones of green unaltered rock. Brecciation is on a coarser scale than is normal 5-7% Pyrite - some fragments are magnetic.  Seen, fine grained, massive flow - moderately to C of chloritized with localized silicification in the upper 1 - 1.5 meters. Pink and carbonate fills moderately developed fractures.  POLE NO SOURCE. SOURCE SOURCE. SILICIFICATION AND CONTROL OF SOURCE	SAMPL  SAMPL  Total Prion  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  TOTAL STRONGLY SILICIFIED - AND AND AND AND AND AND AND AND AND AND	SAMPLE  SAMPLE  angular breccia fragments are set in a white to pink siliceous matrix. Minor zones of green unaltered rock. Brecciation is on a coarser scale than is normal 5-7% Pyrite - some fragments are magnetic chloritized with localized silicification in chock in the upper 1 - 1.5 meters. Pink and coarsely developed fractures.  SAMPLE  100 1 SULPH FOOTAGE  100 2 SULPH FOOTAGE  10	SAMPL  OESCRIPTION  DESCRIPTION  OESCRIPTION  SAMPL  OESCRIPTION  OESC	DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  SAMPLE  SAMPLE  10. \( \frac{5 \text{SULPH}}{100 \text{POOTAGE}} \)  NO. \( 5 \t	SAMPLE  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  SAMPLE  SAMPLE  NO. 10151  FROM FOOTAGE  1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	The sample of green unaltered rock. Brecciation is on a coarser scale than is normal 5-7% Pyrite - some fragments are magnetic chloritized with localized silicification in the upper 1 - 1.5 meters. Pink and not some fractures.  HOLE NO. MCB3-19  SAMPLE  No. SSUPM, FOOTAGE 1.03  FOO
<del></del>	S SUC PH C PER C P	SULPH SOLL SOLL SOLL SOLL SOLL SOLL SOLL SOL	SAMPLINES FROM  1DES FROM  31.03  32.06	SAMPLE  *SULPH FOOTAGE   TO   TO   TO	SAMPLE   SAMPLE   FOOTAGE   TO   TO     10ES   FROM   TO     10ES   FROM   TO     31.03   32.06   33.59	SAMPLE   SULPH   FOOTAGE   TO   TOTAL   TOTAL   TOTAL   TOTAL   TOTAL   TOTAL   TOT	SAMPLE  SAMPLE  SULPH, FOOTAGE 10ES FROM TO TOTAL  31.03 32.06 1.03  32.06 33.59 1.53	SAMPLE ASSA  **SULPH, FOOTAGE TOTAL TOTAL  31.03 32.06 1.03  32.06 33.59 1.53
	<u>                                    </u>	3 3 1 NO.	SAMPL FROM 31.03	NO. MC83-19  SAMPLE  FOOTAGE TO TO TO TO TO TO TO TO TO TO TO TO TO T	NO. MC83-19  SAMPLE FOOTAGE FROM TO TO TO TO TO TO TO TO TO TO TO TO TO	SAMPLE FROM TO TOTAL 31.03 32.06 1.03 32.06 33.59 1.53	SAMPLE  SAMPLE  FROM FOOTAGE TO TOTAL  31.03 32.06 1.03 32.06 33.59 1.53	NO. MC83-19  SAMPLE  ASSA  FROM  FOOTAGE  TO TOTAL  31.03 32.06 1.03  32.06 33.59 1.53

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SHEET NO.\_\_

HOLE NO. \_\_\_\_MC83-19 4 of 4

	:										
LAN	NGRIDGE LIMITED -	TORC 51.18	ONTO —	366-1168	46.06				41.48	TO OK	FOO
		52.43			51.18				46.06	7	FOOTAGE
52.43 END OF HOLE - CASING PULLED	Light to medium green, fine grained with a weakly developed flow foliation at 51.5 m. of 45° to the core axis. The rock is weakly fractured with carbonate in the fractures, non-magnetic, moderately chloritized and nonsilicified. Up to 1% finely disseminated pyrite is found locally.	ANDESITE	50.53	oritized and onate fracture C ally associated Zones of tectonic ckness with 3-5% lt. Flow foliatat 50.4 and 40 at	BASALT	Major silicified zones located at 42.18 - 42.25, 44.78 - 44.87, 45.02 - 45.26 and 45.60 - 45.75 m.	42.00: chloritized shear with 30% pyrite over 2 cm. section - cuts core axis at 40	Dark green, fine grained with 10% grey brecciated silicified zones. Medium grained with depth, weakly to moderately chloritized overall. Flow breccia developed locally, non-silicified, with round to sub-round fragments of basalt up to 20 cm. Minor flow foliation developed locally at 60° - 65° to the core axis, (e.g. 44.5 m).	BASALT		DESCRIPTION
				074			-	•••		, 0	
										1069	
				46.06						FROM	SAMPLE
				47.58						10	_E
				1.52						TOTAL	
										,,	
_										,,,	
										OZ/TON	ASSAYS
										02 TON	

	STARTED 13-5-83	STARTED_
AZIMUTH 3440 DIP -650		ELEVATION
LATITUDE 9 + 75 E DEPARTURE 0 + 46 S	$9 \pm 75 E$	LATITUDE
		LOCATION
HOLE NO. MC. 83-20 LENGTH 72.24 m	MC. 83-20	HOLW NO.
MCDERMOTT	NAME OF PROPERTY	NAME OF

EM. 6-1168

_				_
		66.14	0	FOOTAGE
		-62°	-65°	9
				AZIMUTH
				AZIMUTH FOOTAGE
				DIP
				AZIMUTH

HOLE NO.MC . 83-20 SHEET NO. 1 OF 7

REMARKS COTE Split

BQ core
NOTE: From 66' marker to 74'
marker is 7.3' of core LOGGED BY A.W. WORKMAN

TRON TO  12.93 CASING - OVERBURDEN  12.93 27.89 BASALT  Dark green to grey-green, fine grained, needle texture looks greatly and amphiboles) and with well developed foliation at 45-50 to the core axis. Abundant (10%) 075 li.59 1.50 Trace greatly fracture filling - remainder is quartz and mhor hematite. Book is moderately to the core axis. Abundant (10%) 075 li.59 1.50 Trace greatly magnetic locally and carry by the process of micro vuggy with deeph - particularly below 23.5 m.  14.26, 16.06 and 17.64 m: narrow silicified bands are uprobable fault at 23.77 m; bordering rocks are more strongly sheared and inprobable fault at 23.77 m; bordering rocks are more strongly chloritized on the core are strongly chloritized shears are more strongly chloritized shears are more strongly chloritized and inprobable fault at 23.77 m; bordering rocks are more strongly chloritized are strongly chloritized and inprobable fault at 23.77 m; bordering rocks are more strongly chloritized are strongly chloritized and inprobable fault at 23.77 m; bordering rocks are more strongly chloritized are strongly chloritized are strongly chloritized are strongly chloritized are strongly chloritized are strongly chloritized are strongly chloritized are strongly chloritized are str	CASING - OVERBURDEN   DESCRIPTION   NO. SECONDARY   NO. SECO
CASING - OVERBURDEN  12.93 CASING - OVERBURDEN	CASING - OVERBURDEN  12.93 CASING - OVERBURDEN  Dark green to gray-green, fine grained, needle texture consisted and planch planch p
SAMPLE   ASSAY   ROSCINGE   ROS	SAMPLE   ASSAY   ROSCINGE   ROS
NO. SUPER   FROM   TO   TOTAL   % % 02/TON	NO. SUPER   FROM   TO   TOTAL   % % 02/TON
NO. SWEET   FROM TO TOTAL   W   GZ/TON	NO. SWEET   FROM TO TOTAL   W   GZ/TON
FROM TO TOTAL % % 02/TON  FROM TO TOTAL % % 02/TON  12.93 14.43 1.50 14.43 15.93 1.50 17.53 19.03 1.50 19.03 20.53 1.50 22.35 23.67 1.32 23.67 25.17 1.50 25.17 26.62 1.45 26.62 27.89 1.27 27.89 28.35 0.46  0.01 0.01 0.02 0.02 0.03	FROM TO TOTAL % % 02/TON  FROM TO TOTAL % % 02/TON  12.93 14.43 1.50 14.43 15.93 1.50 17.53 19.03 1.50 19.03 20.53 1.50 22.35 23.67 1.32 23.67 25.17 1.50 25.17 26.62 1.45 26.62 27.89 1.27 27.89 28.35 0.46  0.01 0.01 0.02 0.02 0.03
AMPLE ASAV FROM TO TOTAL % % 02/TON 2.93 14.43 1.50	AMPLE ASAV FROM TO TOTAL % % 02/TON 2.93 14.43 1.50
FOOTAGE	FOOTAGE
A S A A Y S OZ/TON TOTAL % % OZ/TON 0.01 1.50 Trace Trace 1.50 (actually) 0.01 1.32 0.01 1.45 0.02 0.01 0.02 0.02 0.01	A S A A Y S OZ/TON TOTAL % % OZ/TON 0.01 1.50 Trace Trace 1.50 (actually) 0.01 1.32 0.01 1.45 0.02 0.01 0.02 0.02 0.01
OTAL % % 02/TON 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0	OTAL % % 02/TON 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0
ASSAY OZ/TON O.01 Trace Trace Trace O.01 O.01 O.01 O.02 O.01	ASSAY OZ/TON O.01 Trace Trace Trace O.01 O.01 O.01 O.02 O.01
ASSAY  OZ/TON  O.01  Trace  Trace  Trace  0.01  0.01  0.02  0.02	ASSAY  OZ/TON  O.01  Trace  Trace  Trace  0.01  0.01  0.02  0.02
0.01 0.01 0.01 0.01 0.01 0.01 0.02 0.01	0.01 0.01 0.01 0.01 0.01 0.01 0.02 0.01
\$ <b>5</b>	\$ /\forall \text{7}
1 - 4 m	

LANGRIDGE LIMITED,

NAME OF PROPERTY\_MCDERMOTT

HOLE NO.

Mc. 83-20

SHRET NO.

2 OF 7

27.89 28.47 FROM FOOTAGE 44.26 28.47 52.43 る SILICIFIED BASALT MAIN SILICIFIED ZONE chalcopyrite in narrow micro-fractures. Finely disseminated pyrite - 1-3% with traces of bands are purple-grey in colour with cream coloured bands of intensely silicified rock. The silicified which has undergone localized silicification. basalt. Beneath the silicified zone is a basalt variable silicified component. Beneath this lies MAIN MINERALIZED ZONE Fragments of silicified breccia up to 10 cm are noted and set in a foliated intensely chloritized matrix. breccia is intensely fractured, actually re-brecciated weakly silicified rock are carbonate filled. The rock is moderately to strongly fractured with quartz in main fractures. Micro-fractures and fractures in 1.0 cm and are very angular. They are generally grey and set in a lighter coloured matrix of silica. The silicified breccia zone. Fragments are 0.5 mm to which are chlorite filled. zones are frequently offset along narrow fractures, rims, and are oriented along the flow foliation. chloritized with approximately 50% 3-15 mm nodular Dark to medium green, well foliated, strongly this are zones resembling the overlying silicified intensely brecciated and strongly silicified. Within the main silicified zone - generally grey in colour, most is a silicified basalt which is well flow (?) Some smaller fragments are lensitic and oriented along zone from 35.23-36.10 m reflects a major fault. The Pale green to green-grey, aphanitic, strongly foliated, moderately chloritized and contains a This zone is composed of three members. The upper-DESCRIPTION Silicified 094 096 097 098 680 z o 37.60 31.35 29.85 FROM SAMPLE 32.72 40.53 FOOTAGE 39.03 37.60 31.35 42.48 42.03 29.85 1.50 1.50 TOTAL (0.08 0.000 02/TON | 02/TON **ASSAYS** 

HOLE NO. \_\_MC. 83-20 NAME OF PROPERTY\_\_\_ MCDERMOTT

FROM TO
8.47 44.26 the :
28.4
3 5
<b>3</b>

NAME OF PROPERTY\_\_\_\_MCDERMOTT HOLE NO. \_\_\_\_MC.83.20 \_\_\_\_\_ SHEET NO. \_\_\_\_4 OF 7

FOOTAGE	7		ı	١	SAMP	<sup>m</sup>	I				ASSAYS	
	]				7	E00146				<u>ا</u>		
PROM	8		o	IDES	FROM	3	4	TOTAL	*	2	02/TON 0	NOT/10H
28.47 44	<b>44</b> • 26	38.50 - 44.26: green, chloritized, non-silicified zones become more abundant - minor carbonate in micro-fractures, slightly higher pyrite content - up to 7%. Major chloritized zones at 38.62-38.71, 39.41-39.87, 40.90-41.18 and 41.54-41.57.							<u>.</u>			
44.26 5	52.43	BASALT								_		
		Grey-green to dark green to grey locally, fine cyrained and moderately chloritized. Moderately magnetic. Silicification has occurred along fractures and is best developed in breccia zones. Fractures are rimmed with 1-3 mm grey silicified halos. Dilatant zones in fracture systems are most strongly altered. Angular fragments in silicified breccia zones are up to 5 cm in size - major zones at 45.66-45.84 and 46.42-46.60 m. Up to 50% of the rock volume in this unit is silicified. Pyrite averages 2-3% but ranges 1-7%. An 8 mm tuff band at 51.60 cuts the core axis at 35°.	100 100 101 102 103		44.26 45.76 47.26 50.20 51.31	55445 510.27 43.3	#327666 #10666	1.50 1.24 1.11		000000		
52.43 5	54.21	BASALT										
		The upper contact is gradational into the overlying C. silicified basalt. This unit is dark green, fine grained, weakly to moderately chloritized, and moderately magnetic. This is a zone where the percentage silicified rock rapidly decreases to 0% from about 20% above.	106		52. 53. 32	55 55 4 4 6 2 3	<u> </u>	0. 88 9		HH	17 Tr a c c c	
54.21 60	60.59	RALIZED ZONE s grey, often with a purple tint,	0		4.2	5		Մ		H	race	
	·	rock is grey, often with a purple erately to strongly fractured and icciated. Breccia is intensely silirages 5-7% pyrite. Up to 15% pyrit	107 108 109 110		54.21 55.71 57.21 58.71	59.7	7777	1.50		०००म	011 B	<del> </del>

NAME OF PROPERTY\_\_\_\_\_\_MCDERMOTT\_\_\_\_\_\_
HOLE NO. \_\_\_MC\_83\_20\_\_\_\_\_\_ SHEET NO.

itized bands of basalt - non- the dominant fracture filling micro-fractures.  58.00 - 60.59: zone contains basalt  59.89 - 60.62: 7-8% pyrite a and as 1-2 m locally.  60.11 - 60.16: narrow silici and as 1-2 m locally.  60.44: chloritized i fragments of silicifie developed in weak to moderate a chilled flow margin. Carri  90 63.09  BASALT  Dark green, fine to medium gu chloritized with a weak flow throughout. Some zonation of weak foliation at 30-35 to carries 1-2% pyrite, and mil	POOTAGE TO	DMSC			NO.	NO. 1029	NO. IDES FROM	NO. IDES FROM TO
58.00 - 60.59: zone contains basalt  59.89 - 60.62: 7-8% pyrite and as 1-2 mu locally.  60.11 - 60.16: narrow silicitics of to core and as 1-2 mu locally.  60.44: chloritized a chloritized a chilled fragments of silicific developed in weak to moderate a chilled flow margin. Carries a chloritized with a weak flow throughout. Some zonation of weak foliation at 30-350 to carries 1-2% pyrite, and minding the carries with quartz and minding the carries are carries and minding the carrie	54.21 60.59	ne contains 3% dark basalt - non-silici cture filling with	chlor- Quartz is te in	chlor- Quartz te in	chlor- C Quartz is te in	chlor- C Quartz is te in	chlor- C 111 59.71 6 Quartz is 112 60.16 6 te in	chlor- C 111 59.71 Quartz is 112 60.16
59.89 - 60.62: 7-8% pyrite and as 1-2 mr locally.  60.11 - 60.16: narrow silicient for the core and as 1-2 mr locally.  60.44: chloritized some chloritized some some some some some some some some		- 60.59; zone contains 6% basalt	chloritized green					
60.11 - 60.16: narrow silici 50 to core a 60.44: chloritized a  INTRUSIVE  Pale green, aphanitic with al itized fragments of silicific developed in weak to moderate a chilled flow margin. Carri 63.09  BASALT  Dark green, fine to medium grechloritized with a weak flow throughout. Some zonation of weak foliation at 30-350 to carries 1-28 pyrite, and is to fractured with quartz and min		.89 - 60.62: 7-8% pyrite as fine and as 1-2 mm cubes locally.	dissemination - 15% pyrite	lssemination 15% pyrite	lssemination 15% pyrite	lssemination 15% pyrite	issemination 15% pyrite	issemination 15% pyrite
INTRUSIVE  Pale green, aphanitic with al itized fragments of silicific developed in weak to moderate a chilled flow margin. Carries 1-2% pyrite, and is uffractured with quartz and minus process.		<pre>- 60.16: narrow silicified m 50 to core axis -</pre>	ylonite seams at faults ?	seams ?	seams ?	seams ?	seams ?	seams ?
Pale green, aphanitic with al itized fragments of silicific developed in weak to moderate a chilled flow margin. Carrical Dark green, fine to medium grethoughout. Some zonation of weak foliation at 30-35 to carries 1-28 pyrite, and is uffractured with quartz and minus of the control of the control of the carries with quartz and minus of the carries and the carries and the carries of the carries and the carries and the carries are the carries and the carries are the carries and the carries are the carries and the carries are the carries and the carries are the carries and the carries are the carries and the carries are the carries		chloritized shear at	25° to core axis	to core	to core	to core	to core	to core
Pale green, aphanitic with al itized fragments of silicific developed in weak to moderate a chilled flow margin. Carribased a chilled flow margin. Carribased with a weak flow throughout. Some zonation of weak foliation at 30-350 to carries 1-28 pyrite, and is uffractured with quartz and minus of the children with quartz and minus of the control of the carribased with quartz and minus of the carribased with quartz and minus of the carries and minus of the carribased with quartz and		INTRUSIVE						
Dark green, fine to medium green, fine to medium green, fine to medium green, fine to medium green, fine to meak flow throughout. Some zonation or weak foliation at 30-350 to carries 1-2% pyrite, and is the fractured with quartz and mines.		, aphanitic with abundant igments of silicified volcatin weak to moderate fractuflow margin. Carries traces	ar chlor- Chlorite Resembles pyrite.	ar Ch R	ar chlor- C Chlorite Resembles pyrite.	ar chlor- C Chlorite Resembles pyrite.	ar chlor- C 113 60.59 60. Chlorite Resembles pyrite.	ar chlor- C 113 60.59 Chlorite Resembles pyrite.
		green, fine to medium green, fine to medium gritized with a weak flow ughout. Some zonation of foliation at 30°-35° to ies 1-2% pyrite, and is thured with quartz and minduced with quartz and quartz an	cture	oderately C 114 n developed 115 ize along a axis. Unit moderately nate in fractures	ctures C	C 114 115	C 114 60.90 6 62.00 6 ctures.	C 114 60.90 115 62.00

HOLE NO. \_\_

SHEET NO.

6 OF 7

NAME OF PROPERTY\_\_\_\_\_MCDERMOTT Mc.83.20

F00.	FOOTAGE				SAI	SAMPLE						ASSAYS	YS	
FROM	10		z 0	% SULPH	FROM	Ш	FOOT AGE	101VF		-	*	02/TON	N 02/TON	ON
63.09	63.79	SILICIFIED ZONE												<u>.</u>
		Grey to blue-grey, aphanitic, moderately to strongly C. silicified and moderately brecciated. Some relic flow banding is observed at 63.55 m which cuts at 35 to the core axis. Fracturing increase towards the base of the zone, and chlorite begins to appear in fractures at 63.0 m.	116		63.09		63.79	0.70	70			0.08	<u>~</u>	
63.79	65.78	PORPHYRITIC INTRUSIVE			_				<u>-</u>					
		The overlying zone is cut off sharply by a pale green, medium to coarse grained intrusive. It carries round to sub-round quartz crystals up to 3 mm. in size. Some dark needle-like crystals are noted locally (hornblende ?). The groundmass is moderately chloritized. A trace of pyrite is found locally.	117 118		63.79 64.78		64.78	۲.	09			0.01	بَرَتَ	
65.78	66.54	BASALT												
		Dark green, fine grained, strongly chloritized, C. moderately to strongly fractured. Patches of grey silicified rock, 1-2 cm in thickness, are found locally - especially near the overlying intrusive. Foliation, may be shearing, at 30 to core axis.	119		65.78		66.54	0.76	76			0.0	<u>_</u>	
66.54	67.09	SILICIFIED ZONE												
		Dark grey with purple tint, aphanitic, moderately C. brecciated with 5-7% pyrite, mostly filling dilatant zones between fragments or in fracture systems. A foliation, perhaps due to shearing is observed at 66.9 m at 35° to the core axis. This rock is not normally observed at this depth.	120		66.	0 4 0	67.09		ហ ហ			0.1	<u>\</u>	

NAME OF PROPERTY\_\_\_\_\_\_MCDERMOTT

		_	
	67.09	FROM	FOO
	72.24	10	FOOTAGE
Medium green, fine to medium grained, moderately chloritized, massive flow. Minor zones of grey silicified rock (eg. 68.7-68.8) locally. Silicified rock is confined to an upper, more strongly fractured part of this zone - that is, above 69 m. Below this point the andesite is weakly fractured and weakly to moderately foliated. The rock parts easily at 35-40 to the core axis.  72.24 END OF HOLE CASING PULLED	ANDESITE	DESCRIPTION	
1111 2222 4321		ž o	<u></u>
·		Sadi Men	
71.17 17		FROM	SAMPLE
70.09 71.17 72.24		FOOT AGE	144
1.50 1.08 1.07		TOTAL	
	<del></del>		
		*	
0000 0000 0000 1141		OZ/TON	ASSAYS
		OZ/TON	

LATITUDE	HOLE NO.	Z × X M	DIA
333 ?	Mc. 83-21	PROPERTY	MOND
DEPARTURE	LENGTH	McDermott	DRILL
9+62.5 E	60.05 m	·;	RECOR

FOOTAGE	DIP	AZIMUTH	AZIMUTH FOOTAGE	910	AZIMUTH
О	500				
60.05 48°	480				

REMARKS Whole core sent HOLE NO. MC. 83.2 SHEET NO. 1 OF 5

LOGGED BY A.W. WORKMAN for assay all units in metric BQ CORE

P.81 CASING - 15.97 BASALT  Dark grestrongly openings white pagrey, flow fol average weakly mail cification in the zone member which breccia.  zone. It very hard variably	DESCRIPTION  9.81  CASING - OVERBURDEN  15.97  BASALT  Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rook volume. Minor 1-2 cm average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately silicified.  The zone is composed of an upper variably silicified member which grades down into a strongly silicified zone. It is characterized by up to 10% pyrite in a very hard glassy rook. It is underlain by a second variably silicified member.	ELEVATION 17	-5-83 FINISHED 19-3-83
O 9.81 CASING - OVERBURDEN  O 9.81 15.97 BASALT  Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately silicified.  12:50 m: flow (7) lamination at 40°-50°to core axis  MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.	CASING - OVERBURDEN  O 9.81 CASING - OVERBURDEN  BASALT  Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately 12:50 m: flow (7) lamination at 40°-50°to core axis  MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.	OOTAG	T & C & - B + - O
CASING - OVERBURDEN  BASALT  Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm grey, moderately silicified zones parallel to flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified. Lower contact is gradational as silicified.  12:50 m: flow (?) lamination at 40°-50°to core axis  MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second	CASING - OVERBURDEN  BASALT  Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately silicified. The basalt is weakly to very silicified. (?) lamination at 40°-50°to core axis MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified member which grades down into a strongly silicified zone. It is characterized by up to 10% pyrite in a very hard glassy rook. It is underlain by a second variably silicified member.		
Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm grey, moderately silicified zones parallel to flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified.  12:50 m: flow (?) lamination at 40°-50°to core axis silicified.  12:50 m: flow (?) lamination at 40°-50°to core axis member which grades down into a strongly silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second	Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately 12:50 m: flow (?) lamination at 40°-50°to core axis  MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.	9.	1
Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm grey, moderately silicified zones parallel to flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified.  12:50 m; flow (?) lamination at 40°-50°to core axis  MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified member which grades down into a strongly silicified zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.	Dark green, fine to medium grained, moderately to strongly fractured with carbonate and quartz in openings. Veining and stringers resemble splattered white paint - 30% of rock volume. Minor 1-2 cm grey, moderately silicified zones parallel to flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately silicified.  12:50 m; flow (?) lamination at 40°-50°to core axis  MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified member which grades down into a strongly silicified breccia. The breccia comprises the main member of the very hard glassy rock. It is underlain by a second variably silicified member.		BASALT
white paint - 30% of rock volume. Minor 1-2 cm grey, moderately silicified zones parallel to flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified.  12:50 m: flow (?) lamination at 40°-50°-to core axis MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified member which grades down into a strongly silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.	white paint - 30% of rock volume. Minor 1-2 cm grey, moderately silicified zones parallel to flow foliation. Pyrite increases in these zones from average 1% to 3-5%. The basalt is weakly to very weakly magnetic. Lower contact is gradational as silicified zones increase - lower 1.0 m is moderately silicified.  12:50 m; flow (7) lamination at 40°-50°to core axis  MAIN MINERALIZED ZONE  The zone is composed of an upper variably silicified member which grades down into a strongly silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.		n, fine to medium grained, moderately fractured with carbonate and quartz i Veining and stringers resemble spla
The zone is composed of an upper variably silicified member which grades down into a strongly silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.	The zone is composed of an upper variably silicified member which grades down into a strongly silicified breccia. The breccia comprises the main member of the zone. It is characterized by up to 10% pyrite in a very hard glassy rock. It is underlain by a second variably silicified member.		Veining and stringers resemble splatt: - 30% of rock volume. Minor 1-2 cm moderately silicified zones parallel ion. Pyrite increases in these zones to 3-5%. The basalt is weakly to versetic. Lower contact is gradational azones increase - lower 1.0 m is moder zones increase - lower 1.0 core a
is composed of an upper variably silicified hich grades down into a strongly silicified 1 The breccia comprises the main member of the t is characterized by up to 10% pyrite in a d glassy rock. It is underlain by a second silicified member.	is composed of an upper variably silicified hich grades down into a strongly silicified The breccia comprises the main member of the t is characterized by up to 10% pyrite in a d glassy rock. It is underlain by a second silicified member.	. 97	MINERALIZED
		ITED - TORONTO - 366	is composed of an upper variably silicified hich grades down into a strongly silicified. The breccia comprises the main member of t is characterized by up to 10% pyrite in a d glassy rock. It is underlain by a second silicified member.

HOLE NO. MC. 83-21

. 83-21 SHEET NO. 2 OF 5

FOOTAGE	T DOE						34.11	
AGE	70		<del></del>	<del></del>	····		37.49	
		26.09 - 30.88:	30.88 - 31.49:	31.49 - 32.43:	32.43 - 34.11:	34.11 :	SILICIFIED BASALT	Grey to grey-green, aphimoderately to strongly lailicified. This is a lathe overlying breccia all the overlying breccia all the zone becomes pale grones are found at 35.036.20, 36.58-36.79, 36.137.37-37.46; totalling language sub-angular medium fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments are set in a fragments.
		more highly silicified zone with 5-7% pyrite	some green, chloritized and weakly silicified rock in 2-4 cm bands - zone is at least 50% silicified. Possible flow foliation at 60° to core axis. Up to 3% pyrite.	FAULT ZONE - highly fractured with 30% dark green chloritized non-silicified rock. Chloritized mylonite at 32.03 - 32.35. Grey silicified rock in this zone is strongly fractured with chlorite in fractures.	grey with purple tint, very highly brecciated and intensely silicified with average 7-9% pyrite and up to 10% locally. The lower 20 cm is strongly fractured with mylonite and chlorite in fractures.	FAULT - chloritized plane cuts at 30° to core axis	ALT	y-green, aphanitic to fine grained, c to strongly brecciated and variably This is a variably altered zone between ng breccia and non-brecciated rock beneath. comes pale green at 35.66 m. Silicified ound at 35.02-35.11, 35.33-35.72, 36.12- 8-36.79, 36.91-37.12, 37.22-37.25 and totalling 57% of the unit. In these angular medium to dark green 1-3 cm breccia
	z o	444	145 146 147		149 150			1 15 15 15 15 15 15 15 15 15 15 15 15 15
	3 SULPH 1089							
SAMPLE	FROM	6.1 7.1 7.9	29.99 30.88 31.49		32.43 33.27			34.11 35.11 36.11 36.80
in I	FOOTAGE	8.7.			33 4.2			35. 36. 27. 4
	H	μομ ωωω	449 490 100 110		27 0.			900.1. 11.
	TOTAL	.01	. 60 60 64 4		80 80 4. 44			6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	,							
	-							
ASSAYS	02/101	g - 3	0000		0.03	-	_	0.02 0.03 0.01
1 ° [	02/10#	0						

NAME OF PROPERTY MCDERMOTT
HOLE NO. MC. 83-21 SHEET NO.

4 OF 5

	-						Ì				ł	
FOOTAGE		DESCRIPTION		& SULPH	SAMPL	FOOTAGE		$oldsymbol{\perp}$		   <sub>&amp;</sub>	ASSAYS	
FROM	6		z o	1063	FROM	ō	$\forall$	101/1	-	2	OZ/TON O	02/TON
л О	<u> </u>	mylonitic matrix. Fragments are only very weakly silicified. Rock is moderately fractured with pink quartz in main fractures and carbonate in microfractures. Pyrite contents average 3-5% as a very fine dissemination and, locally, as 1-2 mm cubes. Flow banding is observed locally; 37.19 m: 50° to core axis.				<del></del>		<del></del>			<del></del>	<del></del>
37.59 48	48.10	ANDESITE			<b></b> -						<del></del>	
		y to c	ហេបា		8.				(actua	ually)	• –	
		ctures are very	ոտւ		70.5	41:	000	888		000	225	
		to shrinkage. The flow is non-silicified	6		2.5	43	00	8		00	21	
		silicified below 45.42 m. Pyrite content averages less than 1%.	162		44.50	4 4 4 6 5 5 5 5 5 5	<u> </u>	888		<u>он</u> с	race	
		37.49 - 45.42: weakly to moderately chloritized	90		6. 7.	8.	00	60		00	012	
<del></del> -		45.42 - 48.10: narrow grey silicified breccia zones at 45.63-45.77, 46.66-46.74 and 47.46-47.58 m.										
48.10 49	49.53	LOWER MINERALIZED ZONE										
		The unit is composed of dark grey to grey-green, aphanitic moderately to very strongly silicified with minor zones of green, weakly silicified rock. Degree of silicification is proportional to the extent of brecciation. Breccia fragments are extremely angular, frequently mylonitic and are set in a silica matrix. The moderately developed fractures were later developed and are generally quartz-filled with pink carbonate in narrow micro-fractures. Pyrite content averages 3-5%. This zone is more	166 167		48.10 48.81	4 4 9 8 5 8	0.	71 72 72		00	. 14	

		<del></del>	
	49.53	MORE	FO
		7	FOOTAGE
	60.05	ļ°	
60.05 m. END OF HOLE  CASING PULLED	weakly silicified than would be expected judging by what was encountered in other holes.  ANDESITE  Medium green, fine to medium grained becoming coarser down-hole. The uppermost 1.5 m is strongly silicified locally over 2-5 cm zones. These zones are grey, and brecciated similar to the overlying unit. The flow is non-magnetic. Up to 1% very finely disseminated pyrite is found throughout the zone. The rock is moderately fractured with dominantly white and pink carbonate filling. Flow banding is observed locally: 45° at 51.5 m and 40° at 54.6 m.		DESCRIPTION
7	C168 169 170 171 172 173 174	ŏ	
·		1029	
·	4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	FROM	SAMPL
60.	0 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	10 20	
<u> </u>	144444444 1444444444444444444444444444	TOTAL	
		#	-
	act tall	-	-
•	000000	02/	ASS
	00000000000000000000000000000000000000	0Z/TON 0Z	ASSAYS
	Ö (P	OZ/TON	J

ZAMM OF	NAME OF PROPERTY MCD	MCDERMOTT
HOLM NO.	MC-83-22	LENGTH 61.26 meters
LOCATION		
LATITUDE	LATITUDE 0+365	50E
ELEVATION		AZIMUTH 344 DIP -45
STARTED_	STARTED 20-5-83	FINISHED 24-5-83

FOOTAGE	PIP	AZIMUTH FOOTAGE	FOOTAGE	DIP	HLOWIZY
0	-45 <sup>0</sup>				
61.26 -44 <sup>0</sup>	-44 <sup>0</sup>				

HOLE NO. MC-83-23HEET NO. 1 OF 7

LOGGED BY S.M. Trueland

<del></del>	т-			EM. 0 - 1100			LANGRIDGE LIMITED,
	FROM	0	9.54			12.92	
1 > G	70	9.54	12.92			30.33	
D M SI C 70 T O Z		CASING	BASALT:	Dark green fine grained, moderately fractured, slightly brecciated rock. Slightly to moderately chloritized and carbonatized. Dominantly white carbonates (10-15%), with some areas of pink, filling fractures 1-10 mm in size with the majority making an angle of 50-70 to the core axis. Pyrite - zero to trace.	11.58 - 11.83: Core fragmented and broken, possible fault.	MAIN SILICIFIED ZONE:	moderately to severely brecciated - brecciated fragments range from less than 1 mm to 2-3 cm. Infilling material is white silica with no carbonate. Infrequent isolated areas of green chloritized rock (possibly fragments) which have not been affected by silicification - these zones make up no more than 10% of main zone. Less silicification in these zones could be due to minor brecciation in these areas where the larger fragments have resisted silica infiltration. Pyrite content ranges from less than 1% (chloritized zones) up to 10-15% (intensely silicified and brecciated zones). Pyrite appears mainly disseminated with minor amounts of larger (0.5-lmm) euhedral crystals. In areas of high concentration finer subhedral crystals join together forming blebs on the order of 5-10mm in size.
	NO. SULPH			C201 202 203 7			
5				TR. 1			
> 3	FROM			9.54 10.30 11.13 12.07			
P L E	7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			10.			
δĘ.	H			3 13 92			
	TOTAL			0.76 1.00 0.94 0.85			
ę	×						
<b>*</b>	*				-		, · · · · · · · · · · · · · · · · · · ·
S S >	NOT/ZO			Trace Trace Trace			
<b>→</b>	VOZ/TON			<u> </u>			

EM. 6-1168

LANGRIDGE LIMITED,

HOLE NO. \_\_MC-83-22 SHEET NO. 2 OF 7

HOLE NO. MC-83-22

SHEET NO. 3 OF 7

FROM								
70		<del></del>						
	15.0	20.6		20.7		21.1	22.	
	09	55 I		73 -		12 -	19 -	
	20.	20.		21.		22.	23.	
	ស ភ	73:		12:		19:	26:	
DESCRIPTION	SILICIFIED BASALT-PURPLE HUE (5% PYRITE) Silicified zone, fine grained dark grey rock with purple hue. Moderately to severely brecciated with pyrite content averaging 5%.	TUFF? OR FAULT?	, an	LIGHT GREY ROCK WITH YELLOW HUE (10-15%)	Signigicant increase in pyrite content 10-15%. Quartz stringers are wider in this zone - possible result of tensile forces allowing free movements of fluids	Rock becomes medium to dark grey. 2-5% pyrite.	DARK GREY PURPLE HUE (PYRITE 3-5%)	Narrower stringers of white siliceous material. Brecciated fragments seem less distinct and have a more foliated appearance at approximately 60-70 to core axis. Foliation and narrower stringers seem to indicate application of compressive stresses. Pyrite 3-5%.
z o	22222 22109 211109 432109			215	<u></u>	216		217
7 SULPH	U1 dP				15#	2-5		ω •
	1465.		· · · · · · · · · · · · · · · · · · ·	20.		21.		N N N N N N N N N N N N N N N N N N N
<u> 1111</u>	660 1 1 1 1 1 1			73 2		12 2		59 2
FOOT AGE	9.660 0.73			1.12		2.19		3.5 2.5 5.5
70TAL	+00000 +0000 0000			0.4		1.07		0.6
-11	7000000			0		7		76
-								
02/70%	000000			0.3		0.1		00
2	222222		<del>-</del>			<u> </u>		N. 0.
701								

						ł		1		1				
	FROM TO	70 AGE		DESCRIPTION	Z 0.	% SULPH		FOOTAGE			*	02,70%	02, TON	
_			23.26 - 23.71:	LIGHT GREEN ROCK - POSSIBLE FAULT	219		23.26	23.7	0.46			0.01		
				Light green, fine grained rock. Brecciated fragments are more well developed. Core is fragmented and broken at 23.53m which could possibly be a fault. Lower pyrite content in this interval - 1-2%.	<u></u>	1-2#								
			23.71 - 24.02:	SILICIFIED BASALT WITH PURPLE HUE	220		23.71	24.0	2 0.30	_		0.09		
				Same as interval 22.19-23.26m with disseminated pyrite with local concentrations or blebs - 3-5%.	w	Ut Ut dP								
			24.02 - 27.43:	SILICIFIED BASALT WITH CHLORITE-RICH ZONI	S (20	æ)								
-TORONTO-366-1168				ciated with good angular fragments being visible. White siliceous material randomly infills without well-developed foliation. In some locations silicification is not as intense indicated by the medium to dark green chloritized zones which comprise approximately 20% of the interval. These zones range from 1-2cm up to 10-15cm and are softer than the silicifed zone. The presence of the main silicified zone is nearing the end. Pyrite content; less than 1% up to 15% with an average throughout of 5-7%.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 7 dp	24.02 25.85 .76	24.9 25.8 27.4	0.91 671			0.05 0.11 23		
LANGRIDGE LIMITED			27.43 - 28.04:	INTER? OR FAULT?  Interval with larger grain size. Fragments are more well rounded and consist of quartz, feldspar and mafic minerals - area of slight magnetism - more abundant white silica - fault or tuff(?)	225		27.43	28.0	0.61			0.04		

1071

HOLE NO. MC-83-22 NAME OF PROPERTY\_\_\_\_ MCDERMOTT

SHEET NO. 5 OF 7

FOOT AGE				SAMPLE	m			ا ج	ASSAYS	
	DESCRIPTION	ž O	% SULPH	FROM	FOOTAGE	TOTAL	32	<i>y</i> 0	02/TON 0	02 704
	28.04 - 30.33: SILICIFIED BASALT WITH CHLORITE ZONES									
	Same rock type as interval 24.02-27.43m. Pyrite content increases from 28.65-28.96m to 10% with average over the interval of 5%.	226 227 228	UI dP	28.04 28.96 29.87	28.96 29.87 30.33	0.91			0.10	
30.33 30.66	TUFF? OR FAULT?									
	Light green, medium grained rock with well-rounded fragments of quartz and feldspar.	229		30.33	30.66	0.33		ਜ਼	Trace	
30.66 57.00	BASALT									
	Medium green, aphanitic to fine grained rock. Carbonate present as stringers up to 5-10%. The zone has small bands of brecciated and siliciffied material characteristic of the main zone, 2-10cm wide and comprising no more than 10% of the interval. Pyrite is less than 1%.						<del></del>			
	30.66 - 35.91: BASALT									
RONTO - 366-1168	Carbonate - 5-10%. Pyrite - less than 1%.	233 233 233 233 233 5	less than	331.58 332.49 34.32 23.34	32.49 33.49 35.23 5.23	0.91 0.91 0.91 0.91		40000	HOOO	
ED — TOR	35.91 - 36.70: <u>DIABASE?</u>		18							
LANGRIDGE LIMITE	Medium grained, medium green rock. Prismatic amphibole crystals. Pyrite 0-0.5%.	236	less than 1æ	35.91	36.70	0.79			0.04	

6 OF 7

COTAGE		DESCRIPTION			SAMPL	.E				ASSAYS
70			NO.	SULPH IDES	FROM	FOOTAGE	TOTAL	ور		02/TON
36	5.70 - 37.28:	Moderately silicified and brecciated. C 2-5% carbonates. Up to 1% pyrite.	237		36.70	37.28	0.58			0.04
ယ 8	8.19 - 38.37:	Strongly brecciated and silicified. C 2-5% pyrite.	238		37.28 38.37	38.37 39.20	1.10		<del></del>	Trace
39	9.20:	Core broken and fragmented, possible fault.								
<u>ω</u>	9.20 - 47.03:	Carbonate stringers and veining more Cabundant, 15-25%.	4444		1109	2.0			<del> </del>	
			2244 244 244 244 244 344		42.09 43.01 43.92 44.84 45.75	43.91 43.92 44.84 45.75 47.03	0.91 0.91 0.91 0.61		———	00000
47.	7.03 - 47.85:	Carbonate stringers almost absent, 2-5%.	250		47.03	47.85	0.82		-н-	Trace
47.	7.85 - 49.77:	Carbonate stringers 5-10%. Tuffaceous bands 1-10cm in size comprise 5-10% of core.	251 252		47.85 48.77	48.77 49.77	0.91			0.01
4.	49.77 - 57.00:	Bands of carbonates wider with zones of carbonate-free basalt at 50.22-50.38m and 51.22-51.66m.	00000000000000000000000000000000000000		51.00 51.91 52.82 53.74 55.56	51.00 52.82 53.74 55.65 57.00	0.91		- дренен	TTTTACCE

LANGRIDGE LIMITED - TORONTO - 366-1168

59.65 61.26

57.00 59.65

FROM

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FOOTAGE

MCDERMOTT

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	61.26 meters END OF HOLE CASING PULLED WHOLE BQ CORE SENT FOR ASSAY	BASALT  Carbonate stringers less than 1%.	INTRUSIVE DIABASE(?) Light to medium green, medium grained rock with prismatic amphibole crystals. Carbonate stringers 1-3%.	DESCRIPTION	
		264 265	261 263	z o	
· · · · · · · · · · · · · · · · · · ·				3 SULPH	HOLE
		<u>த</u> ை	557 87	$\top$	ŏ
		0. 565	7.00 7.91 8.83	FROM	S A A
		00	ហហហ	113	MC-83-22
		1.5	987	FOOTAGE	83
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		0.91 0.70	0.91 0.91 0.82	107AL	
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		Trace Trace	Trace Trace	NOT / 50	7 of
				T - 1	YS OF
				02, TON	11/2
			<del></del>	++1	

	26-5-83	FINISHED	24-5-83	STARTED_
-45°	3440	AZIMUTH		ELEVATION
	308	DEPARTURE	9+37.5E	LATITUDE
				LOCATION
ES	60.05 meters	LENGTH	Mc-83-23	HOLM NO.
		MCDERMOTT	NAME OF PROPERTY	NAME OF

HOLE NO. MC-83-23HEET NO. 1 OF 9

REMARKS <u>Second hole logged</u>
by S.M.T.

LOGGED BY S.M. Trueland

SHEET NO. 2 OF 9

HOLE NO. \_\_MC-83-23\_ SHEET NO.

3 OF 9

	FOOTAGE	AGE		DESCRIPTION			SAMPLE	m				ASSAYS		
_	NOR.	10			z o	SULPH,	FROM	FOOT AGE	TOTAL	,	,	0Z/TOM	OZ:TON	
			18.30 - 18.80:	TUFF OR FAULT										
				nt to medium green, medium c composed of less than lmm l-rounded grains or fragmen	279	ор О	18.30	18.80	0.53			0.02		
				top and bottom of the zone with larger 3-6mm angular fragments in the middle of the zone - TUFF OR FAULT - pyrite is not visible.  SAMPLE TAKEN 18.62-18.68m (angular										
		-	18.80 - 19.05:	GREY-BROWN YELLOW HUE SILICIFIED ZONE										
				Light grey-brown with yellow hue. Fine grained, intensely brecciated and silicified. Slight foliation at 50-65° to core axis. Pyrite content significantly increases in this interval to 10-15%. The same zone appears in hole Mc-83-22 at 20.73-21.12m.  SAMPLE TAKEN 18.80-18.90m.	280	10-	18.80	19.05	0.24			0.33		
RONTO - 366-1168			19.05 - 19.51;	Core becomes medium grey with brecciated fragments still light grey-brown with yellow hue. These fragments constitute approximately 40-50% of the interval. Very distinct contact with above interval Pyrite content 5-7%.	281	5-7-	19.05	19.51	0.46			0.05		
— TOF			19.51 - 19.81:	TUFF OR FAULT				_						
LANGRIDGE LIMITED				Band of tuff (or fault). Fragments are less than 1mm to 10mm with small frag-ments dominating. No visible pyrite.	28 2	9	19.51	19.81	0.30			0.01		

HOLE NO.	
MC-83-23	
SHEET	
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4 OF 9

FOOTAGE	GE					SAMPLE	m		7		ASSAYS		
FROM	70		DESCRIPTION	<b>2</b> 0	SULPH	FROM	FOOTAGE	TOTAL	,	,	02/TOM	02, TON	
		19.81 - 21.59:	TYPICAL SILICIFIED ZONE (PURPLE HUE)						-				
			Typical dark grey, purple hue rock. Brecciation light to moderate. Fractures less abundant with more regular quartz veins 1-5mm wide. Within quartz veins brecciated fragments are more abundant. Light brown alteration halos associated with some quartz veins while some veinlets infilled with light brown siliceous material. Finer micro-fractures, random throughout interval. Veinlets cut core axis at 30-45 with some clean white quartz veinlets running parallel to the core axis. Pyrite content ranges from less than 1% to 15% with an average concentration of approximately 7%.  SAMPLE TAKEN 20.57-20.65m.	2 2 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	7*	19.81	20.8	0.79 0.79			0.10		
		21.59 - 24.38:	SILICIFIED ZONE: MAGNETIC	-									
300-1100			Dark grey, purple hue rock. Fracturing becomes more abundant and larger. Alteration halos not visible. Core is magnetic throughout entire interval.  Pyrite content is 2-4%.	285 286 287	2-4%	21.59 22.57 23.57	2 2 2 4 3 5 3 5 5	7 1.00 81.00	··-·		0.03		
IMITED - TORONTO -		24.38 - 26.91:	SILICIFIED ZONE: NON-MAGNETIC  Dark grey rock with purple hue, non- magnetic over this interval. Small chlorite-rich zones appear and comprise 5% of interval with greater abundance down hole. Some areas of intense hrecciation and silicification	2 2 8 8 9 P P P P P P P P P P P P P P P P P	1 22 89	25.38 26.38	225 66.3	8 1.00 8 0.53			0.06		
LANGRIL									<del></del>				

3-23	
SHEE	
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DESCRIPTION
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26.91 - 27.28: GREY-BROWN YELLOW HUE SILICIFIE
Rock grey-brown with yellow hue, to interval 18.80-19.05m. Pyrite 7-8%. End of main silicified zon
05 BASALT WITH SILICIFIED ZONES (1-2%)
dark green, aphanitic to medium s of silicification and brecciati metre. These intervals constitut asalt interval. Carbonatization
ages approximately 10%. Pyrite content varies fr some carbonatized-chloritized zones to 5-10% in s fied and brecciated zones.
27.28 - 28.13: TUFF OR FAULT
Light to medium green, fine to medi grained rock with larger fragments 27.86m. Foliation present (measurer not taken). Pyrite absent.
28.13 - 29.57: BASALT WITH SILICIFIED ZONES
Medium green, fine grained basalt with zones of brecciation and silicification comprising 5% of the interval. Carbona stringers throughout core in random pattern and constitute approximately 5% of the interval. 5cm zone of medium

-83-23	ERTY_
-23	3
	MCDEVMOTT
- SHEE	1011

FOOTAGE	Ě		DESCRIPTION			SAMPLE	JE		
FROM				Z O	SJOES .	FROM	FOOT AGE	$\Pi 1$	TOTAL
		29.57 - 33.10:	BASALT ABSENT OF SILICIFIED ZONES						
			n, fine to med	295		29.57 30.57	31.	57	
			due to slow cooling. Carbonate content 5%. Magnetic band at 31.70m making an angle of 30 to core axis. 0 to trace pyrite.	98	Prace	2.	ω ω ω N	01	. 32
		33.10 - 37.50:	BASALT ABSENT OF SILICIFIED ZONES						
			Fine to medium grained basalt with greater amounts of carbonate stringers - approximately 10% - stringers lmm to lcm wide and are emplaced in irregular pattern with the majority making an angle of 80-90 to core axis. Slight foliation over 20cm making an angle of 40 to core axis (36.05-36.27). Pyrite content up to 1-2% averaging less than 1%.	300 300 300 300 300	the server	33.10 36.13 36.13	ωωωω 4.0.00.7	50 0	.00 .00 .70
		37.50 - 37.89:	TUFF??						
			Medium grained, brownish-green rock.  Moderately brecciated with fragments no larger than 2-3mm. Some grains are well rounded - possibly tuffaceous. Carbonate stringers absent from this zone. Pyrite content slightly increased 1-2%.  SAMPLE TAKEN 37.72 - 37.78.	304	1 22 ap	37.50	37.89		0.39
_		37.89 - 38.77:	DIABASE??						
			Medium grained, medium green rock. Carbonate content 10%. Core similar to interval 33.10-37.50m, but grain size is considerably coarser. Prismatic amphiboles - could be considered to be	305	Tess thess	37.89	38.77	77 0.	& &

HOLE NO. MC-83-23 NAME OF PROPERTY\_\_\_

n > > > > > > > > > > > > > > > > > > >	9				ļ	SAM	m			2 Y A 22 A	
FROM TO	TAGE	· <b></b>	DESCRIPTION	Š.	SULPH	SAMPLE	FOOTAGE	70741	22 28	ASSAYS	MOL. 20
		37.89 - 38.77:	diabasic. Pyrite content 0-1%, averages less than 1%.								
		38.77 - 39.24:	BASALT								
			Medium green, fine to medium grained rock. 306 Less carbonates in this interval, which gives the division. Grain size smaller than above interval, but there is a gradational decrease in grain size. Carbonates less than 5%. Pyrite less than 1%.	306	less than	38.77	39.24	4 0.46		Пгасе	10
		39.24 - 39.64:	SHEARED BASALT				<u>-</u>				
-			Well foliated and moderately sheared basalt. Grain size not distinguishable. Foliation makes an angle of 45 to core axis. More intensely sheared at top of interval (39.24m). Moderately sheared at bottom of zone. Pyrite absent from this interval.	307	о ар	39.24	39.64	4 0.37		0.005	
		39.64 - 40.97:	LIGHTLY SHEARED BASALT								
			Basalt slightly foliated (not as intensely as zone above). Foliation makes an angle of 40° with core axis. Pyrite absent. Clay material in fracture 40° to core axis at 40.23m, possible fault.	308 323	0 #	39.64	40.33	3 0.69		Trace	
		40.97 - 42.06:	BASALT						···		
			Medium green, fine to medium grained rock, 309 no foliation. Carbonate stringers comprise 5% of interval. Grain size becomes finer with depth. Pyrite content up to 5%, averages 1%.	,309	سر مه	40.97	42.06	6 1.10		Trace	

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	Mc-83-23
	SHEET
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44.90: BASALT WITH SILICIFIED ZONES (5%)  Fine grained, medium to dark green rock. Silicified zones 2-10cm wide comprising not more than 5% of zone. Wider zones have light brownish-yellow colour,	Fine grained, medium to dark green rock. 310 silicified zones 2-10cm wide comprising 311 not more than 5% of zone. Wider zones 312 have light brownish-yellow colour,	Fine grained, medium to dark green rock. 310 silicified zones 2-10cm wide comprising 311 not more than 5% of zone. Wider zones 312 have light brownish-yellow colour, than the state of the	Fine grained, medium to dark green rock. Silicified zones 2-10cm wide comprising not more than 5% of zone. Wider zones 312 43.06 have light brownish-yellow colour, that the same than 5% of zone than 5% of zone wider zones 312 44.06	Fine grained, medium to dark green rock. 310 Silicified zones 2-10cm wide comprising 311 have light brownish-yellow colour, that the following states are the followed by the following from the following states are the followed by the following states are the followed by the following states are the followed by the following states are the followed by the following states are the followed by the following states are the followed by the following states are the following states.	Fine grained, medium to dark green rock. Silicified zones 2-10cm wide comprising not more than 5% of zone. Wider zones 312 43.06 have light brownish-yellow colour, than 5% of zone into the control of the colour, the colour is the colour.	Fine grained, medium to dark green rock. 310 Silicified zones 2-10cm wide comprising 311 not more than 5% of zone. Wider zones 312 44.06 44.90 have light brownish-yellow colour, that the state of the	Fine grained, medium to dark green rock. Silicified zones 2-10cm wide comprising not more than 5% of zone. Wider zones 312 44.06 44.90 0.84 have light brownish-yellow colour, Sauch From To Total 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	The grained, medium to dark green rock. 310 silicified zones 2-10cm wide comprising 311 43.06 44.06 1.00 not more than 5% of zone. Wider zones 312 44.06 44.90 0.84 have light brownish-yellow colour, than 5% of zone than 5% of zone wider zones 312 44.06 44.90 0.84
		310 311 312 1ess than	310 311 42.06 311 43.06 312 1ess than 18	SAMPLE  NO.   ASULPH   FOOTAGE   FROM   TO   TO	SAMPLE  NO.   7. SULPH   FOOTAGE   100   1	SAMPLE  NO.   TSULPH   FOOTAGE   TOTAL    310   42.06   43.06   1.00    311   43.06   44.06   1.00    312   44.06   44.90   0.84    18   18	SAMPLE  NO.   ASULPH   FROM   TO   TOTAL   A   A    310   42.06   43.06   1.00    311   43.06   44.06   1.00    312   44.06   44.90   0.84    18   18	SAMPLE ASSAYS  NO.   TSULPH   FOOTAGE   70   TOTAL   7   7   02/10m    310   42.06   43.06   1.00   1.00   0.005    311   43.06   44.06   1.00   0.005    1ess   1e

HOLE NO. MC-83-23

SHEET NO. 9 OF 9

						'		1			I
FROM TO		DESCRIPTION	Z O	2 SULPH	FROM	FOOTAGE	10141		*	02/10#	02. TON
	47.06 - 55.40:	BASALT WITH SILICIFIED ZONE (1%)									
		stri	$\vdash$		. 06	9.0	r r	-,-		Frace Frace	
		1-3cm Silcified zones not g more than l% of interval hometite (specular) wein	- <b>-</b> -		09	0.0	·.:	<u> </u>			
		lematite (specular) vein co lcopyrite which makes angle	320	1 U U		000 000 000	11:	,	<u>.</u>		<del>-</del>
		with core axis. Minor cified zones, trace in	100		888	4.	· · ·			Trace	
			22 22		.74	5.4	00			Trace	
			H	Trace		-					
	55.40 - 56.11:	LOWER MINERALIZED ZONE (SILICIFIED ZONE WITH BROWNISH-YELLOW FRAGMENTS)									
		Brecciated silicified zone with brownish yellow fragments similar to interval 46.36-47.06m. Pyrite content increases dramatically to 10-15%.	326	10-15%	. 40	56.11	0.76			0.075	
	56.11 - 60.05:	BASALT	_ <del></del>								
		Basalt with 1-3cm wide zones of darker rock. In these zones pyrite content increases to 1-2% from 0 to trace throughout the rest of the rock. In the last 0.46m of the interval the rock becomes coarser grained gradually and a lighter green in colour. Possibly gradational contact with new rock type but since it constituted such a small amount of the core it was not noted. Carbonate stringers up to 2-3% of core.	322 329 1	7 58 59 59	1111	57.11 58.11 59.11 60.05	1.00 1.00 1.00			Prace Nil	
	60.05	END OF HOLE CASING PULLED Whole BQ core sent in for assay.						· · · · · ·			

Z > X = 0 T	PROPERTY	McDermott
	3-24	LENGTH 92.66 meters
LOC ATION		
LATITUDE	0+50 S	DEPARTURE 9+25 E
ELEVATION		AZIMUTH 3440 DIP -550
STARTED	May 27, 1983	FINISHED June 2, 1983

FOOTAGE	ald	HTUMIZA	AZIMUTH FOOTAGE	DIP	HLUMIZY
0	-55°				
91.44	-52°				

HOLE NO. MC-83-24 HEET NO. 1 OF 7 REMARKS BO COTE

LOGGED BY A.W. Workman

FROM TO  DESCRIPTION  DESCRIPTION  NO. 8.90 OVERBURDEN  DESCRIPTION  NO. 8.90 FROM TO OVERBURDEN  DESCRIPTION  NO. 8.90 OVERBURDEN  NO. 8.90 PRECLIATED BASALT  NO. 8.90 PROCLIATED BASALT  Medium green, fine grained to aphanitic, moderately to strongly become and an expression of the core axis. Intense brecciation is often accompanied by silicification and 3-58 pyrite contents; average content is 1-28. Silicification increases in the lower part of the section. The zone is moderately fractures, at least in part, port-date brecciation. Micro-fractures at 11.30-12.50 meters are faults with 1-2cm displacement.  12.00 - 14.30; increased brecciation and silicification, up to 208 pyrite in 2-3cm seams of breccia - some lom aggregates of fine pyrite crystals. Breccia at 13.20 m.  SAMPLE ASSAURE ASSAURE ASSAURE AND ALLE	A G E DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  NO. SUBSEMPLE  NO. SUBS
OVERBUIDEM  RECCIATED BASALT  Medium green, fine grained to advantitic, moderately to strongly brecciated and very weakly silicified locally. Breccia fragments 40° to the core axis. Intense brecciation is often accompanied by silicification and 3-5% pyrite contents; average content is 1-2%. Silicification and 3-5% pyrite contents; average content is 1-2%. Silicification, increases in the Lower part of the section. The zone brecciation, Micro-fractures, at least in part, post-date brecciation, Micro-fractures, at least in part, post-date brecciation, increased brecciation and silicification, up to 20% pyrite in 2-3m seams of breccia.  12.00 - 14.30; increased brecciation and silicification, up to 20% pyrite in 2-3m seams of breccia.  SEDIMENTS  Medium to dark green, fine to very fine grained with 1-5cm zones of 337 14.30 15.30 1.00 tr. spring the contents at 13.20 m.  SEDIMENTS  ** A M P L E  ** A M P L E  ** A M P L E  ** A M P L E  ** No. SUBSTICE  NO. SUBSTICE  NO. SEDIMENTS  ** NO. SUBSTICE	OVERBUIDEM  RECCIATED BASALT  Medium green, fine grained to advantitic, moderately to strongly brecciated and very weakly silicified locally. Breccia fragments 40° to the core axis. Intense brecciation is often accompanied by silicification and 3-5% pyrite contents; average content is 1-2%. Silicification and 3-5% pyrite contents; average content is 1-2%. Silicification, increases in the Lower part of the section. The zone brecciation, Micro-fractures, at least in part, post-date brecciation, Micro-fractures, at least in part, post-date brecciation, increased brecciation and silicification, up to 20% pyrite in 2-3m seams of breccia.  12.00 - 14.30; increased brecciation and silicification, up to 20% pyrite in 2-3m seams of breccia.  SEDIMENTS  Medium to dark green, fine to very fine grained with 1-5cm zones of 337 14.30 15.30 1.00 tr. spring the contents at 13.20 m.  SEDIMENTS  ** A M P L E  ** A M P L E  ** A M P L E  ** A M P L E  ** No. SUBSTICE  NO. SUBSTICE  NO. SEDIMENTS  ** NO. SUBSTICE
No.   Signification   Post of the pyrite crystals.   Record and splicified to the core axis at 13.20 m.   Signification   Si	No.   Signification   Post of the pyrite crystals.   Record and splicified to the core axis at 13.20 m.   Signification   Si
SAMPLE ASSA Sheet From To Total W % 02/TON 8.90 9.90 1.00 tr. 11.90 12.90 1.00 tr. 12.90 13.90 1.00 tr. 13.90 14.30 0.40 0.01 15.30 16.30 1.00 tr. 16.30 17.30 1.00 tr. 17.70 18.70 1.00 tr. 18.70 19.70 1.00 tr. 19.70 20.42 0.72 tr.	SAMPLE ASSA Sheet From To Total W % 02/TON 8.90 9.90 1.00 tr. 11.90 12.90 1.00 tr. 12.90 13.90 1.00 tr. 13.90 14.30 0.40 0.01 15.30 16.30 1.00 tr. 16.30 17.30 1.00 tr. 17.70 18.70 1.00 tr. 18.70 19.70 1.00 tr. 19.70 20.42 0.72 tr.
FROM TO TOTAL 4 20/TON FROM TO TOTAL 4 20/TON	FROM TO TOTAL 4 20/TON FROM TO TOTAL 4 20/TON
SAMPLE ASSA  FROM TO TOTAL  9.90 1.00 9.90 11.90 1.00 9.90 13.90 1.00 12.90 13.90 1.00 13.90 14.30 0.40  13.90 14.30 0.40  14.30 15.30 1.00 15.30 16.30 1.00 16.30 17.70 0.40 17.70 18.70 1.00 18.70 19.70 1.00 19.70 20.42 0.72  tr.	SAMPLE ASSA  FROM TO TOTAL  9.90 1.00 9.90 11.90 1.00 9.90 13.90 1.00 12.90 13.90 1.00 13.90 14.30 0.40  13.90 14.30 0.40  14.30 15.30 1.00 15.30 16.30 1.00 16.30 17.70 0.40 17.70 18.70 1.00 18.70 19.70 1.00 19.70 20.42 0.72  tr.
1.00	1.00
1.00 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01	1.00 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01 1.00 0.01
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###### 0.01 0.01 0.01 0.01 0.01 0.01 0.0	###### 0.01 0.01 0.01 0.01 0.01 0.01 0.0
ON OZ/:	D D D D D D D D D D D D D D D D D D D
1.71 1	

HOLE NO.

MC-83-24 SHEET NO.

2 OF 7

10
carbonate 14.65 - 1
14.92 -
15.03 -
17.70
25.24 SEDIMENIS
Grey to greenish-grey, fine grained to aphanit brecciated. Angular fragments, 0.5mm to 3cm, silicified. The larger fragments are greenish effective silicification (silica penetration). is very siliceous - essentially quartz. The r fractured with quartz and carbonate filling. zones of silicification. Pyrite, finely disse

Mc-83-24 SHEET NO.

3 OF 7

	31.24		28.24		25.24	FROM	F00
	58.58		31.24		28.24	то	FOOTAGE
The zone is composed of several highly silicified sections separated by similar but less completely silicified rock. Pyrite content probably averages about 3% but ranges from 1-10% with up to 1% chalcopyrite locally. Silicification is best developed in intensely brecciated rock. Because of the breccia developed above this zone, and the sporty silicification associated with it, the upper contact of this unit may extend higher than is indicated herein.	MAIN MINERALIZED ZONE	Medium to dark green, fine to very fine grained with patchy grey silicified zones. Alteration is very strong but limited to narrow breccia seams. The rock is strongly laminated at 45-50° to the core axis (eg. 28.40 meters). Brecciation increases below 30.24 m and the degree of silicification increases similarly. The zone averages 18 pyrite and is very similar to the rock at 14.30-20.42 m. Bedding at 30.35 meters is at 60-70° to the core axis. A clay filled fault plane is located in ground core at approximately 31.00 meters.	SEDIMENTS	Light to dark green, fine grained and moderately chloritized, non-brecciated becoming moderately brecciated towards the base. Brecciation is gradational into the underlying zone. Dilatant zones along fractures up to 2cm in width are carbonate filled. Silicification is relatively rare but may be found in fractured zones up to 3cm in width. The rock is well laminated locally -65-70° at 27.95 meters. The zone averages 0-1% pyrite.	SEDIMENIS		DESCRIPTION
		353 354 355		350 351 352		у О	
						SULPH.	
•		28.24 29.24 30.24		25.24 26.24 27.24		FROM	SAMPL
		29.24 30.24 31.24		26.24 27.24 28.24		FOOTAGE 10	ET .
		1.00		1.00		TOTAL	
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		# O. #		0.00	_	02.70M	ASSAYS
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LANGRIDGE LIMITED - TORONTO - 366-1168

SYASSA	SHEET NO. 4 OF 7
SAMPLE	HOLE NO. MG-83-24
	ноге

ained and loc syenite(?). lized carbona llicification Some cherty
TRANSITIONAL SILICIFIED SEDIMENTS  This zone is a combination of green, fine grained and ke silicified sediments, and, reddish, aphanitic syenite(?) sediments are silicified in response to localized carbon some increase in pyrite is associated with silicification honey coloured alteration is noted locally. Some cherty are supported in non-silicified rock locally - rip-up composite is located at 32.34-32.60 meters. It is strong at the contacts and is highly fractured internally. The very siliceous, perhaps silicified, and carries a trace MAIN SILICIFIED ZONE - UPPER PART
cally . The natization. nn. Minor ragments lasts. The ly brecciated rock is of pyrite.
35 35 z o
ω ω σε σε σε σε
31.24 32.34
31.24 32.34
SAMPLE  TOTAGE  10ES FROM TO  31.24 32.34 32.60 32.36 32.60 33.60
SAMPLE    10E5   FROM   TO   TOTAL
SAMPLE    1065   FROM   FOOTAGE

#### DIAMOND DRIFL RECORE

LANGRIDGE LIMITED - TORONTO -366-1168 42.84 46.69 FROM FOOTAGE 58.58 46.69 7 abundant within fragments. 80-90% of this section. Green chloritized seams make up the 43.35 - 46.69: Some carbonatization is noted. Pyrite content ranges from 1-3%. 41.84 - 42.84is generally confined to the matrix of the breccia and is much less central zone from 48.00-51.00 meters averages 5-7% pyrite. Sulphide size and are highly angular. The zone averages 3-5% pyrite and a silicification (also sericitization). Fragments are 1mm to 2cm in are common and reflect higher degrees of brecciation and remainder. Within silicified rock, cream to yellow coloured zones 42.84 - 43.35: variably silicified. Silicification is controlled by brecciation 40.65 - 41.84: 39.90 - 40.65: Purple-grey, aphanitic, intensely silicified breccia accounts for Dark green to grey-green, weakly to moderately chloritized and MAIN SILICIFIED ZONE - LOWER PART TRANSITIONAL SILICIFIED SEDIMENTS very weakly brecciated, 18 pyrite. alternating grey silicified rock and green nonrock is 50% chloritized sections, remainder is chloritized intrusive(?) with 1% pyrite and traces of chalcopyrite is noted at 44.57-44.88 meters. rock with up to 3% pyrite locally. A dark green, 41.23 meters. at 40.90-40.95 meters. 2-4% pyrite. A 2cm pink carbonate vein is located abundant cream and yellowish silicified matrix to silicified rock, reflecting variable degrees of minor fault at 70° to the core axis is noted at moderately to strongly brecciated and silicified. 41.00 - 41.08: zones carry up to 10% pyrite. A chloritized shear breccia fragments - frequently mylonitic. Yellowish brecciation. The zone carries 40% highly silicified is located at 39.90 meters. Well developed laminations are noted DESCRIPTION 3cm chloritized mylonitic seam at 450 to the core axis - fault. > ç # SULPH 44.88 44.57 44.35 43.35 42.84 FROM SAMPLE 45.88 46.69 44.57 44.88 44.35 7 0.31 0.51 1.00 0.22 TOTAL 000000 **ASSAYS** 0Z/ TON 02 TOM

FORM 2

NAME OF PROPERTY. <u> 1cDermot</u>t

HOLE NO.

MC-83-24

SHEET NO.

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McDermott

HOLE NO. MC-83-24 SHEET NO. 6 OF 7

LANGRIDGE LIMITED - TORONTO -		1168				
	62.86		58.58		FROM	F00
	77.06		62.86		10	FOOTAGE
Medium green, occasionally light green, fine grained and weakly to moderately fractured. Lighter colouration is due to weak to moderate carbonatization. Most fracture filling is quartz with carbonate dominant in the micro-fractures. A well developed set of bedding laminations at 45° to the core axis is noted throughout. Pyrite content averages 1% with up to 2% locally. At one point of major white and pink carbonate veining (68.38-38.55 meters), 10% pyrite was noted as a fine dissemination, as fracture filling, and as 3mm aggregates of finer crystals. The rock is non-magnetic.	SEDIMENTS	The zone begins at a chloritized seam (fault?), at 80° to the core axis - very minor movement, if any, is noted. The rock is dark green becoming medium green locally and is fine to very fine grained. The section is locally brecciated and greyish silicification is found in brecciated sections. Silicified breccia averages 5-7% pyrite whereas non-silicified rock carries 1-3%. The degree and the amount of silicification decreases down-hole into the underlying unit. The rock is non-magnetic. It is well laminated locally - (eg. 45° at 61.70 meters).	TRANSITIONAL SILICIFIED SEDIMENTS	locally, (650 to core axis at 51.20 meters).  50.25: breccia fabric developed at 300 to the core axis.  50.94 - 51.30: 50% chloritized seams at 45-500 to the core axis.  53.20 - 53.52: cataclastic intrusive? - dark green, fine grained, chloritized with occasional lcm pink quartz stringers.  53.95 - 58.58: the content of chloritized, non-silicified rock increases to 25-30% of the unit. The degree of silicification and intensely brecciated rock remains extremely high. Pyrite averages 3-5% and a trace of chalcopyrite. Pyrite crystals exhibit brecciation. The zone from 57.70-58.58 meters averages 7-9% pyrite.		DESCRIPTION
		404 405 406 406 406		375 377 377 377 380 381 382 383 383 384 385 387 387 387 387 387 387 387 387 387 387	Ž O	
•				9555556557756	% SULPH	
		58.58 59.58 60.58 61.58 62.22		46.69 47.79 48.79 49.79 50.79 51.79 52.79 53.79 54.79 56.79 57.79	FROM	SAMPLE
		59.58 60.58 61.58 62.22		47.79 48.79 50.79 51.79 54.79 55.79 56.79 58.58	FOOT AGE	E
		1.00 1.00 0.64		1.00	TOTAL	
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MC-83-24	ERTY
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				67.00				83.20			77.06								FROM	FOOT	
				92.00	3			86.25			83.20								7	TAGE	
CASING PULLED	92.66 meters END OF HOLE	ugastae witu britoma deaerobita perom areta.	breccia in 5cm seams. The uppermost part is			section becomes more poorly laminated down-section but retains a sense of parting parallel to bedding with depth.  84.40: laminated at 45-500 to the core axis.	d. The	SEDIMENTS	Ho.	Dark green, fine grained massive flow. Minor hyaloclastite and some vesicules are noted near the upper contact. The rock is	BASALT	noted locally - /U~ at /6.65 meters.	eddish tone - tuffaceous? Laminations are	are weakly to moderately silicified.	Pones in to 2cm in width	69.02 meters with 1-3% pyrite and a trace of	68.66 - 69.17: major breccia zone - strongly silicified from 68.66-	generally non-brecciated and r		DESCRIPTION	
		429	428	427	426	425	424	423	421	419 420	417 418	415	414	413	411	410	409	407	, z		P O
· · · · · ·	<del></del>																		OE'S	 	HOLE NO.
		91.17	89.17	87.17	85.17	83.17	81.17	79.17	76.17	74.17 75.17	72.17 73.17	71.17	69.17	68.66	67.86	65.86	64.86	62.86	FROM	SAMPL	
		92.66	90.17	88.17	86.17	84.17	82.17	80.17	77.1		• •	72.1	70.1	69.1	67.86	66.86	65.86	63.8	FOOT AGE	E	MC-
		6 1.49	7 1.00	7 1.00	7 1.00	7 1.00	7 1.00			17 1.00 17 1.00		17 1.	17 1.00				1.00		П		MC-83-24
·····	<del></del>	49 ———	8	8	8		8	88	38 —	88	88	88	38 —	52	3 S —	88	88	38	TOTAL		
																			,		SHE
																			,		SHEET NO
		0.01	0.01	0.01	10.01	0.01	10.01	Ħ.	10.01	0.08 0.08	F F	# #	tr.	Ħ,	Ŧ F	Ħ.	t 0	0.0 2.2 2.2	02. TOM	ASSAYS	İ.
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		<u>2</u>	<b>-</b> —-	<u></u>						<b>—</b> —									N GZ TON	YS	7 OF

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LATITUDE \_\_\_ HOLE NO. MC-83-25 LENGTI ELEVATION STARTED 07-06-83 925 E LENGTH 60.96 m \_\_ FINISHED \_\_\_09-06-83 \_ DEPARTURE 0+37 S \_ AZIMUTH 344

	<b>-</b>		
	60	0	FOOTAGE
	-390	-45°	dia
			AZIMUTH
			AZIMUTH FOOTAGE
			DIP
			AZIMUTH

HOLE NO. 83-25 SHEET NO. 1 OF 5

REMARKS Whole core sent for

assay. BQ CORE.

LOGGED BY A.W. WORKMAN

7.92 OVERBURDEN  10.80 BASALT  Dark green, fine grawith white and pink not shearing induced seminated pyrite.  FOLIATED BASALT  Dark green, fine grato the core axis thromatic reasing number of 3 harder than chloritimicro-breccia relatements due to coloura over the 1-2% averagis moderately to high filled in non-silicities moderately to high filled in non-silicities.  12.73 - 12.95: Mafical of the coloura over the series was a serie	FOOTAG	G E	D	M	SCRIPTIO	SCRIPTIO	S A M	S A
Dark green, fine grained, with white and pink carbon not shearing induced. Car seminated pyrite.  Dark green, fine grained, with white and pink carbon not shearing induced. Car seminated pyrite.  Dark green, fine grained, to the core axis throughou creasing number of 3-5 cm harder than chloritized bamicro-breccia related - diments due to colouration. over the 1-2% average. Misilicification along narrois moderately to highly frilled in non-silicified related in non-silicified relava. This unit has been trusive. However, the bre this zone probably is not	FROM TO	Ů	0	;	NO.	2	NO.	NO. Sullah.
Dark green, fine grained, with white and pink carbon not shearing induced. Car seminated pyrite.  Dark green, fine grained, to the core axis throughou creasing number of 3-5 cm harder than chloritized ba micro-breccia related - diments due to colouration. over the 1-2% average. Misilicification along narro is moderately to highly frilled in non-silicified related related in non-silicified related.  DRECCIATED BASALT  Grey to greenish grey, free lava. This unit has been trusive. However, the bre this zone probably is not		9	OVERBURDEN					
Dark green, fine grained, with white and pink carbon not shearing induced. Car seminated pyrite.  FOLIATED BASALT  Dark green, fine grained, to the core axis throughou creasing number of 3-5 cm harder than chloritized ba micro-breccia related - diments due to colouration. over the 1-2% average. Misilicification along narro is moderately to highly freilled in non-silicified related in non-silicified related.  12.73 - 12.95: Mafic introchoritize fractured.  BRECCIATED BASALT  Grey to greenish grey, free lava. This unit has been trusive. However, the bre this zone probably is not	<del></del>	80	BASALT					
Dark green, fine grained, to the core axis throughou creasing number of 3-5 cm harder than chloritized ba micro-breccia related - di ments due to colouration. over the 1-2% average. Mi silicification along narro is moderately to highly fr filled in non-silicified r 12.73 - 12.95: Mafic introperation of the desired probably is not this zone probably is not			green, fine graine white and pink car shearing induced.	tely to highly fractured fractures - tensional -2% very finely dis-	to highly ctures - very fine	to highly fractured 45 ctures - tensional 45 very finely dis- 45	to highly fractured 45 ctures - tensional 45 very finely dis- 45	to highly fractured 457 7.9 ctures - tensional 458 8.9 very finely dis- 459 9.9
Dark green, fine grained, to the core axis throughou creasing number of 3-5 cm harder than chloritized ba micro-breccia related - diments due to colouration. over the 1-2% average. Misilicification along narro is moderately to highly frilled in non-silicified r 12.73 - 12.95: Mafic introchloritize fractured.  BRECCIATED BASALT  Grey to greenish grey, fre lava. This unit has been trusive. However, the bre this zone probably is not	10.80 14.	60						
12.73 - 12.95: Mafic intr chloritize fractured.  0 18.00 BRECCIATED BASALT  Grey to greenish grey, fre lava. This unit has been trusive. However, the bre this zone probably is not			green, fine grained, well fe core axis throughout. The ing number of 3-5 cm silicing than chloritized basalt. The core related - difficul due to colouration. Zones the 1-2% average. Micro-faification along narrow fracterately to highly fractured in non-silicified rock -	oliated basalt - 40-45° e zone contains an infied patches - grey, Silicification may be to distinguish fragcarry up to 5% pyrite ults often cut off tures. Rock generally d - dominantly carbonate quartz in remainder.	eed basalt - 40-45 ne contains an inpatches - grey, cification may be distinguish fraggy up to 5% pyrite often cut off Rock generally lominantly carbonaz in remainder.	red basalt - 40-45° 460 he contains an in- patches - grey, cification may be distinguish frag- ry up to 5% pyrite often cut off s. Rock generally lominantly carbonate z in remainder.	ted basalt - 40-45° 46 he contains an in- patches - grey, cification may be distinguish frag- y up to 5% pyrite often cut off Rock generally lominantly carbonate z in remainder.	red basalt - 40-45° 460 10.8 he contains an in- 461 11.8 patches - grey, 462 12.7 cification may be distinguish fragdistinguish fragry up to 5% pyrite often cut off s. Rock generally lominantly carbonate z in remainder.
O 18.00 BRECCIATED BASALT  Grey to greenish grey, fre lava. This unit has been trusive. However, the bre this zone probably is not			2.73 - 12.95: Mafic chlori fractu	<pre>- very fine grained, y and only weakly .</pre>	<pre>- very fin and only</pre>	<pre>- very fin and only</pre>	<pre>- very fin and only</pre>	<pre>- very fin and only</pre>
greenish grey, fre nis unit has been However, the bre probably is not	18.							
			greenish grey nis unit has However, the probably is	green, fine grained d by a syenitic in- and silicification in lly related to the in-	green, fine grained d by a syenitic in- and silicification lly related to the i	green, fine grained 465 d by a syenitic in- and silicification in 467	green, fine grained 465 14.6 d by a syenitic in- 466 15.5 and silicification in 467 15.6	green, fine grained 46 d by a syenitic in-46 and silicification in 46 lly related to the in-46

SHEET NO. 2 OF 5

A 2cm clay so at 70° to the at 70° to the with up to 7' with up to 7' with up to 7' with up to 7' and an above 10° are pathized manual pathized manual pathized is so of 5-7° pyrite and uppenetrative alteration 10° atrongly fracture.	ed d
ALIZED ZONE  s composed of an upper strongly simber, a middle variably silicified bre pyrite contents average 5-7%, but are noted, particularly in yellowith process strongly silicified bre pyrite.  IFIED ZONE - UPPER PART  IFIED ZONE - UPPER PART  IFIED ZONE - UPPER PART  aphanitic brecciated lava. Fragmery angular and often can be re-as strongly silicified and contains rite. The breccia is frequently fw-cream colour - these zones carry up to 20% locally. Yellowish alterious into breccia fragments as eviden locally. The zone contains abund below 24.00 metres. It is modera ractured with quartz as a fracture tures are carbonated.	The breccia in the fractulocally at 45 y seam at 16.0 the core axis
zone is composed of an upper strongly sicia member, a middle variably silicified breeneral, pyrite contents average 5-7%, bue 10% are noted, particularly in yellowized (?) breccia.  SILICIFIED ZONE - UPPER PART  grey, aphanitic brecciated lava. Fragmmm - very angular and often can be re-ascia is strongly silicified and contains cia is strongly silicified and contains end up to 20% locally. Yellowish alttrative into breccia fragments as eviden ration locally. The zone contains abund seams below 24.00 metres. It is moderangly fractures are carbonated.	0 - 15.65: SYENITE - reddish, strongly intrusive, barren of pyrite 17.86-17.93 and 17.42-17.46
Dark grey, aphanitic brecciated lava. Fragm 1-10mm - very angular and often can be re-as Breccia is strongly silicified and contains of 5-7% pyrite. The breccia is frequently f to a yellow-cream colour - these zones carry pyrite and up to 20% locally. Yellowish alt penetrative into breccia fragments as eviden alteration locally. The zone contains abund ized seams below 24.00 metres. It is modera strongly fractured with quartz as a fracture Micro-fractures are carbonated.	The zone is composed of an upper strongly breccia member, a middle variably silicif brecciated member and a lower silicified In general, pyrite contents average 5-7%, above 10% are noted, particularly in yell pathized (?) breccia.
grey, aphanitic brecciated lava. Fragm mm - very angular and often can be re-as cia is strongly silicified and contains -7% pyrite. The breccia is frequently f yellow-cream colour - these zones carry te and up to 20% locally. Yellowish alttrative into breccia fragments as eviden ration locally. The zone contains abund seams below 24.00 metres. It is modera ngly fractured with quartz as a fracture o-fractures are carbonated.	31.55 MAIN SILICIFIED ZONE - UPPER
	grey, aphanitic brecciated lava. Fracia is strongly silicified and contain -7% pyrite. The breccia is frequently yellow-cream colour - these zones can te and up to 20% locally. Yellowish a trative into breccia fragments as evic ration locally. The zone contains abuseams below 24.00 metres. It is mode only fractured with quartz as a fractureractures are carbonated.

FOOTAGE					SAMPLE	••,		_		ASSAYS	
FROM			vo.	1023 1043	FROM	FOOT AGE	TOTAL	,3	,	02.TON	02.TOH
	20.00 - 21.00: 3-5% pyrite, trace	ce chalcopyrite.									
	21.00 - 21.35: minor 1-5mm chlo	chloritized seams.		-							
	24.00 - 27.00: rock is 25-30% chlo largest at 26.48-26 quartz and some car within quartz strin rock carries 5-7% p chloritized zones. strongly brecciated	30% chloritized seams - 26.48-26.90m. Abundant pink some carbonate in fractures tz stringers. Silicified s 5-7% pyrite vs. 1% in zones. All rock rypes ecciated.									
	25.85-26.15: 10	lost core.									
	26.33: pa ic	<pre>pale green, glassy, lent- icular vesicules - flow top?</pre>									
	27.00 - 28.00: strongly silicified 10% locally.	ied - 5-7% pyrite; up to									
	27.50: foliation at 40°	to core axis.									
	28.00 - 29.09: rock is 50% chlora pale grey, aphrintrusive at 31.0 intrusive at 31.0 is barren of sull to the core axis at 45.75-46.00m	chloritized in a zone near aphanitic and porphyritic 31.05-31.12. Intrusive sulphide and dips at 45-50° axis - corresponds to zone 00m in MC-83-24.	480 481 482 483		28. 29.003 31.003	1.00	1.00			0.01	
	29.09 - 31.55: becoming better silicified.	brecciated - strongly									
31.55 37.55	5 SILICIFIED BASALT							<del></del>			
	Grey to greenish-grey, moderately silicified well-foliated rock. The alternates with 1-3mm cream colour	ly brecciated, intensely The grey silicified rock our feldspathized(?)	484 485 5		31.553 32.553	4.55 55	1.00			0.05	

FOOTAGE			SA	SAMTE		
FROM TO	DESCRIPTION	Z 0	SULPH, FROM	ЦΙ	FOOT AGE	TOTAL
	bands. The zone carries 25-40% chloritized rock. The banding is concordant to the foliation. The foliation is likely a primary structural feature at 75° to the core axis. Chloritized rock carries 3-5% pyrite whereas silicified rock carries 5-9%.	488 488 490	35. 35.	55 35 55 36 15 37	. 1 55 7 55 55	1.00
	34.55 - 34.70: strongly chloritized shear zone at 75° to the core axis; mylonitic silicified fragments in strongly chloritized fault gouge.					
	37.05 - 37.55: 50% chloritized zones.		<u> </u>	<u>.                                    </u>		
37.55 42.12	MAIN SILICIFIED ZONE - LOWER PART					
	The zone is composed of grey intensely brecciated and strongly silicified rock with minor green-grey, fine grained weakly brecciated and chloritized rock. The zones are irregular and do not have a consistent relationship in terms of thickness or apparent orientation to the core axis. The chloritized zones are found in zones up to 10cm thickness accounting for 20-30% of the section. Parting is well developed.	491 493 495	38 40 41	75 38 75 39 75 40 75 41 44 42	.75 1.75 1.75 1.20	6600
42.12 45.20	BASALT					
	Dark green, fine grained, moderately to strongly fract- ured. Fracturing is tensional and is carbonate filled. Zone contains minor grey silicified breccia - less than 5% of section.	496 497 498	444	12 43 12 44 12 45	.12 1	800
45.20 46.16	LOWER MINERALIZED (SILICIFIED) ZONE	<u>.</u>				
	Dark greenish-grey, aphanitic and intensely silicified in highly brecciated zones. Fragments are extremely angular. The zone also contains appreciable (30-50%) chloritized and silicified, weakly brecciated rock. The degree of silicification is not as high as in this zone	499	4 <u>4</u> U1	20 46	.16 0	. 96

HOLE NO. MC-83-25

SHEET NO.

OF.

ANGRIDGE LIMITED - TORONTO - 366-1168 46.16 FROM FOOTAGE 60.96 70 oriented tensional fractures. The bedding is well developed locally: 50° at 48.7m., 75° at 53.5m, and, 40° at 55.2m. The rock carries pyrite up to 1%. Day 54.70 - 55.23: 60.96 metres Non-magnetic throughout. down-hole. The base of the hole is mod. carbonatized locally green chloritized zones appear to increase in number green, fine to medium grained with abundant randomly The zone starts at an intensely chloritized seam, cutting the core axis at 60°. The rock is typically medium SEDIMENIS trace to 2%. on sections to the east. grey-green, weakly silicified breccia END OF HOLE CASING PULLED DESCRIPTION Pyrite content also lower at is well-Dark z O 54.70 55.23 57.00 59.00 50.16 52.16 48.16 46.16 47.16 54.16 FROM SAMPLE 56.00 47.10 48.10 51.10 53.10 58.00 1.00 1.00 1.00 1.00 1.00 1.00 TOTAL **ASSAYS** 02 / TON ° **70** 

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AME OF	PROPERTY	MCDERMOTT
OLE NO.	Mc-83-26	LENGTH 91.65 meters
OCATION		
ATITUDE	7+75 E	DEPARTURE 0+40 S
LEVATION		AZIMUTH 3440 DIP -600
TARTED	07-07-83	10-07-83
FOOTAGE	GE	

EM, 6-1168

FOOTAGE	ald	HLNWIZY	AZIMUTH FOOTAGE	DIP	HLNWIZY
0	-60°				
91.44	-54 <sup>0</sup>				

AGE	DIP	AZIMUTH FOOTAGE	FOOTAGE	OIP	AZIMUTH
	-60°				
44	-54 <sup>0</sup>				

LOGGED BY A.W. WORKMAN REMARKS <u>BO CORE</u> Core split for assay.

				EM, 6-1168	<del></del>		<del></del>	. CIMITE	LANGRIDGL
FOOT	FROM	0	12.06			19.28			
r A G E	то	12.06	19.28			22.25			
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	7 0 2 -	OVERBURDEN	BASALT	ured omprise	lly unstructured with fine grained phases irreg- distributed. Minor silicification locally - e becomes hazy; perhaps related to weak brecciation s up to 1% pyrite as a fine dissemination. Below m, rock contains 1-3mm black chloritized blebs, chloritized micro-xenoliths of wall rock. Moder- fractured with carbonate in fractures. A trace of pyrite is noted locally in these fractures, along uartz and hematite. The lower contact is highly ble. A moderately silicified, vaguely textured t 19.20-19.28 seems appropriate.	BASALT  Dark green, fine to very fine grained with an aphanitic,	sen, line to very fine grained with an aphanitic, lized glassy top. The upper 0.5 m is amygdaloidal sicules squashed along a plane at 40 to the core of the core o	cia zones up to 3cm in width containing 1-2% pyrite. unit is highly fractured and 20-30% of the rock	is evidently controlled by a well developed ion; eg. 45° at 19.58.
	NO. Sui			510 512		ř	2-1-	oom	55 55 55 52 55 73 65 
	SULPH-								
S ×	FROM			2 2 4 7	16.06 17.06 18.06	9 • 2	2109		29. 28. 28. 28. 28. 28. 28.
, L	FOOT AGE			14.0	19.28	0.2	3.21. 22.22	400	26.28 27.28 28.28 30.30
	TOTAL				1.00				7111 00000
	æ	<u> </u>							
	ж								
<b>88</b>	OZ/TON			0.01 0.01 0.01	다 Race	Trace	Trace Trace 0.01	Trace Trace	Trace 0.01 0.01 0.01
<b>∀</b> \$	NOZ/TON				10 10 10				

LANGRIDGL LIMITED,

HOLE NO. MC-83-26HEET NO. 1 OF 8

ANGRIDGE LIMITED

-TORONTO -366-1168

HOLE NO. .

2 0f

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30.30 22.25 FROM FOOTAGE 30.30 49.02 70 chloritized or feldspathized. Alteration highlights the bedding. However, the laminations are only apparent where the sediments are 30.30 contents up to 20% are noted. Average content may be 5-7%. cutting this rock are bounded by yellowish reaction halos. Pyrite preferentially affected alternating Laminations. Quartz veins or alternately, moderately chloritized. Alteration has The uppermost part is grey-green and weakly to moderately silicified appears to be very finely laminated throughout on a 0.1-0.5mm scale Grey-green to purplish-grey, fine grained to aphanitic. The zone 26.74 - 26.81: Minor seams of silicified breccia locally.  $(45^{\circ})$  to the core axis at 26.00 m; 50-60° at 28.25 meters). 21.09 -24.00 - 25.61: Dark green, fine to very fine grained and well foliated/laminated NOTE MAIN SILICIFIED ZONE SEDIMENTS 21.12: The upper zone of "Transitionally Silicified Sediments" is approximately lom in thickness. and chloritized laminations. pale grey-green zone with a strongly brecciated abundant pale yellow to cream coloured intensely silicified breccia zones, 5-7% pyrite, 1% green clay seam - FAULT at 45-500 to the core core axis. yellow-cream coloured base - laminated at 550 to feldspathized(?) zones; 1-2% pyrite, pale grey chalcopyrite. speckles' - altered crystals. DESCRIPTION It is composed of cherty . O % SULPH 1063 37.75 39.75 35.75 36.75 34.70 32.70 35.50 33.70 40.75 38.75 FROM SAMPLE 39.75 38.75 36.75 35.75 35.50 34.70 33.70 40.75 **7** 1.00 1.00 1.00 TOTAL 0.01 **ASSAYS** 02 . TON 62 ₽

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HOLE NO. MC-83-26

SHEET NO. 3 OF 8

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10										
J 	30.70	31.60	32,15	33,15	34.25	35,50	35.95	36.25	38.20	40.00
	l w	l ω	l ω	l ω	l w	l ω	••	I 4	- 40	1
  -  -	1.60:	2.15:	6.25:	3.22:	4.35:	5.72:		0.00:	0.00:	40.50:
DESCRIPTION	purple-grey with yellowish reaction zones around quartz veins at 31.00, 31.10-31.20 and 31.30. Laminations at 40° to core axis. 3-5% pyrite.	weakly silicified, weakly chloritized.	intensely silicified and moderate to strong brecciation; may average 8% pyrite but ranges from 10-15% in the upper part to 1-3% at 35.00-36.30 increasing to 5-7% at 36.30-36.95 and 10-15% at 36.95.	quartz vein appears to mark a tectonic event - rock is broken into 2-5cm semirounded fractured fragments. Above this zone and below, the rock is intensely brecciated and more strongly silicified.	same as 33.15-33.22 m.	FAULT ZONE - large scale (2-5cm) frag- mentation of breccia with surrounding chloritized mylonitic gouge. At least 5cm of clay at 35.66 m - ground core makes interval uncertain.	minor chloritized fault.	sed. lamination becoming apparent, brecciation lowering to weak locally, silicification remains very strong.  36.30 - laminated at 45-500 to core zone from 36.95 to 38.20 carries 10-15% pyrite.	1-3% pyrite.	5-7% pyrite.
o.	611 612 613 614									
2 30LPH		_								
FROM	43.7 44.7 45.7 46.7									
$\sqcup \sqcap$	00000									
FOOT AGE	4.75 5.75 6.75 7.75									
TOTAL	11.000									
,										
02/100	Trace 0.01 Trace 0.005									
2										

NAME OF PROPERTY\_MCDERMOTT

SHEET NO. 4 OF

HOLE NO. MC-83-26

	49.02												FROM	700.70
	57.56												70	
This zone is co	VARIABLY SILICIFIED	48.75 - 49.02:	47.96 - 48.75:	47.92 - 47.96:	47.84:	44.73 - 47.84:	43.65 - 44.73:	43.00 - 43.65:	41.77 - 43.00:	41.35 - 41.77:	40.59 - 41.20:	40.50 - 41.35:		
composed of rocks that are essentially the overlying section. Degree of silicification	FIED SEDIMENTS	5-7% pyrite.	intensely brecciated; 1-2% pyrite, trace of chalcopyrite.	pink quartz vein - barren of pyrite.	2cm breccia seam carries 40% pyrite, marks top of a sheared chloritized zone, carries some mylonite.	intensely brecciated and strongly sili- cified; 3-5% pyrite, trace chalcopyrite - laminated locally at 45° to core axis.	<pre>10-20% chloritized seams - 5% pyrite, trace chalcopyrite - ends at a silici- fied seam indicating minor fault.</pre>	hematitic chloritized seams parallel to laminations - 50% of section, laminations at 40-45 to core axis.	vaguely laminated, strongly brecciated 42.70 - 450 to core axis.	less fractured, strongly brecciated and silicified, non-laminated - 5% pyrite.	abundant chloritized stringers across 0.75 m - fault at 40.79 with carbonate cemented breccia.	1-3% pyrite.		DESCRIPTION
						616						-	0	Γ
													10E8	
		_			-	47.75 48.50							FROM	
						75 48	<del></del>	<del>.</del>					11	
						0.50 20							TO TO	
						0.75 0.52							TOTAL	
													22	
٠														
						0.005	<del> </del>						02, TON	
						<u> </u>							02. TON	
													┼	l

LANGRIDGE LIMITED - TORONTO - 366-1168

SHEET NO. 5 OF 8

HOLE NO. MC-83-26

57.56 66.86 49.02 FROM (Continued FOOTAGE 57.56 7 ations. The rock is generally well parted along a SEDIMENT variable but generally related directly to degree of brecciation. The zone is cut by many green chloritized 55.95 - 56.00: 50.42 - 54.18: 49.02 - 50.42: lower pyrite contents. The rock is dark to medium 54.18 by silicifying fluids. becoming grey in silicified zones. Silicification is is much lower and, in general, this is mirrored in ly chloritized with very fine, often indistinct lamin-Dark to medium green, fine to very fine grained, strong-'patches' which probably reflect areas not penetrated 56.25: 57.56: 10% pyrite. medium to coarse grained, non-laminated; dark green 'bed' of sediment (?) contains 50% chloritized seams, strongly fractized with 1-3mm black chloritized glass shards; dips  $60^{\circ}$  to the core axis. seams may be along minor faults. 55.95 - laminations (?) at 40-50°. cut off small felsic stringers in core -10-15% chloritized seams which appear to ination or as 1-2mm striated cubes. 53.20 - laminations at  $40^{\circ}$  to core axis. micro-fractures within carbonate; 1-3% tured with carbonate cement. Quartz in cified fragments (clasts) - 50-60% below is very fine grained, strongly chlorisub-rounded fragments up to 2mm - matrix pyrite as a very fine grained dissemzone above 50.00 contains 30% pink silito the core axis. Non-magnetic. DESCRIPTION The lower contact is sharp at green 624 625 626 623 622 621 619 620 z O % SULPH 55.87 | 56.56 | 0.69 | 56.56 | 57.56 | 1.00 54.18 55.18 1.00 51.4252.421.00 52.4253.300.88 55.18 55.87 0.69 50.42 51.42 1.00 FROM SAMPLE FOOTAGE şį 0.005 0.005 0.005 Trace 0.02 0.005 Trace 0.03 ASSAYS 02, TON 02 TON

FOOTAGE				SAMPL	r				ASSAYS	
FROM TO	DESCRIPTION	ž 0	SULPH,	FROM	FOOTAGE TO	TOTAL	32		02 / TON	NO. 20
	leavage parallel to the laminations. Minor mod	SN	ກ ປາ	ע פע	0 & CT			_	0.005	
	59.70 meters. The rock is strongly carbonated along narrow fractures parallel to and cross-cutting the	629	6 0 0	5 5 5	60.56	2000			2000	
		w		56	ω : 5				Trace	
_	60.75: wispy laminations at 40-45° to core axis	ω		9 0	4. 1				Trace	
	62.85: wispy laminations at 45° to core axis.	w			6.0	ως			0.02	
	63.25 - 63.63: medium grained with up to 3% pyrite.									
	63.63 - 63.89: moderately to strongly silicified.									
	63.89 - 64.85: well laminated, brecciated locally, 1% pyrite throughout.									
	64.85 - 65.28: several 2-3cm pink quartz veins with minor carbonate - no pyrite.						<u> </u>			
66.86 68.14	SILICIFIED SEDIMENT		·							
	Green-grey, very fine grained, moderately to strongly silicified, moderately brecciated locally - generally weak brecciation as indicated by a generally well laminated fabric. Silicification is best developed in alternating laminations - reflection of original composition. 3-5% pyrite. Up to 8% locally in strongest silicified zones.	636 637	67	50	67.50 68.14	0.64 0.64			0.02	
68.14 86.90	SEDIMENTS			_						
	Light to medium green, fine to medium grained; very thin (0.5-1.0mm) laminations are indistinct but sharp locally. Rock is partially carbonatized with carbonate patches feathering out along the laminations. Numerous pink silicified zones up to 8cm thickness are irregularly distributed throughout zone - cherty sediments?	6644 644 644 644 644 644 644 644 644 64	722 732	 14444 4444	69.14 70.14 71.14 72.14 73.14 74.14	1.000			Trace Trace 0.01 Trace Trace Trace	

NAME OF PROPERTY\_\_\_\_\_MCDERMOTT

HOLE NO. MC-83-26

SHEET NO. 7 OF 8

FOOT	FOOTAGE	DESCRIPTION	z o	- i	1 106	Å l	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE A
FROM	70			z o	₩	₩	IDES FROM	IDES FROM TO	IDES FROM	IDES FROM TO	IDES FROM TO TOTAL	IDES FROM TO TOTAL "
68.14 86.90 (Continued)	86.90 inued)	Most are brecciated, and may contain higher pyrite c tents than average; eg. 3% versus l% average.	con-	0 0 0 4 4 4	0 0 0 4 4 4	- 644 74.1 645 75.1	- 644 74.14 75. 645 75.14 76.	- 644 74.14 75.14 1. 645 75.14 76.14 1.	- 644 74.14 75.14 1.0 645 75.14 76.14 1.0	- 644 74.14 75.14 1.0 645 75.14 76.14 1.0	- 644 74.14 75.14 1.0 645 75.14 76.14 1.0	- 644 74.14 75.14 1.00 645 75.14 76.14 1.00
		73.47: laminations at 50° to core axis.  83.85: laminations at 50° to core axis.  83.91 - 85.91: possible basalt flow - brecciated, sil. and 86.45: laminations at 45° to core axis.		647 648 649 650 651	64 64 65 65 65	647 648 648 81.1 649 83.1 epid 650 85.1 10c. 651 86.1	647 79.14 80. 648 81.14 82. 649 83.14 84. 650 85.14 86. 10c. 651 86.14 86.	647 79.14 80.14 1.648 81.14 82.14 1.649 83.14 84.14 1.650 85.14 86.14 1.651 86.14 86.90 0.	647 79.14 80.14 648 81.14 82.14 84.14 650 85.14 86.14 86.90 651 86.14 86.90	647 79.14 80.14 1.0 648 81.14 82.14 1.0 649 83.14 84.14 1.0 epid 650 85.14 86.14 1.0 10c. 651 86.14 86.90 0.7	647 79.14 80.14 1.0 648 81.14 82.14 1.0 649 83.14 84.14 1.0 epid 650 85.14 86.14 1.0 10c. 651 86.14 86.90 0.7	647 79.14 80.14 1.00 Trac 648 81.14 82.14 1.00 0.01 649 83.14 84.14 1.00 0.01 650 85.14 86.14 1.00 0.01 651 86.14 86.90 0.76
		73.80: fracture surfaces strongly hematized	ф	<u>.</u>		<u>.</u>		<u>.</u>	ž.		ž.	ž.
		86.80 - 86.90: very angular fragments in a carbonate cement.	tte	tt e	tte	ite	ite	ît e	ite	te	tte	ite
86.90	87.90	BASALT										
		Dark green, fine grained with a 10cm brecciated uppontant zone. Fragments are very angular, 1-8mm in Matrix to fragments is essentially quartz. Upper contact cuts the core axis at 20-25°. Up to 1% very for disseminated pyrite. Interior of flow is strongly brecciated without rotation of fragments. Chlorite epidote found in tight fractures of breccia. Non-magnetic.	per n size con- finel,	size on- inely	ze 65 1y	ze 652 86.9 1y d	ze 652 86.90 87.	ze 652 86.90 87.90 1.	ze 652 86.90 87.90 1 1y d	ze 652 86.90 87.90 1.	ze 652 86.90 87.90 1.	ze 652 86.90 87.90 1.
87.90	89.25	SEDIMENTS										
		Medium green, fine grained, thinly laminated locally, well parted parallel to laminations. Angle of lamin-ations is highly variable from 40-70° to the core axis	ly, in- axis.	Œ	<b>6</b> 5	653 87.	87.90 89.	653 87.90 89 s.	87.90 89.25	87.90 89.25 1.3 8.	87.90 89.25 1.3 8.	87.90 89.25 1.3 8.
LIMITED —	91.65	green, fine grained to aphanitic, chloriti	<b>.</b>			00 00 00 00 00 00 00 00 00 00 00 00 00	65.4 89.25 90.25	65.4 89.25 90.25	654 89.25 90.25 1.0	654 89.25 90.25 1.0	654 89.25 90.25 1.0	654 89.25 90.25 1.00 0.0
		Scm flow top breccia marks top of unit. Fly vesicular from 89.40 to 89.60 m. Interiw is finely brecciated. A second flow-top by breccia at 90.54-90.62. Matrix to brecciated. Zone 91.00-91.30 is vesicular, and possibled.	8 1. S 1.	52 F.	8 1.8 0.55	is 655 90.2	is 655 90.25 90. 656 90.95 91.	is 655 90.25 90 656 90.95 91	is 655 90.25 90.95 0	is 655 90.25 90.95 0.7 656 90.95 91.65 0.7	is 655 90.25 90.95 0.7 90.95 91.65 0.7	is 655 90.25 90.95 0.7 90.95 91.65 0.7

HOLE NO. MC-83-26 NAME OF PROPERTY\_\_\_\_

MCDERMOTT

SHEET NO. 8 OF 8

LANGRIDGE LIMITED - TORONTO - 366-1168	T O	<b></b>
	-   *	FOOTAGE
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END OF HOLE		DES
bill Commonweal Commo		DESCRIPTION
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	70	FOOTAGE
	TOTAL	
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	02/TON	ASSAYS
	02 TON	1
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NAME OF	NAME OF PROPERTY	MCDERMOTT
HOLM NO.	HOLE NO. MC-83-27	LENGTH 61.26 meters
LOCATION		
LATITUDE	LATITUDE <u>7+75 E</u>	DEPARTURE 0+30 S
ELEVATION.		AZIMUTH 344° DIP -45°
STARTED_	STARTED 10-06-83	-06-83

FOOTAGE	DIP	AZIMUTH	AZIMUTH FOOTAGE	DIP	HTUMIZA
0	-45°				
60.96 -42°	-42 <sup>0</sup>				

m	ald	AZIMUTH FOOTAGE	FOOTAGE	910	HTUMIZA
1	-45°				
٠. ا	-42°				
_					

HOLE NO. MC-83-27 SHEET NO.

LOGGED BY A.W. WORKMAN REMARKS BQ CORE
Whole core sent
for assay.

	0	12.8								18.7
1	12.	0 18.							45.	
	8	75							30	0.0 2 2 2
D M S C 2 - 7 - 0 2	OVERBURDEN	SEDIMENTS	Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition - that is, re-crystallization of quartz-rich layers.	13.35: laminations at 30° to core axis.	13.75: laminations at 45-50° to core axis.	14.70: laminations at 25-35° to core axis.	80 - 17.50: abundan	<ul> <li>18.75: strongly chloritized sec silicified breccia.</li> </ul>	MINERALIZED ZONE	The zone is composed of a variably silicified upper member, a strongly silicified and intensely brecciated middle member, and a more variably silicified and brecciated lower member. Pyrite contents directly reflect degree of silicification but are highest in yellow-grey
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			115. 8 8 8 8							
PQ			00000						<u>.</u>	
OTAGE			3.80 4.80 5.80 7.80 8.75							
			1.00 1.00 1.00 0.95							
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S>XPLM > SS>YS	ESCRIPTION  NO. SUPPH FROM TO TOTAL % % OZ/TON	OVERBURDEN  DESCRIPTION  NO. SULPH-FOOTAGE % % 02/TON C	OVERBURDEN  DESCRIPTION  NO. SUPPH FOOTAGE % % 02/TON  SEDIMENTS  ASSAN  ASSAN  OVERBURDEN  OVERBURDEN  OVERBURDEN	OVERBURDEN  SEDIMENTS  SEDIMENTS  C  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflect-ing original composition — that is, re-crystallization  OVERBURDEN  NO. SUPPH FROM TO TOTAL % % 02/TON  NO. SUPPH FROM TO TOTAL % % 02/TON  OO.01	OVERBURDEN  SEDIMENTS  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has 536 15.80 1.00 0.01 0.01 preferentially attacked certain layers perhaps reflect-sing original composition - that is, re-crystallization 538 17.80 18.75 0.95 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0	OVERBURDEN  SEDIMENTS  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation has slicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition — that is, re-crystallization of quartz-rich layers.  13.35: laminations at 45-50° to core axis.	OVERBURDEN  SEDIMENTS  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers perhaps reflecting original composition — that is, re-crystallization 538  13.80  12.80  13.80  13.80  14.80  15.80  15.80  15.80  16.80  17.80  18.75  18.80  17.80  18.75  19.95  10.00  0.01	OVERBURDEN  SEDIMENTS  Dark green to grey-green, fine to very fine grained and thinly laminated (0.5-1.0mm scale). Laminations are very irregular locally reflecting soft sediment deformation. The unit is silicified locally. Alteration has preferentially attacked certain layers pethaps reflectory of quartz-rich layers.  13.35: laminations at 30° to core axis.  14.70: laminations at 25-35° to core axis.  16.80 - 17.50: abundant quartz-carbonate veining.	OVERBURDEN         DESCRIPTION         NO.         SAMPLE         ASAN           OVERBURDEN         OVERBURDEN         NO.         BESTIMENTS         NO.         PROTAGE         NO.         NO.         PROTAGE         NO.         OZ/TON         OZ/TON         OZ/TON         NO.         PROTAGE         NO.         NO.         PROTAGE         NO.         OZ/TON         OZ/TON         OZ/TON         NO.         DESCRIPTION         NO.         NO.         DESCRIPTION         NO.         NO.         NO.         DESCRIPTION         NO.	OVERBURDEN

The rock is pikksh-green to grey-green, fine grained with 40 - 50% grey slitisfied zones up to 10 cm. in thickness. Slitisfication occurs in botalized brocks zones. The remainder of the section is moderately chloritized. Some pink feldpathization is associated with slicified zones. The remainder of the section is moderately chloritized. Some pink feldpathization is associated with slicified zones. The rock is well laminated throughout at 30 - 50° to the core axis. Pyrite averages less than 1% with 1 - 2%  Zone begins at a very sharp contact - probably a fault at 50° to the core axis. Pyrite districts of the core axis. Pyrite averages less than 1% with 1 - 2%  Zone begins at a very sharp contact - probably a fault at 50° to the core axis. Pyrite districts of the core axis. Pyrite averages less than 1% with 1 - 2%  Zone begins at a very sharp contact - probably a fault at 50° to the core axis. Pyrite districts of t	20.29	18.75	
ICIPIED SEDIMENT  40 - 50% grey silicified zones up thickness. Silicification occurs bracking the sacciazones. The remainder of smoderately chloritized. Some fixed with silicified six well laminated throughout at 30 - 50° to the core axis. Pyrite averages less than 1% with 1 - 2% in silicified zones.  N SILICIPIED ZONE than core axis. Pyrite averages less than 1% with 1 - 2% in silicified zones.  N SILICIPIED ZONE the core axis. Displacement likely minor. 542 1-2 20.29 21.29 1.00 to the core axis. Displacement likely minor. 542 1-2 21.29 22.29 1.00 liminators of strongly silicified sones.  N SILICIPIED ZONE than 1% with 1 - 2% in the core axis. Displacement likely minor. 542 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 22.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 23.29 1.00 liminators axis. Displacement likely minor. 543 1-2 21.29 23.29 1.00 liminators axis. Displacement likely minor. 544 1-3 26.00 26.73 0.03 liminators axis. Displacement likely minor. 543 1-2 21.25 26.00 0.05 0.01 liminators axis. Displacement likely minor. 544 1-3 26.00 26.73 0.03 0.01 liminators axis. Displacement likely minor. 543 1-2 21.25 0.00 0.01 0.01 0.01 0.01 0.01 0.01 0.0	39. 64	20.29	
NO. TOUR PROM FOOTAGE TO TO TO TO TO TO TO TO TO TO TO TO TO	thickness. Silicified zones up thickness. Silicification occurs breccia zones. The remainder of s moderately chloritized. Some hization is associated with slicified : strongly chloritized. The rock is well laminated throughout at 30 - 50° to the core axis. Pyrite averages less than 1% with 1 - 2% in silicified zones.  N SILICIFIED ZONE  It a very sharp contact - probably a to the core axis. Displacement likely bluish-grey, aphanitic to very fine mm. in size. Very strongly silicified ary laminations visible only locally, 20.50: 45 - 50° to core axis). A intrudes the sequence at 21.77 - 22.0 enitic veinlets cut at 21.23 - 21.25, and 22.72 - 22.77. It is dark red, rongly brecciated and highly siliceous rongly brecciated and highly siliceous FAULT ZONE-1 cm. clay and mylonity seam - surrounding rock is strongly fractured with chlorite in opening fractured with chlorite in opening fractured silicified rock brecciated feldspathized rock av.=2-3% clark grey silicified rock brecciated feldspathized rock	1	DESCRIPTION
18.75 19.52 0.77 0.02  19.52 20.29 0.77 0.01  -2 20.29 21.29 1.00 -2 21.29 22.29 1.00 -3 22.29 23.29 1.00 1 23.29 24.29 1.00 1 24.29 25.15 0.86 1 25.15 26.00 0.85 -3 26.00 26.73 0.73 26.73 27.46 0.73  -5 26.73 27.46 0.73 0.14		Z	z O
18.75 19.52 0.77 0.02 19.52 20.29 0.77 0.01 19.52 20.29 1.00 20.29 21.29 1.00 21.29 22.29 1.00 21.29 23.29 1.00 21.29 23.29 1.00 21.29 23.29 1.00 23.29 24.29 1.00 24.29 25.15 0.86 25.15 26.00 0.85 26.73 27.46 0.73 26.73 27.46 0.73	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1063	% SULPI
5 19.52 0.77 0.02 2 20.29 0.77 0.02 2 20.29 1.00 9 21.29 1.00 9 23.29 1.00 9 23.29 1.00 9 25.15 0.86 5 26.00 0.85 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0	α ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο		
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LANGRIDGE LIMITED - TORONTO - 366-1168

	FROM	FOOT
	70	TAGE
27.46 - 29.85: variable feldspathization - mostly along fracture systems, laminated at 50-60  29.85 - 30.30: strongly fractured fault zone - chloritized planes at 30.25 m.  30.30 - 30.75: INTRUSIVE - light grey matrix to 1-2 mm. dark green, foliated choritized mafic minerals at 60° to the core axis  30.75 - 34.77: coarsely brecciated with angular feldspathization, intensely silicified 3-5% pyrite, 7% locally. Lower 10 cm.  is magnetic.  dark green, medium to coarse grained intrusive. Carries 20-30% pink angular to sub-angular. fragments of syenitic (?) wall rock. Moderately magnetic. Corresponds to 49.3-50.5 in hole 83-26. Carries 1% pyrite, trace of chalcopyrite locally. Lower contact sharp at 65 to core axis.  36.13 - 38.03: same as 30.75-34.77 - 35 pyrite, irregularly feldspathized are dark green, groundmass is pinkish-green biotite?  - now obloritized  38.54 - 39.64: same as 30.75-34.77 - coarsely brecciated with mylonitic phases. local feldspathization, 1-3% pyrite		DESCRIPTION
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1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	IDES	
27.46 28.46 28.46 29.46 29.46 30.30 30.30 30.75 31.75 31.75 32.75 33.75 34.77 35.45 36.13 37.13 38.03 38.54 38.54 39.64	FROM TO	SAMPLE
1.00 0.84 1.00 0.51 1.00	TOTAL	
	ور	
	38	
0.00 H H H O O O O O O H H H O O O O O O O	02/TON	ASSAYS
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SHEET NO. 4 of 6

HOLE NO. Md-83-27 NAME OF PROPERTY MCDermott SHEET NO.

5 of 6

## SILICIFIED SEDIMENTS    SILICIFIED SEDIMENTS   SCREEN TOWN   STATE	FOOTAGE					SAMPLE	М			<b>&gt;</b>	ASSAYS	
Green to greenish-grey, variably brecciated and silicified. Some moderate to strong silicification locally: 46.90-46.95; 47.39-47.48; 47.59-47.62; 47.70-47.75 and 48.30-48.33. Total silicified content is 16%.  SEDIMENTS  Medium to dark green fine to medium grained, laminated and locally graded bedding. Coarser grained sections may be greywacke. Finer sections are argillitic. Below 50.00 m, the rock becomes better laminated. Some soft sediment deformation is noted locally. Silicification has occurred locally along preferred laminations. 3cm pink quartz vein - barren of pyrite. 48.59: medium to coarse grained, graded bedding tops up. Average grain size at 48.38 is 0.2mm, vs 1.0mm at 48.65; grain size rang from 0.1 to 3mm.  50.00-57.85: well laminated but irregularly developed brecord parted parallel to the laminations indistinct the zone is very well laminated and well parted parallel to the laminations: 70 core at 51.20m. Some tensional fracturin across laminations. Weakly silicified at 10cally. 1% pyrite.	ZO S	<u></u>	DESCRIPTION		SULPH.	$\Box$	TOOTAGE	TOTAL	24		02/TON	02/TON
Green to greenish-grey, variably brecciated and silicified. Some moderate to strong silicification locally: 46.90-46.95; 47.39-47.48; 47.59-47.62; 47.70-47.75 and 48.30-48.33. Total silicified content is 16%.  SEDIMENTS  Medium to dark green fine to medium grained, laminated and locally graded bedding. Coarser grained sections may be greywacke. Finer sections are argillitic. Some soft sediment deformation is noted locally. Silicification has occurred locally along preferred laminations.  3cm pink quartz vein - barren of pyrite. 48.59: 48.38-48.65: medium to coarse grained, graded bedding tops up. Average grain size at 48.38 is 0.2mm, vs 1.0mm at 48.65; grain size rang from 0.1 to 3mm.  50.00-57.85: well laminated but irregularly developed brecciation makes orientation indistinct the zone is very well laminated and well parted parallel to the laminations: 70 core at 51.20m. Some tensional fractum across laminations. Weakly silicified at 52.05-52.70. Moderately carbonatized	6.85 4		ILICIFIED									
Medium to dark green fine to medium grained, laminated and locally graded bedding. Coarser grained sections may be greywacke. Finer sections are argillitic. Below 50.00 m, the rock becomes better laminated. Some soft sediment deformation is noted locally. Silicification has occurred locally along preferred laminations.  3cm pink quartz vein - barren of pyrite. 48.59: medium to coarse grained, graded bedding tops up. Average grain size at 48.38 is 0.2mm, vs 1.0mm at 48.65; grain size rang from 0.1 to 3mm.  50.00-57.85: well laminated but irregularly developed brecciation makes orientation indistinct - 70% to core axis at 50.50m. Below 51.0 the zone is very well laminated and well parted parallel to the laminations: 70 core at 51.20m. Some tensional fracturin across laminations. Weakly silicified at 52.05-52.70. Moderately carbonatized locally. 1% pyrite.			en to greenish-grey, variably brecciated and icified. Some moderate to strong silicifica ally: 46.90-46.95; 47.39-47.48; 47.59-47.62 70-47.75 and 48.30-48.33. Total silicified 16%.	·	<u></u>							
locally graded bedding. Coarser grained, laminated locally graded bedding. Coarser grained sections be greywacke. Finer sections are argillitic. ow 50.00 m, the rock becomes better laminated. e soft sediment deformation is noted locally. icification has occurred locally along preferred inations.  3cm pink quartz vein - barren of pyrite. 38-48.65: medium to coarse grained, graded bedding tops up. Average grain size at 48.38 is 0.2mm, vs 1.0mm at 48.65; grain size rang from 0.1 to 3mm.  00-57.85: well laminated but irregularly developed brecciation makes orientation indistinct - 70% to core axis at 50.50m. Below 51.0 the zone is very well laminated and well parted parallel to the laminations: 70 core at 51.20m. Some tensional fracturin across laminations. Weakly silicified at 52.05-52.70. Moderately carbonatized locally. 1% pyrite.	.38 57.	œ	SEDIMENTS		<u></u>							
cification has occurred locally along preferred nations.  9: 3cm pink quartz vein - barren of pyrite. 8-48.65: medium to coarse grained, graded bedding tops up. Average grain size at 48.38 is 0.2mm, vs 1.0mm at 48.65; grain size rang from 0.1 to 3mm.  0-57.85: well laminated but irregularly developed brecciation makes orientation indistinct - 70% to core axis at 50.50m. Below 51.0 the zone is very well laminated and well parted parallel to the laminations: 70 core at 51.20m. Some tensional fracturin across laminations. Weakly silicified at 52.05-52.70. Moderately carbonatized locally. 1% pyrite.			<pre>ium to dark green fine to medium grained, locally graded bedding. Coarser grained be greywacke. Finer sections are argilli ow 50.00 m, the rock becomes better lamina e soft sediment deformation is noted local</pre>									
			cification has occurred locally along preferred nations.  9: 8-48.65: medium to coarse grained, graded bedding tops up. Average grain size at 48.38 is 0.2mm, vs 1.0mm at 48.65; grain size rang from 0.1 to 3mm.  0-57.85: well laminated but irregularly developed brecciation makes orientation indistinct - 70% to core axis at 50.50m. Below 51.0 the zone is very well laminated and well parted parallel to the laminations: 70 core at 51.20m. Some tensional fracturin across laminations. Weakly silicified at 52.05-52.70. Moderately carbonatized locally. 1% pyrite.									

6 of 6

MCDERMOTT

- SHEET NO.

LANGRIDGE LIMITED - TORONTO - 366-1168			60.		5 8	FROM	-
			. 97		. 75	Ĭ	FOOTAGE
	61,26		61.26		60.97	10	AGE
	END OF HOLE - CASING PULLED	Dark green, fine to very fine grained, non-laminated, weakly to moderately fractured with carbonate cement. Moderately chloritized.  Rock type questionable.	BASALT ?	Medium green, fine grained, thinly laminated. Well parted. Moderately carbonatized. 59.80 - laminations at 60 to core axis 60.97 - laminations at 60 to core axis	SEDIMENT		DESCRIPTION
						, z	
						10ES	
						FROM	SAMPLE
						FOOTAGE	
	_		_		<del>-</del>	TOTAL	
						32	
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						02 / TON	ASSATS
						02.70N	

DIAMOND DRILL RECORD

STARTED 13-06-83 ELEVATION LATITUDE \_ HOLW NO. LOCATION HOLE NO. MC-83-28 7+62.5 E MCDERMOTT LENGTH 61.26 m . DEPARTURE 0+28 m S FINISHED 15-06-83

FOOTAGE	DIP	AZIMUTH	AZIMUTH FOOTAGE	DIP	AZIMUTH
0	-45°				
61.26	-42°				

HOLE NO. MC-83-28HEET NO. 1 OF 5

REMARKS BQ CORE
Whole core sent
for assay.

LOGGED BY A.W. WORKMAN

				1168	EM. 6-	<u>.                                    </u>				D,	IMITE	LANGRIDGE L
F 0 0	FROM	0	14.04						19.25		19.2	
7 <b>∧</b> 6	ТО	14.	4 19.25						51.		5 21.70	
m		04							08			O P- 01 F3
D M W C R - T T - O Z	3	OVERBURDEN	SEDIMENT	Dark to medium green, fine to medium grained and general-	ell laminated. Above 16.00 m rock is non-laminated highly chloritized and medium grained. Sediments y 1% pyrite with 2% locally.	17.00: laminations at 70° to core axis.	17.75 - 18.00: very convolute laminations at 45-50° - soft sediment deformation.	19.00: laminations at 40° to core axis.	MAIN MINERALIZED ZONE	The zone is composed of a variably silicified upper member. Silicification is preferentially located along certain sets of laminations. This member is coarsely brecciated. The main central member is strongly brecciated and intensely silicified. A lower member, below 48.85 meters, is composed of alternating silicified and chloritized zones.	SILICIFIED SEDIMENTS	The rock is yellow-green to cream coloured, often grey and fine grained to aphanitic. It is well laminated but individual beds or sets of laminations have been brecciated - rip up clasts? Material filling voids is
	NO.	-		œ	5 6 6 6	90	<del>-</del>			<del></del>		591 592
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s >	FROM			4	15.0	9						20.
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m	FOOT AGE			•	7 0 0 0 4							21.04
	TOTAL				0000	00						0.66
	.e.											
	<i>3</i> %											
> S	OZ/TON			•	0.01	0.01				<del></del>		0.005
>	<b>1</b> 3			0	000	0.0						28
۲ س	NOT/TON	<u> </u>		<del></del>	P 2 P	<u> </u>						<u> </u>

FOOTAG	ř				•	
E C	8		NO. % SULPH	FOOTAGE TO TOTAL	39	% 02/TON
		strongly chloritized. The zone, with the exception of the breccia matrix, is strongly silicified. A sense of the laminations is lost at 21.20 meters, where the rock becomes strongly brecciated and very highly silicified, but with 50% chloritized seams.				
		20.80: laminations at 30° to core axis.				
21.70		MAIN SILICIFIED ZONE				
_						
		y to purple-grey with minor yellow-grey felds- (?) zones. Aphanitic, intensely brecciated. No	93 1-2 21. 94 1-3 22.	0 22.70 1.0		0.0
		of laminations except vaguely at 24.4 m (60° to	95 5-7 23.	0 24.70 1.0		<u> </u>
<u> </u>		Larger frag-	97 5-7 25.	0 26.70 1.0		<u> </u>
		can often be re-assembled - some up to several cm.	98 <mark>8-10</mark> 26.	0 27.70 1.0		_
		racturing is moderate to strong. Some fractures in	99 7-9 27.	0 28.70 1.0		· -
		re-dates brecciation. Several noted after brecciation. Frac-	57 1-3 29.	0 30.70 1.0		
		are silica filled and often have cream coloured	58 1-3 30.	0 31.70 1.0		<del>.</del>
		ually associate	60 5 32.	70 34.70 1.00		000
		ntense fracturing and	63 3 35.	0 36.70 1.0		
		·	64 3-5 36. 65 3-5 37.	0 37.45 0.7 5 38.30 0.7		00
		22.90: 3cm syenitic zone identical to dykes in other DDH.				
		24.00 - 24.97: feldspathized - yellowish, averaging 8-10% pyrite with 15% maximum.				·
		24.97 - 26.82: purple-grey, 5% pyrite.				
		24.50 - 31.30: brecciation diminishes and a sense of laminations returns: 60 to core axis at	:_			

DESCRIPTION  26.82 - 27.75: as at 24.00-24.97 m - average 10% up to 15% locally. Trace of visible in a 3mm accumulation of pyrite grandly. Trace of visible in a 3mm accumulation of pyrite grandly.  28.00: possible laminations at 50° to compare the set of the content drops sharply to 1.  31.30 - 31.90: FAULT ZONE - green chloritized set of the set of the content drops sharply to 1.  31.32 m is surrounded by strongly the dark of the content drops sharply to 1.  31.32 m is surrounded by strongly the dark of the content drops sharply to 1.  31.32 m is surrounded by strongly the dark of the content drops strongly chloritized and the content drops. Fraction of the content drops possible laminations at 4.  31.30 - 31.90: INTRUSIVE - medium grained, dark of the content drops.  32.62 - 38.30: irregular feldspathization along in the content drops.  33.30 - 39.38: 40% dark green chloritized seams in the content drops.  34.85 - 39.38: 40% dark green chloritized seams in the content drops.  35.62 - 38.30: irregular feldspathization along in the content drops.  44.75 - 45.54: INTRUSIVE - dark green, fine to me drained.  44.75 - 45.54: INTRUSIVE - dark green, fine to me drained.  45.54 - 47.50: irregular feldspathization along in the content drops.  45.54 - 47.50: irregular feldspathization along in the content drops.	DESCRIPTION  26.82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  31.30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecciated rock. Fractures strongly chloritized.  34.85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized - carries pink fragments - possibly a mylonite zone?  35.62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicified.  39.38 - 44.75: as at 35.62-38.30 m; minor 1-5mm quartz chief (av. 2%) with up to 1% chief pyrite (av. 2%) with up to 1% chief pyrite (av. 2%) with up to 1% chief pyrite (av. 2%) with up to 1% chief pyrite locally.  44.75 - 45.54: INTRUSIVE - dark green, fine to medium grained, carries pinkangular fragments up to 8mm in size - correlates to similar zone in DDH #26 and #27. Magnetic. 676 irregular feldspathization along fracture systems - strongly brecciated and silicified, possible laminations at 47.54 m at 65° to core axis.	DESCRIPTION  26.82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of yeishie gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  31.30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecciated crock. Fractures strongly chloritized.  34.85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized - carries pink fragments - possibly a mylonite zone?  35.62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicified.  38.30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  39.38 - 44.75: as at 35.62-38.30 m; minor 1-5mm quartz veining with carbonate in micro-fractures 669 2 1-5% pyrite (av. 2%) with up to 1% 668 3-5 2 2 668 3-5 2 670 2 1-5% pyrite locally.  44.75 - 45.54: INTRUSIVE - dark green, fine to medium grained, carries pinkangular fragments up to 8mm in size - correlates to sinilar zone in DDH #26 and #27. Magnetic. 677 1-2 675	26.82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite goralis.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  31.30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecciated rock. Fractures strongly chloritized.  34.85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized - carries pink fragments - possibly a mylonite zone?  35.62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicified.  39.38 - 44.75: as at 35.62-38.30 m; minor 1-5mm quartz veining with carbonate in micor-fractures for 2 chalcopyrite locally.  44.75 - 45.54: INTRUSIVE - dark green, fine to medium grained, carries pink fragments - for 2 chalcopyrite locally.  45.54 - 47.50: irregular feldspathization along fracture systems - strongly brecciated and silicified, possible laminations at 47.54 m at 65° to core axis.	26.82 - 27.75; as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  31.30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brectated rock. Fractures strongly chloritized.  34.85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized - carries pink fragments - possibly a mylonite zone?  35.62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicitied.  38.30 - 39.38: 40% dark green chloritized seams 1-2% 667 3-5 39.38 pyrite, trace chalcopyrite.  40.75: as at 35.62-38.30 m minor 1-5mm quartz chalcopyrite locally.  41.75 - 45.54: INTRUSIVE - dark green, fine to medium grained, carries pink angular fragments 679 2 42.38 chalcopyrite locally.  45.54 - 47.50: irregular feldspathization along fracture green in DDH #26 and #27. Magnetic. 677 1-2 47.58 at 65° to core axis.	DESCRIPTION  26.82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  31.30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brectated rock. Fractures strongly chloritized - medium grained, dark green, chloritized - medium grained, dark green, chloritized - medium grained, dark green, chloritized seams 1-2% possibly a mylonite zone?  35.62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicified.  38.30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  39.38 - 44.75: as at 35.62-38.30 m; minor 1-5mm quartz chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) at 38.30 chalcopyrite (av. 2%) at 38	26.82 - 27.75; as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of risible gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  31.30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecotated rock. Fractures strongly chloritized.  34.85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized and brecotated rock. Fractures strongly chloritized.  34.85 - 39.30: irregular feldspathization along fracture systems - strongly brecotated and silicified.  38.30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  44.75: as at 35.62-38.30 m; minor 1-5mm quartz chalcopyrite (av. 28) with up to 1% chalcopyrite (av. 28) with up to 1% chalcopyrite (av. 28) with up to 1% chalcopyrite (av. 28) with up to 1% chalcopyrite (av. 28) with up to 1% chalcopyrite (av. 28) with up to 1% chalcopyrite (av. 29) with up to 1% chalcopyr	DESCRIPTION  26.82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  31.30 - 31.90: pyrite content drops sharply to 1-3%.  31.30 - 31.90: pyrite content drops sharply to 1-3%.  31.30 - 31.90: pyrite content drops sharply to 1-3%.  32.50: irregular feldspathization along fracture systems - strongly brecolated and slicaliar content pyrite, trace chalcopyrite.  33.62 - 38.30: irregular feldspathization along fractures for 3-5 39.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.38 1.0 for 3-5 40.38 40.3	DESCRIPTION  26.82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite dand brecolited rock. Fractures strongly fractured and brecolited rock. Fractures strongly chloritized.  28.53: pyrite a mylonite zone?  34.85 - 35.62: INTRUSTUE - medium grained, dark green, chloritized - carries pink fragments - possibly a mylonite zone?  35.62 - 38.30: irregular feldspathization along fracture systems - strongly brecolated and silicified.  38.30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  38.30 - 39.38: 40.5 as. at. 35.62-38.30 m, minor 1-5mm quartz containing with carbonate in micro-fractures 670 2 43.38 40.38 1.00 1.5% pyrite (av. 2%) with up to 1% 673 25.30.38 1.00 68 3-5 40.38 41.65 0.68 1.5% pyrite locally.  44.75 - 45.54: INTRUSTUE - dark green, fine to medium grained, carries pinkangular fragments by the containing with carbonates in micro-fracture systems - strongly brecciated and s71.2 44.75 44.75 44.75 0.69 1.00 0.68 1.00 0.68 1.00 0.68 1.00 0.68 1.00 0.68 1.00 0.68 0.68 0.68 0.68 0.68 0.68 0.68 0	26.82 - 27.75; as at 24.00-24.97 m - average 10% pyrite, up to 13% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  28.00: possible laminations at 50° to core axis.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.53: pyrite content drops sharply to 1-3%.  28.54: pyrite content drops sharply to 1-3%.  28.55: pyrite content drops sharply to 1-3%.  28.56: pyrite content drops sharply to 1-3%.  28.56: pyrite content drops sharply to 1-3%.  28.56: pyrite content drops sharply to 1-3%.  28.56: pyrite content drops sharply to 1-3%.  28.56: pyrite content drops sharply to 1-3%.  28.56: pyrite content drops sharply to 1-3%.  28.56: pyrite content drops sharply fractures strongly breociated and ship content sharply breociated and ship content sharply breociated and ship content sharply breociated and ship content sharply breociated and ship content sharply breociated and ship content sharply breociated and ship content sharply breociated and ship content sharply breociated and ship content sharply breociated and ship contents of the pyrite content sharply breociated and ship contents of the pyrite content sharply breociated and ship contents of the pyrite contents by brecciated and ship contents of the pyrite contents of the pyri	FROM										
DESCRIPTION  82 - 27.75: as at 24.00-24.97 m - average 10% up to 15% locally. Trace of visibin a 3mm accumulation of pyrite growth and the possible laminations at 50° to colons at 30° to colons at 30° to colons at 30° to colons at 31.32 m is surrounded by strongly tured and brecciated rock. Fractistrongly chloritized.  85 - 35.62: INTRUSIVE - medium grained, dark chloritized - carries pink fragment possibly a mylonite zone?  62 - 38.30: irregular feldspathization along iture systems - strongly brecciated silicified.  30 - 39.38: 40% dark green chloritized seams in yrite, trace chalcopyrite.  38 - 44.75: as at 35.62-38.30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 30 m; minor 1-5mm over the colons at 40 minor 1 micro-file to me grained, carries pink angular fragger the colons at 40 minor 1	DESCRIPTION  82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  90: possible laminations at 50° to core axis.  13.32 m is surrounded by strongly fractured and bracciated rock. Fractures strongly chloritized.  1.72 m is surrounded by strongly fractured and bracciated rock. Fractures strongly chloritized.  1.73 m is surrounded by strongly fractured strongly chloritized.  1.75 m m m m m m m m m m m m m m m m m m m	DESCRIPTION  No. 1444, 100-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  100: possible laminations at 50° to core axis.  100: possible laminations at 50° to core axis.  101: pyrite content drops sharply to 1-3%.  102: pyrite content drops sharply to 1-3%.  103: pyrite content drops sharply to 1-3%.  104: pyrite dand brecciated rock. Fractures strongly chloritized.  105: pyrite - medium grained, dark green, chloritized - carries plnk fragments - possibly a mylonite zone?  106: pyrite systems - strongly brecciated and silicified.  107: possibly a mylonite zone?  108: as at 35.62-38.30 m; minor 1-5mm quartz pyrite, trace chalcopyrite.  109: pyrite (av. 2%) with up to 1% chalcopyrite (av. 2%) with up to 1% chalcopyrite locally.  109: pyrite dark green, fine to medium grained, carries pinkangular fragments up to 8mm in size - correlates to similar zone in DDH #26 and #27. Magnetic.  109: pyrite systems - strongly brecciated and silicified; possible laminations at 47.54 m at 65° to core axis.	DESCRIPTION  82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 11% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  90: possible laminations at 50° to core axis.  90: pyrite content drops sharply to 1-3%.  30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecciated rock. Fractures strongly chloritized.  85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized - carries pink fragments - possibly a mylonite zone?  62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicified.  30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  30 - 44.75: as at 35.62-38.30 m; minor 1-5mm quartz veining with carbonate in micro-fractures 670 2 41.35 chalcopyrite locally.  175 - 45.54: INTRUSIVE - dark green, fine to medium grained, carries pinkangular fragments 671 2 44.0 673 Tr. 44.5 5 up to 8mm in size - correlates to simi-lar zone in DDH #26 and #27. Magnetic.  54 - 47.50: irregular feldspathization along fracture systems - strongly brecciated and silicified, possible laminations at 47.54 m at 65° to core axis.	DESCRIPTION  82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  900: possible laminations at 50° to core axis.  9yrite content drops sharply to 1-3%.  30 - 31.90: FAUIT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecciated rock. Fractures strongly chloritized - carries pink fragments - possibly a mylonite zone?  62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and silicified.  30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  85 - 44.75: as at 35.62-38.30 m; minor 1-5mm quartz 668 3-5 40.38 (668 3-5 40.38 (67) 3-5 39.3	Description  82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible yold in a 3mm accumulation of pyrite grains.  90: possible laminations at 50° to core axis.  9yrite content drops sharply to 1-3%.  30 - 31.90: FAULT ZONE - green chloritized seam at 31.32 m is surrounded by strongly fractured and brecclated rock. Fractures strongly chloritized.  85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized - carries pink fragments - possibly a mylonite zone?  62 - 38.30: irregular feldspathization along fracture systems - strongly brecclated and silicified.  30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  86 - 44.75: as at 35.62-38.30 m, minor 1-5mm quartz chalcopyrite locally.  10 - 45.54: INTRUSIVE - dark green, fine to medium grained, carries pink fragments - chalcopyrite locally.  11 - 45.54: INTRUSIVE - dark green, fine to medium grained, carries pink fanguart for the property of the carries pink fragments - chalcopyrite locally.  12 - 43.84 40.38 41.38 42	DESCRIPTION  82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of yisible gold in a 3mm accumulation of pyrite grains.  90: possible laminations at 50° to core axis.  92: PAULT ZONE - green chloritized seams at 31.32 m is surrounded by strongly fractures strongly chloritized - carries pink fragments - chloritized - carries pink fragments - possibly a mylonite zone?  62 - 38.30: irregular feldspathization along fracture systems - strongly brecciated and pyrite, trace chalcopyrite.  85 - 35.62: INTRUSIVE - medium grained, dark green, chloritized seams 1-2% 666 1-2 38.30 irregular feldspathization along fracture systems - strongly brecciated and 567 3-5 39.38 40.38 1.0 5 1.	DESCRIPTION  Description  100: up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  100: possible laminations at 50° to core axis.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  113: pyrite content drops sharply to 1-3%.  114: pyrite content drops sharply to 1-3%.  115: pyrite content drops sharply to 1-3%.  115: pyrite content drops sharply to 1-3%.  116: pyrite content drops sharply to 1-3%.  117: possibly a mylonite zone?  128: pyrite content drops sharply to 1-3%.  129: pyrite, trace chalcopyrite.  120: possibly a mylonite zone?  120: possibly a mylonite zone?  121: possibly a mylonite zone?  122: possibly a mylonite zone?  123: pyrite, trace chalcopyrite.  124: pyrite content drops sharply to 1-3%.  125: pyrite, trace chalcopyrite.  126: pyrite pyrite content drops sharply brecotated and slip.  126: pyrite content drops sharply to 1-2 drops drops sharply brecotated and slip.  126: pyrite pyrite locally.  127: pyrite pyr	DESCRIPTION  B2 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  O0: possible laminations at 50° to core axis.  pyrite content drops sharply to 1-3%.  FAULT ZONE - green chloritized seam at 31.22 m is surrounded by strongly fractured and brecolated rock. Fractures strongly chloritized.  FINTRUSIVE - medium grained, dark green, chloritized and prociated rock. Fractures strongly chloritized - carries pink fragments - possibly a mylonite zone?  62 - 38.30: irregular feldspathization along fracture systems - strongly brecolated and silicified.  30 - 39.38: 40% dark green chloritized seams 1-2% pyrite, trace chalcopyrite.  66 3-5 44.75: as at 35.238.30 m; minor 1-5mm quartz 66 2 41.38 41.38 1.00 1-5% pyrite (av. 2%) with up to 1% 66 3-5 40.38 41.38 1.00 1-5% pyrite locally. With up to 1% 673 12 44.06 44.75 45.54 0.79 1.75 45.54 1NTRUSIVE - dark green, fine to medium 673 12 44.06 44.75 0.98 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.75	DESCRIPTION  82 - 27.75: as at 24.00-24.97 m - average 10% pyrite, up to 15% locally. Trace of visible gold in a 3mm accumulation of pyrite grains.  900: possible laminations at 50° to core axis.  possible laminations at 50° to core axis.  pyrite content drops sharply to 1-3%.  30 - 31.90: FAULT ZONE - green chloritized seam at 31.2 m is surrounded by strongly fractured and brecotated rock. Fractures chloritized - carries plnk fragments - possibly a mylonite zone?  62 - 38.30: irregular feldspathization along fracture systems - strongly brecotated and silicified.  85 - 35.62: INTRUSTUE - medium grained, dark green, possibly a mylonite zone?  62 - 38.30: irregular feldspathization along fracture systems - strongly brecotated and silicified;  85 - 35.62: INTRUSTUE - tace chalcopyrite.  86 - 39.38: 40% dark green chloritized seams 1-2% pyrite (av. 2) with up to 1% chalcopyrite (av.	70										
DESCRIPTION  1.00-24.97 m - average 10%  18 locally. Trace of visible  18 locally. Trace of visible  18 locally. Trace of visible  18 locally. Trace of visible  19 laminations at 50° to color  10 locally to 1.  10 locally to 1.  11 locally to 1.  12 medium grained, dark of terms - strongly brecciated  12 mylonite zone?  12 medium grained, dark of terms - strongly brecciated  13 locally brecciated  14 locally.  15 locally.  16 locally.  17 feldspathization along in the locally.  18 carries pinkangular fragram in size - correlates to me in size - correlates to me in size - correlates to me in size - correlated and possible laminations at 4.  19 corre axis.	DESCRIPTION  1. 00-24.97 m - average 10% pyrite, % locally. Trace of visible gold accumulation of pyrite grains.  2. laminations at 50° to core axis.  2. laminations at 50° to core axis.  2. ontent drops sharply to 1-3%.  2. ontent drops sharply to 1-3%.  2. ontent drops sharply to 1-3%.  2. ontent drops sharply to 1-3%.  2. oreciated rock. Fractures of chloritized.  2. ontentized.  2. ontent drops sharply to 1-3%.  2. ontent drops sharply to 1-3%.  2. ontent drops sharply to 1-3%.  2. ontent drops sharply fractures of chloritized.  2. ontentized.  2. ontent drops sharply fractures of chalcopyrite.  3. ontent drops sharply brecciated and defined and silipossible laminations at 47.54 m  3. ontent drops pyrite defined and silipossible laminations at 47.54 m  3. ontent drops pyrite defined and silipossible laminations at 47.54 m  3. ontent drops pyrite defined and silipossible laminations at 47.54 m  3. ontent drops pyrite defined and silipossible laminations at 47.54 m	DESCRIPTION  1.00-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 201d 10 accumulation of pyrite grains.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  3 laminations at 50° to core axis.  3 laminations at 50° to core axis.  4 laminations at 50° to core axis.  4 laminations at 50° to core axis.  4 laminations at 47.54 m  5 laminations at 47.54 m	DESCRIPTION  1.00-24.97 m - average 10% pyrite, locally. Trace of visible gold accumulation of pyrite grains.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  3 laminations at 50° to core axis.  4 laminations at 50° to core axis.  4 laminations at 50° to core axis.  4 laminations at 47.54 m  4 locally.  4 locally.  4 locally.  4 locally.  5	DESCRIPTION  1.00-24.97 m - average 10% pyrite, locally. Trace of visible gold accumulation of pyrite grains.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  2 laminations at 50° to core axis.  3 laminations at 50° to core axis.  4 laminations at 50° to core axis.  4 laminations at 50° to core axis.  4 laminations at 47.54 m  4 laminations at 47.54 m  4 locally.  4 locally.  4 locally.  4 locally.  5 locally.	Description  1.00-24.97 m - average 10% pyrite, 10cally. Trace of visible gold accumulation of pyrite grains.  2. laminations at 50° to core axis.  2. laminations at 50° to core axis.  2. sontent drops sharply to 1-3%.  2. medium grained, dark green, 2. chloritized seam at is surrounded by strongly fraction correlated rock. Fractures 7. chloritized.  2. chloritized.  2. chloritized seams 1-2% a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  2. a mylonite zone?  3. 30 m; minor 1-5mm quartz 669 3-5 39.38 40.38	DESCRIPTION  1.00-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite 100-3%.  NE - preen chloritized seam at is surrounded by strongly fraccided - carries pink fragments - a mylonite zone?  E - medium grained, dark green, 2ed - carries pink fragments - a mylonite zone?  E - medium grained, dark green, 2ed - carries pink fragments - a mylonite zone?  E - medium grained, dark green, 2ed - carries pink fragments 666 1-2 38.30 39.38 1.0 668 3-5 40.38 1.0 68 3-5 40.38 1.	DESCRIPTION  1.00-24.97 m - average 10% pyrite, 100-24.97 m - average 10% pyrite, 201d, 100-24.97 m - average 10% pyrite, 201d, 100-24.97 m - average 10% pyrite, 201d,	OBSCRIPTION  1.00-24.97 m - average 10% pyrite, % locally. Trace of visible gold accumulation of pyrite grains.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 50° to core axis.  1 laminations at 47.54 m	DESCRIPTION  NO. 100-24.97 m - average 10% pyrite, % locally. Trace of visible gold accommunation of pyrite grains.    laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 50° to core axis.   laminations at 47.54 m		.82 - 27.75	28.00:	53	30 - 31.90	85 - 35.62	5.62 - 38.	30 - 39.38	.38 - 44.75	4.75 - 45.54	5.54 - 47.50
	66666666666666666666666666666666666666	600 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10ES FROM 10ES F	NO. TABLER, FROM 10EES	TOUTAGE  TOU	TANUM FOOTAGE TO TOTAGE TO	TOTAGE  TOTAGE  TOTAL	NO. 1055 FROM TO TOTAL  1055 FROM TO TOTAL  1056 TOTAL  1057 TOTAL	TOUTAGE  1055  1066  1067  1068  106	DESCRIPTION	at 24.00-24.97 m - average 10% to 15% locally. Trace of visible a 3mm accumulation of pyrite gr	laminations at 50° to core	content drops sharply to 1-3%	ZONE - green chloritized seam at m is surrounded by strongly frac and brecciated rock. Fractures gly chloritized.	E - medium grained, dark gre zed - carries pink fragments a mylonite zone?	ldspathization along fr - strongly brecciated	dark green chloritized seams 1-2 ite, trace chalcopyrite.	: 35.62-38.30 m; minor 1-5mm quartz ing with carbonate in micro-fracture pyrite (av. 2%) with up to 1% copyrite locally.	TRUSIVE - dark green, fine to wined, carries pinkangular fr to 8mm in size - correlates c zone in DDH #26 and #27. M	r feldspathization along i - strongly brecciated and possible laminations at 4; o core axis.

HOLE NO.	ZAME
Š	9
MC-83-28	NAME OF PROPERTY
	KMOTT

SHEET NO.

4 OF 5

FOOTAGE	36	DESCRIPTION			SAMPL				ASSAYS	
FROM	70		<b>N</b> 0.	% SULPH	FROM	FOOTAGE	TOTAL	 ود	02/TON	02 TON
		47.50 - 47.98: dark green chloritized zone, coarse grained sediment or mylonite? Grain size l-4mm (av. l-2 mm). Black chloritized grains may have been biotite INTRUSIVE? Non-magnetic.	-							
		47.98 - 48.85: strongly silicified and brecciated.						 _		
48.85 5	51.80	SILICIFIED SEDIMENTS			_			 		
		The zone is composed of an alternating sequence of dark green chloritized rock and grey, silicified and brecciated rock. Chloritized rock is often sheared. Silicified rock carries 2-5% pyrite.								
		48.85 - 49.28: chloritized, very weakly silicified.	678		44. 0 00 0 00 0 U1	4 R	00	 	000	
		49.28 - 50.18: variably silicified, 70% chloritized and weakly sheared.	ω -		0.8	51.8		 		
		50.18 - 50.60: strongly silicified.								
1168		50.60 - 51.30: chloritized zone.						 		
366-		51.30 - 51.80: moderately silicified, weakly brecciated	•		<u>.</u>					
51.80	61.26	SEDIMENTS								
ED-TORO	<del></del>	an to grey-green, fine to very fine grained ly well laminated throughout. Moderately l. Carries 1-3% pyrite as a very fine dis-	6666 888 4284	444 0000	52.80 54.80	55.80	1.00	 	0000	
E LIMITE		ome localized silici- ons above 60.0 m in	0 00 00 0	1 1 1	4000	765	. 0 7 6	 ,		
NGRIDG		54.80 - 56.14: zone of pink and white carbonate vein- ing - minor silicified zone at 55.09-	$\infty \infty \alpha$	1	9.1	9.1	000	 	000	
L								 		

MCDERMOTT

SHEET NO. L

5 OF 5

LANGRIDGE LIMITED - TORONTO - 366-1168		<del></del>
	FROM	FOO
	10	FOOTAGE
56.59 - 56.72: 59.90: 61.26		1 .
tween 55.42 and 56.14 with up to 10% pyrite. Contains 50% carbonate veining. ground core - strongly chloritized possibly a fault zone.  Laminations at 55° to core axis.  END OF HOLE CASING PULLED		DESCRIPTION
0 0 0	Ş	_
	1063	% SULPH.
60.14 60.71	FROM	SAMPLE
60.1460.71	10	FOOTAGE
0.55 55	TOTAL	
	-	
•	,	
日 片 な な の の の	02, TON	ASSAYS
	02 TON	7
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_	83		STARTED_
	AZIMUTH 344 DIP 45		ELEVATION
	S 9	7+50 E	LATITUDE 7+50 E
_			LOCATION
	MC-83-29 LENGTH 61.26 meters	Mc-83-2	HOLE NO.
	MCDERMOTT	OF PROPERTY	Z A M O T

FOOTAGE	DIP	AZIMUTH	AZIMUTH FOOTAGE	٩١٥	AZIMUTH
0	-45°				
61.26	-39 <sup>0</sup>				

HOLE NO. MC-83-29 SHEET NO. 1 OF 6

REMARKS BQ CORE
Whole core sent
for assay.

LOGGED BY A.W. WORKMAN

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_   X   0
	19.00
0020.	
	Dark to medium gree sub-angular fragmes with individual lar clasts. Original quartzitic and argifractured - quartz Weakly silicified to strongly chlorit
<b>3</b>	19.3
<u> − TORONTO                                </u>	The the rock by a hori
20.	15 21.30 SILICIFIED
LANGRIDGE LIN	The rocl

							21.30		FROM	3
				_			0 42.58		70	
28.30 -	27.75 - :	25.10 - 3	24.75 - 3	21.30 - 3	controlled. honey coloure feldspathized Pyrite occurs cubes and as it fills smal and minor cha	Dark grey locally - Very fine becoming he silicified present lo	MAIN S	becomes i chloritiz as silici		
30.50:	28.30:	27.75:	25.10:	24.10:	coloured hypathized zon pathized zon as 5mm and as 5mm lls small filmor chalcon	to bluiperhaps grained better bed throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout throughout the bluiperhaps and throughout the bluiperhaps and throughout the bluiperhaps and throughout the bluiperhaps and the bluiperhaps are the bluiperhaps and the bluiperhaps are the bluiperhaps and the bluiperhaps are t	ILICIFIED	intensely zized groun cification		
light grey fragments up to lcm in a dark grey matrix - strongly brecciated, strongly silicified; 3-5% pyrite.	rock is 50% feldspathized to a cream or honey colour - 5-7% pyrite locally.	rock becoming moderately brecciated; some vague laminations at 60-70 to the core axis.	more strongly fractured, chlorite in very tight fracture systems with halos of feldspathization penetrating into rock.	brecciated weakly. Some sense of lamination at 50-65 to core axis; 2-4% pyrite.	nt fracture systems often have 5-10mm alos. Pyrite content averages 2-4%, nes usually contain more pyrite - 5-7%. a very fine dissemination, as 1-2mm aggregates of grains. Occasionally ractures - often associated with chlorite pyrite.	eam to honey coloured t of local feldspathization. ic, moderately brecciated ith depth. Very strongly gue sense of lamination is zation seems to be fracture	ZONE	omes intensely brecciated and the percentage of oritized groundmass diminishes. The laminations fade silicification increases.		DESCRIPTION
				<del></del>	701 702 703 706		റ 		Z O	
		41	5 2 2 2 2 2 2	-7 -6	1 1 1 1 1 1 5 1	444000			DES T	140 1110
		1.53	, , , , , , , , , , , , , , , , , , ,	7 <b>4</b> 4 2 9 7 5 7 4 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	27.75 28.30 29.65 29.65 20.50	16.10 16.10			FROM	5
		N +	, , , , , , , , , , , , , , , , , , ,	, u 4 u , u u u , u u u	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1765432 1765432 1765433 17660000			10	AT A C F
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•					0000000				30	
	<del>-</del> ·		28889	5915	2020061	522888			0Z, TON G	-
									02 TON	١

SHEET NO. 3 OF 6

FOOTAG								
70	30.50 - 31.42:	31.26:	31.42 - 31.85:	31.85 - 32.23;	32.23 - 32.93:	32.93 - 34.53;	34.53 - 36.43:	36.43 - 38.00:
DESCRIPTION	brecciation decreases to moderate, rock is well laminated, highly silicified, 5-7% pyrite; laminations at 75-85° to core axis at 30.60 m - individual laminations are brecciated along bedding to produce blocky 1-2mm x 5-6mm clasts.	very well laminated at $60-65^{O}$ to core axis.	highly brecciated, intensely silicified; 1-3% pyrite.	breccia is very finely re-brecciated on a 1-5mm scale and enclosed in a dark green chloritized groundmass, the zone is 70-80% clasts and may be an INTRUSIVE - upper contact is sharp at 80°; the lower contact is sharp at 40°; a 7cm fragment of sheared chloritized breccia is noted at 31.92-31.99 m - sheared at 70-80° to core axis.	breccia; same as 31.42-31.85 m.	cream coloured feldspathized; moderately brecciated in upper 30cm becoming laminated at 33.23 m - 65-75 to core axis at 33.40 m; 30-40° at 34.35 m. Pyrite content 5-7%, up to 2% chalcopyrite.	well laminated, dark grey, very highly silicified, bedding at 55° to 65° throughout, 1-3% pyrite, 1% chalcopyrite	moderately to highly brecciated, pos- sibly feldspathized weakly, highly sil-
х о.							•	
<u> </u>						<del></del>		
SAMPLE	<u> </u>							
AGE		<del></del>				<del> </del>		
			<del></del>		<del></del> -		·····	
	······································							
ASSAYS						<del></del>		
AYS								

SHEET NO. 4 OF 6

mina 60-6	39.63: laminated with highly brecciated sections - 60-65 to core axis at 38.50 m. 41.43: same as 36.43-38.00 m. 41.98: weakly to moderately feldspathized, up	39.63: laminated with highly brecciated sections - 60-650 to core axis at 38.50 m.  41.43: same as 36.43-38.00 m.  41.98: weakly to moderately feldspathized, up
ed with highly brecciated sections to moderately feldspathized, up	ith highly brecciated sections core axis at 38.50 m.  43-38.00 m.  oderately feldspathized, up	ith highly brecciated sections core axis at 38.50 m.  43-38.00 m.  oderately feldspathized, up
SAMPLE FROM FOOTAGE TO TOTAL	SAMPLE FOOTAGE 10ES FROM TO TOTAL 3	SAMPLE FROM TO TOTAL 3
FROM TO TOTAL	FROM TO TOTAL ".	FROM TO TOTAL 3. 3.
FROM TO TOTAL	FROM TO TOTAL "	FROM TO TOTAL 3. 3.
FOOTAGE TOTAL	FOOTAGE TOTAL 3	POOTAGE 707AL 3
107AL	107AL 3	107AL 3
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## DIAMOND DRILL RECORD

HOLE NO. MC-83-29 SHI

FOOTAGE	1			SA	SAMPLE	ľ		
1 1	DESCRIPTION	Ž O	% SULPH	FROM	Щ	OOTAGE TO	+-1"1	TOTAL
45.11 50.65	SILICIFIED SEDIMENTS							
	Medium to dark green, fine to medium grained, occasionally coarse grained, locally silicified sediments. Moderately chloritized. Silicified zones are usually intervals of less than 15cm which are moderately to strongly brecciated. These zones are grey in colour and contain 1-3% pyrite above the average of less than 1%.	722 723 724 725 726 727	~~ <u>~~</u> ~	000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100076U		400000
	ers.	729	<b>–</b> –	1.	<u>ω                                    </u>			<u></u>
	45.55 - 46.23: begins at a sharp 45° contact - possible fault, rock is strongly brecciated and weakly to strongly silicified.							<del></del>
	46.23 - 50.65: generally chloritized but contains 13.5% silicified breccia bands; eg. 46.52-47.00; 47.14-47.24; 49.00-49.25; 49.55-49.85; and 50.60-50.65. Laminated below 47.60. (75° at 49.15 and 75-80° at 50.80 m).				<del> </del>			
52.23 53.63	LOWER MINERALIZED ZONE							
	Dark greenish-grey, often blue-grey, moderately to strongly brecciated, very highly silicified in 60% of section, especially 52.35-52.78 m. Laminated at 65-75° to core axis (eg. 53.50 m.). Below 52.78 m, silicification has penetrated selected laminations perhaps because of original composition. Carries 2-3% pyrite.	730 731	N N I I W W	52.	9 N 2 U	ωΝ	. 6 9	• •
53.63 61.26	SEDIMENTS							
	Dark to light green, fine to medium grained, well parted. Weakly to moderately well laminated. Moderately carbonatized locally. An 8cm pink carbonate vein is found at 55.67-55.75 m dipping 60 to core axis - carries 1% chalcopyrite.	732 733 734 735 736		000000			2000	• • • • •

NAME OF PROPERTY\_\_\_\_MCDERMOTT HOLE NO.\_MC-83-29\_\_\_\_\_

						TO TO	FO
						70	FOOTAGE
	61.26	60.66 - 61.26:	60.37 - 60.41:	58.90:	56.02:		<b>!</b>
CASING PULLED	END OF HOLE	beginning at a strongly chloritized seam texture is different, non-laminated, possibly coarser non-structured sediment - clasts up to 3mm.	quartz vein, 1% pyrite.	laminated at 85-90° to core axis.	laminated at 60° to core axis.		DESCRIPTION
						NO. SULPH FOOTAGE	SAMPL
						3 3 02/TON 02 TON	ASSAYS

EM. 6-1168

FOOTAGE	OIP	AZIMUTH FOOTAGE	FOOTAGE	DIP	HTUMIZA
0	-50°				
69.22 -49	-49				

HOLE NO. MC-83-3 CHEET NO. 1 OF 8

REMARKS BQ Core

Whole core sent for assay.

LOGGED BY A.W. Workman, S. Trueland

FOOTAGE  PROM TO  DESCRIPTION  DESCRIPTION  DESCRIPTION  O 17.42 OVERBURDEN  O 17.42 OVERBURDEN  Dark green, fine to medium grained, well laminated with selective carbonatization along certain laminations. This highlights the fine 0.5mm scale bedding. Moderated blanes parallel to laminations. Some l-Zem flexures in laminations indicate soft sediment deformation. Contact with underlying silicified sediment deformation. Contact laminations. Zone contains up to 1m cross-cut laminations. Zone contains up to 1m cross-cut laminations. Zone contains up to 1m cross-cut laminations. Zone contains at 50-60 to core axis.  19.15: rippled laminations at 45° to core axis.  SAMPLE AS ANPLE ASSAURAL ASS
THISTED TOTAL  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  NO. 5 TROM TO TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 1 TROM  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TRACE  TOTAL W Z OZYTOM  NO. 1 18.42 19.42 1.00  O.01  TRACE  TRACE  TRACE  TOTAL W Z OZYTOM  NO. 5 TROM TOTAL W Z OZYTOM  NO. 1 18.42 19.42 1.00  O.01  TRACE  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TRACE  TOTAL W Z OZYTOM  TRACE  TOTAL W Z OZYTOM  TRACE  TOTAL W Z OZYTOM  TRACE  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM  TOTAL W Z OZYTOM
DESCRIPTION  DESCRIPTION  DESCRIPTION  NO. SORTH PETER  NO. SORTH PETER AND PLE  A \$ 50.71 AND PLE  NO. SORTH PETER AND P
DESCRIPTION    SAMPLE   ASSAN   POTTAGE   WITH   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   POTTAGE   W.   PROM   TO   TOTAL   W.   POTTAGE   W.   PROM   TO   TOTAL   W.   PROM   TOTAL   W.   PROM   TO   TOTAL   W.   PROM
NO. SHEEN FROM TO TOTAL % % OZ/TON  NO. SHEEN FROM TO TOTAL % % OZ/TON  NO. SHEEN FROM TO TOTAL % % OZ/TON  O.O1  BLY 738 1 18.42 19.42 1.00  Trace  Ot 739 1 19.42 20.55 1.13  Trace  ot na.
SAMPLE ASSAN    SOUTAGE
FROM TO TOTAL % % 02/TON  FROM TO TOTAL % % 02/TON  17.42 18.42 1.00 0.01  18.42 19.42 1.00 Trace  19.42 20.55 1.13 Trace
FOOTAGE
ASSA AGE TOTAL % % 02/TON 0.01 42 1.00 Trace 55 1.13 Trace
1.00   0.01 1.00   0.01 1.13   Trace
A S S A  W OZ/TON  Trace  Trace
A S S A  O . Ol  Trace  Trace
Oz/TON Trace Trace
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OZ/TON
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LANGRIDGE LIMITED,

SHEET NO. 2 OF 8

						20.55 4	FROM	FOOTA
						19.65	70	AGE
	22.32 - 25.32:	21.67 - 22.32:	21.25 - 21.67:	20.55 - 21.25:	Grey to purple-grey, generally laminated structure. Local zo feldspathization. Put is always higher ly silicified throug ciation.	MAIN SILICIFIED		
23.00: laminations at 40-45° to core axi 24.00: increasing feldspathization.	purple-grey, very finely brecciated with 1-2% hematite in very narrow (less than 0.1mm) parallel seams. 3-5% pyrite as very fine dissemination and as 2-4mm clots of crystals.	cream coloured feldspathized rock, feld-spathization introduced along fractures. Pyrite content is 8-10% with up to 12% locally. Well laminated at 45 to the core axis.	mylonitic fault zone - green strongly chloritized and foliated at 45-50 to the core axis.	grey, very highly silcified, locally feldspathized, coarsely brecciated with 2-4cm angular fragments; some very tight chloritized fractures. 2-3% pyrite throughout.	-grey, aphanitic to very fine grained; nated but intense brecciation often masks cal zones of yellow to cream coloured on. Pyrite content is variable (2-15%) higher in feldspathized rock. Very strong throughout regardless of degree of brec-	ZONE		DESCRIPTION
<u>5.</u>		744	742	C			z o	П
		7-9		740 1-3 7418-10 Tr. cpy			IDES	
		24.32	22.32	20.55			FROM	SAMPL
		25.32	•	21.50			FOOT AGE	<b>"</b>
		1.00		0.95		<u> </u>	707AL	
							30	
		Trace	Trace	Trace			02/TON	ASSAYS
							02 TOH	

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FROM	70	25.32 - 28.22:	DESCRIPTION  of greater than 50% fel	thizatio	SAMPL  NO. 35ULPH, FROM  10ES FROM  745 10-15 25.32
		5.32 - 28.22	of greater than 50% feld g fracture systems which brecciation event. Well lly (eg. 25.50:lamination ore axis). Laminations cistinguished even in brecseness of brecciation. 1 o 20% locally.	745 746 747	10-15 25.32 26. 10-15 26.32 27. 8-10 27.32 28.
		25.85 - 26.03:	brecciated intrusive(?), strongly chlor- itized microfracturing, pinkish-green colour, 1% pyrite.	<u>·</u>	
		28.22 - 29.22:	grey with 10% cream coloured patches, moderately to strongly laminated (40-50° to core axis at 28.50). Light coloured feldspathized(?) patches contain up to 20% pyrite - zone averages 8-10%.	748	8-10 28.32 29.
		29.22 - 30.54:		749	10-15 29.32 30.04 8-10 30.04 30.87
		28.82 - 28.90:	chloritized mylonitic seam at 75-80° to core axis - small fault.		
		30.54 - 33.57:	strongly laminated locally and weakly brecciated - individual laminations are broken with little subsequent rotation. Bedding measured at 30.55 and 31.55 at 40 to core axis. Carries 1-2% pyrite, up to 4% locally. Chloritized fault plane at 35-40 to core axis at 31.87-31.90. Some laminations are chloritized	751 752 753	1-2 30.87 31. 3-5 31.87 32. 1-2 32.87 33.

SHEET NO
4
OF 8

FOOTAGE					SAMPLE	) E	
FROM TO			, z 0	3 SULPH	FROM	FOOTAGE	101AL
		and hematitic - probably originally argillitic (3-5% of section). Below 32.00 m, rock is very pink almost appearing syenitic.					
	33.00 - 33.57:	l% chalcopyrite in chloritized fractures					<del></del> ,.
	33.57 - 34.52:	dark green, medium to coarse grained INTRUSIVE, moderately chloritized, carries red siliceous fragments up to l.5cm - 25% of rock volume. Weakly magnetic, weakly foliated at 55° to coreaxis.	754	-	33.57	34.52	52 0.95
	34.52 - 35.55:	creamy yellow intensely brecciated and silicified rock. Hematite fragments are present in top 20cm. Fault or break within top 20cm of interval parallel to core axis. 34.84-35.05 - gap in core possible fault zone. Contact with purple hue rock at 35.55 is at 18 to core axis. 15% pyrite content.	755	15 %	34.52	ω 	55 1.03
	35.55 - 37.15:	interval of alternating creamy yellow   silicified rock within intensely brec-	756	7-10	7-1035.55	36.35	5 0.80
		ciated and silicified purple hue rock. Creamy yellow zones make up 30% of interval. Purple hue rock is brecciated with cream coloured infill. No lamination. Pyrite content 15% within cream zones and 5% within purple hue rock. Average amount is approximately 7-10%. Zone ends at 3cm quartz vein.	757	7-10	7-1036.35	37.1	15 0.80
	37.15 - 42.45:	ue slight	758		37.15	38.1	15 1.00
		licified rock with lamina core axis. Within the in are zones of cream colour			38.15	39.15	

LANGRIDGE LIMITED - TORONTO - 366-1168

HOLE NO. MC-83-30

SHEET NO.

5 OF 8

FOOTAGE	AGE					SAMPLE	Ļ				ASSAYS		
FROM	70			2 0	% SULPH,	FROM	FOOT AGE	10101	ş.	•	02/TON	02 TON	
				760		39,15	40.15	1.00			0.05		
			is more intensely brecciated than purple hue rock.	761		40.15	41.15	1.00			0.06		
			37.40 - 37.65: interval of brecciated silicified pink (felds-pathic?) material.	762		41.15	42.45	1.30			0.04		
		42.45 - 43.15:	mylonitic fault zone. Medium to light green, fine to medium grained rock with	763	0	42.45	43.15	0.70			0.02		
			cified fragme	•									
		43.15 - 44.22:	n T	764	ъ 5	43.15 44 measured	44.22 red	1.07 →1.30			0.01		
			e wit						· <del>··</del>				
		44.22 - 44.80:	creamy yellow brecciated and silicified rock. No distinct laminations within	765		44.22	44.80	0.58			0.06		
			-										
		44.80 - 48.70:	rately	766	ω 5	44.80	45.80	1.00			0.02		
			laminations at 60° to core axis	767	ω 5	45.80	46.80	1.00			0.01		
			ocner local-	768	3 5	46.80	47.80	1.00			0.01		
			filled frac- by a 5cm	769	3 5	47.80	48.70	0.90			0.11		
			chloritized zone.										
			de zone										
			Pyrite content varies										

SHEET NO.\_\_\_

6 OF 8

		1		l						
FOOTAGE	AGE DESCRIPTION	Γ	1	1	SAMPLE	E	ń			ASSAYS
FROM TO	70	7 0	3 SULPH	ĬΤ	FROM	FOOT AGE	П	707AL	 .,,	$\vdash$
	from 2-10% with an average throughout the interval of 3-5% with trace chalcopyri	of of rite.								
	48.70 - 49.65: interval composed of creamy yellow and dark grey purple hue brecciated and silicified rock. Laminations absent from interval. Fractures in purple hue zones infilled with cream coloured material or what appears to be alteration haloes. Pyrite present as localized highs in areas of cream coloured rock, 5% average End of main silicified zone.	and 770 sil- rom zones al or n n erage			48.70	49.65		0.95		
49.65 56.0	56.68 SILICIFIED SEDIMENTS: TRANSITION ZONE									
	Transition zone from main silicified zone to chloritized sediments. At the top of this interval silicification is dominant while chloritized sediments become more abundant lower down in the interval. Silicified zone characterized by intense brecciation and silicification with pinkish fragments within the rock. Chloritized zones softer and have a well defined lamination at 40-60 to core axis. Pyrite content throughout zone averages 5% with lows in chlorite zones of 1% and highs in silicified zones of 10%.	tion one ation 40-60 40-60					<del></del>			
	fied and Brecciated Rock finterval)	771		<u>л</u> Ь О	л л	n > &	>	» >		
	65% of interval. Chloritized zone (35%) have laminations 60° to core axis.Pyrite content 3-5% with trace chalcopyrite.		3 C	50	. 45 5	51.10		0.65		
	51.10 - 51.60: Intrusive?/Fault Zone?  light green-grey, medium grained rock composed of quartz, feldspar, biotite		-,-						 •	

	02,104 02 104
	0.01
	0.01
	0.14
	0.01
	0.01
	0.01
	Trace
measured 1	Trace
	Trace
	Trace
measured 1	Trace
	Trace
	HHHHHO

7021

END OF HOLE  BQ CORE - WHOLE CORE SENT FOR ASSAY  REPORTED HOLE TERMINATION AT 70.12 MEASURED END  INTERVAL 0 - 34.52: logged by A.W. Workman  34.52 - 69.22: logged by S. Trueland
DESCRIPTION

FORM

	STARTED 06-23-83	ELEVATION	LATITUDE 7+25 E	LOCATION _	HOLE NO. MC-83-31	NAME OF PROPERTY
Ĭ						1
	FINISHED 06-27-83	AZIMUTH 344°	DEPARTURE 0+36 S		LENGTH 96.62 meters	McDermott
	27-83		±36_S		62 meters	
		-50°				

_	 		
	96.6	0	FOOTAGE
	-56°	-50°	DIP
			AZIMUTH
			AZIMUTH FOOTAGE
			dia
			AZIMUTH

Whole core sent for assay.
Casing pulled.
LOGGED BY A. Workman, S. Trueland

HOLE NOMC-83-31 SHEET NO. 1 OF 8

	27.22	1 1 8 0 0 29 29	0 0 X
	42.60	18.29 9 24.39 9 27.22	7 A G M
Medium to light green, fine to medium grained well-lamin- ated locally; grains tend to be well-rounded. Abundant carbonate stringers along laminations - occasionally cross-cutting. Moderately brecciated locally with angular fragments up to lcm. Generally non-silicified but weak to moderate silicification noted locally in the base of the unit. Pyrite content ranges from nil to 1%.	Medium green, fine to medium grained rock composed of C 30% felsic minerals - principally quartz and feldspar; and 70% mafics, chiefly pyroxene. Numeroug light green siliceous bands, 2-4mm wide cut core at 45°. Grain size increases down-hole to lower contact at 45° to core axis. Hematite coating on fractures between 21.04 and 24.55 m. Pyrite contents up to 2% are noted locally but average less than 1%.	OVERBURDEN  core badly ground with some continuous sections - assumed to be bedrock.  GABBRO	D M S C R I D T I O N
A801 802 803 804 805 806	792 793 794 795 796 797 798 799 800		Z 0 .
·	*NOTE:		Sadi Per-
27.22 28.22 29.44 30.44 31.44	18.29 19.29 20.29 21.29 22.29 23.29 24.29 25.29 26.29		FROM F
28. 30. 31.	19. 20. 21. 22. 23. 24. 27.		P L E FOOTAGE
4 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 1.00 29 1.00 29 1.00 29 1.00 29 1.00 29 1.00 29 1.00 29 1.00 29 1.00		H 1
0 0 0 0 2 0			TOTAL
	ETTER		*
•	SERIES TI		* >
Trace Trace	0.01 0.01 0.01 Trace Trace		0Z/TON
<u> </u>			N 02/TON

HOLE NO. MC-83-31

SHEET NO. 2 OF 8

FRONTAGE   DESCRIPTION   DESCRIPTION   TO   TO   TO   TO   TO   TO   TO
27.22 - 31.07: laminated section with some brecciation 807   33.44   34.44   1.00   28.44 - 28.76: fault zone(?) - rubble for core - abundant carbonate fracture filling below; 1-5mm breaks at angles of 10-20   810   36.44   37.44   1.00   31.07 - 36.53: weakly laminated locally, carbonate stringers at 70-80 to core axis; pyrite stringers at 70-80 to core axis; pyrite 813   39.44   40.44   1.00   812   38.44   39.44   1.00   812   38.44   39.44   1.00   813   39.44   39.44   1.00   814   39.44   1.00   815   39.44   39.44   1.00   816   39.44
SAMPLE  DESCRIPTION  1.22 - 31.07: laminated section with some brecciation A807 at 28.22-28.55 m.  1.44 - 28.76: fault zone(?) - rubble for core abundant carbonate fracture filling below; olomate fracture filling and 80 to core.  1.53 - 42.60: well laminated at 30-60° to core axis, weakly brecciated locally. Laminations lamination of individual bands.
SAMPLE   S
SAMPLE  NO. *SULPH FOOTAGE TO TOTAL TOTAL TO TOT
SAMPLE  NO. 35ULPH FOOTAGE TOTAL A AROT 33.44 34.44 1.00  808 34.44 35.44 1.00  810 36.44 37.44 1.00  811 37.44 38.44 1.00  812 38.44 39.44 1.00  813 39.44 40.44 1.00  814 40.44 41.44 1.00  815 41.44 42.44 1.00
SAMPLE  10 107AL  33.44 34.44 1.00  34.44 35.44 1.00  35.44 37.44 1.00  37.44 38.44 1.00  38.44 39.44 1.00  39.44 40.44 1.00  40.44 41.44 1.00  41.44 42.44 1.00
POOTAGE TOTAL TOTAL TO TOTAL T
DOTAGE 10 101AL 3 3 4 4 4 1.00 5.44 1.00 6.44 1.00 7.44 1.00 9.44 1.00 0.44 1.00 1.44 1.00 2.44 1.00
1.00 1.00 1.00 1.00 1.00
•
ASSAYS  OIL/TOM  Trace  Trace  O.01  O.01  O.01  O.01
02/10#

ZAME
윽
PROPERTY
McDermot

HOLE NO. MC-83-31

SHEET NO. 3 OF 8

FOOT	TAGE
42.87	57.90

LANGRIDGE LIMITED - TORONTO - 366-1168

Age	10RONTO = 366-1 55 7 9		.50			-					FROM	FOOTAGE	
Ocated individual laminations oriented at 50 to core axis. 58 pyrite.   Asave clated individual laminations oriented at 50 to core axis. 59 pyrite.   Asame as 52.07-53.96   Meakly foliated.   Average 10-15% pyrite.   Average laminations are frequently convoluted.   Average 10-15% pyrite.   Ave		64.66									70	AGE	
SAMPLE   ASSAYS	נוכטע	- 1	5.84 - 57.90	5.78 - 55.	5.13 - 55.78		3.96 - 55.13		2.07 - 53.96	9.82 - 52.07			
SAMPLE  ASSAYS  NO. 7 SULPH   FOOTAGE   1	, aphanitic to fine graine ly brecciated locally. The inuation of the overlying ncreasing non-silicified a Chloritized laminations en as 10-15cm sections. A 5-6% is noted with a range	MENT	rock becoming grey to lepth. Not well laminat 50-60 to core axis. A - up to 15% locally con g laminations.	mylonite -	as 52.07-53.96 laminated with 10% pyrite, v y disseminated and concentra laminations at 50° to core	No apparent	medium to coarse grained, minerals, with 1-4mm pink g	mafic minerals. Inte Average 10-15% pyrit are frequently convol	onartz, feldspar and	/, purple hued, strongly bridividual laminations orien core axis. 5% pyrite.		DESCRIPTION	
SAMPLE   ASSAYS   SULPH   FOOTAGE   TOTAL	0				8 0	<u> </u>					z		
SAMPLE ASSAYS    FROM   TO   TO   TO   TO   TO	<u> </u>												
ASSAYS    TO   TO   TOTAL		<del></del> .	ហ		ហ ហ	5	5 5	51	50 49	<u> </u>	ΙŤ	1	
ASSAYS  1007 1.00  1.82 1.00  2.07 0.25  3.07 1.00  3.96 0.89  5.13 1.17  5.78 0.65  6.78 1.00  0.19  0.02			.78 .78				. 07	•	• •		Š	SAMP	
ASSAYS  1.00 1.00 0.25 0.01 1.00 0.10 0.25 0.01 0.01 0.09 1.17 0.65 0.01 0.01 0.02 1.00 0.01 0.02			• •		55.78	55.13		•	51.82	) )	10	E	
ASSAYS  0.01  0.01  0.01  0.10  0.13  0.01  0.08  0.01  0.12  0.19  0.02			1.00 1.12		0.65					•	TOTAL		
O.01 O.01 O.01 O.01 O.01 O.01 O.01 O.01 O.01 O.02		· <u> </u>			<u> </u>				·				
								<u> </u>			,,		
			0.19			0.01	0.01		0.10	2	02/10M	ASSAYS	
O Z											02.70H		

NAME OF PROPERTY McDermott HOLE NO. MC-83-31

FOOTAG	m	DESCRIPTION			SAMPLE	LE					AS	ASSAYS
T TO I	70		Z 0	IDES	FROM	FOOTAGE TO	TOTAL		Н	,	7,	,,
57.90 64	. 66	Pyrite is present as a very fine cubes in carbonate filled fract		- <u>-</u>								
		of Atatile with crystars of to tem til	TON*	-C-18	*NOTE:C-SERIES	SAMPLES	먇	ເນ	s 	<u>-</u>		
		58.05: laminations at 45° to the core axis. C	901	9-10 S	57.90	58.90		.0	1.00	-		0.05
		e - strongly chlo	902	3-5	58.90	59.90		. 0	1.00	00		.00 0.11
		apparently sheared at 50-55° to the	903	5-7	59.90	60.90		1.00	1.00	1.00		
		axis; 1-3% pyrite.	904	7-9 6	60.90	61.90		1.00	1.00	1.00		1.00 0.07
		60.50: laminated at 30° to core axis.	905	7-9 6	61.90	62.90	_	1.00	1.00	1.00	-	0.03
		62.10 - 62.17: red siliceous zones - syenitic(?) with 20% pyrite in a 2cm zone along each contact.	906	10-15€	62.90	63.90		1.0	1.00	1.00		1.00
		62.90 - 63.66: very strongly silicified - resembles main silicified zone; very finely brecciated with 1-3mm fragments in a cream coloured feldspathized(?) rock. Pyrite content is 10-15% - mostly in the matrix between fragments - minor graphitic partings.							<del></del>			
		63.52 - 63.60: syenite - red, aphanitic, 5% pyrite, conchoidal fracture. Siliceous sediment?										
64.66 78	.74	SEDIMENT										
		fine grained, moderately chloritize ve grey silicification of less than	907 11	15-20 6 1-3 6	63.90 64.66	64.66			6 0.76		0.76	
		Generally well lamin	909	3-5	65.66	6		÷		÷	1.00	÷
_		spread and destroys or masks structure s up to 15cm are noted locally - seem		1-3 6	66.66	67.66			5 1.00		1.00	1.00
		o laminations. Weakly to moderately fractuzin dilatant zones and carbonate in micro-	911	1 -3	67.66	68.66	חסת				1.00	
		Several 1-2cm carbonate veins are noted locally. Below 70.0 m, carbonate fracture filling becomes dominant.			69.66	70.40		0.7	0.74	0.74		

## DIAMOND DRILL RECORD

NAME OF PROPERTY\_\_\_\_MCDermott\_

HOLE NO. MC-83-31 SHEET NO. 6 OF 8

FROM	0	DESCRIPTION	NO. 15 FROM TO TOTAL	T 02/10M 02:10M
_	64.80:	brecciated laminations at 30° to core axis	914 1-3 71.40 72.40 1.00	Trace
	69.10:	laminations at 60-65° to core axis.	915 1-3 73.40 74.40 1.00	Trace
	66.39 - 66.53:	moderately silicified - 5-7% pyrite.		
	67.22 - 67.31:	strongly silicified - 1-3% pyrite.		
	67.22 - 69.13:	strongly brecciated and weakly silicified		
	69.72 - 69.92:	chloritized interval with 50% pinkish- red and green 1-2mm xenoliths - intrusive	~	
	69.92 - 70.40:	80% lost core.		
	72.60:	weakly laminated at 45-50° to core axis.		
	74.22 - 74.35:	strongly silicified.		
	74.35 - 78.74:	minor 5cm grey-green silicified zones; several 5mm thick beds of ash-fall tuff, with clasts less than 0.1mm in size - well laminated at 40 to core axis. Becoming well parted below 76.00 m.	916 1-2 75.40 76.40 1.00 917 1-2 77.40 78.40 1.00 918 1-2 78.40 78.74 0.34	Trace Trace
	76.23:	laminations at 40° to core axis.		
TORONTO	78.00 - 78.37:	DIORITE(?) - pinkish green, with well foliated mafic minerals, about 15-20% pink felsic minerals - similar zone at 77.73-77.81; all are weakly magnetic.		
78.74 79.42	.42 SILICIFIED ZONE			
LANGRIDGE LIN	Greyish-green, a inated, and non- Moderately to st fication of ind:	en, aphanitic to very fine grained, well lam- non-brecciated except for lowermost 10cm. to strongly silicified with selective silici- individual laminae locally.	919 78.74 79.42 0.68	, 0.01

SHEET NO. 7. OF 8

Medium green, fine grained, well laminated with minc selective silicification of individual laminations. Minor silicified sections up to 30cm are noted local (eg. 85.58-85.90). These sections are associated with recolation of individual sets of laminations and brecciation of individual sets of laminations and are characterized by moderate to weak carbonatization. Little movement of fragments has followed brecciatic Bedding cuts the core axis at 45-65.  80.00: laminations at 45-65.  81.62 - 81.70: minor silicified breccia zone.  82.67: laminations at 60-65° to the core axis.  87.62 - 87.73: moderately silicified breccia zone.  88.13 - 89.06: breccjated silicified laminations at 45-55 to core axis with alternate linations or sets of laminations or datant zones are strongly chloritized 90.28: vaguely laminated at 45-50° to core axis.  94.75: laminated at 45-50° to core axis.  94.75: laminations become highly convolute core 95.2 m. Rock is well par to approximately 95.80 m. and more massive below.	PESCRIPTION  SEDIMENTS  Medium green, fine grained, well laminated with minor selective silicification of individual laminations. Minor silicification of individual laminations and selective silicification of individual laminations and selections are associated with precciation of individual sets of laminations and are characterized by moderate to weak carbonatization. Eithle movement of fragments has followed brecciation. Bedding cuts the core axis at 45-65.  81.62 - 81.70: minor silicified breccia zone.  82.67: laminations at 60-65° to the core axis.  84.25: laminations at 60-65° to the core axis.  87.62 - 87.73: moderately silicified breccia zone.  88.13 - 89.06: breccjated silicified laminations at 45-50° to core axis with alternate laminations or sets of laminations or dilatant zones are strongly chloritized.  90.28: vaguely laminated at 45-50° to core axis.  94.75: laminations become highly convolute for tween 95.0-95.2 m. Rock is well parted massive below.	pescription    Poscription   Poscription   Poscription   Poscription	Medium green, fine grained, well laminated with minor C 920 selective slitcified sections up to 30cm are noted locally (eg. 85.58-85.90). These sections are associated with brecciation of individual sets of laminations and are characterized by moderate to weak carbonatization. 921 Bedding cuts the core axis at 45-65.  80.00: laminations at 45-65.  81.62 - 81.70: minor slitcified breccia zone. 926 82.67: laminations at 60-65° to the core axis. 927 928 87.62 - 87.73: moderatedly slitcified breccia zone. 88.13 - 89.06: breccjated slitcified breccia zone. 88.13 - 89.06: breccjated slitcified breccia zone. 928 929 94.00: laminations or sets of laminations at 45-50° to core axis with alternate laminations or sets of laminations or dilatinations or dilatinations or dilatinations or dilatinations or dilatinations or dilatinations at 45-50° to core axis. 94.00: laminated at 45-50° to core axis. 94.75: laminated at 45-50° to core axis. 94.75: laminated at 45-50° to core axis. 94.75: laminations become highly convolute for 20-25cm then laminations are lost between 95.0-95.2 m. Rock is well parted massive below.	Po. 62 SEDIMENTS  Medium green, fine grained, well laminated with minor collective silicification of individual laminations.  Minor silicified sections up to 30cm are noted locally (eg. 85.58-85.90). These sections are associated with preciation of individual sets of laminations and are characterized by moderate to weak carbonatization.  Little movement of fragments has followed preciation.  Bedding cuts the core axis at 45-65.  80.00: laminations at 450 to the core axis.  82.67: laminations at 60-650 to the core axis.  84.25: laminations at 60-650 to the core axis.  87.62 - 87.73: moderately silicified breccia zone.  87.62 - 87.73: moderately silicified breccia zone.  90.28: vaguely laminated at 45-50 to core axis.  90.28: vaguely laminated at 45-50 to core axis.  94.00: laminations become highly convolute for tween 95.0-95.2 m. Rock is well parted massive below.		ONTO ·			•		_									79.42	FROM	FOOT
Medium green, fine grained, well laminated with minc selective silicification of individual laminations. Minor silicified sections up to 30cm are noted local (eg. 85.58-65.90). These sections are associated with recriation of individual sets of laminations and archaracterized by moderate to weak carbonatization. Little movement of fragments has followed brecciation. Bedding cuts the core axis at 45-65.  80.00: laminations at 45° to the core axis. laminations at 60-65° to the core axis. 81.62 - 81.70: minor silicified breccia zone. 84.25: laminations at 60-65° to the core axis. 87.62 - 87.73: moderately silicified breccia zone. 87.62 - 87.73: moderately silicified breccia zone. 88.13 - 89.06: breccjated silicified laminations or datant zones are strongly chloritized vaguely laminated at 45-50° to core axis. 94.00: laminated at 45-50° to core axis. 94.75: laminated at 45-50° to core axis. laminations become highly convolute 20-25cm then laminations are lost between 95.0-95.2 m. Rock is well par massive below.	Medium green, fine grained, well laminated with minor c selective silicification of individual laminations. Minor silicified sections up to 30cm are noted locally (eg. 85.88-85.90). These sections are associated with brecciation of individual sets of laminations and are characterized by moderate to weak carbonatization. Little movement of fragments has followed brecciation. Bedding cuts the core axis at 45-65.  81.62 - 81.70: minor silicified breccia zone.  81.62 - 87.73: moderately silicified breccia zone.  82.67: laminations at 60-65° to the core axis.  84.25: laminations at 60-65° to the core axis.  87.62 - 87.73: moderately silicified breccia zone.  88.13 - 89.06: breccjated silicified breccia zone.  88.13 - 89.06: breccjated silicified laminations at 45-55° to core axis with alternate laminations or sets of laminations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or dilatinations or sets of laminations or dilatinations or sets of laminations are laminations or dilaminations or dilatinations dilatinations or dilatinations dilatinations or dilatinations dilatinations or dilatinations dilati	Medium green, fine grained, well laminated with minor c selective silicification of individual laminations. Manor silicified sections up to 30cm are noted locally (eg. 85.58-85). These sections are associated with brecciation of individual sets of laminations and are characterized by moderate to weak carbonatization. Little movement of fragments has followed brecciation. Bedding cuts the core axis at 45° to the core axis.  80.00: laminations at 60-65° to the core axis.  81.62 - 81.70: minor silicified breccia zone.  82.67: laminations at 60-65° to the core axis.  84.25: laminations at 60-65° to the core axis.  87.62 - 87.73: moderately silicified laminations at 45-55 to core axis with alternate laminations or sets of laminations or dilatant zones are strongly chloritized.  90.28: vaguely laminated at 45-50° to core axis.  94.00: laminations become highly convolute for 20-25cm then laminations are lost between 95.0-95.2 m. Rock is well parted massive below.	Medium green, fine grained, well laminated with minor C 920 Minor Slitcified sections up to 30cm are noted locally (eg. 85.58-85.90). These sections are associated with brecciation of individual sets of laminations and are noted produced by moderate to weak carbonatization.  Little movement of fragments has followed brecclation.  Bedding cuts the core axis at 45-65.  81.62 - 81.70: minor silicified breccia zone.  82.67: laminations at 60-65° to the core axis.  84.25: laminations at 60-65° to the core axis.  87.62 - 87.73: moderately silicified breccia zone.  88.13 - 89.06: breccjated silicified laminations ard 45-55° to core axis with alternate laminations or sets of laminations or dilatant zones are strongly chloritized.  90.28: vaguely laminated at 45-50° to core axis.  94.75: laminations become highly convolute for tween 95.0-95.2 m. Rock is well parted massive below.	BEDIMENTS  Redium green, fine grained, well laminated with minor c selective silicification of individual laminated with minor c 920 selective silicified sections up to 30cm are noted locally (eg. 85.58-95.90). These sections are associated with brecciation of individual sets of laminations and are otherwised by moderate to weak carbonatization. Little movement of fragments has followed brecciation. 921 85.82 86.00: I laminations at 45-65.  Bedding cuts the core axis at 45-65.  Bedding cuts the core axis at 45-65.  Bedding cuts the core axis at 60-65° to the core axis. 928 88.13 89.62 86.62 87.73: moderately silicified breccia zone. 928 92.45 93.82 86.62 86.62 86.73: I laminations at 60-65° to the core axis. 928 92.45 93.83 87.62 86.75: I laminations or sets of laminations at 45-55 to core axis with alternate laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or sets of laminations or dilatations or dilatations or sets of laminations or dilatations or dilatations or sets of laminations or dilatations or dilatations or sets of laminations or dilatations or dilatations or sets of laminations or dilatations or dilatations or sets of laminations or dilatations or dilatations or dilatations or dilatations or dilatations or dilatations or dilatations or dilatations or dilatations or dilatations or dilatations dilatations or dilatations dilatations or dilatations dilatat	<u>-</u>												_			96.6	10	TAGE
ine grained, well laminated with minc ification of individual laminations of sections up to 30cm are noted local of These sections are associated with dividual sets of laminations and axy moderate to weak carbonatization. of fragments has followed brecciation of fragments has followed brecciation are core axis at 45-65.  Laminations at 45-65 to the core axis. Inminations at 60-65 to the core axis moderately silicified breccia zone.  Dreccjated silicified breccia zone.  breccjated silicified breccia zone.  breccjated silicified laminations at 45-55 to core axis with alternate laminations or sets of laminations or datant zones are strongly chloritized vaguely laminated at 45-50 to core axis.  laminations become highly convolute laminations become highly convolute 20-25cm then laminations are lost be tween 95.0-95.2 m. Rock is well par massive below.	DESCRIPTION  Ine grained, well laminated with minor of sections up to 30cm are noted locally on. These sections are associated with individual sets of laminations and are y moderate to weak carbonatization.  of fragments has followed brecciation.  e core axis at 45-65.  laminations at 45-65.  minor silicified breccia zone.  laminations at 60-65 to the core axis.  laminations at 60-65 to the core axis.  moderately silicified breccia zone.  brecciated silicified breccia zone.  brecciated silicified laminations or dilations or sets of laminations or dilatant zones are strongly chloritized.  vaguely laminated at 45-50 to core axis.  laminations become highly convolute for 20-25cm then laminations are lost between 95.0-95.2 m. Rock is well parted massive below.	ine grained, well laminated with minor C 920 ification of individual laminations.  O). These sections are noted locally 921 individual sets of laminations and are 921 of fragments has followed brecciation.  Of fragments has followed brecciation.  Of core axis at 45-65.  Iaminations at 60-65° to the core axis.  Iaminations at 60-65° to the core axis.  Iaminations at 60-65° to the core axis.  Iaminations or sets of laminations or dilatant zones are strongly chloritized.  Vaguely laminated at 45-50° to core axis.  Iaminations become highly convolute for 20-25cm then laminations are lost between 95.0-95.2 m. Rock is well parted to approximately 95.80 m. and more	ine grained, well laminated with minor c grained, well laminated with minor c grained, well laminated with minor c grained up to 30cm are noted locally of fragments has followed brecciation.  of fragments has followed brecciation.  of fragments has followed brecciation.  of fragments has followed brecciation.  e core axis at 45-65.  laminations at 450 to the core axis.  laminations at 60-650 to the core axis.  laminations at 60-650 to the core axis.  breccjated silicified breccia zone.  breccjated silicified laminations or dilations or sets of laminations or dilations or sets of laminations or dilations or sets of laminations or dilations or sets of laminations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or dilatinations or sets of laminations or dilatinations or sets of laminations or dilatinations or dilatinations or sets of laminations or dilatinations or dila	DESCRIPTION  THE DESCRIPTION  DESCRIPTION  TO THE PROOF  THE PROOF	94.75:	94.00:	28	13 - 89.06	.62 - 87.	•	2.67	.62 - 81.	.00	cuts	movemen	ciation of	85.58-85.	silicif	m green,	SEDIMENT		
	e or x lm s s · hy c	ed or xis. Py C 920 Po 921 Po Po Po Po Po Po Po Po Po Po Po Po Po	C 920 NO 921 8 922 8 923 8 927 928 928 926 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8	SAMPLE  NO. SULPH FROM FOOT 10ES FROM POOT 10ES FOOT GE STREEN (87.48 91	minations become highly convolute-25cm then laminations are lost besen 95.0-95.2 m. Rock is well par approximately 95.80 m. and moressive below.	ed at 45-50° to core axis.	laminated at 45-50° to core	ecciated silicified laminations a -55 to core axis with alternate ations or sets of laminations or ant zones are strongly chloritize	silicified breccia	at 60-65° to the core	at 60-65° to the core	silicified breccia	at 45° to the core	core axis at	of fragments has followed bre	vidual sets of laminations and	These sections are associated	ation or individual laminati otions up to 30cm are noted	grained, well laminated with			
SAMPLE    TOOTAGE   TOOTAGE   TOTAL   TOOTAGE	FROM TO TOTAGE TOTAGE TO TOTAGE TO TOTAGE TO TOTAGE TO TOTAGE TOTAGE TO TOTAGE TOTAGE TOTAGE TOTAGE TOTAGE THE FIGURES IN LOMEASUREMENTS.	MARKERS 287 and 93.57 m JRES IN L MENTS.	00 00 00 00 00 00 00 00 00 00 00 00 00				_		307' ARE	N CORE												
SAMPLE  TOUTAGE  TOUTAGE  79.42 80.42 1.00  80.42 82.42 1.00  83.42 84.42 1.00  85.82 86.42 0.60  87.42 88.13 0.71  88.13 89.04 0.91  90.98 91.98 1.00  92.45 93.45 1.00  OTE: FOOTAGE MARKERS BETWREN 287' and (87.48 - 93.57 m THE FIGURES IN LOMEASUREMENTS.	FROM TO TOTAGE TOTAGE TO TOTAGE TO TOTAGE TO TOTAGE TO TOTAGE TOTAGE TO TOTAGE TOTAGE TOTAGE TOTAGE TOTAGE THE FIGURES IN LOMEASUREMENTS.	MARKERS 287 and 93.57 m JRES IN L MENTS.	00 00 00 00 00 00 00 00 00 00 00 00 00	OG ARE				CORRE	MISHL	ВОХ		<del>-</del>	. 0	_	-0	0	0	_ਜ਼	멸		, t	<b>A</b>
SAMPLE    1015  FROM   10   101/L   1   100	FOOTAGE  79.42 80.42 1.00 80.42 82.42 1.00 83.42 84.42 1.00 85.82 86.42 0.60 87.42 88.13 0.71 88.13 89.04 0.91 89.04 89.98 1.00 92.45 93.45 1.00 92.45 93.45 1.00 92.45 93.45 1.00 FOOTAGE MARKERS IN CORE BETWREN 287' and 307' (87.48 - 93.57 m) ARE THE FIGURES IN LOG ARE MEASUREMENTS.	MARKERS IN CORE 287' and 307' 93.57 m) ARE JRES IN LOG ARE JRE	00 00 00 00 00 00 00 00 00 00 00 00 00	ARE E				CTED			- -	2 2	.01	.02	.01	.03	.01	асе	race		<del>}</del>	SAYS
SAMPLE ASS    1001   100   100   172   100   172   100   172   100   172   100   172   100   172   100   172   100   172   100   172   100   172   100	Trace 79.42 80.42 1.00 80.42 82.42 1.00 85.82 86.42 0.60 87.42 88.13 0.71 88.13 89.04 0.91 90.98 91.98 1.00 92.45 93.45 1.00 92.45 93.45 1.00  FOOTAGE MARKERS IN CORE BOX BETWEEN 287' and 307' (87.48 - 93.57 m) ARE MISHLACED THE FIGURES IN LOG ARE CORRECTED MEASUREMENTS.	ASSAYS  42 1.00 Trace  42 1.00 Trace  42 1.00	ASSAYS  OO Trace OO Trace OO OO OOO OOO OOO 91 94 OOO OOO OOO OOO OOO OOO OOO OOO OOO	Trace Trace O.01 O.02 O.01 O.02 O.01 O.01 ARE MISHLACED ARE CORPECTED ARE CORPECTED																	2 TON	

LANGRIDGE LIMITED - TORONTO - 366-1168

HOLE NO. MC-83-31

				P POR	FOOTAGE
				70	AGE
		96.62	95.00		
	CASING PULLED	END OF HOLE	below this point, rock begins to resemble a volcanic with abundant carbonate filled tensional fractures. Minor non-silicified, coarse brecciation locally. Non-laminated. Poorly parted.		DESCRIPTION
				ĕ	_
·				1068	
				FROM	SAMPLE
				10	E
				TOTAL	
				-	
				$T_{a}$	7 >
•				0Z/TON	SSAYS
				12/TON 02:TON	ASSAYS

## DIAMOND DRILL RECORD

Z > M	PROPERTY	MCDERMOTT
HOLM NO.	MC-83-32	LENGTH 66.14 meters
LOCATION		
LATITUDE	7+25 E	4 S
BLEVATION		AZIMUTH 3440 DIP -50
STARTED	30-06-83	FINISHED 06-07-83

			·,
	63.09	0	FOOTAGE
	-48 <sup>9</sup>	-50 <sup>4</sup>	DIP
			AZIMUTH
			AZIMUTH FOOTAGE
			밀
			AZIMUTH

Core split for assay.

LOGGED BY A.W. WORKMAN

OVERBURDEN	DESCRIPTIO OVERBURDEN	DESCRIPTION  76 OVERBURDEN	DESCRIPTION NO.	DESCRIPTION NO. SUPPH-	SAME  OFSCRIPTION  NO. SURPHINOM  OVERBURDEN	SAME  OVERBURDEN  DESCRIPTION  NO. SURPH FROM	DESCRIPTION  NO. SUPPRESSENTED FROM FOC	DESCRIPTION  SAMPLE  FOOTAGE  76 OVERBURDEN
D M W C 22 - 10	EN DESCRIP	DESCRIPTION	DESCRIPTION NO.	DESCRIBTION NO. SULPH-	DESCRIPTION  NO. SULPH FROM  EN	DESCRIPTION  NO. SULPH FROM  EN	DESCRIPTION  SAMPLE NO. SULPH FROM TO	DESCRIPTION  SAMPLE  NO. SULPH-FROM TO TOTAL % %
escription ery fine grained, po	ery fine grained, po	ery fine grained, poorly to moder-	ery fine grained, poorly to moder- C801 Uppermost 2.2m is non-laminated.	ery fine grained, poorly to moder- C801 1 Uppermost 2.2m is non-laminated.	ery fine grained, poorly to moder- C801 1 16.76 Uppermost 2.2m is non-laminated.	ery fine grained, poorly to moder- C801 1 16.76 Uppermost 2.2m is non-laminated.	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated.  SAMPLE  NO. SUPPH FROM TO TO TO TO TO TO TO TO TO TO TO TO TO	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated.  SAMPLE  NO. SULPH FROM TO TOTAL % %  [C801 1 16.76 17.76 1.00]
ery fine graine Uppermost 2.2 some localized	ery fine graine Uppermost 2.2 some localized	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated.	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated. some localized silicification with	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated. Some localized silicification with	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated. some localized silicification with  SAMP  ROM  10. Sulph FROM  10. 76	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated. some localized silicification with  SAMP  ROM  10. Sulph FROM  10. 76	ery fine grained, poorly to moder- Uppermost 2.2m is non-laminated. some localized silicification with	PESCRIPTION  SAMPLE  A  NO. SUPPH FOOTAGE  NO. SUPPH FROM TO TOTAL  WE STAMPLE  NO. SUPPH FROM TO TOTAL  WE STAMPLE  NO. SUPPH FROM TO TOTAL  WE STAMPLE  NO. SUPPH FROM TO TOTAL  WE STAMPLE  A  A  A  A  A  A  A  A  A  A  A  A  A
PTION  le grained, poorl  most 2.2m is non calized silicifi  content ranges f	PTION  PTION  PTION  alized silicification wonlized silicification wontent ranges from trace	poorly to moder- is non-laminated. llicification with	poorly to moder- is non-laminated. licification with anges from trace to 803	poorly to moder- C801 1 licification with anges from trace to 803 1	poorly to moder- is non-laminated. licification with anges from trace to  SAMP  NO. SUPPH FROM	poorly to moder- is non-laminated. licification with anges from trace to  SAMP  NO. SUPPH FROM	poorly to moder- is non-laminated. llicification with anges from trace to  SAMPLE FOOTAGE NO. SULPH FROM TO 10.76 17.76 18.76 18.76 19.76	SAMPLE   A   SOTAGE   NO.   SUPPH   FROM   TO   TOTAL   % %
Ned, poorl 2m is non 1 silicifi	d, poorly to moden is non-laminatesilicification wranges from trace	poorly to moder- is non-laminated. licification with	poorly to moder- is non-laminated. licification with anges from trace to 803	poorly to moder- is non-laminated. licification with anges from trace to 803 1	poorly to moder- is non-laminated. licification with anges from trace to  802 1 17.76 803 1 18.76	poorly to moder- is non-laminated. licification with anges from trace to  802 1 17.76 803 1 18.76	SAMPLE   SAMPLE   FOOTAGE   NO. SULPH   FROM TO   I   16.76   17.76   18.76   19.76	SAMPLE   NO.   SULPH   FROM   TO   TOTAL
	y to modu- -laminator work trace	· · · · · · · · · · · · · · · · · · ·	C801 NO. 803	0 802 1 804 1	C801 1 16.76  C802 1 17.76  0 803 1 18.76  804 1 19.76	C801 1 16.76  C802 1 17.76  0 803 1 18.76  804 1 19.76	C801 1 16.76 17.76 802 1 17.76 18.76 803 1 18.76 19.76 804 1 19.76 20.76 805 1 20.76 21.36	C801 1 16.76 17.76 1.00  C803 1 18.76 19.76 1.00  804 1 19.76 20.76 1.00  805 1 20.76 21.36 0.60
C801 1 16.76 17.76 1.00  B02 1 17.76 18.76 1.00  803 1 18.76 19.76 1.00  804 1 19.76 20.76 1.00  805 1 20.76 21.36 0.60	SAMPLE   FROM TO TOTAL   FOOTAGE   FROM TO TOTAL	FROM TO TOTAL  FROM TO TOTAL  16.76 17.76 1.00  17.76 18.76 1.00  18.76 19.76 1.00  19.76 20.76 1.00  20.76 21.36 0.60  21.36 21.96 0.60	FOOTAGE FOOTAGE TO TOTAL  ROM TO TOTAL  .76 17.76 1.00  .76 19.76 1.00  .76 20.76 1.00  .76 21.36 0.60  .36 21.96 0.60	1.00 1.00 1.00	1.00 1.00 1.00 0.60	×		S S A Y S  OZ/TON OZ/TON  O.01  O.01  O.01  O.01  O.01
NO.   SILEPH   FROM   TO   TOTAL   % %	SAMPLE A  SURPH FROM TO TOTAL  1 16.76 17.76 1.00 1 17.76 18.76 1.00 1 18.76 19.76 1.00 1 19.76 20.76 1.00 1 20.76 21.36 0.60 1 21.36 21.96 0.60	FROM TO TOTAL % %  FROM TO TOTAL % %  FROM TO TOTAL % %  16.76 17.76 1.00 17.76 18.76 1.00 18.76 19.76 1.00 19.76 20.76 1.00 20.76 21.36 0.60 21.36 21.96 0.60	FOOTAGE % % ROM TO TOTAL % % ROM TO TOTAL % % % ROM TO TOTAL % % ROM TO TOTAL % % ROM TO TOTAL % % ROM TO TOTAL % % ROM TO TOTAL % % ROM TO TOTAL % % ROM TO TOTAL % % ROM TO TOTAL % ROM TO TOTAL % % ROM TO TOTAL % ROM TO T	1.00 1.00 1.00 0.60	1.00 1.00 1.00 0.60	* >		02/104
NO.   SILEPH   FROM   TO   TOTAL   % %	SAMPLE A SINES FROM TO TOTAL % % % SINES FROM TO TOTAL % % % % SINES SI	FROM TO TOTAL % %  FROM TO TOTAL % %  16.76 17.76 1.00 17.76 18.76 1.00 18.76 19.76 1.00 19.76 20.76 1.00 20.76 21.36 0.60	FOOTAGE % % ROM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % % NOM TO TOTAL % % NOM TO TOTAL % % NOM TO TOTAL % % NOM TO TOTAL % % NOM TO TOTAL % % NOM TO TOTAL % % % NOM TO TOTAL % % NOM TO TOTAL % % NOM TO TOTAL % % NOM TO TOTAL % % NOM TO TOTAL	1.00 1.00 1.00 0.60	1.00 1.00 1.00 0.60	* >		

SHEET NO. 2 OF 7

	FOOTAGE	AGE				SAMPL	m				ASSAYS		Į
<i>-</i>	FROM	10	DESCRIPTION	, 0	3 SULPH,	FROM	FOOTAGE TO	TOTAL	*	,,	02/TON	62, TOH	
·			certain laminations. Contains 1-2% pyrite.										
			22.23: laminations at 60° to the core axis.										
	`		22.80 - 22.92: limonite filled fracture zone - core badly ground - possible fault.						<u>-</u> -				
LAI	:: 		reen clay i	· -	· ·								
	22.92	45.61	MAIN SILICIFIED ZONE									_	
			ey to grey, with 60% cream coloured zones, C	808	3-5	22.92	23.9	2 1.00			0.07		
	_		grained, highly silicified and		3-5	23.92	24.92	2 1.00			0.02		
			ns high pyrite contents, up to 20% locally. This	018	5-7	24.92	25.92	2 1.00			0.01		
			s than is normally expected. Fracturing, part-	118	5-7	25.92	26.9	2 1.00			0.01		
-				812	5-7	26.92	27.92	2 1.00	<del></del> -		0.01		
<u>्र</u> ्			22.92 - 24.50: non-brecciated, cream feldspathized		5	27.92	•	-					
<i>5</i>			zones along laminations.		<del>ان ام</del>	92	•	<u>.</u> F			• •		
·			eam coloured zones along	918	ω ( υ	30.92	31.92	2 1.00	<del></del> -		0.04		
168			210 210 CC+2 ++2C-2+000 - 1-0	817	3-5	31.92	32.92	1.00			0.03		
366-		_	23.75: laminations at 60-70° to core axis.	918	2-3	32.92	33.72	2 0.80			0.04		
ONTO-			26.45 - 29.92: weakly brecciated, sense of laminations returns.							<u>-</u>			
TOF			29.92 - 33.72: weak to moderate brecciation.		<u></u>								
ITED	·		27.90: laminations are variable 30-50° to axis.									<del></del> -	
E-LIM			29.30: laminations at 40° to core axis.										
GRIDG		•	29.92 - 30.92: sample spans an 80cm breccia zone feld- spathized with up to 10% pyrite.	<u>.</u>					<u> </u>	•			
				_		_							

FOOTAGE					SAMPLE	'n			ASSAY5	
FROM TO	1	DESCRIPTION	Z 0	SULPH.	FROM	FOOT AGE	TOTAL	,,	 02/TON	02. TON
	33.20 - 33.30:	chloritized shear.	618	1-3	33.72	34.82	1.10		 0.01	
	33.75 - 33.85:	chloritized shear.	820	3-5	34.82	35.60	0.78		 0.01	
			821	1-2	35.60	36.25	0.65		 0.01	
	33.85 - 34.32:	abundant chloritized fractures.	822	1-2	36.25	36.90	0.65		 0.01	
	33.72 - 34.82:	INTRUSIVE - dark green, fine grained, moderately chloritized, weakly magnetic with abundant (3-5%) pink silicified xenoliths up to 5mm in size.							 	
	34.82 - 35.60:	purple grey silicified zone, abundant white carbonate stringers, 3-5% pyrite.		<del></del>						
	35.60 - 36.90:	abundant chloritized patches and fracture zones along laminations.								
	36.37:	laminations at 65° to core axis.		<del>-</del>						
	36.90 - 39.45:	moderately brecciated with 1.5cm frag- C ments, strongly silicified with few chloritized patches. Numerous 2-3mm quartz stringers cut core axis at 20-25° - post-date breccia. Occasional 5-10cm zones of extreme silicification - rock resembles quartz veins - zones carry 10-15% pyrite.	8 8 8 2 2 2 5 4 3	5-73	36.90 37.90 38.90 (30cm	37.90 38.90 39.90 lost	1.00 1.00 1.00 core)		 0.01	
	39.45 - 39.75:	lost core.			•				 	
······································	39.90 - 40.85:	intensely silicified with strong feld- C spathization from 40.37-40.85 containing 15% pyrite laminated at 50-60 to core axis.	826	8-10	39.90	40.85	0.95		 0.07	
	40.85 - 41.00:	<pre>INTRUSIVE - dark green, moderately</pre>	827 5	5-7	40.85	41.83	0.98		 0.01	

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PROPERTY_
McDermott

HOLE NO. MC-83-32

SHEET NO. 4 OF 7

ly silicified with abund ate stringers and veins the content to 15% near carbonate veyrite blebs up to 1.5cm veins.	to 1.5cm	֡֟֝֝֟֓֟֓֓֓֟֝ <del>֚</del>		
1.83 - 42.94: INTRUSIVE - dark green, fine t				
grained, biotite bearing very similar to 33.72-34.82 m. Carries 20% pink and green angular fragments of wall rock - fragments have a tuffaceous texture locally, particularly lower in zone.  Pyrite content is 1%.	ب	41.8	3 2 2	94 1.11
42.94 - 45.61: purple-grey to cream coloured, intensely silicified, strongly feldspathized(?) from 43.20-44.56 m. with 10-15% pyrite.  Average pyrite content is 8-10% mostly concentrated along laminations. Laminations well developed. Zone is not brecciated.	10-15 10 7-9	43.94	4 4 4 W 4 70	94 1.00 94 1.00 61 0.67
43.40: laminations developed at 60° to core axis.				
45.61 54.63 SILICIFIED SEDIMENTS			_	
Well laminated with alternating purple-grey and dark green 1-3mm bands; fine to very fine grained. Moderately to strongly brecciated locally with angular 0.5-1.5cm fragments in a cream coloured, possibly feldspathized rock. Fractures have cream coloured halos. Zone is mostly silicified rock. Chloritized sections are limited to less than 15cm thickness at any one point. Combined, they may total 20-25% of the unit. Pyrite content averages 3-5% with up to 15% locally.				

SAMPLE	HOLE NO. MC-83-32
ASSAYS	SHEET NO. 5 OF 7

			_		SAMPLE	m		_		ASSAYS	<i>a</i> 1
		DESCRIPTION	, O	3 SULPH	FROM	FOOT AGE	TOTAL	32	32	02/TOM	02,TON
	45.61 - 47.13:	well laminated at 55-60° to core axis.	832	3-5		46.61	1.00			0.01	
	47.13 - 48.28:	moderately to strongly brecciated.	8 3 3 3 3		46.	47.				0.01	
	47.60:	laminations at 60-70° to core axis.	α υ	ب د ا	4/.01	4 a . o L				10.01	
	48.28 - 48.43:	INTRUSIVE(?) - dark green, chloritized mylonitic zone.									
	48.43 - 48.49:	90% pink carbonate veins carrying l% chalcopyrite blebs, 1-2mm in size and single grains up to 1.5cm in vugs - grain is triangular with sub-angular corners.									
	48.49 - 48.61:	dark green-grey, weakly chloritized.			<u>.</u>						_
	48.61 - 49.85:	intensely silicified, often reddish C colour particularly near chloritized seam at 49.05-49.17 m. Some sections resemble quartz veins and carry 5-7% pyrite, (eg. 48.75-48.94 m). Up to 20% pyrite in lower half of zone - clots of crystals up to 1.5cm.	8 8 3 5	5-7 15	49.23	49.23	0.62			0.01	
<del>-</del>	49.85 - 50.30:	very coarsely brecciated with 1-2cm grey, intensely silicified fragments in a dark green, weakly chloritized matrix - : section is 70-75% silicified. Carries 3-5% pyrite. Laminations are present but un-readable.	837	ယ   	49.85	50.85	1.00			0.10	
	50.30 - 51.53:	at 49.85-50.30 but with ed zones - matrix to si	8 8 3 8	5-7 10-12	50.85 51.80	51.80	0.95		<u> </u>	0.25	
		feldspathization(?). Up to 15% pyrite locally.	840	ယ်     	52.45	53.30	0.85	<u></u>		0.01	

• FORM B

HOLE NO. MC-83-32

SHEET NO. 6 OF 7

53.30 - 53.85: INTRUSIVE - dark green, fine fragments (xenoliths), in a chloritized groundmass. Chi Sim weakly to moderately breccised. Selly silicified. Feldspathiments up to 2cm in a dark green, fine to medium grained, strongly with 1-5cm zones of moderate sylicification making up less than 5% of section above 58.0 ately brecciated at top of unit generally de in degree with depth. Local silicified zone usually brecciated more strongly. Rock is very finely disseminated; in fractus cubes. Up to 4 in sellicified zones. 58.11 - 58.27: )  58.11 - 58.27: )  59.33 60.31 LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey location green to greenish grey, purple-grey location grey silicified with 10% chloritized and to strongly silicified with log chloritized and sellicified with log chloritized approach to strongly silicified with log chloritized approach to strongly silicified with log chloritized approach to strongly silicified with log chloritized approach to strongly silicified with log chloritized approach sellicified with log chloritized sellicified with log chloritized approach sellicified with log chloritized approach sellicified with log chloritized sellicified with log chloritized sellicified with log chloritized				
51.53 - 53.30: same as 49.85-50.30 m.  53.30 - 53.85: INTRUSIVE - dark green, fine to grained with reddish, 1-2mm si fragments (xenoliths), in a mo chloritized groundmass. Chill 5cm wide, at contact dipping 6 the core axis.  53.85 - 54.63: weakly to moderately brecciate sely silicified. Feldspathize ments up to 2cm in a dark grey Carries 1-2% pyrite, up to 3-4 with 1-5cm zones of moderate silicification lower that is a strongly of the core axis.  54.63 59.33 SEDIMENTS  Dark green, fine to medium grained, strongly of with 1-5cm zones of moderate silicification lower that is a strongly of the core axis in degree with depth. Local silicified zones in degree with depth. Local silicified zones usually brecciated at 50.0 m attly brecciated at 50.0 m weakly to moderately domainantly quarts filled above 56.13 m and twards carbonate filling below this point. Car pyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Rock be crudely laminated at 57.10m (50-60 to core ax 58.11 - 58.27:)  58.11 - 58.27:) largest silicified zones.  58.13 - 58.82:)  59.33 60.31 LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro	_  3	18	S C	DESCRIPTION
53.30 - 53.85: INTRUSIVE - dark green, fine to grained with reddish, 1-2mm sine fragments (xenoliths), in a monochart (xenoliths), in a monoch			];	
53.30 - 53.85: INTRUSIVE - dark green, fine to grained with reddish, l-2mm si fragments (xenoliths), in a mo chloritized groundmass. Chill fragments (xenoliths), in a mo chloritized groundmass. Chill fem wide, at contact dipping 6 the core axis.  53.85 - 54.63: weakly to moderately brecciate sely silicified. Feldspathize ments up to 2cm in a dark grey carries l-2% pyrite, up to 3-4 (Carries l-2% pyrite, up to 3-4)  54.63: weakly to moderately brecciate ments up to 2cm in a dark grey carries l-2% pyrite, up to 3-4  54.63: park green, fine to medium grained, strongly carries licification low making up less than 5% of section above 58.0 m ately brecciated at top of unit generally decrived in degree with depth. Local silicified zones usually brecciated more strongly. Rock is weakly to moderately - dominantly quartz filled above 56.13 m and twards carbonate filling below this point. Car pyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Fack be crudely laminated at 57.10m (50-60 to core ax 58.73 - 58.82: )  58.11 - 58.27: ) largest silicified zones.  58.73 - 58.82: )  59.33 60.31 LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				1.53 - 53.30: same as 49.85-50.30
chloritized groundmass. Chill 5cm wide, at contact dipping 6 the core axis.  53.85 - 54.63: weakly to moderately brecciate sely silicified. Feldspathize ments up to 2cm in a dark grey carries 1-2% pyrite, up to 3-4 making up less than 5% of section above 58.0 m ately brecciated at top of unit generally decrin degree with depth. Local silicified zones usually brecciated more strongly. Rock is weathorized below 56.13 m. Weakly to moderately dentified cones. Up to 4% in silicified zones. Up to 4% in silicified zones. Secricely laminated at 57.10m (50-60 to core ax 58.21 - 58.27: )  100ER SILICIPIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				3.30 - 53.85: INTRUSIVE - dark green, fine grained with reddish, 1-2mm
53.85 - 54.63: weakly to moderately brecciate sely silicified. Feldspathize ments up to 2cm in a dark grey carries 1-2% pyrite, up to 3-4  54.63 59.33 SEDIMENTS  Dark green, fine to medium grained, strongly of with 1-5cm zones of moderate silicification lomaking up brecciated at top of unit generally decressing the depth. Local silicified zones usually brecciated more strongly. Rock is weather bonatized below 56.13 m. Weakly to moderately deart of the dabove 56.13 m and the wards carbonate filling below this point. Car pyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Rock be crudely laminated at 57.10m (50-60 to core ax 58.73 - 58.82: )  1. LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				(xenotions), in a digroundmass. Chi at contact dipping xis.
Dark green, fine to medium grained, strongly cwith 1-5cm zones of moderate silicification lomaking up less than 5% of section above 58.0 m ately brecciated at top of unit generally decrin degree with depth. Local silicified zones usually brecciated more strongly. Rock is weat bonatized below 56.13 m. Weakly to moderately domantly quartz filled above 56.13 m and twards carbonate filling below this point. Carpyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Rock be crudely laminated at 57.10m (50-60 to core ax 58.11 - 58.27: )  58.11 - 58.27: )  10WER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				3.85 - 54.63: weakly to moderate sely silicified. ments up to 2cm in Carries 1-2% pyrit
Dark green, fine to medium grained, strongly with 1-5cm zones of moderate silicification lo making up less than 5% of section above 58.0 m ately brecciated at top of unit generally decrin degree with depth. Local silicified zones usually brecciated more strongly. Rock is wesbonatized below 56.13 m. Weakly to moderately dearts filled above 56.13 m and twards carbonate filling below this point. Carpyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Rock be crudely laminated at 57.10m (50-60 to core ax 58.11 - 58.27; )  58.11 - 58.27; )  59.33 60.31 LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro	4.63	59.3	9.3	EDIMENTS
making up less than 5% of section above 58.0 m ately brecciated at top of unit generally decr in degree with depth. Local silicified zones usually brecciated more strongly. Rock is weal bonatized below 56.13 m. Weakly to moderately dominantly quartz filled above 56.13 m and the wards carbonate filling below this point. Car pyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Rock be crudely laminated at 57.10m (50-60 to core ax 58.11 - 58.27; )  58.11 - 58.82; )  10WER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				green, fine to medium grained, strongly l-5cm zones of moderate silicification
in degree with depth. Local silicified zones usually brecciated more strongly. Rock is weabonatized below 56.13 m. Weakly to moderately - dominantly quartz filled above 56.13 m and twards carbonate filling below this point. Carpyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Rock be crudely laminated at 57.10m (50-60 to core ax 58.11 - 58.27: )  58.11 - 58.27: ) largest silicified zones.  58.73 - 58.82: )  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				up less than 5% of section above 50 brecciated at top of unit generally
bonatized below 56.13 m. Weakly to moderately - dominantly quartz filled above 56.13 m and t wards carbonate filling below this point. Car pyrite, very finely disseminated; in fractures cubes. Up to 4% in silicified zones. Rock be crudely laminated at 57.10m (50-60 to core ax  58.11 - 58.27: )  58.73 - 58.82: )  1 LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				v brecciated more strongly spock in
58.11 - 58.27: ) largest silicified zones. 58.73 - 58.82: )  59.33 60.31 LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				below 56.13 m. Weakly to moderately fractly quartz filled above 56.13 m and tend bonate filling below this point. Carries bery finely disseminated; in fractures as to 4% in silicified zones. Rock become aminated at 57.10m (50-60 to core axis).
59.33 60.31 LOWER SILICIFIED ZONE  Grey-green to greenish grey, purple-grey local aphanitic to fine grained, laminated locally, to strongly silicified with 10% chloritized ro				8.11 - 58.27: ) ) largest silicified zones 8.73 - 58.82: )
	59. 33	60.	0.31	CIFIED ZONE  to greenish grey, purple-grey locatorine grained, laminated locally, to fine grained, laminated locally, silicified with 10% chloritized r

MC-83-32 SHEET NO. 7 OF 7

											60.31 66.		59.33 60.	FROM	FOOTAGE	
											14		31	ő	m	
66.14 END		65.75 - 66.14:	64.16 - 64.22:	64.00 - 66.14:	62.25 - 63.95:	63.09:	62.35:	60.31 - 62.25:	locally. A pale post. 61.41 m - contacts	en, fin 1 with Pyrit	SEDIMENTS	59.43:	is not as strongly as might be expect chloritized parting plane at 80° to co			
	OF HOLE	fractures strongly hematitized.	quartz-carbonate vein.	green, fine to medium grained, non- laminated, with abundant tensional fractures - foliation (laminations?) evident at 66.00 at 250 to core axis.	well laminated - laminations fade over 5cm sections.	laminations at 55° to core axis.	laminations at $65-70^{\circ}$ to core axis.	minor moderate brecciation locally.	pink quartz vein is located s at 45 and 55 to core axi	to very fin pth. Minor content aver		laminations at 45° to core axis.	trongly silicified or as uniformly silicified expected from other drill holes. Numerous partings. Lower contact may be a fault to core axis.		DESCRIPTION	
								900	851	850				z o		
_								-	1-2	1-2				1DES		
								65.41	61.41 63.41	60.31				FROM	SAMPLE	
-								66.1	62.4	61.2				TOOTAGE	Ĺ	
								4 0.73	1 1.00	1 0.90				FOTAL		
_														,,		
								•	0.01	H H		<u>-</u>		2	ASS	
_								0.01	0.01	Trace			<del></del>	02/TON 02, TON	ASSAYS	

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22	MITED,			EM. 6-1168	14.		T ROS	F O	STAF		L 00 F	2 2 3
83 27.90					21 22.83	14.21	ОМ ТО	OTAGE	07-	z   <sub>~</sub>	HOLE NO. MC-	7
SEDIMENTS  Dark green, fine grained, strongly chloritized and well	22.35 - 22.41: highly pyritized sediment xenolith carries 20% pyrite, mostly as cubes; sediments are well laminated.	17.96 - 18.11: breccia zone, silicified, 5-10% pyrite, 3-5% chalcopyrite - brecciation extends to 18.30 m.	18.59 - 18.74: 1-3mm elongated black chloritized specks possibly small vesicules.	Dark green, fine to very fine grained, moderately to strongly brecciated with angular to rounded fragments up to 4cm in size. Brecciation is probably flow breccia. The flow was generally massive; abundant tensional fractures are noted below 17.8 m. Relic vesicules are found at 18.74-18.79 as 3-7mm well rounded chloritized amygdules. Some strong silicification is observed locally (eg. 15.03-15.32 m) to carry slightly higher pyrite contents - up to 1%. Flow averages less than 1% pyrite. Below 19.70 m, the rock becomes fine to medium grained and gabbroic textured - probably central flow. The rock does not appreciably fine towards the lower contact. Rock may be weakly sericitized locally.	BASALT	OVERBURDEN	# C	6 C C C C C C C C C C C C C C C C C C C	11	344° 63.00 63.00	0 -500	NIT MODELMOLE CO OO
<del></del>				852 0- 853 0- 854 5- 856 ] 857 ]			NO. SUÍ					7
		<del></del>	<u> </u>	10 11 11 11 11 11 11 11 11 11 11 11 11 1			SULSH-FI	S A			H	
				11 11 11 11 11 11 11 11 11 11 11 11 11			FROM	A M P L	-		H	2
				16.00 17.96 18.11 19.11 21.11 22.83			FOOTAGE TO				$\prod$	
				1.00 0.96 0.15 1.00 1.00			TOTAL					

0.01 0.02 0.02 0.01

0.01

FOOTAGE	OIP	AZIMUTH	AZIMUTH FOOTAGE	PIO	AZIMUTH
0	_500				
53.00  -49 <sup>0</sup>	-49 <sup>0</sup>				
		; ;			

**A S S A Y S** 

OZ/TON OZ/TON

HOLE NO. MC-83-33 SHEET NO. 1 OF 7

REMARKS BQ CORE

LOGGED BY A.W. WORKMAN Whole core sent for assay.

9700	000
200	<u>,</u>

ED - TORONTO - 366-1168	300-1100	<u>5-1100</u>	8		· · · · · · · · · · · · · · · · · · ·		22.83	FROM	FOC	
							27.90	70	FOOTAGE	
	27.50 - 27.90:			26.45 - 27.50:	24.20 - 26.45:	22.83 - 24.20:	pyrite (5%) along laminations Most pyrite as 1-2mm cubes. are strongly carbonatized but Carbonate stringers, 1-2mm in varying angles. The rock is parallel to the laminations. colour - possible sericite all averages 1% and ranges from n copyrite is noted locally on (eg. 25.85 m).			
27.80 - 27.90: FAULT ZONE	coarse brecciation similar to 24.20 - 26.45 m, some partings are slickensided - lower locm of zone is badly ground core with 30% recovery.	26.73: laminations at 70-75° to axis.	26.52: laminations at 50-55° to axis.	well laminated, non-brecciated, a lcm clot of chalcopyrite grains at 27.05m.	brecciated - angular fragments up to 3cm with carbonate filling large dilatant zones - micro-fractures in carbonate are silica filled. Laminated locally - eg. 40-45 to core axis at 25.00 m.	well laminated locally, some massive Cnon-laminated fine grained sections.	along laminations at 40° to the core axis. as 1-2mm cubes. Locally, the laminations carbonatized but still contain 50% silica. ringers, 1-2mm in width cut the core at es. The rock is easily parted along planes the laminations. Cleavages have a waxy green sible sericite alteration. Pyrite content and ranges from nil to 2%. A trace of chalnoted locally on fracture surfaces).		DESCRIPTION	
	_			862 863	860	858		z o		
				1 2-3	р н	р р		% SULPH		0.0
				26.83	24.83 25.83	22.83		FROM	SAMPLE	9.
		_		27.37	25. 83	23.83		FOOT AGE	E	
				7 0.54	3 1.00	83 1.00 83 1.00		TOTAL		
2 2 2								39		9
		· · · <u> · · · · · · · · · · · · · · ·</u>						٠,		740
				Trace	Trace	0.01 Trace		02/TON	ASSAYS	
								02. TON		

V-111111111111111111111111111111111111
MAIN MINERALLIEU CONE
The mineralized section lies in fault lying non-silicified sediments. It is highly silicified, usually brecciated ation overlying a variably silicified lower member.
81 MAIN SILICIFIED ZONE
grey with minor green lized fault movement. Ly silicified, and was
Fragments are angul e-assembled. Silic t of brecciation antent variable; 2-20 very fine disseminto lcm and as small me laminations loca along laminations.
27.90 - 28.16: intensely fractured
pyrite.
8.16 - 29.96: intensely bre locally at 45
29.96 - 30.60: FAULT ZONE - green systems dips at 25- mylonitic locally w rounded silicified Fragments have hone rims, and carry 5-7

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HOLE NO. MC-83-33

SHEET NO. 4 OF 7

intensely silicified and brecciated of laminations locally, 5-7% pyrite.  as at 29.96-30.60 - FAULT ZONE - fracturing at 45 to core axis, silici-
SAMPLE ASSAYS  NO.   % SULPH   FOOTAGE   % % 02/TON    867 5 30.65 31.12 0.47   0.02    868 5 31.12 31.88 0.76   0.10
SAMPLE ASSAYS    10161   FROM   TO   TOTAL   1   1   1   1   1   1   1   1   1
SAMPLE ASSAYS    FROM   TO   TOTAL   1   02/TOM     30.65   31.12   0.47   0.02     31.12   31.88   0.76   0.10
ASSAYS  FOOTAGE 10 101AL 1 2 0.47  12 31.88 0.76  ASSAYS  0.02/10H 0.02
31.12 0.47  31.88 0.76  31.88 0.76
ASSAYS 0.47 0.47 0.76 0.76
ASSAYS 0.02/TOM 0.10
ASSAYS 0.02
ASSAYS  0.02  0.02  0.10
02/TOH 0.02
*
02, TON

NAME OF PROPERTY McDermott

HOLE NO. MC-83-33

SHEET NO. SOF 7

FOOTAGE				LD.	SAMPLE			ASSAYS	
FROM TO		DESCRIPTION	NO. 35	SULPH,	FOOTAGE	GE TOTAL	,,	02/TON	02 TON
	40.15 - 41.0	05: strongly brecciated, minor chloritized C8 fractures with up to 1% chalcopyrite, variably feldspathized in matrix to breccia fragments - pyrite ranges 5-10%, averaging 6-8%.	878 6	4	.15 41.0			0.13	
	41.05 - 42.0	03: strongly brecciated, abundant chloritized 8 fractures with white carbonate in-filling. 1-3% pyrite, up to 10% locally as lcm clots in chloritized dilatant zones.	179 2	41	.05 42.	03 0.98		0.02	
·	42.03 - 42.6	7: purple-grey breccia, few chloritized fractures.	880 1-	<del>-</del> 3 42	.03 42.6	7 0.64		0.02	
	42.67 - 43.46:	INTRUSIVE - dark green, fine to medium grained, well foliated (45-50 to core), mafic minerals (biotite?). Non-magnetic carries 50% xenoliths of silicified sediment. Fragments are 1-8mm in size and are well rounded. Carries 1% pyrite locally. Upper contact at 60 to core axis.	881 1-	-2 42	. 67 43.	46 0.79		0.01	
	43.46 - 43.9	97: purple-grey, silicified breccia same as 8	882	2-3 43	.46 44.	46 1.00		0.01	
	43.97 - 44.3	30: chloritized fracture zone.							
	44.30 - 44.81:	silicified breccia becoming less silic- ified with depth.	883 2-		.46 44.	81 0.35		0.02	
44.81 51.	30 SILICIFIED S	SEDIMENTS							
<del> </del>	Purple-grey to chloritized so with variable up to 5% in so strongly breco	ey to green-grey, becoming green locally in ed sections. Very fine grained to aphanitic able pyrite contents - 1% in chloritized rock, in silicified rock. Generally moderately to brecciated with angular fragments up to several	<del></del> .		<del></del>			•	

SHEET NO. 6 DE 7

FOOTAGE	M				SAMPLE	E				ASSAYS		
FROM	70		z o	SULPH,	FROM	FOOTAGE TO	GE TOTAL	22	1	01/10N	02/TON	
44.81 51	.30	cm. Silicified strongly except in green chloritized C	884		44.81	45.8	81 1.00			0.01		
		es. These zones of chlorite alteration total 19% of section and are located at: 45.23-45.30; 45.70 -		- N	5.	•	٠,			0.01		
		.44; 47.30-47.38; 47.86-47.95; 47.9962; 50.80-50.94; 51.14-51.21.	886	3-5 1-2	46.81	47.8	81 1.00			0.03		
		brecciated laminations at 45° to axis.	888	1-2	48.81	<b>±</b> 9.5	57 0.76			0.01		
		カフ・										
		contact between silicified brecciated sediments and intrusive - sediments become more strongly silicified 15cm from contact. Little fining of intrusive near contact at 60° to axis.										
		49.57 - 50.64: INTRUSIVE - same as 42.67-43.46; weakly magnetic.	889	<b> </b>	49.57	50.64	4 1.07			0.01		
		50.64 - 51.30: silicified breccia with 32% green chloritized rock.	890	1-2	50.64	51.3	0 0.76			0.01		
51.30 63	63.09	SEDIMENTS										
		Medium to dark green, fine to very fine grained, well Claminated but structure is locally obliterated by	891 892	1-2	51.30 53.30	52.30	0 1.00			0.01 Trace		
		in preferred laminations and sets of bands. ification locally, weakly to moderately in association with breccia zones. Average	893	ч	54.30	55.25	5 0.95			Trace		
ED — TORO		th silicificat which are well										
		55.25 - 56.22: several zones of silicification, locally brecciated.	894	2-3	55.25	56.2	2 0.97			0.05		
		56.76 - 57.00: INTRUSIVE - similar to 49.57-50.64 m, very weakly magnetic.	895	2-3	56.22	57.22	2 1.00	· - ·		0.02		

LANGRIDGE LIMITED - TORONTO - 366-1168

FROM

7

FOOTAGE

SHEET NO. 7 OF

parting is very well developed parallel to laminations. laminations at 60° to core axis. laminations at 550 laminations at 50° to core axis. laminations at 60° laminations at 60° to core axis. END OF HOLE CASING PULLED DESCRIPTION to core axis. to core axis. 896 | 0-1 | 58.22 | 59.22 | 1.00 897 868 , O 1 60.22 61.22 1.00 Trace cpy 62.22 63.09 SAMPLE FOOTAGE 0.87 0.04 0.01 0.01 ASSAYS 02/TON 07 TON

63.05:

63.09 meters

62.22:

61.35:

60.10:

58.40:

58.00 -

63.09:

NAME OF PROPERTY McDermott

HOLE NO. MC-83-34 LENGTH 62.80 meters

LOCATION STARTED 11-07-83 FINISHED 15-07-83

FOOTAGE	410	AZIMUTH	AZIMUTH FOOTAGE	- - - -	AZIMUTH
0	-50 <sup>9</sup>				
62.80	-48 <sup>9</sup>	17		ļ	
	T				
					į

HOLE NO. MC-83-34 HEET NO. 1 OF 7

emarks by core split for analysis.

LOGGED BY A.W.WORKMAN

FOOT	<b>∧</b> 6 €				<u>ب</u> ۲	SA AM PL	m m				Y S S Y S	
F ROM	Т0		N O	SULPH	77	FROM P	FOOTAGE TO	TOTAL	×	×	OZ/TON OZ/TON	
0	21.95	OVERBURDEN					•					
21.95	29.86	FAULT ZONE - SEDIMENTS ?							<u></u>			
6 - 1161		en to grey-green, fine to very fine grained rock.	C934	nil	21.	95	22.95	1.00			Trace	
EM,		<pre>(volcanoclastic?) rock.</pre>	935	nil	22.	95	23.95	1.00			0.01	
		sheared and broken. Fractures are limonite coated	936	nil	23.	95	24.95	1.00			Trace	
		Core recovery is 70%. Possible   26.90 m. dip 45-50 to the core	937	٦	24.	95	25.95	1.00			Trace	
			938	٢	25.95		27.40	1.45			Trace	
		27.15 - 29.48: 45% core recovery - badly ground.	939	, <sub> -</sub>	27.	0	•	· •		<del></del>	0.01	
		27.40 - 27.80: core lost.	940	+	24	4.	. 4 α	+. 0			C	
29.86	31.32	28.60 - 29.48: core lost 29.60: clay filled fault zone. SEDIMENT (locally silicified)								<u> </u>		
-MITED,		Dark green with grey to grey-green bands and laminations. Fine to very fine grained. Grey colouration is result of weak to moderate carbonization of selected sets of laminations. Occasional grey silicification of individual laminae. Rock is poorly laminated locally. Contains 1% pyrite - up to 2% locally as a very fine grained dissemination.	941	ь	30.48		31.32	0.84	<u> </u>		0.01	
31.32	53.57	MAIN MINERALIZED ZONE							<u> </u>			
LANGR		This zone is composed of an upper variably silicified, frequently brecciated member overlying the Main Silicified Zone. This unit is strongly silicified and		·	<del>-</del> <del>-</del>							
										-		

7	Γ-
ROM	FOOTAGE
70	AGE
CRUCATT	DESCRIPTION
NO.	
SULPH.	
FROM	SAMPLE
FOOTAGE	m
10171	
02,104	ASSAYS
$\dashv$	5
	02/TON 02/TON
DESCRIPTION FOOTAGE TOTAL TO TOTAL TO TOTAL TO TOTAL	

NAME OF PROPERTY\_\_\_\_MCDermott

FOOTAG	GE		DESCRIPTION	28	SULPH,	SAMPLE	FOOTA		_
FROM	70			, z	06.3	FROM	Ηz	ا ا	TO TOTAL
34.62 5	98	llar	in size ofte						
		it. Some	ich post-dates the						
		ָ בְּיִׁבְ	finely brecciated, or mylonit:						
		mylonitic seam at	t 35.02 is displaced 6cm by a faul						
		up to 5x10mm a	noted.						
		60 - 0/ 75		946 5	5-7 3	~	34.62	62 35.6	62 3
		34.62 - 34.75:	resembles a brecciated quartz vein.	947 5	5-7 3		35.62	.62 36.	. 62 3
		36.23 - 36.98:	y feldspath:	948 7	7-9 3		36.23	. 23 36.	. 23
			7-9% pyrite, up to 12% locally. Tensional fractures at 60-75° to core axis are cut by chloritized fractures at 10-20° to core axis with 1cm displacement.	<u></u>					
		36.98 - 37.50:	dark grey to purple-grey, intensely brecciated, 1-2% pyrite rapidly increasing down-hole to 5-7%; very finely disseminated. Pink carbonate vein with fine quartz particules at 37.30-37.31 at 150 to core axis.	949 2	2-4	8	6.98	37.	
		37.50 - 38.50:	<pre>same as 36.23-36.98 - more abundant quartz veining along tension fractures.</pre>	950 5	5-7	w	37.50	50 38.	50 38
		38.50 - 39.85:	as above - abundant chloritized fractures - average l per 10cm of core.	951 5-7			38.50	50 39.	50
		39.85 - 41.87:	feldspathized, intens reccia; 7-9% pyrite,	952 7 953 b	7-9 ω-12		39.85	39.85 40. 40.85 41.	39.85
			. (2)	95410-15	-15	_	41.85	85 42.	85 

  -  -						•					
FROM TO		DESCRIPTION	Ž O	SULPH	FOL	Iğl	1014	*	<b>,</b>	40T/30	MOL. 20
+				1063	FROM	ā	TOTAL		$\perp$		1
-	41.87 - 42.83:	cream to pale yellow coloured, felds- pathized zone, strongly brecciated - fragments up to 1cm can be reassembled from finer clasts. Material in the 1-2mm range appears to be tuffaceous(?). Relic sedimentary laminations are ob- served logally (eg. 60-65 at 42.00 m and 50-60 at 42.65 m). Pyrite averages 10-15% as very fine dissemination, in clots of grains and as individual crystals concentrated along laminations.									
<del> </del>	42.11 - 42.33:	FAULT ZONE - abundant chloritized fractures at 70-75° to core axis, chloritized mylonite at 42.18-42.33 m.									
<del></del>	42.83 - 42.85:	FAULT - dark green clay seam at 50-60° to core axis.	955	5-7	42.83	43.80	0.97			0.02	
	42.85 - 43.80:	rock becomes dark purple-grey, strongly brecciated and intensely silicified. Reddish syenitic material at 43.41-43.47 and 43.57-43.74 m.									
<del>-</del>	43.80 - 44.81:	INTRUSIVE - dark green, fine grained, intensely chloritized and contains abundant (50% by volume) siliceous xenoliths - angular to sub-rounded, up to lcm in size. Intrusive contacts are chilled and extremely broken. Non-magnetic but strongly resembles magnetic dikes in other holes west of this section. May be biotitic. Up to 1% pyrite.	956	H	43.80	44.81	1.01			0.02	
	44.81 - 45.19:	greenish-grey, fine to medium grained and very finely brecciated, abundant honey coloured alteration (feldspathization?). Un-structured. Very weakly magnetic near upper contact. Average 10% pyrite. May be tuffaceous.	957	. 10	44.81	45.19	0.38		· .	0.07	

NAME OF PROPERTY MCDermott

HOLE NO. MC-83-34

SHEET NO. 5 of 7

IMITED — TORONTO — 36€				50.98								FROM	FOOTAG	
				53.57								70	AGE	
				SILICIFIED SEDI	50.47 - 50.98:	49.91 - 50.47:					45.19 - 49.91:			
onal ced ciated vugs vugs incate	nsery sirici ecciated wea	are strongly brecci	green grey and	SEDIMENTS	as above at 45.19-49.91, few chloritized fractures; 2-4% pyrite.	moderately silicified, weakly chloritized greenish-grey in colour. Chloritized plane at 50.24 m is a fault at 80 to the core axis. Pyrite content is 3-5% with a trace of chalcopyrite on chloritized planes.	tured - quartz	Chloritized planes cross-cut vague sedimentary fabric at 10-20° angle.	red at 60-75° to core axis.	<pre>in 10cm sections, appears tuffaceous locally, 3-4% pyrite, trace chalcopyrite</pre>	riably feldspathized, st			
w •	967	966	965		964	963	962	961	960	959	958	z o		,
	2-4	2-4	2-4		2-4	3-5 Trace cpy	5-7	U	ເກ	ω	ω	Sadi		ן ה ה
	53.00	52.00	50.98		50.47	49.91	49.19	48.19	47.19	46.19	45.19	FROM	SAMPLE	
	54.00	53.00	52.00	_	50.9	50.47	49.91	49.19	48.19	47.19	46.19	FOOTAGE	m -	
	1.00	1.00	1.02		8 0.51	0.56	0.72	1.00	1.00	1.00	1.00	ETOTAL		
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		_										30		1 7
·	0.02	0.01	0.01		0.01	0.01	0.02	0.03	0.02	0.01	0.02	02/10#	ASSAYS	
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3.57 60.	.23 SEDIMENTS
	Medium
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	57.

FORM

HOLE NO. MC-83-34

McDermott

E DESCRIPTION  LOWER SILICIPIED ZONE  Purple-grey to greenish-grey, with medium green sections, 975 2-3 60.23 61.02 0.79  Apphanitic to fine grained, and strongly brecolated.  Moderately to strongly slicified. Purite content averages 2-3% as a very fine dissemnation. Green sections are moderately chloritized. Weaker slicification reflects weaker brecolated.  Medium green, fine to medium grained. Possibly contains 976 0-1 61.02 61.30 0.28  Medium to dark green, fine to medium grained, coarsening 977 1-2 61.30 62.05 0.75  Medium to dark green, fine to medium grained, coarsening 977 1-2 61.30 62.05 0.75  Medium to dark green, fine to core axis.  62.46: coarses to medium grained, unstructured, tensional fractures, occasional 1-1.5 mm.  black chloritized specks - possibly devitified shards of volcanic glass.  62.80 END OF HOLE  ASSAMPLE VARMPLE VARMPLE VARMPLE VARMPLE VARMPLE VARMPLE VALUE VARMPLE VARM	E DESCRIPTION  DESCRIPTION  LOWER SILICIFIED ZONE 1.02 LOWER STRUCTIFIED ZONE Purple-grey to greenish-grey, with medium green sections. 975 2-3 60.23 61.02 0.79 0.01  Aphanitic to fine grained, and strongly brecciated. Aphanitic to fine grained, and strongly brecciated. Aphanitic to fine grained, and strongly brecciated. By the content averages 2-3% as a very fine dissemnation. Green slicification reflects weaker brecciation.  30 INTRUSIVE Medium green, fine to medium grained. Possibly contains 976 0-1 61.02 61.30 0.28 10.01  Medium green, fine to medium grained. Possibly contains 976 0-1 61.02 61.30 0.28 10.01  Medium to dark green, fine to medium grained, coarsening 977 1-2 61.30 62.05 0.75 10.01  Googn-hole. Well laminated locally. Many carbonated filled tension fractures throughout. 62.28: laminations at 45' to core axis. 62.46: coarses to medium grained, unstructured, tensional fractures, occasional 1-1.5 mm. black chloritized specks - possibly devitrified shards of volcanic glass. 62.80 END OF HOLE  **NOTATE NAME TO THE TOTAL AND			_		61.30		61.02		60.23	FROM	FOOTAG	
DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  TO THE TOTAL THE	DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  DESCRIPTION  TO THE TOTAL THE					62.80		61.30		1.0	10	AGE	
DESCRIPTION  DESCR	DESCRIPTION  DESCR		2.46:	•	<u> </u>	•	m green, te - well Weakly	INTRUSIVE	tre 37 to	•			
HOLE NO. MC-83-34  SHEET NO. 7 OI  SAMPLE  SAMPLE  ASSAYS  NO. 1-501/No. 7 OI  NO. 1-5	HOLE NO. MC-83-34  SHEET NO. 7 OI  SAMPLE  SAMPLE  ASSAYS  NO. 1-501/No. 7 OI  NO. 1-5	2.80 END OF CASING	medium grained, unsti fractures, occasional ritized specks - possi	at 45' to core	locally. Many carb hroughout.		ine to medium grained. Possibly developed foliation at 60-65° to agnetic. Same as zone at 57.70-5		-grey, with medium greed, and strongly brecossilicified. Pyrite cony fine dissemination. chloritized. Weaker weaker brecoiation.			DESCRIPTION	
SAMPLE SAMPLE ASSAYS  **SULPN FOOTAGE   100   10   101/10	SAMPLE SAMPLE ASSAYS  **SULPN FOOTAGE   100   10   101/10		red,				ains		tions.			<b>.</b>	
SAMPLE SAMPLE ASSAYS  0.23 61.02 0.79 0.01  1.02 61.30 0.28 1.10  1.30 62.05 0.75 0.01  2.05 62.80 0.75 0.01	SAMPLE SAMPLE ASSAYS  0.23 61.02 0.79 0.01  1.02 61.30 0.28 1.10  1.30 62.05 0.75 0.01  2.05 62.80 0.75 0.01										<u> </u>		O H
SAMPLE SHEET NO. 7 OI SAMPLE ASSAYS  0.23 61.02 0.79 0.01  1.02 61.30 0.28 1.10  1.30 62.05 0.75 0.01  2.05 62.80 0.75 0.01	SAMPLE SHEET NO. 7 OI SAMPLE ASSAYS  0.23 61.02 0.79 0.01  1.02 61.30 0.28 1.10  1.30 62.05 0.75 0.01  2.05 62.80 0.75 0.01										OES.		M NO
LE SHEET NO. 7 OI  TO TOTAL TO	LE SHEET NO. 7 OI  TO TOTAL TO				2.05	3	1.02		0.23		FROM	SAME	1 1
SHEET NO. — 7 OI ASSAYS  0.79  0.79  0.01  0.75  0.01  0.01  0.01	SHEET NO. — 7 OI ASSAYS  0.79  0.79  0.01  0.75  0.01  0.01  0.01				ίς, r	<b>.</b>					100	Ę	83-
SHEET NO. 7 01  ASSAYS  0.01  0.01  0.01  0.01  0.01	SHEET NO. 7 01  ASSAYS  0.01  0.01  0.01  0.01  0.01										$\Pi$		¥
ASSAYS  0.01  0.01  0.01  0.01  0.01	ASSAYS  0.01  0.01  0.01  0.01  0.01				75				79		ĬĂ.	_	
7 OI 01/10H 0.01 0.01 0.01	7 OI 01/10H 0.01 0.01 0.01												SHE
7 OI 01/10# 0.01 0.01 0.01	7 OI 01/10# 0.01 0.01 0.01										*		ET NO
					0.0	) )			0.0		02/10	ASSA	
											+	Š	유

EM. 6-1168 STARTED\_ ELEVATION LATITUDE LOCATION HOLM NO. NAME OF PROPERTY MC-83-35 16-07-83 8 + 00 E McDermott \_\_ LENGTH \_ FINISHED 19-07-83 AZIMUTH \_\_ DEPARTURE 91.74 m. 3440 o + 60 S -600

1	91.74	0	FOOTAGE
	<b>-52</b> 9	-60°C	PIP
	11		AZIMUTH FOOTAGE
	i		FOOTAGE
			_
	-7		DIP AZIMUTH

HOLE NOMC-83-35 SHEET NO. 1 Of 8

REMARKS BO CORE Whole core sent for Analysis

LOGGED BY A.W. WORKMAN

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FROM	Т0	C	Harins on	$\forall$	FROM TO	TOTAL	ж	ж	NOT/ZO	OZ/TON
0	21.95	5 OVERBURDEN								-
21.95	42.50	ANDESITE								
		Flow tops are generally lly show evidence of vess. Rock is moderately chlorioted locally associated withereas the flow averages isent as a very fine dissent rtz-carbonte stringers, an ates on chloritized slippederately to strongly breck a result of post-volcanion particular, the intervalment fault zone. Contain								
		lonite. Core los strongly chlorite chlo	Ϋ́Υ				و والمالية			
		30.95 - 32.48: flow top breccia, rounded to sub-angular fragments up to 5 cm. X 3 cm., andesitic composition, in a finer brecciated matrix strongly chloritized, minor epidote along fractures.						•		

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FOOTAGE					1				
7 ?		DESCRIPTION	7 5 F	* SULPH.	FOOTAGE	IGE		ASSATS	
			-	200					
	33.10 - 34.10:	flow breccia- rounded, vaguely defined fragments up to 7 cm. some remelting.				·	 		
	34.25 - 34.40:	as above							
	34.65 - 35.00:	flow top breccia, same as 33.10-34.10.							
	36.20 - 36.53:	angular breccia, fragments up to 2.5 cm.	_						
·	37.38 - 37.57:	breccia - probably flow bottom; fragments of varying lithologies are well rounded and up to 4 cm. in size.		<del></del>			 		
	37.57:	FAULT - mylonitic shear plane at 40° to core axis.		<del>-</del>			 		
	37.57 - 38.20:	flow breccia - vaguely outlined fragments up to 6 cm., well rounded, andesitic composition.						. <u> </u>	
	38.20 - 38.70:	angular fragments, often mylonitic.					 		
•	38.70 - 38.83:	ground core - some massive; some brecciated.			•		 		
	39.05 - 39.81:	flow top breccia - sharply defined, angular fragments up to 5 cm. which are much harder than enclosing rock. Below 39.20 m., fragments are larger, less distinct and show evidence of re-melting. Minor fault plane at 39.38.							
	40.32 - 40.75:	small silicified zone bordering intensely silicified fracture zone at 40.53-40.58m. Resembles a pale greer quartz vein at 45-50° to core axis.	· ·				 		

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	DESCRIPTION	z o	SULPH SULPH	FC	lŏl	11				
			Ē	-114.6	_		,,		1	-
				FROM	70	TOTAL		1	1	
40.98 - 42.50:	tectonically brecciated locally; lower contact is highly fractured.									
8 SEDIMENTS										
Medium green, fi moderately to st Many non-laminat clasts). Upperm										
depth of 44.1 m.	. Most of sediments are probably tuffaceous.									
44.45:	laminations at 40° to core axis.		_							
45.50:	laminations at 45° to core axis.									
44.83 - 45.17:	strongly brecciated, laminations disrupted.	979		15.17	45.50	0.33			0.02	·
45.17 - 45.50:	numerous black, well laminated cherty bands - tuffaceous? 45 to core axis, carry 1% very	980	0 <u>-</u> 1	15.50	46.50	1.00			0.01	_
	finely disseminated pyrite.	981	1-0	16.50	47.50	1.00			0.02	
44.80 - 44.90:	dark red, well foliated dike (?) SYENITIC (?). Contacts at 40-50° to core axis - possibly a	982	7-0-1	17.50	48.50	1.00			10.01	
	sparply defined zone of nemacized chemical sediments. Also pinkish green sediments at 44.46- 44.52.	983	<u> </u>	18.50 .	49.50	1.00			0.01	
45.50 - 49.60;	weakly laminated locally, medium grained, brecciated locally on a 1-2 mm. scale. Laminations at 46.60 m. dip 50° to the core axis.		_	•						
49.60 - 51.28:	at 350 to the core axis steepening	984	1-0	19.50	50.50	1.00			10.0	
	.08. Moderate sets of laminat	985	<u> </u>	50.50	51.21	0.71			10.0	
MAIN	IZED ZONE				-	_				
This zone is	composed of an upper variably silicified									
	51.28 SEDIMENTS  Medium green, fi moderately to si Many non-laminat clasts). Upperr depth of 44.1 m  44.45: 45.50: 45.50: 45.50 - 45.50: 45.50 - 49.60: 49.60 - 51.28:  75.76 MAIN MINERAL: This zone is	Medium green, fine to very fine grained, well laminated moderately to strongly chloritized. Generall non-silic Many non-laminated, generally coarser grained and sheat depth of 44.1 m. Most of sediments are probably tuffactured.  44.45:  Laminations at 40° to core axis.  45.50:  Laminations at 45° to core axis.  44.83 - 45.17: strongly brecciated, laminations disruged finely disseminated pyrite.  44.80 - 44.90: dark red, well laminated cherty luffaceous? 45° to core axis sharply defined zone of hematized chemical sediments.  45.50 - 49.60: weakly laminated locally, medium grain brecciated locally on a 1-2 mm. scale. Laminations at 46.60 m. dip 50° to the 49.60 - 51.28: well laminated at 35° to the core axis to 45° at 51.08. Moderate carbo of selected sets of laminations.  MAIN MINERALIZED ZONE  This zone is composed of an upper variably sil	SEDIMENTS  Medium green, fine to very fine grained, well laminated and moderately to strongly chloritized. Generall non-silicified. Many non-laminated, generally coarser grained and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45: laminations at 40° to core axis.  45.50: laminations at 45° to core axis.  44.83 - 45.17: strongly brecciated, laminations disrupted.  45.17 - 45.50: numerous black, well laminated cherty bands - tuffaceous? 45° to core axis, carry 18 very finely disseminated pyrite.  44.80 - 44.90: dark red, well foliated dike (?) SYENITIC (?). Contacts at 40-50° to core axis - possibly a sharply defined zone of hematized chemical sediments. Also pinkish green sediments at 44.45.  45.50 - 49.60: weakly laminated locally, medium grained, brecciated locally on a 1-2 mm. scale. Laminations at 46.00 m. dip 50° to the core axis.  49.60 - 51.28: well laminated at 35°0to the core axis. steepening to 45° at 51.08. Moderate carbonatization of selected sets of laminations.  MAIN MINERALIZED ZONE  This zone is composed of an upper variably silicified	SEDIMENTS  Medium green, fine to very fine grained, well laminated and moderately to strongly chloritized. Generall non-silicified. Many non-laminated, generally conser grained zones, 10.0-1.5 mm. clasts). Uppermost zone is weakly brecoiated and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45: laminations at 40° to core axis.  45.50: laminations at 45° to core axis.  45.17 - 45.50: numerous black, well laminated cherty bands - tuffaceous? 45° to core axis, carry 18 very finely disseminated pyrite.  44.80 - 44.90: dark red, well foliated dike (?) SYENITIC (?). Contacts at 40-50° to core axis, corry 18 very sharply defined zone of hematized chemical sediments. Also pinkish green sediments at 44.46-98 to 45° to the core axis - core axis.  45.50 - 49.60: weakly laminated locally, medium grained, brecciated locally on a 1-2 mm. scale. Laminations at 46.60 m. dip 50° to the core axis. to 45° at 51.08. Moderate carbonatization of selected sets of laminations.  MAIN MINERALIZED ZONE  This zone is composed of an upper variably silicified	SEDIMENTS  Medium green, fine to very fine grained, well laminated and moderately to strongly chloritized. Generall non-silicified. Many non-laminated, generally coarser grained zones; (1.0-1.5 mm. clasts). Uppermost zone is weakly brecciated and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45: laminations at 40° to core axis.  45.50: laminations at 45° to core axis.  45.17 - 45.50: numerous black, well laminated cherty bands - tuffaceous? 45° to core axis, carry 1% very finely disseminated pyrite.  44.80 - 44.90: dark red, well foliated dike (?) SYENITIC (?). Contacts at 40-50° to core axis - possibly a sharply defined zone of hematized chemical sediments. Also pinkish green sediments at 44.46-98. Laminations at 46.60 m. dip 50° to the core axis. Laminations at 45° to the core axis steepening of selected sets of laminations.  MAIN MINERALIZED ZONE  This zone is composed of an upper variably silicified	Medium green, fine to very fine grained, well laminated and moderately to strongly chloritized. Generally non-sinicified. New non-laminated, generally coarser grained zones, (1.0-1.5 mm. clasts). Uppermost zone is weakly brecciated and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45: laminations at 45° to core axis.  45.50: laminations at 45° to core axis.  45.17 - 45.50: numerous black, well laminated cherty hands - tuffaceous? 45° to core axis, carry 18 very finely disseminated pyrite.  44.80 - 44.90: dark red, well foliated dike (?) SYBNITC (?). Contacts at 40-50 to core axis - possibly a sharply defined zone of hematized chemical sediments. Also pinkish green sediments at 44.46- 983 0-1 45.50. Laminations at 46.60 m. dip 50° to the core axis. laminations of selected sets of laminations.  45.50 - 49.60: weakly laminated locally, medium grained, hereciated locally on a 1-2 mm. scale. Laminations at 51.08. Moderate carbonatization 985 0-1 49.50 to 45° at 51.08. Moderate carbonatization 985 0-1 50.50 m. MAIN MINERALIZED ZONE  This zone is composed of an upper variably silicified	Medium green, fine to very fine grained, well laminated and moderately to strongly chloritized. Generall non-silicited. Namy non-laminated, generally coarser grained zones, (1.0-1.5 mm. clasted). Uppermost zone is weakly brecclated and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45: Laminations at 45° to core axis.  45.50: Laminations at 45° to core axis.  45.17 - 45.50: numerous black, well laminated cherry hands - tuffaceous? 45 to core axis, carry 18 very finely disseminated pyrites.  46.80 - 44.90: dark red, well foliated dike (?) SYBNITIC (?).  Contacts at 40-50° to core axis - possibly a sharply defined zone of hematized chemical seliments. Also pinkish green sediments at 44.46- 983 0-1 47.50 44.52.  45.50 - 49.60: weekly laminated locally, medium grained, brecclated locally on a 1-2 mm. scale.  Laminations at 45° to the core axis.  49.60 - 51.28: well laminated at 35° to the core axis.  49.60 - 51.28: well laminated at 35° to the core axis.  MAIN MINERALIZED ZONE  This zone is composed of an upper variably silicified  This zone is composed of an upper variably silicified	Medium green, fine to very fine grained, well laminated and moderately to strongly chloritized. Generally cores, (1.0-1.5 mm. clasts). Uppermost zone is weakly brecciated and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45: laminations at 40° to core axis.  45.50: laminations at 45° to core axis.  45.17 - 45.50: numerous black, well laminated cherty hands - tuffaceous? 45° to core axis, carry 18 very finely disseminated pyrites.  46.80 - 44.90: dark red, well foliated dike (?) SYBNITIC (?). Contacts at 40-50° to core axis - possibly a sharply defined zone of hematized chemical seliments. Also pinkish green sediments at 44.46- 983 0-1 45.50 45.50 45.50 - 49.60: weakly laminated locally, medium grained, brecciated locally on a 1-2 mm. scale. Laminations at 45.60 m. dip 50° to the core axis.  49.60 - 51.28: well laminated at 35° to the core axis. steepening of selected sets of laminations.  MAIN MINERALIZED ZONE  This zone is composed of an upper variably silicified.	40.98 - 42.50; tectonically trecolated locally; lower contact is  SEDIMENTS  Medium green, fine to very fire grained, well laminated and moderatealy to strongly chloritized. Generall non-silicified. Many non-laminated, generally coarser grained zones, (1.0-1.5 mm. clasts), upgements zone is weakly trecolated and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45: Laminations at 40° to core axis.  45.50: Laminations at 40° to core axis.  44.83 - 45.17: strongly brecolated, laminations disrupted.  45.50: numerous black, well laminated cherty bands - threfaceous, 45° to core axis, carry 18 very finely disseminated pyrite.  46.517 - 45.50: numerous black, well foliated dike (7) SYENITIC (7).  57.51 - 44.90: dark red, well foliated dike (7) SYENITIC (7).  67.52 - 44.90: dark red, well foliated dike (7) SYENITIC (7).  67.53 - 44.90: weakly laminated locally, medium grained, brecolated locally on a 1-2 mm. esale.  67.55 - 49.60: weakly laminated locally, medium grained, brecolated locally on a 1-2 mm. esale.  67.55 - 49.50: weakly laminated at 30°c the core axis. steepening 984 0-1 49.50 49.50 1.00 to 49.50 at 51.00 Noderate carbonatization 985 0-1 49.50 50.50 1.00 m. dip 50° to the core axis.  67.56 - 51.28: wall laminated at 50°c to the core axis.  67.57 - 49.50: well laminated sets of laminations.  67.58 - 49.50: wall laminated at 50°c to the core axis.  67.59 - 49.50: selected sets of laminations.  67.50 - 49.50: 50.50 1.00	40.98 - 42.50; tectonically brecciated locally; lower contact is  SEDIMENTS  Medium green, fine to very fine grained, well laminated and moderately to strongly chloritized. Generall non-silicitied.  Meny non-laminated, generally coarser grained and sheared to a depth of 44.1 m. Most of sediments are probably tuffaceous.  44.45; laminations at 40° to core axis.  45.50; laminations at 45° to core axis.  45.17 - 45.50; numerous black, well laminated cherty bands - tuffaceous? 45° to core axis, exerty la very finely disseminated pyrite.  46.80 - 44.90; dark red, well foliated byrite.  47.50 - 49.60; weakly laminated locally on a l-2 ms. scale.  18.50 - 49.60; weakly laminated locally, medium grained, brechasted locally on a l-2 ms. scale.  18.50 - 49.60; well laminated at 35° to the core axis. steepening of selected sets of laminations.  49.60 - 51.28; well laminated at 35° to the core axis. steepening 984 0-1 49.50 50.50 1.00  MAIN MINERALIZED ZONE  This zone is composed of an upper variably silicified  This zone is composed of an upper variably silicified

HOLE NO. MC-83-35 NAME OF PROPERTY\_\_\_ McDermott

SHEET NO. L

4 of 8

	53.76		366-110				51.28				FROM	FOOTAG	
	68.12						53.76				70	AGE.	
Dark purple-grey, aphanitic to fine grained, generally well laminated but brecciation often destroys sedimentary textures and structures. Numerous cream coloured feldspathized (?) zones are superimposed on	MAIN SILICIFIED ZONE	53.60 - 53.76: FAULT ZONE - post silicification brecciation, chloritized fractures; silicified fragments up to 2 cm. in size in a fractures chloritized matrix.	52.66 - 53.60: well laminated at 50° to core axis, 40-50% silicified.	52.01 - 52.66: Massive to very weakly laminated, same reddish silicified clasts up to 15 mm.	51.28 - 51.53: very strongly silicified.	Dark green, aphanitic to very fine grained, moderately chloritized with abundant purple-grey strongly silicified sections. The zone is well laminated with a few medium grained, non-laminated sections. Silicification is initially confined to small zones of brecciation then expands to cover sections of non-brecciated rock. Minor pink quartz - carbonate veins up to 1 cm. thickness are noted in this unit.	SILICIFIED SEDIMENTS	alternating silicified and chloritized rock.	hibit recognizeable sedimentary	ng the main silicified zone. Both		DESCRIPTION	
989 990			-			<b>L</b>	-	988	987	986	, v o		] .
3-4								1-3	1-3	1-3	1065		
53.76								52.	52.	51.	FROM	SAN	
6 54.76 6 55.76		-		·				52.9153.76	52.0652.91	51.2152.06	Ц.	SAMPLE	
<u> </u>	<u> </u>												
1.00	<del></del>							0.85	0.85	0.85	TOTAL		
											30		
•				_			-						
0.03								0.01	0.01	0.01	02/TON	ASSAYS	
					_						02:TON	]	
											<u> </u>	1	

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FOOTAGE	Ä		İ	ŀ	SAMPLE	in				ASSAYS		
FROM	8	DESCRIPTION	2 0	% SULPH	FROM	FOOT AGE	E	*	*	02/70#	02 TON	
		high degree of silicification. C	992	5-7	56.76	57.76				0.04		
		thized rock contains higher (10-12%) pyrites, than the purple-grey rock (5-7% pyrite).	993	7-9	57.76	58.36	6 0.60			0.05		
		rauit zones are noted. eased fracturing, local ment of clay seams.	994	7-9	58.36	58.96	6 0.60	<del></del> -		0.06		
		54.89 - 55.23: feldspathized, occasional chloritized fractures, carries 10-12% pyrite.										
		purple-grey, spotty feldspathization clocally, occasional chloritized fractures with slickensides pitching at 20° to 60°. Some individual darts up to 2 mm turfaceous. Averages 7-9% pyrite as a very fine dissemination and as clots of crystals up to 4 mm. across.	9 9 9 5 S	995 10	58.96 59.66	59.66 60.36	6 0.70			0.09		
ONTO - 366-116		56.76 - 58.96: banded cream coloured and purple-grey rock, well laminated, extremely convoluted with very tight folding - soft sediment slumping, particularly at 57.96-5816(recumbant folds).										
		.55: laminations at 30° to core										
SE CIMITE	<u>-</u>	Cloumed,		•								
LANGRIDA	·	loritized pa										

HOLE NO	NAME OF
Mc-83-35	F PROPERTY

McDermott

SHEET NO.

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HOLE NO. .

ANGRIDGE LIMITED TORONTO \_366-1168 68.12 E JOK FOOTAGE 75.76 7 61.25 -60.60: 62.31 - 64.49: sil. rock. Major silicified zones are located at 69.09-69.67, 69.91-70.72 (2 cm. chloritized mylonite plane at 70.15), 71.90-72.81, 74.92-75.12 and 75.29-75.76. Many smaller zones are observed and total 60.36 -Dark purple-grey to green, fine to very fine grained variably brecciated zone of transition from intensely SILICIFIED SEDIMENT 66.60 - 68.12: silicified rock to non-silicified rock. Degree of 64.49 - 66.60: brecciation. Silicification is generally related to zones of silicification and amount decrease with depth. 62.31: 61.25: Average 1% pyrite increases to 3% in brecciated with angular moderately grained with 2-4 mm. dark green crystal: FAULT - 5 mm. green clay seam at 60-70° dark grey, well laminated, locally FAULT ZONE - strongly fractured and chloritized. purple-grey matrix. Breccia can often be re-assembled into whole rock. Relic laminations locally - eg. 45 to core feldspathized fragments in a dark sediments - very weakly magnetic. 10% angular fragments of silicified to core axis. veins carrying quartz grit. brecciated, abundant 3mm. pink carbonate as at 62.31-64.49 - more abundant carbonate veining. Trace chalcopyrite [1204] 1-3 |67.31 |68.12 chloritized fractures and pink in carbonate possibly chloritized biotite - carrie DESCRIPTION റ 1206 1205 1209 997 |1-3 1210 1-2 72.81 73.90 1208 1207 1000| 3-5 |63.31 |64.31 1202| 3-5 |65.31 |66.3] 1201 | 3-5 | 64.31 | 65.31 998 NIL |61.25 |62.31 .203 2-4 66.31 67.31 999 4-6 62.31 63.31 Ż O 1-2|68.12|69.09 2-3 71.55 72.81 2-3 | 69.91 | 70.72 1-2 69.09 69.91 1 |70.72 |71.55 IDES 60.36 61.25 FROM SAMPLE FOOTAGE 1.09 0.89 0.83 1006 0.82 0.97 TOTAL 0.01 **ASSAYS** Trac 0.01 0.01 0.01 0.01 0.02 0.01 02/TON Trac 0.01 0.01 0.01 02, TON

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֓֞֞֟֟֟ <b>֓</b>	FOOTAGE	<u>m</u>					SAMPLE	E				ASSAYS		
TO IN	$\dot{\dashv}$	70		השכת אוד ביסא	Z 0	% SULPH,	FROM	FOOTAGE TO	TOTAL	11	*	02/TON	OZ TON	
			silicified rock ac	accounts for 51% of the section.	1211	1-2	73.90	74.92	1.02			0.01		
					1212	1-2	74.92	75.76	0.84			0.02		
75.76		91.74	SEDIMENT											
<u> </u>			_	ned, moderately	12113	1-0	75.76	76.59	0.83			0.01		
			ritized, nes well	and moderately brecciated.   76.5 meters - parting is	1214	<u>유</u>	76.59	77.42	0.83			0.01		
			y parallel developed a	ding although lamination are not of meters. Irregular bedding	1215	<u>-</u>	77.42	78.32	0.90			Trace		
			(8) (8)	pink quartz veins locally ped parallel to laminations.	1216	<b>–</b>	78.32	79.32	1.00			Trace		
			Pyrite average 1-2	T-Se WIEH UP to se Tocatty.	1217	<u>구</u>	79.32	80.32	1.00			0.01		
			77.42 - 78.32: IN to ch	INTRUSIVE - Medium to dark green, fine to medium grained with well developed chills at contacts. Carries 5-10% siliceous xenoliths; weakly magnetic.										
			81.09: la	laminations at 45° to core axis.				<u> </u>	<u> </u>					
66-1168	<del></del>		84.00: fa mo me	fault plane at 40° to core axis seperates moderately laminated rock above from medium grained non-laminated rock below.	1218	0-1	82.00	83.00	1.00			0.01		
TORONTO — 36		· · ·	85.93 - 89.50: gr we ca re	gradually becomes well laminated, very well parted throughout, moderately carbonatized, carbonate appears to replace selected lamination sets.										
ED - 1			86.50: pa	parting at 65% to core axis.										
E LIMITI			87.90: can	carbonate altered laminations at 70° to core axis.	1219	<u>-</u> -	87.60	88.55	0.95			0.04		
ANGRIDG			87.60 - 88.55: mc	moderately brecciated, weakly silicified 3-4% pyrite			•				•			
									2					

McDermott

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SHEET NO.\_\_

PRODYAGE  DESCRIPTION  DESCRIPT		LANGRIDGE LIMITED - TORONTO - 366-1168		
DESCRIPTION  DESCR			FROM	F00
DESCRIPTION  DESCRIPTION  TO ASSAYS  10.25: medium grained, massive, weakly breconiated.  91.74: shearing (7) at 65° to core axis - planes of increase in size away from mylornitized planes. Graded bads (77) locally.  END OF HOLE  CASING PULLED  SAMPLE  ASSAYS  10.104  1		-	70	TAGE
DESCRIPTION  DESCRIPTION  TO THE TOTAL ASSAYS  MO THE TOTAL AT A 1 01/701  THE TOTAL ASSAYS  THE TOTAL AS A 1 01/701  THE		"ті		
SAMPLE   ASSAYS		medium grained, shearing (?) at very dark greer increase in siz Graded beds (?? END OF HOLE CASING PULLED		DESCRIPTION
FROM TO TOTAL 3 OZ/TON				
FOOTAGE 707AL 3 02/10H		·	- 530 F	
TO TOTAL 3 OZ. TOM			1	SAMPL
707AL 3 02/TOM	_		10	Ē
ASSAYS			TOTAL	
OZ/100 ASSAYS	<u></u>		-1 -2	
			22	
			02/104	ASSAY
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HOLE NO. MC-83-37 SHEET NO. 1 OF 5

LANGRIDGE	AITED - TOR		<del>-</del> 366-1168						<b>n</b> c		<del>.</del> .
		32.65		15.85	Э	FROM	0 0	STARTED	ELEVATION	-1	NAME O
		67.25	T. 1.	32.65	15.85	70	TAGE	o August	) = 10	1	OF PROF
	Medium to dark green, generally medium to coarse grained with occasional fine grained phases. A zone of ground core at upper contact is thought to be the chilled margin. Some variation in texture is noted below 50 meters which may reflect proximity to lower contact.	DIORITE	Dark green, fine to medium grained, locally coarse grained, locally silicified, often associated with brecciation. Weakly to moderately tectonically brecciated locally. Weakly to moderately fractured - breaks are strongly chloritized and often hematized. Pyrite content averages 0-1% and does not seem to increase with brecciation or silicification. Up to 1% chalcopyrite is associated with quartz-carbonate veining locally (eg. 24.85-24.89 m). These veins may carry high pyrite contents - up to 40%.  18.02 - 20.40: weakly to moderately silicified.  22.82 - 23.93: weakly brecciated, moderately silicified.  23.82 - 26.20: weakly to moderately silicified; quartz-carbonate vein at 24.85-24.89 m carries 40% pyrite, 1% chalcopyrite.  28.90: chalcopyrite. carbonated shear at 40-450 to core axis carries 1% chalcopyrite.  chalcopyrite.  chalcopyrite.	BASALT	OVERBURDEN			5, 1983 FINISHED August 11, 1983	344° SIB -65°	123	PROPERTY Lenora FOOT
	r n the		locally derately ured - content or veins onate						-	-	FOOTAGE D
			C 1329 1330 1331 1332 1333 1333			и О.		-	H	-650	
			0-1 0-1 0-1 0-1			SUL PH-				1	AZIMUTH
			18.02 19.21 22.82 23.80 24.80 25.45			FROM	SAMP				FOOTAGE
			19.21 20.40 23.80 24.80 25.45 26.20			FOOT AGE	LE		$\prod$	1	A2
	<u> </u>	<u>-</u>	1.19 1.19 0.98 1.00 0.65 0.75			TOTAL					AZIMUTH
		<del>- 1</del>				જ		LOGGI			7 TO L
				-		ж		LOGGED BY A		<b>7</b> 0	REMARKS BO
						OZ/TON	A S S A	A.W. WO		Split f	BQ Core
						NOT/TON	8	WORKMAN		for assay.	Core SHEET NO.
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FOOTAGE	מ			ı	SAMPLE	<sup>m</sup> ]			ASSAYS		
		DESCRIPTION	5	% SULPH		FOOTAGE		_			
				IDES	FROM	70	TOTAL	  -  -			
		32.65 - 42.20: fine to medium grained with several zones carrying pink feldspar phenocrysts up to 3mm - often									
		se grained, occasionally very coarse m sections with crystals up to 5mm. Ans are noted at 60-70° to core axis ck may be highly pyritized over 5cm	· · · · · · · · · · · · · · · · · · ·								
		- 45.05: zone averages 2-3% pyrite.	1335	2-3	44.55	45.05	0.50		tr.		
		46.15 - 49.20: medium to coarse grained; amphibole crystals up to								<del></del>	
		49.20 - 58.70: medium grained, occasional coarse grained phases; fracture surfaces are well plated with thin foils of									
		pyrite - rock carries an average 0-1%. 58.70 - 59.10: fine, locally medium grained.									
		medium grained; rapid gradation						<u>.                                      </u>	_		
		64.07 - 64.18; 65.01 - 65.08: fine grained, dark green intrusives -					·		_		
8		epidotized zone at edge of	) )			i 3	) 	<del></del> -	}	_	
66-116		intrusive; carries 5% pyrite, contact may be at 80-85° to core axis.	1336	·	66.95	6/.30	- -	<del></del>	20.02		
67.25	125.50	BASALT									
TED — TORONT		Dark green, locally grey-green, fine grained to aphanitic, often flow brecciated with angular to sub-rounded fragments up to 3cm. Moderately to weakly chloritized. Fragments are usually harder then the matrix but of the same composition. The uppermost 1 m carries occasional highly lenticular fragments up to 1cm in size - tuff?				l					, -
ANGRIDGE LIMI		.50: flow-top hreccia50: strongly fractured due to shrinkage - quartz-epidote filling; very fine grained flow; rare fragments are strongly epidotized.	1337	. 0-1	71.50	72.50	1.00		r.		
LA											

LANGRIDGE LIMITED - TORONTO - 366-1168

NAME OF
PROPERTY
Leno

Mc-83-37

SHEET NO. 3 OF 5

HOLE NO.

FROM FOOTAGE 70 81.65 -82.03 -82.63 -91.34 - 91.94: 89.55 - 91.3485.85 -84.90 -83.30 - 84.90; 79.62 - 80.35: 91.94 - 92.54: 88.93 - 89.55: 74.50 - 79.62: 92.54 -93.60: 85.85: 86.95 83.30: 83.25 82.63: 82.03: moderately to strongly brecciated, irregularly irregularly silicified - nil to strong locally; well dark green, abundant tensional fractures at top carries fine, 1-3mm clasts of varying lithologies occasional flow breccia fragments; 1-2% pyrite in strongly brecciated - pale green angular fragments sub-angular fragments up to 2cm - well defined moderately to strongly brecciated, fragments are hyaloclastite? - flow top? moderately brecciated - fragments exhibit lmm moderately to strongly silicified; weakly to chloritized, moderately brecciated locally. weakly brecciated, moderately silicified. fine to medium grained, very weakly brecciated concentrated in fractures - average concentration 90.10 m). Strongly silicified at 90.80-91.34 m. three narrow zones of fine grained dark green rock reaction rims. silicified at 75.60-76.00 m. flow top. massive flow, 1-3% pyrite. associated pyrite. hrecciated throughout - carries 5-6% pyrite mostly weakly brecciated, locally silicified (eg. 89.55 in dark green matrix - weak silicification locally incorporated into flow - possibly sediments. 10cm are noted at 84.50 m - flow breccia. possibly more rounded. Sub-rounded fragments up to larger and less distinct (remelting) with depth and possible base of flow — strongly chloritized silicified; abundant carbonate veining with up to 6% (eg. 89.30-89.55 m). lower temperature flow. fractures and rarely rimming fragments; moderately fragments. DESCRIPTION 1342 1343 1338 1347 1346 1345 1344 1340 1348 1341 1339 z O 0-1 0-1 3-5 2 3-5 222 1-3 88.80 89.30 75.60 92.54 90.80 82.63 82.03 91.94 81.65 FROM SAMPLE 91.34 76.00 89.30 90.10 93.60 92.54 82.63 83.25 90.80 0.40 1.06 0.50 0.60 0.60 0.54 TOTAL 0.01 0.01 0.01 cr. Er. tr. 0.02 0.02 **ASSAYS** 02/TOM 02. TON

SHEET NO.

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LANGRIDGE LIMITED - TORONTO - 366-1168	_	
125.50	FROM	F00
127.10	70	FOOTAGE
93.60 - 93.83: g  93.83 -107.05: 1  107.05-108.30: m  1108.30-109.65: m  111.30-111.50: w  111.77-119.92: f  111.77-120.50: m  120.50-122.63: g  125.43-125.50: g  125.43-125.50: g  Strongly sheared, may be sediments.		1
strongly amygdaloidal - relic vesicules up to lcm are well rounded becoming smaller with depth - TOPS UP.  locally tectonically brecciated, weakly to moderately fractured, fine grained becoming medium with depth. Carbonate vein at 100.54-100.80 m - sulphide.  moderately brecciated (locally strong), non-silicified; carries increased pyrite from 107.10-107.65 m at 2-3%, brecciation is tectonic. moderately to strongly brecciated tectonically, non-silicified, becoming very dark grey-green. White carbonate vein.  flow breccia - fragments angular to well rounded. Largest fragments are well rounded and up to 4cm is ize. Non-silicified; up to 7% pyrite concentrate around fragments but overall average is 3-5%. Mos pyrite at 112.00-112.80 m. Some dilatant zones strongly endium green, non-brecciated zone - strongly fractured.  strongly fractured.  green clay finely disseminated.  green clay filled shear at 45° to core axis - FAULT.  NE  NE  RECCIATE AND TOTAL TOT		DESCRIPTION
no C 1349 1350 1425 t 1426 t 1428 1352 1353 1431 1432	z ,	
. 11-1 3 2 3	1023	3 SULPH
107.05 112.00 112.80 113.58 114.43 115.59 117.43 118.43 119.45 120.50 121.50 122.63	FROM	SAMPL
107.65 1112.80 1114.43 1117.43 1118.43 1120.50 122.63	10	E FOOTAGE
0.60 0.80 0.78 0.85 1.16 1.03 0.81 1.00 0.53	TOTAL	
	,	
0	-	 
	02 / TON	ASSAYS
	02 TON	

NAME OF PROPERTY. HOLE NO. I Mc-83-37

Lenora

SHEET NO.

LANGRIDGE LIMITED - TORONTO - 366-1168 127.10 137.46 FROM FOOTAGE 137.46 meters certain laminations highlights the bedding. Individual sets of breccia fragments is moderately to strongly silicified. No near top of unit is brecciated moderately and the matrix to the 132.20-137.46: 127.10-132.20: strongly chloritized sedimentary matrix. laminations are strongly brecciated below 136.49 m and set in a pervasive silicification is noted. fine grained. Sheared parallel to bedding at upper contact. Zone Dark green with white bands and lensitic laminations; fine to very SEDIMENTS brecciated, silicified matrix with very little moderately well laminated, weakly sheared -END OF HOLE carbonate, 0-1% pyrite. CASING PULLED laminations at 135.40 m are at  $45-50^{\circ}$  to core DESCRIPTION Selective silicification of 1572 1573 1571 1354 1568 1569 1570 1567 1563 1564 1565 1566 z o <u>-</u>1 1-2 **23**0 135.30 136.25 137.00 132.95 130.95 127.95 134.30 133.95 131.95 129.95 128.95 FROM SAMPLE 137.46 136.25 135.30 134.30 133.95 130.95 129.95 132.95 131.95 70 0.75 1.00 1.00 1.00 1.00 1.00 0.95 1.00 TOTAL . . . Cr. 0.03 tr. tr. **ASSAYS** 02/TON 5 OF 5 02 TON

AME OF	AME OF PROPERTY _	LENORA	•
0 m NO.	MC-83-38	OLE NOMC=83=38 LENGTH106.98 meters	• 1
OC ATION			•
ATITUDE	ATITUDE 14+00 W	DEPARTURE 0+35 S	•
-EVATION		AZIMUTH 3440 DIP -450	•
TARTED_	August 11,	TARTED AUGUST 11, 1983 FINISHED AUGUST 23, 1983	1

	106.90	0	FOOTAGE
	-45 <sup>0</sup>	_45 <sup>0</sup>	DIP
			AZIMUTH
			AZIMUTH FOOTAGE
			G G
			AZIMUTH

HOLE NO. MC-83-38 SHEET NO. 1 OF 5

Core split for analysis.

LOGGED BY A.W. WORKMAN

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LENORA

-83-38 SHEET NO.

2 OF 5

41.00 - 42.64; generally massive flow - minor small braccia zones locally - radiating from fracture systems - minor small braccia zones locally - radiating from fracture systems - minor small braccia zones locally - radiating from fracture systems - minor small braccia zones locally - radiating from fracture systems - minor small braccia zones locally - radiating from fracture systems - minor small braccia zones locally - radiating from fracture systems - minor small line showen li	41.00 - 42.64; generally massive flow - minor small breach zones  41.00 - 42.64; generally massive flow - minor small breach zones  42.64 - 44.93; pillowed salidification locally - no pyrite  association.  42.64 - 44.93; pillowed salidification locally - no pyrite  association.  44.93 - 45.98; generally more related so controlly (e.g., 43.10) 1506 0-2 43.64 41.27 0.63  arcmalous number of pillow salvages between  44.93 - 45.98; generally more-alidified to very weakly silidified;  ron-breachased measure flow.  45.98 - 47.99; pillowed, weakly silidified to very weakly silidified;  ron-breachased measure flow associated with narrow fracture  20.90 - 57.38; pillowed - sample of inter-pillow salvages and pyritized measure flow processed pyrites accept in solvages (-54.5 above 1) a warrage;  breachased - strongly seldotized, massive to solvages (-54.5 above 1) a warrage;  consider weakly breachased flow, fine grained to servinyly silidified;  consider - strongly seldotized in farmatized fractures  57.38 - 58.98; breachased, selicification is insegnate.  66.70 - 67.20; massive, mockersely breachased locally, minor  medience silidification locally was contracted to severe the severe control of the s				1	Ì	SAMBI	n				ACC AYC	
### 41.00 - 42.64; generally massive flow - minor small bracciae cones	### 41.00 - 42.64; generally massive flow - minor small bacomes nature in the problem of the pro	700 200	1	DESCRIPTION	T	2 SULP	1	FOOTAGE		T		1	
### 1.00 - 42.64 generally messive flow - minor small brecois zones related silicification locally - no pyrite association.  #### 1.00 - 42.64   1.00   ### 1.00   ##	Al.00 - 42.64 generally massive flow - minor small brackle zones  related silicification locally - no pyrite  association.  42.64 - 44.93 pillowed acquirece - moderately to strongly aboration maker of pillows slowest becken  44.93 pillowed acquirece - moderately to strongly silicified; printiped squirece - moderately results flow.  45.96 - 47.39 pillowed - sample of inter-pillow guidetized and positive on a cm scale - associated with narrow fracture  50.90 - 57.38 pillowed - sample of inter-pillow guidetized and printiped material removed for assay (51.20-51.30).  57.38 - 95.98 preciated material removed for assay (51.20-51.30).  57.38 - 95.98 preciated - encough encounted with narrow fracture sporty silicification locally secondated pyrite except in selvages (3-54 above 18 average). Rock is basel flow, lower 1.0 m is less pillowed.  57.38 - 95.98 preciated - encough guidetized and possible basel flow, lower 1.0 m is less pillowed.  57.38 - 95.98 pillowed - similar to 50.90-7.38 m - pillow centres pillow centres pillowed.  60.03 - 62.83 pillowed - similar to 50.90-7.38 m - pillow centres pillowed massive, moderately bracciated locally minor massive, moderately bracciated locally minor massive, moderately bracciated locally minor massive, moderately moderated possible bracciated and boally minor pillow centres pillowed active silicification locally minor pillow centres pillowed pillowed active pillowed	_			z o	1069	ΙŤ	70	П			02/TON	
related silicification locally - method september - minor related silicification locally - method silicification locally - method september - minor related silicification locally - method september - minor september - minor pritts - association.  42.64 - 44.93 philosed sequence - moderately to strongly (eg. 43.10) 1506 0-2 43.64 44.27 0.63 anramalous number of pillow salvages between 44.93 - 45.98 pritted master of pillow salvages between 44.93 - 45.98 pritted master flow, 47.93 philosed - sample of inter-pillow spidorised and pritting master of minor period for assy (51.20-51.0) pritting master of minor period for assy (51.20-51.0) 1508 2-3 51.20 51.30 0.10 connect crystalline calcite in rodds. Pillows have spotty silicification locally associated with 5-10cm brechised strongly fractured and locally searched with 5-20cm brechised - strongly periodized and locally sheared - possible breal flow, lower 10 m is less pillowed.  57.38 - 58.981 brechised - strongly periodized indicated by the except strongly fractured and locally sheared possible breal flow, lower 10 m is less pillowed.  57.38 - 58.981 brechised - strongly periodized moderately to strongly fractured and locally minor moderates silicification locally minor moderates silicification locally with calcite locally minor moderates silicificated of low, time grained to locally minor moderates silicificated by facelated locally, minor moderate silicificated of locally with calcite l	related silicification locally - no gyrites association.  12.64 - 44.93 pillowed sequence - moderately to strongly alteriated with 1-2mm variolites locally (eg. 43.10) 1505 0-2 43.64 43.64 1.00 alleriated with 1-2mm variolites locally (eg. 43.10) 1506 0-2 43.64 44.27 0.63 armalous number of pillow slivages between 44.93 - 45.98 pillowed weakly silicified locally. 47.99 - 50.90 massive - minor penetrative silicification locally or a on scals - associated with narrow fracture  50.90 - 57.38: pillowed - sample of inter-pillow epiderized and pyritized material removed for assay (91.20-51.30). Correst crystalline calcite in volds. pillows have spotty silicified: and locally associated with 5-10cm brooids zones - no apparent increased pyrite except strongly fractured and locally sheared - possible braciated action, lower 1.0 m is less pillowed.  50.90 - 57.38: 58.98: brecciated - strongly spidotized, molerated to strongly fractured and locally sheared - possible bracial flow, lower 1.0 m is less pillowed.  59.88 - 60.03: massive, weakly brecciated flow, fine grained to vary fine grained to vary fine grained to vary fine grained to locally minor moderate with brecciated, silicification is irregular.  60.70 - 61.20: krecciated - strongly consensuated fractures 1511 1-2 61.45 6.99  67.20 - 68.00: epidotized, brecciated, strongly hemetized fractures 1514 1-2 67.20 67.70 69.70 1.00  1516 1-2 68.70 69.70 1.00		1	flow - minor small breccia									
### 42.64 - 44.93 pillowed sequence - moderately to strongly slicified with 1-2mm variolites locally (eg. 43.10) 1506 0-2 43.64 44.27 0.63 anomalous number of pillow selvages between 44.50-44.90 with 5-108 pyrites in selvages.  ### 44.93 - 45.98 generally non-silicified to very weakly silicified; ron-brecolated measure flow.  ### 45.94.49 outh 5-108 pyrites in selvages.  ### 47.99 - 45.98 generally non-silicified locally.  ### 47.99 - 57.38 pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.00). 1508 2-3 51.20 51.30 on a cm scale - associated with narrow fracture profits of the principal material removed for assay (51.20-51.00). 1508 2-3 51.20 51.30 on a cm scale - associated with narrow fracture sporty silicification locally associated with 5-10m brecola zones - no apparent increased pyrite except in selvages (3-58 above 18 average). Nook is strongly fractured and locally selected by the beal flow, Jower 1.0 m is less pillowed.  ### 55.38 - 58.98 brecolated - strongly epidotized, moderately to strongly silicified.  ### 55.38 - 68.00 measire, weakly brecolated flow, fine grained to 1500 0-1 59.55 60.55 1.00 wery fine grained.  ### 66.03 - 62.83 pillowed - simular to 50.90-57.38 m - pillow centres 1511 1-2 61.45 62.14 0.69 are weakly brecolated Josally minor moderate silicification locally - white calcite locally in dilatent zones.  ### 66.70 - 67.20 brecolated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 chasel flow?  ### 67.20 - 68.00 epidotized, brecolated, strongly hematized fractures 1514 1-2 67.20 67.70 0.50 chasel flow?	### 42.64 - 44.93 pillowed sequence - moderately to strongly			ng from fracture systems - m ntion locally - no pyrite									
#2.44 - 44.91 Pillowed sequence - moderately to etrorshy silicified with 1-2mm writolites locally (eg. 43.10) 1506 0-2 42.64 44.27 0.63  #4.50 - 44.90 with 5-10% pyrite in selvages.  #4.93 - 45.96: generally non-silicified to very weakly silicified; perculated massive flow.  #4.93 - 45.96: generally non-silicified to very weakly silicified; principled in selvages.  #4.93 - 45.96: generally non-silicified to very weakly silicified; principled massive flow.  #4.93 - 45.96: generally non-silicified to very weakly silicified; principled massive flow.  #4.93 - 45.96: generally non-silicified to very weakly silicified; principled massive flow.  #4.93 - 45.96: generally non-silicified to very weakly silicified; principled massive massive flow associated with narrow fracture  #50.90 - 57.38: pillowed - sample of inter-pillow epidotized and pyrite except in selvages (3-56 above it a wearsge). Rock is  #50.90 - 57.38: pillowed - strongly epidotized, moderately to etroryly silicified.  #50.03 - 62.83: pillowed - similar to 50.90-57.38 m - pillow centres	#2.04 - 44.93   10.10wed sequence - moderate by to etrongly   1005 0-2   42.64   43.64   43.64   43.64   43.64   43.64   44.95	·		association.									
At.93 - 45.98; days number of pillow selvages between  44.93 - 45.98; days number of pillow selvages;  44.93 - 45.98; days number of pillow systems;  45.98 - 47.39; pillowed, weakly silicified to very weakly silicified;  50.90 - 57.38; pillowed, veakly silicified locally.  47.39 - 50.90; massive - minor penetrative silicification locally on a on acale - associated for assay (51.20-51.30).  Coarsely crystalline calcite in wide. Pillow shared with 5-10cm brecolated aconse - no apparent increased pyrite except in selvages (3-5% above 18 average). Rock is strongly fractured and locally sheared - possible beast flow, lower 1.0 mis less pillowed.  57.38 - 58.98; brecolated - strongly spidotized, moderately to strongly silicified.  59.88 - 60.03; massive, weakly brecolated flow, fine grained to very time grained.  60.03 - 62.83; pillowed - similar tooles.  60.03 - 62.81; pillowed - similar tooles.  60.03 - weakly brecolated, silicification is irregular.  62.83 - 66.70; massive, moderately brecolated locally, minor moderate silicification locally, minor moderate silicification is irregular.  66.70 - 67.20; brecolated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base) pillowed, brecolated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00 - base1 flow?  1500 - 50.70 0.50 0.50 0.50 0.50 0.50 0.50 0.5	anomalous number of pillow selvages between  44.93 - 45.98; generally non-mildicified to very weakly silicified; non-breciated massive flow.  45.98 - 47.39; pillowed, weakly silicified locally.  45.98 - 47.39; pillowed, weakly silicification locally on a conecal - associated with narrow fracture somes.  50.90 - 57.38; pillowed - sample of inter-pillow epidotized and pyrittzed material removed for assay (51.20-51.30).  Coarsely crystalline calcite in voide, pillows have spotty silicification locally associated with 5-10cm brecciated - coarsely crystalline calcite in voide, pillows have spotty silicification locally associated with 5-10cm brecciated - coarsely crystalline calcite in voide, pillows have spotty silicification locally associated with 5-10cm brecciated - no apparent increased pyrite except in salvages (10-55 showe il a verzage). Rock is strongly fractured and locally sheared - possible basel flow, Lower 1.0 m is less pillowed.  57.38 - 56.96; brecciated - strongly spidotized, moderately to strongly silicified.  59.88 - 60.03; massive, weakly brecciated flow, fine grained to very fine grained.  59.89 - 66.70; massive, weakly brecciated silicification is irregular.  62.83 - 66.70; massive, weakly brecciated, silicification is irregular.  62.83 - 66.70; massive, moderately tones.  66.70 - 67.20; for 67.20; for 67.20; for 67.20; for 69.70; for 67.20; for 67		1					43.64				200	
44.93 - 45.98; generally non-silicified to very weakly silicified;  45.96 - 47.39; pillowed, weakly silicified to very weakly silicified;  47.39 - 50.90; messive - muro penetrative silicification locally on a on scale - associated with narrow fracture  200 - 57.38; pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.0-51.30).  Coarsely crystalline calcite in voids. Pillows have spotty silicification locally associated with 5-10cm brecolated somes - no apparent increased pyrite except in selvages (-54 shove li a verage). Rock is strongly fractured and locally sheared - possible basal flow, lower 1.0 m is less pillowed.  59.88 - 60.03; messive, weakly brecolated moderately to strongly silicification locally and provided to very fine grained.  60.03 - 62.83; pillowed - similar to 50.90-57.38 m - pillow centres 1511 1-2 61.45 61.45 0.90 pillowed - similar to 50.90-57.38 m - pillow centres 1511 1-2 61.45 61.45 0.90 messive, moderately brecolated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20; messive, moderated, moderated fractures 1511 1-2 62.14 62.83 0.69 theoclated - strongly chloritized - near flow margin 1513 1-2 67.70 67.70 0.50 (base)?  67.20 - 68.00; epidotized, hereclated, strongly hematized fractures 1514 1-2 67.70 67.70 0.50 1516 1-2 68.70 1.00	44.93 - 45.98; generally non-calibidided to very weakly silicified; non-brecciated massive flow.  45.98 - 47.39; pillowed, weakly silicified locally.  47.39 - 50.90; massive - mirror penetrative silicification locally on a conscala - associated with narrow fracture zones.  50.90 - 57.38; pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30).  Coarsely crystalline calcite in voides. Pillows have sportly silicification locally associated with 5-10cm brecciated - no apparent increased pyrite except in selvages (3-5% above 18 average). Rock is strongly fractured and locally sheared - possible basel flow, brecciated - strongly spidotized, molerately to strongly silicified.  57.38 - 58.98; brecciated - strongly spidotized, molerately to strongly silicified.  60.03 - 62.83; pillowed - similar to 50.90-57.38 m - pillow centres listi coally are weakly brecciated, silicification is irregular.  62.83 - 66.70; massive, moderates, silicification is irregular.  62.83 - 66.70; massive, moderates, silicification is irregular.  62.83 - 66.70; moderate silicification coally - white calcite locally in dilatant zones.  62.83 - 68.00; epidotized, brecciated, strongly hematized fractures listi 1-2 66.70 67.20 0.50 (hase)?  67.20 - 68.00; epidotized, brecciated, strongly hematized fractures listi 1-2 67.70 68.70 1.00 - basel flow?							44.90				0.0	
44.93 - 45.96; generally non-silicified to very weakly silicified; 145.96 - 47.39; pillowed, weakly silicified locally. 145.96 - 47.39; pillowed, weakly silicified locally. 147.39 - 50.90; massive - minor penetrative silicification locally on a cm scale - associated with narrow fracture 2010	44.93 - 45.98 generally non-silicified to very weakly silicified; non-recontated messive flow. 47.39 - 50.90 massive - minor penetrative silicification locally on a cm scale - associated with narrow fracture 50.90 - 57.38; pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30). 50.90 - 57.38; pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30). 50.90 - 57.38; pillowed - sample of inter-pillow epidotized and pyritized moderated with 5-10cm breach acones - no apparent increased pyrite except in selvages (3-5% above 1% average). Rock is strongly silicification locally associated possible basal flow, lower 10 m is less pillowed. 57.38 - 58.98; breachated silicificated, moderately to strongly silicified. 59.88 - 60.03; massive, weakly breachated flow, fine grained to very fine grained. 60.03 - 62.83; pillowed - similar to 50.90-57.88 m - pillow centres 1511 1-2 61.45 62.44 0.69 are weakly breachated, silicification is irregular. 62.83 - 66.70; massive, moderately trecchated locally, minor moderates silicificated locally, minor moderates silicificated locally, minor breachated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base)? 67.20 - 68.00; epidotized, breachated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00 - basal flow?			44.50-44.90 with 5-10% pyrite in selvages.		_							
A5.98 - 47.39: pillowed, weakly silicified locally.  47.39 - 50.90: massive - minor penetrative silicification locally on a cm scale - associated with narrow fracture zones.  50.90 - 57.38: pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30).  Coarsely crystalline calcite in voids. pillows have sporty silicification locally associated with 5-10cm breccia zones - no apparent increased pyrite except in selvages (3-5% above 1% average). Rock is strongly fractured and locally sheared - possible basal flow, lower 10 m is less pillowed.  57.38 - 58.98: brecciated - strongly epidotized, moderately to strongly silicified.  59.88 - 60.03: massive, weakly brecciated flow, fine grained to very fine grained.  60.03 - 62.83: pillowed - similar to 50.90-57.38 m - pillow centres lill 1-2 61.45 62.14 0.90 are weakly brecciated, silicification is irregular. moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20: brecciated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base)?  67.20 - 68.00: pidotized, brecciated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00 1516 1-2 68.70 68.70 1.00	A5.98 - 47.39; pillowed, weakly silicified locally.  47.39 - 50.90; massive - minor penetrative silicification locally on a om scale - associated with narrow fracture somes.  50.90 - 57.38; pillowed = sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30).  Coarsely crystalline calcite in voids. Pillows have spotty silicification locally associated byrite except in selvages (3-58 above 18 average). Rock is strongly fractured and locally sheared - possible basel flow, lower 1.0 m is less pillowed.  57.38 - 56.98; brecciated - strongly spidotized, moderately to strongly slindfied.  59.88 - 66.01; massive, weakly brecciated flow, fine grained to strongly slindfied are weakly brecciated, slindfiedcation is irregular.  62.83 - 66.70; massive, moderately brocciated locally, minor moderate slindification locally - white calcite brecciated - strongly choritized - near flow margin   1512   1-2   61.45   62.14   62.83   66.70   65.20   66.00; epidotized, brecciated, strongly hematized fractures   1511   1-2   67.70   68.70   69.70   1.00   1509   69.70   1.00		ı	very weakly									
47.39 = 50.90; massive = minor penetrative silicification locally on a cm scale = associated with narrow fracture somes.  50.90 = 57.38; pillowed = sample of inter-pillow epidorized and pyritized material removed for assay (51.20-51.30). 1508 2-3 51.20 51.30 0.10 Coarsely crystalline calcite in voids. Pillows have specification locally associated with 5-10cm breccia zones = no apparent increased pyrite except in selvages (3-5% above 1% average). Rock is strongly fractured and locally sheared = possible brecciated = strongly spidorized, moderately to strongly spidorized, moderately to strongly spidorized, moderately to strongly spidorized, moderately to strongly spidorized, moderately to strongly spidorized, moderately to strongly spidorized, moderately to pillows centres 1511 1-2 61.45 61.45 60.95 61.65 pillowed = similar to 50.90-57.38 m = pillow centres 1511 1-2 62.14 62.83 66.70 for measive, moderately brecciated locally, minor moderate silicification locally = white calcite locally in dilatent zones.  66.70 = 67.20; brecciated = strongly chloritized = near flow margin 1513 1-2 66.70 67.20 0.50 (base) pillows; brecciated, strongly hematized fractures 1511 1-2 66.70 67.70 0.50 - basel flow?  - basel flow?  67.20 = 68.770 68.770 0.50 1.00	47.39 = 50.90; measive - minor penetrative silicification locally on a on scale - associated with narrow fracture  50.90 = 57.38; pillowed - sample of inter-pillow epidotized and pritized material removed for assay (51.20-51.30). 1508 2-3 51.20 51.30 0.10 carses y crystalline calcite in voids. Pillows have sportly silicification locally associated with 5-10cm breccia zones - no apparent increased pyrite except in selvages (3-5% above 10 minor late with 5-10cm brecciated - strongly epidotized, moderately to strongly silicified.  57.38 = 58.98; brecciated - strongly epidotized, moderately to strongly silicified.  59.88 = 60.03; measive, weakly brecciated flow, fine grained to very fine grained.  60.03 = 62.83; pillowed - similar to 50.90-57.38 m - pillow centres 1511 1-2 61.45 62.14 0.99 are weakly brecciated silicification is irregular.  62.83 = 66.70; measive, moderately brecciated locally, minor moderate silicification locally, minor moderate silicification locally, minor brecciated - strongly chloritized - near flow margin 1513 1-2 62.14 62.83 0.69 (57.20 - 68.00; epidotized, brecciated, strongly hematized fractures 1514 1-2 67.70 65.70 1.00 - basal flow?			non-brecciated massive flow.		_							
on a cm scale - associated with narrow fracture  50.90 - 57.38; pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30).  Coarsely crystalline calcite in voids. Pillows have sporty silicification locally associated with 5-10cm breccia zones - no apparent increased pyrite except in selvages (3-5 above 18 average). Rock is strongly fractured and locally associated with 5-10cm brecciated - strongly epidotized, moderately to strongly silicified.  57.38 - 56.98; brecciated flow, lower 1.0 m is less pillowed.  59.88 - 60.03; massive, weakly brecciated flow, fine grained to very fine grained.  60.03 - 62.83; pillowed - similar to 50.90-57.38 m - pillow centres limit 2-2 61.45 0.90 are weakly brecciated, silicification is irregular.  62.83 - 66.70; massive, moderately brecciated coally - white calcite locally in dilatant zones.  66.70 - 67.20; brecciated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50  Chasel?  67.20 - 68.00; peldotized, brecciated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00  1516 1-2 68.70 69.70 1.00	on a cm scale - associated with narrow fracture  50.90 - 57.38; pillowed - sample of inter-pillow epidotized and pyritized material removed for assay (51.20-51.30). 1508  Coarsely crystalline calcite in voids. Pillows have spotty silicification locally associated with 5-10cm breccia zones - no apparent increased pyrite except in selvages (3-58 above 18 average). Rock is strongly fractured and locally sheared - possible basal flow, lower 1.0 m is less pillowed.  57.38 - 58.98; brecciated - strongly epidotized, moderately to strongly silicificat.  59.89 - 60.03; massive, weakly brecciated flow, fine grained to very firm grained.  60.03 - 62.83; pillowed - similar to 50.90-57.38 m - pillow centres 1511 1-2 61.45 0.90 are weakly brecciated, silicification is irregular.  62.83 - 66.70; massive, moderately brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20; brecciated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base)?  67.20 - 68.00; epidotized, brecciated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00 1516 1-2 68.70 69.70 1.00		1 1	representative silicities of the second			_						
pones.    Solution   S	pritized material removed for assay (51.20-51.30).    Source by crystalline calcie in voids. Pillows have spotty silicification locally associated with 5-10cm breccia zones - no apparent increased pyrite except in selvages (3-% above 18 average). Rock is strongly fractured and locally sheared - possible basal flow, lower 1.0 m is less pillowed.    Source by crystalline calcie in voids. Pillow have spotty silicification locally associated with 5-10cm brecciated zones - no apparent increased pyrite except in selvages (3-% above 18 average). Rock is strongly fractured and locally sheared - possible basal flow, lower 1.0 m is less pillowed.    Source by crystalline calcie of the possible basal flow, lower 1.0 m is less pillowed.   Source basal flow, lower 1.0 m is less pillowed.   Source basal flow wary fine grained to very fine grained.   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-57.38 m - pillow centres   Source basal flow wary fine similar to 50.90-5			associated with narrow frac									
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### strongly silicified.    59.88 - 60.03:   massive,   weakly   brecciated flow,   fine grained   to   1509   0-1   59.55   60.55   1.00   very   fine grained.   1510   2-3   60.55   61.45   0.90   0.03 - 62.83:   pillowed - similar to 50.90-57.38 m - pillow centres   1511   1-2   61.45   62.14   0.69   are   weakly   brecciated,   silicification is   irregular.   1512   1-2   62.14   62.83   0.69     62.83 - 66.70:   massive,   moderate   yellowed   moderate   white calcite   locally   minor   moderate   silicification   locally - white calcite   locally   in dilatant zones.   66.70 - 67.20:   brecciated - strongly chloritized - near flow   margin   1513   1-2   66.70   67.20   0.50   67.20 - 68.00:   epidotized,   brecciated,   strongly   hematized   fractures   1514   1-2   67.70   68.70   1.00   68.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2	strongly silicified.  59.88 - 60.03: massive, weakly brecciated flow, fine grained to very fine grained.  60.03 - 62.83: pillowed - similar to 50.90-57.38 m - pillow centres 1511 1-2 61.45 62.14 0.69 are weakly brecciated, silicification is irregular.  62.83 - 66.70: massive, moderately brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20: brecciated - strongly chloritized - near flow margin l513 1-2 66.70 67.20 0.50 (base)?  67.20 - 68.00: epidotized, brecciated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00 - basal flow?	_	ı	brecciated - strongly epidotized, moderately to									
59.88 - 60.03: massive, weakly brecciated flow, fine grained to very fine grained.  60.03 - 62.83: pillowed - similar to 50.90-57.38 m - pillow centres   1511   1-2   60.55   61.45   0.90   62.83 - 66.70: massive, moderately brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20: brecciated - strongly chloritized - near flow margin   1513   1-2   66.70   67.20   67.20   68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.70   68.70   1.00   68.70   69.70   1.00   1.00	59.88 - 60.03: massive, weakly brecciated flow, fine grained to very fine grained.  60.03 - 62.83: pillowed - similar to 50.90-57.38 m - pillow centres lill 1-2 60.55 61.45 0.90 are weakly brecciated, silicification is irregular. lill 1-2 61.45 62.14 0.69 are weakly brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20: brecciated - strongly chloritized - near flow margin lill 1-2 66.70 67.20 0.50 (base)?  67.20 - 68.00: epidotized, brecciated, strongly hematized fractures lild 1-2 67.70 68.70 1.00 lill 1-2 68.70 69.70 1.00			strongly silicified.									
very fine grained.  60.03 - 62.83: pillowed - similar to 50.90-57.38 m - pillow centres   1511   1-2   61.45   62.14   0.69   are weakly brecciated, silicification is irregular.   1512   1-2   62.14   62.83   0.69   massive, moderately brecciated locally, minor moderate silicification locally - white calcite	very fine grained.  60.03 - 62.83: pillowed - similar to 50.90-57.38 m - pillow centres 1511 1-2 61.45 62.14 0.69 are weakly brecciated, silicification is irregular. 1512 1-2 62.14 0.69 massive, moderate pillocated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20: brecciated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base)?  67.20 - 68.00: epidotized, brecciated, strongly hematized fractures 1514 1-2 67.20 67.70 0.50 1516 1-2 68.70 69.70 1.00		J	flow, fine grained	1509	ဂ္ဂ	59.55	60.55	1.8			Ŗ	
62.83 - 66.70: massive, moderately brecciated locally, minor moderate silicification is irregular. 1512 1-2 62.14 62.83 0.69 62.83 - 66.70: massive, moderately brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20: brecciated - strongly chloritized - near flow margin (base)?  67.20 - 68.00: epidotized, brecciated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00 - basal flow?  1516 1-2 68.70 1.00	are weakly brecciated, silicification is irregular. 1512 1-2 62.14 62.83 0.69 62.83 - 66.70; massive, moderately brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones. 66.70 - 67.20; brecciated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base)? 67.20 - 68.00; epidotized, brecciated, strongly hematized fractures 1514 1-2 67.70 68.70 1.00 - basal flow?		l	grained.	1510	2-3	60.55	61.45	0.90			ţ.	
62.83 - 66.70: massive, moderately brecciated locally, minor moderate silicification locally - white calcite locally in dilatant zones.  66.70 - 67.20: brecciated - strongly chloritized - near flow margin   1513   1-2   66.70   67.20   0.50   (base)?  67.20 - 68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.70   68.70   1.00   1516   1-2   68.70   69.70   1.00   1516   1-2   68.70   69.70   1.00	62.83 - 66.70: massive, moderately brecciated locally, minor moderate silicification locally - white calcite    coally in dilatant zones   coally - white calcite   coally   chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatant zones   coally chloritized - near flow margin   1513   1-2   66.70   67.20   0.50     coally in dilatan		ı	50.90-5/.38 m - p	11511	1-2	61.45	62.14	0.69			Ħ	
moderate silicification locally - white calcite locally in dilatant zones 67.20: brecciated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base)? - 68.00: epidotized, brecciated, strongly hematized fractures 1514 1-2 67.20 67.70 0.50 - basal flow?  1516 1-2 68.70 69.70 1.00	moderate silicification locally - white calcite locally in dilatant zones 67.20: brecciated - strongly chloritized - near flow margin 1513 1-2 66.70 67.20 0.50 (base)? - 68.00: epidotized, brecciated, strongly hematized fractures 1514 1-2 67.20 67.70 0.50 1515 2 67.70 68.70 1.00 1516 1-2 68.70 69.70 1.00		1	wderately bracciated locally m	777	7-7	62.14	62.83	0.69	_		tr.	
locally in dilatant zones 67.20: brecciated - strongly chloritized - near flow margin   1513   1-2   66.70   67.20   0.50   - 68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.20   67.70   0.50   - basal flow?   1516   1-2   68.70   69.70   1.00	locally in dilatant zones 67.20: brecciated - strongly chloritized - near flow margin   1513   1-2   66.70   67.20   0.50   (base)? - 68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.20   67.70   0.50   - basal flow?   1516   1-2   68.70   68.70   1.00     1516   1-2   68.70   69.70   1.00     1516   1-2   68.70   69.70   1.00			silicification locally - white									_
- 67.20: brecciated - strongly chloritized - near flow margin   1513   1-2   66.70   67.20   0.50   (base)?  - 68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.70   68.70   1.00   1516   1-2   68.70   69.70   1.00   1.	- 67.20: brecciated - strongly chloritized - near flow margin   1513   1-2   66.70   67.20   0.50   (base)?  - 68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.20   67.70   0.50   1515   2   67.70   68.70   1.00			in dilatant zones.	•			_					
(base)? - 68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.20   67.70   0.50     1515   2   67.70   68.70   1.00     1516   1-2   68.70   69.70   1.00     1.00	(base)? - 68.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.20   67.70   0.50   1515   2   67.70   68.70   1.00   1516   1-2   68.70   69.70   1.00		1	- strongly chloritized - near		1-2	66.70	67.20	0.50			ŗ	
- b8.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.70   0.50	- b8.00: epidotized, brecciated, strongly hematized fractures   1514   1-2   67.70   0.50												
1516 1-2 68.70 69.70 1.00	1516 1-2 68.70 69.70 1.00			brecciated, strongly hematized	1514	ر ا ا	67.20	67.70	0.50		-	Ŗ	
					1516	1-2	68.70	69.70	200			F F	
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DESCRIPTION  TO  TO  DESCRIPTION  DESCRIPTION  TO  TO  TO  TO  TO  TO  TO  TO  TO	68. 8.	FROM	FO
preen, fire to medium grained, mostly carrying 58 strongly cade, weakly pyritized xemoliths of moderately elicified to rock. Xemoliths are usually rounded. Hemetice seems to be introduced. Yes assauritized. Fragments average lom in size but 2m size but 2m size introduced for the regiments. Fragments average lom in size but 2m size size size well foolably more above at varying angles and 2m size but 2m size size size size size size size size		10	TAGE
517 0-1 86,46 86,96 0.50 0.01	green, fine to medium grained, mostly carrying 5% strongly ized, weakly pyritized xenoliths of moderately silicified nic rock. Xenoliths are usually rounded. Hematite seems the fragments. Fragments average lcm in size but 2cm mcn. Intrusive is weakly to moderately fractured. Breaks stitzed and hematized with minor epidote. Feldspar crystals year captals, a usuauritized. Prismatic hormblende crystals up to 1cm a locally. A central zone (73.18-73.70 m), is porphyritic w fractured feldspar phenocrysts - probably were euhedral an Abundant carbonate stringers cut core at varying angles a trace of chalcopyrite. Pyrite content averages 1% 69.00: fine to medium grained, up to 2% pyrite.  - 73.18: several well foliated (chloritized mica), bands to 10cm - up to 5% pyrite locally in less than 1 zones; abundant xenoliths.  - 73.70: porphyritto zone - 1cm hormblende crystals.  - 74.95: medium grained.  - 77.10: fine grained, abundant carbonate stringers, trac chalcopyrite.  - 77.10: fine grained, abundant carbonate stringers, trac chalcopyrite.  - 79.50: carbonate("vein")-filled dilatant zone, carries 5-10% green breccia fragments of local origin.  - 86.60: massive, weakly fractured, medium grained; mm so mottling - texture due to segregation of mafic a felsic components(?). Moderately chloritized. Wajor fractures are strongly hematized.  - 86.76: moderate to strongly fractured - white carbonate filling.  - 86.96: weak to moderate brecciation - rock is finer grafance of the property of t		DESCRIPTION
FOOTAGE   10 TOTAL   1   02.70m   02   02.70m   02   03.70m   03.70m   04   05   05   05   05   05   05   05	51 7		
FOOTAGE TO TOTAL TO TO TOTAL TO TOTAL TO TOTAL TO TO TOTAL TO TO TO TOTAL TO TO TO TO TO TO TO TO TO TO TO TO TO T	<u> </u>		
ASSAYS  TOTAL  T	86.46	╚	SAMPL
7 7 7 02.70m 02 0.50 0.50 0.61	96.98	FOOT AGE	m
ASSAYS 01.70m 01 0.C1		TOTAL	: !
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2	0.01	02/70#	ASSAYS
121			

FORM

4 OF 5

HOLE NO. \_\_\_\_\_\_MC-83-38 SHEET NO.

SHEET NO.

5 OF 5

RIDGE LIMITED - TORONTO - 366-1168	FROM	FOOTAGE	
	70	AGE	
96.50 - 98.15: 1 98.15 - 99.28: 1 99.28 - 100.40: 1 100.00: 106.98: 100.40 - 106.98: 104.60: 104.50: 104.50: 104.50: 104.50: 106.98 meters:			
cone carries 2-4% pyrite and greater than 10% hematite. Some 1mm laminations appear to be up to 50% hematite. (95.10 m laminations at 45-50° to core axis).  moderately to strongly brecciated, abundant hematite, 10-20%, with 1-2% pyrite.  weak to moderate brecciation.  weak to moderate brecciation on a very fine mm scale; strong selective silicification of particular laminations. Brecciation is along the laminations and the original bedding is often preserved. Hematite content is up to 10-20%, which produces a purple-grey colour. Contains higher pyrite contents, 5-7%.  Laminations at 60-650 to core axis.  weakly brecciated, well laminated, and parted parallel to bedding. Weakly hematized. Below 106.45, major fractures are strongly hematized. Rock is less well laminated below 105.30. Carbonate fills most fracture systems. Zone carries up to 2% pyrite. Minor silicification is related to individual sets of laminations. Laminations are 65-70° to core axis. laminations at 65-70° to core axis. laminations at 66° to		DESCRIPTION	
C 1530 1531 1532 1533 1533 1534 1536 1537 1538 1539 1540 1541	2 0		
1111123 111223 111223	SULPH		
96.50 97.50 98.44 99.28 99.84 100.40 101.70 102.71 103.71 104.71 106.50	FROM	s A	
50 97.50 50 98.44 44 99.28 28 99.84 84 100.40 65 101.70 77 103.71 104.71 106.50 50 106.98	FOOT AGE	SAMPLE	
0.94 0.56 0.56 0.79 0.79	TOTAL		
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0000000 0000000000000000000000000000000	02.70M	ASSAYS	
0.121	62 TON		
(4. 0.			

NAME OF PROPERTY		Lenora	
HOLE NO.	мс-83-39	LENGTH	91.74 meters
LOC A TION			
LATITUDE	12 + 75 W	DEPARTURE	0 + 25 S
ELEVATION		AZIMOTH	344° DIP -45°
STARTED_	STARTED August 26, 1983 FINISHED August 29, 1983	FINISHED	August 29, 1983

FOOTAGE	DIP -45°	AZIMUTH FOOTAGE	FOOTAGE	פוס	AZIMUTH
91.44	-49°				

REMARKS BQ Core
Split for analysis.

LOGGED BY A.W. Workman

	F 0	TAGE	1			S >	3 70 F	M				<b>A S S A</b>
	FI ROM	70	- I	∩ 20 	NO. SULPH-	П	FROM	FOOTAGE	TOTAL	કર	Şii	
	0	1.55	OVERBURDEN									j
	1.55	40.85	BASALT (Andesite?)									
<b>5</b> 10 0 1100	EM. 6-1168		Medium to dark green, fine to very fine gr Some pillowed sections are moderately sill- late stage circulating fluids. Selvages a carbonate where voids existed. Some narro brecciated - late stage tectonic event. P 0-1% but increases in selvages - up to 5%. found in carbonate filled dilatant zones. 4.90 - 6.15: abundant pillow selvages -	ctions are moderately silicified - possibly due to lating fluids. Selvages are filled with quartz and voids existed. Some narrow zones are finely e stage tectonic event. Pyrite content averages es in selvages - up to 5%. Chalcopyrite is often te filled dilatant zones.  te filled dilatant zones.  minor carbonate in selvages, 2-3% pyrite, trace								
			chalcopyrite.  6.36 - 7.00: strongly fractured,  zone is mixed flow  Zone is intensely c	red, hematite coating of surfaces - low top breccia and hyaloclastite. ly chloritized as a result of glass					<del></del>			
			7.00 - 8.68: massive flow. 8.68 - 10.98: pillowed zone -	same as 4.90-6.15 m.	<del>-</del> -							
			3 - 11.62:	grained, carries rava up to 2cm - no v								
n	<u>ь,</u>		11.62 - 13.75: fine grained, weakly brecciated pyrite.	eakly brecciated; minor weak in brecciated rock. Zone carries 1%								
1 164	LIMITE		13.75 - 14.12: strongly brecc Highly angular chloritized.	Highly angular fragments up to 2cm in size, weakly chloritized. Dilatant zone at 13.75-13.83 m is 95% carbonate filled with 1-2% chalcoverity.	1469 1		13.75	14.12	0.37			
I ANCO:	LANGRI		14.12 - 15.98: moderately bre									

2 OF 6

	40.85	RONTO — 36	6-116	<u> </u>											T D OK		
<del></del> -				<del></del>											Ĭ	FOOTAGE	
_	55.09			_		_									70	G E	
Dark green, fipink quartz an also carries (presumably).	DIORITE		40.35 - 40.85:	31.95 - 40.35:	t	1			24.78 - 31.26:	23.68 - 24.78:		16.51 - 23.68:		15.98 - 16.51:			
green, fine to medium grained, strongly fractured with abundant quartz and carbonate filled fracture zones above 43.20 m. Zone carries a few fractured silicified xenoliths of volcanic rock numably). These are rounded and up to 2cm in size. Margins are grained with a porphyritic central zone.	•	brecciated; dilatant zones are white carbonate filled. Some increase in pyrite content is noted carbonate filled fractures and interstitially in lava.	36.35-36.50 m). Possibly vesicular at 36. very fine grained, strongly fractured and	massive flow - few pillow selvages; minor brecciation with pink quartz (silica) inficarrying 2-4% pyrite; (eg. 34.90-35.09 and	hyaloclastite - less glassy than might be intense shattering of lava then re-welding.	Dioritic Intrusive: pinkish green, fine grehilled contacts.	(eg. 26.95-27.32 and 28.25-28.80 m). Rare fractured 1-5mm feldspar phenocrysts. Zone averages 1%	pillow margins. Dilatant zones between pil carbonate filled and may contain up to 5% p	phenocrysts up to lcm. No pillow selvages. pillowed section - abundant breccia associated with		pyrite, 2% in pillow selvages. Pillow rims are off-set up to 6cm locally across microfaults.		nded. Upper contact at 55° to core	Dioritic Intrusive - fine to medium greatned, with abundant felsic and mafic fragments. Xenoliths are		DESCRIPTION	
7 7 7		1 n	1474	1473			<u>a.</u>	1471		<u></u> .	1470	G		· ·	z o		ł
		<del></del>		<b></b>				2 2							10ES		
			40.35	34.90				26.95 28.25			18.00				FROM	SAMPLE	
			40.85	35.09			<del></del> -	27.38		<u></u> _	19.00				TOOT AGE	J.E	
			0.50	0.19				0.43			1.00				10171		
								<u> </u>					· <u>·</u>	<u> </u>	23		
			-									-					
			tr.	tr.				0.01			10.01	:			02/10#	ASSAYS	
		<del>-</del>	<u> </u>					<del></del>		<del></del>					02 704	S	
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ZAMM
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PROPERTY
Lenora

FROM TO  40.85 - 43.20: fractured contact zone, strongly chloritized, weakly epidotized; fractures are strongly hematized - carries volcanic xenoliths.  43.20 - 48.16: fine to medium grained, weakly fractured, less altered.  48.16 - 53.80: porphyritic, little increase in grain size of groundmass but carries fractured, previously euhedral pale green feldspars up to 1.5cm - weakly uralitized; zone is weakly fractured.  53.80 - 55.09: finer grained, abundant silicified reddish-pink, fractured xenoliths of volcanic(?) rock. Zone below a shear at 55.05 m carries larger xenoliths in 10cm+ pyritized.	-TORONTO-366-1168					
40.85 - 43.20: fractured contact zone, strongly chloritized, epidotized; fractures are strongly hematized carries volcanic xenoliths.  43.20 - 48.16: fine to medium grained, weakly fractured, less altered.  48.16 - 53.80: porphyritic, little increase in grain size of groundmass but carries fractured, previously euhedral pale green feldspars up to 1.5cm - we uralitized; zone is weakly fractured.  53.80 - 55.09: finer grained, abundant, silicified reddish-pin fractured xenoliths of volcanic(?) rock. Zone a shear at 55.05 m carries larger xenoliths in range. Xenoliths are pinkish, silicified and pyritized.  8ASALT  Medium to dark green, fine to very fine grained, strongly breed post-dating brecciation. Pillow selvages are noted lock (26.50-28.00). The rock is non-magnetic and weakly silicified colocally.  55.00 - 58.00: pillowed zone, some increased pyrite in space between pillows.  58.00 - 58.80: possible xenoliths of sediment - reddish-green to 5cm in size - others are blue-grey and up to 5cm in s			55.09		FROM	FOC
DESCRIPTION  - 43.20: fractured contact zone, strongly chloritized, epidotized; fractures are strongly hematized carries volcanic xenoliths.  - 48.16: fine to medium grained, weakly fractured, less altered.  - 53.80: porphyritic, little increase in grain size of groundmass but carries fractured, previously euhedral pale green feldspars up to 1.5cm - wo uralitized; zone is weakly fractured.  - 55.09: finer grained, abundant, silicified reddish-ping fractured xenoliths of volcanic(?) rock. Zone a shear at 55.05 m carries larger xenoliths in range. Xenoliths are pinkish, silicified and pyritized.  BASALT  BASALT  BASALT  BASALT  The to very fine grained, strongly breeds network of fractures - epidotized. No fragment rotation post-dating breeciation. Pillow selvages are noted loculty.  - 58.00: massive, strongly breeciated.  - 58.00: pillowed zone, some increased pyrite in space between pillows.  - 58.80: possible xenoliths of sediment - reddish-green to 5cm in size - others are blue-grey and up to 5cm in size - others are blue-grey and up to 5cm in size - others are blue-grey silicification fragments are moderately to strongly silicification fragments up to 2mm in size.	91.74		59.45		10	TAGE
ESCRIPTION  act zone, strongly chloritized, actures are strongly hematized ic xenoliths.  grained, weakly fractured, less grained, weakly fractured, less carries fractured, previously green feldspars up to 1.5cm - we ne is weakly fractured.  abundant silicified reddish-piths of weakly fractured.  3 m carries larger xenoliths in the are pinkish, silicified and the are pinkish, silicified and repidotized. No fragment rotat: Pillow selvages are noted local normagnetic and weakly silicified some increased pyrite in space in the grained and highly silicified fine grained and highly silicified fine grained and highly silicified fine grained and highly silicified fine grained and highly silicified fine grained and highly silicified fine grained and highly silicified fine grained and highly silicified fine grained, becoming purple—grey in grained, becoming purple—grey in grained, becoming purple—grey in grained.	SEDIMENTS Dark green, fine	1 1 1 1	4 1 5 W 100	1 1 1		
	to very fine grained, becoming purple-grey	strongly brecciated.  zone, some increased pyrite in space pillows.  xenoliths of sediment - reddish-green, n size - others are blue-grey and up to s are moderately to strongly silicified. pink, fine grained and highly silicified abundant intensely chloritized, green s up to 2mm in size.	very fine grained, strongly epidotized. No fragment ro Pillow selvages are noted n-magnetic and weakly silici	one, strongly chloritized, es are strongly hematized noliths.  noliths.  increase in grain size of increase in grain size of les fractured, previously feldspars up to 1.5cm - woweakly fractured.  sant silicified reddish-pin of volcanic(?) rock. Zone carries larger xenoliths in arries larger xenoliths in the pinkish, silicified and		DESCRIPTION
					- 28	
NO. 7.50 1475 1476 0- 1477 1- 1478 1- 1479 1- 1480 1-					1	}
1-2 5: 5: 4: The state of the s					<b>∐</b> _	AMPL
SAMPL  **SULPH,   FROM		56.09 57.10 58.10 58.80 59.45		41.85	TO TAGE	E
SAMPLI 7. SULPH, FROM FROM 1085 40.85 40.85 40.85 10 10 10 10 10 10 10 10 10 10 10 10 10		1.00 1.01 1.00 0.70		1.00	TOTAL	
SAMPLE    TOUTAGE   FROM   TO					1	
SAMPLE  *SULPH FOOTAGE  40.85 41.85 1.00  -1 53.00 54.00 1.00  -1 53.00 54.00 1.00  -2 55.09 56.09 1.00  1-2 55.09 57.10 1.01  1-2 57.10 58.10 1.00  1-2 58.10 58.80 0.70  2 58.80 59.45 0.65					-	
SAMPLE    10E5   FROM   FOOTAGE   1.00		tr. 0.01		0.01	02. TOM	ASSAYS
SAMPLE ASSAN **SULPH   FOOTAGE   1.00   0.110     40.85   41.85   1.00   0.01     0-1   53.00   54.00   1.00   0.01     0-2   55.09   56.09   1.00   1.00     1-2   55.09   56.09   1.00   1.00     1-2   55.10   58.80   0.70   0.01     1-2   58.80   59.45   0.65   tr.					02 TON	
SAMPLE ASSAYS    1008   FROM   FOOTAGE				<del></del>	1-	1 1

SHEET NO. \_\_\_\_\_ 4 OF 6

ted deeper. Chloritization is strong at the upper contact, saibly due to the overlying lavas, but decreases with depth. Veral zones of moderate to strong silicification are noted, and creases in pyrite content, up to 10%, are observed. The section arages 1-3% pyrite. Purple colouration is due to varying degrees	IDES	FROM	FOOTAGE TO	101AL	7
ted deeper. Chloritization is strong at the upper contact, saibly due to the overlying lavas, but decreases with depth. Veral zones of moderate to strong silicification are noted, and creases in pyrite content, up to 10%, are observed. The section arages 1-3% pyrite. Purple colouration is due to varying degrees					
reases in pyrite content, up to 10%, are observed. The section arages 1-3% pyrite. Purple colouration is due to varying degrees					-
of hematization.		<u> </u>			
59.45 - 60.00: strongly chloritized, weakly sheared, non-laminated; 1482 0-1		59.45	60.00	0.55	0.01
e-grey with honey coloured feld		60.00	60.65	0.65	000
breccia. Fragments are up to lcm -					
8.					
versus an average 3-7%. Below 60.65, chloritized					
tures increase, degree					
pyrite content falls to 3-5%. Purple colouration					
s to moderate hematization, also her					
61.40 - 62.22: FAULT ZONE - intensely chloritized and strongly 1485 0-1		61.40	62.22	0.82	0.02
sheared - mylonitic from 61.68-61.88 m. Lower 34cm					
pyrite.				·	
moderately silicified; moderately to strongly		27.70	04.70	0./0	
brecciated - fragments are very angui					
subsequent rotation. Silicification is penetr					
2 1nto tragments but atteration is incomplete. Zone 62.54-62.64 m is non-silicified.		•			
62.98 - 65.34: moderately chloritized, weakly silicified locally		62.98		1.00	Cr.
and moderately brecciated; laminations visible 1488		63.98	64.66	0.68	Ct .
pyrite.				:	
65.34 - 66.10: sporty silicification; moderate in		65.34	66.10	0.76	0.01
66.10 - 66.84: dark grey-green to grey, well laminated and weakly 1491 8-10		66.10	66.84	0.74	0.07
silicified; very minor brecciation. Carries 8-10%					

F001	OT AGE					SAMPLE	Ð			>	ASSAYS	
FROM	70	4	DESCRIPTION	, z	SULPH,	ROM	FOOTAGE	10171		-	NOT / 50	02 TON
			to the landantions in nations of							_		
			Bedding is at 60-70° to core axis. A fault at									<del></del>
			40° and slickensi					_				
			oss plane.	C							i 	_
		66.84 - 72.06:	moderately laminated, non-brecciated, moderately	1492	1-3	66.84	67.84	1.00		_	0.07	
			ilicified	1493			68.95	1.11			0.08	
			erages 1-3% with minor increases	1494	-3		69.95	200			0.16	
			70 80 - Mr 71 66 71 F6 60 Core	1493			70.90	1 0		5 6	2 1	
		_	- eurrounding rock erronaly	1470	7-1	(0.90	00.17				10.0	_
			ared.		_							
		72.06 - 72.46:	ized zone; 3-5% pyrite - very	1497	3 5	72.06	72.46	0.40		_	0.02	
			ly disseminated between laminations -									
			iliceous and argillitic.	: 	•	: :	: :				<b>3</b>	
	-	/2.40 - /3.70:	moneracely well laminated (/3.10 ac	1,00	1 1 7	72 10	73 00	0.72		<del></del>	2 6	
							7	-	_		_	
		73.90 - 74.11:	brecciated - highly	1500	5-7	73.90	74.11	0.21		0	0.01	-
			to lcm in a strongly									
		:	5-7% pyrite.			7/ 11	7/ /5	n.		<u> </u>	3	
		/4.11 - /4.65:	as /2.46-/3.90 - laminations at 65° to core	1543	1-3	/4.11	/4.65	0.54			0.03	
<u>,                                      </u>		74.65 - 75.15:	zone of soft sediment deformation - bedding tightly	1544	<b>-</b>	74.65	75.15	0.50		<u> </u>	0.09	
168			ed, often open folds along core axis.	_								
<u> </u>		75.15 - 78.35:	laminated, fine to medium grained, moderately	1545			76.15	1.00		_	0.07	
360			silicified locally.	_			77.15	1.00			tr.	
		78.35 - 79.35:	on-laminated,	_			77.75	0.60			0.01	
110		!	fine to medium grained.			77.75	78.35	0.60		0	0.03	
<u>ON</u>		79.35 - 80.70:	ated, similar to overlying section	1549		78.35	79.35	1.00			0.19	_
<u>OR</u>			mpositionally; bedding at 79.40 m is at 50-550	1550		79.35	80.00	0.65		-	0.01	
<u>, — j</u>		,	to core axis. A 3cm quartz vein cuts at 50° at	1551	1-0	80.00	80.82	0.82			10.0	
IEL		80.70 - 80.82:	laminated and strongly brecciated, 1-3% pyrite.								_	_
<u>IMI</u>		ı	non-laminated.	1552	_		81.82	1.00		0	0.02	
L		81.82 - 82.18:	laminated at 20-30° to core axis - soft	1553	0-1	81.82	82.83	1.01			0.01	
DGE			slumping.									
KIL												
ANGI											_	

_	г					-TORONTO-366-1168	LANGRIDGE LIMI
F00.	FROM						
FOOTAGE	10						
		82.18 - 91.74:		91.74 meters			
	DESCRIPTION	inated, some weak its at 30-400 to colly hematized from its in epidotization in the collection in the collection in the collection is a collection in the co	in epidotization is noted, 87.50 m. Rock is medium gr ed at base of hole. A 6cm s thin sectioning.	END OF HOLE	CASING PULLED		
	z o	C 1554 1555 1556	1557 1558 1559 1560 1561 1562				
	% SULPH	0-1	0000000				
SAMPLE	FROM	82.83 83.83 84.83	90.83				
E	FOOTAGE TO	84.83 85.83	86.83 87.83 88.83 89.83 90.83				
	TOTAL	1.00	1.00	-			
	ş2		······································		<del></del>		· · · · · · · · · · · · · · · · · · ·
	,						
ASSAYS	02, TON	0.01	0.05				
σ	02 TON				-		
	┟╌┤						

	LATITUDE 10 +00 E DEPARTURE 1 + 30 S	HOLE NO. MC-83-40 LENGTH 218.87 meters	NAME OF PROPERTY McDermott
DIP	S	ers	

182.88 -59° 218.54 -57°

HOLE NO. MC-83-40 SHEET NO. 1 OF 10 REMARKS BQ Core		
1 OF 10	B	MC-83-40 SHEET
		1 OF 10

E 0 0	1 A G	m
FROM	10	
0	39.93	93
39.93	3 41.45	<u></u>
		Casing
41.45	87.82	22
		Dark green, fine to some massive zones.
	· · · · · · · · · · · · · · · · · · ·	some massive zones. Lava is vesicular locally - vesicul filled with carbonate and occasionally chlorite. Fractuvariable - usually carbonate with hematite. Some texture are noted across narrow breccia or shear zones. Pyrite averages 1% with traces of chalcopyrite. The zone is no 46.90 - 46.95; hematized fractures at 200 to core axis.
		48.45 - 48.56:
		50.35 -
		52.30 -
		58:06 -
	_	
-		63.00 -

SHEET NO. 2 OF 10

F00.	FOOTAGE	DESCRIPTION			SAMPLE	LE				ASSAYS		
F ROM	70		ž O	% SULPH	FROM	TO	TOTAL		38	02/70#	02. TON	
		from 71.30-71.71 between two fractures. Minor epidotization and occasional silicification of pillow interiors is noted. Occasional lmm hematized seams following contours of pillow				<del></del>		····				
		selvages. 87.30 - 87.65: moderately to strongly sheared - pyrite crystals up to 8mm.	C 1582	3-5	87.30	87.82	0.52			tr.		
87.82	90.04	QUARTZ VEIN							-			
		White bull quartz, barren of sulphide; lower 28cm carries abundant 'streaks' of green sediments - preserving bedding orientation as evidenced below. Lower 'dirty' section carries 1-3% pyrite.	1583 1584 1585	1-3	87.82 88.79 89.76	88.79 89.76 90.04	0.97 0.97 0.28			0.00		
90.04	91.93	SEDIMENTS										
		Dark green, fine grained, very well laminated, possibly tuffaceous. Moderately to strongly chloritized with 3-5% pyrite throughout. Several quartz stringers cut core parallel to laminations. Non-magnetic.  90.20: laminated at 55-60° to core axis.  90.95: laminated at 65° to core axis.  91.73 - 91.93: non-laminated, fine to medium grained.	1586 1587	ω ω 	90.04 90.97	90.97 91.93	0.93			0.01		
91.93	109.77	BASALT										
		Medium to dark green, fine to very fine grained, very finely tectonically auto-brecciated. No subsequent rotation of highly angular 1-7mm fragments. Lower part is well pillowed. Some sections are medium grained and felsic - almost dioritic.  Non-magnetic. Similar to flow(s) in top of hole.  92.65 - 93.70: relic vesicules, chlorite and carbonate filled - up to 1mm in size. Very weak flow foliation locally - rock may be weakly flow brecciated. Also relic pillow selvages locally. Carries 1% pyrite and 1-3% quartz stringers up to 2cm width.  93.70 - 96.72: possibly pillowed, alternating aphanitic seams with fine grained epidotized rock.  96.72 - 97.53: fine to medium grained - dioritic.	1588 1589	0-1	92.65	92.65 93.70	0.72			## ##		

HOLE NO. \_\_\_\_\_MC-83-40

40 SHEET NO. 3 OF 10

FOOTAGE				SAMPLE	'n		_	ASSAYS	ŝ
FROM TO	DESCRIPTION	<b>Z</b> 0.	3 SULPH	FROM	FOOTAGE TO	101AL	,	🏻	02/TON
	97.53 -106.25: pillowed section - selvages well defined and average 55cm apart. Up to 5% pyrite between pillow selvages. Pillow centres often brecciated								
	r composed have filled ws then	C 1 590	1-2	106.25	107.10	0.85	 	0.	0.01
	later brecciated. several pillow selvages with 5% pyrite.	1591	5	107.10	107.10 107.25	0.15		0	0.01
	epidotized; locally pidote. Several small shears axis - quartz filled with e parallel to laminations in towermost 12cm may actually	1592	1-2	108.77	109.77	1.00	 	Ħ.	
109.77 111.73	73 SEDIMENTS						 		
	Alternating dark green and pale green laminations; fine to very fine grained and well laminated at 45-50° to core axis at 109.85 m.  Small micro-faults offset banding at right angles on a mm scale.  Some 'silty' zones are weakly carbonatized. Most carbonate in the zone is fracture rather than texturally controlled. Small, locally devloped, breccia zones up to 20cm in width cut across laminations. Zone is non-silicified, non-magnetic. Abundant 0.1-5.0mm carbonate stringers carry 30-50% bladed hematite crystals. Stringers are often parallel to bedding. Zone carries 0-1% pyrite.	1593 1594 1595	0-1	109.77 110.57 111.33	110.57 111.33 111.73	0.80 0.76 0.40		999	
111.73 129.58	58 BASALT						 		
· · · · · · · · · · · · · · · · · · ·	Medium to dark green, fine grained, moderately brecciated locally.  Epidote and carbonate in fractures of breccia - fragments have undergone no subsequent movement. Zone is not pillowed but does contain some flow breccia. Section averages 0-1% pyrite in clots up						 		
	111.73-114.02: weakly to moderately brecciated, non-silicified. 114.02-115.45: greenish-pink, chloritic zone; fine to medium 114.02-115.45: grained with a 1-2cm very fine grained upper contact	1596 1597 1598	0-1-0-1	113.52 114.02 114.72	114.02 114.72 115.45	0.50 0.70 0.73	 		# # # # 

HOLE NO. Mc.83-40

NAME OF PROPERTY\_

McDermott

SHEET NO.

4 OF 10

FROM TO	DESCRIPTION  core axis. zone does not fine	ž	4 SULPH.	SAMPLE	FOOTAGE	1077		 *
	at 80° to core axis. zone does not fine to lower 45° contact - possibly sedimentary rathan intrusive. Carries abundant chloritizes specks - 2-3mm in size. specks - 2-3mm in size. flow-top breccia, weakly to moderately silly carries 3-5% pyrite.	C 1599	3 5	115.45	115.67	0.22		
		1600	<b></b>	118.66 119.41	119.41	0.75	<del></del>	
	silicified locally (eg. 119.41-120.26). silicified locally (eg. 119.41-120.26). 120.26-121.30: medium grained matrix surrounds sub-angular to sub-rounded fragments up to 5cm in width and probably 5-10cm in length; 2-4mm reaction rims. Matrix is strongly chloritized. Zone is likely a	1602	<u>?</u>	120.26	121.30	1.04	<del></del>	
	nically brecciated.  ish-red, fine to medium of the control of the	1603 1604	2-2	121.30 122.07	122.07	1.25	······································	
	Lower contact exhibits a well developed 25cm chill zone. The lower 40cm carries several rounded to sub-angular mafic xenoliths up to 2cm in size.  123.32-129.58: weakly auto-brecciated - tectonic stresses; weakly sheared locally over sections of 30-40cm at 35° to core axis. Fractures are dominantly carbonate and hematite filled. Probable base of volcanic rocks.	1605 1606 1608 1609	22222	123.32 124.43 125.43 126.43 127.43 128.43	124.43 125.43 126.43 127.43 128.43 129.58	1.00		
129.58 146.45	SEDIMENTS  Dark green to medium grey-green, fine to very fine grained		<u></u>				<del></del>	
· ·	Dark green to medium grey-green, fine to very fine grained and weakly to moderately chloritized. Bedding laminations are well exhibited becoming moderately developed locally. Parting is well developed parallel to the laminations. The rock is fine to medium grained locally in grey coloured zones up to 15cm in thickness. Bedding is less well developed in these 'sandy' zones. White		·					

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HOLE NO. \_\_\_\_MC-83-40.

\_\_\_\_ SHEET NO.\_\_\_5 OF 10

NGRIDGE LIMITED - TORONTO - 366-1168	FROM	FC
		FOOTAGE
165.33	70	M
carbonate is found as a replacement feathering out along the laminations. Rock is weakly carbonatized. Abundant quartz-carbonate stringers cross-cut the laminations at varying angles, make up 1-5% of the section. Small shear planes parallel to the laminations are often weakly hematized.  129.58-134.32: weakly hematized, abundant semi-massive rock. Hematite fracture fillings and stringers up to 8mm at 132.80-133.20 m. Pyrite 3-5% in locally developed breccia at 138.75-133.85 m.  134.32-134.85: greyish, fine to medium grained, crudely laminated at 450 to core axis. Pyrite in concentrations up to 5-6% in chloritized seams along laminations up to 5-6% in chloritized seams along laminations locally alternates with non-brecciated beds - possibly due to soft sediment deformation - some weak to moderate silicification in breccia.  134.85-140.64: moderately to well laminated, chloritized, non-brecciated, non-silicified.  140.64-141.38: laminations are better developed, often coarser and possibly tuffaceous (eg. 140.64-141.15 m). Locally disseminated blebs and crystals up to 1mm. Laminations at 40-650 to core axis at 141.10 m.  140.64-141.38: laminated blebs and crystals up to 1mm. Laminations at 40-650 to core axis at 141.10 m.  20ne averages 3-5% pyrite.  141.38-146.45: coarsely laminated, possibly due to original texture; medium to coarse grained towards base. Rock contains 20-30% dark green intensely chloritized clasts up to 3mm in size. Clasts are moderately vell foliated.  MAIN MINERALIZED ZONE  The zone consists of a gradual increase in silicification and brecciation are sediments although sedimentary structure is not always wisthle.		DESCRIPTION
1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1623	<b>N</b> 0	
12 1 2 3 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	1023	
129.58 130.50 131.50 132.50 133.50 134.85 135.85 137.85 140.64 141.38 143.40 145.39	FROM	SAMPLE
130 131 132 133 133 134 136 140 141	FOOT AGE	E
.50 0.92 .50 1.00 .50 1.00 .50 1.00 .50 1.00 .64 0.79 .40 1.00 .41 1.00 .42 1.00 .43 1.00	TOTAL	
	ود	
HARA HARA HARAA	0Z/TON	ASSAYS
	02, TON	S
	-	

LANGRIDGES - TORONTO - 366-1168

146.45 148.42

FROM

5

FOOTAGE

SHEET NO.

47 •		SAMPLE ASSAY
		FOOTAGE ASSAYS TO TOTAL 3 3 02/TON 02/
1 1 3 1 1		ASSAYS OZ/TON OZ/
1.00	SH SH	01/TON 01:
1.00		02.
ASSAY TOTAL 3 3 02/10H TOTAL 3 4 02/10H	ASSAY OZ/TON	

148,42 160,45

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McDermott

NAME HOLE NO. Mc. 83-40 SHEET NO.

i i i		1.00 1.00 0.52	161 162.45 162.97	160.45 161.45 162.45	N NN L L L	1642 1643	This zone is a dark green to grey green, fine grained locally brecciated and silicified transition zone from mostly silicified rock to non-silicified rock. Brecciation resembles shrinkage type fracturing (tensional). Sedimentary laminations are well developed but locally, brecciation masks structure. Pyrite content averages 1-3%, higher in silicified breccia.  160.45-162.97: massive, non-silicified, very locally brecciated along certain laminations. Bedding well developed locally eg. 300 to core axis at 160.50 m. Zone carries 2-3% pyrite - mostly as 1mm cubes.		
							33 TRANSITIONALLY SILICIFIED SEDIMENTS	5 165.33	160.45
ijij	y .	1.00 0.95	159.50 160.45	158.50 159.50	ω ω 5 5	1640 1641	158.50-160.45: essentially same as above section but carries better laminations with more widespread brecciation and silicification. Weak to moderate hematization produces a purple-grey colour locally.		
0.02		1.02	157.50 158.50	156.48 157.50	0-1 1-2	1638 1639	156.48-158.50: dark green, weakly to moderately brecciated throughout with white carbonate in tensional type fractures separating angular fragments up to 2cm. Generally non-laminated. Minor silicified breccia locally (eq. 157.30-157.40).		
0.10		0.83	155.65 156.48	154.65 155.65	2-4	1636 1637	154.65-156.48: 25-50% silicified breccia fragments with brecciated horizons up to 10cm. Flanking horizons are non-brecciated, chloritized and very weakly silicified. Silicified breccia carries 3-5% pyrite above a 1-3% average.		
0.04	<del></del>		154.15			1634	153.65-154.65: fragments increasingly feldspathized, content of silicified fragments decreasing slightly.		
0.06		1.05	153.65	152.60	5-7	C 1633	locally in feldspathized sections. A reddish-purple alteration or hematization is noted locally, becoming stronger with depth.  152.60-153.65: moderately to strongly brecciated, intensely silicified fragments; carries 10-20% chloritized beds; pyrite content 5-7%, well laminated locally; eq. 400 at 152.65 m.		
							150.85-152.60: weakly brecciated, intensely silicified with 10-20% chloritized rock. Some fragments below 151.95 m are feldspathized. Zone carries 5-7% pyrite, up to 10%		
% 02/TON 02/TON		TOTAL	10 10	FROM	2 30 CPH	ş		10	TO OK
ASSAYS			m	SAMPLE			DESCRIPTION	TAGE	FOOT

HOLE NO. L

Mc-83-40 SHEET NO.

8 OF 10

165.33 184.60 FROM FOOTAGE 70 developed breccia zones up to 10cm locally are weakly silicified laminated. Abundant white carbonate replacement feathers out along 164.45-165.33: 175.80-176.52: introduced later and often cut core axis at 0-50. versus an average of 0-1%. Carbonate veins and stringers were sedimentary foliation and highlights probable hedding. Weakly 175.06-176.93: 167.45-169.34: (eg. 166.00-166.05 m), greyish in colour and carry 1-3% pyrite 176.52-176.93: 169.34-175.06: 165.33-167.45: Dark green, fine to very fine grained, non-laminated to weakly 162.97-164.45: LOCALLY SILICIFIED SEDIMENTS carries purple-grey breccia pods and lenses chloritized, dark green rock. weakly laminated becoming stronger with depth; reddish-pink, intensely silicifed, syenitic(?) zone is composed of silicified breccia beds up to averaging 4-5%. strongly silicified breccia, up to 7% pyrite greyish, weakly to moderately magnetic, well sediment deformation. reddish-pink silicified beds cut core axis at 400 Silicification is very strong to intense - abundant up to 3cm in a strongly chloritized dark green appearing zone - carries angular red breccia clasts INTUSIVE - green, abundant pinkish-red silicified weak silicification locally. non-brecciated and generally non-silicified to very developed where hedding is brecciated due to soft intensely silicified with 8-10% pyrite - possibly are micro-brecciated with 1-3mm fragments. very similar to overlying zone. Silicified beds 3cm in a dark green chloritized, laminated sequence. disseminated pyrite. Zone may be sediment. matrix - 60-70% fragments; carries 2-3% very finely increased pyrite with silicification (3-5% at laminated, sandy appearance, weakly silicified, 175.06-175.80). fragments, non-foliated, magnetic. DESCRIPTION 1659 1657 1654 1653 1651 1646 1660 1656 1655 1652 1650 1649 1647 1645 Ž O 4-5 2-4 1-2 1-2 0-1 2-3 2-4 2 ? 1-2 2 2 2-3 176.52 176.93 0.41 175.80 176.52 164.45 165.33 163.68 164.45 0.77 162.97 163.68 0.71 174.00 168.87 167.35 173.00 171.43 170.53 169.34 167.87 166.35 FROM SAMPLE 175.80 174.00 171.4 170.5 169.3 167.8 175.0 173.0 FOOTAGE 168.8 0.47 1.00 0.90 1.19 0.52 0.88 1.00 1.57 1.06 1.00 TOTAL 0.07 **F** Er. Er. tr. **ASSAYS** 0.01 0.07 Er. Cr. Gr. E. tr. 11 FF. 01/TON 02 TON

LANGRIDGES - TORONTO - 366-1168

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9 OF 10

CANGHILIGES — TOHONTO — 300-1108	TO TO	FOO
218 . 87	70	FOOTAGE
176.93-178.44: selection sets Lamin 178.44-179.02: model to 5; 179.02-180.38: dark brecce 180.38-181.21: occas 181.21-181.84: abund Rema: Weak 181.84-183.00: same dissing core 183.00-184.60: percce of loss well laminated at 35; Well laminated at 35; Up to 4% pyrite is of texture may reflect of part of this zone is grained sediments. I the rock is non-brecce 184.60-188.80: brecce silin to co		
selective silicification of particular brecciated sets of laminations - totalling 5-10% of section. Laminated at 250 to core; averages 1-3% pyrite. moderately to strongly silicified and brecciated; up to 5% pyrite, averaging 4-5%. dark green with 10-20% purple-grey silicified brecciated laminations; contains average 2-3% pyrite, up to 4% locally. Weakly magnetic. occasional silicified brecciated laminations. abundant strongly silicified brecciated zones up to 5cm thickness with clots of pyrite up to 1cm. Weakly magnetic. weakly magnetic. same as 176.93-178.44 m. Up to 10% very finely disseminated pyrite locally. Laminated at 400 to core at 182.15 m. Weakly magnetic. some grouping of locally silicified breccia. Carries 60% silicified breccia. Carries 60% silicified breccia between 184.20-184.55 with 2-4% pyrite.  an sandy textured, and fine grained; moderately to stomposed of alternating fine and fine to medium is observed locally. Averages 0-2% pyrite. Sandy lect a tuffaceous component. Below 185.00 m the zone ic often becoming moderately magnetic. The lower local secones variably developed. Generally, brecciated and non-silicified. sandy, non-silicified, laminated at 35-40°, some silicified, up to 5% pyrite, well laminated at 30° to core at 188.80 m.		DESCRIPTION
1661 1662 1663 1664 1665 1666 1667 1668 1669 1670	ĕ	4 1
21 21 2 51 22 4 11 32 32 33 33 33	630	X SUL PH
176.93 178.44 179.02 179.70 181.21 181.84 183.00 184.60 184.60	FROM	SAMPLE
178.00 178.44 179.02 179.70 180.38 181.21 181.84 183.00 184.60 184.60 188.80	70	LE.
1.07 0.44 0.68 0.68 0.68 0.63 1.16 1.00 0.60	TOTAL	
	,,	
0.01 0.01 0.01 0.01 0.01	02/TON	ASSAYS
	OZ/TON	

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3	
	188.80-190.70:
	191.80-200.60:
	200.60-201.00:
	201.15-202.15:
	204.20-212.65:
	212.65-213.50:
	213.50-214.80: 214.80-217.45: 217.45-218.30: 218.30-218.87:
	218.87
	<del>-</del>

STARTED_	ELEVATION	LATITUDE	LOCATION	HOLW NO.	Z > X M O T
STARTED September 14, 1983 FINISHED		9 + 50 E		Mc-83-41	ZAME OF PROPERTY
4, 1983 F	   				
INISHED	AZIMUTH_	DEPARTURE		LENGTH	McDermott
September 16, 1983	344° -70°	1 + 15 S		203.30 meters	
137	9	15		Τ	Ş Ö

FOOTAGE	OIP	AZIMUTH FOOTAGE	FOOTAGE	9	HLUWIZY
0	-70°				
45.72	-70°				
91.44	-68°				
137.16 -64 <sup>0</sup>	-64°				

HOLE NO.
Mc-83-41
SHEET NO.
1 OF 7

RMMARKS

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52.50		16.87		5.00	0	7 7 0 X	F 0 0
85.84		52.50		16.87	5.00	70	TAGE
Rock is medium to dark green and medium green. It is the same texturally as from 5.00-16.87 m. The contact with the above volcanics is abrupt and makes an angle of 10° with the core axis. Fracturing is minor and at random orientations.	The contact with the above flow is gradational over about 20-25cm at which point the rock becomes very fine grained and light to medium green in colour. This is a sequence of pillowed volcanics with well developed selvages which are infilled with carbonate. Amygdules are found within the volcanics in close proximity to the pillow selvages (2-10cm) and are infilled with carbonates. Hairline fractures throughout pillows have no regular orientation. Pillow breccia may be found, but is not abundant. Sulphides may be found associated with carbonates within pillow selvages.	PILLOWED BASALT	Medium to dark green with medium grain size (2-4mm) consisting of 70% mafics and 30% felsics. The rock is massive with minor fractures infilled with carbonate. These fractures are 3-10mm wide and are oriented at 30° and 90° to the core axis. Sulphides can be found throughout in trace amounts.	BASALT	OVERBURDEN		
						NO. SULPHY FOOTAGE	S > X ¬ C m
						- % % OZ/TON OZ/TON	> S S > Y S

### DIAMOND DRILL RECORD

HOLE NO. NAME OF PROPERTY\_ Mc-83-41 SHEET NO. McDermott

FROM																				85.84					
70							_												-	88.78		<u> </u>			
	57.00:	69.64:	72.24:	74.79:				75.50:	77.15:	78.23:		80.65:	• •	81.88 - 82.18:		82.68 - 85.84:				QUARTZ VE	Milky white mas there are mafic	slight foliation laborated to 5-1	with these frag (possibly rewor	to core axis or	
	3cm wide olive green silicified material - looks like epidote but much harder - cuts core at 30° to core axis.	15cm wide carbonate vein at 20° to core axis.	carbonate vein at 700 to core a	cream coloured highly silicif	ning brecciated fragments ranging	lmm to 2cm. Some carbonates found within it	(fizzing from 10% HC1).		carbonate vein at 550 to core	cream coloured with green hue materia	Does not contain large brecciated fragments as with 74.79 meters.	lom wide carbonate vein at 55° to core axis.	Hematite staining between carbonate and wallrock.	intensely brecciated, highly silicified rock.	are predominantly 2-3mm in siz	oundant fractu	ze from 2-5mm. Infilling w	carbonates and possibly quartz. The rock has localized foliation which could be caused by		VEIN	ll quartz. Within the robably broken off from	wallrock upon increason or the quartz. These fragments have a slight foliation to them (possibly sediments) and range in size from 1-2mm up to 5-10cm. Sulphides (pyrite, chalcopyrite) are associated	s as well as fractures containing day wallrock). The quartz makes an angle	d lower contact.	1
z o													1680 1680	1681	1682		1683				1684 1685	1687 1688	1689		
SULPH,																					## 12	타다	ni1	•	
FROM													80.88	81.88	82.18		84.84				85.84 86.35	87.35 87.85	88.35		
FOOT AGE									-	_			81.88	82.18	83.18		85.84			-	86.35 86.85	87.85 88.35	88.78		
TOTAL													1. 8	0.30	1.00		1.00				500	0.50	0.48 (measures	•	
al 2													•					<u> </u>					res 0.70)		
																							Ö		
<del></del>							_						0.01	0.01	10.01	_	10.0		_		4 4 4	44	ţ.	_	_
02/TON																									

LANGRIDGE LIMITED - TORONTO - 366-1168							
	89.93		89.48		88.78	FROM	FOO
	94.63		89.93		89.48	10	FOOTAGE
Medium to dark green, fine grained, well laminated rock oriented between 40° and 60° to the core axis. The rock is locally brecciated with fragments up to 2cm in size. Sulphides are not confined to the brecciated zones, but are found throughout the interval as euhedral crystals, as well as being finely disseminated along lamellae. Hematite (purple) is found locally within some brecciated zones.  89.93 - 90.10: brecciated - fragments up to 5mm.  90.23 - 90.37: brecciated - hematite, 2cm quartz vein, cream coloured fragments (ankerite?).  90.53 - 90.60: quartz - no sulphides.  90.76: brecciated hematized zone.  90.97 - 91.23: quartz vein with cream coloured fragments (ankerite?) 2-5cm in size, and hematized fragments 2-4cm in size. Pyrite, localized, averages 18.  92.37 - 92.44: quartz vein ) pyrite is concentrated within 92.77 - 92.79: brecciated ) the sediments close to the 93.12 - 93.14: brecciated ) brecciation	SEDIMENTS	As from 85.84-88.78 meters.	QUARTZ VEIN	Medium to dark green laminated rock; locally is intensely brecciated. Brecciated fragments (2-10mm) are cream coloured as well as purple and white in colour. Purple coloured material scratches red - hematite. Enhedral pyrite crystals found within the brecciated rock as well as being finely disseminated along sedimentary lamellae. Average amount throughout is 1-2%.	SEDIMENIS		DESCRIPTION
1692 1693 1694 1695 1696		1691		1690 C		, 0	
·		F		1-2		SULPH,	
93.82 93.82		89.48		88.78		FROM	SAMPLE
90.82 91.82 93.82 94.64		89.93		89.48		FOOTAGE	m
0.89 1.00 1.00 0.82		0.45		0.70		TOTAL	
Ctwa	<del></del>				<del></del>		
octual 1.00)							
0.05 0.05 tr.		0.01	_	0.01		02 · 70#	ASSAYS
						02 70#	Š
•							

NAME OF PROPERTY\_

HOLE NO.

Mc-83-41

SHEET NO. 3 OF Z

McDermott

94.64

96.44

FROM

ಠ

FOOTAGE

96.44 123.30

	I	HOLE NO.		Mc-83-41		SHE	SHEET NO.	4 0	0F 7	
			SAMPLE	Э.				ASSAYS		
CERCATTION	2 0	S SULPH	FROM	FOOT AGE	TOTAL		20	02/TON	02 TON	
QUARTZ VEIN	-		!							
Bull white quartz with no sulphides. Pyrite concentrated at contact C between quartz and sediments. Quartz contact is at 10-15° to core   10	C 1697		94.64	95.64	1.00			Ħ.		
	1698		95.64	96.44	0.80			tr.		
SEDIMENIS										
Dark green, poorly to well laminated sediments. Narrow bands of   1699	1500		%.44 44.86	97.44 98.44	88			i i		
represent less than 1% of the zone. Carbonates fill hairline	-									
fractures as well as fractures up to lon wide. The fractures are	1701		99.44	100.44	1.00			Ŧ.		
finely disseminated throughout amount to less than 1%.	1702		100.94	101.94	1.00			tr.		
	1703		102.94	103.94	1.00			ŗ		
lamination at 450 to core	1704		104.94	105.94	1.00 (	(actual 0.78)		tr.		
122.00: Lamination at 40° to core axis.	1705		106.94	107.94	1.00			ŗ		
	1706		108.94 109.94	109.94	1.00			Ħ.		<del></del>
	1707		110.94	111.94	1.00			i.		
	1708		112.94	113.94	1.00			tr.		
	_					_	_		_	

LANGRIDGE LIMITED - TORONTO - 366-1168

123.30 147.19

MAIN SILICIFIED ZONE

1709 1710

121.30 122.30 122.30 123.30

1.8

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The main silicified zone is defined by the presence of highly silicified rock, possibly tuffaceous sediments. At the top of the zone there is alternating silicified and relic chloritized intervals. Chloritized rock is medium green with 40% white sub-rounded to

HOLE NO.	NAME OF
Mc-83-41	NAME OF PROPERTYMcDer
	19

HOLE NO.

SHEET NO.

5 OF

LANGRIDGE LIMITED - TORONTO - 366-1168 FROM FOOTAGE ಠ highly silicified and are either creamy in colour (ankerite?) or 134.42-147.19: 125.63-126.18: silicified zones have up to 10% and average 5%. dark grey with a purple hue (hematite). Brecciation is intense 134.05-134.42: 129.05-134.05 127.87-129.05 126.46-127.87; 126.18-126.46: 125.25-125.63 124.47-125.25 throughout, but the chloritized zone averages less than 1% while throughout the silicified zone. Pyrite is finely disseminated 123.80-124.47; 123.53-123.80: 123.30-123.53; rounded fragments. chloritized interval with laminations at 30° to purple hue silicified rock. silicified rock. cream coloured silicified zone, pyrite 3-5%. grains at top of interval with sub-rounded to interval of non-silicified rock with medium-coarse chloritized interval, 350 to the core axis. purple hue silicified zone. interlayered chloritized and silicified zones. chloritized interval, 40° to the core axis. cream and purple hue silicified zone. chloritized interval, 40° to the core axis. core axis. rounded fragments at the bottom of the interval. 129.05-131.00: purple hue silicified zone. 139.42-147.19: 135.42-135.80: mineralization? Why are these chloritized zones not vulnerable to 133.00-133.10: The silicified intervals are brecciated and DESCRIPTION reddish brown fragments (hematized?) small fragments of non-silicified magnetic of interval. purple hue, magnetic. rock begin to appear - less than 18 proximity. sulphides increase in close Pyrite trace. 다 e 1728 1714 1734 1733 1732 1731 1730 1729 1727 1724 1726 1725 1720 1719 1718 1717 1716 1715 1721 z O 8-10 % SULPH 2-3 1-2 1-2 3-5 <del>6</del> 2-3 128.64 129.05 137.42 141.42 135.42 133.05 132.05 130.05 127.87 143.42 142.42 140.42 136.42 131.05 125.46 124.46 139.42 138.42 134.42 134.05 127.46 126.46 FROM SAMPLE 138.42 136.42 137.42 134.42 135.42 141.42 134.05 133.05 132.05 131.05 128.64 129.05 127.46 126.46 146.42 144.42 143.42 142.42 130.05 140.42 125.46 127.87 SOT AGE 5 1.8 0.52 1.00 1.00 1.00 1.08 1.00 1.08 1.00 1.8 0.37 1.00 1.00 1.00 0.41 1.08 TOTAL [actual 0.80) 0.01 0.24 0.05 Ŗ Ħ. ŗ tr. 0.01 0.08 0.11 10.01 0.02 0.11 0.19 ASSAYS OZ / TON 02 TON

# DIAMOND DRILL RECORD

SHEET NO. 6 OF

Mc 83-41

HOLE NO.

NAME OF PROPERTY.

McDermott

SAMPLES TO BASE OF HOLE WHOLE CORE 200 70 ASSAYS 02, TON 0000 0.03 0.23 0.12 ij tr. संसंसंस ctual 0.91) ctual | 0.77) 99.1 TOTAL 1.00 88 8.1 1.8 1.00 8888 8 8 8 88 8:1 8.1 173.90 50.19 52.72 54.72 155.72 156.88 162.88 165.88 166.88 167.88 169.88 70.88 72.88 53.72 160.88 161.88 163.88 164.88 168.88 71.88 49.19 50.72 51.72 FOOTAGE 10 SAMPLE 151.72 152.72 154.72 158.88 159.88 149.19 50.72 153.72 162.88 163.88 164.88 165.88 166.88 167.88 169.88 160.88 61.88 50.19 70.88 71.88 172.88 148.19 FROM % SULPH 1083 1739 1742 1743 ġ 1741 1744 1745 1746 1752 1755 1756 1757 1758 1759 1760 1762 1753 1754 751 1761 The rock alternates silicified and chloritized within this interval. preciation is moderate to intense. Sulphides are more abundant in Sulphides (pyrite and chalcopyrite) are trace throughout and appear 150.72-156.88 m. Within the upper part of the transition zone the chloritized zones are dark green with a medium-fine to coarse-fine massive rock with carbonate veining comprising approximately 1% of masked by brecciation, but in the lower zone lamellae are oriented Medium to light green, fine to coarse grained, well laminated to grained appearance. The silicified zones are purple in hue to 147.19-150.72 while the chloritized zones dominate 85-90% from transition zone is less abundant and the presence of carbonate veining becomes dominant. Lamination within the upper zone is Carbonates absent. 10cm wide brecciated band at 45° to core axis. the silicified zones, up to 2%, while in the chloritized zone sulphides only reach trace amounts. Brecciation in the lower laminated rock but in a random orientation in a massive rock. carbonate vein 4cm wide at 25° to core axis. interval. The carbonates lie along laminations in the well The rock is still moderately to intensely brecciated. The creamy in hue. The silicification represents 75-80% from massive, less than 1% carbonate veining. very well laminated at 30° to core axis 450 to core axis, less than 1% CO3 Laminations massive, less than 1% CO3 massive, less than 18 co3 DESCRIPTION at between 40-50° to the core axis. 300 to core axis. ) 300 to core axis. 50° to core axis. 350 to core axis. hery finely disseminated. TRANSITION ZONE SEDIMENTS .68.00-169.77: .69.77-170.67: 172.98-173.08: .60.00 .61.00: 165.00: .62.00: 63.00: 164.00: 166.00: 67.90: 56.88 193.72 156.88 ဝ FOOTAGE 147.19 FROM ANGRIDGE LIMITED - TORONTO - 366-1168

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HOLE NO. NAME OF PROPERTY\_\_ Mc-83-41 SHEET NO.

McDermott

			193.72								FROM	Fo
			2 203.30				<u> </u>				10	FOOTAGE
•	203.30 meters END OF HOLE	The rock becomes massive and absent of lamination. The rock is medium green in colour with a medium grain size with very little carbonate veining and trace pyrite. This rock should be thin sectioned for positive identification.	SEDIMENT?	averaging 18, bedding at 50° to core axis.  191.00: laminations at 50-55° to core axis.	brecciated zone, 70% brecciated.	pyrite up to 1%, averaging trace, 550	181.73: brecciated zone, 2% pyrite.	178.72: 5cm wide brecciated zone, bedding at 50° to axis. 179.25: 5cm wide brecciated zone, bedding at 50° to axis.	at 550 to core axis.	increases up to 5%, but averaging 1-2%. Laminations		DESCRIPTION
				1773	1772	1770	1760	1768	1767	C 1766	, o	-
				189.00 189.71 0.71	185.62 186.64 1.02	184.87	183 86	178.72 179.72 1.00	175.53 176.53 1.00	175.53	IDES FROM TO TOTAL	SAMPLE
										<del></del>		
					0.0	200		<del></del>			2	
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				10.0	10.00	300	ີ 	•	0.02	8	01 TON	ASSATS

AME OF	AME OF PROPERTY	McDermott
OLE NO.	Mc-83-42	LENGTH 186.12 metres
OC ATION		
ATITUDE	ATITUDE 7 + 50 E	DEPARTURE 0 + 75 S
LEVATION		AZIMUTH 344° DIP -70°
TARTED _	September 16	September 21/
502.65		

				-62°	137.16 -62°
				-67°	91.44
				-69~	45.72
	-60°	185.93 -60 <sup>0</sup>		-70°	0
DIP AZIMUTH	DIP	FOOTAGE	AZIMUTH FOOTAGE	DIP	FOOTAGE

-	3	=	<u>'</u>
	-60°	יוני	
		26130	***************************************
	Split for analysis	REMARKS BQ COTE	HOLE NO. MC-83-42 SHEET NO. 1 OF 10

LOGGED BY A.W. Workman

3.11 39.4 3.0 TO		l						
O 13.11 OVERBURDEN  13.11 OVERBURDEN  13.11 OVERBURDEN  13.11 OVERBURDEN  13.11 OVERBURDEN  13.11 OVERBURDEN  13.11 OVERBURDEN  13.11 OVERBURDEN  13.11 OVERBURDEN  14.11 OVERBURDEN  15.11 OVERBURDEN  15.11 OVERBURDEN  15.11 OVERBURDEN  15.11 OVERBURDEN  15.11 OVERBURDEN  16.11 OVERBURDEN  16.11 OVERBURDEN  17.11 OVERBURDEN  18.11 OVER		7 0 0			S	> X	г	m
O 13.11 OVERBURDEN  13.11 39.42 BASALT  Light to dark green, often grey-green; very fine grained becoming medium grained locally, probably near flow centres. Lava is frequently vestcular with relic vestcules up to 1cm now chlorite filled. Rock is weakly to moderately fractured with quartz filling and traces of chalcopyrite (up to 5% locally). Fractures are often hematized, mostly in coarser grained sections. Pyroxene crystals are fresh to weakly chloritized; feldspars are moderately epidotized or sausauritized. Locallized strong silicification is noted which does not seem to have a textural or structural association.  13.11 - 19.17: breciated locally; very fine grained; possibly philoved from 17.35-19.35 m.  19.17 - 22.95: moderately brecciated locally in 10cm sections; dilatant zones are silica filled with 1-2% chalcopyrite. Whinor local silicification (eg 20.95-21.05 m).  22.95 - 36.20: fine to medium grained, weakly silicified locally, weakly to moderately fractured becoming strongly fractured with guartz-epidote filling. Zone is strongly brecciated locally with moderate to strong silicification.  Brecciation tends to increase with depth - lower local underlying zone. Fractures are weakly carbonated and moderately hematized.		77 20 0 3	70	-	H87	FROM		FOOTAGE
Light to dark green, often grey-green; very fine grained becoming medium grained locally, probably near flow centres. Lava is frequently vesicular with relic vesicules up to 1cm now chlorite filled. Rock is weakly to moderately fractured with quartz filling and trace of chalcopyrite (up to 5% locally). Fractures are often hematized, mestly in coarser grained sections. Pyroxene crystals are fresh to weakly chloritized; feldspars are moderately epidotized or sausauritized. Locallized strong silicification is noted which does not seem to have a textural or structural association.  13.11 - 19.17: very strongly silicified, non-brecciated, to weakly pillowed from 17.35-19.35 m.  19.17 - 22.95: moderately brecciated locally; very fine grained; possibly chalcapyrite. Winor local silicification; dilatant zones are silica filled with 1-2% chalcopyrite. Winor local silicification (eg 20.95-21.05 m).  22.95 - 36.20: fine to medium grained, weakly silicified locally, weakly to moderately fractured becoming strongly fractured below 35.60 m. Rock is locally brecciated quartz-epidote filling. Zone is strongly brecciated locally with moderate to strongly fractured with greciation to increase with depth - lower local complex carbonated and moderately hematized.		0	13.11	OVERBURDEN		!		
Light to dark green, often grey-green; very fine grained becoming medium grained locally, probably near flow centres. Lava is frequently vesicular with relic vesiculas up to lom now chlorite filled. Rock is weakly to moderately fractured with quartz filling and traces of chalcopyrite (up to 5% locally). Fractures are often hematized, mostly in coarser grained sections. Pyroxene crystals are fresh to weakly chloritized; feldspars are moderately epidocized or sausauritized. Locallized strong silicification is noted which does not seem to have a textural or structural association.  13:11 - 19:17: very strongly silicified, non-bracciated, to weakly brecciated locally; very fine grained; possibly pillowed from 17:35-19:35 m.  19:17 - 22:95: moderately brecciated locally in l0cm sections; dilatent zones are silica filled with 1-2% chalcopyrite. Minor local silicification (eg 20:95-21:05 m).  22:95 - 36:20: fine to medium grained, weakly silicified locally, weakly to moderately fractured becoming strongly fractured below 35:60 m. Rock is locally brecciated and epidocized.  36:20 - 39:42: fine to medium grained, strongly fractured with quartz-epidote filling. Zone is strongly brecciated locally with moderate to strong silicification. Brecciation tends to increase with depth - lower l0cm arrives sub-rounded highly silicified xemoliths of the underlying zone. Fractures are weakly carbonated and moderately hematized.		13.11	39.42	BASALT				
hematized, mostly in coarser grained sections. Pyroxene crystals are fresh to weakly chloritized; feldspars are moderately epidotized or sausauritized. Locallized strong silicification is noted which does not seem to have a textural or structural association.  13.11 - 19.17: very strongly silicified, non-brecciated, to weakly brecciated locally; very fine grained; possibly pillowed from 17.35-19.35 m.  19.17 - 22.95: moderately brecciated locally in lOcm sections; dilatant zones are silica filled with 1-2% chalcopyrite. Minor local silicification (eg 20.95-21.05 m).  22.95 - 36.20: fine to moderately fractured becoming strongly fractured below 35.60 m. Rock is locally brecciated and epidotized.  36.20 - 39.42: fine to medium grained, strongly fractured with quartz-epidote filling. Zone is strongly brecciated locally with moderate to strong sylicification. Brecciation tends to increase with depth - lower local such carries sub-rounded highly silicified xenolithe of the underlying zone. Fractures are weakly carbonated and moderately hematized.	EM. 6-1168			to dark green, often grey-green; very fine grangrained locally, probably near flow centres. ently vesicular with relic vesicules up to lcm land. Rock is weakly to moderately fractured with faces of chalcopyrite (up to 5% locally). Fraces of chalcopyrite	 			
brecciated locally; very fine grained; possibly pillowed from 17.35-19.35 m.  19.17 - 22.95: moderately brecciated locally in locm sections; dilatant zones are silica filled with 1-2% chalcopyrite. Minor local silicification (eg 20.95-21.05 m).  22.95 - 36.20: fine to medium grained, weakly silicified locally, weakly to moderately fractured becoming strongly fractured below 35.60 m. Rock is locally brecciated and epidotized.  36.20 - 39.42: fine to medium grained, strongly fractured with quartz-epidote filling. Zone is strongly brecciated locally with moderate to strong silicification. Brecciafion tends to increase with depth - lower locm carries sub-rounded highly silicified xenoliths of the underlying zone. Fractures are weakly carbonated and moderately hematized.		···		traces of chalcopyrite (up to 5% locally). Fracetized, mostly in coarser grained sections. Pyrosefresh to weakly chloritized; feldspars are modered to sausauritized. Locallized strong silicated or sausauritized. Locallized strong silicated which does not seem to have a textural or structized.	 			
19.17 - 22.95: moderately brecciated locally in 10cm sections;  dilatant zones are silica filled with 1-2% chalcopyrite. Minor local silicification (eg 20.95- 21.05 m).  22.95 - 36.20: fine to medium grained, weakly silicified locally, weakly to moderately fractured becoming strongly fractured below 35.60 m. Rock is locally brecciated and epidotized.  36.20 - 39.42: fine to medium grained, strongly fractured with quartz-epidote filling. Zone is strongly brecciated locally with moderate to strong silicification. Brecciation tends to increase with depth - lower locm carries sub-rounded highly silicified xenoliths of the underlying zone. Fractures are weakly carbonated and moderately hematized.			-	7: very strongly silicified, non-brecciated, brecciated locally; very fine grained; pos pillowed from 17.35-19.35 m.	 	14	14.18	.18 15.18
22.95 - 36.20: fine to medium grained, weakly silicified locally, weakly to moderately fractured becoming strongly fractured below 35.60 m. Rock is locally brecciated and epidotized.  36.20 - 39.42: fine to medium grained, strongly fractured with quartz-epidote filling. Zone is strongly brecciated locally with moderate to strong silicification.  Brecciation tends to increase with depth - lower locm carries sub-rounded highly silicified xenoliths of the underlying zone. Fractures are weakly carbonated and moderately hematized.				- 22.95: moderately brecciated locally in 10cm sector of the sector of t	 	20	20.88	).88 21.62
36.20 - 39.42: fine to medium grained, strongly fractured with quartz-epidote filling. Zone is strongly brecciated locally with moderate to strong silicification.  Brecciation tends to increase with depth - lower local carries sub-rounded highly silicified xenoliths of the underlying zone. Fractures are weakly carbonated and moderately hematized.				<ul> <li>36.20: fine to medium grained, weakly silicified weakly to moderately fractured becoming st fractured below 35.60 m. Rock is locally and epidotized.</li> </ul>	 			
	ANGRIDGE LIMITED,	<u> </u>		- 39.42: fine to medium grained, strongly fractured with quartz-epidote filling. Zone is strongly brecciated locally with moderate to strong silicification.  Brecciation tends to increase with depth - lower locm carries sub-rounded highly silicified xenoliths of the underlying zone. Fractures are weakly carbonated and moderately hematized.	 	w	38.42	8.42 39.42

## DIAMOND DRILL RECORD

NAME OF PROPERTY\_\_\_\_\_\_\_McDermott\_ HOLE NO, \_\_MC-83-42 SHEET

FOOTAGE OM TO	DESCRIPTION
41.57	SEDIMENTS
11. 10. 10. 10. 10. 10. 10. 10. 10. 10.	Light to dark green, fine to very fine grained and well laminated inter-flow sediment. Bedding is at 45° to the core axis, but is locally cross-laminated and rarely exhibits signs of soft sediment slumping. Locally, the rock is strongly brecciated and moderately to strongly silicified with up to 15% very finely disseminated pyrite and 1-2mm cubes. Zone averages 2-4% pyrite. Sediments are epidotized and feldspathized in and proximal to breccia zones best developed above 39.96 m. Pyrite content is proportional to brecciation and alteration.  39.42 - 39.96: variably brecciated; 5-7% pyrite - up to 15% locally.  39.96 - 40.46: non-brecciated; 5-7% pyrite - mostly as a very fine dissemination.  40.46 - 41.57: well laminated, moderately chloritized. Rock has a silicification in 1-3cm zones and feldspathized breccia zones. Pyrite is mostly fracture controlled.
74.68 Da per 17	Dark green, very fine to medium grained, often ophitic textured particularly in coarser zones, and generally massive flow. The upper 15-20cm contains chloritized flattened vesicules up to 1.5mm. The axis of elongation is at 30-350 to the core axis. Largest percentage of flow is medium grained, with coarse grained phases, and very weakly magnetic. Carries abundant (3-5%) pyrite to a depth of 42.75 m. Flow averages 1%.  41.57 - 43.85: brecciated, carries 5-10cm sediment at top of flow - (infilling from above); averages 3-5% pyrite.  Vesicular flow top.  43.85 - 57.00: medium grained, coarse locally - ophitic.  57.00 - 72.36: strongly fractured with hematite and white carbonate in fractures. Rock is locally brecciated. Zone

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HOLE NO. MC-83-42 SHEET NO. 3 OF 10

TROM		74.68		82.48		82.48	
70		82.48		111.61		84.43	
DESCRIPTION	(sediment?), below 66.85 m. Below this point, rock is more strongly brecciated with moderate epidotization.  72.36 - 72.74: strongly brecciated, moderately epidotized, non-silicified.  72.74 - 74.68: fine grained, often tuffaceous in appearance, very similar to 57.00-72.36 m - assumed to be flow.	SEDIMENTS	Dark green, fine grained with clasts up to 1mm - usually angular, non-laminated becoming weakly bedded at 80.0 m (40° to core axis). Bedding is on a 0.1-0.5 mm scale, with zones of white to grey carbonate replacement up to 5mm parallel to laminations. This reflects weak to moderate carbonatization. Zone also carries 1-5%, 1-4mm carbonate stringers parallel to laminations. Section averages 17 pyrite with up to 3% locally. 74.68 - 74.83: pinkish alteration, strongly brecciated, moderately silicified. 74.83 - 80.00: non-laminated to very weakly laminated. 80.00 - 81.00: weakly laminated at 40° to core axis. 81.00 - 82.48: well laminated at 45° to core axis.	MAIN MINERALIZED ZONE	The rocks in this zone are sediments which have undergone variable breciation and silicification. The main silicified zone is overlain by a thin transition zone containing approximately 50% silicified rock; and is underlain by a wider transition zone carrying about 30-40% silicified rock. The central zone contains up to 15% pyrite associated with intensely silicified and strongly feldspathized non-brecciated rock.	TRANSITIONAL SILICIFIED SEDIMENTS	Dark green, fine grained and chloritized with increasing purple-grey intensely silicified, weakly to strongly brecciated bands. These
Š	C 1787		1788 1789 1790 1791 1792 1793 1794 1795				
1DES	0-2		1-00-22				
FROM	74.05	-	74.68 75.68 76.68 77.68 79.68 80.68				
FOOTAGE	74.68		75.68 76.68 77.68 77.68 79.68 80.68 81.68				
TOTAL	0.63		1.00 1.00 1.00 1.00				
loli	ti.						
02/70#	#. 						

FROM

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FOOTAGE

SHEET NO. 4 OF 10

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	Mc-83-42	AME OF PROPERTY

1			l								
	DESCRIPTION			SAMPLE	_m				ASSAYS		l
l		2 0	10ES	FROM	TO	TOTAL	.,		OZ/TON	02 TON	
	hands are concordant to the laminations. The bedding is well developed (35° at 82.78 m and 40-45° at 83.70 m), throughout but							i		Rech.	
	often disrupted by brecciaiton. Purple hue is due to moderate hematization and is strongest in strongly brecciated rock. Breccia fragments are highly angular and often laminated. They may be										
	rock is less than 40% silicified.	C 1796	2-3	82.48	83.38	0.90			tr.		
	- 84.43: rock is 60-65% silicified.	1797	3-4	83.38	84.43	1.05			tr.		
7	MAIN SILICIFIED ZONE										
	Purple-grey, aphanitic to fine grained, intensely silicified with abundant honey coloured sections reflecting feldspathization, (?).  Degree of alteration does not appear to be dependent upon										
	brecciation. Purple hue is best developed in intensely brecciated rock, and is attributable to moderate hematization. Brecciation is	_									
	absent in some sections. Pyrite content averages 5-6% and ranges from 2-15%. Bedding laminations are well displayed in										
	non-brecciated, often feldspathized zones. The zone is non-magnetic.		_							·	
	highly tuffaceous, clasts up to 2mm, laminated	1798	3-4	84.43	85.43	1.00			0.01		
	matrix wraps around some tragments. Clasts are strongly foliated along laminations at 40° to core										
_	axis. Carries 3-4% very finely disseminated										
	red angular										
	86.33 - 86.86; relic laminations are visible through breccia at	1799	ب ا ا	85.43	86.43	1.00			0.01		
	40-450 to core axis. Zone carries abundant	1800	2-4	86.43	87.05	0.62		_	0.03		
	reddish breccia clasts up to 1cm at 86.65-86.80 m Abundant chloritized shear planes at 86.80-86.86 m -										
	minor fault.									) 	
	87.66: strongly brecciated - fragments up to 2cm.	1920	3-4	87.05	87.66	0.61			0.01	0.01	
	at $45^{\circ}$ to core axis at $88.35$ m.	1922	3-5	88.66	89.52	0.87				0.02	
	lnor fault	1923	2-3	89.53	89.86	0.33				0.005	
	movement - rock strongly feldspathized. Minor green clay associated with faulting.		_								
			.,-								

84.43 | 106.77

## DIAMOND DRILL RECORD

NAME OF PROPERTY\_

McDermott

. m . i	1924 1925	- 5 5 E		89.86 91.03	91.03 91.95 92.89	1.17 0.92
<ul> <li>91.95: dark purple-grey; chloritized fractures, core broken, carries 5-6% pyrite well laminated at to core axis.</li> <li>92.89: pale green, with dark green chloritized fract</li> </ul>		<del></del>		9.86 1.03	91.03 91.95 92.89	
broken, carries 5-6% pyrite well laminated at to core axis 92.89: pale green, with dark green chloritized fract				1.03	91.95 92.89	
- 92.89: pale green, with dark green chloritized frac	h 926	7		1.95	92.89	) )
often mylonitic, probable intrusive carries abundant			_			
66			<del></del>			
intrusive in other holes).				) )		<u> </u>
92.89 - 94.35: dark purple-grey with 20-30% honey to cream coloured feldspathized laminations at 40° to core axis -	1928	4-5	_	93.57	94.35	00
very		_		I	1	
94.35 - 95.22: rock becoming increasingly feldspathized along certain sets of laminations. Bedding at 35-40° to	1929	5-6		94.35	95.22	•
100%) of to	930	10-13		5 33	30	
generally well laminated	1931			96.20	96.62	
concentrated along laminations. Some blue-grey	1932	9		6.62	97.42	0.80
of voids near	-					
	1933	0-1		97.42	97.60	•
myrouring (radic) zone. Went corraced at +0-+7- to core axis, parallel to lamination in silicified						
sediment.				•	3	
97.60 - 97.88: strongly feldspathized; 8-10% pyrite.	1934	1-3		97.60	98.75	0.28
rock volume; remainder is purple-grey, well	1936			98.75	99.75	
laminated locally (50-60° at 98.78-99.04 m).	1937			9.75	100.50	
100.50-100.98: Degree of feldspathization decreases with depth.	1938	0-1		100.50	86.00	
convoluted locally - non-s	1020	<u> </u>		00 98	01 98	
feldspathization containing 7-9% pyrite above				,		
average of 4-6%. Moderately laminated at 40-500						
e G						
101.98-103.16: strongly feldspathized locally containing up to 10%	<u> </u>					
pyrite in clots and very finely disseminated.	<b>1940</b>	5· - 30		101.98	02.62	0.64

	~ r			1.00	110.43	109.43	1-3	1777 1778	wer 1.0 m			ANGRIDGE LIM
	ен. 			0.50	109.43	108.93	1-2	1776	inkish-green, fine to medium grained INTRUSIVE - arries abundant (10%), green chloritized ub-angular xenoliths up to 2cm, weakly magnetic, totitic? Zone carries 30% pink fragments in			ITED - TORO
	# # • •			1.00	107.77	106.77	2-3	1774	stion usually associated with fracture systems. d infilling voids and fractures up to lcm wide. Rock ted locally (eg. 45° at 105.87 m). Zone carries p to 5% locally associated with local			NTO - 366-1
<del> </del>												168
									TRANSITIONAL SILICIFIED SEDIMENTS	111.61	106.77	
									strong silicification, weakly brecciated. 106.57-106.77: well laminated at 40° to core axis, intensely silicified, non-chloritized, non-brecciated, non-feldspathized.			
0.01	er. 0.			0.82	106.77	105.95	5	1945	sted; tions			
0.005	FF. 0.			0.82	105.13	104.13	2-3	1943 1944	chloritized seams locally which are			
0.005				0.97				C 1942	ed, spotty			
Rech.	Re								Initially feldspathization is ubiquitous then becomes irregular and fracture controlled below			
1 104	10 101/10		*	TOTAL	00TAGE	FROM	SOLPH,	Z 0.		70	FROM	<del>, ,</del>
	ASSAYS	•			m	SAMPLE			DECEBELON	FOOTAGE	F00	
												)

70711

111.61 124.17

FROM

70

FOOTAGE

HOLE NO.

Mc-83-42

McDermott

7 OF 10

SHEET NO.

	17			
	SEDIMENTS	Medium to dark green, scale. Contains a few moderately to strongly locally at 45-50° to 40-45° in the lower putth infilling by car hematite. Sediments carbonatized. Parting Zone averages 1-2% pyrock comprises 5% of 115.71-116.17 m (modernoted as a very fine 115.12-115.30: fine 115.30-115.71: modernoted 115.30-115.71: weakly section of the 115.71-116.17: weakly section of the 115.71-118.03: well 118.03-118.72: strong section of the 118.03-118.72: strong section of the 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72: well 118.03-118.72-122.35: well 118.03-118.03: well 118.03-118.03-118.03: well 118.03: well 118.03: well	Medium to dark gamederately to state locally at 45-50% 40-45% in the low with infilling by hematite. Sedime carbonatized. Parock comprises 5% 115.71-116.17 m (noted as a very fill.61-115.30: fill.61-115.30: fill.61-115.30: fill.61-115.30:	
DESCRIPTION		w 1-5cm sections of brecciation which are ly silicified. Laminations are distinguishable core in the upper half of the section, and at part. Rock is weakly to moderately fractured rbonate containing quartz debris and 5-10% are weakly chloritized and moderately ng is well developed parallel to laminations. Yrite, with 3-7% in silicified rock. Silicified the section, the largest zone being at erately to strongly brecciated). Pyrite is disemination and as clots of grains up to 3mm. laminated at 40-50° to core axis. to medium grained, chaotic, non-laminated. rately well laminated at 40°. Somm. Strong silicification of lamination sets 5mm. Bedded at 40° to core axis. laminated, moderately carbonatized locally. laminated, to ripping apart of individual cherty nations in chloritized groundmass. Relicing at 40° to core axis.	m hable d at red cified s 3mm.	to 5mm. Bedded at 40° to core axis.  I laminated, moderately carbonatized locally.  Congly brecciated, weakly silicified. Brecciation confined to ripping apart of individual cherty inations in chloritized groundmass. Reliculding at 40° to core axis.  Il laminated at 45° to core; locally silicified, for brecciation. Moderately carbonatized—  Chonate replacement feathering out along innations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.  Reliculations increasing below 120.75 m.
3			C C 1946	
SULPH				
SAMPL		11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6	12.66	15.7 16.1 17.1 18.0 18.7 20.7 22.7 23.5 23.9
E FOOTAG		2 C C C C C C C C C C C C C C C C C C C	> ω N	• • • • • • • • • • • • • • • • • • •
		. L. L. O. O. O. O. L. L. L. L. L. L. L. L. L. L. L. L. L.	· ·	
ASSAYS		0.01	::: :::	0.01 0.01 0.01 0.01 0.01
7				

124.17 132.98

FROM

70

FOOTAGE

7		Ĭ.			Mc-83-42		SHEET	ET NO	8 OF	10	
				SAMPLE	, in				ASSAYS		
1	DESCRIPTION	Ž O	SULPH,	FROM	FOOT AGE	TOTAL	32		02, 70#	02 TON	]
œ	BASALT (with sediments)										
	Dark green, aphanitic to fine grained, weakly pillowed flow with moderate brecciation throughout. Localized silicification is noted along 1-2cm epidotized, bands of breccia, probably pillow selvages. Fractures are strongly hematized, dilatant zones are carbonated. Pyrite content averages 1% with 2% in selvages. Section contains 1.33 m of sediment below 129.36 m. Probably deposited during a hiatus in extrusiion. The lower contact of the sediments is										
	124.17-129.36: Basalt - as described.  129.36-130.69: Sediment - dark green, fine to very fine grained, well laminated at 40-450 to core axis, crudely bedded at base, 1-2% pyrite, weakly silicified locally.  130.69-132.98: Resalt - probably not ciliqued flow base designated	C 1962 1963	1-3	129.36 130.01	130.01	0.65			0.02 tr.		
G	SEDIMENTS										
	Medium to dark green, fine to very fine grained, non-silicified but moderately brecciated locally (eg. 133.92-134.11 and 134.38-134.44). Minor increased pyrite is noted in association with brecciation. The rock is crudely foliated in the uppermost 35cm becoming well laminated at 134.10 m. Zone averages 0-1% pyrite with up to 3% in brecciated rock.										
	ll laminted; 55-60° at 134.10 and axis at 135.50 m. derately brecciated along single	1964		133.50 135.50 136.50	134.50 136.50 137.25				0.01 0.01		
	137.50-137.93: moderately laminated at 65° to core, very weakly brecciated locally.	1968	1-2	137.60	137.93	0.33			0.01		
		1969	<u>.</u>	137.93	138.50	0.57			0.01		
	138.23-139.29: weakly laminated, abundant carbonatization. 139.29-139.61: dark grey to purple-grey, strongly silicified, brecciated locally with 3-5% pyrite. Laminated at	1970 1971	3-5	138.50 139.29	139.29 139.61	0.79			0.01		
	5-60°; lower 15cm is strongly	ا   1972	1-2	139.61	140.45	0.84					

132.98 140.45

HOLE NO. MC-83-42 SHEET NO. 9 OF 10

ften pale green, fine to med fally near upper contact. Fing pillows which must be abo pyrite. Several samples ta elvages. Pillow centres are idotized, and may be breccia minor breccia, hematized fine to vesicules up to 2mm. d, generally silicified, minor breccia, hematized fine flow top.  assy, locally vesicular, brezed hyaloclastite, zone ends id.  To dark green, fine grained ication.  Pillowed, strongly marking sine to medium grained.  To very strongly vesicular.  To very strongly vesicular.  To ne grained.  to very strongly vesicular.  To ne grained.  to very angular, have un rotation movement, and are with be to laminated, mode in width.  To weakly laminated, mode in width.  To well laminated becoming minor grey intense silicification grey intense silicification.	Medium to dark green, often pale green, fine to medium grulocally aphanitic especially near upper contact. Flow is with lcm sclwages marking pillows which must be about 1 m Salvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Fillow centres are strong silicified and often epidotized, and may be brecciated low 143.10-143.65). Rock is moderately fractured throughout. non-magnetic.  140.45-141.20: chloritized vesicules up to 2mm.  141.20-143.75: pillowed, generally silicified, minor breclast-143.75: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a property of the selvage.  145.51-145.71: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a property of the selvage.  145.71-146.48: pillowed.  146.48-146.71: SEDIMENT - dark green, fine grained, well at 50-550 to core axis, chloritized, local selvage.  148.83-150.20: very fine to medium grained.  148.83-150.20: very fine grained.  148.83-150.20: very fine grained.  148.83-150.20: very fine grained.  148.83-150.20: very fine to medium grained. Autorification weak to moderate brecciation with black check to medium grained are weakly to seakly laminated, moderately and well parted.  155.75-156.57: Sediment? zones up to lcm in width. Autorification with well parted.  156.57-157.58: lava is unstructured.  157.58-158.98: SEDIMENT - well laminated, moderately at base; minor grey incense silicification to lox pyrite over 1-2cm. Zone averages pyrite. Bedding at 40-450 to core axis.	Medium to dark green, often pale green, fine to medium grilocally aphantic especially near upper contact. Flow is with lcm sclwages marking pillows which must be about 1 m Selvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Fillow centres are strong silicified and often epidotized, and may be brecciated locally. Place of the contact of the pidotized, and may be brecciated locally. Place of the pidotized wesicules up to 2mm. 141.20-143.75: pillowed, generally silicified, minor breclia. Place of the pidotized hyaloclastic, zone ends at a pelotized hyaloclastic, zone ends at a pelotized hyaloclastic, zone ends at a pelotized hyaloclastic, zone ends at a peloty. Place of the to medium grained. 148.81-148.83: possibly pillowed, strongly sheared at 350-250: very fine grained. 148.83-150.20: very fine grained. 150.20-153.35: weakly to very strongly vesicular. 150.20-153.35: weakly to very strongly vesicular. 150.20: very fine grained. 155.75-156.57: and well parted. 155.75-156.57: and well parted. 155.75-156.57: and well parted. 155.58-158.98: SEDIMENT - well laminated becoming somewhat the base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages pyrite. Bedding at 40-450 to core axis.	Medium to dark green, often pale green, fine to medium gruiccally aphanitic especially near upper contact. Flow is with icm solvages marking pillows which must be about 1 m Selvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Fillow centres are strong silicified and often epidotized, and may be brecciated local 143.10-143.65). Rock is moderately fractured throughout. 140.45-141.20: chloritized vesicules up to 2mm. 141.20-143.75: pillowed, generally silicified, minor breciated 143.75-145.25: massive, minor breccia, hematized fractured 145.51-145.71: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a package. 145.71-146.48: pillowed. 145.71-146.48: pillowed. 146.71-148.83: possibly marking flow is silicification. 146.71-148.83: possibly pillowed, strongly sheared at 35° at 148.73-148.83 m possibly marking flow is showe is fine to medium grained. 148.83-150.20: very fine grained. 148.83-150.20: veak to moderate brecciation with black children to the strong of the second pittle rotation movement, and are weakly to very sine grained. 156.57-156.57: Sediment(?), weakly laminated, moderately and well parted. 157.58-158.98: SEDIMENT - well laminated becoming somewher to 100 pyrite over 1-2cm. Zone averages pyrite. Bedding at 40-450 to core axis.
Medium to dark green, often pale green, fine to medium grilocally aphantic especially near upper contact. Flow is with lcm sclvages marking pillows which must be about 1 m Selvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Pillow centres are strong silicified and often epidotized, and may be brecciated load. 43.10-143.65). Rock is moderately fractured throughout. non-magnetic. Chloritized vesicules up to 2mm. 141.20-143.75: pillowed, generally silicified, minor breciaty. Pillowed, generally silicified, minor breciaty. Pillowed. 143.75-145.51: vesicular flow top. 145.51-145.71: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a pillowed. 145.71-146.48: pillowed. 145.71-146.48: pillowed. 146.48-146.71: SEDIMENT - dark green, fine grained, well at 50-550 to core axis, chloritized, local silicification. 148.83-150.20: very fine grained, strongly sheared at 350 at 148.75-148.83 m possibly marking flow to above is fine to medium grained. 150.20-153.35: weakly to very strongly vesicular. 168.83-150.20: very fine grained brecciation with black characteristic and well parted. 165.57-156.57: Sediment(?), weakly laminated, moderately and well parted. 155.75-156.57: Sediment(?), weakly laminated, moderately at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages into 10% pyrite over 1-2cm. Zone averages	Medium to dark green, often pale green, fine to medium grilocally aphantic caspecially near upper contact. Flow is with lcm solvages marking pillows which must be about 1 m Sqlvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Pillow centres are strong silicified and often epidotized, and may be brecciated loo. 143.10-143.65). Rock is moderately fractured throughout. non-magnetic. 140.45-141.20: chloritized vesicules up to 2mm. 141.20-143.75: pillowed, generally silicified, minor breciated 15.25-145.25: massive, minor breccia, hematized fractured 15.25-145.25: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a peldotized hyaloclastite, zone ends at a selvage. 145.71-146.48: pillowed. 146.71-146.83: possibly pillowed, strongly sheared at 350-150.20: very fine grained. 150.20-153.35: weakly to very strongly vesicular. 150.20-153.35: weakly to very strongly vesicular. 150.20-153.35: weakly to very strongly vesicular. 150.20-153.35: weakly to very angular, have undergond intile rotation movement, and are weakly and well parted. 155.57-156.57: Sediment(?), weakly laminated, moderately at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages pyrite. Bedding at 40-450 to core axis.	Medium to dark green, often pale green, fine to medium gri locally aphantic especially near upper contact. Flow is with lcm solvages marking pillows which must be about 1 m Salvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Pillow centres are strong silicified and often epidotized, and may be brecciated loc 143.10-143.65). Rock is moderately fractured throughout. non-magnetic. 140.45-141.20: chloritized vesicules up to 2mm. 141.20-145.71: pillowed, generally silicified, minor brec 143.75-145.25: massive, minor breccia, hematized fracture 145.21-145.71: very glassy, locally vesicular, brecciate epidotized hyaloclastite, zone ends at a s selvage. 145.71-146.48: pillowed. 145.71-146.89: possibly pillowed, strongly sheared at 35c at 148.75-148.83 m possibly marking flow i above is fine to medium grained. 148.83-150.20: very fine grained. 150.20-153.35: weakly to very strongly vesicular. 150.20-153.35: weakly to very strongly vesicular. 161.83-155.20: weak to moderate brecciation with black ch dilatant zones up to lcm in width. Auto-i fragments are very angular, have undergone intile rotation movement, and are weakly u 155.75-156.57: Sedimen(?), weakly laminated, moderately and well parted. 157.58-158.98: SEDIENT - well laminated becoming somewhe at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages i pyrite. Bedding at 40-450 to core axis.	Medium to dark green, often pale green, fine to medium grilocally aphanitic especially near upper contact. Flow is with lcm solvages marking pillows which must be about 1 m Salvages carry up to 5% pyrite. Several samples taken at intersection of three salvages. Fillow centres are strong silicified and often epidotized, and may be bracciated low 143.10-143.65). Rock is moderately fractured throughout. non-magnetic.  140.45-141.20: chloritized vesicules up to 2mm.  141.20-143.75: pillowed, generally silicified, minor bree 143.75-145.25: massive, minor breecia, hematized fracture 145.25-145.51: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a pelvage.  145.71-146.48: pillowed.  146.48-146.71: SEDIMENT - dark green, fine grained, well at 50-50 to core axis, chloritized, local silicification.  146.71-148.83: possibly pillowed, strongly sheared at 35 at 148.73-148.83 m possibly marking flow to shove is fine to medium grained.  150.20-153.35: weakly to very strongly vesicular. to wery fine grained.  153.45-155.20: weakly to very strongly vesicular. dilatant zones up to lcm in width. Autorl fragments are very angular, have undergone little rotation movement, and are weakly law at sunstructured.  156.57-156.57: Sediment(?), weakly laminated, moderately and well parted.  157.58-158.98: SEDIMENT - well laminated becoming somewhe at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages in pyrite. Bedding at 40-450 to core axis.
Medium to dark green, often pale green, fine to medium grilocally aphanitic especially near upper contact. Flow is with lcm scivages marking pillows which must be about 1 m Scivages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Fillow centres are strong silicified and often epidotized, and may be brecciated locally conormagnetic.  140.45-141.0: chloritized vesicules up to 2mm.  141.20-143.75: pillowed, generally silicified, minor breclay.75-145.25: massive, minor breccia, hematized fracture cepidotized hyaloclastite, zone ends at a selvage.  145.75-145.71: very glassy, locally vesicular, brecciate epidotized hyaloclastite, zone ends at a selvage.  145.71-146.48: pillowed.  145.71-146.48: pillowed.  146.71-148.83: possibly pillowed, strongly sheared at 350 at 148.75-160.83 m possibly marking flow to above is fine to medium grained.  148.83-150.20: very fine grained.  150.20-153.35: weakly to very strongly vesicular.  150.20-153.35: weakly to very strongly vesicular.  150.20-153.50: veak to moderate brecciation with black challed and the contact of the	Medium to dark green, often pale green, fine to medium grilocally aphanitic especially near upper contact. Flow is with lcm solvages marking pillows which must be about 1 m Selvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Pillow centres are strong silicified and often epidotized, and may be brecciated locally 143.10-43.65). Rock is moderately fractured throughout. non-magnetic. chloritized vesicules up to 2mm. 141.20-143.75: pillowed, generally silicified, minor brecciated fractured throughout. 145.25-145.51: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a pselvage. 145.71-146.48: pillowed. strongly sheared at 350.116.71-148.83: possibly pillowed, strongly sheared at 350.20-153.35: weakly to very strongly vesicular. 150.20-153.35: weakly to very strongly vesicular. 150.20-153.35: weakly to very strongly vesicular. 150.57-155.20: weak to moderate brecciation with black childitatent zones up to 1cm in width. Autorl fragments are very angular, have undergone little rotation movement, and are weakly understee brecciation with black childitatent zones up to 1cm in width. Autorl fragments are very angular, have undergoned at base; minor grey intense silicification at base; minor grey intense silicification at base; minor grey intense self-diffication at base; minor grey intense self-diffication at base; minor grey intense self-diffication. 2008 pyrite over 1-2cm. Zone averages pyrite. Bedding at 40-450 to core axis.	Medium to dark green, often pale green, fine to medium grilocally aphanitic especially near upper contact. Flow is with lcm sclvages marking pillows which must be about 1 m Selvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Pillow centres are strong silicified and often epidotized, and may be brecciated low low contress are strong silicified and often epidotized, and may be brecciated low low contress are strong silicified and often epidotized, and may be brecciated low low contress are strong silicified and often epidotized, and may be brecciated fractured. Pillowed, generally silicified, minor bree lide. Pillowed, generally silicified, minor bree lide. Pillowed, generally silicified, minor bree lide. Pillowed, minor bree lide. Pillowed, minor bree lide. Pillowed, minor bree lide. Pillowed. Pillo	Medium to dark green, often pale green, fine to medium grance in the contact. Plow is vith lcm solvages marking pillows which must be about in salvages carry up to 5% pyrite. Several samples taken at intersection of three selvages. Pillow centres are strong silicified and often epidotized, and may be brecciated low 143.10-143.65). Rock is moderately fractured throughout. non-magnetic.  140.45-141.20: chloritized vesicules up to 2mm.  141.20-143.75: pillowed, generally silicified, minor breclid.75: pillowed, generally silicified, minor breclid.75: very glassy, locally vesicular, brecciated fracture 145.22-145.51: very glassy, locally vesicular, brecciated epidotized hyaloclastite, zone ends at a pelvage.  145.71-146.48: pillowed.  146.48-146.71: SEDIMENT - dark green, fine grained, well at 50-550 to core axis, chloritized, local silicification.  148.83-150.20: very fine grained.  150.20-153.35: weakly pillowed, strongly sheared at 350 at 148.75-148.83 m possibly marking flow in above is fine to medium grained.  150.20-153.35: weakly to very strongly vesicular. above is fine to medium grained.  150.57-156.57: Sediment zones up to lcm in width. Autorification fragments are very angular, have undergound well parted.  155.75-156.57: Sediment(?), weakly laminated, moderately and well parted.  156.57-157.58: SEDIMENT - well laminated becoming somewhalt base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages in pyrite. Bedding at 40-450 to core axis.
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56.57-157.58: lava is unstructured.  57.58-158.98: SEDIMENT - well laminated becoming somewhat at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages 1-1	56.57-157.58: lava is unstructured.  57.58-158.98: SEDIMENT - well laminated becoming somewhat at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages 1-4 pyrite. Bedding at 40-450 to core axis.	56.57-157.58: lava is unstructured.  57.58-158.98: SEDIMENT - well laminated becoming somewhat at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages 1-2 pyrite. Bedding at 40-450 to core axis.	56.57-157.58: lava is unstructured.  57.58-158.98: SEDIMENT - well laminated becoming somewhat at base; minor grey intense silicification to 10% pyrite over 1-2cm. Zone averages 1-2 pyrite. Bedding at 40-450 to core axis.
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Sedding ar 40-400 to core		Contract of the contract of th	Ċ

HOLE NO. |

McDermott

SHEET NO.

10 OF

10

LANGRIDGE LIMITED	TORONTO	-366-1168			<u> </u>					
					162.00		160.87		FROM	FOOTAGE
					186.12		162.00		70	AGE
CASING PULLED	186.12 meters END OF HOLE	169.33: flow contact. 169.33-172.30: vesicular massive flow. 172.30-186.12: pillowed flow - coarsely brecciated locally, weak to locally strong silicification throughout. Pillows contain poorly formed variolites.	-162.20: vesicular, massive flow162.75: fine, locally medium grained163.00: brecciated, carbonate filling dilatant zones; pyrite cubes up to 5mm.	Light to medium green, aphanitic to fine grained, and often vesicular, non-silicified to moderately silicified. Strongly brecciated locally. Non-magnetic. Section is probably altered basalt in original composition. Zone averages 1-3% pyrite as blebs up to 1mm. Rock fines below 169.25 and a flow contact is noted at 169.33 m.	ANDESITE	Dark green, fine grained, well laminated locally at 50-60° to core axis. Upper 30-40cm is weakly to moderately silicified. Carries 1-3% pyrite, 5% where silicified.	SEDIMENTS	158.98-160.87: lava is massive and vesicular above 160.40 m. Lower local local strongly epidotized, silicified breccia.		DESCRIPTION
·		1983	1982			C 1981			, O	
· · · · · · · · · · · · · · · · · · ·		1-2	2-3			1-3			SULPH,	
		174.75	162.75			160.87			FROM	SAMPLE
		175.50	163.00			162.00			FOOT AGE	m
		0.75	0.25			1.13			TOTAL	
									3.3	
		tr.	tr.			r.			02, TON	ASSAYS
									02 TON	
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#### DIAMOND DRILL RECORD

STARTED October 3, 1983 FINISHED October 7, 1983 ELEVATION LATITUDE LOCATION HOLE NO. | HOLE NO. MC-83-43 9 + 50 W DEPARTURE 0 + 72 S McDermott \_ AZIMUTH \_ LENGTH 118.14 meters

FOOTAGE	DIP	AZIMUTH	AZIMUTH FOOTAGE	פום	AZIMUTH
0	-70°				
87.48	-66°				
118.10	-64				

HOLE NO. MC-83-43 SHEET NO. 1 OF 7

LOGGED BY A.W. Workman REMARKS BO Core Split for assay. Casing pulled.

LANGRIDGE LIMITED,				EM. 6-1168			<b>,</b>	
	34.46		32.71		12.80	0	FROM	F 0 0
	42.97		34.46		32.71	12.80	10	T A G E
Dark green, fine grained to aphanitic, pillowed with abundant selvages up to 1 m apart. Pillow rims are enriched in pyrite, and may be silicified locally. Basalt averages 1-2% pyrite.  39.30 - 40.30: Intrusive pinkish-green, fine grained to aphanitic with a central porphyritic zone from 39.55-39.85 m.  Carries euhedral pink feldspar phenocrysts up to 2mm. Rock is very weakly magnetic, and carries basalt xenoliths up to 5cm. Contacts are sharp at 30° to core axis.	BASALT	ry fine grained, often aphanitic and especially near upper contact. Well rongly brecciated zones. Lions at 30° to core axis. Fine as very fine dissemination and 1-2mm Rock also moderately hematized along lions.	SEDIMENTS	Grey-green, fine to medium grained, ophitic to sub-ophitic textured. Generally weakly fractured, uniformly textured and massive. White carbonate veins are observed locally with 10% quartz debris (eg. 24.22-24.42 m). Lava tends to be finer grained below 29.70 m, brecciated and locally silicified. Silicification is generally acompanied by epidotization. A chilled lower contact is observed at 32.50-32.71 m. Zone carries an average 0-1% pyrite.	BASALT	OVERBURDEN		
····	0961			C 1984			2 O .	
		<del></del>		0-1			SUL PH-	
	33.43	32.71		31.71			FROM	SAMP
	34.46	33.45		32.71			FOOT AGE	LE
	1.01	0.74		1.00			TOTAL	
							કર	
							<b>%</b>	>
		Ħ.		<b>.</b>			OZ/TON	8 8 4
							OZ/TON OZ/TON	Y S

FROM	FOOT AGE	DESCRIPTION		20	NO. Z SULPH	2 SULPH	7 SULPH
42.97	47.30	SEDIMENTS					- 4
		Medium to dark green, fine grained to aphanitic, well laminated, but very strongly brecciated sections make measurement of bedding angles difficult. Breccia is usually moderately to strongly silicified (eg. 43.33-43.67 and 43.93-44.11 m). Abundant mm-scale lenses of clear quartz along laminations. Individual laminations are carbonatized locally. Averages 1-3% pyrite.  42.97 - 44.60: well laminated at 35-40° to core axis.  44.60 - 44.85: very weakly laminated.  44.85 - 47.30: well laminated, often on a 0.1mm scale. Thinnest laminations carry increased pyrite - up to 5-7% finely disseminated.	C 1987 1988 1988 1990	1-3	42.97 43.90 44.90 45.90	£ 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	43.90 44.90 45.90 46.61 47.30
47.30	58.98	Medium green, fine to very fine grained, moderately to strongly brecciated with moderate silicification of breccia locally. Breccia l may be due to flowage rather than tectonism. Rounded, epidotized fragments up to 5cm are observed.  58.71 - 58.98: strongly silicified and brecciated with pyrite cubes 1 up to 6mm. Pyrite content averages 7-9%.	1992 1993 1994 1996	1-2	47.30 49.30 51.20 54.20 58.21		48.30 50.30 51.60 58.71
58.98	59.48	QUARTZ VEIN  White to pinkish-white, with abundant dark green seams in lower half land carries 3-5% pyrite along seams locally.	1998	2-3	58.98		59.48
59.48	63.86	SEDIMENTS  Medium to dark green, fine to very fine grained; moderately to strongly silicified and weakly to moderately brecciated locally. Well laminated locally. Zone averages 2% pyrite as a very fine dissemination and as cubes up to 5mm in size.					

HOLE NO. \_\_\_\_MC-83-43

\_\_ SHEET NO. 3 OF 7

	63.86		63.86			F 70 M	FOOT
	65.34		100.03			70	OTAGE
Dark green, fine grained, generally well laminated and chloritized with abundant moderately to strongly silicified zones. Silicification begins as halos surrounding microfractures. As fracturing increases with depth to form a network silicification is more highly penetrative into formerly chloritized rock. Some intense feldspathization in lower half of interval. Zone carries 25-50% silicified rock and 1-3% pyrite. The lower 10cm is a fault zone carrying 5-7% pyrite. Shearing is noted at 450 to core axis along a lcm clay plane.	SILICIFIED SEDIMENTS	This section is composed of three memebers; an upper variably silicified zone, a central strongly silicified and locally feldspathized member, and a broad lower zone of irregular breccia-controlled silicification. Pyrite contents are highest in feldspathized sections of the central member.	MAIN MINERALIZED ZONE	Laminated at 40° to vein with abundant k.  inkish quartz veins up id locally below 61.30 by brecciation. rty fragments up to is.	strong silicification in local brecciandant pink quartz veins up to 10cm. Upte cubes. Strongly chloritized and		DESCRIPTION
2206				2000 * CHA 2201 2202 2202 2203 2204	1999	Z O	
1-3				1-2 NGE T 2-3 1-3 1-3	5-7	S SULPH	
63.86				60.31 fo #2200 60.81 61.76 62.76 63.31	59.48	FROM	SAMPLE
64.60 65.34	,			60.81 SERIE 61.76 62.76 63.31 63.86	60.31	FOOTAGE	۳
0.74				0.50 0.95 1.00 0.55 0.55	0.83	10171	1
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						,,	
				2000		+	┨╻
0.01 tr.				0.01	0.01	02,TON	ASSAYS

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80.56

FROM

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FOOTAGE

SHEET NO.

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MAIN SILICIFIED ZONE
SAMPLE ASSAYS    1-3   65.34   65.63   0.29   0.02    -1   10-15   65.63   66.14   0.51   0.18    -2   4   66.14   66.76   0.62   0.08    -3   5   66.76   67.66   0.90   0.14    -3   69.50   70.07   0.57   0.18    -4   5   70.07   70.67   0.60   0.04    -5   70.07   70.67   0.62   0.03    -6   71.29   0.62   0.13    -7   73.01   73.26   0.25   0.25    -7   73.26   73.93   0.67   0.17    -7   73.26   73.93   0.67   0.17
SAMPLE ASSAYS  FOOTAGE TO TOTAL  FOOTAGE TO TOTAL  FOOTAGE TO TOTAL  TOT
FOOTAGE 10 107AL 3 0.29 65.63 0.29 66.14 0.51 66.76 0.62 67.66 0.90 69.50 0.94 69.50 0.94 70.67 0.66 71.29 0.62 71.29 0.62 72.55 0.62 73.01 0.46 73.26 0.25 73.93 0.67 73.93 0.67 73.93 0.67 73.93 0.67
ASSAYS  DOTAGE TO TOTAL TO TO TOTAL TO TO TOTAL TO TO TO TO TO TO TO TO TO TO TO TO TO T
ASSAYS  107/11  1
ASSAYS  0.0770W 02.770W 0.02 0.08 0.08 0.08 0.09 0.18 0.08 0.09 0.18 0.09 0.19 0.17
ASSAYS  02, TON  02, TON  0.02  0.08  0.08  0.08  0.08  0.08  0.08  0.08  0.17
2   3   1   1   1   1   1   1   1   1   1
02

FORM

LANGRIDGE LIMITED - TORONTO - 366-1168

HOLE NO. I

SHEET NO.

5 OF 7

Mc-83-43

ANGRIDGE LIMITED - TORONTO - 366-1168 80.56 FROM FOOTAGE 100.03 5 fine dissemination and as cubes up to 2mm in size. up to 10% locally, over the average 2-3%. Pyrite occurs as a very decrease with depth. Pyrite content is higher in silicified rock thickness of silicified sections and percentage silicified rock penetrative outwards from fracture networks. In general, the grained. Silicification is related to brecciation and is Lighter colours reflect feldspathization. Rock is fine to very fine purple-grey colouration is due to variably developed silicification. Alternating medium to pale green, and honey coloured to grey-green 75.40 76.34 - 76.62 75.80 - 76.34: (minor purple-grey) rock. Green rock is chloritized. Grey to 78.17 - 80.56: 77.07 - 78.17: 76.62 - 77.07: 74.92 -74.24 - 74.92: 73.93 - 74.24: - 75.80: SILICIFIED SEDIMENTS 75.40 well laminated at 450 to core axis, weakly strongly silicified, moderately to strongly strongly silicified but carries 10-15% chloritized slight greenish tint due to chloritization pervades as above, less pyrite. core axis locally. weakly brecciated, well laminated at 60-700 to moderately well laminated, weakly brecciated 79.03 m), totalling 5-10% of section. penetrative from openings in breccia into fragments. brecciated with 5-6% pyrite. Silicification is brecciated, strongly silicified. silicified. intensely silicified, feldspathized intensely silicified throughout, well laminated Zone carries minor chloritized rock (eg. 78.90 the zone. Zone is moderately to strongly feldspathization. 45-500 to core axis. Cream to white coloured laminations. intensely silicified; 5-10% chloritized DESCRIPTION a t 2224 2225 2226 2223 2229 2230 2228 2227 2222 8-10 2221 z O 5-6 4-6 4-6 4-6 2-4 1-3 1-2 4-6 4-6 2-4 79.86 79.20 78.85 75.80 78.07 76.34 75.40 77.07 76.62 74.92 74.24 73.93 FROM SAMPLE 79.86 79.20 78.85 76.62 76.34 77.07 asures 78.07 75.40 74.92 74.24 75.80 FOOTAGE 0.35 0.78 0.66 0.50 0.54 0.28 0.70 0.45 0.48 0.68 1.15) 1.00 TOTAL 0.10 0.11 0.01 p.06 0.08 0.23 0.11 ASSAYS 0Z, TON 07 TON

LANGRIDGE LIMITED -	TORO	NTO = 366-116	8							_								_	_	
	100.03		_																FROM	F00.
	118.14														_			];	70	FOOTAGE
Medium to dark green becoming better bedd laminations or folia tensional fractures. veins up to lcm wide noted locally up to Section at 106.87-10 silicified locally w "lower mineralized z	SEDIMENTS	9/.3/ - 100.03:					90 65 = 97 37.	87.75 - 90.65:	85.05 - 87.75:	1	4	8, 43.		83.37 - 84.43:		81.61 - 83.3/:	1		· I.	
ark green, fine to very fine grained, locally laminated ther bedded with depth. Well parted parallel to or foliation. Abundant (10-20%), white carbonate filled ractures. Occasional pink carbonate and quartz filled lcm wide. Rare greyish silicified breccia zones are ly up to 2cm in width. Zone averages 1-2% pyrite. 106.87-107.73 m is weakly brecciated, moderately locally with 3-5% pyrite. May be equivalent to the ralized zone".		as above but with several wider silicified zones at 97.37-98.27 and 99.67-100.03 m. Below 98.27 m, percentage of silicification decreases markedly. Rock becomes well laminated on a 0.1-0.5mm scale, at 45° to core axis.	zones are noted at 93.85-94.39, 96.18-96.50 and 96.94-97.08 m.	silicified halos. Where fractures are very	ied breccia totals only have lom thick		in altered rock.	1 is less (10%) silicified with some increased	section is 50% silicified with major silicified breccia zones at 85.05-85.35, and 87.15-87.75 m.	n-structured.	30% silicified.	eases with depth.	coloured matrix. Percentage silicification	with 50% intensely silicified breccia.	nble quartz veins.	strongly brecciated and strongly chloritized with 50% silicified, honey coloured to white seams -			DESCRIPTION	
		2256 2257 2258	2254	2252	2250 2251	2249	2247	2246	2244 2245	2243	2242	2240	2239	2237	2236	2235	2233		20.	
		1-2	1-2		1-6		1-2	-2		1-2	3-5	2-2	2-3	2-3	5-7	1-3	2-4	ōcs	% SULPH	
		98.27 98.97 99.67	96.50 97.37	95.27	93.85 94.39	93.25	91.65	90.65	89.75	87.75	87.15	85.35	85.05	83.37	83.09	82.45	, <b>5</b>	FROM		SAMPLE
		98.97 99.67 100.0:	12 W U	96.18	94.39 95.27	ω	92.65	91.65	89.75 90.65	88.75	87.75	86.35	85.35	84.43	83.37	83.09	,	70	FOOTAGE	Э.
		0.70	0.87	0.91	0.54	0.60	1.00	1.00	0.90	1.00	0.60	1.00	0.30	1.06	0.28	0.64	1.05	TOTAL		
																			,	
		0.02	0.01	20	0.13	0.01	200	0.01	0.12	0.07	0.16	0.15	0.02	0.05	0.13	0.04	0.01		07.70	ASSAYS
										)(14.4	) 4.4								0.7 702	
										J	-									

\_\_ SHEET NO. \_\_\_\_ 7 OF 7

ANGRIDGE LIMITED - TORONTO - 366-1168										_			_ T	
													T TO E	F00
		_				_							70	FOOTAGE
		118.14 meters	117.50:	112.50:	111.95:	35:	110.20:	106.87-107.73:	108.80:	108.25:	101.90:			
	CASING PULLED	END OF HOLE	vis. Milicified with 2-3%	but well foliated. 45° to core axis.	moderately to strongly silicitied.		laminations at 40° to core axis.	al silicification in breccia zone with	inations at 55-60° to core axis.	at 25-30° to core axis.	450 to core axis.			
			2271 2272	2269 2270	2268	2266	2265	2263	2262	2261	2259	င	2 0	
		_	1-2	1-2	3-5	1-2	1-2	1-2 3-5	1-2	1-2	1-2	ior.s	% SULPH	
			115.36 117.38	13.	111.55	109.85	107.73	106.12	103.85	101.85	100.03	.  *		
			116. 118.	112.	111.80	110.8	108.	106	104.	102.	101.0	ā	FOOTAGE	
			0.68	_	0 0	0	- 9	9 9			0.1.80	18	7 (	
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			0.01	0.01	0.08	tr.	22	0.01	tr.	0.01	2 2	:	02/101	
			0.01	0.01	020	-	26	2	-	2	2 2		Z TON 02 TON	

NAME OF PROPERTY McDermott

HOLE NO. MC-83-44 LENGTH 118.67 meters

LOCATION 10 + 25 E DEPARTURE 0 + 70 S

ELEVATION AZIMUTH 344 DIP -65°

STARTED October 7, 1983 FINISHED October 13, 1983

FOOTAGE	dia	HTUMIZA	AZIMUTH FOOTAGE	D 0	HTUMIZA
0	-65°				
30.48	-63°				
109.73	-58°				

HOLE NO. MC-83-44 SHEET NO. 1 OF 8
REMARKS BQ Core
Split for assay
Casing pulled

LANGRIDGE LIMITED,	32		31	EM. 6-1168	28	0	7	T T	A I S
	32.50		31.56		28.04		FROM	0	STARTED
	34.18		32.50		31.56	28.04	70	TAGE	
Dark green, fine to medium grained, fining towards the lower contact. Rock is weakly fractured with white carbonate filling tensional fractures. The flow is massive and averages 0-1% pyrite. The lower contact is at 25° to the core axis. The flow is non-magnetic.	BASALT	Dark to pale green, fine grained becoming aphanitic, re-crystallized and strongly silicified in the uppermost 25cm. This zone carries 3-4% pyrite - probably a result of migration with overlying basalt. Well laminated at 25-400 to core axis. Lowermost 10cm carries 50% magnetite seams along laminations and is moderately magnetic. Zone as a whole, is non-magnetic and averages 2-3% pyrite. The lower contact is at 450 to the core axis.	SEDIMENTS	Medium to dark green, fine grained, weakly to moderately fractured with 1-5mm width carbonate stringers in tensional fractures.  Carries occasional pale green, weakly epidotized rounded fragments of flow breccia, up to 2cm in size, below 30.25 m. Rocks are non-magnetic and average 0-1% pyrite.	BASALT	OVERBURDEN			October 7, 1983 FINISHED October 13, 1983
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							FOOT AGE	) L E	
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HOLE NO. MC-83-44 McDermott

SEDIMENTS  34.18 52.98  SEDIMENTS  Dark green, fine to very fine grained, crudely laminated becoming well laminated locally with alternating grey cherty seams and green chloritized argillitic rock. The uppermost 25cm carties shundart magnetite between laminations. The rock is weakly carbonatized. A series of quartz wrise cut the zone between 43.134705 m. Below this with, the sediamates are atrongly tensionally fractured with abundant white to pink quartz stringers in openings. Zone averages in periods the pink quartz stringers in openings. Zone averages in the rock of the laminations are cherty represented. A seal of the probability of the probability of the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty rock and the probability of the laminations are cherty and the probability of the laminations are cherty and the probability of the laminations are cherty and the laminations are cherty and the laminations are cherty and the laminations are cherty and the laminations are cherty and the laminations are cherty and the laminations are cherty and the laminations are solved to core axis.  41.40 - 41.96 tinely laminated, fine grained, moderately are 100 line 1-2 39.09 39.50 0.60 and 100 line 1-2 39.09 40.09 1.00 line 1-2 39.09 40.09 1.00 line 1-2 39.09 40.09 1.00 line 1-2 39.09 40.09 1.00 line 1-2 39.09 40.09 1.00 line 1-2 39.09 40.09 1.00 line 1-2 39.09 40.09 1.00 line 1-2	18 52.98		Ž O	7 SULPH	F F F F F F F F F F F F F F F F F F F	F00TAG	$\Box$
Dark green, fine grained, crudely laminated becoming veil laminated locally with alternating grey cherty seams and green chloritized argilitic rock. The uppermost 25cm carries abundant magnetite between laminations. The rock is weakly carbonatized. A series of quartz wins cut the zone between 45.13-47.05 m. Below this wein, the sediments are strongly tensionally fractured with abundant white to pink quartz stringers in openings. Zone averages C 1-2% pyrite. The rock carries some cherty breccia fragments which seem to have been dusped into green argillitic sediments - probably ripup clasts.  31.60 - 38.55: 40.60% of the laminations are cherty, zone may be graded on a micro-scale, laminations are 45-50° to core axis.  39.50 - 41.40: 20.90% cherty laminated and fine to medium grained. Bedding at 40-45° to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately choritized.  45.40-43.61 and 46.60-46.26 m which carry 2-3% pyrite cubes up to lcm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  Abundant white to pink quartz vaina and stringers up 1116 1-2 31.66 52.33 52.98 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.	18 52.98						
Dark green, fine to very fine grained, crudely laminated becoming well laminated locally with alternating grey charty seams and green chloritized argillitic rock. The uppermost 25cm carries abundant chlority near the fock is weakly carbonatized. A series of quartz veins cut the zone between 45.13-47.05 m. Below this wein, the sediments are strongly tensionally fractured with abundant white to pink quartz stringers in openings. Zone averages C 1-2% pyrite. The rock carries some cherty breccis fragments which seem to have been dumped into green argillitic sediments - probably rip-up clasts.  34.18 - 33.60: dark green, abundant cherty rip-up fragments which seem to have been dumped into green argillitic sediments - probably rip-up clasts.  38.55 - 38.90: same as 34.18-37.60 m.  38.95 - 39.90: same as 34.18-37.60 m.  39.50 - 41.40: zone becomes crudely laminations at 45 to core axis.  41.40 - 41.96: finely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13: crudely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.43-45.61 and 46.06-66.26 m which carry 2-3% tensionally fractured with pink quartz filling.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  47.05 - 52.98: crudely laminated conclaminated, strongly list 1-2 47.05 47.85 tensionally fractured with pink quartz filling.  47.05 - 52.98: crudely laminated conclaminated, strongly list 1-3 50.55 50.90 tensionally carries increased pyrite contents (3-4% locally).  47.05 - 52.98: crudely laminated conclaminated, strongly list 1-2 50.33 52.98 carries storessed pyrite contents (3-4% locally).		J;					
magnetite between laminations. The typerment about the administration of quartz veins cut the zone between 45.11-47.05 m. Below this vein, the sediments are strongly tensionally fractured with abundant white to pink quartz stringers in openings. Zone averages 1-2% pyrite. The rock carries some cherty breccia fragments which seem to have been dumped into green argillitic sediments - probably rip-up clasts.  37.60 - 38.55; 40-60% of the laminations are cherty, zone may be 37.60 - 38.55; 40-60% of the laminations are cherty, zone may be 38.55 - 38.90; same as 34.18-37.60 m.  38.90 - 39.50; 20-30% cherty laminations at 450 to core axis.  39.50 - 41.40; zone becomes crudely laminated and fine to meddum vein at 41.77-41.83 m.  41.40 - 41.96; finely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13; crudely laminated, fine grained, moderately choritized.  47.05 - 52.98; crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  47.05 - 52.98; crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  47.05 - 52.98; crudely laminated to pink quartz veins and stringers up 1116 1-2 50.15 50.90 tensionally fractured with pink quartz roll margins 1117 1-2 52.33 52.98 to roll a carries increased pyrite contents (3-4% locally).		ry fine grained, crudely laminated becon with alternating grey cherty seams and			- <del></del>		
abundant white to pink quartz stringers in openings. Zone averages C 1-27 pyrite. The rock carries some cherry breccia fragments which seem to have been dumped into green argillitic sediments - probably rip-up clasts.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.60: dark green, abundant cherty rip-up fragments.  34.18 - 37.90: dark green, abundant cherty rip-up fragments.  34.18 - 37.90: dark green, abundant cherty rip-up fragments.  1107 1-2 37.90 38.55: dark d650 core axis.  1108 1-2 38.90 39.90: dark dark dark dark dark dark dark dark	vein	rific rock. The uppermost 25cm carries abundant and laminations. The rock is weakly carbonatized. veins cut the zone between 45.13-47.05 m. Below addinguts are strongly tensionally fractured with					
seem to have been dumped into green argillitic sediments - probably rip-up clasts.  34.18 - 37.60: dark green, abundant cherty rip-up fragments. 37.60 - 38.55: 40-60% of the laminations are cherty, zone may be graded on a micro-scale, laminations at 45-50° to core axis.  38.55 - 38.90: same as 34.18-37.60 m. 38.90 - 39.50: 20-30% cherty laminations at 45° to core axis. 39.50 - 41.40: zone becomes crudely laminated and fine to medium grained. Bedding at 40-45° to core. White quartz vein at 41.77-41.83 m. 41.40 - 41.96: finely laminated, fine grained, moderately chloritized. 45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43-45.61 and 46.06-46.26 m which carry 2-3% 47.05 - 52.98: crudely laminated to non-laminated, strongly Abundant white to pink quartz veins and stringers up to 7cm width. Silicified sediment near vein margins to 7cm width. Silicified sediments (3-4% locally). Veins carry rare 1-3mm chalcopyrite blebs.	vein, the	sediments are strongly tensionally fractured to pink quartz stringers in openings. Zone	C	1-2	34.18	34.9	
### 17-up clasts.    34.18 - 37.60   dark green, abundant cherty rip-up fragments.   34.18 - 37.60   dark green, abundant cherty rip-up fragments.   34.18 - 37.60   dark green, abundant cherty, zone may be   107   1-2   37.90   38.55   37.60   38.55   40-60% of the laminations at 45-500 to   108   1-2   38.55   38.90   38.55 - 38.90   same as 34.18 - 37.60 m.   108   1-2   38.55   38.90   39.50   20-30% cherty laminations at 450 to core axis.   109   1-2   38.90   39.50   39.50   41.40   20   20   20   20   20   20   20	pyrite. to have	rock carries some cherty breccia fragment dumped into green argillitic sediments -	9011	1-2	34.18	34.9	
37.60 - 38.55: 40-60% of the laminations are cherty, zone may be graded on a micro-scale, laminations at 45-50° to core axis.  38.55 - 38.90: same as 34.18-37.60 m.  38.50 - 39.50: 20-30% cherty laminations at 45° to core axis.  39.50 - 41.40: zone becomes crudely laminated and fine to medium grained. Bedding at 40-45° to core. White quartz vein at 41.77-41.83 m.  41.40 - 41.96: finely laminated (no cherty material), at 65° to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43-45.61 and 46.06-46.26 m which carry 2-3% pyrite cubes up to low.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  Abundant white to pink quartz veins and stringers up to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 veins carry rare 1-3mm chalcopyrite blebs.	- 37.6	dark green, abundant cherty rip-up frag					
graded on a micro-scare, laminations at 450 to core axis.  38.55 - 38.90: same as 34.18-37.60 m.  38.90 - 39.50: 20-30% cherty laminations at 450 to core axis.  39.50 - 41.40: zone becomes crudely laminated and fine to medium grained. Bedding at 40-450 to core. White quartz lillo 1-2 41.09 42.09 vein at 41.77-41.83 m.  41.40 - 41.96: finely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43-45.61 and 46.06-46.26 m which carry 2-3% pyrite cubes up to lcm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  Abundant white to pink quartz vein sand stringers up lill 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.	1	40-60% of the laminations are cherty, zone may	1107	1-2	37.90		
38.55 - 38.90: same as 34.18-37.60 m.  38.90 - 39.50: 20-30.7 cherty laminations at 450 to core axis.  39.50 - 41.40: zone becomes crudely laminated and fine to medium grained. Bedding at 40-450 to core. White quartz vein at 41.77-41.83 m.  41.40 - 41.96: finely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43-45.61 and 46.06-46.26 m which carry 2-3x pyrite cubes up to lcm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling. lill 1-3 47.05 46.17 47.05 Abundant white to pink quartz veins and stringers up lill 1-2 50.33 50.90 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.		ries.		•			
grained. Bedding at 40-450 to core. White quartz 1110 1-2 41.09 42.09 vein at 41.77-41.83 m.  41.40 - 41.96: finely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43-45.61 and 46.06-46.26 m which carry 2-3% 1111 1-2 45.13 46.17 47.05 pyrite cubes up to 1cm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling. 1114 1-3 47.05 47.85 to 7cm width. Silicified sediment near vein margins 1117 1-2 51.68 52.33 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally).	1 38 30 8	same as $34.18-37.60$ m. $20-30\%$ cherty laminations at $450$ to core	1109	1-2	38.90		
grained. Bedding at 40-450 to core. White quartz lll0 1-2 41.09 vein at 41.77-41.83 m.  41.40 - 41.96: finely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein seystem carries sediment xenoliths at 45.43-45.61 and 46.06-46.26 m which carry 2-3% pyrite cubes up to lcm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  Abundant white to pink quartz veins and stringers up 1116 1-3 50.15 50.90 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.	- 41.	zone becomes crudely laminated and fine					
41.40 - 41.96: finely laminated (no cherty material), at 650 to core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43-45.61 and 46.06-46.26 m which carry 2-3% 1112 1-2 45.13 46.17 47.05 pyrite cubes up to 1cm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  Abundant white to pink quartz veins and stringers up 1116 1-3 50.15 50.90 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.		grained. Bedding at $40-45^{\circ}$ to core. We we in at $41.77-41.83$ m.	1110	1-2	41.09		
core axis.  41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43 - 45.61 and 46.06-46.26 m which carry 2-3% 1112 1-2 45.13 46.17 47.05 pyrite cubes up to 1cm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  Abundant white to pink quartz veins and stringers up 1116 1-3 50.15 50.90 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.	ı	finely laminated (no cherty material), at 650					
41.96 - 45.13: crudely laminated, fine grained, moderately chloritized.  45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43 - 47.05: 45.43-45.61 and 46.06-46.26 m which carry 2-3% pyrite cubes up to 1cm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling. Abundant white to pink quartz vein sand stringers up to 7cm width. Silicified sediment near vein margins carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.		core axis.					
45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.13 - 47.05: quartz vein system carries sediment xenoliths at 45.43 - 45.61 and 46.06-46.26 m which carry 2-3% 1113 2-3 46.17 47.05 pyrite cubes up to 1cm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling. 1115 1-3 50.15 50.90 Abundant white to pink quartz veins and stringers up 1116 1-2 51.68 52.33 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 Veins carry rare 1-3mm chalcopyrite blebs.	ı	crudely laminated, fine grained, modera	1111	1-2	43.09		
45.43-45.61 and 46.06-46.26 m which carry 2-3%  pyrite cubes up to 1cm.  47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling.  Abundant white to pink quartz veins and stringers up 1116 1-3 50.15 50.90 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.	ı	quartz vein system carries sediment xen	1112	1-2	45.13		
47.05 - 52.98: crudely laminated to non-laminated, strongly tensionally fractured with pink quartz filling. 1115 1-3 50.15 50.90 Abundant white to pink quartz veins and stringers up 1116 1-2 51.68 52.33 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally). Veins carry rare 1-3mm chalcopyrite blebs.		45.61 and 46.06-46.26 m which car cubes up to 1cm.	1113	2-3	46.17		
tensionally fractured with pink quartz filling. 1115 1-3 50.15 50.90 Abundant white to pink quartz veins and stringers up 1116 1-2 51.68 52.33 to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally). Veins carry rare 1-3mm chalcopyrite blebs.	ı	crudely laminated to non-laminated, str	1114	1-3	47.05		
Abundant white to pink quartz veins and stringers up it to 7cm width. Silicified sediment near vein margins 1117 1-2 52.33 52.98 carries increased pyrite contents (3-4% locally).  Veins carry rare 1-3mm chalcopyrite blebs.		tensionally fractured with pink quartz filling.	1115	1-3	50.15		_
carries increased pyrite contents (3-4% local Veins carry rare 1-3mm chalcopyrite blebs.	_	near vein marg	1117	1-2	52.33		
Veins carry rare 1-3mm chalcopyrite ble		loca					
		carry rare 1-3mm chalcopyrite bleb					

HOLE NO.	
Mc-	1030 CT TXCT02-1
83-44	
SHEET	
EET NO.	
3 OF 8	
	1

61.23		57.47	·	52.98	FROM	FOOT
65.93		61.23		57.47	3	TAGE
TRANSITIONAL SILICIFIED SEDIMENTS  Dark green, fine grained chloritized rock with many grey-green, aphanitic, silicified sections. These sections account for 35-40% of the zone. Major examples are found at 61.95-62.15, 62.31-62.44, 64.44-64.54 and 65.54-65.70 m. Pyrite content is variable, averaging 2-3% and highest in silicified rock. Non-magnetic.	as lcm x 2cm clots.  57.47 - 59.75: intensely silicified, moderately to strongly brecciated, glassy (chemical sediment?).  59.75 - 60:29: carries chloritized fractures but zone intensely silicified; 20cm ground core at 59.85-60.05 m.  60.29 - 61.23: reddish-pink to pinkish-grey, aphanitic, strongly fractured - chemical sediment? would have been called syenitic previously, carries 10-20% pyrite.	SILICIFIED ZONE  Honey coloured to grey and dark purple-grey, aphanitic and originally laminated (sediments). Strong brecciation masks the structure. Pyrite concentrations along fractures possibly indicate original bedding attitude. Up to 15% pyrite is noted as a very fine dissemination and as 1mm blebs. Some pyrite fills voids in breccia	Pale green to dark green, becoming light grey where silicified, fine to very fine grained, often aphanitic, well laminated locally. Silicification is controlled by selected beds or sets of laminations intifally. With increasing brecciation in the lower half, silicification is more widespread. Strongly silicified sections are noted at 53.86-53.94, 55.92-56.10 and 56.16-56.48 m. The last two intervals carry 3-5% pyrite versus a zone average of 1-3%. 53.75:  laminations at 45-50° to core axis. 55.10:  laminations at 45° to core axis. 56.53 - 56.55: mylonitic fault zone at 65° to core axis. 56.55 - 57.47: moderately to strongly brecciated and moderately to intensely silicified - fractures are chloritized.	TRANSITIONAL SILICIFIED SEDIMENTS		DESCRIPTION
	2279 2280 2281 2281 2282 2283		C 2273 2274 2275 2276 2276 2277		z o	
	10-12 10 7-9 5-7 15		1-3 1-3 2-4		10ES	
	57.47 58.45 59.20 59.75 60.29		52.98 53.75 54.50 55.30 56.01		FROM	SAMPLE
	58.45 59.20 59.75 60.29 61.23		53.75 54.50 55.30 56.01 56.76	<u> </u>	FOOT AGE	3
	0.98 0.75 0.55 0.54		0.77 0.75 0.80 0.71 0.75	<u> </u>	10171	
					.,	
					-	
	0.15 0.12 0.01 0.01		0.01 0.01 0.01 0.01		02.70N	ASSAYS

I SULPHI FOOTAGE	SAMPLE	HOLE NO. MC-83-44
	ASSAYS	SHEET NO. 4 OF 8

65.93		FROM
73.17	1	70
61.95 - 62.15; reddish-pink, intensely silicified - resembles 60.29-61.23 m section. 62.15 - 64.44; same as 61.23-61.95 m. 64.44 - 64.54; same as 61.23-61.95 m. 64.54 - 65.54; same as 61.23-61.95 m. 65.54 - 65.70; weakly brecciated, intensely silicified, 7-9% pyrite; fault plane at 30° to core axis at 65.54 m slickensides pitch 30°. 65.70 - 65.93; strongly brecciated, intensely silicified, silicatified, slicatified, slicatified, slicatified, slicatified, slicatified, slicatified, slicatified and aphanitic, with several dark greylah-green, very fine grained chloritized zones. Rock is generally intensely silicified and is locally fidepathized in lighter coloured sections. The zone is strongly brecciated with some weakly developed breccia locally. Bedding laminations are rarely visible as fragmented relics. Pyrite content averages 4-6% as a very fine dissemination and as clots up to 5mm. The zone is strongly brecciated with some weakly developed brecciated locally. Bedding laminations are quartz vein - lower content gradational. strongly brecciated, may originally have been laminated (relics visible locally); carries 5-7% pyrite as fine dissemination and as clots up to 3mm in matrix to very angular fragments, feldspathization appears to radiate into rock from post-breccia, silica filled fractures. 67.11 - 67.72; honey coloured, assumed feldspathized, possibly micro-brecciated(7) 67.72 - 68.16; purple-grey breccia, intensely silicified, 3-5% pyrite - some as fracture filling.		
2285 2286 2287 2288 2288 2289 2290 2290	C	NO.
1-3 1-3 1-3 5-7 5-7	1063	3 SULPH
61.95 62.90 63.80 64.55 65.25 65.25 66.29	FROM	FROK
62.90 62.90 64.55 65.25 65.29 66.29 67.11	76	FOOTAGE
0.95 0.90 0.75 0.70 0.68 0.36		7
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2 2 0 1 10 000	4	,a
0.01 0.02 0.02 0.01 tr. 0.01		02,TON
		02 TON

HOLE NO.	2 3 3 10 0
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Mc-83-44	2430 です。 でまりてはオードー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
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SHEET NO. 5 OF 8

	73.17								JI O K	FOC
	80.18								10	FOOTAGE
Dark green to dark grey to moderately chloritiz noted locally in seams bedding lamination. Py is observed with depth sections may be more store uppermost 2m of the single section greater generally evenly distribute to 5% in narrow sili	TRANSITIO	72.62 - 73.17:	72.03 - 72.62:	71.79 - 72.03:	70.88 - 71.79:	70.20 - 70.88:	69.60 - 70.20:	68.16 - 69.60:		•
Dark green to dark grey-green, fine to very fine grained and weakly to moderately chloritized. Many intensely silicified sections are noted locally in seams up to 5cm parallel to a crudely developed bedding lamination. Pyrite content is 3-5%. Some general decrease is observed with depth. The rock is locally brecciated, and these sections may be more strongly silicified than is generally the rule. The uppermost 2m of the zone are 40% silicified sections with no single section greater than 5cm in length. Pyrite content is generally evenly distributed in this section, with local increases up to 5% in narrow silicified zones.	TRANSITIONAL SILICIFIED SEDIMENTS	disseminated and 1-2mm blebs. dark purple-grey breccia with abundant chloritized fractures; strongly silicified, carries up to 10% pyrite locally. Lower contact is a very short transition over 1-2cm.	dark purple-grey breccia fragments; intensely silicified with up to 20% pyrite locally, never less than 10%; no coarse clots, mostly very finely	weakly silicified breccia, moderately chloritized	honey coloured, reddish-pink locally (71.28-71.50) similar to other reddish zones. Relic laminations visible locally, zone carries 10-12% pyrite and 10-20% white free quartz filling voids - silica	pinkish-grey to purple-grey, intensely silicified and strongly brecciated - some fragments seem to carry relic vesicule-like openings.	as above - increased feldspathization and up to 10% nurity locally.	y breccia fragments are penetrated by sation - dilatant zones are also honey		DESCRIPTION
1103 1104 1105 1118		1102	1101	2300	2298 2299	2297	2296	2294 2295	z o	
4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		5-6	10-15	1-2	10-15 8-10	3-5	6-8	4-6 5-7	1069	2 SIII BH
73.17 73.67 74.17 74.72		72.62	72.03	71.79	70.88 71.33	70.20	69.60	68.16 68.90	FROM	SAMPLE
73.67 74.17 74.72 75.05		73.17	72.62	72.03	71.33 71.79	70.88	70.20	68.90 69.60	10	E
0.50		0.55	0.59	0.24	0.45	0.68	0.60	0.74	TOTAL	
									32	
							-		at .	
0.01 tr.		0.16	0.69	0.01	0.01	0.01	0.10	0.12	02/10#	ASSAYS
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NAME OF PROPERTY\_\_\_\_\_

McDermott

HOLE NO. \_\_\_\_MC-83-44

	TORONTO - 366-1168	
94.0/	80.18	FROM
7	94.67	FOOTAGE
The rock is purple-grey with minor cream coloured intervals; and several dark green chloritized intervals (eg. 94.88-95.00 and 96.62-97.18 m). The zone is strongly brecciated and, except for chloritized zones, is intensely silicified. Lighter hued rock may be due to feldspathization. Chloritized intervals total 40% of the zone.	75.05 - 75.80: moderately chloritized, possibly weakly laminated, 2-4% pyrite in silicified sections - as clots up to lcm.  75.80 - 77.08: strongly silicified hreccia, less than 10% chloritized.  77.08 - 78.40: mixed silicified and chloritized rock.  78.40 - 78.87: moderately silicified and brecciated, abundant chloritized seams.  79.71 - 80.18: 70% purple-grey intensely silicified breccia with up to 7% pyrite.  LOCALLY SILICIPIED SEDIMENTS  Dark green, fine grained with 16% purple-grey to grey-green brecciated and silicified sections. Strongest silicification is reflected in purple tinted rock. Rock has a poorly developed foliation or crude bedding lamination locally. Narrow silicified breccia seams may be parallel to the original bedding (eg. 40-450 at 82.75 m). The largest silicified zones are located at 83.88 - 84.01; 85.79-86.02; 86.22-86.50; 88.85-86.96; 88.38-88.73; and 90.87-90.84 m. The section from 85.79-88.73 m is 38.5% silicified zones. The rock averages 1-2% pyrite but silicified rock may carry up to 5% pyrite locally. Lark of well developed bedding may point to rapid deposition of this unit.	DESCRIPTION
1135 1136 1137	1160 1160 1161 1162 1163 1165 1166 1167 11120 11121 1122 1122 1123 1124 1127 1128 1129 1130 1131 1133	Ž O
1-2 2-3	11111112111211111 423233 2	3 SULPH,
94.67 95.67 96.40	75.05 75.80 76.44 77.08 77.73 78.87 79.71 88.3.84 87.48 88.38 88.38 89.67 91.20 92.97 93.97	FROM FO
95.67 96.40 97.20	75.80 76.44 77.08 77.08 77.73 78.40 78.40 78.87 79.71 80.93 81.84 82.84 83.84 84.84 85.79 86.50 87.48 88.38 89.73 90.67 91.20 92.20 93.97	FOOTAGE
1.00 0.73 0.80	0.75 0.64 0.65 0.67 0.67 0.67 0.75 0.75 0.91 0.91 0.95 0.97 0.97	TOTAL
 		ASSAYS
		0Z TON

HOLE NO. MC-83-44 NAME OF PROPERTY\_ McDermott

SHEET NO.

T RO T		111		
OR   CO		55		<del></del>
10		118.67		
DESCRIPTION	Medium to dark green, fine grained, generally non-laminated but well parted locally. Locally brecciated sections are the sites of subsequent moderate silicification. The rock is weakly fractured. Fractures often have 1-2mm silicified halos and are quartz filled. White carbonate content in fractures may increase with depth. Pyrite content averages 0-1% with up to 5% in silicified breccia (eg. 100.18-100.38; 100.91-100.94 m).  97.20 -104.37: chloritized with rare silicified sections. 104.37-105.06: purple-grey to cream coloured, strongly brecciated cherty fragments set in a medium green argillitic(?) matrix. Purple tint in uppermost 25cm may be due to subsequent silicification. Carries 3-5% pyrite.  105.06-107.04: weakly to moderately laminated (eg. 550 to core axis at 107.04-107.36: 50-60% cherty laminations at 35-400 to core axis.  107.04-107.36: subsequent silicification at 35-400 to core axis.  107.04-107.36: 50-60% cherty laminations at 35-400 to core axis.  107.04-107.36: 50-60% cherty laminated with 10% cherty laminations: 550 to core axis at 107.90 m and 40-450 to core axis at 110.40 m.	CHERTY AND ARGILLITIC SEDIMENTS	The zone is composed of grey to purple-grey angular cherty fragments which are set in a medium green, fine grained chloritized matrix. These sections alternate with well laminated zones composed of intercallated grey cherty laminations and green chloritized laminations. The fragmental zones have probably been brecciated through rip-up action by high energy sediment flow (turbidite?). Localized subsequent silicification is noted, often with elevated pyrite contents (3-5%). Average pyrite content is 1-3%. Laminations are well preserved except where the rock is strongly because of the content of the co	brecciated.  111.55-112.10: brecciated cherty beds, chloritized matrix.  112.10-112.85: well laminated at 60° to core axis.  112.85-113.22: brecciated, weakly to moderately silicified.
z o	C 1138 1140 1141 1142 1143 1144 1145			1149 1150 1151
SOLPH	1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -			3-4
$\Box\Box$	97.20 98.22 99.23 99.97 100.60 102.42 103.87 104.37			111.55 112.10 112.85
ROM FOO				5 112.10 5 112.85 5 113.22
FOOTAGE	<del></del>			
101AL	1.02 1.01 1.01 0.74 0.82 0.50 0.50 0.50			0.55 0.75 0.37
1.				
-				
NO7/50				# # # # # #

												FROM	FOOT
			•									70	FOOTAGE
		118.67 meters	117.92-118.67:	117.74-117.92:	116.82-117.74:	116.31-116.82:	115.85-116.31:	115.18-115.85:	114.60-115.18:	113.72-114.60:	113.22-113.72:		
	CASING PULLED	END OF HOLE	is very weakly laminated medium green, chloritized rock, weakly laminated becoming better laminated with depth - 40° to the core axis.	to lem,	parted, few cherty	laminations. strongly brecciated, cherty laminated zone; 4-6%	brecciated locally. well laminated, few brecciated zones, 30% cherty	ated at 50°	ly brecciated, very weak	laminations. strongly brecciated, moderately silicified.	mostly green chloritized rock, few cherty		DESCRIPTION
<del></del>				1159	1158	1157	1156	1155	1154	11153	C 1152	Ž O	
												<del></del>	
•				1-2	1-2	2-3	1-2		2-3	3-4	0-1	10ES	
-				1-2 117.74		2-3 116.31	1-2 115.85	1-2 115.18	2-3			IDES FROM	1
				1-2	1-2		115	115.18	2-3 114.60	3-4	0-1	T	SAMPL
				1-2 117.74	1-2 116.82	116.31	115.85	115.18 115.85	2-3 114.60	3-4 113.72 114.60	0-1 113.22	FROM	SAMPL
				1-2 117.74 118.67	1-2 116.82 117.74	116.31 116.82	115.85 116.31	115.18 115.85	2-3 114.60 115.18	3-4 113.72 114.60	0-1 113.22 113.72	FROM TO	SAMPL
				1-2 117.74 118.67 0.93	1-2 116.82 117.74 0.92	116.31 116.82 0.51	115.85 116.31 0.46	115.18 115.85 0.67	2-3 114.60 115.18 0.58	3-4 113.72 114.60 0.88	0-1 113.22 113.72 0.50	FROM TO TOTAL 3	SAMPLE
				1-2 117.74 118.67	1-2 116.82 117.74	116.31 116.82	115.85 116.31	115.18 115.85 0.67	2-3 114.60 115.18 0.58	3-4 113.72 114.60 0.88	0-1 113.22 113.72	FROM TO TOTAL 3	SAMPL

NAME OF PROPERTY	OPERTY	McDermott
HOLE NO.	Mc-83-45	LENGTH 111.86 meters
LOCATION		
LATITUDE	8 + 87.5 E	LATITUDE 8 + 87.5 E DEPARTURE 64 + 00 S
ELEVATION		AZIMUTH 344 DIP -650
STARTED 0	ctober 13, 1983	STARTED October 13, 1983 FINISHED October 17, 1983

FOOTAGE	٩١٥	AZIMUTH	AZIMUTH FOOTAGE	밀	AZIMUTH
0	-65°				
30.48 -65°	-65°				
111.86   -61	-61°				

9	AZIMUTH FOOTAGE	FOOTAGE	DIP	AZIMUTH
-65°				
-65°				
-61°				

HOLE NO. MC-83-45 SHEET NO. 1 OF 8

REMARKS BQ Core

Split for assay Casing pulled

LOGGED BY A.W. Workman

70	0 T A	G F			v	> 2 0	> 2 0	> 2 0	> 2 0	> 2 0	A TO FEM
TO TO S	<b>M</b> TO	٥		NO. SULPH-	FROM	FOOT AGE	TOTAL	¥	*	OZ/TON	OZ/TON OZ/TON
0	11	11.30	OVERBURDEN								
11.30		27.57	ANDESITE (BASALT ?)		 						
EM. 6 - 1168			Medium to light grey-green, fine grained to aphanitic and non-magnetic. The section is a series of flows which are generally flow brecciated with rounded fragments up to 5cm. These fragments are mostly etched with reaction rims and are of slightly varying colour (composition?). Flow bottoms are well chilled. Flow tops are denoted by angular breccia zones where fragments are set in a strongly chloritized glassy matrix.  11.30 - 16.03: flow brecciated.  16.03 - 20.70: aphanitic, tectonically brecciated, minor flow breccia locally - irregularly epidotized below 20.00 m.  20.70 - 21.18: flow top breccia, angular fragments up to 3cm. 21.18 - 24.50: flow brecciated - some massive flow locally.  24.50 - 26.50: may be pillowed - vague selvages.  26.50 - 27.57: massive flow - flow brecciated locally; lower contact at 40-45° to core axis.								
27.57		28.81	SEDIMENTS		 						
LANGRIDGE LIMITED,	<u> </u>		Dark green, fine to very fine grained and thinly laminated with grey siliceous lenses and seams up to 5mm. Uppermost 10cm is weakly silicified and locally hematized. Bedding is at 50° to the core axis. Rock carries up to 5% very finely disseminated pyrite locally, usually associated with silicified seams in the upper half of the section.	C 1169 2-3 1170 1-2	27.57	28.18 28.81	0.61			0.01	

NAME OF PROPERTY\_\_\_\_\_\_\_\_McDermott
HOLE NO. \_\_\_\_\_Mc-83-45 SHEET NO. \_\_\_\_2 OF 8

DESCRIPTION  DESCRIPTION  DESCRIPTION  10 1001  DASALT  Dark to medium green, fine to very fine grained, weakly to noderate by flow breecisted throughout - possibly pillowed below carry of the bundant chloritized interpillow satisant. Flows the satisfied brecis eases, but in general average 0-1X.  28.81 - 90.90; mostly flow breccisted  29.90 - 31.57; Intrusty - pinkshrygenen, fine grained with wall composition and carries numerous thin composition and carries numerous the rook is magnetize-filled fractures. Consequently, the rook is magnetize-filled fractures. Consequently, the rook is moderately to strongly magnetic. Contacts dip in opposition and carries numerous the contacts of the core axis.  29.80 - 90.91; Seldmante - thinly lantaneed, probably tuffaceous.  40.05 - 40.45; Seldmante - thinly lantaneed, probably tuffaceous.  40.05 - 40.45; is trongly flow breccised with rounded fragmants up to 2 cn. occupying 20% of rock volume.  40.25 - 41.25; if the to medium grained, moderatedly chloritized.  41.25 - 41.25; if the to medium grained, moderatedly chloritized.  42.35 - 43.25; action grained, lower 15 cm. is moderately to strongly affectived, lower 15 cm. is moderately to strongly flow breccise - wide variety of rounded to sub-  42.70 - 50.70; gamently meaning, fine grained, certonically fractured - shirklage fractures.  50.70 - 52.15; crude pillowed appearance - possibly pillow-  breacia (?).
DESCRIPTION  DESCR
DESCRIPTION  DESCRIPTION  TO VETY fine grained, weakly to throughout - possibly pillowed below chloritized inter-pillow sediment. Flows memnated pyrite locally in association cal seems, but in general average 0-1%.  Throughout - possibly pillowed below the collist of the coll
NO. TABLEM FOOTAGE TOTAL TO TOTAL TO A 17-TOM
FROM TOTAL 3 4 02.70m
FROM TOTAL 3 4 02.70m
FOOTAGE 70 TOTAL 3 Q 27.70M
TOTAL 3 02/TOW
3
% 02/10N
02/10N

NAME OF PROPERTY\_\_\_

McDermott

FOOTAGE	14				SAMPLE	m	
FROM	70	DESCRIPTION	Ž O	SULPH,	FROM	FOOTAGE TO	TOTAL
52.15 59.	55	SEDIMENTS					
		e to medium grained, variably laminated - from poor Bedding locally exhibits signs of soft sediment arbonatization is weakly developed locally and ong the laminations. The zone averages 0-1% pyrite dissemination and as occasional blebs up to 1 cm.					
		elongated along laminations.  52.15 - 52.30: abundant quartz (replacement?) filling voids up to 3 cm. roughly parallel to bedding.  52.30 - 52.70: well laminated at 30° to core axis: moderately chloritized.	1171	<u> </u>	52.15	53.15	1.00
		ated with minor carbonatization along a ed foliation at 45° to core axis.	1172	<u> </u>	53.15	54.15	1.00
		laminated sections up to 10 cm. (53.95-54.05),	1173	9-1-	54.15	55.15	1.00
		95-54.10 meters.  ately well laminated becoming better laminated	) ] ]	) 1	· · · · · · · · · · · · · · · · · · ·	)   	, ,
		ighted by	1175	0-1	57.00	57.00 57.90	0.90
		elevated pyrite (1-3%) above the average. Laminations at 45-50° to core at 55.60 m. and 45° at 57.90 m.					
		citized, strongly fractured, micro-faults liel to core axis.	1177	0-1	57.90	58.75	0.85
		and 450 at 59.20 m.	1178	0-1	58.75	59.55	0.80
59.55 92.55	55	MAIN MINERALIZED ZONE					
		The zone is composed of an upper member which is variably silicified, a more strongly and broadly silicified middle member and a lower variably silicified member. The central member, the "main silicified zone", is altered in response to brecciation. Little or no silicification is noted apart from breccia zones. These zones carry elevated pyrite contents of up to 10% locally.					

SHEET NO. 4 OF 8

AGE
70
92.55) Average pyrite content brecciation is not as a zone.
61.59 TRANSITIONAL
Dark green, very fine to fine laminated. The zone carries sediments?) roughly oriented pyrite as blebs up to lmm. 59.55 - 60.03: abundant chear grained matri
60.03 - 61.30:
89.51 MAIN SILICIPIED
Dark purple-grey, with abundant (about 30%) dark green chlor sections. Brecciation controls the degree of silicification in this zone, and this in turn is reflected in purple tinted Locally, especially near or in major fracture zones, a honey coloured alteration (feldspathization?) dominates the highly silicified sections. Silicified rock carries elevated pyrit contents (average 2-4%), mostly as a fine dissemination in t matrix to highly angular breccia fragments. The zone, as a averages 1-3% pyrite with highest levels approaching 10% in feldspathized rock. Because of the lack of widespread brecclarge sections of non-silicified and chloritized rock are fo the main zone. This is abnormal in a general sense, and may a 'local' anomaly. The rock is non-magnetic.

2022

HOLE NO. \_

F00	FOOTAGE			١	İ	SAMPLE	m				ASSAYS	
T TO	10			ž 0	% SULPH,	FROM	FOOT AGE	TOTAL	30	20	02, TON	02 TON
		1	attack to delicate the second	2811 C	1 2	61 50	62 45	286			7	
		01.37 - 01.77:	purple-grey coloured.				2	-				
		61.99 - 63.00:	y silicified, strongly	<u>.</u>	ງ   ພ	۸ ۲	23	> n			:	
			cutting breccia.	1103		04.40	93.00	0.00				
		63.00 - 63.69:	ed 'feldspathized' rock with up to	1184	3-5	63.00	63.69	0.69			0.02	
			e axis visible									
				500	<b>3</b>	A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	^ ^ ^	? !			<u>-</u>	
		63.69 - 65.02:	ey preccia	1186	2-7	64,50	65.02	0.52			0.01	
		65.02 - 65.50:	Abundant chloritized 'patches' up to 8cm where	1187	1-2	65.02	65.50	0.48			0.01	
			ple-grey silicification has not penetrated; that									
			is, the rock has not been brecciated to provide									
		65.50 - 66.30:	Same as 61.99-63.00 m.	1188	2-3	65.50	66.30	0.80			tr.	
		•	d rock.	1189	1.3	66.30	67.12	0.82			tr.	
		1	but carries 70%	1190	1-2	67.12	68.19	1.07			tr.	
		}		1	3_/	68 10	68.65	0.46	_		•	-
		68.65 - 70.15:	same as 67.12-68.19 - 50% chloritized non-silcifiled	1192	1-3	68.65	69.47	0.82			tr.	
			up to lum	1193	1-3	69.47	70.15	0.68			tr.	
<u> </u>			(tuff?), parallel chloritized and silicified breccial seams may reflect original bedding - 40° to core									
100									_			
<u>, , , , , , , , , , , , , , , , , , , </u>		70.15 - 71.05:	10% chloritized	1194	2-4	70.15	71.05	0.90			0.02	
			zones; honey coloured halos near major fractures carry up to 7% pyrite locally.									
		ı		1195	1-3	71.05	71.75	0.70			0.01	
KON		71.75 - 73.02:	95% chloritized; 5% silicified breccia, generally well foliated/laminated at 40-50° at 72.15 m.	1196	1-2	71.75	72.54	0.79			tr.	
			Silicified breccia carries 3-5% pyrite, overall									
		73 00 = 73 08.	average 1-2%.	1197	1-2	72.54	73.02	0.48			rt rt	
<u> </u>		ı		1198	1-2	73.02	74.05	1.03			tr.	
			(biotite?), and									
(IDG			occasional pink siliceous xenoliths up to bmm.  Carries 0-1% pyrite. Non-magnetic. White 2-3mm					–		_		
ito.			locally.									

7021 -

LANGRIDGE LIMITED - TORONTO - 366-1168

NAME OF PROPERTY\_ McDermott

\_\_ SHEET NO.

F00	FOOTAGE		1			SAMPLE					ASSAYS		
FROM	10		כהטכאין	z O	SULPH 1068	FROM	FOOTAGE	TOTAL	22	,	02/TON	02 TON	
		73.50 - 74.05:	generally well laminated with 30-50% silicified										
			sets of laminations. Also lled silicification. Beddi										
_	_		B	1100	ر ا ا	74 05	74 70	) 65			7		
		74.05 - 74.70:	amount of silicified rock increases to 80% as the level of brecciation increases.	6611	<b>2-3</b>	/4.05	/4./0	0.00			-		
		74.70 - 76.30:	chloritized, well laminated with siliceous cherty	1200	1-2	74.70	75.66	0.96			0.01		
_			up to 5% silicified	3		78 66	76 30	) ()			2		
			at 450 at 75.00 m. Several	1052	7-1	/3.00	/0.50	•••					
			de-watering channels are strongly silicitied and	3303	ر ا ا	76.30	76.72	0.42			0.01		
		76.30 - 77.72:	Indicate TOPS DF (eg. 70.00 m). 75% strongly silicified breccia, locally laminated.	2303	1-2	76.72	77.72	1.00			0.01		
		1	ble-grey, intensely silicified breccia, up to 5%	2304	2-3	77.72	78.20	0.48	_		0.01		
			pyrite locally in clots up to 1.5cm.										
			recciated than above zor										
		•	71.75-73.04 m, very little si	2305	1-2	78.20	78.75	0.55			tr.		
		/8./5 - /9.35:		0002	,	70.75							
			ite quartz filled w										
			'feldspathized' halos. These halos carry 5-7%					<b>-</b>					
<u>B</u>		79.35 - 79.77:	pyrice and up to 10% locally. same as 78.75-79.35 - very little 'feldspathized'	2307	2-4	79.35	79.77	0.42			0.01		
116				300	<u>,</u>	70 77	20 28	0.61			0.05		
<u>66-1</u>		79.77 - 80.00:	purple-grey intensely silicitied breccia with pyrite in clots up to 1.5cm and fracture filling.	2000	9	/3.//	00.00	•			3		
<u>-3</u>		80.00 - 80.38:	above, very finely		, ,	; 3 _	) )	) ) n	_		1		_
<u>10</u>		1	green, chlo	2309	1-2	80.38	81.23	0.85					
DN.		1	dark purple-grey silicified by	2310	1-2	81.23	82.11	0.88					
OR			stones. Minor tault zone at	2311	1 5	82.85	83.59	0.74			::		
<u>-</u> 7		מא אם ו מא מאי	office of the south party of	2313	2-4	83.59	85.14	1.55			0.03		
ITED				2314	2-4	85.14	85.83	0.69			0.01		
<u>LIM</u>		85.83 - 86.11:	'feldspathization'. Weakly brecciated, moderately chloritized with only	2315	0-1	85.83	86.11	0.28			0.01		
DGE	-	Š	licified sections.										
NGRI													
LAN													
				_	_				_			_	

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SHEET	Chermon
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laminations; 3-4% disseminated 92.03 - 92.30: 50% silicified breccia; 3-5% 92.30 - 92.55; 75% brecciated cherty laminations.  intercalated laminations.  SEDIMENTS	- 92.30; - 92.55;		91.45 - 92.03: abundant cherty fragments and silicified	51 - 91.45: 5% silicified intervalues (91.23-91.34). Weakly	Zone is generally dark green, fine grained and initially becoming better bedded with depth as in percentage. Carries numerous intensely sill up to 5cm in width. The number and size of sill decrease with depth. Upper contact of zone is 580 to core axis at 89.58 m.	92.55 TRANSITIONAL SILICIPIED SEDIMENTS	hreccia; ve 87.72 m between 88	87.08 - 87.33: tensional fracturing	86.11 - 87.08: intensely silicified  Pyrite in clots up to  'feldspathization' bo		
d fine grained with abundant white quartz along probably a replacement. Rock is weakly to moderately below 95 m. A well developed parting parallel to a		pyrite. tions with chloritized	nd silicified sets of ted pyrite.	with 3-4% pyrite locally laminated at 50° to core whatfred locally.	grained and non-laminated th depth as cherty seams increase thensely silicified breccia zones size of silicified zones of zone is possibly sheared at	Ια	10-20% green, chloritized rock - h. Carries 4-5% pyrite in clots 3.36 and 88.71 m.	and brecciation ~ white silica	ed breccia, 5% chloritized rock. to lcm. Increasing below 86.54 m. Up to 12% pyrite		DESCRIPTION
		2325	2324	2322 2323			2319 2320 2321	2318	2316 2317	ŏ	
<u> </u>		3-5	3-4	1-2			2-3 4-5 1-3	1-3	3-5	SOLPH.	
		92.30	91.45	89.51 90.33			87.72 88.36 88.71	87.08	86.11 86.54	FROM	SAMPLE
		92.55	92.30	90.33 91.45			88.36 88.71 89.51	87.72	86.54 87.08	FOOTAGE TO	E
		0.25	0.85	0.82			0.64	0.64	0.54	TOTAL	
			<del></del>							-	
										,	
		0.05	tr.	0.01			0.09	0.01	0.01	02/TON	ASSAYS
										02. TON	

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366-11													L.
											i	FROM	FOO
												70	FOOTAGE
	111.86 meters	11000	110 17-111 86.	108.90-109.13:	106.83-108.90:	105.15-105.65:	101.10-105.15:	•	97.40 - 98.69:	94.50 - 97.40:	92.55 - 94.50		<b>L</b>
CASING PULLED	END OF HOLE	ll0.55 m; 450 to core axis.	at marrow preces zones with 2-ably tuffaceous at 109.75-109.85	ight green clasts or mostly oritized matrix.	n, very fine grained, very fine.	sional fractures; quartz=	r silica. laminated.	ed nodular texture	finely laminated, moderately carbonatized.	inely lamina	weekly leminated.		DESCRIPTION
		•	, a		•	nare		netic			,		
		2336 2337 2338	a		•	nate 2332	2331		2328	2327	C 2326	z o	
		2336 0-1 2337 2-3 2338 0-1	2335 0-1	2334 0-1	2333 0-1			2330	2328 1 2329 1	_	C 2326 1-2	NO. SULPH	
		2336 2337 2338	2335	2334	2333	2332	2331	2330 1		1 93.			1
		2336 0-1 2337 2-3 2338 0-1	2335 0-1	2334 0-1	2333 0-1	2332 0-1	2331 0-1	2330 1 96.12		1 93.33 94	1-2 92.	7 SULPH	SAMPL
		2336 0-1 108.81 2337 2-3 109.54 2338 0-1 110.17	2335 0-1 105.80	2334 0-1 103.80	2333 0-1 101.67	2332 0-1 99.67	2331 0-1 97.77	2330 1 96.12 97.12	1 94.35	1 93.33 94.35	1-2 92.55 93.33	IDES FROM	SAMPL
		2336 0-1 108.81 109.54 2337 2-3 109.54 110.17 2338 0-1 110.17 110.75	2335 0-1 105.80 106.45	2334 0-1 103.80 104.80	2333 0-1 101.67 102.67	2332 0-1 99.67 100.67	2331 0-1 97.77 98.69	2330 1 96.12 97.12	1 94.35 95.22	1 93.33 94.35	1-2 92.55 93.33	IDES FROM TO	SAMPL
		2336 0-1 108.81 109.54 2337 2-3 109.54 110.17 2338 0-1 110.17 110.75	2335 0-1 105.80 106.45	2334 0-1 103.80 104.80	2333 0-1 101.67 102.67	2332 0-1 99.67 100.67	2331 0-1 97.77 98.69 0.92	2330 1 96.12 97.12	1 94.35 95.22	1 93.33 94.35	1-2 92.55 93.33	IDES FROM TO TOTAL	SAMPL
		2336 0-1 108.81 109.54 0.73 0.00 2337 2-3 109.54 110.17 0.63 0.00 2338 0-1 110.17 110.75 0.58 0.00	2335 0-1 105.80 106.45	2334 0-1 103.80 104.80	2333 0-1 101.67 102.67	2332 0-1 99.67 100.67 1.00	2331 0-1 97.77 98.69 0.92	2330 1 96.12 97.12 1.00	1 94.35 95.22	1 93.33 94.35 1.02	1-2 92.55 93.33	IDES FROM TO TOTAL	SAMPL
		2336 0-1 108.81 109.54 0.73 2337 2-3 109.54 110.17 0.63 2338 0-1 110.17 110.75 0.58	2335 0-1 105.80 106.45 0.65	2334 0-1 103.80 104.80 1.00	2333 0-1 101.67 102.67 1.00	2332 0-1 99.67 100.67 1.00	2331 0-1 97.77 98.69 0.92	2330 1 96.12 97.12 1.00	1 94.35 95.22 0.87	1 93.33 94.35 1.02	1-2 92.55 93.33 0.78	IDES FROM TO TOTAL 3	SAMPLE

LANGRIDGE LIMITED - TORONTO - 366-1168

## DIAMOND DRILL RECORD

ZAME OF	NAME OF PROPERTY	McDermott
OLE NO.	Mc-83-46	LENGTH 111.86 meters
OCATION		
ATITUDE	7 + 75 E	DEPARTURE 0 + 65 E
ELEVATION		AZIMUTH 344° DIP -65°
5TARTED _	October 17, 19	ber 19. 1

FOOTAGE	OIP	AZIMUTH	AZIMUTH FOOTAGE	יום	AZIMUTH
0	-65°				
30.48	-63°				
111.86	-59°				

REMARKS BQ Core	HOLE NO. MC-83-46 SHEET NO.
	1 OF 6

Split for assay.

OVERBURDEN  OVERBURDEN  DESCRIPTION  NO. Sign 700 TOTAL V. K. GA/TOW OX/
OVERBURDEN  DESCRIPTION  NO. Strongly  PROVIDED TO THE TOTAL  NO. Strongly  PROVIDED TO THE TOTAL  NO. Strongly  BASALI  BASALI  Beddum to dark green, aphanitic to medium grained, strongly  brecclated due to tectonic activity to a depth of 34.40 m and  frequiarly throughout the section. A large portion of these lavas  are flow brecclated as indicated by rounded, slitefield fragments up  to 5mm in size. Rock is non-magnetic and averages 0-1% pyrite as  0.1-1.0mm blebs.  28.65 - 34.40 angularly brecclated, flow breccla locally visible.  About 0.85 m of core ground and lost between 26.52  and 28.65 m.  34.40 - 36.10: flow brecclat.  37.10 - 38.32: massive, fine to medium grained.  38.32 - 39.80: core basined flow.  29.80 - 40.10: very fine grained flow.  40.50 - 45.95: fine to medium grained, sub-ophitic textured, becoming coarse grained locally (eg. 42.30-43.35).  Strongly sheered and moderated by silicified from  40.50 - 45.95: fine to medium grained, sub-ophitic textured, seam at 44.65 marks a minor fault - local shearing at 500 to core axis, and nor fault - local shearing  45.95 - 46.20: tectonically brecclated, epidotized; angular  fragments up to lom.
DESCRIPTION  No. STORM  NO. STORM
No.   SUEST   FROM   TO   TOTAL   %   X   OZ/TON
NO. SUPERIOR FROM TO TOTAL & % 02/TON  NO. SUPERIOR FROM TO TOTAL & % 02/TON  C 2339 1-3 40.10 40.50 0.40 tr.
SUPPH FROM TO TOTAL & % 02/TON
FROM TO TOTAL % 02/TON  40.10 40.50 0.40 tr.
FOOTAGE TO TOTAL % % 02/TON 40.50 0.40 tr.
0.40 & % 0z/TON
% 0z/T0N
0z/10N
07/TON

Mc-83-46

HOLE NO.

McDermott

SHEET NO. 2 OF 6

61.59 56.20 FROM FOOTAGE 61.59 91.84 7 chloritized zone carrying 15% silicified breccia. tuff is in evidence. Small localized fault zones are chloritized silicified and strongly brecciated. Some non-brecciated lapilli is a variably silicified zone where alteration is limited to breccia 59.90 - 61.59: 58.30 - 59.90: 51.15 - 52.35 47.95 - 51.15: 46.20 - 47.07: 47.07 - 47.95: along radiating fractures. The lower member of this section is a The middle section, the 'main silicified zone', is intensely groundmass, are in much evidence. These are chemical sediments. zones. Cherty beds, although brecciated and set in a chloritized 57.80 - 58.30: 56.20 - 57.80: on a 1-2mm scale highlighted by 10-15% moderately carbonatized 52.35 - 56.20: The main zone is composed of three sub-sections; the upper section texture is observed locally, possibly diagenetic silica. laminations and seams parallel to the bedding. A semi-nodular Medium to dark green, fine to very fine grained; crudely laminated MAIN MINERALIZED ZONE SEDIMENTS well laminated at 50° to core axis. well laminated with 5-10% hematized 1-2mm seams, well laminated with nodular texture locally. crudely laminated, weakly carbonatized with abundant tectonically brecciated flow breccia - confused several silicified and epidotized patches, some fine to very fine grained, abundant tight epidotized medium-coarse grained, massive. cherty fragments and brecciated cherty laminations breccia; pillow rims? intensely silicified breccia, epidotized - probably bedding at 450 at 57.00 m and 30-350 at 57.80. texturally - generally fine to very fine grained, ladder-type shrinkage fractures. locally. abundant shearing at varying angles. flow-top breccia below apparent flow contact at DESCRIPTION 2343 2340 2341 2342 Z O 1-2 1-2 1-2 1-2 0-1 59.05 58.15 56.20 57.20 60.90 59.85 FROM SAMPLE 60.90 59.85 59.05 58.15 0.80 0.90 1.05 1.00 TOTAL 20000 **ASSAYS** 02, TON ٥ ۲ 2

HOLE NO.

Mc-83-46

SHEET NO. 3 OF 6

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LANGRIDGE LIMITED - TORONTO - 366-1168

1021

HOLE NO. MC-83-46 NAME OF PROPERTY\_\_

McDermott

SHEET NO. 4 UP 6

DESCRIPTION    100						4	(					
St.   St.	$\dashv$		DESCRIPTION		3 SULPH		FOOTAGE				$\dashv$	۱ 🕽
- 69.80 95% honey coloured 'feldapathized' rock with abundant chlorite in tight fracture systems and between fragments in breccis. Lower contact is a 2cm green clay seam - fault plane at 43-590 to core axis. A zone of intense fracturing extends 0.5 m above feath plane. 42-507 to core axis. A zone of intense fracturing carriers of the purpler grey, sphantic, intense ystems 2358 2-3 69.80 70.60 0.80 fracturing has created 20-30% green mylonitic seams. Creatish sheared zone at 69.80-70.55 m. above, less purple tint, degree of silicification 2361 1-2 72.24 73.04 0.82 moderately to strongly brecisted. 2359 2-3 70.60 71.42 0.82 rock as high but still very strong. Spotty 2662 1-2 73.04 73.78 0.74 174.78 moderately to strongly brecisted. 2359 2-3 70.60 71.42 0.82 rock as high but still very strong. Spotty 2662 1-2 73.04 73.78 0.74 174.78 moderately to grey-green, fine to medium gray silicified xenoliths concentrated near upper contact (floatation); weakly magnetic locally. With 3-4% pyrite locally 2563 0-1 73.78 74.73 0.95 grained with abundant grey silicified xenoliths concentrated near upper contact (floatation); weakly magnetic locally. Purpler grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.79 as IX is observed. Relic laminations are visible 2366 7-9 74.73 75.46 0.79 as IX is observed. Relic laminations are visible 2366 7-9 76.87 77.28 0.41 76.75 m. 2369 1-3 78.15 78.75 0.60 0.70 as IX in tensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31 pyrite in matrix to fragments. 236 1-3 79.51 79.51 0.60 0.31 pyrite in matrix to fragments. 2371 1-3 79.06 79.51 0.55 10.60 0.50 0.50 0.50 0.50 0.50 0.50 0.50				C								I
2cm green clay seam - fault plane at 45-550 to core axis. A zone of intense fracturing extends  1.50 m above fault plane.  1.70.60: rock was strongly 'feldapathized' but intense fracturing has created 20-30% green mylonitic seams.  1.72.24: dark purple-grey, aphanitic, intensely silicified, 2559 2-3 70.60 0.80 moderately to strongly brecciated.  1.73.78: as above, less purple tint, degree of silicification 2561 1-2 72.24 0.82 as above, less purple tint, degree of silicification 2561 1-2 73.04 0.82 not as high but still very strong. Spotty 'feldapathized' rock grey-green, fine to medium 2562 1-2 73.04 73.78 0.74 increasing dith abundant grey silicified xenoliths concentrated near upper contact (floatation?); weakly magnetic locally. Purple-grey zones carry 2-4% but as little 2565 4-6 75.46 76.16 0.70 as 1% to baserved. Relic laminations are visible 10-15% of breccia - carries up to 12% pyrite 1.76.75 m.  10-15% of breccia - carries up to 12% pyrite 2565 4-6 75.46 76.16 0.70 as 1% to baserved. Relic laminations are visible 2565 6-8 76.16 76.87 0.71 fo.28 1.75.75 m.  10-21ly - 500 at 76.30 m and 450 to core axis at 2567 7-9 78.15 78.15 0.87 79.06 purple-grey sone - little pyrite.  10-78.75 choritized fractured zone - little pyrite.  10-79.06: purple-grey as above - 1-3% pyrite.  10-79.10: purple-grey as above - 1-3% pyrite.  10-79.11: purple-grey as above - 1-3% pyrite.  10-79.12: purple-grey as above - 1-3% pyrite.  10-79.13: purple-grey to grey silicified breccia vith 3-6% 2370 3-6 78.75 79.06 0.31 pyrite 1.00.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.56 1610 pyrite 1.00 0.70 0.70 0.70 0.70 0.70 0.70 0.70		1	honey coloured 'feldspathized' rock with ndant chlorite in tight fracture systems and	2357	4-6	68.95	69.80	0.85			).15	
0.5 m above fault plane.  70.60: rock was strongly 'feldspathized' but intense fracturing has created 20-30% green mylonitic seams.  71.24: dark purple-grey, sphanitic, intensely silicified, corenials sheared zone at 69.80-70.05 m.  72.24: dark purple-grey, aphanitic, intensely silicified, core and shigh but still very strong. Sporty 'feldspathization' locally brecciated.  73.78: as above, less purple tint, degree of silicification 2361 1-2 73.04 73.78 0.74 1.83 above, less purple tint, degree of silicification 2361 1-2 73.04 0.80 corentrated near imper contact (floatation?); 'feldspathization' locally with 3-4% pyrite locally; seakly magnetic locally. Serving grey soluted 'feldspathized' rock accounts for locally. Purple-grey zones carry 2-4% but as little 2363 0-1 73.78 74.73 0.95 as 1% is observed. Relic leminations are visible locally - 500 at 76.30 m and 430 to core axis at 76.75 m. Folio choritized fractured zone - little pyrite.  79.51: purple-grey intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31 pyrite in matrix to fragments.  79.51: purple-grey to grey solutified breccia with 3-6% 2370 3-6 78.75 79.06 0.31 purple-grey as above - 1-3% pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured seams up to 1.5cm in with 3-6% 2370 3-6 78.75 0.60 0.31 pyrite in matrix to fragments.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little pyrite.  80.07: choritized fractured zone - little zone choritized zone choritized zone ch	· · · · · · · · · · · · · · · · · · ·		green clay seam - fault plane at 45-550 to axis. A zone of intense fracturing extends	_								
fracturing has created 20-30% green mylonitic seams.  Greenish sheared zone at 69.80-70.05 m. Greenish sheared zone at 69.80-70.05 m. moderately to strongly brecclated.  - 73.78: moderately to strongly brecclated 73.78: as above, less purple tint, degree of silicification 2361 1-2 72.24 0.82  Feldspathization' locally with 3-4% pyrite locally;  Feldspathized near upper contact (floatation?);  reakly magnetic locally.  - 74.55: INTRISTUE - grey to grey-green, fine to meddum grained with abundant grey silicified xenoliths concentrated near upper contact (floatation?);  reakly magnetic locally.  - 77.28: honey coloured feldspathized' rock accounts for locally. Purple-grey zones carry 2-4% but as little 2364 7-9 74.73 75.46 0.73 as IX is observed. Ralic laminations are visible locally - 500 at 76.30 m and 450 to core axis at locally - 500 at 76.30 m and 450 to core axis at locally - 500 at 76.30 m and 450 to core axis at locally - 50.60 at 76.30 m and 450 to core axis at locally - 50.60 at 76.30 m and 450 to core axis at locally - 50.60 at 76.87 77.28 78.15 0.60 purple-grey as above - 1-3% pyrite.  - 79.51: purple-grey as above - 1-3% pyrite 79.51: purple-grey as above -	<del></del>	1	m above fault plane.	2258	2 1 2	80	70 60	5 5			2 2 	
- 72.24: dark purple-grey, aphanitic, intensely silicified, 2359 2-3 70.60 71.42 0.82 moderately to strongly brecciated 73.78: as above, less purple tint, degree of silicification 2361 1-2 72.24 73.04 0.82 not as high but still very strong. Spotty 'feldspathization' locally very strong. Spotty 'feldspathization' locally with 3-4% pyrite locally: 2362 1-2 73.04 73.78 0.74 'feldspathization' locally with 3-4% pyrite locally: 2363 0-1 73.78 74.73 0.95 grained with abundant grey silicified xenoliths concentrated near upper contact (floatation?); weakly magnetic locally. Purple-grey zones carry 2-4% but as little 2363 0-1 73.78 74.73 0.95 locally. Purple-grey zones carry 2-4% but as little 2365 4-6 75.46 0.73 locally. Purple-grey zones carry 2-4% but as little 2365 4-6 75.46 75.5 m. 10-15% of bectved zone - little pyrite. 2364 7-9 76.87 77.28 0.41 76.75 m. 2364 7.9 76.87 77.28 0.70 0.56 77.87 76.87 77.28 0.70 0.70 0.70 0.70 0.70 0.70 0.70 0.7			gry retuspathized but intense created 20-30% green mylonitic seams.	0000		07.00	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	90				
moderately to strongly brecolated.  73.78: as above, less purple tint, degree of silicification 2361 1-2 72.24 0.82 not as high but still very strong. Spotty (feldspathization) locally with 3-4% pyrite locally:  1		.60 - 72.	purple-grev, aphanitic, intensely silicified	2359	2-3	70-60	71 . 49	0 83			•	
- 73.78: as above, less purple tint, degree of silicification 2361 1-2 72.24 73.04 0.80 not as high but still very strong. Spotty  'feldspathization' locally with 3-4% pyrite locally;  average content is 1-2%.  - 74.55: INTRINSIVE - grey to grey-green, fine to medium grained with abundant grey silicified xenoliths concentrated mear upper contact (floatation?);  weakly magnetic locally.  - 77.28: honey coloured 'feldspathized' rock accounts for 10-13% of breccia - carries up to 12% pyrite locally. Purpla-grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.70  as 1% is observed. Relic laminations are visible 2364 7-9 74.73 75.46 0.73  10-211y. Purpla-grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.70  as 1% is observed. Relic laminations are visible 2366 6-8 76.16 76.87 77.28 0.41  76.75 m.  78.75: choritized fractured zone - little pyrite. 2364 7-9 76.87 77.28 0.41  79.51: purpla-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31  pyrite in matrix to fragments.  - 80.07: carries 10-15% chloritized seams up to 1.5cm in 2372 1-2 79.51 80.07 0.56  'feldspathized' breccia.  - 81.88: purpla-grey to grey silicified breccia; relic 2373 1-3 80.07 80.77 80.77  80.77 81.88 1.11  - 78.75: choritized seams; up to 10% pyrite locally over 2374 1-3 80.77 81.88 1.11			sately to atrongly brecciated.	2360	2-3	71.42	72.24	0.82				
rot as high but still very strong. Spotty  'feldspathtzation' locally with 3-4% pyrite locally;  average content is 1-2%.  - 74.55: INTRUSIVE - grey to grey-green, fine to medium  grained with abundant grey silicified xenoliths  concentrated near upper contact (floatation?);  weakly magnetic locally.  - 77.28: honey coloured 'feldspathized' rock accounts for lo-15% of breccia - carries up to 12% pyrite  locally. Purple-grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.70  as 1% is observed. Relic laminations are visible 2366 6-8 76.16 76.87 0.71  locally - 50° at 76.30 m and 45° to core axis at 2367 7-9 76.87 77.28 0.41  76.75 m.  - 78.15: increasing grey rock - less 'feldspathized'.  - 79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31  pyrite in matrix to fragments.  - 79.51: purple-grey as above - 1-3% pyrite.  - 80.07: carries 10-15% chloritized seams up to 1.5cm in 2372 1-2 79.51 80.07 0.56  'feldspathtzed' breccia.  - 81.88: purple-grey to grey silicified breccia; relic chloritized seams; up to 10% pyrite locally over locally locale		1	s purple tint, degree of silicification	2361	1-2	72.24	73.04	0.80		_	<b>.</b>	
average content is 1-2%.  INTRIDISIVE - grey to grey-green, fine to medium grained with abundant grey silicified xenoliths concentrated near upper contact (floatation?);  weakly magnetic locally.  10-15% of breccia - carries up to 12% pyrite locally. Purple-grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.70 as 1% is observed. Relic laminations are visible locally - 50° at 76.30 m and 45° to core axis at 76.75 m.  78.75: choritized fractured zone - little pyrite. 79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 pyrite in matrix to fragments.  79.51: purple-grey as above - 1-3% pyrite. 79.51: purple-grey as above - 1-3% py			as high but still very strong. Spotty ldspathization' locally:	2362	1-2	73.04	73.78	0.74			. <del>.</del>	
INTRUISIVE — grey to grey-green, fine to medium grained with abundant grey silicified xenoliths concentrated near upper contact (floatation?);  veakly magnetic locally.  10-15% of breccia — carries up to 12% pyrite 10-25% of breccia — carries up to 12% pyrite 2364 7-9 74.73 75.46 0.73 10-211y. Purple-grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.70 as 1% is observed. Relic laminations are visible 10-21y. Furple-grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.70 as 1% is observed. Relic laminations are visible 10-20% 2364 7-9 74.73 75.46 0.73 10-25% of breccia. 236 6-8 76.16 76.87 0.71 10-21y. Purple-grey rock — less 'feldspathized'. 2366 6-8 76.16 76.87 0.71 10-21y. Purple-grey rock — less 'feldspathized'. 2367 7-9 76.87 77.28 0.41 76.75 m. 2364 7-9 74.73 75.46 0.73 17-28: honey coloured 'feldspathized'. 2369 6-8 76.16 76.87 0.71 10-25% and 450 to core axis at 2367 7-9 76.87 77.28 0.41 10-21y. Purple-grey as above — 1-3% pyrite. 2369 1-3 78.15 78.75 0.60 10-21y. Purple-grey as above — 1-3% pyrite. 2369 1-3 78.15 78.75 0.60 10-21y. Purple-grey as above — 1-3% pyrite. 2369 1-3 78.15 78.75 0.60 10-21y. Purple-grey as above — 1-3% pyrite. 2370 3-6 78.75 79.06 0.31 10-21y. Purple-grey as above — 1-3% pyrite. 2371 1-3 79.06 0.31 10-21y. Purple-grey to grey silicified breccia, relic 2371 1-3 80.07 80.77 0.70 10-25% and rerec below to axis; 10-20% 2374 1-3 80.77 81.88 1.11 10-25% and rerec below to axis; 10-20% 2374 1-3 80.77 81.88 1.11	_		content is 1-2%.			! !	· !					
### 17.28: honey coloured 'feldspathized' rock accounts for 10-15% of breccia - carries up to 12% pyrite 10-15% of breccia - carries up to 12% pyrite 10-236		) )	with abundant grey silicified xenoliths trated near upper contact (floatation?);	2363		/3./8	/4./3	0.95				
10-15% of breccia - carries up to 12% pyrite	_	55 - 77.	coloured 'feldspathized' rock accounts			_				_		
locally. Purple-grey zones carry 2-4% but as little 2365 4-6 75.46 76.16 0.70 as 1% is observed. Relic laminations are visible locally - 500 at 76.30 m and 450 to core axis at 2366 6-8 76.16 76.87 0.71 76.75 m.  - 78.15: increasing grey rock - less 'feldspathized'. 2367 7-9 76.87 77.28 0.41 78.75: choritized fractured zone - little pyrite. 2368 2-3 77.28 78.15 0.87 79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31 pyrite in matrix to fragments. 2370 3-6 78.75 79.06 0.31 pyrite-grey as above - 1-3% pyrite. 2370 3-6 78.75 79.06 0.31 purple-grey as above - 1-3% pyrite. 2371 1-3 79.06 79.51 0.45 relications at 810-20% silicified breccia; relications at 81.07 m at 550 to core axis; 10-20% 2374 1-3 80.07 80.77 0.70 chloritized seams; up to 10% pyrite locally over 1-5cm and research pyrite locally over 1-5cm and research pyrite locally over 1-5cm and research pyrite locally over 1-5cm and research participated at 1.11			f breccia - carries up to 12% pyrite	2364	7-9		75.46	0.73			.24	
as 1% is observed. Relic laminations are visible 10cally - 50° at 76.30 m and 45° to core axis at 2366 6-8 76.16 76.87 0.71 76.75 m.  - 78.15: increasing grey rock - less 'feldspathized'. 2368 2-3 77.28 0.41 78.75: choritized fractured zone - little pyrite. 2368 2-3 77.28 78.15 0.87 79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31 pyrite in matrix to fragments. 2370 3-6 78.75 79.06 0.31 purple-grey as above - 1-3% pyrite. 2371 1-3 79.06 79.51 0.45 width; also carries 20-30% silicified fieldspathized' breccia. 2372 1-2 79.51 80.07 0.56 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Purple-grey zones carry 2-4% but as little	2365	4-6		76.16	0.70		_	.12	
76.75 m.  76.75 m.  76.75 m.  76.75 m.  78.15: increasing grey rock - less 'feldspathized'.  78.75: choritized fractured zone - little pyrite.  79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31  pyrite in matrix to fragments.  79.51: purple-grey as above - 1-3% pyrite.  80.07: carries 10-15% chloritized seams up to 1.5cm in width; also carries 20-30% silicified  'feldspathized' breccia.  81.88: purple-grey to grey silicified breccia; relic chloritized seams; up to 10% pyrite locally over chloritized seams chloritized seams chloritized			1% is observed. Relic laminations are visible	2366	3 1 2 1 2		76.87	0.71		50	.19	
- 78.15: increasing grey rock - less 'feldspathized' 78.75: choritized fractured zone - little pyrite 79.06: purple-grey, intensely silicified breccia with 3-6% 2369 1-3 78.15 78.75 0.60 - 79.06: purple-grey as above - 1-3% pyrite 79.51: purple-grey as above - 1-3% pyrite 80.07: carries 10-15% chloritized seams up to 1.5cm in width; also carries 20-30% silicified 'feldspathized' breccia 81.88: purple-grey to grey silicified breccia; relic laminations at 81.07 m at 550 to core axis; 10-20% 2374 1-3 80.07 81.88 1.11 chloritized seams; up to 10% pyrite locally over			Ly - 50° at 76.30 m and 45° to core axis at m.	236/	)-ų	/6.8/	//.28	0.41		<del>_</del> _		
- 78.75: choritized fractured zone - little pyrite 79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 0.60 - 79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31 - 79.51: purple-grey as above - 1-3% pyrite 80.07: carries 10-15% chloritized seams up to 1.5cm in 2371 1-3 79.06 79.51 0.45 - 80.07: width; also carries 20-30% silicified 'feldspathized' breccia 81.88: purple-grey to grey silicified breccia; relic 2373 1-3 80.07 80.77 0.70 - 81.88: purple-grey silicified breccia; relic 2374 1-3 80.77 81.88 1.11 - 5cm and rare chalconverte as a laborate of the content of th	_		asing grey rock - less 'feldspathized'.	2368	2-3		78.15	0.87		<u> </u>	.02	
- 79.06: purple-grey, intensely silicified breccia with 3-6% 2370 3-6 78.75 79.06 0.31 pyrite in matrix to fragments.  - 79.51: purple-grey as above - 1-3% pyrite.  - 80.07: carries 10-15% chloritized seams up to 1.5cm in 2371 1-3 79.06 79.51 0.45 width; also carries 20-30% silicified (feldspathized) breccia.  - 81.88: purple-grey to grey silicified breccia; relic laminations at 81.07 m at 550 to core axis; 10-20% 2374 1-3 80.07 80.77 0.70 chloritized seams; up to 10% pyrite locally over 1-5cm and rere chalconverte as a lamination.		•	fractured zone - little pyrite.	2369	1-3		78.75	0.60	_	_	.02	
- 79.51: purple-grey as above - 1-3% pyrite.  - 80.07: carries 10-15% chloritized seams up to 1.5cm in 2372 1-2 79.51 80.07 0.56 width; also carries 20-30% silicified 'feldspathized' breccia.  - 81.88: purple-grey to grey silicified breccia; relic laminations at 81.07 m at 55° to core axis; 10-20% 2374 1-3 80.07 80.77 0.70 chloritized seams; up to 10% pyrite locally over 1-5cm and rere chalconverte as a late of the local contents.		ı	-grey, intensely silicified breccia with 3-6% in matrix to fragments.	2370	3-6		79.06	•		-	02	
- 80.07: carries 10-15% chloritized seams up to 1.5cm in 2372 1-2 79.51 80.07 0.56 width; also carries 20-30% silicified 'feldspathized' breccia.  - 81.88: purple-grey to grey silicified breccia; relic 2373 1-3 80.07 80.77 0.70 laminations at 81.07 m at 550 to core axis; 10-20% 2374 1-3 80.77 81.88 1.11 chloritized seams; up to 10% pyrite locally over 1-5cm and rere chalconverte as alleted to shloritized.		ı	-grey as above - 1-3% pyrite.	2371	1-3	79.06	79.51	0.45		-	 	
'feldspathized' breccia.  - 81.88: purple-grey to grey silicified breccia; relic  laminations at 81.07 m at 55° to core axis; 10-20% 2374 1-3 80.77 81.88 1.11  chloritized seams; up to 10% pyrite locally over		ŧ	15% chloritized seams up to 1.5cm in carries 20-30% still(ifted	2372	1-2	79.51	80.07	0.56			 	
- 81.88: purple-grey to grey silicified breccia; relic 2373 1-3 80.07 80.77 0.70 laminations at 81.07 m at 550 to core axis; 10-20% 2374 1-3 80.77 81.88 1.11 chloritized seams; up to 10% pyrite locally over	_		ed' breccia.		_		_					
seams; up to 10% pyrite locally over		ı	to grey silicified breccia; relic	2373	1-3	80.07	80.77	0.70		• •	<u> </u>	
THE PERSON OF THE PARTY OF THE PROPERTY OF THE PERSON OF T			seams; up to 10% pyrite locally over are chalcopyrite as plates in chloritized									

HOLE NO. MC-83-46

SHEET NO. 5 OF 6

91.84		85.99		T TO TO	FOOT
111.86		91.84		70	TAGE
SEDIMENTS  Light to medium green, fine to very fine grained, generally well laminated highlighted by cherty 1-3mm laminations separating wider chloritized lamination sets. Cherty chemical sediments may comprise 50% of the rock volume over sections as great as 55cm.  Carbonatization is moderate in cherty sections, but weaker in	R8.61: INTRUSIVE - medium green, fine to medium grained, carries 5-10% reddish-pink siliceous xenoliths.  Lower contact is at 45-50° to core axis, parallel to underlying chloritized seams.  90.24: very few silicified sections, locally laminated (eg. 40° at 89.80 m).  91.84: fine grained, medium locally; graded beds at 90.35 m indicate tops up; minor cherty fragments, well laminated with cherty laminations at 40-45° to core at 90.70 m.	TRANSITIONAL SILICIFIED SEDIMENTS  Light to medium green, fine to very fine grained with abundant (15%), purple-grey, aphanitic intensely silicified breccia zones. Rock is weakly laminated at 55° to core axis. Fracturing is moderately to strongly developed with pink quartz-carbonate filling.	81.88 - 82.83: INTRUSIVE - dark green, fine grained, with abundant (5-10%), reddish-pink silicified xenoliths carrying greyish reaction rims. Lower contact at 55° to core axis - parallel to chloritized seams below. highly silicified breccia with 10-15% chloritized seams up to 10cm width. Seams are parallel to what resembles a relic lamination at 40-45° to core axis (eg. 83.45 m). Zone at 84.00-84.07 m is tuffaceous and bedded at 45-50° to core. Laminations at 45° at 85.05 m.		DESCRIPTION
	2385 2386 2387	2380 2381 2382 2383	2375 2376 2376 2377 2378 2379	20	
	0-1 1-2 1-2	1000	0-1 1-3 1-2	SULPH,	
	89.30 90.24 91.09	85.99 86.94 87.49 88.10	81.88 82.83 82.83 83.65 83.65 84.43 84.43 85.36 (measures 85.36 85.99	FROM	SAMPLE
	90.24 91.09 91.84	86.94 87.49 88.10 88.61 89.30	33 35 33 35 35 35 35 35 35 35 35 35 35 3	10	
	0.94 0.85 0.75	0.55	0.95 0.82 0.78 0.93 1.07	TOTAL	
				32	
				,,	
	444	4444	7 7 7 7 7	2	3
	• • •			02. TON	ASSAYS

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													FROM	FOOT
<u>.</u>													70	TAGE
	111.86 meters			102.00-111.86:		96.80 -102.00:	96.07 - 96.80:	95.25 - 96.07:		- 95.2	blebs up to 2mm.	strictly chlori		
CASING PULLED	END OF HOLE		107.40 m; 45° to core axis at 111.50 m.	moderately laminated zation. Bedding at 4	-	l laminated, occasional chert. Beddin		cherty laminations, minor local brecciation of cherty hads.		cherty sections: bedding at 50-550 to core axis at	e zone is non-magnetic and averages to Pro	ock. Carbonate alteration feathers out		DESCRIPTION
· .		2400	2399	2398	2397	23	-	~ ~	2	2 2		ນ ດ	T	
·				&	3	2396	395	394	392	390 391	2389	20	, z	
		0-1	0-1	98 0-1	)7 0-1	96 0-1	ဝှ	394 0-1		390 0-1 391 0-1			NO. TOES	
			0-1			ဝ	<u>-1</u>	<u>- 7</u>	<u>,                                    </u>	99	0	2	+,	
		9-1	0-1 107.73	0-1	0-1	0-1 99.75	0-1 97.70	0-1 96.80	1 95.25	0-1 93.57 0-1 94.40	0-1 92.69	0-1-01-84	1969 1941)	SAMPL
		0-1 110.80	0-1	0-1 105.25	0-1 102.25	0-1 99	0-1 97.70	0-1 96.80 97.70	1 95.25 95.93	99	0-1 92.69 93.57	0-1 01.84 02.60	IDES FROM	SAMPL
		0-1 110.80 111.86	0-1 107.73 108.73	0-1 105.25 106.15	0-1 102.25 103.25	0-1 99.75 100.75 1	0-1 97.70 98.55	0-1 96.80 97.70	1 95.25 95.93	0-1 93.57 94.40 0-1 94.40 95.25	0-1 92.69 93.57	0-1 01.84 02.60	IDES FROM TO	SAMPL
		0-1 110.80 111.86	0-1 107.73 108.73	0-1 105.25 106.15	0-1 102.25 103.25	0-1 99.75 100.75 1	0-1 97.70 98.55	0-1 96.80 97.70	1 95.25 95.93	0-1 93.57 94.40 0-1 94.40 95.25	0-1 92.69 93.57	0-1 01.84 02.60	IDES FROM TO TOTAL	SAMPL
		0-1 110.80 111.86	0-1 107.73 108.73	0-1 105.25 106.15	0-1 102.25 103.25	0-1 99.75 100.75 1	0-1 97.70 98.55 0.85	0-1 96.80 97.70 0.90	1 95.25 95.93 0.68	0-1 93.57 94.40 0-1 94.40 95.25	0-1 92.69 93.57 0.88	0-1 01.84 02.60 0.85	IDES FROM TO TOTAL	SAMPL

LOCATION ELEVATION LATITUDE \_ STARTED October 19. HOLE NO. NAME OF PROPERTY Mc-83-47 7 + 25 E 1983 FINISHED McDermott LENGTH 120.30 meters \_ AZIMUTH \_ DEPARTURE 0 + 62 S October 21 1983

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	121.92 -60°	30.48	ο	FOOTAGE
	-60°	-64°	-65°	٩١٥
				AZIMUTH
				AZIMUTH FOOTAGE
				DIP
				AZIMUTH

HOLE NO.MC-83-47 SHEET NO. 1 OF 7

REMARKS BO Core

Split for assay.

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F OK	то		NO. SULPH	PH FROM	FOOTAGE M TO	GE TOTAL	%. %.	<u>ئ</u> ر	OZ/TON	ON OZ/TON
0	11.80	OVERBURDEN								
11.80	66.95	BASALT							<del></del> -	<del></del> _
EM. 6-1168	· · · · · · · · · · · · · · · · · · ·	This section is composed of a series of flows. All are medium to dark green, fine to very fine grained at the margins with relatively coarser grained centres. The thinner flows are flow brecciated. The one thick flow seems to be massive. Rocks are weakly to moderately chloritized, and non-magnetic. Pyrite content averages 1-2% but is higher in localized 'pods' of silicified breccia.					<del>-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1</del>		<del></del>	···
·		15.40 - 16.10: fine to very fine grained.  16.10 - 16.80: flow top breccia - moderately hematized fractures.  16.80 - 24.00: flow breccia - aphanitic, rounded fragments up to								<u> </u>
		to very fine grained, chloritized, m framgnets up to 2cm. led fragments, probably tectonically			<del></del>			· <del>· · · · · · · · · · · · · · · · · · </del>		
		brecciated due to late flow movement. Rare zones of 5-10% pyrite associated with minor silicification.  May carry some 20-50cm sections of flow breccia.				··				
		- 28.85: - 29.60:		<del></del> -						
o,		- 32.32: tectonically brecciated.		<del></del>						
IITE		contact at 60° to core axis.					<del></del>			
ELIM		37.20 - 39.75: very fine grained to aphanitic, sheared locally.  39.75 - 40.45: SEDIMENTS - strongly silicified at upper contact.		<u> </u>			-			
_							<del></del>	<u> </u>		

66 <b>.</b> 95	Ž C	F ZO ₹
75.95	7	70
54.55 - 56.2: 56.25 - 57.5: 57.55 - 59.6: 59.66 - 64.8: 64.60 - 66.9: 66.90 - 66.9: 66.90 - 66.9: Medium green 1-3mm scale. which freque highlighted 1aminations. 1aminations. 1aminations. 66.95 - 68.4: 68.40 - 74.6 68.40 - 74.9		1
54.55 - 56.25: 56.25 - 57.55: 57.55 - 59.66: 59.66 - 64.80: 64.80 - 66.90: 64.80 - 66.95: 66.90 - 66.95: Medium green, f: 1-3mm scale. Which frequent; highlighted by laminations and 66.95 - 68.40: 68.40 - 74.61: 74.61 - 74.98:	· ·	
(40.45-41.45), then becoming medium to coarse grained. Minor epidotized breccia - tectonic type. 54.55 - 56.25; fine to very fine grained. 57.55 - 57.55; fine to werd fine grained. 57.55 - 57.55; fine to werd fine grained, strongly tectonically brecciated. 59.66 - 64.60; very fine grained to aphanitic, abundant silicified and epidotized breccia. Tensional fractures are common below a silicified zone at 63.09-63.38 m. 64.60 - 64.80; flow-type breccia - rounded fragments up to 5cm carry well developed reaction rims. 64.80 - 66.90; fine grained, abundant tensional carbonate filled fractures.  SEDIMENTS  SEDIMENTS  Medium green, fine to very fine grained, mostly well laminated on a 1-3mm scale. Wider laminations are composed of cherty material which frequently pinches and swells up to 1cm thickness. Bedding is highlighted by pale grey carbonate replacing selected sets of laminations and is weak to moderate in strength. 66.95 - 68.40; well laminated, occasional carbonatization, bedding at 450 to core axis at 67.20 m. 68.40 - 74.61; moderate to well developed laminations with occasional purple-grey hematized and carbonatized beds. Carbonate alteration dramatically increases in this section. Bedding at 71.40 m at 300 to core axis and at 73.10 m at 400 to core axis. 74.61 - 74.98; strongly carbonatized seams and laminations - purple grey colour reflects minor localized silicification and hematization.		
2501 2502 2503 2503 2504 2506 2507		z O
2222222	1013	HATINS %
66.90 67.90 68.80 70.65 71.55 72.35	FROM	Ы
67.90 68.80 70.65 71.55 72.35	10	FOOTAGE
	TOTAL	11
0.90	7.	٠,
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		% 02/10M

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LANGRIDGE LIMITED	TORONTO - 366-1168					 	
		75.95		75.95		FROM	FOO.
		81.24		111.46		70	FOOTAGE
75.95 - 76.85: well laminated locally with silicification confined to only thin sections.  76.85 - 78.23: silicification replaces carbonatized cherty fragments eventually coalesing into massive beds.	Medium to dark green, with abundant pink to light grey replacements of fine to very fine grained dark green chloritized laminations and sets of laminations. Most of this replacement is silica although some carbonate is also present. Approximately 20% of the zone is silicified sections. A reddish cherty zone is noted at 78.23-79.02 which was previously termed syenitic. Bedding is well developed locally. Major silicified horizons are noted at 76.85-76.95; 77.23-77.35; and 77.41-77.98 m.	TRANSITIONAL SILICIFIED SEDIMENTS	The zone is composed of four sections - a variably silicified upper member; an intensely silicified central zone; a lower variably silicified member; and, at the base a second thin zone of very strong silicification (lower mineralized zone). Pyrite contents up to 12% are noted - highest in honey coloured 'feldspathized' rock. Brecciation is irregularly developed throughout the zone and has a vague control over 'feldspathization' (but not silicification, except in lower section).	MAIN MINERALIZED ZONE	74.98 - 75.29: abundant cherty fragments up to 3cm are lensitic in shape. Chloritized laminations wrap around fragments. Rock becomes a characteristic purple-grey colour but contains only minor weak silicification. 75.29 - 75.95: purple-grey sets of laminations up to 1cm thickness. Non-silicified, non-brecciated. Bedding at 75.70 m is at 400 to core axis.		DESCRIPTION
2512 2513 2514					C 2510 2511	, O	
1-2					0-1	JOES .	
75.95 76.97 77.60					74.61 75.29	FROM	SAMPLE
76.97 77.60 78.23					75.29 75.95	TO TO	m
1.02 0.63 0.63					0.68	TOTAL	
						ų	
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					а п ч ч	02/104	ASSAYS
						02. TON	

NAME OF PROPERTY

SHEET NO. 3 OF 7

McDermott SHEET NO. 4 OF 7

	FOOT	TAGE				SAMPLE	m			ASSAYS		J
	F HOM	70	CONCATT	ē	He Ins	Mind	FOOTAGE	lu (A)	, and a second s	No. 10	NO. 10	, [
			-pink, aphanitic, possibly laminated, y brecciated and highly siliceous. Carries rite. Highly fractured - chloritized	C 2515	3-5	78.23	79.02	0.79		t r		
			79.02 - 81.24: chloritized with abundant siliceous (cherty), fragments up to 5cm - laminated locally - core badly ground.	2516 2517 2518	222	79.02 79.74 80.47	79.74 80.47 81.24	0.72 0.73 0.77				
-	81.24	98.67	MAIN SILICIFIED ZONE									
			rey, aphanitic, laminated locally, variably brecc honey coloured 'feldspathized' sections. Pyrite? are noted in honey coloured rock. Purple-grey									
<del>.</del>			carries smaller amounts. Pyrite is found as a very fine grained dissemination, as clots up to 2cm and as fillings between laminations. Purple colouration is due to strong, very fine grained					_			· · · ·	
			81.24 - 81.97: mostly purple-grey, intensely silicified breccia.  81.07 - 82.37: attoricly 'faldenathired' - up to 77 purite.	2519	2-4	81.24	81.97 82.37	0.73		0.29		
		_	averaging $4-6\%$ , concentrated along $1-2mm$ seams - possibly reflecting former laminations.									
<u>a</u>			s in a dark	2521	1-3	82.37	83.04	0.67		0.08		
116			coloured, moderately brecciated; strongly			83.04	83.74	0.70		0.31		
<u> 366</u>			a t	2524	7-9	84.64	85.48	0.84		0.14		
опто			'feldspathized' with minations - 55° to	2525 2526	7-9 7-9	85.48 86.08	86.78	0.60		0.05		
TOR			core axis at 85.75 m.   86.15 - 88.21: same as 83.04-85.45 m - laminated locally 450 to	2527	7-9	86.78	87.60	0.82		0.06		
ED -			core axis at 87.83 m.			87.60	88.21	0.61		0.03		
LIMIT			ant siliceous xenoliths. Carries abundant	2530	<b>,</b> ,	88.96	89.68	0.72		0.01		
LANGRIDGE			1-2mm chlorifized riakes - blotife: Cut by several l-5cm quartz veins. Contains up to 1% pyrite.									
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HOLM NO	NAME OF
HOLE NO. MC-83-47	PROPERTYMC
SHEET NO.	Dermott

5 OF 7

LANGRIDGE LIMITED - TORONTO - 366-1168 95.61 FROM FOOTAGE 109.85 5 93.30 - 94.29: 92.65 - 93.30: 92.15 - 92.65: 91.17 - 92.15: 96.60 - 99.40: 99.40 -100.85: not silicified. chloritized rock is dominant although significant quantities of 95.61 - 96.60: silicified breccia are observed below this point. Laminated rock is Percentage chloritized rock ranges from 25-75%. Below 99.65 m. 90.70 - 91.17: 89.68 - 90.70: non-magnetic. honey coloured with 40-50% dark green chloritized laminations. Initially, the zone is purple-grey, intensely silicified and locally TRANSITIONAL SILICIFIED SEDIMENTS well laminated - 80% 'feldspathized' initially strongly brecciated, locally laminated, with 10% dominantly silicified rock, well bedded at 450 to grey to purple-grey with increasing honey coloured minor chloritized patches. Zone is increasingly same as 89.68-90.70 m but carries 10% dark green purple-grey, aphanitic, laminated at 450 to core mostly silicified, honey coloured, brecciated rock. chloritized with silicified breccia locally. at 550 to core axis at 92.65 m. same as 89.68-90.70 m. at 89.83 m. chloritized patches up to 5cm. chloritized and hematized patches up to 2cm in faults. Core recovery in this section is 75%. average 2-3%. Bedding visible locally - 450 at to 10%. Up to 12% pyrite is carried in massively decreasing with depth. Chloritized seams increase rock in strongly brecciated zones. 'feldspathized' along fracture systems. Laminated diameter. Clay seams at 88.76 and 88.81 m indicate minor Localized increases in pyrite content to 3-4% feldspathized rock. Bedding at 550 to core at increasing brecciation with depth. core axis. The zone is generally well laminated. The rock is Bedding is increasingly disturbed by DESCRIPTION 2536 2533 2534 2531 2532 2544 2545 2543 2542 2541 2540 2539 2538 2537 2535 , O 8-10 4-6 4-6 4-6 1-2 1-2 1-3 1-3 447.05 % 2-3 2-3 1-3 1-3 1-3 **DE3** 89.68 90.53 100.00 92.15 99.23 98.33 97.46 96.51 94.29 92.80 91.30 95.61 94.69 93.85 93.30 FROM SAMPLE 100.00 92.80 99.23 98.33 94.69 94.29 93.85 92.15 91.30 97.46 95.61 90.53 7 0.65 0.85 0.40 0.77 0.44 0.50 0.85 0.90 0.87 0.95 TOTAL 'n 0.03 tr. 0.01 0.14 0.20 0.01 0.01 0.01 0.04 ASSAYS 02, TON 02 TON

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	108.34		106.79				FROM	FO
	4 120.30		9 108.34				70	FOOTAGE
Dark g lamina sectio Single averag	SEDIMENTS	Honey coloured to purple-grey, intensely silicified breccia with 2-4% very finely disseminated pyrite. Minor chloritized rock at 107.15-107.48 m. A sheared, mylonitic fault zone is noted at 107.78-107.91 m. Movement has occured at 60° to the core axis. The "lower mineralized zone" might extend up to and include the silicified breccia found there.	LOWER MINERALIZED ZONE	102.29-103.52: same as 100.85-101.79 m. 103.52-105.76: zone is 75% strongly to intensely silicified breccia. Some sections (eg. 104.17-104.75 m) carry up to 6% finely disseminated pyrite. Laminated locally - 550 at 105.55 m. 105.76-106.79: dark green, fine grained, chloritized, non-silicified, weakly developed lamination or foliation.	SIVE - dark green, fine grained, silicified iths near upper contact, non-magnetic. Mostly d core. Lower contact at 60-650 to core	100.85-101.79: chloritized, limited silicification along fractures C Strongly silicified breccia at 101.55-101.73 m. 2		DESCRIPTION
		2554 2555		2550 2550 2551 2552 2553		546	, z	
		2-4 1		12-6		1-3	1063	
		106.79 107.77		102.99 103.52 104.16 104.74 105.75	01.78	100.86	FROM	SAMPLE
		107.77		103.52 104.16 104.74 105.75 106.79	102.28	101.78	TO TAGE	m
		0.98		1.01	0.50	0.92	107AL	
							.,	
		0.01		0.01	0.01	0.01	02, TON	ASSAYS

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McDermott

17 SHEET NO. \_\_\_ 7 OF 7

LANGRIDGE LIMITED - TORONTO - 366-1168	2	Γ
	ROM	FOOTAGE
	7	AGE
111.47: 114.85: 117.75-118.30: 120.30 meters	109.20-110.40:	
laminated at 60-650 to core axis. bedding at 550 to core axis. bedding at 650 to core axis. bedding at 650 to core axis.  END OF HOLE  CASING PULLED	at 650 to	DESCRIPTION
2555 565	20 20	1
2557 2557 2558 1 2560 1		1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1068 1068	4 C Bu
1-2 108.34 1-2 111.65 1 114.65 1 119.32	IDES FROM	SAMPL
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IDES FROM TO	SAMPL
1-2 108.34 109.23 1 114.65 112.65 1 117.65 118.59 1 119.32 120.30	IDES FROM TO	SAMPL
1-2 108.34 109.23 1 114.65 112.65 1 117.65 118.59 1 119.32 120.30	IDES FROM TO TOTAL	SAMPL
1-2 108.34 109.23 1 114.65 112.65 1 117.65 118.59 1 119.32 120.30	IDES FROM TO TOTAL TOTAL	SAMPLE
1-2 108.34 109.23 0.89 1 114.65 115.65 1.00 1 117.65 118.55 0.90 1 119.32 120.30 0.98	IDES FROM TO TOTAL TOTAL	SAMPL

ZAME OF	NAME OF PROPERTY	McDermott
HOLE NO.	Mc-83-48	LENGTH 145.08 meters
OCATION		
-ATITUDE	10 + 25 E	DEPARTURE 1 + 00 S
LEVATION		AZIMUTH 344° DIP -65°
STARTED		October 29, 19
1		

144.78 -57°	53.34	0	FOOTAGE
-57°	_63 <sup>0</sup>	-65°	DIP
			AZIMUTH
			DIP AZIMUTH FOOTAGE
			DIP
			HTUMIZA

HOLE NO. MC-83-48 SHEET NO. 1 OF 8

REMARKS BQ Core
Split for analysis

LOGGED BY A.W. Workman

OVERBURDEN  BASALT  DESCRIPTION  NO. 5	OVERBURDEN  BASALT	OVERBURDEN NO.	OVERBURDEN  DESCRIPTION  NO. SULPH-FROM  BASALT	OVERBURDEN  DESCRIPTION  NO. SULPH FROM  BASALT	OVERBURDEN  DESCRIPTION  SAMPLE  FOOTAGE  OVERBURDEN  BASALT
<u></u>	DE SULPER PROPERTY OF THE PROP	SULPH FROM	SILEPH. FROM	SAMPLE SULPH FROM TO TO 1 41.56 42.16	SAMPLE SULPH FROM TO TOTAL &  1 41.56 42.16 0.60
		41.50	FROM P	FROM TO  41.56 42.16	FROM TO TOTAL &

98.		69.10 88.11	FROM TO	
NOTE: Depth markers in core boxes 7-10 inclusive are very regular in spacing and indicate a regular core loss of 12-28cm (average 16.1cm per 3.05 m or 10'). Total loss between 69.19 and 96.62 m is 1.45 meters. These markers may be in error. Very little ground core is observed.  SEDIMENTS	s up to 5mm width are carbonate filled with up to rite locally (average less than 1%). Fractures be ngly hematized. White quartz veins are located at .96 m and 70.06-70.17. They carry abundant green 1 rock. Small quartz veins up to 1cm width are co A mylonitic carbonate 'vein' dips along the core .22 m. Below 75.90, tectonic breccia is noted loc.90 m).	66.97 - 68.27: white bull quartz, xenoliths below 68.05 m. 68.27 - 68.58: dark green xenolith - sediment?; lenticular, clastic texture. 68.58 - 69.10: white bull quartz.  BASALT  Medium to dark green, very fine grained to fine grained, aphanitic locally, and possibly variolitic above 70.60 m. Abundant tensional	DESCRIPTION	
			Z 0	
	<del></del>		1063	
			SAMPLE	
	<del></del>		F00TAGE	
	<del></del>		$\Pi \cap \Pi$	
<del></del>			TOTAL	
			,2	
0.01			ASSAYS	
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McDermott
83-48 SHEET NO. 3 OF 8

	98.55		98.55		FROM	FOO
	101.00		129.45		10	FOOTAGE
Two textural types are present - dark green, fine grained, chloritized clastic rock and grey to purple-grey cherty sediments. The amount of cherty beds varies throughout the zone and is often present as rounded to sub-angular fragments up to 2cm in size. Cherty sediments are well laminated locally (eg. 55° at 98.58 m). Brecciation of cherty beds may be due to rip-up action. Pyrite is present as a very fine grained dissemination.  98.55 - 99.90: cherty fragments in a green chloritized matrix.  99.90 -100.09: massive cherty sediments - chemical origin?	TRANSITIONAL SILICIFIED SEDIMENTS	The main silicified zone which forms the core of this section, is not nearly as well developed as is usual. Brecciation is not particularly strong anywhere in this zone and very few sections of significant thickness are free of chloritized, non-silicified rock. Average pyrite content, reflects the lack of substantial silicification and amounts to 3%. Up to 9% is noted locally. The upper and lower transition zones are wider than would be expected based upon the diminished thickness of the main silicified member. Therefore the alteration process has not been of sufficient duration to produce a thick central member.	MAIN MINERALIZED ZONE	18 laminated at 60-65° to core axis - uppermost part is weakly brecciated; lower contact is very well colouration may be compositional.  96.85 - 98.35: dark green, fine grained, chloritized, poorly bedded.  98.35 - 98.55: strongly sheared, abundant polished and chlorite coated planes. Fault at 98.40 m is denoted by a 2cm green mylonitic clay seam - possibly a bedding fault.		DESCRIPTION
2576 2577 2578 2579				C 2571 2572 2573 2574 2575	z o	
1-2				00000	1063	
98.35 98.90 99.90 100.60				94.25 95.10 95.97 96.62 97.44	FROM	SAMPLE
98.90 99.90 100.60 101.28				95.10 95.97 96.62 97.44 98.35	10	E
0.55 1.00 0.70 0.68				0.85 0.87 0.65(m 0.82 0.91	TOTAL	
				18 20 CC TC	-	
				9 0.37	32	
0.04 0.04				u	02,70%	ASSAYS
<del> </del>				<del></del>	1	<b>1</b> ~

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FORM W

LANGRIDGE LIMITED - TORONTO - 3	P-11P8	101.00	T OO E
		101.00 106.35	FOOT AGE
d may carry sliminor fault plesses to the core axis a percentage of 50%.		100.09-101.00: brecciated cherty sediments in a chloritized clastic matrix. Cherty fragments appear to have been ripped up from the top of the underlying zone.  MAIN SILICIFIED ZONE  Purple-grey to honey coloured strongly silcified and cherty sediments alternate locally with dark green chloritized sediments. Silicification is limited to breccia zones and together with cherty beds account for 80% of the section. Green chloritized rock is non-brecciated. The rock is well laminated locally. Pyrite content	DESCRIPTION
	C 2580 2581 2582 2583 2584	~	, o
·	2 5222		10ES
	101.28 101.86 102.33 102.79		FROM
	0 0000 0 0000		11   2
	101.86 102.33 102.79 103.43		F00TAGE
	0.58 0.47 0.46 0.64		TOTAL
			34
		<del></del>	1,
	0.10		02/10H
			<del>                                     </del>
<del></del>	1.78		02 TON
	0.14 0.06 0.17 0.09	Rech.	

HOLE NO. MC-83-48 SHEET NO. 5 OF 8

_	FOO	FOOTAGE			İ	SAMPLE					ASSAYS		
	FROM	10	DESCRIPTION	NO.	3 SULPH	FROM	FOOTAGE TO	TOTAL	32	<b>38</b>	0Z/TOM	NO1 20	ł
			pproximately 80-90% chloritized rock with seams up to lcm associated with fractures ure networks. Rock is weakly laminated A lcm pink carbonate vein is located at	C 2585	2-3	104.05	104.90	0.85			0.02		
			104.90-106.35: the percentage of siliceous rock increases to 80% as cherty layers become more abundant. The rock is better laminated below 105.80 m. Bedding at 105.95m is at 55° to the core axis. Chloritized sections increase in the lowermost 10cm.	2586 2587	4-3	104.90 105.77	105.77 106.35	0.87			0.04		
	106.35	129.45	TRANSITIONAL SILICIPIED SEDIMENTS										
			The zone is principally dark green fine grained and non-silicified. Localized sections of purple-grey silicification and cherty laminations make up 30-40% of the section. In general, silicification is confined to brecciated rock, and to narrow halos surrounding fractures. Bedding is not well developed in this region, generally only exhibited where cherty laminations are present. A cyclic repetition of cherty beds is noted locally. The							·			
66-1168			This transition occurs over intervals up to 1 meter.  106.35-107.01: minor silicification above 106.65 m then slowly increasing brecciation allows increasing	2588	2-4	106.35	107.01	0.66			0.02		
<u>мто – з</u>			lying zone - silicified halos to reasing silicification and ow 107.80 m.	2589	2-3	107.01	108.01	1.00			10.01		
TED - TORO			weakly silicified ized. Strongly 8.47 m - increasing to core axis.	2590	-5	108.01	108.97	0.96			0.01		
GE LIMI			grey, moderately to strongly brecciated and ly silicified.	2591	3-5	108.97	109.40	0.43	·		0.04		
LANGRID													

NGRIC	OGE LIMITED -	TORONT	0-36	6-1168								FROM	
				<del></del>					_			O X	FOOTA
												ő	AGE
	120.78-122.79:	120.53-120.78:	119.48-120.53:	118.88-119.48:		116.42-118.88:	115.05-116.42:		111.70-115.05:	110.87-111.70:	109.97-110.87:		
	caroonate filled. same as 116.42-118.88 m - well laminated locally (300 at 121.50 m), becoming very well bedded below 122.27 m. Bedding is highlighted by grey cherty laminations.	nts up to	35-400 to core axis. Tew microfaults running	ey to honey-grey coloured, strongly d with 5-10% relic chloritized rock. Pale zones carry 7-9% very fine pyrite. Zone is brecciated centrally at 119.22-119.34 m.		to purple-grey intensely developed recciation. Up to 3%		icified breccia are located at .97-113.16; 113.72-114.11 (80% 5-114.83 and 114.90-115.05 m.	rey-green with selected silicification of reas (breccia), up to 35cm in thickness.	purple-grey with honey coloured halos around fracture systems - moderately to strongly silicified.	ish-grey, becoming medium grey with depth - ional white to pink quartz seams parallel to		DESCRIPTION
	2608 2609	2607	2606	2605		2603 2604	2601	2597 2598 2599 2599	2595 2596	2594	C 2593	, z 0	
	1-2	1-2	1-2	<b>5</b> 1		~~~	20,0	22-2	ω 7	3-5	2-3	10ES	
	121.41 122.20	120.53	119.48	118.88		117.25 118.10	115.76 116.42	13.1 14.3	111.70 112.40	110.87	109.97	FROM	SAMPLE
	122.20 122.79	121.41	120.53	119.48				113. 114.		111.70	110.87	FOOTAGE	Ę
	0.79	0.88	1.05	0.60				0.57 0.75		0.83	0.80	TOTAL	
												,,	
					_						-	*	
	<b>##</b>	tr.	tr.	tr.		##	44	2000	0.01	0.01	0.01	02,70#	ASSAYS
												02 TON	
					<del></del>								1

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	138.2	129.4		FROM	F00
	2 139.29	138.22		70	TAGE
Purple-grey and aphanitic, strongly silicified with less than 20% grey-green moderately chloritized rock. A moderately brecciated top (138.22-138.52 m) grades downwards to a zone of alternating silicified and chloritized beds. Zone carries 2-3% finely disseminated pyrite.	LOWER MINERALIZED ZONE	Dark green, fine grained and weakly to moderately chloritized, minor silicification of fracture walls over 1-3mm. Minor cherty fragments up to 5cm. Zone has a tuffaceous texture locally - possibly ash fall. Sedimentary laminations are found in sections up to 30cm thickness (eg. 30° at 131.50 m). The rock is strongly fractured locally with polished chloritized surfaces.  131.58-132.11: INTRUSIVE - dark green, fine to very fine grained with 10-15% reddish-pink siliceous xenoliths. Very weakly magnetic. Chills are moderately well developed.	122.79-124.00: dark green, minor 8mm silicifed halos around fractures. Zone includes 15cm of lost (ground) core at 123.18-123.33 m. 124.00-129.45: dark green with 20% purple-grey silicified and cherty fragments. Clasts appear to have (in part) been ripped up from cherty beds. The zone 125.35-126.01 m is 50% siliceous material. The lower contact is a fracture system which has undergone minor penetrative silicification.		DESCRIPTION
2631		2619 2620 2621 2622 2623 2623 2624 2626 2627 2627 2629	C 2610 2611 2612 2613 2614 2615 2616 2617 2618	Ž O	
2-3		111111111111111111111111111111111111111	111111111111111111111111111111111111111	1069	
138.22		129.45 130.25 131.09 131.58 132.11 132.97 133.76 134.60 134.60 135.37 136.25	122.79 123.34 124.00 124.90 125.75 126.56 127.34 128.10 128.77	FROM	SAMPLE
139.29	·	130.25 131.09 131.58 132.11 132.97 133.76 134.60 135.37 136.25 137.09	123.34 124.00 124.90 125.75 126.56 127.34 128.10 128.77 129.45	10	m
1.07		0.80 0.84 0.49 0.53 0.86 0.79 0.84 0.87	0.55 0.66 0.90 0.85 0.78 0.78	TOTAL	
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				,,	
0.02		001111111111	0.010	02, TON	ASSAYS
				+	4 ~~

10 M

139.29 145.08

FROM

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FOOTAGE

McDermott

HOLE NO. \_\_\_\_MC-83-48 SHEET NO. 8 OF 8

 				oxdot	
CASING PULLED	145.08 meters END OF HOLE	Dark green, fine to very fine grained, with no silicified brecciation. Fractures have minor 1-2mm silicified halos. Minor cherty laminations are found locally in 5cm thick zones (eg. 140.26-140.31 m). These sections are the only zones of well laminated rock generally at 45° to core axis. Pyrite content is 1% as blebs up to 1mm.	SEDIMENTS		DESCRIPTION
		C 2632 2633 2634 2635		<b>z</b> 0	
		مع مع مع مع		3 SULPH	
		139.29 140.16 140.97 143.00		FROM	1 1
				Ш	SAMPLE
		140.16 140.97 141.90 143.70		FOOTAGE	m
 				П	
		0.87 0.81 0.93 0.70		TOTAL	
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 				_	
		0.01		02,70#	ASSAYS
				02 1	"

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LANGRIDGE LIMITED - TORONTO - 366-1168

DIAMOND DRILL RECORD

ZAME OF	NAME OF PROPERTY	McDermott
HOLE NO.	Mc-83-49	LENGTH 139.46 meters
LOC ATION		
LATITUDE	10 + 00 E	10 + 00 E DEPARTURE 0 + 93 S
ELEVATION	ĺ	AZIMUTH 344 DIP -650
STARTED_	November 1. 1	STARTED November 1, 1983 FINISHED November 4, 1983

FOOTAGE	9	AZIMUTH	AZIMUTH FOOTAGE	DIP	AZIMUTH
0	-65°				
30.48 -	-62°			,	
139.46	-58°				

		3
Casing	Split	REMARKS BO Core
Rulled.	for analysis	Ĉe

HOLE NO. MC-83-49 SHEET NO. 1 OF 8

C	S
Casing Pu	Split for
Pulled	ana

LOGGED BY A.W. Workman

NOTERBUNDEN  19.10    DESCRIPTION    RASALT	OVERDINDUEN    NASALT   Non-magnetic to very weakly magnetic. The base of the flow and spidotized and locally slitclified. The section carries 1X pyrite locally as base up to lam.   22.70: fine to medium grained.   19.10: 22.70: fine to medium grained.   22.10: 23.6: fine grained   100er half is weakly to moderately	DESCRIPTION  BASALT  Hedium green to grey-green, fine to medium grained massive flow. No. 100 TOTAL N. 100 TOTAL No. 201/100 Total No. 100 TOTAL N. 100 TOTAL No. 100 TOTAL NO. 100 TOTA		19.10	0	FROM	FOOT
BASALT  BASALT  Breen to grey-green, fine to medium grained magnetic to very weakly magnetic. The base of the planes which developed during flowage are mode ized and locally silicified. The section carrly as blebs up to 1mm.  - 22.70: fine to medium grained.  - 25.10: fine to medium grained.  - 25.25: medium to coarse grained.  - 26.25: medium to coarse grained.  - 30.37: fine to medium grained - brecciated base is at flow contact at 450 to co.  - 30.80: aphanitic to very fine grained.  - 31.10: fine grained, weakly to moderately sepidotized locally.  - 42.30: fine to medium grained.  - 48.00: fine grained, locally very fine; a zero to pof section carries abundant quar veins up to 2cm at 200 to core axis.  - 49.80: fine to medium grained, abundant epidotized flowage structures.  - 57.05: fine, occasionally medium grained.  53.46 m is strongly silicified brecco bottom?). Sharp contact at 55.46 m	NASALT  RASALT	OVERNOUNDEN  DESCRIPTION  RASALT  No. St. 1007/06		58.30	19.10	70	၈
PTION  PT	medium grained massive flow.  c. The base of the flow and glowage are moderately The section carries 1% pyrite recia.  Ined. as ined. as the core axis.  Ined. brecciated below 30.10 m. tract at 450 to core axis.  Ined. brecciated below 30.10 m. tract at 450 to core axis.  Ined. brecciated below 30.10 m. tract at 55.41-  Ined. bre	medium grained massive flow.    Output	Medium green to Non-magnetic to shear planes whepidotized and locally as bleb 19.10 - 22.70: 22.70 - 23.67: 25.10 - 26.25: 26.25 - 30.37 - 30.80: 31.10 - 38.05: 38.05 - 39.00: 42.30 - 42.30: 42.30 - 42.30: 49.80 - 52.00: 52.00 - 57.05:	BASALT	OVERBURDE		
ive flow. flow and ely 1% pyrit 1% pyrit ow 30.10 axis. cified; cified; of 70cm carbonate carbonate flow 450 to	NO. SUPPH FROM TO TOTAL % % 02/TON  B. A M P L E  A 5 5 A Y  TO TOTAL  W % 02/TON	NO. SUBH FROM TO TOTAL % QZ/TON  B. SAMPLE  ASSAM  ASSAM  ASSAM  OZ/TON	medium grained massive c. The base of the flow g flowage are moderately The section carries 1% rained.  Ined.  Ined.  Ined - brecciated below 3 tact at 450 to core axis fine grained.  Ined.		N	:	E S C R - P T - O
	FROM TO TOTAL % % OZ/TON	A M P L E A S S A Y  FROM TO TOTAL % % 02/TON				•	
!.	FOOTAGE TO TOTAL % % 02/TON	FOOTAGE TO TOTAL % % 02/TON				FROM	> 3
S S S S S S S S S S S S S S S S S S S	% AS S A ( OZ/TON	% % oz/10N				FOOTAGE	r
S S S S S S S S S S S S S S S S S S S	% OZ/TON	% OZ/TON				TOTAL	
SAMPLE SUPPH FROM TO	OZ/TON	OZ/TON				<b>3</b> €	
SAMPLE FROM TO TOTAL	S S A Y	OZ/TON A N				*	
SAMPLE SULPH FROM TO TOTAL % %						OZ/TO	SS
SAMPLE FOOTAGE X X							

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LANGRIDGE LIMITED - TORONTO - 366-1168

TO DESCRIPTION  TO SAMPLE  SAMPLE  SAMPLE  SAMPLE  SOUTH FOOTAGE  TO 1011  STORE SHADE  FOOTAGE  TO 1012  STORE SHADE  FOOTAGE  TO 1014  FOOTAGE  TO 1014  FOOTAGE  TO 1014  T	TO DESCRIPTION  TO SAMPLE  SAMPLE  SAMPLE  SAMPLE  SAMPLE  STOTAGE  70.05 - 58.30: fine grained with several epidotized breccia fragments up to lcm in size. Zone is strongly fractured with quartz-carbonate veining.  GlARTZ VEIN  White buil quartz with abundant dark green xenoliths in the uppermost 13cm and the lowermost 75cm. The upper part, at the contact, carries minor 1-2cm pyritized fractures. The lower contact zone is distinguished by strong pyritization of foliated (50° to core axis) sedimentary fragments. Up to 3% pyrite is noted with occasional 1-2cm blebs of chalcopyrite.  SEDIMENTS  Medium to dark green, fine to very fine grained, moderately foliated 2637 0-1 61.23 62.20 0.93 and parted parallel to foliations. The rock is weakly to 2638 0-1 62.20 63.09 0.89 good evidence of depositional laminations. The rock is weakly to 2638 0-1 64.15 65.05 0.90 0.85 repulsements after the foliation for the foliation of the foliation at 10cal basis. White carbonate 2639 0-1 64.15 65.05 0.90 0.81 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.00 0.81 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.81 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.81 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly to 2640 0-1 65.05 65.05 0.90 0.85 for poliation at 10cal basis. The rock is weakly t	05 05 08 08		61.05	58.30	FROM	F
DESCRIPTION  DESCRIPTION  TO 1. VIVE TO 1. THE PROPERTY OF THE	DESCRIPTION  DESCRIPTION  DESCRIPTION  TABLE 1  SAMPLE ASSAYS  TO 1-TOP OF THE GRAINE UP to low fire several epidotized breccia fragments up to low fine size. Zone is strongly fractured with abundant dark green xenoliths in the uppermost lice and the lowermost 75cm. The upper parts at the contact, carries minor 1-2mm pyritized fractures. The lower contact core is distinguished by strong pyritizetion of foliated (500 to core axis) secilementary fragments. Up to 3X pyrite is noted with contact of depositional laminations. The rock is weakly to moderately carbonatized on a local basis. White carbonate replacement factors out along the foliation and highlights the life to cally feed on a local basis. White carbonate replacement factors of the long the foliation and highlights the life to cally fractured, cocasionally brecolated. Distants movement has allowed carbonate to 12 parts locally fractured, cocasionally brecolated. Distants movement has allowed carbonate to 12 parts brecolated. Distants movement has allowed carbonate to 12 parts brecolated. Distants movement has allowed carbonate to 12 parts brecolated. Distants movement has allowed carbonate to 12 parts brecolated. Distants movement has allowed carbonate to 12 parts brecolated. Distants movement has allowed carbonate to 12 parts brecolated up to 3 mm.  Description of the collection of the foliated of angular chloritized of the collection of the foliated moderately dayloped brecola. Non-magnetic.  Description of the collection of the foliated of angular chloritized of the foliated foliated angular chloritized of the foliated		75.00			70	OTAGE
SAMPLE  TOUTAGE  TOUTAGE  TO TOTAL  TO TO TOTAL  TO TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TOTAL  TO TO TOTAL  TO TO TOTAL  TO TO TOTAL  TO TO TOTAL  TO TO TOTAL  TO TO TOTAL  TO TO TOTAL  TO TO TO TOTAL  TO TO TO TOTAL  TO TO TO TO TO TO TO TO TO TO TO TO TO T	SAMPLE  FOTAGE  10615  FROM TO 107AL  1	green, very fine grained to aphanitic, and generally finely ically brecciated. Dilatant movement has allowed carbonate he voids in breccia. Non-magnetic.  - 72.00 strongly fractured, occasionally brecciated with 5 intensely silicified moderately developed breccia.  - 72.63: very finely brecciated - angular chloritized fragments up to 3mm.  - 73.20: flow breccia - rounded fragments up to 7cm in size with reaction rims.  - 75.00: fine grained, weakly brecciated; pink carbonate in fractures.	good evidence of depositional laminations. The rock is weakly to moderately carbonatized on a local basis. White carbonate replacement feathers out along the foliation and highlights the 'bedding' locally (eg. 60° at 66.40 m). The zone contains up to 1% pyrite locally.  BASALT  BASALT	contact, carries minor 1-2mm pyritized fractures. The lower contact zone is distinguished by strong pyritization of foliated (50° to core axis) sedimentary fragments. Up to 3% pyrite is noted with occasional 1-2mm blebs of chalcopyrite.  SEDIMENTS  Medium to dark green, fine to very fine grained, moderately foliated and parted parallel to foliation (45° at 61.20 m). Very little	57.05 - 58.30: fine grained with several epidotized breccia fragments up to lcm in size. Zone is strongly fractured with quartz-carbonate veining.  QUARTZ VEIN  White bull quartz with abundant dark green xenoliths in the uppermost 13cm and the lowermost 75cm. The upper part, at the		DESCRIPTION
SAMPLE    SULPH   FOOTAGE   1	SAMPLE ASSAYS    SULPH   FOOTAGE		640	637	636		
FROM TO TOTAL 3 3 4 4 5 5 5 5 5 5 5 6 5 . 9 6 1 . 2 3 6 2 . 2 0 . 9 7 6 2 . 2 0 6 3 . 9 9 0 . 8 9 6 4 . 1 5 6 5 . 9 0 0 . 8 5 6 5 . 9 0 0 . 8 5 6 6 . 8 5 6 7 . 6 6 0 . 8 1	SAMPLE ASSAYS    FOOTAGE   10   10   10   10   10   10   10   1		0 - 1	0-1	1-2	SULPH	
FOOTAGE 70 107AL 7. 7. 61.23 0.93 61.23 0.97 62.20 0.97 63.09 0.89 65.05 0.90 65.06 0.81 67.66 0.81	FOOTAGE 70 107AL 70 107AL 70 107AL 71 02.70# 02 61.23 0.93 ET. 62.20 0.97 ET. 63.09 0.89 ET. 65.05 0.90 ET. 67.66 0.81 ET.		65.0 66.8	61.2	60.3	$\Pi$	
24 Jan	ASSAYS  CTT.  CTT.  CTT.  OZ. 70M  OZ.  OZ.  OZ.  OZ.  OZ.  OZ.  OZ.  OZ					Ш	ÅPLE
	ASSAYS  CTT.  CTT.  CTT.  OZ.70N  OZ.  OZ.  OZ.  OZ.  OZ.  OZ.  OZ.  OZ		0.85	0.97	0.93	TOTAL	
	ASSAYS CTT. CZ. TON CTT.					33	
ASSAYS	OZ AYS					25.	
				й п н н	r.	02,TON	ASSAYS

HOLE NO. MC-83-49

McDermott SHEET NO. 3 OF 8

	83.65		75.00	FROM	FOOT
	103.22		83.65	ō	TAGE
This zone is composed of three sections; a thin upper transitional zone, the central 'Main Silicified Zone', and the lower transitional zone. The central zone is an intensely silicified breccia zone. The flanking members are less well silicified rocks originally very similar to the central zone. With silicification, pyrite contents increase up to 7% locally, usually as a very fine dissemination and occasionally, as clots up to 3mm. The sequence of events operating in the 'Main Silicified Zone' is:  (1) brecciation and chloritization (2) penetration along fracture networks of hematite and silica bearing fluids (3) later fracturing of silicified rocks and introduction of silica as clear, colourless quartz.	MAIN MINERALIZED ZONE	Medium to dark green, fine to very fine grained; weakly to moderately foliated - often highlighted by carbonatization which feathers out along the foliation (eg. 50-55° at 75.02 m). The rock is well laminated locally becoming more strongly laminated below 81.45 m. Minor brecciation is noted throughout the zone. 75.00 - 81.45: foliated, laminated locally, weakly to moderately carbonatized. Core is ground and lost at 78.45-78.60 m (minor), and 79.40-79.98 m (34cm lost). Bedding at 80.05 m at 60° to core axis. 81.45 - 83.18: well laminated throughout - alternating laminations are white and siliceous, and, dark green and chloritized. Bedding at 40-45° at 81.50 m. 83.18 - 83.65: rock carries 10-15% cherty lenticular fragments up to 2cm in length oriented parallel to the laminations. The fragments are probably rip-up class now layered at 55° to core axis at 83.55m.	SEDIMENTS		DESCRIPTION
·		2642 2643 2644 2646 2646 2647 2648 2649 2650 2651		z o	
·				% SULPH	Ì
		75.02 76.07 76.95 77.80 79.40 (34c 80.53 81.45 82.32		FROM	SAMPLE
<del></del>		76.07 76.95 77.80 79.40 80.53 81.45 82.32 83.18		FOOT AGE	'n
		1.05 0.88 0.85 0.80 0.80 1.13 d and 1 0.92 0.87 0.87		TOTAL	
		lost c			
		Cone)			
		0000 0000000000000000000000000000000000		NOT - 10	ASSAYS
				<del>                                     </del>	ľ

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TRANSTITONAL SILICITED SEDIMENTS  TRANSTITONAL SILICITES  TRANSTITONAL	84 • 5	83.65	FROM	۴٥
TRANSITIONAL SILICIFIED SEDIMENTS  The rock is essentially the same as the overlying sediments but is also. Fragments increase is niste down-section into a massive cherty fragments increase is niste down-section into a massive cherty between the state of the failt increase is niste down-section into a massive cherty sediments but is core axis at 539-84.21 at 33.98-84.23 0.88 0.02 at 33.98-34.12 at the matrix to the class is dark green, lasted and at 84.27 m cutting the core axis at 539. Secciation of the cherty sediments and chloritisation of fractures is need achieved the cherty sediments and chloritisation of fractures is need achieved the cherty sediments and chloritisation of fractures is need achieved the cherty sediments and chloritisation of fractures as at 539. Secciation of the cherty sediments and chloritisation of fractures and chloritisation of fractures and chloritisation of fractures and chloritisation of the chlority process axis at 40-459, is mylonitic and carries pink siliceous fragments - located at the section has been at one carries of the section and the section has been accomply fractured and dilatent-type movement has allowed the postings to be commented with specularity. The section has been strongly fractured and chlorites and chlorites is seldom absent from fractures. Some 26513 m. Chlorites is seldom at 184.23 at 184.25 at 184.		84.	70	OTAGE
SAMPLE ASSAYS    1	The rock is essentially the same as the overlying sediments but is more poorly laminated with larger cherty fragments up to 5cm in size. Fragments increase in size down-section into a massive cherty bed at 83.98-84.12 m. The matrix to the clasts is dark green, clastic and may be tuffaceous. A 2cm green clay seam (FMUT) is noted at 84.27 m cutting the core axis at 550. Brecciation of the cherty sediments and chloritization of fractures is noted each side of the fault. Another fault zone cutting the core axis at 40-450, is mylonitic and carries pink siliceous fragments — located at 84.43-84.53 m.  MAIN SILICIFIED ZONE  Purple-grey to honey coloured, aphanitic to very fine grained, generally strongly brecciated and intensely silicified. Relic sedimentary laminations are noted locally. The section has been strongly fractured and dilatant-type movement has allowed the openings to be cemented with specularite. Intense silicification is not well developed in the section above 86.13 m. Chlorite is sediom absent from fractures.  84.53 - 84.91; fault block - silicified, intensely fractured. Some silica dumping in lowermost 20cm. Section carries 5-72 very fine pyrite above the quartz-rich zone, 1-27 below. Minor slickensides parallel to core axis, developed in fractures.  84.91 - 85.59; probable fault block - highly fractured with choritized partings. Base of section is very strongly broken.  85.59 - 86.26; more characteristic purple-grey colour, chlorite not as common in fractures and change to specular hematite takes place at 86.13 m along single fractures. Silicification is stronger and appears to emanate from below.	TRANSITIONAL SILICIPIED		DESCRIPTION
SAMPLE ASSAYS  FROM TO TOTAL 7 02/70M 02  83.65 84.53 0.88 0.02  84.53 84.91 0.38 0.05  84.91 85.59 0.68 0.04  85.59 86.26 0.67 0.01	2652 2652 2653 2653		ě	
FOOTAGE 10 101/L 10 1	N N W W		1068	
NSSAYS  101 TOTAL  1	83.65 84.91 85.59		FROM	SAMPL
O.88 0.02 0.02 0.08 0.02 0.05 0.068 0.067 0.01	84.53 84.91 85.59		TO	m
ASSAYS  0.02  0.02  0.04  0.01	0.88 0.68		707/1	
02/10M 02 0.02 0.04 0.04			,,	
02.			,,	
02	0.02		02/TOM	ASSAY
			02, 70,	5

FROM

7

FOOTAGE

5 OF 8

96.26 - 87.76: purple-grey to mauve, intensely bracciated carrying 10% hematite and 3-4% pyrite. Intense silicification in fragments along major fracture systems and in large dilatant zones. Many small, less than 1cm, zones of relic chloritized rock remain which are only partially invaded by silicification. The zone 87.14-87.43 m is nearly completely silicified. Fractures from 87.43-87.74 m are strongly chloritized. Fractures from 87.43-87.74 m are strongly chloritized. Fractures from 87.43-87.74 m are strongly chloritized patches patches up to 2cm in size.  90.95 - 91.72: intensely silicified breccis; pale purple-grey with patches up to 2cm in size.  90.95 - 91.72: intensely silicified but increasing number of chloritized fractures and patches — up to 20% of section. Minor zones of silicified breccis carry 8.10% pyrite locally.  TRANSITIONAL SILICIFIED SEDIMENTS  The section is dark green and fine grained becoming greenish grey and often purple-grey where strongly brecciated and subsequently silicified. Silicification has altered about 50% of the section in zones up to 50cm in width. Pyrite content generally increases with silicified. Silicified zones are located at 91.99-92.12; 92.35-92.83 m is composed of 50% silicified breccis at 91.99-92.11; 92.59-93.73; 93.39-93.73; 93.90-93.98; 94.01-94.11; 92.16-94.20; 97.795.37; 93.39-93.73; 93.90-93.98; 94.01-94.11; 92.16-94.20; 97.795.37; 93.59-95.92; and 96.83-97.01 m. The zone from 95.92-96.83 m is composed of 50% silicified breccis in 5cm seams carrying 3-5% pyrite. Several sections carry high percentage silicified rock increase in size and number downhole. These areas of non-silicified rock increase in size and number downhole. These areas of non-silicified rock increases of 8.36-99.23 m; with increasing chloritization at 99.23-100.82 m (20-30%) and little silicification (10-20%) from 100.82-103.22 m.		DESCRIPTION	NO.	* SULPH	SAMPL	FOC			**		,
86.26 - 87.76: purple-grey to mauve, intensely bre 10% hematite and 3-4% pyrite. Intensely bre silicification in fragments along n systems and in large dilatant zones less than lcm, zones of relic chlor remain which are only partially invented in the zone strongly chloritized.  87.76 - 90.47: intensely silicified breccia; pale a moderate number of chlorite-plug decreasing with depth. Relic lamin locally: 450 at 89.65 m.  90.47 - 90.95: same as 87.76-90.47 m but with 10% patches up to 2cm in size. Intensely silicified but increasing chloritized fractures and patches section. Minor zones of silicified becoming and often purple-grey where strongly brecciated and silicified. Silicification has altered about 50% czones up to 50cm in width. Pyrite content generali silicification. Major silicified zones are located 92.35-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.88; 94.14-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97; from 95.92-96.83 m is composed of 50% silicified became carrying 3-5% pyrite. Several sections carry silicified rock increase in size and number Typical sections are located at 98.36-99.23 m; with chloritization at 99.23-100.82 m (20-30%) and little chloritization at 99.23-103.92 m.	┿		4-	<u>0</u> 6.3	$\neg$	FROM	Ш	Ш	10	TO TOTAL	TO TOTAL T
less than 1cm, zones of relic chlor remain which are only partially invalidation. The zone 87.14-87. silicification. The zone 87.14-87. completely silicified. Fractures if are strongly chloritized.  87.76 - 90.47: intensely silicified breccis; pale a moderate number of chlorite-plug decreasing with depth. Relic lamin locally: 450 at 89.65 m.  90.47 - 90.95: same as 87.76-90.47 m but with 10% patches up to 2cm in size.  90.95 - 91.72: intensely silicified but increasing chloritized fractures and patches section. Minor zones of silicified 8-10% pyrite locally.  TRANSITIONAL SILICIFIED SEDIMENTS  The section is dark green and fine grained becoming and often purple-grey where strongly brecciated and silicified. Silicification has altered about 50% c zones up to 50cm in width. Pyrite content generall silicified. Silicification has altered and 96.83-93.93; 93.9-93.73; 93.90-93.98; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.14-94.20; 94.77-95.37; 95.32-95.92; and 96.83-99.11e. Several sections carry salicified rock increase in size and number Typical sections are located at 98.36-99.23 m; with chloritization at 99.23-100.82 m (20-30%) and littly (10-20%) from 100.82-103.22 m.		- 87.76: purple-grey to mauve, intensely brecciated 10% hematite and 3-4% pyrite. Intense silicification in fragments along major fragments along major fragments along major fragments. Many	C 2656 2657	3-4 3-5		4 86.26 5 87.14		86.26 87.1 87.14 87.7	86.26 87.14 87.14 87.76	86.26 87.14 87.14 87.76	86.26 87.14 87.14 87.76
87.76 - 90.47: Intensely silicified breccia; pale a moderate number of chlorite-plugg decreasing with depth. Relic lamin locally: 450 at 89.65 m.  90.47 - 90.95: same as 87.76-90.47 m but with 10% patches up to 2cm in size.  90.95 - 91.72: Intensely silicified but increasing chloritized fractures and patches section. Minor zones of silicifies becoming and often purple-grey where strongly brecciated and silicified. Silicification has altered about 50% c zones up to 50cm in width. Pyrite content generalisilicification. Major silicified zones are located 92.35-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.14-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97; from 95.92-96.83 m is composed of 50% silicified by seams carrying 3-5% pyrite. Several sections carry silicified rock increase in size and number Typical sections are located at 98.36-99.23 m; with chloritization at 99.23-100.82 m (20-30%) and littly (10-20%) from 100.82-103.22 m.		elic chloritized rock tially invaded by 87.14-87.43 m is nearly ractures from 87.43-87.74									) 0.154 ) 4.21 ) (13.8'
90.47 - 90.95: same as 87.76-90.47 m but with 10% patches up to 2cm in size. 90.95 - 91.72: intensely silicified but increasing chloritized fractures and patches - section. Minor zones of silicified 8-10% pyrite locally.  TRANSITIONAL SILICIPIED SEDIMENTS  The section is dark green and fine grained becoming and often purple-grey where strongly brecciated and silicified. Silicification has altered about 50% c zones up to 50cm in width. Pyrite content generall silicification. Major silicified zones are located 92.35-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.14-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97; from 95.92-96.83 m is composed of 50% silicified by seams carrying 3-5% pyrite. Several sections carry silicified rock increase in size and number Typical sections are located at 98.36-99.23 m; with chloritization at 99.23-100.82 m (20-30%) and little (10-20%) from 100.82-103.22 m.		- 90.47: intensely silicified breccia; a moderate number of chlorite decreasing with depth. Relic		. A A . W	3-5	87.76 88.73 88.73		87.76 88.73 89.16	87.76 88.73 0. 88.73 89.16 0. 89.16 89.75 0.	87.76 88.73 0.97 88.73 89.16 0.43 89.16 89.75 0.59	87.76 88.73 0.97 88.73 89.16 0.43 89.16 89.75 0.59
chloritized fractures and patches - up to 20% of section. Minor zones of silicified breccia carry 8-10% pyrite locally.  TRANSITIONAL SILICIFIED SEDIMENTS  The section is dark green and fine grained becoming greenish grey and often purple-grey where strongly brecciated and subsequently silicified. Silicification has altered about 50% of the section zones up to 50cm in width. Pyrite content generally increases with silicification. Major silicified zones are located at 91.99-92.92.35-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.01-94.11; 94.14-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97.01 m. The zerom 95.92-96.83 m is composed of 50% silicified breccia in 5cm seams carrying 3-5% pyrite. Several sections carry high percent silicification with 10-30% green chloritized patches. These are of non-silicified rock increase in size and number downhole. Typical sections are located at 98.36-99.23 m; with increasing chloritization at 99.23-100.82 m (20-30%) and little silicification; from 100.82-103.22 m.		- 90.95: same as 87.76-90.47 m but with 10% patches up to 2cm in size.	2662		1-2		90.47	90.47 90.95 0.	90.47 90.95 0.	90.47 90.95 0.48	90.47 90.95 0.48 0.08
TRANSITIONAL SILICIPIED SEDIMENTS  The section is dark green and fine grained becoming greenish great and often purple-grey where strongly brecciated and subsequently silicified. Silicification has altered about 50% of the section zones up to 50cm in width. Pyrite content generally increases we silicification. Major silicified zones are located at 91.99-92.35-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.01-94.11; 94.14-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97.01 m. The zerom 95.92-96.83 m is composed of 50% silicified breccia in 5cm seams carrying 3-5% pyrite. Several sections carry high percent. silicification with 10-30% green chloritized patches. These are of non-silicified rock increase in size and number downhole. Typical sections are located at 98.36-99.23 m; with increasing chloritization at 99.23-100.82 m (20-30%) and little silicificat. (10-20%) from 100.82-103.22 m.		- 91.72: intensely silicified but increasing chloritized fractures and patches - section. Minor zones of silicified 8-10% pyrite locally.	2663		2-3	ı	-3 90.9	-3 90.95 91.	-3 90.95 91.72 0.	-3 90.95 91.72 0.77	-3 90.95 91.72 0.
section is dark green and fine grained becoming greenish greenisted of the purple-grey where strongly brecciated and subsequently icified. Silicification has altered about 50% of the section is up to 50cm in width. Pyrite content generally increases will icification. Major silicified zones are located at 91.99-92.18; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.01-94.11; 4-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97.01 m. The zero of 5.92-96.83 m is composed of 50% silicified breccia in 5cm is carrying 3-5% pyrite. Several sections carry high percent. Icification with 10-30% green chloritized patches. These are non-silicified rock increase in size and number downhole. Ical sections are located at 98.36-99.23 m; with increasing pritization at 99.23-100.82 m (20-30%) and little silicificat20%) from 100.82-103.22 m.	<u> </u>	SILICIFIED	2664 2665		1-3	$\begin{vmatrix} 1-3 & 91.72 \\ 9-4 & 92.35 \end{vmatrix}$	91.	91.72 92.35 0.	91.72 92.35 0.	91.72 92.35 0.63 92.35 92.78 0.43	91.72 92.35 0.
cified. Silicification has altered about 50% of the section is up to 50cm in width. Pyrite content generally increases will cification. Major silicified zones are located at 91.99-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.01-94.11; 4-94.20; 94.77-95.37; 95.52-95.92; and 96.83-97.01 m. The zone scarrying 3-5% pyrite. Several sections carry high percent cification with 10-30% green chloritized patches. These are con-silicified rock increase in size and number downhole. Included sections are located at 98.36-99.23 m; with increasing pritization at 99.23-100.82 m (20-30%) and little silicifications from 100.82-103.22 m.		section is dark green and fine grained becoming	2666 2667		1-2	92.	92.78 93.3 93.39 94.2	92.78   93.39   0 93.39   94.20   0	92.78 93.39 0. 93.39 94.20 0.	92.78 93.39 0.61	92.78 93.39 0.61
licification. Major slifcified .35-92.78; 92.92-93.07; 93.39-9 .14-94.20; 94.77-95.37; 95.52-9 om 95.92-96.83 m is composed of ams carrying 3-5% pyrite. Seve licification with 10-30% green non-silicified rock increase i pical sections are located at 9 loritization at 99.23-100.82 m 10-20%) from 100.82-103.22 m.		cified. Silicification has altered about 50% of the section up to 50cm in width. Pyrite content generally increases w	2668		1-2	94	94.20	94.20 94.77 0.5 94.77 95.37 0.6	94.20 94.77 0. 94.77 95.37 0.	94.20 94.77 0.57 94.77 95.37 0.60	94.20 94.77 0.57 94.77 95.37 0.60
om 95.92-96.83 m is composed of ams carrying 3-5% pyrite. Seve licification with 10-30% green non-silicified rock increase i pical sections are located at 9 pical section at 99.23-100.82 m 10-20%) from 100.82-103.22 m.		92.35-92.78; 92.92-93.07; 93.39-93.73; 93.90-93.98; 94.01-94.11;	2671		2-3	2-3 95.92	95.92	95.92 96.83	95.92 96.83 0.	95.92 96.83 0.	95.92 96.83 0.
licification with 10-30% green non-silicified rock increase i pical sections are located at 9 loritization at 99.23-100.82 m 10-20%) from 100.82-103.22 m.		from 95.92-96.83 m is composed of 50% silicified breccia in 5cm	2673 2674		0-1	97.55	97.55	97.55 98.36 0.	97.55   98.36   0.	97.55   98.36   0.	97.55 98.36 0.81 98.36 99.23 0.87
pical sections are located at 9 loritization at 99.23-100.82 m 0-20%) from 100.82-103.22 m.		110	2675			99.23	99.23	99.23 100.00	99.23 100.00 0.	99.23 100.00 0.	99.23 100.00 0.77
		pical sections are located at 9	2677				100.82	100.82 101.65 0.	100.82 101.65	100.82 101.65	100.82 101.65 0.83
			2679			1 102.42		102.42 103.22 0	102.42 103.22 0	102.42 103.22 0	102.42 103.22 0.80 cr

91.72

103.22

FOOTAGE
FROM TO
103.22 126.38 SEDIMENTS
Dark green, fine grained, moderately chloritized, gener non-laminated - may be weakly foliated locally. Section occasional zones of purple-grey, intensely silicified folioritized matrix (eg. 106.49-106.55; 108.49-108.56 and 112.13 m).  109.83-110.00: carries green chloritized fragments up networks of purple-grey silicified breck fracture controlled.  111.40-111.60: purple-grey silicified brecking purple-grey silicified brecking three controlled.  113.40-114.13: irregularly developed silicified brecking systems.  114.50-114.65: same as 113.40-114.13 m.  116.03: weakly laminated at 250 to core axis.  117.96-126.38: occasional purple-grey, intensely silicified brecking purple-grey, intensely silicified brecking at 120.09-120.19 m is well laminated, is silicified. Bedding at 400 to core axis second zone, laminated at 123.85-123.95 moderately silicified at 123.85-123.95
126.38 137.56 VARIABLY
Zone is half dark gr siliceous material - laminations. Where strongly silicified. zones. Cherty beds contact between chlo

PIMMYNY PRILL RETURN

HOLE NO. MC-83-49

SHEET NO. 6 OF 8

HOLE NO. \_\_\_\_\_MC-83-49 SHEET NO. Z OF 8

LANGRIDGE LIMITED - TORONTO - 366-1168	_	τ
	F ROM	FOOTAG
		AGE
to core axis is very sharp and may delineate a fault at edge of preciation predating silicification. Larger silicified zones carry 2-4% pyrite as a very fine dissemination and as clots up to 2cm. Major zones of silicification are located at 127.20-127.30 m; 127.61-128.00; 128.80-129.00; 129.17-129.67 (60% siliceous fragments); 129.55-129.87; 130.25-130.45; 130.98-131.07 and from approximately 131.80-131.95 m. Locally, silicification is microfault controlled and offset against chloritized rock. Seldom the process of solely chloritized rock exceed 15cm in thickness. The zone from 129.17-129.67 m carries 50-60% honey coloured brecciated cherty beds in a chloritized clastic matrix. Colour of the breccia fragments may be a degenerative result of faulting and brecciation. The zone grades into purple-grey silicified breccia at 129.67 m. Some zones of brecciated beds are convoluted and deformed possibly due to soft sediment deformation (eg. 130.00-130.45 m).  126.38-131.95: 35-40% silicified breccia, laminated locally usually highlighted by cherty seams (450 to core at 131.00 m). Zone includes 25cm of ground and lost composed of silicified breccia. Approximately 15cm core pround and lost at 134.15-134.30 m. A 10cm section at 135.20 m is well laminated at 400 to the core axis. The section below 156.25 m is 80-85% silicified breccia with up to 5% pyrite locally.  135.55-137.56: equivalent to lower mineralized zone - uppermost 70cm is 50% composed of 1-3cm 5107fied breccia xis. The section below 156.25 m is 80-85% silicified breccia with up to 5% pyrite locally.		DESCRIPTION
C C 2702 2703 2700 27704 27705 27707 27711 27712 27713		Z 0
2011 101 110 000 000 000 000 000 000	Ē	* SULPH,
127.20 128.00 128.00 129.67 130.57 131.52 136.25 136.25	FROM	SAMPL
128.00 128.80 129.67 131.52 132.55 136.25 137.56	10	E FOOTAGE
0.80 0.80 0.95 0.95 0.66	TOTAL	
es 0.78 es 0.78		
<u> </u>	1.	
0.01 0.01 0.01 0.01 0.01 0.02 0.02 0.03	NO1 . 10	ASSAYS
0.425 5.35 6,	02 10%	
0.04 0.02 0.105	Rech.	

				137.56	FROM	F
					<u>*</u>	FOOTAGE
				139.46	70	AGE
	CASING PULLED	139.46 meters END OF HOLE	Dark green, fine grained and chloritized, with 5-10% silicified breccia seams up to 2cm in width. The number and thickness of these 2 seams rapidly decrease down-section. The rock becomes well foliated, perhaps crudely laminated towards the base of the hole (eg. 35° to core axis at 139.25 m).	SEDIMENTS		DESCRIPTION
			C 2714 2715 2716		Š	
						1
			سو سے ضو		7 SULPH	
<del></del>			1 137.56 1 138.26 1 138.91		DES FROM	1
			1 137.56 1 138.26 1 138.91		ROL	VAST
			سو سے ضو		FROM	JAM1
			1 137.56 138.26 1 138.26 138.91 1 138.91 139.46		FROM TO	200
			1 137.56 138.26 1 138.26 138.91 1 138.91 139.46		FROM TO TOTAL	97M7
			1 137.56 138.26 1 138.26 138.91 1 138.91 139.46		FROM TO TOTAL 3	37 7 0
			1 137.56 138.26 0.70 1 138.26 138.91 0.65 1 138.91 139.46 0.55		FROM TO TOTAL 3	JAM1

HOLE NO. \_\_\_\_\_FIC-03-47

SHEET NO. OUT O

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## DIAMOND DRILL RECORD

MCDermott  LENGTH	INS. 27 meters  O + 74 S  O + 74 S  November 7, 1983  DESCRIPTION  DESCRIPTION  DESCRIPTION  MOVEMBER 7, 1983  SAMPLE  SAMPLE  109,73 -63°  109,73 -63°  NO. 50EST FROM TO TOTAL  TO medium grained with coarse and very fine flow is massive and unstructured. It is weakly magnetic locally. to medium grained, occasional (less than 1%) if fled and epidotized breccia zones from 23.20- m and epidotized breccia zones from 23.20- m and epidotized breccia. to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained. Race is finer grained to aphanitic; 60% epidotized and epidotized batches. Minor carbonated with fine grained to aphanitic; 60% epidotized and epidotized to aphanitic; 60% epidotized and epidotized to aphanitic; 60% epidotized and	POOTAGE DIP AZIMUTH POOTAGE DIP AZIMUTH  109.27 meters  0 + 74 S 0 + 74 S 0 + 74 S 109.73 -630  November 7, 1983  DESCRIPTION  DESCRIPTION  DESCRIPTION  SAMPLE  109.73 -630  NO. Sign of the flow is massive and unstructured. It is weakly magnetic locally. to medium grained, occasional (less than 1%) if fled and epidotized breccia zones from 23.20- m and epidotized breccia zones from 23.20- m and epidotized breccia. to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with the grained to aphanitic; 60% epidotized and epidotized batches. Minor carbonated with filed breccia.  FOOTAGE DIP AZIMUTH P	TRE 0+74 S  O - 50  November 7, 1983   medium grained with coarse and very fine flow is massive and unstructured. It is weakly magnetic locally. to medium grained, occasional (less than 1%) if led and epidotized breccia zones from 23.20-) m in seams up to 10cm. Rare 1cm quartz to medium grained, occasional quartz veins up to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained, increasingly brecciated with to medium grained to aphanitic; 60% epidotized and epidotized to aphanitic; 60% epidotized and
AGE DIP AZIMUTH FOOTAGE DIP AZII  48 -640  48 -640  5 AMPLE  S AMPLE  NO. SULPH FOOTAGE  NO. DEST FROM TO  BEST FROM TO  3.20-  3.20-  and	AZIMUTH   FOOTAGE   DIP   AZIMUTH	AZIMUTH   FOOTAGE   DIP   AZIMUTH	AZIMUTH   FOOTAGE   DIP   AZIMUTH
S A M P L E  O. SUBH FROM TO  TO	S A M P L E  O. SUBH FROM TO TOTAL	S A M P L E  O. SULPH FROM TO TOTAL	S A M P L E  S TROM TO TOTAL  TOTAL
S A M P L E FROM TO	SAMPLE FROM TO TOTAL	SAMPLE FROM TO TOTAL	SAMPLE FROM TO TOTAL
FOOTAGE TO	PLE FOOTAGE TO TOTAL	PLE FOOTAGE TO TOTAL	PLE FOOTAGE TO TOTAL
	TOTAL TOTAL	TOTAL TOTAL	TOTAL TOTAL

HOLE NO. MC-83-50 SHEET NO. 1 OF 6

Split for assay.

OZ/TON OZ/TON

HOLE NO.

Mc-83-50

SHEET NO. 2 OF 6

FROM	FOOTAGE	
		1
		45.25 - 47.55: 47.55 - 50.35:
		50.35 - 51.21:
		51.21 - 58.10:
		•
		60.00 - 60.55:
<u> 366-1168</u>	<del></del>	60.55 - 61.65:
		61.65 - 64.16:
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SHEET NO. 3.0F 6

၂ ကို ကို ကို ကို ကို	units cen transitio fault. A In genera degree of strongly most comm  TRA  Dark gree is well d microfaul Siliceous section t Zone aver 67.95: 68.15: 68.21 - 6
TRANSITIONAL SILICIFIED	TRANSITIONAL SILICIFIED SEDIMENTS  green, with 25-50% pale green siliceous laminat developed and often plastically deformed alofaults parallel to core axis; displacement up theory cherty laminations (chemical sediments) in on to 60-70% at 68.00 m and massive cherty sediments averages 1% pyrite.  laminations at 450 to the core axis.  laminations at 40-450 to the core axis.  laminations at 40-450 to the core axis.  at 45-500 to core. Zone includes a clay seam at 68.30-68.34 m.
oped and often plastically deformed along nar- loped and often plastically deformed along nar- loped and often plastically deformed along nar- loped and often plastically deformed along nar- loped and often plastical sediment up to 1cm.  Prival aminations (chemical sediments) increase  laminations at 450 to the cherty sediments  laminations at 450 to the core axis.  FAULT ZONE - highly sheared with chloritize  at 45-500 to core. Zone includes a gritty	Seam at 00.30-00.34

TORE

LANGRIDGE LIMITED - TORONTO - 366-1168

\_\_ SHEET NO. 4 OF 6

FOOTAGE	AGE		DESCRIPTION	_		SAMPLE	m				ASSAYS	
ROK	70			z o	SULPH,	FROM	FOOTAGE TO	TOTAL	ja e	4	02/TOM	02 TON
		68.35 - 69.83:	honey coloured, cherty, non-laminated sediments; strongly brecciated - chlorite and hematite in fractures around fragments. Rock is more yellow hued below 69.72 m where silicification increases.	C 2743 2744	1-2	68.35 69.10	69.10 69.83	0.75 0.73			0.07)	
		69.83 - 70.23:	t 2cm intensely brecciated.  tink, aphanitic, highly siliceous zones up	2745	1-3	69.83	70.66	0.83			0.12)	
		70.23 - 70.66:	same as 68.35-69.83 m - pyrite increases to 2-3%, moderately brecciated - relic laminations at 35-400 to core axis		_							
· · · · · · · · · · · · · · · · · · ·		70.66 - 70.92: 70.92 - 71.24:	rite, cherty sediments. ey, resembles a quartz vein - strongly recciated, intensely silicified with 8-10%	2746	6-8	70.66	71.24	0.58			0.12)	0.124
		71.24 - 71.48:	purple-grey, strongly fractured, with green chloritized partings - 1% pyrite.	2747	<b>–</b>	71.24	71.48	0.24			0.02)	(26.6)
		71.48 - 73.64:	grey, intensely silicified, pyrite - very finely	2748 2749	5-6 7-9	71.48 72.24	72.24 72.90	0.76			0.08)	
<u> </u>		73.64 - 74.54:	fracture fillings locally, cified breccia - up to 6%	2751	3-5	73.64	4	0.90			0.09)	
		74.54 - 74.95:	oloured with relic laminations at 40-450 to e axis (eg. 74.70 m).	2752	4-6	74.54	74.95	0.41			0.21)	
		74.95 - 75.64: 75.64 - 76.47:	same as 73.64-74.54 m. rock grades to a purple-grey colour with 10% honey coloured patches - carries 10% green chloritized	2753 2754	မှ မှ တ တ	74.95 75.64	75.64 76.47	0.69			0.16)	
		76.47 - 78.54:	es 10-15% green chloritized patches up to 5cm rple-grey intensely silicified breccia. Green	2755 2756	2-4	76.47 77.20	77.20 77.93	0.73			20.0	
		78.54 - 79.42:	icified with 5% chloritized	2758	5-7	78.54	79.42	0.88			0.01	
		79.42 - 79.96:	as 76.47-78.54 m.	2759	3-4	79.42	79.96	0.54			0.04	

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	Mc-83-50
	SIMMY NO.

91.04		FROM
109.27		TO
of chloritized rock. Abundant white to quartz in matrix to brectia fragments.  quartz in matrix to brectia fragments. quartz in matrix to brectia fragments. quartz in matrix to brectia fragments. brectia fragments. No zones of relic chloritized patches of relic chloritized patches. No zones of relic chloritized patches of relic chloritized patches.  B8.66 - 90.44: 5-10% weakly silicified and chloritized patches of relic chloritized patches.  B8.66 - 90.44: 5-10% weakly silicified and chloritized patches of preciated; carries are pink quartz veit preciated; carries are pink quartz veit preciated; carries are pink quartz veit preciated; carries are pink quartz veit preciated; carries preciated; carries preciated; carries preciated; carries preciated; carries preciated patches of increasing matrix preciated patches of purple-grey intensely silicified brecciated; carries and preciated patches preciation are located at 91.38-91.38-91.26-100.13; 100.101.83-102.12; 102.90-103.00 and 108.06-108.22 meters. Silicification is controlled by brecciation and often allowards of fractures and fracture systems. The number at these zones diminishes with depth, particularly below 10.91.04 - 96.98: 20% purple-grey silicified brecciated preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates. Silicified brecciates preciates preciates preciates preciates. Silicified brecciates preciates preciates. Silicified purple-grey brecciates preciates. Silicified brecciates preciates. Silicified purple-grey brecciates. Preciates preciates preciates preciates. Silicified purple-grey brecciates. Preciates preciates preciates preciates. Preciates preciates preciates preciates preciates preciates preciates preciates preciates preciates preciates preciates preciates preciates preciates preciates precia	le as 78.54-79.42 - zone at 80.82-81.25	DESCRIPTION
ed ed on The The to 3cm e and to 3cm to 5cm in 5cm in	free	
ree ccia ed on Th The The an e an sa a scalar to 3 for to	is free	z o
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ree 2761 3-5 80.82 Ccia, 2762 2-3 81.57 ccia, 2763 2-3 82.38 2-3 82.38 2-4 83.18 ed 2765 2-4 84.08 2766 6-8 84.87 The 2767 2-3 86.90 s. 2770 2-3 86.90 s. 2771 1-3 88.66 to 3cm 2772 1-3 89.56 to 3cm 2772 1-3 89.56 to 3cm 2775 1-2 91.04 ents - 2776 1-2 91.73 ms as 2776 1-2 93.57 1-2 93.5	ts free 2760 3-4 79	2 SULPA FROM
ree 2761 3-5 80. Ccia, 2762 2-3 81. Ccia, 2763 2-3 81. ed 2765 2-4 84. ed 2766 6-8 84. The 2767 2-3 86. S. Cm 2777 1-3 86. e and 2777 1-3 89. ents - 2776 1-2 91. ents - 2778 1-2 91. e of 2782 2-4 97. co 5% in 2785 2-4 97. co 5% in 2785 2-4 99	1s free 2760 3-4 79.96 80.	SOUTH FROM T
ree 2761 3-5 80.82 81.57 0.75 2762 2-3 81.57 82.38 0.81 2762 2-3 81.57 82.38 0.81 0.80 2765 2-4 83.18 84.08 0.90 2766 6-8 84.87 85.12 0.25 2769 2-3 85.12 86.02 0.90 1.25 2770 2-3 85.12 86.02 0.90 1.25 2770 1-3 88.66 89.56 0.90 1.25 2774 1-2 91.04 91.73 0.69 91.04 0.54 91.73 1.12; 2778 1-2 92.65 93.57 0.92 2781 1-2 95.15 95.88 96.70 0.87 2782 2-4 99.53 100.13 0.69 97.26 0.56 97.26 0.56 97.26 0.90 97.26 0.92 97.26 97.26 0.92 97.26 97.26 0.73 1.25 2782 2-4 98.70 99.53 0.83 0.83 2-4 99.53 100.13 0.69 0.83 0.83 2-4 99.53 100.13 0.69 0.83 0.83 2-4 99.53 100.13 0.69 0.83 0.83 2-4 99.53 100.13 0.69 0.83 0.83 0.83 2-4 99.53 100.13 0.69 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83	1s free 2760 3-4 79.96 80.82 0.	SOMPLE
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ree 2761 3-5 80.82 81.57 0.75 2763 2-3 81.57 82.38 0.81 82.38 0.81 0.80 0.81 2765 2-4 83.18 84.08 0.90 0.80 2765 2-4 84.08 84.87 0.79 0n 2766 6-8 84.87 85.12 0.25 The 2767 2-3 85.12 86.02 0.90 0.81 2769 2-3 86.02 86.90 0.88 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	1s free 2760 3-4 79.96 80.82 0.86	SOMPLE FROM TO TOTAL
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50 SHEET NO. 6 OF 6

	FROM	70
	7	FOOTAGE
100.13-100.43: 100.43-101.12: 100.43-101.83: 101.83-102.12: 102.23-102.72: 102.72-105.70: 105.70-107.10: 107.10-109.27: 109.27 meters		<u></u>
intensely silicified, purple-grey breccia - up to 5% syrite.  50% silicified breccia in seams up to 2cm in a dark green chloritized rock.  purple-grey silicified breccia - minor honey coloured halos around fractures.  as at 101.83-102.12 - minor chloritization of fracture surfaces.  carries 10-20% purple-grey silicified breccia; strongly fractured throughout with white carbonate in voids. White to pink silicified halos surround fractures. Some cherty laminations locally (eg. 250 to core axis at 102.90-103.00 m).  5% pinkish-grey silicified breccia zones (eg. 105.5-106.63 meters).  up to 107.06.3 meters).  up to 107.07.30, 108.06.108.22 and 108.75-108.81 meters. Locally laminated, 300 to core axis at 107.06 meters.  END OF HOLE  CASING PULLED		DESCRIPTION
C 2786 1-2787 1-2788 1-2792 1-2793 1-2795 1-2797 1-	, z	4
	DC3	3 SULPH
100.13 101.12 101.83 101.83 102.72 103.65 104.54 105.15 106.58 107.10 108.60	FROM	SAMPL
101.12 101.83 102.72 103.65 104.54 107.10 108.60 109.27	10	-E
0.99 0.71 0.89 0.89 0.89 0.80 0.70 0.67	TOTAL	
	,,	
0.01 0.01 0.01 0.01 0.01	02/TOM	ASSAYS
	$\rightarrow$	┤ "

## DIAMOND DRILL RECORD

2 A S M O F	ZAME OF PROPERTY	McDermott
HOLW NO.	Mc-83-51	LENGTH 140.51 meters
LOC ATION		
LATITUDE	9 + 75 E	DEPARTURE 0 + 94 S
ELEVATION		AZIMUTH 3440 DIP -700
STARTED_	November 8, 19	STARTED November 8, 1983 FINISHED November 9, 1983
	-	

FOOTAGE	DIP	AZIMUTH	AZIMUTH FOOTAGE	DIP	AZIMUTH
0	-70°				
45.72	-67°				
140.21	-65°				

カース・カス い	HOLE NO.
s BQ Core	Мс-83-51 SHEET
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	0

LOGGED BY A.W. Workman

Split for assay.

O 4.86 OVERBURDEN  DESCRIPTION  NO. SULPH FOOTAGE FOOTAGE FROM TO TO A.86 OVERBURDEN		કર કર	0Z/TON 0Z/TON
4.86 OVERBURDEN 68.39 BASALT			
68.39	_	-	
n to dark green, fine to med grained and aphanitic section ified and weakly epidotized us, (eg. 4.95-5.50 m). The tic. Flow(s) appear to be 1			
Flow(s) appear to be largely massive and unst 0.80: fine to very fine grained 2.90: fine to medium grained.			
12.90 - 15.25; fine to very fine grained, epidotized breccia			
15.25 - 17.45: weakly pillowed, fine to very fine grained.  17.45 - 17.80: aphanitic to very fine grained.			
meters.			
21.40 - 28.20:			
28.20 - 28.90:			
28.90 - 30.70: same as 21.40-28.20 m.			
30.70 - 32.50: fine to medium grained, massive flow.  32.50 - 34.50: fine grained, medium locally.			
34.50 - 35.05: fine grained, moderately fractured with quartz			
35.05 - 35.45: fine to very fine grained.			

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FOOT AGE	DESCRIPTION
	36.10 - 36.45: fine grained. 36.45 - 40.60: medium grained, massive flow. 40.60 - 42.95: fine grained, pale green, rare medium grained
	asional red hem ore axis. W. sional epidotiz
	<ul> <li>- 66.05: medium grained, occasional fine grained occasional silicified shear planes (eg. 70° to core axis).</li> <li>- 68.30: fine to very fine grained.</li> <li>- 68.39: aphanitic, strongly silicified.</li> </ul>
68.39 70.72	QUARTZ VEIN
	White bull quartz with xenoliths of dark green sediments along the lower contact.  68.39 - 70.40: white bull quartz - trace pyrite locally.  70.40 - 70.72: abundant dark green xenoliths of sediments with pyrite crystals up to lcm. Xenoliths average 30-40% pyrite, with up to 1% chalcopyrite.
70.72 96.34	SEDIMENTS
	Dark green becoming medium green locally, fine to very fine grained. The upper part of the section is not laminated visibly except where quartz veins cut and produce sericite alteration. This localized alteration highlights the bedding. These altered zones also carry abundant pyrite crystals up to 1cm in size. The rocks are moderately fractured. Voids along the fractures, often sub-parallel to the core axis, are often lined with quartz crystals and red hematite. These rocks are non-magnetic, and average 0-1% pyrite.

7071

HOLE NO. \_ Mc-83-51

\_\_\_\_ SHEET NO. \_\_\_\_3 OF 7

	96.34		FROM	F001	
	125.50		70	FOOTAGE	
The upper member o horizon with up to thicker in section strongly silicifies attain the typical apprite content is variably brecciates but no purple-crev	MAIN MINE	70.72 - 75.00: 75.00 - 79.49: 79.49 - 79.82: 79.82 - 84.20: 84.20 - 85.60: 85.60 - 89.58: 89.58 - 96.34:			
The upper member of the zone is a variably silicified and brecciated horizon with up to 80% cherty sediments. This unit is somewhat thicker in section than might be expected. The central member, a strongly silicified breccia, is not well developed and does not attain the typical purple-grey colour. Perhaps as a consequence, pyrite content is very low, seldom over 3%. The lower member, a variably brecciated and silicified section is of normal thickness but no purple-grey colouration is noted.	MINERALIZED ZONE	carries 25% quartz veins up to 33cm (eg. 72.29-72.52 meters), sediments flanking veins carry abundant pyrite.  rarely laminated, strongly fractured with carbonate filling - tensional-type fractures. Rock is well parted parallel to a weakly developed foliation - probably along bedding: 65° at 75.35 meters.  50-55° at 75.35 meters.  same as 75.00-79.49 m.  moderately to weakly brecciated with pink carbonate filling - some fracture voids filled with quartz crystals.  same as 75.00-79.49 m.  rock becomes weakly laminated, moderate locally; and strongest below 92.30 m. Bedding is denoted by a moderate to strong foliation of 0.1-0.5mm clasts - may be tuffaceous. Lowermost 30cm fines - inversely graded?  89.82 m: foliation at 50° to core axis.  92.20 m: foliation at 45-50° to core axis.  92.40 m: lamination at 45-50° to core axis.  94.80 m: laminations at 45-50° to core axis.		DESCRIPTION	
<u>".</u>		52 C 2805 2806 2807 2809 2810 2811 2812 2813 2814 2815 2814 2815 2816 2817 2819 2820 1y 2821 2822 2823 2823 2824 2825	<b>z</b> 0		
		999999999999999	10E3		
		1 75.87 1 76.72 1 77.69 1 78.66 1 79.49 1 81.14 1 81.14 1 82.05 1 83.95 1 84.89 1 85.84 1 86.75 1 89.58 1 99.53 1 99.53 1 91.31 1 94.11	PH. FROM	SAMPL	
		76.72 77.69 80.34 81.14 82.05 83.00 83.95 84.89 90.53 91.31 94.11	FOOTAGE		
		0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95	E TOTAL		
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			02,100	ASSAYS	
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\_\_ SHEET NO.\_

4 OF 7

LANGRIDGE LIMITED TORONTO 300-1100		-	
101.03	96.34	FROM	F00
107.22	101.03	70	FOOTAGE
The zone carries 10-80% pale greenish-grey cherty rip-up clasts set in a chloritized dark green, fine to very fine grained groundmass. Fragments range from 2mm to 5cm - larger fragments being sub-angular, smaller are generally more rounded. Average size is 1cm. Smaller clasts, less than 5mm, exhibit a weak to moderate foliation, (eg. 45-500 at 96.55 m). Some irregular bedding is noted locally, possibly reflecting soft seddment slumping. Occasional pale green brecclated chert beds up to 2cm thickness are noted (eg. 97.34 m at 600 to core axis). Cherty seddments do not carry pyrite. The zone ends at a massive siliceous zone carrying higher and more consistent pyrite contents - 1-3% versus 0-2%. 96.34 - 98.16; cherty clasts are pale green; llcm lost core at 97.89 meters.  98.16 - 98.17; green clay seam (FAULT), cutting core at 480. 98.17; cherty clasts are pale grey with purple tint. Fragment size increases down-hole, massive chert at 99.40-99.74 m. Several other smaller massive chert at 1	TRANSITIONAL SILICIFIED SEDIMENTS		DESCRIPTION
2 2 8 2 9 2 8 3 3 2 2 2 8 3 3 2 2 2 8 3 3 2 2 2 8 3 3 2 2 2 8 3 3 2 2 2 2		0	
1-2-1		SULPH,	
96.34 97.10 98.80 99.74		FROM	SAMPL
97.10 98.16 98.80 99.74 100.31		FOOTAGE	m
0.76 0.64 0.57	_	TOTAL	
		7	
0.000		OZ; TON	ASSAYS
		02 TON	

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HOLE NO. \_\_\_

Mc-83-51

\_\_ SHEET NO. \_\_ 5 OF 7

LANGRIDGE LIMITED - TORONTO - 366-1168	<del></del>
107.22	FROM
125.50	FOOTAGE OM TO
becciation down section. Up to 5% pyrite locally (averages 3-4%); with some pyrite in relic bedding planes at 102.00-102.30 m. Several zones of relic chloritization remain.  104.25-105.25: same as 101.63-104.25 but with abundant chloritized chert and slitclified breccia fragments.  105.25-105.57: honey coloured, strongly slitclified breccia with 60% dark green chloritized breccia and fractures with 60% of the same as 104.25-105.25 m. occasional pink druey quartz crystals on fractures. Weakly laminated locally - 35-400 at 105.70 meters.  105.46-107.22: 40-50% chloritized material between slicified sections. Fractures are chlorite filled.  TRANSITIONAL SILICIFIED SEDIMENTS  Pale waxy green, moderately to strongly slitclified breccia with 50% dark green chloritized rock (probably non-brecciated). Brecciation daveloped in a network pattern which was subsequently slitclified. Central parts of the network were not penetrated by silica bearing finids. More highly slitclified rocks carry higher pyrite contents, up to 3% locally. Some relic laminations are noted locally (eg. 108.00 m at 35-400 to core axis).  107.22-109.30: approximately 50% slitclified breccia with few individual sections greter than locm. Fluorite (1-2%) noted above 108.10 m - purple colour - not previously recognized in any drill hole. Slitcified rones often defined along sharp contest. A radiating needle-like texture (micro-breccia?) on a lmm scale is noted locally - eg. 108.40 meters  109.30-116.73: carries 25-30% slitcified breccia, percentage decreaing down-section.	DESCRIPTION
228335 228335	Ž O
	% SULPH
101.03 101.54 102.31 103.22 104.65 105.53 106.44 109.02 110.85 111.80 111.80 111.35 116.25	SAMPL
101 102 103 104 105 106 107 111 111 111 111 111 111 111 111 111	FOOTAGE
0.51 0.91 0.92 0.93 0.93 0.93 0.93 0.93 0.93 0.93	101VT
Bures se	
0.60	
# # # # # # # # # # # # # # # # # # #	2 %
001 001 001 001 001 001 001	ASSAYS
0.22 0.22 0.28 0.09	02 TON

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ANGRIDGE LIMITED - TORONTO - 366-1168 125.50 140.51 FROM FOOTAGE 70 Pyrite is very finely disseminated and averages 1%. seams up to 2cm width - probably developed along bedding planes. 116.73-121.70: bedded below 136.00 m. The zone carries 10% silicified breccia Dark green, fine to very fine grained, poorly bedded becoming well 121.70-122.70: 122.70-125.50: 132.50-136.00: 132.35 127.30-128.00: 126.35-127.30: SEDIMENTS well laminated at 30° to core axis highlighted by well foliated - chloritized mafic clasts are roughly core axis. carries 20-30% cherty sediments, well bedded but siliceous sections partly cherty sediments and part very finely disseminated pyrite is noted below chloritized and polished same as 116.73-121.70 m. clastic matrix. Bedding at 121.80 m at 400 to openly folded - slumping? Individual beds are carbonate vein is noted at 120.35 meters. Below 118.30 m siliceous rock represents 15-20% of represented by a foliation (eg. 40° at 118.80 m). non-laminated, moderately fractured, cherty aligned. pale grey siliceous laminations. brecciated and set in a dark green chloritized the section - minor cherty sediments. A 2cm orange at 40-45° at 117.65 m. Bedding below 118.50 m is silicified. Laminated at 20-25° at 116.80 m and sharply below this point to less than 5% of percentage chert and silicified breccia decreases laminations locally - eg. 200 to core axis at 124.30 meters. 133.70-133.80 meters. section. DESCRIPTION fractures. An increase Abundant slickensided 2869 2870 2853 2867 2866 2864 2865 2860 2859 2858 2857 2856 2855 2854 2871 2868 2861 z O HOLE NO. 9 <u>인</u> 1-2 0-1 133.10 133.95 <u>ှင်</u> 9-1 <u>-1</u> 1-2 1-2 1-2 1-2 1-2 <u>인</u> 1-2 1-2 1-2 1-2 122.70 119.70 118.85 118.00 130.07 129.12 128.27 127.30 126.35 125.50 124.96 124.33 123.55 122.06 121.45 120.60 117.11 131.02 FROM SAMPLE 127.3 123.55 122.70 120.60 119.70 124.96 124.33 122.06 121.45 118.85 130.0 128.2 126.35 118.00 132.02 131.02 129.1 FOOTAGE 0.85 0.85 0.95 0.85 0.97 0.85 0.64 0.61 0.90 0.85 0.95 TOTAL SHEET NO. \_ 0.04 0.01 0.10 0.02 0.01 0.10 **ASSAYS** 02/TON H 6 OF 7 70 20

HOLE NO. \_\_\_ Mc-83-51 SHEET NO.

						FROM	     
						7	FOOTAGE
		140.51 meters			136.00-140.51:		I
	CASING PULLED	ers END OF HOLE	140.50 m: bedding at 50-550	m: bedding at	moderately to well lan		DESCRIPTION
			to core	core ax			
			gz >> -	•	•		
			2874	2873	C 2872	7 O	1
•			2874 0-1			NO. % SULPH	1
•			2874 0-1 139.29	2873 0-1 138.25	C 2872	OES FROM	
			2874 0-1	2873 0-1 138.25	C 2872 0-1	OES FROM	
			2874 0-1 139.29	2873 0-1	C 2872 0-1 136.25	1058	
			2874 0-1 139.29 140.21	2873 0-1 138.25 139.17	C 2872 0-1 136.25 137.25	DES FROM TO	
			2874 0-1 139.29 140.21	2873 0-1 138.25 139.17	C 2872 0-1 136.25 137.25	IDES FROM TO TOTAL	
			2874 0-1 139.29 140.21	2873 0-1 138.25 139.17	C 2872 0-1 136.25 137.25	10ES FROM TO TOTAL 3	

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HOLE NO. MC-83-52 SHEET NO. 1 OF 8

15.85   51.85	15.85	FROM	FOOTAG	Н.	ELEVATION	LOCATION _	HOLE NO.	NAME OF TR
BASALT	OVERBURDEN		ESCRIPTIO	November 14, 1983	106.68	+ 25 W 0 + 70 S 30.48	$\downarrow$	McDermott
<u></u>		NO. SU		-55°l	-57°	-64 <sup>0</sup>	-65	DIP AZIMUTH
		Ħ	N A S					TH FOOTAGE
		┸	ס					<u>6</u>
		TOTAL						HTUMIZA
		% % 0Z/TON 0Z/TON	> S > Y S	LOGGED BY A.W. Workman			입	HOLE NO. 100 BO Core
AND		OVERBURDEN  BASALT	OVERBURDEN  BASALT  BASALT  TO TOTAL % % 02/TON	DESCRIPTION  OVERBURDEN  BASALT  DESCRIPTION  NO. SUBPLE FROM FOOTAGE W FOZ/TON  BASALT  TO TOTAL % % OZ/TON	November 14, 1983  DESCRIPTION  DESCRIPTION  OVERBURDEN  BASALT  No. 1983 FINISHED November 14, 1983  LOGGED BY A.W. WOY  A S S A  No. 50 PH FROM TO TOTAL % % % OZ/TON	106.68   -570   108.44   109.50   106.68   -570   106.68   -570   106.68   -570   106.68	30.48   -64°   106.68   -57°   106.68   1	No-83-52   Length   183.18 meters   0   -650   Split fo     9 + 25 W

1		
	HOLE NO.	
	Mc-83-52	
	SHEE	
	SHEET NO.	

2 OF 8

37.49 - 40.00; SEDIMENTS - dark green, well laminated locally at 35-400 to core axis (eg. 37.50 m.) Rock is very file grained, often brechtadd. A layer of pale green safe-fall tuff is noted at 39.00-39.13 carrying clasts up to lam. A well foliated 'unfaceous' zone at 500 to core is located at 39.00-39.13 carrying clasts up to lam. A well foliated 'unfaceous' zone at 500 to core is located at 39.00-39.13 carrying clasts up to lam. A well foliated 'unfaceous' zone at 500 to core is located at 39.00-39.13 carrying clasts up to lam. A well foliated 'unfaceous' zone at 500 to core is located at 39.00-39.13 carrying clasts up to lam. A well foliated 'unfaceous' zone at 500 to core at located at 39.00-39.13 carrying clasts up to laminated. A located at 39.00-39.13 carrying clasts up to laminated sich depth, below 51.15 same at 41.15-46.40 - fines slightly tecrotach fragments.  54.92 SEDIMENTS  54.92 SEDIMENTS  54.92 SEDIMENTS  54.92 SEDIMENTS  54.92 SEDIMENTS  54.92 SEDIMENTS  54.92 SEDIMENTS  54.93 SEDIMENTS  54.92 SEDIMENTS  54.93 SEDIMENTS  54.94 SEDIMENTS  54.95 SEDIMENTS  54.95 SEDIMENTS  54.97 SEDIMENTS  54.98 SEDIMENTS  54.99 SEDIMENTS  54.99 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  54.90 SEDIMENTS  55.10 SEDIMENTS  56.90 At 4.80 meters  57.90 At 4.80 meters  57.90 At 4.80 meters  5	FROM POOL		51. 85.		ANGRIDGE LIMITED - TORON 44 9
- 40.00; SEDIMENTS - dark green, wall laminated locally at 137-407 to core axis (eg. 37.50 m), Rock is very fine grained, often bracciated. A layer of gland clasts up to lum. A wall foliated 'tuffaceous' zone at 50 to core is located at 39.63-40 cm.  - 40.36; flow top braccia; angular fragments.  - 41.15; variably bracciated, often with white quartz between fragments.  - 46.66; fine to very fine grained, often bracciated, cocasional epidetized and silicified flow braccia fragments.  - 51.85; same as 41.15-46.40 - fines slightly towards base. Lower contact is at a strongly silicified and weakly carbonated zone.  - 51.85; same as 41.15-46.40 - fines slightly towards base. Lower contact is at a strongly silicified and weakly carbonated zone.  - 51.85; same as 41.15-46.40 - fines slightly towards base. Lower contact is at a strongly silicified and weakly carbonated zone.  - 51.87; the to very fine grained, locally laminated, becoming trized. Beading is highlighted by chrew seems parallal to the also found in irregularly developed crose-cutting tris also found in irregularly developed crose-cutting tris at a strongly silicified and weakly 2277 0-1 53.39 54.27 0.88 0.01 titled. Silve to be found in irregularly developed crose-cutting tris at a strongly silicified and weakly 2277 0-1 53.39 54.27 0.89 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0	POOTAGE TO				
PROM   TOTAL	- 40.00: SEDIMENTS - dark green, well laminated locall 35-40° to core axis (eg. 37.50 m). Rock is verifine grained, often brecciated. A layer of green ash-fall tuff is noted at 39.03-39.13 clasts up to lmm. A well foliated 'tuffaceou at 50° to core is located at 39.69-40.00 m 40.36: flow top breccia; angular fragments. ragments. fragments. fine grained, often brecciated, occasional epidotized and silicified flow breccia fragments.	- 40.00: SEDIMENTS - dark green, well laminated locall 35-40° to core axis (eg. 37.50 m). Rock is verifine grained, often brecciated. A layer of green ash-fall tuff is noted at 39.03-39.13 clasts up to lmm. A well foliated 'tuffaceou at 50° to core is located at 39.69-40.00 m 40.36: flow top breccia; angular fragments 41.15: variably brecciated, often with white quartz fragments 46.60: fine grained, often brecciated, occasional epidotized and silicified flow breccia fragments 46.86: fine to very fine grained.	<ul> <li>46.86: fine to very fine grained.</li> <li>51.85: same as 41.15-46.40 - fines slightly to Lower contact is at a strongly silicificarbonated zone.</li> </ul>	green, fine to very fine grained, locally laminated, becoming a laminated with depth, below 53.17 m. The rock is moderately litized. Bedding is highlighted by cherty seams parallel to the stions - up to 5mm in thickness. This is probably secondary - it is also found in irregularly developed cross-cutting press. The section carries up to 1% pyrite as a very fine nination.  - 53.17: poorly laminated, weakly foliated.  - 54.92: well laminated: 550 to core axis at 53.17 m and 55-600 at 54.80 meters.	MAIN MINERALIZED ZONE  zone is developed closer to the overlying volcanicact than is normally observed. The upper transition cified sediments contain a variable amount of siliconents, chert and possibly carbonate (diagenetic) seques of intrusives, little is observed of the 'main of the 'main's contain a variable amount of siliconents, chert and possibly carbonate (diagenetic) seques of intrusives, little is observed of the 'main's contain a c
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SHEET NO.

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HOLE NO. |

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54.92 FROM 59.03 FOOTAGE 59.03 65.04 70 54.60 - 54.69: and have a purple-grey colour. The individual 'growths' are below an intrusive body at 70.55-82.79 meters. The main zone and 58.39: 58.39 - 59.03: locally may be moderately to strongly silicified (eg. 56.72-57.42), 1-5mm ovoid carbonate 'growths' - possibly diagenetic. These zones seams up to 25cm thickness. These beds have a texture composed of have been well developed. the lower transitional zone seem, from what evidence remains, to zone'. The lower member, a second variably silicified zone is found abundant pale waxy green siliceous phases. The rock is strongly 58.01 - 58.39: 40-45° at 57.90 meters. Major carbonate bearing zones are to core axis at 56.30 m). The rock is well laminated locally zones have a weakly developed foliation along the bedding (eg. 500 partially outlined by dark green silt, present as thin wisps. up to lim. silicified from 60.30-61.30 m and carries 18 pyrite locally as blebs Olive green, fine grained with green nearly acicular crystals up located at 54.95-55.08 m; 55.71-56.01; and 56.09-56.33 meters. Dark green with abundant pale grey to light purple-grey beds and Same sections up to 20cm width near the contact, carry TRANSITIONAL SILICIFIED SEDIMENTS INTRUSIVE The rock is non-magnetic. lost ore. pale purple-grey cherty rip-up clasts, up to 3cm in strongly fractured with moderate to strong chloritization of voids - strongly sheared zone of noted. Purple-grey fragments are intensely groundmass. Some massive cherty beds up to 5cm are size supported in a dark green chloritized silty green clay seam - FAULT. silicfied and carry 2-3% very fine pyrite. laminated cherty and silty sediment. DESCRIPTION g 2885 2886 2881 2879 2883 2884 2882 2880 z O <u>ဂ</u>္ဂ ၀ 123 1-2 54.92 55.75 56.72 57.42 58.01 58.39 59.03 59.90 FROM SAMPLE 59.90 60.68 55.75 56.72 57.42 58.01 58.39 59.03 0.83 0.97 0.70 0.59 0.38 0.87 TOTAL # # 0.tr 0.01 02/TON ASSAYS 02 TON

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LANGRIDGE LIMITED - TORONTO - 366-								
	70.55		67.20		65.04		FROM	FOOTAGE
	82.79		70.55	·	67.20		10	FAGE
Dark green, fine to very fine grained, well laminated locally (eg. 45-50° at 70.73 m). Abundant white free quartz filling voids. Localized zones of silicified breccia are up to 25cm in thickness, but average about 5cm. Silicified breccia is purple-grey and occasional honey colcured. Fractures are often surrounded by 1cm honey colcured halos, which are also strongly silicified. Relic green colcured rock tends to be non-brecciated and subsequently non-silicified. Up to 3% pyrite is noted in strongly altered rock. A 3cm orange carbonate vein is located at 71.68 meters.	TRANSITIONAL SILICIFIED SEDIMENTS	Identical to 59.03-65.04 meters; carries occasional quartz veins (eg. 68.38-68.50 m), with variably dipping contacts. Trace of very weak magnetism locally. Lowermost 40cm is fine grained, strongly chloritized and fractured. A well developed chill is noted at the lower contact-possibly parallel to bedding in underlying sediments.	INTRUSIVE	Purple-grey, intensely silicified breccia with 5% honey coloured possibly feldspathized zones bordering fractures. Zone also carries 10-15% relic dark green chloritized non-silicified rock, mostly in the lowermost 72cm. Rock contains up to 3% finely disseminated pyrite in silicified rock. No trace of relic bedding is observed.	MAIN SILICIFIED ZONE	60.68 - 60.94: ground and lost core - some overburden pushed down- hole - not included in sample. 63.74 - 65.04: probably a fractured xenolith of silicified breccia - upper contact sub-parallel to core axis. All fractures strongly chloritized. A 3cm pink quartz- carbonate vein is noted at 63.95 meters.		DESCRIPTION
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		0.80 0.95 0.83		0.79 0.65 0.72		0.93	TOTAL	
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LANGRIDGE LIMITED - TORONTO - 366-1168			
82.79		FROM	F00
88 <b>.</b> 80		10	FOOTAGE
endium to pale (sericite?) green, with major silicified zones at 81.00-81.17 and 82.45-82.61 m.  DIORITE  DIORITE  Dark green to pale wax green with occasional pinkish-green 5mm wide halos surrounding fractures. The rock is generally massive and unstructured. It is very weakly magnetic locally. The intrusive has a needle-like texture locally. Crystals up to 2mm in length and accicular in habit are probably amphiboles. This texture is observed as high as 79.25 m in this hole, interzones with silicified breccia. The intrusive is not carbonatized.  82.79 - 84.15: pale waxy green, randomly oriented dark green accicular needles up to 2mm.  84.15 - 85.72: darker green, rock texture with needles not as well developed.  Second intrusive from overlying body. Greyish-green, fine grained feldspathic core at 87.35-87.65 m. Strongly fractured with a pinkish-green, fine to medium grained feldspathic core at 87.35-87.65 m. Strongly fractured with orange carbonate at 86.90-87.25 m. Lower contact at 200 to core axis.	intrusive is noted kish-green to kish-green to like amphiboles(?) ad xenoliths. cherty fragments chloritized silty y 18 ccia. ccia. act to 50%. A dark of 15.75 meters (same seams up to 5cm		DESCRIPTION
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ne grandevella fine grand ally and sally arey	Dark green, fine to very fine grained, with a greyish tor uppermost 30cm. Weakly to moderately fractured - white a filled. Moderately to well developed bedding laminations with concordant 1-2cm purple-grey silicified breccia seam of section above 92.70 m). The rock is moderately well perallel to the laminations, and is non-magnetic. Weak carbonatization is noted locally.  92.70 - 93.55; zone contains 50% silicified breccia.  94.23 - 94.33; Diorite - fine grained, non-magnetic with at 60° to core - concordant to bedding.  Bedding Attitudes: 90.05 m; 40-45° to core axis.  90.70 m; 50-55° to core axis.  91.70 m; 40-45° to core axis.  91.70 m; 50° to core axis.  101.70 m; 50° to core axis.  105.00-109.20; sporty carbonatization feathering out alo laminations. Minor cherty beds locally (107.40 m). Bedding at 109.19 m at 30° to becoming weakly brecciated below 111.25 m. Two pillowed are noted. Pillow size is approximately 1 meter. Winor tuff and hyaloclastite are observed. The flows are non-mare not carbonatized.  115.40-115.61; variolite and hyaloclastite bearing zone.  115.61-116.18; Tuff - dark grey with reddish hue; ash from the flow and the parameter and first to 4mm in a very fine grained matrix.	Dark green, fine to very fine grained, with uppermost 30cm. Weakly to moderately fractifilled. Moderately to well developed bedding with concordant 1-2cm purple-grey silicifies of section above 92.70 m). The rock is mode parallel to the laminations, and is non-mag carbonatization is noted locally.  92.70 - 93.55: zone contains 50% silicifies 94.23 - 94.33: Diorite - fine grained, non-mag carbonatization is noted locally.  92.70 - 93.55: zone contains 50% silicifies 94.23 - 94.33: Diorite - fine grained, non-mag out of the section of the sec	
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of section above 92.70 m). The rock is moderately well parallel to the laminations, and is non-magnetic. Weak carbonatization is noted locally.  92.70 - 93.55; zone contains 508 silicified breccia.  94.23 - 94.33; Diorite - fine grained, non-magnetic with at 60° to core - concordant to bedding.  Bedding Attitudes: 90.05 m; 40-45° to core axis.  92.00 m; 40-45° to core axis.  94.75 m; 45-50° to core axis.  96.90 m; 35-40° to core axis.  103.15 m; 30° to core axis.  105.00-109.20; sporty carbonatization feathering out alo laminations. Minor cherty beds locally ( 107.40 m). Bedding at 109.19 m at 30° to becoming weakly brecciated below 111.25 m. Two pilloweed are noted. Pillow size is approximately 1 meter. Minor tuff and hyaloclastite are observed. The flows are non-mare not carbonatized.  109.20-111.25; massive, non-brecciated flow.  111.25-115.40; brecciated flow - angular fragments, rock epidotized.  115.40-115.61; variolite and hyaloclastite bearing zone.  115.61-116.18; Tuff - dark grey with reddish hue; ash from the grained matrix.	of section above 92.70 m). The rock is moderately welly parallel to the laminations, and is non-magnetic. Weak carbonatization is noted locally.  92.70 - 93.55; zone contains 50% silicified breccia.  94.23 - 94.33; Diorite - fine grained, non-magnetic with at 60° to core - concordant to bedding.  Bedding Attitudes: 90.05 m; 40-45° to core axis.  92.00 m; 40-45° to core axis.  92.00 m; 40-45° to core axis.  92.00 m; 35-40° to core axis.  93.05 m; 45-50° to core axis.  101.70 m; 50° to core axis.  105.00-109.20; spotty carbonatization feathering out alo laminations. Minor cherty beds locally (  107.40 m). Bedding at 109.19 m at 30° to core axis.  107.46 BASALT  Medium green, fine to very fine grained, massive in the ubecoming weakly brecciated below 111.25 m. Two pilloweed are noted. Pillow size is approximately I meter. Minor tuff and hyaloclastite are observed. The flows are non-mare not carbonatized.  109.20-111.25; massive, non-brecciated flow.  111.25-115.40; brecciated flow - angular fragments, rock epidotized.  115.40-115.61; variolite and hyaloclastite bearing zone.  115.40-115.61; variolite and hyaloclastite bearing zone.	of section above 92.70 m). The rock is mode parallel to the laminations, and is non-mag carbonatization is noted locally.  92.70 - 93.55: zone contains 50% silicifies 94.23 - 94.33: Diorite - fine grained, non-at 600 to core - concordant Bedding Attitudes: 90.05 m: 40-450 to core 90.70 m: 50-550 to core 90.70 m: 50-550 to core 91.70 m: 500 to core 101.70 m: 500 to core ax: 103.15 m: 300 to core ax: 103.15 m: 300 to core ax: 105.00-109.20: sportly carbonatization feath laminations. Minor cherty 1 107.40 m). Bedding at 109.127.46  BASALIT  Medium green, fine to very fine grained, man becoming weakly brecciated below 111.25 m. are not carbonatized. Pillow size is approximately 1 r tuff and hyaloclastite are observed. The fine not carbonatized.  109.20-111.25: massive, non-brecciated flow 1109.20-111.25: massive, non-brecciated flow 115.61-115.61: variolite and hyaloclastite 115.40-115.61: variolite and hyaloclastite 115.40-115.61: variolite and hyaloclastite 115.61-116.18: Tuff - dark grey with redding to 4mm in a very fine grained.	and model the production of
parallel to the laminations, and is non-magnetic. Weak carbonatization is noted locally.  92.70 - 93.55: zone contains 50% silicified breccia.  94.23 - 94.33: Diorite - fine grained, non-magnetic with at 60° to core - concordant to bedding.  Bedding Attitudes: 90.05 m: 40-45° to core axis.  90.70 m: 50-55° to core axis.  92.00 m: 40-45° to core axis.  92.00 m: 45-50° to core axis.  96.90 m: 35-40° to core axis.  103.15 m: 30° to core axis.  105.00-109.20: spotty carbonatization feathering out alo laminations. Minor cherty beds locally ( 107.40 m). Bedding at 109.19 m at 30° to becoming weakly brecciated below 111.25 m. Two pillowed are noted. Pillow size is approximately 1 meter. Minor tuff and hyaloclastite are observed. The flows are non-mare not carbonatized.  109.20-111.25: massive, non-brecciated flow.  111.25-115.40: brecciated flow - angular fragments, rock epidotized.  115.40-115.61: variolite and hyaloclastite bearing zone.  115.61-116.18: Tuff - dark grey with reddish hue; ash from the carbonatized.	parallel to the laminations, and is non-magnetic. Weak carbonatization is noted locally.  92.70 - 93.55; zone contains 50% silicified breccia.  94.23 - 94.33; Diorite - fine grained, non-magnetic with at 60° to core - concordant to bedding.  Bedding Attitudes: 90.05 m; 40-45° to core axis.  90.70 m; 50-55° to core axis.  91.70 m; 50-50° to core axis.  91.70 m; 50-50° to core axis.  91.70 m; 50° to core axis.  101.70 m; 50° to core axis.  105.00-109.20; sporty carbonatization feathering out alo laminations. Minor cherty beds locally (  107.40 m). Bedding at 109.19 m at 30° to becoming weakly brecciated below 111.25 m. Two pillowed are noted. Pillow size is approximately 1 meter. Minor tuff and hyaloclastite are observed. The flows are non-magnetized.  115.40-115.61; variolite and hyaloclastite bearing zone.  115.61-116.18; Tuff - dark grey with reddish hue; ash from the context and how a very fine grained matrix.	parallel to the laminations, and is non-mag carbonatization is noted locally.  92.70 - 93.55: zone contains 50% silicifies 94.23 - 94.33: Diorite - fine grained, non-at 600 to core - concordant ending Attitudes: 90.05 m: 40-450 to core 90.70 m: 50-550 to core 91.70 m: 50-550 to core 92.00 m: 40-450 to core 91.75 m: 35-400 to core 91.75 m: 35-400 to core 101.70 m: 500 to core ax: 105.00-109.20: spotty carbonatization feath laminations. Minor cherty 1 107.46  BASALT  127.46  BASALT  127.46  BASALT  127.46  127.46  128.20-111.25: massive, non-brecciated flowing and not carbonatized.  109.20-111.25: massive, non-brecciated flowing and not carbonatized.  119.20-111.25: massive, non-brecciated flowing productive and hyaloclastite epidotized.  115.40-115.61: variolite and hyaloclastite 115.61-116.18: Tuff - dark grey with reddite to 4mm in a very fine grained.	
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Tuff - dark grey with reddish hue; ash to 4mm in a very fine grained matrix.	Tuff - dark grey with reddish hue; ash to 4mm in a very fine grained matrix.	Tuff - dark grey with reddish hue; to 4mm in a very fine grained matr	
			to 4mm

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SHEET NO. \_ ermort

LANGRIDGE LIMITED - TORONTO -	132 •83	127.46	FROM
			FOOT AGE
	183.18	132.83	10
Dark green, becoming pale green where strongly epidotized and moderately brecciated above 136.25 m. Several flows are noted in this section, one of which is pillowed. Flow tops are marked by angular flow top breccia. The rocks are non-magnetic and are weakly chloritized.  132.83-136.25: angular, shatter-type tectonic brecciation. Fracture systems are moderately epidotized. Fine to very fine grained.	Dark green, fine to very fine grained, locally very well laminated (eg. 50° at 127.72 and 132.70 m). The zone is brecciated and strongly chloritized at the upper contact. The section carries up to 1-2% very finely disseminated pyrite. Locally developed carbonatization is of moderate strength and feathers out into the laminations. Non-magnetic.  130.20-131.55; massive, non-laminated zone (silty).  132.68-132.83; ground and lost core.	pale green, strongly tectonically brecciated pillowed sequence. Selvages up to 4cm in width are strongly epidotized. Pillow tops are weakly vesicular.  122.75-122.84: SEDIMENTS - well laminated at 50-550 to core.  123.84-123.35: dark green massive flow.  123.85-123.80: SEDIMENTS - moderate to well developed laminations at 450 to core axis - possibly tuffaceous.  123.80-124.50: brecciated basalt, minor hyaloclastite, moderately epidotized locally.  124.50-127.46: dark green pillowed basalt - same as 116.23-122.75 meters.	DESCRIPTION
<u> </u>	2938 2939 2940 2941 2942 2943		2 0
·			% SULPH,
	127.49 128.35 129.16 130.04 130.96		FROM
			<u>                                     </u>
	128.35 129.16 130.04 130.96 131.83		FOOTAGE
	0.86 0.81 0.88 0.92 0.87 1.00 (measures		TOTAL
	Ces O		-
	0.85)		
	44444		02/TON
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LANGRIDGE LIMITED TORONTO 366-1168

FROM

HOLE NO. .

Mc-83-52

SHEET NO.L

8 OF 8

FOOTAGE 70 183.18 meters 151.40-154.00: 151.20-151.40: 149.85-151.20: 141.00-149.85: 175.32-183.18: 171.55-175.32: 171.33-171.55: 158.75-158.78; 154.00-158.75: 136.25-141.00: 160.70-171.33 158.78-160.70: pale greenish-grey, very fine grained becoming fine grained at 155.50 m, and almost medium grained at 158.40-158.75 meters. END OF pale green, weakly brecciated and epidotized. pillowed; strongly brecciated throughout pillow very fine grained to aphanitic; finely brecciated fine grained, weakly to moderately brecciated with brecciated massive flow - abundant carbonate weakly pillowed. aphanitic. pale green, tectonically and flow brecciated; sheared at 65-70° to core - zone resembles centres, zone includes a brecciated but massive rock grades rapidly to very fine grained. strongly silicified locally. Very fine grained to Moderately silicified. flow top breccia with angular fragments up to 1cm. carbonate filled fractures. fine grained and generally massive, weakly CASING PULLED sedimentary laminations. angular breccia from 169.35-171.33 meters. section at 164.50-166.08 m and strongly epidotized FLOW CONTACT locally. Abundant white carbonate stringers. chloritized; epidotized locally in association with fractures or breccia. HOLE DESCRIPTION ž O HUJUS \$ FROM SAMPLE 7 TOTAL ASSAYS 02/TON 20 ₫

ined when massive flow. The ined when massive flow. The of the it a trace of magnetism locally. Up to 2mm. Rocks above 36.42 m is up to 2mm. Rocks above 36.42 m is up to 2mm. Rock agenerally massive. It is weakly pillowed below act is arbitrary. It is arbitrary and silicified and it is arbitrary. It is arbitrary and silicified and it is arbitrary. It is arbitrary and silicified and it is arbitrary. It is arbitrary arb	to grey sn-gree to medium graatized and exhib pyrite as blebs are massive flow fine grained, non-br to medium grain below. 5 m; not below. 5 m; not below. 5 m; not below. 5 m; not below. 6 m. Lower cont grained, locall clation; quartz owed, very fine grained "shatter-cia. cified "shatter-cia. to very fine grained, very fine owed, very fine cia. to see of zone owed, to fine grained owed, to the flow, fine grained base of zone owed, the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow, fine grained the flow flow flow flow flow flow flow flow	when pillowed and fill rocks are non-carbon. The flows average 1% are pillowed; below 4.23 - 5.75: very 5.75 - 7.70: fine 7.70 - 11.45: fine 11.45 - 11.95: fine 11.45 - 12.3: 15.3: 15.3: 15.3: 17.75 - 20.20: fine breck 20.20 - 28.60: pillowed; breck 28.60 - 33.05: fine 511: 511: 511: 511: 511: 511: 511: 511		
			68.81	4.23
	EN	OVERBURDEN	4.23	0
1			70	T ROK
o z	0 M		T A G E	F 0 0

HOLE NO. MC-83-53 SHEET NO. 1 OF 6
REMARKS BO Core

Split for analysis.

LOGGED BY A.W. Workman

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OZ/TON OZ/TON

Casing Pulled.

FOOT AGE

TOTAL

FROM

70

FOOTAGE

41.18 46.50 54.75 49.30 50.85 47.15 very fine grained dissemination and as cubes up to 1mm (eg. 69.80-70.07 moderately carbonatized). Other carbonate alteration is noted carry elevated pyrite contents - up to 5%. Pyrite is noted as a carbonatization produces a greyish tone to the rock, and these zones 65.30 - 68.81: 64.07 - 65.30: 63.40 - 64.0770.70 meters). Rock is generally weakly to moderately chloritized. It is non-magnetic. Dark green, fine to very fine grained, and well laminated. Local as a selective replacement of alternating laminations (eg. 70.07-- 47.15: - 54.85 - 54.75: - 46.50: - 63.40: SEDIMENTS 49.30 41.18: medium to coarse flow breccia - sub-rounded very fine grained to aphanitic, flow top breccia fine grained, lower contact is sharp at a lcm axis at 57.15 m - increased fracturing below. massive, medium grained, sheared at 150 to core sheared; brecciated and mylonitic. same as 39.45-40.11 meters. carbonate and red hematite. massive, medium grained, weakly to moderately massive, fine to medium grained. along shear foliation in flow at 450 to core axis. above 64.24 m - finely brecciated below. quartz-carbonate seam at 20º to core axis - minor fine to medium grained, massive, occasional fractured - filled with quartz and minor white Some fragments may be derived from underlying groundmass. Below 68.35 m, fragments are elongated fine grained, strongly epidotized. epidotized seams up to lcm in width. to alteration - possibly uralitization. fine grained with increasing brecciation and aphanitic ending at a siliceous 2cm seam. sediments. Lowest 10cm is very fine grained to rragments up to 5cm in size in moderately epidotized fracturing; spotty epidotization, texture cloudy due DESCRIPTION 2944 2945 2946 2947 ĕ HOLE NO. -1-2 % SULPH 1068 68.81 69.80 70.70 71.54 FROM SAMPLE Mc-83-53 69.80 70.70 71.54 72.35 FOOTAGE 3 0.99 TOTAL SHEET NO. 8888 **ASSAYS** 02/TON 2 OF 6 02 TON

FORM 2

LANGRIDGE LIMITED - TORONTO -

366-1168

68.81

79.50

FROM

**7**0

FOOTAGE

123.04 131.37

HOLE NO. |

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6 OF 6

	131.37 meters END OF HOLE  CASING PULLED	Medium to dark green, fine to very fine grained, with up to 1% silicified seams (centred on fractures - reaction halos). Rare honey coloured silicified breccia zones up to 15cm are noted. Fractures within these zones are often hematized. In general, the rock is weakly to moderately chloritized, and non-magnetic. Fractures are generally carbonate filled. The rock is weakly carbonatized locally. Pyrite content averages 0-1% as a very fine dissemination.	pyrite is noted locally. Average content is 1-2%. The rock is non-magnetic and very weakly carbonatized locally.  SEDIMENTS	DESCRIPTION
<del></del>		850 851 852 853 854 856 856 859	844 845 846 847 848 848	2 0
		000000000000000000000000000000000000000	Νω	SULPH,
		123.04 123.90 124.80 125.68 126.55 127.37 128.22 129.08 129.97 130.55	118.03 118.94 119.84 119.72 120.72 121.67	SAMPL
		123.90 124.80 125.68 126.55 127.37 128.22 129.08 129.97 130.55	118.94 119.84 120.72 121.67 122.27 123.04	E FOOTAGE
		0.889	0.91 0.90 0.88 0.95 0.60	TOTAL
				<b>3</b> 2
				,
		0.0000000000000000000000000000000000000	0.01 0.13 0.06 0.12 0.08 0.10	ASSAYS
				02/TON

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LANGRIDGE LIMITED - TORONTO - 366-1168

LANGRIDGE LIMITED - TORONTO - 366-1168

HOLE NO. \_\_\_\_\_\_MC-83-53

SHEET NO.

3 OF 6

LANGRIDGE	E LIMITED - TORONTO - 366-1168						
		80.71		79.50		FROM	FOO
		93.76		80.71		70	FOOTAGE
	This zone is essentially the same as the section at 68.81-79.50 m. It is less well laminated, and for the most part is only moderately foliated. Parting is not well developed along the foliation. The rock is moderately to strongly fractured with 5-10% quartz veining above 83.30 m. Most fractures are carbonate filled. The unit carries up to 2% pyrite locally but averages less than 1%. 88.85 - 89.30: weakly to moderately laminated at 45-55° to core. 90.70:  5cm laminated zone at 40-45° to core axis. 90.90 - 91.95: weakly to moderately carbonatized. 93.76: moderately carbonatized. 93.76: moderately to strongly fractured - surfaces are chlorite polished.	SEDIMENTS	White bull quartz containing 75% intensely sericitized xenoliths of sediment. Fragments contain pyrite crystals up to 1.5 cm above 80.00 meters.	QUARTZ VEIN	68.81 - 70.90: well laminated, moderately carbonatized locally.  Bedding at 69.10 m at 550 to core axis, and, at 70.85 meters at 450.  70.90 - 76.65: less well laminated, minor red cherty (jasperoid) sediments; non-laminated locally.  well foliated, weakly to moderately laminated; minor brecciated rock locally - purple-grey, non-silicified, carbonated.  Bedding: 450 to core at 77.00 m.  450 to core at 77.40 m.  50-550 to core at 79.33 m.		DESCRIPTION
	2965 2965 2965 2965 2965 2966 2970 2971		2957 2958		22222222222222222222222222222222222222	NO.	
	000000000000000000000000000000000000000		5-7		2111111	SULPH,	
	80.71 81.61 82.57 83.43 84.28 84.28 85.08 85.97 86.86 87.69 88.55 90.29 91.10 91.95		79.50 80.12		72.35 73.16 74.08 75.00 75.88 76.72 77.50 78.38 79.03	FROM	SAMPL
	81.61 82.57 83.43 84.28 85.08 85.97 86.86 87.69 87.69 90.29 91.10 91.10 91.95 93.76		80.12 80.71		73.16 74.08 75.00 75.88 76.72 77.50 78.38 79.03	FOOTAGE TO	
	000000000000000000000000000000000000000		0.62		0.92 0.92 0.92 0.88 0.88	TOTAL	
						*	
						*	
	#### 000000		# # #			OZ/TON	ASSAYS
						02. TON	

\_\_\_\_ SHEET NO. \_\_4 OF 6

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FOOTAGE	SAMPLE	HOLE NO. MC-83-53
*		SHEET NO.
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02/TOM 02 T	ASSAYS	5 0
22 7		6

110.13	•	FROM	
13			
123.04		70	AGE
Dark green, fine to very silicified breccia zones purple-grey locally and bedding. Fractures are coloured reaction halos. localized scale (eg. 40-sections are found at 11 (25-35% silicified); 116 (19.40-119.84 (70% siliciare associated with alte	100.99-103.00: 100.99-103.66: 103.00-103.66: 103.66-105.80: 105.80-107.28: 107.28-108.41: 108.41-109.45: 109.45-110.13:		-
IFIED SEDIMENTS  fine grained with up to 70% honey coloure up to 15cm in width. These zones may be show some evidence of developing along the often surrounded by silicified, honey The rock is well laminated on a very 450 at 117.62 m). Major silicified 0.13-110.96 (50% silicified); 111.82-115.6 .40-117.50 (60% silicified); and, ified). Small increases in pyrite content ration. Up to 3% very finely disseminated	in tone down hole. Tight fractures carry red hematite.  grey-green, weakly to moderately silicified with honey coloured intensely silicified rock in locally developed breccia and surrounding fractures as 1-3mm halos. Locally, silcified breccia seams and chloritized seams may be parallel to bedding - (eg. 350 to core axis at 101.94 m). Zone may carry 5-10% cherty sediments.  honey coloured intensely silicified breccia with 30% purple-grey zones - up to 5% pyrite locally. Occasional chloritized fractures.  same as 103.00-103.66, but no purple-grey rock; abundant chloritized fractures at 104.55-105.15 m. carries 20-30% green relic chloritized patches in a generally honey coloured intensely silicified rock. same as 103.00-103.66 m but carries 10% purple-grey rock. same as 103.00-103.66 m but carries 10% purple-grey rock. honey coloured, strongly silicified, with 30-40% relic green chloritized patches and seams. Rock becomes greenish toned with depth. honey coloured, intensely silicified breccia; averaging 5-7% pyrite and up to 10% locally.		DESCRIPTION
2997 d 2998 2999 3000 NOTE 839 841 842	2981 2982 2983 2983 2984 2986 2988 2988 29991 29991 29994		
11111	5 3111112 2 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1 2 2 1 3 1 1 1 1	IDES	
110.13 111.82 112.68 113.59 114.44 115.36 116.24	100.17 100.17 101.79 102.62 103.02 104.51 106.22 106.22 107.28 107.28 108.41 109.45	FROM	SAMP E
1110. 1111. 1112. 1113. 1114. 1115.	100.17 100.99 101.79 103.62 103.02 104.51 106.22 107.28 1107.85 1108.41 109.45	FOOTAGE	
08008 46410 0808 40420			1
00000 20000	0.82 0.80 0.83 0.40 0.64 0.56 0.56 0.57	707AL	
0.86 0.86 0.91 0.91 0.92 0.92		707AL 3	
00000 20000			
0.83 0.86 0.91 0.91 0.85 0.92 0.88 0.92			

7071